CROSS POLLINATION

Halton Master Gardeners Monthly Newsletter
APRIL 2024 | VOL. 17 ISSUE 3

In this issue:

Halton Region Master Gardeners

Golden Alexander (*Zizea aurea*)

By Sundaura Alford-Purvis, Guest Author from 'A Cultivated Art'

Ever wonder what black swallowtail caterpillars ate before carrots, dill and parsley plants arrived here with settlers?

Among other things, the lovely Golden Alexander (*Zizia aurea*), one of several native species that belong to the *Apiaceae* family of umbel flowering plants.

My '*Zizia'* (isn't that such a cool name?) started out in my urban garden as a single plant and has, over two or three years, expanded outward to form a ring of crowns that sent up a lovely show of chartreuse blossoms last spring.

The mounded foliage stayed fairly low, not much more than 12", with the blooming stems growing to around 30" in height. Given their blooming season and stature, I think that they would be striking in combination with red columbine in a location with dappled shade. American alumroot, hairy beardtongue, heart-leaved aster and bluestem goldenrod would also be good neighbours and spread out the blooming season. Thimbleweed and black cohosh could provide a bit more architectural form and would be quite happy in similar growing conditions.

Fill in the spaces with sedges, woodland phlox and lance leaf prunella and you'd have a season long symphony of blooms and the start of semi-shaded ecosystem.

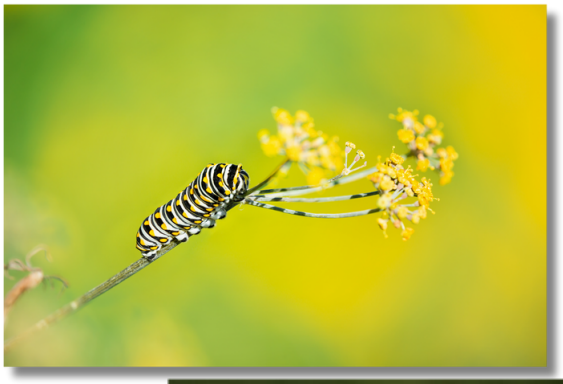
Continued on next page

ZIZEA AUREA (CONT'D)

Zizias' bloom and foliage appearance might cause them to be mistaken for feral parsnip, which may result in a call to bylaw or well intended removal by a concerned neighbour if they are planted near a sidewalk or roadway. They may be more of a backyard plant to avoid any unfortunate outcomes of mistaken identity.

Soil wise, they are doing just fine in well drained garden soil and don't seem to be stressed by dry conditions during the peak of summer. Their base foliage remains deep green and full through to fall, something not always the case for earlier blooming native species.

The blooming stems naturally brown as the seeds mature. They tend to fade into the surrounding plants in my very packed patch but, if you are bothered by the stems, you can clip them to the height of the remaining foliage after the seeds have fallen, been gathered or eaten.



Black Swallowtail Butterfly, Image: Bug Guide

Golden Alexanders can be used effectively as a tall groundcover over a large, partly shaded, moist area. The long-lasting greenery of the lower leaves and attractive seedheads provide multi-season interest in the garden.

Consider planting Golden Alexanders with blue false indigo (Baptisia australis) Image: Dyck Arboretum

For more information:

- A Cultivated Art - Sundaura Alford-Purvis
- *Zizea aurea* - Ladybird Johnson Wildflower Centre
- Golden Alexander Hosts Black Swallowtail Butterflies - The Natural Web

