

Oregon Small Farm News

Oregon State University Small Farms Program

GATHERING TOGETHER

FARMS

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CABBAGE

SALAD GREENS

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Cover Photo:

Local Lunch at the 2017 Small Farms Conference.

Photo by: Deanna Lloyd

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Welcome Clare Sullivan

Clare Sullivan joined the OSU Small Farms Team in February 2017 as the Small Farms and Community Food Systems Extension Agent in Central Oregon. Clare is currently exploring the region she covers (Crook, Deschutes, Jefferson counties and Warm Springs) and meeting her new stakeholders. She very much enjoys working with growers in small, medium and large sized operations, and is excited to find out local growers' needs to address and strengthen the local food system.



Clare moved to Central Oregon from the Willamette Valley, where she served growers in Linn, Benton and Polk counties as the South Valley Field Crops Extension Agent. As an Extension Agronomist Clare's work focused on educational programming, on-farm demonstrations, and applied research to address the needs of seed crop, grain, mint, and oilseed producers in the Southern Willamette Valley. She looks forward to bringing the Extension and research skills she acquired into her new position within Small Farms.

Clare moved to Oregon in the summer of 2014 from the Fraser Valley in British Columbia where she worked as a Soil Research Technician with the Ministry of Agriculture. In BC Clare recruited 100 farmers from different commodity groups to coordinate a Valley-wide soil nutrient survey, and gained a great appreciation for working with growers. Before starting at the Ministry of Agriculture, she completed her MSc in Soil Science from the University of Saskatchewan. Clare's research focused on reducing tillage in organic grain production and the effect on nutrient cycling and soil quality. Her interest in Agriculture started as an undergraduate student at the University of British Columbia where she completed her BSc in Agroecology.

Clare has also worked as a soil consultant, teaching and research assistant, pest management scout, fruit picker, Market Garden worker, landscaper, and yoga teacher. Originally from Guelph, Ontario, she enjoys distinct seasons of weather. Her interests include growing her own food, cooking and canning, swapping ideas with farmers, exploring the outdoors, surfing, international travel, dancing, and practicing French and Spanish when possible. 

Taking the Research on the Road: The Future of Oregon's Farmland

Contributed By: Nellie McAdams, Farmland Preservation Program Director, Rogue Farm Corps

Almost two-thirds of Oregon's agricultural land will be changing hands in the next two decades, but the vast majority of Oregon farmers and ranchers have not formalized plans to pass their land and businesses to the next generation.

This is just one of the sobering findings of a research report published in September 2016 by Oregon State University, Portland State University, and Oregon nonprofit Rogue Farm Corps – [*The Future of Oregon's Agricultural Land*](#).

But do these statistics ring true for Oregon's farmers, ranchers, and agricultural landowners? What does farm and ranch succession look like on the ground? What education, policies, and programs can help address the issues that are arising?

To help answer these questions and share the findings with farmers and ranchers themselves, one of the researchers – Nellie McAdams, Director of the Farm Preservation Program [hyperlink to: <http://www.roguefarmcorps.org/farmpreservation>] at Rogue Farm Corps – went on the road. Since January, she has travelled 3,445 miles within Oregon, visiting 21 communities in 21 counties, presenting to 918 people, including 642 farmers and ranchers. She has 10 more events planned for April.

Ms. McAdams' visits include research presentations to Farm Bureau, Soil and Water Conservation District, and Livestock Association meetings, as well as full succession planning workshops with presentations from attorneys and landowners who have been through the process. She has heard confirmation of at least ten succession plans that were begun as a result of these efforts.

And so far, the research has run true with Oregon farmers and ranchers. "It's clear that they identify with these challenges," said McAdams. "They see their neighbors' farms being sold off after they pass away



Land Succession Workshop in Bandon, Oregon.
Photo provided by Nellie McAdams

and they fear the same thing will happen to them. But they don't have a successor, or they don't feel ready to address the family issues that need to be resolved in order to plan, or they just don't know where to start."

Said one Tillamook farmer: "It's a burden. It's paralyzing being the 4th generation and having the 5th generation coming up, but not knowing if it'll work out."

Why Succession Can Be So Challenging

For many farmers and ranchers, their occupation is their identity. It's difficult for them to retire from being themselves. This causes farmers and ranchers to work extremely hard, far past normal retirement age for many professions, and idealize dying in the saddle or on the tractor. But it also makes it more difficult for them to pass the reins: to transition management and financial roles and decisions to the next generation in time for them to become confident successors of the business.

Many farm children do not necessarily want to return to the homestead and run the family business, especially if the business is not financially successful. When this is the case, their parents often do not plan for succession, thinking that there is no point and

that their kids will simply divide the estate equally. Farms and ranches, being land-rich and cash-poor, often have to sell off land in order to divide the assets between heirs, especially if planning has not been done. This fragments farms into smaller parcels that will be more difficult to earn a living from and might become more vulnerable to development in the future than larger contiguous blocks.

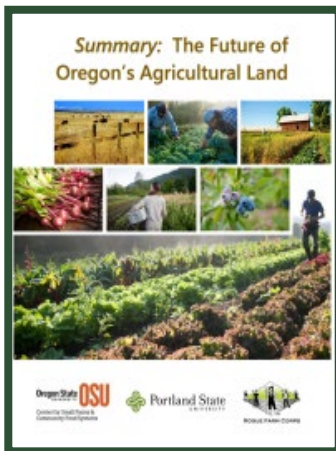
Meanwhile, many first-generation farmers and ranchers would gladly begin to work into existing farm businesses and eventually earn management and ownership roles. It is exceedingly difficult for these beginning farmers and ranchers to start and grow a business if they do not stand to inherit land and infrastructure. They must have the training and experience, to build a track record and accumulate the collateral, to get the financing to buy the land and infrastructure, to scale up so that they can hire the employees, to eventually make a living wage. This can require decades of back-breaking work and a few, well-timed lucky breaks.

Increasingly, farmers are looking for successors outside of their families. These might be farm managers or interns who have become familiar with the land and love stewarding it. Passing land to such successors can take a great deal of thoughtful planning and a lot of legal work, but can be one way of passing on a legacy.

Working Lands Easements

Another way to preserve the farmer's legacy while helping plan for succession and helping beginning farmers access land is to convey a working lands easement. This is a conservation easement where the landowner sells or donates property rights that they would not use on their operation anyway (like permitted residential development, aggregate mining, or any of the 50+ exceptions to Exclusive Farm Use zoning) in exchange for cash or a charitable deduction.

A working lands easement not only preserves the land for agricultural use, but provides a cash-poor farmer



with liquidity from an otherwise illiquid asset (real estate), and also reduces the fair market value of the property for the next generation of farmer or rancher. In Oregon, nonprofit land trusts and governmental entities like Soil and Water Conservation Districts can hold easements, creating a partnership between conservation and working landscapes.

There has been growing interest in these working lands easements, and there is currently legislation that would help support this tool. House Bill 3249, the Oregon Agricultural Heritage Program, would fund easements and other voluntary conservation measures, as well as farm succession planning.

"I see it as a win-win-win for keeping our farm land base, helping agricultural landowners with succession, and helping our beginning farmers and ranchers access land," said Ms. McAdams.

The research team of OSU, PSU, and Rogue Farm Corps are committed to bringing more information and tools to the table to address the potentially large-scale challenges related to unplanned farmland succession in Oregon. They are applying for additional funds to support research and extension efforts, and collaborating with fellow resource providers and stakeholders through the Oregon Community Food Systems Network [hyperlink to: <http://ocfsn.net/>] and other coalitions.

"Healthy food systems depend on healthy farm businesses," said Lauren Gwin, one of the lead researchers for the farmland report and the Associate Director of OSU's Center for Small Farms and Community Food Systems. "And for many of Oregon's farms with aging operators, it's now or never in terms of providing resources to help them with succession." *✍*

Dry Farming Collaborative: *Innovating and adapting to a changing climate*

By: Amy Garrett, Oregon State University Small Farms Program

In response to escalating concerns about climate change, drought, and reduced summer water availability, the OSU Small Farms Program launched the Dry



Farming Project in 2014 with support from the USDA National Institute for Food and Agriculture Beginning Farmer and Rancher Development Program. The project started small with a few case studies and demonstrations, and has had a growing impact over the past three years leading to the establishment of the Dry Farming Collaborative (DFC) in 2016.

The DFC is a group of farmers, extension educators, plant breeders, and agricultural professionals partnering to increase knowledge and awareness of dry farming management practices with a hands-on participatory approach. This bottom-up approach employs the knowledge and experience of the agricultural community in identifying adaptive strategies while simultaneously assessing and integrating them on the ground. The original function of the DFC was to facilitate farmer-to-farmer information sharing as growers started to experiment and establish their own dry farming trials.

Now the OSU Extension Small Farms Program is supporting the DFC in multiple ways:

- **Facilitating communication and creating space for information sharing:** DFC Facebook group (200+ members), email list (90+ members), field days, winter meeting and coordinating conference presentations with DFC members.
- **Creating dry farming resource hub on the OSU Small Farms website:** Will include articles, books, presentations, upcoming events, and other

resources (<http://smallfarms.oregonstate.edu/dfresources>).

