



Oregon State University Extension Service

Central Oregon Agriculture

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Central Oregon Food Network Website Launch Party

Date: Saturday, June 5, 2010

Location: Environmental Center, 16 NW Kansas, Bend, Oregon

Time: Noon – 5:00 pm

Website Vision: To build a local food economy with a central place for the exchange of information about agricultural products, events and businesses that support local food production and consumption. This includes discussion threads for producers to exchange information about crops, experiments, resources, production, distribution and processing.

If you are interested in producing, or enjoying local food, this website is for you! Check it out:

www.centraloregonfoodnetwork.com

The Central Oregon Food Network Website is ready to launch so come join the fun. Its purpose is to connect agricultural producers with our community so that we can enjoy the fresh taste and health benefits of locally grown food. This website will help to build our local food economy by making it easier to share information about agricultural products, events, and businesses that support local food production and consumption.

The afternoon will feature a local food community potluck, entertainment and an opportunity to share your products, services or educational material. Contact Sarahlee Lawrence for details at sarahlee.lawrence@gmail.com

This event and website are supported through a grant from Sustainable Agriculture Research and Education in collaboration with OSU Extension Service and Central Oregon Intergovernmental Council and with a generous donation from The Environmental Center and The Green Spot.

Dana Martin

Tractor Safety Training Certification

Are you a youth looking for summer employment? Be aware that farmers and ranchers who employ minors younger than 18 years of age are required to hire those who have completed and passed a tractor safety training program.

A three day Central Oregon Farm and Tractor Safety Training and Certification Course, sponsored by the OSU Extension Service, will be offered June 21-23 at the Deschutes County Fairgrounds and Expo Center in Redmond, Oregon. Training will include classroom work as well as hands-on experience with a variety of tractors and implements. Safety on All-Terrain Vehicles (ATV) will also be covered.

This class is open to those who will be 14 to 17 years of age during the upcoming agricultural season. Registration fee for tractor safety training is \$50. Registration deadline is June 1 and class size is limited.

For more information or to register, contact the OSU Extension Service in Deschutes County, (541) 548-6088 or email: dana.martin@oregonstate.edu or candi.bothum@oregonstate.edu Registration forms are available at this website: <http://extension.oregonstate.edu/deschutes/>

Dana Martin

"Central Oregon Agriculture" is a bi-monthly newsletter produced by the Central Oregon Extension offices and the Central Oregon Agricultural Research Center. The intent of this newsletter is to extend agricultural research-based information to solve problems, develop leadership and manage resources wisely. Please direct comments and changes to the mailing list to your local County Extension office listed below (**all area codes are 541**).

Central Oregon County Extension Offices:

Crook County Extension Service - Phone 447-6228, 498 SE Lynn Blvd., Prineville, OR 97754

Deschutes County Extension Service - Phone 548-6088, 3893 SW Airport Way, Redmond, OR 97756

Jefferson County Extension Service - Phone 475-3808, 34 SE D St., Madras, OR 97741

Warm Springs Indian Reservation - Phone 553-3238, 1110 Wasco St., PO Box 430, Warm Springs, OR 97761

Central Oregon Agricultural Research Center:

Madras Site – Phone 475-7107, 850 Dogwood Lane, 97741

Powell Butte Site - Phone 447-5138, 8215 SW Hwy. 126, 97753

Extension Service & Experiment Station Web Sites:

Crook County: <http://extension.oregonstate.edu/crook>

Deschutes County: <http://extension.oregonstate.edu/deschutes>

Jefferson County: <http://extension.oregonstate.edu/jefferson>

Central Oregon Agricultural Research Center:

<http://oregonstate.edu/dept/coar/index.php>

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Pam Wiederholt - Ag Newsletter Coordinator, 447-6228

Bo Ming Wu - Plant Pathology, 475-7107

The above individuals represent 7.75 full time equivalents devoted to extending agricultural information to producers. Many of the individuals, in addition to agriculture, have assignments in research, 4H/youth, administration and community resource education.

Often it is appropriate to mention brand names of some commercial products; however, they are used only for the purpose of information. Extension does not guarantee or warrant the standard of the product, nor does it imply approval of the product to the exclusion of others.

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Agritourism in Central Oregon

Farmers and ranchers can increase profits and add value to their operations by including agritourism as part of their business plans. In Oregon, agritourism is defined as "a commercial enterprise at a working farm or woodland, ranch, or agricultural plant conducted for the enjoyment of visitors that generates supplemental income for the owner. Certain off-the-farm direct sales of product and experiences may also be considered agritourism."

For agritourism to be effective there needs to be something for visitors to see, something for them to do or something for them to buy. Agritourism enterprises may include outdoor recreation, educational experiences, entertainment, hospitality services, on-farm direct sales and off-the-farm direct sales.

To promote agritourism in Central Oregon, we have connected with *The Oregon Country Trails*. To date, three trails, possibly four have been formed:

- Good Earth Country Trail (Terrebonne)
- Crooked River Country Trail (Prineville)
- High Desert Country Trail (Bend)
- Tumalo Country Trail (pending) (Next meeting Monday, May 17, Redmond Extension office; application and \$100 fee is due at this time.)