APRIL GARDEN 'TO DO' LIST

By Claudette Sims, Halton Master Gardener

- ☐ **Nature-Friendly Spring Tasks** – Cutting back plants or removing dead leaves is largely an aesthetic consideration-most plants don't benefit from it. Stems or leaves will slowly decompose as the temperatures warm, or will be covered by new growth. Leaving leaves & stems allows native bees & butterflies time to emerge, & gives them places to hide. If old stems do need removal consider standing them at the back of the garden bed.
- ☐ **'Chop & Drop'** – When pruning or cutting back plants, use the 'chop & drop' method to return organic material to the soil & provide nesting material for birds.
- ☐ **Pruning** – Prune trees, shrubs and vines before leaves emerge. Use clean, sharp tools to remove dead, damaged, diseased wood. Prune to improve air circulation & appearance only if needed. Cut back branches to just above another branch or a bud. Keep a sharp eye out for cocoons and chrysalises when pruning. Keep in mind that if you prune spring flowering shrubs now, you will sacrifice blooms. **Lavender**: When new growth starts to appear, use secateurs to prune back dead or overgrown stems to a vigorous bud. Do not over prune.
- ☐ **Oak trees** – Stop pruning oaks in April to prevent oak wilt. If you absolutely need to prune your oak when it is in leaf, treat cuts with pruning paint. Note: This is the only situation where pruning paint is recommended.
- ☐ **Spring bulbs** – Blood meal or chicken manure pellets sprinkled around emerging tulips *may* help to deter deer and squirrel grazing.
- ☐ **Seeds** – Time to start your tomato seeds if you haven't already done so. Start tender annual flowers indoors for mid- to late-May planting. Seed cool weather crops like peas, spinach, lettuce, beets, and radishes directly in the garden as soon as the ground can be worked.

> *"In this time of climate disruption and mass extinction, gardens are becoming places of activism...Native plant gardening does not limit your aesthetic choices; it expands your ethical ones."*

Benjamin Vogt, A New Garden Ethic: Cultivating Defiant Compassion for an Uncertain Future

- ☐ **Lawn** – Remove leaves or debris only if walking on the lawn leaves NO footprints. This reduces soil compaction. Wait for warm weather before overseeding
- ☐ **Perennials** – divide or transplant perennials as growth resumes and soil is workable.
- ☐ **Invasive Plants** – This is the perfect time to spot & remove invasive plants like periwinkle & English ivy. Remove garlic mustard seedings as they appear to stop them from producing chemicals that kill the beneficial soil fungi which provide critical food to maples & other native plants. For comprehensive information about invasive plants visit the Canadian Coalition for Invasive Plant Regulation.
- ☐ Check out our March newsletter for any garden jobs that you may have missed
- ☐ Celebrate **Earth Day** by planting a native tree or keystone plants which support biodiversity.

Coneflowers, goldenrods, asters and native sunflowers are keystone perennials which support greater biodiversity.

A Troublesome Trio – Periwinkle, Goutweed and English Ivy

Pam MacDonald, Halton Master Gardeners

Trilliums struggle to grow within a mat of Vinca - Image: Andy's Northern Wildflowers

The forest floor and trees are overtaken by English ivy (Hedera helix) on the Bruce Trail.
Image: Marlene Knezavich

In the February issue of Cross Pollination, ***With Spring Comes Hope and Gratitude*** (page 9), one of the recommended activities was to remove an invasive plant on your property this spring and replace it with a native plant. You might well think "Easy for you to say, but nothing else will grow in that spot and besides, I don't live anywhere near a park or ravine". I call this ***NIIMBYS*** – *Not Invasive In My Backyard Syndrome*. I too have suffered from this delusionary condition. If you have ever owned a Beagle and thought you had successfully fenced him in or bought a birdfeeder you were convinced would keep the squirrels out, you know containment of any determined species is a *mug's game*.

Invasive plants are a lot like Barney - there's no stopping them.

The troublesome trio of groundcovers that includes periwinkle (*Vinca minor*), goutweed (*Aegopodium podagraria*) and English ivy (*Hedera helix*) have multiple escape routes – sneaking out in garden waste, collaborating with birds to spread their seeds – and, all three do have seeds, though the seed producing flowers of ivy aren't always obvious. They can insinuate their way under, through or over barriers, much like my beagle, Barney. On a more encouraging note, dedicated native plant gardeners and native plant nurseries have been trying out more and more species of native plants every year to see how they perform in public and private gardens. The result is that every year there are more native plant options available that have demonstrated they fit the bill of 'plants for challenging locations' – the niche the troublesome trio usually fill.

Foam flower, Tiarella cordifolia - a beautiful alternative to the 'Troublesome Trio'

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A TROUBLESOME TRIO (CONT'D)

Speaking personally, this gardener couldn't imagine 5 years ago what to put where the periwinkle, English ivy and goutweed were growing (yes, I had all three and quite a few more invasives). Now I have early spring ephemerals replacing scilla, bunchberry where the lily of the valley used to be, and Woodland strawberry filling in the space once carpeted with English Ivy.

