



Native Plant to Know

Arrowleaf Sweet Coltsfoot

Petasites frigidus var. *sagittatus*

by Flora Nadafi

I have come to realize in recent years how important it is to have many days or even weeks of extreme cold weather in winter, like we had in southern Ontario in the winter of 2022. Those days of -21C (-5.8F) and below not only kill the eggs of the devastating alien, invasive *Lymantria dispar dispar* (LDD moth), formerly known as the gypsy moth, but also bring out native plants that are used to much colder climates.

This is exactly what happened last spring, when there was no sign of those ever-hungry LDD caterpillars. I also discovered a new plant near my house, in a spot where I had let nature take over. During one of my usual exploratory walks around the house, inspecting every nook and cranny in search of new gifts from nature, I noticed a large leaf emerging from the ground. There was neither a stem nor a flower, just a lone leaf on a long, sturdy stalk.

After extensive online research, I decided this plant was arrowleaf sweet coltsfoot (*Petasites frigidus* var. *sagittatus*). It is notable among sweet coltsfoots, members of the aster family (Asteraceae), because its leaves are markedly different: large, arrow-shaped and dentate. The plant gets its common name from the sweet scent of



its flowers and its big basal leaves. Arrowleaf sweet coltsfoot is native to all the Canadian provinces plus the Yukon and the northwestern and northern American states.

This perennial prefers moist, shady areas, such as cold, forested wetlands and streambanks, where it can grow quickly and vigorously to a height of one metre (three feet). The basal leaves, which arise from underground,

lateral, creeping rhizomes, are not lobed but coarsely toothed and sometimes wavy. They are light green on the upper side and covered with fine white hair on the underside.

Faintly pink or grey-white clusters of flowers appear well before the leaves in early spring (there have even been reports from late February). The flowers can be two centimetres (three-

The Blazing Star is . . .

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NANPS News

Our Blossoming YouTube Channel

In partnership with the David Suzuki Foundation and thanks to generous funding from the McLean Foundation, the North American Native Plant Society completed three informative and colourful videos that are now up on our YouTube channel: <https://www.youtube.com/@northamericannativeplantso1902/videos>.

Why Native Plants? is presented by Jode Roberts of the David Suzuki Foundation. Jode heads up the organization's Nature in Cities program, the Butterflyway Project, Bee-bnb and BIMBY (Bees In My Backyard) citizen science project.

Growing Your Native Plant Garden is presented by Natasha Gonsalves, a flora biologist with the Toronto and Region Conservation Authority, and NANPS board member.

Why I Want a Native Plant Garden is presented by Nancy Lang, an artist and pollinator gardener in Toronto, Ontario.

Another recent addition to the NANPS YouTube channel – created with a much-appreciated donation from TD Friends of the Environment – is a webinar by Clement Kent titled *Making Gorgeous Pollinator Gardens Using Native Plants: How to Do It!* Clement is an adjunct professor at York University studying the genomic and genetics of insect behaviour, co-founder of Project Swallowtail and vice-president of the Horticultural Societies of Toronto and Parkdale. In this video he highlights the problems one may encounter planting a native plant garden and how to overcome them.

Our YouTube channel is packed with a wide array of videos, including the submissions from the past three years to our native plant garden video contest, the NANPS 2022 AGM and earlier webinars on balcony gardening, native edibles and other fascinating native plant topics.



Giant purple hyssop (Agastache scrophulariifolia) forms the backdrop for blue vervain (Verbena hastata) at the new Charles G. Williams Park Pollinator Garden.

PHOTOGRAPH BY CLEMENT KENT CC BY SA 3.0

Letters to the Editor are always welcome. Email them to editor@nanps.org with your name and home town or mail them to North American Native Plant Society, Box 69070, St Clair P.O., Toronto, Ontario, Canada, M4T 3A1.

