April 2022

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

April 2 .......... Local Bee Group meetings: On Saturday, April 2nd, the Bee Group will host a full-day Bee Class from 9-noon indoors at the Extension office in St. Helens and in the afternoon with bee hives. Cost $50 which will also give you a year membership in the group. Register at columbiacountyoregonbeekepers@gmail.com

April 7 ................ On Thursday April 7th at 6:00 pm there will be a free zoom event with Paul Stromberg, President of Portland Metro Beekeepers. He will talk on queen rearing for backyard beekeepers and as a sideline commercial beekeepers. To get the Zoom link, email columbiacountyoregonbeekepers@gmail.com

April 9 ............ Join the Watershed Council at their Spring Native Plant Sale Saturday, April 9th, from 9 am to 3 pm at the SBWC nursery, located behind Scappoose High School. For more information see https://www.scappoosebay-wc.org/native-plant-nursery/.

April 19 .......... Chat with Chip: A roughly one and a half hour interactive Zoom program on garden and related topics with Chip Bubl. Tuesday, April 19th from 6:30 pm -8pm. You are invited to attend the monthly Zoom Presentations each 3rd Tuesday evening from 6:30 - 8:00 PM. Register in advance for this meeting online. After registering, you will receive a confirmation email containing information about joining the meeting.

April 23&24 .... The Chronicle Home and Garden Show: The Home and Garden show returns after several years. It will be at the Fairgrounds on April 23rd and 24th. Times: Saturday from 10am-5pm; Sunday from 11am-3pm. There will be speakers including some Master Gardeners on their favorite topics. See https://www.the-chronicleonline.com/2022_columbia_county_oregon_home_and_garden_show/ for more details.

April 28 ........ Columbia County Master Gardener Chapter Zoom meeting: on April 28th at 6:30pm. Speaker: Weston Miller, OSU Extension on “Making Your Garden More Resilient in Climate Change”. Open to the public. Register in advance for this meeting: https://tinyurl.com/24yhykfs.

April 30 ........ The Columbia County Master Gardeners’ Spring Fair will also return after two years. It will be Saturday, April 30th from 9am-3pm. There will be 3,000 tomato plants, peppers, and garden related items by other vendors. It will be at the Fairgrounds since St. Helens High School is undergoing major renovations.
In the garden

A green salad garden

Salads are a wonderful way to eat a variety of excellent plants, mostly grown but some perhaps foraged. There are an incredible range of flavors and textures worth trying. Lettuce varieties are the base of most salads but even there, you have leaf, Romaine, Iceberg, butter, and many more types in a variety of colors, leaf form, heat and cold tolerance, and productivity. With a little help from a cold frame or greenhouse, lettuce can be grown year-round. That said, the low sun hours of December don’t create much opportunity for growth. But lettuce grows more vigorously as we turn the calendar to a new year.

In the cabbage family, arugula is quite cold hardy and can be planted for harvest almost year round. The kale group, which can be eaten raw in salads, tend to toughen up in the winter although they also get sweeter. The Lacinato kales, which are very tender, are less likely to stand colder temperatures but do well protected in a greenhouse. Mustard greens are fairly winter hardy but do get stronger flavors. Cabbages can stand in the garden or can be picked and stored in the coolest space you have. Those left unpicked will tend to “split” leaving the head open to decay. All the cabbage family will bolt to seed early the following spring.

Other garden vegetable plants that can be mixed into salads (many best when young) are spinach, beet greens, Swiss chard, endive, and radicchio. Fresh salad herbs include mint, tarragon, parsley, cilantro, oregano, chives, and others.

Here are some garden “weeds” that mix well in salads. Most are best picked young: lambsquarters, pigweed, purslane, sheep sorrel, miners lettuce, and true dandelion (esp. early spring leaves). Always make sure you have a good identification before consuming “wild” plants.

Rhododendron too big?

Gardeners sometimes need to move (or destroy) a rhododendron that has gotten too big for its space. Since rhododendrons are very attractive, can live for over 500 years, and are relatively easy keepers, it is a tough decision.

