

Bottle Gentian, Gentiana andrewsii

By Tinamarie Jones, Halton Master Gardeners

As the calendar moves into late August and then into the fall months of September and October, leaves start to turn colour and fall, and most annual and perennial plants visibly decline. It is easy to see why a lot of gardeners may feel that the gardening season is finished for the current year, aside from perhaps planting some bulbs for spring. However, everyone can extend the life of their garden well into October by incorporating plants that flower later in the season.

Image: Minnesota Wildflowers © 2007 Kay Chakra

Incorporating later blooming plants not only prolongs a garden's visual appeal, but more importantly, provides essential nourishment in the form of nectar for pollinators preparing to overwinter, allowing these pollinators to feed for longer, resulting in better vitality and overwintering success. When it comes to later blooming plants, there are many to choose from; however, one of the most captivating is Bottle Gentian or *Gentiana andrewsii*.

A member of the *Gentianaceae* or Gentian family, Bottle Gentian is also known by a variety of common names such as: Closed Bottle Gentian, Andrew's Gentian, Blind Gentian, Cloistered Heart, Closed Gentian, Fringe-top Bottle Gentian, Gall Flower, and Prairie Closed Gentian. The genus name honours King Gentius of Illyria, who reigned from 180-168 BCE and discovered medical applications of the plant. According to the Missouri Botanical Garden site, the "Specific epithet honors English botanical artist Henry C. Andrews (active 1794-1830)."

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BOTTLE GENTIAN, GENTIANA ANDREWSII (CONT'D)



Only the strength of a bumble bee can access the flower.

The stem of Bottle Gentian is sturdy and smooth, with a light green or purplish colour. The leaves are simple, lance-shaped and ovate. They can be up to 4 inches in length and 2 inches wide, with a glossy surface and parallel veining. The leaf edges are entire with no lobes or teeth, and the leaves taper to a point. They are stalkless. The leaves grow opposite on the stem, with two leaves per node. Interestingly, the leaves become larger instead of smaller the closer you are to the top of the stem. The leaves located at the very top of the plant directly underneath the flowers grow differently instead of growing opposite, in this location they grow in a whorl just under the flower cluster.

Bottle Gentian boasts a very noticeable and distinctive round flat cluster of flowers at the top of the main stem; they are unusual and charming. The upright tubular flowers can be 1-1.5 inches long, with five fused petals or sepals which overlap. The flower colour is usually cobalt blue or purplish. Other flower colours, such as pink or white, can be found in different varieties. What makes *Gentiana andrewsii* stand out is not only the striking colour and presentation of its flowers but the curious fact that the flowers do not open. They remain closed, with the flowers retaining a bud-like appearance. (Other varieties of Gentian exist, some resembling Bottle Gentian, others with flowers that open). The flowers have no noticeable scent.





Fruit

Seeds

This native perennial blooms in the late summer and fall, generally between August and October. It is a slow grower, but once established, naturalizes easily into larger clumps if left undisturbed. It is naturally found among woods, prairies, and thickets that are moist and near streams and ponds. In terms of habitat, it has a clear preference for moist but well-drained mildly acidic soil. It can tolerate growing conditions from full sun to part shade, but tends to thrive best in cooler, shadier areas, such as woodlands, shade gardens and around water such as ponds or lakes. It does not tolerate hot humid growing conditions well. The plants can grow as tall as two feet and tend to spread one foot wide. It has a habit of leaning at maturity, so planting it in combination with other sturdy plants is recommended to keep it more upright. Given that Bottle Gentian grows slowly, any companion plants should be chosen with care, to give the plant time to establish and spread.

Spent flowers dry into papery seed cases containing numerous tiny seeds. Each seed has very tiny papery 'wings' that help it disperse in the wind and water once the seed case splits open. Propagation of *Gentiana andrewsii* via seed requires cold moist stratification for at least 60 days, then surface sowing of the seeds.

