

OSU Extension Service Small Farms Program

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Cover Photo:

The view of some of the speakers for the 2022 virtual Oregon Small Farms Conference. Two days, 800 participants, 70 speakers. Photo by Garry Stephenson

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Drought, Fire, Flood, Disaster Relief & Resiliency Programs

By: Rachel Suits, Oregon State University, Small Farms Program

This list is useful to find funding resources for disaster relief and farm resiliency through federal and state programs.

State Programs - disaster relief for losses Oregon Department of Aq (ODA)

Oregon Drought and Disaster Assistance Program (fact sheet): Loan forgiveness program for farmers in Oregon that experienced economic hardship from a natural disaster in 2021. These funds are best for farmers that have 2017-2019 Schedule F (learn about Schedule F) paperwork to determine a 3-year baseline farm gross income. However, If farmers do not have a schedule F for those years, farmers can use 2020 Schedule F or National Agricultural Statistics Service (NASS) to help determine a 3-year baseline. Program opening early March 2022. The maximum forgivable loan will not exceed \$125,000 or 90% of farm 3-year baseline income. Historically underserved producers by USDA definition are eligible for a loan up to \$150,000 or 95% of baseline and demonstrate a 5% loss.

Grants Loans and Technical Assistance

Farmer & Rancher Disaster Relief Grant Program: This grant program was created for farms who are not eligible for, or cannot feasibly apply for, federal disaster relief and/ or a forgivable loan from the Oregon Disaster Assistance Program. Applicants must be small-scale farmers and ranchers who are actively working the land located within the state of Oregon, derive a portion of their income from their own farm business, and are involved in the day-to-day operations of the farm. Preference will be given to farmers and ranchers from populations historically experiencing the greatest systemic inequities and who are most likely to fall through the cracks of our traditional safety nets. For this reason, farmers of color, immigrant farmers, and undocumented farmers will be given preference, but we encourage all farmers to apply. The maximum grant size is \$30,000, and the program is currently open to apply.

Informational Session for ODAP loan forgiveness and OCFSN grant program:

April 4, 2022 from 10:00-11:00 AM PST
 Visit the <u>OCFSN website</u> to register and receive a zoom link

Federal Programs - disaster relief, for losses<u>Disaster Assistance Discovery Tool</u>: Use this tool to determine which USDA disaster program is best fitting for a farm.

Farm Service Agency (FSA)

Programs farmers can apply for 2021 losses based on due dates:

- Livestock Indemnity Program: Benefits to eligible livestock owners or contract growers for livestock deaths in excess of normal mortality. An owner or contract grower must file a notice of loss within 30 calendar days of when the loss of livestock is first apparent as well as file an application for payment within 60 calendar days after the end of the calendar year in which the eligible loss condition occurred.
- Emergency Forest Restoration Program (EFRP):
 Provides payments to eligible owners of nonindustrial private forest land in order to carry out emergency measures to restore land damaged by a natural disaster. Owners should check with their local FSA office to find out about sign-up periods after a natural disaster.
- <u>Tree Assistance Program</u> (TAP): provides financial assistance to eligible orchardists and nursery tree growers to replant or rehabilitate eligible trees, bushes, and vines lost by natural disasters. Apply within 90 calendar days of the disaster event or the date when the loss is apparent to the producer.
- Emergency Conservation Program: Provides emergency funding and technical assistance to farmers and ranchers to rehabilitate farmland and conservation structures damaged by natural disasters and implement emergency water conservation measures in periods of severe

- drought. The county FSA office will provide guidance on the approval process and next steps.
- Emergency Farm Loan Program: Emergency loan
 for farms that own/operate a farm in a county
 that has deemed a natural disaster, a permanent
 citizen of the U.S., suffered 30% loss from a
 natural disaster, have repayment ability and
 have a credible credit history. Applications for
 emergency loans must be received within eight
 months of the county's disaster or quarantine
 designation date.
- <u>Disaster Set-Aside Program</u>: As a direct result of the disaster, the borrower is unable to pay all family living and farm operating expenses, payments to other creditors, and payments to FSA. The borrower must be current or not more than 90 days past due on any FSA loan when the application is completed.

Programs that farmers can apply for 2022 losses based on due dates

- Livestock Forage Disaster Program: Livestock growers of eligible livestock and raise forage or suffered a loss of grazed forage and experienced economic hardship from a natural disaster. Eligible livestock producers who are also producers of grazed forage crop acreage must provide a completed application for payment and required supporting documentation to their FSA office within 30 calendar days after the end of the calendar year in which the grazing loss occurred.
- ELAP: Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program: Provides financial assistance to eligible producers of livestock, honeybees and farmraised fish for losses due to disease, certain adverse weather events or loss conditions, including blizzards and wildfires. ELAP assistance is provided for losses not covered by other disaster assistance programs. The ELAP application period ends Dec. 31 of each calendar year. For honeybee losses, 15 days after loss is

apparent and for Livestock and farm-raised fish losses, 30 days after loss is apparent.

Small Business Administration

• Economic Injury Disaster Loans: If you have suffered substantial economic injury and are a small agricultural cooperative located in a declared disaster area. This is a loan that will not exceed 4% interest rate. Follow the link to apply online and the Small Business Administration will send an inspector to estimate the cost of damage once your application is completed and submitted.

Farm Resilience Programs -- these programs are not for disaster relief but can provide financial support for farmers to be more resilient during future disasters.

