Dear Small Farmer and Landowner;

Welcome to the July/August Issue of the Small Farms and Acreage Newsletter. In this time of tightening budgets and uncertain economies a little good news is always welcome. In this issue you will find under the resources section three large sources of grant funds from USDA that are directly related to helping farmers and agribusinesses develop new opportunities in agriculture. This is a tremendous opportunity for farmers or local businesses, which have ideas relating to added value or new market development etc., to access funds to help put these ideas into action. The web pages associated with the various grants provide in depth information concerning grant application procedures. It should be stressed that two of these grants have application deadlines in August so interested folks need to act quickly. With the new Farm Bill it is anticipated that there will also be additional sources of funds that will be of interest to area small farmers and we will make sure that information is published in the newsletter.

In this issue there is an excellent article by Steve Castagnoli about blueberry production in the Mid-Columbia. This article provides some good insights about what the potential is and where to get additional resource information. In addition to the article, it should be noted that Oregon State University Caneberry and Blueberry Field Days are scheduled for July 9 at the North Willamette Research and Extension Center in Aurora Oregon. This is an excellent opportunity to learn about current research in caneberry and blueberry production. In the upcoming programs section, I have listed the program agendas for both field days.

Also included in this issue there is a very good article by Ole Helgerson, WSU Extension Area Forester, Skamania County about “Why Trees Die.” This article should be very helpful this year particularly in those areas where drought is still of concern. We have some real challenges this year in growing trees and this article provides some good insights for those wanting to make sure their tree plantings are successful.

A footnote to this article, we are still very much in a drought in the eastern side of the Mid-Columbia. Due to the severe drought last year, there was no recharge of the subsoil and this combined with the lower than normal precipitation this year will severely impact local trees. Where possible at least for those trees around the homestead, it is strongly encouraged that additional water be provided. Lack of adequate soil moisture will cause trees to be more severely impacted by disease and insect pests.

For additional information about tree management please contact Ole at the Skamania County Extension Office. Their phone number is listed at the top of this page.

Sincerely,

Mid-Columbia Extension Agent
Calendar of Events

2002

July

12-14  **American Emu Association 2002 National Symposium**, Shilo Inn, Richland. Information: Dick Reiter, rreiter@otter-creek.net; (509) 328-7590.

15-26  **Silviculture Shortcourse**, Oregon State University, Corvallis. Information: OSU College of Forestry, 202 Peavy Hall, Corvallis, OR 97331-5707; telephone (541) 737-2329; e-mail outreach@for.orst.edu. On the Internet: www.cof.orst.edu/cof/extended/conference

17    **Raspberry Open House**, WSU Puyallup, Farm 5, 6-8 p.m. For more information contact: moorepp@wsu.edu

18    **Small Fruit Open House**, WSU Mt. Vernon, 3-5 pm. For more information, contact: moorepp@wsu.edu

24    **Certified Nursery Professional Exam**
        4 to 7 p.m. at Guentner's Gardens, 5780 Commercial St. S.E., in Salem. The testing fee is $25 for OAN members, $150 for non-members. To obtain an OCNP Training Manual ($25 members; $95 nonmembers) or to register for the test, call the OAN office (503) 653-8733 in the Portland area or (800) 342-6401 toll free or e-mail: dbrackett@oan.org.

        Registration deadline is July 17.
        The next test is scheduled for October 23, 2002.

26-28  **SolWest Renewable Energy Fair**, Grant County Fairgrounds, John Day. Information: (541) 575-3633, e-mail: info@solwest.org; Internet: www.solwest.org.

August

3     **HOS Budding & Summer Pruning Workshop**, 9 am - noon, HOS Arboretum, Clackamas Community College, Oregon City

7     **Hazelnut Annual Tour**

Benton & Lane Counties, 9:00 am
Contact Polly Owen: 503-678-6823

10-11  **Dufur Threshing Bee**.
        Information: P.O. Box 362, Dufur, OR 97021; Phone (541) 467-2349; fax (541) 467-2353; e-mail dufurcity@netenct.net. Dufur is 15 miles south of The Dalles on Highway 197. The Dufur Threshing Bee features the use of old horse-drawn equipment to cut and harvest wheat, as it was done in the late 1800s. Parade, crafts, food, entertainment.

