

CROSS POLLINATION

Halton Master Gardeners Monthly Newsletter
MAY 2022 | VOL 15 ISSUE 4

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Halton Region
Master Gardeners



Liverwort— A Beauty with a Beastly Name

(Hepatica nobilis or Anemone hepatica)

By Claudette Sims, Halton Master Gardener

Sometimes I think our native flowers are in serious need of rebranding. *Hepatica*, AKA liverwort or liverleaf, got its name because the leaves somewhat resembled a human liver. Surely we can name a plant based on more interesting characteristics! *Hepatica* gets the most insect services using the least energy resources. It receives important pollination services from bees with a minimum energy output by specializing in making pollen rather than nectar. It further protects that precious pollen by closing its flowers at night or when it rains. *Hepatica* entices ants to disperse its seeds by offering them a reward-nutritious food packets, called elaiosomes, that are attached to the seeds. The ants take the seeds back to their nest, usually in a location with rich soil and out of reach of hungry birds. *Hepatica* typically blooms from April to May and when you come across it in a woodland, the delightful flowers range from blue and pink to white. *Anemone hepatica* is native to temperate woodlands of the Northern Hemisphere. In your garden it would prefer a somewhat moist area in partial shade, although it can tolerate drier areas in summer. Given its beauty and clever survival strategies, perhaps we could refer to it as Bee's Delight or Stunning-in-Spring? ✿

Photo: Mark Dennee MGOI FB

MAY GARDEN 'TO-DO' LIST

by Claudette Sims, Halton Master Gardener

- ☐ **Perennials** – [Divide & transplant](#) overgrown fall blooming perennials on an overcast day. Add wire supports/stakes around tall perennials as needed.
- ☐ **Lawn** – When lilacs are blooming, over-seed to enhance the general vigour of your lawn. Feed soil and lawn by top-dressing with ½ inch (2 cm) fine textured compost/manure. Areas with moss indicate soil has been compacted and nutrient level is likely low. Learn more [about moss here](#).
- ☐ **Prune** roses now that the forsythia are blooming. Here's an introductory [video](#) about rose pruning.
- ☐ **Tomatoes** – Transition seedlings to the garden slowly, starting with a sheltered location, from 1-2 hours on day 1, and increasing each day to full sun. Plant in the garden when they're about 6" high when all danger of frost is past. Plant deeply, right up to the bottom leaves.
- ☐ **Corn** – Sow corn seeds when oak leaves are the size of a squirrel's ear!
- ☐ **Perennials** - [Divide or transplant perennials](#), overgrown fall blooming perennials on an overcast day. Add wire supports/stakes around tall perennials as needed.
- ☐ **Bird Feeders** - [Avian flu](#) has been confirmed in Ontario this year. Using bird feeders is still safe as long as they are not located near poultry. Be extra vigilant in keeping bird feeders and baths clean. Avoid handling any wild birds.



Watch a [video](#) of a hummingbird using spider silk to make its nest at this American Bird Conservancy link.

Hummingbirds use twigs, moss, lichen, and spider's silk to make their nest. Make your garden a welcome place for spiders and hummingbirds.



- ☐ **Trees** – New research recommends pruning trees from April to August, to allow cuts to heal. EXCEPTION: Oak trees should NOT be pruned April 15 to July 15 due to [oak wilt disease](#). Inspect trees for scale, fungus or other disease. Check these links for [fruit trees diseases](#), [Black knot fungus](#) and [magnolia scale](#).
- ☐ **House plants** - Increase watering & feed, preferably with a dilute organic fertilizer. If the soil is drying out quite quickly between watering, it may be time to repot, one size larger. Note: hoyo & Nile lily (Agapanthus) flower when slightly pot bound, so repot these less often.

Trilliums Anyone?

Watch for trilliums blooming in May. We have five native trilliums in Ontario. Consider adding one to your garden!

