CROSS POLLINATION

Halton Master Gardeners Monthly Newsletter
OCTOBER 2026 | VOL. 19 ISSUE 9

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Halton Region Master Gardeners



Image: Nancy Little, Sutton Ontario

Staghorn Sumac (Rhus typhina)

Pat Kerr, Halton Master Gardener

I walked toward an urban Peterborough garden and stopped at the gate. A tall, stately plume of staghorn sumac curled over the entrance like a welcoming arm. Its graceful sweep gave the entrance an exotic simplicity. I'm used to seeing sumac as an overgrown, shrubby thicket in fields, so I had to stare. It was striking, elegant and stylish.

The gardener laughed. "That's nothing. Come in. I use a clothespin to weigh down the tip and shape it."

Later, in a Thessalon garden, I saw a triple-stemmed sumac as a focal point. A friend nudged me and whispered, "They'll be sorry soon."

We walked around the stunning plant island garden, shaking our heads. "They use a lawn mower," the friend added. "All they do is mulch the base, and bingo — it's perfect. I'm getting one." The effect was a miniature multi-stemmed almost gothic tree. I bent down and checked the soil. I've lazed on beaches with more nutrient-holding capacity. Yet the sumac was perfect in this small-space dry garden.

We both ran home and added sumac to our gardens. Neither of us is sorry. *Rhus typhina* is a native plant that simply needs the right place.

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STAGHORN SUMAC (RHUS TYPHINA) (CONT'D)



Staghorn sumac has a massive root system. It's a survivor. The natural patch in our field has metre-long roots, each with a new shoot.



Break apart one of those fuzzy red cones and the inside is often full of black or brown sawdust-like frass — the work of a native sumac fruit-boring moth that tunnels through the inner structure of the cluster. The berries remain intact, and birds (or foragers) still eat them.

The soil pH is 8, far from optimum, and we have annual intermittent droughts often 6 weeks long. When conditions are perfect, the roots will spread further and reproduce faster, growing massive plants. It's a plant that requires management unless you are using it for erosion control. For soil stabilization, it's the tall layer. Fragrant sumac (*Rhus aromatica*) is the only native non-colonizing sumac. Smooth sumac, *Rhus glabra* is less aggressively spreading but it lacks the twisted form for winter interest.

Sumac is a flaming autumn colour on hillsides and features bright red “cones” in winter. You can prune it, shape it, or let it spread as the tall groundcover to stabilize a naturalized slope. It’s also a standout plant for bird lovers. Waxwings, robins, bluebirds, grouse, turkeys, chickadees, bobwhite, pheasant, mourning dove, cardinals, and woodpeckers all show up for those tangy, lemony berries.

I’ll admit it: I rub my hands on the hairy seed heads and lick my fingers or chew a few berries before the deer get them. Why not? Even picky moose will browse sumac when winter is harsh. Few plants offer such a buffet. I’ve purchased it at the Bulk Barn but the taste is bland. Fresh, it is zingy, lemon-like but with an all Canadian twist.

What sumac does best, though, is support an entire community of insects and pollinators. It hosts Cecropia moths, Io moths, tiger moths, sphinx moths, duskywings, tussock moths, and even the tiny red-banded hairstreak butterfly. Caterpillars feed on sumac, and more birds feed on the caterpillars. It is a foundational ecosystem plant.



Sumac flowers in June to July. Bees, wasps, and beetles are strongly attracted to the flowers.
Photo: USDA Forest Service

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STAGHORN SUMAC (RHUS TYPHINA) (CONT'D)

STAGHORN SUMAC: A tree of many names and uses

The individual fruits of a staghorn sumac are called drupes, and the large, cone-shaped cluster they form together is commonly called a sumac bob.

Staghorn Sumac was highly valued by Indigenous people who used the root, sprouts, bark, leaves, and berries.

In Anishinaabemowin it is known as **baakwaanaatig** (translated as 'vinegar tree'). In Kanien'kéha it is known as **tará:kwi** ("the sun is dipping into the water").

Photo credit: Catkin of *Rhus typhina*. J. Dolan 2021: Greenbelt Indigenous Botanical Survey





Sumac spice is made by drying and coarsely grinding the tart, crimson-red berries (drupes) of the sumac plant. It is widely used in Middle Eastern and Mediterranean cooking for its tart, citrus-like flavor.



