



Country Living

Provided to you by the

OSU Extension Service Columbia County

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January 2024

Programs for you . . .

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

January 4th : **Columbia County Beekeepers Monthly meeting.**

Thursday, January 4th at 7pm Fonta Molyneuz will talk by Zoom about the honeybee brood nest. Fonta is an experienced beekeeper with many hive styles. Understanding what is happening in the brood nest is a main driver of the beekeeper's activities throughout the year. All are welcome to attend. Contact Linda Zahl at ColumbiaCountyOregonBeekeepers@gmail.com for the zoom link or attend in person at the Extension Office.

January 16th : **Chat with Chip** (<https://beav.es/STR> and 6:30-8pm time)

February 20th through early May: 2024 Columbia County/OSU Master Gardener™ classes: See last page for details.

On-line Bee School: Columbia County Oregon Beekeepers will join Tualatin Valley Beekeepers Association for their online Bee School March 18, 19, and 21st. We will have our own Field Day on April 6th or 15th depending on the weather in Trenholm. For registration contact Linda Zahl at Columbiacountyoregonbeekeepers@gmail.com



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, 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 gardens and small farms

Watering blueberry bushes

Blueberry plants are more sensitive to moisture stress than many gardeners think. The demand for moisture is highest in July and August when two processes are going on in parallel. First, the blueberry fruit is in its most



rapid stage of growth. Second, and equally important in the long term, the flower buds for next year's crop are forming at the same time.

Floral initiation also continues after the fruit has been picked.

Typical peak moisture use for a 6+ year old plant in July and August will be **1.75 – 2.25 inches of water per week**. When it's really hot, give them more water.

If little or no watering has been done up to July (and if not much rain has fallen since early June), the plants will need careful monitoring as to their moisture needs. Since the leathery leaves of blueberries tend to resist wilting, the signs of moisture stress can be very subtle. So take a small shovel, a hand trowel, or a soil moisture probe and actually check to see how much moisture is in the bulk of the rooting zone (~ the top 12").

Blueberry roots are quite shallow, rarely extending below 18 inches and concentrated in the upper 12 inches. If you have been putting on quite a bit of sawdust or other woody surface mulch (which blueberry plants like), a large percentage of the roots may grow into the mulch layer. These roots can dry out more quickly if moisture is short and temperatures (and plant demand) are high.

If you are transplanting blueberry plants (and now is a good time if the soil you are moving them to isn't too soggy) they need the same 12-14 or so inch deep worked up soil.

Blueberries can be irrigated with drip systems. Many commercial operations are now using paired drip lines on each side of the row. This insures that the bulk of the root system will get wet if the system is run long enough. As noted above, you should check to see how well distributed the moisture is. Small sprinklers that are moved from bush to bush can deliver pretty uniform coverage but take a bit more effort to move back and forth.

For more information on blueberries, see <https://extension.oregonstate.edu/catalog/pub/ec1304> and <https://extension.oregonstate.edu/catalog/pub/pnw-656-blueberry-cultivars-pacific-northwest> and for pruning https://media.oregonstate.edu/media/t1_c3ujz270

Leafy greens for better health

Evidence continues to strengthen that leafy greens (especially greens from the cabbage family) are good for your health. The cabbage family greens include broccoli, cabbage itself, kale, collard greens, mustard greens, and numerous oriental greens like the gail lan pictured. The key elements are fiber (all are high in that) and folate (vitamin B9). There may be other compounds that also play a role in cancer rate reduction, especially colorectal cancer.

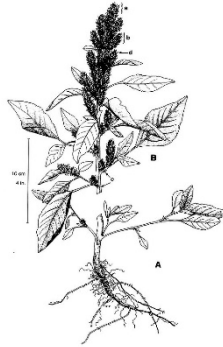


Other sources of B9, include spinach, cabbage, broccoli, sunflower seeds, wholegrains, pulses (like such as chickpeas, lentils and beans), and fruit, especially citrus fruits like such as oranges. All are good additions to your diet.

