Dear Small Farmer and Landowner,

Welcome to the January/February issue of the Small Farms and Acreage Newsletter. On behalf of all the Mid-Columbia OSU and WSU Extension Agents, we wish you the very best in the new year.

In this issue you will find part 2 of the Home Poultry Production series by Dr. Susan Kerr, Klickitat County Extension Agent. Also as you look through this issue you will see number of local workshops including “Passing the Baton: The Art of Handing Over the Farm to the Next Generation”. This workshop, which will be held February 2nd at the Columbia Gorge Community College, is a must for anyone who is even remotely considering passing on their farm or ranch to the next generation. A second workshop that will be of interest to many is a “Winegrape Production, Vineyard Establishment and Management” Workshop to be held at the Columbia Gorge Community College on February 14th. The third workshop deals with livestock production which will be held February 28th, at the Discovery Center in The Dalles. Workshop topics will include animal nutrition, animal behavior, feed values, grazing rotations and range carrying capacities. For more information concerning any of these workshops, please see the “Coming Events” section of this newsletter.

As you review this issue, if you should have any questions about any of the information found in the newsletter or questions about small farming, please give us a call. You can contact your local county extension office at the numbers found on the top of this page. Again, please let us know how we can be of help to you.

Also as a reminder, if you receive this newsletter electronically, please make sure you let us know whenever you change your e-mail address so we can make sure you remain on the mailing list.

Sincerely,

Brian V. Tuck
Mid-Columbia Extension Agent
Oregon State University
Wasco County
Calendar of Events

2005

January

4-5 2006 Western Washington Horticultural Convention, Seattle Marriott SeaTac, WA. For more info see website at: http://wwha.wsu.edu/ or phone 1-800-942-4978.

5-6 Ninth annual Northwest Direct Seed Cropping Systems Conference, Three Rivers Convention Center, Kennewick, Wash., for growers in four Western states. Information: (509) 783-4676.

6 – Oregon Blueberry Commission Research and Public Relations Roundup, North Willamette Research and Extension Center, Conference Room, 15210 NE Miley Road, Aurora. Information: (503) 678-1264.

9-10 57th Western Small Fruit Pest Conference, Best Western CottonTree in Mount Vernon, WA. For more information see website: http://berrygrape.oregonstate.edu/news/events.htm

10 Fourth Organic Seed Growers Conference and Seed Biology Short Course, McMenamin’s Edgefield, Troutdale. Registration deadline Dec. 31. Information: Organic Seed Alliance, P.O. Box 772, Port Townsend, WA 98368, (360) 385-7195, info@seedalliance.org.

11 SAIF Corporation’s 11th Annual Agriculture Safety Seminar Series, Hood River Best Western, 1108 East Marina Way, Hood River, 9:30 a.m.- 2 p.m. Free. Information: (503) 373-8000 or (800) 285-8525.

12 Berry Day of the North Willamette Horticultural Association, Holiday Inn Wilsonville. Information at website: http://berrygrape.oregonstate.edu/news/events.htm

17 Austin Family Business Program “Ties to the Land: Keeping Family Forests and Farms in the Family”, 8:00 AM - 12:00 PM, OSU LaSells Stewart Center, Ag Science Room, 875 SW 26th, Corvallis OR. Fee: $35 first person; $10 per additional family member. Information at: http://www.familybusinessonline.org/programs/workshop_calendar.aspx


19-21 2006 Sustainable Agriculture Workshop, Shilo Inn, Portland, Soils and Agronomy Course. Advance registration advised. $400 or $450 after Jan. 1, includes workbook, lunches, and dinner on the 20th. Registration: (800) 779-1709.

24-25 Cheesemaking Workshop, Seattle, WA. See “Coming Events” section of this newsletter for more information.

