



# Country Living

Provided to you by the  
**OSU Extension Service Columbia County**  
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## June 2019

## Programs for you . . .

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

- June 4..... [Scappoose Bay Watershed Council](#) 7:00 p.m. 57420 Old Portland Road, Warren.
- June 6..... [Master Gardener™ Board Meeting](#) 10:30 a.m. OSU Extension Service, St. Helens.
- June 6..... [Columbia County Oregon Beekeepers](#) 6:00 p.m. Meets 1<sup>st</sup> Thursday, monthly at CRPUD.
- June 8..... [St. Helens Garden Club Tour](#) 10 a.m. - 3 p.m. Rain or Shine! Tour of five Columbia County Gardens. \$10 with optional lunch & museum admission available for purchase. \*See back page
- June 11..... [Lower Columbia River Watershed Council](#) 7:00 p.m. Clatskanie PUD, 495 Hwy 30.
- June 24 ..... [Farm Bureau Meeting](#) 7:30 p.m. OSU Extension Service, St. Helens.
- June 27 ..... [Upper Nehalem Watershed Council](#) 5:30 p.m. at the Vernonia Grange, 1201 Texas Ave.
- June 27 ..... [Master Gardener™ Chapter Meeting](#) 6:30 p.m. Guest speaker: Jim LaBonte of the Oregon Department of Agriculture, presents "Oregon Spider Facts!" Public Welcome!



**Oregon State University**  
Extension Service  
Columbia County

*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

### Planning for a longer corn season

Sweet corn is best fresh from the cob. But overripe sweet corn is not all that great with muted flavors and sugars turned to starch. So how do you plan for a longer corn harvest? You plant several blocks of corn. But how do you know when to plant block 2 and possibly block three? Plant too soon and they may catch up to each other – not what you want. The best method is to wait until the previous block of planted corn is 2 to 3 inches high. An alternative is to plant corn varieties with different maturities together but I haven't found that works all that well, especially if the weather is cool after planting. There is still time to plant corn.

### Disease causing weather returns

Rain has returned and with the rain comes new concerns about diseases on many woody plants. Black spot on roses and apple scab on pears and apples will be evident soon. Cherries are showing signs of ["dead bud"](#) and bacterial canker. As temperatures warm and we get dry days with high humidity, powdery mildew will start infecting grape leaves and fruit and the leaves of a number of other susceptible woody and herbaceous perennial plants. If you wish to do any preventative spraying, start now.

### Improving clay soils

A discussion on how to improve clay garden soils reveals lots of opinions but surprisingly little comparative research. The core premise is that the small particles size and resulting small pore spaces of clay make drainage slow, leading to poor root aeration and poor plant

growth. That much is true. Possible solutions include:

- Soil drain tiles (to remove the water faster)
- Adding sand
- Adding organic matter
- Adding gravel
- Raised beds
- Cover crops

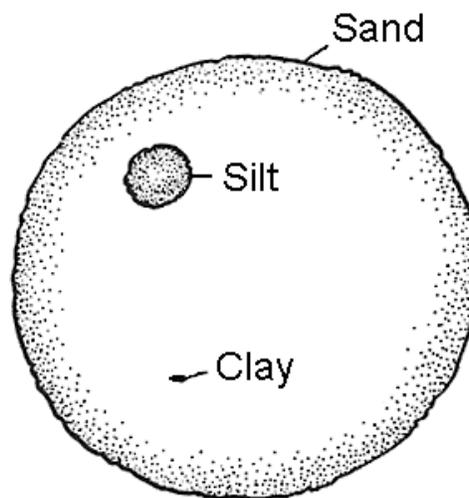
For a home garden, soil drain tiling is expensive, complicated, and best done while the home landscape area is being shaped. Finding a point to outlet water collected by the tiles can be a challenge.

