



## Native Plant to Know

# Shagbark Hickory

by Don Scallen

Shagbark hickories (*Carya ovata*) are deemed of such importance to the survival of endangered Indiana bats that the U.S. Fish and Wildlife Service advises landowners to abide by this recommendation: “Do not harvest or manipulate shagbark hickories unless the density of shagbark hickory exceeds 16 trees per acre.” The USFWS also recommends including shagbark hickories in reforestation projects.

Indiana bat mothers take advantage of the most salient feature of shagbark hickories: their namesake shaggy bark. Under the peeling sheaths of bark, female Indiana bats raise a single precious pup.

The role of shagbark hickories in Indiana bat child-rearing is undeniably important. However, these lovely trees support ecological diversity in many other ways throughout an extensive range that covers much of eastern North America, from Texas and Georgia in the south to Minnesota and Quebec in the north.

Small birds called brown creepers, like Indiana bats, also use the protected spaces beneath the shags to raise their young. Caterpillars – at least 200 species, according to Doug Tallamy in his book *Bringing Nature Home* – feed on its leaves. One of these is the hickory horned devil, the largest

and, arguably, most spectacular caterpillar in eastern North America.

The caterpillars that shagbark hickory supports are high-quality food for songbirds. Other animals, including deer, bears, squirrels and turkeys feast on shagbark hickory nuts, which are packed with nourishing fat and protein.

The Great Lakes posed a barrier to the northward movement of shagbark hickories into my province of Ontario after the last glaciation. The late horticulturist Henry Kock, in *Growing Trees from Seed*, wondered how they had made it to Ontario at all: “The long-distance northward migration of these heavy nuts in postglacial forests, and how they

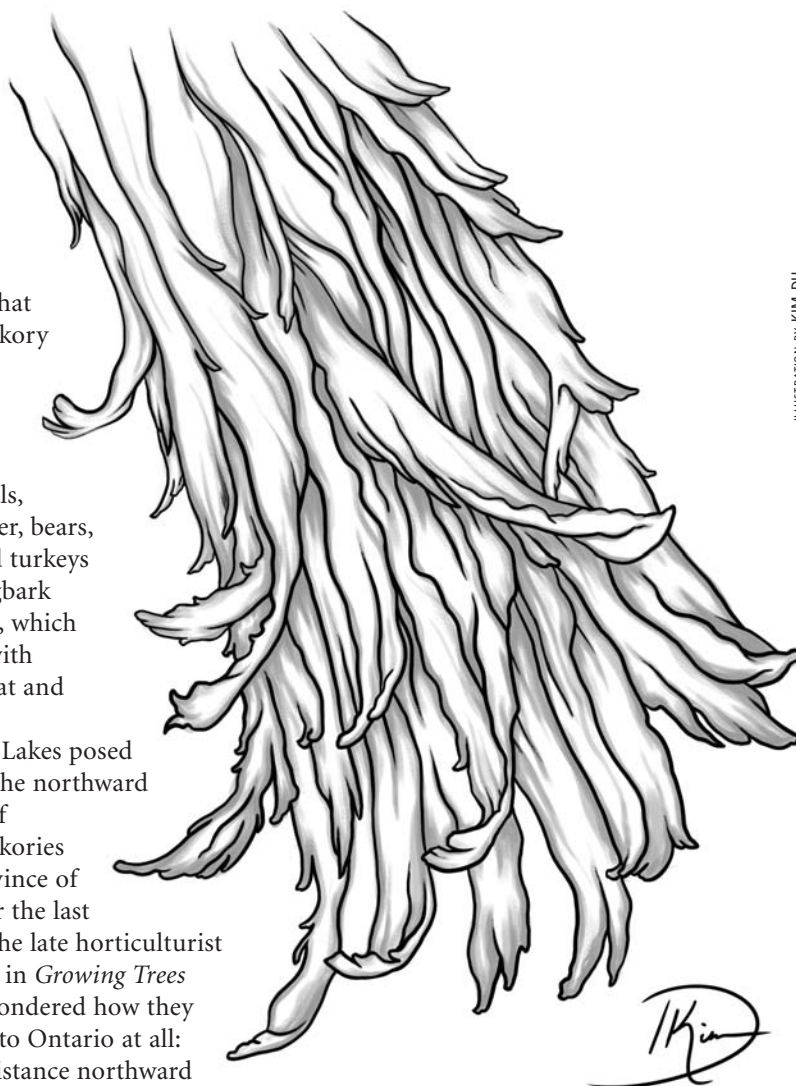


ILLUSTRATION BY KIM DU

Continued on page 14

## The Blazing Star is . . .

*The Blazing Star* is published quarterly (April, August, November, February) by the North American Native Plant Society (NANPS). Contact [editor@nanps.org](mailto:editor@nanps.org) for editorial deadlines and for advertising rates. The views expressed herein are those of the authors and not necessarily those of NANPS.

The North American Native Plant Society is dedicated to the study, conservation, cultivation and restoration of North America's native flora.

Fall 2020

Volume 21, Issue 4

ISSN 2291-8280

Editor: Irene Fedun

Production: Bea Paterson

Copy Editor: Vicki Soon-Ai Low

Printed by: Guild Printing,  
Markham, Ontario

© North American Native Plant Society  
Images © the photographers and  
illustrators, text © the authors.  
All rights reserved.

North American Native Plant Society,  
formerly Canadian Wildflower Society,  
is a registered charitable society, no.  
130720824 RR0001.  
Donations to the society are tax-  
creditable in Canada.

NANPS Membership:  
CAN\$25/YEAR WITHIN CANADA,  
US\$25/YEAR OUTSIDE CANADA

Join online or send cheque or money  
order to North American Native Plant  
Society, Box 69070, St. Clair P.O.,  
Toronto, Ontario, Canada M4T 3A1.