12-13  **Washington State Sheep Producers Ram and Ewe Sale**, Moses Lake. All consignors must be members in good standing with WSSP. All sheep for sale must have the Mandatory Scrapie Tag. Information: (509) 826-0535; on the Internet: wssp@televar.com.

15-18  **Wasco County Fair**, Tygh Valley


21-24  **Ornamentals Northwest Seminars**
        The OAN's Ornamentals Northwest Seminars complement the Farwest Show with more than 40 hours of educational presentations. Speakers about the industry's most important topics. To learn more and to register online, go to www.farwestshow.com.

22-24  **Farwest Show** For the first time in its 30 consecutive years, the OAN's Farwest Show will open on Thursday instead of Friday. The show will run from noon to 6 p.m. all three days at the Oregon Convention Center in Portland. The industry's premier trade show boasts 870 booths and a spectacular display of plant material. To learn more about the show, visit www.farwestshow.com, where you can register for the show and the accompanying Ornamentals Northwest Seminars.

24-25  **World of Wood**, Black Mountain, WA. This is a weekend event showcasing historical logging equipment, educational workshops, forest products vendors and much more. For more info: info@blackmountainforestry.com
Calendar....continued

September

7 Southern Oregon Wine and Grape Workshop
Second annual workshop hosted by Rogue Community College along with OSU, SOU, RCOWA, and SOWA. For more information respond by e-mail bjiron@roguecc.edu or call Bill Jiron @ 541-245-7905.

16-18 Health and Safety in Western Agriculture - Cultivating Collaborations, Coeur d’Alene, Idaho. The Pacific Northwest Agricultural Safety and Health Center and the UC Davis Western Center for Agricultural Health and Safety bring you, Health and Safety in Western Agriculture: Cultivating Collaborations. This conference will highlight common safety and health issues that are experienced along the West Coast and foster the development of collaborative projects between the individuals and organizations committed to agricultural injury and illness prevention. Registration is now open! Please visit the conference website, http://depts.washington.edu/pnash/westreg/confhome.html, for program and registration details.

21-22 HOS Pioneer Orchard Fruit Display, Wintering-In, 10 a.m. to 5 p.m. Bybee-Howell Pioneer Park, Sauvies Island, OR.

November

8-10 Tilth Producers Conference: Farmers on the Cutting Edge, Yakima, WA.
For more information call 206-422-7620, or e-mail nancy@tilthproducers.org

Area Workshops and Seminars

Forest Stewardship Plan Writing Class
A woodland management plan is relatively easy to write and will help you get what you want from your forest, whether your goals are wildlife, timber, clean water, wildfire management or a mix of these. The 2002 Columbia Gorge Forest Stewardship Plan Writing class will be offered for woodland owners and the interested public, September 1 to November 5, Underwood, WA, fee tba.
Contact Ole Helgerson, 509-427-9427, helgerso@wsu.edu.

Noxious Weeds
The best defense is a good offense!
A workshop on noxious weeds control will be held Saturday, July 13, 2002, 9AM until noon, at the OSU/Hood River County Extension Office, 2990 Experiment Station Rd. Lewis Ambers, Hood River County Weed & Pest Control Officer, will identify which noxious weeds will overrun your land if given a chance. A slide show
The following research topics/plots will be discussed with researchers on hand to act as hosts and discuss their projects:
⇒ Visit raspberry and blackberry breeding plots and taste new selections
Area Workshops and Seminars...continued

- Nitrogen management of red raspberry; alternative production systems for 'Marion'; thorn reduction in machine-harvested fruit
- Cane disease management in trailing blackberry; Cane burning options in blackberry and raspberry
- Pesticide options for raspberry and blackberry; Fungicide efficacy trials
- Raspberry Bushy Dwarf Virus in raspberry and blackberry

Blueberry Field Day

You are invited to attend Blueberry Field Day at the NWREC on July 9. The program has been designed to highlight our research and extended education programs. I encourage you to come out and see our trials, learn more about pest management, and taste some cultivars and advanced selections. The day starts with an ice-cream treat at 2:00 pm. The program starts at 2:30 pm -- see the agenda for more information.

