April

2020

Cross Pollination

Newsletter of the Halton Master Gardeners

April Garden To Do List

- □ Insect Friendly Clean up Wait until daytime temperatures are in the 10's C as many beneficial insects are sleeping in the leaf litter. If you're cleaning up perennial beds, consider just shortening stalks, instead of removing them completely. This will help protect any native bees who may have used them for shelter. For detailed info on insect friendly spring clean up read Spring Clean up done RIGHT from Savvy Gardening.
- ☐ Lawn Rake leaves or debris only if walking on the lawn leaves NO footprints.
- Lavender- When new growth starts to appear, use secateurs to prune back dead or overgrown stems to a vigorous bud. More info here.
- □ Prune shrubs that DON'T flower in spring as needed. Use clean, sharp tools. Cut back branches to just above another branch or a bud. Remove dead, damaged, diseased wood. Keep a sharp eye out for cocoons and chrysalises when pruning.
- □ Dahlia, calla, canna etc. If tubers start to sprout, pot them up and grow in your sunniest window. Otherwise, continue to check them weekly. Pot up bulbs from late April to May.
- Seeds Start hardy annuals and vegetables indoors for mid to late May planting. Seed peas, spinach, lettuce, beets, sweetpeas, marigold, pansy and calendula directly in the garden as soon as the ground can be worked.



Hummingbirds arrive May 1st or earlier

- □ Follow good cultural practices to reduce disease and pests for trees & shrubs at risk e.g. proper sanitation (removing dead leaves/fruit), pruning to allow for air flow, a strong spray from your garden hose for pests.
- □ Apply dormant oil sprays and/or lime sulphur before bud break and when temperatures permit for control of disease and pests, only as needed, e.g. disease on fruit, scale/mites on ornamentals last season. Follow label directions carefully. Keep in mind that dormant oil sprays will kill ALL overwintering insects, including valuable pollinators and beneficial insects which may keep your garden in balance.
- □ Spring bulbs Sprinkle blood meal or chicken manure pellets around emerging tulips to help deter deer and squirrel grazing.
- ☐ Divide or transplant perennials as growth resumes.
- ☐ Houseplants Spring is a great time to transplant pot bound plants. Step by step guide to repotting here!
- □ Birds Add native plants to your garden. Put out nesting materials-<u>never</u> use dryer lint or wool scraps. Info about <u>nesting materials here</u>. Get hummingbird feeders ready for May!

What did the big flower say to the little flower?





Hi Bud!

2020

Cross Pollination

Newsletter of the Halton Master Gardeners

The Amateur's Guide to the Indoor Veggie Garden

Halton MG Dar Corrigan

When my dream of an indoor garden became a reality in early January of this year, little did I know how handy it would become as trips to the grocery store become less and less pleasant and we all face the prospect of being indoors for the indeterminate future. Indoor veggie gardening can easily provide a whole range of positive outcomes:

- Fresh greens and herbs to brighten the meal options for my family of four
- Long-term learning experience for children and parents
- Something productive to do with all this time at home
- A meditative outlet to see us through this period of uncertainty

My indoor veggie garden literally brightens my days!

Things to Keep in Mind

Exercise caution when installing/using indoor garden equipment, particularly grow lights. Be mindful of fire and electrical hazards, and read all product information guides.



My "AV Cart" Veggie Garden

Keep your garden clean. Allow for proper airflow and make sure your pots, watering cans and equipment are properly sanitized prior to use.

Setting Up - What you need

At the most basic level, you will need the following:

- Seeds
- Soil
- · Containers with drainage holes
- Light source
- A structure to support your lights

Seed Selection

What you are interested in eating? Don't plant kale if you hate it! What is suitable to grow in pots? Look for descriptions such as "great for containers" on the seed packet.



