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SolWest Renewable Energy Fair

July 24-26

The full SolWest Renewable Energy Fair program has been posted on the web at <http://www.solwest.org>. This year's SolWest is an incomparable educational event featuring keynote speaker Jeff Mapes on "Pedaling Revolution," 53 workshops, 33 exhibitors, 4 pre-SolWest in-depth workshops; as well as many ways to observe and get hands-on experience with renewable energy and sustainable living technologies. There is no better opportunity in the Northwest for learning and networking with other renewable energy enthusiasts!

Check out the online program and let me know if I can answer any questions. If you haven't contacted us in two years, and you wish to receive a printed fair program in the mail, please send your current mailing address.

Jennifer Barker, EORenew/SolWest Fair
(541) 575-3633 or info@solwest.org or www.solwest.org

Attention All Landowners: Crook County SWCD 2009/2010 Small Grant Program is Here!

Funding for The Small Grant Program is generated through Oregon lottery dollars and is a voluntary program that works within 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 quantity and improve water quality.

Projects to achieve these goals *may* include, juniper removal, native grass seeding, riparian and stream restoration, off-site watering, riparian fencing and spring developments. The program has been a huge success. Each year we see an increased interest from landowners in the county who would like to formulate their own restoration project.

Funding is limited, so if you're interested in learning more please contact Suzi Miller Hermens at (541) 447-3548.

Suzi Miller Hermens/SWCD Conservation Technician

"Central Oregon Agriculture" is a 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 Centers, Madras & Powell

Butte: <http://oregonstate.edu/dept/coarclindex.php>

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Libby Rodgers - Ag. Program Assistant/Fire Prevention, 447-6228

Pam Wiederholt - Ag Newsletter Coordinator, 447-6228

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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OSU Extension programs will provide reasonable accommodation to persons with physical or mental disabilities. Contact Pam Wiederholt at (541) 447-6228 to request reasonable accommodation.

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Crop Water Use Program —

Powell Butte, Madras, Bend, and Christmas Valley are the local Agrimet weather station sites that producers can go on line and follow predicted crop water use by different crops. These evapotranspiration (ET) numbers represent the amount of water that is transpired and evaporated from the crops on a per acre basis in inches. What these numbers do not take into account is the efficiency of the irrigation system. The web site is: <http://www.usbr.gov/pn/agrimet>.

Mylene Bohle

Cereal Leaf Beetle Bio-Control Update —

Numerous T. Julius wasp infested Cereal Leaf Beetle larvae have released in a number of fields in Crook, Deschutes and Jefferson counties in June. The T. Julius wasp will travel so if a good population can be increased in different pockets, they will spread on their own. There are a couple of wheat fields west of Terrebonne, which have Cereal Leaf Beetle larvae that are 70% parasitized by the T. Julius wasp! If there are any cooperators who would like to participate in the release, please contact Colin Park, USDA/APHIS at (503) 730-7622 or Mylen Bohle at (541) 447-6228.

Mylene Bohle

Potential Live Weight Gain on Grass? —

Have you ever wondered what the potential for live weight gain on irrigated grass pastures might be?

Here are the results of one study that was done in the PNW (at Prosser, WA), from 1978-1981 comparing orchardgrass and perennial ryegrass, 3-acre pastures, using Management-intensive Grazing. Light-weight steers were grazed over the 4 seasons and the animals were put in or removed as needed to avoid under, or over-grazing.

Orchardgrass supported an average of 3.66 steers/acre, while perennial ryegrass supported 3.00 steers per acre. Average daily gains, for orchardgrass was 1.92 lb/ac and 2.26 lb/ac for perennial ryegrass. Average annual steer gains in lb/ac, was 1,106 lb from orchardgrass and 1,129 lb from perennial ryegrass. 'Grimalda' Perennial ryegrass sustained winter damage between the first and second years of the study, while 'Latar' orchardgrass was not damaged at all. Steers grazing orchardgrass had to eat 17% more forage in order to obtain the same amount of net energy as the steers that consumed the Perennial ryegrass.

(Edited from Heinemann, W. and Hanks, E.. 1982. Irrigated Orchardgrass and Perennial Ryegrass Pastures Grazed by Light Weight Steers. WSU Research Bulletin XB 0926.)