Bunchberry (Cornus canadensis) is one type of spring ephemeral - preferring acidic/moist soil.

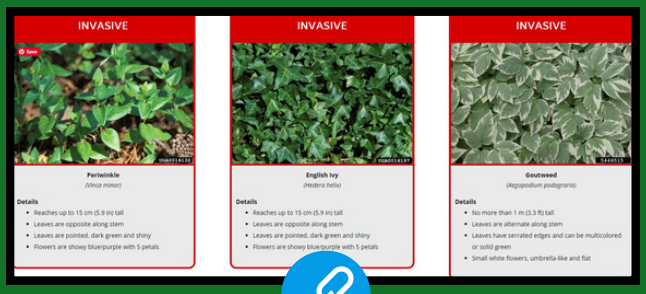
To make it easier for you to take the leap, the following summarizes why this deceptively attractive trio is of such concern and offers some of the many native options to replace them. All the plants suggested as alternatives are available from at least one native plant nursery in the GTHA. There is a comprehensive list of native plant nurseries on the Halton Master Gardeners website.

There is a lot of ground to cover (pardon the pun) so in the May issue we will continue with suggestions for replacing ground covers and in June, we'll be offering suggestions for replacing invasive shrubs and vines. Now if I could just find a solution to the Barney problem ….

Resources: Removal & Disposal

Reporting

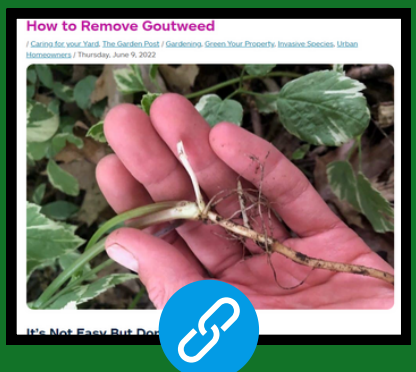
Identification



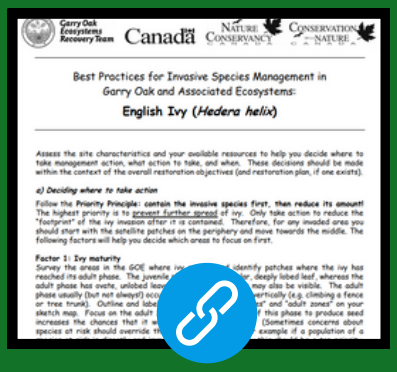
Take Action

Removal: Periwinkle

Removal: Goutweed



Removal: English Ivy



A TROUBLESOME TRIO (CONT'D)

Removal & Replacement			
	Periwinkle (***Vinca minor***)	**Goutweed** (***Aegopodium podagraria***)	**English ivy** (***Hedera helix***)
			
Function in the landscape	Groundcovers for challenging locations like the north side of a building, in the root zone of large trees and in full shade and dry soil.		
Why are they considered harmful and invasive?	• They spread quickly below ground by rhizomatous roots, above ground by runners or both, crowding out other plants in their path. • They crowd out the seedlings of native trees as well as understory shrubs and wildflowers. • Periwinkle is allelopathic; it contains substances that are toxic to other plants and soil biota. In this way, it destroys native plants and damages soils. The leaves of periwinkle are poisonous to mammalian species. • Both periwinkle and English ivy will grow up trees and eventually kill them. • Very small pieces of the runners or rhizomes are capable of starting new colonies of plants where they land – in other gardens, compost piles or anywhere else garden waste is dumped. • All three, including English ivy, produce seed that is eaten by birds and can be dispersed in their droppings far from the mother plant. • Insects, other than the occasional honey bee, do not use them for food. Browsers such as deer and rabbits also don't eat them, giving them a further advantage over native plants. • Once established in a wooded area it is very difficult and expensive to remediate the area.		

