Summer 2015

Oregon Small Farm News

Oregon State University Small Farms Program

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Oregon State University OSU Extension Service

OSU Extension Service Small Farms Program

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Cover Photo:
Root washer. Gathering Together Farm.
Photo by Garry Stephenson

Oregon Small Farm News Layout by: Chrissy Lucas

Welcome to Sara Runkel

Sara Runkel began her position as the Small Farms and Food Systems Coordinator for Douglas County Extension in May. Her position is based in Roseburg and she will be working with small acreage land owners and commercial small farms as well as overseeing the Master Food Preserver Program.

Prior to this position, Sara owned and operated a diversified farm in Pennsylvania where she grew vegetables for a winter CSA, specialty cut flowers, and pastured poultry. She also worked for Penn State Extension assisting the Sustainable Agriculture Educator and providing farm food safety training to fruit and vegetable growers.

Sara has a Master of Science degree in Sustainable Systems from Slippery Rock University and over 15 years of farming experience. Her strengths include beginning farmer training, farm equipment selection and safety, farm food safety, organic vegetable production, value-added production, and direct to consumer marketing.

Sara is excited to be in this new position and is looking forward to meeting small farmers in Douglas County to learn of local needs and to provide assistance to the community.

She can be reached at: sara.runkel@oregonstate.edu

Dry Farming Demonstration

By: Amy Garrett, Small Farms Program, Oregon State University

Three 10' x 100' plots have been established at Oak Creek Center for Urban Horticulture (OCCUH) in Corvallis to demonstrate dry farming practices in several crops including dry beans, tomatoes, potatoes, squash and melon. In Western Oregon these crops are typically irrigated with between approximately 12 to 20 inches or 300,000 to 500,000 gallons of water per acre depending on the location, planting date, seasonal variation, irrigation method, and variety (Oregon Commercial Vegetable Production Guides). The dry farming demonstration plots will receive absolutely no irrigation. Varieties and management practices (soil preparation and planting techniques) were selected based on interviews with several established growers experienced in dry farming. Soil temperature and moisture in each plot will be monitored through out the growing season at 6" and 18" (*compliments of USDA Hydrologist, Deb Harms, with the National Water & Climate Center*).

May 5, 2015 - Preparing dry farm plots for planting at Oak Creek Center for Urban Horticulture. *Photo by Amy Garrett*

So what is dry farming? Dry farming refers to crop production during a dry season, (e.g. summer in the Willamette Valley), and utilizing the moisture stored in the soil from the rainy season. No irrigation is used. The Willamette Valley receives about 40" of precipitation per year, with less than 1" of rain falling during July and August combined. This seasonal drought coincides with the greatest period of transpiration. Dry farmers work to conserve soil moisture during these long dry periods through a combination of management strategies including drought-resistant crops and varieties, planting technique (timing, depth, spacing and method), tillage, surface protection and increasing soil organic matter. Regional rainfall and soil type are important considerations for dry farming. A soil with moderate clay content and high organic matter can effectively store water for crop growth during dry summer months. The soil type for dry farming demonstration at OCCUH is a Dayton silt loam, which has some clay content from 15 to 40 inches deep.

Dry farming is not a yield maximization strategy; rather it works with nature to produce sustainable food with fewer external inputs such as irrigation water and fertilizer. (Runsten and Mamen, 2014). Production costs are lower, but yields often are lower as well, and the economics of dry farming are poorly understood. Dry farming is also not a new way of farming. Before the rise of dams and aquifer pumping, dry farming was a staple of agriculture for millennia in places like the Mediterranean, and much of the American West including the Papago Indians in the Arizona desert (Soloman 2009). However, there is little research-based information on what soil types are most conducive to dry farming vegetables or how dry farming management practices affect vegetable quality and productivity.

Why dry farm? As our water supply is becoming increasingly affected by climate change through reduced snowmelt, higher temperatures and drought (Van Horne et al., 2013), water scarcity is becoming a harsh reality in the western region. It is critical for

June 17, 2015 - Dry Bean Plot

June 30, 2015 - Dry Bean Plot, For most recent photos visit http://smallfarms.oregonstate.edu/dry-farming-demonstration

June 17, 2015 - Squash and Melon Plot

June 30, 2015 - Squash and Melon Plot, For most recent photos visit http://smallfarms.oregonstate.edu/dry-farming-demonstration

June 17, 2015 - Tomato and Potato Plot

June 30, 2015 - Tomato and Potato Plot, For most recent photos visit http://smallfarms.oregonstate.edu/dry-farming-demonstration

our food security to understand what we are capable of producing in the absence of irrigation. Dry farming practices could assist in diversifying cropping options for some growers on land without water rights or on irrigated land in drought years when water supply is limited. OSU Extension Small Farms Program is applying for grant funding to further this work with field research focused on yield, quality and economics as well as mapping the soils in our region that may be conducive to dry farming vegetables to better understand how dry farming management practices may assist growers in our region.

For more information about the dry farming demonstration and upcoming field days visit: http://smallfarms.oregonstate.edu/dry-farming-demonstration

This project is funded in part by the National Institutes of Food and Agriculture under the Beginning Farmer and Rancher Development Program, and supported by the OSU Small Farms Program, OSU Department of Horticulture, and the USDA National Water and Climate Center.

Resources

Oregon Commercial Vegetable Production Guides: http://horticulture.oregonstate.edu/content/vegetable-production-guides

Runsten, D. and Katy Mamen. "Dry farming". California Agricultural Water Stewardship Initiative (CAWSI). 10 November 2014. http://agwaterstewards.org/index.php/practices/dry_farming

Solomon, Steve. Gardening Without Irrigation: or without much anyway. Valde Books. 2009.

