



Mid-Columbia Small Farms & Acreage Newsletter

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March-April 2004

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Dear Small Farmer and Landowner,

Welcome to the March/April Issue of the Small Farms and Acreage Newsletter. In this issue as usual we have an article written by Dr. Susan Kerr concerning Selenium. For those with livestock this is an important article to review as Selenium is deficient in our soils.

I have also included an article I wrote concerning soil sampling. As our weather and soils begin to warm, this is now the ideal time to be testing your soils and applying your fertilizers. Plants need adequate nutrients to be healthy and productive, particularly early on in the growing season.

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 Co.



Calendar of Events

2003



March

- 2 OSU Extension Service Blueberry Production Course**, Red Lion Inn, Salem, 8:30 a.m.-5:30 p.m. Information: (503) 364-2944.
- 4 Field Burning & Residue Management: Are They Compatible?** workshop, Rufus Community Center, Rufus, OR, 8:30 – 4:00 pm. See Area Workshops & Seminars section of newsletter for more information.
- 6 NW Food Business 101: How to Start a Successful Food Business**, Columbia Gorge Community College, The Dalles, 8:30 - 1:00 pm. See Area Workshops & Seminars section of newsletter for more information.
- 6 Home Orchard Society Scion Exchange & Rootstock Sale**, 11 am-4pm. Clackamas County Fairgrounds, Canby
- 8, 15 & 22 Willamette Valley Beekeepers Association Annual Bee School**, Chemeketa Community College, Building 34, Room A, Salem, 7-9 p.m. Registration for three days is \$20 per person and includes materials. Subjects include Biology of Honeybee; Starting and Maintaining Hives; Spring and Fall Management; Medications Information: Mike Rodia, (503) 364-3275.
- 9-11 33rd Annual Pacific Northwest Range Management Symposium**, Oregon State University Extension Building, Baker City, OR Sponsored by the OSU Department of Rangeland Resources. Registration information: Julie Wentland, OSU, Corvallis, at (541) 737-1619, or by e-mail, Julie.Wentland@oregonstate.edu. Information about the conference on the Internet at <http://oregonstate.edu/dept/range/>.
- 15-19 Oregon City Irrigation Courses**, presented by the Irrigation Association, at Clackamas Community College, Clairmont Hall, 19600 S. Molalla Ave., Oregon City. Topics: Principles of Irrigation, Landscape Irrigation Auditor, Landscape Drainage Design, Irrigation System Installation and Maintenance, Landscape Irrigation Design, Understanding Pumps, Controls and Wells, Sprinkler System Scheduling, Predicting and Estimating Landscape Water Use. Pre-registration deadline March 2. Information; www.irrigation.org, or call (703) 536-7080. Conference co-sponsors include Oregon Sandcastle Contractors Association and Regional Water Providers Consortium.
- 18 Hood River/Mosier Biological Control Workshop and Orchard Walk**, meet at Mosier Grange, 5 miles east of Hood River, 9 a.m.-4 p.m. \$12 at the door; lunch provided. Information: Gwendolyn Ellen, (541) 737-6272, or visit www.tilth.org/index.html.
- 18 "Basics of Whole Grain Bread,"** Bob's Red Mill, 5209 SE International Way, Milwaukie, 7-9 p.m. Gill Hammond, head baker, will share tips and techniques. Class fee \$20. Information: Katie at (503) 654-321, ext. 254.
- 19 Oregon Family Forest Fair**, Chemeketa Community College Auditorium/Theater building No. 6, Salem campus, 9 a.m.-4 p.m. OWSA annual business meeting will be held from 7:30 a.m. to 8:30 a.m. Fair is for forest landowners, forestry-interested public and members of all forest products-related crafts and industries. Information and complete schedule of day: www.oswa.org.
- 19 Microfarm Sustainable Hydroponic Business Workshop**, Central Point. \$35 fee includes starter kit and handouts. Information and registration: www.MicrofarmSustainable.org or by calling (503) 868-7679. Registration deadline March 13.
- 23 WSU Extension Workshop for Berry Growers**, Vancouver campus of WSU. Full day workshop for growers. Agenda will be available later. Information: (360) 576-6030 ext. 14.
- 24 Pest Monitoring in the Orchard**, 10-3 pm, Campbell's Resort, 104 West Woodin Ave., Chelan sponsored by Washington Tilth. Cost is \$25/person. For more information call 206-442-7620.