Mylene Bohle

Afternoon vs. Morning Cut Hay —

What “minor” management trick is there that can change the quality of hay, to make it better, or “to make it better (by making it worse)”? We can increase the digestibility and palatability, and the protein content, of grass or legume hay by harvesting or cutting later in the day. The closer we can cut or swath hay around 8:00 pm or so, the higher the quality of hay. So if we can start swathing hay between 3:00 or 4:00 pm until around 9:00 pm or so, we can increase digestibility, as well as palatability! It has been proven time and time again by a majority of animals used in feeding preference trials. The animals prefer afternoon-cut hay compared to morning-cut hay. So this would make the hay worth more, for the both the seller and buyer, if you want higher quality hay to increase meat or milk production.

Now, if we want to make hay better, “by making it worse”...we would manage our hay harvest just the opposite. In this case, we are trying to conserve hay that is lower in digestibility (lower in non-structural carbohydrates and sugars) and palatability. So we would want to cut or swath as early in the morning as possible and then stop cutting hay before noon. The problem with this management method is that the dew can stop us from starting harvest, sometimes until late morning or after noon, depending upon the time of year. This will produce lower-carb / lower-sugar hay than normal, that some of the horse hay buyers are looking for. If you swath with dew on the foliage, then you will have to ted the hay more often to dry it down, or do you?

When hay is drying down from around 78-82% moisture when initially cut and until the hay reaches about 48% moisture – the plants are still transpiring and you are losing dry matter yield and feed value. If you are after high quality feed, then you want to dry that hay down as rapidly as possible – cut as wide of windrows as possible, condition it, and ted it to increase the speed of drying time, before baling. If you are after lesser quality hay, then cut the hay into narrow windrows, do not condition, and do not ted the hay, allow it to take longer to dry, before baling...but there may be a trade off in bleaching.

If I was a serious buyer of hay, I would ask whether it was afternoon-cut or morning-cut; and, if I was the seller, I would want to be able to tell them the answer.

Mylon Bohle

Clover / Bluegrass Pastures & Warm Weather —

With warm summer weather here, producers with Kentucky bluegrass and White clover pastures will want to start paying closer attention to grazing heights.

We are now into much warmer weather than what cool season grasses like for growing conditions; but we are also now just into the type of warm weather that legumes

(such as White clover), like growing in, and will stay that way into August.

Cool season grasses like Kentucky bluegrass, especially (and to a lesser extent, orchardgrass, tall fescues, the bromes, etc.) are now at a disadvantage growing in this warmer weather (they do best with temperatures in the mid 60s to mid-high 70’s degrees F), and Legumes (like White clover, alfalfa, red clover, etc.) have an advantage when in a mix. Alfalfa grows best at 86 degrees F. This is just based on species adaptation.

Then if we introduce short grazing heights into the mix, how does that play out? If we can keep grazing heights up to 3-4 inches, Kentucky bluegrass will grow better and compete better with White clover. As we lower that grazing height, White clover has many tiny leaves close to the soil surface (plus it likes hot weather and grows rapidly) and can keep regenerating itself. Kentucky bluegrass on the other hand, as you reduce grazing height, has less leaf material in which to photosynthesize (plus it does Not like hot weather and wants to go dormant, and not grow)...suddenly you have a pasture that looks like an all White clover and no grass pasture, if you are allowing your animals to close-graze your pastures (down to one-two inches or less). So if you want more Kentucky bluegrass (or any other grass species) growing in your mixed pasture, keep the grazing height up.

If you are unhappy with all of that clover in your pasture, you can always spray it out with a herbicide; but you give up a resource, that if managed better, provides excellent feed quality and fixes nitrogen to feed itself and partially it’s surrounding grass plants. Once an excellent grass/legume pasture is functioning properly, by managing it properly, little, if any, nitrogen fertilizer, may be needed.

Mylon Bohle

Clover Mite in Grass Trial “Update” —

We completed a 6 treatment insecticide trial to control Clover mites in a mostly orchardgrass, but mixed grass species field in the Lower Bridge area this year. We applied the treatments the first of April and we sampled weekly until the first part of June to track the population trend and efficacy of treatments. We had one treatment that worked very well. We had another treatment that seemed to slow down the damage of the clover mite, but did not eliminate the mites. Three treatments did not work at all, including the check. One treatment actually increased the numbers of clover mites over the course of the trial. We are hoping the company can get the insecticide labeled by next spring.