Adding sand alone is very controversial. There is evidence that the interaction between some sand and some clay particles can create a soil that may become hard and unusable. The working theory is that tiny clay particles fill the pore spaces between much larger sand particles, causing the soil to harden. The recommendations to reduce this problem include using only sharp builder's sand (probably a good idea) and adding an equal

volume of organic matter at the same time (also a good idea). Others suggest that sharp sand alone will work if added in an amount equal to at least 30% of the soil volume. This is a lot of sand!! There is some logic to this but no evidence it really works with our clay soils.

Adding well-aged organic matter alone to clay soils has been shown to work in research by Neil Bell of OSU Extension. He tested un-

amended and compacted clay-loam soil and plots amended with compost. Those in the compost amended beds (compost either worked in or as a surface mulch) performed better.



For more information, see:

[https://cdn.ymaws.com/www.oan.org/resource/resmgr/imported/digger/Digger\\_May\\_2011\\_p49-53%20.pdf](https://cdn.ymaws.com/www.oan.org/resource/resmgr/imported/digger/Digger_May_2011_p49-53%20.pdf)

Also, here is an interesting and useful publication on organic mulches and their use:

<https://catalog.extension.oregonstate.edu/ec1629/html>

There is a passionate following for the use of quarter-ten sharp-edged gravel as a soil amendment for landscape beds. Joy Creek Nursery pioneered this treatment on some tough red-clay soils and the results are spectacular. Here are their recommendations:

- Loosen clay with a fork to the depth of the tines.
- Add on top two inches of sharp clean gravel.
- On top of gravel, add two inches of compost, or other organic amendment.
- Dig in to approximately eight inches with a spade. Mix well—the gravel will look like chocolate chips in cookie dough.
- For each planting hole, sprinkle in a handful of organic food with numbers like 4-6-5, or 4-4-8 to give plants a beginning boost.
- Spread on two inches of your favorite mulch. Keep mulch away from growing stems to avoid problems with rot.

I have seen enough to believe this works, at least for woody and herbaceous perennial plants.

Raised beds (and to some extent, berms) also work by raising the top layer of soil further above the winter water table. The raised beds require a lot of effort to install and maintain. Coupled with routine soil organic matter additions and fertilization, they will do just fine.

Finally, cover crops, which deserve more attention, help open soil by their penetrating roots and through their decomposition when the plants are tilled in.

## Organic insecticides

Here is a summary of the strengths (and weaknesses) of organic insecticides:

Neem/azadirachtin: Feeding deterrent and repellent. Slows insect molting. Fair on beetles. Weak on aphids. Good on caterpillars. Good on young thrips but not older ones. Neem should not be used as a rescue treatment but as part of a program to prevent problems.

Pyrethrum: Quick knockdown, little residual. Good on aphids/ whiteflies, thrips and beetles. Mixed on caterpillars.



Bacillus thuringiensis (Btk): A bacterial derived toxicant for use on caterpillars. Very effective if reapplied often and coverage is good. Bti works on mosquito and fungus gnat larva and there is another Bt active on several beetles.

Spinosad: Newer product from a fungal fermentation. Very good on caterpillars and thrips. Pretty good on beetles and caterpillars. Fair on aphids. Better residual activity than most organic products. Has been rapidly adopted by commercial growers. Several trade names.

Soaps and horticultural oils: Good on soft-bodied insects if directly sprayed. Good on thrips and mites. Can damage plants so read labels. Short-lived.

Essential oils: These work a bit like the soaps and also act as feeding deterrents. Good mite and aphid activity. Rosemary and citrus based products are available. Some can cause plant damage potential. Short-lived.

# JUNE

## 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

- Construct trellises for tomatoes, cucumbers, pole beans, and vining ornamentals.

