The cover photo and its thumbnail version on this page are not Suncrest peaches. “Not Suncrest peaches,” as in “there are not any buyers for Suncrest peaches,” was something Mas Masumoto heard from fruit buyers about his great tasting traditional Suncrest peaches. This lack of a wholesale market and the need to keep his family farm viable motivated his journey into biologically-based farming and alternative markets for his fruit and eventually to his classic book, “Epitaph for a Peach.”

As a farmer, Masumoto has experienced first hand the forces of conventional wholesale markets on smaller family farms. Finding new methods and new markets to keep a family farm operating is hard work and is also a story worth telling. As a writer he notes, “Economics and business will not adequately explain the work we do – it will take story and art. There is a type of art to our approach to farming – and the power of story captures the emotional and the physical nature of our work.”

David Mas Masumoto is the keynote speaker for the 2010 Oregon Small Farms Conference. He is a third generation farmer from the Central Valley of California. He and his family farm 80 acres of organic peaches and grapes. He is the author of several books in addition to “Epitaph for a Peach,” including his latest entitled, “Wisdom of the Last Farmer: Harvesting Legacies from the Land.”

The line up of sessions for this year’s conference includes:
- WIC Fresh and Frozen Fruit & Veggie Voucher Program
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- Small Scale Grain Production
- It’s a SNAP!
- Farmers as Writers
- Farmers’ Market - Public Health Partnerships: Solutions for Healthy Eating
- Alternative Meat Marketing Strategies
- Cover Crops for Soil Fertility and the Bottom Line

The invited capnote speaker is Congressman Kurt Schrader. He 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.

The 10th annual Oregon Small Farms Conference is Saturday, February 27, 2010 on the campus of Oregon State University. For more information or to register go to: [http://smallfarms.oregonstate.edu/](http://smallfarms.oregonstate.edu/) or see page 8.
A new study by an Oregon State University economist comparing Oregon’s taxes with national averages has found that taxes are lower in Oregon than in most states, and so are some public services. Even with passage of Measures 66 and 67, Oregon state taxes will be lower than the national average, according to the report.

Jaeger compared tax data in Oregon with all other states over a period of 17 years. Jaeger compared total state taxes to total personal income for each state to reveal how much of people’s income is paid in state taxes. His data show that as a percentage of personal income, state taxes maintain a fairly steady level of about 6.4 percent nationwide, dipping a bit lower during periods of recession. Oregon’s taxes follow a similar trend, but at a lower level, averaging 6.0 percent of personal income. And the nationwide dips in tax revenue during the current and previous recessions show even deeper reductions in Oregon. Oregon is ranked 44th in the nation in terms of taxes as a percentage of personal income. Taxes in neighboring Washington (ranked 30th) and California (ranked 15th) claim a larger proportion of personal income. Oregon’s local taxes are also lower than in most states, 3.75 percent of personal income compared to the national average of 4.34 percent. Oregon’s business taxes are also low, ranked 48th out of 50 states, according to a study done for the Council on State Taxation, a nonprofit trade association consisting of more than 600 multistate corporations engaged in interstate and international business.

Jaeger compared the level of state taxes with the level of some government services. In terms of student/teacher ratios – a comparative indicator for K-12 public education – Oregon ranks 49th out of 50. Other indicators suggest similar declines in public safety and higher education. The report notes that average educational levels are declining in Oregon: 28.8 percent of younger Oregonians have college degrees compared to 33.4 percent of older Oregonians. This downward trend is opposite to the rising levels of education in most other states and countries.

The study provides data relevant to two upcoming ballot measures. Measure 66 raises taxes on households earning more than $250,000 a year; Measure 67 raises corporate income taxes. The study posed two questions related to the choice voters will face in January. First, in a recession, is it better for state governments to cut spending or raise taxes?

In his study, Jaeger quoted Nobel Prize winner Joseph Stiglitz of Columbia University and Peter Orzag, then-director of the Congressional Budget Office, who wrote: “Tax increases on higher-income families are the least damaging mechanism for closing state fiscal deficits in the short run.” “Stiglitz and others conclude that cutting social services further harms those already hurt by the recession, while a tax increase on high-income groups affects only those who are doing well during a recession,” Jaeger said.

The second question is whether these tax increases would harm or help Oregon’s growth and competitiveness in the long run. The study cites a survey of dozens of scholarly, peer-reviewed economic studies and concludes that increases in taxes, when used to expand the quality of public services, can promote economic development and growth in employment.

“There is no reason to believe that these tax increases on the wealthiest sector would make Oregon less competitive,” Jaeger said. “Oregon’s taxes are significantly below national average, and they would remain below average even with the passage of Measures 66 and 67.”