Mylon Bohle, Glenn Fisher, Amy Dreves, and Rich Affledt

Nematodes Affecting Wheat Yield in Central Oregon? —

Most nematodes are microscopic roundworms that either contribute to or detract from agriculture. Out of the 20,000 identified nematode species, 2,000 are known to be plant parasites. They cause an estimated \$8 billion worth of damage to all crops in the U.S. each year.

Cereal-Cyst, Root-lesion, Root-Knot, Stunt, Pin, Dagger, and Root-gall nematodes have been found in small grain crops in eastern Oregon and Washington over the years. Cyst and lesion nematodes are responsible for most of the damage or yield reduction in cereals.

All of these nematodes decrease the function of the root to absorb moisture and nutrients through reduction of the root depth and root branching. Yield reduction is difficult to prove, because studies are needed to show effect of nematicides, soil fumigation, and resistant and susceptible varieties. It is difficult because yield responses are influenced by multiple interacting climate, plant and soil factors.

Cereal-cyst nematodes can be eliminated by one year of rotating to a non cereal or grass. Back to back wheat or grasses would encourage their reproduction. Root-lesion nematodes (*Pratylenchus neglectus* and *thornei*) have a very broad host crop range. Crop rotation can only reduce root-lesion numbers by summer fallow or by planting field pea, flax, safflower, or triticale.

In a few controlled experiments in eastern Oregon, looking at zero nematodes to increasing numbers of nematodes, Stephens wheat yield was reduced from 105 to 55 bu/acre, by Cereal-cyst nematode; Zak spring wheat yield was reduced from 85 to 65 bu/acre by root-lesion (*P. thornei*) nematodes; and Zak spring wheat yield was reduced from 48 to 40 bu/acre by root-lesion (*P. neglectus*) nematodes.

Excellent irrigation and fertility management under irrigated conditions can go a long way to lessening the damage to wheat. In irrigated crops, the 900 root lesion nematodes per pound of soil for an economic threshold is likely greater. Some fields sampled in eastern Oregon had populations as high as 16,000 nematodes per pound of soil. 40-45 percent of the fields surveyed in eastern Oregon have populations higher than the 900 per pound threshold.

There is progress being made on quantifying the resistance and susceptibility of spring and winter wheat, and barley varieties to different nematodes. Barley varieties seem to be much more tolerant. Dick Smiley at the CBARC, Pendleton, Oregon, is leading this project.

Knowledge of the nematode history of a particular field and the decision to plant what cereal, and or variety, into that field, will hopefully be made with greater knowledge in the future, as we learn more about the effects of certain

nematodes on cereal production, and provide better future variety recommendations under such conditions.

Hopefully there will be some very good information available before this Fall's planting.

(The information in this article was partially edited from R. Smiley. May, 2005. "Plant-parasitic Nematodes Affecting Wheat Yield in the Pacific Northwest". OSU Extension Service publication EM 8887.)

Mylen Bohle

Low Carb/Sugar Forage —

It has been a challenging spring for forage producers, especially those growing grass for pasture. One needs to be careful and not overgraze the pasture up front, or for

that matter, ever. For those who are grazing horses on pasture, I find it interesting as I drive around central Oregon and see all of the overgrazed pastures, I marvel at the lengths that some horse owners are going to in order to produce, manipulate, modify, sell and/or buy low-carb or low-sugar hay to feed their animals. Why?

We manage horse diets in the late Fall to early spring with hay (low-sugar (fructans) carb hay for those prone to laminitis), but then in the Spring, Summer and Fall, many horse owners allow their horses to graze their pastures "tight" (less than an inch in height). If you are grazing your pasture tight, then you are allowing those animals to increase their intake of higher carb/sugar forage. How? The closer the animal grazes to the soil and into the crown of the plant, the higher levels of non-structural carbohydrates and sugars the animals will consume; because that is where those nutrients are stored in the plant in higher concentrations. Not good for the animal, and not good for the plant!

Horse owners (and other livestock owners) also spend a lot of money on parasite programs, but then they again allow their animals to graze tight. The tighter a producer allows their animals to graze, there is an increased chance of the animal picking up parasites.