In order to form a trail in another area, trail boss "leaders" need to be identified and a \$100 membership fee paid. This fee covers the printing of maps, website upkeep and advertisement expenses. If you are interested in being on a trail or forming one in your area, please contact Dana at (541) 548-6088 x 7957 or dana.martin@oregonstate.edu. Time is limited to be involved in this project.

Dana Martin

Central Oregon Food Summit

Save the date: Friday, September 10, 2010

Remember the Community Food Assessment/Producer Survey where we wanted to learn more about what is being produced in addition to what challenges and issues you face as producers?

To hear the results of this survey and other key food assessment findings, plan to attend the Central Oregon Food Summit. Those who attend the summit will help develop a Community Action Plan for food security. The day will feature a keynote speaker, educational workshops and an opportunity to be part of a movement to grow a community-based food system which promotes healthy people, healthy food and farms, and a healthy local economy.

For more information contact Dana at (541) 548-6088 X 7957.

Dana Martin

Wheat Marketing Meeting

The Oregon Wheat League will resume their monthly Wheat Marketing Meetings in September or October. Please watch for more information in upcoming newsletter editions.

Mysten Bohle

Wine Grape Association of Central Oregon

The Wine Grape Association of Central Oregon (WGACO or WACO) is holding a workshop on May 15th at the Faith, Hope, and Charity Vineyard on Lower Bridge Road west of Terrebonne (Directions: turn west on Lower Bridge Road just north of Terrebonne, drive 9 miles west and turn left at Mile Marker 9, drive ¼ mile and turn left on 1st driveway). RSVP to Cindy Grossman at (541) 350-5384.

- 9:00 Refreshments, Coffee, and Juice
 9:30 Kevin Judkin, Inland Desert Nursery
 Cultivar Sections, Advancement in Hybrid
 Propagation, Establishment of Young Vines
 11:30 Doug Case, Jim's Vineyard Supply, Vineyard
 Establishment, Trellis Systems, Use and Management
 of Grow Tubes
 1:00 Lunch (Bring your own Sack Lunch)
 1:30 Vineyard Tour and Discussion
 4:00 Adjourn

The WGACO meetings will be held on the third Thursday evening, every other month at 7:00 pm (started in February). Board Meetings will be held monthly in the month in between member meetings on the third Thursday. Mark these dates on your calendar if you are interested in wine or table grapes. Everyone is welcome, whether you have 5 grapes or 5,000 grapes or are interested in getting into grapes.

Future General Membership Meetings: June 17, August 19, October 21, and December 16.

For more information contact either Cindy Grossman, Secretary, at (541) 350-5384, or Kerry Damon, Vice President, at (541) 771-7817.

Mylene Bohle

Deschutes County Landowner Small Grant Program is Here!

Funding for The Small Grant Program is generated through Oregon lottery dollars and is a voluntary program that works with your framework and objectives to enhance and preserve natural resources on your property. Some of the goals for maximizing resource potential include: soil stabilization (reducing erosion in uplands and riparian), native bunchgrass and perennial grass recovery and enrichment, weed control, in-stream and riparian enhancements, irrigation efficiency, improve wildlife habitat, increase water quality and improve water quality.

Funding is limited, so if you're interested, please contact Spring Olson/Conservation Technician at (541) 647-9604 or email: springalaska@hotmail.com.

*Spring Alaska Olson/Conservation Technician/
Deschutes County SWCD*

Cost Share Grants Help Landowners & Schools Control Noxious Weeds

Deschutes County recently received grants that will continue to help combat noxious weeds on private land in the next year. A local group, the Resource Advisory Committee has again granted the County \$70,400 in cash and \$134,400 in in-kind donations to continue the Cost Share program.

The Cost Share program is a financial matching program providing financial assistance to help people fight noxious weeds on their land. Landowners may apply for assistance, potentially resulting in the award of up to 50 percent of funding. Grant dollars may be used to purchase weed treatments, pay for equipment and labor, purchase seed for restoration, supplies, and other weed eradication materials.

In addition, Cost Share funding helps local schools control the spread of noxious weeds on Countywide school properties. Through the recent grant dollars, school districts would provide a minimum of 50% of the cost for treatment and restoration if needed.

For more information about this program or how to combat noxious weeds in Deschutes County, please call Deschutes County Weed Outreach Manager Dan Sherwin at (541) 322-7135.

Dan Sherwin, Deschutes County

Central Oregon Hay Growers' Association

The Central Oregon Hay Growers Association (COHGA) is still recruiting new members (dues are \$75/year). Census of Ag data indicates there are more than 1200 farms in central Oregon that raise hay or have irrigated pasture. The Association has reached the 50 member mark this past month. With 50 members, the Association has reached one goal of being able to run a weekly advertisement in the Capital Press, pointing potential buyers to www.hayfinder.org in order to help market your hay. The Association needs 60 members to be able to sustain a funding level of \$2,000 per year for forage research in central Oregon.

The COHGA Board has 3 main goals they were working on in 2009 and will continue working towards in 2010:

1. \$500 scholarship for a graduating senior in the tri-county area (or child of COHGA member) wanting to major in an Ag related field or trade school. Education is key to our future. No one applied this year!
2. \$2,000 has been budgeted annually for local forage research—\$35 of each member's annual dues will go toward research. (\$2,000 does not buy much for forage research any more, but it does help.)
3. Aid in marketing your hay, through the Oregon Hay Directory and the COHGA has also developed an updatable web site www.hayfinder.org. Check it out! Each producer can get a password for their information and keep their section updated or have the web master keep it current. The web site is advertised in the Capital Press each week. What a bargain for you as a hay marketer.