Van Horne, B., Strobel, M.L., and S. Hardegree. Climate Risks in the Northwest. 2013. USDA Regional Climate Hubs: Managing your risk in a changing climate. http://www.usda.gov/oce/climate_change/hubs/NorthwestFactSheet.pdf

Soil moisture and temperature and monitoring stations are recording measurements hourly.
Photo by Amy Garrett

What Do We Know About Small Farms & Local Food Systems? Recent Research in Brief

Two recent studies conducted by OSU graduate students shed new light on farmers' market ownership and the ways small farms define success.

Recognizing the Strengths and Limitations of Farmers Market Ownership Structure Alternatives

By Snehalatha Gantla, MPP, Oregon State University (advised by Larry Lev)

Farmers markets are widely recognized for their important roles in developing local food systems, supporting small farms, increasing local economic activity, help address issues around food access and security, and providing community building opportunities. Markets typically were organized and operated by farmers themselves; over the last fifteen years, however, other groups have organized and operated most new markets. This study examines how market ownership influences market operations and identifies strengths and weaknesses of different ownership alternatives.

Gantla interviewed the managers of 25 farmers markets in Oregon – vendor-led, community-led, and subentities of other organizations – to learn about general characteristics of the markets, management and decision-making processes, market mission and goals, and resources available to the markets. She used the interviews to analyze how markets with different ownership structures operate differently.

Gantla found that markets are becoming more diverse in the interests they serve and the roles they play in communities. New markets are more frequently developing as community-led and subentity structures, rather than vendor led. Other findings include:

- Vendor-led markets highlight the critical importance of local agriculture to all markets regardless of ownership structure.
- Managers of vendor-led markets must also take on additional community-oriented functions to build partnerships, access additional resources, and ensure community embeddedness.
- Some form of community ownership has become the new standard in order to relieve farmers of this burden. This strengthens the "localness" of markets but sometimes reduces their agricultural links.
- The involvement of diverse community members allows markets to tap additional resources, ensure community buy-in, and increase overall impact.
- New markets require considerable human and financial resources, and starting out as a subentity to a well-established community organization can be very helpful.

The full study is available as a Small Farms Technical Report (http://smallfarms.oregonstate.edu/sites/default/files/small-farms-tech-report/strengths_and_limitations_of_farmers_market_ownership_structure_.pdf) and will soon be published in the Journal of Agriculture, Food Systems, and Community Development.

Farmer Perspectives on Success and Challenges: A Study of Small Farms in Oregon's Willamette Valley

By Kristin Pool, MS, Oregon State University (advised by Garry Stephenson)

How do small farmers define success? Kristin Pool's qualitative, participatory study investigated success and challenges for small farmers operating direct marketing farm businesses in Oregon's Willamette Valley. Small farms are important players in local food systems, and ensuring their success is an important part of expanding and sustaining local food systems.

Based on interviews with farmers, Pool developed a framework describing four dimensions of small farm success: social, operational, quality of life, and financial. The farmers she spoke with see financial success as a vital component of overall success, but acknowledge that financial success is not enough

if achieved to the exclusion of other dimensions of success.

Pool also developed four models for how small farmers perceive financial success: *financial success as the baseline of overall success*, *equal dimensions of success*, *interdependent dimensions of success*, and *financial success as a gauge of overall success*. Impeding small farm success are internal and external challenges that small farmers must navigate through the negotiation of the farm system and scale. Beginning and experienced farmers face the same challenges, but beginning farmers report internal challenges, land access, and access to capital at greater rates than experienced farmers. Experienced farmers speak more frequently about policy and regulations, and labor as challenges.

Pool hopes that her study will improve understanding of these innovative businesses, with implications for research, education, and small farm planning—allowing farmers to incorporate past farmers' perspectives on success and challenges into their future businesses.

The study, just completed as Pool's master's thesis, will be published soon as a Small Farms technical report and separate journal article.

Rural Economic Development One Oven at a Time

"Freedom smells like cinnamon rolls." So said Oregon Representative Mike Nearman (R-Dallas) when the Oregon House overwhelmingly passed the Small Home Business Baking Bill earlier this month. Governor Kate Brown signed it on June 16, and the new law will go into effect January 1, 2016.

The Small Home Business Baking Bill, the latest of Oregon's innovative "cottage food" laws, will allow home bakers to make and sell small volumes of low-risk baked goods, direct to consumers, without having to obtain a food processing license from the Oregon Department of Agriculture (ODA).

These small home businesses are required to have an Oregon Food Handler card (https://public.health.oregon.gov/HealthyEnvironments/FoodSafety/Pages/cert.aspx) and follow the same food safety and sanitation regulations as a domestic home kitchen license holder. Sales are limited to $20,000 per year. All goods produced under the new law need to be labeled that they are homemade and not produced in an inspected kitchen. Additionally, ODA has authority to inspect and require a license for a home baking business if there are concerns about food safety practices by that business.

Low-risk baked goods and confections are those that do not require temperature control (hot or cold) to keep the product safe from attracting or incubating harmful microorganisms. This includes bread, fruit pies, cookies, brownies, and muffins. (Marijuana edibles are explicitly prohibited by the law.)

Only direct sales to consumers are allowed. Sales can happen at farmers' markets, farm stands, events, or at personal residences.

Oregon Food Bank's Community Food System team worked closely with Oregon lawmakers on the bill, which OFB saw as particularly important for rural Oregon communities.

"The idea for the Small Home Business Baking Bill," OFB's Sharon Thornberry explains, "came from listening to communities' concerns and ideas for their food system through our FEAST events and Community Food Assessments. We heard that many Oregon communities – especially in Eastern Oregon and the Coast – had very limited access to quality baked goods. We also heard that there are many aspiring entrepreneurs who wanted to meet this demand but were deterred by the licensing and registration process."