How to remove and dispose	**Removal:**
	• Best done in spring when the root zone is moistened from rain or thorough watering:
	  ◦ Begin at the outer edges.
	  ◦ When top growth is long enough, use it as a handle to hand pull roots and runners.
	• Dig out remaining roots with a spade or hori hori knife (an indispensable garden tool).
	• Monitor for, and expect some regrowth from missed pieces of the roots or runners.
	• **NOTE**: It is highly recommended to ***NOT*** replant the area until at least the next growing season, using that time to monitor for regrowth. Lay down a tarp to exclude light, and if you are concerned about the appearance of the area lay mulch over top of the tarp. Add a few large containers with colourful annuals suited to the light conditions.
	• **Dispose of the plants in sealed black garbage bags**. Leave the bags in a sunny place until the plants are 'cooked and killed'. Put out as garbage, **NOT** as garden waste.		

A TROUBLESOME TRIO (CONT'D)

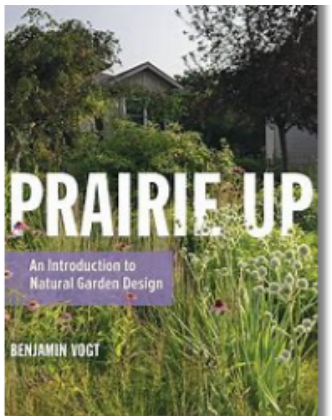
Removal & Replacement (cont'd)

	Suggested Replacement	What it Looks Like	Features
Deep shade /dry soil	***Asarum canadense*** *(Canadian wild ginger)*		• Attractive heart shaped leaves that overlap • 4"-6"h - plant 6" apart for quick coverage • Note: slow to establish but worth the wait
Part shade/full shade with average to moist soil	***Tiarella cordifolia*** (Foamflower)		• Delicate, feathery white flower in spring • 4-10"h • Attractive foliage • Spreads to form colonies
Part shade/shade with average to moist soil	***Fragaria vesca*** (Woodland strawberry)		• Low profile, 4-6" h • Spreads fairly quickly by runners • White flower in spring followed by red or white berry
Part shade/part sun with dry soil	***Fragaria virginiana*** (Wild Strawberry)		• Low profile, 4-6" h • Spreads fairly quickly by runners • White flowers in spring followed by red berries
Full shade/full sun, with moist or wet loam soils	***Geranium maculatum*** (wild geranium or spotted geranium)		• Mauve-pink spring flowers, • Delicate seed-heads • Approx. 10"-12" h • Foliage turns red/orange in fall
Part-shade/full-sun with agerage to moist soil	***Anemone canadensis*** (Canada anemone)		• attractive spring flower • 12"-18"h • Rapid spread by rhizome that will fill a large space quickly
Full-sun, medium to moist soil	***Clinopodium arkansanum*** (Calamint)		• Low-profile • Minty aroma & lavender flowers • Roots at nodes to spread

THE PRIORITY OF RETHINKING PRETTY

By Kirsten McCarthy, Halton Master Gardener

Many of us already know the importance of creating pollinator gardens to increase biodiversity to feed bees, butterflies, and other important insects. Benjamin Vogt's newest book, *Prairie Up: An Introduction to Natural Garden Design* is a captivating and beautiful introduction to the importance of connecting with nature through growing *prairie* plants.



Here in Southern Ontario it is uncommon for us to see many prairies, except for small, fragmented remnants of tall grass prairie, but Vogt's book teaches us that the prairie ecosystem does, and can exist in urban areas and shows us how to create our own. Vogt reminds us of the importance of biodiverse ecosystems as habitat for wildlife, but he also teaches us that prairie plants are a necessary addition to home gardens to reduce the damaging effects of climate change. Before teaching us about garden design, he shares his own experiences growing up in prairie landscapes and why they hold a special place in his heart. He then asks us to garden with intent, by researching and choosing native plants thoughtfully, before planting.

His helpful how-to leads us to learn about our specific ecoregion (rather than frost dates) and the taxonomy of native species (scientific names, please) to ensure we are putting the right plant in the right place. He discusses "creating regionally appropriate, nature-based gardens that reflect local plant communities" as the goal of gardeners wishing to increase functional biodiversity — a concept to add more plants from the same ecoregion and even the same family, in one garden design.