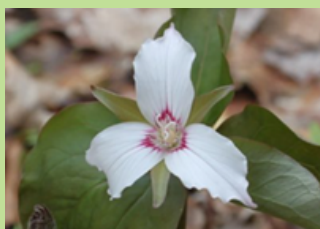
Painted Trillium

White Trillium

Red Trillium

Drooping Trillium

Nodding Trillium



GARDENING WITH CHILDREN: FROM LITTLE SEEDS...

By Allyn Walsh, Halton Master Gardener

It's spring! Everything is growing, both plants and children, and you may ask how we can get them growing together? And why do we want to? For those infected with the gardening bug, it can be as simple as sharing something very joyful and satisfying. Our primary objective may be to help a child become more aware of the natural world around us. For the healthiest and best future, our children need to understand the importance of the ecosystem and biodiversity – and what better place to start than in a garden.

Getting outside and being active is good for young and old. Everyone is more likely to sample food they have grown themselves— what a good way to get children to eat their veggies!

I've managed to engage children as young as two in gardening and as long as you have age-appropriate expectations, tolerate some mishaps, and are ready to quit for the day when the child is no longer engaged, any child able to communicate can enjoy gardening with you. There are many programs to introduce children to gardening.

I have enrolled my own children, and now my grandchildren, in programs at the Royal Botanical Gardens and I encourage you to take advantage of those and similar programming for children. I maintain though that nothing beats having a garden at home.

Gardening Tasks

Children enjoy playing with water (well, so do I) and watering is a natural for them. Child-sized watering cans ensure the child can lift, carry, and water, and it is certainly hard to overwater using them. Even the youngest toddler will enjoy helping tip the watering can over plants. As far as equipment goes, I have found child-sized trowels and spades don't get much use, and those cute little gloves don't stay on for very long. Most kids enjoy planting, watering, and weeding with their bare hands anyway.



Planting is lots of fun for kids—mucking around in dirt!—but they will need careful guidance on spacing and depth. Sowing seeds indoors under lights can be very rewarding since the results become apparent quite quickly. However direct sowing outdoors is also a thrill, particularly if seeds that germinate quickly are selected. (More on this later.)

Weeding is a challenge for young children to understand — why some plants should be pulled out and others must stay. BUT even a three-year-old can be shown a plant and then asked to find more of it—this quickly leads to the identification and pulling of your undesirables. Some plants are too hard for little ones to pull out without tools (for example those with tap roots like dandelions), so identify weeds that come out easily and set them to work.

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GARDENING WITH CHILDREN CONT'D



Harvesting may be the best part of gardening and children love taking this on. I have never seen cherry tomatoes disappear so fast as when my grandchildren spend time in the garden. Ditto the raspberries at their grandparents'. Learning how to harvest vegetables and edible berries encourages kids to eat them. They also enjoy picking flowers (caution is advised— set some limits or you may get an unwelcome surprise bouquet!).

Garden clean-up has become much less of a task as we have recognized the importance of leaving plants to feed the soil and protect hibernating bugs. Still, there is always lots to do, and children participate with enthusiasm, particularly if there is a game involved (Who found the biggest branch? How many stones can you put back into the gravel?).

What to plant

There is so much choice! So many seeds, and so many nursery plants are available. I have found a few things that are particularly easy and satisfying for children to plant and these are my suggestions:

- Chose plants wisely, avoiding anything toxic and as always put the right plant in the right place. In other words, do your homework!
- Plant food! Choose things they like to eat as well as plants you would like them to eat. Examples include lettuce, carrots, beans, tomatoes (particularly cherry tomatoes), and potatoes. Radishes are particularly fast growing, and pretty to look at. Varieties of squash are fun, as they are fast growing and produce heavily (zucchini, pumpkins etc.) but they need lots of space.
- Plant flowers that attract and host butterflies and birds. Native plants excel, but consider dill and parsley for swallowtail butterflies. My grandchildren were very excited by a swallowtail caterpillar on the parsley last year.
- Plant annuals which come up fast and attract pollinators. Nasturtium (*Tropaeolum majus*), sweet alyssum (*Globularias maritima*), marigolds (*Tagetes spp.*), and calendula (*Calendula spp.*) look pretty and are good to eat too. They are easy for kids to plant and very successful in any soil.
- Plant bulbs, even though it's quite a wait for them to come up. Even preschool kids have no difficulty remembering planting them and enjoy seeing them come up in spring.