OFB did its homework and found that more than 40 states have passed "cottage food laws" which make it easier for aspiring entrepreneurs to sell low-risk food products in their communities.

"The new law," says Thornberry, "will support Oregon's food deserts through increased access to quality baked goods, while at the same time providing an economic development opportunity in rural communities where new jobs are few and far between."

Biodegradable Mulch Update – New NOP Rule

By: Nick Andrews, Small Farms Program, Oregon State University; Lisa DeVetter, Washington State University; Carol Miles, Washington State University

Black plastic has been used horticulturally since the 1950's to increase crop yield, control weeds, conserve soil moisture, increase soil temperature and shorten time to harvest. By 2006 black plastic was being used on 40,000 acres in the U.S. Every acre under plastic generates about 100-120 lbs of plastic waste that has to be removed from the field and disposed of. Because the plastic is contaminated with soil, it is difficult to recycle. One strawberry grower estimated the cost of plastic mulch removal and disposal to be about $330 per acre. Despite the horticultural virtues of plastic mulch, its use contradicts the values of many organic farmers and consumers (http://rodaleinstitute.org/beyond-black-plastic/).

Paper and other biodegradable mulches (BDMs) may align more closely with organic values while maintaining the horticultural benefits of plastic mulch. Biodegradable mulches are currently more expensive to buy than conventional plastic mulch, but generally perform as well as plastic mulch. Biodegradable mulch is designed to decompose in the field and so does not need removal or disposal.

Paper mulch has always been allowed on certified organic farms. Plastic mulch has also been allowed as long as the mulch is removed at the end of the growing season. Last fall, the USDA National Organic Program also approved "biodegradable biobased films" for use in organic production and for soil incorporation. Currently the only NOP compliant biodegradable mulch is paper. So far no other BDMs are fully biobased and so do not meet this NOP criteria (see sidebar).

Figure 1. BioBag biodegradable mulch with tomatoes grown in the open field at WSU Mount Vernon NWREC, 24 Sept., 2012; the rip is due to weathering of the mulch over the course of the growing season, and longitudinal tears are characteristic of this type of mulch product. *Photo by Carol Miles*

DeVetter, Miles and other researchers at WSU are evaluating biodegradable mulch alternatives to plastic mulch in vegetable and small fruit production. The rest of this article reports on their recent work.

Vegetables:
Four potentially biodegradable mulches, BioAgri, BioTelo, WeedGuardPlus and SB-PLA were compared to black plastic mulch and

Previous NOP list of synthetic substances allowed as herbicides or weed barriers in organic crop production:

- Herbicides, soap-based - for use in farmstead maintenance (roadways, ditches, right of ways, building perimeters) and ornamental crops
- Mulches
  - Newspaper or other recycled paper, without glossy or colored inks.
  - Plastic mulch and covers (petroleum-based other than polyvinyl chloride (PVC).

Effective October 30, 2014 the USDA-AMS National Organic Program (NOP) passed a final rule which added biodegradable biobased mulch film to their list of allowed substances for organic crop production. The USDA organic regulation is "7 Code of Federal Regulations (CFR) section 205" and is available at http://www.regulations.gov/#!documentDetail;D=AMS-NOP-13-0011-0125.

Primary points of this new rule are:

- To be considered biodegradable and biobased, a mulch film MUST:
  - Reach at least 90% degradation in the soil within two years or less in accordance with ISO 17556 or ASTM D5988
  - Be biobased in accordance with ASTM D6866
  - Meet compostability specifications of one of the following standards: ASTM D6400, ASTM D6868, EN 13432, EN 14995, or ISO 17088. (*Section 205.2*)
- A biodegradable biobased mulch film must be produced without organisms or feedstock derived from excluded methods. [*Section 205.601(b)(2)(iii)*]
- A biodegradable biobased mulch film must be produced without the use of non-biobased synthetic polymers. Minor additives such as colorants and processing aids are not required to be biobased. (*NOP Policy Memo 15-1*)

a no-mulch control in 2010, 2011 and 2012 at WSU's Northwest Washington Research and Extension Center in Mount Vernon (NWREC). Mulches were evaluated for durability, weed control, and yield of 'Celebrity' tomatoes grown in high tunnels and open fields.

Brand name	Derived from	Brand name	Derived from
BioAgri	Starch and polyester	Organix	Natural biodegradable plastic compliant with EN13432
BioTelo	Corn starch	Experimental	Poly-lactic acid and polyhydroxyalkanoate
Experimental SB-PLA & PHA	Poly-lactic acid & polyhydroxyalkanoate	Experimental SB-PLA	Poly-lactic acid and polyhydroxyalkanoate
WeedGuard Plus	Paper*		Cellulose
Naturecycle	Starch and other ingredients		

Table 1: Names of BDMs used in these trials, and their main constituent.
**Currently paper derived mulches are the only NOP compliant BDMs. Check with your certifier before using any product in certified organic production.*

Deterioration was worse in the open field than in the high tunnels, likely due to high winds, greater solar radiation and more rainfall. Overall, WeedGuardPlus, BioTelo and BioAgri had the greatest percent visually observed deterioration (PVD), while SB-PLA showed essentially no deterioration and was equivalent to black plastic.

From a horticultural perspective, BDMs held up well in the field and in high tunnels. Weed growth did not differ between high tunnels and open field, and apart from 2010 when the SB-PLA product was white (and allowed light penetration), there was no difference in weed control among all mulches. Total fruit weight was lowest for bare ground (overall average for 3 years was 5.8 tons per acre) and was highest for BioAgri (overall average for 3 years was 8.1 tons per acre). Tomato yield was greater in the high tunnel (overall average for 3 years was 12.7 tons per acre) than in the open field (overall average for 3 years was 1.7 tons per acre). This research was funded by a USDA SCRI grant (Award No. 2009-02484).