Are those really Grandma’s weeds?

I had a call last summer about a newly worked garden. The space had been her grandmother’s garden but had been a lawn for more than 40 years. The client was astounded by the wide variety of plants that sprouted after the late spring rototilling.

Those sprouting plants were **not** everyday lawn weeds like false and true dandelion, plantain, clovers, etc. Instead, they were “summer annual” vegetable garden weeds like pigweed (pictured), lambsquarter, purslane, some flowers like hollyhock, and more!



Could these seeds have come from Grandma’s less than attentive weeding before the plot was turned into a lawn?

Yes, it is possible. Seeds are the main way a plant goes from one generation to the next. For a plant species to survive over a number of years, there have to be good ways for their seeds to be distributed around and to survive difficult growing conditions.

Weed seeds come with subtle internal controls that indicate it’s the right or possibly, the wrong time, to germinate.

Some seeds have to “measure” a certain amount of hours below a certain temperature threshold before they can germinate. This is very common for seeds of native plants.

It is also true for some, though not all, of “summer” garden weeds (most of which came originally from Europe, traveling to North America in the ships that carried European settlers here).

It is not true at all for most of our vegetable seeds. We have bred that need to experience winter out of them. That’s domestication. Once a seed is primed to germinate, it will need to experience the right mix of warming soil temperatures, soil moisture, and, often, some light before germination actually starts.

Tillage, which brings weed seeds to the surface, stimulates germination. That said, there will be some seeds that should grow, but they remain obstinately dormant. This is the plant version of “I need more than a few good days”.

This helps to guarantee that there will be a reservoir of those genetics to keep the particular weed population going even if many germinated and then died from very hot weather right after germination. Evolution drives the “programming” that keeps a species functionally present in the landscape. If you tart beds a few days after tillage, you may kill quite a few germinating weeds.

So, to answer the question that started this discussion, those plants could have been undisturbed in the ground for 40+ years. Many would have been lost to hungry composting organisms and insects. But enough could remain to make quite a show when brought back up to the surface.

Here are the average lifespans of some common garden weeds:

Lambsquarters	40	years
Pigweed	10-30	“
Purslane	40	“
Mustard family	40+	“
Canada thistle	30+	“
Moth mullein	70+	“
Hollyhock family	35+	“
Crabgrass	3	“

January OSU Extension garden hints

Oregon State University Extension Service encourages sustainable gardening practices. Preventative pest management is emphasized over reactive pest control. Identify and monitor problems before acting and opt for the least toxic approach that will remedy the problem.

Planning

- Keep a garden journal. Consult your journal in the winter, so that you can better plan for the growing season.
- Check with local retail garden or nursery stores for seeds and seed catalogs and begin planning this year's vegetable garden.
- Have soil test performed on garden plot to determine nutrient needs. For a list of laboratories, go to <https://catalog.extension.oregonstate.edu/em8677>
- Take hardwood cuttings of deciduous ornamental shrubs and trees for propagation.
- Plan to replace varieties of ornamental plants that are susceptible to disease with resistant cultivars in February.
- Start pruning on dry days if the extended weather forecast isn't too cold.



Maintenance and Clean Up

- Clean pruners and other small garden tools with rubbing alcohol.
- Reapply or redistribute mulches that have blown or washed.
- Place windbreaks to protect sensitive landscape evergreens against cold, drying winds.
- Do not walk on lawns until frost has melted.

- Water landscape plants underneath wide eaves and in other sites shielded from rain.
- Protect plants in containers from very cold weather if possible. Roots are often more affected than tops.

Pest Monitoring and Management

- Monitor landscape plants for problems. Don't treat unless a problem is identified.
- Watch for field mice damage on lower trunks of trees and shrubs. Eliminate hiding places by removing weeds and cutting grass tight. Use traps and approved baits as necessary.
- Use dormant sprays of lime sulfur (getting harder to find) or copper fungicide on roses for general disease control, or, plan to replace susceptible varieties with resistant cultivars in February.
- Moss in lawn may mean too much shade or poor drainage. Modify site conditions if moss is bothersome.
- **Mid-January:** Spray peach trees with approved fungicides to combat peach leaf curl and shothole. Or plant curl-resistant cultivars such as Frost and others.