February

1 Austin Family Business Program “Challenges &Opportunities in Managing Family-Owned Real Estate” 8:00 AM - 5:00 PM, Hilton Portland & Executive Tower, Pavilion East/West, Plaza Level, 921 SW Sixth Ave. Portland OR. Fee:$175. For more information see website at: http://www.familybusinessonline.org/programs/workshop_calendar.aspx

2 Passing the Baton: The Art of Handing Over the Farm to the Next Generation, Columbia Gorge Community College, Building 2, Room 2.384, The Dalles, Oregon from 1-4 p.m., $29. To ensure a seat, register by Jan. 31 by calling (541) 506-6011. Information: Brian.Tuck@oregonstate.edu.


14 Columbia Gorge and OSU Extension Service “Wine Production, Vineyard Establishment and Management Workshop” from 9 to 4 pm, The Dalles. For more information see Coming Events section of this newsletter.
15-16   SAIF Corporation’s 11th Annual Agriculture Safety Seminar Series, Discovery Center, Wasco County Historical Museum, 5000 Discovery Drive The Dalles, Wednesday, English 9:30 a.m.-2 p.m. & Thursday, Spanish, 8 a.m.-noon. Free. Information: (503) 373-8000 or (800) 285-8525.

16   Austin Family Business Program “Ties to the Land: Keeping Family Forests and Farms in the Family” 8:00 AM - 12:00 PM, Umpqua Community College, Tami, Room 120, 1140 College Rd. Roseburg OR. Fee: $35 first person; $10 per additional family member. Information: http://www.familybusinessonline.org/programs/workshop_calendar.aspx

18   Farm Direct Marketing Conference., La Sells Stewart Center, OSU, Corvallis. Information: http://smallfarms.oregonstate.edu/conferences/2006FDM.pdf

25   Home Orchard Society Grafting Workshop, Clackamas Community College ($15/class) 9:00am - 10:30am, Beginning, 10:45am - 12:15pm, Beginning,12:45pm - 2:15pm, Intermediate. Information: http://www.homeorchardsociety.org/events/

28   OSU and Wasco County Soil and Water Conservation District Mid-Columbia Livestock Workshop, 1-5 pm, The Discovery Center, The Dalles, Oregon. For more information please see the “Coming Events” section of this newsletter.

March

4   Home Orchard Society Fruit and Berry Cutting (Scion) Exchange from 10am to 4pm. at the Clackamas County Fairgrounds, in Canby, OR. Hundreds of FREE scion wood will be available, rootstock for sale, valuable written information about fruit trees & berries, fruit tree supplies for sale, and more. Talk with experienced fruit growers. For more information see website at: http://www.homeorchardsociety.org/events/

17-19   Northwest Horse Fair and Expo, Linn County Fair and Expo Center, Albany. Information: jjcloe@equinepromotions.net.

25   2006 Clackamas County Extension Service Tree School. Contact the OSU Clackamas County Extension office (503-655-8631) to add your name to the mailing list to receive the 2006 Tree School booklet when it's mailed in January. Enrollment will be limited again this year so register early!

Coming Events

“Passing the Baton: The Art of Handing Over the Farm to the Next Generation”
The Dalles
February 2, 2006

Today, 95% of Oregon’s small landowners are 65 or older making family succession planning all the more critical.

“Based on the average age of farmers and ranchers right now, the next decade is going to see a huge transfer of land resources to the next generation,” says project coordinator, Cheryl Williams-Cosner. “Passing property from one generation to the next can be an emotional experience.”

For families, the real challenge may not be technical issues, but communication. Lawyers and accountants are skilled at dealing with the technical aspects of moving assets between Mom and Dad and Son or Daughter through the use of business and legal tools.
Coming Events….continued

But without informed decision makers, family emotions may prevent honest, open communication. This alone can prevent families from being able to pass their land on to the next generation intact.

The OSU Wascos County Extension, WSU Klickitat County Extension, OSU Austin Family Business Program and Columbia Gorge Community College jointly host this Forum to explore the human side of estate planning, focusing on ways to maintain family ties to the land from generation to generation. This Forum will build awareness of key challenges facing family businesses and help families to address them. Practical exercises will teach families necessary tools to address tough issues.

