



Native Plant to Know

Monument Plant

Frasera speciosa

by Evan Cantor

There's nothing like a good topo map. It was on a very good topographical map that I first noticed Quartzite Ridge, a rocky outcrop in the vast, rolling high plateau of Colorado's Flat Tops. At an elevation of 11,185 feet (3,440 metres), Baxter Peak, the ridge's summit, promised a 360° view. But it had been a long, snowy winter and the four-wheel drive track was blocked by snowdrifts made solid by June rain. I pulled out my topo map and considered the options.

I turned the car around, heading past unnamed lakes and the Broken Rib trailhead, to make camp at the edge of an aspen grove verdant with bluebells (*Mertensia alpina*). Instead of examining Quartzite Ridge, we would explore the forested backbone of Deadhorse Mountain. Hiking up a damp, southwest-facing meadow, we waded through a waving sea of flowers. The heavy winter's legacy was a midsummer profusion of blossom. At this elevation, the middle of summer resembles spring and all the world seems fresh in bloom. Days are a procession of cool mornings,

warm afternoons and frigid nights.

Many of the flowers were old friends. I photographed Rocky Mountain bee-plant aka bee balm (*Cleome serrulate*), white and yellow violets (*Viola* spp.), western valerian (*Valeriana occidentalis*), the delicate, pink-veined blossoms of Richardson's geranium (*Geranium richardsonii*) and nodding clusters of mountain forget-

me-not (*Myosotis asiatica*). As expected, we saw white and pink spring beauty (*Claytonia lanceolata*), fields of white bittercress (*Cardamine cordifolia*) in moist spots, fuzzy purple fringe (*Phacelia sericea*) and bushy clumps of blue columbine (*Aquilegia coerulea*). Around the base of

Continued on page 15



ILLUSTRATION BY EVAN CANTOR

***The Blazing Star* is . . .**

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NANPS NEWS

Webinar: Crime Pays but Botany Doesn't:

A Punk Rock Botanist's Five Favorite North American Plant Species

Tuesday, February 25, 2025, 7 – 8 p.m.

Joey Santore of Wired and Kill Your Lawn fame has built his public persona on his colourful language, interesting life story and unwavering passion for native plants. Joey describes his YouTube channel, also called "Crime Pays but Botany Doesn't," as "A Low-Brow, Crass Approach to Plant Ecology & Evolution as muttered by a Misanthropic Chicago Italian. We study plants through the lens of ecology and evolution, rather than what supposed anthropocentric uses they can provide (as if holding up the biosphere wasn't enough)." There will be lots of time for questions after Joey's short, but pithy, presentation. To register visit <https://bit.ly/joeyasantorewebinar>.

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Purple fringe (Phacelia sericea)

PHOTOGRAPH BY EVAN CANTOR

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

Project Cardinal

by Deborah Paes

For the past few years, I've been slowly replacing my well-established, non-native plants with natives. I've been offering whatever I was digging up to neighbours. They were delighted to receive plants from my garden that they'd admired for years and I was pleased to find homes for my much-loved perennials. Still, the exercise of passing along non-natives left me feeling unsettled. Should I be doing this?

As my native plants became established, the same neighbours began admiring the new additions to my garden. One neighbour asked if she could have some of my brilliant red cardinal flower (*Lobelia cardinalis*). An avid gardener herself, she had never seen anything quite like it and proceeded to plant it in a prominent spot in her front yard. She then asked about my orange butterfly milkweed (*Asclepias tuberosa*)! Her newfound interest in my native plants sparked an idea and resolved my dilemma—why pass along non-natives when I could pass on native plants?

I hatched Project Cardinal in the fall of 2023. I collected seeds from the *Lobelia cardinalis* in my yard and planted up 50 four-inch (10-centimetre) pots. I left them outdoors over the winter. By spring, I pretty much had a 100% germination rate. In July 2024, I distributed the plants, delivering them to the front porches of each and every home on my street in Mississauga, Ontario (45 homes in all). I asked people if they would consider growing the plant in a sunny, moist spot in their front yard. My primary goal was to introduce people to native plants and the benefits



PHOTOGRAPH BY DEBORAH PAES

Deborah's front garden sports cardinal flower, swamp milkweed (*Asclepias incarnata*), anise hyssop (*Agastache foeniculum*) and the bright orange butterfly milkweed (*Asclepias tuberosa*).