Figure 2. Field study with 5 biodegradable mulches at WSU Mount Vernon NWREC, with pumpkins transplanted June 29, 2015.
Photo by Carol Miles

In 2015, a new 5-year project was started at WSU's NWREC-Mount Vernon to test 5 biodegradable mulch products, WeedGuard, BioAgri, Naturecycle, Organix, and an experimental poly-lactic acid (PLA) and polyhydroxyalkanoate (PHA) product. These mulches are being compared to plastic mulch and a no-mulch in 'Cinnamon Girl' pumpkin. This four year study is also being done at the University of Tennessee-Knoxville. Evaluation includes mulch impacts on crop production, soil micro-organisms, and mechanisms of biodegradation. Additionally, economical aspects of BDM use and barriers to BDM adoption will be investigated. This project is also funded by a USDA SCRI grant (award no. 2014-51181-22382).

Websites for more vegetable mulch information:
http://vegetables.wsu.edu/AltMulch.html
http://vegetables.wsu.edu/SCRI/index.html
http://biodegradablemulch.org

Small Fruit (berries)

'Draper' blueberry at WSU-NWREC: Drs. Miller and DeVetter began work this year comparing two living mulches, buttercup (*Rununculus arvensis*) and sweet woodruff, (*Galium odoratum*) to organic herbicide, sawdust, and experimental SB-PLA compostable

Figure 3. 'Albion' strawberry grown with four mulch treatments. Key: 1) corn-starch based BDM film; 2) a bio-based polyhydroxyalkanoate (PHA) based BDM film; 3) a cellulose-based BDM (NOP compliant); 4) polyethylene plastic. *Photos by Lisa DeVetter*

mulch. SB-PLA is an experimental alternative to PP-based "weedmat" and landscape fabric mulches used in perennial crops. They are measuring weed control, mummy-berry incidence, vole damage, and effects on plant competition (as reflected by plant growth and yield). This project is funded through the WSU internal grant program, BIOAg.

Raspberry: plastic mulch may limit the natural emergence of red raspberry canes, but promote the establishment of tissue culture plants that are notoriously difficult to establish relative to bare-root stock . BDMs may be better for the canes if they can biodegrade before future cane emergence. Dr. DeVetter is working with Randy Honcoop of Honcoop Farms in western Washington to compare Organix BDM and bare ground in 'Wakefield' tissue culture raspberry. They will observe mulch weathering and degradation to see if they could be useful during establishment.

Day-neutral strawberry: DeVetter is comparing three BDMs with black plastic and bare ground in 'Seascape' and 'Albion' strawberry. The BDM mulch treatments include: 1) a corn-starch based film; 2) a bio-based polyhydroxyalkanoate (PHA) based film; and 3) a cellulose-based mulch. In the first year of their study, all mulches provided adequate weed control, with the exception of the PHA-based film (Figure 4).

The PHA-based film weathered too rapidly, leading to increased weed cover later in the season. The formulation of the PHA-based film was subsequently adjusted by the cooperating mulch manufacturer to allow greater in-field stability required for strawberry production. Yields under BDMs were as good as under black plastic (Figure 4).

Future work will evaluate mulch performance and effects on yield. In addition, DeVetter, Miles and Shyam Sablani (WSU-Biological Systems Engineering), will also evaluate the potential for chemical migration of small, leachate molecules present in deteriorating mulches to move to developing strawberry fruits in contact with mulches. This will be the first time agricultural mulch will be evaluated as a food contact substance in the US and will be informative in revealing the occurrence and extent of chemical migration among agricultural products that

come into contact with foods. This project is funded through the WSU-internal grant program, Emerging Research Issues.

Biodegradable mulches clearly offer an alternative to black plastic. For certified organic growers, paper mulch is the only currently available alternative, but other options may meet NOP requirements in coming years. Stay tuned for more information coming from WSU's BDM research program. If you would like more specific information, don't hesitate to contact any of the authors of this article.