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BOTTLE GENTIAN, GENTIANA ANDREWSII (CONT'D)

Sowing seeds outdoors on top of the soil in the fall is also an option. Division of the plants themselves tends to be unsuccessful and is best avoided. Fortunately, Bottle Gentian is becoming more widely available at shops that sell native plants, making it easier to acquire this unique beauty if you want to plant directly.

In terms of faunal associations, this plant is almost exclusively frequented by bumblebees as they are one of the few pollinators strong enough to muscle their way inside the closed flowers. One of the charms of having this plant in the garden is observing bumblebees forcing their way into the closed flower to gather the nectar, and then forcing their way back out. Bottle Gentian is also the host plant for the Verbena Bud Moth (Endothenia hebesana).

For gardeners looking for an interesting and low maintenance plant, Bottle Gentian (Gentiana andrewsii) is that welcome plant that has few pests and is relatively low maintenance, a boon to any gardener. It brings a welcome pop of cobalt blue colour, it extends the life of the garden, is relatively pest free, and provides much needed nectar for bumblebees as they ready themselves to overwinter. For all these reasons, Bottle Gentian is a terrific choice for the garden.

NAME OF PLANT - DETAILS AT A GLANCE DAPPLED SUN FULL SUN MOIST Plant Type, Family: Gentianaceae (Gentian) Height/Width: (H) 30-60cm (1-2') (W) 60cm (2') Features: Blue round flat cluster of flowers at the top of the main stem.

Faunal Value: Bumblebees. Host plant for the Verbena Bud Moth (Endothenia hebesana). Short-tongued bees will chew a hole at the base of the flower for nectar. Once a hole is made, honey bees, sweat bees and carpenter bees can access the nectar. Blister beetles will feed on the flowers.

Companion Plants: New England Aster (*Aster novae-angliae*), Obedient Plant (*Physostegia virginiana*), and Prairie Blazing Star (*Liatris pycnostachya*), Ferns.

Landscape Uses: Moist fields, thickets, edges of woods.

Native Range: Saskatchewan to Quebec Supports:





More Information:

- Missouri Botanical Gardens
- The Morton Arboretum
- Minnesota Wild Flowers
- Native Plant Trust Go Botany
- Johnson, L. (1999 rev. 2017). 100 Easy-To-Grow Native Plants for Canadian Gardens, Douglas & McIntyre, BC.

Images: Native

Plant Gardener

- Gray, R. and Booth, S. (2024). The Gardener's Guide to Native Plants of the Southern Great Lakes Region. Firefly Books Ltd, Richmond Hill, ON.
- Dickinson, R. and Royer, F. (2021). Plants of Southern Ontario. Lone Pine Publishing, China.