Winter Listening

by Vicki Low

After one has read all the books of Douglas Tallamy and Lorraine Johnson, and every word of the latest issue of *The Blazing Star*, where else can a native plant aficionado turn for information? Here are three podcasts that explore the world of native plants from every angle—from the science of soil to the sociology of yardwork.

Launched in 2016, the aptly named *Native Plant Podcast* is the longest-running of the three. Hosted from Middleburg, Virginia, by landscape designer John Magee and a rotating assortment of co-hosts, the podcast features interviews with ecologists, entomologists, horticulturists, land stewards, landscape industry insiders and other experts from basically every field that has a bearing on native plants and the ecological imperative they serve. The friendly, relaxed humour that John Magee brings to every episode belies the serious attention given to what each guest has to say about their work and how they came to it. I have got something out of

every episode I've listened to, but especially memorable were "Using Science to Save the American Chestnut Tree," with Dr. Sara Fitzsimmons of the American Chestnut Foundation (July 6, 2021). It plays like a sequel to the tragic story I first read about in Tallamy's *Bringing Nature Home*. "Attracting Beneficial Bugs to the Garden: A Natural Approach to Pest Control," with Jessica Walliser (October 6, 2021), provided me with a much-appreciated entry point to a vast, bewildering subject. Each episode ends on a mellow, down-home note, as guests are invited to tell stories about their pets and to pop open a bottle or can of their favourite (not necessarily alcoholic) beverage. Incidentally, John Magee submitted a prizewinning entry for the 2021 NANPS video contest! My only complaint about it was that his very good dog, Chewy, did not appear in it.

With an edgier, faster-paced vibe, *Native Plants, Healthy Planet* is hosted by Fran Chismar and Tom Knezick of the Pinelands Nursery in Columbus, New Jersey. The podcast has such an

active following that an episode from November was recorded before a live audience! Chismar and Knezick's Facebook page is home to a lively community—so much so that a significant portion of the "The Buzz" episodes are given over to housekeeping issues. For this reason, I recommend that new listeners start with the episodes built around interviews (typically, though not always, titled "Meet ..."). For example, the recent conversations with Dr. Peter Groffman of the Cary Institute of Ecosystem Studies examine yardwork from a sociological perspective, the better to grasp how native plant advocates may reach a wider audience ("Your Lawn Does What?" Parts 1 & 2, December 2 and 16, 2022). The emphasis of the podcast is as much on the "healthy planet" side of things—one interview that takes a whole-biosphere perspective is with the oceanographer Enric Sala about his book, *The Nature of Nature*. The conversation encompasses not just the scientific but also the political and

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NANPS EVENTS

NATIVE SHRUBS FOR YOUR GARDEN

Tuesday, March 21, 2023

7:00 - 8:30 pm

This webinar will feature Colleen Cirillo, who has an MSc in environment and resource studies, and has spent many years working in nature interpretation, protection and restoration.

Native shrubs vary greatly in form, size and habitat. Learn about options for every application or corner of the garden – shade or sun, wet or dry, specimen or hedge, naturalized or formal. Canada is home to hundreds of native shrub species but this webinar will consider only a small selection of mostly wide-ranging species that work well in gardens and

can be found in nurseries.

This webinar is offered in partnership with the David Suzuki Foundation and with the generous support of TD Friends of the Environment Foundation.

To reserve a ticket:
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Goldenseal (*Hydrastis canadensis*)

PHOTOGRAPH BY SHAWN PATIL

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economic angles of our environmental crisis. Yet the focus remains our native flora: a spin-off of the podcast, about to enter its second season, is *A Native Plant Every Day*, short episodes in which Knezick and Chismar take turns quizzing each other on specific plants. Even these hosts don't always get it right, which together with the funny and self-deprecating tone of their interviews has the disarming effect of making the listener feel that we are all learning about native plants together, with plenty of laughs to be had along the way.