To create this biodiversity, Vogt helps us understand the importance of shifting our aesthetic focus. Instead of choosing a traditional garden of exotic plants that do very little to support wildlife, Vogt encourages us to choose to garden *for* nature, to see that native prairie plants are beautiful, calming, create habitat, increase biodiversity, and mitigate climate change. Then he shows us how to do it step by step. He also tells us ways to deal with difficult neighbours (or home associations) that might complain about a prairie garden, and how to avoid a by-law officer visiting your property.

Images: Benjamin Vogt

With over one hundred beautiful and rich and colourful photographs, the bulk of his book introduces us to planning, installing and managing a prairie garden. He goes into detail about different garden designs (with a focus on The Matrix), seeding vs. planting seedlings, annual expectations, year by year maintenance, and he provides a lot of useful resources and websites. For anyone seeking to revive diversity in their home gardens, *Prairie Up* is an invaluable reference. Whether you're a seasoned gardener or a curious beginner, this book will inspire you to create sustainable, native-focused landscapes that harmonize with nature.

Q&A

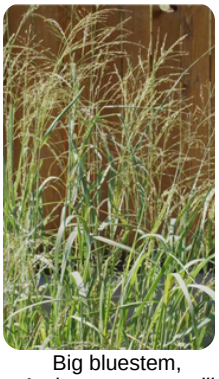
By Hariette Henry, Halton Master Gardener

> *What are good options for native grasses that get tall enough to provide privacy? We'd like to create a living fence between our property and the neighbours.*

In many suburban areas the space between residential properties has become smaller and smaller. For this reason, Ontario tallgrass species make a great option for privacy screenings as they are upright, mounding and quite narrow. Many of these plants will be available through the Native Plant Nurseries in our region. A map can be found on our website where the location of these nurseries is highlighted in green with links to their websites.

Grasses are often overlooked when planning a privacy border but they shouldn't be as they have important benefits such as: being cost effective; preserving and building soil; and outcompeting weeds. Native warm-season grasses provide habitat for beneficial insects such as bees. The exposed soil between grass clumps provides a perfect spot for ground nesting bees to make their homes. Native grasses provide seeds and habitat for our native birds, critically important in fall and winter. These plants have very deep roots (5-6 feet or more) making them useful for erosion control. They create excellent winter interest as they tend to retain their structures over the colder months.

We recommend integrating native wildflowers and adding low mounding sedges or grasses as edging, to create a diverse border that mimics a natural prairie. Excellent companion flowering plants include smooth aster, dense blazing star, woodland sunflower, New England aster, wild bergamot or purple coneflower. As edging plants, Prairie dropseed and Pennsylvania sedge make great options. This habitat used to exist in Southern Ontario but it has been lost over the years due to urban development and agriculture.



Big bluestem, *Andropogon gerardii*

Wood grass (previously Indian grass), *Sorghastrum nutans*

Switchgrass, *Panicum virgatum*

Below are a few of the taller native grass species to consider. Hope this gives you a good start!

- Big bluestem, *Andropogon gerardii*, typically reaches a height of 7ft. It makes an excellent structural plant and has nice variability of colour during the summer months. It develops an attractive seedhead later in the growing season, providing interest in winter. It prefers moist to average sites but is drought tolerant once established. Its fibrous root system can reach depths of 10 ft.

- Wood grass (previously known as Indian grass) *Sorghastrum nutans*, grows to 6 ft., prefers dry to moist soils but is fairly adaptable to most well-drained soils. Expect it to grow shorter in dryer soils. It is valued for its blue-grey foliage and tall, vertical stature. The showy fall colour takes on a bronze/orange hue. The foliage feeds the larvae of various skipper species. Birds eat the seeds and use dried parts of the plant for nesting material.

Skipper butterfly

- Switchgrass, *Panicum virgatum*, grows to 6 ft., is another tall, native grass used for its ornamental appeal and tough adaptability to a wide range of soil conditions. It is prized for its vertical stature and attractive winter foliage. In mid-summer it is topped by pink-green flowers, giving the plant an airy appearance. The seeds are an excellent food source for birds.

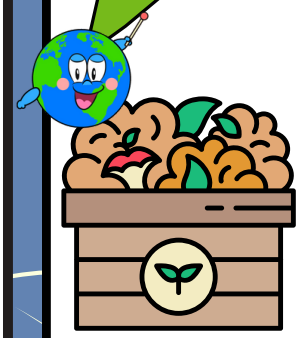
Garden Inspiration!