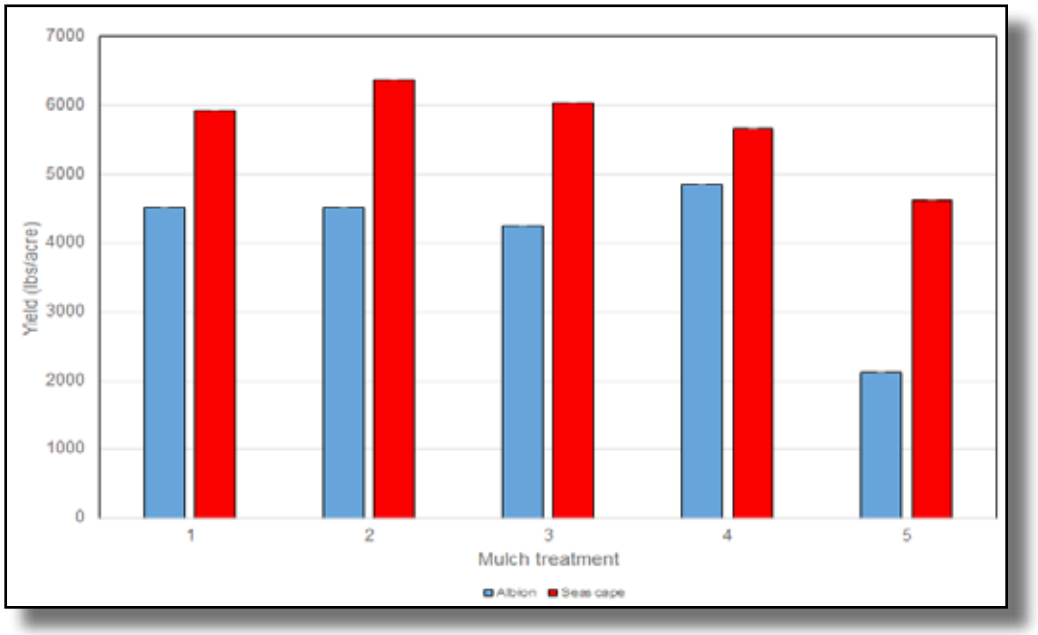


Figure 4. Average fruit yield (y axis of 'Albion' (blue bars) and 'Seascape' (red) strawberry grown with biodegradable and non-biodegradable mulches, 2014. Mulch key: 1) Corn-starch based BDM film; 2) Polyhydroxyalkanoate (PHA) based BDM film ; 3) Cellulose-based, organic-approved, BDM paper mulch; 4) Standard black polyethylene plastic mulch; 5) bare ground. *Graph by Lisa DeVetter*

Pope Francis and Small Scale Agriculture

Recently, Pope Francis issued an encyclical on human causes of environmental degradation and climate change. In it he includes his views on small scale agriculture:

"…it is imperative to promote an economy which favours productive diversity and business creativity. For example, there is a great variety of small-scale food production systems which feed the greater part of the world's peoples, using a modest amount of land and producing less waste, be it in small agricultural parcels, in orchards and gardens, hunting and wild harvesting or local fishing. Economies of scale, especially in the agricultural sector, end up forcing small holders to sell their land or to abandon their traditional crops. Their attempts to move to other, more diversified, means of production prove fruitless because of the difficulty of linkage with regional and global markets, or because the infrastructure for sales and transport is geared to larger businesses. Civil authorities have the right and duty to adopt clear and firm measures in support of small producers and differentiated production. To ensure economic freedom from which all can effectively benefit, restraints occasionally have to be imposed on those possessing greater resources and financial power. To claim economic freedom while real conditions bar many people from actual access to it, and while possibilities for employment continue to shrink, is to practise a doublespeak which brings politics into disrepute."

Francis. LAUDATO SI' [Encyclical Letter on Our Common Home]. Accessed June 23, 2015. http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html

Oregon Grown Produce at a School Near You

By: Deanna Lloyd, Farm-to-Institution Manager, Corvallis Environmental Center

Voices reverberate off the shiny industrial kitchenware as locally grown rhubarb, fresh from grower Patrick Long, is chopped into chunks. At Corvallis School District's central kitchen locally-grown rhubarb is being turned into a cobbler that will be served to over 3,500 students as part of the District's monthly Tasting Table program. And the students will devour it.

Many hands, make light work as the Corvallis High School girls soccer team helps slice fresh nectarines. The Oregon-grown fruit will be frozen and used in school lunches during the winter months. *Photo provided by Deanna Lloyd*

Oregon students are being introduced to locally-grown foods through "Harvest of the Month" programs like Corvallis' that are part of the farm-to-school programs growing across the state. Each month of the school year, a different Oregon-grown "harvest" is featured. Items may be served as a sample during a "tasting table," featured in a special "local lunch" or incorporated multiple times in various cafeteria meals throughout the month.

Though Farm to School programs look a bit different in each district, a goal of all the programs is to get more Oregon grown foods into Oregon schools, creating new market opportunities for local farmers.

Schools are increasingly asking their distributers to source from Oregon growers, and can cite geographical preference as part of their bid. Many schools now purchase more of their Oregon-grown products direct from farmers. New USDA regulations have eased the purchasing process for schools, which now have the freedom to make any purchase under $2,500 without going through a formal bidding process. This change has huge implications for the farm-to-school movement and makes it easier for Oregon farmers to sell direct to schools.

While not every school participates in Farm to School activities, if you're interested in learning more or selling to a school, contact the school district's food service director to see what options may be available. General

Sample "Harvest of the Month" Schedule

September	Bell Pepper
October	Grapes
November	Cabbage
December	Apples
January	Potatoes
February	Wheat
March	Cane Berries
April	Dry Beans
May	Rhubarb

Corvallis School District's 2015-2016 "Harvest of the Month" schedule. Each month the school district will focus on incorporating the harvest into their menu. Check-in with your local school district to see if what harvests they're promoting. *Provided by Deanna Lloyd*

information about the state's Farm to School program is available here: http://www.ode.state.or.us/search/results/?id=379

Corvallis School District's 2015-2016 "Harvest of the Month" schedule. Each month the school district will focus on incorporating the harvest into their menu. Check-in with your local school district to see if what harvests they're promoting.

In November, the Corvallis School District offered samples of roasted Brussels sprouts. Kids loved them and went home with "Ask Me About Brussels Sprouts" stickers to encourage conversations with their families about healthy, local and delicious food! *Provided by Deanna Lloyd*

Small Poultry Processing Business for Lease

Interested in running a small-scale poultry processing business but not ready to own it outright? The owners of Scio Poultry Processing, Inc., in Scio, Oregon, are ready to transition their business to a new operator and are offering a lease to help that person get started.

Joe Schueller started the business in 2008. It is a state-licensed plant, exempt from federal inspection. The facility has in the past operated under USDA inspection and could do so again (the new operator would have to re-apply) if there were enough demand for inspected processing to warrant doing so.

The plant is 1650 square feet, with loading dock, and consists of refrigerated storage, kill room with scalder, drum plucker, wax tank (for water fowl), an evisceration room with shackle line, ice maker, chill totes, storage totes, two vacuum packaging machines, parting table, tipper tie vacuum machine for large birds, poultry transportation crates, controlled atmosphere stunning box, and 10,000 gallons of water storage. The plant has a large parking area. The lease would include the current business customer list & contact information.