A new favourite of mine is the *Backyard Ecology* podcast, hosted by Shannon Trimboli, wildlife biologist, educator and co-owner with her husband of the Busy Bee Nursery and Consulting, in south-central Kentucky. As the name implies, the podcast digs into the ecosystems "right outside our doors." While Trimboli covers the familiar lists of pollinator-friendly plants that bloom in each season, she also frequently invites guests that help demystify the fauna that frequent our yards. More than the other two podcasts, *Backyard Ecology* includes birds as a focus—there are episodes on the annual Backyard and Christmas Bird Counts (February 4 and December 8, 2022), while another examines the effect of light pollution on birds and other wildlife (a topic close to my heart as a long-time FLAP Canada volunteer; April 14, 2022). Always of interest to me (because of my near-total ignorance on the subject) are the episodes on insects and other tiny critters. Louis Nastasi, a PhD candidate at Penn State, recently joined Trimboli to talk engagingly about galls and gall wasps (September 29, 2022). Dr Sonia Altizer and Kade Donaldson, both of the University of Georgia, provide an unusual angle on monarch butterfly health in their discussion of the increasingly prevalent parasite *Ophryocystis elektroscirrha* (October 27, 2022). Also somewhat unexpected was the great value I found in listening to the



PHOTOGRAPH BY MATT MCCLELLAN

Tom Knezick and Fran Chismar of Pinelands Nursery in Columbus, New Jersey. Fran and Tom present the wildly popular Native Plants, Healthy Planet podcast, nativeplantshealthyplanet.com.

conversation with Larry Weaner on "Ecology Based Landscaping" (January 8, 2023)—I mistakenly thought that I had by now digested all the whys, if not the hows, of native plant gardening, but Weaner's thoughtful comments on the long-term relationships we gardeners build with the yards we tend describe nothing less than a life ethos: "a rewarding way to live," as he quietly remarks.

Hearing specialists chat informally about their life's work is a great way to learn not just about plants but the people who care about them. It's fascinating to hear, for instance, in Douglas Tallamy's guest appearances on the first two of these podcasts, how his mild-mannered

modesty meshes with his passionate convictions. As a native plant newbie who last studied science in high school, I find these glimpses into the world of plant and ecology professionals quite intriguing. During this long winter there won't be much to do in the yard besides admiring seedheads in the snow, but I'll enjoy listening to these podcasts and others in preparation for the season ahead.

Vicki Low is the copy editor of The Blazing Star.



Our Coast Guard

by Marie Charles Pelletier

American dune grass grows all along the shores of the St. Lawrence and the Atlantic coast of Canada. You've surely seen, or even trampled on, this native plant before. *Leymus mollis*, also known as sea lyme and wild-rye, is a resilient grass that straightens quickly after being stepped on and can also withstand crashing waves, gusts of wind, and harsh salt spray. Once it takes root, dune grass forms a tough, grassy strip that pushes up through sand, rock cliffs and washed-up trash and debris. The secret to its strength lies under its tall stems and golden spikelets: an impressive root system that retains sediment and stabilizes the soil.

As a child, Véronik Rioux-Pin spent most of her time playing in the sandbanks along the St. Lawrence in Anse au Sable in Quebec. The years and tides have greatly altered the shores she adored as a child. She still searches for whelks and picks samphire along the river, but now she also studies coastal dynamics as a geographer who specializes in managing erosion and flooding. Rioux-Pin travels Québec back and forth along Route 132, seeking to convince coastal property owners of the ecological value of the land and their power to act upon it. The geographer wants to persuade them that the best form of action is actually to let the environment evolve on its own, allowing indigenous plants to grow rather than ballasting the shores with rocks and boulders.

In a small greenhouse attached to her home, Rioux-Pin cultivates marine shoreline plants, including dune grass. With samples from her nursery in hand, Rioux-Pin shows shore dwellers how to read the tidemark so that they know where to replant. Because of a general lack of knowledge about their benefits, a great deal of dune grass and other marine shoreline plants have been repeatedly pulled out. But the more closely we observe an ecosystem,



PHOTOGRAPH © ALEX CORMIER BESIDE

the more we recognize its uniqueness—and the importance of leaving indigenous plants where they're found. By stripping the shores of their guardians, we've left them more vulnerable to the tug of the tides.

