



Country Living

Provided to you by the
OSU Extension Service Columbia County
505 N. Columbia River Hwy, St. Helens OR 97051
Phone: 503.397.3462 ▪ Fax: 503.397-3467
Email: chip.bubl@oregonstate.edu
Office hours: Monday-Friday, 8 a.m. to 5 p.m.
The office will be closed Fridays from Noon to 1 p.m.
Website: <http://extension.oregonstate.edu/columbia/>

July 2016

Programs for you . . .

Listen to the Gardening Spot on KOHI (1600 am) radio - Every Saturday, 8:05 to 8:15 a.m.

- July 4..... Columbia County Extension Service office closed for Holiday
- July 5..... Scappoose Bay Watershed Council. 7 p.m., 57420-2 Old Portland Rd., Warren
- July 6..... OSU Blueberry Field Day. 1-5 p.m., NWREC, Aurora. Call for Details. Or visit their website:
<http://oregonstate.edu/dept/NWREC/programs/berry-crops>
- July 7..... Demonstration Garden and other MG Extension Projects Planning Meeting. 10 a.m., OSU Extension Classroom, St. Helens
- July 7..... Master Gardener™ Board Meeting. 10:30 a.m., OSU Extension Classroom, St. Helens
- July 12..... Lower Columbia Watershed Council. 7 p.m., SWCD office-35285 Millard Rd., St. Helens
- July 20-24..... Columbia County Fair. Columbia County Fairgrounds, St. Helens
- July 20..... Soil & Water Conservation District. 7:30 p.m., SWCD office-35285 Millard Rd., St. Helens
- July 23..... OSU Day at Columbia County Fair!
- July 28..... Upper Nehalem Watershed Council. 7 p.m., Vernonia Grange, <http://nehalem.org/> 503-429-0869
- July 30..... Water Bath Canning High-Acid Foods. 9 a.m.-1 p.m., Columbia Soil & Water Conservation District, 35285 Millard Rd., St. Helens, classes put on by Jenny Rudolph, OSU Educator - see back page for registration. (August 27th-Pressure Canning class)

FOOD SAFETY/PRESERVATION HOTLINE - July 11 through October 14, 2016

1-800-354-7319

9 A.M. TO 4 P.M.; MONDAY-FRIDAY, except holidays

Certified Family Food Education volunteers and OSU Extension staff will answer your questions.

You can get the OSU Extension Service publications at <http://extension.oregonstate.edu/catalog>, click on nutrition and foods for publications on canning, drying, pickling and freezing too!



Chip Bubl

Chip Bubl, OSU Extension Faculty, Agriculture



Agricultural Sciences & Natural Resources, Family and Community Health, 4-H Youth, Forestry & Natural Resources, and Extension Sea Grant programs. Oregon State University, United States Department of Agriculture, and Columbia County cooperating. The Extension Service offers its programs and materials equally to all people.

In the garden

Summer pruning of stone fruits

If you have stone fruit trees (that is plums, apricots, peaches and cherries), early summer once the fruit is gone, is a good time to prune them.

All the stone fruits, but especially sweet cherries, peaches, and apricots are very susceptible to bacterial canker. This disease can kill a young or old tree. Symptoms are usually branch die back and in the late stages, heavy ooze from cankers on the limbs and trunk.



Fall winter copper sprays can help reduce infection. But evidence is mounting that winter pruning spreads the disease while the dry conditions of summer pruning does not. For more information on this disease, go to our PNW Plant Disease Handbook: <http://pnwhandbooks.org/plantdisease/cherry-prunus-spp-bacterial-canker>

These do not require radical pruning unless they are way overgrown. Just take off any diseased, dying and damaged branches, always known as the three Ds, and then look at the overall shape. Generally, stone fruits are pruned to an open or vase-shaped structure to maximize air circulation. Remove branches that are clogging up the open center or are crossing or competing with each other.

Overgrown trees can be rejuvenated in stages over several years. Lop one or two

branches a year, making sure that the cuts are done in such a way as to leave a branch collar for wound closing. If it is a larger renovation, remove some suckers as they appear during the summer.

