

Oregon Small Farm News

Oregon State University Small Farms Program



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Cover Photo:

Learning to make cheese in the new OSU Dairy Foods pilot plant. See story on page 11.
Photo by Lynn Ketchum, Oregon State University
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Communications.

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USDA Offers Conservation Funding to Organic Producers Initiative in its Third Year

The US Department of Agriculture will provide funding to help organic producers and those transitioning to organic production implement resource conservation practices on their agricultural operations.

2011 marks the third year of USDA's Organic Initiative, and up to \$50 million is available this year for producers to plan and implement conservation practices that address natural resource concerns in ways that are consistent with organic production. For example, organic producers may use the funding to plant cover crops, establish integrated pest management plans, or implement nutrient management systems consistent with organic certification standards.

Eligible producers include those certified through USDA's National Organic Program, those transitioning to certified organic production, and those who meet organic standards but are exempt from certification because their gross annual organic sales are less than \$5,000. In FY 2010, NRCS obligated nearly \$24 million through the Organic Initiative to help producers implement conservation practices.

Organic Initiative funding is provided through the Environmental Quality Incentives Program (EQIP), a voluntary conservation program administered by USDA's Natural Resources Conservation Service (NRCS) that promotes agricultural production and environmental quality as compatible national goals. The 2008 Farm Bill provided for assistance specifically for organic farm operations and those converting to organic production.

Under Organic Initiative contracts, producers are paid 75 percent of the cost for the organic conservation measures they implement. Beginning, limited resource, and socially disadvantaged producers are paid 90 percent. The program provides up to \$20,000 per year per person or legal entity, with a maximum total of \$80,000 over six years.

Producers interested in applying for Organic Initiative funding must submit applications through their local NRCS Service Center, which can be located through the Web site at <http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>. Applications are accepted on a continuous basis, with the cutoff date set for March 4, 2011.

Farm Profile: Fields Farm

By: Dana Martin, OSU Small Farms Program

Jim Fields can't help but grin when he points out the strategically placed grain silo on his farm. During the Central Oregon housing boom, the silo served as a beacon to land developers that his property was not for sale.

Today, it symbolizes much more as it towers over the ten-acre farm east of Bend. Completely surrounded by houses, Jim and Debbie Fields have developed a unique paradise, proving that small-scale sustainable farming is possible in this challenging climate.

Central Oregon is a region recognized for its shallow sandy soil, 12-inch annual rainfall, and short 90-day growing season. The challenge is magnified by wide temperature fluctuations of 90 degree days and evenings that cool to below 50 degrees. Some even remember having snow on the 4th of July. But none of this affects the enthusiasm at Fields Farm.

From Jim's perspective, many of the extreme conditions can be modified. Soil can be enhanced through composting; temperatures can be improved through season extenders; and thanks to the irrigation rights on his property, he can use water effectively for frost control. In fact, Jim points out advantages of Central Oregon farming. "This climate is good for sweetening vegetables so our carrots are really good. They tend to taste better," he says.



Jim and Debbie Fields were the recipients of a 2010 Cooperator Award presented at the 2010 OSU Extension Service Outreach and Engagement Conference. Photo by Lynn Ketchum, OSU Extension and Experiment Station Communications.

Jim and Debbie purchased their Bend property in 1989 after deciding that the farm lifestyle was in sync with their family values. Debbie continued to work as a public health nurse while Jim learned all he could from Eliot Coleman's book on farming in cool climates and by participating in the OSU Extension Master Gardener's program. He pursued his goal of being an organic farmer and direct marketer, at a time when this type of farm business was rare.

To get a feel for direct marketing, Fields Farms started with eight Community Supported Agriculture (CSA) shares and slowly worked to increase farm capacity. By 2003, Jim and Debbie had expanded to 50 CSA shares, added a farmers' market and were wholesaling produce to retail stores. In 2006, after growing to 68 CSA shares and the pressures of attending two farmers' markets, Jim was forced to re-evaluate his priorities. "I had taken on too much and maxed out," he says. "I decided to take 2007 off and planted a cover crop to let my land rest."

The break served its purpose and by the following year, Jim was ready to hit the ground running. It didn't take long to rebuild CSA shares in Fields Farm due to strong relationships that had formed through the years.

Jim also pursued his passion for composting. Early on in his farming career, Jim had developed a composting system with a goal of building soil through



Students learn about innovative equipment.
Photo by Dana Martin

a process that would be economically viable. By receiving waste hops and spent grains from Deschutes Brewery, the composting plan turned out to be mutually beneficial for both parties. Jim then focused on a new desire to recycle waste food into soil food, and keep methane out of the landfill. Fields Farm now has a regular pickup route, collecting biodegradable wastes from restaurants in Bend's Old Mill District.



Composting at Fields Farm.
Photo by Dana Martin

This meshes well with Jim's current goal for Fields Farm to have a zero carbon imprint. Since landfill methane is produced when organic materials are decomposed by bacteria under anaerobic conditions, Jim is helping his environment by bringing food wastes to his farm. He manages the wastes for a year and then uses the compost as a soil amendment and fertilizer for his farm. Jim also installed a solar array to help power irrigation and he utilizes bio-diesel in his tractors. Although this all contributes towards his goal of having a zero carbon footprint, Jim notes that the difficult part is being able to quantify it.