Staghorn Sumac is also known as the "Lemonade Tree" because you can make a tangy and refreshing lemonade using the fruit beverage. Chef Nico Albert (Cherokee Nation), a self-taught chef, caterer and student of traditional Indigenous cuisines has this recipe. Photo: PBS Food



Image: Linda Taylor, Roots 2 Success

This shrub prefers neutral or slightly acidic ground; outside this range it slows down a bit and is shorter, that's all. It shrugs off six-week droughts without a withered leaf. It tolerates moderate salt and compaction. It does refuse flooded soil. It laughs at Canada's Plant Hardiness Zone 3 **(Cold!)** and handles Zone 9 in the summers.

I haven't grown staghorn sumac from seed. However, in Henry Kock's book, Growing Trees from Seed, he has a slight warning. Some years an entire colony will produce sterile seed. (It makes sense for a survivor like the staghorn sumac to ignore seed development during a challenging year.) Henry used a blender on medium to break the hard seed coat and clean the seed. He then did a float test to determine viability. Good seed sinks. Poor seed floats. He used a hot soak prior to planting. Quality seed will double in size during the soak. Germination is in 10 days. Note: Staghorn sumac will hybridize with Smooth sumac (*Rhus glabra)*.

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STAGHORN SUMAC (RHUS TYPHINA) (CONT'D)

Companion shrubs are lower growing shrubs that will frame the open branching structure of the sumac, such as Ninebark, (*Physocarpus opulifolius*) and Snowberry, (*Symphoricarpos albus).*

Serviceberries (spp. *Amelanchier*) will add early spring blooms and add a layered height variation. Witch Hazel, *(Hamamelis virginiana),* will complement the blazing red and orange fall foliage with it's own seasonal display.

Spreading Junipers, (*Juniperus horizontalis*), can be used for slope stabilization or banks where the sumac is used for erosion control.

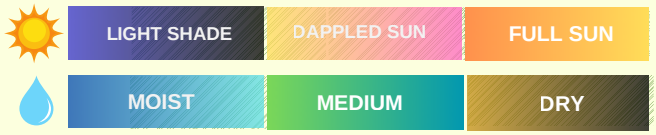
Staghorn sumac isn't just tough. It is generous, adaptable, and full of life - a native plant that rewards anyone willing to give it a place to shine.



Further Information!

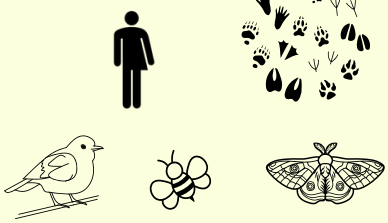
- Brooklyn Botanic Garden
- Trees of Canada
- Foxy Gardens - Landscaping with Sumac in Ontario

STAGHORN SUMAC - DETAILS AT A GLANCE



Plant Type, Family: Cashew, *Anacardiaceae* Family.
Height/Width: (H) 1 to 9 m (3 to 30')
(W) 4.5 to 9 m (15 to 30')
Features: Twigs covered with velvet hair, (name "*as resembles antlers"*). Flowers: 8" (20cm) pyramidal. Leaves compound, opposite, toothed.
Faunal value: Nectar and pollen for pollinators June to July. Fruit for birds throughout the winter months.
Companion Plants: Native grasses to provide soft, fine textured contrast to sumac's course leaves: Little Bluestem, Switchgrass, or Prairie Dropseed. Asters and Coneflowers to add colour and pollinator support prior to Sumac's fall firey leaves and fruit.
Landscape Uses: Upland fields & slope stabilization.
Native Range: Ontario to Nova Scotia, South to North Carolina and West to Kentucky.

Supports





VASCAN



Spectacular view of brilliant red flowers of Staghorn Sumac contrasted by winter white snow.
Image: Staghorn Sumac, Winter Setting, Dominion Arboretum Gardens, Ottawa, Ontario

OCTOBER GARDEN 'TO DO' LIST

By Claudette Sims, Halton Master Gardener

- ☐ **Fall Garden Management – Leave the leaves** in your garden to feed the soil and preserve overwintering insects. Store excess leaves in bags or piles to use as mulch in spring. Leave plant stems and seed heads for native bees and birds. Clean up the shed, garage, patio, paths, etc. Donate unused tools, and repair, recycle or throw away broken items. Drain and store hoses and turn off the water supply. Clean and store or cover pots, watering cans, etc., to prevent cracking during freeze up. Cover ponds with netting before leaf fall or remove leaves in the pond with a bamboo rake. Check for weeds weekly.

