Country Living

Provided to you by the
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November 2023

Programs for you . . .

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

November 2nd Columbia County Beekeepers Monthly meeting. The program will be a question and answer session on winter beekeeping duties and yearly Board elections. Thursday, November 2nd , at 7pm meeting at the Saint Helens /OSU Extension Office or by Zoom. Please email for the zoom link. All are welcome. Columbiacountyoregonbeekeepers@gmail.com

November 21st *Chat with Chip.* A roughly one-and-a-half-hour interactive Zoom program on garden and related topics with Chip Bubl. Tuesday, November 21st from 6:30 – 8pm. You are invited to attend! Reserve a place: https://beav.es/STR

Oregon State University Extension Service Columbia County

Chip Bubl

Chip Bubl, OSU Extension Faculty, Agriculture

In the garden and landscape

Winter dreaming

Different plants grow at differing rates, and plants do not grow at the same rate all of the time. During unfavorable seasons, such as the winter, they limit their growth or cease to grow altogether. This is why plants can survive the winter months or hot, drought conditions.

Dormancy is a special condition of arrested growth, after which growth continues when temperatures become warmer or when water or any other limiting factor becomes available again.

Bud dormancy: A dormant bud or embryo, however, can be activated only by certain, very often extremely precise environmental cues. Dormancy in buds is essential to the survival of both herbaceous and woody perennials that are exposed to our low winter temperatures.

Before plant growth ceases altogether in the autumn, the plant tissues undergo numerous physiological and physical changes to prepare for the winter months. This process is called **acclimation**.

It is triggered by increasing night length which the plant leaves "measure". This sets in motion export of the readily mobile plant compounds in the leaves down into the trunk or root systems to be stored for future use next spring. The leaves then drop and the process slows until full dormancy is reached.

Bud dormancy in trees is initiated in midsummer, long before leaf fall in the autumn. Shortening days cause leaves to produce growth inhibitors that accumulate in the buds leading to dormancy.

Changing balances of plant growth regulators made and transported within the plant control these physiological processes.

The **dormant bud** is an embryonic shoot consisting of a growing tip, nodes and internodes (not yet extended), and tiny, rudimentary leaves with buds or bud primordia all encased by the bud scales. These bud scales are very important because they help prevent desiccation, restrict movement of oxygen in the bud, and insulate the bud from heat loss. The layer of bud scales acts much like the seed coat of seeds.

Acclimation to cold leads to cold hardiness. Many dormant buds, just like many seeds, require cold to break dormancy. If branches of flowering trees are brought into the house during the autumn, they do not flower, yet if the same are brought in the late winter or early spring they will flower. The winter **"chilling requirement"** varies greatly among different species. The bud loses a bit of the growth inhibitor with each hours the bud is exposed to below a certain temperature, usually around 43 degrees. The number of critical chilling hours varies between species and also between cultivars within a species like apples.

Cold is not required to break the dormancy in all cases. In the potato, in which the eyes or buds are dormant, at least 2 months of dry storage are the chief requirements; temperature is not a factor. In other plants, the photoperiodic response breaks winter dormancy, with dormant buds being the receptor organs. Some trees may have this characteristic but it isn't as nearly as strong as temperature on temperate zone trees as it is on other plants.

Umami- the 5th food flavor

We all know the basic four food flavors: sweet, sour, bitter, and salty. These flavor elements have been profoundly important in human evolution. Excess **sourness** signaled acidic diseased meats or unripe fruit. **Sweetness** said "calories" which our bodies need for physical (and mental) activity. We have bred many plants to increase their "native" carbohydrate profile to improve the food supply beyond what could be gained by gathering wild plants. **Saltiness** perception is important in food preservation and human nutrition but excess salt can cause serious imbalances in our blood systems. There is a "moderate salt" perception that gives us pleasure and a "high salt" tongue response that says, "Whoa ….way too salty". And finally, **bitterness** warned us away from poisonous plants, though a little bitterness in a "hoppy" beer is quite nice.