- Ask an Expert Short Video Introductions: These short videos introduce many organizations that work with farmers to help find land, find funding for farm operations or integrate conservation efforts on your farm.
- NRCS Farmer Programs by County
- Conservation Reserve Program (fact sheet): In exchange for a yearly rental payment, farmers enrolled in the program agree to remove environmentally sensitive land from agricultural production and plant species that will improve environmental health and quality. Contracts for land enrolled in CRP are from 10 to15 years in length.
- Environmental Quality Incentive Program (EQIP):
 Provides financial and technical assistance to
 agricultural producers and non-industrial forest
 managers to address natural resource concerns
 and deliver environmental benefits such as
 improved water and air quality, conserved
 ground and surface water, increased soil health
 and reduced soil erosion and sedimentation,
 improved or created wildlife habitat, and
 mitigation against drought and increasing
 weather volatility. To learn more about
 EQIP, contact your local NRCS office. An NRCS

- conservationist will visit you and evaluate the natural resources on your land. NRCS will then present a variety of conservation practices or system alternatives to help you address those concerns or management goals that improve or protect the natural resource conditions on your land. Historically underserved (HU) participants are eligible for advance payments to help offset costs related to purchasing materials or contracting services through EQIP.
- Emergency Watershed Protection Program: The EWP Program allows communities to quickly protect infrastructure and land from additional flooding and soil erosion. EWP does not require a disaster declaration by federal or state government officials for program assistance to begin. Recovery projects begin with a local sponsor or legal subdivision of state or tribal government. Eligible sponsors include cities, counties, towns, conservation districts, or any federally-recognized Native American tribe or tribal organization. Interested public and private landowners must work through a sponsor.
- Agricultural Conservation Easement Program:
 The Agricultural Conservation Easement
 Program (ACEP) protects the agricultural
 viability and related conservation values of
 eligible land by limiting nonagricultural uses
 which negatively affect agricultural uses and
 conservation values, protect grazing uses and
 related conservation values by restoring or
 conserving eligible grazing land, and protecting
 and restoring and enhancing wetlands on eligible
 land. To learn more, contact your local NRCS
 office. An NRCS conservationist will visit you
 and evaluate your land to help you determine
 eligibility for the various components of ACEP.
- Western SARE Grants: The Farmer/Rancher grant program involves agricultural producers (main applicants) and technical advisor(s) implementing projects to address identified needs in sustainable agriculture. With the support and guidance of the technical advisor, producers must integrate research and education

to conduct on-site/on-farm experiments to improve production, marketing, and the environment.

<u>USDA Crop Insurance</u>, <u>Whole Farm Revenue Program</u>:

Whole-Farm Revenue Protection (WFRP) provides a risk management safety net for all commodities on the farm under one insurance policy.

Adopting Medicinal Herb Crops into your Farm

By: Teagan Moran, Oregon State University, Small Farms Program

Online REGISTER for link or contact Teagan.moran@oregonstate.edu

You're invited to join us for an evening exploring opportunities for farmers in PNW to grow medicinal herbs for market. A North Willamette Research and Extension Center project has been focusing on what medicinal herbs grow well in our region some considerations for market quality,

and where to start when adopting new crops.

Initial results
will be released
soon in this
publication: Medicinal
Herb Production in
the Pacific Northwest:
Opportunities and
Obstacles in a
Growing Market.

Come hear a summary of results, opportunities to engage in ongoing research, ask questions, and network and connect with other growers.



New Small Farms Program Podcast: For the Love of Farming

By: Teagan Moran, Oregon State University, Small Farms Program

It is with great joy that I introduce a new Small Farms
Program Podcast: For the Love of Farming: https://anchor.fm/teagan-moran. This series is all about connecting listeners to small-scale farmers and ranchers. We come together to talk about their why, how they came to be where they are, challenges, joys, and how they keep going.

As a beginner farmer myself, the most helpful information I have received has been shared by other farmers and is not

always technical. Farming is deeply personal, and so much of how we farm and how we make decisions on the farm, is informed by who we are as individuals. That being said, I also see a shared collective farming experience. What it means to work outside, to tend to your body as a part of the farm, to respond to the land, to participate in our current food system, and to be humbled daily by how hard and unpredictable the work can be. I am fascinated by the nuances within farming and aim to distinguish experiences that are shared and those that may be unique to individuals, unique to specific pieces of land, or where we are in the farming journey.

The name, For the Love of Farming, is a nod to all the sacrifices people make, all the challenges they work through, all the messy and complicated paths people take to make small-scale farming and ranching a reality today. Why do they do it? What keeps them going? I believe it is the most powerful human experience, LOVE. I have gone through several stages of love with farming. After graduating college I traveled around working on farms abroad, I would say I was enamored. I officially started my farming path as a Rogue Farm Corps intern in the Southern



Willamette Valley. That first year working full time on a farm I had an infatuation, an attraction that had my heart pumping and Dopamine levels surging. It was an exciting time and I quickly fell in love with farming. It was all rose colored glasses, delighted senses, and bouquets of greens. In the second year of my internship, the romance started to mature and the coupling truly began. Despite the flaws, I had developed an emotional connection and I wanted the relationship (with farming) to keep going. That

coupling then evolved as I moved on to manage a farm. The 3rd stage of love; disillusionment and disappointment hit. During this phase, the masks are off and one starts to see the worst. Farming revealed stress, failure, one challenge after the next. I had to take responsibility for my own feelings, and there was so much opportunity for personal growth. I started to learn how to set realistic expectations for farming and how to take care of myself in the relationship. My love of farming then grew to become a committed, comfortable, and lasting love. I wanted to be with farming for the rest of my life. I just needed to figure out how best to do that (and I am still figuring it out).

My hope is that this podcast will highlight the nuances, that the stories shared will offer helpful tips AND perspective. More episodes are on the way. I am so grateful to the individuals who are generous with their time, willing to get a little personal, share their wisdom, lessons learned, and yes - their love of farming with us all. If you want to recommend someone or be interviewed yourself, let me know: Teagan.moran@oregonstate.edu. A relationship like no other – for the love of farming!

AVIAN INFLUENZA (BIRD FLU)



A virus that infects domestic poultry, such as chickens, turkeys, quail, and geese, and wild birds such as shorebirds and waterfowl.

Bird flu spreads quickly by direct bird-to-bird contact. Viruses can be carried by manure, tools, equipment, vehicles, egg flat, crates, clothing, and shoes. Migratory waterfowl can also carry the disease.

6 ways to protect your birds



- Wash your hands thoroughly before and after working with your birds, Clean and disinfect equipment.
- Buy birds from reputable sources and keep new birds separated for at least 30 days.
- DON'T BORROW DISEASE

 Do not share equipment or supplies with neighbors or other bird owners. If you must borrow, disinfect it first.
- Early detection can help prevent the spread of disease. Check your birds frequently. If you find a sick or dead bird, don't touch it.
- REPORT SICK BIRDS

 Don't wait. If your birds are sick or dying, call ODA at 1.800.347.7028.



What are the signs of bird flu?