ILLUSTRATION BY DEBORAH PAES

Pots of *Lobelia cardinalis* with handy information sheets

they had to offer. As an added benefit, I could tell them that cardinal flowers attract hummingbirds! I had a feeling that if the native plant idea didn't go over well, the hummingbird idea would. It worked! This fulfilled my secondary goal of creating a biological corridor for hummingbirds by connecting the neighbourhood yards.

With each pot, I included a short write-up on the project, a picture of the plant in bloom and planting instructions. I also included an invitation to join me in my front yard the next day. I would answer questions and they'd get to see the mature plants in bloom. I interacted with roughly 50% of the neighbours who received pots, either in person or via email. People were enthusiastic about the project. They were surprised to see cardinal flower at its full height, something they couldn't imagine or appreciate when presented with a young plant. I showed videos of hummingbirds visiting the flowers in my yard. That generated even more enthusiasm! Some people wanted to take their plant inside, "for safe-keeping" over the winter, but I advised against it! Others were going to take their time to find exactly the right spot. Some families planned to involve their children in deciding where to plant. A few of my neighbours chatted about their successes with other native plants, such as milkweed, but for most, I believe, this project represented an introduction to the idea of planting natives. I gave everyone the option of passing along the plant to an interested party, if they were not keen, or returning it to my front porch, but no plants were returned. All the feedback I received was positive.

Given the success of Project Cardinal, I embarked on Project Sneezeweed. I had already planted some sneezeweed (*Helenium autumnale*) seeds in the spring of 2024, so by August I had enough to pot up another 50 plants. Later that month, I again distributed plants to every home on my street. This time, in the project description, I was careful to emphasize that sneezeweed does not contribute to allergies or sneezing! Along with the planting instructions, I included a small stake, so that people could mark the planting spot and more easily locate the plant in the spring. I colour-coded the tops of the stakes (red for cardinal flower, yellow for sneezeweed). Since this was the second time I distributed

plants, people seemed quite comfortable, almost blasé, about plants being deposited on their front porches!

Needless to say, I am already preparing for a couple of distributions to my neighbours in 2025, starting with Project Hyssop (*Agastache foeniculum*). For this project, the planting stake will be coloured purple. My neighbours are probably unaware of my grand plan – a small native plant garden in each and every yard on the street! Whether this comes to fruition remains to be seen. Still, this project has been immensely satisfying, especially since people are now stopping at my yard not only to chat about native plants, but also to check out the birds, bees and butterflies they attract!

Deborah Paes leads tree walks in parks, on trails and along residential streets, with a focus on tree identification and the benefits of planting native trees. Most of the walks are in her community, but she has gone as far afield as Halifax, Nova Scotia. Participants range from Girl Guides to medical residents, students and seniors. She has successfully nurtured many native trees from seed, but credits the NANPS SeedEx with getting her started on herbaceous plants! Contact Deborah at treeideb@gmail.com. To view plant- and tree-related content, visit Deborah's Instagram account [@treeideb](https://www.instagram.com/treeideb).



Pots of sneezeweed ready for distribution, with mature plants in the background

PHOTOGRAPH BY DEBORAH PAES

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Restoring Magic to the Head of a Great Lake

by Paul O'Hara

Botanical study is an increasingly isolating experience. The gravity of the loss pulls you down the deeper you go. Over 30 years, I've learned about all the small plants and all the historical plants that have gone from the landscape, never mind all the big plants, our forest trees lost to invasive pests and disease.

Where I live in Hamilton, Ontario, I think about the great prairies and savannahs that Elizabeth Simcoe described in the 1790s as "quite like a park, with large oak trees dispersed, but no underwood." I think about the white milkweed (*Asclepias variegata*) that early botanist Alexander Logie described in the 1860s; this species of milkweed – at the northern edge of its range – was only ever documented here at the head of Lake Ontario. And I think about the now-extirpated Bowman's root (*Gillenia trifoliata*)

that the Royal Botanical Gardens' botanist, Aleksander Tamsalu, found in the Grindstone Creek valley in the 1950s.

Today, after more than two centuries of loss, I can only imagine what that Hamilton looked like.

Last spring, I completed botanical surveys at 11 urban natural areas in the City of Hamilton. They included three sites from the central mountain, two along the Niagara Escarpment, one from west Hamilton, two from Ancaster and three from Dundas; together they comprised 80-100 hectares (200-250 acres). The surveys were funded by the Hamilton Naturalists' Club as a precursor to the 2024-2026 Hamilton Natural Areas Inventory.