- ☐ **Perennials** – Moist soil and cool days of fall are perfect for transplanting or dividing most perennials. Lift the whole plant with a fork or spade, getting as much root as possible. Pull the clump apart carefully or use a sharp knife to divide it. Replant at the same level as the plant was growing and gently tamp down the soil. Note that plants with deep taproots do not transplant well, e.g., New Jersey Tea, False Indigo, Butterfly Milkweed.

- ☐ **Seeds** – Continue to collect seed for next year's garden. Collect and prepare containers for winter sowing perennials.

- ☐ **Trees and shrubs** – Mulch trees with wood chips. To reduce rodent and rabbit damage, use tree guards or chicken wire and trim the grass around the tree. Continue to water until freeze up. Consider replacing Boxwood which is now susceptible to eight pests and diseases and requires ongoing spraying and care to keep it healthy. Choose from this gallery of shrubs under 4 feet tall as well as a variety of shrubs with high wildlife value, winter interest and fall colour!

- ☐ **Houseplants** – Decrease watering as the days become shorter. Check for pests weekly.

Got extra leaves? Try your hand at making your own Gardeners' Gold-leaf mold! It can be used as a mulch, soil conditioner, potting mix or seed compost.





- ☐ **Veggies** – Harvest **squash** and leave in bright light to cure for 2 weeks; see What is the proper way to harvest and store winter squash? | Yard and Garden. Prepare bed and plant **garlic**, preferably hardneck; see Growing Garlic from Cloves: A Toronto Master Gardeners Guide. Keep eyes on the weather predictions and, prior to the first frost, collect the last of the **tomatoes**. If they are showing any signs of blush, leave in bright light to continue to ripen. For those that are truly green, make pickles or fried green tomatoes. Harvest the last of the **beans**, keeping dried beans for kitchen use or seed swapping. Leave veggies such as **kale, rapini, broccoli, parsley and leeks** to continue to grow–they can withstand hard frost–and harvest as needed.
  Disconnect and store any irrigation systems that might have been used. Clear beds of expired plant material such as tomato vines and peppers and add to the compost pile. Spread finished compost on cleared beds.

- ☐ **Fruit and herbs** – Cut **raspberry canes** that have borne fruit this year, leaving next year's canes untouched. Place tree guards on trunks of small fruit trees such as apples and plums to protect from winter damage by rabbits and voles. Learn more about protecting trees from the University of Saskatchewan College of Agriculture and Bioresources. Bring any tender container plants, such as **rosemary** and **bay laurel**, indoors to overwinter.



The 2026 Monarch Awards

PLEASE JOIN US IN CONGRATULATING THE 2026 MONARCH AWARD RECIPIENTS



Alan Bewell
Christine Corsini
Sheelah Dunn Dooley
Joanna Dyer
Zoë Frances
Sarah Halonen
Lindsey Hamilton
Allison Hillier
Kim Hockney
Nancy Hurst
Harbir Hundal
Jason Ireland
Lisa Jeffs
Emma Jolly
Martin Keller
Kate Lazier
Kirsten McCarthy
Lana McCulloch
Andrea Nelson
Rosina Pejcic
Tanya Ritchie
Karen Shea
Melanie Skene
Rose-Anne St. Jean
Allyn Walsh
Brian Wylie

Congratulations to all 60 applicants that took part in the 2026 Monarch Awards!
We look forward to celebrating your achievements together on:

Monday, October 19, 2026 - 6:45 pm
Dundas Municipal Centre, 60 Main St., Dundas, ON

Thank you to:
The City of Hamilton Enrichment Fund for Their Support!

Hamilton

Media Contacts: Janet Mackey, Kate Sault, Co-Chairs of the Halton Region Monarch Awards
Questions? Contact: monarchawards.hmg@gmail.com

A WHIRLWIND TOUR OF CANADA'S INVASIVE PLANT PROBLEM



By Cathy Kavassalis, Halton Master Gardener

I had quite an experience on August 24th!

Following Mitchell Fox's CBC article, Invasive plants are available across Canada. Is federal regulation possible?, I was invited to do a CBC Radio syndication interview. Not one to shy away from a new experience, I said sure.

What did that mean? Well, I spent four hours, off and on, talking to 17 different CBC hosts from across the country.