Containers placed at child height make it easy for kids to plant, weed, and harvest. Isolating the child's plantings this way allows them to see up close what they have achieved. Containers are good for many vegetables too since they can be placed in spots with the right sunny conditions and even moved if things change. Containers can fit in very small areas too.

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GARDENING WITH CHILDREN (CONT'D)

- Try cuttings for school-aged children. They particularly enjoy watching them root in water, but any method is satisfying. Common plants that propagate easily this way include coleus (*Plectranthus scutellarioides*), geranium (*Pelargonium spp.*), and many houseplants such as pothos (*Epipremnum aureum*), African violet (*Streptocarpus sect. Saintpaulia*) as well as herbs such as basil (*Ocimum basilicum*) and mint (*Mentha spp.*) These plants all have a good success rate for both rooting and surviving after planting.

Final Tips

Expect accidental destruction, crop failures, and short attention spans—and roll with it. As gardeners, we are all good at that!

Take photos of the children gardening and their results. They love looking at the photos.

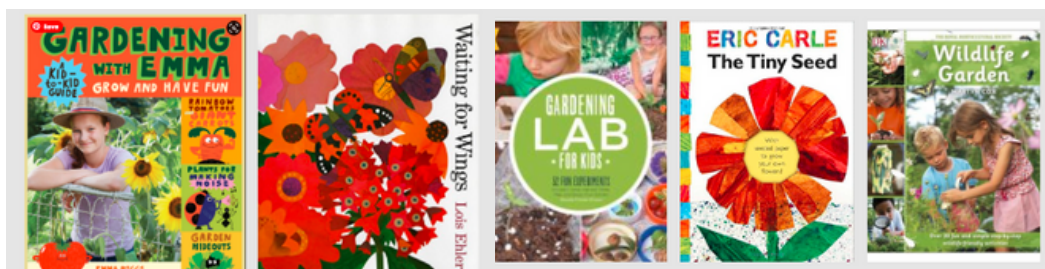
Explain as you go but avoid lectures. It's easy to get carried away with the details, but it's better to make a short comment or explanation and then respond to any questions. Their questions can be fascinating! Finally, as in all things gardening, don't be afraid to take a break or stop when you or the kids are no longer enjoying the garden. This is about inspiring the next generation and having fun at the same time! ✿

Resources and Further Reading

- [Little Green Sprouts – 3 Toddler-friendly Gardening Projects](#)
- [Toxic Plant List](#)
- [Native Plants for Pollinators](#)



Enjoy some great books for gardening with children.

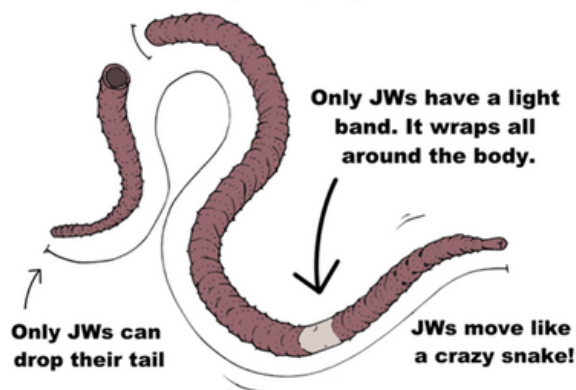


Visit Halton Master Gardeners: [Growing Gardeners](#) for more gardening ideas

INVASIVE JUMPING WORMS—SPREAD THE WORD NOT THE WORM!

By Claudette Sims, Halton Master Gardener

How to Identify Jumping Worms



What's the problem?