Jim is enthusiastic about learning new techniques and methods relating to farm production, operations and marketing. He shies away from the "pioneer" distinction and cites long-time farmers who were direct marketing crops to local supermarkets long before he arrived. But Fields Farm has paved the way for many aspiring Central Oregon farmers and Jim is happy to share his knowledge and help people learn from his experiences.

His first advice to new farmers is to start small and try things out before totally diving in. It is also helpful to have off-farm income to support the farm, especially when getting

Jim teaches for Growing Farms: Successful Whole Farm Management, an OSU Extension Small Farms program.
Photo by Dana Martin



established. To further assist people, Jim teaches classes for OSU Master Gardener programs and OSU Extension Small Farms programs including *Growing Farms: Successful Whole Farm Management* and *Living on a Few Acres*.

Education doesn't focus solely on adults. Fields Farm hosts farm tours for local schools, attracting 450 students last spring, who came to learn where food comes from. The farm also serves as a learning laboratory for Central Oregon Community College culinary students as they gain a better understanding of how organic, locally grown food is produced. Students said their time on the farm gave them a new appreciation for what it takes to grow and provide a steady source of food. "Some of these future chefs had never tasted raw carrots right out of the ground," says Jim. "They were amazed by the flavor."

In recognition for their contribution to agriculture, their community and the OSU Extension Service, Jim and Debbie were recently honored with an Oregon State University Extension Service 2010 Cooperator Award.

As small-scale sustainable farmers, Jim and Debbie have enjoyed the lifestyle, values and freedom that farming has provided for their family. With the growing enthusiasm and interest in local food, they feel it is more exciting than ever to be involved in agriculture. Local farmers are likely to benefit from the momentum of the local food movement as more people become interested in how their food is grown and where it comes from.

“This cultural shift is all good” he says. “People are willing to pay a little more for food that has more food value so our farmers can stay in business -- and we will become a healthier society because of it.” With this, Jim shares a very important bit of information for aspiring young farmers. “You don’t do this to make money,” he says. “You do it for the love of growing things. Ours is a lifestyle choice.”

Oregon State University Extension Service presents the 11th annual

Small Farms Conference

February 26, 2011 - LaSells Stewart Center - Corvallis, Oregon



Chuck Hassebrook, Keynote: *The Next Wave of Change in Agriculture, the Food System & Rural America*. Small farms are creating a wave of change in the farm and food system that offers rural people and communities the opportunity to retake control of their destiny. Public research and federal policy have driven industrialization of agriculture and undermined family farms and rural communities. Now, American consumers are voting with their dollars for a new approach. Public policies can be changed.

Invited Capnote speaker: Kurt Schrader was elected to the U.S. House of Representatives in 2008 representing Oregon’s 5th District. Congressman Schrader currently serves as a member of the House Committee on Agriculture. He is a veterinarian and farmer who lives with his wife Martha on their Three Rivers Farm in Canby.



Concurrent Sessions

10:30 am to 11:45 am

- *A Conversation with Chuck Hassebrook*
- *Use FoodHub to Build Your Wholesale Business*
- *Marketing Your Produce: Weaving Together Multiple Sales Channels*
- *The Farmer to Shopper Connection: Increase Sales with Farm Direct Checks & WIC Fruit & Veggie Vouchers*
- *Production Challenges for Niche Meat Markets*
- *Food Safety on the Farm: An Introduction to Good Agricultural Practices*
- *Is That Really Old MacDonald’s Tomato? Why and How to Conduct Farm Visits*

1:00 pm to 2:15 pm

- *Projects, Partners, and Policy: Changing Oregon’s Food and Agricultural System*
- *Farm Stay U.S.: Growing Farm Stay Agritourism in the Pacific Northwest*
- *Multi-Farm Community Supported Agriculture: Sharing the Risks and Rewards of CSAs*
- *Nitrogen Management & Cover Cropping*
- *Meat and Poultry Processing: Relationships, Costs, and DIY*
- *Oregon Farm Direct Bill and Farmers’ Markets*
- *Farm Energy Success Stories*

2:45 pm to 4:00 pm

- *Measuring the Economic Impacts of Local Food*
- *Niche Meat Markets: From First Date to Lasting Relationship*
- *Keys to Quality: Post-Harvest Handling*
- *Managing Wildlife Opportunities and Challenges on Your Land*
- *How Do You Make Soils Exciting?*
- *Marketing Your Market to Bring in More SNAP Customers*
- *Growing and Selling Produce, Livestock, Value-Added Farm Products: Do I Need a License?*

\$45.00 each or 2 for \$80.00

Registration deadline

Feb. 16th, 2011

after deadline registration fee increases

Full Registration brochure and detailed session descriptions can be found at:

<http://smallfarms.oregonstate.edu>

To request a hard copy of the brochure, contact 541-766-3556 or Chrissy.Lucas@oregonstate.edu

Crop Planning - One Farmer's Approach

By: Josh Volk, Slow Hand Farm

Every year in October, I start to think about planning the next season's plantings. Plantings for a small CSA are complex: lots of varieties of lots of crops, multiple successions of many of those, and new ones to experiment with all the time. Thinking about the harvests first, I always want to spread things out over the season, keeping mid summer harvests from being too overwhelming, avoiding gaps in early and late harvests, and generally providing a good mix every week of the harvest season. This is not so different from planning for direct sales at a farmers market, or farm stand, or even in a kitchen garden.