AGENDA

2:00 p.m. REFRESHMENTS; Ice Cream and berries
2:30 p.m. What blueberry cultivars/selections look good? Discussion and walk through OSU/USDA cooperative breeding test block

Watershed Weeks

September 14 – October 13

Oregon Watershed Weeks features dozens of family-oriented water education and stewardship events throughout the state. Last year, Oregon Watershed Weeks included more than 120 activities, ranging from canoe tours to stream restoration projects. We all live in a watershed - get to know yours. For more information please see their web site at http://seagrant.orst.edu/watershedweeks.html

Resources

Funding Resources

U.S. Department of Agriculture Small Business Innovation Research (SBIR) Program - FY 2003

The Department of Agriculture (USDA) released the FY 2003 Small Business Innovation Research (SBIR) Program Solicitation on June 5, 2002. More information about the topics, closing date, and access to the electronic version (PDF, Word, WordPerfect) of the solicitation is available on the Web site: <www.reeusda.htm>www.reeusda.gov/sbir. Phase I proposals must be received at the USDA/CSREES Proposal Services Unit in Washington, DC, by close of business (5:00 pm Eastern Time) on August 30, 2002.

The SBIR program awards grants to qualified small businesses for innovative research on important problems facing American Agriculture and/or Rural America that could lead to significant public benefit. Initially, small businesses apply for a 6-month feasibility grant for up to $80,000 to conduct a technical feasibility study on a new scientific/technological
U.S. Department of Agriculture Value-Added Agricultural Market Development Grant Program

The Rural Business-Cooperative Service (RBS) announces the availability of approximately $33 million in competitive grant funds for fiscal year 2002 to help independent agricultural producers enter into value-added activities. RBS hereby requests proposals from eligible independent producers, agricultural producer groups, farmer or rancher cooperatives, and majority-controlled producer-based business ventures interested in a competitively awarded grant to fund one of the following two activities: (1) Developing feasibility studies or business plans (including marketing plans or other planning activities) needed to establish a viable value-added marketing opportunity for an agricultural product; or (2) acquiring working capital to operate a value-added business venture or an alliance that will allow the producers to better compete in domestic and international markets. In order to provide program benefits to as many eligible applicants as possible, applications can only be for one or the other of these two activities, but not both.

Value-added products are defined as follows: (1) A change in the physical state or form of the product (such as milling wheat into flour or making strawberries into jam); (2) the production of a product in a manner that enhances its value, as demonstrated through a business plan (such as organically produced products); (3) the physical segregation of an agricultural commodity or product in a manner that results in the enhancement of the value of that commodity or product (such as an identity preserved marketing system). As a result of the change in physical state or the manner in which the agricultural commodity or product is produced or segregated, the customer base for the commodity or product is expanded and a greater portion of revenue derived from the marketing, processing, or physical segregation is made available to the producer of the commodity or product. Value-added also includes using any agricultural product or commodity to produce renewable energy on a farm or ranch.

The maximum award per grant is $500,000. In order to maximize the distribution of program benefits, smaller grant requests under $500,000 will receive priority.
Resources….Continued

points. Priority is also being given to projects producing energy from biomass or demonstrating profitable use of innovative technologies.

DATES: Applications must be completed and submitted to the appropriate State USDA Rural Development office as soon as possible, but no later than 4:00 pm on August 8, 2002. Applications received after August 8, 2002 will not be considered. Late applications will not be accepted and will be returned to the applicant. Applicants must ensure that the service they use to deliver their applications can do so by the deadline. Due to recent security concerns, packages sent to the agency by mail have been delayed several days or even weeks.