I tallied 409 vascular species of plants across the 11 urban natural areas, including 256 native plants (63%) and 153 (37%) non-native. Of the 256 native species, 254 are listed as

Common (S4) to Very Common (S5) in the Province of Ontario. Only two Provincially Rare Species were documented during this survey: butternut (*Juglans cinerea*), Endangered, S2 or Very Rare, and Hill's oak (*Quercus ellipsoidalis*), S3 or Rare.

Given that I found only two Provincially Rare Species and over a third of the flora was composed of non-native species, the data implies that these 11 areas are unable to provide habitat for rare or conservative plants. None of the natural areas surveyed had forests with healthy ground or shrub layers or vigorous canopy tree recruitment. The few botanical highlights of the survey included a few dozen butternuts, some small, degraded Provincially Rare Vegetation Communities and one species new to the region, Back's sedge (*Carex backii*).

The results suggest that the urban



Butternut (*Juglans cinerea*) surrounded by European buckthorn



Back's sedge

PHOTOGRAPH BY PAUL O'HARA

PHOTOGRAPH BY PAUL O'HARA

natural areas of the City of Hamilton have little to no ecosystem function and urban biodiversity is in severe decline. The urban and near-urban habitats of the city are subject to far too many disturbance vectors to maintain healthy ecosystem function. Major disturbance vectors include the following:

- **Tree Pests and Disease:** Dutch elm disease, chestnut blight, beech bark disease, beech leaf disease, spongy moth, butternut canker, emerald ash borer and dogwood anthracnose have completely changed the structure of the forests at the head of the lake over the last 150 years. It is unclear how new pests and diseases like Asian long-horned beetle, hemlock woolly adelgid, oak wilt and sudden oak death will affect our forests in the coming years.

- **Deer Predation:** The ground layer, shrub layer and canopy tree recruitment of almost all the 11 natural areas were severely affected by deer browsing. Common forest herbaceous species like white trillium (*Trillium grandiflorum*), wild geranium (*Geranium maculatum*) and Solomon's seal (*Polygonatum pubescens*), as well as common native shrubs such as bush honeysuckle (*Diervilla lonicera*), maple-leaved viburnum (*Viburnum acerifolium*) and witch-hazel (*Hamamelis virginiana*) were rare or completely absent.
- **Dumping:** Dumping was common at all the sites and was especially egregious where residents have installed fences and gates backing onto these habitats.

- **Non-native Earthworms:** Soils have been altered in our local natural areas by non-native earthworms that accelerate organic matter decomposition, disrupting nutrient recycling and leaving soils vulnerable to colonization by invasive species.
- **Invasive Species:** Every invasive species under the sun is found in the City of Hamilton. European buckthorn (*Rhamnus cathartica*) was abundant at all the sites surveyed. Other major invasive plants included Norway maple (*Acer platanoides*), non-native honeysuckles (*Lonicera tatarica*, *L. maackii*, *L. x bella*), glossy buckthorn (*Frangula alnus*), multiflora rose (*Rosa multiflora*), autumn olive (*Elaeagnus umbellata*), barberry (*Berberis*

Continued on page 8

PHOTOGRAPH BY PAUL O'HARA



Plant poaching at Dundas Driving Park

PHOTOGRAPH BY PAUL O'HARA



The only stand of cutleaf toothwort (*Cardamine concatenata*), a spring-blooming native species, found during the survey

vulgaris and *B. thunbergii*), white mulberry (*Morus alba*), common privet (*Ligustrum vulgare*), winged euonymus (*Euonymus alatus*), phragmites (*Phragmites australis* subsp. *australis*), erect hedge-parsley (*Torilis japonica*), dog-strangling vine (*Vincetoxicum rossicum*), garlic mustard (*Alliaria petiolata*) and Eurasian woodland bluegrass (*Poa nemoralis*).

- **Recreational Use:** The urban natural areas of Hamilton are overrun with trail users and mountain bikes; footpaths that were narrow a generation ago are now several metres wide. As well, off-leash dogs and outdoor or feral cats make it nearly impossible for urban natural areas to be used by ground-nesting birds, small mammals and other sensitive fauna.

- **Plant Poaching and Foraging:** Dozens of holes where native wildflowers had been poached were noted at several of the sites. Plant poaching and foraging have become increasingly common in recent years as apps like iNaturalist lead users directly to stands of native wildflowers and food and medicinal plants. For example, only one small stand (about 0.25 square metre in size) of wild leek (*Allium tricoccum*), a once-common woodland herb, was documented during the entire survey.