With many members paying dues, whether you sell hay or feed all of your production on-ranch, so much more can be accomplished collectively. Our goal is to increase membership to 200. Membership applications are due now for inclusion in the 2010 Oregon Hay Directory. For more details and to obtain an application, contact John Lang, COHGA Secretary at (541) 923-2849.

Greg Mohnen, Pres. COHGA and Mylene Bohle

Pasture and Grazing Management in the Northwest

A multi-state (ID, OR, UT, & WA) program of research, education, and extension for pasture-based livestock production systems was identified as a priority in 2003 at a Pacific Northwest Forage Workers Conference. The project was designed at a PNW Forage Workers Conference in 2005 and a grant proposal for professional development to the Western Sustainable Agricultural Research and Extension (WSARE EW05-012) was awarded in 2005. The project was designed with three phases: 1) professional development education and training in 2006 and 2007; 2) research to determine the relationship of sward height and herbage mass for forage in rotational pasture systems in the Northwest was conducted; and 3) publish a comprehensive pasture and grazing management guide. *Pasture and Grazing Management in the Northwest* is a Pacific Northwest Extension Publication, PNW 614. There are 17 chapters and a glossary, by 36 authors from Cooperative Extension, USDA Agricultural Research Service and Natural Resources Conservation Service, a livestock producer, and a private consultant. Authors are located in the states of Washington, Oregon, Idaho, Montana, Utah, and West Virginia. The 208 page document is published by the University of Idaho Extension and is the first comprehensive management guide for pastures and grazing in the Northwest.

To direct-order a copy for \$18 plus postage (\$4.75) contact the University of Idaho at (208) 885-7982 or go to the website: <http://www.cals.uidaho.edu/edComm/detail.asp?IDnum=1587>. The OSU/Crook County Extension office is looking into ordering a box and might be able to sell them out of the office for about \$20/copy(?), with no postage charge. Call us if you would like to order one locally (541) 447-6228.

Glenn Shewmaker, University of Idaho and Mylen Bohle

Managing Small-acreage Horse Farms

For those looking for information on managing horse pastures, there is an OSU Extension Service publication titled "Managing Small-acreage Horse Farms in Central and Eastern Oregon", publication EC 1610. There are 40 pages of information and color photos. Cost is \$4.50. Contact your local Extension Service office, go online and order a copy, or download it at <http://extension.oregonstate.edu/catalog> (in the box that says *Search entire Catalog*, type in EC 1610 and there it is!).

Mylen Bohle

"Hay Cap" Covers

Hay Cap Covers may offer a novel way to cover large bales if you are looking for a different product other than a tarp, or building a hay shed to store extra hay under. Take a look at their website www.haycap.com.au. I received a call from a grower asking me what I thought about the product, so I looked over the website and then contacted an Extension colleague in Australia. I received a good report from her. These caps probably do not replace a hay shed, long term, but might be worth a look depending upon your seasonal situation needs for cover. So I am not giving the product, a thumbs up, or a thumbs down, but wanted to alert our local hay industry if you have not already seen the product.

I believe the cost would be somewhere around \$1.50-\$2.00 per square foot to cover bales and I think you have to order in a minimum of 50 caps, and it takes 4-6 weeks or so to ship.

Mylen Bohle

Root Lesion Nematodes

A Pacific Northwest Extension Bulletin PNW 617 on root-lesion nematodes was published on March 2010. Root-lesion Nematodes: Biology and Management in the Pacific Northwest Wheat Cropping Systems bulletin is available online at <http://ir.library.oregonstate.edu/jspui/bitstream/1957/15119/1/pnw617.pdf>. The author is Richard Smiley, Plant Pathologist at the OSU Columbia Basin Ag Research Center at Pendleton, Oregon.

There are 70 species with at least 8 of those species parasitic to cereals. Four of the species occur in cereal producing regions around the world. All 4 are present in the PNW, but only 2 are most prevalent and are associated with major yield loss in cereals. Root-lesion nematodes can cause yield loss in both dryland and irrigated cereals. Yield losses of 35 – 70 percent have been documented. It is estimated that there is an annual yield reduction of 5% in the PNW caused by Root-lesion nematodes.

If you raise cereals for grain or hay, this bulletin is an excellent management resource. The focus of this bulletin is on spring wheat and barley, along with some information on winter wheat.

Mylen Bohle

Baler Clinic

Deschutes Valley Equipment, at 710 F Street, Terrebonne, will be hosting a Baler Clinic on May 15 from 8:00 am to Noon.

This clinic is designed to help minimize down time during the busy haying season. Topics to be covered include basic machine maintenance, basic knotter troubleshooting and basic adjustments required during the hay season.

To RSVP by May 8; call (541) 548-8385 or email: dve@bendcable.com.

Mylen Bohle

Reduce Irrigation Energy Costs

Want to reduce your irrigation energy costs? Get cash back incentives for irrigation systems upgrades! Energy prices continue to rise; but a farm can reduce electricity costs for pumping by 35% with a variable frequency drive pump alone. Improvements like converting to drip irrigation or a linear/pivot systems can save water and energy.