- Lack of energy or appetite
- Decreased egg production and/or soft-shelled or misshapen eggs
- Swelling of the head, eyelids, comb, wattles, and hocks
- Purple discoloration of the wattles, combs, and legs
- Runny nose, coughing, sneezing
- Stumbling or falling down
- Diarrhea
- Sudden death without any clinical signs

ODA Avian Influenza information and updates:

https://oda.direct/AvianInfluenza

APHIS Defend the Flock resources:

http://healthybirds.aphis.usda.gov



IF YOU FIND A SICK OR DEAD BIRD, DON'T TOUCH IT. REPORT IT.

DOMESTIC BIRDS

Oregon Department of Agriculture Animal Health Program 1.800.347.7028

WILD BIRDS

Oregon Department of Fish & Wildlife 1.866.968.2600

The Power of Women Farm Networks

By: Teagan Moran, Small Farms Program, Oregon State University with excerpts from Evaluation Report by Vernita Ediger

have had the joy and honor of helping to facilitate the Willamette Women's Farm Network for the past three years, prior to this role I was connected as a farmer member. This is a regional network of women and femme identified farmers who are actively farming in Linn, Lane, and Benton Counties. The network was started in 2007 by a small group of women farmers who saw a need to share information and support one another in the male dominated agricultural field. They joined forces with OSU Extension Small Farms faculty, Melissa Fery, and started to meet regularly. One of those founding women shared:

"A group of women all moved to Oregon at about the same time to farm. I came to the network looking for experienced farmers. What I got was a group of other women who were going through the same process as I was."

The network has grown from a handful of beginner farmers to 227 women who are now currently connected via an email listserv and directory. Fifteen years later, those beginner farmers are now some of the experienced farmers offering advice. While most in the network sell direct to consumer, they span all market channels, range in age from 18 - 80, range in scale from 1 - 100+ acres and have anywhere from 0 - 50 years of farming experience. The group gets together to further knowledge of farm and ranch related issues both in the market place and in

agricultural practices. We are working together to enhance economic self-sufficiency through shared experience, resources, and visions of how farm work will impact ourselves and our community. We aim to provide each member a safe, supportive environment, and opportunity to learn

practices regarding farming/ranching that promotes responsibility, profitability, and conservation of the land.

My role as a facilitator is to help monitor the email listsery, add new members, share relevant resources and respond to network requests to bring members together to learn and share. Over the past 15 years this group has held farm tours, workshops, retreats, made bulk purchases, shared equipment, and built a community of support. Most the women who started the group are still involved, many others have come and gone as their farming path has evolved, and we welcome new members regularly. As the network has grown, so has the needs of its members and ways in which people connect through it. With over 200 members we know the needs are diverse.

In 2021 it was time to evaluate the network again and to understand how/if it was benefiting members. There are more women in farming and ranching in Oregon than ever before. There has been a noticeable shift in the farming community in the past 15 years and women are no longer always assumed to be the farmer's wife/daughter/sister. With this noticeable shift we needed to ask: Do women in agriculture still need a dedicated space to support one another? After an extensive evaluation including a survey and focus groups, the answer is a very confident and loud YES. While more women are owning and operating



farm businesses, entering into farming, and holding managerial roles on farms, the agricultural profession and associated businesses are still male dominated. During the evaluation women shared experiences of not being invited to farming conversations with male colleagues or neighbors, and of being side-lined when a man was around. This included a woman farm owner being ignored while a male farmhand was nearby at a farm store. Women are still asked where their husbands are when making purchases or interacting with other Ag businesses.

Women in the network shared the importance of feeling connected to other women in agriculture and the need to have a close-knit set of connections to which they belonged. Many of these women described experiences of being "left out" or "excluded" by male acquaintances in agriculture who more naturally communicate and share resources with each other (lessons learned, equipment, etc.).

Women reported that the network had benefited them by providing:

- Social connections with other women farmers,
- Increased access learning opportunities and information.
- Increased awareness of and access to farmrelated resources,
- Opportunities to see other farms and learn hands-on, and
- Increased access to business opportunities.

We learned that the benefits listed above were harder to access or didn't feel as comfortable in mixed gender settings. Farming can be a lonely and demanding business and while farmers in the network often enjoy their own company, they also feel a need for companionship and connection, specifically with likeminded women.

"My experience is that farming is really isolating, which I love. But I also want to socialize with people who are somewhat similar or in some similar realm. My realm of socializing is to be social but (social while) focused on farming."

Network participants connect with other women who share a common lifestyle, values, and limitations on time availability. This allows them to feel comfortable reconnecting with people after months of 'radio silence' due to overwhelming farm schedules during the growing season.

"When your friends who aren't farmers don't hear from you for 4 months, they think you don't want to be connected. Harvest is a busy time here and (non-farmers) don't get that but people here understand that."

Women in the network report cultivating a sense of community and belonging that they are unable to elsewhere. Several women personally shared how this network provided the foundational and emotional support they needed at critical moments to be able to continue or remain in farming.

"This network gave me a ton of support for going to Farmers Market for the first time. They supported me every way: telling me how to do it, what tent to buy, I even ended up hiring help through this network and help that was specifically good at doing marketing and Farmers Markets. The social aspect of (the network) and the community to start a business and take a business to a new level, is what I have found."

Another example of emotional support was described by one woman who shared the following:

"I started my business and my farm about 4 years ago. So, I was about 2 years in at that point. I was pretty much at the breaking point. I was questing everything: 'Can I do it? Is this going to break me?' Then (the retreat through the network) came up and it was everything I needed. It was a way for me to bring my product and share it with other people who really appreciate it. It was, in a way, an ego boost. There were sessions about physical things like exercise programs and how to protect your back. That was super helpful: The reminder to (take care of yourself). There was a really powerful venting session—or sharing session. That was a reality check to hear other people were

having similar things and its part of the deal (of farming). It was a real lifesaver and it totally gave me the boost in many areas I needed... The retreat covered very important topics on how we can support each other."

This network provides a space for women to ask what they need to ask without concern of judgment. Whether that be a question to the email listserv or at a farm tour. They reported feeling safe to ask questions in a way they reported not feeling in mixed gender situations. In addition, they had confidence in the information they were getting, whether that be from the network facilitator or others in the network. The network itself became a trusted source of information. This saved members time and worry as they were able to benefit from the research and experience of other women they knew and trusted.

