

Halton Master Gardeners Monthly Newsletter JULY 2024 | VOL. 17 ISSUE 7

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American Hophornbeam (*Ostra virginiana*): Nature's Tough Tree for Challenging Conditions

By Janet Mackey, Halton Master Gardener

This species is often missed by gardeners or landscapers looking for a tree to plant in a new subdivision or replacing one in an established garden. We're often drawn to trees we're familiar with, remember growing up with, or admire in other gardens. American Hophornbeam is an understated tree, no flashy flowers or distinctive leaves. Its fall colour tends to blend with other foliage when it changes to a golden yellow. In spite of its seemingly 'common' features I urge you not to walk by it at the nursery. This tree is a workhorse in the tree world. It can be grown in complete shade or complete sun. It can thrive in both acidic or alkaline soils. Once established it can even maintain healthy growth during drier periods. About the only place you shouldn't plant it would be in moist, poorly drained soil. This tree is the perfect choice for a newer subdivision with disturbed soil and heavy clay. The slower growth and smaller size make it suitable to plant on narrow lots or in

crowded gardens. In my garden, I've planted it under the full shade of the large Norway Maple (the canopy has been raised to allow some early morning light) with a plan to eventually remove the invasive maple (*Acer platanoides*).



As part of the Betulaceae family, *Ostra virginiana* produces catkins that remain on the tree heading into fall.

Image: Bark of a mature American Hophornbeam (Dundas Driving Park), Janet Mackey

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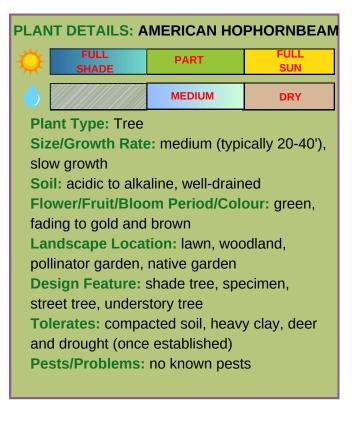
AMERICAN HOPHORNBEAM (CONT'D)

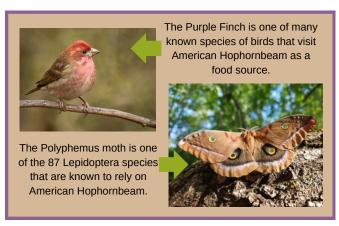


American Hophornbeam (also referred to as Eastern hop hornbeam, Hop hornbeam, Ironwood, Leverwood, Ironwood Hornbeam) is an understory tree found across much of southern Ontario and is part of the birch family (Betulaceae). Like birches, it produces catkins and has seeds that resemble hops, hence the common name. The smooth bark eventually develops long strips that some people feel resemble strips of bacon.

Interesting Facts:

- The wood from American Hophornbeam is known as one of the strongest types of wood found in the southern Ontario region.
- Historically, it has been used as tool handles, sleigh runners and even golf clubs.
- This tree is known to attract 87 species in the Lepidoptera family including butterflies (Redspotted Purple, Eastern Tiger Swallowtail), moths (Polyphemus moth, Mourning Cloak moth), small mammals, birds (Ruffed Grouse, Downy Woodpecker, Purple Finch and other songbirds).





For more information:

- <u>Tree of the Week: Eastern Hophornbeam</u>,
 University of Kentucky Forestry Dept. (video)
- <u>Ironwood Ostra vriginiana</u> University of Guelph Arboretum
- Plant Guide: Hop Hornbeam USDA

