

Oregon Small Farm News

Oregon State University Small Farms Program

In This Issue:

Oregon Hosts Multicultural Roundtable	2
Farm Profile: Afton Field Farm	3
Compost Discovered	5
USDA Releases Interim Rule for Country of Origin Labeling (COOL)	7
Supplemental Feed for Poultry	8
Grape Production in Central Oregon	9
Women's Agricultural Networks	10
Sustainable Livestock Production - Part 1	11
Weed Control in Pastures Without Chemicals	14
Are Your Fruits & Vegetables Safe for Human Consumption?	16
What's Happening in OSU Extension	19
Calendar	20

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Cover Photo:

*Tyler and Alicia stroll among their
pastured laying hens at Afton Field
Farm.*

*Photo by Lynn Ketchum, Oregon State University
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Extension Service Small Farms Program

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Oregon Hosts Multicultural Roundtable

Nearly 80 representatives of non-government organizations, universities, and state and federal agencies gathered in Hood River Oregon to take the first step toward creating a more integrated support system for disadvantaged, minority, immigrant and refugee farmers. The organizations represented education, advocacy, technical assistance, and loan programs. The *Multicultural Farming Roundtable* was organized by the Oregon State University Small Farms Program, Heifer International, the Washington State University Small Farms Program, and the USDA Risk Management Agency.

Farmers Jose Guzman of Guzman Orchards near Yakima and Tong Xiang who farms near Portland spoke about their backgrounds in Mexico and Laos and the challenges and successes of starting a commercial farming operation in the United States. Complicated paperwork through federal agencies and access to farmable land were high on their list of challenges.

Based on the most recent census of agriculture (2002), there are about 160,000 farmers in the U.S. who are African American, Asian, Hispanic or Latino, and Native American. Hispanic and Latino farmers are the fastest growing group, increasing by 50% between the 1997 and 2002 census. Because of language, cultural, and bureaucratic barriers, these farmers have typically been under-served by traditional agriculture service, research and outreach organizations. However, all farmers increase in average age, this sector of the farm population holds promise for the future of food production in the U.S.

Groups in attendance who currently serve or plan to increase service to these farmers included university faculty from Washington and Oregon State Universities, USDA agencies (FSA, NRCS, RMA), Heifer International, Mercy Corps Northwest, Adelante Mujeres, Ecumenical Ministries, Oregon Food Bank, Oregon Tilth, Oregon Friends of Family Farmers, the Washington Farm Bureau, Washington State Department of Agriculture, the New American Farming Association, and others. *℘*



Farm Profile: Afton Field Farm, Benton County

By: Melissa Fery & Garry Stephenson

In high school, Tyler Jones was trying to decide what he might study in college. He enjoyed working with animals on his family's property but thought that he'd need a million dollars and land to be a farmer. Then one day, a family friend sent him a magazine article written by Joel Salatin of Polyface Farm in Virginia. He wrote Joel about the possibility of an internship and after a two year wait, Tyler spent a year in Virginia learning Salatin's unique approach to producing a family income by raising livestock. Since his return to Oregon in 2003, he has been slowly and strategically building his farm business.

The Farm and Philosophy

Actually, Tyler has a longer history with farming. He raised chickens on the family farm his whole life and started keeping bees at the age of nine. In 1991, Tyler's parents would help set him up at the Corvallis Farmers' Market to sell the honey. Now, with several years into his adult life enterprise—Afton Field Farm—he is following Joel Salatin's two main rules:

1. You can't pick and choose what aspects of the farm you want. You must have it all! Using all livestock species to create a holistic and profitable farm.
2. Don't short-change yourself. Pay yourself a living wage. Tyler says he is paying himself between \$25 and \$40 an hour for his time.

Another aspect of Tyler's approach to farming is educating people about what they're eating. He sees high quality, nutritious food as preventive medicine. Eating a more healthy diet saves money in the long-term.

Afton Field Farm raises and sells poultry, beef, pork, lamb, turkey and manages 13 bee hives for honey.



Honey provides diversity to farm income. Photo by Lynn Ketchum, Oregon State University Extension & Experiment Station Communications

Tyler sees his role as growing grass and managing the grass with livestock. He currently is farming the five acre home place and uses two rental properties. In addition, he raises beef in cooperation with another local farmer.

He is hoping to purchase a farm of his own soon. Renting land is always tenuous and the type of improvements to land from good grazing management are a long term investment. For instance, using chickens on pastures is improving the soil and increasing grass production plus reducing weed seeds. Tyler says "it's painful to watch all of the improvements and great grass regrowth on ground we may only be on for one year".

Afton Field Farm uses several marketing venues: On-farm sales, a farmers market (Corvallis Saturday), restaurants, and buying clubs in Portland. Afton Field Farm sells to Corvallis area restaurants (Big River, Magenta,) and Fife in Portland. Tyler is planning to add four more Portland restaurants next year. However, he says "customers willing to come to the farm have first priority for products."

Broilers

For the pasture raised broilers, Tyler uses Salatin's classic 10'x12'x2' pastured poultry pens. "He (Joel) has been doing this for over 30 years. He's not a dumb man, he knows what he's doing." The pens are moved manually once a day. There are currently about



Tyler checking on broilers in portable pastured pens
Photo by Lynn Ketchum, Oregon State University Extension & Experiment Station Communications

eight pens. It takes about 25 minutes to feed, water and move pens. Broilers are processed at 7 weeks old and 3 ½ pounds to fit the desires of restaurants. A new batch is started every 3 weeks. The first processing date is in May and the last is in October. A recent issue for the farm is a good feed source since a custom feed mill in Dallas went out of business.



Photo by Lynn Ketchum, Oregon State University Extension & Experiment Station Communications

Tyler recently received a state license for an on farm processing facility allowing the farm to operate under the USDA 20,000 bird exemption. This opens new retail opportunities. The processing facility is unique in its open-air design. Pragmatic but efficient, the birds go from “kill to chill” in less than five minutes. The farm currently raises and processes 2500 birds per year and is planning to expand to 6000 birds.

Laying Hens

Tyler runs about 160 laying hens on pasture. He uses Road Island Red, Barred Rock, Black Australorp, Silver Lace Wyandottes, Buff Orpington. He chose heritage breeds because of their bigger body and they are good layers plus the older hens can be sold as stewing hens.

For the layers, a light weight shelter/roost is moved daily within an electric netting fenced area. The net fencing is moved to clean pasture every 5 to 7 days. Tyler uses sheep in the spring to graze grass down to a manageable height for the chickens. The hens are on pasture from March through October and live in the barn during the winter. Tyler estimates about 15% of the diet comes from foraging. The hens are always fed a high protein grain mix. The hens are also fed beer mash from a local brewery. Tyler cleans out mash in exchange for chicken feed and beer.