It was an enormous privilege but, frankly, quite overwhelming. Each interview was only about five minutes, so there was barely time to catch my breath before the next host was calling from another part of Canada.

In those brief conversations, I responded to some variation of the same five or six questions:

- **How does gardening factor into the spread of invasive plants?**
- **What are invasive plants, and what harm do they actually do?**
- **What should I be worried about here?**
- **What would regulation mean for the people who grow and sell these plants?**
- **What should I plant instead?**

Five minutes was never enough for any of them.

I tried to make the case for better regulation of invasive plants that can cause harm to our economy, environment and, in some cases, public health. I was better in some interviews than others at giving concrete examples, because the examples and the risks change from one region to another.

Depending on the region, I talked about plants such as tree-of-heaven, goutweed, periwinkle, yellow flag iris, Tartarian honeysuckle and scilla. In the prairie provinces and northern territories, I mentioned caragana, or Siberian pea shrub, and the work being done to control it in places where it is displacing native vegetation and altering shrubland habitats. In Nova Scotia, one host was dealing with knotweed in her own backyard, so we talked about the damage these plants can do to riparian systems, the enormous costs of control seen in places such as the United Kingdom, and the importance of getting ahead of emerging problems rather than waiting until they become widespread and expensive.

CBC Schedule For Guest / Host – Cathy Kavassalis
2:20 OTTAWA - All in a Day Alan Neal - Host Alysse
2:30 NEW BRUNSWICK - Shift Vanessa Vander Valk - Host
2:40 LONDON/WINDSOR - Afternoon Drive Host: Matt Allen
2:50 HALIFAX - Mainstreet Nova Scotia Jeff Douglas - Host
3:07 TORONTO - Here and Now Host – Mary Ito
3:20 CHARLOTTETOWN -- Mainstreet PEI Steve Bruce - Host/Producer
3:40 YELLOWKNIFE - Trail's End Northwest Territories Host: Lawrence Nayally
3:50 ST. JOHN'S - On the Go Newfoundland and Labrador Host: tba
4:07 VANCOUVER - On the Coast Gloria Macarenko - Host
4:20 QUEBEC CITY - Breakaway Host: Alison Brunette
4:40 SASKATCHEWAN - The 306 Host - Peter Mills
4:50 CAPE BRETON (SYDNEY) - Mainstreet Nova Scotia Wendy Bergfeldt - Host/Producer
5:20 SUDBURY / THUNDER BAY - Up North Jonathan Pinto - Host
5:40 EDMONTON - Radio Active Alberta HOST: Jessica Ng
5:50 WHITEHORSE - Airplay Yukon Host: Dave White
6:07 CALGARY -- Homestretch Alberta Host - Chris dela Torre
6:20 WINNIPEG - Up to Speed Manitoba Host: Faith Fundal



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A WHIRLWIND TOUR OF CANADA'S INVASIVE PLANT PROBLEM (CONT'D)

I tried to explain some of the characteristics that can make a plant invasive: its ability to reproduce and spread, escape natural enemies, outcompete other plants, alter the environment around it, and persist despite attempts to control or remove it.

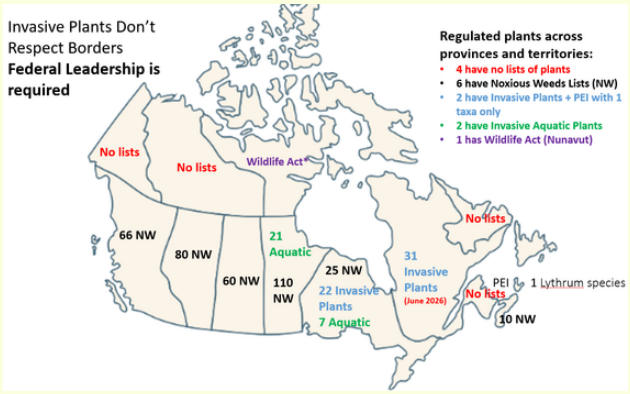
Did I always find the right example? Probably not. Switching from region to region and trying to identify the most locally relevant concern was challenging.

Did I make the bigger picture clear? Again, probably not in five minutes. But perhaps I planted a few seeds of doubt. Maybe someone will look at a plant in a garden centre and think: Before I buy this, I wonder if it could become a problem here?