In 2010 a devastating storm struck eastern Québec with waves over five metres (16 feet) tall and winds of more than 80 kilometres an hour (50 miles). Residents watched their land slide into the sea and get washed away. When it was all over, some houses had to be demolished; others were preventatively shifted further inland.

A few years later, Justin Parisien bought a three-season chalet in Grand-Métis. The resident of Centre-du-Québec had dreamed of living

closer to the sea. Speaking with his new neighbours, he learned that the sea was also moving toward him: more than a dozen metres of his land had been eaten away by coastal erosion and bad weather, including the infamous storm.

Glaciers once served as natural ramparts against rough winds and waves. Over time, the ice cover has decreased, but the wind has not. So what is left to protect the shoreline? From Métis-sur-Mer to Greenland, coastal dwellers are accustomed to having front-row seats to a steadily eroding shoreline. The changes to the landscape are visible, concrete and impossible to ignore. Does this mean landowners should be the guardians of

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their coasts? If property rights entitle us to use a good, to reap its fruits and to dispose of it—by transforming it, destroying it, selling it or giving it away—perhaps we ought also to know how to protect it.

Fortunately, mindsets are changing, not just along the sea but also inland. Rather than simply adding greenery to their properties without giving further thought to what is being planted, people are beginning to allow the land to quietly regenerate on its own. We must ask



PHOTOGRAPH © ALEX CORMIER BESIDE

Membership Renewal

For those who haven't renewed their NANPS membership for 2023, we encourage you to do it now and not miss a single issue of *The Blazing Star*. Membership has other advantages as well:

- Discounts to native plant-related events, speakers and workshops
- Access to the NANPS Seed Exchange
- Access to online pre-ordering of plants from our spring native plant sale

Use the membership form on the back page of this publication or visit nanps.org/become-a-member to renew. You can pay with Paypal, e-transfer or cheque.

If you wish to check the status of your membership, please email membership@nanps.org. If you have questions or comments, contact us at info@nanps.org.

Thank you for your commitment to native plants and wild ecosystems!



Winged loosestrife (Lythrum alatum)

PHOTOGRAPH BY MATT IRELAND

ourselves whether there's anything natural about an inclination to make our yards look like an emerald brush cut, and whether a lawn can truly interact with other species or support biodiversity.

Marie Charles Pelletier is a producer and writer at BESIDE, and is interested in people and the stories they tell. She began her career as a cultural writer before shifting to film production. At BESIDE, Marie Charles co-produces the series Going Sideways and continues to write the stories of people who inspire her. She spends the rest of her time getting lost — either in the forest or in her thoughts. This article was originally published in BESIDE, issue 12. It is reprinted here with permission.



PHOTOGRAPH © ALEX CORMIER BESIDE

A Northern Gardener's Guide to Native Plants and Pollinators

In the fall 2022 issue of *The Blazing Star* we reviewed an indispensable book by Lorraine Johnson and Sheila Colla entitled *A Garden for the Rusty-Patched Bumblebee:*