E-mail: [info@nanps.org](mailto:info@nanps.org)

Web: [nanps.org](http://nanps.org).

Facebook: [facebook.com/nativeplant](https://facebook.com/nativeplant)

Twitter: [@tnanps](https://twitter.com/tnanps)

Instagram:

[instagram.com/nativeplant\\_society/](https://instagram.com/nativeplant_society/)

### Board of Directors:

Vice-president: Adam Mohamed

Treasurer: Ralph Fernando

Secretary: Dilys Bowman

Jason Bernardon

Subroto Ghosh

Janice Keil

Atena Keshavarzian

Alice Kong

Donna Lang

## NANPS'S FIRST VIRTUAL AGM

The 2020 annual general meeting of the North American Native Plant Society was held via Zoom, allowing long-distance members to "attend", some for the first time. Sixty native plant enthusiasts from Sarnia, Hamilton, Windsor, Montreal and the Greater Toronto Area tuned in. After the directors completed the usual business, Dilys Bowman presented the year in review and Harold Smith gave an overview of NANPS history. Then participants separated into three chat rooms, where they discussed native plant issues in their respective areas.



PHOTOGRAPH BY SAYEH DASTGHEIB-BEHESHTI

*Common milkweed (Asclepias syriaca)*

The winner of NANPS's first native plant garden video contest is Sayeh Dastgheib-Beheshti of Toronto. Sayeh, whose video highlighted the pollinators her native plant garden had attracted, received a one-year NANPS membership and \$50 to be spent at her local native plant nursery. The other finalists (all from Ontario) were Dylan and Cassandra Muileboom of Niagara Falls, Laura Tipton of Whitchurch-Stouffville, Mike Smith of Chatham-Kent, Baz Conlin of Peterborough and Kimberlee Adams of Mulmur. Each finalist received a one-year NANPS membership. To view the videos, visit [facebook.com/nativeplant](https://facebook.com/nativeplant). Congratulations and thanks to all who participated and all who nurture native plants and ecosystems.

## TIME TO COLLECT SEEDS

Could this be the year that you participate in the NANPS Seed Exchange by collecting native plant seeds from your garden or wild places? Send the seeds separated by species and identified with the source/parentage to NANPS Seed Exchange, Box 69070, St. Clair P.O., Toronto, Ontario, M4T 3A1. For help on how to collect seeds and do it ethically, visit [nanps.org/seed-collecting](http://nanps.org/seed-collecting). Thank you very much for your valuable contribution to native plant restoration!



*Pale purple coneflower (Echinacea pallida)*

PHOTOGRAPH BY DEBORAH CHUTE



# In Memoriam: Deborah Chute

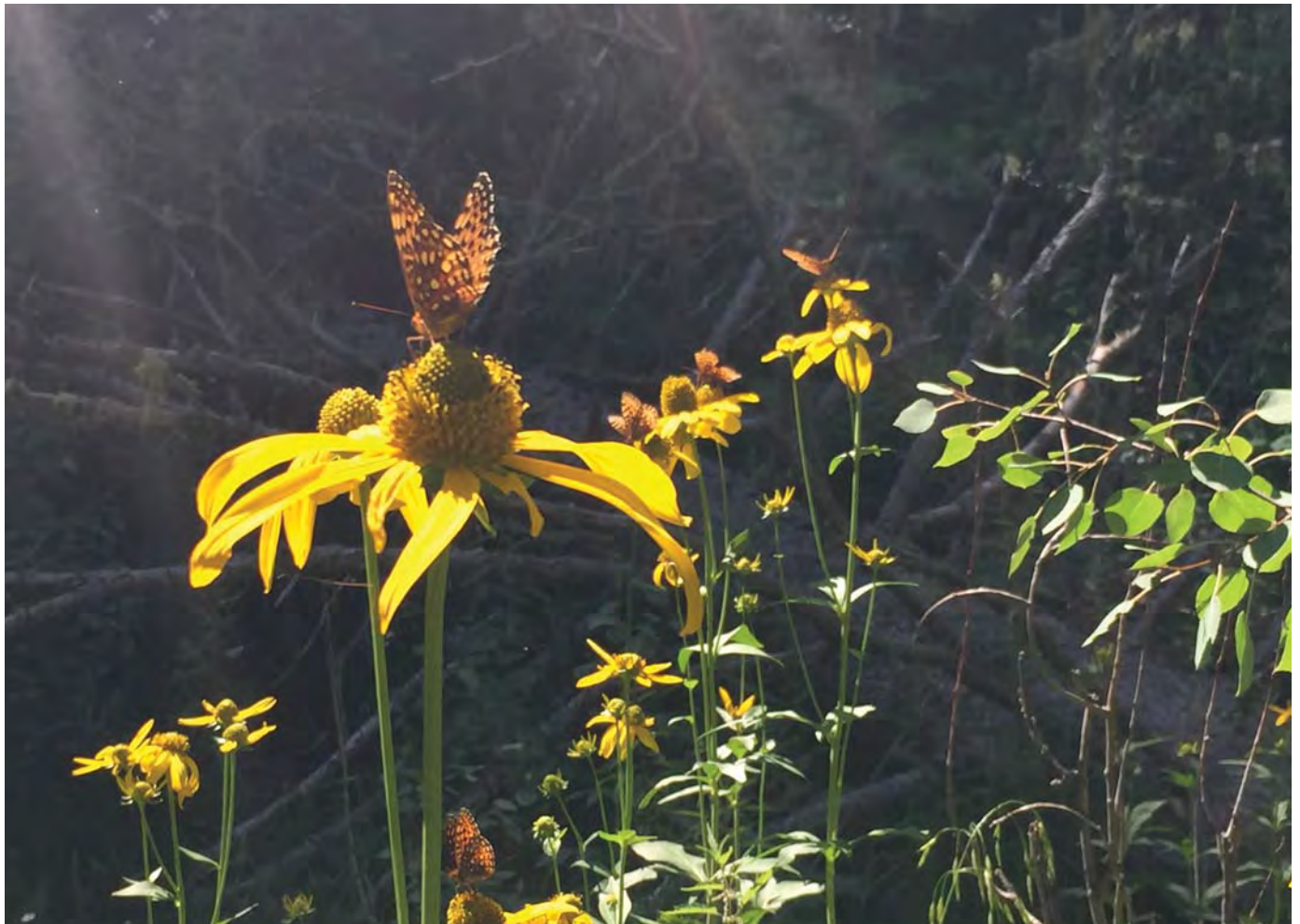
Deborah Chute, a much-loved volunteer with the North American Native Plant Society, passed away recently after a brief illness. An ESL teacher before her retirement a decade ago, Deborah was an accomplished speaker of Mandarin Chinese, a keen gardener and an active member of Cummer Avenue United Church in Willowdale, Ontario. Deborah not only helped with NANPS annual plant sales for many years, but also wrote an article about her ambitious native plant gardening experiences in *The Blazing Star* and illustrated with numerous photographs. In her obituary, Deborah's husband, Chungsen Leung, wrote: "Deborah was an Earth Enthusiast (a term we came up with together) constantly striving