What the questions revealed: Going through this rapid-fire questioning process made the underlying problem increasingly clear. While some people and organizations know a great deal about invasive plants in Canada, we don't have a system that effectively brings that knowledge to consumers and sellers. We don't have a consistent way to reduce the flow of potentially invasive plants into our gardens and landscapes.

Canada has a patchwork of provincial and federal regulations. Some provinces regulate a handful of horticultural plants that pose serious risks. Quebec's new regulation, in force since June 2026, prohibits the sale and commercial propagation of 31 priority invasive plant species, and Manitoba prohibits 21 invasive aquatic plants under its Water Protection Act. These are models for change. But many jurisdictions have no framework at all, and all are struggling for the resources to screen and address a growing problem.

Governments from the municipal to national level, invasive species councils, conservation organizations, botanical gardens, Master Gardeners and many others, are doing important work identifying problems and educating the public.



Canada has a patchwork of regulations

But we are not effectively bringing that information together across borders.

Again and again, hosts came back to the same question:
"What invasive plants are being sold in my local garden centres, and how do I know which ones are a concern?"

I pointed hosts toward Grow Me Instead guides where they were available and encouraged listeners to support regional native flora and keystone species, the plants that support the most local wildlife.

One thing became very clear during those 17 conversations: We need a national coordinating body to develop a national database of invasion risks. It would be a trusted, science-based resource that brings together the available evidence and identifies potential risks across different regions of Canada. A gardener, retailer or regulator should be able to enter a plant name and find its invasion risk for the regions of Canada where it might be sold or planted.

Plants that pose an unacceptable risk should be phased out of the marketplace. Others could carry clear labels about their potential to spread and cause harm, along with safer alternatives.

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A WHIRLWIND TOUR OF CANADA'S INVASIVE PLANT PROBLEM (CONT'D)

Over the coming weeks, I'll look at what is happening in different provinces and territories. What is regulated? What invasive plants are recognized as problems? What resources are available to gardeners? And try to help identify significant gaps.

There are some wonderful examples of leadership across the country. There are also some surprising inconsistencies.

I'll be exploring those inconsistencies in future articles.

Invasive Alien Species Pose Major Global Threats to Nature, Economies, Food Security and Human Health (IPBES, 2023)

""*Invasive species have become one of the five horsemen of the biodiversity apocalypse that is riding down harder and faster upon the world.*"
(Inger Andersen, UNEP)



The five horsemen. Adapted from Bill Bramhall/NYDN

What is an invasive plant?
It's important to point out that the term invasive is not a matter of opinion. It's an established scientific, legal, and policy framework. While specific definitions may vary in wording, an invasive plant is always defined as one that **causes harm**. Invasive plants grow out of control because they are non-native and lack natural predators, diseases, or specialized herbivores in their new environments. Here are some definitions and their sources:

•Invasive species are species "whose introduction and spread **cause harm to the environment, the economy, or society"**. Government of Canada

•Under the *Convention on Biological Diversity* (CBD), to which Canada is a signatory, **invasive species** are those whose introduction and/or spread, **threatens biological diversity**.

•Ontario's *Invasive Species Act* (2015) defines an invasive species as one that is **not native to Ontario** and is harming or **likely to harm the natural environmen**t, including biodiversity and ecological processes.

What you need to know
• Gardeners are generally unaware that plants sold in nurseries can be invasive.
• Canadian retailers have no mandate to identify invasive plants.
• The horticultural trade continues **to be the primary pathway** for the introduction of invasive plants.

How do invasive plants escape gardens?
Many gardeners don't believe invasive plants are a problem because they keep them contained. Invasive plants can be spread intentionally by gardeners who are unaware that a plant is invasive. Invasive plants are spread unintentionaly through seeds by birds, animals, wind and water.



Are We Keeping Our Gardens Awake at Night?

Science Spotlight

By Nikolina Radulovich, Halton Master Gardener

As October arrives and daylight hours grow shorter, many of us turn on our garden lights a little earlier. A softly illuminated pathway or strings of decorative lights can make a garden inviting in the evening, but new research suggests that artificial light at night may be changing plant behaviour in ways we rarely consider. Plants use light not only for photosynthesis, but also to tell time. Photoreceptors and internal circadian clocks help regulate germination, flowering, and even the daily opening and closing of petals. These light-sensitive rhythms can be disrupted by nighttime illumination, sometimes even at relatively low intensities.