"There are a lot of FB groups where you can throw your questions out—but I don't know who I'm hearing from when I get the answer back. I can trust the response in this group..."

The network has helped to support farm businesses as a space for women to share their experience getting loans and grants. This not only introduced resources to others but demystified some of the daunting application processes.

"Part of the vision for the group was to address the business side of farming as well as the practical farming side. It's a big deal—and it's interesting to see people getting loans and money."

"The connections are not just to the group—but to grants and classes. That's how I find out about everything."

The evaluation confirmed that engagement in the network had positive increases for all indicators assessed:

- Farm-related knowledge & skills
- Application of knowledge and skills to on-farm practices and ag-businesses

- Increase in connections with each other
- Increase in connections to resources
- Improved attitude and outlook about their future in farming
- Expansion of their farming businesses and/or launching new ag-related ventures

As the network has grown, so has the diversity of needs, farming practices, and businesses. The network is now in an exciting time where the group is figuring out how to segment itself into focused learning/themed groups. They also want to think about how to create a more established mentorship program, identifying those who are available to mentor or those seeking mentorship. This group is constantly evolving and has the power and ability to organize however they want. I aim to provide the tools and organizational support necessary to implement their goals.

Since this network's inception, two other Small Farms Program Women Farm networks have formed both in the North Willamette Valley and in Southern Oregon. You can visit the Small Farms Program Women Farmer Network Webpage here: https://smallfarms.oregonstate.edu/smallfarms/osu-women-farmer-networks.

Current OSU Small Farms Faculty, Melissa Fery and Maud Powell, took what they learned from the establishment of these networks and published a guide to assist others in this process; Creating Farmer Networks A Toolkit for Promoting Vibrant Farm Communities. This toolkit provides information and resources needed to create a successful farmer network. It is intended for farmers, extension agents, community organizers, and other agricultural professionals. https://www.sare.org/wp-content/uploads/pnw638.pdf.

Overwintering Cauliflower and Purple Sprouting Broccoli for Willamette Valley Farmers: Summary of NWREC Variety Demonstrations

By: Heidi Noordijk, Small Farms Program, Oregon State University

ring time brings freshly harvested purple sprouting broccoli and cauliflower to market booths and CSA shares throughout Western Oregon. The current climactic conditions of the Willamette Valley are suitable for overwintering cauliflower and purple sprouting broccoli production. Much of the knowledge on production of these crops comes from the UK, Coastal France, Spain, and Italy which are known for these winter crops. OSU Extension and the Organic Seed Alliance have been doing trials for suitably of these crops in the Pacific Northwest. Overwintering cauliflower and purple sprouting broccoli require less irrigation during their production cycle than fall maturing varieties, create more opportunities for farms to retain year-round employees, and have high market demand from consumers looking for fresh local produce from late winter through spring.

Inspired by the increase in production and demand for winter vegetables, variety demonstrations for overwintering cauliflower and purple sprouting broccoli began in 2015 at OSU's North Willamette Research and Extension Center (NWREC) in Aurora, Oregon. Outcomes from these demonstrations and information from experienced winter vegetable farmers and plant breeders will be shared in this article.

Crop Planning and Growth Responses to Temperature

Experienced farmers, researchers, seed breeders, seed distributors, market managers, and wholesale distributors were consulted on crop planning, field management, and variety selection. The first year of the demonstrations looked at potential planting dates for production in the North Willamette Valley. Both overwintering cauliflower and purple sprouting broccoli had plant spacings of 18 inches

in row and 24 inches between row. Planting dates of August 18, September 1, September 16 and September 30 were selected with the goal of having a plant that is 2/3-3/4 full vegetative size going into winter. Planting too early can lead to large, lush plants that are more susceptible to disease and cold injury and planting too late leads to small plants that won't form viable heads and curds. Plants from the September 16 and 30 planting dates were too small going into winter and did not produce a marketable crop. In 2018 the project continued with planting dates of August 7, 17, and 28. The best results were from the August 7 and 17 dates. Mid-August was selected as a transplant date that worked for Aurora, Oregon and was used for the 2019-2021 plantings. Farmers throughout the Willamette Valley transplant in the fields between mid-July and mid-August, with greenhouse seeding occurring four weeks earlier.



overwintering cauliflower plots in mid-November. Plant early enough to achieve a plant that is 2/3-3/4 full size going into winter. Select varieties that mature at different times to have a long harvest season. Photo by Heidi Noordijk

Cauliflower goes through several growth stages before developing a marketable curd, three of the stages are: juvenile, curd initiation, and curd growth. The juvenile stage is when leaves are developed and the framework of the plant is formed, this stage ends when the plant has developed a certain number of leaves and has met a temperature requirement to begin curd and head initiation. In cauliflower this can range from 32 and 112 leaves, depending on variety and seasonal weather conditions. Curd and head initiation of cauliflower and purple sprouting broccoli is triggered by vernalization, a response to prolonged cold temperatures. Once the chilling requirement is satisfied, the curd and head can begin to grow and expand. Without receiving these cold temperatures viable curds and heads will not form.

Temperatures that are too cold can damage the plants. Most of the common winter cauliflower varieties are hardy to about 19°F and hybrids have survived temperatures of 10°F. NWREC is currently in USDA Plant Hardiness Zone 8b with low temperatures expected between 15-20°F. All varieties are transplanted on or around the same day, however their harvest times will vary depending on their cold requirements and seasonal temperatures. Breeders have modified overwintering cauliflower so they will form curds with varying degrees of cold requirement. When crop planning, select varieties that work with your market and CSA needs, some farmers will have an early, mid, and late variety for each crop. If weather is warm during the growth period, some of

the varieties may have overlapping harvest windows. Changes in weather can lead to differences in harvest times from year to year.