“Passing the Baton: The Art of Handing Over the Farm to the Next Generation” will be held on Thursday, February 2, from 1-4 pm at Columbia Gorge Community College, Building 2, Room 2.384. Participant cost is $29 per person. To insure your seat, please pre-register by Tuesday, January 31st with Columbia Gorge Community College at 541-506-6011. For more information contact OSU Extension Service, 400 East Scenic Dr., #2.278, The Dalles, Oregon 97058. (541)296-5494 or e-mail: brian.tuck@oregonstate.edu.

Wine Production, Vineyard Establishment and Management Workshop
The Dalles, OR
February 14, 2006

Columbia Gorge Community College together with OSU Extension Service will be offering a workshop entitled “Wine Production, Vineyard Establishment and Management” on February 14, 2006, from 9:00 am – 4:00 pm. This workshop will cover everything you need to know about young and mature vineyards, including establishing a vineyard and site selection, varieties and trends, quality and marketing factors and cost of production and more.

The workshop is presented by a variety of experts in their fields, from OSU and WSU extension, and is appropriate for growers in all areas of the gorge. The workshop will be held at Cousins Country Inn, 2114 W. 6th Street. The cost is $39.00 and includes lunch. Pre-register by calling the college at 541-506-6011.

National Cheese Expert to Teach Hands-On Cheesemaking Short Course
Seattle, WA
January 24-25, 2006

As consumer demand for specialty and locally made cheeses is growing, learning to make artisan and farmstead cheeses is also gaining popularity throughout Washington. Washington State University King County Extension and Beecher’s Handmade Cheese will host Vermont cheese maker pioneer Peter Dixon for a two-day, hands-on cheesemaking class in Seattle.

Peter Dixon will be teaching the basics of artisan cheesemaking. This two-day workshop will allow participants to experience all aspects of the cheesemaking process, including an overview of the cheesemaking process and how different types of cheese are made, the heating of the milk, hooping of the curds, salting and brining of the cheese, the ripening process, and equipment and facilities needed for making cheese. Each participant will be making and taking home cheese as well as learning about the history and science of cheese craft. A variety of different cheeses will be made.

The class will be Tuesday and Wednesday, January 24-25, 2006, at Beecher's Handmade Cheese, 104 Pike Street, #200, Seattle, WA.

The workshop is limited to twelve participants and there is an application process to get into the class. Class Fee is $250. The class begins promptly at 9am and will end around 5pm. Lunch and snacks will be provided. For more information and to get an application go to www.metrokc.gov/wsu-ce or contact Sylvia Kantor 206-205-3131; sylvia.kantor@metrokc.gov.

Mid-Columbia Livestock Producers Workshop
The Dalles, OR
February 28, 2006

Oregon State University and the Wasco County Soil and Water Conservation District are hosting The Mid-Columbia Livestock Workshop to be held on February 28th from 1- 5 pm, at the Discovery Center in The Dalles. This workshop is focused on small and medium sized producers who have livestock as a primary or secondary enterprise. Topics include: animal nutrition, cattle behavior, feed values of range and forage species,
Coming Events... continued

grazing management, alternative crops for forage production and practical experiences of a conservation rancher. Cost of the workshop is $5.00 per person and can be paid at the door. Pre-registration is required by Monday, February 27th, with the Wasco County Extension Office at 296-5494. For more Information call either the Wasco County Extension Office or the Wasco County Soil and Water Conservation District at 541-298-8559 ext 3.

