Dear Small Farmer and Landowner;

Welcome to the March/April Issue of the Small Farms and Acreage Newsletter. In this issue we have an important note about Exotic Newcastle Disease (END) from Dr. James Hermes, OSU Poultry Specialist. Those with poultry really need to take time to read this article. Note, the Oregon Department of Agriculture has additional information about this disease on their website and this can be found at: www.oda.state.or.us/ In this issue there are also good feature articles on Pasture Management by Brian Tuck and Starting a Herd by Susan Kerr.

Due to time constraints we were not able to finish the third installment of the CAFO articles by Randy Mills, OSU Umatilla County Livestock Agent in this issue but will finish this series in the May/June Issue so stay tuned.

Again, as we enter into the spring, we are still in a drought condition due to the dry subsoil. It is important that for deep rooted plants that, where possible, additional water be applied this summer to offset poor deep soil moisture. Drought also affects the ability of plants to fight off disease and insect pests so a little extra water can make a big difference. The other thing I have also noticed this year under dryland cropping conditions, where it is normal to apply fertilizer on an annual basis such as with pastures, that the upper two feet have higher than normal nitrogen levels. This is due to reduced plant growth in dry years and underutilization of available nitrogen. In droughty years it is crucial to soil test to make sure what nutrient levels are available. Your local Extension Office has information on how to soil test and where to send your samples.

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.

As a reminder, If you look at this newsletter on the web, please keep in mind that if you change your internet carrier to be sure to let us know so we stay current with your e-mail address.

Sincerely,

Brian V. Tuck
Mid-Columbia Extension Agent
# Calendar of Events

## 2003

### March

13 **Lingon berry Conference**, North Willamette Research and Extension Center, 15210 N.E. Miley Road, Aurora. Conference will cover variety trials, the best varieties for the Pacific Northwest, picking dates, an updated cost enterprise sheet and research photos of how lingonberries are grown in Scandinavia, Germany, Estonia and Alaska.

13 & 14 **OSU Winegrape Research Days**, LaSells Stewart & CH2M Hill Alumni Centers, OSU Campus, Corvallis. For registration information, contact: Debby Yacas, ph: 541.737.6483, e-mail: deborah.yacas@oregonstate.edu

15 **Horse Farm Tour**, Redmond, WA. Call 206-764-3410 ext. 130.

19 **Commercial Stables Tour**, Renton WA. Call 206-205-3105 or e-mail greta.cook@metrokc.gov

19 **Fifth Annual Small Fruit Grower's Workshop** will be held at WSU Vancouver campus. Information via website: http://berrygrape.oregonstate.edu/news/WSU03.pdf

21-23 **Greater Northwest Equine Expo**, Linn County Fair and Expo Center, Albany, Ore. Information: (765) 655-2107.

29-30 **Packgoat Seminar**, Olympia WA. Call 360-923-1451 or e-mail edelweissacres@attabi.com

### April

1-2 **Repairing Pacific Northwest Rangelands**, Spokane, WA. Website http://ext.nrs.wsu.edu/Go to Watershed/Rangeland Extension then to News & Events section for information or call Denise Boyd 509-335-2811 or ceeps@wsu.edu

3-5 **WA Farm Forestry Association Annual Meeting**, Bellingham, WA. For information, contact Tom Westergreen, (360) 966-3605, twestergreen@compuserve.com

4-5 **Klickitat County Lambing School**, Centerville, WA. Call 509-773-5817 or e-mail kerrs@wsu.edu

7-12 **Washington State Sheep Producers Shearing School**, Grant/Adams Counties, site TBA, e-mail grant-adams.wsu.edu/agriculture/livestock/sheep

24-26 **Oregon Small Woodlands Association Annual Meeting and Woodlot Tours**, Agate Beach Inn, Newport. Starts 1 p.m. on the 24th, $175 fee until March 22. Information, registration: Joe Steenkolk (541) 875-1541.