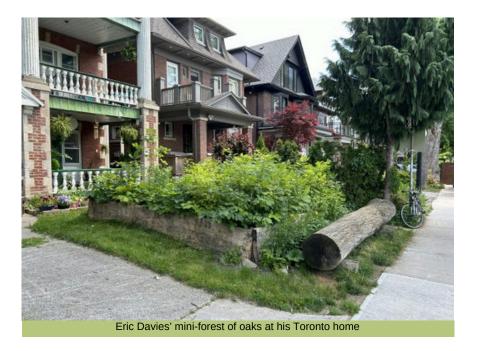


AUGUST GARDEN 'TO DO' LIST		
Perennials – Cut back any tired looking perennials; remove yellowed or dying stems, leaves or flowers, e.g., lavender, penstemon, perennial geranium. Remove seed heads to control spread of aggressive self-sowing perennials or to save seeds for winter sowing. Where possible, leave seed heads to feed birds in the late summer & fall. Annuals – Pinch back old flower heads or lightly shear the tops to keep plants producing flowers.	Stop the flop' and say goodbye to plastic and purchased stakes. Here's a great video from MG Sean James who shows you how to easily support plants by using twigs and branches from your garden! Lawn — Encourage deep roots by watering less frequently, but more deeply. Follow these cultural practices to have healthy lawns that use water efficient practices. Weeds — Every weed pulled now is thousands of weeds you won't have to deal with later! Removing flowers before they go to seed will greatly reduce the seed bank in the soil. Don't add flowers or seeds to compost. Watch for these August weeds: bindweed, purslane, creeping bellflower, thistle, burdock, black medick, dog strangling vine, buckthorn. Pests — Welcome animals that eat pests like Japanese beetles, e.g., robins, crows, sparrows, blue jays, cardinals, animals like raccoons, skunks, moles, shrews. Add these wildflowers to attract spiders, assassin bugs, ants, ground beetles, predatory stink bugs & tachinid flies to control problem insects. Earwigs like to hide in small, dark places so trapping is effective in reducing populations. Scatter rolled cardboard traps in problem areas & check daily. Remove	
		Potted Plants may need more than one watering per day during hot weather. If plants wilt despite watering, gently tip them out to see if they are pot-bound and need a larger container.
		Fertilize plants as needed using a slow release organic product such as hen manure.
Veggies – Water during dry or hot weather to reduce plant stress. Remove diseased & damaged leaves/fruit. Avoid high nitrogen fertilizers on tomatoes, squash and peppers as it can lead to blossom end rot. Harvest vegetables and berries regularly so that the plants keep producing. Add new plantings like chard, radishes, carrots, kale, spinach, turnips, beets, basil. Identify pests troubling your veggie garden to take effective action.		
Strawberries – August is a good time to renovate your strawberry beds.		trapped earwigs by shaking into a pail of soapy water. Learn more about <u>earwig management</u> <u>here</u> .
Phalaenopsis Orchids – Inspect plants for pests and complete any repotting this month. Fertilize weekly & water carefully. Encouraging healthy new leaves will give your phalaenopsis orchids the energy to bloom well this winter.		Prairie coneflower is a dainty near-native wildflower with a very long bloom time (June to August+). It is a perfect addition to
Trees – Water deeply during dry periods; reduce soil compaction around trees by using mulch or growing perennials or shrubs at the base instead of lawn. Water newly-planted trees	your pollinator garden. Consider adding it to your garden next year!	

and shrubs weekly.

SAVING AN OAK FOREST - FROM BYLAW ENFORCEMENT

Lorraine Johnson, Honorary Halton Master Gardener, Author and Cultivation Activist Re-printed with permission from <u>Lorraine Johnson's Blog</u>



Eric Davies is one of Toronto's most vocal advocates for the heritage oak trees that have managed to survive in this rapidly developing urban environment. For more than a decade, Eric has been collecting and propagating acorns from the city's oldest oak trees and giving young trees to community projects, schools, residents' associations, Indigenous land stewards, neighbours —basically, anyone who's concerned about Toronto's urban forest and wants to grow trees for the future.

Ironically, the mini-forest Eric has planted in front of the apartment building where he lives in Toronto's west end is now under threat. The City has issued a Notice of Violation, ordering the vegetation—oak saplings and native perennials—cut to below 0.85 metres and the removal of the 100-year-old red oak log Eric salvaged, with permission, from the City's forestry facility and that serves as a welcoming neighbourhood bench for passersby.

According to the Notice of Violation, the vegetation is:

obstructing/encumbering/damaging/ fouling" the street and the "decorative log" causes an "obstruction/nuisance/dangerous condition.