ADDRESSES: Submit proposals and other required materials to your State USDA Rural Development Office. RBS is strongly encouraging the electronic submission of proposals. If proposals are electronically submitted, signed paper copies of the three required forms, SF-424 “Application for Federal Assistance,” SF-424A “Budget Information—Non-Construction Programs,” and SF-424B “Assurances—Non-Construction Programs,” need to be mailed to the state office. A list of Rural Development State Offices, addresses, e-mail addresses, and telephone numbers follows.

For further information contact your USDA State Rural Development Office. You may also obtain information from the RBS website at: www.rurdev.usda.gov/rbs/coops/vadg.htm.

Western SARE Request for Proposals

Western SARE announces 2000-03 calls for proposals for farmers and ranchers to apply for innovative grants. These grants represent a great opportunity for producers to obtain some financial support for trying out alternative growing methods, marketing, implementing new practices or other applied research-type activities.

The deadline for producer grants is October 1, 2002. The WSARE calls for proposals and program details can be found on the Web at http://wsare.usu.edu or by calling the Western SARE office at Utah State University, (435) 797-2257.

Web Pages

USDA Launches Farm Bill Implementation Website
http://www.usda.gov/farmbill


The Oregon Farmers Markets Association (OFMA) website (www.oregonfarmersmarkets.org) is

WSU Vegetable Pathology Team Newsletter
http://mtvernon.wsu.edu/plant_pathology/plant_path.htm

University of Idaho Extension Forestry Publications
A wealth of information on topics ranging from Agroforestry to Wood Splitter's Secrets. http://www.its.uidaho.edu/extforest/publications.htm

Publications

Sustainable Agriculture in Washington State. This report is the first step toward identifying trends in sustainability http://csanr.wsu.edu/resources/CSANR_Report_5.pdf

Current Trends in Organic Tree Fruit Production
CSANR Report No. 4 - A PDF manuscript presenting organic tree fruit acreages in Washington State along with national and international estimates. Price trends are also included. Data are current through the end of 2001. http://organic.tfrec.wsu.edu/OrganicIFP/Home/Index.html

ITC Study on the Market for
Resources....Continued

Organic Products in the USA
The USA with a market of eight billion dollars (2000) represents the largest market for organic products in the world and sales of 20 billion dollars are expected by 2005. Many addresses and references to Internet sites make the 38-page documentation a helpful tool for getting to know the US market. http://www.intracen.org/mds/sectors/organic/foodbev.pdf

Canopy Gaps and Dead Tree Dynamics: Poking Holes in the Forest Note: this is a .pdf file and will require Adobe Acrobat Reader software to open. http://www.fs.fed.us/pnw/sciencef/scifi43.pdf

Developing Stand Density Management Regimes
Stand density management is the process of controlling tree density within a stand to achieve desired objectives. This requires an understanding of the effects of density management practices on the structure and development of stands, and the combined effects of all treated stands on forest management objectives and future economics. This document provides essential information on each of these elements, and provides a structured decision process for making site-specific density management prescriptions. http://www.for.gov.bc.ca/hfp/pubs/stand_density_mgt/index.htm#TopOfPage


Profitable Poultry: Raising Birds on Pasture. New from USDA SARE http://www.sare.org:

Pasture and Hayland Renovation in Western Washington EB1870, is available on the web at http://cru.cahe.wsu.edu/CEPublications/eb1870/eb1870.pdf

Cottonwood: Establishment, Survival and Stand Characteristics, EM 8800, March 2002. This publication can be obtained from any OSU Extension Office.

Newsletters
ATTRA news Digest Newsletter www.attra.org/attra-digest/index.html Has lots of good ideas for sustainable agriculture.

Feature Articles

Why Trees Die
By: Ole Helgerson, WSU Extension Area Forester, Skamania County

As Extension Forester serving the Columbia River Gorge, two of the more frequent questions I receive are; why is my tree dying and what can I do about it? The answers are that there are biological and environmental causes of tree decline and often nothing can be done about it after the fact.