PHOTOGRAPH BY CHUNGSEN LEUNG



to protect, preserve and promote native plants, wild bees and butterflies." He added that she found solace working in the garden and derived great pleasure from seeing different native flowers blooming over the seasons. Deborah was also a member of the Richmond Hill Naturalists and the Richmond Hill Garden and Horticultural Society where she enjoyed working with like-minded persons, populating public gardens in Richmond Hill, Ontario, with native plants.

Our heartfelt condolences go out to Chungsen, their daughter, Elysia, and their family and friends. Memorial donations in Deborah's name can be made to the North American Native Plant Society, [nanps.org](http://nanps.org).



PHOTOGRAPH BY LISA CHAMBERS

*Cutleaf coneflower (Rudbeckia laciniata) and spangled fritillaries in New Mexico*



# Toronto Launches Campaign to Build Parkette around Historic Red Oak

The City of Toronto hopes to create a parkette to preserve and showcase a magnificent 250-year-old red oak (*Quercus rubra*) growing on a residential property near the Humber River. The oak was recognized as a heritage tree in 2009 under Forests Ontario's Heritage Tree Program, thanks to its age, size, beauty and cultural significance. A part of Toronto's delicate oak savannah ecosystem, the red oak is one of the oldest in the city. It's located in the immediate vicinity of the historic Toronto Carrying Place trail system used by First Nations to travel along their trade routes between Lake Simcoe and Lake Ontario. The oak survived European settlement despite logging along the Humber River, clearing of land for agriculture and the development of a suburban neighbourhood in the 1960s.

Under Council's direction, the City signed an agreement to purchase the

property at 76 Coral Gable Drive. Completion of the sale is conditional upon raising \$430,000 by **December 12, 2020**. As of this writing, \$257,115 has been confirmed and committed to the campaign, 60% of the total. Donate online at [toronto.ca/redoak](https://toronto.ca/redoak) or send a cheque to the City of Toronto, Metro Hall, Finance & Treasury Services, 55 John Street, 14th Floor, Toronto, ON M5V 3C6, Attn: Roy Moniz. Make cheques payable to Treasurer, City of Toronto and include Historic Oak in the memo section on the cheque.

If the donation target is not met by the deadline, collected funds will be used by Toronto Urban Forestry's Community Planting and Stewardship Grant and Greening Partnership Grant programs to help the city achieve and sustain its target of 40% canopy cover through tree planting and stewardship on private land and publicly accessible green spaces. Preserving and fostering

the tree canopy has many benefits. Trees reduce air pollution in the form of fine particulate matter, cool the air through transpiration, provide wildlife habitat, reduce stormwater runoff and sequester carbon from the atmosphere.

The branches of this monumental tree span 24 metres (26 yards) and its trunk has a circumference of over five metres (over five and a half yards). In September 2019, Heritage Toronto unveiled a commemorative plaque to capture this great oak's place in our living history.

Edith George, who lives in the neighbourhood, has championed the red oak for years. She says, "When COVID-19 came along, I went to the red oak. She is my cathedral. She has survived all these years and she gives me hope for a planet that is in peril due to natural and man-made disasters."



PHOTOGRAPH BY RANDY VANDERSTARREN

Donate to the preservation of this great oak by December 12, 2020 at [toronto.ca/redoak](https://toronto.ca/redoak).



# Wildlife Tales in a Habitat Garden

by Angelique Mori

As human-dominated landscapes relentlessly diminish ecosystems crucial for our own survival, it's wise to consider the words of writer-ecologist Doug Tallamy: "Garden as if life depends on it." Native plants support not only human life but the lives and reproductive capacity of countless animals. They are foundational to the interconnected systems and associations with fauna

community. Passersby may feel inspired, seeing an urban native plant oasis lush with life. The spark created by your garden may lead to curiosity, learning, action and the sharing of knowledge.

Among the wild, unexpected delights of a native plant garden are the insects. People may scoff at the foolishness of providing nourishment for what they perceive to be pests. Yet these tiny protein packs invite the creatures that eat them! Frogs,

(*Cercis canadensis*) in my yard takes on a lacy effect as a result of their harvesting!