Click to open catalogues

2020 Gardening Guide

2

The Amateur's Guide to the Indoor Veggie Garden

Here's what I chose:

- Variety of lettuces such as <u>Tom Thumb</u> and <u>City</u> Garden Pelleted
- Kale
- Mini variety of radish they grow indoors and the edible leaves are great additions to salads
- Herbs such as mint, parsley, chives, and dill to liven up meals
- Tomatoes, cucumbers and peppers to start for the outdoor garden
- <u>Sunflower seed micro greens</u> this week -every news report makes me think that I have to plant more!



<u>City Garden Pelleted</u> - an amazing Mesclun blend

April 2020

Potting Medium

I started all my seedlings directly in potting soil or peat pellets, as I'm growing a full garden here - not just starting seedlings for transplanting outdoors. However, for some microgreens, soilless options are available. Read up on your seedlings to decide on the right potting medium for your plants.

Remember that <u>potting soil</u> is <u>different from garden soil</u>. Trust me when I write that it matters.

Containers, Pots and Mats

Remember to wash your containers and garden tools well before starting your seedlings. This is a time to be creative:

- Reuse/repurpose what you already have. Add drainage holes if using repurposed items.
- Match pots to plants: lettuces need about 2" of depth; radishes need deeper clay pots
- Window boxes (long and narrow).
- Email friends or neighbours to see if they will lend you pots not in use.
- Trays under pots: I used old boot trays but any plastic tray with lip to prevent overspill will do.
- Mats that wick water make watering much easier



Window boxes are perfect!

Light Source

Huge bay windows that receive a generous amount of sun work well enough for herbs, and new seedlings that have a plastic "dome" to keep in moisture and heat, but for most people, garden grow lights are in order for a veggie garden that is meant to feed a family.



Click to open link to West Coast Seeds container vegetables

The Amateur's Guide to the Indoor Veggie Garden

Grow Light Options

I am trying out different lights myself, and have had success with the full spectrum fluorescent grow lights (about \$45) and the LED grow lights (in panels at about \$60 and strips \$60). Here are the ones I have:

- Fluorescent grow lights by SunBlaster 24" Grow Light Kit fabulous, but pricey
- LED Grow Lights for Indoor Plants, YGROW Upgraded 75W
- LED Grow Light Strips for Plants 2FT, 60W (6 x 10W)

As for how may lights you would want, that depends on how many containers you plan on seeding.





April 2020

Grow lights are available in grids or strips

Structures - Getting Creative

If you are like me, and not willing to pay for an expensive indoor garden set up, you are going to have to build your own, or get a little creative.

Last year, I was at a fundraising garage sale at a local private school, when I can across one of those giant AV (audio-visual) carts that schools used in the good old days. Do you remember them? Made of sturdy metal, on wheels, multi-tiered, with built in multi electrical outlet with extension cord... Perfect for my indoor winter gardening project! At \$20, it was a steal, and was a major repurposing score, which is always a winner for me.

In addition to my AV cart, I have built simple wood platforms propped up with four wooden legs. Today, I attached two fluorescent bulbs to the undersides of an inexpensive Ikea TV bench that I was not using.



Get creative-who knew this lkea TV bench could become a veggie garden!

Below: Bench with lights on



The Amateur's Guide to the Indoor Veggie Garden

I have gardener friends who are using the frames of small greenhouses. Attaching lights to these structures is very easy and requires no tools at all.

The lights kits came with hardware or pulley systems. The first time I installed lights, I used double-sided, 3M Velcro stick pads. It was super easy and sturdy (the light strips are very light), but I would recommend using the included hardware in the light kits.

Remember to set your garden up close to a water source to make watering easier!

Planting, Planning & Recording

Grow lights will not be needed until the seeds start germinating, so start planting while you work on your structures!

Timing will be important to keep a steady supply in such limited space. Seed packets should have information on how long it takes for veggies to grow. How many plant trays can you accommodate? How many grow lights can you/will you be able to purchase? How much produce do you wish to provide?

Every week, I am planting new seedlings, to take the place of the food that I harvest. I also keep a little journal beside my planting station so that I can record what I am doing. Recording makes it easier to plan. Additionally, I would recommend labelling your seedling trays with planting dates. Trust me this will take a lot of the guess work out later!