There are many, very good reasons for keeping your grazing height up on your pasture, for both the health of the animal and the health of the plant.

Mylen Bohle





Wine Growers Association of Central Oregon to Hold Meeting —

The Wine Growers Association of Central Oregon (WGACO) have scheduled a meeting for Tuesday, July 14th, most probably at the Ranch at the Canyon, 6:00 pm. For more information and to RSVP, contact Doug Maragas at (541) 546-5464) or Mylen at (541) 447-6228.

Mylen Bohle

June 21 - Important Date for Grass Roots? —

After June 21st, perennial grass plants will be growing for the rest of the growing season with decreasing day lengths. Sometime right around that date, is approximately when our grasses begin their summer slump - slower growth that we talk about. Cool season grasses do not care much for growing in hot temperatures and therefore do not provide as much forage as we would like them to produce at that time. So if we plant a legume with cool season grasses, like alfalfa or clover, legumes grow best when the temperature is around 86 degrees F vs. around 63-65 degrees F average daily temperature for cool season grasses. But I digress...

So what is also happening with the cool season grasses below the soil around or after June 21, the longest day of the year? The roots of cool season grasses begin to shed them-selves. They will have been white up to that time period and actively growing, but from that point on, they will appear to be tan to brown, and in decline. So the summer slump that we talk about would appear to be due to root shedding – it sure would have an effect on grass growth if the root is not actively completely regenerating itself during this time.

The roots will continue that way until around the end of August until the first to mid part of September when the plant will be growing new roots going into the fall. During that Fall root growth period, next years spring forage growth will also be set; the spring tillers are formed in the Fall. If you graze your pasture down, like a table top, in the Fall, you will have grazed a lot of next years spring forage growth. You will dramatically reduce your yield of harvestable forage by your animals. That 4 inches of stubble or regrowth you need to leave behind belongs to the plant, not the animal grazing it. Think of it as your grass bank account (and when you over draw (over-graze), there is a penalty!)

Fall grazing management is extremely important as you might imagine, but so is spring grazing management, and summer grazing management, if you want to optimize

your forage production. Be careful with those grazing and clipping heights on your grass plants. All of your forage production comes from the regrowth of your pasture or hay fields. If you graze or clip to the ground, the plant has to regenerate itself from the root system, which does not contain nearly as much non-structural carbohydrates and sugars as the crown area does, which is needed to re-grow. And the green leaves (think of them as solar panels) left as stubble, allow the plant to photosynthesize immediately, and re-grow and regenerate it's root system. This needs to happen in the Fall, when the plant is regenerating it's root system to go into the winter.

Mylen Bohle

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If you are unhappy with all of that clover in your pasture, you can always spray it out with a herbicide; but you give up a resource, that if managed better, provides excellent feed quality and fixes nitrogen to feed itself and partially it's surrounding grass plants. Once an excellent grass/legume pasture is functioning properly, by managing it properly, little, if any, nitrogen fertilizer, may be needed.

Mylen Bohle

N Fertilization for 2nd Cutting Grass —

First cutting grass hay is a done deal in terms of how, when and what rate of N fertilizer we applied. First cutting is the most efficient for fertilizer and water use, and the reward is the highest yield we will achieve of the usual 3 cuttings we harvest in central Oregon. Nitrogen prices (all fertilizer prices) have been steadily climbing all spring and may change again by the time one has to apply N fertilizer for 2nd cutting.

After we harvest first cutting grass hay, we will be faced with: “how much N fertilizer do we apply for 2nd cutting – economically”. Everyone’s situation can be different, so the following table shows yield responses to N fertilizer on 2nd cutting grass hay at 6 different sites in Crook and Deschutes counties in 1992 and 1993. Hopefully this will be of help to producers in trying to figure out an economical rate of N to apply. The trick is to apply to the point that the last lb/ac N applied gives you back a positive return based on cost of N, application cost, and value of hay – it is a partial budget exercise – return to N fertilizer. As you keep adding N, each pound of N applied needs to provide a positive return, when the last pound of N provides no return, then you should have stopped at the previous rate – not always easy to pinpoint. Of course there are other production costs to determine as well.

Table. Yield response of different grass hay fields to different N rates in Crook and Deschutes counties in 1992 and 1993.