For a long time, these big four taste sensations was all that science recognized. But cooks and consumers knew better. They used the term savory to describe the meaty, sometimes salty taste that could hold certain recipes together. It turns out that this was well-known in Japan. Food ingredients and preparations that provided this "flavor, called "umami" in Japanese, were highly valued. Fish, fresh, preserved in salt, or fermented were main elements of Japanese cuisine. Fermenting soybeans created soy sauce. A meaty broth held deep flavors together. Many mushrooms also fit the umami bill. The same goes for bacon, cheese, and tomatoes. The core of the flavor are some glutamates and various naturally occurring nucleotides.

Seaweed also provides this flavor and has been extensively used in Japan. There is now a company operating in Tillamook Bay in Garibaldi that is raising dulse, a purplish seaweed. It is sold fresh. This is common in Japan but rare in the U.S. Is this our "baycon" for the future? For more information, see https://www.oregonseaweed.com/

One large spider

There have been an inordinate number of spiders brought into the office this fall. I don't know how to account for the influx. Did this year particularly favor spiders or is arachnophobia on the rise?

Many of the specimens were *Tegenaria gigantea*. This spider can be almost three inches wide from leg-tip to leg tip. It has the "chevron" markings that put it in the same group as the hobo or aggressive house spider (which was once thought to be poisonous, but isn't now). The Giant *Tegenaria* is also harmless. In fact, some spider experts say that where the "Gigantea" thrives, the hobo will be absent.

However, from my survey of people bringing spiders into the office, they want neither.

It is a bit of a mystery how these spiders enter homes. Young ones can slip under doors but then there have to be enough insects to grow

them to adult sizes. Adults can flatten themselves and slip under sliding glass doors.

Once, when our offices were in the Courthouse, I came into work on Saturday. On the counter was a glass container and a note from our clerical staff: “This is the biggest spider we have ever seen!” **There was no spider!** I looked closer and the client who brought the spider in for identification liked spiders and made a very tiny hole in the metal lid so it could breathe. It was enough for it to escape and we never did find it. Our main office door didn’t have the tightest fit so it probably escaped. Ironically, our offices were right above the jail at that time.

Don’t spray lots of pesticides to control spiders inside. The cure is worse than the disease, especially if you have children around. Our family takes spiders outside although that, in winter, is risky for the spiders. If you are really frightened by spiders, you could treat the outside of regular doors, sliding doors, and window tracks. For more information see http://pestsense.cahnrs.wsu.edu/Search/MainMenuWithFactSheet.aspx?CategoryId=17&ProblemId=851

General gardening observations

Field mice (voles) are present in rather high numbers. We have two main species and their numbers go up and down. You can reduce damage to your trees and shrubs by mowing tightly around them and/or pulling back mulch to about 12 inches away from the trunk. The furry rascals hide under the mulch or in taller grass. Quarter-size holes are a good indication that you have voles. Trapping can be effective on a small scale. Baits are tricky since the baits are toxic to other animals, including pets, and aren’t labeled for general outside use. Always read and follow instructions when using any pesticide (organic or conventional, including baits).

It is hard to tell what this winter will bring. If you have arborvitae hedges, it might be worthwhile to tie up individual plants with twine in the upper third of the plant) to keep them from flopping over in a heavy snow load. Sometimes when they do that, they don’t recover their normal form. The binding keeps them looking good. The 23-24 winter weather projection is projecting generally warmer but perhaps more wet, heavy snow.

Lawn and landscape bed mushrooms worry some homeowners. But there is nothing that can be done to prevent them. Generally, the fungi are beneficial partners with the trees in the yard. Some mushroom-producing fungi recycle organic matter like old tree roots in the soil. A few of these mushrooms may be poisonous so be careful with children or pets. Some can be pathogenic but generally, you will be seeing the target plant already looking “poorly” Repeated mowing will obliterate the mushrooms (basically the fruiting bodies of the underground fungus) if they really worry you. But they won’t stop the mushrooms from coming back this season (which has been very mushroom favorable) or in succeeding years

Some flowers lace their nectar with caffeine. That helps the bees remember where the flowers are and encourages them to come back for more. This doesn’t always work out well since bees “addicted” to caffeine may ignore more nutritious flowers blooming at the same time.

Storing garden produce

The wonderful sunny days in September gave a great boost to our gardens. As October starts and the weather pattern turns wetter and cooler, gardeners spend time getting produce stored for the winter.