25-26 **Honey Bee Pest and Disease Update Workshops** for Hobbyist and Commercial Beekeepers in the Clackamas/Colton area. April 25 7-9 p.m., April 26, 9 a.m.-3 p.m. Cost per participant $15 includes Saturday lunch and workshop materials. Pre-registration advised. E-mail: honeybeeworkshop@attbi.com; visit www.orsba.org; or write to Honey Bee Workshops, P.O. Box 42353, Portland, OR 97242.

26-27 **Oregon Ag Fest**, Oregon State Fairgrounds, Salem. Information: Debbie Leahy, (503) 363-8434, e-mail oragfest@cyberis.net or www.oragfest.com

26 **Commercial Stables Workshop**, Silvana, WA. Call 425-335-5634.
May

8-10  **Second Annual Columbia River Wine Expo.** WestCoast Hotel Pasco, in Pasco. Buyers from around the world meet with wineries from throughout Washington; taste tests and exhibitions; educational session. More information: Gary A. White, (509) 372-7614 or gawhite@tricity.wsu.edu.

27 - 28  **Private Forests Forum of Washington**  
Olympia, WA; Summit 2000 resulted in numerous policy discussions and decisions affecting private forest lands. Summit 2003 is your opportunity to help understand and protect Washington's private forests and to participate in developing a plan to sustain future prosperity of our forests in economic, social, and biological contexts. Plenary and technical sessions will address issues such as: economic impacts; silvicultural needs; urban challenges; regulations and riparian zone biology.  
http://www.cfr.washington.edu/Outreach/summit2003/

29-31  **The 2003 Sustainability Forum,** Portland, OR  
Three-day conference for business and community leaders committed to addressing economic, environmental and social challenges in the Pacific Northwest. The Sustainability Forum's 130+ panels and workshops are designed to define and facilitate progress towards sustainability in the Northwest - promoting sustainable products and services, creating employment in sustainable industries, revitalizing communities, and restoring natural ecosystems.  
http://www.sustainablenorthwest.org/soc/sfindex.htm

Area Workshops and Seminars

**Klickitat County Lambing School**

April 4 and 5, Centerville, WA.  
9:00 am to approximately 4:00 p.m. each day. $10 per person or family. Participants may attend one or both days. Appropriate for OLDER, well-behaved youth. Participants will have the opportunity to assist ewes with lambing, as well as experience many other hands-on activities. Call 509-773-5817 or e-mail kerrs@wsu.edu for more information. Pre-registration is required.

**Food Business 101:**  
**Helping New Food Industry Entrants**

This workshop will be held March 12, 2002 from 1 - 5 pm at the Food Innovation Center in Portland. The program is designed to help guide people who have a wide variety of reasons for starting a food business. The list includes capturing more value for agricultural products they produce, having a family recipe they believe is unique, and enjoying food enough to make it the centerpiece of a second career. These new entrants into the food industry oftentimes have limited knowledge of what it takes to start and run a food business. Faculty at Oregon State University's Food Innovation Center Experiment Station collaborated with an Extension faculty member from Washington State University to develop NW Food Business 101, a half-day workshop to provide the basic overview needed opportunities. This series focuses on education, not regulation or reporting. Call 509-773-5817 or e-mail kerrs@wsu.edu for more information. Pre-registration is required.

**Water Quality Monitoring Education Series**

March 29, April 12, and another date TBA; Goldendale, WA. Learn how to monitor the water quality of the water you live near and care about, and learn about what you can do to improve water quality. This FREE series will offer plenty of hands-on, practical learning experiences. Pre-registration is required.
Area Workshops and Seminars...continued

by most new entrants to the food industry. Technical, regulatory and business issues are introduced and discussed. Case studies and hands-on, class exercises bring the concepts home for the participants of the workshop.

For more information and registration information, please go to:
http://fic.oregonstate.edu/OSU/4Business/
NWFoodBus101/info.htm OR contact: Aaron Johnson via email (aaron.Johnson@oregonstate.edu) or phone (503-872-6674).

days 6:30 p.m.- 8:30 p.m. On April 17 topics include goat health, grass productivity, and stocking rates. At radio KDNA, 121 Sunnyside Avenue, Granger. On May 1 topics include cow health, pasture profitability, drought strategies, and fencing, at the Outlook Grange. In both workshops, bring in your weeds to have them identified.