A summary of findings and several graphs illustrating Oregon and national trends in state taxes can be found with the full report at: http://ir.library.oregonstate.edu/jspui/bitstream/1957/13620/1/em8997.pdf

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**Organic EQIP Signup Deadline Extended to January 22, 2010**

Conservation assistance is available to farmers and ranchers through the Organic signup under the Environmental Quality Incentives Program (EQIP). You may be eligible to receive payments and technical expertise for the conservation work you want to do on your land, such as: Conservation Crop Rotation, Cover Crops, Nutrient Management, Pest Management, Prescribed Grazing, Forage Harvest Management, and much more.

Call the Natural Resources Conservation Service today and ask about Organic EQIP. In Oregon, the program signup closes on January 22, 2010. Contact your local USDA Service Center listed with federal agencies in the phone book or go to: http://www.or.nrcs.usda.gov/programs/eqip/fy10/organic.html.

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DEQ Implements New Rules For Composting Facilities
By: Nick Andrews

On September 14th, 2009 new rules administering composting facilities in Oregon were put into effect. The Oregon Department of Environmental Quality (DEQ) started the rule-making process in 2004. After extensive input from industrial and agricultural composting operations, regional governments and other stakeholders the new rules have been implemented. Throughout the process, DEQ’s role has been to protect human health and the environment while promoting composting. Important drivers for the new rules have been concerns about the water quality impacts of large composting facilities and the growing interest in centralized food waste composting, especially in metropolitan areas.

Oregon Department of Agriculture will administer the new rules on Concentrated Animal Feeding Operations (CAFO’s) under the oversight of DEQ. CAFO inspections address similar concerns to the composting rules, and composting at CAFO’s is a good manure management strategy. DEQ will directly implement the new rules on non-CAFO farms and other non-exempt composting facilities.

Exemptions
Exemptions from DEQ permitting requirements have been changed under the new rules, with minimum tonnages increasing which will exempt many small farms. Facilities composting less than 100 tons of type 1 or type 2 feedstock (see sidebar) in one calendar year are exempt from DEQ permitting requirements, as long as they meet the performance standards identified in the rules. Facilities composting less than 20 tons of type 3 feedstock per year are exempt, as are facilities composting less than 40 tons of these materials using in-vessel containers designed to prevent odors and vector attraction. All home composting facilities are also exempt from permitting requirements. The rule includes the following volume to weight conversion factors: grass clippings (950 lbs/yd³), leaves (375 lbs/yd³), uncompacted yard debris (250 lbs/yd³), wet waste such as food waste and manure (1,600 lbs/yd³).

Registration and screening
Facilities that do not meet the exemption criteria must obtain a DEQ permit by submitting an application for an environmental risk screening, which will evaluate the degree of environmental risk posed by the facility. Low-risk facilities will operate under a registration permit. Higher-risk facilities will be required to provide an operations plan for DEQ approval that addresses the identified risks. These facilities will operate under a composting permit.

It is expected that most small farms will qualify as a registration category, posing a low-risk to the environment. The initial DEQ screening process involves completing a relatively simple compost management plan describing the operation and providing environmental information. They will be required to pay a one-time $150 registration fee and obtain a Land Use Compatibility Statement (LUCS) from the local land use planning authority. In most cases, LUCS are not expected to be a serious obstacle to agricultural composting since composting is considered an agricultural activity when it is consistent with farming practices. Land use planners are most often interested in whether the composting facility could increase population in the area, increase traffic or change traffic patterns, increase noise or pollution problems close to residential areas, increase work shifts on nights or weekends, or involve a physical expansion.
Compost management plans are reviewed by DEQ staff and screened according to their level of risk. Site characteristics that may be considered include the location and distance to groundwater and surface water, soil type and permeability, proximity to residential areas and wells, and prevailing wind. Management practices that are considered may include feedstock type, volume and source, composting method, end-use of the compost, characteristics of any leachate produced at the site, pathogen reduction (if applicable), methods used to control vectors, seasonal variations in management practices and the compliance history at the facility. Farms producing compost for on-farm use are not subject to pathogen reduction requirements unless DEQ determines that such compliance is necessary to protect human health.

Facilities that are found to be unlikely to contaminate water, generate nuisance odors or threaten human health will be required to register with DEQ, but will not need a full permit. As registered facilities, they must report the annual weight of feedstocks used for composting to DEQ, keep composting records for at least 10 years, and notify DEQ of any violations of their compost management plan, or significant changes to their facility or management practices. If a facility is found to pose a significant risk to human health or the environment, they may be required to pay an engineering review fee and obtain a full DEQ permit.

The previous composting rules were not always completely enforced and some agricultural composting facilities have been operating in violation of DEQ's earlier rules. The new rules do introduce new requirements to agricultural composters. However, they also increase the exemptions, and provide a regulatory structure that makes it possible for farmer to legally compost larger quantities and different types of feedstock. Farms have an important role to play in the development of robust local and regional strategies for recycling organic waste, and our hope is that the new rule will promote these goals while protecting human health and the environment. The rule making process was very long, and was contentious at times. DEQ deserves considerable credit for carefully considering the competing interests of stakeholders on different sides of the issue.