Resources

Publications

OSU Extension Publications

The following are new publications from Oregon State University. Please see the OSU Web Site for more information on these and other publications

http://eesc.oregonstate.edu


EM 8895-E, Tree Buffers along Streams on Western Oregon Farmland New October 2005, 24 pages, available only online http://eesc.oregonstate.edu/agcomwebfile/EdMat/em8895-e.pdf

EM 8899-E, Weed Control in Nursery Field Production, New November 2005, 16 pages, available only online and from North Willamette Research & Extension Center, Aurora http://eesc.oregonstate.edu/agcomwebfile/EdMat/em8899-e.pdf

Other Publications

OSU has available new 4-H Beef, Sheep, Swine, Rabbits, and Goats resource manuals. These were designed initially for 4-H Members but are excellent resource manuals for the small scale livestock producer. For more information contact you local OSU Extension Office.

“USA: Market Growth Stifled by Undersupply” is a good article that describes the need for more organic production to meet demands. To see the complete article and related articles please go to: http://www.organicmonitor.com/r1512.htm

Web Pages

In December there was an excellent Bio-Diesel on the Farm Workshop Sponsored by the Oregon Environmental Council. They have just recently posted all the powerpoint presentations from the workshop. To see these presentations please go to the following website; http://www.biofuels4oregon.com/presentations/bionfarm

Columbia Gorge Community College BizCenter. This site provides some excellent tips on business development for the Mid-Columbia. The website is found at: http://cgccbizcenter.blogspot.com/


Newsletters

Here is the latest issue of Northwest Gardeners' eNews, an online newsletter from OSU Extension and Experiment Station Communications. http://extension.oregonstate.edu/gardening/
Rearing Pullets

At the end of 10 weeks, chicks have passed the brooding stage. They are now ready for the growing or rearing stage. It will take 12 to 14 more weeks before they begin to lay eggs. Remove all roosters at this stage unless you want to have fertilized eggs and raise your own chicks.

Refer to Table 1 for recommended rations for various classes and ages of birds. Do not offer grain with a complete pullet feed and do not feed egg-type pullets a broiler ration or you will have overweight hens with poor egg production. The addition of grit is not necessary.

Pullets can be allowed to develop in total confinement or range in open areas. Confinement rearing is growing pullets in a house instead of on open range. Allow 3 square feet for each bird. Allow 4 to 5 inches of feeder space per bird. Three 8 foot feeders or four 5 foot feeders will take care of 100 pullets. Provide a 4 foot waterer for each 100 pullets. Maintain 4 to 5 inches of clean, dry litter and plenty of fresh air.

Ranging Pullets

If you let your pullets run outside, they can get by with less space during the growing period. For small flocks, you may use the same house they were brooded in by letting them run out during the day. Do not let your pullets range on land that has had chickens on it during the past two years. Provide some kind of shade for your pullets and their waterers and feeders. Protect your pullets from dogs and other predators. Use the same kind of feeding program as with the confined rearing. Your feed bill may be a little lower because the birds will eat some green feed.

Lighting Programs

All lighting programs used with commercial flocks use the principles of decreasing light stimulation for growing pullets and increasing light stimulation after the pullets have reached a mature production age. Never subject pullets to increasing light and never subject layers to decreasing light. The duration of light is more important than its intensity. Until pullets are three weeks old, they should be given 20 to 24 hours of light daily. Between three and 22 weeks of age, the birds should be put on a decreasing day length lighting program. At 22 weeks old, the birds should receive a natural day length for that time of year and can be placed on a lighting program designed for laying hens.

Laying Flock Management

When your pullets reach 20 weeks of age, it is time to confine them to the laying house for either caged layer or floor production systems. The hens will be easier to manage and you will get fewer dirty eggs. The laying house should be comfortable. Keep the house dry and provide fresh air without getting the temperature too cold or too hot.

Requirements include:
- Four to five inches of dry litter on the floor
- Two-and-a-half to three square feet of floor space per hen
- Five inches of feeder space per hen
- One inch of watering space per hen
- One 14”x14”x14” nest for every 4 hens with 4” of wood shavings or straw

The sides of the building must be open during hot weather. Cover openings with poultry netting. During the winter, cover the north, east and west sides of the house with plastic. Leave the south side open for ventilation.