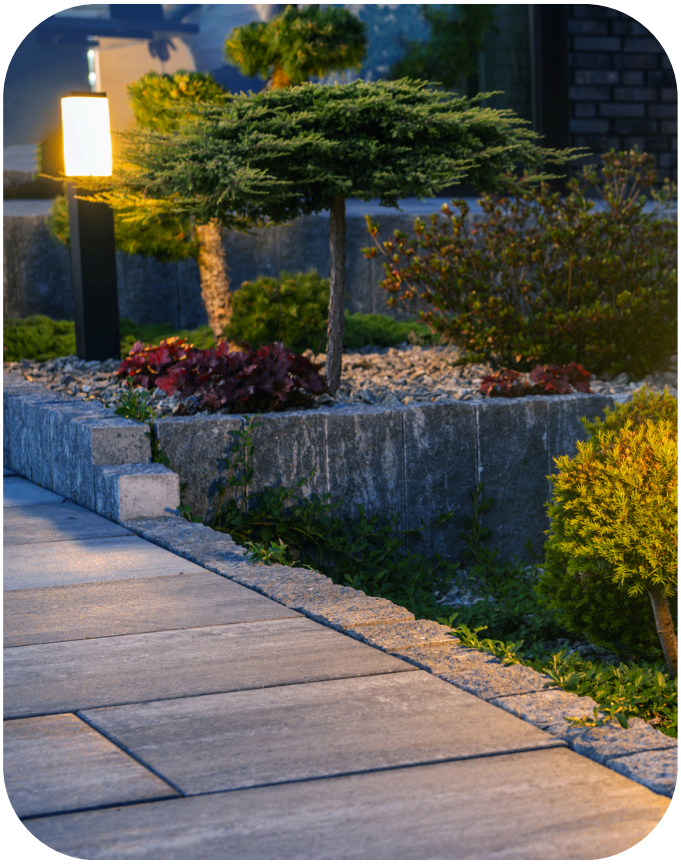
A 2026 study in Biological Conservation examined this in Swiss wildflower communities. Researchers compared 14 sites exposed to LED streetlights with 14 dark control sites. They found that artificial light altered flowering schedules in 12 of 16 species studied. Nine species showed some form of earlier flowering, while others showed delayed or mixed responses. In several cases, shifts exceeded a week.

The effects were not limited to flowering. In a day-flowering species, *Malva moschata*, illuminated flowers began opening an average of 147 minutes earlier in the morning. In a night-flowering Silene, petal closure was delayed by about 80 minutes. Even short-term exposure of only three nights was enough to alter these daily rhythms.



Artificial light also changed when seeds emerged. Chicory (*Cichorium intybus*) germinated about 9.6 days earlier, crimson clover (*Trifolium incarnatum*) about 15 days earlier, and *Silene pratensis* about 18 days earlier under nighttime lighting. Overall germination percentage did not change, but the timing did.

One especially interesting finding was that relatively low light levels mattered. Flowering changes were still detected in plots receiving around 10 lux, similar to levels that can occur around pathways and roadside lighting. The authors concluded that artificial light can alter plant phenology even at modest intensities.



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Are We Keeping Our Gardens Awake at Night? (Cont'd)

Science Spotlight

A second 2026 study, this one in the Journal of Plant Ecology, looked at what happens when nighttime lighting interferes with pollination. Researchers studied *Pedicularis kansuensis*, a plant dependent on insect pollinators. At night, most visits came from moths, which accounted for 72.3% of nighttime flower visits and contributed to more than one-third of total seed set.
Under artificial lighting, moth visitation fell by 49.1%, nighttime pollen deposition dropped by 53.8%, and seed set declined by 56%. Interestingly, total insect visits did not fall because visits by flies increased. The issue was not simply fewer insects, but a shift away from the most effective pollinators.

The two studies together tell an important story. Artificial light can alter plant timing, shift flowering schedules, and in some cases disrupt relationships with nocturnal pollinators. Not every plant responds the same way, and these experiments were not conducted in Ontario gardens, but they suggest that darkness itself is an important ecological resource.

What does all this mean for an Ontario garden? Neither experiment was conducted in Canadian residential landscapes, so we should not conclude that a porch light will automatically reduce seed production in our gardens. But together, these studies make a compelling case that nighttime darkness is an ecological resource in its own right.