Resources
Information including the new rules and related documents are at [www.deq.or.us/lq/sw/compost/](http://www.deq.or.us/lq/sw/compost/). Regional contacts are: NW Region, Stephanie Rawson, (503) 229-5562, rawson.stephanie@deq.state.or.us; West Region, Bob Barrows, (541) 687-7354, barrows.bob@deq.state.or.us; East Region, Bruce Lumper (541) 298-7255 x240, lumper.bruce@deq.state.or.us. Information about obtaining a LUCS is at: [http://www.deq.state.or.us/pubs/permithandbook/lucs.htm](http://www.deq.state.or.us/pubs/permithandbook/lucs.htm).

Upcoming Workshop
**Agricultural Composting Resources & Education**

In collaboration with Clackamas County Soil and Water Conservation District (SWCD), DEQ, ODA and independent composting consultants, OSU is launching a new agricultural composting school at the North Willamette Research & Extension Center in Aurora (30 miles south of Portland). The 2010 workshops will be all day on Friday February 19th and Friday February 26th. The workshop will include hands-on and classroom activities. Participants will learn about different composting methods, facility design and location, environmental and regulatory concerns, equipment for agricultural composting, developing compost recipes, using compost, and more. A $50 registration fee includes lunch for both days. Funding for the workshop is provided by Western Sustainable Agriculture Research & Education and Clackamas County SWCD. For more information, or to register, please visit [http://smallfarms.oregonstate.edu/ag-compost-workshop](http://smallfarms.oregonstate.edu/ag-compost-workshop) or contact Kristin Pool at (503) 678-1264 x118.
Tax season is upon us and farmers running a for-profit business have special tax forms required of them when filing with the IRS. Any farm that receives income from the sale of products raised on the farm (or bought for resale) fills out a Schedule F in order to report net income gain or loss from the farm in any one tax year. This includes income generated from operating a stock, dairy, poultry, fish, fruit, or truck farm and income from operating a plantation, ranch, range, or orchard. Income from a nursery operation is also reported on the Schedule F. Filling out your Schedule F is important for several reasons. Many banks and other lenders will require a copy of your Schedule F in order to process loans. It is also required to be on record for exclusive farm use tax assessment purposes. The Schedule F is also a useful tool to understand your farm’s financial status, i.e. are you making money, which products sell the most, and what are your largest expenses?

There are a number of intricacies associated with the Schedule F and your best resource guide for this is IRS Publication 225: A Farmer’s Tax Guide. Generally, you are required to report income from sales of any of your farm’s products. As well, there are some other things to keep in mind about reporting farm income. You may be able to delay reporting a gain from selling off animals or other products because of weather-related problems until the next tax year if you qualify. You also typically have to report income from agricultural payments for conservation programs or direct payments like crop insurance or disaster related farming payments except for cost-share programs. For instance, if you have received payment and reimbursement for organic certification from the government in 2009, you will need to report this income on your Schedule F. If you receive payments from a cooperative, you may need to report that income as well. Again, a great resource is the Farmer’s Tax Guide and a local accountant!

The list of deductible expenses related to the farm business is extensive, so make sure you keep all of your receipts for farm-related expenses throughout the year and think about using a bookkeeping program to track expenses if you don’t already. The IRS defines deductible expenses as “ordinary and necessary costs of operating a farm for profit.” These expenses include insurance, labor hired, repairs & maintenance, interest, travel expense, feed, fertilizer, seed, advertising, marketing fees, etc. For a full list of deductible expenses, read through the Farmer’s Tax Guide. Remember that keeping receipts from all of your purchases is important if you are ever audited in the future.

If you work with an accountant, they can help you fill out your Schedule F for the year, but some farmers also do their own taxes by using tax software like Intuit’s Turbo Tax®, which leads you systematically through filling out the proper tax forms for your farm business. The tax forms are then stored for future use once you submit, so that you can refer back to them and easily access them for loan applications or other uses. Recordkeeping throughout the year is extremely important as you can save a lot of time if you have adequately tracked expenses and income through a bookkeeping program. We’ve all heard of the farmer stashing receipts in a shoe box and when tax time comes around, that same farmer must spend hours sorting through receipts to understand how much
the farm spent in one year and how much it made. But, staying organized and keeping better records can avoid this struggle. As well, keeping accurate and organized records has more benefits: moderating your farm’s progress as a business, helping you with banks and creditors by keeping more accurate financial statements, helping you to organize expense receipts, and finally, tax preparation and documentation is easier if you have kept good records.

Finally, find yourself a tax advisor or accountant that can help you sort through your questions. Setting up organized systems for recordkeeping to track income and expenses will help make your tax work easier each year.