It's important to consider the interrelationships in the natural world when selecting plants for the habitat garden. Native flora plays host to innumerable bugs, which in turn act as the lowest rung of the food web. In my garden, I planted dwarf hackberry (*Celtis tenuifolia*), designated as a species at risk in Canada, to attract several butterfly species, including the overwintering mourning cloak. This beautiful, aptly named butterfly can appear when scattered snow still powders the ground in spring! Likewise, wood nettle (*Laportea canadensis*) was added specifically to attract red admirals, tortoiseshells, question marks and eastern commas. As a bonus, nettles are a delicious and nutritious potherb and tea. Later butterfly arrivals, the darting American ladies, readily deposit their progeny on woolly pearly everlasting (*Anaphalis margaritacea*). This reliable source of nutrition guarantees the butterflies' unfailing return every year. Intriguingly, American lady butterflies in the chrysalis state have a unique behavioural strategy to deter predators: they quiver, rattle and shake! Sometimes, despite your best intentions to provide native plants as hosts, such as the delicate golden Alexanders (*Zizia aurea*), black swallowtail caterpillars will still nibble on the parsley in your vegetable garden. Habitat gardeners need to be patient (maybe even delighted?) with tattered foliage for a brief time, for butterflies' sake.

I was startled by the appearance of a giant promethea moth several years ago. When I planted a cucumber tree (*Magnolia acuminata*), a rare Carolinian species, endangered in Ontario, I was unaware that it played host to this moth. We keenly await the queue of early instar larvae that gobble leaves in a row, rather like little soldiers on parade. Later instars

Continued on page 6



PHOTOGRAPH BY ANGELIQUE MORI

American lady caterpillar on pearly everlasting

that have evolved over millennia – remove pieces and the complex system risks collapse. When we plant native flora in our yards we not only restore habitat, but a whole world of wonder emerges.

Sara Stein's *Noah's Garden* (1993) serves as an inspiration to dedicated habitat gardening. Each individual who contributes to this effort promotes awareness, applying eco-conscious practices in their own life. This has a ripple effect in each

salamanders, snakes, birds, bats and others relish the bountiful insect buffet. Consequently, it's imperative to be pesticide free. Moreover, "messy" garden areas invite magical evenings dotted with the twinkling dance of fireflies. Visualize the extraordinary emergence of monarch butterflies, whose exclusive host plant is milkweed (*Asclepias* spp.), or the doily-like foliage created by nursery-constructing leafcutter bees. Every spring, the redbud tree

Continued from page 5

withdraw each to their own leaves to complete their life cycle. Given their immense size, you'd think they'd be a cinch to spot. Not so. Their particular shade of chartreuse mimics the luminous, back-lit green of the leaves. You can find them by looking for defoliated branch tips, copious frass (larval excrement) and surprisingly audible chewing! You might see them hibernating in rolled leaves that persist

through winter like rustic little ornaments. If you're observant – and lucky – you might witness the remarkable pairing of a newly emerged female and her mate. *Promethea* moths have also discovered the tulip tree (*Liriodendron tulipifera*) in my yard and share that bounty with tiger swallowtail larvae. Small wonders can surprise you at any moment when gardening for wildlife.

Since I build brush piles and retain snags, many amphibians and reptiles claim my yard as home. I eagerly anticipate March and the call of diminutive spring peepers. Their deafening, lusty chorus resonates when thin ice sheets still grace the pond's surface. Neighbours enjoying their evening strolls are first perplexed, then incredulous, to learn that frogs are capable of such racket! Every year it's



PHOTOGRAPH BY ANNALIESE MORI

*Promethea* moth eggs on tulip tree leaf



PHOTOGRAPH BY ANNALIESE MORI

*Promethea* moth caterpillar



PHOTOGRAPH BY ANNALIESE MORI

*Promethea* moth chrysalis overwintering on cucumber magnolia



PHOTOGRAPH BY ANNALIESE MORI

Newly emerged *promethea* moth female with mate





Grey tree frog

fun to wager on where the grey tree frog will take up summer residence. Will it be under the birdbath, in the log pile or behind the shed door? Summer resounds with the banjo twang of green frogs and the ardent trill of the American toad. Any pesticide use would silence these wild and wonderful seasonal songs, since the abundance of bugs keeps these amphibious singers sated and multiplying!

Salamanders and snakes find accommodation beneath “artfully” arranged log piles. I love finding small, glistening salamanders in their moist hidey-holes. A recent delight was the discovery of a northern ring-necked snake quietly rustling through running strawberry bush (*Euonymus obovatus*). It’s a diminutive, delicate-looking creature, but a proficient hunter among tangled ground covers, such as foamflower (*Tiarella cordifolia*), barren strawberry (*Waldsteinia fragarioides*) and golden star (*Chrysogonum virginianum*), where small fauna find cover. Once, while I was removing invasive plants from around the vernal pond, I startled a substantial garter

snake as it stalked its prey among the ostrich ferns (*Matteuccia struthiopteris*) and sensitive ferns (*Onoclea sensibilis*). It swiftly slipped through the rushes (*Equisetum hymale*) and proceeded in a hasty, serpentine swim to the sunnier side of the pond. Who knew? Garter snakes can swim!

Many native forage and understory shrubs, such as dogwoods (*Cornus* spp.), ninebark (*Physocarpus opulifolius*) and viburnums (*Viburnum* spp.), provide food and shelter for birds. One time as I worked in the shrubby area of my yard, loud chortles and squawks emerged from the bushes, immobilizing me with the thought that something interesting was about to occur. Sure enough, in a startling flurry, a rafter of wild turkeys burst out. As I stood motionless, I was able to study these impressive, iridescent birds at length. Oblivious of me, they gorged on the delectable treats around my feet, presumably thinking I was a shrub, then strutted off towards the pond. Even in my developed neighbourhood, a stone’s throw from Walmart, small residential woods or

wetland havens attract surprising visitors, like the wary Virginia rail that appeared briefly, snacking on a wealth of snails and slugs.

