Country Living

Programs for you . . .

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

Nov. 1 ......... **Outside the Door: Birds, Worms, Trees & More!** CSWCD, 35285 Millard Rd, (503) 433-3205 9-3:30pm. Free workshop for local educators. Check it out, and register online HERE.

Nov. 2 ......... **Creating a Pollinator Hedgerow** Matteson Demo Forest. Free. RSVP: https://beav.es/Ze2.

Nov. 2 ......... **Nob Hill Nature Park Work Party** 1:00-4:00 p.m. Semi-Annual Volunteer Day, Rain or Shine! Pre-register by email info@scappoosebay-wc.org or call the SBWC at 503-397-7904.

Nov. 5 ......... **Scappoose Bay Watershed Council** 7:00 p.m. 57420 Old Portland Road, Warren.

Nov. 6 ......... **Mycological (mushrooms & fungi) Presentation** 6:30 p.m. Jordan Weiss, Scappoose Library

Nov. 7 ......... **Master Gardener™ Board Meeting** 10:30 a.m. OSU Extension Service, St. Helens.

Nov. 7 ......... **Columbia County Oregon Beekeepers** 6:00 p.m. Columbia River PUD, 64001 Hwy 30. Steve Gomes will introduce the Walt Wright nectar management system. Free, open to all.

Nov. 9 ......... **St. Helens Mushroom Fair** 9 a.m. - 8 p.m. $5 admission. Held at the future Columbia Pacific Food Bank at 14th/Columbia in St. Helens. 1st Annual event with a pop-up dinner from 6-8 p.m.

Nov. 11 ......... **Office Closed** Thank you for your service, Veterans!

Nov. 12 ......... **Lower Columbia River Watershed Council** 7:00 p.m. Clatskanie PUD, 495 Hwy 30.

Nov. 18 ......... **Oregon Bee Atlas Taxonomy Workshop** 6:00 p.m. OSU Extension Service, St. Helens.

Nov. 20 ......... **Columbia Soil & Water Conservation District Meeting** 7 p.m. 35285 Millard Rd, St Helens.

Nov. 25 ......... **Farm Bureau Meeting** 7:30 p.m. OSU Extension Service, St. Helens.

Nov. 28-29 .... **Office Closed** Enjoy your Thanksgiving Holiday!

Oregon State University
Extension Service
Columbia County

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

Hazelnuts or filberts - can Steller’s jays tell the difference?

A sharp-eyed Chronicle reporter once noted that filbert trees produce an inordinate number of filbert shells with no nuts in them. She wondered why. In addition, she wanted me to clear up the names hazelnut and filbert.

So first, the name. I was born in the Willamette Valley and grew up calling these tasty nuts filberts. Most Oregonians cannot use the “other” name without a certain hesitation.

But are filberts the same as hazelnuts? Are they different? Here is what I know. All filberts or hazelnuts are in the genus _Corylus_. This genus is found throughout the Northern Hemisphere from North America to Eurasia. They were important in early Greek medicine and seem to have been cultivated for ~2-4,000 years or more. The “wild hazelnut” common to Columbia County is _Corylus cornuta_. The nuts were eaten by the native American populations and were a significant source of food. The European hazelnut species _Corylus avellana_ was the source for the _Barcelona_ variety, the mainstay of the Oregon industry until recently.

Virtually all the first varieties grown in Oregon came through Europe. In France they are called noisette, in Spain, avellana, Italy, nocciola, and Germany hazelnuss. English is a complex mix of Germanic and Romance language words. In England, the Germanic side won and it became the hazelnut.

Filbert appears to be a word that also got stuck to hazelnuts in England (and perhaps, France) where the name coexisted with hazelnut. It is thought to have derived from St. Philibert day, one of the many saints’ days that populated calendars of the time. St. Philibert lived in France in the seventh century. The day he is honored is either August 20th or 22nd (traditions vary) which is about the time filberts are ripe in some parts of Europe.

There is an unverifiable rumor that an adventurous (early 1800’s) French settler/trapper in the northern Willamette valley brought some “filberts” to be planted and the name stuck.

A.M. Gray went to Philadelphia with bags of Oregon filberts in the early 1900’s (the crop was just starting to gain traction) where he found a ready reception for his crop. By then, the east coast hazel/filbert industry had been destroyed by Eastern filbert blight. He became an evangelist for Oregon filberts and by 1923, western Oregon had 10,000 acres. His comment on the name is as follows: “The only difference between the filbert and the wild hazel is what care and selection have produced during a period of 2,000 years.” Currently, Oregon has 70,000 acres of hazelnuts (or filberts).