Slow Hand Farm grows 70 different crops for a year round CSA. Pictured are lettuce for seed, carrots, leeks, kale, tomatoes and other various crops from last summer.
Photo provided by Josh Volk

In November I start to get things down on paper. I review my notes and records from the previous seasons. Actually, I don't use much paper anymore; I mostly use computer spreadsheets which are easy to edit, easy to store, and easy to sort and to make automatic calculations on. Over the years I developed a system that I like, and that fits my needs.

The first step in my system is creating the harvest plan. I have one spreadsheet template where I keep all of those notes. See an example at <http://slowhandfarm.com/supplemental/summer%202011.pdf>. Once I have the harvest plan, I use another template to create the planting plan. That sheet carries all of the planting information, seed ordering information, greenhouse propagation, and any other notes on each crop. My third step which is to map out all of the plantings, essentially doing a dry run on planting out all of the fields, figuring out where everything should go, how it will fit, and if I even have space for all of it.

This is a somewhat circular process. Often, when I get to the last step of mapping out the fields it becomes obvious that I need to adjust the harvest plan to make everything fit. In this case I edit the first two steps until I get it right. By December or January, the seed catalogs have mostly come, and I order my seeds in time to start first ones in late January.

There are a lot of considerations on what to plant and when. I definitely consider my market, first and

foremost, deciding what I think I can sell and when, and how much it's going to cost me to produce it. I also consider good crop rotations. Some crops may be planted more to support a good rotation, or to even out work flow rather than for the money they will bring in immediately. With the plan on paper it's easy to see where cover crops will fit into the fields, and to make sure that I always have enough seed on hand. A written plan is easier to adjust mid season, as I can see how changes will effect future crops and make more informed decisions with less effort. I put high value on crop rotations as a way of reducing disease and pest problems, and in addressing weeds and fertility issues. By planning out rotations years in advance I can also avoid rotational problems due to poor placement of crops from year to year.

The plan helps keep track of all of the plantings, makes sure there's space for everything, helps all of the crew to understand the work flow, and reduces my stress level during the season by limiting the number of tasks that I have to keep in my head and pass on to others. It also creates a template for record keeping which helps me improve my planning from year to year and even within the season. After years of farming I could probably get by without having the plan down on paper, but I know that it would be far less efficient and I would loose a lot of the information that is so valuable to me for future plans. *℘*



The OSU Small Farms Program and Oregon Tilth present a course to provide beginning specialty crop and livestock farmers with tools and knowledge to manage the biological and financial risks of farming. Participants will assess their farm enterprise and gain the ability to develop a whole farm plan. This program targets farmers in their first five years of farm business. A mix of OSU faculty, experienced farmers, and other professionals will present information and resources vital to developing a sustainable farm.

Topics include:

- Strategic Planning
- Farm Finances
- Production
- Farm Operations
- Marketing
- Managing Liability

Growing Farms is designed for beginning farmers and ranchers in their first 5-years of business. Come and learn how to navigate the biological, financial and human aspects of farming.

Central Oregon

January 26, February 2, 16, & 23 and March 2 & 9
(Wednesdays) 5 to 9pm
Field day: February 12
Location: Deschutes Co. Extension Office in Redmond

Contact: Dana Martin
541-548-6088 x7957 or
dana.martin@oregonstate.edu

Register online:

<http://smallfarms.oregonstate.edu/central-oregon-growing-farms-workshop-series>

North Willamette Valley

January 19 to February 23
(Wednesdays) 4:30 to 9pm
Field day: February 12
Location: North Willamette Research & Extension Center in Aurora

Contact: Kristin Pool, 503-678-1264 x118 or
kristin.pool@oregonstate.edu

Register online:

<http://smallfarms.oregonstate.edu/north-willamette-valley-growing-farms-workshop-series>

Southern Oregon

January 27 to March 3rd
(Mondays) 4 to 8:30pm
Field days: TBD
Location: Business Entrepreneurial Center in Kerby

Contact: Tracy Harding, 541-776-7371 or
tracy.harding@oregonstate.edu



Information & enrollment at
smallfarms.oregonstate.edu
Or contact
Kristin.pool@oregonstate.edu
(503) 678-1264 ext.118



Meat Short Course at Small Farms Conference: Raise It, Process It, Sell It

By: Lauren Gwin, Oregon State University

We've all heard the expressions "farm to plate" and "field to fork." But what do they really mean for meat? If you're interested in niche markets – like local, grass-fed, organic, pastured, or natural – come to the three session "meat track" at this year's Small Farm Conference, February 26, and a special, limited enrollment carcass breakdown workshop on Sunday, February 27.

Experienced practitioners, OSU Extension specialists, and others will talk shop about production, processing, and marketing challenges for farmers and ranchers looking to market their own meat and poultry.

In "Production Challenges for Niche Meats," grass-fed rancher David McKibben of McK Ranch and OSU Extension Specialist Gene Pirelli will cover pasture and forage management for 100% grass-fed production. Oregon Tilth's Garth Kahl will offer tips for Certified Organic animal husbandry. We'll also run through common niche labels and what they mean for on-farm production.