New mason bee publication

This new publication by Brooke Edmunds, Richard Little, Ramesh Sagili from OSU is entitled *EM 9130, Nurturing Mason Bees in Your*

Backyard in Western Oregon. It provides an overview of mason bee basic



biology and life cycle, and detailed descriptions of what is needed to start keeping mason bees, including desirable plants, nesting sites and types of nests, and caring for the cocoons over fall and winter. There are many helpful color photos throughout. It is available free on line at https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/em9130_0.pdf or simply go to Oregon State University Extension service + publications in your search engine and type in “mason bees” into the search box of the upper right hand corner of the publications web page.

New OSU Tree Planting publication

This new publication can be freely downloaded as an app or a pdf file at <https://catalog.extension.oregonstate.edu/ec1438> . It covers tree selection for various sites, site preparation before planting, and care of your trees after planting, and long term care like pruning. It also contains information on hiring an arborist. The pictures are great and the text, even better. It was produced by Steven Fitzgerald and Paul Ries, both from OSU Extension.

Soils and Watering

Water infiltration is affected by soil porosity and texture. In the summer, homeowners whose lawn and garden soil is sandy often lament that their gardens and lawn require more watering than those growing in finer soil.

Actually it's a myth that lawns and gardens in sandy soil need more water than other soils. The difference is not how much water the lawn or garden uses but how much and how often it needs to be applied in coarse versus fine soils.

Grass is grass and garden is garden, and soil type does not have much to do with how much water is being used. An extreme amount of water used by a lawn in summer would be half an inch per day, regardless of soil type. Fine, textured (tiny clay particle) soils can hang on to more water longer than the coarser, larger particle, better drained soils in the Columbia Basin or central Oregon.

Soils with silt and clay, typical of many western Oregon soils, can store up to eight inches of water in the soil profile. But coarse sands in the Columbia Basin or central Oregon can store as little as two inches of water in the soil. This means that a finer western Oregon clay/silt soil can store four times as much water as a Columbia Basin sandy soil.

The total water needed in each place might be the same but a different schedule is needed. You can get away with watering four inches every eight days with fine soil, because the soil can hang on to the water. With sandy soil, you'd still use four inches, but you'd have to apply it one inch at a time, every other day over eight days.

It is rarely advantageous to water more than every other day because a coarse soil cannot store the water. Add any more water to a sandy soil, and the rest would leach down below the roots of the plant.

Soil water retention in sandy soils can be somewhat improved with the routine addition of two inches of compost worked in every spring.

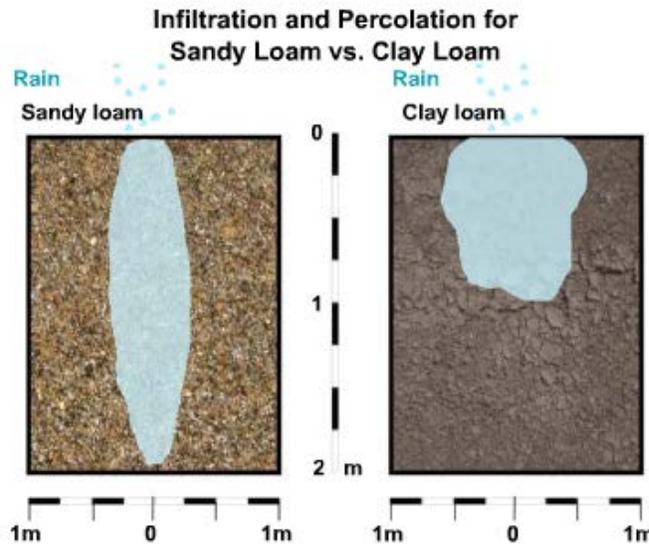
The moral of the story is that you should water sandy soils with smaller quantities of water applied more frequently than with clay/silt soils. You can water silt/clay soils

less frequently than sandy soils without leaching water.

To learn more waterwise gardening,

check out Extension's publication *Conserving Water in the Garden*.