In the Columbia River Gorge, moisture stress limits where conifers are capable of growing. Ponderosa pine and Douglas-fir seedlings easily become established on sites too droughty for long term growth. They appear healthy for a number of years, but eventually their demand for water becomes greater than the supply and the trees die. More trees die during drought years. Drought-stressed ponderosa pine also becomes susceptible to attacks from bark beetles that finish off what the drought has started.

The second major natural source of tree death are the root diseases. These spread mostly by root-to-root contact and affect ponderosa pine, Douglas-fir and grand fir. Infected Douglas-fir and grand fir then become susceptible to their own types of bark beetles that attack and finish off the diseased trees. Infected trees start to fade over 2 or 3 years, often produce lots of pine cones and then suddenly die.

The drought and disease problems are related to fire...
Feature Articles continued

suppression since European settlement. Frequent low intensity ground fires once kept tree numbers low so that they would have enough soil water and similarly helped reduce root disease. Without fire, trees invaded areas where they are set up to die from drought or disease. Many droughty areas now have so many trees to provide fuel that the stage is set for very large, hot catastrophic fires.

Other mortality causes can include compacted soils like driveways, severed roots from construction, over watering and simply planting the wrong tree. There are no effective cures for trees dying from drought or root disease, but damage from construction, over watering or planting maladapted trees can be avoided. For landscaping, make sure to plant a species, variety or seed source adapted to your area. For example, cherries and apricots just don't do well in Skamania County's wet climate and moisture loving species such as dogwood or maples may be a challenge in the Gorge's dry east end. Last, if a dying tree is close enough to a structure to cause damage when it falls, remove the tree before nature does.

A very good Forest Service website, http://www.fs.fed.us/r6/nr/fid/health.shtml describes native forest insect pests and root diseases. Information on selecting and caring for ornamental trees is available from your local WSU or OSU Cooperative Extension Service Master Gardeners. For other tree questions and for woodland management information, please contact me at POB 790, Stevenson, WA, 509-427-9427, or helgerso@wsu.edu.

BERRY GOOD NEWS From OSU Researcher

Ronald Wrolstad will tell anyone who'll listen that blackberries, blueberries, raspberries - just about any berries - are tiny, tasty fountains of youth.

Wrolstad, a food science professor at Oregon State University, has been researching the healthful properties of berries for the past six years of his 30-year career in food science. He is an expert on the ways that berries fight "free radicals," the compounds that age and degrade cells in the body, affecting everything from flesh firmness to memory. Berries are naturally rich in the "anti-oxidants" that fight the rusting, browning, decaying - in short, aging - effects that happen when oxygen combines with these free radicals.

Now a feature in the June 17 edition of Newsweek magazine is taking Wrolstrad's message to a national audience. In its weekly news feature "The Tipsheet," Wrolstad is quoted as verifying that research supports the theory that berries 'may help prevent everything from cancer to heart disease.'

"In the past we would've said the main reason to eat berries was vitamin C," Wrolstad said. "Then we learned about potassium, fiber and folate. Today we're learning that berries are also rich in anti-oxidants."

Wrolstad, who is on a year-long sabbatical in New Zealand until January, said it is always good when a wide audience learns exactly how science backs up what grandma said when she told you that fruits and vegetables were good for you.

Graduate students and research assistants at OSU are continuing Wrolstad's research in his absence into the health benefits of apples, pears, blueberries, blackberries, and cherries.

Blue Berry Production
By: Steve Castagnoli, OSU Extension Agent, Hood River County

Several months ago, I wrote a column about the potential for wine grape production in the Mid-Columbia region as an alternative to producing tree fruits. Blueberries are another crop that have potential to provide pear and apple growers with an alternative to declining profitability. Harvested blueberry acreage in Oregon has increased nearly four-fold over the last fifteen years to keep pace with increasing demand.