In the second session, we'll turn to one of the most important links in the niche meat supply chain: your processor. Bob Dickson, manager of USDA-inspected Dayton Meats, will talk with his customer Bette McKibben, also of McK Ranch, about how producers and processors can establish and maintain an effective working relationship. Bob Dickson and Karen Schueller of Scio Poultry Processing will explain challenges and costs from the processor perspective. And for the DiY crowd, Tyler Jones of Afton Field Farm will describe his on-farm, state licensed poultry processing facility – how he built it and how it works. Then we'll ask the question that really should come first: who's going to buy it? How do you find potential customers and convince them to try your products? Once you've made a sale, how do you maintain the relationship? How do buying clubs and bundles work, and are they cost-effective? In "Niche Meat Markets: From First Date to Lasting Relationship," we'll hear from Cory Carman of Carman Ranch, John Neumeister of Cattail Creek Lamb, retail buyer Jeannie Holiday



of First Alternative Co-op, and distributor Scot Laney of Eat Oregon First about marketing relationships between producers and different kinds of customers: direct sales, restaurants, retailers, institutional buyers. And if you came to last year's meat marketing session, don't worry that you've "heard it all before" – Cory and John will tell us how their marketing and supply chains have evolved during the past year.

At Sunday's carcass breakdown workshop, we'll watch OSU Meats Instructor Lea Ann Kinman cut up a side of beef and a side of pork. She'll show us how the carcasses break down into wholesale cuts, primals and subprimals, and restaurant cuts. We'll talk value-added, pricing, yields, processing regulations, and more. If you sign up for this one, dress warmly!

The meat track sessions and workshop are sponsored by USDA's Western Center for Risk Management Education. All will be held on the OSU Campus. The Sunday workshop is limited to 30 registrants. The cost is \$75 per person. The cost of the Small Farms Conference is \$45 per person or \$80 for two from the same farm or organization. Register online for the Small Farms Conference to attend the three session "meat track": <http://smallfarms.oregonstate.edu/2011SFC>. Register separately for the carcass breakdown workshop: <https://secure.oregonstate.edu/smallfarms-events/register/38> 🍷

Pacific Northwest Researchers and Farmers Collaborate on Organic Breeding Efforts

By: Kristina Hubbard, Director of Advocacy, Organic Seed Alliance and Micaela Colley, Executive Director, Organic Seed Alliance

The Northern Organic Vegetable Improvement Collaborative (NOVIC) brings together researchers and organic farmers in Northern states to address seed and plant breeding needs. NOVIC includes researchers and educators from Organic Seed Alliance, the U.S. Department of Agriculture, and four land grant universities: Washington State University, Oregon State University, University of Wisconsin – Madison, and Cornell University. NOVIC partners with organic farmers to breed new varieties, identify the best performing varieties for organic agriculture, and educate farmers on organic seed production and plant variety improvement.

The availability of plant varieties with regionally adapted productivity traits that perform under organic production challenges – be it weed competition, low-input fertility, and pest and disease pressure – is fundamental to the success of organic agriculture. Responses to a nationwide survey conducted by Organic Seed Alliance in 2010 indicate the organic



Frank Morton (left) of Wild Garden Seed and John Eveland (right) of Gathering Together Farm discuss pepper traits at the NOVIC Field Day.
Photos by Lane Selman

sector is underserved in genetics specifically adapted to organic cropping systems, regions, and market niches. Many farmers are challenged by a lack of sufficient quantity and scarcity of information on performance under organic conditions for those varieties for which



Washington State NOVIC field day, carrot and beet taste tests.
Photo provided by Micaela Colley

organic seed is available. Few breeding programs focus on varieties suitable for on organic production, even though the opportunities to address unique challenges and consumer demands are very great.

NOVIC collaborators work with farmers on regional breeding projects that focus on traits important for season extension, a breeding priority for organic farmers producing for regional markets. Breeding projects also focus on flavor and horticultural traits crucial to organic agriculture. All breeding is conducted under organic conditions.

Plant breeding projects are underway in five states – Minnesota, New York, Oregon, Washington, Wisconsin – and focus on five vegetable crops. The breeding goals include **broccoli** (heat tolerance, marketable uniformity in an open-pollinated variety); **carrot** (cold-tolerant, weed-competitive, ‘Nantes’ type); **snap pea** (heat-tolerant, disease resistant, stringless variety); **sweet corn** (good cold soil emergence in a sugar enhanced variety); **winter squash** (long term storability). Carrot, corn, broccoli, and snap pea breeding efforts are underway in Washington and Oregon with cooperating organic farms.

Collaborators work with farmers to conduct vegetable variety trials on certified organic ground, at research stations, and on cooperating organic farms. Trials include the five crops mentioned above in addition to crops chosen by regional farmers. For the 2010 season, farmers in Washington chose to conduct trials on table beets and farmers in Oregon chose bell and sweet peppers.

NOVIC is committed to sharing resources and information with farmers, seed companies and research and education organizations nationally. To that end, a national database of organic variety trial results will be created in 2011 with a feedback forum for farmers to contribute their experience with variety performance on their farms. This information is also shared through field days and workshops.