Table 1. Recommended Feeding Schedule

<table>
<thead>
<tr>
<th></th>
<th>Protein %</th>
<th>Energy Kcal/lb*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Broilers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-6 weeks</td>
<td>23</td>
<td>1450</td>
</tr>
<tr>
<td>6 weeks to slaughter</td>
<td>20</td>
<td>1450</td>
</tr>
<tr>
<td><strong>Replacement Pullets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(meat or egg type)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-6 weeks</td>
<td>20</td>
<td>1320</td>
</tr>
<tr>
<td>6-14 weeks</td>
<td>16</td>
<td>1320</td>
</tr>
<tr>
<td>14-22 weeks</td>
<td>12</td>
<td>1320</td>
</tr>
<tr>
<td><strong>Layer/Breeder Hens</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(egg or meat type)</td>
<td>16</td>
<td>1280</td>
</tr>
</tbody>
</table>

*Kilocalories of metabolizable energy per pound of ration
The caged layer production method consists of placing the hens in wire cages with feed and water provided to each cage. Two to three hens are housed in each cage, which measures approximately 12"x16"x18". Water and feed are supplied outside the cages. The cages are designed so eggs will roll out of the cage to a holding area by means of a slanted wire floor. This method of housing is used primarily with egg-type layers kept for infertile egg production.

The floor production method is designed for either egg-type or broiler-type birds kept for fertile or infertile eggs. Provide horizontal roost poles two to three feet above the floor and nest boxes for egg laying. Broodiness is often a problem in floor production housing. It is characterized by a hen wanting to build a nest and set on eggs. The problem can be solved by removing the hen from the flock and placing her in a suspended wire-floored cage for three to four days. Ample feed and water should be supplied to the broody hen, which can then usually be returned to the flock.

**Lighting for Layers**

To promote maximum egg production, use one 60-watt bulb for each 200 square feet of floor space and provide 16 hours of light daily using a combination of natural daylight and artificial lights. Be sure to supply exactly the same amount of light each day or egg production will drop.

**Feeding Layers**

Feed a laying mash when pullets begin to lay eggs. The laying mash may be a complete feed in mash, crumble or pellet form. This complete feed is usually about 15 percent protein and it is all the feed the hens need. You may opt to place ground oyster shell in hoppers throughout the house. Oyster shell helps make strong egg shells. Use a special breeder ration if the eggs are being saved for hatching purposes. These breeder diets contain higher levels of vitamins that help produce higher hatchability and healthier chicks.

Chickens prefer the same feed day after day so avoid changing feed. Make a habit of feeding your hens the same hour each day. Provide plenty of clean fresh water. Clean waterers daily.

**Caring for Eggs**

Gather eggs at least four times per day and cool as soon as possible. This prevents breakage and dirty eggs and helps keep egg quality high. Store eggs at 50 to 55°F with a humidity of 75 percent. Wash eggs in an egg detergent sanitizer except those that will be hatched. Keep water at 110 to 120°F and do not leave eggs in water longer than 150 seconds. Store eggs with their small end down in clean, cool cartons. Do not store cracked and dirty eggs with clean eggs. Sell only clean and uncracked eggs. Know in advance where you are going to sell your eggs. Be sure to investigate and abide by state and county laws regarding egg sales.

All eggs should be candled. A candler is a device with a light inside and a hole through which the light shines so the contents of an egg can be examined for defects. This is especially important if hens have contact with roosters and eggs could be fertilized.

Other routine tasks to care for a laying flock:

- Keep nests clean and prevent hens from roosting in the nests.
- Remove culls, egg-eaters and diseased birds from the flock.
- Remove wet spots or caked litter.
- Check birds for lice and mites.
- Keep rats and mice out of your laying house and feed room.
- Keep feed, production, growth, financial (expense and revenue) and health records.
- Clean and fill waterers; sanitize at least once a week.
- Keep feed troughs half full.