Nutrient Management and Irrigation

The recommended soil pH for Brassicas is 6.3, if there's a history of clubroot in the field a pH above 6.5 can be helpful. Take a soil sample of your fields before planting, use those results and follow guidelines from OSU Extension's publication on Nutrient Management for Sustainable Vegetable Cropping Systems in Western Oregon to create a plan. Boron deficiency can lead to hollow stems in cauliflower and broccoli, boron can be applied as a preplant application or with split foliar applications starting around 4 true leaves. A soil nitrate-N test taken a week or two before planting will help in calculating the nitrogen needs to establish the crop. The NWREC demonstration plantings aimed for preplant N levels of 50 lb/A. Excess nitrate will leach with the fall and winter rains, so don't apply more than necessary. Dale Hemphill, a former vegetable researcher at NWREC conducted overwintering cauliflower trials in the late 1970's and early 1980's. Hemphill noted that "winter cauliflower has consistently responded to spring nitrogen application with increased yield, greater head size, and better foliage cover of the curd. Greatest yields have been obtained with side dress application of 100 lb/A of N in early February and again in early March". The 2020/21 trials at NWREC received one side-dressing of feather meal at a rate of 50

Ib/A of N in early March for the later maturing cauliflower varieties. The purple sprouting broccoli demonstrations at NWREC were not sidedressed. Experienced winter vegetable farmers with high levels of soil organic matter do not sidedress their cauliflower or purple sprouting broccoli and have been satisfied with the results. More



Cauliflower curd development of six varieties in early March 2021 Photo by Heidi Noordijk



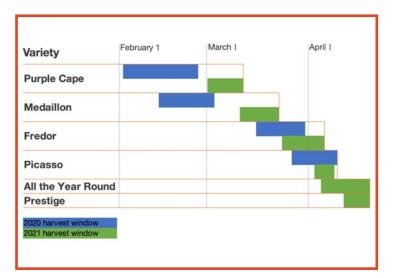


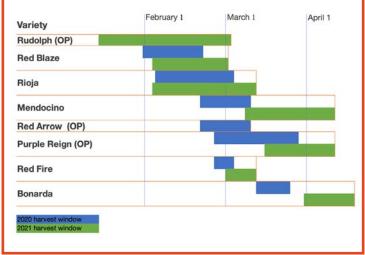
Heads were harvested every 2-4 days with the first sign of a visible head as wrapper leaves loosened. When exposed to sunlight, curds turn from white to an off-cream or brownish color and are more susceptible to cold injury and pest damage. This early harvest may have prevented heads from reaching maximum size. Picasso head with wrapper leaves (left), Picasso head with wrapper leaves removed (right) on same day.

research could be done on nutrient management of overwintering Brassicas in the Willamette Valley. Transplanting occurs in mid-July to mid-August, often hot and dry conditions in the Willamette Valley, pre-irrigation and supplemental irrigation for plant establishment are needed until fall rains arrive.

Results from 2019-21 Variety DemonstrationsOSU Metro Small Farms Program partnered with the OSU Vegetable Program and the Culinary Breeding Network in 2019 on a project to promote awareness and consumption of winter vegetables in Oregon.

Included in this project were community outreach events, fields days, development of a project website for farmers and market managers, and overwintering cauliflower and purple sprouting broccoli variety demonstrations at NWREC. Varieties were selected using results from past NWREC trials and recommendations from farmers and seed companies. Most varieties had two replicated plots each year and results are summarized in the following graphs and tables.





Harvest windows can vary year-to-year depending on seasonal temperatures.. Graphics provided by Heidi Noordijk

Variety	Marketable yield (percent by weight)		Average marketable head (pounds)	
	2020	2021	2020	2021
White Magic	69%		1.29	
Purple Cape	70%	79%	0.46	0.46
Medaillon	98%	94%	1.08	0.80
Fredor	97%	98%	1.58	0.93
Picasso	91%	99%	1.52	1.18
All the Year Round		80%		0.77
Prestige		91%		0.80

Table 1. Harvest data from winter and overwintering cauliflower variety demonstrations. Transplanted August 14, 2019 and August 12, 2020

Variety	Comments
White Magic	Not an overwintering variety. Planted on the field margin, increased pest damage could be from edge effect.
Purple Cape	Beautiful color, early and open canopy can lead to chilling injury of head. Wide variation in head size, shape, and curd tightness.
Medaillon	Early variety, high yields, tight wrapper leaves, holds well in field
Fredor	Tight wrapper leaves, easy to harvest
Picasso	Large heads, lumpy dome shape, tight wrapper leaves. Discoloration on leaves,
All the Year Round	Side shoots, with mini heads. Tight wrapper leaves
Prestige	Nice heads, short harvest window due to warm temperature

Table 2. Notes from winter and overwintering cauliflower variety demonstrations.

Variety	Marketable yield (percent by weight)		Marketable yield of ten plants (pounds)	
	2020	2021	2020	2021
Rudolph (OP)		99.9%		4.36
Red Blaze	83.8%	99.3%	7.13	7.34
Rioja	82.0%	99.7%	5.27	13.71
Mendocino	98.3%	99.2%	5.47	10.30
Red Arrow (OP)	100%		7.72	
Purple Reign (OP)	96.1%	99.7%	7.61	6.17
Red Fire	95.4%	100%	7.17	11.11
Bonarda	97.7%	100%	8.24	10.50

Table 3. Harvest data from overwintering purple sprouting broccoli variety demonstrations. Transplanted August 14, 2019 and August 12, 2020



Above: Purple sprouting broccoli bunch at harvest. Photo by Heidi Noordijk

Right: Table 3. Harvest data from overwintering purple sprouting broccoli variety demonstrations. Transplanted August 14, 2019 and August 12, 2020

Challenges

Producing overwintering vegetables can be challenging and hurdles can change from year to year. Late July to mid-August is a busy time on many farms, having enough time and a large enough crew to transplant winter vegetables while in peak summer harvest has been a struggle for growers. Unpredictable weather with extreme heat events, ice storms, and frosts can impact survival and development of these crops. There are few seed companies that offer overwintering cauliflower for the PNW, consistent availability of varieties has been a challenge for growers in the region. Geese have destroyed fields of overwintering purple sprouting