Here is the good news: rhododendrons can be moved (or planted) almost every month of the year. They are remarkably resilient. Their shallow root systems help a lot. First, locate a place where you might put your rhodie—morning sun and afternoon shade is perfect. Work up an area not too deeply but really wide for an old plant. While somewhat controversial, it may make sense to incorporate high quality compost into the area to be transplanted.

To move a rhodie, start by doing some root loosening about 3 feet out from the base of the plant all around it. Next comes the more difficult part of the process. Rhodies need to be “wrenched” out if at all possible. This means attaching a heavy chain to something very strong like a tractor or a power winch attached to a truck. Do not attach directly to your pick-up or SUV! You can bend the frame of your vehicle! Wrap the other end low down around the rhodie, covering the chain with an old towel or something to reduce bark damage. Then pull. With any luck, it will come out. Transfer to the prepped hole, cover with soil from the hole as needed, and
top-dress with coarse bark mulch or tree trimmings. Water deeply.

If moving a rhodie is something you have time to prepare for, you might consider prepping a hole or over summer and moving it in the fall just as we are getting fall rain. But I have moved rhodies in the summer, fearing the worse, yet they make it.

There is an alternative to moving rhododendrons. They can be pruned back hard. After doing it, you watch for quite a few weeks and see ….nothing! You are convinced you killed it. But that is rarely the case. Eventually, buds that may have been formed 70 years ago emerge from the bark that covered them. The plant is on its way to life as a smaller but equally beautiful plant. Your attentive care and thoughtful pruning will keep it more compact. For more information on rhododendrons, see https://catalog.extension.oregonstate.edu/fs12/html. It is by one of the founders of the Master Gardener program in Oregon, Extension Agent Ray McNeilan, from whom I learned a lot.

**Why plant hardiness zones matter and when they don’t**

This article by Nicole Sanchez, Oregon State University Extension horticulturist, is an excellent introduction to plant zones. I have a few related comments at the end.

*You visit the nursery, pick out a primo plant, come home, put it in the ground and wait for it to become a beautiful tree, shrub or perennial. Then spring arrives and it’s dead or floundering.*

**What happened?**

*In some cases, cold temperatures are the culprit. It’s a matter of right plant, right place. Plants survive to a certain low temperature, a characteristic they developed through evolution in their native habitat. You need to know about hardiness zones to be assured your plants will avoid cold-related death. Plants bought at nurseries should have the hardiness zone on the label.*

*The zones are determined by the U.S. Department of Agriculture, working with Oregon State University’s PRISM Climate Group, and based on a 30-year period of averaged minimum low temperatures. The latest hardiness map came out in 2012 and is from data collected during the years 1976-2005. Zones are ranked from 1 (-60 degrees) to 13 (70 degrees), though the extremes are rare. To find yours, put in your ZIP code and your hardiness zone will appear.*

*Oregon’s hardiness zones range from 6a (-20 to -15) to 8b (15 to 20), with pockets of 5b (-15 to -10) in eastern Oregon. The map doesn’t reflect the coldest it has ever been or ever will be at a specific location, but simply the average lowest winter temperature for the location over a specified time.*

*But with climate change, the zones are shifting. For instance, the 2012 map zones changed in many areas by 5 degrees – or a half-zone warmer – than the previous map. Already, there’s talk of the Portland area moving from zone 8b to 9a, which has a low of 20-25 degrees.*

*We won’t know the specifics about zones changing until we have another 30 years of*
data to go on, but that doesn’t mean we wait until 2035. They may use an earlier time period. Then we can look and see if there are long-term changes that would be reflected in new zones for particular areas. So, we wait and see.

I always hear people say, ‘This is the warmest spring ever’ or ‘I’ve never seen a summer so hot.’ Usually, they’re wrong. Weather is a short-term phenomenon and climate is a long-term pattern.

The map is a guide, not an absolute document. There can be winters when lows dip below your zone minimum. Nature can throw a curve ball; nothing is guaranteed. For now, gardeners should base their plant choices on the current map.