Jumping Worms (JWs) are now confirmed in Ontario (Windsor-Essex in 2014, and Dundas, Toronto and Wheatley in 2021). Most earthworms in Ontario are non-native, but JWs cause much more damage & spread much more quickly. They can kill plants by stripping the soil of nutrients, leaving behind bare, dry granular pellets. They are a threat to our gardens and lawns, farms and forests, as well as bird and animal life. People spread the worms without realizing it on shoes, in plants, soil and mulch. One JW cocoon (egg) or worm is enough to infest a garden.

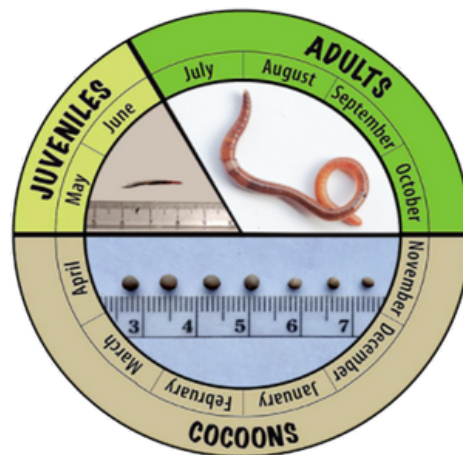
Prevention is Important!

There are currently no controls or pesticides to stop these worms. Become familiar with JW appearance, life cycle and snake-like movements. JWs die over winter, but their eggs survive in small cocoons and begin to hatch when temperatures reach 10°C. JWs will thrash and jump wildly if disturbed and may even drop a part of their tail. They are most easily identified when they mature (July-Oct.).

What You Can Do Now

Arrive Clean / Leave Clean: Clean footwear before and after visiting any private/public garden, or natural area.

New Plants: Inspect the soil and roots before planting in your garden. Be aware that in spring, worms will be tiny and impossible to identify. Choose bare-root plants or grow plants from seeds when possible. You may want to isolate plants.



Inspect New Soil: Check new mulch, compost, and soil for JWs.

Ask Questions: Ask nurseries, landscaping companies and soil, compost and mulch providers how they are controlling JWs. If they know nothing about JWs, then be concerned and offer to share information with them.

Safe Disposal: Kill suspected JWs by freezing, leaving in a bag out in the sun, or soaking in vinegar or rubbing alcohol. Discard in garbage.

Infested Soil: Soil can be placed in sealed plastic bags and left in the sun. Temperatures need to reach a minimum 40°C for at least three days before being safe to reuse in the garden.

Bait: Never use Jumping Worms for bait. Fish don't like them and they don't stay on a hook. Dispose of all unused bait in the garbage, never on natural lands.

Make a Difference by Reporting JWs

Use Ontario's Early Detection & Distribution Mapping System to report JWs:

www.eddmaps.org/ontario/

Learn More about Invasive Jumping Worms

- [Information for Home Gardeners](#)
- [Dealing with Infestations in your Garden](#)
- [Information for Plant Sale Volunteers](#)

For more information scan this QR code or click on this [link](#)



CARRIE DOES NOT LOVE TOM. SHE NEVER DID.

By Bev Wagar, Halton Master Gardener

Carrot had been growing beside Tomato for only a few weeks when she realized she didn't like the guy. In fact, she couldn't stand him. And couldn't let the rumours continue.

"It's not personal, Tom", she said. "But I think the expectations around our relationship were far too high." Sadly, Carrot's attempt at tact did not have the desired effect. Tomato erupted in a flood of sticky tears.

"But... but... You said you loved me!" Although they were just beginning to form, he let a few flowers drop to show the depth of his feelings for her. Tom had never been good at hiding his feelings. He couldn't help but droop at the slightest thirst and his leaves turned yellow at the least provocation.

"I never said that," Carrot retorted, a bit too quickly. "It was that book and all the humans who read it. Something about 'companion planting'. Malarkey, all of it, and now I'm stuck here, trying to grow in your shade."