Workshops and tours are free, including the lunches for the tours, but please register in advance. Spanish translators will be available. To register, contact Marie Zuroske with SWCD at 837-7911.

Small Farm Expo
Saturday March 29, 2003, 9am-3pm
King County Fairgrounds in Enumclaw

This unique event puts tools for success in the hands of small-acreage landowners. Come see and learn -- all for free. The Expo provides the information you need -- with no distractions! See hands-on demonstrations and educational presentations. Hear about the best technologies in livestock, crop and resource management For more information contact: WSU Cooperative Extension in King County, Brad Gaolach at 206-205-3100 or look at the Expo web site at http://www.metrokc.gov/wsu-ce/FarmExpo/Index.htm

Spring Lamb Viewing at OSU

They're fluffy, they're frisky and they're arriving daily. The annual onslaught of spring lambs has begun at the Oregon State University Sheep Barns.

This year, 375 white Suffolk ewes are expected to give birth to about 800 lambs in the barns at 7565 N.W. Oak Creek Dr., said Thomas Nichols, the sheep barn manager.

The annual event has become an early sign of spring's imminent arrival to the Willamette Valley. It is especially popular with school children, who enjoy seeing the tiny lambs wagging their tails like puppies as they nuzzle and head-butt their moms.

The barns will be open until April 5. The public can view the ewes and lambs from 9 a.m. to 2 p.m. weekdays, and from 9 a.m. to 5 p.m. weekends. The barns will be closed for academic exercises Feb. 28, March 7, and March 14.

Groups of more than 10 visitors should call Helen Chesbrough at 541-737-4854, or by sending an e-mail to her at: helen.chesbough@oregonstate.edu

Regional Pasture Tours and Workshops

South Yakima Conservation District, in cooperation with Washington State University, Solar $, and Natural Resources Conservation Service, is proud to offer their second year of pasture tours and workshops for anyone interested in improving their pastures.

Pasture Tours. On March 15 tour goat pastures and March 29 cow pastures, both on Saturdays, 9 a.m.-noon. Walk through small pastures with forage and livestock specialists. What does it take to make a pasture more productive? What works, what doesn’t work. Meet at the Outlook Grange, 4400 Van Belle, Outlook, then drive to the pastures. Lunch provided.

Pasture Workshops. April 17 and May 1, both Thurs-
Agency Notes

Wasco County Soil and Water Conservation District (SWCD)
The following are meeting dates for various Wasco County Watershed Councils

The Dalles Watershed Council
March 19th
May 21
August 20
October 15
November 19
All meetings will be 7PM at the USDA office, TD

Mosier Watershed Council
Next meeting, March 13, 6:30 p.m. Mosier Grange

Bakeoven Watershed Council
Next meeting will PROBABLY be on April 29th, 10AM at the Legion Hall in Maupin.

White River Watershed Council
The next meeting will be on June 11th, 7PM, Tygh School Community Center.

Crop Disaster Assistance Program - Signup dates not yet announced
a. Directed toward Counties with 2001 or 2002 crop loss - you choose
b. Loss threshold is for losses greater than 35%
c. May include Livestock Assistance Program and Quality Loss in addition to crop production loss
d. It looks like it will only be available to Counties with a "National Disaster Declaration" - Wasco County received the designation in both 2001 & 2002.

Funding for Environmental Quality Incentive Program (EQIP) - Increased nationwide

Conservation Security Program (CSP) - Not yet announced

Grassland Reserve Program (GRP) - Not yet announced

Note: This information applies to all small and large farmers in both in Oregon and Washington

2001-2002 Disaster Programs

The following websites have been made available to help you keep track of what's happening for the 2001 or 2002 Disaster Programs: www.usda.gov or at http://disaster.fsa.usda.gov The second site let's you get current information and Questions & answers about the program.

Appropriations Bill has been Passed

Congress has passed an appropriation bill funding Federal Farm Programs for 2003. What does that mean in the short term? Conservation Reserve Program Signup - Signup date not yet announced - expected in the spring of 2003.

