Dear Small Farmer and Landowner,

Welcome to the January/February issue of the Mid-Columbia Small Farms and Acreage Newsletter. This issue is particularly special to us in that it is the first issue of our second year of publication. I, and the other Mid-Columbia Oregon and Washington State University Extension Agents, hope that this newsletter has been of use to you this past year as you manage your small farm.

To help us to continue to improve our support to you, we will be sending out a Small Farms and Acreage Newsletter Survey both electronically to those who receive the newsletter on the web and as a hard copy that will be attached to this month’s issue for those who receive the newsletter via surface mail. We would ask your help and support in filling out this survey. It is very important that we know your feelings about the newsletter and its benefits to you. Please, tell us what parts of the newsletter are the most helpful, and which are not and how we can improve it to make it more useful for you.

Please note, your individual responses will be kept completely confidential.

I would like to make mention about the number of great workshops and trainings available to small farmers in January and February. One of particular importance is the Northwest Agricultural Show and Oregon Horticultural Society, Nut Growers Society and Oregon Society of Nurserymen seminars. The Ag Show and technical seminars run from January 29-31 and are held at the Portland Double Tree Inn (formerly the Red Lion Columbia River). The Ag Show is a great place to see the most up-to-date technology. The seminars offer an excellent opportunity to increase your understanding of tree fruit, wine grape, strawberry, blueberry, caneberry, nuts and nursery production.

In the ‘Coming Events’ section of the newsletter, phone numbers of where to call for further information and the dates for the different technical meetings are listed. Also there are a number of other great workshops listed in this issue on marketing, woodland and livestock management and other topics of interest. We hope you will have the time to attend some of these excellent workshops and seminars.

Sincerely,

Mid-Columbia Extension Agents
**Calendar of Events**

**January**

2002

8-9 **Mid Columbia Farm Forum and Ag Show**, at TRAC, Pasco. Sponsored by Greater Pasco Area Chamber of Commerce. Information: Phone: (509) 547-5538; fax: (509) 547-5563.

12 "Fiber Frenzy" Pygora Goat Show, Washington County Fair Complex, Hillsboro, 10 a.m.-4 p.m. vendors, demonstrations. Free admission and parking. Information: Lisa Roskopf, (503) 985-3331, e-mail: sa@hmrpygoras.com.


15 Oregon Blueberry Growers and Processors Annual Research and Public Relations Roundup North Willamette Research and Extension Center, Aurora, 8:30 a.m. Information: (503) 369-7676; e-mail nwfpa@nwfpa.org, or on the internet: www.nwfpa.org.

20-23 "Putting the Pieces Together," 88th Annual NW Food Manufacturing and Packaging Expo, Oregon Convention Center, Portland. Information: (503) 639-7676; e-mail nwfpa@nwfpa.org, or on the internet: www.nwfpa.org.

29-31 Northwest Ag Show and OAN Seminars. Portland Exposition Center and Doubletree Hotel, Columbia River. See the latest in ag equipment and learn about some of the industry's top issues. For more information on the Ag Show, contact Jim or Shirley Heater at (503) 769-7120 or e-mail silver.mtn@juno.com For additional information concerning the OAN seminars, contact Oregon Association of Nurserymen at 503-653-8733.

31 Oregon Horticulture Society Blueberry Day, Columbia River DoubleTree, Portland, 8:30 a.m.-1 p.m. Discussion of frozen market, world production. Program held in conjunction with Northwest Ag Show. Information: (503) 364-2944.

**February**

5 Why Does Soil Biology Matter and How Do We Affect It? Workshop and Forum on Soil Biology, Lake Washington Technical College, Kirkland, WA., 9 am to 5 pm. For further information contact Andy Bary at 253-445-4588 or bary@wsu.edu or see their web site at www.puyallup.wsu.edu/soilmgmt/Events.htm


8-10 An introduction to Permaculture: A Design Workshop for Women on Self-Reliant Living, Lost Valley Educational Center, Dexter, OR. For further information, contact Jude Hobbs, 541-342-1160 or hobbsj@efn.org

12 Columbia Gorge Society of American Foresters Mid-Columbia Small Woodland Owners joint meeting, Charburger, Hood River, 6:30 p.m. Ross Holloway will talk about how ODF’s innovative structure based forest management meets timber, wildlife and other goals.