Like most front-yard gardens in the city, Eric's planting is on the municipal right-of-way, what's known as the street allowance, which in small Toronto yards can extend to the porch or house. Perhaps most residents who garden in their small front yards aren't aware that a significant portion of their planting is

actually an encroachment. Indeed, most gardeners care for these right-of-way spaces with impunity. In Eric's case, most likely someone complained. This triggered an inspection, a Notice of Violation, and an order to cut the trees and plants down to 0.85 metres within seven days or face "further enforcement measures", including a fine.

Given the City's goal of increasing the tree canopy to 40 per cent by 2050, one might expect that Eric's mini-forest would be embraced, not threatened with destruction. Along with his own front-yard contribution to the tree canopy, Eric has given away thousands of oak trees for others to plant. But the value of what he's doing goes far beyond numbers alone: by propagating acorns from the city's old-growth oaks, he is preserving the irreplaceable genetics of heritage trees before they succumb to old age, the degraded conditions of the city's ravines and natural areas, and to development.

Continued on next page

SAVING AN OAK FOREST CONT'D

Eric is a champion of the future forest, preserving through propagation, the unique adaptations to local conditions that these oak trees contain in their genetic make-up. Climate change and biodiversity loss add urgency to the crucial work Eric is doing.

The order to cut down to 0.85 metres the oak saplings and the dozens of native perennials Eric has planted with them and that naturally grow in association with oak trees, is an order to cut down a regenerating oak ecosystem. This ecosystem has much in common with the rare black oak savanna in High Park, that the City has committed to protecting. Eric's planting is one piece in what could be—should be—a matrix of oak ecosystem protection in the city.

The Notice of Violation would be understandable if the planting interfered with sightlines or if the log obstructed passage on the sidewalk. But they don't. The planting is set back at least 1.2 metres and the log 30 to 38 cm from the sidewalk. The sightlines are clear. Nearby are large city-planted street trees throughout the neighbourhood, and gardens with plants higher than 0.85 metres in the municipal road allowance. As with Eric's planting, there is safety, the ability to see past the trees, and there is carefully nurtured growth.



Further Information:

- <u>Is this Front-Yard Forest Too Tall</u> Toronto Star
- We're Losing These: Man campaigns to save native species in Toronto ravines - CBC News
- Lorraine Johnson's Blog

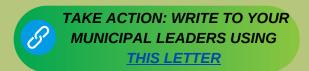
The City recently revised its "grass and weeds" bylaw in an effort to support biodiversity and naturalized yards. Eric's is a banner project in support of these twin, connected goals. Unfortunately, it's also a banner example of how bylaw enforcement continues to be a problem—whether through the mistaken identification of native plants as prohibited plants or, as in Eric's case, claiming his front-yard garden is an encroachment.

Now that the City has updated its "grass and weeds" bylaw, what needs changing are bylaw enforcement policies. Quite simply, the City needs to stop placing barriers and threatening to punish those who are trying to protect our collective future.

Take Action for Bylaw Reform

July 22, 2024

Below is a link to an open letter to municipalities, written by the <u>Canadian</u>
<u>Society of Landscape Architects</u>, the <u>Canadian Wildlife Federation</u>, the <u>David</u>
<u>Suzuki Foundation</u>, the <u>Ecological Design</u>
<u>Lab</u>, and me (Lorraine Johnson), that we ask you to download and send to your Councillor and Mayor. We are advocating for the reform of outdated "grass and weeds" bylaws and enforcement practices that place barriers in the way of cultivating habitat gardens.





How I Stopped Worrying and Learned to Love Garden Evolution or 'Why I Stopped Maintaining My Garden'

Allyn Walsh, Halton Master Gardener

Where did my Hairy Beardtongue penstemon (Penstemon hirsutus) go? A lovely delicate plant, one of the early blooming natives that is mauve instead of white, and this spring I missed it! Searching my front garden, I discovered it had been crowded out by three other plants – Foam flower (Tiarella cordifolia), Nodding onion (Allium cernuum), and Pearly everlasting (Anaphalis margaritacea). It was still there in a tiny patch, but clearly it was not nearly as happy in my garden as the other three plants. In years gone by, I mourned plants that seemed to disappear and quickly replanted them. After all, I had mapped out my garden with nicely drawn patches, just like in the garden magazines. Sometimes I decided to replace the plant with another. Some thrived, some did not. I drew up new plans again and again, trying to maintain the look of my garden.