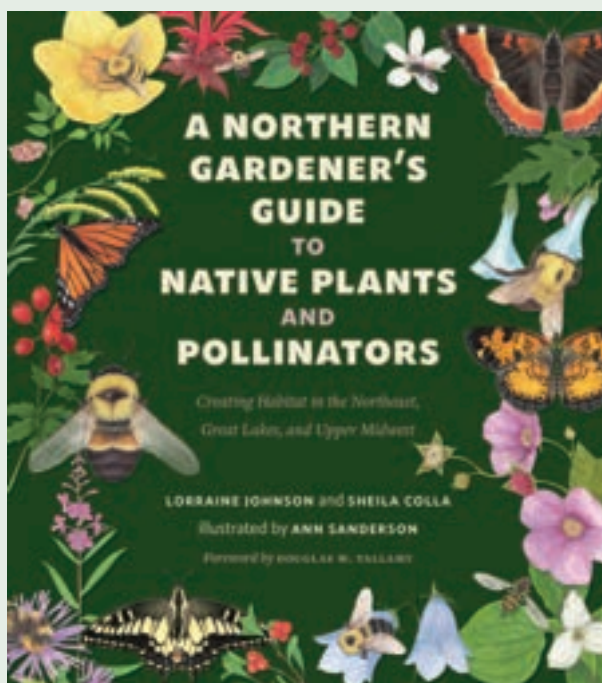
Creating Habitat for Native Pollinators. That was the Ontario/Great Lakes region edition of this new book by the same authors, which comes out in April – *A Northern Gardener's Guide to Native Plants and Pollinators.* Just like its predecessor, this engaging book is packed with information and suggestions for creating gardens that benefit pollinating insects and other animals, and in turn benefit humans and the planet. Its focus is the U.S. Northeast, Midwest and Great Lakes regions.

The book describes over 300 native plants and includes information on blooming periods, sun exposure, soil moisture, good plant companions and interactions with pollinators. The authors offer sample designs for everything from residential to community gardens, advice on how to

manage tall plants and suggestions on which plants work best in different scenarios, even balconies. Site preparation tips, for planning a garden from scratch or

adding native plants to an existing landscape, are provided as well. Full-colour illustrations and photographs add to the appeal.

The foreword is written by Douglas Tallamy, the author of many much-loved books on native plants and pollinators. He writes: "Landscaping in ways that eliminate nature is a fool's errand, and we can do better. And that is what Lorraine and Sheila will help you do. Protecting and enhancing pollinator populations is one of the best ways to ensure our future, and the future of the life around us. There is no better resource for this noble task than the book you now hold."



Published by Island Press, *A Northern Gardener's Guide to Native Plants and Pollinators* will be available in bookstores or online after April 11, 2023.

Learning to Look: Driftwood Beach, November 26, 2022

by *Conor Mihell*

The dog wonders why I am on hands and knees, plucking red berries and stripping winter-dry leaves from fibrous stems. He's also never seen me gather Labrador tea. Its droopy, fuzz-covered leaves sag like another type of dog's ears, standing tall in a canopy over a carpet of moss. A pocketful smells startlingly like summer. My hands reek of the tangy odour

that wafts beneath my canoe on a long portage, joyously bringing me back to so many journeys in the North. I am jealous of how all this must smell to the dog's nose. But then why the quizzical, impatient stares? This is a new type of journey for us both, I am realizing. One of learning to see the miniature round cactus leaves of snowberry creeping in the sphagnum and discovering how red bearberries materialize

in late-afternoon, late-November sunlight. The old dog is learning something about me, too, as I learn how to look. He lies down on the frozen sand, scratches, takes it all in. A different type of gathering. Our friends are far ahead but he's resigned to never leave me. Soon enough we will move on.

Conor Mihell writes for Cottage Life, ON Nature, Sierra and other magazines, and produces multimedia content for Wildlands League, Evolugen by Brookfield Renewable and Ontario Tourism.



PHOTOGRAPH BY CONOR MIHELL

The rich maroon colours of bearberry (Arctostaphylos uva-ursi) complement the minty hues of reindeer moss (Cladonia rangiferina) in early winter in the dunes of Driftwood Beach off Lake Superior near Wawa, Ontario. Both serve as traditional medicines for local Indigenous people.

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New Directions in the American Landscape
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The Cambridge Pollinator Preserve

by Jim Dyer

By November, all that can be seen at the Cambridge Pollinator Preserve in Cambridge, Ontario, are dead flower stalks and leafless tree branches. As I wandered around the preserve in the fall of 2022, the only visitors I saw

were occasional dog walkers and a few hikers on the walking trail. Compared to the heavy summer traffic, it was peaceful and I could be alone with my thoughts and preparations for the following year. Autumn is the time to select and prepare a new site for planting day in the spring. I needed to

ensure that my choice didn't overlap with previous planting sites. The traces of half a dozen such sites reminded me of all the volunteer work that had gone into building this native plant preserve and all the knowledge gained from that effort.