Near the end of the first year of lay, egg production may become so poor that poultry owners must decide to molt birds or sell them. Molting refers to the life stage when hens stop producing eggs, rest and restore body reserves, lose their feathers and begin to grow new ones. A "forced molt" will improve production above pre-molt levels, improve feed efficiency and improve egg shell and albumen quality, but production levels will fall more rapidly than before the molt. Also, a larger percentage of defective eggs will result with a non-productive period during the molt and a higher mortality during the molt. Many methods can be used to initiate molt, including light restriction.

**Culling Birds**

Culling is removing the nonlayers from the flock. This should be done on a regular basis. A nonlayer has a dull, shriveled comb and a hard abdomen. Sick and crippled birds should also be removed from the flock.
Roosters
Do not keep roosters in the flock unless you have a specific need for fertile hatching eggs. Roosters are not required in a flock to maintain the production of eggs for consumption. If fertile eggs are desired, provide one rooster for every 10 to 12 hens.

Management of Broiler Chicks
Feed a good commercial 23 percent protein chick starter ration for the first five to six weeks. Follow with a 20 percent protein finisher feed until the broilers reach the desired slaughter weight. A recommended feeding schedule and the nutrient levels of the ration are shown in Table 1. The chicks should have access to feed and water at all times. The water fountains should be cleaned daily and the feeders cleaned frequently.

Disease and Parasite Control
Coccidiosis is the most common disease found in young, unmedicated flocks. This protozoan disease, characterized by diarrhea, unthriftiness and death is transmitted by the ingestion of contaminated droppings. The disease can be prevented by feeding rations containing a coccidiostat medication. Adult birds usually do not require a feed that contains a coccidiostat but young layers on littered floors may experience outbreaks. If coccidiosis is diagnosed, treatment can be given through the drinking water. Treat all birds in the susceptible age range at the first sign of illness in one bird.

Vaccinating
Many diseases can be prevented by using a program such as the one shown in Table 2. Newly-hatched chicks are commonly vaccinated at the hatchery to protect them from Marek's disease. All birds kept for egg production should be vaccinated for Fowl Pox between the ages of 8 and 12 weeks. This is a virus that causes lower egg production and death and is often transmitted by mosquitoes. There is usually no need to vaccinate small flocks for Infectious Bronchitis or Newcastle Disease. Other poultry diseases include aspergillosis, epidemic tremors, Gumboro, necrotic enteritis, fatty liver syndrome and blackhead. Work with your Extension educator or veterinarian to develop a vaccination program for your flock.

Table 2. Disease Prevention Program

<table>
<thead>
<tr>
<th>Disease</th>
<th>Vaccination or Prevention Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newcastle Disease</td>
<td>In hatchery or at 4 days using the drinking water method. Revaccinate at 4 weeks and 16 weeks in the drinking water with B1 type vaccine.</td>
</tr>
<tr>
<td>Infectious Bronchitis</td>
<td>In hatchery or at 4 days using the drinking water method. Revaccinate at 16 weeks using drinking water method.</td>
</tr>
<tr>
<td>Marek's Disease</td>
<td>In hatchery using subcutaneous injection.</td>
</tr>
<tr>
<td>Fowl Pox</td>
<td>Vaccinate at 12 weeks of age using wing-web stab method. As early as 1 day of age if mosquitoes are present.</td>
</tr>
<tr>
<td>Coccidiosis</td>
<td>Daily feeding of preventative medications in ration for up to 20 weeks.</td>
</tr>
</tbody>
</table>

Watch for external parasites such as mites and lice and intestinal parasites such as roundworms, cecal worms, capillary worms and tapeworms.

Sanitation Practices
- Keep brooder and layer houses dry to prevent diseases.
- Keep all visitors out of your facilities. They can bring disease agents in on their clothing or shoes.
- Don't allow other chicks to mix with your chicks because they might bring a disease into your flock.
- Isolate sick birds and work with your Extension educator and/or veterinarian to identify the cause of illness.
- Examine birds regularly for lice, mites and other parasites.
- Keep pullets separated from older birds.