Variety	Comments
Red Blaze	Cold injury to exposed buds in mid-Feb both years
Rioja	Cold injury to exposed buds in mid-Feb both years
Mendocino	High yield, easy to harvest, significant stem girdling from rodents
Red Arrow (OP)	Difficult to harvest due to variability
Purple Reign (OP)	Variety being developed by OSA, lots of variability, stem girdling from rodents
Red Fire	Easy to harvest, short harvest window
Bonarda	More leaf than head, long stems with tight heads, long stems are a bit tough

variety	(percent by weight)		Average marketable nead (pounds)	
	2020	2021	2020	2021
Incline	82%	54%	1.28	1.18
White Magic	69%		1.29	
Purple Cape	70%	79%	0.46	0.46
Medaillon	98%	94%	1.08	0.80
Fredor	97%	98%	1.58	0.93
Picasso	91%	99%	1.52	1.18
All the Year Round		80%		0.77
Prestige		91%		0.80

Table 4.
Notes from
overwintering
purple sprouting
broccoli variety.
demonstrations







Left: Cold injury to purple sprouting broccoli. Middle: Rodent feeding caused girdling on purple broccoli stems. Right: Slug feeding and damage on mature cauliflower Photos by Heidi Noordiik

broccoli and rodents (voles and field mice) have also damaged this crop. Pests haven't caused too many problems in these winter crops. Aphids, cabbage looper, diamond back moth, and imported cabbage worm can cause slight damage to young plants. Slugs and cabbage maggot have made cauliflower curds unmarketable in spring. Brassica crops are grown in all seasons in the PNW, having enough ground for rotations to avoid disease and insect pests can be an issue.

Farmer Advice and Resources

Experienced winter vegetable farmers shared guidance throughout the NWREC variety demonstrations and they've provided advice for farmers thinking about adding winter vegetable production to their farms.

- Know your market and why you want to do this.
 Do your customers want winter vegetables? Do you have enough acreage? Do you have the labor? When you plant these there are lots of other things to do on the farm in July and August. Do you have enough labor to handle this?
- Winter vegetables make sense for direct market growers at the small to mid-size farm range, but you need to be careful. Cashflow and retention of customers and crew is good, but it is challenging

- and really hard. Winter vegetables fall mid-range in terms of profitability
- Dealing with the wet and muddy fields slows down harvest, to help alleviate muddy conditions in the field interseed cover crops in September to provide a cover in the pathways so the field doesn't become a mud bog
- Some varieties are difficult to get a hold of because winter vegetables are a niche product for seed companies. Work closely with your seed companies to select varieties that fit your needs. Look for hardy, tasty, and productive varieties.
- There's nothing like seeing purple sprouting broccoli or winter cauliflower reach maturity in late winter or early spring after all you've had for a while is leafy greens and root vegetables
- Visit the Eat Winter Vegetables website: https://www.eatwintervegetables.com for recipes, cooking videos, and variety information. Share this resource with your customers.
- Check out <u>Purple Sprouting Broccoli: A Guide to</u>
 Growing for Fresh Market and Seed in the <u>Pacific</u>
 Northwest from Organic Seed Alliance that was published in November of 2021.
- Reach out to <u>Heidi Noordijk</u> if you're interested in joining a winter vegetable farmer network.

New Online Course for Oregon Producers Considering Agritourism

By: Audrey Comerford, Small Farms Program, Oregon State University

Developing a Successful Agritourism Business in Oregon is a new online course for farmers and ranchers interested in adding an agricultural tourism business to their operation. Agritourism includes welcoming visitors onto your farm or ranch to sell products, engage with customers, offer various agritourism activities, enhance the visibility of local farms, and build connections in the community.

Agricultural tourism can provide a new source of revenue and boost sales of agriculture products, possibly employ a family or community member, help with farm succession, and educate the public about agriculture.

This online course was developed by OSU Extension Service along with Oregon partners to help producers learn about the possibilities and complexities of opening farms and ranches to the public.

As a participant, you will learn about the types of agricultural tourism and determine if it is a good fit for your whole farm business. The course includes sections about managing risk, understanding legal requirements, marketing your business, and customer service and hospitality. As you work through the curriculum, you will start an action plan that will help you begin to assess, plan and develop an agricultural tourism business.

The course is self-paced and includes text, videos

and worksheets. It is anticipated to take several hours to complete. You will have opportunity to consult with the course instructors to ask questions and engage in additional activities. Course registration is \$20 with scholarships available upon request.

To get more information and register for the course, please visit the class website **Developing a Successful Agritourism Business in Oregon** or the **OSU Agricultural Tourism** website.

If you have questions about the course or other OSU Agricultural Tourism work please contact Melissa Fery, melissa.fery@oregonstate.edu or Audrey Comerford, audrey.comerford@oregonstate.edu

Development of this course is based upon work supported by USDA/NIFA under Award Number 2018-70027-28587.



Farmers, Ranchers & Advocates Praise Legislature for Funding Program to Keep Working Lands Working

By: Kelley Beamer, Coalition of Oregon Land Trusts: 503-719-4732, kelley@oregonlandtrusts.org

coalition of farmers, ranchers and conservation advocates praised the Oregon Legislature today for approving \$5 million for the Oregon Agricultural Heritage Program (OAHP) – the first appropriation to the program since it was signed into law in 2017.

The new funding will enable working landowners like farmers and ranchers to now access not only the newly appropriated \$5 million in state funds, but also millions in similar federal funds intended to keep working lands working. Currently, most of the federal funds dedicated to agricultural preservation are going to other states; Oregon has received only 0.4% of these funds because the state did not have a matching program.

"For over 20 years, I've worked within Oregon's land-use system to promote wise development and protect farmland and open spaces. Despite the strength of that system, we continue to lose farmland across the state. The Oregon Agricultural Heritage Program will help reverse the trend, support local economies, and conserve wildlife habitat and water quality," said Representative Ken Helm (D-Washington County).

"Many of our farmers and ranchers are approaching retirement and looking to pass on their operations to the next generation. This fund will help ensure Oregon's farmlands stay in production, supporting clean air, clean water, wildlife habitat, rural economies, and our Oregon way of life," said Rep. Mark Owens (R-Baker, Grant,



The Oregon Agricultural Heritage Program is designed to support farmers and ranchers like Woody Wolfe, a sixth-generation farmer in Wallowa County who is taking steps to conserve his family's ranch at the confluence of the Lostine and Wallowa rivers. Photo by Rick McEwan

Harney and Malheur counties). According to <u>research from Oregon State University</u>, nearly two-thirds (10.45 million acres) of Oregon's agricultural lands <u>will change hands</u> in the next 20 years due largely to intergenerational transfer. "It's important we keep Oregon's working lands working," Owens added.