Calendar of Events....continued

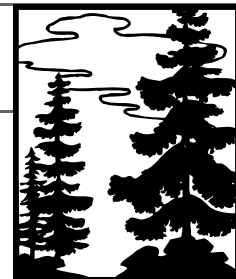
- 27 Tree School**, WSU Small Farm Expo, Enumclaw, WA. 9-3pm, King County Fairgrounds. There will be hands-on demonstrations, exhibits, educational presentations and more. Cost is Free. For more information call 206-205-3206 or visit www.metrokc.gov/wsuc-ce/farmexpo.
- 27 Lane County Beekeepers Association Beekeeping School**, 8:30 a.m.-5 p.m. \$30 per person, \$40 per family. Information: Chuck Hunt, (541) 607-0106 or e-mail lcbao@pacinfo.com.
- 27 High Desert Wool Growers Fiber Market Day**, Crook County Fairgrounds (Carey Foster building), Prineville, 10 a.m.-4 p.m. Vendors with fibers from raw fleece to spun and dyed yarns; tools; equipment for crafters, books and patterns; information for producers, ranch and home products; livestock. Demonstrations throughout the day. Information and vendor registration forms: Robina Koenig, (541) 389-7678 or e-mail tumblecreekfarm@juno.com.
- April**
- 3 Microfarm Sustainable Hydroponic Business Workshop**, Spokane. \$35 fee includes starter kit and handouts. Information and registration: www.MicrofarmSustainable.org or call (503) 868-7679. Registration deadline March 27.
- 3,10,17 WSSP Annual Lambing School**. Please see Area Workshops section of newsletter for more information.
- 8 Managing a (Family) Wine Business: From A(dvertising) to Z(est)** will be held at Willamette Valley Country Club, Canby, OR. <http://berrygrape.oregonstate.edu/vvinflyer.pdf> for details.
- 13-14 2004 State of the Deschutes Conference**, Kah-Nee-Ta Resort, Warm Springs. Anyone interested in the future of the Deschutes River Basin is encouraged to attend. Information: www.wyeastrcd.org/sod or contact Wy'East Resource Conservation and Development Council, (541) 296-2391 ext 118.
- 16-17 Honey Bee Pests and Diseases Update** Workshop for hobbyist and commercial beekeepers, in the Salem area; 7-9 p.m. on April 16 and 9 a.m.-3 p.m. April 17. Cost per participant \$15. Information: www.orsba.org. For questions or to register, send an e-mail to honeybeeworkshop@comcast.net or write: Honey Bee Workshops, P.O. Box 42363, Portland, OR 97242. Sessions offered in Eugene area May 14-15.
- 16-18 Small Farmer's Journal 2004 Swap Meet and Auction**, Sisters, OR. Information: 541- 549-2064 or 800-876-2893.

Area Workshops and Seminars

Tree School 2004

Scheduled for Saturday, March 27, 2004 at Clackamas Community College. Registration booklets were mailed the week of January 5th. If you haven't received one by February 1, call the Extension office to request a copy. You can view the entire 40-page booklet on their web site at <http://extension.oregonstate.edu/clackamas/forestry/documents/TS2004bookletcomplete.pdf> or by

calling OSU Clackamas County Extension Office at 503-655-8631. You can print the registration form (print page 39 only or you will print the whole booklet!), fill it in and mail it to our office along with your fee. We do not take registrations online or by phone. Thirteen classes are already full. Registration deadline is March 8 or 575 registrants, whichever is first.



Area Workshops and Seminars...continued

WSSP Lambing School

The WSSP annual lambing school will be offered three times this year, April 3rd, 10th & 17th, 2004. Dr. Jill Swannack will be teaching the school during lambing time at Feustel Farms. They will be lambing 800 ewes and 300 ewe lambs from March 30th to April 30th.

Topics covered include basic lamb care, dystocia management, lambing supplies, drugs and dosages, normal lambing, grafting, correcting malpresentations, necropsies, handling, feeding, and raising bummer lambs. The day will begin at 9:00 a.m. and will close around 3:00 p.m. Dr. Jill Swannack will be conducting



the "hands-on" schools and those enrolled will have the opportunity to DO the work, not just observe. Each day of the school is tailored by the questions from the group. Each one-day school is limited to ten (10) students per day. The cost is \$35.00 for WSSP members and \$45.00 for non-members. Enrollment is on a first-paid, first-enrolled basis, with advanced payment required to reserve your spot.

For more information, please contact Carrie Anthony, WSSP Executive Secretary, at (509) 826-0535 or wssp@televar.com, or send payment to: WSSP, P.O. Box 3445, Omak, WA 98841.

Resources

Publications

The following are new publications from Oregon State University. Please see the OSU Web Site for more information on these and other publications at: <http://eesc.oregonstate.edu>.