### Maintenance and Clean Up

- Prune lilacs, forsythia, rhododendrons, and azaleas after blooming.
- Fertilize vegetable garden 1 month after plants emerge by side dressing alongside rows.
- Harvest thinnings from new plantings of lettuce, onion, and chard.
- Pick ripe strawberries regularly to avoid fruit-rotting diseases.
- Use organic mulches to conserve soil moisture in ornamental beds. An inch or two of sawdust, barkdust, or composted leaves will minimize loss of water through evaporation.
- Blossoms on squash and cucumbers begin to drop: this is nothing to worry about. Cherries may also drop fruit: this is not a major concern.
- After normal fruit drop of apples, pears and peaches in June, consider thinning the remainder to produce a larger crop of fruit.
- Make sure raised beds receive enough water for plants to avoid drought stress. 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. Measure your water use by placing an empty tuna can where your irrigation water lands.
- **(Mid-June):** If green lawns are being maintained through the summer, apply 1 lb. nitrogen per 1,000 sq.ft. to lawns.

### Planting/Propagation

- Plant dahlias and gladioli.

### Pest Monitoring and Management

- Continue monitoring blueberry, strawberry, cherry & other plants that produce soft fruits & berries for Spotted Wing Drosophila (SWD). If SWD are present, use an integrated, least toxic approach to manage the pests. To learn how to monitor & manage SWD, visit <https://extension.oregonstate.edu/pests-diseases/insects/spotted-wing-drosophila-swd>
- First week: spray cherry trees for cherry fruit fly, as necessary, if fruit is ripening.
- First week: spray for codling moth in apple and pear trees, as necessary. Continue use of pheromone traps for insect pest detection.
- Learn to identify beneficial insects and plant some insectary plants (e.g. Alyssum, Phacelia, coriander, candytuft, sunflower, yarrow, dill) to attract them to your garden. Check with local nurseries for best selections. See [PNW550](#) (Encouraging Beneficial Insects in Your Garden) for more information.
- Control garden weeds by pulling, hoeing, or mulching.
- Control aphids on vegetables as needed by hosing off with water or by using insecticidal soap or a registered insecticide.
- Watch for 12-spotted beetles on beans and lettuce and cabbage worms or flea beetles in cole crops (cabbage, broccoli, brussel sprouts). Remove the pests by hand or treat with registered pesticides.
- Spray peas as first pods form, if necessary, to control weevils.
- Birch trees dripping a sticky fluid from their leaves means that aphids are present. Control as needed.
- Use yellow sticky traps to monitor for cherry fruit fly. About 1 week after the first fly is caught, spray cherries at appropriate intervals.
- Last week: second spray for codling moth in apple and pear trees, as necessary.

### Houseplants and Indoor Gardening

- Move houseplants outdoors for cleaning, grooming, repotting and summer growth.

## Weed of the month: Nipplewort

Nipplewort (*Lapsana communis*) has become increasingly common in Columbia County over the last 30+ years. It is an Aster family annual native to Europe and Asia. Nipplewort probably came to North America in the 19<sup>th</sup> century, either as a contaminant in bags of crop seed or, possibly, as a medicinal plant. It is not clear why its abundance has changed so dramatically in the last 30 years.

Nipplewort is most often found at the margins of sun and shade, though it can thrive in full sun. It is rarely found in deep shade. It is not picky but it prefers soils that retain moisture well. Our clay-based soils fill that bill.

It has alternate, oval, and slightly toothed leaves arranged in a spiral along the stem. The leaves get smaller toward the top and the upper leaves aren't oval at all but more lance-shaped. The leaves and stems are hairy and when broken, ooze white latex. The larger lower leaves have two small lobes at their base. One story has it that the lobes resembled nipples. Another account claims that it is the shape of the unopened flowers that also were thought to resemble nipples. In any case, early medicinal botany was informed by the odd idea ("Doctrine of Signatures") that plant physical characteristics gave clues as to a plant's medicinal value. If a plant leaf looked like a nipple, it must be good for nipple ailments, hence the name.