Education is central to the purpose of NOVIC. Collaborators have hosted workshops at which farmers gain skills in seed production and plant variety improvement. Last July the first on-farm participatory breeding workshop was held at Common Ground Farm in Olympia, Washington. The workshop was co-taught by Jim Myers, OSU and John Navazio, WSU and drew over 40 participants, primarily farmers and students of sustainable agriculture. OSU held a farmer field day to view variety trials. Summer variety trial field days and tasting evaluations were also held in Oregon and Washington in 2010. NOVIC will publish guides on seed production, plant variety improvement, and participatory plant breeding throughout 2011-2013. Publications, event announcements, and a trial database will be created through eOrganic and shared with the public on www.eXtension.org. For more information about NOVIC activities planned for 2011 in the Pacific Northwest visit www.seedalliance.org.

NOVIC benefits organic farmers and the communities they serve in a number of ways. First, farmers have access to shared knowledge and resources, including seed

growing equipment, with the goals of developing varieties optimal for organic systems and safeguarding invaluable plant genetic resources. Second, the project assists organic farms in meeting compliance with organic regulations by helping farmers learn which organically certified varieties perform well in their region. And, third, access to on-farm seed production and plant variety improvement resources and educational events will help farmers achieve more success on their farms.

NOVIC is an effective working model that the organic community can emulate to collaboratively build infrastructure for developing and distributing organic seed. *z*



ORGANICOLOGY

*Workshops
Networking
Tradeshow*

The Study of a Sustainable Food Future

Feb. 10-12, 2011

PORTLAND, OREGON
DOUBLETREE LLOYD CENTER

**Get Educated, Involved & On Board | What's Driving
the Organic Trade from Soil to Seed to Table**

Get Schooled!

keynotes
Steven Jones, Andrew Kimbrell & Jim Hightower

Produced by
Oregon Tilth, Food Trade Sustainability Leadership Association,
Organic Seed Alliance & Organically Grown Company

www.organicology.org

New OSU Dairy Foods Facility Open

By: Lisbeth Goddik, OSU Dairy Processing Extension Specialist

"This is for all of us who appreciate good food. Cheese is the perfect accompaniment with wine, micro brew, berries, and artisan bread. Local cheeses exemplify the concept of Oregon terroir: from grazing cows to shady Douglas firs. It is a product of choice for consumers who demand to know where and how their food is produced."

After 30 years of hibernation, the OSU dairy plant has been completely remodeled and is once again a fully licensed dairy facility. With state-of-the-art cheese making equipment imported from Europe it is possible to produce most types of specialty cheeses in the facility. One reason for applying for the license was to serve as incubator for starting cheese companies. Cheese makers can make and sell cheeses produced at OSU while constructing their own facilities. This lowers the entrance barriers for start-ups. Currently, "Cheese Louise" is producing ricotta and mascarpone cheeses which are sold for food service use.



Keith Ellis, owner of Cheese Louise, is making cheese in the OSU cheese pilot plant.
Photo provided by Lisbeth Goddik

Scaling up of the equipment is required to handle larger production batches. A new 240 gal cheese vat has just been ordered from Holland. New cheese caves are currently being built and a new cheese press was just installed. Funding for covering start-up costs will come from dairy industry companies and private donors.

The dairy plant hosts several extension classes each year. Besides receiving training in cheese making, dairy sector employees are trained in safe processing procedures, GMPs, SSOP, and HACCP. Cheese making classes are also popular among OSU students. In the past the classes were open to all students but are now restricted to food science and dairy option students only due to the large enrollment growth in these programs.

By Homecoming 2011, an OSU cheese "Beaver Products" label will be released. Based on OSU's strengths in food science and innovation. Beaver Products cheeses will be developed, produced, marketed and sold by OSU students using milk from the OSU dairy farm. The practical hands-on experience will provide great training for students, and provide paying jobs for students right on campus.

In November, the Paul and Sandy Arbuthnot

Professorship was established which supports the Arbuthnot Dairy Center. The Arbuthnot Dairy Center is both a physical location on campus and an outreach program. The center consists of the dairy pilot plant with connecting laboratory and classroom. The classroom and laboratory are currently undergoing renovation to better fulfill industry standards.

The outreach program will focus on promoting development of safe and innovative dairy products in Oregon. Special attention will be given to helping dairy farmers adding value to their milk by converting to farmstead dairy operations. Each year an international cheese maker will be invited to be cheese maker in residence at OSU. The first cheese maker is expected to be from Italy. The cheese maker will work with Oregon's artisan cheese makers through classes at OSU and on-site visits. The endowment will also support student internships with dairy companies. This endowment will support OSU's dairy foods programs in perpetuity and will have a great impact. The first recipient of the professorship, Dr. Lisbeth Goddik, extends a sincere thank you to the donors, a couple who believes in the importance of safe and nutritious dairy products, sustainable rural communities, family farming, and local food. 🌾

Pioneering a Local Food System in Central Oregon

By: Dana Martin, OSU Small Farms Program

“Local Food”, “Food Patriotism”, “Community Food Security” --- whatever you choose to call it, there is definitely a movement happening to support locally grown food and sustainable food systems that maximize self-reliance within communities. From production to distribution to consumption, people are interested in learning where their food comes from and doing what it takes to promote local agriculture.

