## **Gardening Newsletter**

by Linda Gilkeson
November 7, 2019
Leaves, Mulching for Winter

This is my annual note to remind you to collect as many leaves as possible now, both to mulch your garden for winter and to stockpile for mulching next summer. Here are some notes addressing misconceptions and questions that appear every year at this time:

What kind of leaves can be used for mulch? All leaves are usable, but black walnut leaves shouldn't be used on some plants until the leaves have been well composted first (this breaks down a chemical called juglone in the leaves, which suppresses the growth of some plants). One hardy perennial myth is that maple leaves shouldn't be used (luckily, no one told my garden, which has been heavily mulched with Bigleaf Maple leaves for 18 years). Even oak and Arbutus/Madrone are fine, but they do take longer to break down. Mixing oak leaves with other tree leaves works well for a fluffy winter mulch and I reserve Arbutus leaves for pathways where their toughness is an advantage.

Should they be shredded? Not for winter mulching, which is when we want a fluffy, coarse mulch that won't break down until spring. Shredded or mowed leaves decompose quickly, which is great if you want to make a bin of leaf mold (pure decomposed leaves) or add leaves to a compost pile. Shredding is optional for a compost pile, however, because whole leaves decompose fine, just taking a bit more time than shreddies. Even those huge leaves of Bigleaf Maple can be used intact—I just scrunch them up to work them between standing vegetables.

Where can I get leaves? For many gardeners this will be no problem: rake them off of lawns so they don't smother the grass and collect them from driveways, roadsides and boulevards. For those who don't have deciduous trees handy, keep bags and a rake in the car so you can collect leaves elsewhere. Cruise rural roads for leaves or scout urban neighbourhoods for leaf piles put out along the street for municipal services to collect. I don't take leaves from under my maples in a wood by my house because those leaves are where they can feed the trees, but you will be doing a service by removing leaves blocking street drains, covering sidewalks, lawns, etc. You might know someone who can't rake their own leaves who would be happy to have you make off with them.

Be sure to store a supply of leaves for use next summer (no one ever has enough summer mulch!). The best for this are dry leaves collected on a dry day. Keep them dry over the winter (in bags or bins with covers to shed rain) to prevent them from decomposing and you will have an excellent summer mulch, ready for use.

<u>How thick should the mulch be?</u> I aim for a fluffy layer of leaves 4-6 inches thick covering the soil of the whole garden between plants by the time cold weather hits. Rain and snow will pack it down over the winter, but if you have a stockpile of surplus leaves you always add more mulch if necessary to insulate roots during an Artic outbreak later in the winter.

<u>Mulching methods?</u> Work leaves under and between large plants, such as cabbage and broccoli. Push what leaves you can between leeks, beets, lettuce and other small plants in densely planted beds. When the first really cold weather is forecast (usually around early December), I pile on a final layer of leaves right over the tops of carrots, beets, celeriac and other root crops to make sure the shoulders of the roots won't be damaged by frost. Also cover the bulb of kohlrabi. Right now carrots and other roots are

still growing [albeit slowly], which is why I wait until temperatures are too cold for photosynthesis before I cover the plants entirely and effectively turn the beds into a living root cellar. Don't forget to cover empty beds with leaves too, to protect the soil from erosion, smother weeds and build soil organic matter.

Once leaves are wet they stay in place pretty well especially around plants. To hold dry leaves in place on garlic beds and beds without plants you can lay down chicken wire, stucco wire, branches or anything else you have on hand on top of the leaves.

Will the leaves be in the way for spring planting? Little decomposition happens from now until March, though the mulch looks thinner as leaves pack down in the rain. When the soil warms in the spring, worms, insects and microorganisms become active again and leaf mulch decomposes rapidly between March and May. If the leaves are still intact enough to interfere with early spring planting, turn them into the soil or rake them off the bed before sowing seeds. Later you can move them back between small plants as summer mulch.

What about a garden cleanup before winter? I leave everything possible on the ground around or under plants to break down in place over the winter (the perfect nutrition for any plant is really it's own leaves). My only exceptions are woody material that gets in the way or looks ugly or that won't decompose over a winter. Leave roots of spent plants in the ground (cut them off at the soil line, rather than pulling them out). The roots provide valuable organic matter and leaving them in the ground also preserves the community of beneficial microbes that live around roots. I you have diseased plants infected with a pathogen that can survive in soil (such as tomatoes with late blight or crops with root diseases) remove the whole plants with roots and dispose. Don't put them in your compost, but they can go to municipal composting, which is done at high enough temperatures to kill pathogens. Most leaf pathogens can only overwinter on intact leaves or on living plant material so for most all you have to do is ensure leaves decompose before spring. For example, apple scab overwinters on intact apple leaves under trees, but not if the leaves are composted or if they are mowed a few time to shred them so they decompose under the trees. Putting a layer of leaves (from another tree species) on top of infected leaves on the ground is another way to hasten decomposition and prevent spread of spores in the spring.

When to worry about covering vegetables for cold protection? I talked to someone the other day who was already covering her winter vegetables to protect them from the frost. This isn't necessary yet because hardy greens, such as chard and leaf beet, winter lettuce, Komatsuna, Mizuna, leaf mustards and hardy Chinese cabbages are usually fine to about -5oC (23oF) without covers. At those temperatures the leaves freeze, but all you have to do is wait until it warms up and the leaves have thawed out before you harvest. Winter broccoli, cauliflower, cabbage, kale, Brussels sprouts are even hardier and I don't worry about throwing a tarp over them unless the forecast is for -9oC (16oF) or lower. Harvest tip: Pick the outer, older leaves of leafy greens first as these are less hardy and less disease resistant than the younger leaves in the centre of the plants.