NOVEMBER GARDEN 'TO DO' LIST

NOVEMBER GARDEN 'TO DO' LIST	During the winter, the diet of chickadees
By Claudette Sims, Halton Master Gardener	shifts to about 50% insects and spiders
General Garden Care—Empty or cover decorative pots and store in a dry place to avoid damage from freezing. Turn off water supply to the garden and disconnect hoses and accessories. Empty watering cans and hang garden hoses to drain for winter storage.	and 50% plant matter - primarily seeds and berries. Goldenrod galls are a great source of insect protein for them. Leaving seedheads also helps chickadees to find needed insects.
Stems & Seedheads—Leave seedheads and stalks intact over the winter. Stems offer shelter for cavity dwelling native bees & beneficial insects and also collect snow to insulate and protect plants. Seedheads provide food for birds and winter interest for everyone.	Coldenrod galls contain yummy treats for birds! Lawn and Weeds—Rake or "mow" leaves and remove to garden beds. Leave some leaves uncut for beneficial insects and pollinators who overwinter in leaf litter. Keep on weeding as long as the soil is workable. When mowing is done for the season, clean the mower and
■ Bulbs—Plant spring flowering bulbs as long as the soil is workable. You may also have time to divide and replant overcrowded spring bulbs. Water bulbs after planting.	sharpen the blades. Invasive Plants—Remove any invasive plant seedlings like multiflora rose, common buckthorn and garlic mustard. MG Sean James
Trees and shrubs—Check tree stakes and inspect any ties or wires to ensure they will not damage or girdle tree bark. Protect young trees and shrubs from damage with tree guards or chicken wire (60 cm/24" high) or by using wire baskets to cover very small trees or shrubs.	shows you how to remove larger weed tree seedlings using needle nose pliers! Continue to hand pull, rake or cut off weeds at ground level with a sharp spade or garden tool. Remove and dispose of seed heads to reduce the seed bank in your soil.
Bare Soil—Protect bare soil from erosion and winter sun with a layer of organic matter, e.g., compost, leaves, straw or manure. Avoid tilling which destroys soil structure and soil organisms and encourages weeds to germinate.	Seeds and Winter Sowing–Continue to collect seeds to sow or share. Here's another great video from MG Sean James to simplify growing your own plants this winter.
Houseplants –Check individual plants, before you water. If the soil feel dry/hard or the plant "feels light" for its size, it is likely time to water. If the soil feels cool/moist or the plant "feels heavy", wait and retest in a few days. Check for pests weekly & treat appropriately. Increase lighting in low light areas with grow lights or reflective surfaces. Grouping plants together and using a humidifier are now considered the	2026 Planning—Take notes for next year. What needs to be moved, divided or pruned? Are plants located where you can enjoy their blooms? Do you have plants blooming spring through fall? What plants should be replaced to better support biodiversity? Read about the 2025 Monarch Award gardens for inspiration and check our resources section to help you plan that perfect garden!
most effective methods to ensure stable humidity.	Check our October newsletter for any garden jobs that you may have missed!

MONARCH AWARDS 2025

By Trish Moraghan, Halton Master Gardener

Monarch Awards Take Flight Again!

The Monarch Awards were created in 2016 by dedicated volunteers and staff from the Hamilton Naturalists' Club and Royal Botanical Gardens, under the leadership of Beverley Wagar. In spring 2025, the Halton Region Master Gardeners proudly relaunched this impactful program in the city of Hamilton.



Photos of Recipients' Gardens









Monarch Awards Celebration

The Monarch Awards Celebration was held at the Eva Rothwell Centre in Hamilton on October 15^{th.}. Proud recipients were joined by family and friends to commemorate achievement in growing gardens that support biodiversity and follow eco-friendly garden practices.







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MONARCH AWARDS 2025 (Cont'd)

Proud Recipients with Lorraine Johnson

It was a very special honor for recipients to be congratulated by <u>Lorraine Johnson</u> who is an author of numerous books about growing native plants, connecting with nature, gardening and restoring habitats for pollinators, and ecological health.







A neighbor said, about my garden, "If I was a bee, a bird or an animal, I would live in your garden."

Recipient: K. Shea











Congratulations to All Recipients

Gardeners at the *Good Start* level received a certificate to celebrate the start of their ecological gardening journey. Participants at the *Chrysalis* and *Caterpillar* levels received a certificate and a garden sign to acknowledge their progress toward creating a fully ecological garden.

Gardens of *Monarch Award* recipients exemplify ecological gardening practices. These participants received a certificate and a plaque to display in their garden.

We truly appreciate the time and effort you put into growing gardens that support biodiversity. Every garden helps build a healthier community and we celebrate everything you are doing. We look forward to the 2026 Monarch Awards! Whether you are "Getting Started" or your garden is well on its way to being a Monarch, we encourage you to participate. Learn more here.