Houseplants and Indoor Gardening

- Monitor houseplants for correct water and fertilizer; guard against insect infestations; clean dust from leaves.
- Protect sensitive plants such as weeping figs from cold drafts in the house.
- Propagate split-leaf philodendrons and other leggy indoor plants by air-layering or vegetative cuttings.
- Plant dwarf annual flowers inside for houseplants: coleus, impatiens, seedling geraniums.
- Gather branches of Japanese quince, forsythia, and flowering cherries; bring indoors to force early bloom.

Nature's place: Steller's jays

Steller's jays play a commanding role in the bird universe around our home and adjacent forest. We do feed them some of their favorite foods (cracked corn and black oil sunflower seeds). I have come to admire them despite their reputation (somewhat undeserved in our region) for eating the eggs and young birds of other species.

Jays are chatterboxes of the first order. Our "top" jay has a specific call for "breakfast is served" when we go out to feed them. They mimic the red-tail hawk call when a hawk starts looking for a tasty jay meal. They are supposed to be able to mimic cat calls, squirrels, dog chatter, other birds, chickens, and even mechanical sounds.

Steller's jays appreciate hanging bird feeders and bird seed spread on hard surfaces. They co-exist in very local "groupings", each becoming more dominant and determined to manage the scene the closer another jay group gets to the core of "their" territory. They apportion roles for "THINGS TO BE DONE" within groupings and even between groups. The jays use their huge range of calls and some physical bluster to keep the groups functional and safe. The "fanning" of their crown feathers adds to the show.

Jays attempt to share the birdseed among all the "groups" and other bird species that also think bird feeders are dandy. It's both messy and comical. That said, scrub jays apparently out-rank Steller's jays and Douglas squirrels are determined to eat despite any Steller jay ideas to the contrary. The squirrels can be quite mean little rascals if food is involved.



Steller's jay predators are mostly red tail other hawks and very stealthy cats. The jays have specific warning calls/behaviors for each threat. The group can instantly disappear and just as quickly reappear when the "all clear" call goes out.

In addition to provided birdseed, Steller's jays consume many seeds, nuts, some berries (including hawthorn berries), overripe apples, insects (possibly quite a few), spiders, small amphibians, small mammals (mostly small voles), small birds (the "notorious nest robbers" issue), maybe worms (this is debated), and possibly some flowers.

Here, the most abundant native seeds are from big leaf maples and Douglas fir cones. The nuts are from the wild Oregon hazelnut. This was a very big year for hazelnuts and the jays spent hours caching many and cracking some for an immediate reward. They can tell if a shell is a "blank" with no nut inside. These are discarded as fast as they can be.

This process is also used in commercial hazelnut orchards where a certain small percentage of "blanks" get removed from the tree and then dropped unopened by the jays.

A lot of the seeds and nuts are "cached", mostly in the ground but sometimes in cavities in trees. They have a very strong sense of spatial memories for both the caches and the core boundaries of "their" territory. The caches that are forgotten or not needed become incubation places for the seeds to sprout and grow.

Steller's jays appear to mate for life. Once they agree that the partnership is on, they will

start building a nest up in mainly Douglas fir trees on our place but sometimes in big leaf maples. They place the nest where a major limb joins the tree trunk, usually in the upper third of the canopy. One large double trunked Douglas fir in a field near the garden and where the birdseed is placed seems to be the luxury suite for the group “leader” duo.

Their nests are composed of strong sticks, tall pieces of strong grass, and moss, which are then cemented together by mud in varying amounts. The nests are about 10-18 inches across and 4-6 inches tall. Once the 2 to 6 eggs are laid, the female jay won't leave the nest until the eggs hatch in 16 days.