To make improvements easy and affordable, the Energy Trust of Oregon offers cash-back and custom incentives. There are numerous ways, large and small, to improve linear and pivot systems, and wheel and hand-line systems. The project must be approved before purchasing to receive an Energy Trust incentive. Check with your electrical company provider to see if you are eligible to participate, or contact Energy Trust of Oregon at (503) 928-3154, or go to www.energytrust.org/pe/agriculture.html.

Mylen Bohle

Cereal Leaf Beetle Bio-Control Project Natural Enemies are Established in Oregon

The cereal leaf beetle is again expected to be causing damage in Oregon grain fields. June is the time when damage caused by cereal leaf beetle larva becomes most evident in grain fields. When threshold levels are reached, growers spray to control damage. An alternative, which has proven effective in other areas of the US, is the use of biological control. USDA, APHIS in cooperation with Oregon Department of Agriculture and Oregon State University have been releasing natural enemies of the grain destroying beetles since it was first found in Oregon in 1999. These natural enemies are now established in several counties in both eastern and western Oregon.

The cereal leaf beetle is a serious pest of grain crops, particularly spring plantings of oats, wheat, and barley. In Oregon, we have also seen severe damage to newly seeded grass seed fields, especially tall fescue and perennial ryegrass. A project study found that over 50,000 acres were sprayed to control cereal leaf beetle in 2005 at an estimated cost of over \$602,000. This was a slight decrease in the acres affected and cost of treatment which has increased dramatically every year prior. With the establishment of the bio-control insects an alternative to insecticides is now available to Oregon grain growers. The Cooperative Program is looking for growers interested in facilitating cereal leaf beetle bio-control.

The cereal leaf beetle has one generation per year. It overwinters as an adult in vegetation around and near grain fields. As the weather warms in spring, adults move first into winter grains. As spring grains emerge, the adult beetles abandon the winter grains for the spring cereal fields, where most of their eggs are laid, hence the more severe damage to spring grain crops. The adults do feed on the cereal plants, but the real damage is done later by the larva, which consume the upper layer of chlorophyll containing cells from the cereal leaf, leaving a frosted appearance on heavily infested fields. Treating adults is ineffective as they are mobile and will re-infest treated areas. As larvae are noted in a field, a grower needs to watch threshold levels carefully, especially as the grain nears the flag leaf stage.

Cereal leaf beetle has been established in the Eastern and Midwestern US since 1962. It has been successfully controlled there since the mid 1970's, by imported egg and larval parasites. A cooperative biological control program, involving ODA, OSU, and USDA, was started in Oregon, immediately after the initial find in 1999. Parasitic wasps were brought in from eastern states, where the introduced wasp populations now exist naturally and keep cereal leaf beetle populations in check without using insecticides. The cooperative program initiated field insectaries for the purpose of raising the parasitic wasps in Oregon. Field insectaries for growing the larval parasitoid, *Tetrastichus julis*, have been set up at the Union, Madras, and Hyslop OSU Experiment Stations. Insectaries for rearing the egg parasitoid, *Anaphes flavipes*, are established on private land in Washington County, and the OSU Ag Experiment Station in Union County.

In 2003, we recovered *T. julis* from the Union insectary field. In 2004 it was also found in nearby private grain fields in

Union county as well as near release sites in Malheur and Multnomah Counties. The egg parasite was confirmed established in the insectary field in Washington County in 2004. The objective now will be to allow the parasitic wasps to prosper, by encouraging growers to provide unsprayed buffers in beetle infested fields, in areas where the parasites are known to be present. In addition, when parasite populations reach high enough levels, the Program will draw from Oregon sources for redistribution. The first, within-state redistributions of the larval parasite were made from a grower's field in Union County in 2005. We expect to find higher larval parasite levels in Union, Baker, Multnomah, Linn, and Washington counties. The Cooperative Program will monitor the natural increase and spread of the parasitic wasps. The success of this program will become apparent over time as the parasite population reaches levels where cereal leaf beetle damage is reduced below economic levels without the use of insecticides.

We encourage growers in these areas to watch the thresholds levels carefully and use insecticides only when warranted. Also, when using insecticides, leaving un-sprayed buffer areas within or around the edge of sprayed fields will allow the parasitic wasps a chance to survive and prosper. We need to get the parasitic wasp established in Central Oregon. Any grain grower wishing to participate in this biocontrol project which will release CLB larvae parasitized with the parasitic wasp into their fields, is encouraged to contact USDA, APHIS, (503) 326-2814, or ODA (503) 986-4636, or contact Mylen Bohle at (541) 447-6228.

Gary Brown, Marc Peters, Darrin Walenta and Mylen Bohle

FREE Workshop: Smart Marketing in a Down Economy

Wednesday, May 19, 2010, Inn at Cross Keys Station, Madras, Oregon. Noon to 2:30 pm. (lunch an additional \$10)

Discover what it takes to be the Customer's first choice.. Somebody will gain market share in this economy. Why can't it be you?

Come hear what an expert has to say about:

- Why customers buy, or don't buy, and what to do about it.
- How to create an experience that customers want.
- How to find and keep more customers on a limited budget.
- Specific things you need to do to create customer loyalty.
- Proven marketing ideas to improve customer relationships and grown your business in a down economy.