2002 Wool & Mohair Loans Or LDP's

The deadline to request Loan Deficiency Payments (LDP) for 2002 shorn wool has been extended to March 31, 2003. Procedure is now available for LDP payments for unshorn lambs sold in 2002. For more information, contact FSA for program requirements.

Wool Or Mohair producers need to make how to maintain your eligibility for 2003 payments. If wool or unshorn lambs are sold prior to before an application has been filed, you will have lost program payment eligibility. Contact the FSA Office for more information.
Resources..... continued

Funding/Technical Resources

The Agricultural Marketing Resource Center (AgMRC) is a USDA sponsored center for value-added agricultural groups. Their web site is located at http://www.AgMRC.org or http://www.agmrc.org/ and provides detailed information on market and industry developments, how to start a business, and information on writing feasibility, marketing and business plans. This is a good resource site for folks looking for help with marketing issues.

USDA SARE Grant Program has announced that they will be posting their call for proposals on their web site beginning April 1, 2003 which can be found at http://wsare.usu.edu/ Proposals will be for Farmer/Rancher Grants, Marketing System Grants and Organic System Grants. For more information about this program please refer to their web site.

Funding For Road and Culvert Improvement Projects
Small Forest Landowners interested in receiving financial assistance with road and culvert improvement projects are encouraged to enroll now for funding in 2003 through the Environmental Quality Incentives Program (EQIP). EQIP is administered by the Natural Resource Conservation Service (NRCS) and will provide up to 75% of the cost of making forest road improvements that will benefit water quality and salmon habitat. NRCS is taking applications now for funding through EQIP that will be made available in 2003. To receive an application, contact the NRCS office in your region. For a list of all NRCS offices, please visit: http://oip.usda.gov/scripts/ndisapi.dll/oip_agency/index?state=wa&agency=nrsc

Small Forest Landowner Funding Source
This website highlights potential funding opportunities for small forest landowners in WA State that lists cost-sharing programs, grant opportunities and other government and non-government financial assistance programs for owners of small woodlots. This site can be found http://www.wa.gov/dnr/sflo/resources/

Web Pages

Yakima County WSU Tree Fruit Website. This is another good source of tree fruit production information and can be found at: http://treefruit.yakima.wsu.edu/

Home gardener fact sheets for managing plant problems with IPM or Integrated Pest Management. http://pep.wsu.edu/hortsense/


North Central Washington Tree Fruit Production http://www.ncw.wsu.edu/tftindx.htm

Publications

Avoiding Residues in Small Poultry and Game Bird Flocks, PNW 564, January 2003. This is a free publication and can be obtained from any OSU or WSU Extension Office.

Why Did My Chickens Stop Laying, PNW 565, January, 2003. This is a free publication and can be obtained from any OSU or WSU Extension Office.

Tall Fescue Endophyte Concepts. This is a good overview of Endophyte issues as they relate to use of fescue as a fresh and dry forage source for livestock and horses. For a copy of this free publication, please contact the Oregon Tall Fescue Commission at 503-585-1157.

Using Strip Tillage in Vegetable Production Systems in Western Oregon, EM 8824. This publication is a good primer for folks doing intensive commercial crop production where there is concern over soil erosion, even though it was designed for Western Oregon. Cost of this publication is $2.50 and can be obtained from any OSU Extension Office.
Options for Forest Certification. This publication sorts out various systems of forest certification to help forest owners and managers choose the best system for their forests and markets. It can be found at: http://eesc.oregonstate.edu/agcomwebfile/EdMat/pubresults.lasso?sortnum=0504&skip=10

Fruit Crop Ecology and Management is a publication by Michigan State University Extension that responds to the increasing number of regulatory and environmental restraints on fruit production systems. To help fruit growers and consultants transition to more sustainable practices, MSU specialists collaborated with them to produce this publication explaining how ecology works within fruit production systems. The book explores how those who want a biologically intensive fruit production system must look at their farm as an ecosystem where organisms form an integrated web that allows farms to function. With knowledge of these interactions, growers can effectively modify their own production system.