- **Climate Change:** The effects of climate change include extreme heat and cold, extreme precipitation events, extreme drought, increased erosion, disrupted seasonal rhythms for flora and fauna, and decreased

snow cover to protect plant roots and overwintering insects, reptiles and amphibians.

I already knew things were bad before I started the survey. I've been observing plants and habitats in the City of Hamilton for three decades and have watched a decline that has only accelerated in the past 15 years. These 11 urban natural areas are a microcosm of what is happening across the Greater Golden Horseshoe.

There isn't one hectare of high-quality habitat within the cities of Toronto and Mississauga. The public natural areas of the Oak Ridges Moraine in York Region have become an off-leash dog park and plant-harvesting zone for the growing communities north of Toronto. All my old forest haunts where I grew up in Oakville and Burlington are compromised by urbanization and



Snowberry (*Symphoricarpos albus*) cannot compete with invasive honeysuckles. It has become an increasingly rare sight in the Carolinian Zone of Ontario.



Scilla siberica, an oft-planted spring bloomer, has invaded many wild areas and parks.

exploitation. In Hamilton, large natural areas like Cootes Paradise, the Dundas Valley, the Niagara Escarpment and Beverly Swamp have been in decline for decades from these same disturbance vectors. And the Niagara Region, eager to build its tax base, seems to be green-lighting any and all developments to the detriment of the area's incredible natural heritage.

Yes, there are lots of small habitat creation, stewardship and native plant gardening initiatives happening in the region. The Meadoway Project in Scarborough, the marsh restoration work in the Lower Don and the prairie and savannah stewardship work undertaken by the Nature Conservancy of Canada in Norfolk

and Northumberland counties are all wonderful habitat restoration projects. But they're not enough to improve region-wide ecosystem function – not when, every year, thousands of hectares across the Greater Golden Horseshoe are urbanized, back forty forests are over-harvested and hedgerows are lost as farmlands are consolidated and industrialized.

To bolster ecosystem function across the Greater Golden Horseshoe, we need significant action and investment in the following:

1. Community education programs and annual, city-wide public events to encourage citizens to plant native trees, shrubs, wildflowers, ferns, sedges and

grasses on their properties.

2. Creation of large-scale naturalization projects in all under-utilized public parks and facilities that are currently in turf, in order to enhance ecosystem function and contribute to a region-wide Natural Heritage System.
3. Protection, enhancement and expansion of our existing urban natural areas through restoration plantings; reduction or, better yet, elimination of disturbance vectors by controlling invasive species and discouraging deer through fencing or doing a region-wide cull; and a citizen education program around recreational use, poaching and dumping.

A fundamental shift in the way we think about the land beneath our feet must accompany these actions. We need to learn to walk lightly on the land. We must abandon the frontier mentality that has dominated our culture for centuries and realize there is nothing left to take. We need to cultivate citizens that see themselves not as consumers of natural resources but as stewards of the land because, whether we want to believe it or not, we have entered the Great Age of Habitat Restoration.

I will never see the magical plants and habitats that Simcoe, Logie and Tamsalu saw in historical times at the head of Lake Ontario. But, with a lot of hard work, we can bring back another kind of paradise, one of healthy urban forests, naturalized parklands and boulevards of bees, butterflies and birdsong. So let's get to work!

Paul O'Hara is a field botanist and the owner-operator of Blue Oak Native Landscapes (blueoak.ca) in Hamilton. Paul's first book, A Trail Called Home: Tree Stories from the Golden Horseshoe, was published by Dundurn Press in 2019.