N Rate / lb/ac	Bluegrass (older stand) (t/ac)	Orchardgrass (older stand) (t/ac)	Timothy (newer stand) (t/ac)	Orchard/Blue (older stand) (t/ac)	Orchardgrass (newer stand) (t/ac)	Orchard/Legume (newer stand) (t/ac)
1992						
0	0.30	--	0.13	1.55 (85)	0.99	1.58
50	1.27	--	1.03	1.89 (135)	1.96	1.89
100	1.73	--	1.58	2.12 (185)	2.38	2.04
150	1.56	--	1.72	2.44 (235)	2.78	1.91
1993						
0	0.97	0.66	0.22	0.98	0.85	1.73
50	1.21	1.93	1.87	1.29	1.65	2.40
100	1.47	2.21	2.22	1.45	1.98	2.71
150	1.85	2.30	2.37	1.58	2.30	2.50

() After plots were fertilized, the field was fertilized with 85 lb/ac N, and the trial was fertilized again, by mistake.

Mylene Bohle



What is Hay Worth? —

Wondering what the price of hay is whether you are buying or selling?

Especially if you are raising and selling hay, you may want to get in on the weekly call from USDA Market News Service, Moses Lake, WA. The C.O. hay market report can be accessed at: http://www.ams.usda.gov/mnreports/ml_gr313.txt. Jack Getz or another person in their office will call and inquire if you have sold hay, for what price, what the quality is, etc.

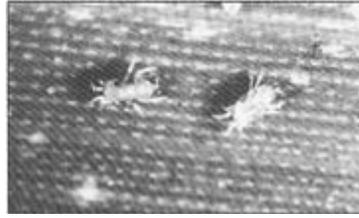
This information is then compiled weekly and put up on the Internet or is published in the Capital Press.

The idea is if both seller and buyer know the market, then a true, free and fair market exists for all concerned.

It also works if you want to buy hay and you are wondering where the market is at, when looking for hay to purchase. Contact Jack Getz at (509) 765-3611 or email him at: jack.getz@usda.gov.

Mylene Bohle

Banks Grass Mite Update —



The Banks Grass Mite has been found in

Crook and Jefferson counties a couple of years ago, and it is highly probable that it is also in northern Deschutes County at the very least. The Banks grass mite will affect corn, wheat, sorghum, soybeans, and grasses (turf also).

The Banks Grass (*Oligonychus pratensis*) and Two -Spotted Spider (*Tetranychus urticae*) Mites look very similar. They are very small (< 1/32 inch), oval, and color ranges from green, yellow, reddish-brown, to black like. Both over-winter as adult females and nymphs. As the temperature warms in the spring, eggs are deposited on the stems and leaves of grass. They go through several stages of development and there can be up to 7-10 generations per season! Both of these mites reproduce under hot and dry conditions and can attain very high populations in the summer. Banks grass mite usually appears a little earlier in the spring than does the two -spotted spider mite. Miticide efficacy varies greatly between the two in other areas of the U.S.

So what is interesting (in a very negative way), is that we already have the winter grain mite and the clover mite that we are dealing with in the Fall and then late winter through late Spring. Now we may be dealing with the Banks grass mite from late spring through the summer and possibly in to early Fall!

There are some mites or insects that will prey on the Banks grass mite. There is the Predatory mite (*Neoseiulus fallacis*) (juveniles feed on 4 mite eggs/day for 8 days and adults eat 15 mites/day for 70 days), Mite Destroyer Beetle (*Stethorus* sp.) (eats 40 mites or eggs a day and lives a year), Six-spotted Thrips (*Scolothrips sexmaculatus*) (larvae eat about 7 mites /day for 10 days and adults feed on 60 mite eggs/day for 60 days), and Minute pirate bug (*Orius* sp.) (eats 30 mites a day) will prey on the Banks grass mite and help control them. Much more work needs to be done to see how well these pests control the Banks grass mite. In Kansas, there is a fungal pathogen (*Neozygites floridana* and *adjarica*) that has been identified that attacks the mite if there are several cool days (<80-85 degrees F) in a row.

If you want to see the visual differences between the 4 mites (clover, two-spot, banks, and winter grain mite) go to: <http://entomology.unl.edu/turfent/documnts/spmites.shtml> or type in Grass Banks Mite into an internet search engine and you will find numerous articles and Extension Bulletins on the web.