Nipplewort can mature at 6 inches or grow to six feet. The small yellow flowers are borne on branching stems. The flowers are self-fertile. The seeds (achenes) form in capsules that give up their seeds when blown by wind, animal grazing, or other physical disturbance. The abundant seeds fall to the ground and are moved around by animal



feeding, vehicle traffic, or animal/human feet. It is common to see deer-clipped tops. Like many invasive plants, nipplewort seeds prefer bare, disturbed ground to get a good start. Thankfully, the seeds don't persist very long.

Given bare ground, nipplewort can dominate an area. Its seed germinates almost all year. In mild winters, it is quite capable of overwintering and going to seed the following spring. Nipplewort is fairly easy to pull when soil is moist. Hoeing is also effective if done early and often. Mulches can suppress germination. It is susceptible to post-emergent treatment with glyphosate (Roundup and other trade names). I haven't tried either boiling water or vinegar but plan to soon and will report.

Is it medicinally valuable? That isn't really clear. There are people that eat the leaves like spinach (cooked to get rid of the hairiness, I presume).

Here is a Finnish website with some good pictures of the plant:

<http://www.luontoportti.com/suomi/en/kukkakasvit/nipplewort>

## Skunk cabbage invades England

English wetlands are being choked with our very own western skunk cabbage and biologists are not at all pleased. Skunk cabbage was introduced as an ornamental aquatic plant in 1901 (those Brits really keep records!) and was first discovered "feral" in 1947. It has spread rapidly throughout Great Britain, especially in the more southern counties. Skunk cabbage forms large colonies, which choke out native bog plants, change local hydrology, and affect the survival of other non-plant species including insects, amphibians, and mammals.

Conservation biologists are actively developing tools and techniques to remove the plants. But it won't be easy. Skunk cabbage spreads by both seed and rhizomes. That is the nightmare scenario. Fortunately, here other species keep it in check. But those don't exist in England.

## Native plant of the month: Red alder

Red alder doesn't get the respect that it deserves. As a first colonizer of disturbed sites, logged or otherwise, it is generally treated like a nuisance, a tree to be killed to allow Doug fir and other conifer species to prosper. But is that always a good idea? The continuous replanting of Douglas fir has led to more and more acres of root rot. These trees thrive for a time and then fall over. There is no practical way to prevent it except to rotate out of Doug fir.

Alders, on sites with suitable moisture, will grow to harvest size in 30 years, command a great price, break up the disease cycle, and provide a boost of nitrogen to the firs that follow. Those firs almost leap out of the ground with enthusiasm. Alder management mainly involves thinning to the right stand density and possibly some lower limb removal.

The market for alder is easy to access and logs of suitable size are turned into kiln-dried hardwood lumber for furniture making and other valuable products. I have a large cutting board product made by Carl Brandenfels in a small factory in Scappoose from alder mill ends. After 35 years it is still beautiful and useful.

Biologically, alder is a keystone species along western streams and rivers. It provides shade to cool the creeks, feed for a variety of insects and the birds and fish that eat them, browse for beaver, elk and deer, and many of other functions. Alder groves along streams shelter salmon runs, and catch rocks (once they fall into the stream) for eggs to be hidden

in. Fallen wood decays in water into algae and other fungal/plant material that strengthen the micro and macro-invertebrate populations so important to salmon smolt.

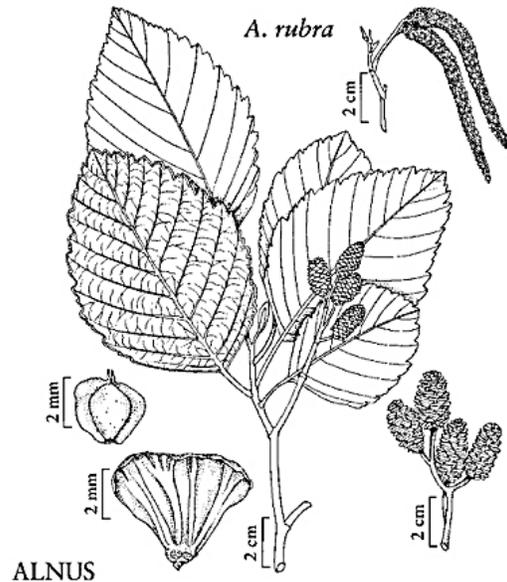
Not convinced yet? What about the value of alder for firewood (easy to split and of decent heat value) or for smoking fish (excellent!)