**Tax Resources**

- Farm Income Taxation Fact Sheet [http://trmep.tamu.edu/cg/factsheets/rm7-5.html](http://trmep.tamu.edu/cg/factsheets/rm7-5.html)

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**Breaking News: Oregon Tilth and OSU Small Farms Program Form Long-term Partnership**

In a timely convergence, the OSU Small Farms Program and Oregon Tilth have formed an innovative partnership. Using funding support from Oregon Tilth, the partnership creates a framework for the OSU Small Farms Program to enhance Oregon Tilth’s research and education efforts in support of organic farmers. The funding is relieving a portion of the recession-related budget reductions to the Small Farms Program.

At this time, the partnership has four areas targeted:
- Cover crop research by OSU in organic systems including development of a Cover Crop Calculator
- Education for beginning farmers through OSU’s Growing Farms: Successful Whole Farm Management series
- Education for organic and transitional farmers through Organic Day at the North Willamette Horticulture Society annual meeting
- And, an ongoing needs assessment of organic farmers by OSU to set a research and education agenda for the future.

Oregon Tilth brings to the partnership a deep understanding of organic market trends, the regulatory environment and industry connections. OSU brings the ability to leverage well-established resources and infrastructure in outreach, education and research.
Keynote Speaker - David Mas Masumoto is a third generation farmer from the Central Valley of California. He and his family farm 80 acres of organic peaches and grapes. He is the author of several books including “Epitaph for a Peach,” and his latest entitled, “Wisdom of the Last Farmer: Harvesting Legacies from the Land.”

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- The Business of Farmers’ Markets
- Funding Successful Energy Improvement Projects
- New Tools for Marketing Your Products
- Small Scale Grain Production
- It’s a SNAP! Implement EBT at Farmers’ Markets
- Farmers as Writers
- Farmers’ Market - Public Health Partnerships: Solutions for Healthy Eating
- Alternative Meat Marketing Strategies
- Cover Crops for Soil Fertility and the Bottom Line

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.

$35.00 each or 2 for $60.00
Registration deadline Feb. 17th
after deadline registration fee increases

Registration brochure 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
Somewhere in the Pacific Northwest right now there is a food buyer trying to find the perfect parsnip and a rancher looking for a home for his grass-fed beef. Luckily for both, a new social venture from the nonprofit Ecotrust should make it easier for food buyers and sellers to find each other, connect and do business.

FoodHub (http://food-hub.org) is a recently launched online directory and marketplace designed specifically to connect wholesale food buyers and sellers. Larger institutional purchasers such as public schools, colleges, hospitals and grocery stores are beginning to assign geographic preference to their purchasing criteria, right next to cost, quality, quantity, and delivery requirements. Yet too often finding regional suppliers is like looking for the proverbial needle in the haystack. At the same time, farmers, ranchers and fishermen continue to struggle to find markets for their products, having not found a viable method for accessing and profiting from the burgeoning local food market. FoodHub offers a viable and effective solution for both sellers and buyers.

**Food Hub: Where food people connect**

Website makes it possible for food buyers & sellers to find each other

**Food Sellers**

Food sellers can go online and create a list of caterers, food service operators, restaurants, retail grocers and others who might be interested in buying their products. With a few clicks of the computer keyboard, food sellers can both research market opportunities and promote themselves and their products to diverse food buyers. The hope is that farmers, ranchers and fishermen of all scales can spend more time running their operations instead of knocking on doors, making cold calls and offering free samples.

“FoodHub is designed to be a one-stop-shop for the chef who needs six dozen artichokes for a menu special, the baker looking for a local source for flour, or the large institutional food buyer whose purchasing power could significantly stabilize a family farm,” said Deborah Kane, vice president of Ecotrust’s Food & Farms program.

Developed using open source technology with private foundation, nonprofit and government resources, FoodHub is intended for broad use throughout the agricultural community. From those who have perfected their pitch and need a bigger soapbox to those just beginning to realize there may be a market beyond the dock or cannery, FoodHub accommodates food producers and food buyers of every scale and production type.

Maintaining an active profile within FoodHub costs $100 per year. Those who join FoodHub before January 31, 2010 will receive a $20 rebate. In addition, the Eugene Water and Electric Board will subsidize a 2010 FoodHub membership for all farmers in the McKenzie River watershed, which is eastern
Lane County. Contact the FoodHub Member Services Team at 503.467.0816 or email connect@food-hub.org to check on their eligibility.

FoodHub is being offered initially in the Pacific Northwest with a specific emphasis on serving buyers and sellers in Oregon and Washington. However memberships will be accepted from neighboring states. Already ranchers in Montana have called the tool “magnificent” and food service operators in the Portland metropolitan area declare themselves to be “addicted” to FoodHub’s search and browse features.

Off to a great start, backers expect FoodHub will shorten the perceived and real distance between rural and urban communities and make it much easier to localize supply chains.