Predators are a problem with layers. A radio and Christmas lights on the portable roost help. Battery powered electric net fencing keep out raccoons and bobcats. Once, a Great Horned Owl was stealing a hen each night for 10 nights—baffling the farmers. Eventually, the problem identified and fixed by putting

a tarp on the end of the shelter so that the owl couldn't sweep in to get the birds.

Pork and Turkeys

Pigs are raised in the barn until they are about 100 lbs. While in the barn, they are on deep bedding which is later spread to the pasture. When heavy enough the pigs go on pastures in the oak woodland. Tyler

uses Gloucestershire Old Spots crossed with Chester Whites. These breeds have good foraging and herd instincts. They are finished on acorns from the oak trees. Tyler notes this “adds a wonderful flavor to the meat.” Currently, pork is sold to individual customers. “Everybody wants it. Pork is not the other ‘white meat.’ It’s pink because it should be. It’s a healthy meat.”

Turkeys are raised for the holidays. They are sold on personal orders and processed in November for fresh or frozen use. Tyler raises the turkey poults with broiler chicks in the brooder for the first 3 weeks. He says the broilers teach the turkeys how to survive, how to eat, where to eat, drink, and so on. “Turkeys could top the list as the dumbest farm animal.”

Tyler is not all work. Not long ago, Alicia, a city girl from Portland, became interested in locally grown food and the importance of food for good health. She started buying eggs and honey from Tyler. The rest is history. They plan to marry in October of this year. *✍*



*Tyler and Alicia, owners of Afton Field Farm
Photo by Lynn Ketchum, Oregon State University Extension & Experiment Station Communications*

Compost Discovered

By: Kristin Pool

Composting is a common practice on many farms. While it may seem straight forward, on-farm composting is a complex process with several benefits and some potential pitfalls. The optimal composting system depends on the type of feedstock available (the raw material to be composted), the volume to be produced and the management method. The key to a successful composting system is an understanding of the composting process.

Some Advantages and Disadvantages of Composting
Compost offers numerous benefits to the farm, including:

- Improved management of on-farm wastes such as manure, livestock bedding, and crop residues
- Management of plant and human pathogens, weed seeds and odor which can be a concern with some raw organic amendments
- Valuable amendment for potting soil and field application
- Improved soil organic matter content and soil tilth
- Alternative livestock bedding material
- Reduced need for off-farm inputs
- Potential income from compost sales or waste disposal services

Some of the disadvantages of on-farm composting are the investment in equipment and dedication of area for composting. Managing compost is like growing a new crop; it requires a time investment. There is also potential for excessive leachate production, if composting is managed improperly, which can contaminate water.

The Process

Compost is the result of aerobic decomposition which occurs naturally over time under the right conditions. Optimal conditions for aerobic decomposition reduce the time needed for organic matter to decay and

improve the quality of the compost produced.

The optimal conditions for aerobic decomposition balance energy, moisture and air. If these components are balanced microorganisms, the agents of decomposition, will thrive and reproduce, speeding up decomposition. In some cases mature compost can be produced in as little as six weeks. Heat is a byproduct of microbial respiration. When the population is high enough and the compost pile is sufficiently insulated, temperatures will climb to 130°F or more. Therefore increased temperature is an indicator of successful composting. These high temperatures also kill plant and human pathogens and weed seeds. Table 1 lays out the target characteristics that provide ideal energy, moisture, and aeration.

Characteristic	Ideal Range
Carbon Nitrogen ratio (C:N)	25-40:1
Moisture Content	50-60% (wet basis)
Bulk Density	40lbs/cubic ft
Particle Size	0.5-2" in diameter
Temperature	131°- 150°F

Table 1 - Characteristics of a well prepared compost pile.

Feedstock

The ideal characteristics in Table 1 are created when selecting and mixing feedstock. There are three categories of feedstock: energy materials, bulking agents, and balanced materials. Energy materials provide the nitrogen and high-energy carbon compounds. Bulking agents are dry porous materials that increase aeration. Balanced materials can be composted on their own, because they already contain the above ideal characteristics. They are also good

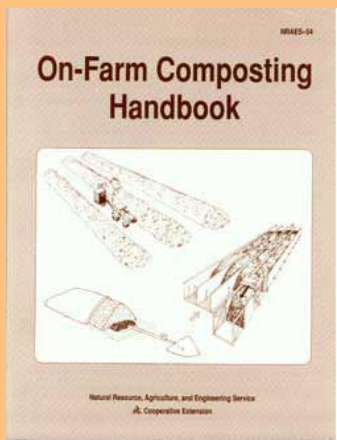
Category of Feedstock	Description	Examples
Energy Materials	High nitrogen and moisture, low aeration	Grass clippings, crop residue, and fresh dairy, chicken or rabbit manure
Bulking Agents	Low nitrogen and moisture, high aeration and porosity.	Wood chips, sawdust, grass hay, wheat straw, corn stalks
Balanced Materials	Low to medium moisture, medium nitrogen, medium aeration	Horse manure and bedding, deciduous leaves, legume hay, and ground tree or shrub trimmings.

Table 2 - Feedstock category

additions to any compost pile to ensure successful composting. Table 2 categorizes common feedstock into these three categories.

Particle size is also an important factor in selecting a feedstock. Smaller particles accelerate aerobic decomposition because they have more surface area for microorganisms to feed upon, larger particles (i.e. bulking agents) increase aeration. It is advantageous to grind up very large particles.

The *On Farm Composting Handbook* (NRAES-54) and the *Field Guide to Composting* (NRAES-114) are useful resources with estimates of the C:N ratio, moisture content, and bulk density of common feedstock.



Moisture

Aerobic decomposition will slow as water becomes scarcer. The ideal moisture content is approximately that of a wrung out sponge. The best time to add water is when building a pile. It is surprising to many first time composters how much water is needed to increase the moisture content of organic matter. It is then imperative to maintain the proper moisture content throughout the composting cycle. If a pile is allowed to dry out irrigation may not have the needed effect. Water will take the path of least resistance and simply percolate through a dry pile without wetting the materials. Likewise, a pile should not be over watered or left exposed to excessive precipitation. A pile that is too wet will start decomposing anaerobically, which is an odorous process that produces compounds that are toxic to plants.

Scale


The size of compost pile is also important to the success of a composting system. Smaller compost piles will not heat up to ideal temperatures because they cannot support a sufficient population of microorganisms. The minimum size for a compost pile is about 2-3 yds³. Any

smaller and the pile will not heat up; decomposition will be slower and the pile may not satisfy safety guidelines for food production. Composting in smaller piles is possible, but the pile will behave more like a worm bin.

The Finished Product

Mature compost is dark, crumbly in texture, and smells like soil. When turned mature compost will not heat up. This high quality compost holds a wealth of benefits for farms, but creating the optimal compost is tricky work. Understanding the process and how it can be controlled will help you to master your on-farm composting system. With a successful composting system high quality compost is just a few months away.