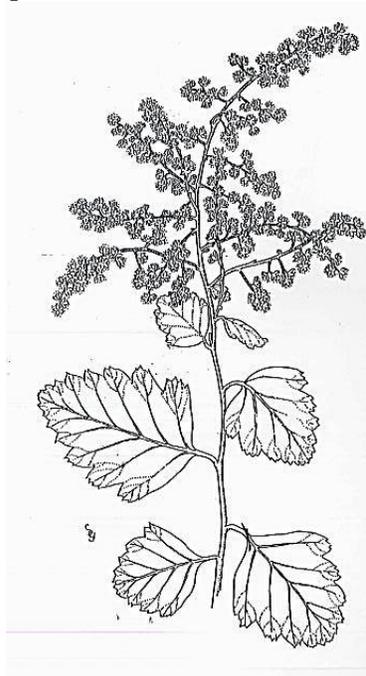
From Joy Jones, OSU Extension agent in Tillamook County



Ocean spray (*Holodiscus discolor*)

We have the opportunity when we buy landscape plants to create a garden that is not only beautiful but supportive of the bees, butterflies, birds, and other creatures that evolved together in this region. This is the first in a series of discussions about the value of particular native plants and how best to use them in your landscape.

Ocean spray is tall, open, multi-stemmed deciduous shrub (6-15 feet or more) and is just finishing up its bloom cycle. The creamy, white, tiny flowers are borne on drooping panicles in mass clusters creating a spectacular display. As the flowers wither, they turn brownish. The leaves look a bit like tiny hawthorn or alder leaves and are borne alternately on the stems. It is in the rose family. There is a smaller ocean spray (*H. dumosus*) found east of the Cascades.



Ocean spray can tolerate dry soils and rocky outcrops but is also comfortable in clay soils that hold more moisture. Once established, it will not need watering. It does well in both full sun and a mix of sun and shade. The eastern Oregon species needs excellent drainage so a rocky, dry site would be perfect for it. *H. discolor* is winter hardy to zone 5 and is found in zone 10 sites as well. Here, it is often found with Douglas fir on the drier sites as well as madrone, Garry oak, and poison oak. It can be found in all the western states as far east as Montana to the north and Utah and Arizona to the south. It often establishes on bare or disturbed sites. It

doesn't do well where there is intense grass competition.

Ocean spray was first described to "European" botanists by Meriwether Lewis in the early 1800s but was well known to and used by native-Americans. The wood of ocean spray is very hard. The thin, upright new shoots were ideal for arrow shafts and were also used for cooking implements, digging tools, canoe paddles, fishing points, wooden nails, and even gambling pieces.

Medicinally, the plant was used externally for burns, sores, and cuts. Internally, the leaves and flowers were used as tea for analgesic purposes (though willow bark was preferred), as a "blood tonic", and to slow diarrhea.

Many native species used the plant as well. It is an important source of nectar and pollen for many moths and butterflies including swallowtail and azure butterflies. It may be grazed by deer. Seed is used by many birds in the winter. Several birds, especially, the bush tit, use the shrub structure as a nesting site. Bushy-tailed wood rats also find larger ocean spray clumps suitable for their aerial nests. Tree frogs rest there as well.

To preserve the genetic diversity of the species, it is best to propagate from seed. Unfortunately, fall collected seed has very low viability (10% or so). It has to be stored cold and moist peat moss in a refrigerator at ~ 40 degrees F for as much as 18 weeks. It then can be sown in greenhouse with temperatures of around 70 degrees. Alternatively, the seed can be seeded in the fall and allowed to go through winter and germinate in the bed. Some protection from birds and rodents seeking seeds might be necessary. Ocean spray can also be propagated by semi-hardwood cuttings (Sept-Nov.), hardwood cuttings (Jan-Feb.) or root sprouts (late fall or early spring).

Ocean spray can be pruned hard (right after flowering) to keep in more compact or allowed to grow (with light pruning to keep it open) into the very large and lovely clump it can become.



That's the Way it Grows

Loving My Summer Job

The best thing about my work schedule is the two months vacation I get every summer. I call it my summer retirement. I get to play the dirt every day!