An enormous, swollen anthill has sprouted a jumble of calico asters (*Symphyotrichum lateriflorum*), Virginia mountain mints (*Pycnanthemum virginianum*) and sneezeweeds (*Helenium autumnale*). It’s not slipshod landscaping, but just the result of my scheme to encourage flickers and thrashers, ground-feeding birds whose preferred food is ants. Birdfeeders are fine, but native plants provide opportunities for wild foraging. The stunning woodland pinkroot (*Spigelia marilandica*), vibrant, crimson oswego tea or beebalm (*Monarda didyma*) and lanky carpenter’s square (*Scrophularia marilandica*) entice ruby-throated hummingbirds. Seeds of purple coneflowers (*Echinacea purpurea*), northern sea oats (*Chasmanthium latifolium*) and bottlebrush grass (*Hystrix patula*) offer exceptional winter nutrition and shelter. You can feel noble shirking fall garden clean-up! Late bloomers, like goldenrods (*Solidago* spp.) and asters (species of *Symphyotrichum* and other genera), satiate autumn pollinators and deliver “meatier” meals, such as energy-rich goldenrod gallflies, to sustain overwintering birds. Some nights, you may hear the deep, resonant hoots of a great horned owl or the sweet trill of the eastern screech owl. These nocturnal predators appreciate snags, cavities and conifers, like the towering trio of eastern white pines (*Pinus strobus*) that dominate my back garden.

One morning while enjoying a revitalizing tea on the garden bench, I heard furtive noises from the hazelnut (*Corylus americana*). A handsome, tuxedoed creature trundled through the robust stone root (*Collinsonia canadensis*) and fragrant wild beebalm (*Monarda fistulosa*). Mindful of skunks’ poor vision, I remained still,

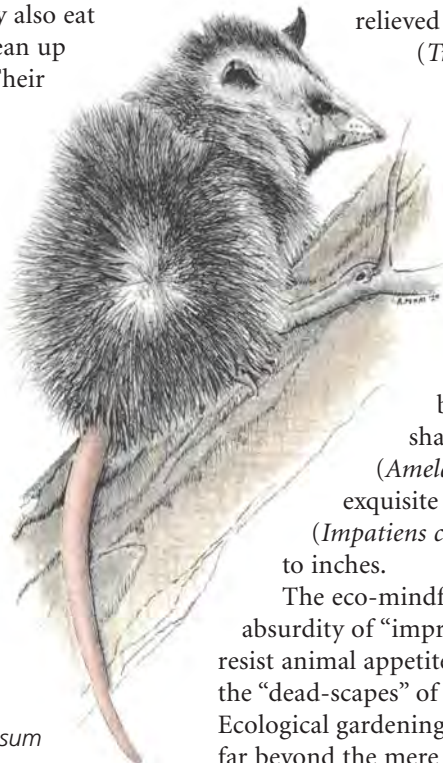
Continued on page 8

Continued from page 7

but murmured quietly to reduce alarm. At the first sound, the skunk stood stock still, warily raised his moist, black nose, did an impressive military turnabout and retreated. If he were to spray, I'd be concerned that he would be defenceless for the time required to replenish his arsenal. Skunks are not welcome visitors for everyone, but I was happy he habituated to my presence, becoming a regular visitor. Of course, the lawn became pitted as a result of his grub explorations. Natural pest control!

Let's applaud an unacknowledged champion in the battle against Lyme disease – the unassuming Virginia opossum. Over the years we've "hosted" regular guests that persist in investigating our unsatisfying recycling boxes. We can easily differentiate individuals by the unfortunate frostbite injuries on their ears and tails. Canadian winters are tough on North America's only marsupial. Considered ugly by some, these maligned animals are fastidious groomers, adeptly consuming upwards of 5,000 ticks per season. Gardeners will appreciate that they also eat snails and slugs, and clean up fallen, over-ripe fruit. Their ungainly toddle is an endearing sight. In winter, their characteristic tracks lead to the brush piles where they live. Opossums are beneficial, benign creatures – a veritable wild clean team!

Large insects, small rodents and, occasionally, songbirds are on the menu for golden foxes and swift raptors in habitat gardens. Deer are welcome to enjoy Solomon's seal



Opossum



Oswego tea or beebalm

(*Polygonatum* spp.) and cheery woodland sunflower (*Helianthus divaricatus*) in my garden.

Admittedly though, I'm relieved that the trilliums

(*Trillium* spp.) and Virginia spring beauties

(*Claytonia virginica*) have yet to be

discovered. I consider it a small sacrifice

on my part to have my

beleaguered shadbush

(*Amelanchier laevis*) and exquisite jewelweed

(*Impatiens capensis*) devoured to inches.

The eco-minded recognize the absurdity of "improving" plants to resist animal appetites and the folly of the "dead-scapes" of turf monoculture. Ecological gardening provides benefits far beyond the mere aesthetic. As urban sprawl intensifies, it is time to

awaken to the repercussions of destroying habitats. The known benefits of preserving or restoring ecosystems are enormous: flood mitigation, water quality improvement, air filtration, traffic noise hushing, climate regulation and carbon storage. We should all embrace gnawed bark and nibbled leaves to support biodiversity and the well-being of all living things.

Plant ecologist and writer Robin Wall Kimmerer mentions in *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants* (2013) that the word for plants in some First Nations languages can be translated as "those who take care of us." It all starts with plants. Plant it and they will come.

*Angelique Mori, a wildlife aficionado, delights in habitat gardening in Hamilton, Ontario, where her property offers small sanctuary amid urban intensification. Angelique was a 2020 recipient of Hamilton's Pollinator Paradise Monarch Award for gardens that nature loves.*

PHOTOGRAPH BY ANGELIQUE MORI

ILLUSTRATION BY ANGELIQUE MORI



## Interrupted Fern



Cartoon by Rosemary Mosco, [birdandmoon.com](http://birdandmoon.com) and [rosemarymosco.com](http://rosemarymosco.com).