If anyone is noticing damage from Banks grass mite and would be interested in allowing OSU to run an insecticide trial please call Mylen at (541) 447-6228.

(The information in this article was edited from numerous Extension Bulletins and articles on the Web)

Mylen Bohle

Blackgrass Bug —

Eastern Oregon areas have reported some problems with the Blackgrass bug this spring. The Blackgrass bug (*Labops hesperius*) has been around central Oregon for years and does do some damage from time to time. I have not heard of it doing any damage yet this year, but did notice some these “bugs” in a few Orchardgrass fields this spring. In the past the heavier infestations have been around the Tumalo/Bend/Cloverdale area, and minor problems in a few other areas, infesting some dryland, as well as irrigated pastures and hay fields. Three years ago, damage was experienced in the north-central Oregon wheat fields, and there were some infested wheat fields in the Culver area in Jefferson county.

The insect is grayish black, about ¼ inch long, and “somewhat” pear shaped. Feeding causes pale spots on the leaves of cereals and grasses, and when severe, leaves have a general yellowish, stippled appearance.

Most years the damage will not be severe enough to require treatment, and after a few years, the insects will run their course and will comparatively disappear for years. Usually in range situations, the cost of applying treatments exceeds the benefit. That may or may not be true for irrigated grasses and cereals.

Be on the lookout this year. As stated previously, there sometimes has been economic damage in cereal crops and has required treatment.

Mylen Bohle





Gigi Meyer

SMALL Farms Windflower Farm —

Windflower Farm is the accumulation of everything Gigi Meyer loves. From her barn deck, which she hopes will

someday serve as an art and writing studio, she oversees horses grazing the lush pasture below. In the opposite direction the view changes to artistically designed vegetable and flower beds. Two greenhouses, an orchard and an old barn converted into a chicken coop serve as a backdrop to this beautiful scene.

Gigi seldom has time to enjoy the vision she has created on her 10-acre farm located about 15 miles east of Bend. She is much too busy planting seeds, pulling weeds, and harvesting crops to fulfill her 30 member CSA (Community Supported Agriculture) operation. Still, she is excited about living her dream, which combines all her passions.

“I have found a way to bring art, writing, horses and gardening, all the things I love, into one place,” says Gigi. “After all my wandering, it feels good to be settled in Central Oregon and have this farm as my home.”

Gigi’s life journey has taken her places throughout the world. Growing up in Portland, she was first exposed to Eastern Oregon when her family purchased a large cattle ranch in Westfall. Summertime and vacations were spent on the ranch where she learned to ride horses and work cattle with the buckaroos. This was the perfect setting for a horse crazy 10-year-old and these experiences eventually lead Gigi to jobs of training and conditioning race horses and teaching riding lessons.

After graduating from high school, Gigi headed east to attend college and pursue her love of art. But even after 10 years of painting in New York, Gigi’s form would usually reflect the deeply entrenched influence of Eastern Oregon. “In the process of abstraction, an image of the Oregon desert was present,” she says.

In March, 1989, Gigi had the opportunity to travel to Italy to write a feature article on the Palio Horse Race.

While there, she worked as a caretaker for a villa in Tuscany and discovered her passion for farming.

“It was a diverse villa with a beautiful rose garden, vineyard and lavender field. Different vegetables and flowers were growing and I learned a lot from my friend who was a horticulturist. It was a magical time,” says Gigi.



Windflower Farm

After several months in Europe, Gigi returned to the United States a changed person. Realizing her need to be close to nature, she returned to the West Coast and eventually ended up in Bend.

In the fall of 2005, she was able to sell her house in town and purchase a farm in the rural Alfalfa community east of Bend.

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SMALL FARMS: Windflower Farm

Continued from page 8

“The timing was right because Alfalfa was still off the map so I was able to buy the farm for less than the house I sold,” says Gigi, noting that her new property was set up with a house, old barn and an inefficient irrigation system.

“The first thing I did was improve the fences and irrigation system. Otherwise, I knew all I would be doing is moving hand lines,” she adds.

Utilizing her talent as an artist, Gigi then designed the layout for her farm. She figured out where she wanted fence lines for the horse pastures and the placement of new greenhouses and horse barn. She planned the location for her garden and decided where the orchard should be planted.