Many vegetables will last for some months if stored properly. Advice common to all fruits and vegetables is to only try to store produce that is in good condition ("one rotten apple can spoil the box"). In addition, check periodically to see if sprouting or rot has developed after initial storage. Finally, freeze or can produce where that makes sense.

Onions and garlic: The hard, pungent onions store the best. If they are still in the ground, dig them now and bring them under cover to cure. Remove the roots. Some gardeners keep the tops on for awhile as the onions dry. The onion tops should be removed when the bulbs are bagged for final storage unless you are braiding them.

Onions and garlic both need to be stored in dry conditions. Most outbuildings have too much moisture in the fall/winter and in those conditions, onions and garlic will start to sprout. You will have better luck inside storing them in a warm, dry room than a cool but moist location. If you can get onion mesh bags for storage, so much the better but they will store well in paper bags. Some air circulation is important. Sweet onions should be eaten right away as they have very poor storage ability. Sort onions and garlic often to remove those that sprout or decay. A well-cured pungent onion should last at least four months in a proper storage. Garlic can last until late spring. Don't store with fruit as that encourages sprouting.

Winter squash: Those wonderful winter squash are also easy to store. **Harvest them before a frost.** When rainy weather sets in, squash are done growing and will only rot if left outside. Butternut and Hubbard squash store for six months or more if well cured. Acorn squash are best used within four months of harvest.

Clip the squash from the vine leaving a stem end. Wash the dirt from the squash and let them cure in a warm room on a counter or table for a week. Check for any signs of rot. Then put them into a dry room on a shelf or a shallow box. Best storage temperature is about sixty degrees. Check periodically for decay.

Potatoes: Potatoes are hard to store. They need cold and moist storage. We have the moist but don't get enough cold weather for long-term storage. The best storage system I have seen is placing the potatoes in five-gallon buckets or small garbage cans with sawdust surrounding the spuds. They could be kept in an unheated outbuilding. Don't store diseased potatoes, check often for sprouts and eat your spuds quickly. Some varieties store better than others but few people have much luck holding potatoes past late January. If you do, please call me and tell me your secret.

Other root crops: Carrots and parsnips develop better flavor if left in the ground until a frost. However, if the meadow mice find them, all you will have are carrot stubs with cute little teeth marks. In addition, if you had problems with the carrot rust fly, their tunnels will decay faster if the roots are left in the ground. They are best stored like potatoes in buckets with sawdust. Don't store with fruit. The ethylene they give off can cause sprouting and bitter flavors.

Winter planning: Containers

Plants in landscape containers have particular issues in the winter. The most significant concern is that if cold temperatures last for several days, roots in the containers may be killed. It takes really cold weather, normally around 10 degrees or less, to see this happen. Gardeners are surprised that plants that should be able to tolerate those temperatures based on "zone" ratings are often affected. However, the zone hardiness ratings assume that the plant is in the ground and the roots are protected by a mass of soil. Roots of a given plant are generally not as hardy the trunk and branches of the same plant. So put the roots into a more exposed situation in a pot and the plant may not survive temperatures that wouldn't have killed the same plant in the ground.

Think ahead to where you temporarily move container plants if really cold weather shows up. Some gardeners put them into unheated but enclosed garages. That is generally sufficient to keep them from damage. Plants can also be grouped close together with a blanket or other insulating material thrown over them. This is standard practice in nurseries where you see large acres of containers covered in heavy "frost blankets", which are basically very thick row covers.

Finally, you can hope for snow before temperatures drop. Snow is an excellent insulation if it is deep enough around the container.

If you have zone 8-9 plants and we get a zone 5 winter, plan on replacing some of your less hardy plant material, even those planted in the ground.

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. Voles and moles often occupy the same habitat. In fact, mole runways give voles easy, protected ways to move around the garden without being eaten by cats or owls.. Most vegetation damage blamed on moles is actually caused by meadow mice.

So what can you do?

One approach is to reduce vole hiding places by tight mowing (this is very important around young trees), removing plastic mulches, and collapsing mole tunnels which give the voles access to tree trunks, tree roots, and your root vegetables left in the garden. The tunnels are the hardest task, since there can be lots of tunnels in a relatively small area. Trapping moles on a consistent basis will help.