PHOTOGRAPH BY PAUL O'HARA

Duck pond slough at Crerar Woods

Coopérative Monark

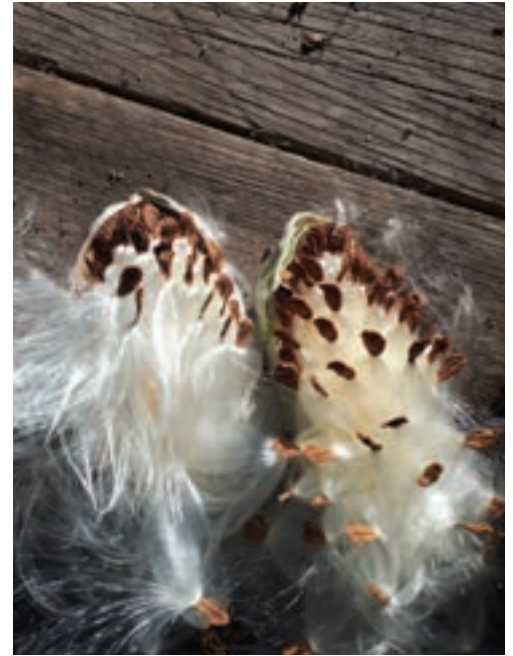
by Irene Fedun

Consider the many ways that milkweeds (*Asclepias* spp.) have proven their usefulness to humans. At the height of World War II, milkweed floss was used to provide flotation in life jackets for soldiers. More recently, the fluffy fibres have been harnessed to provide insulation for automobile interiors, winter clothing, sleeping bags, quilts and much more. The potential commercial applications seem endless. All it takes is ingenuity, financing, research and a great marketing strategy. No mean feat.

Enter Coopérative Monark, a network of pioneering milkweed farmers in Quebec whose mission is to preserve biodiversity through knowledge exchange, resource sharing and the fostering of milkweed crops at

every stage of growth; to contribute to research and the development of new products; and to promote locally and internationally products made from milkweed. The vision statement expresses the high ideals of the founders: to implement an ethical value chain where every participant benefits; to ensure the quality and success of products made from milkweed; to add value to marginal land and ensure agricultural diversity; and to strive for local, sustainable production that promotes the vitality of their community.

But why common milkweed (*Asclepias syriaca*), a perennial native to eastern North America (from Saskatchewan to New Brunswick, south to Georgia, west through Tennessee to Kansas and



Milkweed fibres

PHOTOGRAPH COURTESY COOPÉRATIVE MONARK



A field of milkweed in Quebec

PHOTOGRAPH COURTESY COOPÉRATIVE MONARK



Collecting milkweed pods

Iowa) and still considered a noxious weed in many provinces and states? Yes, *Asclepias* species are crucial to the survival of the endangered monarch butterfly, whose larva is exclusively dependent on the pods and leaves for sustenance, and milkweeds are visited by innumerable pollinators. Honey made by bees that visit milkweed farms is highly prized for its unique flavour in what is as yet a niche market. But what's really special about milkweeds is the hollow structure of the floss. (Do you remember playing with the little parachutes when you were a kid?) This makes it exceptionally lightweight, low-density,

warm and absorbent. A single fibre viewed under a microscope reveals a thin wall and a large, air-filled lumen that gives it excellent thermal and acoustic insulation properties. Milkweed fibres are also covered in a waxy substance, making them water-repellent, great for winter clothing. Even when they're wet, they retain their insulating properties. Plus, milkweed is antibacterial, resisting odours.

Clearly it's an amazing resource, but is it economically feasible to grow milkweed in quantity, continually develop new applications that guarantee good performance, durability and stability, and ensure reliable markets? Let's just say there are challenges.

In their enthusiasm, native plant advocates might promote the notion that their gardens and restoration efforts are problem-free, doing great things for the environment without insect or disease infestations. This belief bears out in small gardens with reasonably good soil and adequate precipitation. But if you're cultivating a large parcel of land dedicated to one species, even one as carefree as common milkweed, there are further considerations.

Milkweeds are distinctive in that, after flowering, they develop large, pale green, pointy seed pods called follicles, which dry up and split in late summer. The pods release brown seeds attached to silky floss that parachutes the seed – if all goes as planned – to bare ground where it can take root. The plant also spreads commonly by rhizomes. *Asclepias syriaca* will grow in most soils in full sun, even abandoned farm fields, but it takes three years to convert a field to milkweed production, according to Marie-Noël Breton, project manager for Coop Monark, who maintains four hectares (10 acres) of milkweed that are harvested by hand or with homebuilt machinery.

Despite its reputation as an

Continued on page 12



Milkweed with monarch larva munching on leaves

Continued from page 11

aggressive plant, common milkweed, like any agricultural crop, does not flourish when there's a lot of competition from other species, native and otherwise, such as buttercups (*Ranunculus* spp.), Queen Anne's lace (*Daucus carota*) and burdock (*Arctium lappa*). Marie-Noël is researching low-growing native plants that won't smother the milkweed or hinder mechanical harvesting.