- **Coordinating participatory research:** Developing protocols and tools to assist with data collection, sourcing plant material for dry farm trials and distributing to trial hosts.
- **Developing resources to assist growers new to dry farming:** ‘Dry Farming in the maritime Pacific Northwest’ extension publication series is underway and will begin with topics such as site assessment and selection, soil preparation and planting, case studies, and variety trial reports (expected release will begin in 2018).

In 2016, twenty Oregon farmers in the DFC conducted exploratory trials involving site selection and crop varietal choice (tomatoes, potatoes, squash, melon, dry beans), took notes on crop varietal performance, and captured pictures and videos, many shared on the DFC Facebook page. The first winter meeting was held in December 2016, where DFC members shared results from last year’s trials, and discussed future directions for this project.

Thirty growers from all over Western Oregon have signed up since then to host dry farming trials in 2017 on a total of 12 acres. DFC members, including several plant breeders, provided input on the varieties of interest and the following will be replicated across multiple sites this year:

Tomatoes (ungrafted and grafted - sponsored



DFC Winter Meeting at Mary's River Grange
Photo courtesy of Amy Garrett

our water supply and agree that exploring alternatives to irrigated agriculture is a necessity for the sustainability of their farms. Each member of the DFC brings expertise and innovations, which accelerate collective learning. Join us for our field days in August to see what these crops and management practices look like in the field!

Field day details and registration information will be released in the summer edition of Small Farm News. For more information join

the Dry Farming Collaborative Facebook group or visit: <http://smallfarms.oregonstate.edu/dry-farming-demonstration>. ☞

by Log House Plants): Big Beef, Early Girl, Dirty Girl, Cour di Bue, Perfect Rogue, Stupice

Potatoes: Russet Norkota, Bintje, Red Pontiac, Ozette, Chieftain, Desiree, Yukon Gold

Zucchini: Costata Romanesco, Dark Star, Goldini Zucchini, Genovese, Rugosa Friulana

Squash: Lower Salmon River, Hidatsa, Zeppelin Delicata, Winter Sweet, Little Gem

Melon: Rich Sweetness, Sweet Freckles, Eel River, Piel de Sappo, Christmas Watermelon

Corn: Open Oak Party Mix Dent, Cascade Ruby-Gold, Painted Mountain, Papas Red, Magic Manna

Dry Beans: Beefy Resilient Grex, Whipple, Early Warwick, Volga German

Many DFC members will also be conducting exploratory trials with other crop varieties and various management practices. More than 10 sites will also be hosting tours for our field days in August, which will be the focus for the 2017 Growing Resilience: Water Management Workshop Series (supported in part by Western SARE).

DFC members share concerns about the future of

Dry Farming Collaborative Field Days

Mark your calendars for Tuesdays in August!

August 1st - Corvallis

August 8th - Springfield

August 15th - Southern Oregon

August 22nd - Elmira/Veneta

August 29th - Philomath

Food Hubs and Wholesale Market Development

By: Matthew Buck, Coordinator, Oregon Community Food Systems Network

A “Wholesale Market Development” tour hosted by [the Oregon Community Food Systems Network](#) identified both opportunities and challenges for farmers trying to scale from direct to wholesale markets, and for distributors and retailers trying to source more local products.

Local organizers for the tour included THRIVE and Rogue Valley Farm to School. Support for the event came from Meyer Memorial Trust and the Corvallis Environmental Center.



Fry Family Food Hub's Licensed Commercial Kitchen.
Photo courtesy of Lauren Gwin

Tour stops included two local farms ([Fry Family Farm](#) and [Wandering Roots Farm](#)), two handling facilities ([Fry Family Farm Food Hub](#) and [Naumes, Inc.](#)) and one retail store ([Cartwright's Valley Meat Company](#)).

The Fry Family Farm Food Hub is a recently completed a \$1.2M project to develop an on-farm produce-washing and sorting line, cooler and freezer space, loading dock, commercial kitchen, and retail space. Family members Ashley and Amber Fry stressed the importance of planning to determine the appropriate design, capacities, and scale of the facility to ensure full utilization.

Panel discussions were also held with wholesale distributors ([Charlie's Produce](#), [Organically Grown Company](#), and [Rogue Natural Foods](#)), retail food buyers ([Ashland Food Co-op](#), [Natural Grocers](#), and [Ray's Marketplace](#)), and farmers exploring wholesale markets ([Blue Fox Farms](#), [Rainshadow Organics](#), and [Shasta View Inc.](#)).

Speakers on the distributor and retail panels affirmed that there is growing consumer demand for local

products. It can be challenging finding the right fit though both for buyers and farm suppliers. As Chris Jagger of Blue Fox Farms said, “With wholesale, you have to bring your ‘A Game.’”

Issues of concern raised by panelists included the quality of produce, consistent supply, the importance of cosmetic appearance and the challenge of finding value for seconds and thirds, and meeting requirements for food safety.

Farmers noted the importance of telling their story and using websites and social media to enable a connection with the end buyer even with distribution.

Both farmers and food processors also called out increasing challenges meeting labor needs.

Tracy Harding of Rogue Valley Farm to School, and a recent graduate of the Food Hub Management certificate program at the University of Vermont, put together the following list:

Resources for people interested in learning more about food hubs:

- **The Role of Food Hubs in Local Food Marketing**
https://www.rd.usda.gov/files/NY_Foodhub.pdf

- **Running a Food Hub: Lessons Learned from the Field**

https://www.rd.usda.gov/files/SR_77_Running_A_Food_Hub_Vol_1.pdf

- **Running a Food Hub: A Business Operations Guide**

https://www.rd.usda.gov/files/SR_77_Running_A_Food_Hub_Vol_2.pdf

- **Food Hubs - Solving Local: Small-Farm Aggregators Scale Up With Larger Buyers**

[http://www.ngfn.org/resources/ngfn-database/knowledge/Food_Hubs - Solving Local.pdf](http://www.ngfn.org/resources/ngfn-database/knowledge/Food_Hubs_-_Solving_Local.pdf)

- **USDA Food Value Chains Creating Shared Value to Enhance Marketing Success**

[https://www.ams.usda.gov/sites/default/files/media/Food Value Chains Creating Shared Value to Enhance Marketing Success.pdf](https://www.ams.usda.gov/sites/default/files/media/Food_Value_Chains_Creating_Shared_Value_to_Enhance_Marketing_Success.pdf)

- **Fresh Connections: The Pilot Season of a Rural Food Hub**

<http://www.extension.umn.edu/family/health-and-nutrition/toolkits-and-resources/healthy-food-access/docs/fcfh-report.pdf>

- **Best Practices Guidebook: Food Hub Vendor Manual**

<http://open.alberta.ca/dataset/4ddcf67a-0893-4f20-b297-7310144c3e46/resource/b44478b7-e4a2-4e44-bf98-fc6c85ac1514/download/2016-Best-Practices-Guidebook--Food-Hub-Vendor-Manual-Agdex-843-2.pdf>

- **Best Practices Guidebook: Food Hub Grower Manual**

<http://open.alberta.ca/>

<dataset/11249ba5-defe-429d-b128-47dc66abdee0/resource/3f277e1e-5f67-4fd6-9e11-433393a7c136/download/2016-Best-Practices-Guidebook--Food-Hub-Grower-Manual-Agdex-843-1.pdf>

- **Sacramento Region Food Hub Feasibility Analysis**
http://valleyvision.org/sites/files/pdf/sacramento_region_food_hub_feasibility_analysis.pdf

- **Building Successful Food Hubs: A Business Planning Guide for Aggregating and Processing Local Food in Illinois**

<http://www.familyfarmed.org/wp-content/uploads/2012/01/IllinoisFoodHubGuide-final.pdf>

- **Food-Hub-Business-Assessment-Toolkit**

<http://www.ngfn.org/resources/ngfn-cluster-calls/assessing-food-hub-businesses>

- **Running a Food Hub: Assessing Financial Viability**

[http://www.rd.usda.gov/files/publications/SR 77 FoodHubsVol3.pdf](http://www.rd.usda.gov/files/publications/SR_77_FoodHubsVol3.pdf)

*Learn more about the
Oregon Community Food Systems Network
at <http://ocfsn.net> *



New produce washing and sorting line at Fry Family Food Hub.
Photo courtesy of Lauren Gwin

Research on Essential Oils to Control Snails & Slugs

Newly published research, by OSU Slug Specialist Dr. Rory Mc Donnell and collaborators, highlights the potential of essential oils for snail and slug control in crop production. The research, published in the Journal of Pest Science in 2016, tested eleven

oils and one terpene against the eggs and juveniles of the invasive snail pest, *Cornu aspersum*, using a dip method for potted nursery plants. Clove bud oil was found to be most effective. [See the journal abstract.]

Mc Donnell, who joined the OSU Crop Science Department in 2016, is now leading a series of new experiments with a variety of essential oils to test their effectiveness against slugs. What he and his collaborators learn has the potential to help all farms who struggle with slugs, but certified organic and biological farming systems, in particular.

Nick Andrews, Organic Extension Agent with the OSU Small Farms Program, will be working with Mc Donnell to make sure organic growers learn about the new research and potential new slug control options they may have in the future.