# Landscape Masks

by *Evan Cantor*

Colorado's pandemic stay-at-home order in early March was followed by a wave of cancellations. My music gigs and a guest artist exhibition were all cancelled. The whole world went online and I gave up my charter membership in the Order of the Troglodytes to follow. But still, I wasn't excited by the prospect of Zoom gigs or online exhibitions. It was enough that I learned how to Zoom just to be in touch with family. The inner spirit that drives me to play the acoustic guitar and put a paintbrush in my hand simply doesn't cotton to a life lived electronically.



*Lisa Chambers wearing her Ghost Ranch mask*

Then came the opportunity to see my artwork printed on face masks. The coronavirus pandemic had closed so many doors, but here was one opening. I couldn't have asked for a better way to share my artwork with friends, family and beyond. Ultimately, the sharing is the best part of the creative process and only secondary to my primary goal of communicating the sacred beauty of the natural world. I am grateful to have found a new way to share that expression with friends I haven't yet met.

The masks are available online at: <https://fineartamerica.com/profiles/evan-cantor/shop/face+masks>.

PHOTOGRAPH BY LISA CHAMBERS



*"Ghost Ranch" (private ranch, New Mexico)*  
Only a few miles east of the Continental Divide, Ghost Ranch, with its iconic cream and yellow cliffs, is primarily known as the home of artist Georgia O'Keeffe. Colourful Entrada Sandstone bluffs look over dinosaur quarries in mudstones of the Petrified Forest Formation. Wandering the high-desert piñon-juniper

forest (*Pinus edulis*, *Juniperus monosperma*), you will encounter sulphur-yellow and scarlet varieties of Indian paintbrush (*Castilleja* sp.), Navajo yucca (*Yucca baileyi*) and the bright red blossoms of the claret cup cactus or mound cactus (*Echinocereus triglochidiatus*). Managed by a private foundation, Ghost Ranch's exhibits and hiking trails are open to the public most of the year.





**"Animas River Canyon"** (San Juan National Forest, Colorado)  
Near Molas Pass, the view stretches from the lower montane to the alpine tundra of the Continental Divide. This autumn scene is dominated by clonal groves of quaking aspen (*Populus tremuloides*). Aspen is the most widely distributed deciduous tree in North America, ranging from sea level in the far north to high-elevation sky islands in Arizona and Mexico. In the spring, you'll find the sunny groves brightened by early blooming, butter-coloured golden banner (*Thermopsis rhombifolia*). When the aspen turn, the forest floor is busy with blue common harebells (*Campanula rotundifolia*) and a variety of purple asters (*Aster* spp.).



**"Bear Canyon Hogback"** (Boulder Mountain Park, Colorado)  
This vertically oriented sedimentary rock formation reflects the energies that pushed Colorado's high country to elevations exceeding 14,000 feet (4,270 metres). The formation appears at the very mouth of Bear Canyon, thus representing an ecotone, combining elements of the Great Plains grasslands and the Rocky Mountains foothills zone. The trees in this scene are ponderosa pines (*Pinus ponderosa*), dominating the dry, sunny side of the canyon. If you follow the trail around another corner, you will encounter a large grove of staghorn sumac (*Rhus typhina*), which turn a bright scarlet in autumn. Arctic sagebrush (*Artemisia frigida*), a small, low-growing sagebrush variety, is common at an elevation of 5,500 feet (1,680 metres), but thrives all the way up to the alpine at 12,000 feet (3,660 metres).



**"Mt. Meeker"** (Rocky Mountain National Park, Colorado)  
From this angle, Mount Meeker hides the view of its 14,259-foot (4,346-metre) neighbour, Longs Peak. This vista looks over a recent burn, stretching across the "rain shadow" of the Continental Divide, from the eastern ridges of the foothills west to the divide itself. The forests here are dominated by Engelmann spruce (*Picea engelmanni*), Douglas fir (*Pseudotsuga menziesii*) and lodgepole pine (*Pinus contorta*). Riparian zones support Rocky Mountain maple (*Acer glabrum*) and box elder (*Acer negundo*). Occasional stands of quaking aspen (*Populus tremuloides*) punctuate the forest. Treeline communities feature sculptural limber pines (*Pinus flexilis*) and groves of matted krummholz and picturesque flag trees, primarily Engelmann spruce that have migrated from the montane to the alpine environment. In August, one of my favourite wildflowers, arctic gentian (*Gentiana algida*), blooms in profusion in open meadows of the alpine.

Continued on page 12





***"Black Sand Basin"*** (Yellowstone National Park, Wyoming)

Yellowstone is the caldera of an ancient supervolcano that likely covered all of North America in ash over 600,000 years ago. That hot spot in the earth's crust still drives a fantasy landscape of hot springs and geysers, Black Sand Basin among them. Here coyotes can feast on the cooked viscera of young bison who have stumbled into boiling water. It is also where a tourist recently defied the pandemic closure, stumbling into a hot spring, suffering severe burns and making a long drive back to the park entrance, where she was discovered by rangers. The Continental Divide follows a winding path through the national park. The forests here are dominated by vast, uninterrupted stands of lodgepole pine (*Pinus contorta*), a tree that requires periodic fire to pop open its serotinous cones.



***"Three Lakes"*** (Assiniboine Provincial Park, British Columbia)

Mount Assiniboine overlooks the Continental Divide separating British Columbia and Alberta. Sometimes called North America's Matterhorn, the glaciers here feed Lake Magog and its neighbours, Sunburst and Cerulean, all three visible in this view from The Nub. Alpine flowers I photographed in this region included bog laurel (*Kalmia microphylla*), western pasqueflower (*Pulsatilla occidentalis*), mountain forget-me-not (*Myosotis asiatica*), moss campion (*Silene acaulis*) and twinflower (*Linnaea borealis*). Notable stands of alpine larch (*Larix lyallii*), a deciduous tree that looks like an evergreen but turns yellow and drops its needles in autumn, are found in and around these lake basins.