For the past 13 years, the Ancient Mariners Canoe Club, in partnership with the City of Cambridge, has been restoring a retired dog run on the west bank of the Grand River, north of the railway bridge in downtown Cambridge. The project started with tree planting in 2008.

During the second spring planting day in 2009, a discussion arose about whether simply planting trees was the best way to re-green an urban landscape. Yes, deciduous trees provide shade and store carbon, but only the flowering trees provide the forage that insect pollinators require. While all deciduous trees produce flowers, those that are wind-pollinated are very small and inconspicuous.

The so-called flowering trees have colourful floral displays that signal to bees that nectar and pollen are on offer. Flowering trees play an important role in pollination ecology. When we added herbaceous wildflowers to the planting, the preserve was born.

Lessons from the Cambridge Pollinator Preserve

Recognizing the need for protected places for pollinating insects to forage, an increasing number of organizations have started creating flower patches for bees and their kin. Most projects follow basic guidelines. They replace ornamental flowers with wildflowers and avoid using herbicides and insecticides. Naturally, we follow these guidelines at our preserve, but they have evolved into an expanded set of work-related guiding principles over the years.

Our original vision entailed creating a sustainable pollinator habitat that would help raise local public



PHOTOGRAPH BY JIM DYER

Common milkweed (Asclepias syriaca) visited by a bronze copper butterfly.



PHOTOGRAPH BY BRIDGET WHITE

A ninebark shrub (Physocarpus opulifolius) in glorious flower. The visitor is a small black sweat bee (Halictidae family).

awareness about these crucial insects. After almost a decade of operation, we realized that other groups hoping to create pollinator habitat in their communities could benefit if we shared what we'd learned. Thus, the third goal of the Cambridge Pollinator Preserve was born: to serve as a model pollinator habitat.

Principle # 1

Our most important lesson: the creation of sustainable pollinator habitat is unlikely to happen without a multi-year commitment. This is mainly because floral and pollinator diversity is mostly achieved through trial and error. We have to keep track of which plants survive in this particular environment. Climate fluctuations in the years after planting necessitate follow-up. Plants that flourish and bloom profusely in a wet year might wilt and die during a prolonged dry spell. Long-term commitment also requires adaptability: repeat what works and abandon what doesn't. Some mistakes can be avoided by learning from existing habitat restorations, but each new project must adapt to its local environment. For example, we learned a harsh lesson from the black walnut trees (*Juglans nigra*), although we were not the ones who planted them. Juglone, a toxic compound produced by the leaves, bark, fruit, roots and husks of black walnuts, stunts the growth of many other plants. After some of our early tree selections mysteriously died, we learned that in the corner of the preserve closest to the black walnut grove we needed to plant juglone-tolerant trees, mainly redbud (*Cercis canadensis*) and catalpa (*Catalpa speciosa*). While northern catalpa and eastern redbud are at the northern edge of their range, they are both Carolinian species and Cambridge is in the Carolinian zone. They are, therefore, native to the region and have proven to be very good additions to our habitat. Another issue at our preserve: the stony and

sandy soil makes water retention a challenge during dry spells.

Principle # 2

Biodiversity is the guiding pillar of plant selections. In keeping with the pollinator habitat goal, only native species of insect-pollinated flowering plants were selected for the preserve. Cultivars were never used because they don't provide as much bee forage as the wildflowers whose genetics have not been tampered with. Only locally grown natives were planted since they would be best adapted to the region. To date, all of our plantings have been young plants, rather than seeds, and we have maintained high biodiversity.