Composting Research and Education at OSU

This summer OSU researchers, Nick Andrews and Dan Sullivan, began work on a compost program. A Research and Education Facility will be constructed at the North Willamette Research and Education Center (NWREC). This facility will be used to research compost recipes that produce high quality compost for blueberries and other crops. An intensive workshop program for on-farm composters is also planned for 2009/10. 



Compost at NWREC
Photo by Nick Andrews

References:

On Farm Composting Handbook: NRAES-54. Natural Resource, Agriculture, and Engineering Services Cooperative Extension, Cornell University, 1992.

Field Guide to On-Farm Composting: NRAES-114. Natural Resource, Agriculture, and Engineering Services Cooperative Extension, Cornell University, 1999.

Croger, Craig and Dan M. Sullivan. *Backyard Composting*. Washington State University Extension Publication EB 1784.

USDA Releases Interim Final Rule for Country of Origin Labeling (COOL)

The U.S. Department of Agriculture recently issued an interim final rule for the mandatory country-of-origin-labeling program that will become effective September 30, 2008. The implementation of COOL represents a six-year battle between various industry groups from producers to retailers. If you are not interested in reading the 233 page rule, there are several “cliff notes” versions of the law. The following information is extracted from a summary published by the American Meat Institute. Outlined are a few major highlights and their effect on different segments of the meat industry.

COOL Applies to Certain Retail Meat Products

COOL is a retail labeling law that requires retailers to provide country of origin information regarding “covered commodities,” which include certain meat products. Because COOL is limited to retail sales, products sold at food service establishments are exempt. For meat, a “covered commodity” includes “muscle cuts” of beef, lamb, chicken, goat, and pork, as well as ground beef, ground lamb, ground chicken, ground goat, and ground pork. However the law exempts from COOL a product “is an ingredient in a processed food item.” Thus, the rule treats all cooked items (e.g., cooked sausages, cooked roast beef) as processed food items and outside the scope of a covered commodity. The rule also exempts as processed an item if it has been cured, smoked, or restructured. Thus, other examples of meat products not covered are flavored pork tenderloin, smoked ham, corned beef, etc.

Four-Tiered Labeling Process

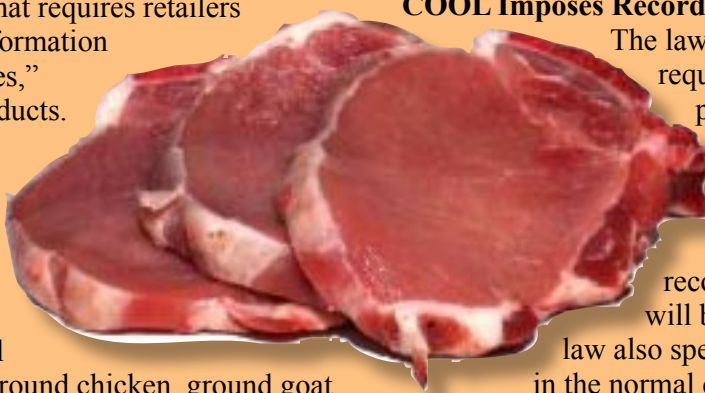
The law provides for four categories of origin for meat: Product of the United States, Multiple Countries-of-Origin, Imported for Immediate Slaughter, and Covered Commodity that is Foreign Country-of-Origin. Product of the United States is defined as a meat product “exclusively from an animal that is exclusively born, raised, and slaughtered in the United States.” Multiple Countries-of-Origin captures covered commodities from animals with an affiliation with more than one country, but are not from animals that are imported for immediate slaughter. For example, cattle that are born in Mexico, spend part of their lives there as well as in the United States, and then are slaughtered in the U.S. The label in this scenario could read “Product of the

U.S and/or Mexico”. Imported for Immediate Slaughter refers to animals imported to the U.S. for immediate slaughter and will be labeled as Product of Country X and the United States. For example, the covered commodity from a market hog delivered directly to a slaughter plant in the U.S would be labeled “Product of Canada and the U.S.” Immediate slaughter is defined as being slaughtered within two weeks from the date of entry. The last category, Covered Commodity that is Foreign Country-of-Origin, captures covered commodities from an animal for which no production steps (born, raised, or slaughtered) occur in the United States.

COOL Imposes Recordkeeping Requirements

The law imposes recordkeeping requirements on packers and processors and anyone else who supplies a covered commodity to a retailer. The packer requirement will trickle through the production chain and the recordkeeping system ultimately will begin at the producer level. The law also specifies that “records maintained in the normal conduct of business” can serve as verification of the country-of-origin of a covered commodity. Those records may include animal health papers, import or customs documents, as well as producer affidavits. The law is very clear that a National animal ID system is not to be tied to COOL or made a mandatory requirement of COOL. However, there are indications the USDA may provide a “safe harbor” for producers who are participating in the national animal ID program. This could alleviate some of the paperwork and traceability burden for producers. Also there is a grandfather date for all cattle within the United States before July 15, 2008. Any animal on U.S. soil prior to this date will be considered a part of the national herd and labeled “Product of the U.S.”, regardless of heritage. The supplier of an animal that enters the U.S. after that date has an obligation to ascertain the origin of the animal that yielded the covered commodity. Since COOL will be mandatory as of September 30, it is best to start keeping records now. If you are buying or selling cattle, moving your calves off the farm and onto the feedlot, keep a record of where and when you bought or sold cattle. A simple sheet of paper with the numbers and lots will be helpful come fall. *Z*

[By Zac Erwin, MU Extension Service, Missouri Ag Opportunities, Volume 19, Number 9, September 2008]



Supplemental Feed for Poultry

By: James Hermes, Extension Poultry Specialist


Most producers of small poultry flocks have found feed prices increasing over the past several months. This is especially true for certified organic feeds. Much of the increase is related to increases in commodity costs (especially corn and soybean meal) as well as the increased cost of transportation. In addition, as winter approaches the problem will grow worse as cold weather will increase the birds' feed consumption and the value of any pasture that is available will drop to nearly nothing. Pasturing chickens are feeding mostly on insects and seeds which become quite scarce in the late fall and winter months. So, as feed costs climb many small producers look for ways to reduce the cost of feeding their birds.

Many small producers will turn to supplementation of their normal feeds with whole or cracked grains. Or they may turn to garden waste or table scraps to supplement a portion of the prepared ration that they purchase at the feed store. This may or may not reduce cost of feed and if supplementation is too high, poor performance from the birds may result.

It is important to understand that chickens require a balanced diet. This means that each day they require a certain amount of protein, carbohydrate, fat, vitamins, and minerals. Prepared diets have been formulated to provide all of their needs so they don't require any supplementation. In fact, supplementation can cause the diet to go out of balance.

Why is this?