GARDEN JOURNEYS 2025

By Allyn Walsh, Halton Master Gardener

Our second open garden event was a terrific success, despite the heat and drought! *Forty* gardens in the City of Hamilton, from Waterdown right through to Stoney Creek, were open for the public to visit over two weekends in August. This open garden event is free of charge and ticket free, making it easy for people to either plan their visit or be spontaneous. Gardens are selected based on ecological garden principles such as the use of native plants, organic horticultural practices, rainwater management and support for native wildlife.

Garden Journeys Open Days (GJOD) has a few goals:

- Connect Gardeners: To bring together and build community for gardeners focused on supporting biodiversity through their native plants and sustainable gardens
- 2. Educate the Public: To illustrate sustainable gardens and educate the general public that having a garden which supports biodiversity and the ecosystem is a journey which can start with small steps
- 3. Re-define "garden": To demonstrate the pleasure and beauty of gardens which not only look good but have functional connections with living things, both plant and animal.
- Rainwater Management: To Reduce impervious surfaces and the impact of stormwater runoff.



Jennifer Jury, Rain Garden. Photo, A. Walsh



Front Boulevard looking west. Photo, Karen Lawrence

Many of the gardens were available to view from the street at any time during the two weekends without a host gardener present, and most of the gardens had posted times during which the host gardener was present to show visitors around the entire garden and to discuss their garden journey.



Photo, Jessie Blake

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GARDEN JOURNEYS 2025 (Cont'd)

Host gardeners were enthusiastic about the event and particularly enjoyed the opportunity to 'talk gardening', not only with those already growing in eco-friendly ways but also with those visitors who were interested in knowing more about the eco-horticulture movement and how to get more involved.

Plans for future GJOD are already in progress, with some tweaks being discussed. The 40 host gardeners have provided a wealth of ideas and suggestions. For more information and more photos of this year's gardens, watch the website at: https://haltonmastergardeners.com/garden-journeys-open-days/.

You can also get in touch with the program leads at: gardenjourneysopendays@gmail.com at any time.



Martin Keller. Photo by A. Walsh



Victoria Park Sidewalk Showcase.

Photo, Pam MacDonald

A quote from the anonymous feedback form sums up the response from host gardeners:

"It was such a good chance to connect with other native plant gardeners and trade stories, tips, and even seeds or plants. I also loved chatting with more traditional gardeners who were curious about the benefits of native plants—it felt great to share what I've learned. On top of that, it gave me the perfect excuse to get my yard looking its best, and I walked away with plenty of fresh ideas for next year's garden."

We would like to extend our most sincere thank you to all of the host gardeners, Green Venture for their referrals from their rainwater management program, and those of you who took the time to visit all of the gardens.

Look for <u>more beautiful photos</u> in future issues on the Halton Master Gardeners website and exciting news in future issues of the Cross Pollination Newsletter for next year's Garden Journeys.

This event would not have been possible without the dedication of your Event Planners:

Allyn Walsh, Lynn Courtney, Halton Master Gardeners,

and Jean Jacobs and Valerie Meneguzzi.



BEAUTY AND THE BEASTS CHINESE SILVER GRASS (MISCANTHUS SINENSIS)

By Kirsten McCarthy, Halton Master Gardener

Origin

In the fall *Miscanthus sinensis*, commonly known as Chinese silver grass, often dominates a perennial garden with its extremely tall beige stalks and wispy, feathery plumes. The genus Miscanthus encompasses approximately 20 distinct species. The name itself originates from the Greek words "mischos," meaning stalk, and "anthos," meaning flower, a fitting description for these plants with their prominent stalks and delicate feathery flowers that bloom in September and October.

A quick google search reveals that this common ornamental grass is extremely invasive in Ontario. Unfortunately, Chinese silver grass isn't listed under the Invasive Species Act, so it is still legal to sell and buy it in local garden centres. Chinese silver grass is native to Japan, the Philippines, India, East Asia, Malaysia and Polynesia. It is a common plant in Japan, often growing along roadsides and disturbed places throughout much of the country. It was brought over to North America in the late 19th century to be used as an ornamental grass and barrier in agricultural fields. Since its introduction, Chinese silver grass has escaped cultivation and naturalized across Ontario. It can be found in disturbed sights, such as ditches and along roadsides.