Watching it Grow!

This is the fun part-watching your garden come to life! Of course, patience will be in order, but we might have a lot of time on our hands for the next little while.... Still, this process can amuse you and your assistant gardeners a.k.a. the kids! There will be no harvest for at least 45-60 days, but with careful planning, once that time passes,

you will be enjoying a continuous supply of veggies.



Plant kale-but only if your family likes it!

Watering

The indoor garden should never dry out. Be sure to keep the soil moist. Mist regularly and water from the roots once your garden is growing. Be careful not to over water.

Air flow and Humidity Levels

My indoor garden is in my basement, which is rather dry over the winter. Be mindful of healthy humidity levels in your home, and do what you need to keep it comfortable for plants and people alike.

If airflow is a concern, install a fan nearby. I run a fan in the room every now and then, while I am tending to the plants and turn it off when I leave as I do not want it to over dry them out. Keep an eye on your soil for signs of trouble.

April 2020

The Amateur's Guide to the Indoor Veggie Garden

Putting your lights on a timer

You can turn them on and off each day and night, but having them on a timer is easier. New seedlings and plants like around 13-15 hours of light. I am going with 14 hours. So far, it is working.

Harvest

Do a little online research before going near your plants with shears! Personally, I try to harvest my kale leaves and different lettuces so that the plants don't get over crowded, allowing for better air flow. Know when it is time to replace your plant altogether (some of my lettuces get replaced after two full harvests), so as to make good use of your indoor garden space and plant a new crop.

Concluding Thoughts

Regardless of what is going on in the world, I do believe that time spent on this project will be rewarding. Moreover, vegetable gardening, whether indoors or out, will teach anyone involved that we should never, ever waste food! I look at wasted food in a whole new way since beginning this project.

I wish you all the best of luck, and hope that your garden will serve as an outlet for stress during these difficult times, and as a great learning experience for any kids involved in the project! Please feel free to email me with questions, concerns, corrections or advice of your own. I am always open to learning.

Enjoy and happy gardening!

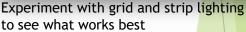
Dar Corrigan

Master Gardener in Training Halton Master Gardeners

Wish you could smell these herbs!









Spotlight on Native Plants - Why is this important?

Halton MG Claudette Sims

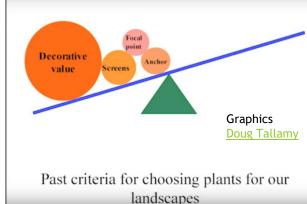
You may wonder why Master Gardeners constantly recommend native plants and some of you may even be tired of hearing this message. I recently watched a talk by my hero, Doug Tallamy "Hope for the Wild 2019" and came away more determined than ever to spread the word about native plants.

Here's a property near me-the owner has chosen plants according to what he thinks is attractive. "Attractive" obviously means "neat", "lawn" & "conformity" He has anchor plants near the foundation & there's a focal point in the front. All the plants are non-native. There are no plants that support insects (food web), nothing for pollinators, and very little carbon sequestering because of the huge lawn area which in turn is actively destroying MY watershed.



April 2020





Thinking of "plants only as decorations or landscaping = ecological destruction" (Doug Tallamy)

Contrast that with this property-it has all the decorative elements of the above but this owner chose to plant mostly native plants because of their function, not just their looks. It feeds pollinators, support monarch butterflies and has a rain garden so it protects the watershed, which in turn protects human health. This garden restores the eco-balance.



"If we add function to the criteria used to select plants, landscaping = ecosystem restoration." Doug Tallamy



Future criteria for choosing plants for our landscapes

Doug Tallamy

FAQs Native Plants

•Do I have to plant only native plants?

•No! You can plant non-native plants, but strive for **70**% native plants in your garden. That's how much is needed to support a family of chickadees!

•How do I make the change to native plants?

•Start by replacing any invasive plants e.g. periwinkle, goutweed, with beautiful native plants. Continue to replace other non-natives as you gain more knowledge.