*Evan Cantor is an artist, musician and occasional nature writer living in Boulder, Colorado.*



# Yogurt's Lessons on Nativars

by Janet Allen

Back in the late 20th century, Americans discovered yogurt and its health benefits. But it was a bit too tart for the American palate. The solution? Add sugars and flavourings. Manufacturers added not just fruit, but jam; not just a sprinkling of nuts, but bits of candy; not just flavours from real food, but artificial flavourings and unnatural colours.

Today, grocery stores devote a whole wall of the dairy section to the many varieties of sweetened yogurt. Want just plain yogurt? It's there, but you'll have to search for it.

We've turned what had been an ancient, health-sustaining food into just another unhealthy dessert. Yet it's a dessert we feel virtuous in eating. After all, it's yogurt, right?

Why am I writing about food in a plant journal? Because we're doing to plants what we've done to yogurt and other foods. We're taking life-sustaining "plain" plants — our native species — and "sweetening" them beyond recognition. Novelty-seeking humans like lots of extra petals, unnaturally garish colours, fewer "messy" berries. Industrial horticulture has flooded conventional nurseries with these profitable creations.

We know that excess sugar doesn't support human health and we're now finding that many cultivars of native plants — known as "nativars" — don't provide healthy food for wildlife or the benefits of genetic diversity.

Does it matter that a plant is technically native if it has so many petals a bee can't reach the nectar? That its nectar guides — invisible to people, but essential cues for pollinators — have disappeared in our race to create novel colours? That flowers haven't produced seeds birds need in fall and winter?

But as with eating yogurt, we have a virtuous feeling when we plant a nativar. After all, it's native, right?

People who have chosen to eat



PHOTOGRAPH BY DON SCALLEN

*A wild downy serviceberry (Amelanchier arborea) whose flowers are pollinated by bees, beetles and butterflies.*

unprocessed foods have been rewarded with better health. Many even discover that their taste buds adapt and formerly favourite foods now taste sickeningly sweet. Our re-educated taste buds can actually enjoy the clean taste of simple yogurt, a piece of fresh fruit, a simple vegetable dish.

We can similarly rethink our choice of planting nativars. Sure, just as occasionally indulging in a dessert-y yogurt won't destroy our health, planting an occasional nativar (especially one similar to the species) won't destroy all the benefits of a natural landscape. But we can re-educate our horticultural "taste buds" and come to appreciate the simple elegance of the species, the variations we see in plants when they reseed, the charm of subtler colours.

Even more, we can revel in the life native species support. We can enjoy watching a bee zeroing in on a nectar-rich flower or a bird devouring nutritious seeds left to overwinter on

spent stalks. We can hope that some of the genetically varied seedlings our species produce will be able to adapt to a changing climate or survive attacks by exotic pests and diseases.

In an increasingly industrialized society and threatened environment, we can know that we're doing one of the most important things an individual can do to support life on earth: planting native species.

*Janet Allen is the co-founder and president of Habitat Gardening in Central New York, a local chapter of the national organization Wild Ones. She created a six-session discussion course "Caring for Our Piece of the Earth" available as a free resource at [hgcnyc.org/course/](http://hgcnyc.org/course/) and is the webmaster of "Our Habitat Garden" at [ourhabitatgarden.org](http://ourhabitatgarden.org). The article originally appeared in the Wild Ones Journal, a publication of Wild Ones: Native Plants, Natural Landscapes [wildones.org](http://wildones.org).*

crossed the rivers of the Great Lakes region, remains a mystery to me.”

A possible answer comes from the 18th-century naturalist William Bartram in his book *Travels*:

*The fruit is in great estimation with the Indians. The Creeks store it in their towns. I have seen above an hundred bushels of these nuts belonging to one family. They pound them to pieces, and then cast them into boiling water, which after passing through fine strainers, preserves the most oily part of the liquid: this they call by a name which signifies hiccory (sic) milk; it is as sweet and rich as fresh cream, and is an ingredient in most of their cookery especially hominy and corncakes.*

First Nations also used the strong, hard hickory wood for bows and war clubs. The value of shagbark hickory would have been obvious to Native people regardless of whether the tree grew in their territories. Demand for the nuts may have spurred trade, which could explain how the trees arrived in Ontario and parts of Quebec. The possible agency of First Nations in shagbark hickory dispersal is also suggested by isolated outposts of the tree in southern Ontario along Georgian Bay and Lake Huron. Further support for this idea comes from the range of shagbark hickory in eastern Ontario and Quebec, which closely follows major First Nations trading routes along the Ottawa and St. Lawrence Rivers.

European colonists also held

shagbark hickory in high esteem and used it in applications where strength was crucial, such as tool handles and the spokes of wagon wheels.

*Carya ovata* thrives in a variety of habitats, despite an oft-quoted preference for rich, moist soils. In my bailiwick at the northern edge of contiguous shagbark hickory distribution just west of Toronto, shagbarks grow on the dry, west-facing valley crests of rivers flowing south into Lake Ontario. They also grow in remnant woodlots in agricultural areas with some standing sentinel in farmer's fields, demonstrating their ability to tolerate sun, wind and drought. This tolerance allows them to colonize abandoned farmland as an early successional species.

At these northern sites, associates



*Shagbark hickory bud opening.*



*Shagbark hickory tree in the fall.*



include bitternut hickory (*Carya cordiformis*), red oak (*Quercus rubra*), white oak (*Quercus alba*) and sugar maple (*Acer saccharum*). While shagbark hickory seldom exceeds 80 centimetres (30 inches) in diameter, oaks and maples often exceed one metre (three feet). Nevertheless, the slender shagbarks stretch upwards to claim their share of sunlight. And these slender shagbarks can be old. One 45-centimetre (18-inch) diameter specimen had 150 growth rings.