To enhance its appeal for its audience, Fruit Crop Ecology and Management was written and designed to explain ecological principles within a farming context using colorful photos and illustrations along with practical examples. Sample pages and content description can viewed at the MSU IPM Program website: http://www.msue.msu.edu/ipm/Pubs_eco.htm

Cost of the publication is $16.

The Agri-Tourism Workbook: Guide to Building a Successful Agriculture Business Through Farm Direct Marketing has just been updated and can be ordered through Agri-Business Council of Oregon or can be viewed online at www.aglink.org/agritourismworkbook.htm. The workbook is to be used as a working guide for individuals who may be interested in starting an Agri-Tourism business or are interested in expanding their established business with other revenue sources. The workbook contains ideas, explanations, resource contact information and a self-assessment form.

Managing the Other Forest: Collecting and Protecting Non-Timber Forest Products. This publication can be found at: http://www.fs.fed.us/pnw/scifind.htm

Identification and Control of Knapweed Species in Central and Eastern Oregon, EC 1559, February 2003. Cost of this publication is $2.00 and is available from any OSU Extension Office.

Newcastle Disease a Potential Problem for Oregon’s Poultry

By Jim Hermes, OSU Poultry Specialist

Exotic Newcastle Disease (END) is well known by poultry producers, its mere mention sends shivers up the spine of even the most stalwart of poultrymen. While it is well known for its devastating effect on poultry by producers, this disease is virtually unknown to most, even many involved in other agricultural enterprises.

Newcastle disease is caused by a virus that is usually confined to the tropical areas of the globe. It can be found naturally in numerous species of birds found in these regions. When contained there is poses little threat to commercial poultry in the US and particularly in Oregon. However, occasionally it finds its way from the tropics, crossing international borders, usually by smugglers of pet or domestic birds, and into the highly susceptible birds in commercial poultry flocks in the US.

Currently, there is a severe outbreak of this disease in Southern California. First identified in October of last year, it remained confined to small game fowl and backyard chicken flocks. However, in spite of intense bio-security measures including, restricting bird traffic, depopulating infected flocks, door to door searches for infected birds, and isolating commercial poultry flocks,
the bad news came in late December - END was found in a commercial flock of layers, and has since been found in four more. In addition, it has been found in Nevada, near Las Vegas. Since then, USDA has placed a federal quarantine on the area, stopping the movement of all birds or bird products from the area.

The CA Dept. of Food and Agriculture has depopulated hundreds of small flocks and most of the infected commercial flocks totaling nearly two million birds so far. During the last major outbreak in California in 1971, about 12 million birds were depopulated before the END crisis ended. With and estimated cost of $56 million.

What about Oregon producers? Should they be concerned? Even though our commercial poultry flocks are hundreds of miles from the quarantined areas of California, Oregon's commercial poultry industry, a nearly $100 million per year agricultural industry in Oregon, has already heightened their bio-security programs to reduce the possibility of infection in their flocks. However, the industry needs the help of the small flock producer as well. Many times, the small home flock of chickens will become infected with disease organisms, particularly END before the commercial flocks.

To reduce the chance of flocks becoming infected producers must isolate themselves from sources of infection, other flocks of birds. Bird or human traffic from flock to flock is the most common method of spreading this disease.

Small flock producers must to promptly report their sick birds to authorities. Proper diagnosis of sick or dead birds is very important. The primary symptom of END in chickens is respiratory in nature, labored breathing, coughing, sneezing, drainage from nose or mouth. Other symptoms may accompany the respiratory stress such as lethargy, head bobbing or neck twisting, malformed eggs, in addition to others. The worst part is that nearly 100% of birds exposed will become sick and more than 90% will die of the disease.

The good news is that END, while devastation to poultry and other birds, is not infectious to people or other mammalian livestock or pets. The poultry and egg supply remains safe to consume as always.