The oldest known Steller's jay was banded 16 years before it was seen alive again. They may well live quite a bit longer.

Steller's jays are in the Corvid family which includes ravens, crow, and all the other jays. When the West Nile disease first went through the Northern Hemisphere some years ago, the Corvids as a group were really hit hard. They bounced back but Steller's jay numbers are thought to be in a mild decline. At this point, habitat loss and high summer temperatures combined with low rainfall are probably the core challenges.

When trees age

Natural forests are complex in both age classes and species. Trees go through life stages over extended time horizons. Within a stand, there may be many age classes from young shade tolerant seedlings to mature trees. As trees weaken, they begin to support a whole new population of insects, birds, mammals and other species.



Holes are dug in the bark by woodpeckers and many other bird species in search of insects or to develop nesting sites. Thinning trees serve as perches for raptors. Woodpeckers drum on the trees to communicate their territorial rights.

As the tree center rots, and the top breaks out, species adapted to those sites will begin to colonize them. Vaux swifts use hollow tree trunks (once they look like chimneys) to build their nests. The lack of such long-standing trees in our modern forests have pushed swifts into the urban landscape and fireplace chimneys as a substitute. Bear, fox and coyotes are among the many mammals that like a hollowed-out tree for shelter.

Ultimately, the tree topples. As it rots, it provides a whole new set of species with cover and food. As it decays, the tree releases over many years the minerals locked up in its wood. The tree incubates almost uncountable numbers of fungal, bacterial, and insect species.

After a period of time (and it is different between species) the tree is broken down

enough to become a fertile bed for new seedlings of the species found in that forest.

Dead wood is important. Don't feel that it all needs to be cleaned up. Leave snags if they won't damage anything if

they fall. And take some time to observe the teeming life found in dead and dying wood.

Farm and livestock notes

Organic Canada thistle control

Canada thistle is one tough plant. It spreads by seeds but perhaps more importantly through an aggressive underground root system. Prior to the introduction of herbicides, Canada thistle was best controlled by repeated tillage during the summer. This required that a given plot of land lay fallow. Farmers knew that cover crops or smothering crops like alfalfa could help reduce the problem.

It is rare that a modern farmer can take a field out of production for a summer. The economics just aren't there. So what are the organic options?

One study looked at some of the organic herbicides available and several combinations of tillage, mowing, and cover crops. Here are the conclusions:

Organic herbicides (vinegar, clove oils, etc.) desiccate the aerial portions of plants. For a crop with great root reserves like C. thistle, this proved to be useless.

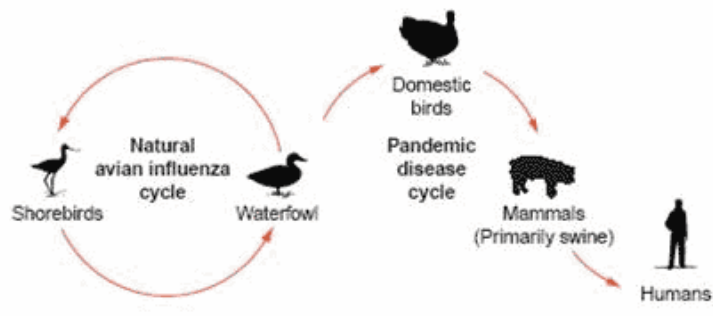
Tillage over the summer was quite effective. Tillage combined with cover crops of buckwheat or sudangrass were very effective. However, it hurt thistle suppression if the buckwheat was mowed while mowed sudangrass plots re-grew and continued to reduce thistle shoot production.

My own experience in Columbia County indicates that alfalfa harvested three times a summer will reduce the amount of Canada thistle in a field over several years. However, as the alfalfa stand weakens, the thistle returns, often with a vengeance. Cutting alfalfa two

times didn't seem to offer as much thistle suppression.