Each supplemented item that the chickens eat will generally reduce their overall intake of the prepared feed. Also, most supplements do not have the proper balance of nutrients so if we mix the feed and the supplement, their diet will be out of balance. For example, corn is high in carbohydrates (starch and sugars) but low in protein and some vitamins and minerals. So, feeding the diet mixed with corn will result in a reduced protein diet with possible deficiencies of some of the vitamins and minerals. Other supplements will result in similar dietary problems. Since nutritional balance is necessary for chickens to maintain maximum egg production supplementation to reduce feed costs may also result in reduced production. However, if maximum egg production is not necessary, some supplementation, no more than about 15% of their total daily intake, should not cause many problems.

A final note: Egg production will decline during the fall and winter as a result of declining and short daylengths. To keep chickens laying during these months, provide 14 to 16 hours of light per day. For more information see the Extension Publication PNW 565 Why Did My Chickens Stop Laying? 



Side by Side Comparison of Farm Bills

The USDA's Economic Research Service has a side-by-side comparison of the new farm bill with previous legislation.

Summarized but substantive, it offers a time-saving reference to farm bill provisions. In addition to key provisions and details by Title, the side-by-side includes links to related ERS publications and to analyses of previous farm acts. The Food, Conservation, and Energy Act of 2008 (Farm Bill), enacted into law in June 2008, will govern the bulk of Federal agriculture and related programs for the next 5 years. Go to: <http://www.ers.usda.gov/farmbill/2008/>

Grape Production in Central Oregon

By: Dana Martin

Considering the cold climate, is it possible to have a viable grape growing industry in Central Oregon? Approximately 50 members of the newly formed Central Oregon Grape Growers and Vintners Association at least believe in the possibility.



Cluster of grapes at the Ranch at the Canyons in Terrebonne, Oregon.
Photo by Dana Martin

According to Mylen Bohle, area agronomist for OSU Extension Service in Central Oregon, several growers have planted various varieties throughout the years and have experienced varying degrees of success.

Ron and Susan Matheny of Madras are enjoying their third year of harvest from about 125 vines of hybrid and vinifera varieties. Kerry Damon, viticulturist at the Ranch at the Canyons in Terrebonne, oversees 3.5 acres of hybrid grapes and is looking forward




Kerry Damon, viticulturist at the Ranch at the Canyons, describes some of his grape growing techniques at a workshop sponsored by OSU Extension Service.
Photo by Dana Martin

to his first harvest. Doug Maragas of Maragas Winery, is experimenting with about 16 different vitis vinifera varieties and looks forward to someday being able to utilize his own grapes at his winery. Kurt and Nyssa Farris have harvested Concord grapes 14 out of the last 15 years. There are also table grape niche market opportunities for fresh market, U-pick, juice, and jellies.

People interested in growing grapes in Central Oregon have been attending workshops

offered by OSU Extension Service to understand more about climate and vine physiology as well as variety selection and vineyard establishment. Tours of established vineyards have also been included where participants learn about pruning techniques, irrigation methods and cover crops.

“We have evidence that grapes have been growing here for the past 13 to 15 years so certain varieties will grow in Central Oregon. The question is, can certain grapes can be grown for harvest and I believe they can,” says Mylen, noting that it is exciting to be part of a potentially new industry. 

Practical Introduction to Cheesemaking

Oct 20-22nd is now open for on-line registration at http://oregonstate.edu/dept/foodsci/extservices/Pract%20Intro%20Cheesemkg_regform.htm.

The course includes practical hands-on cheese making sessions using our new equipment from Holland and France. For further information contact Lisbeth Goddik, 541 737 8322, lisbeth.goddik@oregonstate.edu.

Women's Agricultural Networks

By: Melissa Matthewson

Women's agricultural networks are active in many states, especially in the Northeast. Based on the Northeast model of women's agricultural networks, in October of 2007, the OSU Small Farms Program founded the *League of Women Farmers* in southwestern Oregon. The group consists of over fifty women farmers from Jackson and Josephine counties who are farming on a very small-scale and marketing directly to consumers in the Rogue Valley. The group has been meeting for almost a year on a regular basis and continues to grow.

The group convened in October of 2007 when Maud Powell and Melissa Matthewson invited thirty women farmers from the Rogue Valley to an introductory meeting. Fourteen women attended the first meeting and came up with a six-month schedule of activities and tours. The basic design, thus far, has been to alternate between potluck discussions at OSU Extension office in Central Point, Oregon and farm tours. We have toured seven farms so far—many of them diversified farms with animals, fruit and vegetables. We have visited an organic seed farm, a diversified farm that raises milk cows, laying hens, pigs, vegetables and bedding plants, an organic flower farm, a pear orchard and ranch that raises milk goats, pack goats, pigs and broilers. We have also discussed the philosophy of farming, balancing families and farming, marketing as well as weed control and identification. We have also eaten really good food together, much of it produced on the farms. In October of this year, to celebrate our one-year anniversary, we will show a documentary called *Ladies of the Land* in which four women small farmers are profiled with a facilitated discussion after the viewing. The group has grown quite a bit as more women hear




League of Women Farmers gather for a farm tour.
Photo provided by Steve Brown, Capital Press

about the tours and meetings and join the group. It is inter-generational with many young women farmers involved as well. The *Capital Press* featured the group on the Small Acreage page in the newspaper on March 2008. Many of the women farmers are finding great value in getting together once a month to share their stories, successes and challenges of farming. It is also a wonderful social outlet for women as many of them work on the farm and rarely see other women farmers throughout the season. New ideas are being generated at each meeting as well as new ventures and relationships. There has been talk of cooperative marketing endeavors, trading of agricultural products as well as research projects and educational workshops. We

are currently applying for a SARE grant to organize an on-farm demonstration of how to build small structures on the farm, a topic that the group identified as being important, that is, carpentry for women!

The group membership is very informal and new members are joining every month. OSU Extension has been facilitating the group by helping to organize guest speakers, farm tours and announcements to the group. All in all, we are astonished by the number of women farmers in the Rogue Valley and the creativity and dedication each has to their own farm as well as to the whole of agriculture in this region. We are encouraged by this community and look forward to its continued growth and success. If you would like to hear more about the group in southwestern Oregon, please email Melissa Matthewson at Melissa.Matthewson@oregonstate.edu.

Planning is currently underway to begin a women agricultural network in the southern Willamette Valley. If you have interest in participating in a start up meeting later this fall, please contact Melissa Fery in the Benton County at (541) 766-3553 or email Melissa.Fery@oregonstate.edu. 

Sustainable Livestock Production, Part 1

By: Dr. Susan Kerr, WSU-Klickitat County Extension Director

Definitions of sustainable agriculture usually include references to financial, environmental, ethical, social and product quality issues. In addition to those considerations, sustainable livestock production also needs to address animal welfare issues. Keys to sustainable livestock production include extensive pre-planning, knowledge of one's goals, understanding of marketing options and the ability to review and adapt plans as needed. This article is a brief introduction to the concept of sustainable livestock production. Readers may find it asks more questions than it answers, but what it takes to be sustainable will differ on every farm.