Fortunately, protecting darkness does not require abandoning garden lighting. Instead direct it downward, keep it as dim as practical, and use timers or motion sensors rather than leaving lights on all night. In pollinator gardens and naturalized areas, preserving truly dark spaces may be especially valuable.

We often think about what plants need during the day: sunlight, water, nutrients, and good soil. These studies are a reminder that plants evolved with something else too — darkness. Sometimes the best thing we can do for the garden is simply turn off the lights.



Q&A

I think my clay soil is dead. What can I do to bring it back to life?



By Claudette Sims, Halton Master Gardener

Healthy, living soils contain billions of tiny organisms working together to support plant health. Soil cultural practices have changed a lot over time and climate change is driving wiser use of resources. Let's review what is currently recommended.

To till or not to till?
Tilling and digging your soil are no longer recommended as both expose beneficial soil life to heat and sun, killing them. Tilling and digging also destroy the network of pore spaces in soil, that are essential for channeling air, water, and nutrients to plant roots. No till results in increased plant health, less watering and less weeding.



What about adding synthetic fertilizers?
Manufacturing synthetic nitrogen requires high heat and pressure, typically powered by fossil fuels which release massive amounts of carbon dioxide before the fertilizer ever reaches a field. Pelletized chicken manure is a better choice as it repurposes agricultural waste, but transporting bulky manure can add to its carbon footprint.

What about adding sand, mulch or earthworms?
Clay is made up of tiny particles which are what causes it to compact so easily. Sand is made up of larger particles, so adding sand seems like a good way to loosen the soil. The problem is you would have to add massive amounts of sand (up to 50% of the existing garden soil) to make a difference.

Bagged mulch requires energy to transport and may contain dyes and contaminants which actually inhibit microbial activity.

Earthworms are not needed to improve soil either. All earthworms found in your garden are non-native and invasive. Earthworms are soil engineers that change the chemical and physical charecteristics of soil.

They can actually decrease the numbers of native plants and animals and accelerate climate change.

So how do you bring soil back to life?
The secret to bringing dead soil back to life is remarkably simple: give back what nature gives us for free. Leaves, branches, wood chips and spent plants all become food for the soil organisms when we return them to the soil. Adding **organic matter** is the healthiest way to improve both clay and sandy soils, and there are many free options. **Leaves** improve soil tilth (structure), support mycorrhizal associations essential to plant roots and reduce water loss. Leaves also support biodiversity by sheltering overwintering insects. Best of all-they are **free** for the taking during the month of October! **Arborists chips,** a mix of wood and leaves, offer superior soil nutrition, resist compaction, enhance moisture retention, offer rich biodiversity support and are free, sustainable and local. You can request them through Chipdrop, but you do need an area such as a driveway for the drop off and you don't have a say in drop amount or timing. Any gardener can 'chop and drop' plant material any time of year, and it has the same benefits as arborists chips. All you need is a pair of secateurs!

Return organic matter to the soil, and the soil will return the favour—suporting plants with a thriving web of life.

Further Reading



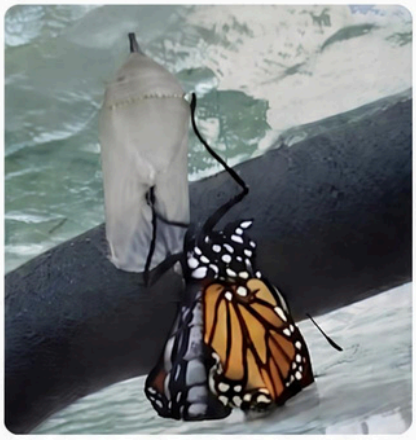
- Adding sand to clay soils is not recommended
- The unseen invaders: introduced earthworms as drivers of change in plant communities in North American forests
- The pros and cons of no till gardening

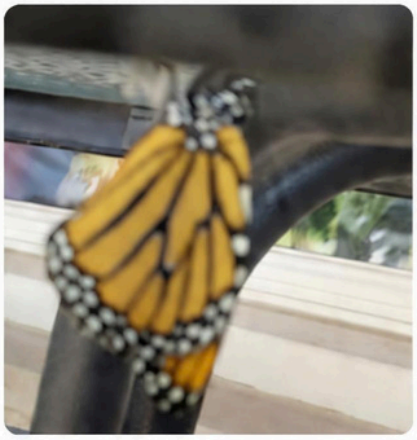
Garden Inspiration!