With help from her family, Gigi then went to work digging up rocks and creating rock walls around the garden area. She enhanced her soil and started planting currant bushes to help serve as a windbreak for other crops.

Two greenhouses were constructed to give her an early growing advantage in the cold Central Oregon climate and the old barn was remodeled to accommodate 30 laying hens. Gigi also built a 7 stall barn and has plans to board horses to help create more revenue for her farm.

In 2007, Gigi was ready to offer 5 CSA memberships. The number grew to 15 in 2008 and this year, Windflower Farm has 30 CSA members and there is a waiting list. For a fee of \$625, a weekly bag of produce is dropped off for pickup in downtown Bend and for slightly more, home delivery is provided. For an additional \$100, members can add fresh cut flowers and for \$65 more, members can have eggs with their order.

Gigi’s CSA season runs six months, May through October, and starts a month earlier than most other programs in Central Oregon due to her greenhouse advantage. A wide variety of produce is offered, ranging from different types of lettuces early on to tomatoes, peppers, cucumbers and herbs later in the season. She has established a market with a local grocery store that will accept extra produce and she is talking to a local caterer who is interested in using locally grown vegetables in his business.

As interest in local food grows, Gigi enjoys sharing what she has learned with others. She consults with people who are trying to establish gardens and has attracted volunteers who are eager to help out on the farm.

“I am learning as I go and have had some hard lessons along the way,” says Gigi. “Farm work is physically and mentally tiring and there are always worries about money.

I feel that it’s important to have some balance in life so hopefully, I will reach a point when that happens.”

For now, Gigi is exploring all opportunities to increase income on her farm. She voices frustration with the laws and policies that make it difficult for small farmers to financially survive.

“It would help if there was some flexibility in zoning requirements to allow for agri-tourism,” says Gigi. “This has become quite popular in Europe. Farmers rent out a room or spot on the farm for tourists who would like to spend a few days in the country and learn a bit about farming. This helps keep farmers on the farm and also helps city-folk get first-hand experiences of country life.”

Despite the long hours and exhausting work, there is no place Gigi would rather be than Windflower Farm.

“Growing healthy food is very satisfying and I’m motivated by the enthusiasm people have for the farm and what we are growing,” says Gigi. “It’s wonderful that people are becoming more aware of what they eat and how everything we do affects the environment. I really want this to work because food is so important to everyone.”

Dana Martin

Central Oregon Small Farm Network Group Summer Gathering —

It’s time to get together for some fun and conversation!

Date:	Saturday, August 8, 2009
Time:	4:00 p.m.
Location:	Central Oregon Agricultural Research Center, 8215 SW Hwy. 126, Powell Butte, Oregon
Bring:	Potluck item to share
Discussion:	Next steps of forming a Small Farm Cooperative; grant potential for researching small farm specialty crops; Central Oregon Small Farm website and blog; 2010 Living on a Few Acres Conference and more.

Please RSVP by August 3 to Dana Martin at: dana.martin@oregonstate.edu; (541) 548-6088 x7957. It is very important that you let us know if you are coming! Look forward to seeing everyone.

Dana Martin



Gigi and friends!

Root Zone Depths

The following table shows the effective rooting depth and allowable depletion (%) of soil water for some of the crops grown in central Oregon. The root zone can be limited by soil depth, hard pans, etc. The crops depend upon 90% of their water needs within these listed root depths. The allowable depletion (%) is the amount of total available moisture that these crops can withdraw from the total soil water holding capacity without suffering yield loss.

Root Zone Depths for selected crops grown in central Oregon.

Crop	Root Zone (ft)	Allowable Depletion (%)
Alfalfa	4.0	60
Beans	2.5	50
Chickpeas	4.0	60 (?)
Corn	3.0	50
Grapes	3.0	65
Mint	1.0	40
Orchard	6.0	50-65
Potatoes	2.0	30-40
Pasture	2.0	60
Small Grains	3.0	50

Information edited from various BPA publications.

Mylon Bohle

CALENDAR

JULY

14 Wine Growers Association of Central Oregon Meeting (See Page 5)

24-26 SolWest Renewable Energy Fair, (See Front Page)

AUGUST

8 Central Oregon Small Farm Network Group Summer Gathering (See Page 9)

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