The lease holder/operator would need to pay for electricity, maintenance and repair of equipment, the plant interior, and the wash water system to the storage tank; partial maintenance and repair costs for the well; and maintain the office and lunchroom.

The owners will continue to provide maintenance and repair for the exterior building, the freezer, and the wash water irrigation system, and will share the cost of well maintenance /repair.

The lease terms are $1100/mo. for a 24 month lease, with 2 months rent at signing.
If interested, contact Joe Schueller: rainshadowrancho@aol.com.

Ask a Veterinarian or Ask Social Media?

By: Joan S. Bowen, DVM, Bowen Mobile Veterinary Practice, Wellington, Colorado

The American Association of Small Ruminant Practitioners listserv held a very lively discussion regarding use of social media as a way for livestock producers to seek veterinary information about their sick animals. Many producers search the internet to self-diagnose their animals' health problems, but they lack the ability to thoroughly examine their animals and the knowledge to distinguish between fact and fiction. At least one Facebook group offers producers a forum to describe abnormal health conditions in their animals and seek diagnosis and treatment recommendations from veterinarians who participate in this group.

The veterinarian who started this website has good intentions for helping people who say no veterinarian is available in their area or they cannot afford veterinary expenses. Those supporting this concept say the veterinarians participating on this website are providing help through improved management practices, nutrition and health care while encouraging producers to seek veterinary care and decrease unnecessary or illegal drug use in their sick animals. One respondent commented that increased use of video clips from cell phones and the ability to video chat with a veterinarian online will be another way that veterinary medicine will be provided in the future.

The practice of veterinary medicine has changed dramatically over time. Prior to the Food, Drug and Cosmetics Act of 1958, veterinarians could prescribe or administer almost any drug available for treatment of adverse health events in animals without concern for drug residues that might occur in those animals. By 1968, Congress passed legislation that strengthened the provisions of the Food, Drug and Cosmetics Act pertaining to regulation of drugs used in treating animals. Animal drugs, medicated feeds and food additives had to be safe for the animals for which they were intended, and if food-producing animals, safe for human consumption and the environment.

Over time, regulations for drug use in animals have become more restrictive due to concern for the presence of potential drug residues in food products from treated animals and for development of bacterial resistance to antibiotics. In the 1950's, chloramphenicol was approved for treating very serious bacterial infections in people and later for use in dogs and cats. However, the drug was never approved for use in livestock species because it caused fatal aplastic anemia in some people. In 1981, a feedlot producer treating cattle with pneumonia accidentally got chloramphenicol in a cut on his hand and died several months later from aplastic anemia. FDA notified veterinarians nationwide about the danger of using this drug in animals and finally banned use of the drug in 1986 due to the alarming number of drug residues found in animal products intended for human consumption. Over the past thirty years, FDA has banned 7 drugs or classes of drugs in food-producing species, restricted the extra-label use of 5 classes of drugs from food-producing species, and restricted an additional 4 drugs from use in dairy cattle. Yet low numbers of violative residues continue to occur in animal products for human consumption.

Recognizing that very few drugs are licensed or labeled for use in animals, Congress passed the Animal Medicinal Drug Use Clarification Act in 1994 (AMDUCA) which gives veterinarians greater flexibility for using their professional judgement to treat animals. Under AMDUCA, veterinarians may use drugs in animals that are approved for use in humans or animals, drugs approved in one species for a different species, or at a dose different from that on the label if certain requirements are met. An important requirement of this legislation is the obligation to establish a veterinary-client-patient-relationship (VCPR) between the veterinarian and the owner of the animal(s).

AMDUCA, state veterinary medical practice acts and the American Veterinary Medical Association Code of Ethics list five requirements that must be met in order to establish the VCPR which would allow a drug to be used in an animal different from its label. The veterinarian assumes the responsibility for making clinical judgments regarding the health of the animals and the client agrees to follow the veterinarians' instructions. The veterinarian has sufficient knowledge of the patient to initiate at least a general or preliminary diagnosis of the medical condition of the patient. The veterinarian must be personally acquainted with the keeping and care of

the patient by virtue of a timely examination of the patient by the veterinarian or medically appropriate and timely visits by the veterinarian to the operation where the patient is managed. The veterinarian is readily available for follow-up evaluation or has arranged for veterinary emergency coverage and continuing care and treatment. The veterinarian provides oversight of treatment, compliance and outcome. Patient records are maintained.

Both producers and veterinarians are in violation of AMDUCA when producers use social media to contact veterinarians who have not visited their property, examined the animals in question, observed the management practices or agreed to work cooperatively together to diagnose and treat the animals. The long distance veterinarian on social media is unlikely to be available for follow-up evaluation or continuing care, and patient records are unlikely to be maintained. Only veterinarians have extra-label privilege, and the producer who searches the internet to self-diagnose their animals' illness cannot legally administer drugs to their own animals in a manner different from the product label.

A better practice would be for the animal owner to contact a local veterinarian prior to needing emergency care to develop a working relationship with that veterinarian. When livestock are involved, the owner should have the veterinarian visit his or her property at least annually so that the veterinarian can observe the animals, evaluate their condition and become aware of the management practices of that premise. This annual visit can be very useful to the client as the veterinarian can examine the nutritional program, body condition score the animals and look for subtle conditions that the client may not have observed. The ability to examine the affected animals in their natural environment is invaluable when trying to diagnose health challenges and develop treatment, control or prevention programs. The onsite visit provides both parties with the opportunity to ask questions, exchange information and meet the requirements of VCPR so that the veterinarian can choose from a greater variety of medications when health problems occur. To overcome long distances between producers and veterinary services, several clients could schedule their annual visit at the same time to share the cost between them. If the local veterinarian is less experienced with the species involved, then several clients might share the cost of an excellent medical reference or pay dues for that veterinarian to join a species specific veterinary medical association.