Learn more about Rory Mc Donnell here: <http://cropandsoil.oregonstate.edu/content/rory-mcdonnell>. 



Rory Mc Donnell
Photo from <http://cropandsoil.oregonstate.edu/content/rory-mcdonnell>.

Mc Donnell, R., J. Yoo, K. Patel, L. Rios, R. Hollingsworth, J. Millar, & T. Paine. (2016). Can essential oils be used as novel drench treatments for the eggs and juveniles of the pest snail *Cornu aspersum* in potted plants? Journal of Pest Science 89:549-555.

Abstract

The horticultural trade is an important pathway for the introduction and spread of invasive gastropods because potted plants are essentially portable microhabitats, which protect snails and slugs, especially buried eggs and juveniles, from desiccation and molluscicides. The identification of a drench or dip treatment would therefore be an important development in helping to manage this pathway. We assessed the potential of using eleven essential oils and one terpene against the eggs and juveniles of the quarantine snail pest, *Cornu aspersum*. Clove bud oil was most efficacious and based on Lethal Concentration 50 (LC50) values it was 22 times more toxic than the commercially available product Snail and Slug Away[®] which has cinnamon oil as its active ingredient. Importantly, at a concentration of 0.116 %, clove bud oil caused 100% mortality of *C. aspersum* eggs and juveniles in potted plants after 24 hr and was not phytotoxic. Although more expensive than a widely used metaldehyde product (Slug-Fest

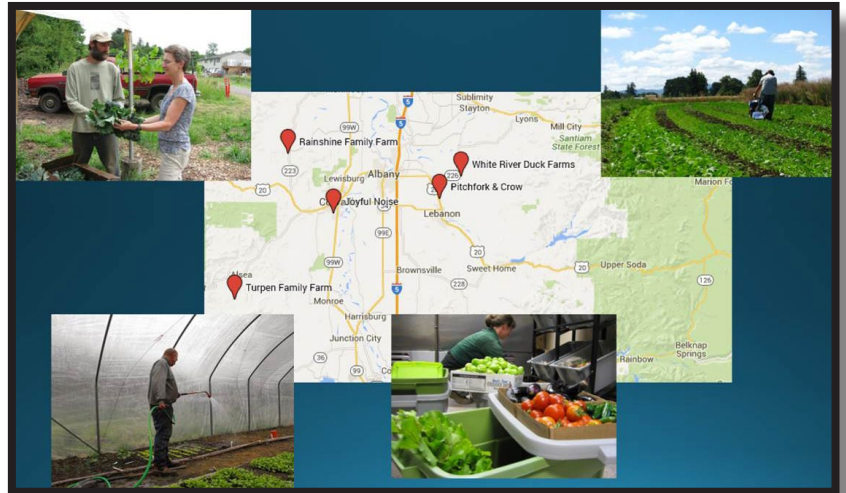
All Weather Formula) clove bud oil causes rapid mortality, is pleasant smelling, is non-toxic to humans and is exempt from pesticide registration requirements and pesticide residue tolerance requirements under federal law in the United States. This exemption would decrease the time and costs associated with bringing a new molluscicide to market, which has clove bud oil as its active ingredient.

For a pdf of the full article, contact Lauren Gwin, OSU Center for Small Farms & Community Food Systems, whose office is just down the hall from Rory's. lauren.gwin@oregonstate.edu

Small Farms and a Regional Food Bank Grow Community Food Security

By: Lauren Gwin, Oregon State University Small Farms Program

At this year's OSU Small Farms Conference, we heard about an innovative partnership between a regional food bank and local farms. Linn-Benton Food Share (LBFS), which serves Linn and Benton counties, began an "Intentional Growing Program" in the 2016 growing season. As LBFS Director Ryan McCambridge explained, the purchasing power of regional food banks is yet another way they can help build community food security, by supporting local, sustainable farms.



2016 Participating Farms.
Image courtesy of Ryan McCambridge

In 2016, LBFS contracted with five small, local farms to purchase an agreed-upon dollar amount of fresh, healthy produce on a regular basis over the season. But in an important twist on a typical supply contract, LBFS did not specify exactly which crops or specific volumes of those crops. This allowed the farms valuable flexibility, in case they had any production problems or delays due to weather or other factors.

Joyful Noise Farm, a new, organic farm located in Corvallis, was one of the four participating farms. Their contract with LBFS was for \$4500: ten weekly

deliveries of produce, each worth \$450, based on an average price of \$1.75/lb., with a total target weight of 2572 lbs.

"This program was invaluable to me as a first year farmer," Brooke Kaye said at the Conference. "Having a guaranteed market for my produce and income early in the season helped break down some of the barriers to starting a farming operation. It was also important to me to grow great food for people who don't often have access to local, organic produce."

The Intentional Growing Program is just beginning its second year, with 5 local, organic farms participating (2 Linn, 3 Benton). All farms participating are within the first 5 years of operation. Based on her experience the first year, farmer Brooke plans to streamline her delivery system as well as help LBFS improve its produce storage.

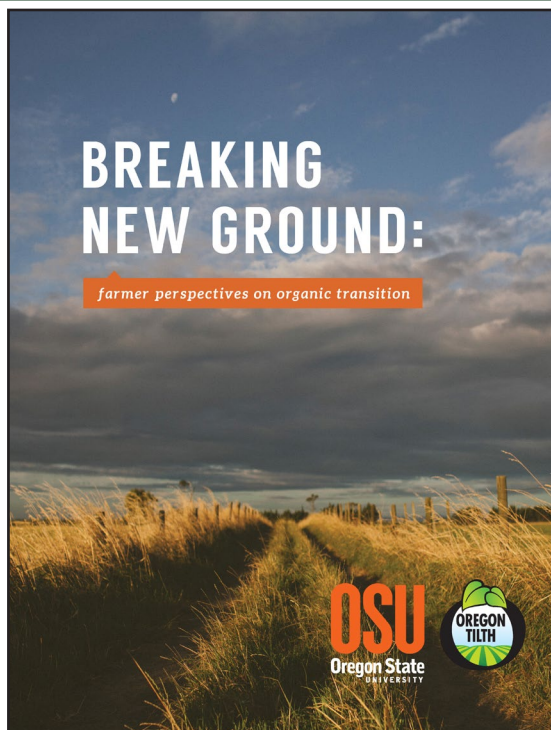
The idea is simple: everyone deserves fresh, healthy food regardless of their income level. Providing local, organic produce to emergency food clients means not only dignity in the quality of food itself, but further enhances the relationship between volunteer and recipient. *B*



Joyful Noise future farmers.
Photo courtesy of Brooke Kaye

New Report on Farmer Transition to Organic: Breaking New Ground: Farmer Perspectives on Organic Transition

Organic transition is a hot topic: despite increasing consumer demand for organic food and farm products and double-digit annual sales growth, U.S. organic production is currently flat and unable to meet demand. Organic food manufacturers and other buyers have reported difficulty sourcing enough certified organic food ingredients domestically.



In response, the organic industry, nonprofit organizations, universities, and public agencies are working on multiple levels to support farmers choosing to access the expanding organic market.

Breaking New Ground: Farmer Perspectives on Organic Transition, offers one piece of the puzzle: findings from a national survey of farmers about their experiences with organic transition. We asked farmers about their motivations to transition, the obstacles they face in doing so, and the resources and support that are most helpful during the transition process.

What we learned should be of interest to a wide range of stakeholders and service providers, including organic sector businesses, organic certifiers, academic and agency researchers, Cooperative Extension, organic advocates, and policymakers.

The farms and farmers represented in this study cover a wide range of farm sizes, crop types, farming experience, age, and approach to organic farming.

The structure of our survey allowed us to identify and compare results for four categories of farmers that together improve our understanding of the transition process:


- Farmers who have successfully been through the process of transition and are 100% certified organic.
- Farmers who are currently in the midst of transitioning to organic certification.
- Farmers with split certified organic and non-organic operations.
- Farmers who have decided not to pursue organic farming.

We found useful differences among these categories regarding motivations, resources, and support. However, our most compelling findings arose regarding obstacles – including those within a farm's sphere of influence and those beyond the farmer's control – and whether these groups of farmers view them as major, minor, or not an obstacle at all.

Farmers in our study echo long-standing concerns about costs, recordkeeping, on-farm production challenges, infrastructure, and access to profitable markets. Our results make it clear that there is plenty of work to do by a wide variety of organizations and agencies that specialize in crop research, infrastructure development, market development, and policy development related to the organic sector. Guided by compelling survey findings, we recommend strategies to support the success of farmers who choose organic.

We suggest that those interested and invested in organic transition look closely at the information in this report and identify what they can do to provide support, overcome obstacles, or promote policy to support transition and retain certified organic farmers.

The survey was a collaboration between Oregon State University's Center for Small Farms & Community Food Systems and Oregon Tilth, Inc. We surveyed more than 1800 farmers who participated in the U.S. Department of Agriculture's Natural Resources Conservation Services (NRCS) Environmental Quality Incentives Program (EQIP) Organic Initiative between 2010 and 2015, with a focus on transition.

The survey's response rate was more than 34% and represents more than 600 producers. 