The Details:
http://food-hub.org
• Annual membership fee: $100, sign up before January 31, 2010 and receive a $20 rebate.
• Taxonomy developed for: fruits, vegetables, livestock, fish, herbs and nuts (taxonomy for dairy, beverages and processed products on the way)
• Geography covered: A special emphasis on food buyers and sellers in Oregon and Washington; memberships also accepted from neighboring states and Montana and Alaska.
• Funding provided by: The Oregon Department of Agriculture and the Washington State Department of Agriculture along with several private foundations.
• FoodHub is a project of Ecotrust (http://ecotrust.org) 🍃

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Top 20 Food Trends for 2010

Each year the National Restaurant Association surveys professional chef members of the American Culinary Federation. The latest survey, conducted in 2009, was based on the input of more than 1,800 chefs. Respondents ranked 214 items by how trendy they would be in 2010. Here are the top 20 trends:

1. Locally grown produce
2. Locally sourced meats and seafood
3. Sustainability
4. Bite-size/mini desserts
5. Locally-produced wine and beer
6. Nutritionally balanced children’s dishes
7. Half-portions/smaller portion for a smaller price
8. Farm/estate-branded ingredients
9. Gluten-free/food allergy conscious
10. Sustainable seafood
11. Superfruits (e.g. acai, goji berry, mangosteen, purslane)
12. Organic produce
13. Culinary cocktails (e.g. savory, fresh ingredients)
14. Micro-distilled/artisan liquor
15. Nutrition/health
16. Simplicity/back to basics
17. Regional ethnic cuisine
18. Non-traditional fish (e.g. branzino, Arctic char, barramundi)
19. Newly fabricated cuts of meat (e.g. Denver steak, pork flat iron, Petite Tender)
20. Fruit/vegetable children’s side items

For the full report go to: http://www.restaurant.org/pdfs/research/whats_hot_2010.pdf
The OSU Oregon Small Farms team is collaborating with partners, Oregon Tilth, and USDA Risk Management Agency to offer Growing Farms: Successful Whole Farm Management workshop series in the winter and spring of 2010.

Growing Farms launched in 2009 in four regions in Oregon where 105 farmers benefited from the series. Participant evaluations gave the team powerful feedback to improve the series for the future.

This eight week course is designed to provide beginning specialty crop and livestock farmers with the tools and knowledge to manage both 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 5 years of their farm business.

The workshops address these six broad topics:

- Dream It: Strategic Planning
- Do It: Farm Operations
- Manage It: Farm Finance
- Grow It: Production
- Sell It: Marketing Strategies
- Keep It: Managing Liability

For detailed information go to http://smallfarms.oregonstate.edu and click on the Growing Farms Link.

Central Oregon starts March 23rd
Dana Martin (541) 548-6088

North Willamette Valley starts January 27th
Kristin Pool (503) 678-1264, ext 118

South Willamette Valley starts March 10th
Melissa Fery (541) 766-3553

Southern Oregon starts January 25th
Tracy Harding (541) 776-7371

A farmer comments on Growing Farms Workshop Series

“I was a participant in the 2009 Growing Farms class offered in Southern Oregon. As a retired veterinarian I was contemplating going beyond dabbling in farming and taking his pastime to market. Exercises in goal setting, clarifying values, and measuring risks helped Bob decide what his best venture would be. Soon after the class ended, my family and I started vending at a local farmers’ market. We began the season with vegetable starts and produce knowing they were simply holding booth space and gaining a presence in the market while they developed their niche market plans.”

Robert Bradford, Bradford Family Farm, Rogue River OR

The Bradford Family Farm has built the first ODA licensed chicken and rabbit processing facility in Southern Oregon. This allows them to sell their meat to market customers, restaurants and grocery stores. Bob is also growing a couple acres of wheat that he hopes to bring to farmers’ markets in the spring. They plan to grind the wheat on site as it is purchased.
Due to the time of year, weather and associated management changes, we are right in the middle of livestock pneumonia season. However, good managers know how to recognize early cases and treat for best outcomes. More importantly, they know how to reduce the factors that put animals at risk of this serious disease.

Pneumonia: The Scourge of Animal Populations

Pneumonia means inflammation of the lungs. Inflammation is a normal bodily response to anything foreign that enters the body or disturbs cells; it is actually part of the body’s defense system and healing process. Unfortunately, the fluid and cells that rush to a diseased or injured tissue during the process of inflammation can be quite detrimental when this process happens in the lungs. Extra fluid and cells in the free space of the lungs or in the walls of the air sacs can significantly interfere with the exchange of oxygen and carbon dioxide that must occur for optimal animal health and performance. Indeed, an animal’s response to a disease-causing agent in the lungs may cause much more damage than the pathogen itself.