Why Do You Want to Raise Livestock?

Most of this article will focus on the need to identify one's motivations and goals before beginning a livestock enterprise. Wanting to produce a protein source for one's family will result in management decisions much different from the goal of needing to earn primary income from livestock production. Which of the below best matches your goals?

- *You want to produce fresh, wholesome protein source for your family*
- *You want to produce a healthy, wholesome protein source for the public*
- *You want to produce fiber for yourself or for sale*
- *You want to use livestock to manage plants on your land*
- *You want to help preserve an endangered breed of livestock*
- *You want to earn a living from your land*
- *You want to supplement your income with a livestock enterprise*
- *You want to maintain your land's lower agricultural zoning tax rate*
- *You "love animals" and want to have lots of them around*

These goals are not mutually exclusive and you can certainly work toward more than one at the same time. However, decisions involved with "quality of life" or "lifestyle" goals may differ greatly from those associated with a profitable, agriculturally-based small business.

What Are Your Resources?

What do you have available to help you obtain your

goals? An inventory of tools, land, soils, fences, water, forage, shelter, labor, etc. is crucial when considering a new livestock enterprise. For example, already having pastures with productive plants well-suited to the location may eliminate the need to budget for pasture development. This list might help you consider items you did not consider as resources before.

- *Acreage (Own or lease? Water availability? Soil type? Plants? Slope? etc.)*
- *Fences*
- *Buildings*
- *Labor (Self, family, volunteers, paid or barter)*
- *Financial resources (Savings, loans, salaries, pensions, inheritance, other)*
- *Agency cost-sharing opportunities (NRCS, Conservation Districts, etc.)*
- *Advisors (Extension, NRCS, Conservation Districts, FSA, CPA, state departments of agriculture, attorneys, veterinarians, neighbors, mentors, etc.)*
- *Time*
- *Relevant skills, knowledge and experience*
- *Equipment (Livestock handling facilities, tools, machinery, etc.)*
- *Financial lenders (Commercial banks or other sources)*
- *Credit rating (Ability to secure loans/mortgages)*
- *Supporting businesses (Nearby feed/farm supply stores, etc.)*
- *Consumers (People ready to purchase your product)*
- *Aptitudes and interests (Do you genuinely like working with livestock? Which species?)*

An inventory of resources often reveals more available resources than one might have thought at first. Be creative, seek input from others and create your list over a period of several days to make sure it is complete.

What Are Your Challenges?

It is best to identify challenges before initiating a new enterprise. Some challenges may preclude certain options on your acreage. For example, if you do not have water rights, it is not feasible to consider an enterprise that will necessitate the need for irrigation. If you have little or poor topsoil, it may take a great deal of time, labor and expense to make the land productive. Ideally, you purchased land compatible with your goals. Issues to consider as challenges include:

- *Noxious weeds*

- *Soil (Poor soil type, little soil, predominance of marshy or rocky areas, hardpan, etc.)*
- *Water (Is rainfall sufficient? Do you have legal water rights?)*
- *Laws (Zoning and other regulations)*
- *Distance from markets/customers*
- *Distance from USDA-certified meat processing plants*
- *Labor*
- *Financing*
- *Physical attributes of the property (Location of roads, driveways, hills, etc.)*
- *History of property (Previous mismanagement, livestock diseases, etc.)*
- *Waste management*
- *Profitability (More on this later)*

What Are Your Options?

Sustainable livestock production could involve any or all production phase of these species, if not more

- *Beef cattle*
- *Dairy cattle*
- *Horses*
- *Sheep*
- *Goats*
- *Swine*
- *Poultry*
- *Ostriches/emus*
- *Rabbits*
- *Llamas*
- *Alpacas*
- *Other*



Some species such as sheep and goats provide producers with the opportunity to produce multiple products (milk, cheese, fiber, meat, breeding animals, pets, etc.). Some producers choose to specialize in a certain aspect of the industry, such as rearing dairy heifer replacements, training horses, shearing sheep, raising cow-calf pairs and so on. Others are involved with all aspects of production, from breeding and birth through marketing products. If you want to raise livestock, here are some essential questions to answer before you purchase your first animal:

- *Which species should I raise?*
- *Which breed(s) should I raise?*
- *Where should I obtain my first animals?*
- *What health requirements should I have for purchased animals?*
- *Will I have an open or closed herd?*

- *Should I raise purebreds or crossbreds?*
- *Do I want to have registered or grade animals?*
- *Do I want to sell breeding stock?*
- *Do I want to retain ownership of young stock?*
- *Do I want to raise replacements for others?*
- *Where will I get feed and supplies?*
- *What shelters and fencing do I need?*
- *Do I need to protect livestock from predators?*
- *Who can be my veterinarian?*
- *What are my livestock health and nutrition programs?*
- *What is my manure management plan?*

Devote a good deal of time to researching various breeds of the species you wish to raise. Go to shows, fairs and sales and ask plenty of questions. Research breeds on the Internet. Ask people who already have a certain breed why they selected this breed. Most producers are proud of their breed and may over-emphasize the positive attributes of this breed, so gather information from multiple sources, compare, compare, compare, then apply this information to your own situation. For example, livestock breeds known to have strong mothering instincts may not be the safest choice for a small acreage operation with young children.

Know Before You Grow!

Perhaps the most common reason for failure of new farm enterprises is lack of adequate market research. Even if you have the resources you need, have selected a livestock product to produce and are ready to go, your enterprise will not be sustainable if there is no one to purchase your product. To have a chance at profitability and sustainability, you **MUST** be able to answer these questions before purchasing your first animal:

- *How and where will you market your animals? (Local auction yard, Internet, farmers' market, live animal farm gate sales, restaurant sales, etc.)*
- *Who is your expected clientele and what do they want? (Lowest price, highest quality, organic, free-range, natural, etc.)*
- *How will people find out about your product?*
- *How will you market your product cost effectively?*
- *How will your product be unique and why should people buy it?*

Think outside the box stall, too; consider innovative enterprises such as agro-tourism, composted manure, brush control for a fee, selling shares in your products, starting a community-supported agriculture operation—your imagination is the only limit (besides some

regulations, that is...). Consider specialty or niche markets, which often can bring higher retail prices and greater likelihood of profit. For example, you could contract with a local B&B to supply fresh eggs and breakfast meats and they could feature the use of local products in their advertising. Some people prefer duck eggs to hen's eggs so you could produce a product for that niche market. Some handspinners are extremely selective about the wool fleeces they purchase so you could choose to raise the breed and type of sheep wool breed in which they are interested. Some consumers may balk at paying more than five dollars a pound for USDA-inspected ground goat meat, but others may happily pay the equivalent of more than \$14 a pound for goat meat jerky.