As alder ages (its best years are from 0-30) it is widely used by cavity nesting birds. When it dies, it is used by the banded alder borer (a striking black and white beetle) and oyster mushrooms which are delicious.

There is one odd aspect to alders. They have very few mycorrhizal fungi that produce mushrooms we value. In fact, alders in the western hemisphere (PNW to Argentina) have the smallest populations of ectomycorrhizal than any other common forest tree. For comparison, Douglas fir can have over 1,000 ecto species compared to 50 for alder. It is thought that the deep relationship that alders have with nitrogen fixing bacteria (not the same ones as legumes) may affect the need for or access to the alders by the ecto fungi. It appears that the ectomycorrhiza that colonize alders evolved together as communities throughout the hemisphere.

There are a few alder insects that cause calls to our office. The most common is the western tent caterpillar that devours alder leaves and, in a heavy outbreak, can defoliate the trees. That happened about 6 years ago in a ten-mile radius around Rainier. But all the latent leaf buds emerged after defoliation and a month later, you couldn't tell it happened.

This year, there was an outbreak of the alder flea beetle. Leaves were skeletonized but the trees will return healthy.



# Farm and livestock notes

## The ebb and flow of agriculture in Columbia County

The recent agricultural census noted a significant decline in agricultural land in Columbia County. Oregon has fairly good land-use laws designed to preserve agricultural land for future generations. But those have limitations. The best agricultural lands have always been behind the dikes along the Columbia, on the first “benches” adjacent to Highway 30 between Scappoose and Deer Island, and along the Nehalem in Vernonia. Historically, hill farms scattered throughout the county provided a lot of grazing and some grain.

So where are we now? First, many of the “hill” farms have been converted to tree farms as they were purchased by timber companies over the past 50 years. That grazing space is a fraction of what it once used to be and I suspect that trend may continue.

The close in “bench” agricultural lands have been reduced by rural residential and some industrial/commercial development. One large parcel outside the diked areas was mined for gravel and it is now lost to all potential uses. But there are still a number of farms on those bench lands.

The diked areas from Scappoose to Clatskanie contain the largest blocks of actively farmed land. They include over 300 acres of blueberries, a big mint farm, one medium sized dairy, a very large production nursery, about 800 acres of grain and

seed crops, some big pieces that currently are being grazed by cattle, an increasing acreage producing fresh market vegetables, and a number of productive small farms. Until recently, there were over 6,000 acres devoted to the production of hybrid poplars for pulp and dimensional wood use. But that operation seems to be winding down and may release a lot more quality land back to higher value agriculture.

The biggest risks faced by the diked lands are pressure from gravel mining in South County, creeping urbanization and/or industrialization, and the long-term status of the dikes. Land-use laws don’t protect farm land from mining as it is considered a “conditional” use, though there are processes to review that use. Converting land to residential or industrial land requires a more

forceful argument over the competing uses.

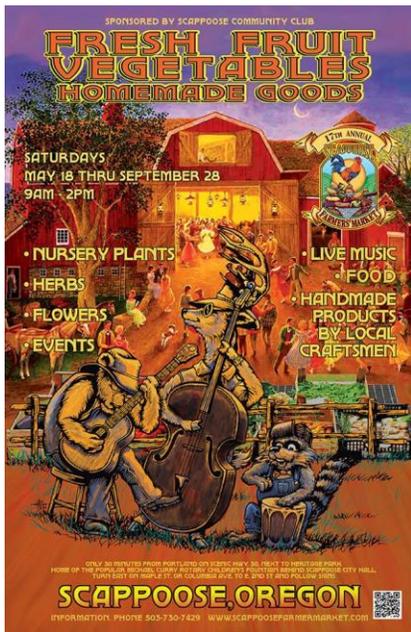
The dikes are the most complex story. They protect not only farm land but, in the case of Scappoose, the town as well. In winter, water is actively pumped from drainage canals into the Columbia to keep land from flooding. Many of the dikes were built in the 1930s and have had varying degrees of consistent maintenance over the years.