By Jennifer Blake, Halton Master Gardeners

Halton Master Gardener Lynn Courtney, was lucky enough to watch a Monarch Butterfly emerge under her garden table!







What an experience to be part of one of nature's most incredible journeys! The monarch caterpillar leaves the milkweed that sustained it to find a sheltered place to pupate. Often under a leaf, or a railing–or here, the underside of the garden table! For two weeks Lynn was able to observe the jade green chrysalis becoming almost translucent–revealing the black of the wings furled inside, and then the "eclosion" of the butterfly. Born late in the season, these emerging butterflies will not reproduce until they have completed their migration. They must fill up on nectar for their 5,000 km journey. It will be their "great-great grand-butterflies" who return.



Image Compiled by Jennifer Blake

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Garden Inspiration! (Cont'd)

Our Role as Gardeners

The remarkable life cycle and journey of the monarch is only possible because of their diet of milkweed leaves, which they consume as larvae, and the nectar of late blooming flowers, as adult butterflies. Monarchs breed in all 10 provinces; southern Ontario and Quebec have the largest populations, so have a key role to play.

There are several Ontario milkweeds: Common milkweed, (*Asclepias syriaca)*, Swamp milkweed, (*A. incarnata)*, and Butterfly milkweed, (*A. tuberosa).*

The nectar from such natives as asters, goldenrod, coneflower and Joe Pye weed provides the nutrients for their 3-4 month long migration.



Asclepias tuberosa from the garden of Lynn Courtney

Learn more about Native Plants from Halton Master Gardeners



The Urqhart Butterfly Garden

Located in Dundas, along the Desjardins Canal, the native plant garden was founded thanks to the efforts of Joanna Chapman, who was inspired by a swallowtail butterfly that she saw emerge on a rue outside her store.

It was named to honour Toronto zoologists, Fred and Norah Urqhart, who asked themselves where the Monarchs go when they leave Ontario, and first described their migration.

They enlisted thousands of volunteers in the project-possibly the first crowd-sourced science.

The gardens are a volunteer project and free to visit.



References and Information

- The benefits of big-team science for conservation: Lessons learned from trinational monarch butterfly collaborations.
- **Photos from personal collections.**
- **Infographics: The Monarch's Amazing Journey.**
- **Concept and content: content verified by Jennifer Blake; illustration and design created with ChatGPT (OpenAI), 2026.**

What's Growing On?

By Trish Moraghan, Halton Master Gardener

Network of Nature

[Learn more here]

Connecting people to plants across Canada



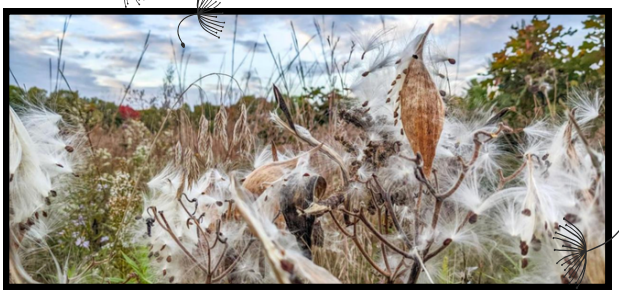
Grasses/Sedges/Rushes
Graminoids

Herbaceous Flowers
Forbs

Ferns/Allies
Pteridophytes

Trees/Shrubs/Vines
Woody Plants

Carolinian Canada





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Unlock the natural colour that is inside black walnut hulls







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What's Growing On?

Royal Botanical Gardens



[Fall Displays]



[Children's Gardening]



[Pumpkin Trail]



[What's in Bloom]

Check our calendar for events



HALTON REGION MASTER GARDENERS

Growing Your Own Garlic



[Read the article]





Keystone, Native & Invasive Plants

In order to support pollinators with a pollinator garden, it is important to understand the differences between native, non-native, and invasive plants as well as cultivars or 'nativars'. What we plant matters.

- ▸ Keystone Plants
- ▸ Native vs. Invasive Plants:
- ▸ Native:
- ▸ Non-native:
- ▸ Invasive:
- ▸ Cultivar:
- ▸ Weed:

[Learn more here]

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 their 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.The content displayed in our newsletter is the intellectual property of Halton Region Master Gardeners and their authors. It can be shared in its entirety, but specific content should not be reused, republished or reprinted without the author's consent.

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