22 Clark County Farm Forestry Association Potluck, 6:30pm, Manor Grange, Clark WA. Contact:Dick Easter 360-247-5236.

22-24 Yard, Garden and Patio Show, Oregon Convention Center, Portland. Information: (503) 653-8733 or (800) 342-6401 or at the OAN web site http://www.ygpshow.com/

**March**

12 Columbia Gorge Society of American Foresters & Mid-Columbia Small Woodland Owners joint
Calendar of Events continued

meeting, Charburger, Hood River, 6:30 p.m., Roger Scott, Washington Hardwoods Commission will talk about hybrid poplars and other hardwoods in Pacific Northwest forestry.

April

6 Tree School 2002, Clackamas Com. College
8:00 am to 5:30 pm. Program provides numerous workshops on woodland management as well as an extensive vendor display. Cost for the workshop is $35/person. For further information and to register contact Clackamas County Extension Office at 503-655-8631.

9 Columbia Gorge Society of American Foresters & Mid-Columbia Small Woodland Owners joint meeting.

18-20 Oregon Small Woodlands Association Annual Meeting, Canyonville, OR Contact Barbara Long, 541-673-3713 or jlong@mcsi.net

April 25-27 Washington Farm Forestry Association
LaQuinta Motel, Tacoma, WA
Contact Phil Poppleton, 360-825-3365

May

8-10 Oregon Society of American Foresters Annual Meeting. LaGrande, Oregon. Contact Ole Helgerson, 509-427-9427 or helgerso@wsu.edu

Area Workshops and Seminars

Adapting to the National Organic Program;
A series of training workshops for growers and others interested in organic food production and marketing:
January 9 SeaTac, WA
January 16 Vancouver, WA
January 29 Port Townsend, WA
January 30 Mt. Vernon, WA
For more dates and locations, visit:

Horticultural Society & Nurserymen Annual Meetings and Technical Seminars:
As part of the Northwest Agricultural Show this year, the Oregon Horticultural Society, Nut Growers Society and the Oregon Association of Nurserymen will be having their annual meetings and technical meetings and seminars. The following is a brief review of the technical seminars. Please note: All the technical seminars will be held at the Double Tree Inn (formerly Red Lion Columbia River) in Portland.
Tuesday, January 29 Pome Fruit Section
8:45—3:30, Willamette Room
Tuesday, January 29 Stone Fruit Section
8:30—4:15 Riverview Room
Tuesday, January 29 Winegrape Section
9:00—3:30 Klamath Room
Wednesday, January 30 Nut Growers Section
8:00-2:00pm Klamath Room
Wednesday, January 30 Strawberry & Caneberry
9:00-3:00 Rogue Room
Wednesday, January 30 Nurserymen Section
8:00-3:30 Willamette Room
Thursday, January 31 Nurserymen Section cont.
8-3:30pm Riverview Room
Thursday, January 31 Blueberry Section
8:30-1:00 p.m. Willamette Room
Area Workshops and Seminars  Continued

**Fundamental Training and Applications of the Landscape Management System/LMS**
This workshop will be held at Clark College, Vancouver, WA, February 6-8, 2002. LMS is powerful and fairly easy to learn PC software that generates “visualizations” of how the trees in your woodland will look in the future after various types of timber harvest or thinning. It also prints out board foot production and various types of wildlife suitability. It can show how trees grow either on a stand level depicting on acre, or over a three dimensional landscape. Experience using Microsoft Excel and Powerpoint or similar software is recommended though not necessary. Contact: forestce@u.washington.edu; www.cfr.washington.edu/; 206-543-0867, FAX: 206-685-6705; Forestry Continuing Education, University of Washington, Box 352100, Seattle, WA 98195-2100