Will mouse traps work? They most certainly will. Meadow mice don't seem to be the brightest animal on the block. They have devoted their evolutionary energy to rapid 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 (peanut butter generally

works). Place the traps where voles are active (test by putting out pieces of apple first) but put the traps underneath something so that birds won't get inadvertently trapped. There must be enough free space above the trap for it to snap normally. Dig a narrow, shallow trench about 6 inches or so deep and cover it with plywood or something similar. Then test bait with apples to see if voles visit. Finally place and set traps with peanut butter. Check daily or more often.

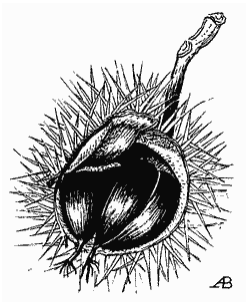
It is possible to poison voles but few baits are labeled for outside use by gardeners. Considerable caution must be taken to make sure that cats or dogs cannot get to the baits directly. If they do, it can be fatal. You need some kind of dog-proof bait station or secure underground bait placement. Read and follow all label instructions.

November Garden Hints from OSU Extension

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.

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. 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., elderberry, flowering currant, and mock orange.
- Still time to plant spring-flowering bulbs, such as tulips, daffodils, hyacinths, crocuses. Don't delay. Force spring bulbs for indoor blooms in December.
- 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 iron phosphate baits, which are pet-safe.

Houseplants and Indoor Gardening

Reduce fertilizer applications to houseplants and watch water needs carefully.

Walk on the Wild Side: The Paulownia tree

Paulownia tomentosa trees have an interesting history. They were brought from China to the United States in the early to mid-1800s, first to the east coast and later to the west coast as well. They were valued for their ornamental beauty which explains its common names as the "Empress", "Princess", or "Royal Paulownia" tree. It does have nice purple flowers that appear before the leaves in the spring. There are quite a few mature Empress trees in the St. Helens area. Most, if not all, were intentionally planted.

However, it wants to escape and when it does, it confuses lots of people. Paulownia has a seed capsule that has hundreds of very air mobile seeds. What is really confusing is that when the seed starts to grow, the seedling stem grows really fast and look nothing like the tree it will become. The leaves are huge but the stems seem quite weak for the tree that it wants to be. But they don't give up. If you cut it back, it will sucker and return. Most of the time, when you see a small group of Empress trees, they are all from one initial seed. Ultimately, herbicides are generally needed to get rid of the tree.

In the early 1980s, a landowner in the Apiary area planted quite a block of these trees (~15 acres if my memory is correct) with the expectation that he could sell the wood to China and make a fortune. It never got to that. Empress trees are marginally hardy here. His trees went through to cold winters where temperatures hit about zero degrees F for a couple of days, back to back. That took the entire plantation out.

Deer browse preferences

Columbia County gardeners struggle with deer browsing on their ornamental and edible landscapes. Despite the extensive lists of deer-resistant plants, there are lots of reports of exceptions to those lists.

Several factors could account for the observations. First, a deer resistant plant isn't necessarily immune from browsing, simply that it is less likely to be browsed to death. Second, deer can develop tastes for plants that they normally avoid. During the heavy snow of December 2008, our deer ate evergreen azaleas, which they had never touched before. They continued to actively browse the plants. Third, deer are always assessing the best available food in terms of protein and digestibility. This causes pattern changes from year to year. Fourth, deer resistance is not always carried into cultivated varieties of certain species. For example, rugosa roses are generally deer resistant (not immune, mind you) but some varieties are readily browsed. Finally, deer may prefer fertilized plants. A story in the recent *Fine Gardening* magazine described a brief experiment in which one pot of Liriope was fertilized and one was not. Both were left for deer and they clearly preferred the fertilized plant

Take home messages are that deer are curious nibblers, they may prefer fertilized plants, and that cultivars may not have the same deer resistance as the species plant. Also, that deer fences are useful when all else fails.

Farm and livestock notes

Get off the grass (as soon as you can)

A livestock operation is only as good as the grass that supports it. Most Western Oregon cattle and sheep farms are leveraged to make money on the explosion of grass that comes between April and July. This grass is cheap and profitable feed.

