Gardening Newsletter

by Linda Gilkeson

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Sowing Winter Crops, Winter Kill Redux, Irrigation

With the cool, wet weather recently, the cabbage/mustard family plants, peas and leafy greens are thriving. I still haven't planted out my melons or some cucumber seedlings (the ones I planted out a couple of week ago are barely hanging in there). Sweet basil is another fragile crop that can't handle cool weather so hold off on planting them out if you can. If basil, cucumbers or melons were set out earlier and are now turning yellow and failing, there is still time to harvest a good crop if you have to start over with new plants or from seed (sow now, indoors). For most gardens in the region, the soil is probably too cool to plant corn or even bean seeds directly in the garden so continue to start seeds indoors so they can germinate in warm conditions. Most squash and tomatoes outdoors should get through this cool weather OK as they are the most robust of the warmth loving crops, but if tomato leaves are looking purplish colour or squash have yellowing lower leaves, those are signs of nutrient deficiencies that occur due to cool weather. Once it warms up again, plant should recover and produce normal green leaves and shoots. For more detail on dealing with cool spring weather see my May 25, 2022 message: http://www.lindagilkeson.ca/gardening_tips.html

Planting for winter: Meanwhile, hard as it is to believe, the time to start sowing some important crops for fall and winter harvests is here. The last week of May to first week of June is good timing for sowing Brussels sprouts because plants develop sprouts late enough to avoid late summer aphid damage. Timing is tricky, however, because if sown later than this the plants might not produce sprouts by fall. Many excellent, cold-hardy cabbages (e.g., the wonderful 'January King') can stand all winter in the garden, but they do grow slowly and can take the whole growing season to reach a large size. For winter cabbages, check variety description and sow the varieties that show 100-180 days to harvest on the package now. Unlike Brussels sprouts, however, a few weeks later start with cabbages won't mean a crop loss, just smaller heads at harvest. I now sow these plants a week or so earlier than I used to allow for the loss of growing days during heat waves, when such cool weather crops cease growing until temperatures moderate.

To preview the winter crop planting schedule through summer, you can print out a planting schedule here: http://www.lindagilkeson.ca/pdf/Linda%20Gilkeson%20Planting%20Schedule.pdf If you haven't already stocked up on seeds for fall and winter crops, get onto it immediately as seed suppliers do run out of seeds. Check variety descriptions for frost hardiness or cold tolerance in above-ground crops (lettuce, cabbage, broccoli, chard). This is not an issue for root crops because roots are protected from cold in the soil (and by the thick mulch you will be spreading next fall) so for carrots, beets, etc., plant your favourite varieties.

Winter injury: Cold damage from last January is still showing up on perennial plants. By now, it is clear whether less hardy plants, such as parsley, rosemary, sage, French tarragon, are dead or alive, but it can take May or June for cold injury to show up on woody shrubs and trees. Because there can be such a long delay in showing cold injury or winter kill on bay laurel, citrus, figs, olives, roses, etc. you might wonder if symptoms that are appearing now are due to disease. While some woody plants just have some dead branches or branch tips, others were killed back to the ground. If they were well-established of bay laurel and olives can sprout again from the roots, although it will take weeks to months to see new shoots.

Mermithids are wriggling: If you see long, pale, hairlike worms waving from leaves or on the soil surface on these wet days, those are insect parasitic nematodes in the Mermithidae family [photos: http://www.lindagilkeson.ca/beneficial.html#115]. They are native nematodes that parasitize large insects, such as grasshoppers and earwigs. They come out during wet periods in May and June to mate and retreat when the sun comes out.

ABCs of Gardening: Irrigation

This section contains notes especially for beginning gardeners. The series started with my December 21, 2023 message: http://www.lindagilkeson.ca/gardening_tips.html

How to water a vegetable garden, for how long and how often are common questions for new gardeners. Vegetables do need more water during the growing season than landscape plantings, lawns or even fruit trees and they need careful attention to watering until seedlings have put down a good root system. Coastal summers are generally dry but summer rain varies over the region: areas in the rain shadow of local mountains are the driest, with barely measurable rainfall over the summer. You will need to decide how to water your garden and also to be aware of summer water conservation restrictions that may be in force from your local water district, municipality or regional district.

