



Country Living

Provided to you by the
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November 2014

Programs for you . . .

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

- Nov. 4 Scappoose Bay Watershed Council. 7 p.m., Scappoose Bay Watershed Council's office, Warren
- Nov. 6 Master Gardener™ Board Meeting. 3:45 p.m., OSU Extension Classroom, St. Helens
- Nov. 11 Lower Columbia Watershed Council. 7 p.m., SWCD office-35285 Millard Rd., St. Helens
- Nov. 19..... Soil & Water Conservation District. 7:30 p.m., SWCD office-35285 Millard Rd., St. Helens
- Nov. 27-28 Thanksgiving Holiday, Extension Service office closed

READING THIS ON PAPER?

You can receive this newsletter (in full color and with working links) and other news by subscribing to our email list.
Just send an email to vicki.krenz@oregonstate.edu and request to be on the Country Living email list. Include a physical address and phone number (so we can remove you from our paper mailing list and keep our email list current).



Chip Bubl

Chip Bubl, OSU Extension Faculty, Agriculture



Agriculture, Family and Community Development, 4-H Youth, Forestry, 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

Brown Marmorated Stink Bugs look to spend the winter with you

Despite its cumbersome name, the BMSB is getting quite a reputation. These insects are now present in much greater numbers than they were some six to eight years ago when they first showed up in Columbia County. In the greater Portland agricultural region, they stuck their piercing mouthparts into peppers, tomatoes, apples, and pears. The injection and sucking of the “fruity juicy bits” is facilitated by an enzyme that causes dry, hard dimpled areas to form in fruit near the fruit surface. Often, home gardeners either don’t notice the surface damage or just pare it away. But



commercially, it is a major defect and leads to lots of unsaleable and discarded produce.

The true bug is distinguished by the alternating black and yellow bands on its antenna and legs. We have one native bug that is similar in appearance but not present in anywhere the numbers of the BMSB and it lacks the black/yellow antennae banding.

What is especially awkward this year is that BMSBs numbers are high and they have decided they want us to share our houses with them (and with the box elder bugs and Asian lady beetles). BMSBs are showing up on exterior walls exposed to the sun in the afternoon. They then find ways to get inside, either through gaps in siding around exterior window frames, poor covers on soffit vents, chimneys with gaps where they come through the roof, and/or traveling inside on a

garage door when it is opened and not taking the return trip back out.

Once they are in, they really have no escape plan. If they get into a cool attic, they can stay there until it starts to warm in the spring. Later it becomes clear to them that they made a very bad life choice since they can’t locate the exit signs. Then they die. BMSBs in warmer portions of the house either get smashed by homeowners, escorted out, “bug-bombed” (not very effective), or dry out and die. They do no direct damage to houses but their psychological impact on the less insect-friendly homeowners is significant.

There is considerable debate about whether there is any benefit to spraying the outside walls of your house where the insects congregate. I think it is generally a wasted effort but in some cases, it may be a benefit. Most effective insecticides are the synthetic pyrethroids labeled for exterior home insect control. When using any pesticide, read and follow all label instructions. The other options are tightening up the house by caulking around window and door frames, closing up chimney gaps, and sweeping off the garage door of the resting BMSBs before you raise it.

Publications for evening reading

PNW 655, *Raspberry cultivars for the Pacific Northwest*. New February 2014, 11 pages, NC <https://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/45870/pnw655.pdf>

PNW 656, *Blueberry cultivars for the Pacific Northwest*. New February 2014, 13 pages, NC <http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/45871/pnw656.pdf>

EC 1618, *Strawberry cultivars for western Oregon and Washington*. Revised February 2014, 8 pages, NC <https://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/45878/ec1618.pdf>

Vole control in the garden

Many have discovered that vole numbers have exploded. No one knows why. These rascals (also known as meadow mice) can damage a lot of woody plants in the winter. So what can you do?

First, reduce their hiding places by tight mowing (this is very important



around young trees since voles seem particularly attracted to young bark) and removing plastic mulches. Second, collapse mole tunnels that give voles access to tree trunks, tree roots, and your root vegetables left in the garden. Knocking in tunnels is a hard task since there can be lots of tunnels in a relatively small area. Persistently trapping moles will help.

Mouse traps work! Meadow mice don't seem to be the brightest animal on the block. They have devoted their evolutionary energy to reproduction. Many voles are having youngsters within 6-8 weeks after they were born.