- EM 8328, Hazelnut Pest Management Guide for the Willamette Valley, revised February 2004, 9 pages, no charge (available only online)--
<http://eesc.oregonstate.edu/agcomwebfile/edmat/html/em/em8328/em8328.html>
- EM 8329, Cherry Pest Management Guide for the Willamette Valley, revised February 2004, 13 pages, no charge (available only online)--
<http://eesc.oregonstate.edu/agcomwebfile/edmat/html/em/em8329/em8329.html>
- EM 8851, Field Measurements of Nitrogen Leaching Below Willamette Valley Row and Mint Crops, new January 2004, 8 pages, \$1.50 (available only online)-- <http://eesc.oregonstate.edu/agcomwebfile/edmat/EM8851.pdf>
- EM 8856-E, Christmas Tree Nutrient Management Guide for Western Oregon and Washington, new February 2004, 32 pages, \$4.00 (available only online)--<http://eesc.oregonstate.edu/agcomwebfile/edmat/EM8856-E.pdf>
- EM 8857-E, Acidifying Soil for Crop Production West of the Cascade Mountains (Western Oregon and Washington), new February 2004, 11 pages, \$2.00 (available only online)--
<http://eesc.oregonstate.edu/agcomwebfile/edmat/EM8857-E.pdf>
- SR 790, 2003 Oregon County and State Agricultural Estimates, revised February 2004, 16 pages, no charge (available only online)--<http://eesc.oregonstate.edu/agcomwebfile/edmat/SR790-03.pdf>
- SR 1006, Chilling and Freezing Guidelines to Maintain Onboard Quality and Safety of Albacore Tuna, new January 2004, 28 pages, no charge (available only online)--<http://eesc.oregonstate.edu/agcomwebfile/edmat/SR1006.pdf>
- SR 1050, Nitrates and Groundwater: Why Should We Be Concerned with Our Current Fertilizer Practices?, new January 2004, 28 pages, no charge (available only online)--<http://eesc.oregonstate.edu/agcomwebfile/edmat/SR1050.pdf>

Resources....continued



- EM 8847, Economic Evaluation of Lingonberry Production, December 2003, 24 pages. Cost is \$4.50 and available through any OSU Extension Office.
- EM 8803-E, Cover Crop Nitrogen for Summer Vegetable Crops, December 2003, 7 pages. Cost is \$1.50 and available through any OSU Extension Office.
- EC 1119, Incentive Programs for Resource Management and Conservation, November 2003, 4 pages. Cost is \$1.50 and available through any OSU Extension Office.
- EM 8826, Understanding and Addressing Issues Related to the Well-being of Livestock, March 2003. Cost is \$1.50 and available through any OSU Extension Office.
- EM 8835, The Organic Farmer's Guide to Oregon State University, October 2003. Cost is \$1.50 and available through any OSU Extension Office.
- EC 1255, Controlling Pocket Gopher Damage to Conifer Seedlings, May 2003. Cost is \$2.50 and available through any OSU Extension Office.
- EM 8838, Promoting The Safety of Northwest Fresh and Processed Berries, October 2003. Cost is \$4.00 and available through any OSU Extension Office.

Farm to Cafeteria Connections, WSDA Small Farm & Direct Marketing Program, November 2003. Copies can be obtained by calling 360-902-1976

Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses was published by the Sustainable Agriculture Network (SAN) for the Sustainable Agriculture Research and Education (SARE) program. This publication can be found on-line at: <http://www.misa.umn.edu/publications/bizplan.html>. For more information about grant opportunities and other resources, visit www.sare.org.

Grants

Grants Available For Low Cost Watershed Projects

The Hood River Small Grant Team, a partnership of the Hood River Watershed Group, the Hood River Soil & Water Conservation District, and the Confederated Tribes of the Warm Springs Reservation, is now accepting applications for watershed restoration projects in Hood River County. The Hood River Small Grant Team had \$90,000 to award to low cost projects through June 2005. The maximum amount for a single grant is \$10,000 and there is a 25% match requirement.