Hurricane Katrina breached the dikes around New Orleans and forced the Army Corps of Engineers to get serious about dike certification. Right now, no dikes in Columbia County are certified. The Scappoose District is furthest along but it still has a lot of work to do. The remaining Districts (~12) are in varying stages of planning for their continued future. A lot of good farm land is in the balance.



Picture: Scappoose and farm land

## Columbia County: Farmers Market Season is Ramping Up!



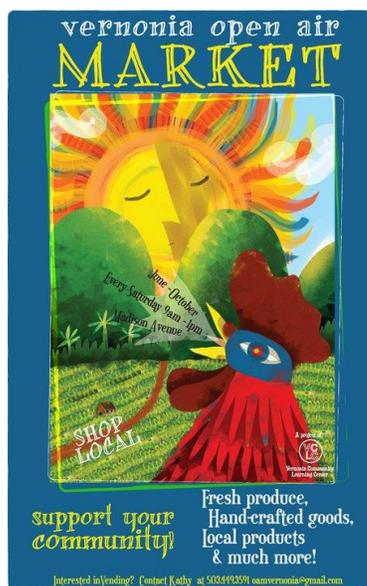
The [Scappoose Farmers' Market](#) is celebrating their 17<sup>th</sup> season! This year they will have a variety of new and past vendors, selling selections of nursery plants, beautiful fresh cut flowers, handmade jewelry, berries, leather products, soap, massage service, bakery goods, local, fresh veggies and more! Join the fun (live

music, too!) on East 2nd Street, one block off Hwy 30, just off Columbia Avenue, next to City Hall & Heritage Park with the popular Michael Curry Rotary Children's Fountain. The Market is open on Saturdays now through September, from 9am-2pm.

**Manager, Bill Blank, contact: 503-730-7429.**

The [Vernonia Open Air Market](#), a project of the Vernonia Community Garden, is underway for 2019! Their motto is "Building community by bringing farmers, crafters, artists and local businesses together." Located at Grant Avenue & Bridge Street. The 2019 Season runs May 18<sup>th</sup> – September 28<sup>th</sup> (except for August 3<sup>rd</sup>) from 10am-2pm.

**For Info, Contact: Brett Costley at (503) 307-3343.**



The [Clatskanie Farmers Market](#) kicks off their 6<sup>th</sup> season on Saturday June 1<sup>st</sup>. This community organized, nonprofit organization, operates with an emphasis on food literacy education. The Market is open on Saturdays from 10am-2pm through September, in Cope's Park, across from the Clatskanie Library and just two blocks off HWY 30. The Clatskanie Farmers Market features a unique green-space setting, weekly live music and a family-friendly outdoor venue to shop for local and unique produce, arts & crafts, and much more!

Clatskanie Farmers Market gladly accepts EBT - SNAP payments for qualifying purchases and additionally, select farmers honor the FSNP and WIC vouchers. Consider shopping locally for your family's healthy groceries, ingredients for your next barbecue, unique gifts for those very special people in your life, or just come to have lunch and enjoy this weekly fun, community event!



Special events scheduled this season include: Bee Education Day on July 27<sup>th</sup>, The 4th Annual Garlic Festival on August 17<sup>th</sup>, Apple Cider Pressing on September 28<sup>th</sup> and the Holiday Bazaar Dec. 6<sup>th</sup> - 7<sup>th</sup>.