Product Classifications

At the grocery store, you have probably noticed the different food product classifications that have increased in number in the past several years. Product labels include "natural," "organic," "grass fed," "free range," "hormone free," "non-GMO" and so on. Each label may appeal to a different segment of consumers.

Some state departments of agriculture strictly define and regulate the use of such labeling on food products and others do not, so check with your state's department of agriculture about this issue. The Washington State Department of Agriculture's "Green Book" for direct marketing is an excellent resource and is available at <http://agr.wa.gov/Marketing/SmallFarm/default.htm>. Oregon's Department of Agriculture has a resource called "Agripedia" available at www.nass.usda.gov/Statistics_by_State/Oregon/Publications/Annual_Statistical_Bulletin/index.asp. Agripedia has information about agricultural resources, regulations, marketing, zoning and other issues; pages 109-199 are most relevant to the issues discussed in this article.

Federal and local regulations often apply to the production of some food products, as well. For example, meat to be sold as retail cuts must be processed and inspected at a USDA-certified meat processing plant. County regulations may further dictate that processed meat be transported in a certain type of container and at a certain temperature; check with your county's public health department for more information.


Financial Considerations

For most producers, sustainable livestock production must also take financial sustainability into consideration. Sadly, many producers do not know enough about their costs of production to determine a break-even price for their product(s). Without knowledge of their break-even price, producers can easily sell products for less than production costs and lose money through their livestock enterprise. A less-than-fair price does not allow producers to pay themselves for their labor and management services and help retire debts. Other businesses build in a profit margin when they price their products, so why shouldn't you?

As mentioned, market research is a key part of creating a successful small business. Your nearest Small Business Development Center staff can help you with a marketing plan. They can also advise you on how to develop a business plan and enterprise budget and conduct periodic financial analyses. Introductory materials on these subjects is available at <http://extension.oregonstate.edu/wasco/smallfarms/RiskManagement.php>.

Conclusions

In Part 1 of this two-part series on sustainable livestock production, the importance of pre-planning has been highlighted. It is very challenging for an agricultural enterprise to be financially sustainable, but thorough planning helps reduce threats to profitability. Pre-planning issues include resource inventory, selection of product(s), market research, determination of break-even price, specific challenges and more. The need for planning cannot be overemphasized because the damage to your livestock and wallet due to lack of preparation can be devastating.

After you have answered all the questions asked in this article, you can focus on producing a consistent and high-quality product at a fair price for loyal customers. In Part 2, we will address enterprise-specific issues. 

Resources

www.attra.org/livestock.html
www.sare.org
<http://smallfarms.oregonstate.edu>
<http://smallfarms.wsu.edu>
<http://extension.oregonstate.edu/catalog/>
<http://pubs.wsu.edu>
<http://extn.msu.montana.edu/ag.asp>
<http://info.ag.uidaho.edu:591/catalog>

Weed Control in Pastures without Chemicals

By: Sam Angima

Due to cost, time, grazing restrictions, lack of selectivity or by personal choice, some growers do not want to use chemical methods of weed control in pastures. Weed control without chemicals is a viable option with a number of factors to consider. A year round management plan is essential.



Weeds can be a problem in pastures.
Photo by Sam Angima

Weeds are plants that possess some undesirable traits. In pastures, weeds can be poisonous or not palatable thereby reducing animals or forage productivity. Weeds may be prolific seed producers with effective means of spreading. Whatever the weed problem, using sound production practices will be the solution to weed control without chemicals.

New Seeding

The time to begin your weed control strategy is in the establishment phase of forages otherwise they may choke out a new seeding or allow weeds to encroach into the established stand. Before seeding a new pasture, always test the soil and apply needed fertilizers and lime to adjust the pH to the proper levels for the pasture species you are planting. Start with a well-tilled seedbed or use special drills to establish no-till pastures. Always follow suggested seeding rates for the species desired. Using rates that are too low will invite weed encroachment. When possible, select fields with a low weed population. Avoid fields severely infested with perennial weeds and if present, control them prior to seeding. One strategy is to till or mow every 2-4 weeks throughout the summer. This helps deplete the weeds carbohydrate reserves, weakening and eventually killing them. Then follow with a late

summer seeding in September-October. Late summer seeding means fewer annual weed problems as well. Do not use a companion crop or graze these seedings until the following spring.

Annual weeds may threaten spring seeded pastures.

A companion crop

such as oats or barley will decrease annual weed levels and control soil erosion. It is desirable to chop these small grains at the boot stage to remove annual weeds especially if cut at 10-12 inch height. Harvesting as silage or hay provides higher quality forage and allows more time for the under-seeded grass and legumes to establish.

Established Pastures

Many pastures become severely infested with weeds due to continuous grazing. Overgrazing results in an open sod that allows light to penetrate to weed seeds and seedlings. Undergrazing can be harmful as well, as excessive growth will smother new shoots, inhibit tiller development and weaken the desirable species thereby creating open spots for weed encroachment. Use rotational grazing to avoid these problems.

Livestock should be left in a paddock until the grass has been grazed to the proper height (generally around three inches), then moved to another paddock and so on. The original paddock is grazed again only when it has had sufficient time to recover with vigorous pasture that easily competes with weeds (generally about six to eight inches). Rest periods may range between 15 to 35 days depending on the season and forage species. Maintaining proper fertility and pH is also critical in maintaining

a healthy stand and decreasing weed encroachment.

Walking your pastures often is another key to weed control. This is the best way to catch weed problems before they become serious. Weeds should be hoed, pulled, or cut before they set seed and spread.

Mowing is another option for weed control in pastures. Mowing on an interval that allows weeds to re-grow between mowing will eventually kill or reduce the number of some weeds. If weeds are encroaching due to thin stands, introducing new species or increasing density of current species will help reduce these problems. *ℳ*



Undergrazing may smother new shoots, inhibit tiller growth and weaken the desired species.
Photo by Sam Angima

Oregon Small Farms Team Bring Home the Gold!

Exciting News!

The Oregon Small Farms Team was awarded the National Association of County Agricultural Agents Team Newsletter Award. This is a very prestigious award with entries from throughout the United States. This award was presented to team members at the 2008 National Association Professional Improvement Conference held in Greensboro North Carolina.

Team members include:

**Garry Stephenson
Chrissy Lucas
Melissa Fery
Melissa Mathewson
Nick Andrews
Sam Angima
Susan Kerr
Brian Tuck**



Are Your Fruits & Vegetables Safe for Human Consumption?

Good Agricultural Practices & Marketing Agreements

By: Nick Andrews

When produce contaminated by *E. coli*, *Salmonella* or other human pathogens is distributed by large shippers, food scares show up on the front pages and the evening news. While food safety problems in local food systems are less likely to make the national news, people can still be made ill or in rare cases killed, and the impact on a farm can be financially and emotionally devastating.