Using the Hood River Watershed Assessment and other reference documents, the team has established the following natural resource priorities:

High priority:

- Water quality /irrigation efficiency
- Riparian process and function
- Fish passage
- Instream process and function
- Upland process and function

Medium priority:

- Road impact reduction
- Wetland process and function

Low priority:

- Urban impact reduction

Eligible project types include:

- Livestock fencing along streams
- Off-stream livestock watering facilities
- Streamside plantings
- Manure storage and management
- Removal of irrigation or push-up dams
- Upgrades of culverts or bridges
- Irrigation system improvements that increase instream flow
- Pesticide/chemical management
- Road/trail erosion management
- Restore instream structure

Resources..... continued

If you have a potential project, want information and/or an application, contact Hood River SWCD Manager Anne Saxby at 386-6719. The Hood River Small Grant Team will accept applications during two-week windows every other month. Windows are March 1-15, May 1-15, July 1-15, Sept. 1-15, Nov. 1-15, and Jan. 1-15. The team and a technical advisory committee made up of representatives of local, state and federal natural resource agencies, will evaluate applications within two weeks of each window. The goal of this program is to quickly process and implement small restoration projects that use tried-and-true methods to solve local resource concerns.



Funding for these grants is made available by the Oregon Watershed Enhancement Board (OWEB) through Ballot Measure 66, approved by voters in 1998. Measure 66

specified that 15 percent of lottery proceeds be used for watershed enhancement and maintenance of state parks. OWEB uses this funding to support voluntary efforts to improve water quality, water quantity and the recovery of listed fish. For more information on OWEB or any of its programs, visit www.oweb.state.or.us.

Keeping in Touch

Farm Services Agency



Farm Storage Facility Loan Program

Producers who plan to build new on-farm storage or increase existing storage may apply for a loan. Now is the time to start the process, so it can be completed before 2002 harvest.

Program facts:

- Loans up to 85% of the net cost of storage facility -- Maximum loan is \$100,000
- 7-year term
- Fixed interest at Commodity Credit Corporation rate - March - 3.75%
- Storage for up to 2 years production, minus existing storage on the farm
- UCC-1 lien will be filed on the facility and related equipment
- If the loan is over \$50,000, a first position real estate mortgage is required
- Applicant must have a satisfactory credit history and must show repayment ability
- Remodeling to increase existing storage capacity may qualify

Estimated time needed by FSA to complete processing is 30 days. Approval must be obtained **before** construction begins and a site inspection, to check for environmental issues, must be completed before the site preparation begins.

Ewe Lamb Replacement/Retention Program

Just announced!! Sheep producers may qualify for \$18 per head for each ewe lamb saved as replacement ewes for the flock or for ewe lambs purchased for breeding stock.

Eligible lambs must have been purchased or born between 8/1/03 and 7/31/04. The ewe lambs must not have produced an offspring. For more information, contact the FSA Office.



Feature Articles

Selenium: Essential for Livestock Health

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

Tragically, the first time some livestock producers hear the term “White Muscle Disease” is during the necropsy of one of their animals. What causes this serious disease and more importantly, how can it be prevented?

Cause of White Muscle Disease

White Muscle Disease (WMD) is caused by a deficiency of either of two important nutritional anti-oxidants: Vitamin E and Selenium. Anti-oxidants help protect cell membranes from the oxidizing effects of toxins, free radicals, normal metabolism and other factors that destroy cell membranes. Young, growing animals are rapidly creating muscle mass, so Selenium deficiency shows itself most commonly as muscle cell degeneration. There are various areas of the country that are deficient in Selenium and other areas that have toxic levels. Pacific Northwest soils are generally low in Selenium, as are feeds that are grown here.

Signs of Illness

Some of the signs of Selenium deficiency depend on the tissues that are affected. Young animals may appear stiff, lame or weak; spend most of their time lying down and resting their chin on the ground; have diarrhea; and be unthrifty, chronic poor do-ers. If the muscles involved with swallowing are affected, food can be inhaled instead of ingested, which causes aspiration pneumonia. Animals may die very suddenly during exercise if heart muscle is involved. In pigs, Selenium deficiency can also cause liver degeneration.

Selenium deficiency manifests itself much differently in adult animals. Instead of muscle degeneration, weakness and death, Selenium-deficient adults tend to have chronic infections and reproductive problems. Examples include chronic mastitis, chronic pneumonia, retained placenta, infertility and miscarriages.

Diagnosis

As alluded to previously, an experienced eye can often detect WMD during necropsy. Look for soft, pale, white areas of muscle where you expect to see normal-looking firm, red muscle. The most common muscles affected are those in the tongue, heart and at the back of the thigh. Cut across the muscles and look for bands or stripes of muscles that are paler than surrounding muscle. Selenium is associated with a serum enzyme called glutathione peroxidase, so blood tests can be conducted to assess Selenium levels. Selenium also can be measured

from biopsied or post-mortem liver samples. In some cases, a diagnosis of Selenium deficiency is made by the animal’s response to treatment.