Although Oregon is known for rain, summer is usually pretty dry in the Pacific Northwest. That means watering. Hand watering, unless you have a watering system, especially on your container plantings. Regular watering is extremely important for landscape and garden plants. Uneven watering can lead to misshapen fruit or vegetables and dead or dying landscape plants.

Plants “breathe” in the form of transpiration; the movement of oxygen, water vapor and carbon dioxide through stomata—pores—in the leaves. Even on cooler days, water evaporates at a decent rate. A windy day can suck away just as much water from plants’ leaves as a hot, sunny day.



Most people know that blossom end rot in tomatoes is caused by calcium deficiency. The cells of the plants become unable to take up nutrients at an even rate due to uneven watering, which leads to cells shriveling at the blossom end of the tomatoes. This is a totally avoidable condition that can be remedied simply by watering regularly.

Uneven watering can lead to misshapen cucumbers, which have been researched and found to be more often bitter than straight fruit. Seriously, it’s been researched. Fruit become misshapen because cells grow unevenly, for reasons including damage to the growing fruit or uneven watering. I’ve had English cucumbers grow in a circle, instead of straight, and it’s pretty funny. I’ll have to test the theory that they are more bitter.

To reduce the amount of watering you have to do, and the amount of water you have to pay

for, there are the usual tips: mulch, water in the morning instead of the hottest part of the day, don’t overhead water, put plants close together to shade the soil and crowd out weeds, reduce your square footage of lawn, come to terms with lawns naturally turning brown (going dormant) in the summer.

Controlling weeds will reduce the amount of water stolen from your landscape plants. I find it easiest to get out the good old-fashioned hoe and take the weeds out when they are small. It’s very easy to do and doesn’t take a lot of effort. I don’t care to spray (or have the husband spray) much, because I’ve had wind drift kill plants. I just go out with my stirrup hoe (also known as a scuffle hoe, or by the brand name Hula-Ho). Just a little scuffling of the soil takes care of the weeds very adequately.

Deadheading your flowering plants is well worth the effort. Removing spent blossoms encourages more growth, branching and more blooming. Letting the spent blossoms stay on the plants and go to seed signals to plant that its life cycle or growth cycle is over. I actually find it meditative to trip blossoms.

Sometimes, I go a little bit crazy and buy too many plants. Recently, I had two gift certificates from a nursery, and got to buy anything and everything I wanted, without adding up the cost. Thank you Dad! However, My eyes were bigger than my ability to plan ahead, and I have some plants left to put in the landscape.

Plants in nursery containers need extra care and monitoring to make sure they don’t dry out. Sometimes, they require watering more than once a day, as nursery medium is often peat-based. I like to give them a shot of water-soluble fertilizer at half strength once a week. Ideally, it’s best to place nursery plants in the garden right away.

I’m enjoying my summer job—playing in the dirt. I hope you enjoy summer, too!

—Lisa M. Long

Columbia County Master Gardener™

Free gardening ebooks at:

Smashwords.com/profile/view/LisaMarieLong

JULY

Garden hints from your OSU Extension Agent

Oregon State University Extension Service encourages sustainable gardening practices. Always identify and monitor problems before acting. First consider cultural controls; then physical, biological, and chemical controls (which include insecticidal soaps, horticultural oils, botanical insecticides, organic and synthetic pesticides). Always consider the least toxic approach first.

All recommendations in this calendar are not necessarily applicable to all areas of Oregon. For more information, contact your local office of the OSU Extension Service. **Maintenance and Clean Up**