**Soil Fertility & Nutrient Management**
This workshop will be February 14th, from 12:30—5:00 p.m., at The Dalles Discovery Center. There is no charge. For further information contact the OSU/Wasco County Extension Office at 541-296-5494 or the Wasco County Soil & Water Conservation District at 541-298-8559, Ext.3
12:30 Registration/Sign-in
12:45 Welcome
1:00 Nutrient & Resource Management Systems
  Tom Gohlke, NRCS Agronomist
1:30 Water Quality Aspects
  Terry Nelson, NRCS Watershed Planner
2:00 Macro & Micro Nutrients in Small Grains
  Don Wysocki & Neil Christensen,
  OSU Soil Scientists
2:30 Macro & Micro Nutrients in Orchards
  Tim Righetti, OSU Horticulture Researcher
3:00 Break
3:15 Soil Testing & Tissue Testing
  Don Hornek, OSU/Umatilla County Ext. Agent
  Neil Christensen, OSU Extension Soil Scientist
4:15 Precision Application—The Future
  Tree Fruits: Clark Seavert, Supt. MCAREC
  Small Grains: Travis Hillman, Ag Tech, T.D.
4:45 Composting
  Will Charleton, Pro-Gro
5:30 No Host Social Hour
6:30 Wasco County SWCD Annual Meeting
Ag Banquet

**Farm Direct Marketing 101: Strengthening Agriculture & Communities**
This workshop is to be held at Oregon State University’s LaSells Stewart Center in Corvallis, Oregon, Saturday, February 23, 2002. Some of the topics to be covered include: Managing the farm direct marketing business; Building Communities through Farm Direct Marketing; Improving Farmers’ Market Sales; Farm Direct Marketing Alternatives.

The cost of the workshop is $15.00 per person which includes lunch. Pre-registration is required. For more information and to obtain a program brochure and registration form, please contact the Benton County Extension Office at 1-800-365-0201 or 541-766-7650 OR visit their web site at: smallfarms.osu.orst.edu

**Forest Stewardship Management Plan Writing**
There are good reasons to have a woodland management plan; obtaining timberland tax status, saving on federal income taxes, qualifying for cost-share programs and getting Tree Farm certification which can assist marketing of logs. This 8-class course will be held in Underwood, WA and starts April 2, running through May 8. The course covers fundamental woodland ecology and management plan writing. Participating woodland owners have a better ability to get wheat they want from their woodlands. Contact: Ole Helgerson, 509-427-9427, helgerso@wsu.edu
Tree Fruit Pruning Workshop
Maryhill, WA. January 26. Pre-registration required. Call 509-773-5817 or e-mail kerrs@wsu.edu for more information. Participants should bring their own lunch and dress warmly!

Sheep and Goat
Management Skills Workshop Part 1
Fernandez Ranch, Centerville, WA.
9 AM-4 PM, March 16.
The focus of this workshop will be on proper vaccination administration, de-worming techniques and foot trimming. Call 509-773-5817 or e-mail kerrs@wsu.edu for more information and to pre-register. Please bring your own lunch. Sanitation procedures will be required. Please wear clean coveralls and CLEAN RUBBER BOOTS. Come prepared for cold and/or wet weather.

Sheep and Goat
Management Skills Workshop Part 2
Fernandez Ranch, Centerville, WA
9 AM-4 PM, April 19 and 20
(same program offered twice)
The focus of these workshops will be handling sheep, neonatal lamb management skills, and other lambing-time management issues. Call 509-773-5817 or e-mail kerrs@wsu.edu for more information and to pre-register. Refreshments will be provided; please bring your own lunch. Sanitation procedures will be required. Please wear clean coveralls and CLEAN RUBBER BOOTS. Come prepared for cold and/or wet weather.

Clackamas Community College
Special Programs
For additional information on any of the following programs, please contact one of the following persons:
Elizabeth Howley at 503-657-6958 ext. 2389
Bob Nelson 503-657-6958 ext. 2236
Bruce Nelson 503-657-6958 ext. 2786

Green House Growers Conference, January 16, 2002, 8:00 am to 4:00 pm.
This conference sponsored by the Oregon Association of Nurserymen – Greenhouse Chapter is designed for growers producing bedding plants and herbaceous perennials. A variety of speakers will present technical information associated with media and cropping systems. For further information and to register, please contact Carol Coley at 503-651-2558

Vegetable Gardening Symposium,
February 5, 2002, 8:00 a.m. to 4:00 p.m.