Currently, Oregon ranks fifth and third in terms of blueberry acreage and production in the U.S. Oregon and Washington rank first and second in the U.S. for average per acre yield of northern highbush blueberries. This is one indication that blueberries are well adapted to the growing conditions of the Pacific Northwest. Although most of the Oregon blueberry acreage is located in the Willamette Valley, blueberry production is not new to the Mid-Columbia. There are
problems with root pathogens favored by poorly aerated soils. For this reason, blueberries are often grown on raised beds. While they do not tolerate saturated soil conditions, blueberries are sensitive to water stress, especially during fruit development and ripening. Careful irrigation scheduling can help in avoiding the application of too little or too much water. Mulching is a common practice, which can help moderate soil temperatures and maintain soil moisture.

Blueberry production practices have changed over the years. Raised beds, closer in-row spacing, wider between row spacing, and trellising all facilitate higher production and mechanical harvesting. Although mechanical harvesting is on the increase, it is currently limited to fruit going to processing rather than fresh markets. Blueberries produced for fresh markets are almost exclusively hand harvested.

What about the economics of blueberry production? During the workshop, Clark Seavert, OSU Extension Service Agricultural Economist, compared the cost of establishment and return on investment for blueberry production to those of pear and sweet cherry. Seavert estimated the per acre cost of establishment for blueberries to be approximately $2,500 less than that of pears, with a 12% greater return on investment for blueberries. According to Seavert, the cost of establishment for high-density blueberries is slightly less and the return on investment slightly higher than for high-density sweet cherries. He considers the expected 20% return on investment for high-density blueberry plantings to be a reasonable return in relation to the risk.

From an economic standpoint, Seavert thinks that blueberries may be a good way for tree fruit growers to diversify. He points out, however, that there are additional important factors to consider. Primary among these are the need for a sound marketing plan. Also, if growers are considering producing for the fresh fruit market without the aid of mechanical harvesting, it is important to realize that blueberries have a higher requirement for picking labor, five pickers per acre compared to the estimated one half to three fourths for pears and one per acre for cherries. This is one way that the timing of blueberry operations and demands for labor must fit with ongoing farming activities.

The three main types of cultivated blueberries in the U.S. are known as northern highbush, southern highbush, and rabbiteye blueberries. The northern highbush varieties are the most cold hardy and generally have the highest fruit quality. Consequently, northern highbush varieties are the most commonly produced in the northern U.S. and Canada. Numerous northern highbush blueberry varieties are currently available with wide ranging berry size, berry quality, and yield. The time of ripening varies from July to mid-September.

Many local orchard soils have been adjusted to a pH of around 6 with the addition of lime. For good performance, blueberries require soil with a pH in the range of 4.5 to 5.5. Careful attention must be paid to measuring and adjusting the soil pH to this range before planting. In the Mid-Columbia area, this will usually require reducing the pH with the addition of elemental sulfur. This requirement for low soil pH is characteristic of many blueberry relatives including rhododendron and cranberry. It is possible to over acidify the soil, so monitoring pH is an ongoing routine for blueberry growers.

Blueberries do not require extremely deep soils. A soil depth of 18 to 24 inches is sufficient. The soil must, however, be well drained in order to avoid several existing blueberry operations in the area. What is the potential for increased production here?

On May 24th, the OSU Extension Service sponsored a workshop in Hood River on blueberry production to provide local growers with an introduction to establishing and producing blueberries. Dr. Bernadine Strik, OSU Berry Crops Specialist, and other Oregon State University research and extension personnel covered the basics of blueberry production and economics. In this column, I have summarized some of the information presented during the workshop.
Feature Articles...continued

For those wanting to find out more about blueberry production, I would suggest the following resources: Highbush Blueberry Production (PNW215), a complete guide to establishing and producing blueberries, is available at your local OSU or WSU Extension Service Office. The Northwest Berry and Grape Information Network, http://osu.orst.edu/dept/infonet/, which contains information on most aspects of blueberry production, is cooperatively produced by Oregon State University, Washington State University, University of Idaho, and the United States Department of Agriculture.

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:

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Moro, OR 97039

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