



Flourishing GARDENS

Written by Jane Yealland

This fall, instead of putting the garden to bed, regenerate it with measures that will improve your garden's ability to sequester carbon dioxide. Last spring, the City of Kingston was the first municipality in Ontario to declare a climate change emergency. Local master gardener Astrid Muschalla has some easy steps gardeners can take to create climate-friendly gardens, and this fall is a good time to make changes.

Astrid is an expert in regenerative land care; she lectures at a number of community colleges and has worked with organizations like Sunnybrook Hospital in Toronto to regenerate their landscape. "Healthy soil has the capacity to help mitigate climate

change," Astrid says, "as healthy soil can draw down and store a surprisingly large amount of carbon dioxide. Optimally, we should be working to reduce lawn size by increasing the number of shrubs and trees we plant in our yards."

Even though there is a growing movement to replace lawns with alternative landscapes, Astrid acknowledges that "for walking and playing on, you can't get much better than a lawn."

Healthy lawns are a mix of different grasses and other supporting plants, such as Dutch clover. "There is no need for synthetic fertilizers," Astrid points out, because "it's all about increasing biodiversity above and below

ground." We need to adopt lawn practices that reduce the need for mowing, watering and fertilizers.

Astrid has some suggestions you can put into practice this fall to improve your lawn's ability to absorb increased CO². Repair thin or bare areas in your lawn during fall, since cool nights and shorter days provide the ideal time for seed germination. Purchase a good-quality seed mix of different grasses, and spread it on your lawn. This helps with disease resistance and provides a more uniform lawn. By having clover and fescues in the mix, the lawn stays green during drought periods in the summer. Finally, add a quarter inch of good-quality compost. One source for local

organic compost that Astrid recommends is available from Norterra Organics on Joyceville Road.

If your lawn has a problem with thatch, which is the result of a buildup of old grass roots and rhizomes, then fall is the time to deal with it. "Too many gardeners wait until spring and then aggressively rake lawns, which actually causes more damage," Astrid says. "If your lawn is not absorbing water because of thatch, then aeration will help, as well as leaving grass clippings on the lawn to help decompose old roots and rhizomes. Healthy soil can hold a lot more water than compacted soil, reducing rain washing into the storm drain because the soil can't hold on to the water."

Astrid advises not to cut grass too short: "Never mow more than 30 percent of the plant, or you will compromise the plant's ability to photosynthesize; so, for example, at 5 inches cut to 3 inches. Leave the grass clippings, which help feed soil microbes, and be sure to keep your mower blade sharp. Dull blades tear the leaf, leaving more surface area exposed to disease. A healthy lawn is the best defence against weeds."

Now is a perfect time to plant shrubs and trees; although the soil is getting cooler, there's still time for roots to grow and get established. Whether next spring arrives early or

late, the plants will wake up naturally rather than in pots in a nursery. It is important to mulch your trees and shrubs, and Astrid recommends that you use fallen leaves to create a 3-to-4-inch blanket as a cover. "Don't cut back spent plants in the fall. Wait until spring, as plant stalks catch snow and act as a protective blanket."

If you are planting a new tree, you will need to wrap the trunk with a tree wrap to keep rodents from chewing off the tender bark, called girdling; and if not stopped, this will kill the tree. Astrid advises to wait to wrap until the ground is frozen, because "those determined mice and voles will dig under the wrap."

Finally, keep watering shrubs and trees until the ground freezes. Conifers store water in their needles, and Astrid notes that the main cause of yellow needles is the lack of water.

Mo Whyte's front- and backyards are lawn-free and filled with a medley of shrubs, perennials and trees. The front displays perennials and shrubs, while the shaded backyard displays ferns and giant hostas. "Spring is our busy time in the garden, weeding, mulching, planting and relocating plants," Mo explains. "In the fall, we enjoy our garden, especially during those last final fall days when you can sit out in the autumn sun. We do very little work, maybe cut out any dis-

eased leaves, especially on the hostas, but otherwise, we leave everything, as the shrub branches and leaves that fall from our tree add a layer of protection. We have some large pots out by our front walk that we leave out all year-round. We find these large coloured plastic planters can withstand Kingston winters. It is the only section of the garden where we plant annuals. Once they are finished, I remove the plants and compost them, but I leave the soil and add a bit of new soil in the spring when I plant the next annuals. In the fall, we decorate the pots with dogwood branches and lights, so they serve two purposes." Mo laughs as she adds that because of the pots' weight due to the earth, "they never go missing."

Mo says that "it's nice to just be able to enjoy our gardens in the fall. Contrary to what people think, we find that perennial gardens take less work than lawns. And by not using mowers and synthetic fertilizers, we are doing something to help reduce our carbon footprint."

This fall, try some regenerative practices to improve your garden's soil health. Even a small garden can increase its capacity to sequester carbon dioxide and to help combat Kingston's climate change emergency. 🌱

SOURCES

Astrid Muschalla
www.OasisGardenDesign.ca

Norterra Organics,
2069 Joyceville Road.
www.norterraorganics.com

Regenerative Gardening
www.regenerationcanada.org