What happens in your garden could very well be different than your neighbor because of what are called microclimates. A microclimate can have an effect similar to moving to a colder or warmer zone. They can be influenced by structures like the orientation of your house to the sun. South will be warmer than north, west warmer than east. Other microclimates may be related to slope: cold air pools at the bottom and the high points are cold, too, because of wind and exposure. So, the middle of a slope is the sweet spot for borderline hardy plants. Microclimates can be created with rock walls and mulches, buildings and fences, and windbreaks created with plants.

I’m in zone 6 Klamath Falls. If I wanted to plant dahlias, which are zone 7 plants, I’d plant them on the south side with a gravel mulch that would store heat.

Zones are essential when choosing a plant. To be successful, plants must fit into your zone, which helps with selection. If you have five plants you like and only two are in your zone, it narrows down your selection. You can push the envelope; just be prepared to lose plants periodically.

Some gardeners get a kick out of growing something that allegedly won’t grow in their zone. Sometimes a plant will survive for several years because the weather doesn’t get down to the minimum of your zone. But, then a really cold winter comes along and zaps them. Be careful with woody plants like shrubs and trees. They are investments. You can pay $350 for a tree or $15 for a flat of impatiens.

Chip Bubl comment: We in Columbia County are now in Zone 8b except the higher elevations are Zone 8a. The last time we had temperatures near zero were two back to back years in about 1989–90. When planting vegetables, we don’t care about ultimate winter cold temperatures but rather how long (frost interval) and how warm a growing season we have. We grow a lot of sub-tropical annual vegetables (tomatoes, peppers, eggplant, corn, cucumbers, etc.) and flowers. We don’t expect them to winter over. The few vegetables
that can winter over (garlic, kale, rhubarb, asparagus, etc.) are quite cold hardy and definitely not sub-tropical. Next month we will talk about the implications of frost intervals, heat units and extreme summer temperatures. We will conclude the “weather” series with a discussion of rainfall patterns in the June issue.

**Mason Bees**

I have been dithering for two years about whether or not to put out houses of some kind for mason bees, what kind of houses to provide, how to care for the bees, and so on and so forth. I do have mason bees in my garden, so providing shelter for them would, I hope, only cause them to increase in numbers, but I continued to procrastinate because I don’t know much about bees in general (well, they might sting and there’s the obvious benefit of honey – yum!) and mason bees in particular. I never did seem to find the time last winter, so did a little research on the subject. Part of the problem is that I don’t really want to add something that will be a bunch more work in the garden right now since I still have my hands full with completing paths and other hardscape in my garden, choosing native perennials to include in the garden, and figuring out in my mostly shady landscape where I can grow tomatoes and an apple tree or two. Then along came Glen Andresen.

Glen Andresen spoke at a Columbia County Master Gardener chapter meeting many years ago. His talk was mostly about mason bees and was not only very informative but also amusing. We learned a lot about the sex lives of bees. Glen is a keeper of approximately 30 colonies of honey bees; he keeps mason bees; he’s been a Master Gardener since 1991; he’s Metro’s natural gardening instructor; and a whole lot more. Like the rest of us he likes to play in the dirt. Now thanks to Glen, I feel I am more knowledgeable about mason bees. I also feel a lot better about putting out homes for them. Here’s what I learned from Glen:

Mason bees are a small, gentle, blue-black, native bee that pollinates our early spring fruit trees, flowers and vegetables. They hatch in March, mate, pollinate and build nests and by early June their life cycle is complete until the next year. In nature they nest in insect holes in trees or wood, but they can be attracted to the home garden by providing them with nest boxes that can easily be made. Here are Glen’s top ten reasons for keeping mason bees:

- These bees are active in early spring before honey bee colonies reach large sizes,
- They prefer fruit flowers and will stay in the crop,
- They usually contact the flowers’ anthers and stigmas on each visit,
- They fly rapidly, thus working many flowers,
- Pollen is carried loosely under the abdomen and is thus freely dusted on the stigmas,
- Males also pollinate,
- They have a short flight range which will keep them near your own yard,
- Gardeners can easily raise their own bees,
- They don’t make honey
- They are gentle and hardly ever sting, and
- They can be stored away between pollination seasons.