Find the report here: https://tilth.org/app/uploads/2017/03/OT_OSU_TransitionReport_03212017.pdf
and here: <https://ir.library.oregonstate.edu/xmlui/handle/1957/60547>

Finally, a USDA Insurance Program for the Rest of Us: Whole Farm Revenue Protection

You know that farming is uncertain and that a wide range of problems, large and small, can occur that could reduce your expected farm income next year. Risk in farming cannot be eliminated. But there are proven ways to manage risk. How do you currently manage your farming risks?



A new federal insurance program, USDA's Whole Farm Revenue Protection (WFRP), now guarantees up to 85% of your expected farm income from all crop and livestock production, including specialty or organically grown products. It is available today in every county and covers mixed farming operations of all sizes, both established and beginning, including those that direct market part or all of their production.

The USDA and Oregon State University, in cooperation with Northwest Farm Credit Services, are offering a two-hour workshop to help farmers understand WFRP. In this workshop, you'll learn how WFRP can be the core of an effective risk management strategy for all farms, including those that may already have some other form of crop insurance. (WFRP expands on the existing Federal Crop Insurance program, which insures a single commodity.) Nancy Jensen, an Oregon small farmer, will describe via video how she benefits from using WFRP and what this insurance costs her. You'll learn how to estimate what the WFRP benefits might be for your farm, how to calculate what your cost would be and work through a loss scenario. You will also learn the next steps to take, if you decide to move forward and apply for WFRP coverage.

The Lane County area WFRP workshop is on
Monday, April 24th from 10 to noon at the **Lane County Extension Office**
996 Jefferson Street, Eugene, OR 97402.

Registration is not required and there is no fee to attend. Coffee & biscotti.

Kent Fleming
OSU Applied Economics Dept.

George Harris
Northwest Farm Credit Services

For more information:

- About WFRP: Download the [WFRP Fact Sheet](#)
- About the workshop: Contact Kent Fleming at (541) 285-5678 or kent.fleming@oregonstate.edu

On-Farm Food Safety Workshops for Oregon Produce Growers

By: Lauren Gwin, Heidi Noordijk, and Rachel Suits, Oregon State University Small Farms Program

At three workshops in February, small and mid-scale produce growers learned practical ways to incorporate food safety into daily practice – from on-farm production through point of sale – to satisfy new laws and evolving market requirements.

The OSU Center for Small Farms partnered with FamilyFarmed and nationally known trainer Atina Diffley to bring their farmer-designed food safety training program to Oregon. Diffley is a dynamic and highly effective trainer who draws on her three decades of experience as an organic farmer.

Farmers who attended the workshops really appreciated learning from another farmer who has taken her own “food safety journey” over many years, coming up with approaches that support and don’t detract from the farm and farming business.

As one mid-scale produce grower said afterwards, “Her lived experience as a farmer was incredibly important for me.”

Before the workshops, we reached out to farmers to identify priority questions and topics, then collaborated with Diffley to design and deliver three workshops: two for small-scale, direct market produce farmers, and one for mid-scale, wholesale-focused produce farmers.

The three workshops were attended by 75 farmers representing 53 farms. Participants included multi-generation farms and also new and beginning farmers, and both conventional and organic farms.

At the workshops, Diffley made it clear that the “how” of food safety isn’t one-size-fits-all. Small and mid-



Portland workshop at OSU Food Innovation Center
Photo provided by Lauren Gwin

scale growers, sustainable and organic growers, and direct market farmers need practical, cost-effective strategies that fit their farms and businesses. The best strategies are those that also improve product quality and, ultimately, profitability.

In post-workshop evaluations, 100% of attendees said they learned something useful and that they could now make more informed decisions about on-farm food safety. “Excellent presentation and information,” one

farmer wrote. “You made a daunting subject feel more approachable.”

Diffley also set aside time for farmers to talk to each other about different topics along the way, and farmers really appreciated that opportunity. As another farmer put it, “I enjoyed the time, information, materials, interaction with other people, and hearing stories from other farmers.”

Finally, even very experienced farmers took new ideas home. One farmer wrote, “I’ve been working in ag for 15 years and think of myself as very competent with food safety and still learned new things AND found value in the handouts.”

Financial support for the workshops was provided by USDA Risk Management. Learn more about FamilyFarmed and the On-Farm Food Safety Project here: <http://www.familyfarmed.org/our-work/food-safety/>. 



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Center for Small Farms & Community Food Systems

Changes Coming to Federal Ag Water Standards under FSMA

The Food Safety Modernization Act “Produce Rule” created new microbiological standards for agricultural water quality and required a specific testing regimen. The U.S. Food and Drug Administration, which wrote the rule, has been receiving copious feedback about problems with their approach.

In February, we heard that FDA was reconsidering the ag water standards. On March 20, FDA went public with the following announcement:

The U.S. Food and Drug Administration (FDA) is exploring ways to simplify the microbial quality and testing requirements for agricultural water established by the Food Safety Modernization Act’s (FSMA’s) produce safety rule [hyperlink to <https://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm334114.htm>] while still protecting public health.

Agricultural water can be a major conduit of pathogens that can contaminate produce. That is why FSMA’s produce safety rule sets microbial quality standards for agricultural water, including irrigation water that comes into contact with produce.

However, the feedback that the FDA has received is that some of these standards, which include numerical criteria for pre-harvest microbial water quality, may be too complex to understand, translate, and implement. These factors can be important to achieving high rates of compliance.

In response to these concerns, the FDA is considering how it might simplify the water standards. FDA intends to work with stakeholders as these efforts related to the water standards proceed.

It is important that as FDA implements FSMA, the agency strikes an appropriate regulatory balance and decreases regulatory burdens whenever appropriate. FDA remains committed to protecting public health while implementing rules that are workable across the diversity of the food industry.

Thanks to the National Sustainable Agriculture Coalition for sharing this announcement. You can learn more on NSAC’s website: <http://sustainableagriculture.net/blog/fda-fsma-water-standard/> and <http://sustainableagriculture.net/fsma/>

We at the OSU Center for Small Farms will track this process, with NSAC’s help, and report back to you in future editions of Oregon Small Farm News, as well as on our FSMA page: <http://smallfarms.oregonstate.edu/node/175900>

Protect Oregon's Brassica Crops: ODA's black leg rules aim to control a disease outbreak

By: Nick Andrews, Oregon State University Small Farms Program

Black leg is a serious disease of *Brassica* crops that has recently appeared in outbreaks in western Oregon. It threatens *Brassica* production in the Pacific Northwest. In an effort to manage the disease and get it back to low incident levels, the ODA developed black leg rules in 2014, and have revised them since. The current ODA rules are [here](#). Cindy Ocamb from OSU has published a *Clinic Close-up* with detailed biological and management information which is online [here](#). This article briefly summarizes the ODA black leg rules and the OSU Clinic close-up publication.

If cover crop brassica, forage brassica, and vegetable and specialty seed brassica growers follow the ODA black leg rules and manage the disease well, we may be able to return black leg to historic low endemic levels in western Oregon.

Highlights of the ODA Black Leg Rules:

1. All *Brassica*, radish, and mustard seed intended for planting in Oregon must test negative for black leg. Previous rules allowed small seed packets (0.5 oz or smaller) to be untested. Encourage your seed supplier to test any non-tested seed lots for black leg. Normally in canola and processing *Brassica* production, stock seed is tested by the seed companies; it is much cheaper to test parent

lots than for individual farmers to test each *Brassica* seed lot purchased.

2. Seed treatment is not required by the current ODA black leg rules, but seed treatment is recommended as a good management practice (see management information).
3. Crops should be monitored for black leg, and any disease outbreaks found should be managed. Farms with poorly-managed infections are subject to the Public Nuisance Abatement process.

Biology:

Black leg is seedborne but also survives and reproduces on infected crop residues. Clean seed and crop residue management are the most critical management strategies for black leg. Infected plants and crop residues left on the soil surface produce pseudothecia. During the fall, winter and spring in western Oregon, the pseudothecia release sexual ascospores into the air during dry periods in between rain showers. Ascospores are carried on the wind, and can cause new infections of *Brassica* plants. When an ascospore lands on a *Brassica* leaf, they will germinate and infect the leaf when conditions are cool and moist. New infections are small, indistinct light-green areas that are very difficult to recognize. These spots will enlarge and turn ashy gray with small black dots (Figure 1). **Look for these leaf spots on Brassicas in your field!**

These little black dots in the center of leaf spots are pycnidia, which produce asexual spores (conidia) that can spread with water. If you suspect black leg, you can collect infected leaves, put them in a ziplock



Figure 1: Leaf spots caused by black leg.
Photos by Cindy Ocamb (OSU Department of Botany and Plant Pathology)



Figure 2. Pycnidia oozing conidia (rain-splashed asexual spores).
Photos by Cindy Ocamb (OSU Department of Botany and Plant Pathology)

bag with a moist paper towel and place in the fridge. After a few days, look at the pycnidia to see if they are exuding a pinkish to purplish ooze of conidia (figure 2) – this is diagnostic for black leg.

These infections become systemic. The fungus can grow from a leaf spot down the stem of the plant, causing the classic black leg symptom, stem cankers (figure 3); conidia can also splash on to stems and then infect. These stem cankers result in the next generation of pseudothecia and ascospores via infected plant residues (figure 4).