Irrigation systems can be as simple as a watering can or hand-held hose or as complex as a custom installed drip system with automatic controllers than can be managed via cell phone (and lots of less options in between). Drip systems deliver water from small emitters spaced along irrigation pipes and are best for perennials, such as berry bushes, grapes, fruit trees. Linear systems emit water from many small openings along a hose or narrow tubes. Linear systems can be installed to run in parallel the length of beds, or if they are flexible, can be looped back and forth over a bed. Drip or low-flow systems can be installed by professional irrigation company or by handy home gardeners with patience (to learn more about what you would be getting into installing a drip system yourself see a free online guide from Lee Valley Tools: https://assets.leevalley.com/Original/10108/49771-irrigation-design-guide-c-02-e.pdf). In vegetable beds, avoid using emitters that spray water onto the soil surface as these also wet leaves, which provide the right conditions for serious diseases of tomatoes, potatoes, beans and other crops.

Many factors influence how often to water a vegetable garden: Soil type and drainage, soil organic matter, air temperature and humidity, wind, daylength, density of plantings, garden bed design, use of mulches (which are excellent for retaining soil moisture). This sound complicated, but here are some simple ways to check when your soil needs water and how long you need to run your irrigation system.

Gardens should be watered thoroughly and as infrequently as possible so that plants have deep roots without wasting water. Generally, for most gardens, watering once a week in the spring to twice a week in normal summer temperatures should be enough for established plants. Watering every day or two may be necessary in heat waves and for plants growing in shallow soils, such as in planters or beds built on a hard surface. While established plants can be irrigated with drip or linear systems, you will need to hand water seedlings and to keep seedbeds evenly moist until seedlings come up (in hot weather, shading seed beds avoids the need for daily sprinkling).

Calibrating a drip or linear irrigation system: A common beginning mistake is to run these systems until the soil looks wet. You really cannot tell by looking at the soil surface whether enough water has been delivered because hardly any water seeps sideways from the point where an emitter or soaker hose contacts the soil. Plenty of water can be available to roots, yet the soil surface may look bone dry. If you could see a cross-section of the soil from the point where the water enters the soil, you would see a cone- or pyramid-shaped moisture zone expanding downward, with the tip of the cone at the emitter. When plant roots reach the moist area, more roots will develop to exploit water at that location—so once you lay down an irrigation system, don't move the emitters or pipes unless you do it between crops because plant roots can't chase through the soil looking for the wet zone.

To calibrate any system, run it for a short period (most deliver plenty of water in 10 or 15 minutes), turn it off and wait for an hour or two. Then take a trowel and dig down to the root zone, about 15 cm/6 inches deep (in a spot without plants) and see if the soil looks moist. If not, run the system for another interval, wait, then recheck root zone moisture. This will tell how long to run your system to deliver sufficient water at each irrigation session. Don't run the system for the next couple of days, but continue checking the root zone moisture every day to determine how often you might need to water. Use this information to adjust your watering cycles according to the weather by adding another irrigation session during the week in heat waves or by turning off an automatic system when it rains.

Calibrating hand watering or overhead sprinkler: Hand watering can be very efficient or very wasteful because you can't tell how much water has been delivered, but you can monitor this by putting out 5 or 10 empty tuna or salmon tins around a garden bed. Using a gentle "rain" setting on a hose nozzle, evenly pass the hose back and forth across the bed until the whole bed has received water just once (for a sprinkler system, run the system for 15 minutes). Check how much water has collected in the tins and whether the tins contain similar amounts of water, showing how evenly you are watering. A total of 1 cm (½ inch) is usually enough water per session, but if less than that has been laid down, do another pass with the hose nozzle/sprinkler and check again. After an hour or two, check the soil moisture in the root zone as for the irrigation systems, above, and adjust watering time accordingly.