- Mound soil up around base of potatoes. Gather and eat a few "new" potatoes from each hill, when plants begin to flower.
- Early morning is the best time to water vegetable and flower gardens to reduce evaporation. Water the soil, rather than leaves to reduce disease. Water deeply and infrequently to encourage root growth.
- Hanging baskets of flowers or vegetable plantings need careful attention to watering and feeding during extended periods of hot weather.
- Weed and fertilize rhubarb and asparagus beds. A mulch of compost or rotted cow manure works well as fertilizer. Water deeply to develop crowns for next year.
- Mulch to conserve soil moisture with paper, plastic, sawdust, etc.
- Stake tall-growing flowering plants such as delphinium, hollyhocks, and lupine. Stake tomatoes, as necessary.
- If a green lawn is desired, make sure lawn areas are receiving adequate water (approximately 0.5 to 1.5 inches per week from June through August). Deep watering less often is more effective than frequent shallow watering.
- Make compost of lawn clippings and garden plants that are ready to be recycled. Do not use clippings if lawn has been treated with herbicide, including "weed-and-feed" products. Do not compost diseased plants unless you are using the "hot compost" method (120° to 150°F).

Planting/Propagation

- Midsummer plantings of beets, bush beans, carrots, cauliflower, broccoli, lettuce, kale, and peas will provide fall and winter crops.
- Dig spring bulbs when tops have died down; divide and store or replant.

Pest Monitoring and Management

- Continue monitoring raspberry, blackberry, blueberry, cherry and other plants that produce soft fruits and berries for Spotted Wing Drosophila (SWD). If SWD are present, use an integrated and least toxic approach to manage the pests. To learn how to monitor for SWD flies and larval infestations in fruit, visit <http://swd.hort.oregonstate.edu/gardeners>.
- Control hollyhock rust by sanitation, picking affected leaves, or spraying with a registered fungicide. Read and follow label directions.
- Watch for cutworm damage in garden. (In July, climbing cutworms become a problem and large portions of foliage will begin to disappear on established plants.) Use barriers, remove by hand, use beneficial nematodes when soil temperature is above 55°F, or spray with *Bt-k* according to label directions.
- Late this month, begin to monitor for early and late blight on tomatoes.
- Place traps to catch adult apple maggot flies. You can use pheromone traps to monitor presence of pests.
- July 10: spray filbert trees for filbert worm, as necessary.
- July 10-15: spray peach and prune trees for peach tree borer, and peach twig borer, as necessary.
- July 17-23: third spray for codling moth in apple and pear trees, as necessary.
- Cover blueberry bushes with netting to keep birds from eating all the crop.
- Watch for early and blight on tomatoes. Correct by pruning for air circulation, picking off affected leaves, and/or treat with approved fungicide.
- Monitor camellias, holly, maple trees for scale insects. Treat if necessary.
- Monitor rhododendrons for adult root weevils.
- Check leafy vegetables for caterpillars. Pick off caterpillars as they appear. Use *Bt-k*, if necessary.
- Spider mites can become a problem on ornamental plants, vegetables, and fruit plants during hot, dry weather. Watch for dusty-looking foliage, loss of color, presence of tiny mites. Wash infested areas with water or spray with appropriate pesticides.
- Remove cankered limbs from fruit and nut trees for control of diseases such as apple anthracnose and bacterial canker of stone fruit. Sterilize tools before each new cut.

Farm and livestock notes

Where are the nutria?

Several observant Columbia County farmers and fishermen have called to say that the nutria seem to be largely gone from the lower Columbia river. Nutria were introduced from South America for their fur in the early 1930s (they were the emu get rich quick scheme of their time) and either escaped or were released by owners who couldn't make a go of nutria ranching. Nutria look most like a medium beaver but have a rat like tail. They have big orange rodent front teeth. They are largely vegetarian and have been altering the aquatic vegetation in the area for a long time. They den in holes made into a river



bank or dike.

For years, they were very abundant. Not now, at least here. Why the change? The most likely explanation is that they either out grew the available food (nutria eat a tremendous volume of succulent aquatic plants but are also fond of lawns), a disease has gone through the population thinning it out drastically, and/or predators like coyotes and eagles have taken their toll.

Early impacts of fewer nutria seem to be more muskrats (native) and more vigorous native plant communities. Some rush populations are returning as are some wapato patches. It is too early to say that this will be the new normal. Populations of successful invaders are hard to keep down.