The key to getting vigorous spring growth is good fall and winter pasture management. Grass plants store their reserves in their green leaves. This is different from alfalfa, which sends late season sugars down to the crown and root system.

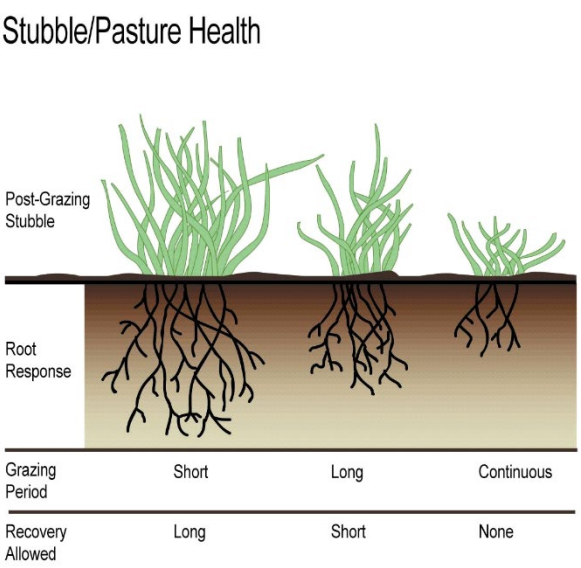
The harder you graze the grass without rest periods, the sooner you will have to replant (or sell your livestock).

Rest periods vary by season and growing conditions. We have had some timely rains that gave us some good fall forage. Spring rest periods can often be as short as 15 days. In the summer, it might be 45 days before you should re-enter a field with stock.

Winter grazing is the very challenging. The cool temperatures and low light intensities slow growth. Ryegrass should not be grazed below 2" during the dormant season. Tall fescue and orchardgrass should be left at three inches. These heights allow roots to grow and tillers to form.

Livestock inevitably compact wet fields. Mild compaction can be managed if there are long rest periods. In that time, new root growth will help break up the compaction. Heavy compaction ruins pastures.

The take home message is to adjust livestock grazing and feeding plans to the residual fall grass. Don't throw away spring grass growth for the minimal gains from excessive winter grazing. Stock can be sold to meet your pasture resources and feed budget. You can rent more pasture or buy more feed. Finally, you could feed and house stock strictly in the barn from November through March, giving your pastures a complete rest. That is a technique used in England where winters are like ours.



Soil sampling and phosphorus

Some years back now, Gene Pirelli and John Hart looked at the phosphorus (P) status of pastures. They found that if you take soil plugs 6 inches deep for a soil test, the pasture often appears to need P. But if you sample the top 2 inches, there is plenty of P to support the plant growth. Most of the P supplied to pastures comes as top-dressed balanced fertilizers like 16-16-16 rather than incorporated into tilled ground for a new seeding. The evidence is clear that much of the top-dressed P stays near the soil surface in enough quantity to both confuse the soil test results with standard sampling protocols and to provide the pasture plants with adequate P without adding as much as a standard soil probe would recommend. Good soil test information could save you a lot of money.

***Fire Resistant Plants for Home Landscapes*:** Home landscaping is an important part of a community's resistance to wildfire. Learn what plants can help you create an attractive environment and reduce the risk of fire. https://extension.oregonstate.edu/catalog/pub/pnw-590-fire-resistant-plants-home-landscapes

How to Use Compost in Gardens and Landscapes: Compost is a soil amendment consisting of partially broken-down organic material. Use compost to improve soil for vegetable gardens, landscape areas and lawns. Learn how to apply the correct amount of compost and how to avoid common compost mistakes. https://extension.oregonstate.edu/catalog/pub/em-9308-how-use-compost-gardens-landscapes

Propagating Plants from Seed: The enjoyment of growing plants can be enhanced by using successful methods. This booklet covers seed selection, starting plants indoors, planting seeds outdoors, and starting both herbaceous and woody plants. Numerous black-and-white photos make this valuable for both new gardeners and experts. Tables suggest methods for starting common vegetables; annuals, potted plants, and ornamental herb seeds; and selected woody plants. https://extension.oregonstate.edu/catalog/pub/pnw-170-propagating-plants-seed.

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