Mason bee nest boxes should be at least 3 feet off the ground, face East, Southeast or South, having some protection from rain and direct
sun is good, and the nests should be near wa-
ter since they use mud in their nest building. They like clay soil – no problem with
that here in Columbia County. It is im-
portant that the nest boxes be anchored so they won’t move, and the nest boxes
should not be moved at all during nest-
ing activity. Rough handling or jarring
movements may separate the egg from
its food ball in the nest, causing the
loss of that mason bee. There are many types
of nest boxes. Glen demonstrated how to
make your own. The simplest way to provide
for the bees is to drill holes into untreated
wood. Holes should be 5/16 in diameter and 6
inches deep. There should be a half inch of
wood between the bottom of the hole and the
back of the wood block and the holes should
be at least ¾ of an inch from the sides of the
block to help prevent parasitic wasps from
laying their eggs in the nest holes. Mason
bees lay female eggs deep in the nest holes
and then only male eggs in the last two inches
of the hole so if a parasitic wasp does manage
to invade the nest the next generation of fe-
males may survive. And, since multiple fe-
male mason bees will use a single nest block,
drill the holes ¾ inches on center to separate
their individual holes. You can use a block of
firewood, scrap wood, or even buy paper
“straws” for the bees. Glen showed a picture
of these straws in a can that is mounted on a
piece of wood with a piece of plastic pipe
mounted over it like an awning. Use your im-
agination and have fun with this. Put the nest
boxes or blocks where you can watch them at
work.

Mason bee nest boxes can be carefully stored
in an unheated garage or shed or just left in
place. I liked Glen’s statement that these bees
have been around for millions of years and
have survived quite well on their own without
help from humans. He also said that there will
always be some losses to parasitic wasps and
to mites, but the bees always make it.

He believes in keeping our intervention in
their lives to a minimum, which quite
frankly reminds me of the benign neglect
stance I have taken quite successfully over
the years with my house plants. So, I have
put out a mason bee house and will add a
couple more quite soon. I feel confident that
keeping mason bees can be easy and fun if
you just know the basics. --Jean Landers, 2007
Master Gardener

Squeeze soil before rototilling

Don’t get too ambitious with your rototiller. Working wet soil can really ruin soil structure
and leave you problems you will fight all
summer.

Tilling wet soil comp-
pacts clay into hard
clods and damages
natural drainage. You
don’t want brick-like
clods. And when
drainage is degraded, moisture is held longer
in the soil profile and soil temperature in-
creases slowly. Our vegetables like warm
soils and a nice mix of oxygen and moisture
around their roots.

If your soil contains even moderate amounts
of clay (and most in Columbia County do),
tilling with the right moisture content is criti-
cal. To find out whether the soil is ready for
tilling, take a handful of soil and squeeze it
into a ball. If slight pressure from your finger-
tips causes the soil to crumble, the moisture
content is just right. If it holds together in a
tight ball, wait to till. It is not enough to check
the top several inches of soil. You need to
check soil as deep as you intend to till. Pa-
tience is a virtue.
~ APRIL ~

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. For more information, contact your local office of the OSU Extension Service.

Planning:
- Write in your garden journal throughout the growing season.
- Prepare garden soil for spring planting. Incorporate generous amounts of organic materials and other amendments, using the results of a soil analysis as a guide.
- Prepare raised beds in areas where cold soils and poor drainage are a continuing problem. Incorporate generous amounts (at least 2”) of organic materials.
- Use a soil thermometer to help you know when to plant vegetables. When the soil is consistently above 60°F, some warm season vegetables (beans, sweet corn) can be planted.

Maintenance and Clean Up:
- Allow foliage of spring-flowering bulbs to brown and die down before removing.
- Apply commercial fertilizers, manure, or compost to cane, bush (gooseberries, currants, blueberries), trailing berries.
- Place compost or well decomposed manure around perennial vegetables, such as asparagus and rhubarb.
- Cut back ornamental grasses to a few inches above the ground, in early spring.
- Cover transplants to protect against late spring frosts.
- Optimum time to fertilize lawns. Apply 1 lb. nitrogen per 1,000 sq.ft. of lawn.
- Optimum time of year to dethatch and renovate lawns. If moss was a problem, remove moss before overseeding.
- Prune and shape or thin spring-blooming shrubs and trees after blossoms fade.

Planting/Propagation:
- Plant gladioli, hardy transplants of alyssum, phlox, and marigolds, if weather and soil conditions permit.
- It’s a great time to start a vegetable garden. Among the vegetables you can plant, consider: Broccoli, Brussels sprouts, cabbage, carrots, cauliflower, chard, chives, endive, leeks, lettuce, peas, radishes, rhubarb, rutabagas, spinach, turnips.

Pest Monitoring and Management:
- Clean up slug and millipede hiding places. Bait for slugs; iron phosphate baits are safe to use around pets.
- Monitor strawberries for spittlebugs and aphids; if present; wash off with water or use insecticidal soap as a contact spray. Follow label directions.
- If necessary, spray when flower buds appear for apple scab, cherry brown rot, and blossom blight. See EC 631: [https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/ec631.pdf](https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/ec631.pdf)
- Cut and remove weeds near the garden to remove potential sources of plant disease.
- Use floating row covers to keep insects such as beet leaf miners, cabbage maggot adult flies, and carrot rust flies away from susceptible crops.
- Help prevent damping off of seedlings by providing adequate ventilation.
- Manage garden weeds while they are small and actively growing with light cultivation.
- Spray stone fruits, such as cherries, plums, peaches, and apricots for brown rot blossom blight, if necessary.
The natural landscape

Replanting natural areas

We have learned some valuable lessons the past few years in our efforts to replant natural areas. Those lessons came directly out of a succession of failures. Most of the plantings have been along the creeks and streams of Columbia County but there have been some upland plantings as well.

Here’s what have we learned:

☐ Non-native plants like reed canarygrass, Scotch broom, Himalayan blackberries, Japanese knotweed, and Canada thistle are incredible competitors and have to be dealt with prior to planting. Generally, this will involve the use of the appropriate herbicides for the existing weed flora. Physical removal of perennial weeds like the ones mentioned above is not nearly as effective as a well-thought out herbicide pre-plant program. Even with herbicides, but especially with mechanical removal, it is often appropriate to work on the site for two growing seasons before planting the spring following the second year of work. If effective site preparation isn’t completed before planting, you can likely kiss your plants good-bye. If you have questions about herbicide options, contact me.

☐ Weed competition also provides ideal cover for meadow mice (voles), who love to eat the bark off of tender, coddled nursery trees and shrubs. Wraps around the bases of trees and shrubs will help. But it is another great reason for good weed site preparation prior to planting. Remove the cover and the hawks and owls will have a vole feast.

☐ Compaction on the site can be an issue due to past management practices or mechanical weed control with heavy equipment. Working the ground with a subsoiler when it is dry and won’t further compact is an option.

☐ Plant trees and shrubs on sites in which they have a competitive advantage (“right plant, right place” concept).

☐ You have to have a long time horizon. Weed management even with excellent pre-planting site preparation will need to be continued until the trees and shrubs are “free to grow” (past the point of being suppressed by weeds). There are some grass-only control options available now for use post-planting.

☐ Beaver are industrious and an increasing challenge. We have plantings that have grown nicely over 5-10 years only to be taken apart in three weeks by beaver. Solutions are hard to come by but include planting lots more trees and shrubs than you need, planting trees that they don’t like (cascara, elderberries and possibly spruce), and wrapping individual trees and shrubs in beaver protectors. This is not an insignificant problem and takes attention to the planting over a very long time horizon.
Farm and livestock notes

Cattle temperament and health

U.S. Department of Agriculture (USDA) and university scientists have found that cattle temperament influences how animals should be handled, how they perform and how they respond to disease.

The team of researchers looked at stressful events—such as weaning, transportation and vaccination—that beef cattle experience during routine management practices. The researchers examined interrelationships of stress and cattle temperament with transportation, immune challenges and production traits.

Between 24 and 36 calves were used for each study, depending on the trial. An exit velocity system, which measures the rate at which an animal exits a squeeze chute and crosses a certain distance, was used to select for temperament. A higher exit velocity was judged to be a more temperamental calf. A pen scoring system was used in conjunction with exit velocity to calculate an overall temperament score for cattle selected as the calmest, the most temperamental or as intermediate.

When challenged with a bacterial toxin, cattle showed dramatic differences in sickness behavior, depending on their temperament. The more temperamental animals failed to show behaviors that allow detection of sick animals, whereas calm animals immediately displayed visual signs and became ill. Studies also revealed that temperamental cattle did not have the same vigorous immunological response to a vaccine as less temperamental cattle in the same herd.

In new research, it has been found that temperament is significantly heritable. It makes no sense to keep a cow (or possibly ewe and doe) in your breeding herd if they are temperamental. Your health and the productivity of your herd will improve.

Why pastures decline

Overgrazing: Grass has to have periods of rest to develop enough leafiness to capture sunlight. If you took a load of hay (10-14% moisture) and burned it to ash, the ash weight is what came from the ground. Grass is mainly carbohydrates and that is what photosynthesis makes. Whoever gets the light, wins! Without enough leaf area to capture sunlight, you will have a declining root system, a declining crown and eventually a missing plant. Let grass grow to six inches several times a year. In addition, letting livestock eat what they like best will ensure that, after a time, all that will be left are those plants they don’t like.

Undergrazing: Ironically, pastures that are only hayed, particularly if they are hayed late (late June onwards), will tend to thin out as well. This is because grass evolved being grazed by animals. Grass needs periodic grazing followed by periods of rest. Hay fields should either be cut as close to the first of June as you can or grazed in mid-April for several weeks and then allowed to recover before haying.

Little or no fertilizing: Removing hay without adding nitrogen, phosphorus, potassium, magnesium, calcium and sulfur back will lead to pasture decline. Nitrogen can be supplied by a healthy stand of legumes like clover or lotus (trefoil) but the other minerals have to come from somewhere else. If you buy feed for your livestock, you are essentially importing fertilizer. Make sure you get their barn manure spread back on your fields.

Grazing in the winter: Besides removing leaves when the pasture needs to recover from fall grazing, winter grazing on our wet soils inevitably leads to soil compaction. Compacted soils are starved for oxygen and grass and legume pastures need good aeration. The best advice: Raise sheep, which don’t tend to cause compaction, or don’t have your animals on pasture from November through March. The English use deep-bedding systems to barn-feed cattle during their similar winters. Horse owners make well-drained exercise yards to allow activity without grazing. If you have lots of acres (say 5 acres per cow or horse) that you are willing to use for winter gazing, you may get away with winter grazing (if you manage carefully). Additionally, some very well-drained soils are more resilient to hoof compaction. In the end, the quality of your grass in March will tell you how well you, as the manager of the grass of your realm, did. Grass that has been overgrazed will be very slow to respond to the longer and warmer days of spring.

Did you know? Our pastures produce 60% of the grass they will produce all year between April 1st and June 30th!
Columbia County Master Gardener™ Association

Spring Fair

April 30, 2022 ♦ 9 AM - 3 PM

Columbia County Fairgrounds Pavilion

buy tomato & pepper plants
gardening information
raffle tickets & prizes
tomato information
displays & vendors

face masks
required indoors
directed parking by
St. Helens CERT
please carpool

ATM on-site

In cooperation with Columbia County OSU Extension Service ♦ 503-397-3462
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SPRING NATIVE PLANT SALE

Great Plants grown by Great Volunteers sold at Great Prices

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Behind Scappoose High School

PORTLAND

APRIL 9, 2022 • 9am-3pm

Now accepting payment via Square, Check and Cash

www.scappoosebay-wc.org
Publication Picks of the Month

Short Season Vegetable Gardening: http://www.extension.uidaho.edu/publishing/pdf/PNW/PNW0497.pdf

Practical Lawn Care for Western Oregon: https://extension.oregonstate.edu/pub/ec-1521

Fire Resistant Plants for the Willamette Valley: https://catalog.extension.oregonstate.edu/sites/catalog/files/project/supplemental/em9103/em9103print.pdf

What Can I Do with My Small Farm: https://catalog.extension.oregonstate.edu/ec1529

Small-scale Harvest for Woodland Owners: https://catalog.extension.oregonstate.edu/em9129

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