Voles can be trapped repeatedly in the same area with the same bait (most use peanut butter). Find a way to place the traps somewhere voles are active (check this by putting apple slices out under a board over vole pathways to see if they get gnawed) and locate the traps in a dip and underneath something so that birds won't get inadvertently trapped. There must be enough free space for the trap to close normally. There are some newer snap traps that take less space for the trap mechanism to work and are also easily thumb set. These traps are readily available and I have found them to be effective.

Fruit flies drink to get well

Fruit fly numbers are finally slowing down. Good sanitation helps. So does colder temperatures and less fresh fruit on the counters. Fruit flies reproduce by laying their eggs on or near rotting fruit. The maggots hatch, feed on the yeasts and bacteria that rot the fruit, develop into adult fruit flies that mate and lay eggs and so it goes.

Recent research studied a tiny wasp that lays its eggs in fruit fly maggots. But, since it takes some time for the wasp larva to develop, the maggot is not killed by their presence. Instead, it continues to grow after the maggot turns into a fly. Eventually, the adult fruit fly dies from the feeding in what probably is an awful death.

But fruit flies have a defense! They have a gene that produces an enzyme that detoxifies alcohol. So fruit flies maggots seek out yeasts which produce alcohol from the fruit they are rotting. The maggots get enough alcohol in their system to kill the wasp eggs but stay alive themselves by that defensive alcohol-detoxifying enzyme. It doesn't help to hit the sauce before the egg is laid but those maggots will crawl on the double to alcohol-rich yeast colonies once they are infected with the wasp eggs. Self-medicating maggots!

The wasp also dies a rather bizarre death but I won't go into that.

One wasp species

didn't take this lying down. They evolved an alcohol tolerance to resist the maggot's booze defense. A toast to both.





That's the Way it Grows

Inspiration

Inspiration for your landscape can come from just about anywhere. Those of us who are more paint-by-numbers instead of fly-by-the-seat of your pants need a little extra help in that department.

Sometimes inspiration can be a magazine photo. Sometimes a stroll through a good nursery, or a stroll through a neighborhood to drool at the yards you wish you had. Sometimes it comes from a garden book you've flipped through a hundred times and finally found the right page, or just a talk with a friend about your landscaping (or lack thereof).

My inspiration came from a rock. Or a picture of a rock, anyway. I commandeered a magazine from my mom's kitchen table (which I hope she doesn't remember I still have!) and found the right photo that just struck me. A rock, with a bowl shape, just perfect for a tiny "pond."



And that was all it took to get my mind running with ideas and me drawing pictures and buying plants and visiting anyplace that sells rock. And now I have it. The perfect rock. The perfect place to start from in my front garden bed, which has been bare dirt and VERY sad looking for a year now. I was waiting, apparently, for a meteor to hit. It did, in a way.

Visualize, if you will, a small bed beneath my front window, about two feet by ten feet. The morning sun hits the water in my bowl-shaped rock, nestled among creeping ground covers that tolerate afternoon shade and drier conditions. Several flat rocks of interesting shape lay on the mulch surface, with the creeping plants growing between and over them. Short blue fescues poke up, along with the grassy mop of *Armeria* that will produce its intense violet pom-pom blossoms in the summer. The long, spiky leaves of a *Dracaena* poke up from behind my rock-bowl, while a metal sculpture of a blue heron stands beside it, as if watching for a meal. Dew glistens from leaves in shades of green, yellow, silver-blue and red, that contrast and compliment the colorful flat stone edging the bed. I assure you, it truly is a sight.



For now, it exists only in my head. But the weatherman predicts some good weather coming, and I've got the rock and the plants. The inspiration has hit me, my friends. Sometimes all it takes is to be hit over the head with a rock.

Happy Fall Gardening!

—Lisa M. Long
Columbia County Master Gardener™
Smashwords.com/profile/view/LisaMarieLong

NOVEMBER

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.

Planning

- Force spring bulbs for indoor blooms in December.

Maintenance and Clean Up

- All of Oregon: Service lawn mower prior to winter.
- Check potatoes in storage and remove any going bad.
- Place a portable cold frame over rows of winter vegetables.
- Place mulch around berries for winter protection.
- Cover rhubarb and asparagus beds with composted manure and straw.
- Rake and compost leaves that are free of diseases and insects. Use mulches to prevent erosion and compaction from rain.
- Protect built-in sprinkler systems: Drain the system, insulate the valve mechanisms.
- Clean and oil lawnmower, other garden equipment and tools before storing for winter. Drain and store hoses carefully to avoid damage from freezing. Renew mulch around perennial flower beds after removing weeds.
- Protect tender evergreens from drying wind.
- Tie limbs of upright evergreens to prevent breakage by snow or ice.
- Trim chrysanthemums to 4 to 6 inches after they finish blooming.
- Leave ornamental grasses up in winter to provide winter texture in the landscape. Cut them back a few inches above the ground in early spring.
- Last chance to plant cover crops for soil building. You can also use a 3- to 4-inch layer of leaves, spread over the garden plot, to eliminate winter weeds, suppress early spring weeds and prevent soil compaction by rain.
- Watch for wet soil and drainage problems in yard during heavy rains. Tiling, ditching, and French drains are possible solutions. Consider rain gardens and bioswales as a long term solution.
- Take cuttings of rhododendrons and camellias for propagation; propagate begonias from leaf cutting
- Prune roses to "knee-high" to prevent winter wind damage.