Pests are few, but can do great damage, especially the milkweed leaf beetle. The adult overwinters in the soil on the edge of woodlands and migrates towards the field in May, when milkweeds start growing. The female lays her eggs on milkweed leaves or at the base of the plants. The larvae emerge in July and feed on the whole plant until it rots. The engorged

larvae fall onto the soil, where they metamorphose into adults, possibly spelling the end of the entire crop. To prevent calamities, Coop Monark members use an integrated pest management approach. Marie-Noël says, "We are very creative and responsible in our search for control solutions." For example, the milkweed growers test companion plants to repel beetles or they intercept the insects' migration by harrowing rows or using traps, rather than acting too late on an infested field. The goal of saving beneficial creatures, such as monarchs, bees, beetles, birds and others that visit the plants, is a priority for the cooperative – without them the milkweed project would be meaningless.

Milkweed fibres are fragile,

demanding innovative techniques to preserve the entire structure. To date, it has been necessary to reinforce milkweed fluff with thermoplastic fibres (either polyester or polyactic acid), but Marie-Noël foresees a day when non-woven fabrics (fabrics assembled in ways other than the traditional weaving, knitting or sewing) are made from 100% plant fibres.

Milkweed must be handled carefully in factories because of its unique properties. Being ultra light and buoyant, it flies off easily and lands in tight places, such as manufacturers' equipment, necessitating extra maintenance.

Markets are slowly expanding as researchers develop reliable products. In collaboration with scientists at



PHOTOGRAPH COURTESY COOPERATIVE MONARK

Milkweed leaf beetles (*Labidomera clivicollis*) devastating common milkweed plants

Sherbrooke University, Coop Monark develops insulators for technical textiles and automotive applications. The products must resist abrasion, compression and damage done through washing. These are not insubstantial demands to put on a single plant.

Forward-thinking entrepreneurs such as Lasclay have incorporated milkweed into the manufacture of everything from oven mitts, lunch bags and wine cooler totes to slippers, beanies and thermal insoles. Research and development require financing – not always easy to come by – but the effort is worth it as more products come on the market and milkweed fibre regains its status as a valuable product.

Historically, milkweed was highly valued, initially by First Nations, who made rope and decorative thread from it and used it as a medicinal plant. During World War II, when the supply of kapok from the East Indies (now Indonesia) was cut off by invading Japanese forces, the United States government recruited children in the northern states to gather milkweed pods in onion sacks. Bags were tied in twos and slung saddle-style over fences to dry. The government paid 15 to 20 cents for each bag filled and used slogans such as “Two bags save one life” and “Don’t let our sailors sink” to remind kids that the floss would be used to prevent our servicemen and -women from drowning when air force pilots were shot out of the air or Allied vessels were sunk by German submarines. When supplies of wool for soldiers’ uniforms and latex for military tires dwindled, milkweed was again pressed into service.

Sadly, with the rise of monoculture farms, milkweed was branded an invasive weed without differentiation among species. The government of Nova Scotia, for example, still promotes the removal of common milkweed, claiming that “it can reduce crop yields significantly. Because of its rapid spread, it can quickly become a

nuisance weed on farmland... At harvest, the thick sap of common milkweed can clog combine parts. The fluffy seed may also clog air intakes.” The argument that milkweed should be removed due to toxicity to livestock doesn’t seem to hold water since cattle and sheep avoid eating it. When asked if she’s had complaints from neighbouring farmers about her milkweed crop, Marie-Noël replies that there have been none.

In fact, milkweed has a lot going for it. As a crop, it contributes to healthier soil structure by increasing organic matter. It eliminates the need for soil tillage and irrigation, permanently covers the soil and protects it from erosion, supports biodiversity and can be cultivated on abandoned land. (A 2008 study published by Agriculture and Agri-Food Canada found that wasteland covered at least 100,000 hectares [247,000 acres] in Quebec.) As a deep-rooted perennial, milkweed traps more carbon than annual plants, making it useful in the struggle against climate change. And the production of milkweed fibres requires 25% less energy than the production of synthetic fibres.

A societal shift in perception is necessary to bring milkweed cultivation and the manufacture of its products into the mainstream. Coop Monark is actively working at this by promoting collaborative innovation, listening to manufacturers to understand their needs and their production processes, and investing in



PHOTOGRAPH COURTESY COOPERATIVE MONARK

Coop Monark is developing a non-woven fabric based on milkweed. It will be used in the manufacture of technical clothing, outdoor wear and bedding. It could be adapted to other applications, such as interior automobile coverings and acoustic insulation.

research to achieve the technical performance required to ensure that milkweed fibre becomes a sustainable textile alternative to petrochemical products. With luck, consumers, manufacturers and governments will soon catch up.