The local food movement in Central Oregon is gaining momentum thanks to collaborative efforts to build a local food system that will enhance community food security in our region. To formally kick off this project, a Community Food Assessment (CFA) was initiated by Wy’East Resource Conservation and Development in the fall of 2009. Sydney Leonard, VISTA AmeriCorps volunteer, was brought on to work in partnership with NeighborImpact, Central Oregon Intergovernmental Council and Oregon State University Extension Service.

A CFA is a collaborative, participatory project that takes a big picture look at the food system in all its parts (production, distribution, consumption) with the purpose of learning how it works and how to improve food and farms. “It shows what our most pressing needs are, as well as the key community assets on which to build,” said Sydney.

The CFA process included the gathering of data and community input regarding food production, access and availability. Agricultural producer and consumer surveys were completed and additional information was collected through community meetings, direct interviews and focus groups. People were further engaged through the Central Oregon Food Summit where 120 attended to hear the CFA report and strategize next steps for moving forward.

Some “producer” highlights gleaned from the CFA 115-page *Pioneering a Local Food System in Central Oregon; a Community Food Assessment Report*

address farm and ranch viability in Central Oregon, many of these issues relate to marketing challenges, profitability and regulatory compliance, all which are interrelated. Specifics include:

- A majority of local farm products are not being sold in the places that people are used to accessing food; this “lack of access” was indicated to be a greater barrier than “price” as a reason for consumers not buying local food.
- Local producers are struggling to get products into the local sector and on existing distribution lines because of marketing related challenges and the challenge of meeting quality consistency, and quantity needs of retailers and distributors.
- The economic viability of farming in Central Oregon is an important issue if we want to preserve farms and farmland and secure our ability to meet regional food needs. Most local producers rely heavily on off-farm jobs to survive, leaving less time for marketing and on-farm work. Many survey respondents were landowners who were interested in making use of their land and producing food for the local community but faced marketing challenges.
- Survey respondents emphasized the prohibitive effects of land-use regulations in regards to diversifying farm income through activities such as agritourism, farm internships and building a separate dwelling on farmland. Because of the immense struggles around the economic viability of small-scale farming, this will be an important issue for the public and county governments to address.
- 60% of those surveyed described the current state of agriculture in Central Oregon as struggling, with 35% surviving and 5% thriving. However, when asked about future plans, 52% said that they plan to expand or diversify production over the next 5 years.

As a result of the Central Oregon Food Summit and CFA process, a Central Oregon Food Policy Council has formed. A diverse group of stakeholders who support a sustainable food system has been meeting regularly to focus on the identified issues. The goal of this group is to improve healthy food access; be

involved in public policy; and connect people through networking opportunities.

One priority for the Central Oregon Food Policy Council is to review governmental regulations and policies that stand in the way of revitalizing the local food economy. Central Oregon farmers and ranchers are being asked to share their thoughts about land use policies and specific changes that would help them to be more successful on their land.

Topics to be discussed at the next meeting include: housing for farm employees; agritourism; and mobile butchering and processing. The next meeting will be January 13, 2011, with plans to identify and promote implementation of new policies that will help local farmers, food processors and food retailers. For more information about this meeting, contact Katrina Van Dis at kvandis@coic.org or Dana Martin at dana.martin@oregonstate.edu. ☞



Living on a Few Acres

Classes for Rural Landowners

Saturday, March 5, 2011
Deschutes County Fairgrounds & Expo Center
Redmond, Oregon

This conference includes a choice of four classes from topic areas of livestock care, fencing, irrigation, pasture management, farm business, agritourism, tractor driving and safety, specialty crops, sustainable farming, forestry and small woodlands management (tree health, fuel reduction), chainsaw safety and use, wildlife management, wildlife control, land use laws, food safety, pond health, food preservation, bee keeping, seed collecting, water quality and more.

Keynote speaker and trade show included in this event. Cost: \$40 per person or \$75 per couple.

Registration opens in mid-January. For more information contact Dana Martin at dana.martin@oregonstate.edu

—*SAVE THE DATE*—

Aminopyralid Residues in Compost

By: Sam Angima, Oregon State University Small Farms Program and Andy Hulting, Oregon State University Weed Specialist

Several farmers and gardeners in Washington State lost most of their vegetable crops in 2010 due to the effects of aminopyralid herbicide residues that originated from composted dairy manure. For more information see Herbicide Carryover in Hay, Manure, Compost, and Grass Clipping at <http://smallfarms.oregonstate.edu/sfn/f09Herbicide>.



Image of a tomato plant affected by aminopyralid residue in the soil.
Photo provided by WSU Extension

Aminopyralid (marketed as Milestone™, Chaparral™, and Opensight™), is an auxinic growth regulator herbicide and will cause damage to sensitive broadleaf plants such as tomato, lettuce, beans and peas. Impacted plants will usually not die when exposed to low residue amounts in compost, but will produce few quality fruits or no fruits.