Figure 3. Black leg on a broccoli stem (l) and the base of a kale plant (r).
Photos by Cindy Ocamb (OSU Department of Botany and Plant Pathology)

Management practices:

1. Use tested seed (ODA Black leg rules requirement).
2. Treat seed with effective fungicides or hot water. Hot water seed treatment tips from Wild Garden Seed and High Mowing Organic Seeds are [here](#). High Mowing Organic Seeds is offering steam seed treatment services for vegetable growers. Contact Tom Stearns directly for more information: Tom@highmowingseeds.com; cell: 802-224-6301; office: 802-472-6174 ext. 114.
3. Avoid fall and winter brassicas near fields with black leg-infected residues (figure 4) the previous year. Wait until woody residues from infected crops have decomposed.
4. Avoid *Brassica*, *Raphanus* or *Sinapis* species for cover crops or forages near vegetable or specialty seed crops.
5. Delay spring planting to avoid ascospores.
6. Use relatively wide crop spacing so that good airflow will dry the crop canopy quickly after rain or dew.
7. Control *Brassica* weeds (birdsrape mustard, field/hedge mustard, wild radish, wild turnip) in and around your field.
8. Monitor your crop with a hand lens. Leaf infections are easier to recognize when the crop is dry.
 - a. Look for black leg leaf spots (figure 1).
 - b. Look for black leg stem cankers (figure 3).
9. When infections are found, trim leaf spots and rogue plants, and/or use recommended fungicides. See the PNW Disease Management Guide for your crop for fungicide recommendations, the radish page is [here](#). Efficacy of organically-approved fungicides has not been confirmed yet.



Figure 4. Black leg on plant residues.
Photos by Cindy Ocamb (OSU Department of Botany and Plant Pathology)

OSU, WSU, the University of Manitoba (Canada), and Rothamsted Experimental Station (UK) are collaborating on a USDA grant proposal that will hopefully fund new biological and management research in the PNW. 

10. Chop and incorporate *Brassica* crop residues as soon as possible after harvest. This will help residue decompose quickly, and minimize ascospore release. During the epidemic, this is a reasonable precaution even if you don't identify black leg in your crop. Walk the field after cultivation to make sure tough plant stems and crowns aren't left on the soil surface.

Use tested seed, scout your field and prevent ascospore release. If you suspect black leg, samples can be sent to the OSU Plant Clinic. This is a destructive disease that especially threatens high value *Brassica* crops in Oregon. Please support the farmers who are trying to manage black leg.

Contact nick.andrews@oregonstate.edu or ocambc@science.oregonstate.edu if you have questions or comments about black leg management.

Presented by: OSU Extension Service Yamhill County, Rogue Farm Corps,
Yamhill Soil and Water Conservation District



Two-thirds of Oregon's agricultural land will be changing hands in the next 20 years, but the vast majority of Oregon's farmers and ranchers don't have succession plans.

So if you:

- Want to hear about the trends in farm/ranch succession, access to land, and land use in Oregon.
- Want to learn the steps for preparing a succession plan for your property.
- Want to hear the stories of local farmers who have gone through the process.

COME AND JOIN US FOR THIS FREE EVENT!



MONDAY
APRIL 24TH
5:30 PM - 8:30 PM

LOCATION:

Public Works Auditorium
OSU Extension Service
Yamhill County Office
2050 NE Lafayette Ave.
McMinnville, OR 97128

Dinner will be provided

**Contact Yamhill County
Extension to RSVP or
for more info:**

Heather.stoven@oregonstate.edu
503-434-7517

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Local Food Production and Sales Increase in the Rogue Valley

By: Regan Emmons, Coordinator, Rogue Valley Food System Network

Rogue Valley farmers and producers grew and sold more food to local consumers in 2015 compared to 2013 according to an ongoing research study conducted by Southern Oregon University (SOU). Many farmers are selling directly to people they know and using the internet to sell products in addition to using many other enterprises.

The *Rogue Valley Grower Economic Assessment of 2015*, conducted by Southern Oregon University (SOU) assistant professor Dr. Vincent Smith and his student Aaron Anderson, studied the economic impact of agriculture, which includes food grown, produced, and consumed in Jackson and Josephine Counties. It follows a similar assessment conducted for the 2013 growing season.

The data was collected from identified farmers and ranchers in Jackson and Josephine County via survey in early January of 2016. In total, there were 481 respondents, 52% of whom were correctly identified themselves as farmers, and 226 individuals provided complete economic assessment of their agricultural enterprises. The total sample represents 9.66% of individuals reporting sales during the USDA 2012 Census of Agriculture.

Other key findings include:

- Agricultural products grown were worth \$115 million according to the simple estimation and \$51 million according to the stratified estimation.
- The data shows consistency with the national trend of a lack of agriculture in the middle, whereby about a large number of very small farms reported annual sales of less than \$1K-25K, a few farms reported annual sales over \$100K, and very few in the middle of this range.
- Many farmers reported growing on far less land than total land owned, even after considering fallow land in crop production.
- There is a diversity of markets utilized by respondents. The Community Supported Agriculture (CSA) enterprise is the least common market utilized by



Siskiyou Sustainable Co-operative CSA packout.
Photo courtesy of Regan Emmons

respondents while wholesale and farm stands were the most commonly utilized enterprises.

- 72% of respondents who shared complete economic information sold 100% of their products in the Rogue Valley, with average sales of \$34,700 annually.
- The Rogue Valley produced 6.2% to 15.2% of the total food needs of the Rogue Valley.
- Rogue Valley producers grew and sold to local consumers 3.9% to 11% of the total food needs of the Rogue Valley.

An interest in measuring the success of programs to strengthen the Rogue Valley food system led to the creation of these survey efforts. The USDA Agricultural Census Data, collected every five years, provides detailed production information, but does not specifically address the extent to which food produced is marketed and/or sold locally or regionally. No other relevant data existed from available sources.

While this economic assessment study used several reliable survey projection tools, the small number of respondents in 2015 means the results should only be considered a rough estimation. The results of comparing the two growing seasons should also be

considered limited in its ability to detect trends. The study could become a robust tool to reliably track significant changes in the economic impact of agriculture in the Rogue Valley if assessments are conducted every two years and the number of participants increases.

The Rogue Valley Food System Network is a group of individuals, organizations, and businesses who have joined together to strengthen the local and regional food system of the Rogue Valley through cross-sector collaboration.

Please send questions or comments about this article to Regan Emmons, Coordinator, Rogue Valley Food System Network, coordinator@rvfoodsystem.org or 541-507-7742



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The 2017 OSU Small Farms Conference in Six Photographs

By: Garry Stephenson, Oregon State University Small Farms Program

The 2017 Oregon State University Small Farms Conference celebrated its 17th year with 1,000 farmers and food and farm oriented non-profit organizations. These six photographs tell the story. See you next year on February 24, 2018! 🍷



Left: Twenty-one concurrent sessions in English and Spanish on topics ranging from small farm and ranch production to community food system development.

Right: Great vendors and generous sponsors who reduce the registration fee and support conference speakers.



Right: Networking with farmers and the statewide and community-based organizations that support them.

Below: The opportunity to hear nationally known speakers who inform or challenge our thinking.



Below: An amazing lunch that included pork, fish, beans, grains, and vegetables from local farms and commercial fishers.



Below: Socializing and sampling local brews and wine during *Think with a Drink*.



All photography by Deanna Lloyd, Instructor, Department of Crop & Soil Science

How Has Cannabis Legalization Affected Small Farms so Far?

By: Maud Powell and Lauren Gwin, Oregon State University Small Farms Program

The legalization of recreational cannabis is changing the farming landscape in parts of Oregon. Oregon voters passed Measure 91 in November 2014, and recreational cannabis became legal in the state the following July. Prompted by anecdotal reports, especially from Southern Oregon, about unintended consequences for Oregon farmers, several OSU Small Farms faculty surveyed attendees at the recent OSU Small Farms Conference, on February 18th, in Corvallis.

We used a rapid assessment method known as “dot posters,” in which willing participants use dot stickers to answer one or more questions written on posters. The survey method is meant to be fun, interactive, and low-pressure, and was first used by OSU Extension Economist Larry Lev and Small Farms Specialist Garry Stephenson while conducting research on Oregon farmers’ markets.

We set up the posters in the lunch line at the Conference, so that all of the approximately 900 attendees would have the option to participate, and 155 did so.

Effects – positive and negative

The first question was whether “the legalization of cannabis production” had affected their farm. Seventy-nine percent of survey participants (122) said that it had little or no effect, while 22% (33) indicated that

Table 1: How has cannabis legalization affected your farm?