Since we market our filberts to Europe and the Far East and since most of the world knows them (in English) as hazelnuts, our industry (which produces 98% of the US filberts) made a conscious effort to get the name hazelnuts stuck to our crop. So basically, this is a long way of saying that all filberts are hazelnuts. I am adjusting well.

Crows, jays, and a few other birds love hazelnuts. In every hazelnut crop, there are a percentage of nuts that are “blanks”. In other words, there is a shell but no nut inside. The reasons for the blanks are poorly understood. Pollination weather (in late winter) certainly plays a role. So does mineral nutrition of the tree. There is evidence that the brown marmorated stink bugs that were so abundant last fall can drill into hazelnuts and suck the nut meat dry!
Homeowners may start to harvest their filberts only to find that most of them are blanks. They wonder what went wrong with the tree. What went wrong is that there were probably 5-20% blanks. But the crows and jays can tell the blanks from the shells with nut meat inside and they grabbed all the good ones first. They will harvest a tree in a day or two, usually well before the nuts start to drop naturally.

The only answer is to have lots of trees and perhaps start picking them by hand (instead of waiting for them to drop) when you first see jays or crows there. They know when they are ripe. It is also clear that they prefer our cultivated types to the smaller wild hazelnut.

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 as 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 can 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. If you had a large sawdust or mulch pile, the pots could be sunk deep into the pile and the insulation provided by the mulch would shelter the roots. 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 animals 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.

Food for thought on native plants in the landscape: comments by journalist Jeff Ball

Lately I’ve been struggling with ways to communicate in basic English how a home landscape can be managed as an ecological system rather than as a lawn with some trees. Virtually every native plant (tree, shrub, or other) has a specific collection of songbirds, pest insects and beneficial insects dependent on that plant for food, cover, nesting, or something else.

When we take a native plant away, or when it dies and we replace it with something non-native, we destroy that piece of habitat that helps keep our home landscape ecosystem in some form of balance.

A few years back, we lost a flowering dogwood to the anthracnose that is killing off most of the dogwoods in the Delaware valley. Not wanting to plant another flowering dogwood just to have it die from anthracnose, we planted a Kousa dogwood. The Kousa is equally ornamental, it lives well in our climate and soils, and it adds to the diversity of the neighborhood.

What it does not do is serve the needs of those ten species of songbirds and maybe twenty species of beneficial insects that use the native flowering dogwood as part of their habitat. The Kousa dogwood might, over time attract some birds and some insects, but the flowering dogwood took several million years to acquire its menagerie of critters.

I am beginning to appreciate the impact of fifty years of American homeowners bringing in non-native trees, shrubs, flowers, and grasses in their home landscapes. While on the surface it would seem that we have created a diverse ecological structure ready to serve the needs of all the songbirds and all of the beneficial insects, I am wondering if in fact the reduction in variety of songbird sightings in home landscapes might be directly related to the vast reductions of native trees and native shrubs used around homes.

I believe that a healthy population of songbirds (at least ten species in residence) and a healthy population of at least 15 or 20 most common beneficial insects is capable of reducing the needs for insecticide by 90%. The absence of a functioning natural landscape requires people to use a lot of time, money, and chemicals to make up for that absence.
Weed of the month: English holly
(*Ilex aquifolium*)

It’s not often that I describe a crop grown successfully in Columbia County as a weed. Oregon Holly, started by Carl Brandenfels and managed by his son Martin today, has sold cut holly and holly wreathes for over sixty years. In addition, it is widely planted in home landscapes. But English holly is becoming at least a nuisance and has the potential to expand into a serious invasive plant problem.

English holly is native to southern Europe, North Africa, and the eastern end of the Mediterranean. It has been cultivated in northern Europe for hundreds of years for both its association with pre-Christian winter celebrations and its alleged ability to ward off lightning and witchcraft.

There was some use of holly as cattle feed and to improve the appetite of rabbits if given a small branch to gnaw. The leaves have had various medicinal uses but the berries are considered, at the worst, poisonous, and at best, a violent emetic. Holly wood cures hard and beautifully white. It has been used for many ceremonial objects and for farm and industrial purposes in the past.

But let’s now look into holly’s dark side. Birds consume holly berries and drop seeds along fencerows. It is almost impossible to walk through our forests without finding holly trees. And the pace of the invasion is picking up, to the point that managers of Columbia County timberlands are becoming concerned.