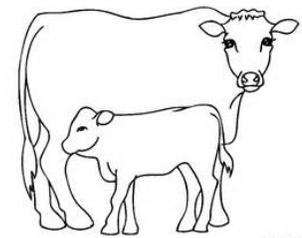
But the return of the native plants should encourage more control efforts for the nutria that are still present. It's always been an open season on nutria. If you have any insights, I am interested in your observations.

Cow maintenance costs and genetics

Beef producers have seen trends in cattle type come and go, from the short and fat dwarf cattle of the 1950s to excessively large-framed giants of the 1970s and 80s. Since the 1990s, cow sizes have become more moderate, but Oklahoma State University animal scientist Dr. Dave Lalman, says many producers still are not selecting for cows that match their environments, meaning lost efficiencies and higher-than-necessary production costs.

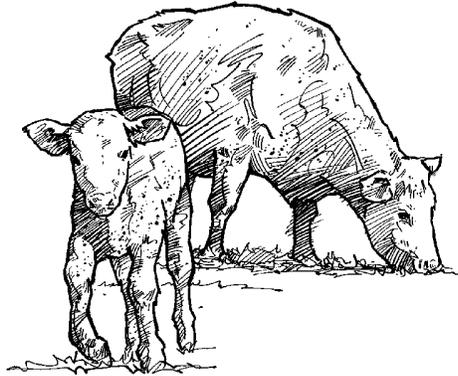
In some respects, producers have made good progress in improving the genetic potential in their herds, Lalman says. For example, birth weights have held fairly stable while weaning weights have increased in some breeds, and fed cattle today average close to 70 percent USDA Choice compared with 50 percent in 2006.

However, he says cow efficiency does not appear to be improving significantly. There is good evidence that producers are feeding more hay per head to meet the growing appetites of their cow herds.



Lalman focused particularly on milk production as a trait indicating overall cow efficiency. Data show, he says, that just one breed – Simmental – has posted reductions in its average EPDs for milk production in recent years. Historically, Simmental was had the highest milk production among beef breeds. Virtually all

the other major beef breeds have been moving higher in milk production. Even in the Oklahoma State University commercial cow-calf herds, average milk yields have increased from 17.8 pounds per day in 1998 to 31 pounds today. Higher milk production, Lalman says, correlates directly to higher year-around maintenance requirements for the cow. Those high-milking cows have greater visceral-organ mass, need more harvested feeds and are more difficult to keep in good body condition for high first-service pregnancy rates.



Part of this trend relates to steer and heifer yearling weights, which have been increasing for most breeds. Higher yearling weights in feeder cattle generally correspond with heavier mature weights for cows, and mature-cow weights have been moving higher in several breeds.

Some breeds and breeders are measuring and selecting for lower feed intake and feed efficiency along with adequate growth and milk production and other economically important traits. Lalman says commercial producers should take a close look at their forage resources, feed expenses, cow size and milk EPDs, and consider applying selection pressure toward cows that perform efficiently in their production environment, with lower maintenance requirements and less need for harvested feeds. In summary he says:

- There is little to no evidence that cow efficiency is improving.

- Commercial cow herds are on an unsustainable path for some genetic traits.
- Cows are not getting taller, but are getting bigger.
- The cow-calf sector overall can't seem to get enough milk production and muscle growth.
- Feed inputs and costs per cow-calf pair continue to increase, and production returns are not keeping up with those costs.

Slightly edited from an article in Drovers online news feed.

Mixing order for crop protection products

Tank mixes save time and fuel. But the mixing order can affect the activity and effectiveness of any sprays that you might apply. For detailed recommendations, talk to your dealer about any specific mixing or compatibility issues with the products you are considering mixing into one application.

1. Read and follow all label instructions.
2. Fill spray tank to about 70% of what you need. Start agitation.
3. Add any water conditioners (including ammonium sulphate or pH altering materials).
4. Add Water Dispersible Granules (WDG) or Dry Flowables (DF).
5. Agitate for at least 10 minutes
6. Add liquid suspension concentrates and continue to agitate.
7. Add any Emulsifiable Concentrate (EC) products (keep agitating)
8. Add any soluble liquid products
9. Fill tank nearly full
10. Add glyphosate products if using
11. Add any adjuvants and fill the tank
12. Apply as labeled.