Chinese silver grass can grow in a wide variety of habitats, but prefers full sun areas with moist, well-drained soil. It is intolerant of shade, but it can still spread into sparsely forested areas and has the ability to form heavy infestations when reaching disturbed sites. It is a drought tolerant, wind tolerant, and deer resistant invader that often creates a monoculture in the areas where it has taken over.



Image: Jasmin Jardin

Due to its ability to spread quickly via rhizomes, Chinese silver grass is difficult to control. It spreads so prolifically that it can quickly create a monoculture environment, stamping out the growth of other, more beneficial grasses such as native grasses. It grows on a variety of soil types, including acidic, well-drained, and nutrient-poor soils.



Image: <u>iNaturalist</u> (c) 663highland, some rights reserved (CC BY)

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BEAUTY AND THE BEASTS (Cont'd)

Identification and Removal of *Miscanthus*





Image: Plume-like Miscanthus Flowers

Chinese silver grass isn't hard to find. This clumping, warm season grass is 1-2 m tall with leaves 30-60 cm long and about 1 cm wide. The stems are almost cane-like in their appearance. The stems and leaves are upwards arching, giving it a rounded fountainlike form. The flowering seed heads emerge throughout the summer and fall in fan-shaped spikelets that grow vertically. The spikelet flowers create a fluffy appearance and usually appear in a white, silver, or slightly pinkish color.

Ornamental plantings should be watched carefully for self-seeding into nearby gardens, woodlands, or natural areas. In the fall, (October) when flowers are conspicuous, is a good time to look for selfseeded plants. Individual plants can be handweeded or removed by digging out the entire root system, or at least the flowers and seedheads removed to prevent further self-seeding, thus reducing the seedbank and helping control the spread of plants. Individual plants can be removed by digging them up; for small areas this is a very practical and easy method. Plants can be removed at any time of the year. Removal before flowering assures that fewer seeds are spread into the area. When digging, ensure that all rhizomes are removed from the soil and that the plant is disposed of in the garbage, not in yard waste.

Native Alternative







Image: Kirsten McCarthy, Aug. 2024 Big Bluestem & New York Ironweed

A showstopping native alternative grass to Chinese Silver Grass is the North American native grass Big Bluestem, *Andropogon gerardi*. Not only is it revered for its functional properties but it is also grown for its decorative features. This grass adds a pop of color to a landscape all year round transitioning from bright green in the spring, to a blue-green in the summer, to a fiery copper-red in the fall months.



When it flowers, it boasts small purple or yellow spikelets. The flowers branch out on three small spikelets—Big Bluestem is also affectionately called "Turkey Foot". This fast-growing grass is adaptable to a wide range of soils so long as they are well draining. It thrives in full sun. Big Bluestem's natural habitat is the dry soils of the North American prairies. As with many native grasses, Big Bluestem has a very deep root system that helps to prevent soil erosion. With its dense foliage, it also provides wonderful nesting sites for small birds and other mammals. The seeds are beneficial to wildlife species like birds and small mammals. With its multilayered benefits, Big Bluestem stands out as a remarkable plant for both ecological and aesthetic purposes in an urban landscape.

Further Information

- 10 Benefits of Having a Big Bluestem
- North Carolina Cooperative Extension
- Canadian Coalition for Invasive Plant Regulation
- University of Minnesota Miscanthus
- The Spruce How to Grow Big Bluestem





By Hariette Henry, Halton Master Gardener

In the past, annuals were the primary plants appearing in containers on balconies. Today everything from perennials to small trees and shrubs are grown in containers either on decks or balconies and the thought of tossing them out at the end of the season is unacceptable to most gardeners.