Here are some suggestions: (*invasive)

- Instead of
- Periwinkle*
- Forsythia*
- Burning bush*
- •Lawn*
- Norway Maple*
- Hosta



Creeping phlox (P. stolonifera)

Try this:

Phlox stolonifera

Spicebush

Aronia - Chokeberry Reduce each year by 10%

Sugar Maple

Wild Ginger



Spicebush is a host plant for 3 Butterflies & moths.



Click on booklet for more ideas!

•Do I have to get rid of ALL my lawn?

•No! Lawns make great pathways as they are really the only plant that you can walk on. But try and reduce it each year by planting trees, shrubs and low care native plants.

•What can I plant to support birds species?

•The majority of bird species require caterpillars to feed their young. While berries and seeds are part of their diet, without caterpillars, bird numbers plummet. While any native plant is good, "keystone" plants are the best! (see next page)



Chickadees need over 6,000 caterpillars to raise their chicks! (Image: National Audubon society



Not matter how many flowers or feeders you have in your garden, you won't have hummingbirds without insects! (Image: The Spruce)

April 2020

FAQs continued...

- •Are all native plants equally useful in gardens?
- •No! "Keystone plants" support larger number of species of caterpillars. Having these 3 species in your garden would make a BIG difference.

(# of caterpillar species supported in brackets)

1. Quercus spp- (275 species supported)

- •Quercus alba/ White Oak
- Quercus bicolor / Swamp White Oak
- •Quercus macrocarpa /Bur Oak
- Quercus muehlenbergii / Chinquapin Oak
- Quercus rubra / Red Oak



Nannyberry (V. lentago) -has glossy, red foliage in the fall; fruits are highly sought after by birds



← Bur Oak (Quercus macrocarpa) Oaks are easily grown from seed (acorn) and yes, you'll likely see it grow in your lifetime!

April 2020

2. Viburnum spp (76 species supported)

- •Viburnum acerifolium /Maple-leaved V.
- Viburnum lentago / Nannyberry
- Viburnum rafinesquianum / Downy Arrow-wood
- •Viburnum recognitum /Smooth Arrow-Wood
- Viburnum dentatum / Southern Arrow-wood
- <u>Viburnum trilobum</u>/ Cranberrybush

3. Prunus spp (250 species supported)

- Prunus nigra / Canada Plum
- Prunus pensylvanica / Pin Cherry
- Prunus serotina / Wild Black
- Prunus virginiana / Chokecherry

Wild Black Cherry (P. serotina) → has fragrant white flowers & is the larval host plant for 2 beautiful butterflies (& 1 gorgeous moth!



Spotlight on Native Plants is MOVING next month!

Look for native plants highlighted on our website under

NEWS and Mondays on our FACEBOOK page.

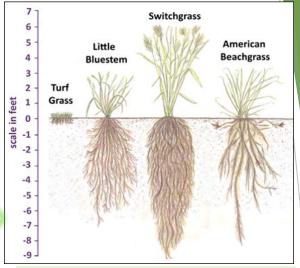


Did you know?

Carbon Sequestration (storage of carbon to mitigate climate change)

- Lawns 120 lbs/acre/yr
- Prairies 3000 lbs/acre/yr
- Forest 3500 lbs/acre/yr

The "root cause" is due to the comparative size of plant roots. Most native plants have really long roots!



Compare roots of turf with 3 native plants.



April 2020

WE'RE FEEDING **POLLINATORS** www.hamiltonpollinatorparadise.org

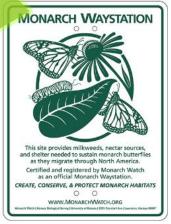


You can apply for these cool signs for your garden! Click on each for more info









Further Reading

HALTON NATIVE PLANT SPECIES CHECKLIST

NEW Plant List: Native Plant List for Breeding Birds

NEW Plant List: Native Plant List for Migrating Birds

NEW Plant List: Native Plants for Pollinators

NEW Plant List: Woodland Plants for Landscaping

NEW Plant List: Prairie & Meadow Plants for Landscaping



Newsletter of the Halton Master Gardeners



Question of the Month



Help! I repotted two tropicals with some potting soil that appears to be saturated with these little fruit fly looking beasties! This sticky fly tape is covered with them. I've sprayed both plants with soapy water to no effect! Any ideas on how to stop this would be appreciated. I'm finding them everywhere.