How to improve weed control

1. Identify the weed. We can help with this. Just send us a picture or bring down the weed(s).
2. Select the right mix of treatments appropriate to the crop and weed. In most cases, cultural controls like tillage, grazing management, etc. are combined with herbicide tools.
3. Control weed seedlings within the first four weeks after germination if possible.. This is very important. It means you must know weed life cycles and be observant.
4. Kill annual and biennial weeds as early in the life cycle as possible. Don't let them go to flower.
5. Control perennial weeds in the bud stage or as the label directs. Treat perennial weed re-growth or escapes that fall.
6. Remember that fall is a good time to control tansy seedlings and Canada thistle that re-grew after haying.
7. Use spring/summer rotation grazing to strengthen grass and reduce weed biomass.
8. Don't graze your pastures much from

November through March. The grazing can reduce the vigor of the grass.

9. Fertilize all crops to maintain maximum vigor.
10. Keep fence line, ditch banks and roadways free from weed seed sources.

Stockpiled forage

As I write this, we are just getting our second bit of good hay weather since early May. Some fields may not get cut with the later season and a shortage of people who cut and bale. Just how valuable is mature standing forage for grazing? It is low in protein, often about 4% or less. However, ruminants like cattle and sheep can make good use of this forage if they are supplied with enough extra protein to crank up the rumen bacteria.

You can feed alfalfa, soybean or cottonseed meal rations to make those bacteria happy. Research indicates that the animals actually use the protein supplements better if they are fed a double dose every other day. If you have questions, give us a call. *Inspired by comments from Shelby Filley, Extension Livestock Agent, Southern Oregon.*

Cost of hay per ton when bought by the bale

| <u>Bale weight (#s)</u> | <u>Bale price</u> | | | | |
|-------------------------|-------------------|---------------|---------------|---------------|---------------|
| | <u>\$1.00</u> | <u>\$2.00</u> | <u>\$3.00</u> | <u>\$4.00</u> | <u>\$5.00</u> |
| 40 | \$50 | \$100 | \$150 | \$200 | \$250 |
| 50 | \$40 | \$80 | \$120 | \$160 | \$200 |
| 60 | \$33 | \$67 | \$100 | \$133 | \$165 |
| 70 | \$29 | \$57 | \$86 | \$114 | \$143 |
| 80 | \$25 | \$50 | \$75 | \$100 | \$125 |
| 90 | \$22 | \$44 | \$67 | \$89 | \$111 |
| 100 | \$20 | \$40 | \$60 | \$80 | \$100 |

2016 Summer Food Preservation Classes, held in St. Helens



Back by popular demand are our summer food preservation classes. These classes are great for both the beginner and experienced canner. Classes will be held in St. Helens at the Columbia Soil & Water Conservation District. Class size is limited to allow for hands-on involvement in the kitchen.

Saturdays, **July 30, 9 a.m. to 1 p.m. – Water Bath Canning High-Acid Foods** and **August 27th, 9 a.m. to 1 p.m. – Pressure Canning Low-Acid Foods.**

Cost to attend is \$30 per class. A small number of scholarships are available. Payment must be made in advance to hold your spot. Contact the OSU Extension Service – Columbia County office at 503-397-3462 to register or online at <http://extension.oregonstate.edu/columbia>.

Benny Beaver set to entertain at 2016 Fair

Benny Beaver will be showing his trademark buckteeth and flat tail at the Columbia County fair this year! The OSU mascot will be trotting about the fairgrounds on Saturday, July 23, starting at 2:30 p.m. with free photo opportunities. He will be on stage with the Hit Machine at 4:30 p.m. and at the Rodeo Grand Entry at 7 p.m. If you are able to stop by, he will be handing out OSU swag for fair-goers.



If you have questions about Benny's visit, contact Woody Davis at 503-397-3462 or woody.davis@oregonstate.edu.

We encourage all OSU supporters to wear ORANGE on Saturday of fair!

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