When an animal owner seeks veterinary advice over social media, the veterinarian is dependent on the ability of that owner to accurately observe the animal, determine its health status and convey that condition to the distant veterinarian. Veterinarians are familiar with normal anatomy, behavior and physiology of multiple animal species and have been trained over several years to observe, examine, sample and test animals to determine a diagnosis and develop an appropriate treatment program. The veterinarian trying to diagnose health conditions over social media based on the observations of a producer he or she has not met may not receive all of the information necessary to develop an accurate diagnosis. The opportunity for misdiagnosis and inappropriate administration of drugs with resulting violative residues is far greater when the producer and veterinarian have not met the requirements of the veterinary client patient relationship as required by law.

Helpful references for drug use in animals:

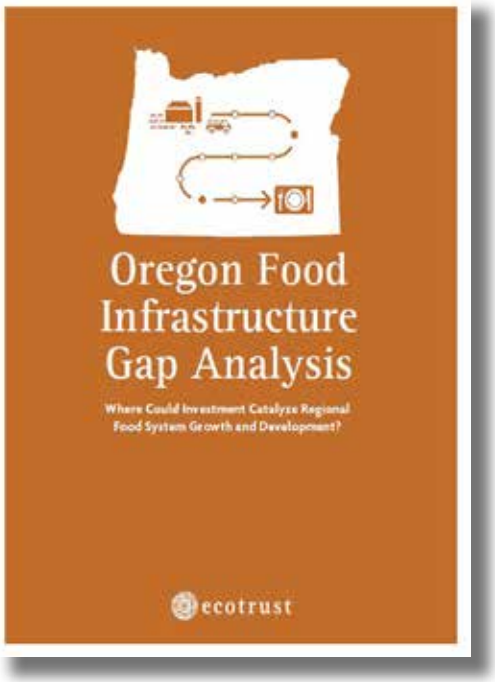
http://www.fda.gov/AboutFDA/WhatWeDo/History/ProductRegulation/AnimalHealthandConsumerProtection/

http://www.farad.org/eldu/prohibit.asp

https://www.avma.org/KB/Resources/Reference/Documents/VCPR_printable.pdf

New Report from Ecotrust Highlights Regional Food System Challenges and Opportunities

A new report led by Ecotrust asserts that we have a great deal of opportunity in Oregon to increase production and consumption of "Oregon grown" food, especially food differentiated by environmental, humane, and other sustainability values.



Yet the report also confirms what many have suspected or experienced: for a wide variety of reasons, food aggregation, processing, and distribution infrastructure is not readily or affordably accessible by Oregon's small and midscale, differentiated farmers, ranchers, and artisans. The study argues that this lack of access is inhibiting the growth and development of a robust regional food economy. The study also highlighted many other interdependent factors related to the development of a strong regional food economy.

The report, "Infrastructure Gap Analysis: Where could investment catalyze regional food system growth and development," was released this spring. The project team, led by Ecotrust's Amanda Oborne, drew on secondary data and primary research (interviews, visits, and tours) with key stakeholders around the state. The report also includes analysis, based on secondary data, of specific product categories: chicken, beef, pork, small grains and legumes, storage crops, and greens.

All study results were vetted by partners, advisors, and industry experts. Ecotrust's project team included Oregon food systems consultant Matthew Buck and Lauren Gwin of OSU's Center for Small Farms & Community Food Systems. Project advisors included Meyer Memorial Trust, Oregon Department of Agriculture, Oregon Food Bank, Northwest Food Processors Association, and several important regional food businesses.

Ecotrust proposed the study, which was funded by Meyer Memorial Trust, to meet three objectives on behalf of impact investors, practitioners, and policymakers:

1. To provide an overview of key supply, demand, and infrastructure drivers affecting the development of Oregon's regional food system;
2. To illuminate aggregation, processing, and distribution infrastructure gaps inhibiting the flow of whole and minimally processed agricultural and food products from small and midscale Oregon producers to domestic wholesale food buyers, and;
3. To suggest opportunities for investment to advance the development of a robust regional food economy in Oregon.

As Ecotrust explains in the report, "infrastructure" was originally conceived as both the physical components of food aggregation, processing, and distribution (e.g., warehouses, equipment, trucks), as well as the network of relationships (e.g., producers, processors, butchers, brokers, distributors, chefs), required to move food from the farm or ranch to the point of consumption. Yet very early in the research process, the project team realized that infrastructure was in fact an "entry point into a much broader examination of the challenges and opportunities posed by the development of regional food systems."

The report includes specific recommendations for would-be investors who want to "do something" about