Pneumonia is rare when animal populations and densities are low. In winter, animals are housed or gather more closely together, increasing the concentration of pathogens in their environment. Confinement and higher animal densities also result in increased air temperatures, humidity and condensation, which are beneficial conditions for pathogen survival and transmission. Contact between disease-carrying individuals and the rest of the herd increases during cold weather, as well.

Predisposing Factors

Pneumonia is regarded as a “multifactorial disease,” which means multiple factors are usually responsible for the development of clinical disease. To clarify, in an otherwise healthy animal, the presence of potentially-pathogenic bacteria in the nasal passages would usually not be enough to cause disease. However, a chilled, stressed and malnourished animal would be at much greater risk of clinical disease. The bacteria responsible for most cases of pneumonia are common inhabitants of the nasal passages of healthy animals. Many factors can weaken the host’s immune system and/or damage the lining of the respiratory tract to such an extent that these pathogens are able to progress deeper into the respiratory tract and cause disease (Table 1).

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<th>Viruses</th>
<th>Predisposing Factors</th>
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<td>Viral causes of pneumonia deserve special mention because they often precede cases of secondary bacterial pneumonia. The main viral causes of pneumonia in cattle include Infectious Bovine Rhinotracheitis (IBR), Parainfluenza 3 (PI3), Bovine Respiratory Syncytial Virus (BRSV) and Bovine Viral Diarrhea Virus (BVD). Other recognized but less common pneumonia-related viruses include Herpesvirus, Adenovirus, Rhinovirus, Malignant Catarrhal Fever Virus, Enterovirus and Reovirus.</td>
<td>Irritant fumes (ammonia, smoke, carbon monoxide, etc.)</td>
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In small ruminants, a chronic “slow virus” (Ovine Progressive Pneumonia virus in sheep and Caprine Arthritis and Encephalitis virus in goats) can also cause pneumonia. The lungs of affected animals enlarge as the body responds to the virus by depositing scar tissue; death is usually due to a secondary bacterial infection.

The Real Culprits

_Pasteurella multocida_ and _Mannheimia haemolytica_ are the two bacteria most commonly associated with pneumonia in cattle, particularly in recently-weaned calves that are transported significant distances (“shipping fever”). These bacteria can also be problematic in sheep, goats and swine. Numerous other bacteria can also cause pneumonia including _Mycoplasma, Pseudomonas, Corynebacterium, Staphylococcus, Hemophilus, Streptococcus, E. coli, Bordetella, Neisseria, Erysipelothrix_, and _Fusobacterium_.

Breakout from Pneumonia Outbreaks

By: Dr. Susan Kerr, WSU-Klickitat County Extension
Miscellaneous Causes
Fungal organisms can sometimes cause respiratory infections, as can lungworms. White Muscle Disease secondary to selenium deficiency can affect muscles involved in swallowing, predisposing the animal to inhalation pneumonia. Vomiting, improper administration of oral medications or any other situation that causes foreign objects to enter the airway can also result in pneumonia.

Signs of Illness
Animals with pneumonia typically have a fever, reduced appetite and are less active than their herdmates. They may stand alone. They will lag behind when the herd/flock moves. As the disease progresses, animals will have an increased respiratory rate and breathe with difficulty, sometimes to the point of open-mouthed breathing. They may cough and/or have nasal discharge. Weight loss and “rough looking” condition are common in chronic cases. Animals can die after a very short time of illness with few clinical signs or weeks later after a prolonged course of pneumonia. Others can become chronic “poor do-ers” with poor performance; they can also serve as a source of infection for herdmates.

Prevention
As already mentioned, successful managers are able to keep the incidence of pneumonia low through effective management practices. Here is a summary of effective practices.

1. Provide adequate nutrition, meaning proper amounts of a balanced diet for all individuals based on desired levels of production and performance as well as maintenance.
2. Do not add new animals to a group without an extensive period of quarantine. Closed herds or closed groups are safest.
3. Consider airflow and nose-to-nose contact: do not have younger animals downwind of or in direct contact with older animals.
4. Do not keep chronic poor do-ers.
5. Minimize dust and smoke in the environment.
6. Control mud—it promotes chilling, which increases stress and maintenance requirements.
7. Working with your veterinarian, create and implement an effective vaccination program to prevent pneumonia. Follow vaccine recommendations, including proper storage, handling, and administration of doses.
8. Monitor weanlings and young animals carefully; they are the most likely to develop clinical disease.
9. Ensure excellent ventilation that provides fresh, clean air to all animals. Do not mistake drafts for ventilation. Assess air quality at all levels, including nose level of recumbent animals—this is where high ammonia levels are most often detected.
10. Do not overcrowd. Ensure adequate feeder space and bedding space for all animals.
11. Isolate suspected cases in a hospital area. Do healthy animal chores first, then treat sick animals. Change clothing, wash hands and disinfect equipment after handling sick animals.
12. Necropsy dead animals when the cause of death is unknown. Laboratory tests can often identify the causative virus and/or bacteria, determine antibiotic sensitivities and lead to effective vaccination recommendations.