Avian Influenza
Avian Influenza (AI) is a highly contagious viral inflection caused by the influenza virus Type A which can affect chickens, turkeys, quails, guinea fowl, pet birds and wild birds.
Influenza viruses occasionally emerge among humans as part of the natural ecology and biology of influenza viruses. Normally animal influenza viruses do not infect humans. However, avian influenza viruses can sometimes cross this barrier and directly affect humans.

Avian influenza virus is killed by the heat of normal cooking. Washing hands after handling raw poultry is always a good precaution, but there is no danger of getting avian influenza from properly cooked poultry.

Signs of Avian Influenza in birds include:
- Sudden death without signs of illness
- Lack of energy and appetite
- Decreased egg production and/or soft shelled or misshapen eggs
- Swelling of the head, eyelids, comb, wattles and hocks
- Purple discoloration of the wattles, combs and legs
- Nasal discharge, coughing and sneezing
- Incoordination
- Diarrhea

Dr. Leonard Eldridge, Washington State Veterinarian, encourages bird owners to practice good biosecurity and report signs of unusual illness among birds. To report disease in Washington, contact the State Veterinarian's office at 360-902-1878, the U.S. Department of Agriculture at 360-753-9430 or your private veterinarian. Oregon poultry owners should report sick birds to the USDA at 1-866-536-7593.

POULTRY RESOURCES FOR SMALL SCALE PRODUCERS

Avian Influenza
- [www.avianinfluenzainfo.com](http://www.avianinfluenzainfo.com/)
- [www.cdc.gov/flu/avian/facts.htm](http://www.cdc.gov/flu/avian/facts.htm)

Mississippi State University Extension Service Publications available from [http://msucares.com/4h_Youth/4hpoultry/index.html#pubs](http://msucares.com/4h_Youth/4hpoultry/index.html#pubs)
- Publication 255, 4-H Poultry Manual - Unit One
- Publication 743, 4-H Poultry Manual - Unit Two
- Publication 268, The Home Flock
- Publication 358, Culling Hens

These OSU publications are available from [http://eesc.oregonstate.edu](http://eesc.oregonstate.edu) or your local Extension office:
- Brooding and Rearing Baby Chicks, PNW, 491
- Hatching Small Numbers of Eggs, PNW 478
- How to Feed Your Laying and Breeding Hens, PNW 477
- Growing Broilers in Oregon: Facts for the Potential Grower, EM 8426
- Why Did My Chickens Stop Laying? PNW 565

These WSU publications are available from [http://pubs.wsu.edu](http://pubs.wsu.edu) or your local Extension office:
- Poultry Leader Guide, EM4887
- Poultry Science Exhibit Ideas, EM3497
- Home Processing of Poultry, MNEF411
- National Poultry Judging Manual, NE4H460
- Brooding and Rearing Ducklings and Goslings, EB1190
- Care of a Small Flock of Chickens, EB0971
- Helpful Hints on Growing Fryers, EB0911
- Poultry Pests and Their Control, EB0912
- Small Poultry Flock Health Tips, EB 1371
- Basic Ventilation Considerations for Livestock or Poultry Housing, PNW0307
- Troubleshooting Mechanical Ventilation Systems for Livestock/Poultry Housing, PNW0308

Other Resources
- [Ohio State University Poultry Learning Laboratory kit](http://www.care.org/publications/poultry/poultry.pdf)
- Available from [www.attra.org/publication.html](http://www.attra.org/publication.html):
  - Sustainable Poultry: Production Overview
  - Small-Scale Poultry Processing
  - Range Poultry Housing
  - Growing Your Range Poultry Business: An Entrepreneur’s Toolbox

Sign up for the Small Farms and Acreage Newsletter….
Call 541-565-3230, 296-5494 or visit us on the web: