Country Living
Provided to you by the
OSU Extension Service Columbia County
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Office hours: Closed until further notice
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at our Website: http://extension.oregonstate.edu/columbia/

April 2020

Programs for you . . .

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

Columbia County Oregon Beekeepers 6:00 p.m. April 2nd, 2020 Virtual Meeting ID: 250 573 297
https://oregonstate.zoom.us/j/250573297 Dial in: (971) 247-1195

Registration open now: Free Vegetable Gardening Course, a series of short courses excerpted from OSU’s Master Gardener online course, allowing you to study specific fundamentals of gardening: how to select a site, prepare soil and plant vegetables properly as well as gain skills to successfully produce food and identify common insect and disease problems.
https://workspace.oregonstate.edu/course/master-gardener-series-vegetable-gardening

Seed to Supper: this free beginning gardening course teaches participants the tools they need to start a garden and grow their own food on a budget. A joint program of Oregon Food Bank and OSU Extension Service, Seed to Supper is usually offered throughout our area each spring, but all classes have been canceled. Meanwhile, you may download a free version of the Seed to Supper curriculum.
https://www.oregonfoodbank.org/our-work/programs/education/gardening/

For resources and publications to download, visit: https://catalog.extension.oregonstate.edu/

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.
Gardening in a Time of COVID-19

Many of us are largely shut down now. The OSU Extension office in Columbia County has been closed to face-to-face public interactions since March 16th though we are all still working from home. We are answering phone calls and emails and working on other projects that have been on the back burner for some time. Unfortunately, the annual OSU Master Gardener™ Spring Fair (aka “Tomato Sale”) has been canceled. There was no way around it given the strong chance that our communities still will be at least partially shut down.

The COVID-19 outbreak has created a lot of collateral damage for Oregon and Columbia County. People have been let go from jobs and unemployment will climb fast. When money doesn’t circulate, it is like a heart attack to the economic system. This can reverse quickly if the affected businesses can find the cash to start back up once the quarantine has been lifted. But that isn’t always easy.

We have been getting a lot of questions about food availability, food cost, and food safety. My sense is that the overall food system is intact. Outside of fresh produce, the movement of wheat, beef, chicken, pork, rice, sugar, dry beans, and the many other “staples” in our diet has been pretty efficient. That’s because it takes surprisingly few people in this country to feed us from the farmer to the processor to the shippers and then to the shelf stockers in the stores. Outside of some hoarding behavior, and perhaps stores not being ready for restaurants closing, food is still there and should get better as peoples’ fears are allayed. The weak link is fresh produce. This requires more labor to harvest. If that is okay, fresh produce will be in stores.

Which brings us to another question: is it possible to get COVID-19 from fresh produce? The answer is no. It either doesn’t survive well on moist organic materials and/or the pathways and all the cooling and cleaning that goes on before shipping basically eliminates it. Either way, produce is safe!

With more people out of work, local food supplies can be more important. If you haven’t grown a garden recently, or ever, try one this year. Even a 10 x 10 foot garden can produce an amazing amount of fresh food. You can have lots of green beans, abundant tomatoes, perfect peppers, and lots of greens like lettuce, chard, kale and others to make your home cooking shine. If you want to try a larger garden, consider one 20 x 20 feet which at 400 square feet gives you a lot more space to grow for both the summer and winter storage. You could plant more tomatoes to can or freeze, grow wonderful winter squash like the Butternut that can last six months or more, and have left over kale, cabbage, lettuce and chard to take you into December.

Is it time to start your garden if you are starting from scratch? Maybe, but the soils are a little soggy and cold yet. If the area is currently covered with grass, it would be worthwhile to cover the area with some tarp or black plastic to weaken and kill some of the grass. This would need to be started right away. Leave it on until the middle of April or even early May. Then check how wet the soil is and decide whether it is ready to dig or roto-till. If the dirt can be squished in your hand into a ball that doesn’t easily come apart, it is too wet. Be patient. Tilling soil that hasn’t yet drained enough will produce clods that can haunt you for years if you try to till it. You don’t want that!
Your vegetables will need some nitrogen fertilizer to get rolling. About one-half pound of “actual” N per 100 square feet should be enough. To calculate for the fertilizer you use (organic or conventional) look at the first number on the bag. That is the percentage actual nitrogen in that fertilizer. Take the number of pounds needed per 100 square feet (one-half pound) and divide it by the percentage on the bag. So if it is .5/.16 = about 3 pounds of the fertilizer per 100 square feet. If the first number is 7, it would be .5/.07 = about 7 pounds of that fertilizer in the same area. See, it isn’t that hard. Sprinkle the fertilizer evenly over the soil before you till. You can judge how much by remembering that “a pint is a pound the world around”. It is a rough guide. So the three pounds in the first example would equal three pints on a 100 square foot area.

But once the soil is tilled, you are ready to plant. So, seeds or transplants, or both? I do like transplants for tomatoes, peppers, and even early season lettuce. Direct seeded crops include lettuce, kale, chard, green beans, corn, cabbage, broccoli, both summer and winter squash, and quite a few others. Try to plant as the weather is warming, if possible. It makes the seeds germinate so much faster. (see the “Some like it Hot” article and the chart to follow).

Then, as the seeds are coming up, you have to spend the time to weed around your vulnerable seedlings. Weeds are crafty. Their seeds germinate faster that most of your crop seeds. They grow faster too and start to shade your seedlings! Seedlings without sun are like fish thrown out of water. They are doomed. So the first three weeks you weed after you seed is the most important time you will spend in the garden. If you get your vegetables off to a good start, they will produce well for you.

Wait! I almost forgot slugs. They are deeply fond of most of your seedlings. If you don’t have chickens that have “pre-cleaned” the area of slugs, you must bait or you can lose the crop. Go out at night with a flashlight to see them in operation.

For experienced gardeners, please grow extra rows for your friends that may need it and for the Food Bank. It can make life so much better for people working hard to get back on their feet. Also consider a donation to either the Food Bank and/or United Way. This is the time all our supportive resources will be tested.

If you want some great practical gardening information, see Growing Your Own, an Oregon State University publication you can find free online. If you have questions, please feel free to email me at chip.bubl@oregonstate.edu or call and leave a message for me at 503 397-3462.

Some like it hot

Soil temperature can have a huge impact on seed germination. Inexperienced gardeners often plant heat-loving vegetables like corn, beans, and the squash/melon family before the soil is warm enough for rapid germination. In such conditions, the roots and shoots may emerge slowly. The longer the process takes, the greater the chance the seed will mold or be eaten by soil insects.

A soil thermometer is a great gardener’s gadget. To get good information, measure the soil temperature at a two-inch depth at 9:00 am over several days. Without a soil thermometer, you can estimate that the soil temperature will be a week behind the average air temperature.
Here are some minimum germination temperatures for seeds in well-drained gardens:

<table>
<thead>
<tr>
<th>Seed</th>
<th>Temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basil</td>
<td>60-65</td>
</tr>
<tr>
<td>Beans</td>
<td>48-52</td>
</tr>
<tr>
<td>Cabbage</td>
<td>38-40</td>
</tr>
<tr>
<td>Corn</td>
<td>46-50</td>
</tr>
<tr>
<td>Melons</td>
<td>55-60</td>
</tr>
<tr>
<td>Onions</td>
<td>34-36</td>
</tr>
<tr>
<td>Peas</td>
<td>34-36</td>
</tr>
<tr>
<td>Peppers</td>
<td>55-60</td>
</tr>
<tr>
<td>Tomatoes</td>
<td>50-55</td>
</tr>
</tbody>
</table>

But increasing soil temperatures by 10 degrees can dramatically speed seed emergence (see the table on page 5).

It is possible to warm the soil before seeding (or transplanting) by covering it with clear or black plastic. Clear plastic warms more than black plastic because it acts like a greenhouse with the solar energy directly warming the soil and the plastic keeping the adsorbed heat in there. Raised beds drain off excess moisture and, as a result, warm more quickly.

Once the seed is in the ground, it is not unusual for the weather to turn cold and rainy. Newly planted rows could be covered with plastic tunnels or floating row covers to keep them warm until the seeds germinate. Plastic on wire hoops works well but must be lifted on sunny days to avoid frying the plants underneath. Floating covers can be left in place but don’t forget to bait for slugs.

Starting corn

The “high-sugar” corn varieties are outstanding in quality. However, they are more sensitive to poor germination conditions (cold, wet soils). It is not uncommon to lose a third or more of the seed planted.

You can reduce the problem by

- Warming the soil with clear plastic prior to planting.
- Covering the corn rows with floating row covers after planting to further warm the soil, keep the crows from eating the seedlings, and reduce soil “crusting”.
- Plant enough seed so that even in a bad year, you will still have a stand. You will need to learn how to thin the excess out to get a good crop. If your rows are 30 inches apart, thin within the row to 9 inches between plants. If row spacing is wider, you can thin to 6 inches between plants.
Days to Appearance of Seedlings at Various Soil Temperatures from Seed Planted at ½” Depth

<table>
<thead>
<tr>
<th>Crop</th>
<th>Soil temperature in degrees F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32</td>
</tr>
<tr>
<td>Asparagus</td>
<td>x</td>
</tr>
<tr>
<td>Bean</td>
<td>x</td>
</tr>
<tr>
<td>Beet</td>
<td>...</td>
</tr>
<tr>
<td>Cabbage</td>
<td>...</td>
</tr>
<tr>
<td>Carrot</td>
<td>x</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>...</td>
</tr>
<tr>
<td>Corn</td>
<td>x</td>
</tr>
<tr>
<td>Cucumber</td>
<td>x</td>
</tr>
<tr>
<td>Eggplant</td>
<td>...</td>
</tr>
<tr>
<td>Lettuce</td>
<td>49</td>
</tr>
<tr>
<td>Muskmelon</td>
<td>...</td>
</tr>
<tr>
<td>Onion</td>
<td>135</td>
</tr>
<tr>
<td>Parsley</td>
<td>...</td>
</tr>
<tr>
<td>Parsnip</td>
<td>171</td>
</tr>
<tr>
<td>Pea</td>
<td>...</td>
</tr>
<tr>
<td>Pepper</td>
<td>x</td>
</tr>
<tr>
<td>Radish</td>
<td>...</td>
</tr>
<tr>
<td>Spinach</td>
<td>62</td>
</tr>
<tr>
<td>Tomato</td>
<td>x</td>
</tr>
<tr>
<td>Turnip</td>
<td>x</td>
</tr>
<tr>
<td>Watermelon</td>
<td>...</td>
</tr>
</tbody>
</table>

X  little or no germination
...  not tested

Data Compiled by J. F. Harrington, Dept of Vegetable Crops, University of CA at Davis
~ APRIL ~

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:
- 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. Reduce risks of run-off into local waterways by not fertilizing just prior to rain, and not over-irrigating so that water runs off of lawn and onto sidewalk or street.
- Optimum time of year to dethatch and renovate lawns. If moss was a problem, scratch surface prior to seeding with perennial ryegrass.
- 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
- 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 weeds while they are small and actively growing with light cultivation or herbicides. Once the weed has gone to bud, herbicides are less effective.
- Spray stone fruits, such as cherries, plums, peaches, and apricots for brown rot blossom blight, if necessary.
Raising Baby Chicks: how to begin, without burning down the barn!

So you brought home a box of fluffy baby chicks from the feed store… but now what? As a hen surrogate, your job is now to provide a few basic needs to your growing flock of egg layers: warmth, food, water and protection.

Chick housing can be as simple a setup as a box with absorbent material such as wood shavings or shredded straw that is kept warm and out of drafts. Don’t use newspaper without a layer of shavings on top as they need traction to avoid getting “splayed” legs.

Young chicks are unable to regulate their own temperature and must have consistent warmth (95 degrees to start, lowered 5 degrees each week) which can be easily measured by their behavior: huddled chicks are too cold; chicks far from the heat source are too warm; and those that are milling around freely in their space are just right!

This heat can be provided by a heat lamp (red light will cause less behavior issues than a white lamp: better rest periods and prevent pecking each other!) To avoid the risk of FIRE, it is advisable to place a metal screen over the box so that if a hanging lamp should fall, it will not ignite the bedding! Take extra care if kids, pets or even wild animals can get near the heat lamp.

Either way – plan to check your set-up often, and DO keep a fire extinguisher nearby.

Chicks don’t need too big of a space to start out, and in fact can get “lost” if they have too much room, but they WILL outgrow their box in a surprisingly short time. You can add another box and connect them with a tunnel or a mouse hole cut out, giving them more room - and a kitchen and a living room area, so to speak.

Of course, you’ll be feeding and watering these little cuties (feed stores can recommend a good feeding tray and waterer to purchase) and all of the chicks should fit around one (or more) feeding/watering stations at one time - you may need to add more and fill them more often as they grow! For their first few weeks they need to be freely fed a balanced crumbled chick feed. Do not give so many “treats” that they don’t eat their starter feed as that could result in malnourishment.

Clean, room temperature water must be constantly available, and kept as far from the heat source as possible – they may refuse to drink hot water.

Chicks are pretty hardy if warmth, food, water and protection are well-provided, but the best defense against illness is to keep them draft-free and in VERY sanitary quarters. This may require placing them in a temporary holding area to clean out their box; or giving them a new box altogether. While you are brooding and rearing your new baby chicks, be sure to read up on backyard coop designs if you haven’t already decided how to house them when they outgrow your garage!  