Treatment and Prevention

The only bright spot concerning WMD is that it can be both treated and prevented. Injectable products containing Selenium and Vitamin E are available from veterinarians or by prescription. As always, if you want to use one of these products in a species or dose not listed by the manufacturer on the bottle, you must first get approval from a licensed veterinarian with whom you have a valid client-patient-veterinarian relationship. Make sure to abide by all meat and milk withholding times required for the medication. Typically, injections are given to clinically-affected animals or to healthy animals once or twice a year for prevention. Toxicity is possible, so make sure to use recommended dosages and record treatment dates carefully. This is NOT a case of “if a little is good, a lot is better!”

In Selenium-deficient areas such as ours, Selenium can and should also be supplemented through trace-mineralized salt and concentrates on a daily basis. Your veterinarian or Extension agent can work with you to design a Selenium supplementation program that is best for your herd.

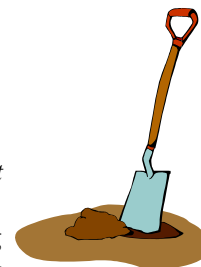
Summary

WMD is a common, serious but preventable disease of young livestock, causing poor performance and death. The adult form of this deficiency also affects animal health and performance in less dramatic but chronic ways. Responsible livestock producers will learn about WMD and other Selenium-responsive diseases and develop a prevention program for their animals. Don’t learn about WMD the hard way!

Soil Testing

By Brian Tuck, OSU Wasco County
Dryland & Irrigated Field Crops Agent

Now is the time for folks to be thinking about testing their soils. As the weather starts to warm plants are starting to come out of dormancy and the soils are beginning to warm. As plants break dormancy the requirements for nutrients from the soil increase dramatically, which means you need to have adequate amounts of nutrients like nitrogen, phosphorus, potassium, sulfur etc., readily available if plants are to be healthy and productive.



To help producers know how much of a nutrient is available in the soil and how much may need to be added, it is necessary to test your soils. As to when you should test your soils the following guidelines will be helpful.

- For perennial crops that are to be established such as orchards, timber, Christmas trees, vines, berries, pastures etc., it is best to sample the soil prior to crop establishment. This will allow nutrients to be added and tilled into the soil. This is particularly important where acidic soils are present and lime is to be added.
- For established plantings of perennial legumes like alfalfa and clover and grass pastures, test the soil every three years after planting.
- For annual crops, particularly vegetables and other specialized annual crops, test the soil before planting. If you plant successive crops in a single season, you don't need to soil test before each planting.
- For timber or Christmas tree plantings, it is usually not necessary to test the soil until replanting, unless tree growth is unsatisfactory.
- For established commercial stands of fruit trees, berries, or grapes, soil testing is usually not done. Nutrient needs are determined through foliar analysis.

Soil sampling is easy to do and the Oregon State University Extension Service has an excellent

publication "Soil Sampling for Home Gardens and Small Acreages", EC 628 that describes how to properly sample your soils. To obtain a free copy of this publication, please contact any OSU Extension Office.

Oregon State University also has a list of Analytical Laboratories Serving Oregon, EM 8677. This listing provides names, addresses and phone numbers of testing laboratories in the state and what tests they perform. To obtain a free copy of this list, please contact any OSU Extension Office.

As to what analysis you should request from a laboratory. The standard soil test from most laboratories measures organic matter, nitrogen, phosphorus, potassium, calcium, magnesium, sodium, and soil pH (acidity). For acidic soils, the SMP buffer test is the best way to determine how much lime is needed. With respect to nitrogen, this test is more important for annual crops or when establishing new perennial plantings.

Some specialized crops have higher or specialized requirements for certain nutrients, please contact your OSU or WSU Extension Agent for specific recommendations. Also, for Columbia Basin producers, you will want to test for sulfur and if you are growing tree fruits, vines or other high value perennial crops you might want to test for boron and zinc as well.

For further information concerning soil testing, please contact your OSU or WSU Extension Office.

Mid-Columbia Small Farms and Acreage's Newsletter Subscription Form

To receive a paper copy of the newsletter please fill out this form and enclose a check for **\$6.00** for six issues (one-year subscription). Make checks payable to **Sherman County Extension** and mail your check along with this form to:

**OSU Sherman County Extension
P.O. Box 385
Moro, OR 97039**

Name _____

Address _____

City _____ State _____ Zip _____

If you wish to receive the newsletter electronically, which is available free of charge, you only need to send an e-mail message to **join-mcsf@lists.oregonstate.edu** You do not need to put anything in the subject line or in the body of the message. The listserve will take your e-mail address and put it on the list to