Instructor, Robert Sherk, has mentored hundreds of small business owners during his 11-year teaching career with Oregon Small Business Development Centers, plus he owns and manages a successful consulting business.

Space is limited-pre-registration is required, call 541) 383-7290.

Sponsored by Economic Development for Central Oregon Jefferson County; Central Oregon Community College; Oregon State University; Madras-Jefferson County Chamber of Commerce; Mid Oregon Credit Union

Wy'East RC & D Helps Local Ag Save Water Save Energy

The Wy'East Resource Conservation & Development has teamed up with Bonneville Power Administration and local utilities to work with the Ag sector to capture energy efficiency savings. Central Electric Coop, Midstate Electric Coop, and Wasco Electric Coop are some of the local Electrical Utilities that Wy'East RC&D is working with. This is a pilot program sponsored by Bonneville Power Administration called "Save Water Save Energy".

BPA and Northwest public utilities recognize that energy efficiency is the premier low-cost source of new energy, and work together to bring energy savings to the agriculture industry. By saving energy, farmers may be able to reduce costs, increase irrigation uniformity, decrease the amount of water and fertilizer required, and may even increase yield in many cases.

Through BPA-sponsored incentives, local public electric utilities offer services and financial reimbursements to farmers for eligible energy efficiency measures including:

Irrigation-

Scientific Irrigation Scheduling (SIS): Know exactly when and how much to irrigate crops through a system that monitors weather and soil moisture data. In addition to reducing energy cost for pumping water, SIS conserves water, and reduce fertilizer use and run off. In determining when to irrigate, the system takes into account the specific type of crop planted in a monitored field. Annual energy and water savings can be more than 10%.

Pump Motor: Premium Efficiency Motors, rebates are available if you upgrade your pump motor to a NEMA Premium Efficiency unit.

Irrigation System Upgrades: Replacement or installation of high-efficiency irrigation equipment qualifies for incentives, including nozzles, brass sprinklers, gaskets, regulators, drop tubes and multi trajectory sprays. Incentives are also available for repair of leaking hand lines, wheel lines and portable mainlines.

Variable Frequency Drives: In some applications, Variable Frequency Drives (VFD) save energy and increase the performance and life span of industrial grade motors. VFD's are like dimmers for motors, providing soft starts and slow ramp-up speeds that extend the life of the motor. VFD applications are for turbine irrigation pumps, centrifugal pumps are not included in this program.

Lighting Upgrades-

In addition to energy cost savings between 25 to 50 percent, energy efficient lighting upgrades can increase visual acuity and lighting equipment life; improve security; and improve worker safety, productivity and quality of work.

Wineries-

With nearly 1,000 wineries and vineyards in the Pacific Northwest, wineries are the fastest growing segment within the agricultural community.

Many processing applications at wineries: including crushing, de-stemming, pumping, cooling and fermenting; are ripe for energy improvements. Energy saving enhancements such as lighting upgrades, HVAC, pipe insulation, compressed air, VFD's and refrigeration are all eligible opportunities for incentives.

In addition to BPA and Utility incentives, Wy'East will leverage all state and Federal program incentives, credits, and assistance such as:

- USDA Natural Resource Conservation Service – Environmental Quality Incentives Program (EQIP)
- USDA Rural Development – REAP
- Oregon Department of Energy – Business Tax Credit (BETC)
- Oregon Department of Energy – Energy Loan Program (SELP)
- Federal Investment Tax Credits

For more information contact Robert Wallace with Wy'East RCD, (541) 815-5503 or email: WyEastRobert@gmail.com.

Robert Wallace/Wy'East RCD

Ducks Better Than Chickens on Pasture?

Western SARE Farmer/Rancher Grant Example

The benefits of chickens in an integrated system are all but proven. However, ducks are a similar vertebrate bird that could potentially exceed the benefits over chickens. Ducks are hardier than chickens, do not require nighttime heating when fully feathered, are more resistant to diseases and produce more than 300 eggs per year that are more nutritious and command a higher price. This Farmer/Rancher Grant is examining the contribution that layer ducks on pasture provide to the soil health and weed and pest management Idaho. The study will quantify the change in soil health, pest populations and weed populations in pastures stocked with ducks. The project will encourage a sustainable agriculture system that provides economic benefits from selling the duck eggs.

For more information contact Stephanie Etter, technical advisor, Canyon County Extension Educator, University of Idaho, (208) 459-6003, or email setter@uidaho.edu.

Tim Deboodt

Did you know... OSU is one of only two U.S. universities designated a land-, sea-, space- and sun-grant institution. OSU is also Oregon's only university designated in the Carnegie Foundation's top tier for research institutions, garnering more than 60 percent of the total federal and private research funding in the Oregon University System. Its enrollment of nearly 22,000 students come from all 50 states and more than 90 nations. OSU programs touch every county within Oregon, and its faculty teach and conduct research on issues of local, national and global importance.

Growing Degrees Update

The T-Sum (temperature summing) is calculated by summing the daily average between the daily maximum and minimum temperature in degrees F, and then subtract 32 degrees (base temperature for T-Sum) (Example: 60+ 40 = 100/2 = 50- 32 = 18 gdd). If the average is less than 0, discard the number, if the number is positive, it is accumulated, from January 1st as a growing degree -day (gdd). One web site address you can track the thermal time is at: <http://pnwpest.org/wea>. <http://ippc2.orst.edu/OR/index.html> is the direct web site to all Oregon weather stations on this system. Use “simple average” and 32 degrees base temperature to plug into the calculator.