(June E. - Master Gardeners of Ontario Facebook Group)

April 2020

Wow that is an impressive outbreak! Good news is that fungus gnats are relatively benign. Adults do not bite and do not harm plants. However, the larvae can do root damage in that volume. Typically larvae feed on algae, fungi and decaying plant material in soil, but can also feed on root hairs.

So what to do? First you need to change your cultural practices. You need to let your soil/media dry out. This will kill off the larvae and reduce their food source. Sticky tapes as you are doing can be used to collect the adults so they don't continue to breed and spread.

Generally pesticides are not recommended.



Mostly because they are not particularly effective at dealing with the larvae. Anything from soaps to pyrethrins can kill off adults, but these give temporary results as they do not persist long. There are more long lasting synthetic pyrethroids products like Schultz fungus gnat spray (containing Resmethrin) that require less repetition, but honestly, I think you will be able to manage it with cultural changes.

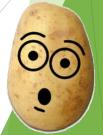
Researchers have found that Bounce® fabric softener dryer sheets (Outdoor Fresh Scent) repels fungus gnat adults and greenhouse producers insert dryer sheets into growing medium. There are ongoing experiments with things like lavender (Lavandula angustifolia Mill.), marjoram (Origanum vulgare L.), and basil (Ocimum basilicum L.) which contain linalool (3,7-dimethyl-1,6-octadien-3-ol) to see it they have the same effect. You might try sprinkling some oregano on the soil surface as an experiment.

Sliced potatoes pressed on the surface of the soil are great for drawing the larvae to the surface. They are good for monitoring levels and can be discarded to remove some of the problem.

More Reading:

- Fungus Gnats as Houseplant and Indoor Pests
- Fungus Gnats
- Effect of monitoring technique in determining the presence of fungus gnat

Cathy Kavassalis, Halton Master Gardener



"What's Growing On" Covid 19 Updates

Halton Master Gardener Meetings are cancelled until further notice.

Luckily, Gardening is NOT Cancelled!

We are still answering your garden questions, so send us an email! It's what we do best! HaltonMasterGardeners@Gmail.com

Do you need Seeds?

Many seed companies are still able to do business online. Here's a list from recent recommendations on Master Gardeners of Ontario Facebook Group:

- Stokes Seeds 2020 Gardening Guide
- Matchbook Garden & Seed Company
- Hawthorne Farm Organic Seeds in Palmerston
- Urban Harvest
- Vessey Seeds
- Wildflower Farms
- · William Dam Seeds in Dundas, Ontario

Do you need plants?

Although there is uncertainly of when nurseries may be able to open, use this <u>map of nurseries in Ontario</u> to find a nursery near you. Many nurseries are offering online specials, especially of seasonal plants.



Spring Clean up Intervention!

As the weather warms up and people are itching to do something, I'm watching my neighbours spreading seed on their lawns and raking up leaves. It's time for an intervention!

- 1. Please read suggestion in our April Garden To Do list, especially the Spring Clear up link.
- 2. Seeding Lawn Wait until lilacs bloom. It's too cold to seed now. Your seeds will likely just rot.
- 3. Leaves: If you must rake them up, place them somewhere in your garden. Why?
- a) Leaves add nutrients to the soil.
- b). Beneficial (and magical) insects like fireflies and native bees (who DON'T usually sting) live in leaf litter or plant stems.
- So by throwing out the leaves, you are NOT helping your garden!
- 4. If you MUST cut stems of perennials (you don't HAVE to), stack the stems against a fence or border.



'I THINK I HAVE

ENOUGH PLANTS"

GARDENER, EVER

Firefly larva live in leaf litter & hunt slugs & snails! Image: Savvy Gardening

April 2020

12