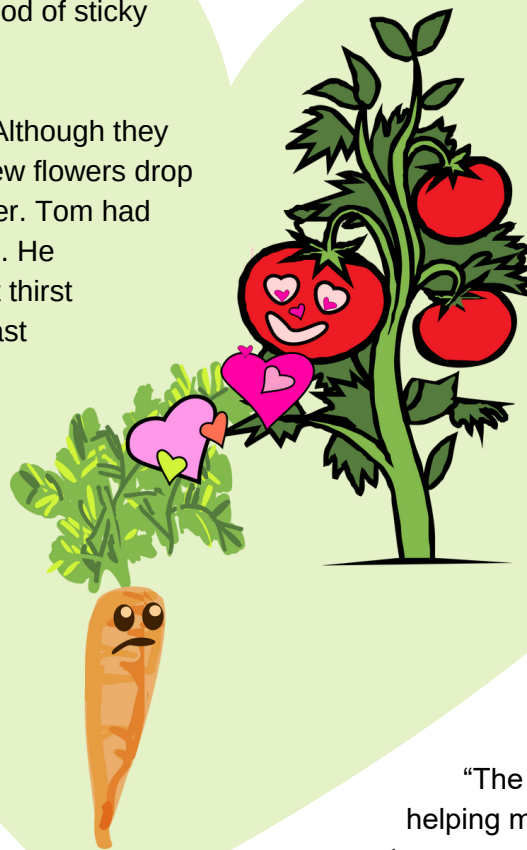
Tom arched over his unwilling companion with a sad fondness. He'd loved Carrot from the moment they'd met. She'd been planted as a seed, back in late April, and had already been thinned once before Tom got plunked in beside her. Right away he was smitten. And when her soft frilly leaves began tickling his lower stems he became so giddy his leaf axils sprouted six more secondary stems almost overnight.

"The human who planted us had good intentions" said Tomato. "I overheard her talking about all the different plants that are supposed to like or dislike each other. The book was about secrets and mystery—and rules. So many rules! Apparently our human was skeptical about the 'lack of scientific evidence' or something like that, but she was going to follow the book's advice anyway."

Carrot tossed her curly green locks and shot him one of those looks reserved for naughty seedlings. She knew Tom wasn't to blame for the current situation. But she also knew he was a Big Boy, an old hybrid, robust and resistant to many of the diseases his type was prone to. He wasn't going away and, unless his cage broke, he wouldn't get any shorter. And they were both in clay, so her root was struggling to get to the usual depth while Tom's roots did not seem to mind.

"The human's little experiment is not helping me at all. Most of the bi-peds are nuts anyway," she snarked. "And now you're getting all crazy, too. Tom, you need to stop telling everyone we're in love!"

Carrot noticed the stunned look on Tom's face but kept going. "You think you're doing me a favour by providing shade? Is that it? Well just because I like it cool doesn't mean I don't need sunlight. And Tom, you big lug, you're hogging it all!"



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CARRIE DOES NOT LOVE TOM (CONT'D)

It had to be her hungry chloroplasts talking, thought Tom. Surely the sweet-scented seedling he adored would not be so cruel.

"Carrie sweetheart, what did I do? Why are you treating me like this?"

She hated that name but kept her composure. She wasn't finished.

"And what's with all the fertilizer, especially the nitrogen," she continued. "That blue powder the humans mix up and douse you with. Well it doesn't stay on your side. I can't stand it. Makes my root get all hairy and weird."

"I had no idea" said Tom. "That stuff is like candy to me. But I wish they'd give me real food, like fish meal or manure or any of those, what do they call them, *organic* ferts. But I don't have any choice, do I?"

Carrot softened a bit. They were both stuck in the same garden. Tomato wasn't a bad plant, just a little thick. Was it the gorgeous fruit that made him so popular? Sometimes Carrot wished she wasn't so, well, *difficult*. A little popularity would surely keep the humans from treating her like a useful but dispensable sidekick to that big sauce-monkey overhead. She rearranged her leaves and tried her best to sound gentle and caring.