Negative Effects (esp. in the fall)	#
Increased land prices	15
Water: quality, availability; water rights violations	7
Harder to find labor	5
Increased input prices	4
Increased traffic	4
Safety concerns	4
Hard to find greenhouse space to lease	3
Farmers switching to cannabis	3
Increased negative community engagement	3
Misuse of good soil	3
More unpermitted dwellings	3
Lack of enforcement of the regulations	3
Travelers camping looking for work	2
Competition between enterprises	2
Lack of resources for property owners to make leasing decisions	2
Employees under the influence	1
Increased competition	1
Unknown impacts of increasing cash economy	1
Monocropping	1
Environmental impacts	1
Positive effects	#
Diversified income stream	9
Increased cash flow in local economy	6
Growing own supply saves money	5
They buy inputs (manure & hay)	4
Increased interest in growing things	4
Co-existing with cannabis grower brings infrastructure and financing help to property	4
New growing techniques adopted	4
Creation of new businesses	3
Increased viability of very small farms	3
Regulations may reduce safety concerns with illegal grows	3
Growing hemp increases income	3
More conversation between food growers and cannabis growers	2
Keeps existing ag supplier business in operation	2
Increased access to land	2
Increased property values	1
More labor available in Spring	1
You can make a living from your farm	1

it had “quite a bit” or “a lot” of effect. We then asked this latter group to say more about the effect on their farms, whether positive or negative, and we counted the number of times each effect was mentioned. Table 1 provides the full list of effects given by participants, with the number of mentions in column 2.

Most of the negative effects participants reported related to resource scarcity, for example: higher land prices and less land for growing food, less water for irrigation, more competition for labor, more expensive inputs, and less greenhouse space available for lease. Traffic and safety were also expressed as concerns, as was a “negative” impact on “community engagement.”

Positive effects participants reported included diversified and increased income, leading to improved economic viability;

increased local cash flow and the creation of new businesses; improved communication between food and Cannabis growers; increased property values; and the possibility of improved safety with the demise of “illegal grows.”

Our final question was, “what suggestions do you have to improve the situation?” People provided a wide range of answers, related to public policy (changes related to laws, regulations, implementation, and enforcement), education and communication, marketing, and more sustainable production methods (see Table 2).

Suggestions	#
A way to sell at farmers' market and edibles and plants	6
Cannabis needs to be embraced within the farming community so that we can share resources & knowledge to help cannabis production become healthier for people & the planet. It is farming & can be a great crop for small farms.	4
Cannabis growers should buy local, be a part of community	4
Use extra space effectively: lease	3
Federal legalization: get rid of black market	3
More education on fertility management	3
Awareness of water contamination	3
More research on growing methods	3
Local enforcement of water rights	2
Consumer education	2
Support from medical community	2
Better management of leftover soil	2
Decrease chemical inputs (rodenticides, etc.)	2
Better business plans	2
More resources	1
Easier, simpler explanation of regulations	1
Better communication between all parties	1
Come up with better process based on stakeholder input	1
Secede	1
Map location of operations	1
Legalize growing fiber hemp	1
Zoning/tax funds restrictions	1
Acreage minimum	1
Eliminate medical grows	1

Table 2: What suggestions do you have to improve the situation?

Survey limitations and next steps

Our dot survey allowed us to hear directly from farmers all over Oregon about the wide range of positive and negative effects related to cannabis legalization, as well as their creative ideas for improvement where needed. The survey design did, however, have some shortcomings. First, we did not ask participants where their farms are located, which would have shed light on which parts of the state have been most effected.

Southwestern Oregon, for example, with its hot, dry summer and autumns, provides an ideal climate for production. According to statistics from the Oregon Liquor Control Commission, one-third of large commercial outdoor marijuana grows are in Jackson County alone (Medford Mail Tribune, September 26, 2017). In addition, by keeping the first question simple, asking whether or not a farm has been affected by cannabis legalization, we don't know whether the "yes" answers reflect positive or negative effects. We can extrapolate somewhat from the actual lists of effects and how often each was mentioned.



Conducting the dot survey at the OSU Small Farms Conference.
Photo courtesy of Garry Stephenson

Because OSU receives federal funds, faculty and staff are not legally permitted to provide information on any aspect of production, processing, and marketing of cannabis. However, cannabis production is clearly affecting Oregon agriculture. Our survey sought to shed light on the opportunities and challenges that cannabis legalization may be creating for small farms in Oregon.

The most significant finding from this initial survey seems to be that cannabis legalization is affecting at least some farms in multiple ways, both positive and negative, and that the situation is complicated and worthy of further study. Additional research may be most useful regionally, in areas of the state most affected.

In Southern Oregon, for example, the Rogue Valley Food Systems Network is convening groups of stakeholders, including land use planners, cannabis and food producers, community groups and agencies to explore similar questions and work towards community-based collaborations and problem-solving.

Many thanks to the Small Farms faculty and additional volunteers who helped implement the survey at the Small Farms Conference. Many people, many dots, and a lot of conversation.

Reflections of a SARE Fellow

By: Dr. Susan Kerr, WSU Regional Livestock and Dairy Extension Specialist

The 2014-2016 cadre of SARE Fellows visited numerous farms in Arkansas, Nebraska, Idaho, and West Virginia to study sustainable agricultural practices. The Fellows themselves were from Florida, Maine, Missouri, and Washington (see www.sare.org/Professional-Development/Fellows-Program/About-the-Fellows for more info); they overlapped with eight other Fellows who were either starting or ending their two-year study period.

The various locations visited, diverse enterprises studied, and range of farming practices employed ensured exposure to a cross section of agricultural business with varying degrees of sustainability. The Fellows learned to use the “Reading the Farm” assessment tool, which provides a framework for holistic evaluation of farms using the strengths, weaknesses, opportunities, and threats (SWOT) approach.

Sharing some of the lessons learned from farms visited during the SARE Fellows program in this article may be useful to prospective small-scale producers, beginners, and even experienced producers who are considering making changes to their enterprise(s). These reflections are shared using the categories of the Reading the Farm process: production and processing; social and quality of life; environmental; and marketing and economics. Major take-away messages and a farm example is included for each.

Production and Processing

By far, the most important lesson learned regarding production and processing was how important it was for farms to *focus on profit centers* and what they did well. Although diversification is wise and can help reduce risk of the loss of single crops, many farms overdiversified and ended up doing few things well (or even profitably). For long-term success, enterprises that are sustainable environmentally, socially, and economically are a must.

Regardless of the crop produced, farmers must be knowledgeable about and employ *best management practices* (BMPs) for that crop. Irrigation, pest control, fertilization, season extension, and harvesting practices used should be state-of-the-art for that crop, applying the results of relevant research for optimal production efficiency. The differing levels of efficiency between farms was remarkable and mostly depended on the operator’s knowledge and use of BMPs.



Production and Processing

Farm A: More is Less

Farm A did not lack for start-up capital. This second-career farmer had a very lucrative first career and used his extensive savings to fund his new passion for farming. However, he did not limit production to crops he grew well and were profitable—he kept expanding and experimenting as additional crops caught his interest. He did not abandon previous crops, just kept adding more and more, delighting his CSA customers but overwhelming his limited labor force. Some crops were poorly-suited to local conditions, not profitable, had no local market, or required too much labor to be feasible. Due to poor crop performance and inefficiencies, more and more savings had to be pumped into the operation to keep it solvent. Long-term sustainability was doubtful without re-focusing efforts on profit centers and abandoning production “whims” that were hard to justify for this new operation.

Farm A. Already struggling to keep up with an extensive number of crops for its CSA, farmers’ markets, and restaurant customers, the owner of Farm A decided to add yet another new crop on an underutilized section of the farm: mushrooms
Photos by Susan Kerr

Social and Quality of Life

Nearly every farm mentioned something about *family dynamics*.

On the most successful farms, the families had a shared vision and were working toward a common goal. Other farms were struggling, often due to the loss of passion and enthusiasm for the work by one or more partners, or conflicting goals. Some partners are open to and excited by new opportunities and want to explore them and others say NO to trying anything new or different. As is true in all relationships, compromise on both sides is often needed to keep a farm moving forward.

Working conditions are important for employers and employees. Employee turnover is very costly, so anything reasonable that can be done to prevent loss of trained employees is a good investment. Adding simple mechanization wherever possible to decrease labor and increase efficiency is warranted. Keeping worker comfort in mind, particularly in processing areas, will pay dividends through fewer injuries and less worker dissatisfaction. Working conditions become a larger consideration for owners as they age, too.

Many farmers mentioned the need for *work-life balance* for the entire family. Everyone needs time off the farm or doing something they enjoy not related to work. It is easy to become isolated and insular on a farm due to the sheer amount of work to do, but it is wise to make time to network with others to learn, share, and decompress.

Do you have a *succession plan*? Several farmers mentioned the importance of a farm succession plan but said they just hadn't gotten around to creating one yet. If you care about the future of your farm and would like to have a say in its future, a farm succession plan is essential. Make it a priority to meet with an attorney experienced in drawing up farm succession plans.

Social and Quality of Life

Farm B: Beauty is in the Eye of the Bee-holder

Farm B was beautiful. Located a reasonable distance from several population centers, it is a popular destination for family day trips. The farm offers on-farm and off-farm sales of cut flowers and berries, including U-pick options. Its pest management practices are well-received by the public: bats, hummingbirds, swallows, and purple martins are attracted for insect control; roses and other strategically-placed flowers attract pollinators; and motion-detector lights deter raccoons. Shaded picnic areas are



Farm B. The farm was alive with beneficial insect life, much to the delight of customers
Photos by Susan Kerr

Environmental

Weed, disease, and insect *pest management* was most effective when integrated methods were used. Some farms used row covers to protect specific crops from pests of concern at certain times. Beneficial insects were attracted by providing habitat in targeted areas. Scouting for insect pests each day helped producers get early notice of pest trends so decisions about control could be made early. Whether they were certified organic or not, most producers wanted to avoid the use of chemicals to control pests.