Holly is quite shade tolerant but prefers full sun. There is some debate as to whether holly in a deep full-canopy forest gets enough light to flower and set fruit. It is worth noting that holly trees are either male or female. The male trees flower but never set fruit. The female trees produce the berries. Holly fruits are bee pollinated.

Holly impacts on managed forests and protected native plant communities are similar. In native plant areas, dense stands of holly can suppress the germination and growth of desirable native vegetation. Holly can grow as a single stemmed tree up to fifteen feet wide and as tall as sixty feet. It can also form a thicket of multiple branches, especially if cut, that can cover a much wider area.

Holly extracts a lot of water from the soil and in conditions of shortage, can out-compete native vegetation for the moisture. It consumes more nutrients than it replaces because its leaves decompose so slowly.

Successful control generally requires the use of an herbicide. Cutting a single-stemmed tree without an herbicide treatment painted on the cut surface will cause the plant to produce the thicket described above. At that point, your future control options have become ten-fold more difficult.

Spraying the foliage with an herbicide is rarely successful due to the waxy cuticle that covers the leaves. So a cut stem herbicide treatment (glyphosate, triclopyr, or the RTU form of picloram are effective) in the late spring/early summer is by far the best answer. Always read and follow all herbicide label instructions. Monitor the treated area for re-growth or missed plants. It is possible to pull very small individual plants when the soil is wet.
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.
Farm and livestock notes

Winter feeding thoughts

- Are your livestock in good condition going into this winter? People who didn’t feed their stock in the late summer probably have seen some loss of condition, though the October rain did provide some renewed pasture growth. Evaluate your stock carefully and plan a feeding program with a realistic starting point.

- Are you prepared for rain and mud? Rain and mud extract a significant toll in energy from our livestock. It simply takes more feed for them to live and grow in a muddy barnyard. In addition, mud increases disease and saps an animal’s ability to fight off problems. If your barns have gutters, directing the water away from feeding areas will significantly improve animal performance. Feed yards that maintain a firm base are also very helpful. The best option is an indoor feeding area that can be cleaned periodically or deep bedded.

- It is tough for shy, retiring types to compete at the feed trough. If you are not careful, timid ewes, cows, and calves will begin to lose weight. Carried to extreme, they can lose enough condition to put them at risk. Provide sufficient bunk space so everyone gets enough. Partitions or stanchions can keep the bossy types occupied. If this is not possible, split the herd and feed at different times.

- Winter brings livestock into close quarters. This often leads to problems with lice and coccidia. Lice are external parasites that spread easily from one animal to another. Symptoms include poor condition and a rough hair coat. This is not a surprise since the little blood-suckers are getting a significant portion of the feed you are offering. There are some great controls available. Use them.

Coccidia are internal parasites that aren’t “worms” but are in another more primitive class. They scrape the intestinal walls to draw nourishment. Younger stock are the most affected and it is not uncommon that they lose condition so badly that they die. Bloody diarrhea may indicate coccidia but is not always evident. Older animals may be heavily infested and may be “shedding” (thus infecting other stock) but often don’t show the same level of physical decline. The organism is easily picked up in a fecal test provided by your vet. Regular “wormers” won’t catch coccidia but several products will clean things up.

Bill Zollinger’s choice beef rule

A retired OSU beef specialist had a rule of thumb for determining the size at which offspring of a given cow and bull may be expected to reach the low choice slaughter grade. His formula is to average the combined weight of the cow and bull and multiply by 75%. For example, a 1000# cow mated to a 2,000# bull would give an average weight of 1,500#. Multiply that number by 75% and you get 1,125 pounds. At that weight, the animal should grade low choice. A 1,125 pound steer or heifer with a dressing percentage of 63% yields a 709# carcass.

Farm financial risk

Some years ago, I wrote sections of an OSU publication on becoming a farmer. Small business and farm lending has been upended by newer digital lending institutions that are largely unregulated compared to conventional banks. The following article is mostly the original piece with some revisions reflecting the changing financial lending landscape.
Farming, like any business, involves financial risk. All crops require you to spend money in advance to establish the crop. What is returned when the crop is harvested is determined by the skills of the farmer, the weather, and what happens in the market. Some crops, such as tree fruits, might require several years before any income is realized. Knowing in advance where you stand financially and your capacity for taking risks will influence the types of choices that best fit your situation. Consider the following questions:

- What can you invest in startup and operating costs without putting your family at financial risk?
- Is it feasible to work at “regular” jobs while starting your farm? Most small farmers need the cushion of a stable income stream.
- How long can you wait for the crop to begin to create some cash flow? How long can you wait for the crop to generate some profit? There is a learning curve with any crop.
- If the market price is high when you plant or buy feeder livestock but low when you harvest, are you sufficiently cushioned financially to survive?
- How much time and money can you allocate toward selling your crop?
- What financial obligations are you taking on with the farm? Make up cash flow and enterprise budgets and evaluate them against your experience often.
- What are your benchmarks for success, and when is it time to change your strategy?