Planting/Propagation

- Plant window garden of lettuce, chives, parsley.
- Good time to plant trees and shrubs. Consider planting shrubs and trees that supply food and shelter to birds; e.g., sumac, elderberry, flowering currant, and mock orange.
- Still time to plant spring-flowering bulbs, such as tulips, daffodils, hyacinths, crocuses. Don't delay.
- Good time to plant garlic for harvest next summer, and to transplant landscape trees and shrubs.

Pest Monitoring and Management

- Monitor landscape plants for problems. Don't treat unless a problem is identified.
- Rake and destroy leaves from fruit trees that were diseased this year. Remove and discard mummified fruit.
- Check firewood for insect infestations. Burn affected wood first and don't store inside.
- Treat peaches 4 weeks after leaf fall spray for peach leaf curl and shothole diseases.
- Moss appearing in lawn may mean too much shade or poor drainage. Correct site conditions if moss is bothersome.
- Bait garden, flower beds for slugs during rainy periods. Use traps or new phosphate baits, which are pet-safe.

Houseplants and Indoor Gardening

- Reduce fertilizer applications to houseplants.





The Grapevine
 News for Columbia County Master Gardeners™
www.columbiacountymastergardeners.org



November 2014

Deadline for THE GRAPEVINE - All materials will need to be into the OSU Extension office no later than the 20th of each month.

President's Corner

Greetings from my Garden

Well, the rains have arrived and summer is officially over. I did manage to get the lawn fertilized and cover crop planted in the garden before the waterworks started. I like to plant crimson clover for the cover crop - it is good for the soil and the blooms really attract the bees.

A group of us went to the Oregon Garden this last week. They offer really nice packages that include rooms for the night, dinner, live entertainment, breakfast and also admittance to the garden. All in all it was a very enjoyable evening and a great way for friends to celebrate the end of summer.

The weather didn't cooperate for touring the garden, but I enjoyed it anyway. We've been through the garden numerous times but never in the fall - it has a whole new look. If you haven't visited, it is really worthwhile.

My wife and grandson got anxious and dug one raised bed of sweet potatoes. They really like the raised bed and produced 52+ pounds from this one bed. You would have thought that it was Christmas and they were opening presents when the crop was exposed.

Our paw-paws have really produced this year. New to the dessert menu this year will be paw-paw sorbet.

We did attend the Home Orchard Society fruit tasting on Sunday, the 19th. There are always apples we have never tried and maybe we need in our orchard. You never know!

Happy Gardening! --Dennis Snyder

Busy Bee Wash

Come to any New Bug Crew meeting and you'll hear the exclamations, *wow* and *cool* or *I had no idea*, and that perfectly describes the enthusiasm and discoveries we made at our Bee Wash on October 11. We were so busy we lost count of how many cocoons we washed, but ten Mason beekeepers came with nests to clean. In addition to Mason Bees, we found Paper Wasps in one nest, Grass Carrying Wasps in another,



Calendar: At-A-Glance

Nov. 6. Board Meeting, 3:45 p.m. Extension office

Note:

- ✓ ..No Demonstration Garden and other MG Extension Projects Planning meetings until March 2015
- ✓ ..No Chapter meetings until January 2015

and a cocoon we'd never seen before, but with the help of Ron Spendal, identified as an Organ Pipe Wasp. Thank you to everyone for your help and getting the word out. Don't forget that Ron Spendal will present his research about Mason Bees and other solitary nesters, including the Organ Pipe Wasp and Grass Carrying Wasps, Thursday, November 13 at 6 pm at the Extension Office.

--Deb Brimacombe

Election Results - 2015 Officers:

President – *Wes Bevans*; Vice-President – *Joe Crisp*; Treasurer – *Peggy Crisp*; Secretary – *Sue Snyder*; Historian – *Lavina Patterson*; State OMGA Rep – *Chuck Petersen*; and Alt. State OMGA Rep – *Deb Broberg*. Thank You All!



St Helens Garden Wins by 18 Pounds!