Gardeners Making a Difference

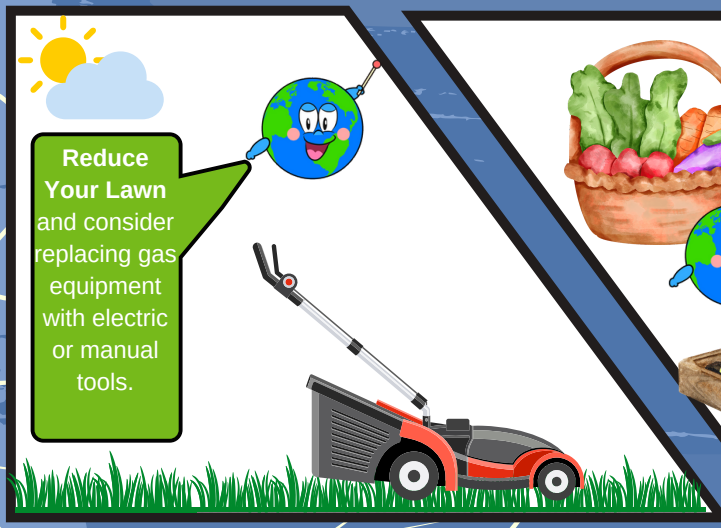
Borrow or Thrift a garden tool: Check 'Buy Nothing' sites or create a neighborhood garden tool library.

Look for plants in compostable containers or check to be sure plastic containers can be returned to the place of purchase.

Compost on Site using a bin, vermicomposter or 'chop & drop'.



Reduce Your Lawn and consider replacing gas equipment with electric or manual tools.



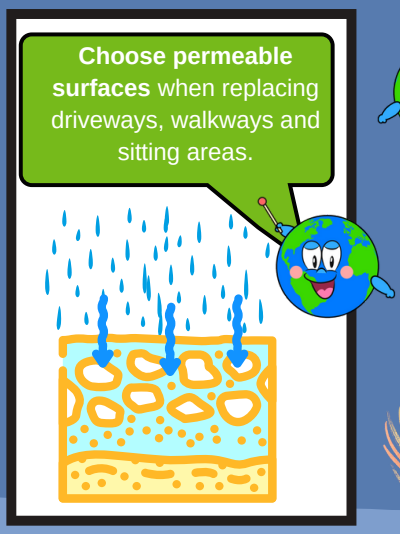
Grow Your Own or locate local produce.

Reduce Use of Peat and locate local sources to enrich soil (ie., leaf mold or compost).

Plant a tree for yourself, others or the community.

Reduce storm runoff by disconnecting downspouts and adding a rain garden.

Choose permeable surfaces when replacing driveways, walkways and sitting areas.



Choose native plants that are resilient to drought conditions.

Janet Mackey

What's Growing On ?

April 22nd is Earth Day!

Earth Day Events in Hamilton

A horticultural organization since April 20, 1919 and still going strong!

Learn More Here

Learn More Here

Apr 5
Nature Art

Apr 18
Kingsford Garden Pollinator Prep

Apr 20
Earth Day Clean Up!

Falcon Watch, Pollinator Paradise Project, Junior Naturalist Club and more.

Check their April calendar of events

What's Growing On ?

Royal Botanical Gardens

Birding

Blooms in April

Earth Art

Nature Trails

Arbor Week in Ontario starts on the last Friday of April.

Plant a native tree !

Butternut

Eastern hemlock

Gray birch

Red maple

Tulip tree

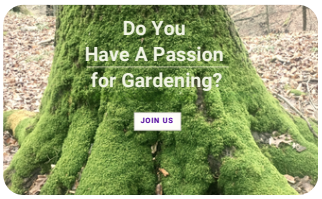
White oak

Check our calendar for events

Halton Region Master Gardeners

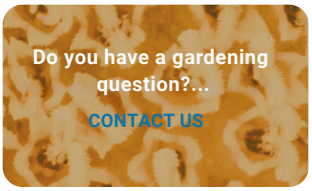
Come Grow with Us

Learn more here



Learn more here

Visit our website. We love to hear from you !



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.

Copy Editor: Isabel Belanger

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