TORONTO FIELD NATURALIST

Number 701 May 2026



American Robins. Painting by Joanne Doucette

REGULARS

About TFN	23
Extracts from Outings Leaders' Reports	18
Focus on Nature – Circles and Ovals	24
In the News	20
Junior Naturalists	15
Lecture Notice	24
Lecture Report	3
President's Report	2
Sharing Nature Encounters	22
TFN Outings Information	6
Weather (This Time Last Year)	21

FEATURES

Message from the Editor	2
2026 TFN Lifetime Award	4
Stewardship Season	5
Getting to Know Your Walk Leaders – Part 3	7
Top Reasons to Protect Toronto Islands' Nature	8
Plants and Their Insect Pollinators	10
Reminder re Fee Increase	12
Insect of the Month: Ants	13
The Cedar Waxwings' Courtship Dance	16
At the Table: Four City Projects TFN is Fighting for Right Now	17
Looking Back 50 Years: Reflections on the April 1976 Newsletter	19
Pharmacists' Services	20

PRESIDENT'S REPORT

You may know that TFN partners with many conservation and environmental groups to promote and protect nature, but we also partner to help young people just starting on careers that affect nature – those beyond the 6-14 age range for our excellent Junior Naturalists program. Here are a few of them:

I will host a session of Lorraine Johnson's class at York University, *Urban Habitats and Restoration Ecology*, to introduce her students to restoration on a landfill, ongoing stewardship, and Metrolinx planting.

TFN is working closely this summer with LEAF's *Young Urban Forest Leader* (YUFL) program to help mentor participants in how to lead nature walks. TFN members will get the chance to attend these walks.

Andrea Williams' U of T course, *Writing with Environmental Groups,* worked with both TFN and Green Ummah this past term. For TFN, the students investigated methods of attracting younger and more diverse members through social media.

TFN's *Walk Leader Training* course will run again this summer, inviting university students to learn how to design and lead nature walks. Members are also welcome to take the training!

And, of course, TFN will again sponsor two youths for Ontario Nature's *Youth Summit for Mother Earth*, which will be held in September.

Speaking of Ontario Nature, Peter Smith is taking over for me as TFN's representative on ON's Nature Network. For those who don't know, TFN meets with other Nature Network groups twice a year to share experiences and challenges, and look for ways of working together. I've been the rep since 2020.

I hope everyone has an excellent summer and that I get to meet you on the trails, at one of our in-person meetings, or at a stewardship event!

Lynn Miller
president@torontofieldnaturalists.org

MESSAGE FROM THE EDITOR

Thank you to all who have contributed to the newsletter during the past year, helping us towards fulfilment of our objectives:

- To help people to better understand nature through articles about insects, birds and plants.
- To foster appreciation of nature by sharing stories of encounters with it and through art and photography.
- To encourage and share news of members' efforts to protect nature through stewardship and advocacy.



We encourage members to contribute articles, images, book reviews, etc. Please email your submissions to newsletter@torontofieldnaturalists.org

Thank you also to the members of the newsletter committee for your dedication and attention to detail, helping us to produce an accurate and attractive publication.

Wendy Rothwell

Members of the newsletter committee enjoying wild blue lupines in High Park, May 2025. From left: Kathleen Brooks, Jenny Bull, Wendy Rothwell, Charlotte Broome, Leslie Padorr and Wendy Winters. (Absent: Elisabeth Gladstone, Katrina McGuire, Jennifer Smith.)

LECTURE REPORT

Your Lawn is a Battlefield – The Fascinating World of Ant Diversity, Ecology and Behaviour

April 7, 2026

Dr Aaron Fairweather, Senior Lecturer and Sessional Researcher in Toxicology, Biochemistry, and Entomology, University of Guelph

Some ant queens can live for up to 80 years; ants exceed human biomass by a factor of four to one; if you smell citrus when digging in your garden, this is likely the chemical defence of the bright yellow *Lasius* (citronella) ant. These are some of the fascinating facts Dr Fairweather shared about the Formicidae, illustrated with mesmerizing photos and videos.

There are an estimated 1,000 ant species in North America, and 20,000 known species worldwide. New species continue to be discovered. Ants occupy a diverse range of habitats, and display a wide and complex range of behaviours and morphologies. Within species, morphology varies with sex and caste – specialized roles in the colonies such as nest protection, brood care, foraging, and animal/plant husbandry. Some ants change caste over their lifespans.



Five types of ants and 135 species are currently found in Ontario. Ponerinae and Amblyoponinae are mostly subterranean, while Dolichoderinae are often associated with bogs and wetlands. Ants we are most likely to see are Myrmicenae, found in lawns or foraging settings, especially acorns, and Formicinae (the largest local subfamily), which tolerate a lot of different environments, are red or black or a combination, and are frequently mound-builders or log dwellers.