"You and I have such different cultural requirements, Tom. Why would the humans think we love each other?"

"Something to do with you repelling insects that are supposed to be attracted to me," replied Tom. "Or your flowers that are supposed to bring in the ones who eat the insects that eat my leaves. When the humans talk about that stuff it's all mixed up with moon phases and star positions and something called astro-zoology."



"Companion Planting" rules as presented in popular books that anthropomorphize plants are vague and, in many cases, unsupported by science. For a critical overview of the topic, read Linda Chalker-Scott's *The Myth of Companion Plantings*. <https://s3.wp.wsu.edu/uploads/sites/403/2015/03/companion-plantings.pdf>

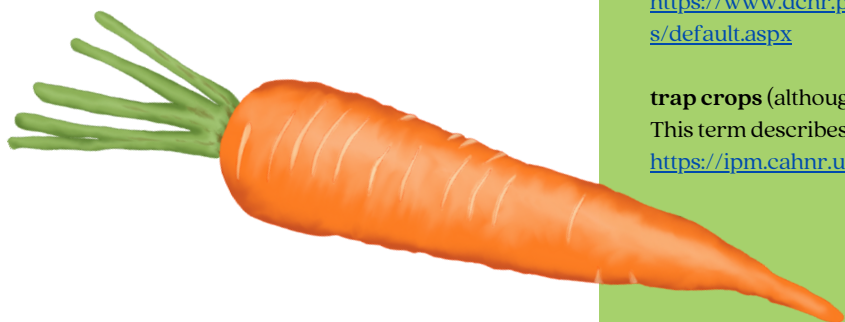
According to Chalker-Scott: "Pseudoscientific, mythological and occult applications of "companion plantings" are not scientific and will damage your credibility as a professional."

Concepts that are supported by research include:

intercropping and polyculture: These are terms used to describe agricultural production methods using mutually beneficial species. The University of Vermont's Food Systems Blog provides an interesting overview: <https://learn.uvm.edu/foodsystemsblog/2014/01/09/controlling-pests-with-plants-the-power-of-intercropping/>

plant associations / plant communities: In the field of Ecology and Biology, these terms are used to describe species that: share a common environment; and interact with each other, animal populations, and the physical environment. <https://www.dcnr.pa.gov/Conservation/WildPlants/PlantCommunities/Pages/default.aspx>

trap crops (although some argue this practice is not really an "association"): This term describes the practice of adding plant species as decoys for pests <https://ipm.cahnr.uconn.edu/perimeter-trap-cropping-works/#>



CARRIE DOES NOT LOVE TOM (CONT'D)

"A bunch of mystical mumbo jumbo," Carrot quipped. "But the insect stuff does make sense in a general way, even though most of the little buzzers just want my flowers and those won't happen until next year, if I even live that long. But what about right now? You're so big nobody knows I'm here. What good am I doing you? Besides, I'm the one who's suffering!"

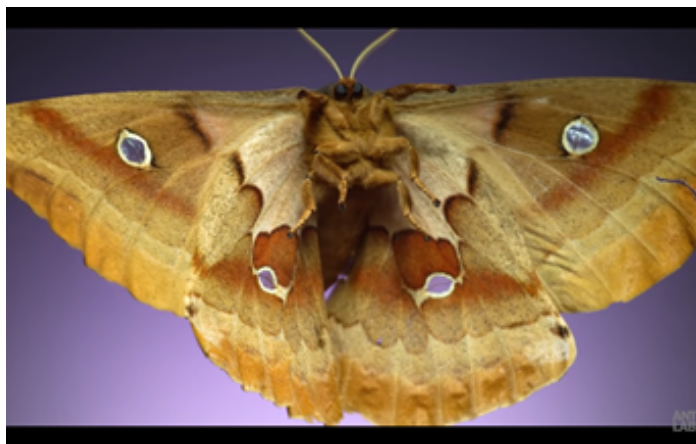
Tom was about to reach down and tickle her frilly mop-top when they both noticed the Birkenstocks. The human was back! And what was that in her hand? A garden fork! Carrot knew her time had come. Even though her root was short, she was being harvested for a sweet snack.