A three-year-old shagbark hickory grown by Henry Kock at the University of Guelph Arboretum had a 110-centimetre (43-inch) taproot! The length of these taproots is given as one reason why many nurseries don't grow this tree. Perhaps this explains why these adaptable,

charismatic trees, of salutary ecological value, are seldom part of tree-planting initiatives. They should be. The old fire regimens of the past that may have opened landscapes to shagbark hickory colonization are no more. Shagbark hickories are a precious part of our natural and cultural heritage. We should plant them for wildlife, for ourselves, and for our grandchildren.

*Don Scallen is an educator, writer and lifelong naturalist.*



*The characteristic five-leaflet compound leaf of shagbark hickory and its thick-husked nuts*

ILLUSTRATION BY ANGELIQUE MORI

## New & Noted

### *Nature Where We Live*

by Don Scallen

2020, Knotty Toad Press

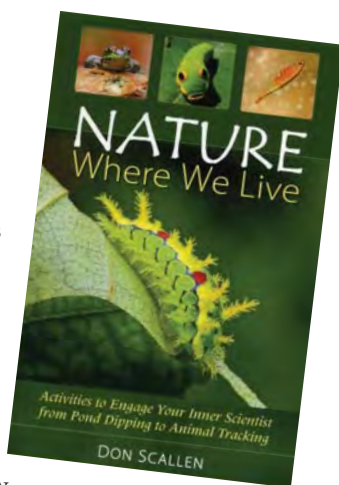
ISBN: 978-1-7773186-0-4

Colour photos, softcover, 94 pages

With his charming little book, *Nature Where We Live*, Don Scallen sends his readers out into local woodlands, wetlands, fields – and even our own gardens – to discover the rich array of life in native habitats. He opens up a new avenue to appreciation of natural ecosystems, encouraging us to examine more closely the native plants we love: what fascinating animal life will we find there?

Each chapter begins with a paragraph that whets our appetite for nature exploration. Here's an example from Chapter 5, Pond Dipping: "Standing pondside, I bask in the glow of a fine day in June. Dragonflies whirl and red-wing blackbirds balance on cattail stalks. I scan the surface and smile at the snouts of green frogs and painted turtles among the duckweed. Gazing into the water I track beetles and backswimmers as they speed by and I spot a newt prowling the shallows..."

A brief natural history lesson based on Don's lifelong observations follows. In the Rearing Swallowtails chapter, he



tells us that in his yard in southern Ontario tiger swallowtails lay eggs on black cherry (*Prunus serotina*) and white ash (*Fraxinus americana*); giant swallowtails on common hop tree (*Ptelea trifoliata*) and prickly ash (*Zanthoxylum americanum*); spicebush swallowtails on spicebushes (*Lindera benzoin*) of course; and black swallowtails on anything in the carrot family, including several non-native garden herbs.

Don includes sections on gear needed, when and where to look, how to tread softly and how to extend the experience. He encourages readers to do what they can to protect forests, wetlands, meadows and shrubby areas and to transform urban areas into native habitat for pollinators and other species in the How to Help section of each chapter.

*Nature Where We Live* is a joyful celebration of our natural world and a delightful read for young and old alike from a regular contributor to *The Blazing Star*. Available on Amazon and on the Urban Nature Store website. You can also buy it from the author at [donscallen232@gmail.com](mailto:donscallen232@gmail.com) for \$25 (including postage). Don's book can also be ordered from the Loops and Lattes website of Nicola Ross <https://loopsandlattes.ca/product/nature-where-we-live-don-scallen/>.

*Review by Irene Fedun, editor of The Blazing Star.*



FALL 2020

# NANPS MEMBERSHIP

New membership ☐ Renewal ☐

Change of Address ☐ Gift ☐

	Digital Blazing Star	Paper Blazing Star (includes mailing costs)
_____ 1-year regular membership:	<b>\$25</b>	<b>\$30</b>
_____ 2-year regular membership:	<b>\$40</b>	<b>\$50</b>
_____ 3-year regular membership:	<b>\$60</b>	<b>\$75</b>
_____ 5-year sustaining membership:	<b>\$200</b>	<b>\$225</b>
(includes \$100 tax receipt)		
_____ Full-time student membership:	<b>\$10</b>	Digital Only

Name of institution \_\_\_\_\_

\_\_\_\_\_ **Donation** (Canadian tax receipts are issued for donations of \$20 or more. Canadian registered charity #130720824 RR0001)

\_\_\_\_\_ **Total** \_\_\_\_\_ **cheque** (payable to NANPS)

For online applications with credit card go to [www.nanps.org](http://www.nanps.org)

DATE \_\_\_\_\_

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_

CITY \_\_\_\_\_

PROVINCE/STATE \_\_\_\_\_

POSTAL/ZIP CODE \_\_\_\_\_

PHONE (optional) \_\_\_\_\_

\*EMAIL \_\_\_\_\_

Required for digital copies of *The Blazing Star*

☐ I am interested in volunteering with NANPS.  
Please contact me.

Send this completed form along with your cheque to:

**NORTH AMERICAN NATIVE PLANT SOCIETY**  
Box 69070, St. Clair P.O., Toronto, Ontario, Canada  
M4T 3A1

*The North American Native Plant Society treats all information we receive as confidential. We do not rent, sell or provide this information to third parties.*



**NORTH AMERICAN  
NATIVE PLANT SOCIETY**

Box 69070,  
St. Clair P.O., Toronto,  
Ontario, Canada  
M4T 3A1

CANADA		POSTES
POST		CANADA
Postage paid		Port payé
Publications Mail		Poste-publications
PM41578532		