This was a gardener's dream summer and the competition was hot, too. St. Helens only slipped behind Scappoose once, maybe twice, and managed to take the title for 2014. The final – St. Helens with **2964** pounds donated and Scappoose with **2946** pounds donated. As one of their star gardeners claims, "And ours is a smaller garden." Congratulations St. Helens, but don't expect to hold that title for long!

--Deb Brimacombe



Nature notes

Deer rework forests

Another study has further described the impact of deer grazing on the native species diversity of Eastern hardwood forests. For a long time, it has been known that deer numbers in these forests are much greater now (by about 10 times per square mile) than when Europeans first settled the east coast. That is largely due to more cleared land, younger forests, and fewer large predators like cougar, bear, and wolverines.



Some years ago, it was noted that the palette of fall forest colors was diminishing. A closer look revealed that the deer were eating the seedlings of all but a few native species and thus converting what had been a rich mix of twenty plus trees down to about five. With that decline came the decline in visual interest in the fall color but also a decline in insect, bird, and other species diversity in the forest.

The new study looked at deer impacts and the invasion of the forest by non-native species. What they found was really not surprising. The deer preferred native plants to non-native ones. That led to an over grazing of native species and a helping hand to non-native ones by removing their competition. Overall, there were more and larger bare patches, less recruitment of native species, much lower native species diversity, lower total overall plant biomass, and the development of shrub thickets largely composed of non-native species.

In addition, they discovered that the seed bank in these forests were very different in those areas grazed by deer and those from which they were excluded. There were far fewer seeds of native woody plants present and a far greater number of non-native

annual, biennial, and perennial plant (both herbaceous and woody) seed present. That predicts that even with focused reduction in deer populations, it would take the forest a long time to regain its natural state.

I can see this happening in our own forests, particularly with the proliferation of ivy,

Scotch broom, the geranium known as “Stinky Bob (aka Robert’s Geranium), and other invasive species in our forests and a smaller palate of native species due to high deer grazing pressure even where invaders haven’t taken over.

Climate change and bird distribution

Scientists are busy trying to predict how mobile species like birds will respond to climate change. Temperature is the variable most studied. But it had rather poor predictive value when used alone for climate changes that already happened.

When precipitation change was added to the model mix, the predictive capacities of the models improve greatly. That makes sense, given that water (from rain, snow pack, fog, etc.) is important for all species to consume directly. In addition, precipitation has a huge impact on the plant species that prosper or are stressed as the regional climate profiles change. They are often the foundational species for the web of life for all species

Birds are the most studied since they are quite mobile. Other slower moving species like amphibians, plants, will either have to evolve in place quickly (not an easy task which is what makes this process so ominous with the current and predicted rates of change) or go extinct. We look fairly good in the climate change projections for the Pacific Northwest west of the Cascades but that really shouldn’t make us too happy.

Farm and livestock notes

Winter feeding

Several factors affect the nutritional demands of your livestock as you start winter feeding:

What condition are they in coming into late fall? Learn to body condition score your animals. There are many resources on line. Just type in “body condition scoring + cattle + university” and you will some good info. You can substitute sheep for cattle.

What is the weather like? Wet

weather takes a tremendous toll on livestock outside. Rain reduces the insulation value of hair or wool, forcing the cows and ewes to burn more calories to maintain body heat. A dry place to feed and rest is very important.

What is the quality of your feed? This can be a bit tricky. Most people don't test their hay nor do the sellers. Hay that is leafy and green will probably have a crude protein (CP) content of ~7% and a “total digestible nutrients” or TDN of ~55%. Over-mature hay can be dramatically lower in both CP and TDN. More on that in a minute.

What do your animals need over the winter feeding months? An 1100 pound cow will need 1.4 pounds of crude protein and 9.7 pounds of TDN per day now in this stage of gestation. In the late gestation stage or in very adverse weather conditions, the demand goes up to 2.9 pounds of CP per day and 16.8 pounds of TDN per day.



So can your hay alone meet this demand? In other words, how much hay can they consume/day and will that amount give them what they need through calving? Cattle can only consume 1.5 percent of body weight (BW) of low quality forage per day, 2.5 percent of their BW of medium quality forage per day, and 3+ percent of their BW of high quality forage per day. For an 1100 pound cow being fed 7% CP and 55% TDN hay, she will be eating about 26 pounds per day (28-30 pounds of actual hay to account for moisture in the hay and some bunk loss). So how much CP and TDN is in 26 pounds of that hay? $CP = 26 \times .07 = 1.82$; $TDN = 26 \times .55 = 14.30$. So at this gestation stage and in good weather conditions, both the CP and TDN needs are being met. But if weather and/or barn conditions really get bad or we get into late gestation, **this amount of hay will not cover her needs!**

So can you just feed more hay? It won't work because she literally can't eat anymore hay unless you improve the protein and TDN through supplements. That is why many livestock raisers feed 2/3 local hay and 1/3 alfalfa each day. That would be, for the cow, ~20 pounds of local hay and 8 pounds of alfalfa per day. Others will feed about 6 pounds of a supplement containing 16% or more protein and adequate TDN with 22-5 pounds of hay.