Aminopyralid breaks down slowly or not at all in the digestive system of a cow or in the composting process, but instead, remains with the organic matter throughout the composting cycle. Problems arise when this compost is used to amend garden soils. Concentrations as low as 1 part per billion (ppb) of aminopyralid will affect sensitive plants such as vegetables. Damage to broadleaf plants includes cupped leaves, twisted stems, distorted apical growing points, and reduced fruit set. See images of damaged plants at: <http://whatcom.wsu.edu/ag/aminopyralid/images.html#img9>

Conduct Your Own Bioassay

End users like vegetable farmers and gardeners can test for aminopyralid contamination in compost or manure by conducting a bioassay before planting broadleaf plants in soil that has been amended by suspect compost or manure. Sow seeds of plants with known susceptibility, such as peas, beans or tomatoes, in small pots with a mix of the compost material and peat-based potting mix. Place the pots indoors in a warm well-

lighted place, especially during winter. Find detailed instruction on conducting a bioassay in this WSU document: <http://www.puyallup.wsu.edu/soilmgmt/Pubs/CloBioassay.pdf>.

Aminopyralid is slowly broken down by microorganisms commonly found in soil. To dispose of contaminated compost or manure spread them on soils in areas where broadleaf plants will not be

grown and incorporate lightly into the soil and irrigate heavily in dry areas. A second and third mixing with the soil may speed the decomposition of the material.

Perform an additional bioassay before planting broadleaf plants into these receiving sites for contaminated materials. Farmers with optional acreage, may plant wheat, oats, or any grass-based cover crop. Grass crops are not susceptible to aminopyralid; planting them provides additional time for aminopyralid to break down. The half-life of



A pepper plant showing signs of injury from aminopyralid residue in compost.
Photo provided by WSU Extension

aminopyralid is about 35 days. It is broken down by soil microorganisms in warm, moist environments by aerobic process.

Crops harvested from fields tainted with aminopyralid residue cannot be sold. Effected plants will show injury symptoms long before setting fruit. Grow grass-based crops or cover crops in such fields to allow time for aminopyralid to breakdown.

As you plan for the 2011 season, remember to check your manure or compost source and be prepared to

take the necessary steps if you suspect aminopyralid contamination. It is important for everyone in agriculture, livestock growers, composters, and crop farmers to be aware of our actions and to seek information on our inputs.

For more images of plants affected by aminopyralid contamination, check the Washington State University Extension website <http://whatcom.wsu.edu/ag/aminopyralid/images.html#img9> ☞

[Content credits: Colleen Burrows & Craig MacConnell, WSU Extension]

SAVE THE DATE

February 26, 2011

**Oregon State University
Extension Service**

Small Farms Conference

LaSells Stewart Center - Corvallis, Oregon



Do You Have Lousy Animals?

By: Dr. Susan Kerr, WSU Klickitat County Extension Director and Holly Ferguson, WSU-Prosser Extension IPM Coordinator Specialist

As we enter the colder, darker, damper time of year, we will be re-visited by a pest from the past: lice. An annual problem, lice can affect animal health and farm profitability. Here is a short primer on this parasite.

Species Specificity

Lice are generally quite species specific (Table 1). This means poultry lice won't spread to cattle or people and vice versa. Sheep and goats can share some lice species, however. The table lists primary locations of particular lice on their host, but keep in mind that when lice numbers are very high, they may be found anywhere on the body.

Life Cycle

The entire life cycle of most lice species takes about a month and occurs on the host. Adults and nymphs that fall off the host do not survive beyond a few days. Adults feed for about a month, then lay eggs ("nits") and die. Nits are attached tightly to hair shafts. Eggs hatch in one to three weeks and the resultant nymphs metamorphose into adults. Adult biting lice and nymphs eat dead skin cells, hair and other debris found on skin; adult sucking lice and nymphs penetrate skin and consume blood.

Signs of Infestation

Most experienced livestock owners are well acquainted with the signs of lice infestation: rough coat, hair loss, scratching, irritated skin, secondary skin wounds and infections, weight loss and general restlessness. Occasionally, afflicted animals develop problematic hairballs from licking themselves excessively and ingesting hair. Heavy infestations of sucking lice can result in clinical anemia and even death, especially in young animals. Lice can sometimes transmit disease-causing agents, such as rickettsia. They can also debilitate animals enough to predispose them to secondary problems such as pneumonia.

Animal host	Biting lice		Sucking lice	
	Species	Location	Species	Location
Cattle	cattle biting louse	head, ears, neck, topline, brisket	longnosed cattle louse	
			little blue cattle louse	head, ears, neck, topline, brisket
			shortnosed cattle louse	
Goats	goat biting lice (3 species)	base of tail, between legs, head, neck, topline	goat sucking lice	neck, underline, udder
Equines	horse biting louse	at roots of forelock and mane, base of tail, hairs above hoof	horse sucking louse	side of neck, flanks, base of tail
Sheep	sheep biting louse	all over body	sheep foot louse	on foot
			face and body louse	hairy parts of skin
			African blue louse	on flanks
Swine				in or behind ears, in neck folds, inside legs, inner flanks, under scurf of skin
			hog louse	

Table 1. Animal hosts and their lice species
Sources: Merck Veterinary Manual 2010 online and www.pested.msu.edu.

Transmission

If lice don't live off the host very well and they aren't a problem in summer, why are they a problem every winter? Some "carrier" animals may harbor small populations of lice year-round. When it gets to be a louse's favorite time of year (dark, cold and damp), animals are usually in close contact to stay warm, making it easy for lice to move between animals. Carriers give managers another reason to closely inspect any new animals brought into a herd; consider lice treatment as something to add to your quarantine procedure.