Conclusion
Losses due to pneumonia are much greater than the obvious loss of individual dead animals. Pneumonia in a herd or flock means animals are not performing up to their maximum potential, production costs are higher than they should be, labor is increased and food product quality is compromised. Responsible animal caretakers know it is their duty and responsibility to address animal welfare concerns and ensure a safe and healthy environment for their animals. During animal confinement season, it is essential that producers be ever vigilant for the factors that can result in a pneumonia outbreak and mitigate as many of these factors as possible.

For additional information
www.vet.cornell.edu/consultant/consult.asp
http://uwadmnweb.uwyo.edu/vetsci/Courses/PATB_4110/2-21/Class_Notes.htm
http://server.age.psu.edu/extension/factsheets/g/G80.pdf
www.abe.psu.edu/extension/factsheets/g/G110.pdf
Planting Trees along Your Stream: A Survivor’s Guide
By Ken Diebel, Riparian Specialist, Oregon Department of Agriculture

Planting trees is like raising kids. It is a long-term commitment. This is particularly true along streams. The riparian area, as scientists call the narrow band next to creeks, is a dangerous place for a tree or shrub. It is full of weeds and animals that will choke out or kill woody plants we may want to grow there.

While there are challenges, you can successfully establish trees and shrubs by following proper procedures. Keep in mind this is only an outline. Contact OSU Extension, your local Soil and Water Conservation District or Watershed Council, the Oregon Department of Forestry, and the Natural Resources Conservation Service for more detailed assistance.

Know Your Creek
How often does your creek flood? Does it run dry by the end of June? Are the banks stable? Or are they constantly peeling off and falling into the water? Knowing the answers to questions like these will help you determine the kinds of species to plant. Some will tolerate frequent flooding while others are better able to withstand drought.

If your banks are unstable, you might consider forgoing planting until you stabilize them. Too often people plant trees on vertical banks only to have the stream erode the soil right out from under the plant.

Put the Right Plant in the Right Place
Most people would not plant a redwood in the desert. That may sound ridiculous, but planting a pine in a bog is just as bad, but it happens. Matching plant species to your site takes some research and thought.

An important step to selecting the right species is to find out as much as you can about the soils along your creek. The Soil Survey, available from the Natural Resources Conservation Service, has a detailed description of soil types, and general guidance for suitable vegetation to plant in your area. Another consideration is picking a species adapted to the seasonal pattern of moisture levels. Plant water loving species, such as willow, in the area closest to the creek. Further away, where it is only seasonally flooded, plant species like dogwood or cottonwood. Pines should only be planted in the relatively dryer places.

Be Prepared
Like a boy scout, a good tree planter’s motto is “be prepared.” Map out where you want to plant. Look up. Power lines may be rare out in rural areas, but they are there. It is a shame to have to cut a perfectly healthy tree just because it has grown into a power line.

Have all the equipment you need to plant ready and on hand. Planting your trees immediately will greatly increase their survival. If you have to store your seedlings, keep them cool and moist.

Plant It Right
One of the easiest challenges to overcome is simply planting the seedling or cutting correctly. Too often, this straightforward process is neglected. If you are using rooted plants one of the most important considerations is keeping the roots from drying out. It takes only a few minutes for damage to occur.

Another common mistake is to plant a willow, or cottonwood cutting with too much left above ground. A general rule is to put 75 or 80 percent of the cutting below ground. This enables the plant to develop an adequate root system to support the above ground leaves and branches. Plants know about gravity. It is important to plant a cutting with the buds pointing up.
One of the ways to overcome some of the problems with lack of moisture late in the summer is to plant as long a cutting as possible. This will help keep the roots within reach of subsurface water. OSU Extension has several publications to guide you with proper tree planting techniques.

**Take Care of Your Trees**

A recent assessment of riparian plantings in Union County Oregon revealed that proper maintenance is critical for success. Statewide assessments have come to the same conclusion.

Weeds and grasses not only compete with trees and shrubs for moisture, light, and nutrients, they also provide cover for rodents. These rodents will chew on the bark and roots of woody plants killing them.

In your plans for planting your riparian area, include some means of controlling competing vegetation. Using plastic weed mats is one alternative. Mowing and or spraying are other possibilities. Check to ensure the chemical you plan on using is acceptable for use around streams.

Irrigating your plants during the hot dry months does help, but consider this option carefully. If your stream runs year round, and you have planted the right species in the right place, you probably won’t need extra water.