Principle # 3

Reliable floral succession is necessary to support a diversity of native bees. It means providing something in bloom throughout the growing season to feed the different bee species that appear over the summer. The so-called spring bees are gone by the time most herbaceous plants start to bloom. Bumblebees demand a full season of floral forage because their reproductive success hinges on the newly emerged queens in spring. Planting flowering trees and

shrubs that typically bloom in the spring satisfies the foraging needs of the earliest arrivals. The nectar and pollen from these woody plants has supported healthy populations of several different bumblebee species on the preserve, such as the rare northern amber bumblebee we've had the good fortune to spot.

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PHOTOGRAPH BY LORNA FERGUSON

A new plant is about to be planted into a hole dug through the cardboard.



PHOTOGRAPH BY DONNA WHITTIER

Two AMCC volunteers at work in a cell on the preserve.

PHOTOGRAPH BY LORNA FERGUSON



Another flowering tree finds a home in the preserve, thanks to two AMCC volunteers.

Principle # 4

Many forbs, such as New England asters (*Aster novae-angliae*), bloom well into September but in southern Ontario bees and other insects rely heavily on the prolific floral displays of Canada goldenrod (*Solidago canadensis*). In late summer and fall it is a rich source of pollinator forage and a critical component of floral succession. Aside from its copious display of gold each fall, goldenrod has proven to be an effective groundcover throughout the growing season, preventing many invasive, non-native seeds from germinating. Although goldenrod is now embraced by most naturalists, this wasn't the case when we started the preserve. Public attitudes towards this plant have changed in the last decade but some gardeners still consider it to be an



PHOTOGRAPH BY JIM DYER

One of the many redbuds (*Cercis canadensis*) well suited to conditions on the Cambridge Pollinator Preserve

aggressive weed. Hence, goldenrod deserves a special mention as one of the basic principles that our preserve can share.

Principle # 5

The preserve is a habitat, not a garden. As our motto, this catch-phrase is meant to inspire low maintenance. We take a function-over-form approach, with no effort wasted on achieving conventionally acceptable visual appeal. The only concessions to visitors are a network of walking paths maintained by mowing and a few rock benches. Low maintenance means minimal input. When we plant, we add only organic soil and water. After planting, watering is done only in the first year, if needed. Weeding is done even less frequently; no heroic measures are taken to eliminate non-native flowers, particularly if they provide bee forage. For the preserve to become truly sustainable, inputs and maintenance must eventually be reduced to zero.

Principle # 6

Minimal disturbance is critical to sustainable pollinator habitat. The soil is never intentionally left bare, even briefly, and there is never any clearing or soil tillage. The existing vegetation must eventually be displaced, of course, in order for our new plants to have access to the mineral soil. But that is never done without immediately planting something in that space. The dense growth of existing herbaceous plants, of which goldenrod is the dominant species, can be thought of as the matrix of the habitat, since all the wildflower plantings are surrounded by undisturbed stands of this essential native plant.



Culver's root (Veronicastrum virginicum) in bloom

PHOTOGRAPH BY JIM DYER

Principle # 7

Planting into “cells”, also referred to as “lenses”, is how minimal disturbance is achieved. Careful preparation of the cells gives the forb plantations their best chance of success. Cells are typically four metres (12-15 feet) in diameter. In the fall, before snow covers the ground, we cover the designated area with corrugated cardboard rescued from recycling bins, then several inches of wood chips. Although we haven't tried it on the preserve, old newspapers can be used for the same purpose. The cardboard and wood chips are softened up enough by the winter freeze and spring thaw to allow planters to cut through this cover so that potted



The white flowers of this young catalpa (Catalpa speciosa) attract a variety of spring bees.

PHOTOGRAPH BY JIM DYER

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plant roots will contact the soil. Once through the cardboard, however, our planters still have to dig a big enough hole to ensure the root ball is fully covered. The rest of the cardboard remains strong enough to keep neighbouring plants from encroaching into the cell for several years and to prevent the wind-blown seeds from unwanted invasives from germinating.