Diagnosis

Examine livestock for lice regularly starting in early fall. To find the more common but less pathogenic biting lice, part the animal's hair on its neck and back and look for very small moving grayish or brownish insects. The dash in Figure 1 is about the



Figure 1.
Approximate actual size of an adult louse.

same size as an actual louse; it is very small (~2-3 mm) but still visible to the naked eye. A magnifying glass or zoom lens (macro function) on a digital camera (Figure 2) makes diagnosis even easier. Sucking lice are generally larger and darker than biting lice. Depending on the host and lice species, they may also be found on an animal's muzzle, feet, legs, udder and groin areas. When in doubt, use sticky tape to capture a specimen and take it to your veterinarian for identification.



Figure 2. Goat sucking lice seen with a macro function on a digital camera.

Lice treatments come in many forms including sprays, pour-ons, dust bags, back rubbers, drenches, dipping vats and even injections for some lice species. Examples of treatments for different animal hosts are in Table 2. Your veterinarian may recommend extra-label use of other medications if a valid veterinary-client-patient relationship exists and proper record keeping is conducted. For all products, be sure to follow label instructions.

Theoretically, treating all livestock at the same time and re-treating two to three weeks later and moving to a clean environment should break the lice cycle. However, an infestation can persist if dusting powder is used and lice on an animal's underbelly escape treatment or if nits on shed hair are transported to a new site via clothing, wind, equipment etc.

An early or mid-winter series of two treatments should be conducted when routine monitoring reveals three or more lice per square inch of skin. Lice populations will naturally decline when environmental temperatures are consistently over 60°F. Excellent nutritional programs have been shown to make livestock more resilient to lice infestations.

Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock. *Z*

For more information

- <http://wiki.bugwood.org/uploads/CattleLice-Cattle.pdf>
- www.goatbiology.com/lice.html
- http://ipm.ncsu.edu/AG369/notes/hog_louse.html

Treatment and Control

There are two important things to keep in mind regarding treatment:

1. All livestock on an affected premise should be treated at the same time.
2. Most de-lousing treatments do not kill lice eggs.

Animal host	Treatment
Cattle	ivermectin subcutaneous injection at 1 ml per 110 lb body weight. Do not treat within 35 days of slaughter.
	cyfluthrin pour on at 8 ml per 400 lb of body weight (see label chart). Pour along top of back and head.
Goats, sheep	zeta-cypermethrin + synergist dust. Apply up to 2 oz per animal evenly into hair over head, ears, neck, shoulders, back and tailhead.
Horses	zeta-cypermethrin + synergist dust. Apply up to 2 oz per animal evenly into hair over head, ears, neck, shoulders, back and tailhead.
Swine	permethrin 0.5% ready to use. Spray or wipe on with applicator mitt. Avoid eyes. Do not soak hair or skin.
	ivermectin subcutaneous injection at 1 ml per 75 lb body weight. Treat sows 14 days before breeding or farrowing. Do not treat within 18 days of slaughter.
	permethrin 0.25% dust. Apply up to 1 oz per animal as a uniform coat to head, shoulders, and back. Do not treat within 5 days of slaughter.

Table 2. Examples of treatment recommendations for lice on different animal hosts
Source: Pacific Northwest Insect Management Handbook. <http://uspest.org/pnw/insects>
Note: Your veterinarian may prescribe other treatments that are not listed here.

Calendar

January

6 - Rural Living Basics: Wells and Septic Systems, Streamside Plants, and Native Fish

Participants may have their water screened for nitrates by bringing about 1/2 a cup untreated well water to class in a clean container. Benton County Fairgrounds, Carriage House off of 53rd Street, Corvallis, OR. 6:30 p.m. to 9:00 p.m. For more information contact Donna Schmitz at 541-753-7208 or DSchmitz@bentonswcd.com **FREE.**

February

26 - 2011 OSU Extension Service Small Farms Conference

Full day conference offering 21 sessions for small scale family and commercial farms, for farmers' markets managers and for food policy advocates. Marketing and innovative marketing channels, agritourism, soil quality, post-harvest handling, food and farm policy and legislation. LaSells Stewart Center, Corvallis, OR. 8:00a.m. to 5:00p.m. For more information contact Chrissy Lucas at Chrissy.Lucas@oregonstate.edu or 541-766-3556. Register online at <https://secure.oregonstate.edu/smallfarms-events/register/35> **\$45 each or 2 for \$80, after Feb 15th price increases**

26 & 27 - Niche Meat Production and Marketing Shortcourse.

Three sessions included in the Small Farms Conference address production, processing & marketing meat and poultry in niche markets. Sunday half-day carcass breakdown at OSU's Clark Meat Lab. Corvallis, OR. Small Farms Conference registration online at <https://secure.oregonstate.edu/smallfarms-events/register/35> **\$45 each or 2 for \$80.** Sunday carcass breakdown registration <https://secure.oregonstate.edu/smallfarms-events/register/38> **\$75.** For more information contact Lauren Gwin at Lauren.Gwin@oregonstate.edu

March

5 - Living on a Few Acres Conference

Topic areas of livestock care, fencing, irrigation, pasture management, farm business, ag tourism, tractor driving and safety, specialty crops, sustainable farming, forestry and small woodlands management, wildlife management, land use laws, food safety, pond health and more. For more information contact Dana Martin at dana.martin@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