In 2006 the Center for Disease Control [Disease Outbreak Surveillance System](#) reported 1,247 disease outbreaks of foodborne illness with a total of 25,659 individual cases. Of these, 820 were of biological origin and 64 were of chemical origin, with the rest undetermined. Seven deaths were reported that year. While this is a small number compared to the 13,491 automobile deaths in 2006, there were many hospitalizations, and the impacts on individual families and businesses were severe. In 2004 produce related outbreaks surpassed those linked to beef, poultry or fish. This highlights the importance of following safe handling practices to protect the health of our families, friends and customers.

E. coli happens – What can be done?

Most strains of *Escherichia coli* are non-pathogenic. However, there are some strains (i.e. *E. coli* 0157:H7) that can cause cramps, diarrhea or severe illness such as haemolytic uremic syndrome which can lead to kidney failure. *E. coli* is used as an indicator of fecal contamination because it is easy to find in lab tests. OSU



Positive results - *E. coli* growing in the lab.

Extension Publication [EM 8838](#) describes Good Agricultural Practices (GAPs) for promoting food safety on berries. The pre-harvest, harvest and post-harvest practices described are relevant to all fresh produce. Mark Daeschel leads OSU Extension's work addressing microbial food safety issues, he investigates natural products that combat pathogens. Mark and his colleagues also provide periodic food safety and food processing workshops that are announced on their [website](#).

Currently no food safety licenses are required to sell fresh fruit and vegetables from your own farm in Oregon. Processed products, eggs, dairy products, meat, honey and other commodities do require licenses. The Oregon Department of Agriculture (ODA) [Farm Direct Marketing](#) website explains what licenses are required. The ODA offers voluntary Good Agricultural and Good Handling Practices [Certification](#) for fresh fruit and vegetable growers and handlers. These audits are based on the Food and Drug Administration's [Guidelines to Minimize Microbial Contamination for Fresh Fruits and Vegetables](#). This service aims to give the producers and consumers the confidence that Oregon grown produce is grown and handled in a manner that reduces the potential of microbial contamination.

When assessing the risk of contamination on your farm it is important to protect food safety from seed to fork. Concern arises when there is potential for the edible portion of a crop to come into contact with human or animal feces, pesticides or fertilizers. Fecal contamination can occur when raw or inadequately processed manure is improperly used as fertilizer, when contaminated irrigation water is used without proper precautions, or when workers practice poor hygiene during harvest.

[National Organic Standards](#) (NOS) require 90-120

day pre-harvest intervals for the application of raw manure and set rules for composting and manure processing that reduce pathogens. Non-certified growers are not required to follow these practices, but could consider them guidelines. Pesticides should be used only in strict compliance with label requirements. Poor manure management in a watershed or proximity to a large Confined Animal Feeding Operation can increase the risk of fecal contamination of irrigation water. When contamination is suspected water can be tested for *E. coli*, an indicator of fecal contamination. If results are positive, alternative irrigation water could be used, drip irrigation and micro-sprinklers may also reduce the number of pathogens on the harvested crop. Special care should be taken when irrigation is used close to harvest. During harvest it is important to make sure workers have access to clean water and toilet facilities, and that they practice good hygiene.



A high pressure carrot washline at Ralph's Greenhouse near Mt. Vernon, WA removes soil from the crop and helps to ensure food safety.
Photo provided by Tim Terpstra

After harvest, removal of soil from the crop dramatically reduces the pathogen load. Rapid cooling of the produce by harvesting early in the morning, hydro-cooling with clean water, forced cold air and/or quickly transferring produce into a cold store can prevent small pathogen populations from increasing. Sanitation of the produce (i.e. with clean, chlorinated water) and sanitation of all food contact surfaces while crops are being prepared for market will reduce risk. Excellent worker hygiene during post-harvest handling is critical to prevent re-contamination and proper storage will slow reproduction of any small pathogen populations. Growth in the sale of ready-to-eat products

such as bagged salad mixes and fresh berries may increase the risk of infection.

Moving Goalposts

In response to the 2006 *Escherichia coli* O157:H7 outbreak on spinach that sickened at least 204 people, caused three deaths and disrupted the entire spinach industry in California, a voluntary [Leafy Greens Marketing Agreement](#) was developed by The Western Growers Association. Many produce distributors adopted these guidelines, effectively making them rules in the market place that are now been implemented by nearly 100% of California producers. The Agreement includes many pre-harvest and post-harvest hygiene standards. However, some required field practices restrict the use of organic amendments and have been criticized as undermining soil conservation practices.

The June 13, 2008 version of the Agreement discourages the use of raw manure, and requires a one year interval between application and planting of leafy greens. Under the Agreement, manure-derived compost and processed manure must meet standards similar to those in the NOS. Additionally, pathogen testing is required, and processed manures “should not be applied after crop emergence”, a 45 day pre-harvest interval is also stipulated. Other natural amendments containing animal products such as compost tea, fish emulsion, fish meal, blood meal and other bio-fertilizers must undergo heat treatment (minimum temperature: 300°F for 60 minutes resulting in a moisture content <30% dry weight) and pathogen testing.

Practices that eliminate or reduce intrusion by wildlife and livestock viewed as vectors of human pathogens are also required under the Agreement. Priority animals are deer, wild or domestic pigs, cattle, goats and sheep. Livestock cattle are the largest reservoir of *E. coli* O157:H7 with up to 50% of a herd shedding the strain. By comparison, less than 1% of wildlife associated with natural environments have been found to carry it (Stuart personal communication). Monitoring for evidence of feeding, footprints, signs of feces, etc. is required and remedial actions and/or crop destruction as

dictated by a food safety professional must occur when these signs are found. Commonly applied remediation tactics include removal of ponds, duck habitat, irrigation reuse systems, non-crop vegetation such as grassed waterways, filter strips, trees and shrubs. Growers report being required to use bare ground buffers, increased fencing, trapping and poisoned bait stations to kill and repel wildlife and livestock. Crops have been rejected because deer tracks were found near a field, when fields contained potential frog habitat, and portions of fields were rejected due to signs of snails, frogs, tadpoles, mice and other small animals (Beretti and Stuart, 2008). Stuart et al. (2006) point out the conflict between pre-harvest food safety guidelines in standards such as the Agreement and decades old efforts to improve conservation of natural resources. They reviewed the science behind pre-harvest food safety practices and argue that environmental conservation practices could actually improve food safety.