OAHP includes four grant programs:

1. Working Land Easements: Compensating farmers and ranchers for voluntarily protecting their land and its natural resource values. Landowners are compensated for the monetary value of the development rights and the land remains in production.





























- 2. Conservation Management Plans: Compensating landowners for implementing practices that conserve soil and water and enhance existing habitat.
- 3. Succession Planning: Helping landowners pass their land onto the next generation.
- 4. Technical Assistance:
 Supporting non-state
 organizations to implement
 the grant programs.

A diverse coalition of agricultural and conservation groups championed OAHP and the effort to fund it.

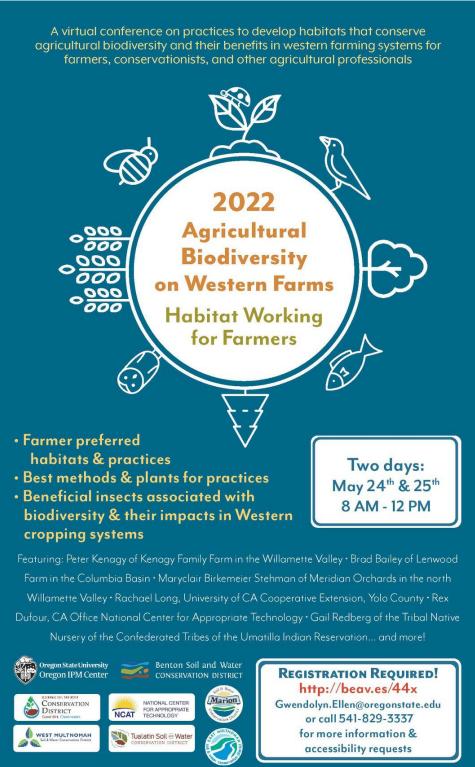
In the U.S. Department of Agriculture's most recent ag census, data showed that:

- Oregon lost 340,000 acres of farmland from 2012-2017, more than three times the number of acres lost from 2007-2012 (98,000 acres). This area is significantly larger than the entire Portland Metro Area and greater than all of Oregon's 10 largest cities put together.
- Since 1997, Oregon lost nearly 10% of its farmland (9.6%).
- The number of mid-size and large farms (between 50 to 1,999 acres) continued to decrease, a consistent 20-year trend.

The next ag census, measuring years 2018-2022, is expected to be published in 2024.

"The amount of farmland lost in Oregon keeps growing. It's a disturbing trend. We are grateful to the legislature for stepping up to help farmers save their farms," said Kelley Beamer, executive director of the Coalition of Oregon Land Trusts.

History of the Oregon Agricultural Heritage Program (OAHP): Governor Brown signed a bipartisan bill authorizing creation of OAHP in September 2017. OAHP offers a suite of voluntary tools including grants for permanent working lands conservation easements and 20- to 50-year covenants, and succession and conservation management planning.



Organic Nutrient Management for Vegetable Production: a new online course for farmers and other professionals

By: Nick Andrew, Organic Extension Program, Oregon State University

Nutrient management—
providing crop nutrients in
the right amount and at the right
time—is one of the most important
aspects of managing a farm. This
course is designed to improve your
nutrient management skills, and
reach the production and profit
goals for your or your client's farm
business. In this course, we use
the word organic in its broadest
sense to indicate an ecological,
whole-system approach to nutrient
management.

Organic Nutrient Management for Vegetable Production is a new self-guided course that is now available through OSU's Professional and Continuing Education program. Registration is currently \$25 and the course is available on demand at any time. You will have access to an instructor if you have questions as you work through the material.



established between rows of fall cabbage at 47th Avenue Farm. It reduced mud problems during harvest, and this spring the nitrogen from this cover crop will help to fertilize the next crop. Photo by Nick Andrews

You will develop a whole farm perspective for making nutrient management decisions, and learn to evaluate different organic nutrient sources for their nutrient content, plantavailable nitrogen, soil building capacity and other characteristics. Course activities will teach you how to test soil, interpret the results and develop cropand site-specific nutrient management plans. You will establish a framework for making decisions about nutrient management that spans multiple growing seasons and balances crop performance, profitability and environmental sustainability.

What You'll Learn

This course covers the key concepts, principles and practices of organic nutrient management. It consists of five modules, we expect each module will provide two to four hours of professional education depending on how thoroughly you work through the material:

- 1. Introduction to Organic Nutrient Management
- 2. Organic Amendments and Fertilizers: What Types Are Best for Your Farm?
- 3. Pre-Season Planning and Management
- 4. Organic Nitrogen Management
- 5. Nutrient Management for Long-Term Success

This course is intended for managers of small-to medium-scale diversified vegetable farms, professionals who work with them, and other students of agriculture. Although the course focuses on organic nutrient sources and methods, it is not just for organic farms. Anyone interested in developing a more holistic approach to nutrient management will benefit from taking this course.

This is an intermediate- to advanced-level course, so we recommend that participants have at least four years of farming under their belts or some academic background in agriculture. Beginning farmers are welcome to join, but may find some of the material challenging. The course was written by Nick Andrews, Clare Sullivan and David Chaney, and was reviewed by Dan Sullivan and Doug Collins.

Oregon Agriculture Food And Fiber: An Economic Analysis 2021

or more than 20 years the Oregon State University's College of Agricultural Sciences has partnered with the Oregon Department of Agriculture to produce and update an analysis and report of the economic impact of agriculture in the state.

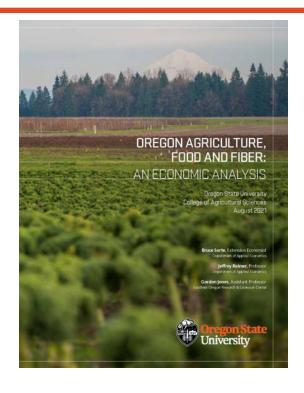
We are pleased to present the 2021 economic impact report which underscores the vital role agriculture and the food system play in the health of Oregon's economy and its communities.

More than 531,000 jobs are associated with the agriculture, food and fiber industry with a total farmgate production of \$5.5 billion and overall economic impact from the food system of \$42 billion. It is a part of our culture and our values in Oregon. 95% of our farmland is family held and 60% of all private land in Oregon is used for farming. In addition, the global reach of our agricultural system continues to grow, with exports up 25% since 2015.