But, a garden is part of nature, and nature does not stand still! There is a natural succession in natural lands, even without our destructive human activity. My garden is in a heavily disturbed urban area, built over 100 years ago, where many alien invasive species had taken hold. I can't return the land to what it once was (quite possibly an Oak savannah (wouldn't that be lovely!) but I CAN take a lesson from nature. Sunny areas become shadier as plants grow.

Conditions suit some plants more than others. Soil becomes richer as leaves are left and compost added. Soil is sometimes very moist and often very dry in the summer. If I were to maintain my garden, I would have to fight the natural inclinations of its flora and fauna. I would have to water some plants and let others go dry. I would have to keep replanting unhappy specimens. I'd have to do unhappy things to the rabbits, squirrels, chipmunks and racoons that apparently live here. Instead of attempting to maintain my garden in a steady state, now I manage it.



"A garden is part of nature and nature does not stand still!" Front yard of Allyn Walsh's garden. Image: Allyn Walsh

If a plant is too beloved of bunnies, I will protect it for a year or so but not longer. It may thrive, it may disappear - nature decides. All plantings for the last 6 years are as native to this area as I can make them. Most thrive, a few disappear (I miss you *P. hirsutus*! But perhaps you will return, since I pulled back the foam flower and fortunately had winter sown some of your seeds). New plants get hand watered for the first year, and after that they are on their own. Aggressive plants or those that just don't fit get rooted out. Tufted hairgrass was very lovely but not with its enormous seed heads falling over the walk to the front door.





SEPARATING FACT FROM FICTION
By Olga Marranca, Halton Master Gardeners

MYTH: Goldenrod will bother my allergies if I plant it!

Goldenrod, (*Solidago* and *Euthamia* species) is frequently mistaken for causing seasonal allergies. Here is why that is just not true. The pollen on the beautiful goldenrod plant is heavier than the actual culprit, *Ragweed!* Ragweed pollen is ultra fine and easily disbursed by the slightest breeze. The particles hover in the air like fog. Goldenrod pollen in contrast, is heavy, large, viscid (sticky), and transported by animals or insects, not by the wind.

Ragweed and goldenrod bloom simultaneously in late summer. Goldenrod, being the showier of the two, is usually the scapegoat for the seasonal allergies caused by the unassuming greenish flowers of ragweed.

According to the US Centers for Disease Control, ragweed produces almost one billion grains of pollen a season and is a major contributor of fall allergies (hay fever). With climate change causing precipitation extremes, rising temperatures, and increased atmospheric carbon in the air, plant pollen producing seasons could get longer, extending the allergy season.

In our Mixed Wood Plains <u>Ecoregion 7E</u> (Ontario Carolinian), which encompasses Lakes Ontario and Erie, goldenrods are important <u>keystone</u> <u>plants</u> which are hosts to over 100 species of Lepidoptera caterpillars and more than 40 species of pollen specialist bees.

See "Garden Inspirations" for more beautiful Goldenrod (Pg. 9)



Goldenrod

Ragweed

Some goldenrod, e.g. Canada goldenrod (Solidago canadensis), Tall goldenrod (Solidago altissima) and Late goldenrod (Solidago gigantea) are difficult to distinguish from each other and can spread aggressively through their rhizomes and seeds. Don't let this discourage you from choosing some beautiful manageable goldenrod species that will extend the bloom time of your garden and provide nourishment for many butterflies, moths and bees as spring and summer blooms die off.

Ontario Wildflowers list many goldenrods that are appropriate for the home garden. My (rare) Seaside goldenrod (Solidago sempervirens) and (commonly found) Zigzag goldenrod (Solidago flexicaulis) have been well behaved and manageable for a number of years, spreading slowly.

Did you know?