Your answers to these questions may change over time as you gain experience. So it is important to reassess on a regular basis, perhaps every season.

Access to capital

For many, it can be a challenge to finance a new agricultural business. Often, new farmers launch their enterprises using family resources, including off-farm income. For most small farmers, financing – that is, loans from banks and other lenders – is generally available only after they can show several years of successful experience.

USDA’s Farm Service Agency (FSA) now offers a suite of financing options specifically designed for beginning farmers, veterans wishing to enter farming, and limited resource farmers, including loans to purchase land, operating loans, and microloans. In the Pacific Northwest, Northwest Farm Credit Services also offers an array of such programs (in addition to banking and insurance services).

In addition, cost-share programs offered by USDA’s Natural Resource Conservation Service (NRCS) can fund some infrastructure projects. Examples include high tunnels, some types of fencing, and water conservation projects.

If you decide to seek financing, what are some of the issues you face?

- Small farms may lack “bankable” equity, so lenders want tangible evidence that you can produce crops and sell them at a profit. A small farm might be well capitalized with two incomes but have little hard collateral or loan history. Keep good records including any farm tax records (Schedule F) to demonstrate credit worthiness.
Experience is the hardest quality to prove and the most difficult one for a lender to assess. A documented 3-year track record showing successful progress for the farm is the best information you can bring to the table. Learn to keep meticulous records and analyze them from a business perspective. Have them in a form that a lender can review and understand.

Small farmers represent a large part of the potential credit market in terms of numbers but not in loan volume. From a bank’s perspective, the earning potential from a large loan is much greater than that from a small one while the same time and paperwork are needed for both.

If the first mortgage on a property is large relative to a conservative estimate of liquidation value, it might be tough to get an operating loan as well.

Lenders want to see that you have the financial capacity to weather both mistakes and external factors like changes in markets or rising input costs.

Many small farms use personal credit cards to start or expand their farms. This method is risky and expensive but has been used successfully. That said, if you are driven that direction, be very clear-headed about what you are doing and conservative about the net income you will need to pay off the debt.

### Digital lending is a swamp

Most new small farmers are digital natives. They are comfortable in that world and like the freedom from extensive forms, bank paperwork, and bank processes in general. Many non-bank digital lenders have sprung up. Digital lending feels clean. But, often, it isn’t.

Unlike banks and credit cards, these institutions are largely unregulated. They do minimal background checks or reviews of your business financials. They have fast turn-around times.

But there is a price for this slippery slide. The new digital lenders often require large fees in lieu and/or in addition to interest on the “advance”. Effective borrowing rates (fees, interests, and/or other charges) can easily exceed 30% or more!

They may require a fixed percentage of your gross credit card income (extracted daily from your credit income account) if you are the kind of business with consistent cash-flow (usually not farmers). This can bleed you of operating capital. On a more positive note, fewer people are tapping home equity to finance daily living costs. The lessons from the 2008 recession have sunk in.

### Summary

It is not impossible to secure credit, but it takes a lot of planning and a solid financial record.

It may seem obvious but when you do get a loan, plan very carefully how you will use the money. Most successful farms use debt wisely, spending borrowed money for the greatest benefit for the business.

Here is full publication:
[https://catalog.extension.oregonstate.edu/ec1529/html](https://catalog.extension.oregonstate.edu/ec1529/html)
The OSU Master Gardener™ Volunteer Training will be offered in St. Helens this next year, with classes Wednesday evenings AND every other Saturday, beginning February 5th and meeting for 10 weeks. The classes will be held at the OSU Extension Service conference room, with a few hands-on classes in other nearby locations. 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. Students completing the class will be expected to pay back about 40 hours on community horticultural projects. Cost of the class is $100 and there are a few scholarships available. Registration is online again this year, at: https://tinyurl.com/ColumbiaMG2020.

For questions about the program, please call the OSU Extension office in St. Helens at (503) 397-3462 or email either Chip.Bubl@oregonstate.edu or Sonia.Reagan@oregonstate.edu.

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