If you have birds or know of birds, chickens or other species, that are showing the signs of END described above, it is imperative that a proper diagnosis is obtained to rule out this disease. Sick or fresh dead birds can be submitted to the OSU Veterinary Diagnostic Lab in Corvallis 541-737-3261. Or contact,

---

**Spring Pasture Management Tips**

*By Brian Tuck – OSU Wasco County Dryland and Irrigated Field Crops Agent*

As the weather starts to warm up and pastures begin grow, how you manage your pasture in the spring can make all the difference in forage quality, animal growth and weed control problems.

**Pasture Fertility Management**

Healthy pastures need good fertility management to maximize production and animal health. Most dryland pastures in the Mid-Columbia are a mix of annual and perennial grasses, which if the soil is healthy generally only need annual applications of Nitrogen in the spring and fall. But those with pastures in the wetter regions of the Mid-Columbia or who have irrigation often have alfalfa or clovers in the mix will need additional applications of Phosphorus, Potassium and Sulfur. Because soils vary greatly in the region, the need to know which and how much of a nutrient to apply each year is **Very Important** and this can be accomplished through soil testing every 2-3 years. Information concerning soil sampling techniques and where to send samples can be obtained from any OSU or WSU Extension Office.
Pasture Use – How Much Forage Can Be Removed and Not Hurt the Pasture

The Rule of Thumb for grazing is **Take Half And Leave Half** and not graze pastures below three inches in height. Research and practical experience have shown that removing more than 50-percent of the grass or grazing below three inches in one grazing period is very damaging to pastures and will reduce long-term plant health. To determine actual use, it is beneficial to have a small area excluded from grazing to use as an indicator. It is important to remember, you are looking for 50-percent removal by volume not by height. Studies have shown that when over 50-percent of the grass in removed, 50-percent or more of the root growth is stopped. The following table shows how grass removal effects plant root growth which directly effects leaf regrowth following grazing.

### Table 1.

<table>
<thead>
<tr>
<th>Percent of Grass Plant Removed</th>
<th>Percent of Root Growth Stopped</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>20%</td>
<td>0%</td>
</tr>
<tr>
<td>30%</td>
<td>0%</td>
</tr>
<tr>
<td>40%</td>
<td>0%</td>
</tr>
<tr>
<td>50%</td>
<td>2-4%</td>
</tr>
<tr>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>70%</td>
<td>78%</td>
</tr>
<tr>
<td>80%</td>
<td>100%</td>
</tr>
<tr>
<td>90%</td>
<td>100%</td>
</tr>
</tbody>
</table>

How Much Does An Animal Eat

As a part of knowing how much pasture you can remove, it is important to know how much forage an animal needs to be healthy. This will help to balance the numbers of animals you can put on your pasture with the amount of forage available to avoid over use. The following table illustrates how much forage typical grazing animals will need in a month.

### Table 2. Forage Requirement for Livestock.

<table>
<thead>
<tr>
<th>Grazing Animal</th>
<th>Forage needed (Dry Matter) in lbs/month*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Cow (1000 lbs weight)</td>
<td>800</td>
</tr>
<tr>
<td>1 Horse</td>
<td>1000</td>
</tr>
<tr>
<td>1 Sheep</td>
<td>200</td>
</tr>
<tr>
<td>1 Llama</td>
<td>300</td>
</tr>
<tr>
<td>1 Goat</td>
<td>200</td>
</tr>
</tbody>
</table>

*These weights are for actual consumption, when feeding hay, include 10% more to account for waste.

**Weed Identification and Control**

Last but not least is weed control. Good pasture management will keep plants vigorous, healthy and competitive, which will reduce the ability of weeds to become established or compete. The following are some very good resources to help identity pasture weeds suggestions for control:

* **Weeds of the West.** This is an excellent resource book that provides very good photos of weeds found in our area and information on how they grow. It can be ordered through any OSU Extension Office or local bookstore.

* **Northwest Weeds** by Ronald Taylor. This is a smaller version of Weeds of the West. Again a very good resource for small farmers and can be ordered through any local bookstore.

* **The Field Guide to Plants Poisonous to Livestock: Western US** by Shirley A. Weathers is a good resource in identifying poisonous plants in your irrigated or dryland pasture and ordered through a local bookstore.