Guest article by Sonia Reagan
Farm and livestock notes

Moldy hay

Moldy grain and hay is a potential health hazard for livestock and humans. This winter, a lot of hay in barns started to mold during the unremitting wet weather we had in January. At the Extension office, we measured ~14 inches of rain. Outlying areas got a lot more. And the mist permeated everything. The symptoms are a dark, powdery growth on the bales.

Moldy hay absolutely should not be fed to horses! Horses are particularly susceptible to inhaled mold spores. Feeding moldy hay can lead to respiratory disease and actual poisoning from the molds.

For cattle, the picture is a bit different but still not great. Moldy feeds can cause problems for several reasons. Palatability is often decreased causing a reduction in feed intake and performance if the ration is not supplemented. Molds may produce mycotoxins that are harmful to animals. Some moldy forages may lead to mycotic abortions in cattle. When the mold spores are inhaled, they may also cause allergic reactions leading to respiratory difficulties and pneumonia.

If moldy hay or grain is fed (to cattle only), minimize the risks by observing the following precautions:

- Avoid feeding moldy feed to young, lactating or pregnant animals. These animals are most at risk to mold related problems.
- Feed the suspect feed to a small pen of animals for 2 to 3 weeks and closely monitor their performance.
- Introduce moldy feeds into a ration gradually. If problems occur, stop feeding the moldy feed immediately and seek help from a competent source.
- Balance moldy feeds with good quality ingredients. It is particularly important to feed a well-balanced ration.
- Feed moldy feeds outdoors to minimize the effects of dust and spores on the respiratory system.

Producers should be aware of the health hazard involved in working with moldy feeds and take every precaution to decrease personal exposure.

Adapted from Manitoba Agriculture
Cattle condition crucial at breeding time

Grass in pastures is starting to respond to some warmer days. Please avoid the temptation to put your cows out too early unless you have great grass. If your herd hasn’t calved yet (and even if they have), make sure they get enough good feed to maintain condition. The cows went through winter getting the calf ready to emerge and now are spending a tremendous amount of energy to milk them. Some alfalfa hay in the evening can do wonders for their condition and disposition.

Cows need to be in good shape as they go in to the breeding season. If they are not, they will settle poorly at first service. This will result in a strung out calving season in 2021.

With milk production at a high level, early spring grass at a high moisture level, and cows trying to gain weight back, it is entirely possible that your breeding stock can be short of energy. New grass is an excellent source of protein so that nutrient is probably in good supply.

Energy supplements, without question, will increase feed costs for most producers. To avoid over-spending, this may be a time to split the herd if they are all being run together and all are in generally good condition.

The toughest animals to get settled are the heifers that have just dropped their first calves. They almost certainly should be separated and given higher quality feed. Other candidates for supplementary feeding will be those cows that calved late (they are still likely to be down in condition) and any of the cows that are, for whatever reason, thin. Heavy milkers often fall into this category.

Observation and feeling the cow can help determine condition. Even though the ribs are not obvious, if you cannot feel some sponginess over the ribs, the cow may be in borderline condition. If she has good overall appearance, feels a bit spongy over the ribs, and is starting to put a little fat on either side of the tail head, she is approaching ideal condition.

Those that are carrying considerable fat and are very spongy over the ribs and tail head have gone too far. There is no economically sound reason to be giving supplementary feed to these animals.

Supplementary energy sources include high quality local hay, grain mixtures or molasses blocks. If your pasture is not growing much and is still very short, you may have to continue to feed protein as well as energy. A good alfalfa fed with some local hay is probably your best choice.

There is no percentage in supplementing worms. If you haven't done internal parasite control on your herd, now is none too soon to get the job done.

Last thoughts

Keep the magnesium blocks in front of the cattle to keep grass tetany in check. It can be a killer.

April and May are the ideal months to control tansy and Canada thistle. Weedmaster is still the most widely used product for tansy and Curtail for thistle control. Remember, thistles must be sprayed relatively young (8-10" tall) for best results with Curtail.

Rotate pastures and get your hay equipment ready.
Currently, our office is closed until further notice. Staff are working remotely and may be reached by email. To continue receiving this newsletter, and other important updates, please SUBSCRIBE to our digital mailing list online at:

https://extension.oregonstate.edu/newsletter/country-living-newsletter

If you require a printed and mailed copy, you will need to email or call Sonia Reagan at Sonia.Reagan@oregonstate.edu or 503-397-3462 and leave a voice message. These messages are checked daily. Thank you!