**Resources**

**Sources of Seedlings**
Oregon Department of Forestry.
[http://egov.oregon.gov/ODF/privateforests/docs/ForestNurserySeedlingSources.pdf](http://egov.oregon.gov/ODF/privateforests/docs/ForestNurserySeedlingSources.pdf)

The Native Seed Network.
[www.nativeseednetwork.org/](http://www.nativeseednetwork.org/)

**Seedling Care and Planting**


**Soils Information**
Natural Resources Conservation Service

**Species Selection**
USDA Plant Database
### SMART HORSE CERTIFICATION PROGRAM

The Jackson Soil and Water Conservation District and Oregon State University Small Farms Extension in Jackson County are pleased to announce the Smart Horse Certification Program. For new and experienced horse enthusiasts, participants of the program or of individual classes therein will explore a host of important topics relating to owning healthy horses, managing resources, and becoming part of the solution to improve water quality in your watershed.

The first of these classes, entitled Horses and Mud, investigates how grazing and pasture management, as well as mud and manure management, impacts horse health and soil and water quality. Other important issues such as cost-share programs and ODA regulations will also be discussed. Horses and Mud will be held on February 20th in the Eagle Point Library. The next workshop, Horse Cents, will cover logistical issues such as smart fencing, facility design, and economical horse owning, and will answer questions about what to do if there is fire or flood, if your horse dies, or how many horses your acreage can support.

Stay tuned for more information on these and other workshops in Jackson County; visit [http://extension.oregonstate.edu/sorec/farms](http://extension.oregonstate.edu/sorec/farms).

### Comment Period on Deregulation of Genetically Engineered Alfalfa

The Environmental Protection Agency (EPA) announced the availability of a draft environmental impact statement (EIS) that evaluates the potential environmental effects of deregulating two lines of alfalfa genetically engineered (GE) to tolerate the herbicide glyphosate, known commercially as Roundup®. The GE alfalfa is commonly referred to as Roundup® Ready (RR) alfalfa.

The USDA Animal and Plant Health Inspection Service (APHIS) is accepting public comments on the draft EIS for 60 days, closing the comment period on February 16, 2010. APHIS will also hold four public meetings in different U.S. locations during the open comment period. APHIS will announce meeting details in the Federal Register and on its website when they become available. APHIS originally deregulated the lines of RR alfalfa in June 2005 and a lawsuit was subsequently filed. The judge vacated APHIS’ 2005 decision to deregulate RR alfalfa and determined that the Agency must prepare an EIS in support of its decision to deregulate RR alfalfa.


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**Living on a Few Acres Conference is Back!**

The annual Living on a Few Acres Conference will be held Saturday, March 20, 2010, 9:00am to 4:30pm at the Deschutes County Fairgrounds & Expo Center in Redmond, Oregon.

This event will include a featured speaker and educational workshops covering a variety of topics ranging from cooperative community supported agriculture programs, first aid for livestock, urban poultry production, irrigation and pasture management, and growing crops in Central Oregon. A tractor safety training and driving class will also be featured.

For information, contact Dana Martin, Oregon Small Farms Faculty, [dana.martin@oregonstate.edu](mailto:dana.martin@oregonstate.edu).
January

20 to 22 - Hazard Analysis Critical Control Point (HACCP) Training for Meat and Poultry Processors
Also open to livestock producers and others with interest in meat processing food safety. LaSells Stewart Center, Oregon State University, Corvallis, OR. To register, contact Lauren Gwin: 541-737-1569 or lauren.gwin@oregonstate.edu

25 - Southern Oregon Growing Farms
Beginning Farmer Training Program. For additional information please refer to our website. http://smallfarms.oregonstate.edu/growing-farms-workshop-series. Jackson County OSU Extension Office, Central Point, OR. For more information contact Tracy Harding at Tracy.harding@oregonstate.edu, 541-776-7371 ext 208. $175/person or $350/2 participants-same farm

27 - North Willamette Growing Farms
Beginning Farmer Training Program. For additional information please refer to our website. http://smallfarms.oregonstate.edu/growing-farms-workshop-series. North Willamette Research and Extension Center, 15210 NE Miley Rd, Aurora, OR. Wednesday nights.4:30pm-9:30pm. For more information contact Kristin Pool at Kristin.Pool@oregonstate.edu. $225/person or $400/2 participants-same farm

February

2 to 3 - NW Pesticide Short Course
A pesticide short course is scheduled for PNW Chemistry, Toxicology and Policy. 11-12 hours of credit. Lane Community College, Eugene, OR. 8:00am - 5:00pm. 541-682-7308

27 - Oregon Small Farms Conference
Keynote speaker: David Mas Masumoto; invited capnote speaker US Representative Kurt Schrader. This year’s conference includes sessions on alternative meat marketing, alternative poultry feed, small scale grain production, and successful farm internships. LaSells Stewart Center, Corvallis, OR. 9:00am-5:15pm. Conference brochure and online registration here: at http://smallfarms.oregonstate.edu/2010SFC Contact: Chrissy Lucas 541-766-3556 or chrissy.lucas@oregonstate.edu $35 per person; $60 for two from the same farm or organization.