We are still riding a Highly Pathogenic Avian Influenza outbreak

The United States Department of Agriculture's (USDA) National Veterinary Services Laboratory (NVSL) recently confirmed the presence of highly pathogenic avian influenza (HPAI) in two commercial poultry operations and four backyard flocks. The commercial operations are in Linn and Marion County. The backyard flocks are in Deschutes and Marion and recently Clatsop (near Seaside) and Benton (near Cor-



vallis). Approximately 790,000 birds from the affected flocks were euthanized to prevent the spread of the disease and did not enter the food system.

Avian influenza does not affect poultry meat or egg products, which remain safe. HPAI is also considered low risk to human health, according to the U.S. Centers for Disease Control.

The confirmation at the two commercial poultry operations initiated a state-federal response between the Oregon Department of Agriculture (ODA) and USDA. ODA works closely with USDA's Animal and Plant Health Inspection Service (APHIS) on a joint incident response and action plan.

State Veterinarian Dr. Ryan Scholz issued a regional quarantine around each commercial operation to prevent the movement of poultry and poultry products from within the affected area, giving state and federal staff time to conduct

surveillance to ensure no additional cases of HPAI exist. The USDA tracks the number of cases nationwide and most recently reports 47 states have been affected by HPAI representing approximately 63 million birds nationwide.

For details on the quarantine area, ODA provides an [online map](#). In addition to the map, the online tool allows people to enter their address to determine whether their property is included in the quarantine area. ODA will lift the quarantine as regional surveillance is complete.

[Highly pathogenic avian influenza \(HPAI\)](#) virus strains are extremely infectious, often fatal to chickens, and can spread rapidly from flock to flock. ODA continues to advise commercial poultry farmers and backyard flock owners to be vigilant with biosecurity measures and surveillance. Dr. Scholz says, “It is important for commercial and backyard poultry operations to monitor their flocks’ health closely. The most recent cases of HPAI in Oregon reinforces the need to follow strict biosecurity measures, including keeping birds enclosed without access to wild birds or other domestic flocks.”

Biosecurity measures can include:

- Washing your hands before and after handling your flock
- Cleaning vehicles tools or equipment
- Limiting unnecessary visitors
- Sanitizing shoes in clean foot baths
- Changing clothes upon contact with birds and more

For more tips on protecting your backyard flock, please visit the ODA online at [Avian Influenza](#) or en Español at [Avian Influenza – Spanish](#).

Death or illness among domestic birds should be immediately reported to ODA. Please report by calling 503-986-4711

(Alt Phone: 1-800-347-7028).

Please contact the Oregon Department of Fish and Wildlife (ODFW) for wild birds. Do not collect or handle the birds but report the incident directly to ODFW at 866-968-2600 or Wildlife.Health@odfw.oregon.gov.

Heat lamps in the barn

Heat lamps are important farm tools for warming young poultry and chilled new lambs, piglets, and calves. But they have been the cause of numerous barn fires. Often, heat lamps are knocked into dry bedding where fires quickly ignite. Barn animals, rats, raccoons, and even coyotes have been implicated in the fires. Often the lamp placement was less secure or tight than it should have been.

Heat lamps can be set too close to the bedding itself and directly heat the bedding to ignition.

But a third source of fire is the very quality of the fixtures, wiring, and bulbs. Many of the readily available heat lamp fixtures and bulbs from hardware stores or even farm stores are not as safe as you would want. Look for quality in the gauge of electrical wire used, the safety record of the fixture as best as you can ascertain it, how well it can be attached and hung, and the thickness of the bulb glass to reduce the shatter potential.

Other possible heat lamp safety improvements might be to:

- Let hens incubate eggs and chicks. Use heat mats for piglets and lambs. Move calving and lambing seasons to April. Skip heat lamps altogether.
- Upgrade breaker panels – talk to an electrician
- Isolate heated spaces from the main barn to reduce fire issues.