* **OSU has a large number of individual Weed Publications** covering a host of weeds including Russian Thistle, Puncturevine and various Knapweeds to name a few. Again, they can be ordered through any OSU Extension Office or from their web site at http://eesc.orst.edu. These publications have excellent photos and information on identification and control.

Those with questions concerning pasture management are encouraged to contact the Wasco County Extension Office at 541-296-5494.
Assembling a Herd
Susan R. Kerr, DVM, PhD
WSU Cooperative Extension Educator-Klickitat Cty.

Taking the time to do some planning before you assemble a herd will save you a lot of time, money and headaches later. Here is a brief overview of things to consider before you assemble a herd of livestock. This information is not intended to replace the advice of your veterinarian. Always contact your veterinarian when you have a question about animal health.

1. Prepare the premises.
Before you bring the first animal home, you should have your facilities ready. Put up fencing that is safe and effective; the specifics will depend on the species you intend to raise, and this information is available at your county Extension office. Fence animals out of riparian areas, but make sure they have a reliable source of clean water in several locations.

Have some type of restraint system so you can handle individual animals. You may need a livestock chute so you can give vaccinations, de-worm animals, perform pregnancy exams, or do other routine procedures.

If you have a barn, make sure it is safe and well ventilated. Eliminate protruding nails, exposed wires and other dangers. Install gutters and drainpipes to reduce mudholes around doors. Remove all junk, trash and debris from your animals’ environment.

Identify and fence out or eliminate toxic plants in the animals’ pasture. It will take some effort to learn about these weeds in advance, but your work could save a life. Also remove batteries, lead paint, antifreeze, corrosive materials, solvents, stagnant water, and any other potential sources of toxins.

Calculate how much hay and feed you will need for your animals, and make sure you have enough on hand before you bring any livestock home. Your Extension agent can help you determine how much feed you will need. The amount to stockpile will depend on your animals’ needs as well as your storage space, budget and the anticipated future availability and costs of the feed. Make sure to keep grain and other concentrates safely locked away from livestock so they cannot overeat it. Develop a trace mineral feeding program, with special emphasis on Selenium.

2. Obtain healthy animals.
After you decide what species of livestock you want to raise, start looking for sources. Try to buy locally—the animals will be more acclimated to the area, it will be easier to research the seller’s reputation, and transportation costs will be lower. How do you find out who has animals for sale? Check local and regional newspapers, especially agricultural papers. Talk with your county Extension agent and local veterinarians. Look for fliers at feed stores. Contact your local livestock growers’ association or cattlemen’s group. Try an Internet search, using your location and the breed of animal you are looking for. Consider paying for a “wanted” ad in your newspaper.

After you locate a potential source of animals but before you put down your hard-earned cash, do some research! Investigate the reputation of the seller and the quality of his/her livestock. If they are reputable and have healthy stock, the seller should not object to your contacting their vet and asking questions about their farm and livestock. Also, speak with others who have purchased animals from this source to see how well the animals worked out for them. Were the animals healthy? Were they animals easy to deal with, or were some of them too timid or aggressive? What is the seller’s return policy?

Ask the seller for documentation about the animals’ history and health status. This includes ages, vaccination and de-worming histories, any illnesses and treatments, breeding and pregnancies, routine or other surgical procedures, etc. If the animals are registered, be sure to get their registration papers.

Although it will significantly increase your costs, it is wise to do some laboratory tests on your foundation animals. Consult with your veterinarian for specific recommendations. Some diseases of concern include:
**CATTLE**
- Johne’s Disease
- Tuberculosis
- Brucellosis
- Bovine Leukosis
- Bovine Viral Diarrhea

**SHEEP**
- Johne’s Disease
- Ovine Pleuropneumonia
- Genetic testing (Spider, Scrapie)
- *Caseous lymphadenitis
- Brucellosis

**GOATS**
- Johne’s Disease
- Caprine Arthritis Encephalitis
- *Caseous lymphadenitis
- Tuberculosis
- Brucellosis

**SWINE**
- Atrophic Rhinitis

Pre-purchase examinations by a veterinarian are a wise investment, especially if you are purchasing breeding animals. Breeding soundness examinations will identify infertile animals.