Irene Fedun is the editor of The Blazing Star. She recently purchased a pair of cozy mittens made with milkweed.

Letters to the Editor
are always welcome.

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New & Noted

This Is How a Robin Drinks: Essays on Urban Nature

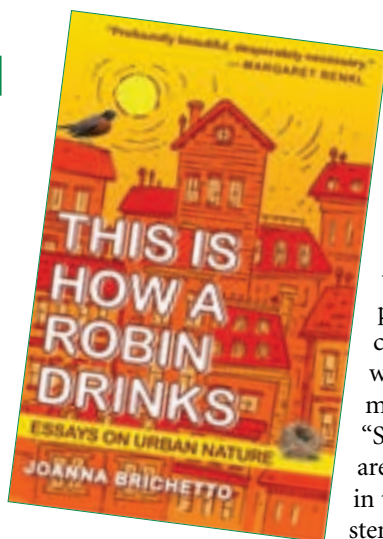
by Joanna Brichetto
Terra Firma Books, 2024
238 pages

This is How a Robin Drinks has been praised by such luminaries as entomologist Douglas Tallamy and award-winning writer Margaret Renkl, with the adjectives “engaging,” “insightful,” “profoundly beautiful, desperately necessary.” All of them are true. But perhaps the best description of the book comes in the preface from the author herself.

“*This is How a Robin Drinks: Essays on Urban Nature* offers a new version of several old hunches: that by paying attention to the natural world we have a chance to figure out who, where and when we are; that by getting to know the living beings around us we come to a more sustainable vision of our place among them; that the more particular a story the more universal; that suffering is inexplicable and unredeemable but strangely useful to the imagination; and that nature is all around.”

In Joanna Brichetto’s essays of unusual and everyday experiences in which plants, animals, ecosystems and humans collide, the ordinary becomes extraordinary, funny, disturbing. Nature and language dance a merry dance, making her essays pure pleasure to read.

A certified Tennessee naturalist, Joanna writes the urban nature blog *Sidewalk Nature: Everyday Wonders in Everyday Habitat Loss*, which sets out to entertain and teach. Some of the essays in this book are reprinted from the blog on her website, sidewalknature.com. She delves deeply, taking the time to ask the questions (no matter how weird) and seek out the answers (often wonderful). What’s the difference between resin and rosin? “Resin, for the record, is drooled sap, and rosin is resin worked into something serviceable, like what’s powdered in a bag on a pitcher’s mound or what a fiddler uses to ‘rosin up the bow.’” She complains eloquently about the things many of us nature lovers only grumble about: the fate of



city trees, the paving of “empty” lots, trash in wild places. And she conjures the wildest metaphors: “Sycamore leaves are dinner plates in the grass, with stem ends so big and hollow they

could be goblets for Barbies.”

Below is Joanna’s essay from the winter section entitled “Liriodendron tulipifera.”

Listen to the music of a tulip poplar’s name: Leer-ee-oh-DEN-drun too-lip-PIFF-ur-uh.

“It sounds like a spell from Harry Potter,” my boy says. Surely there are wands made of it.

Izzy has been home sick for a week and will miss tomorrow’s test on Tennessee symbols. At the kitchen table he drew the homework mockingbird and iris and passionflower and tulip poplar tree, and colored them with pencils from the old cigar box. He also drew Elvis.

None of these things is at school. The closest tulip poplar tree is across the street, but the kids don’t know that.

In spring, blooms of a tulip poplar look like orange-yellow-green tulips. Leaves are shaped like folk art tulip silhouettes. But the tree is neither tulip nor poplar; it is a magnolia.

I could bring his class my framed poster of Young Elvis, but I can’t bring a bird, and my passion vine is December brown and my irises are dormant.

So today I left my son at home and brought a cardboard tray to his teacher who said “yes, please” to

- *a stack of soft tulip poplar leaves, still autumn yellow (one per kid)*
- *a seed cluster on a twig (a cue to ID the tree in winter)*
- *a curled leaf full of loose seeds (helicopters!)*
- *an info sheet with pictures of tulip poplar leaf, seeds, twig, flower*

On her desk at the whiteboard, I left a pickle jar filled with orange hothouse tulips. Because you can’t understand tulip poplar if you can’t understand tulip.

They for sure don’t know what a poplar is, but that’s okay. She told me they all say “popular” anyway.