This T-Sum 360 F (pasture) or T-Sum 720 F (grass hay) system for calculating gdd’s is only to be used for timing nitrogen fertilizer applications on grass pasture and hay fields. If you want earlier pasture production, then when 360 F gdd’s is accumulated, that is the best time to apply 50-60 lb/ac N. If you are applying high rates (100-150 lb/ac) of nitrogen to grass hay fields, than apply around 720 gdd’s.

Table 1. T-Sum dates for the present year(s) for 180, 360, 540, 720, and 900 accumulated T-Sum growing-degree days (GDD’s) from January 1st for selected Oregon locations. (Fertilize at 360 gdd’s for pasture, if you want earlier forage, and around 720 gdd’s for grass hay.) (GDD’s using 32 degrees F base temperature as of May 2, 2010)

Location/ Elevation	Year	180 GDD’s	360 GDD’s Fertilize Pasture	540 GDD’s	720 GDD’s Fertilize Grass Hay	900 GDD’s
Madras (2440’)	2008	Feb 16	Mar 10	Apr 6	Apr 25	May 6
	2009	Feb 6	Mar 20	Apr 8	Apr 20	May 3
	2010	Jan 21	Feb 16	Mar 12	Mar 30	Apr 17
Prineville 4 NW (2840’)	2008	Feb 23	Mar 14	Apr 14	May 3	May 14
	2009	Feb 3	Mar 15	Apr 7	Apr 20	Apr 30
	2010	Jan 23	Feb 17	Mar 15	Apr 4	Apr 19
Redmond (3077’)	2008	Feb 24	Mar 18	Apr 22	May 5	May 16
	2009	Feb 4	Mar 20	Apr 10	Apr 25	May 9
	2010	Jan 24	Feb 25	Mar 21	Apr 15	Apr 26
Powell Butte (3180’)	2008	Feb 20	Mar 10	Apr 13	May 2	May 14
	2009	Feb 3	Mar 15	Apr 7	Apr 21	May 6
	2010	Jan 20	Feb 16	Mar 15	Apr 6	Apr 26
Bend (Agrimet) (3650’)	2008	Feb 24	Mar 18	Apr 14	May 3	May 14
	2009	Feb 4	Mar 19	Apr 9	Apr 21	May 3
	2010	Jan 29	Feb 28	Mar 24	Apr 16	Apr 29
Paulina (3688’)	2008	Mar 18	Apr 22	May 6	May 16	May 24
	2009	Feb 25	Mar 31	Apr 23	May 3	May 15
	2010	Feb 13	263	Mar 17	Apr 15	Apr 26
Christmas Valley (4360’)	2008	Mar 12	Apr 24	May 8	May 17	May 27
	2009	Mar 1	Apr 8	Apr 23	May 12	May 21
	2010	Feb 12	Mar 28	Apr 23	May 11?	May 21?
Fort Rock (raws) (4430’)	2008	Mar 13	Apr 24	May 8	May 17	May 26
	2009	Feb 25	Apr 5	Apr 21	May 8	May 18
	2010	Feb 11	Mar 16	Apr 16	Apr 30	May 15?
Seneca (4665’)	2008	Apr 30	May 7	May 17	May 27	Jun 11
	2009	Apr 10	May 2	May 17	May 25	Jun 2
	2010	Mar 28	Apr 2	May 9?	May 22?	Jun 2?

Mylene Bohle

Irrigation 101

The following are a few quick tips on increasing water use efficiency and profitability.