This material is summarized from an excellent piece written by Michael Glos in the Cornell Small Farms Quarterly. Read the whole article. It can be found at <http://small-farms.cornell.edu/2014/04/07/managing-risk-using-heat-lamps-on-the-farm/>

Winter grazing

A grass pasture is the crop that livestock turn into money. It is hard to manage pastures in the winter. The saturated soils make it hard to graze without punching holes in the turf. Compaction caused by heavy hoof traffic of cattle and horses can damage grass and lead to pastures lacking in good grass and dominated by weeds.

In New Zealand, farmers watch plant growth stages to decide when and how much to graze. Phase 1 grass/clover would be 0-3 inches in height. Phase 2 would be 3-12" and phase 3 is over 12".

Phase 2 is the vegetative or most active growth stage. Farmers strive to keep their pastures in that phase. If a pasture is grazed down to phase 1, there will be damage to the crowns and a loss of root reserves. Plants will recover slowly, if at all, when the warmer spring temperatures return. New Zealand farmers will not graze a pasture until it is in the upper end of phase 2 and will remove the animals when the pasture is eaten down to the lower end of phase 2 (3-4").

In our winters, this usually requires taking the animals off the pasture from November until often mid-late March. Then the animals may get some grazing but will be limited by the growth rates of the pasture. *Adapted from an article by Gene Pirelli, area livestock agent based in Polk County.*



Do you really want to cowboy?

Cows that are too wild and rambunctious are hard on themselves, hard on other animals, hard on equipment, and hard on the people that work with them.

One veterinarian believes that nastier cattle are more susceptible to some diseases and ailments. There is little doubt that they don't convert feed as efficiently as more mellow cattle. There is some evidence that the "dark-cutters" may be behavior problem cattle.

Disposition is heritable, though none of the breed associations really rank disposition. But ranchers do eliminate calves from mis-behaving cows when selecting herd replacements.

Salt needs of livestock

Livestock don't always eat what is good for them. There are many well-documented cases of cravings for poisonous plants, paint or other equally unhealthy objects.

Salt, however, is one thing that livestock seem to consume in proper proportions (assuming it is available and there isn't a crush at the salt lick). Beef cattle eat about one ounce per day. Voluntary consumption of salt is higher when cattle are eating succulent forage, often twice as much as for dry-fed animals. Sheep show similar patterns in their salt needs, averaging $\frac{1}{2}$ to $\frac{3}{4}$ pounds per month.

The crux of the matter is that well-placed salt feeders and blocks are essential to maintain healthy livestock. The animals will regulate their own needs.

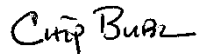
It is also critical to start feeding magnesium supplements this month and through spring to prevent grass tetany.

Master Gardener™ class signups being taken for 2024 class in St. Helens

If you enjoy gardening and have been curious about the interactions that you have observed in your garden, you will enjoy taking the Master Gardener classes this spring at the Columbia County Extension Service Office. Have you ever wondered if there is something you could do to improve harvest? What's eating your plants? Tired of weeding, weeding, weeding? This is your chance to learn more about the science of gardening and meet other gardeners willing to share their experience and knowledge. You will learn how to find the most up to date information. Favorite topics discussed in the classes are the science of soil, fertilizer, and pesticides; botany, plant growth, and propagation; weeds, vertebrate and invertebrate pest control. You will even learn more about native bees. Class size is limited so register soon.

Classes begin Tuesday evenings, February 20 through May 7 from 6 PM to 8:30 PM, with additional hands-on workshops in local gardens on select Saturday mornings. Workshop participants will gain experience creating raised beds, pruning trees and perennials, and installing drip irrigation in a garden bed. Master Gardeners are encouraged to share what they learn. But this is just the beginning of many additional learning opportunities made available to you so you can continue learning.

Cost of the program is \$100.00 which includes a large resource book. Some scholarships are available. Master Gardeners are responsible for providing volunteer gardening education to the community as partial payback for the training. Registration is now open! Register online at <https://beav.es/qBc> or call the Extension office at 503-397-3462 for more information.



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