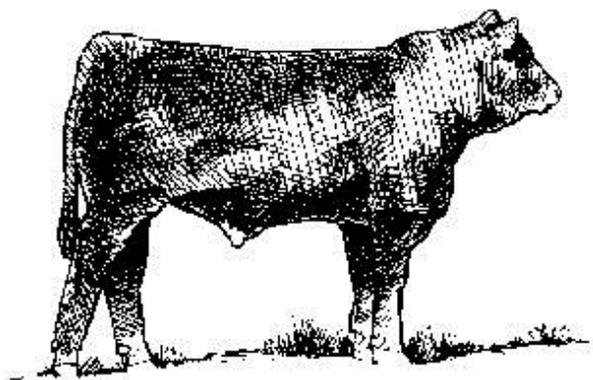
**Market Manager, Dimidy Kjelland, can be reached at 503-410-2595.**

Be a Farmers Market shopper. Support local agriculture & healthy communities! Use the Oregon Farmers Markets Assoc. [Market Finder Tool](#) to find a market near you!

~ Sonia Reagan, OSU Extension Staff

## Cattle fly control

Flies are not good for cattle. Face flies can transmit pinkeye. Horn, stable, and biting flies can transmit other diseases and can cause irritation and physiological changes that affect weight gains. Most cattle raisers use insecticide ear tags to reduce the problem. However, flies develop resistance to the insecticides in tags so over time, tag effectiveness may be reduced.



It is important that the insecticide “classes” of ear tags be rotated. This means that if you used a pyrethroid tag last year, try another type of compound this year.

There are some great new products that can be given to the cattle as boluses. These contain an insect growth regulator, which slow the development of flies from the manure piles. They can be very effective in a local area and are very non-toxic.

Talk to your veterinarian about the options available to you.

## Effect of Body Condition on Beef Cow Reproductive Performance

In an excellent review paper, University of Nebraska scientist, Rick Funston, discussed nutritional factors that affect reproduction in beef females. Table 1 shows the relationship of body condition score (BCS) to beef cow performance and income. BCS is evaluated on a scale of 1 to 9 (1=emaciated; 9=obese).

**Table 1. Relationship of BCS to Beef Cow Performance and Income**

BCS	Pregnancy rate, %	Calving interval, days	Calf avg. daily gain, lb	Calf weaning wt., lb	Calf price \$/cwt	Income, \$/cow exposed <sup>a</sup>
3	43	414	1.60	374	96	154
4	61	381	1.75	460	86	241
5	86	364	1.85	514	81	358
6	93	364	1.85	514	81	387

<sup>a</sup>Income per calf x pregnancy rate.

As shown above, peak performance and income were achieved at a BCS of 6. In addition to increasing costs, getting cows fatter would reduce reproductive performance, especially when BCS reaches 8 or 9.

*Extracted from Beef Cattle Research Update as prepared by Michigan State University*



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**June 8<sup>th</sup> 2019 - 10:00 a.m. – 3:00 p.m. “St. Helens Garden Club Tour” Rain or Shine!**

Join us for this year’s 2019 Garden Tour! Enjoy a day touring five beautiful gardens in Columbia County. Each place has its own unique style, which is sure to inspire you! \* Garden Tour Cost: \$10, Optional Lunch \$5, Optional Museum Tour \$3 \*Purchase Your Garden Tour Tickets in St. Helens at 2Cs Vendor Mall, Bertucci's Chocolates, or from the St. Helens Garden Club Members.

**June 27<sup>th</sup> 2019 - 6:30p.m. Jim LaBonte of the ODA presents, “Oregon Spider Facts!”**

Join us at the monthly Master Gardener Chapter Meeting to hear entomologist Jim LaBonte, of the [Oregon Department of Agriculture](#) (Insect Pest Prevention & Management Department) share about our Oregon Spiders. Listen to cool facts about the species of spiders around the state to learn they are far more beneficial than they are dangerous! Jim is the curator for the ODA insect collection in Salem and is extremely knowledgeable about Oregon insects in general. Free talk, open to the public.

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