- + Straight-set irrigate, Do Not skip-set irrigate (if possible and makes sense for your field).
- + Off-set irrigate every other time.
- + Maintain proper pressure at the nozzle (50-60 lb psi, 55 psi best?).
- + Own or purchase a soil probe to check soil moisture, and pick up an oil filled pressure gauge and pitot tube to check pressure at the nozzles.
- + Nozzle size enlarges from use and wear over time (check your nozzle sizes with same size drill bit).
- + Repair any leaks as soon as possible.
- + Monitor soil moisture in your field by using the feel test method with soil probe, gypsum blocks, water-mark sensors, tensiometers, etc.
- + Utilize the Agrimet water use program.
- + Know how much water you are applying (tenths of inch per hour) (you need to know spacing, pressure, nozzle size, hours of set).
- + Invest in a pressure gauge.
- + Know how much water your soil can hold (inches per foot) – determine water holding capacity of soil.
- + Know the maximum allowable depletion for your crop.
- + Alternate day-time and night-time irrigation sets if possible.
- + Know the wetting diameter of your nozzle being used.
- + Know that every time you irrigate, about 0.10 inch of moisture gets trapped in the plant canopy, once there is substantial foliage, and never touches the soil, and therefore is lost to evaporation.
- + Run pivots as close to 10% speed as possible (see sentence above why), although there may be reasons to run in the 20-30% range.
- + Every extra gallon of water you pump, through leaks or by over-irrigating more than the crop can use, is a direct energy cost to you.
- + If you are flood irrigating, try some form of “surge”-irrigation to improve efficiency and reduce infiltration and leaching.
- + Make sure all nozzles are the same size on the line.
- + If your system is set up for it, try the new Nelson Wind Fighter heads (they are supposed to be as efficient in a 10 mph wind than a Rainbird type head is with no wind, but they do have a slightly lesser wetting diameter).
- + Many soils in central Oregon will be over irrigated, if you irrigate longer than 8 hours per set, depends on application rate, soil depth and texture (water holding capacity), a few fields will not.
- + Irrigation systems were designed to have and work best with 50% overlap.
- + Use flow-control nozzles when the pressure variation between the first and last nozzle exceeds 20 percent.
- + Use closer spacing boom mounted nozzles and/or rotating-type nozzles for center pivot systems.
- + Drop the nozzles on pivot systems as close to the crop as possible (switch over from over head mounted nozzles).
- + The uniformity of irrigation is dramatically reduced when wind is greater than 10-15 mph (wind greater than 10 mph drops your efficiency by 10 percent, or much more with much higher wind speeds).
- + Use self leveling nozzles: Nozzles on hand lines or wheel lines need to stand straight up or efficiency of water application will be reduced.
- + Rubber gaskets crack with age, replace them as needed (keep extras in water so they do not dry out).
- + Pump impellers tend to wear out occasionally, so need to be checked annually.
- + Make sure you have a good screen for your intake pipe to minimize plugged sprinkler heads.
- + Install an oil filled pressure gauge on your pump (if you do not already have one) and always check the pressure.
- + Make sure pressure relief valves are working properly.

If you would like more information on any of these ideas, please contact your local OSU/County Extension Service office, NRCS, or SWCD, or WyEast Rep, or contact Mylen Bohle at (541) 447-6228.

Mylene Bohle

Crop Water Use Program

The following table summarizes the crop water use or evapo-transpiration (ET) to date (May 2, 2010) for some of the irrigated crops grown in Central Oregon. For much more detailed information, one can log on to the Agrimet weather site at: <http://www.usbr.gov/pn/agrimet/>. There is general information about the program, weather data, crop water use information, graphs, maps, news, relevant links, and other information. You can follow the crop water use for these sites and other locations. The green up date or emergence date, canopy closing date, daily water use (ET), 7 day predicted use, and 14 day predicted use, are just some of the information you will find. Start-up dates may be different for each site for each crop. Start-up dates for some of the crops still need to be designated and added as the crop emerge or green up, and some may be changed.

Table. Accumulation summary of Crop Water Use or evapotranspiration (ET) to date (May 2, 2010) for Madras, Powell Butte, Christmas Valley, and Bend, OR Agrimet weather stations.

Crop	2010 Madras 2440 ft. (in)	2010 Powell Butte 3180 ft. (in)	2010 Bend Agrimet 3650 ft. (in)	2010 Christmas Valley 4360 ft. (in)
ETr	7.5	7.2	6.4	5.4
Alfalfa Peak	5.4	4.5	4.7	2.1
Alfalfa Mean	5.0	4.2	4.3	2.1
Pasture	4.1	3.6	3.6	2.4
Grass Hay Mean	6.0	5.2	5.2	3.0
Grass Hay Peak	6.0	5.2	5.2	3.0
Lawn	5.1	4.5	4.5	3.1
Winter Grain	6.2	5.5	5.4	3.6
Spring Grain (early plant)	0.9	0.6	0.9	0.6

Mylon Bohle

FoodHub — Connecting Regional Food Buyers and Sellers

What does an online matchmaking service for Northwest food buyers and sellers look like? How is it being used? What can it do to help you make business connections? Two upcoming FoodHub orientations will provide answers to these and other questions.

Monday, May 10 — Seattle, WA, 2:00 pm to 3:30 pm, Palace Ballroom, 2100 5th Ave. (RSVP by May 7 to Susan Wilch, FoodHub Member Services: (503) 467-0816 or susan@food-hub.org.)

Or

Thursday, May 20 — Enterprise, Oregon, 1:00 pm to 3:00 pm, Wallowa Mtn. Visitors Ctr., 88401 Hwy 82 (RSVP to Sara Miller of the Northeast Oregon Economic Development District: (541) 426-3598 or saramiller@neoedd.org.)

We're looking forward to connecting with you in person — food buyers and sellers alike. Grab a friend or neighbor and join us.

Want us to come and give an orientation in your area? Let us know. We'd love to connect with you in person .

We are hosting FoodHub Ambassador trainings in Seattle and Enterprise in concert with the orientations. These trainings are specifically for organizational partners who are championing FoodHub in their communities.

For more information on becoming an Ambassador and application instructions contact dkane@ecotrust.org or if you would like to attend one of the following Ambassador trainings:

Tuesday, May 11 — Seattle, WA, 1:00 pm to 3:30 pm, Palace Ballroom, 2100 5th Ave.

Or

Wednesday, May 19 — Enterprise, Oregon, 1:00 to 3:30 pm, Fishtrap, 400 East Grant St.

For more information see web page at: www.food-hub.org.