Tom didn't quite know what was happening until he felt the soil churn around his north-facing roots. Carrot had just enough time to say goodbye before she was uprooted and dumped into a wicker basket with the others.

For a few days Tomato was inconsolable. He indulged his melancholy, longing for his pretty carrot companion, the root he loved. But as the sun arced higher in the sky, his tall indeterminate vines sprawled, and one by one his fruit grew heavy and irresistibly red. Tom basked in the attention and admiration, forgetting his teenage heartbreak. There was no lack of water, no blossom-end rot, no wilts, no hornworms. All in all, Tom had a good season. ✿

GROW THESE SEVEN SPECTACULAR MOTHS IN YOUR GARDEN

By Claudette Sims, Halton Master Gardener



Watch this [fascinating video](#) of moths taking off in slow motion. (Polyphemus moth pictured)

I was delighted by this amazing video of moths taking off in slow motion. Many of these beautiful creatures can be found in our gardens if we plant the right plants! Keystone tree species support the greatest variety of moth caterpillars. Consider adding any of our **native** oaks, maples, willows or birches to your garden. Some, like our oaks, are larval hosts to hundreds of [lepidoptera](#) species. Moth caterpillars are essential food sources that our native birds need to feed to their young.

Here are some of the larval hosts of the moths, in order of appearance:

- [Rosy maple moth](#) - native maples
- [Polyphemus moth](#) - oak, willow, maple, birch
- [Dark Marathyssa](#) - Staghorn sumac, Smooth Sumac
- [Virginian Tiger moth](#) - shrubs, trees, common milkweed
- [Beautiful Wood-nymph](#) - buttonbush, grapes, hops, Virginia creeper
- [White-dotted Prominent](#) - oak, beech
- [Blinded sphinx](#) - basswood, willow, birch, hawthorn, poplar, oak

Many of these moths complete their life cycles as pupae in the soil directly under their host tree. If the tree is planted in a lawn, the compacted soil will not allow them to enter and they will likely die. Planting groundcovers or shrubs at the base of trees ensures that caterpillars can grow into the beautiful moths they were meant to be. It will also protect your tree from mechanical damage of lawnmowers and lawn trimmers. ✿



By Cathy Kavassalis & Hariette Henry,
Halton Master Gardeners

The answer is no, white clover or *Trifolium repens* is only an alternative, not a replacement for the traditional lawn. It is not native and does not support biodiversity. It can however fix nitrogen from the atmosphere, requiring less fertilization than the typical Kentucky bluegrass, *Poa pratensis*, that is found in most sod. It can reduce the need for watering due to its deep root structure and it requires fewer herbicides to kill weeds as it often outcompetes them.

Clover does not form a very dense canopy, and it would likely not tolerate foot traffic very well or recover from intense use. However, adding clover to lawns can increase structural complexity and diversity.



Ecolawn research plots at Oregon State University's Lewis Brown Turfgrass Research Farm in 2019
Photo: Brooke Edmonds

“Is the best replacement for grass clover? I would like something that is better for pollinators but still need “running space” for my kids (hence why I’m doing clover rather than planting a garden).”

“Rather than using clover as a lawn replacement it is better to select grasses that require fewer inputs (use less pesticides and fertilizers). There are a variety of [sustainable lawn systems](#) or ecolawns on the market. They provide a turf-type ground cover that tolerates the typical uses of grass lawns. Unlike grass lawns, ecolawns are a mix of broadleaf and grass species that are mutually compatible and ecologically stable, they need less water than conventional grass, and less fertilizer.



Photos of sustainable lawn substitutes in Whitby & Ancaster, Ontario
Wildflowerfarm.com



By Cathy Kavassalis & Hariette Henry,
Halton Master Gardeners cont'd

One of the reasons gardeners often give for not replacing lawns with more natural landscapes is a desire for children's play areas. But why would a meadow not be a wonderful place for a child to spend time in.