So, how does a robin drink? A question that cannot be answered in a few words. I invite you to read the book to find out.

Review by Irene Fedun

SeedEx Seeds Still Available

NANPS annual seed exchange still has some seeds native to eastern North America available on a first-come, first-served basis. Visit nanps.org/nanps-seed-exchange. Thank you for contributing to native plant restoration!



Yellow hyssop (Agastache nepetoides) and ironweed (Vernonia gigantea) in seed

PHOTOGRAPH BY STEFAN WEBER

evergreens, Jacob's ladder (*Polemonium pulcherrimum*) had made itself at home. It was a prodigious season of blossom and there were a few surprises: prairie smoke (*Geum triflorum*), with a fuzzy red flower hanging upside down, and the bright blossoms of pygmy bitterroot (*Lewisia pygmaea*), set like a pink jewel in a patch of dried mud. I concluded (hopefully) that the mystery plant I photographed was an early-sprouting western Indian paintbrush (*Castilleja occidentalis*).

As we meandered through the mixed aspen, fir and spruce, we came to the east-facing side of Deadhorse. Was that a crowd of people standing on the meadow up ahead? The view through the trees revealed an expansive vista, far into the central Elk Mountains beyond the valleys of the Eagle and Roaring Fork rivers. As we got closer, we realized that what had looked like a parade of upright creatures was actually a meadow full of monument plants (*Frasera speciosa*).

In Colorado's high country, conditions typically favour certain species each summer. Sometimes it's an endless carpet of *Castilleja* varieties, at other times it's a forest brimming with blue columbines. This was obviously monument plant's moment in the sun. Each spike, technically an elongated cluster, is covered in hundreds of blossoms, enough to make every woolly mullein (*Verbascum thapsis*) in the world envious.

The mullein, a more humble, elongated cluster introduced from Eurasia, need not be envious though; the Navajo regarded it as the "female" corresponding to the monument plant's "male." In the Navajo cultural tradition, gender was created at the beginning of the universe for the purpose of regenerating all things; all things possess either male or female energies, rough and tough versus smooth and soft, masculine versus feminine. This is obviously a

metaphysical distinction, not a botanical one. The leaves of both plants were ground together to make a concoction for rubbing on the bodies of horses and hunters, to give them strength.

The Navajo also smoked the dried leaves of the monument plant in a corn husk cigarette. They believed that it would encourage clearing of the mind if someone were lost or confused on an expedition.

Although monument plants can live for as long as 20 years without blooming, they bloom only once and then die. The elaborate blossoms

feature four white petals with a pale green stripe down the middle. They are spotted with purple flecks so dark as to appear black. Each petal sports two oblong glands at the base, one sprouting white fuzz, the other yellow. At the central axis is a bulbous green ovary surrounded by four green stamens. Each individual flower is backed by four pointed green bracts. Is it any wonder that this plant is sometimes called green gentian? The palmate leaves at the base are good browse for deer and are said to resemble the ears of a deer, leading, of course, to the other common name, deer's ears.

Monument plants are known to grow to seven feet tall (two metres plus). A field filled with them is a spectacular sight.

Monument plants are not the only members of the gentian family calling Colorado's high country home. Mountain gentian (*Gentiana parryi*) and fringed gentian (*G. detonsa*), both with dark purple, trumpet-like blossoms, and the spotted white flowers of arctic gentian (*G. algida*) are all found in moist meadows at high elevations. Monument plant is found in the same habitat, but it

thrives in the montane zone at moderate elevations. It's happiest in well-drained meadows and open woodlands, ranging from the interior northwest of Washington State through the Rockies all the way south to northern Mexico.

The Latin genus name, *Frasera*, refers to John Fraser (1750-1811), a Scot who collected plants in North America for the Russian czar. *Speciosa* means special or showy. The gentian family is named for Gentius, the king of Illyria in the Balkan Peninsula around 200 BC. He supposedly discovered the medicinal properties of



PHOTOGRAPH BY EVAN CANTOR

yellow gentian (*Gentiana lutea*).

Despite the traditional Navajo uses of monument plant, it has no known medicinal properties. I, however, find the mere sight of them spiritually refreshing, a tonic for the soul. *Frasera speciosa*, old friend, I look forward to our reunion every summer.

Evan Cantor is a musician, artist and part-time flower-hunter living in Boulder, Colorado. He loves to explore off the trail, treading lightly and visiting little green friends that pop up every spring for a joyful reunion.



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