Growing Fruit in The Northwest, Feb. 23, 2002, 8:30 a.m. to 4:30 p.m.
Topics to be discussed include seed saving, developing soil, farming with horsepower, and winter vegetables. For further information and registration, please contact Michelle at 503-657-6958 ext. 2246

Wasco County Tree & Shrub Sale
Wasco Co. SWCD is conducting their annual tree and shrub sale. The trees and shrubs are nursery grown bare root seedlings. The majority of the trees offered are suitable for our semi-arid conditions and chosen for their tolerance. Details concerning size, cost, zone and particulars can be found on their tree and shrub sale list posted at: www.netcnct.net/community/conserve. You can also contact them at 296-6178 ext 3 for a copy of the list. Orders need to be placed by January 31, 2002. Trees and shrubs will arrive the first week in March.
Small Diameter Timber: Resource Management, Manufacturing and Markets

The symposium is scheduled for February 25-27, 2002 at the West Coast Grand Hotel at the Park in Spokane WA. Nearly 50 speakers from 13 states and Canada will present results of completed and ongoing activities related to management and utilization of small diameter trees. There will also be poster presentations and vendor exhibits. Details and registration information can be found on the symposium web site at http://ext.nrs.wsu.edu/small-diameter

Winter Livestock School

The 2002 Winter Livestock School is set for March 2, 2002 to be held at the Portland Community College’s Rock Creek Campus. This all day workshop will include sessions on pasture management, composting, marketing, and beef, sheep, goats and poultry production. Contact the Clackamas County Extension Office at 503-655-8631 for further information.

Resources

Web Pages

foodfarm.wsu.edu This is a web site that WSU has been developing over this last year and has now grown to be a really good source of information for the small acreage landowner with articles on subjects ranging from pastures, livestock, organic and commercial crop production, calendar of events and soil and water conservation, marketing to name a few of the resources.

groundwater.orst.edu This is a site established by OSU Extension Service to provide a link to the latest ground water issues. The site includes information on such topics as permits, wells, septic systems, and fuel storage tanks, ground water geology and impact that our development activities have on groundwater.

Infobasket.gov.bc.ca This is a new site that has been developed by the British Columbia Ministry of Agriculture, Food and Fisheries to provide a very extensive data base on a wide variety of agricultural enterprises using information from sources worldwide. Primary enterprise topics at this time include, agroforestry, organics, ornamentals, specialty crops and bison. It should be noted that this is a new site and will continue to grow over time.

www.wafarmersmarkets.com/ This is a new web site that has just been developed by the Washington State Farmers Market Association.

www.nurseryguide.com/oan This is the web site for the Oregon Association of Nurserymen and provides an excellent resource concerning upcoming programs and resources concerning nursery production.

eesc.orst.edu This is Oregon State University’s web site to obtain garden information.
Resources

Publications

Profitable Pork: Strategies for Hog Production. This is a new USDA publication that provides an excellent resource for those interested in hog production. This publication can be obtained through the USDA SARE web site at the following address www.sare.org/bulletin/hogs/

Forest Landowners Guide to the Federal Income

Tax, USDA Ag Handbook 718. This is a very good tax planning resource for those with forestlands. Copies can be obtained through the US Government Bookstore in Portland their phone number is 503-221-6217, e-mail is portlandbks@gov and their web site is located at http://bookstore.gpo.gov/locations/portland.html

Food Safety Begins on the Farm: A Growers Guide. This is a good summary of issues related to food safety and includes specific recommended practices for fruit and vegetable growers. It is available from the Cornell Good Agricultural Practices Program at http://www.gaps.cornell.edu or by calling 607-254-5383.

Feature Articles

What's For Dinner? Part 2

By Susan Kerr
Klickitat County Extension Agent

In Part 1 of this series, we reviewed the fundamentals of ration formulation. In this article we will apply that information and run through an example of ration formulation.

Example 1: a 10 year old 1,100# gelding in good health used for light trail riding occasionally on weekends. The forage available is a good quality grass-alfalfa hay. Its analysis is 16.1% crude protein (CP), 55.3% total digestible nutrients (TDN), 92.9% dry matter (DM), 0.9% Calcium (Ca), and 0.3% Phosphorus (P). Some hints: One kg. = 2.2 lbs. One kg. TDN = 4.4 Mcal DE (megacalories of digestible energy)