The crude protein (CP) rule of thumb for mature cows is 7-9-11. Cows need 7 percent CP feed during mid-gestation, 9 percent during late gestation and 11 percent during lactation. The total digestible nutrients rule is 55-60-65 for the same periods.

I hope this helps you to plan your feeding program. People raising sheep can use the 1100 pounds and divide it by the weight of

your ewes (say 150 pounds each to get the amount each ewe should get per day.

Chickens on pasture

Putting chickens out on pasture is a popular management method for many small flock



owners. The birds can freely scratch and peck over a large area, eating to their heart's content. The best pasture for chickens is one with a variety of

plant species for a couple of reasons.

Nutritionally, the value of the pasture is really tied up in the insects and in any seeds that are created by the pasture grasses. The grass itself is not of particular value in a poultry diet.

They will consume some of the grasses, particularly early in the season, but as you get later it's not providing very much nutrition other than the birds' ability to find insects and seeds.

Unlike other pasture-grazing animals, chickens aren't able to digest plants, because they lack the enzymes to break down the cellulose. But even though chickens don't consume much of the forage, the pasture still needs to be managed. Poultry can't move around very well when the grass is a foot-tall. Going through with the mower is one option, but often, people use cattle or sheep to mow it down in a rotational grazing system.

If you have some cattle ahead of the chickens, then the cattle will keep the grasses down a little bit, move them around, and then have the chickens follow behind. They'll clean up materials that are left behind by the cattle, they'll spread everything around, they'll find all the insects and things in the manure. They'll pick up nutrients that the cattle don't digest so it's a great relationship.

Chickens also provide good nutrition for the pasture. Their manure leaves behind a healthy dose of nitrogen, potassium and phosphorus.

From Dr. Jim Hermes, OSU Poultry Extension Specialist.

Feeding Meat Type Chickens from Dr. Hermes is now available for free download at <https://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/46466/pnw658.pdf>

Herding sheep

Rounding up sheep successfully is a deceptively simple process involving just two basic mathematical rules, a study found. One causes a sheepdog to close any gaps it sees between dispersing sheep. The other results in sheep being driven forward once the gaps are sufficiently closed.

A computer simulation showed that obeying these two rules alone allowed a single sheepdog to control a flock of more than 100. The discovery has implications for human crowd control as well as the development of robots that can gather and herd livestock.

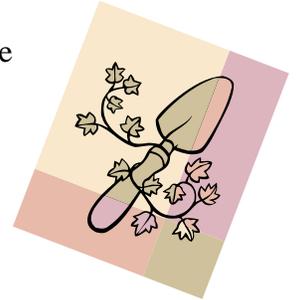
Swansea University lead researcher Andrew King, Ph.D., said, "If you watch sheepdogs rounding up sheep, the dog weaves back and forth behind the flock in exactly the way that we see in the model. We had to think about what the dog could see to develop our model. It basically sees white, fluffy things in front of it. If the dog sees gaps between the sheep, or the gaps are getting bigger, the dog needs to bring them together."

Researchers fitted a flock of sheep and a sheepdog with backpacks containing highly accurate global positioning satellite. Movement tracking data from the devices was programmed into computer simulations to develop the mathematical model. *Adapted from an article in the English paper The Daily News.*

2015 Master Gardener™ classes to be offered in St. Helens



The OSU Master Gardener™ class will be offered in St. Helens starting on Monday, January 5th and meeting every Monday through mid-March. The classes will meet from 9:00 am until 4:00 p.m. with an hour break for lunch. The programs will be held **St. Helens Public Library** in St. Helens. Topics to be covered will include vegetable gardening, insect identification, botany for gardeners, plant problem diagnosis, growing fruits and berries, lawn management, weed identification and management, pesticides safety, and plant propagation. Cost of the series will be \$75.00. Students completing the class will be expected to pay back about 60 hours on community horticultural projects. For more information or to register, contact the OSU Extension Office in St. Helens at 503 397-3462 or email either Chip Bubl (chip.bubl@oregonstate.edu) or Vicki Krenz at (vicki.krenz@oregonstate.edu).



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