The US food supply is widely touted as the safest in the world. However as food scares on other crops arise and pressure to implement laws based on this Agreement mounts, there is a growing concern that these rules will be more widely implemented. On October 10th, 2007, the USDA announced they were considering implementing [National Leafy Greens Handling Regulations](#). The public comment period is over, but no decision has been announced. From the text of the California Agreement it seems apparent that the authors are aware that some of the standards may conflict with soil, water and wildlife conservation practices, for example, the standards advise growers to check that food safety remediation efforts do not violate conservation laws. Nevertheless, implementation of the Agreement may increase pesticide and nutrient runoff and leaching, erosion, and degradation of aquatic and marine ecosystems (Beretti and Stuart 2008, Stuart et al. 2006). In 2003 Oregon Tilth hosted a National Summit on Human Pathogens from Livestock Manure (Scheuerell et al. 2004) to review the science of pathogen reduction in the field and discuss grower's concerns that the NOS standards contradicted their soil building efforts. As additional research is conducted, continued dialog that



Channel 2 Evening News interviews Joe Siri of Siri & Son Farms during the California spinach E. coli outbreak in 2006. This farm uses Good Agricultural Practices to ensure food safety and was not implicated in the outbreak.
Photo by Nick Andrews

can impact future rule making that balances and finds common ground between pathogen management and the soil building efforts and environmental goals of growers would be valuable. Such research and dialog would improve our chances of reaching Stuart et al's goal of safe food and a healthy environment. 🌿

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What's Happening in OSU Extension

By: Dana Martin

With funding from the USDA Risk Management Agency, the Oregon Small Farms team is collaborating with partners to deliver a series of workshops on Specialty Crop Production and Farm Business Management over the 2008-2009 winter. The series will be offered in the North and South Willamette Valley, Southwest Oregon and Central Oregon.

Nick Andrews, Dan Sullivan and John Luna are collaborating in a cover crop research project on the OSU Vegetable Research Farm and four farms in the North Willamette Valley. They aim to create a cover crop calculator that will estimate nitrogen release from cover crops and calculate the cost of managing cover crops. The calculator will be an extension of the organic fertilizer calculator which is available at <http://smallfarms.oregonstate.edu/organic-fertilizer-calculator>. USDA CSREES is funding this work through the Oregon Organic Cropping Research program.

OktoberPest, a series of pest management workshops for Greenhouse and Nursery Growers, is starting its eighth year of offering this series every Thursday in October. This year's topics will cover a diverse range including Phytophthora management; pesticides and water quality; biological control; invasive species; and applicator safety training (in Spanish). For more information on OktoberPest, check out the North Willamette Research and Extension Center website at: <http://oregonstate.edu/dept/NWREC/>

Research on organic hay production is being conducted at the Central Oregon Agricultural Research Center near Madras. A perennial rotation of alfalfa and orchard grass, and an annual rotation of berseem clover and oat hay are being trialed with the emphasis on weed control strategies. Brian Duggan and Mylen Bohle are involved with this project.

Andy Hulting, Mylen Bohle and David Hannaway are working with the OSU Small Farms team to provide new materials for the Small Farms website. This fall, a presentation about poisonous plants and their management will be available in the pasture page of the website. The presentation will be complete with color photos and toxicity information for commonly found plants in Oregon. Melissa Fery is coordinating this effort.

Nick Andrews and Dan Sullivan are in the early stages of developing a research and education composting facility at the North Willamette Research and Extension Center in Aurora. They plan to use the facility to host workshops for on-farm composters. They will also conduct research into the development of high quality compost for various applications using feedstock that is widely available in Oregon. The first research project will be evaluating compost recipes for blueberry production. Funding is provided by the Agricultural Research Foundation.

Penn State Study Shows Consumers Find Grass-fed Beef Acceptable

High feed-grain prices and the growing interest in "natural" foods have spurred both consumers and farmers to consider grass-fed beef, and a recent study done by Penn State College of Agricultural Sciences researchers may reinforce this trend.

According to John Comerford, associate professor of dairy and animal science, the study showed that most consumers find the taste and tenderness of grass-fed beef acceptable in blind taste tests. He recommends that producers look for ways to interest more potential customers in grass-fed beef. "There are also some important human health benefits related to components of grass-finished beef," said Comerford, who oversees the University's beef research and extension programs. "While there is no difference in the cholesterol content of grass-and grain-finished

beef, and the limited amount of conjugated linoleic acid in cooked steaks is too small to do much for human health, there is still an advantage in the increased omega-3 fat content in grass-fed beef."

The work also suggests that some of the preconceived notions held by farmers about the physical type of the cattle and the length of the grazing season needed for high-quality grass-fed beef may not be true. "The results of the study showed that most consumer evaluations of the cooked meat were not influenced by frame sizes of the cattle, weight at harvest, range of grazing period from 120-180 days, and final fat composition of the carcass," Comerford explained. "However, all of the cattle must have plenty of high-quality forage to consume daily plus be harvested at 18 months of age or less."

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WWW.OHS.ORG

Calendar

September

24-Pasture Management Workshop

Fall is an important time for your pastures' health. Discover practices that will ensure lush, green pastures year round and reduce seasonal feed costs. 7:00 PM - 9:00 PM. Mt. Hood Community College Room 2057, 26000 SE Stark St., Gresham, OR. 503-222-7645. *Free*

October

4-Farmers as Writers

This workshop is designed for anyone interested in publishing or writing about their farm and homestead. 9:00 AM - 2:30 PM. Southern Oregon Research & Extension Center, 569 Hanley Road, Central Point, OR. For more information contact Melissa Matthewson at 541-776-7371 or melissa.matthewson@oregonstate.edu \$20

11 to 12-The Home Orchard Society's All About Fruit Show: Growing Good Fruit at Home

Taste fruit varieties, order trees, view displays, buy fruit, identify unknown fruit (bring 6 samples of each), find exhibits & publications on research, control of diseases & insects. 10:00 AM- 4:00 PM. Alder Creek Middle School Cafeteria, 13801 SE Webster Road, Milwaukie, OR. 503-266-6745 or 503-293-1468.

15-Living on the Land

There are 4 workshops in the series and 1 field tour for small acreage landowners. 6:00 PM to 9:00 PM. OSU Extension Service, Linn County, Evelyn Downing Room, 104 4th Street SW, Albany, OR. Information - 541-766-3556 or Chrissy.Lucas@oregonstate.edu. \$30

18 to 20- North American Lavender Conference

This 4th conference features speakers, presentations, workshops, and a trade show, addressing topics such as suitable varieties, propagation, distillation, and hydrosols. Sequim, WA. For more information, go to: http://www.lavendergrowers.org/conference/08_schedule.html

November

1-Cultivating Our Local Food Economy Workshop

This workshop is focused on developing direct markets among local producers, restaurants, institutional food buyers and other end users. St. Charles Medical Center, 2500 NE Neff Road, Bend, OR. Information contact Dana Martin at (541) 548-6088 ext. 7957 To register, visit: www.coic.org/localfood. \$20 registration; \$10 for display table.



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