A balcony in winter, particularly in a high-rise apartment, is a pretty harsh environment. There are things that you can do, to help your plants get through the coldest months. Key to overwintering plants in containers is to prevent the soil mass from freezing and to maintain some level of moisture in the soil throughout the winter.

- You will want to choose plants that are at least 2 to 3 zones hardier than the zone you're in. As you are in Burlington (zone 7a) and most sedums and goldenrods are hardy to zones 3 and 4, you should be ok.
- You'll also want to ensure your plants have enough time to grow a robust root system before winter. If the perennials are new to the pot, plant them six to eight weeks before the first frost date. This will give the roots time to establish, strengthening them against freezing damage.
- Remove any die-back from plants and do not fertilize past the active growing season.
- Choosing the proper pots is also an important decision. Materials such as terra cotta or clay are not recommended in colder temperatures as they are likely to crack.

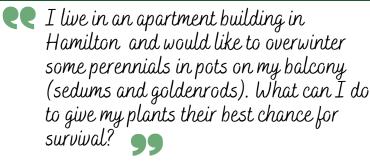




Image source: Urban Garden, January26, 2025 | Vertical + Balcony Gardening

- Wood, concrete, composite and metal make more long-lasting options as they are able to withstand winter temperature variations.
- The larger the pot the better as the greater soil mass provides more insulation for the roots. If your pots are on the small side, you should consider burying them up to the rim in a larger pot and adding a thick layer of mulch, straw and/or leaves on top.
- To further protect the pots and plants, you can huddle them together away from the edge of the balcony and hill them in with straw and/or leaves. Burlap or bubble wrap secured with plastic wrap can be placed around the pots for additional insulation. Taller, columnar plants can be protected with a supporting hoop tied around the plant. Heavy plastic, blankets or even layers of newsprint can be placed over the plants to protect them during a temporary freeze.
- Water your plants deeply before the first frost and continue watering them regularly as you do not want the roots to dry out.

Good luck with your overwintering endeavors!

Further Information:

- Winter Care on Balconies: Tips for Overwintering Balcony Gardens
- How to Overwinter Perennial Plants in Pots & Containers
- In the Zone: Canada's Plant hardiness Zone Maps get an Update
- Overwintering Plants in Containers, Barb Ryan



Garden Inspiration!

The fall colours this year have been beautiful, and who doesn't want more of those in their own garden? It's not too late to plant a *small* woody perennial if you get right on it – or dream for the spring instead. Here are some small Ontario natives that deliver big colour. As always, plants suitable to your hardiness zone, site sun exposure and soil will have the greatest chance for success.



Witch Hazel (*Hamamelis virginiana*) flowers in the fall. Photo: Copyright © 2025 William Cullina.



Spicebush (*Lindera benzoin*) Photo: © Copyright Mark H. Brand



Allegheny Serviceberry (*Amelanchier laevis*) Photo: Copyright © 2025 Janet Davis



Black Chokeberry (*Aronia melanocarpa*) Photo: Proven Winners® ColorChoice®



Virginia Creeper (*Parthenocissus quinquefolia*) Photo: treetime.ca



Cultivar: 'Grow Low' Sumac (*Rhus aromatica* 'Gro-Low') Photo: University of Illinois Extension

hat's Growing On? By Trish Moraghan, Halton Master Gardener





Learn more here

CHOOSE YOUR ADVENTURE



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Rain Ready Hamilton



Learn more here



Visit EcoHouse



Learn more here



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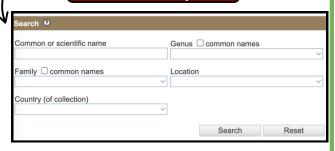
Walks and Tours



The arboretum has 400 acres of plants, trails, woodlands, wetlands and meadows.

Search for trails, botanical collections and species

Arboretum Explorer



Learn more here

What's Growing On?





For All Ages



Let's Go Birding





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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