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Daily Requirements</th>
<th>Nutrients on hand</th>
<th>Deficits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Matter</td>
<td>1100# X 1.2% = 13.2# DM</td>
<td>13.2# DM*</td>
<td>-</td>
</tr>
<tr>
<td>Energy</td>
<td>16.4 Mcal DE</td>
<td>7.3 # TDN = 3.3 kg TDN = 14.5 Mcal DE</td>
<td>1.9 Mcal</td>
</tr>
<tr>
<td>Protein</td>
<td>656g</td>
<td>2.1 # CP = 0.966 kg CP = 966g CP</td>
<td>-</td>
</tr>
<tr>
<td>Calcium</td>
<td>20g</td>
<td>54g</td>
<td>-</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>14g</td>
<td>18g</td>
<td>-</td>
</tr>
</tbody>
</table>

As you can see, all requirements are met except for energy. We could substitute a high-energy feed for some of the hay, being sure to check that the other nutrients are still in balance. However, a horse at rest is happy to eat more than 1.2% of its body weight in dry matter per day (just ask any fencepost, board or tree!)

As part of the art:

*Don’t forget to convert dry matter basis to “as fed” basis to know how much to actually feed the animal. As-fed basis takes into account the weight that water content adds to feed. The water component of feed contains no nutrients so it is discounted when formulating a ration, but it must be considered in real life because feeds contain water. If you feed animals on a dry matter basis and forget to convert to as-fed, you will underfeed your animals by the percent of water in the feed (usually about 10% for hay, 20 to 80% for pasture or range, 30 to 75% for silage, 10 to 12% for grain). To calculate the actual amount to feed, divide the DM requirement on a dry matter basis by the percent of dry matter in the diet. For the above example, this calculation is: 15.4 / 0.929 = 16.6 # as fed. Can a horse eat this much hay in a day? Yes.
Always weigh the feed you are feeding. Don’t go by volume, size or any other measure. Only by weighing feed can you tell if you are giving the animal the right amount of feed that it needs. The “coffee can” approach is fine on a routine basis once you have figured out how much a certain volume weighs.

One of the reasons the horse example above was constructed was to demonstrate that at a low level of work, most horses’ nutritional needs can be met with simply good quality hay, water and trace-mineralized salt. In these cases, feeding grain meets more of the human’s need than a horse’s need. A handful of grain as a treat every day doesn’t hurt and helps the horse bond to the owner, but overfeeding grain predisposes an animal to founder, obesity and other problems.

In addition to calculating a balanced diet for an animal, livestock producers can use ration formulation to determine how much hay to buy to get through the winter. If an animal will need 16.6 pounds of hay per day and you will feed it from October until May, you will need to buy 16.6# x (8 months x 30 days/month) = 3,984 # or about two tons of hay.

In the third and final article in this series, we’ll tackle a harder task: formulating a ration for a lactating ruminant.

WEED SPOTLIGHT
RUSSIAN THISTLE
By Merle Keys
Wasco County Weed Superintendent

“Tumble along, tumbling tumbleweed.....” or however that song goes. This is the type of weed we are discussing this edition.

Russian thistle is a member is mostly known as the “tumbleweed”. This plant grows quite well along road shoulders and it is a rounded bush, much branched annual, ranging in height from 8 inches to 3 1/2 feet tall. The stems are usually red or purple striped. This plant can fight back as it has spiny bracts located along its stems and leaf junctions. The seeds are easily spread when a mature plant breaks off at ground level and are scattered by the wind as “tumbleweeds”. It can produce up to 200,000 seeds per plant.

Since Russian thistle was accidentally introduced (from Russia) in the late 1800’s, it has become one of the most common and troublesome weeds in the drier regions of North America. It is well adapted to cultivated dryland agriculture, but it is also found on disturbed wastelands (i.e., vacant lots, and road shoulders).

This plant is a late spring annual so a program of control could be Round-up on small plants or digging them out later in the summer and burning them in the burning barrel.

Seedling plants have long, fleshy leaves; herbicide applications should be made at this growth stage or before. Stems are striped with purple at most growth stages. Flowers are found in leaf axils at maturity.

Russian Thistle: *Salsola iberica* Sennen
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@list.orst.edu. You do not need to put anything in subject line or in the body of the message. The listserve will take your e-mail address and put it on the list to receive notification of when the most current newsletter is available on the Wasco County Extension Web Page with a hotlink directly to the web page. For additional information concerning subscribing to the newsletter please contact your local Oregon or Washington State University Cooperative Extension Office.

Please fill out the attached survey to help us better serve your needs.