Dana Martin

EOARC Beef Cattle Field Day

Thursday, May 27th, 2010

**Eastern Oregon Agricultural Research Center
67826 Hwy 205 – Burns, OR**

**RSVP REQUIRED by
5/17/10**

Full Registration: \$30.00
(Includes Program, Lunch & Dinner)
Program & Lunch Only: \$15.00
Dinner Only: \$20.00

- | | |
|-------------------------------|---|
| 7:30 – 8:40 am | On-Site Registration |
| 8:40 – 9:00 am | Introduction and Welcome
Dr. Dave Bohnert – <i>EOARC Assistant Superintendent</i>
Dr. Tony Svejcar – <i>USDA-ARS Research Leader</i> |
| <u>Morning Section</u> | <u>Contemporary Issues for Beef Cattle Producers</u>
<i>Moderator – Dr. Reinaldo Cooke (EOARC – Burns)</i> |
| 9:00 – 9:30 am | Current Topics in Beef Cattle Health
Dr. Masie Custis – <i>Harney County Veterinary Clinic</i> |
| 9:30 – 10:00 am | Bureau of Land Management Updates
Ed Shepard – <i>Oregon/Washington BLM Director</i> |
| 10:00 – 10:30 am | Public Lands Issues
John O'Keeffe – <i>Beef Producer and Chair of OCA's Public Land Committee</i> |
| 10:30 – 11:00 am | What does the Oregon Beef Council Provide to Cattlemen?
Will Wise – <i>Oregon Beef Council Executive Director</i> |
| 11:00 – 11:15 am | Break – Refreshments Provided |
| 11:15 – 12:00 pm | Round Table
All Morning Speakers |
| 12:00 – 1:30 pm | Lunch |

Continued on page 11

Continued from page 10**Afternoon Section****Research Update***Moderator – Dustin Johnson (Harney County Extension)*

1:30 – 2:10 pm

Managing Disposition to Improve Performance of the Cow Herd*Dr. Reinaldo Cooke – Beef Cattle Specialist*

2:10 – 2:45 pm

Consequences of Late-Gestational Nutrition on Future Performance*Dr. Dave Bohnert – EOARC Assist. Superintendent and Ruminant Nutritionist*

2:45 – 3:25 pm

Including Production and Environmental Aspects in a Breeding Program*Dr. Chad Mueller – Beef Cattle Nutrition and Management*

3:25 – 3:40 pm

Break – Refreshments Provided

3:40 – 4:20 pm

Nutritional Implications for Beef Cattle Grazing Rangelands*Dr. Tim DelCurto - EOARC Superintendent and Range Cattle Nutritionist*

4:20 – 5:00 pm

Campus Beef Cattle Research Overview*Dr. Jim Males – Head of Department of Animal Sciences***Evening Section****Dinner and Social at the Burns Elks Lodge (118 N. Broadway, Burns)***Moderator – Dave Bohnert*

5:30 – 6:30 pm

Social Hour

6:30 – 8:00 pm

Prime Rib Dinner

8:00 pm

Cowboy Poetry by Marty Campbell

For more information, please visit the Beef Cattle Sciences Website (<http://beefcattle.ans.oregonstate.edu>), or contact David Bohnert at (541) 573-8910 or Reinaldo Cooke at (541) 573-4083

Oregon State University



Beef Cattle Sciences

Calendar

May

- 10 FoodHub Workshop, Seattle, Washington (see article page 9)
- 11 FoodHub Ambassador Training, Seattle, Washington (see article page 9)
- 13 Oregon Integrated Water Resources Strategy Meeting, 4:00 pm to 7:00 pm, Redmond Fire and Rescue Building, Redmond, Oregon
- 15 WGACO Workshop and Field Day (see article page 3)
- 15 Baler Clinic, Terrebonne, Oregon (see article page 4)
- 15 Northeast Washington Hay Growers Association Annual Field Day, Eric Ostby Farm and JKO Ranch, Chattaroy. Phone: (509) 725-4171.
- 19 FoodHub Ambassador Training, Enterprise, Oregon (see article page 9)
- 19 University Of California Alfalfa & Forage Crops Field Day, UC-Davis Agronomy Field Headquarters, Davis.
- 20 Smart Marketing in a Down Economy, Madras, Oregon (see article page 5)
- 20 FoodHub Workshop, Enterprise, Oregon (see article page 9)
- 26 Hyslop Farm Field Day (Cereals and Grass Seed), Corvallis. 8:00 am – 4:00 p.m. Lunch by Crops Club
- 27 EOARC Beef Cattle Field Day, Burns, Oregon (see article pages 10 & 11).

June

- 5 C.O. Food Network Website Launch Party, Bend, Oregon (see article front page).
- 15-18 Lost Rivers Grazing Academy. U. of Idaho Extension, Salmon, ID. Preregister by June 9. \$450
Contact Scott Jensen at (208) 896-4104 or email scottj@uidaho.edu
- 15 Pendleton Station Field Day
- 16 Sherman Branch Station Field Day
- 17 WGACO Member Meeting, 7:00 pm. Location TBA (see article page 3)
- 21-23 C.O. Tractor Safety Training, Redmond, Oregon (see article front page)
- 21-23 American Forage And Grassland Council Annual Conference, University Plaza Hotel, Springfield, MO. www.afgc.org

September

- 1-4 National Hay Association Annual Meeting, Griffin Gate Marriott Resort, Lexington, KY.
- 10 CO Food Summit (see article page 2)

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