In 1914, Thomas Edison and Henry Ford began to worry about reliance on foreign rubber production. They teamed up with Harvey Firestone to try and find a local plant that contained enough latex to produce a usable rubber.



That plant turned out to be goldenrod and Ford gifted Firestone a Model T with tires made from goldenrod! Read more about this <u>Early Flower Power!</u>

For more information:

- Native Goldenrods for Ontario Gardens In Our Nature
- Canada Goldenrod: Much Maligned and Misjudged
- Nature Conservatory Canada A case of Mistaken Identity.
- Pollinator Pathways Fields of Gold
- Top Plants for Biodiversity





By Hariette Henry, Halton Master Gardener

Butterfly milkweed (Asclepias tuberosa) is a long-lived herbaceous perennial that is native to much of North America. This bushy perennial grows dark green foliage on multiple stems from a large taproot, forming a clump 2' X 3' tall and wide. It is a larval host plant for several butterfly species including Monarch and Queen butterflies. Asclepias tuberosa does

best in full sun with six or more hours

of direct exposure a day.

It can tolerate shade, but lack of light usually causes legginess and fewer blooms. These plants prefer well-drained soils – even a bit rocky – with neutral to slightly acidic pH. Too much water can lead to crown rot and/or root rot.

This native perennial can become infested with aphids – most often the bright yellow oleander aphid with black legs, *Aphis nerii*. Small numbers of these insects will not harm the plant and they will often be eaten by opportunistic predators such as lady beetles, parasitic wasps and green lacewings. Large populations of aphids can be knocked off with a forceful stream of water should the plant develop this problem.

Butterfly weed is also susceptible to <u>rust</u> which causes powdery pustules of red-brown spores to appear on the leaves and stems. This disease mostly just looks bad and doesn't cause lasting harm to the plant. Giving susceptible plants proper care should allow them to naturally overcome a rust outbreak.

The leaves on my butterfly milkweed plant are turning yellow. They also appear to be speckled and are somewhat misshapen. The leaves have tiny dark specs mostly on the underside. The plant is in full sun and the soil is loamy.

Can you tell me what might be bothering my plant?



Butterfly milkweed, Asclepias tuberosa

Leaf spots cause necrotic areas to develop on leaves and are caused by several pathogenic agents. This usually happens in wet conditions and might become severe if many lesions appear or start to merge. Using a spray made of 40% milk and 60% water can be as effective as chemical fungicides to control the spread of these diseases.

The leaf damage in your photo looks like "stippling or flecking". This damage is caused by sap-sucking insects that give the leaves that spotted appearance. Leafhoppers, thrips and spider mites are some of the most common pests that cause this type of damage. Since you mention that you see dark specs on the undersides of the leaves you may have thrips leaving black tar-like specks called frass (or poop) on the plant.

As with aphids, a strong spray of plain water from a garden hose can dislodge mites and thrips. However, this runs the risk of dislodging young Monarchs as well. There are no selective treatments that will spare the Monarch larvae while ridding the plant of pests. Eventually however predacious insects will find the pests and numbers should abate. You could also cut the plant back to ground level in late fall, removing and disposing of the infested foliage. Be sure to keep an eye out for young Monarch caterpillars which are usually not visible to the naked eye until they are more than a week old.

Garden Inspiration!

Goldenrods are Great!

For **Biodiversity**

For **Beauty**

For Bees and Monarchs







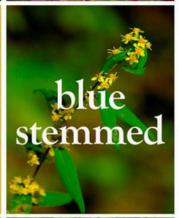


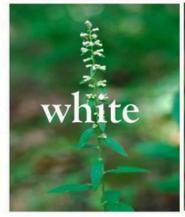


Got Goldenrod?

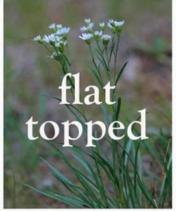
Goldenrods are the quintessential late summer flowers in the American landscape. Beautiful and with great ecological value; we can't think of an excuse not have at least one goldenrod species in every yard.













Healthy Yards

By Trish Moraghan, Halton Master Gardener Growing Gu 7









What's Growing On?





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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