Do not purchase foundation animals from sale yards. You rarely know these animals’ health history, age, why they are being sold, their pedigree, pregnancy status, or anything else about them. They are often carriers of serious diseases such as Salmonellosis, Cryptosporidiosis, Orf, mastitis, Johne’s Disease, Caprine Arthritis Encephalitis, Caseous Lymphadenitis, pneumonia, and others.

Vaccinate your animals for appropriate diseases as needed. Vaccinations to consider include but are not limited to:

**CATTLE**
- Bovine Viral Diarrhea
- Leptospirosis
- Bovine Respiratory Syncytial Virus
- Parainfluenza Type 3
- Infectious Bovine Rhinotracheitis
- Vibriosis
- Pinkeye
- Rotavirus
- Coronavirus
- E. coli
- Haemophilus somnus
- Redwater
- 8-way Clostridium
- Brucellosis

**HORSES**
- Eastern and Western Encephalitis
- Tetanus
- West Nile Virus
- Influenza
- Venezuelan Encephalitis
- Potomac Horse Fever
- Strangles
- Rhinopneumonitis
- Rabies

**SHEEP**
- 3 or 8-way Clostridium
- Caseous Lymphadenitis
- Vibriosis
- Chlamydia psittaci (EAE)
- Soremough
- Bluetongue
- Foot rot

**GOATS**
- 3 or 8-way Clostridium
- Soremough
- Caseous Lymphadenitis

3. **Caring for Your Herd.**
If you are able to assemble your herd from a single source, it will simplify the isolation and quarantine procedures you’ll need to do on your farm. If you have no other animals on your farm, there is no special procedure needed. If others of the same species are present, you should isolate the new animals downstream and downwind from the other animals for at least one month; do chores for the new animals last.

Take care not to purchase more animals than you can afford to feed and care for, nor more than your land can support. Consult your Extension agent for advice about stocking density. Many of the brittle acreages in our area cannot support many head, and soon become drylots. This poor management practice causes long-term damage to the land and reduces its productivity; overstocking also can have a negative impact on water quality.
Develop an effective parasite control program. Work with your veterinarian to select the appropriate wormer for your animals and their stage of lactation and/or pregnancy. Weigh your animals to avoid under- or over-dosing. Pay particular attention to the parasite status of young animals: some parasites can kill them quickly. Use fecal examinations to monitor the parasite status of your herd.

Don’t rely on your memory; use tags, tattoos, or another reliable system to identify individuals. Without identification, you run the risk of breeding brothers to sisters or mothers to sons, or making other major management errors. Keep excellent records. You can never have too much information! To make essential management decisions, you may need to know how old an animal is, the pounds of milk it produced, who its sire and dam were, what treatment it received, etc. Write information down and keep it in a safe place, such as a computer database.

For optimal animal health and human safety, develop an effective bio-security program. Keep all equipment clean and disinfect, disinfect, disinfect. Pay particular attention to milk bottles, nipples, pails, pill guns, milking equipment, your hands, your boots, syringes, needles, feed bunks, and water troughs. Bleach is an excellent disinfectant, but surfaces must already be very clean for bleach to work; it is deactivated by manure, dirt or other organic matter. A good way to drastically change the micro-environment in your facility is to periodically use a steam jenny; this uses heat and pressure to kill bacteria and disturb their environment. Periodically clean and let housing areas dry thoroughly (preferably by exposure to the sun), lime the base, then bed well with clean straw. Draining wet areas where possible will also help improve sanitation.

When assembling or expanding a herd, the value of your veterinarian cannot be overemphasized. Your vet can help you locate healthy animals, design vaccination and worming programs, and advise you about nutrition programs. Your county Extension is also a good source of information, and has many helpful resources available for you.

---

**Vaccinations….continued**

**SWINE**

Erysipelas
Bordetella bronchiseptica
Pasteurella multocida

*Caseous lymphadenitis: testing via visual inspection for abscesses and herd history of abscesses

*Are not necessary for all animals; work with your vet to determine your herd’s vaccination needs