In his book [The American Meadow Garden, Creating a Natural Alternative to the Traditional Lawn](#), John Greenlee writes about growing up in a sterile, “natureless” 60’s cookie-cutter tract home, and “The Field”, an undeveloped spot on the edge of his neighbourhood being “heaven” for him and his 10-year-old friends.



His book came out in 2009 and it must have, in some way, been inspired by his experiences as a child. The Publisher, Timber Press, describes the book as follows, “In *The American Meadow Garden* ornamental grass expert John Greenlee creates a new model for homeowners and gardeners. For Greenlee, a meadow isn't a random assortment of messy, anonymous grasses. Rather, it is a shimmering mini-ecosystem in which regionally appropriate grasses combine with colorful perennials to form a rich tapestry that is friendly to all life”.



The trend toward wilder, less formal outdoor spaces has definitely been embraced by garden designers, landscape architects and the public at large. The High Line and Brooklyn Bridge Park in NYC are good examples of these popular outdoor spaces. Perhaps it's time we embraced these ideas in our home gardens as well, to the delight of our children. ✿

The American Meadow Garden,
Creating a Natural Alternative to the
Traditional Lawn. John Greenlee,
Timber Press

Take a Closer Look!

- [Sustainable Lawns and Lawn Alternatives](#)
- [Lawn Alternatives](#)

What's Growing On?




Contact us to [REQUEST](#) a speaker for your garden group, invite us to your event or ask for Garden Advice (onsite) or if you have a question.

We're still answering your garden questions!


Answering your
Gardening
Questions!

Send us an [email](#). It's what we do best!

- Do you have a passion for gardening and sharing your knowledge? Learn more about [joining us](#).
- Interested in attending a meeting?
- Contact us at [Halton Master Gardeners](#)



Royal Botanical Gardens



Plan your May visits:

- [Rock Garden](#) - tulips and spring flowers
- Magnolias & cherries at the [Arboretum](#)
- [Lilac Dell](#) near the end of May



Check our [Calendar of Events!](#) for more information.



Free webinar

Amplifying Sustainability and Biodiversity through Pollinator-friendly Solar

Presenter: Carly Sibilia

Mon, May 16, 2022, 12:00 PM EDT

Register [here](#).





Gardening Humour FB
for Dr. Who fans!

What's Growing On?

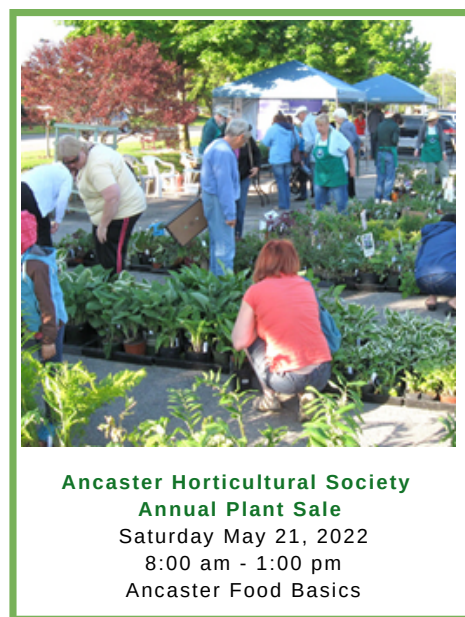
Local Plant Sales



[RSVP here](#)



Look for HMGs at this event!



More [info here](#)



More [info here](#)



Gardening Humour FB

About Our Newsletter

Cross Pollination is published monthly from February to December and is written and prepared by our dedicated volunteers. Halton Master Gardeners are experienced gardeners who have studied horticulture extensively and continue to upgrade our skills through technical training. We strive to provide science-based, sustainable gardening information to the general public. The information in our newsletter has been verified by our volunteers to the best of our abilities, but given the scope of horticulture and science some concepts may not reflect current knowledge.

Your [donations](#) support our work!

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