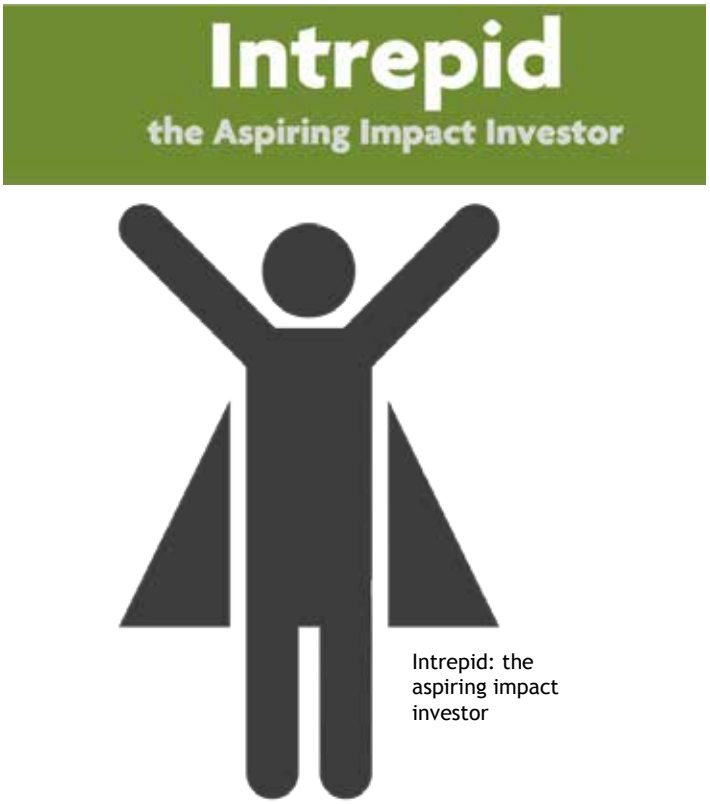
regional food systems. Ecotrust's top recommendation for them? "Pick a problem and go to work." As the report explains, "the issues are many and varied, so coordination of a wide variety of investment and initiatives will be required to change the overall situation."

Learn more on the report website: http://www.ecotrust.org/publication/regional-food-infrastructure/:

- Read the Executive Summary (15 pp)
- Read the full report (240pp including references)
- Meet "Intrepid" – a hypothetical investor hoping to make a difference – and take an interactive (and clever) journey through the report findings.

What the media had to say:

- Capital Press, 6/8/15: http://www.capitalpress.com/20150608/researcher-focuses-on-ag-of-the-middle
- Capital Press, 5/28/15: http://www.capitalpress.com/Opinion/Editorials/20150528/new-effort-gives-ag-of-the-middle-a-boost
- OPB Think Out Loud: http://www.opb.org/radio/programs/thinkoutloud/segment/the-unique-challenges-facing-medium-sized-farms/
- The Oregonian: http://www.oregonlive.com/business/index.ssf/2015/05/oregon_lacking_ag_in_the_middl.html
- Portland Business Journal: http://www.bizjournals.com/portland/blog/sbo/2015/05/why-ecotrust-is-building-a-food-hub-in-portlands.html



Intrepid: the aspiring impact investor

Closing the Hunger Gap

September 13 – 16, 2015
Portland, OR

The 2015 Closing the Hunger Gap: Cultivating Food Justice Conference, hosted by the Closing the Hunger Gap network and Oregon Food Bank, will bring together food banks, anti-hunger advocates and food justice activists from across North America. More than 500 attendees will be in Portland, Oregon from September 13-16 to network, learn about community food systems strategies and create a collective vision. If you believe food banks should expand their efforts beyond food handouts and toward collaborative, community-based empowerment initiatives, this event is for you!

The conference aims to incorporate a broad range of topics including health and nutrition, food hubs, community organizing and strengthening connections between local farms and emergency food providers. Presenters and attendees will represent food banks, farms, and nonprofit organizations focused on health, education and food justice. In addition we will hear from emerging leaders and people most impacted by hunger.
The conference features:

- A key note presentation by Nick Saul from Community Food Centres Canada.
- Field trips around the region focusing on labor in the food system, empowerment through food, child nutrition, community economic development and the Columbia River Gorge food system.
- 35 workshops on topics such as community economic development, how to fund community food system projects and food justice.
- A fantastic reception featuring food from participants of a multi-cultural food business incubator program, live music and time to connect with other conference attendees.
- An intensive, day-long course on Food Policy Councils.
- An open space session where every participant has the opportunity to convene a discussion about what interests them most.

Registration opens June 1. Scholarship applications will be available mid-May. Learn more about the conference at thehungergap.org.

Calendar

July

8 to 16 - Blueberry Field Days
North Willamette Research and Extension Center, 15210 NE Miley Rd, Aurora, OR. For more information contact 971-373-5912 Amanda.Vance@oregonstate.edu ***$10***

31 - Last Friday Farm Tours
Bring a friend and come see what's going on at the farm! Learn about current research projects and other activities at NWREC. Tours begin at 2:00 PM. They are usually about 1.5 hours in length. North Willamtte Research and Extension Center, 15210 NE Miley Rd., Aurora, OR. Please pre-register with Jan by calling 503-678-1264. ***FREE***

August

28 - Last Friday Farm Tours
Bring a friend and come see what's going on at the farm! Learn about current research projects and other activities at NWREC. Tours begin at 2:00 PM. They are usually about 1.5 hours in length. North Willamtte Research and Extension Center, 15210 NE Miley Rd., Aurora, OR. Please pre-register with Jan by calling 503-678-1264. ***FREE***

September

22 - Small-Scale Equipment Field Day
A small-scale equipment field day will be held at the Oak Creek Center for Urban Horticulture on September 22, 2015. Multiple tool-makers and suppliers will bring equipment and tools for farmers to try out, see in action, and ask questions. Oak Creek Center for Urban Horticulture, Corner of 35th and Western, Corvallis, OR. 1:00 PM - 6:00 PM. For more information contact Chrissyl at 541-766-3556 or chrissy.lucas@oregonstate.edu. ***$25***

25 - Last Friday Farm Tours
Bring a friend and come see what's going on at the farm! Learn about current research projects and other activities at NWREC. Tours begin at 2:00 PM. They are usually about 1.5 hours in length. North Willamtte Research and Extension Center, 15210 NE Miley Rd., Aurora, OR. Please pre-register with Jan by calling 503-678-1264. ***FREE***

http://smallfarms.oregonstate.edu for more upcoming events!

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