Agriculture is not only the backbone of our economic and social identity but it is a source of innovation and creativity with more sustainable farming and ranching practices and new foods and products being developed constantly as we source from the 225 agricultural commodities produced in Oregon.

This detailed report is a resource for policy makers and the public to better understand the economic value and importance of agriculture and our food system in Oregon. When we invest in the future of a resilient and sustainable agricultural system, we invest in a vision to make tomorrow better.

2021 Economic Impact Report (PDF)



OREGON AG, FOOD AND FIBER AT A GLANCE





Online Spring Workshop Series for Equine Owners

Each online class is \$5.00, register for one or for all. Questions? Contact: Teagan.moran@ oregonstate.edu

Tuesday, April 12 6:00-7:30 PM **Equine Pasture Management and Pasture Nutrition**

Presenter: Dr. Shayan Ghajar, Assistant Professor, OSU Extension Service Small Farms Program

From brood mares to retired easy-keepers, forage is the foundation of all equine nutrition. In this class, learn about pasture species, grazing systems, pasture nutrition for equine & environmental health.

REGISTER HERE

Tuesday, April 26 6:00-7:30 PM

Managing Mud and Manure on Horse

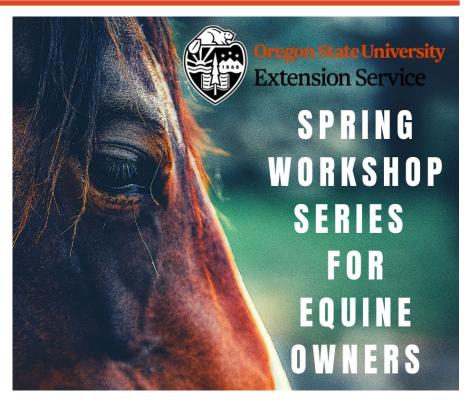
Properties

Presenter: Melissa Fery, Associate Professor, OSU Extension Service Small Farms Program The amount of mud and manure that can accumulate on horse properties can feel overwhelming. In this class we will explore options to establish sacrifice areas, build all-weather paddocks and compost manure to benefit your horse's health and your property and hopefully your own frustration next winter REGISTER HERE

Tuesday, May 10 6:00-7:30 PM

Dangerous Plants in Pastures and Paddocks

Presenters: Hayley White, Program Coordinator and Melissa Fery, Associate Professor, both with OSU Extension Service Small Farms Program.



Horses can encounter poisonous plants and other vegetation that can cause injury. This class will teach you how to identify some of the common dangerous plants found in Western Oregon and how to manage them on your small acreage horse property.

REGISTER HERE

Tuesday, May 24 6:00 -7:30 PM

Don't Panic – What to do if Your Horse is Injured

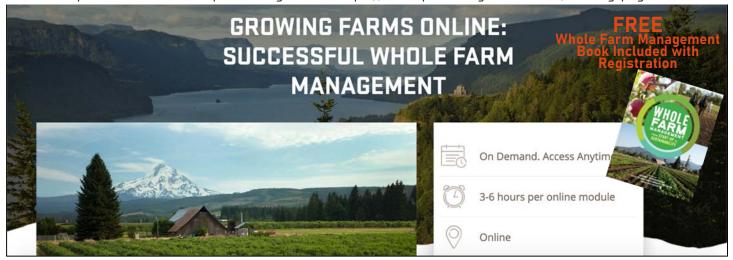
Presenter: Dawn Sherwood, Horse Specialist, OSU Extension Service Animal Science Program

It is stressful with your horse is bleeding or injured and often we're not sure what to do. This class will cover some basic first aid procedures, help you determine when to call your veterinarian and some steps you can take until your veterinarian arrives.

REGISTER HERE

Online Courses offered by us - Sign-up NOW!

Available anytime online and self-paced. Register at: https://workspace.oregonstate.edu/catalog-page#all-courses



To Growing Farms: Successful Whole Farm Management https://workspace.oregonstate.edu/course/growing-farms-online-successful-whole-farm-management



To Pasture Management: https://workspace.oregonstate.edu/course/pasture-and-grazing-management



To Ecological Strategies
https://workspace.oregonstate.edu/course/growing-farms-short-course-ecological-strategies-for-managing-insects-on-a-farm

Register now to have access to all of the 2022 OSU Small Farms Conference Session Recordings

View all of the session recordings (over 25) from the virtual OSU Small Farms Conference. Access will be granted through May 18th, 2022. Access can only be granted with a paid registration.

- What's Happening With Oregon's Local Food Hubs?
- Introductory Hydroponics
- Stewarding Resilient Seeds For A Hotter, Drier Future
- Just Getting Started? Exploring What to Farm
- Drought, fires, floods: federal & state assistance programs
- Roundtable: Meet Your Local Regional Small Farms Team
- Roundtable: Oregon USDA Beginning Farmer Rancher Program
- Roundtable: Energy Efficiency and Renewable Energy Assistance for Oregon Farms & Ranches
- Adding Agritourism: On-Farm Lodging
- Wash, Rinse, Succeed! Farmer stories of water use and flow during post-harvest
- The Art & Science of Pasture Finishing Ruminants
- Basic Concepts in Forming and Maintaining a Nonprofit Organization
- Adding Agritourism: Farm to Table Dinners
- Field-to-Market: Producing & Selling Farm Direct, Processed Foods in Oregon
- Western SARE: Should My Farm Apply for a grant?
- Need to renovate your pasture? Let's talk options.
- Oregon Department of Agriculture Agricultural Drainage Channel Maintenance Program
- Understanding and Managing for Income Tax
- Pastures in a Changing Climate
- Applied Mycology: Doing On-Farm Research
- What does farming for climate resilience look like in Oregon?
- Hopi Dry Farming: 2000 Years of Resiliency
- Cover Crops in Vegetable Rotations
- Small Farms and Community Food Systems at the Oregon Legislature
- Mark Bittman Talks to the Heirloom Collard Project

We are offering a special for the remainder of April. Use code DAYLIGHTSAVINGS for \$15 off the virtual registration.

https://blogs.oregonstate.edu/smallfarmsconference/