Farms prospered when proper attention was paid to *soil health* and nutrient management. Using mulch, cover crops with varying root depths, quantified compost/fertilizer, and soil test results, good managers were able to improve fertility and farm production over time. Cover crops promoted soil retention and nutrient cycling; they were often missing on farms with gaps in BMPs.

Marketing and Economics

The major lesson learned from the farm visits was the crucial

need to know the *profitability of each farm enterprise*. Sometimes growers had only a vague sense of profitability or what their costs of production were. Professional farmers need to conduct an enterprise analysis for each crop to identify profit centers and losers and then use the results of the analysis to make critical decisions. Unprofitable endeavors should be carefully evaluated: can expenses be decreased or revenue increased? Should the enterprise be mothballed for a while or forever? If a market cannot be found that will meet the cost of production plus a reasonable profit margin, an enterprise should be retired. Successful full-time diversified produce growers who direct market try to realize ~\$20,000 per acre in gross income. The importance of financial recordkeeping is underscored during any discussion of cost of production determination or profitability assessment.

The pressure for success selects for *innovation*. Innovative growers have identified and pursued numerous opportunities such as marketing for other growers for a fee; creating value-added products to reduce waste and increase profits; using season extension or unique crops to help cash flow through

Environment

Farm C: Underutilizing Resources

This farm was a surprising disappointment. Established as a working farm to promote education about livestock production, it was not employing practices that encouraged soil health, nutrient cycling, plant vigor, or optimal animal performance. Pastures were noticeably understocked. Also, cattle were not rotated through smaller paddocks but instead kept in one large field they did not utilize uniformly. This resulted in a great accumulation of over-mature forage that became senescent instead of being used as animal feed.



Farm C. Too few cattle for the available forage and lack of rotational grazing resulted in pasture underuse. This land could have been much more productive if managed to its potential. Photos by Susan Kerr

year-round sales; specializing in niche crops identified by market analyses; conducting marketing plans for each product; and determining whether wholesaling or retailing is best for them. CSAs help finance farms before crops are available to sell each season, but CSAs are not for everyone. Some of the most successful farms are successful because one or more of the partners has secured steady income and benefits from a full- or part-time job off the farm.

Methods to foster a *dedicated customer base* pay off over years. Having a well-deserved reputation for product quality and consistency is paramount. Being located close to an urban center may reduce marketing

Marketing and Economics

Farm D: The Early Nut Gets the Worm

The owner of Farm D used to raise row crops and cotton but had difficulty making a profit on limited acreage. He researched alternative crops and decided to try pecans. He planned meticulously, devised optimal tree spacing, and provided irrigation to every tree. As trees came into production, the producer found a way to get to market sooner (and therefore at a higher price) than competitors: he harvests pecans before they are fully dry, dries them in the bag, then sells to a wholesaler who expo exports for international holiday markets. This farmer shrewdly “recruits” neighbors with gifts of pecans to help keep an eye on the farm and reduce losses due to theft.



Farm D. These mature pecan trees required a lot less work for the farmer than row crops and they were profitable. The producer has an excellent relationship with a wholesale buyer and a strong international market.
Photos by Susan Kerr

expenses somewhat, help customers feel connected to a farm, and make agritourism opportunities realistic. Advertising in local/regional agriculture marketing efforts will reach the target audience and help a farm stay connected with local farm events and fellow producers. Developing an attractive logo and including it on products, in advertising, and at the farm strengthens brand recognition by new and returning customers.

Conclusions

The 11 lessons learned by the 2014-2016 SARE Fellows shared above are key concepts worthy of being embraced by producers who hope to manage farms into sustainability. Valuable information can be gleaned from both highly successful and struggling farms. In any arena, learning from the successes and failures of others saves time, money, and aggravation and makes the road to sustainability shorter and less rocky. *✍*

The goal of the SARE Fellows program is to work hand-in-hand with SARE to achieve its vision: agriculture that is “profitable, protects the nation’s land and water and is a force for a rewarding way of life for farmers and ranchers whose quality products and operations sustain their communities and society.”

Recommended resources

- USDA Sustainable Agriculture Research and Education site. www.sare.org.

- Managing a CSA farm 1: production, labor and land. www.cias.wisc.edu/managing-a-csa-farm-1production-labor-and-land.
- Managing a CSA farm 2: community, economics, marketing and training. www.cias.wisc.edu/managing-a-csa-farm-2-community-economics-marketing-and-training.
- Whole farm profit management tool from University of Wisconsin-Madison to help growers with decision making and financial planning to enhance profitability and improve sustainability. www.veggiecompass.com.
- Soil Nitrate Testing as a Guide to Nitrogen Management for Vegetable Crops. <http://njaes.rutgers.edu/pubs/publication.asp?pid=E285>.
- Using the PSNT Test to Manage N Fertilization of Vegetable Crops. www.uvm.edu/vtvegandberry/factsheets/PSNT.html.
- Whole farm planning: Growing Farms: Successful Whole Farm Management Planning Book Think It! Write It! http://smallfarms.oregonstate.edu/sites/default/files/growing_farms_workbook.pdf.

D.I.Y. Farm Tools and Equipment

By: Melissa Fery, Oregon State University Small Farms Program

Recycling, repurposing and modifying are not new concepts for farmers, who are constantly working to find the right piece of equipment for a task or a cost effective way to get a job done. Some people have a natural ability to engineer what they need and the rest of us have the wisdom to reproduce their ideas, legally, of course.

Thanks to online resources, such as <http://farmhack.org/tools> or youtube videos, limitless ways to make something you need, utilizing materials you have laying around the farm are just a few clicks away. Need an example? Search 'homemade chicken plucker' on youtube and you'll find creative, yet functional designs that use an old washing machine drum and a 55 gallon barrel to a cordless drill and pvc pipe.

On a recent farm tour, Beth Hoinacki of Goodfoot Farm showed great example of repurposing a broken chest freezer into a seed germination chamber. "The most expensive part was the new latch, purchased to keep the door securely closed," said Beth. With a



Rainshine Farm's new CoolBot powered walk-in cooler.
Photo provided by Rachel Ashley

little wiring and experimentation with lightbulb wattage to get the needed temperature, she is able to germinate tomatoes and peppers with ease. Beth cautioned, "You need to watch carefully because once the seed has germinated you need to get them out, otherwise they'll turn leggy without sunlight."

Designing equipment to solve problems and increase efficiency is what Mark Luterra has been doing since his employment with Wild Garden Seeds in

2014. As he helped winnow seeds with box fans, wind drip tape onto a reel or other farm tasks, Mark's engineering and planning skills were also at work. As a result, he has designed and built equipment to meet



Flats of seeds preparing to germinate.
Photo provided by Melissa Fery




Broken freezer turned seed germination chamber at Goodfoot Farm.
Photo provided by Melissa Fery



The original Winnow Wizard designed and built by Mark Luterra.
Photo provided by Mark Luterra

needs at the farm. The Winnow Wizard and Wonder Winder are two examples with original designs available at <http://luterra.com>. Mark also offers a Problem-solving, Brainstorming, Design service where you can send him a need and he'll ponder it and reply with some tentative ideas.

Keeping fruit and vegetables fresh to minimize spoilage often requires cold storage, a cost that many small-scale farms can't justify. What if you could find a way to insulate a simple structure and make your own walk-in cooler for a few hundred dollars? Ron Khosla, a farmer and engineer who now resides in Oregon, developed the CoolBot®, a device that tricks a window air conditioner unit into getting colder without freezing. Within the last few years, many local farms have invested in a CoolBot® to make a DIY cooler that provides opportunity to extend the harvest to market period and the ability to store produce efficiently and safely. More information about the CoolBot and designs for structures are available at <https://www.storeitcold.com/agriculture>

Are you proud of a useful tool or piece of equipment you have made and would like to share it other farmers? Please email a photo, along with your name and a brief description of what it is to SmallFarmsProgram@oregonstate.edu and we'll post it on our OSU Small Farms Facebook page. 

Be Counted in the 2017 Census of Agriculture

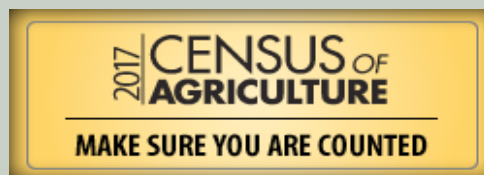
In just a few months, America's small farms and ranches will have the opportunity to make a positive impact on the federal policy and their communities by taking part in the Census of Agriculture. Conducted every five years by the USDA's National Agricultural Statistics Service (NASS), the census captures a complete count of all U.S. Farms and ranches and those who operate them. You can find the results of the 2012 Census of Agriculture at <https://www.agcensus.usda.gov/>.

NASS is in the final stage for preparing the 2017 Census of Agriculture mailing list. **If you are new to farming or didn't receive a 2012 Census of Agriculture questionnaire there is still time to be counted** by signing up at <https://www.agcounts.usda.gov/cgi-bin/counts/>.