In Summary

A successful pollinator habitat embodies all these principles, but ultimately their implementation requires volunteers. The scale of habitat creation and the workload that volunteers can undertake depend on the size of the organization and commitment from its members. A typical cell can accommodate six volunteers before people trip over plants and each other. There are always other jobs, such as carrying plants, water and bags of organic soil, to occupy additional volunteers. An afternoon's worth of work by one or two volunteers in November is all that cell preparation requires. Planting the cell seldom takes more than two hours. Two to four people can plant several trees in this time, including the labour-intensive digging of holes deep and wide enough to accommodate a tree's root ball.

Armed with this set of principles, volunteers can create sustainable pollinator habitats, like the Cambridge Pollinator Preserve, in which their organization can take well-deserved pride.

Jim Dyer received the North American Pollinator Protection Campaign (NAPPC) Pollinator Advocacy Award in 2006 for his work protecting pollinators (as an environmental consultant for Environment Canada). His consulting experience led to the launch of the Cambridge Pollinator Preserve in 2009, a project that he conceived and chairs. Without the support of the City of Cambridge, the preserve would not have been possible.

Continued from page 1 – **Arrowleaf Sweet Coltsfoot**

quarters of an inch) across and show up in a cluster up to 10 centimetres (four inches) across on top of a fleshy stalk that can grow to 20 - 75 centimetres (eight to 30 inches) in height. Flowers are dioecious (male and female flowers are on separate plants) and insect-pollinated. Leaves usually appear one to two months after the blossoms and they keep their distance from the flowers. This explains why I noticed the leaf in mid-June, when the flowers, in cotton-ball silvery white cluster seeds, had already

blown away.

According to a document published by the U.S. Department of Agriculture Forest Service in 2003, arrowleaf sweet coltsfoot is usually associated with the following tree species in North America: northern white cedar (*Thuja occidentalis*), tamarack (*Larix laricina*) and black spruce (*Picea mariana*). Associated shrubs might be bog birch (*Betula pumila*), speckled alder (*Alnus incana*) and willows (*Salix* spp.). Companion grasses and grass-like plants include Canada bluejoint



Seedhead of arrowleaf sweet coltsfoot

PHOTOGRAPH COURTESY BENNIE BENGSTON, LADY BIRD JOHNSON WILDFLOWER CENTER

(*Calamagrostis canadensis*) and sedges such as Buxbaum's sedge (*Carex buxbaumii*), wiregrass sedge (*C. lasiocarpa*) and few-seeded sedge (*C. oligosperma*). Forbs found in the vicinity of this coltsfoot include northern blue flag (*Iris versicolor*), bog willow-herb (*Epilobium leptophyllum*), Ohio goldenrod (*Solidago ohioensis*) and marsh bellflower (*Galium* spp. *campanula aparinoides*).

Indigenous people took full advantage of the attributes of arrowleaf sweet coltsfoot. They used it as medicine to heal chest and stomach ailments. They added the leaves, stem and flowers to cooked dishes or used them raw in salads. The mature leaves could be

fashioned into a makeshift funnel or a temporary container for berries. They would also cover kegs of berries and rhubarb to discourage mould growth during winter storage. When the leaves are dried and burnt to ashes, the residue can be used as a natural salt substitute.

However, the presence of pyrrolizidine alkaloids in all parts of the plant can cause cumulative liver damage so consumption must be limited. Self-medication using this plant is not recommended.

A couple of weeks after I saw the arrowleaf sweet coltsfoot for the first time, I noticed a few larger, dentate leaves in cool and damp corners of my backyard. Insects had helped themselves to some of the leaves. Now that I know when and where to look for the beautiful flowers of this fascinating plant, I can't wait to catch up with them in late winter or very early spring every year.

Flora Nadafi is the founder and operator of a container-grown, native tree nursery in Dufferin County, Ontario called ForFaraz (www.forfaraz.com). She resigned from the engineering profession and started the nursery in memory of her beloved son, Faraz.



The leaf was the first part of the plant Flora noticed last spring.



WINTER 2023

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