The Census of Agriculture provides a unique picture of U.S. agriculture since it shows the contributions of farms of all sizes at the county, State, and national level. It is also the main source for demographic data (age, sex, race/ethnicity) of U.S. farmers.

Language may be a barrier for immigrant and refugee farmers and ranchers. Non-profit and community-based organizations that work with non-English speaking farmers should contact Dave Losh, State Statistician, at the Oregon NASS office at: nass-or@nass.usda or 800-338-2157.

All individual information provided to NASS is confidential and only used for statistical purposes. In accordance with the Confidential Information Protection provisions of Title V, Subtitle A, Public Law 107-347 and other applicable Federal laws, your responses will be kept confidential and will not be disclosed in identifiable form to anyone other than employees or agents. By law, every employee and agent has taken an oath and is subject to a jail term, a fine, or both if he or she willfully discloses ANY identifiable information about you or your operation.



GROW Healthy Kids and Communities - Reporting Back After 5 Years in Communities

In the Summer 2014 issue of Oregon Small Farm News, our colleagues in the College of Public Health and Human Sciences Extension reported on [GROW Healthy Kids and Communities \(GROW\)](#), an innovative, community-based approach to improving the health of rural kids in Oregon. [Read the [2014 article here](#) for additional background]

The overall goal of GROW was to prevent obesity in rural children by improving their opportunities—at home, in school, and in the community—to make healthy eating and physical activity an easy and preferred behavioral choice. To do this, the GROW team engaged rural communities in identifying local environmental factors that support or hinder habitual physical activity and healthy eating, to enable residents to use new knowledge to make appropriate changes to the community context. The \$5 million, five-year integrated research and Extension project was funded by the U.S. Department of Agriculture.

Three years later, lead investigators Deborah John and Kathy Gunter, GIS Technician Tammy Winfield, and the full GROW team, have outcomes to share.

We also congratulate them on receiving the 2017 Jeanne M. Priester Award for developing Mapping Attributes using Participatory Photographic Surveys (MAPPST[™]), an Extension tool to identify and address issues in each community's Healthy Eating Active Living (HEAL) context. (Read on for more detail.) The Priester Award recognizes “exemplary, impactful leadership to your state of Oregon and Cooperative Extension nationwide in the area of health and wellness.”

The GROW team is now developing an online training and MAPPST tool to address local issues of health and place.

The following is an abridged version of an article written for OSU Extension's [Bridges to Prosperity](#) by Tammy Winfield, MS, GIS Technician for GROW; and Project Directors Deborah John, PhD, Associate Professor and

Health Extension Specialist, and Kathy Gunter, PhD, Associate Professor and Physical Activity Specialist; OSU College of Public Health and Human Sciences.

GROW – Summary and Outcomes

From 2011 through 2016, GROW was implemented in Clackamas, Columbia, and Klamath counties in Oregon and in five additional western states. Specifically in Oregon, County Extension supported GROW activities in partnership with the towns and elementary schools of Estacada, Molalla, Clatskanie, Rainier, Bonanza and Chiloquin.

Campus and County Extension teams worked closely with rural residents, schools, and community partners to measure the height, weight, and school day physical activity of about 1,900 grade schoolers two times per school year over a three-year study period. About 200 kids and their families completed surveys about their eating and activity habits in the home and wore devices to record their physical activity levels over a week. Participatory assessments of school physical activity and nutrition environments provided school partners with information to make changes that supported students healthy eating and physical activity patterns at school.

Additionally, GROW leaders developed an Extension tool, Mapping Attributes using Participatory Photographic Surveys (MAPPST[™]) to identify and address issues in each community's Healthy Eating Active Living (HEAL) context. Community HEAL MAPPST[™] teams, local residents and organizational partners, were equipped with camera-enabled GPS devices. The MAPPers used technologies to photograph and map their encounters with the HEAL environmental features in their towns—like the availability (or not) of vending machines, sidewalks and bike lanes—that influence children's and families' eating, drinking, active recreation and transportation habits. MAPPers shared photos at public meetings, facilitated by local Extension, where attendees conversed and offered suggestions for dealing with the



GROW communities' local food resources include farmers' markets, farm stands, CSAs, and home-based operations selling products like eggs and vegetables. While food types and amounts varied by community, each had at least 2 local food options, and residents perceived local food as supportive of healthy eating.

environmental barriers to developing and maintaining weight healthy rural lifestyles.

Project Results

New resources valued in total over \$700,000 resulted from engaged, inclusive participation, local data and demand driven actions in all counties and communities.

In **Klamath County**, in both Chiloquin and Bonanza, local unavailability and inaccessibility of affordable, healthy food choices, active recreation and transportation supports, and considerable travel distances to access needed resources (sometimes upwards of 30 miles), emerged as a common theme likely contributing to rural (compared to urban) weight health disparities.

As a solution, the Chiloquin community planted a school garden to provide produce to students, the playground resurfaced to improve safety, and new portable play equipment acquired to increase activity at the elementary school.


In Bonanza, a HEAL MAPPS™ photo of the minimart and community conversation on the quality of local

food choices, provoked installation of garden beds at the school to increase access to fresh produce and support nutrition education. Engaged residents petitioned the park board to unlock restrooms to promote families use of public parks and playgrounds.

In **Columbia County**, the Clatskanie community mobilized to improve healthy food access through a new farmers' market, school garden and salad bar. Partners planned, leveraged resources, and completed extensive playground renovations at the school, secured additional funding and installed new trails to enable community connectivity, and walkability safety.

In Rainier, GROW was leveraged to improve activity environments at the elementary school and support farm to school, bicycle safety, and community recreation programs.

In **Clackamas County**, the Molalla community launched the "Let's Move Molalla!" to promote weight healthy, active family lifestyles. Yet, HEAL MAPPS™ revealed a dearth of public physical activity supports. Community partners' leveraged Extension resources, including GROW data, to plan and install a series of story walks in Molalla neighborhoods and the 500th school garden at Molalla High School. YA4-H Culture Club members advocated for food pantry refrigerators, set up produce stands and provided produce from the garden to families with limited access to fresh foods. In Estacada, GROW helped community and school partners collect data that informed the creation of an extensive bicyclists plaza to improve cyclists' recreational experiences, healthy school snack environments and water fill stations.

Although the research has ended, OSU Extension efforts in rural Oregon and beyond are engaging communities to GROW Healthy Kids and Communities. 

Calendar

April

19 & 20 - OSU Forage Management Series

This series will focus on a “project ranch” that we work on together, including site visits and on-line document sharing and blog. The project ranch will be the Wilson Farm, the OSU sheep facility with sheep and cattle grazing the pastures. You can also work on your own ranch as a side project if desired. The objective of the series is to improve knowledge about managing forage on properties in the Willamette Valley. April 19 & 20 – Farm and Forage Assessment, May 24 & 25 – Harvest Management, June 28 & 29 – Irrigation, August 16 and 17 – Fertility, September 20 and 21 – Renovation Techniques. 6:00PM-8:30PM. Oldfield Animal Teaching Facility, OSU Campus, Corvallis, OR. Pre-registration required. Call 541-248-1088 for registration. Questions? Shelby.Filley@oregonstate.edu **\$30/segment or \$120/series**

20 - Feeding and Marketing Pigs

If you are new to raising market pigs, this may be the class for you. Topics include feeding and nutrition for raising market pigs, basic health topics and information about processing and marketing pork. 6:00PM-8:30PM. Linn County Extension Service, 33630 McFarland Rd, Tangent, OR. Contact Chrissy. Lucas@oregonstate.edu or (541) 766-3556. **\$10**

26 - Domestic Well Safety

The class is designed for domestic well owners to learn the basics of groundwater and water well stewardship. Learn steps to protect the health of your family, neighbors, animals, your property investment, and the safety of groundwater resources. 6:30PM-8:30PM. Wellspring Conference Center, 1475 Mt. Hood Ave., Woodburn, OR. RSVP by calling 503-588-5407 or emailing gdeblase@co.marion.or.us **FREE**

May

24 & 25 - OSU Forage Management Series

This series will focus on a “project ranch” that we work on together, including site visits and on-line document sharing and blog. The project ranch will be the Wilson Farm, the OSU sheep facility with sheep and cattle grazing the pastures. You can also work on your own ranch as a side project if desired. May 24 & 25 – Harvest Management, June 28 & 29 – Irrigation, August 16 and 17 – Fertility, September 20 and 21 – Renovation Techniques. 6:00PM-8:30PM. Oldfield Animal Teaching Facility, OSU Campus, Corvallis, OR. Pre-registration required. Call 541-248-1088 for registration. Questions? Shelby.Filley@oregonstate.edu **\$30/segment or \$120/series**

Check our online calendar at for the most up to date events
<http://smallfarms.oregonstate.edu>

Want to add your event to our calendar then please submit your information at <http://calendar.oregonstate.edu/advanced/list/extension-smallfarms/> “Click the Submit an event button.” Events have to be approved and will not immediately post. If you have questions please contact Chrissy Lucas at Chrissy.Lucas@oregonstate.edu or 541-766-3556