Ants engage in both inter- and intra-species communication, commonly via chemical compounds (pheromones), to signal foraging routes, threats, nest identity and the like. Unique variations in these compounds make them similar to spoken language. Ants also use tactile communication such as antenna taps, and mandibles or exoskeleton plates are employed for acoustic communication (stridulation).

Nests are often made in logs or soil. Huge underground structures, many metres in depth and diameter, with various specialized chambers, may be created. Some ants nest in tree canopies. Using the silk glands of their larvae as 'glue', weaver ants knit leaves together to form nesting baskets.

As a result of competitive pressures, ants may display temporary or permanent social parasitism (inquilinism). Mimicking chemical and tactile host communication, a parasitic queen takes over another nest, commandeering the nest resources, and in some cases killing the host queen. In slave-making (dulosis), the host queen is killed and her brood taken back to the invader's nest, where they remain for their life cycle, caring for the parasitic species. Some ants have evolved to require a host species for survival.

Managing aphids for their honeydew production is a common example of animal husbandry. This is not entirely mutualistic, as ants may cull and eat the aphids if they start to kill off the host plant, thus protecting the plant while accessing a protein source.

Some ants display herbivory, and ant-plant mutualism is seen worldwide. Ants frequently feed on pollen, nectar, and fruit. Coevolution has given rise to nutrient-dense fruiting bodies (eliasomes) on seeds, incentivizing their transport to nests where they will grow. In Ontario this assists in the dispersal of trillium seeds. Other species maintain extrafloral nectaries or collect plant matter to nourish the fungal gardens they feed on. *Camponotus* (carpenter ants) do not destroy damp wood, rather they eat the fungi that are feeding on it. In the tropics, lemon or citrus ants create "devil's gardens", spraying a chemical herbicide in huge areas to destroy all plants except the ones they find beneficial. Parasitic or mutualistic relationships also occur with Myrmicophiles, organisms that have co-evolved to take advantage of ants. In Ontario, Lycaenid butterflies excrete a sugary substance that encourages ants to come into their nests and care for their butterfly brood.

Continued on next page

2026 TFN LIFETIME AWARD

The Nomination Committee and the Board are happy to announce that Joanne Doucette and Jason Ramsay-Brown are this year's recipients of the TFN Lifetime Award. This award recognizes volunteers who have made significant and sustained contributions to TFN and its mandate for at least 10 years. Recipients of this award become lifetime members of TFN.

Joanne has been a member of TFN since the '80s. She started leading nature walks in 1992 – even some in TFN's Jim Baillie Nature Reserve near Uxbridge! Her drawings adorned the pages of the TFN newsletter before it was possible for us to use photographs. In 2014 Joanne joined the TFN Board and took over leadership of the Nature Arts group, leading many Nature Arts outings on Saturday mornings. Joanne became TFN's first volunteer coordinator in 2015, setting up procedures, volunteer job descriptions and other vital processes needed to keep track of and value our volunteer corps. Joanne continues to lead popular walks for TFN, where she is recognized for her wealth of knowledge on nature and heritage.

Jason began leading walks for TFN in 2015, then joined the Board in April 2016. In 2018 he became president, bringing with him a wealth of knowledge about Toronto's ravines, conservation and stewardship. Jason is responsible for the digitalization of TFN's archive of 35 mm slides, paper newsletters and other historic documents, and was part of the team that brought the *Then & Now* photo exhibition to life for TFN's 100th anniversary. In 2018 he took over as webmaster and completed a full redesign to bring our site up to modern standards, including being viewable on handheld devices.

In 2023 he overhauled our membership renewal process, allowing renewals based on date-of-joining (instead of all on one date) among other innovations. His stewardship accomplishments include starting the Cottonwood Flats Monitoring Project, procuring a Management Plan for TFN's Jim Baillie Nature Reserve, and expanding our citizen science projects. Jason continues to be a leader on our stewardship team and, even though he has moved well outside Toronto, has likely visited our nature reserves more than any other member.





Thanks to both Jason and Joanne for everything they have done and continue to do in support of TFN!

Lynn Miller

LECTURE REPORT *continued*

Humans may see ants as pests, as they can create problems in gardens, golf courses, greenhouses and homes. Some ant species bite, and others can sting. Currently there is only one stinging species in Ontario, invasive European fire ants. However, as general ecosystem engineers, ants also provide important ecosystem services. They are increasingly recognized as important in agriculture as beneficial indicators of soil health. They serve as seed dispersers, soil aerators, decomposers, and nutrient cyclers, in addition to regulating plant communities, and often feeding on pest species. For over 2,000 years, weaver ants have been used for pest control in China; ants may be more effective than pesticides. As well, ants and their larvae have been used for human food worldwide, providing an inexpensive but high protein source.

For more information about ant biology and local identification, Dr Fairweather recommends: *A Field Guide to the Ants of New England***,** Ellison *et al*., 2012.

Dr Fairweather provided a masterful blend of science, intriguing facts, and enthusiasm for their topic. Members can listen to the lecture at:
TFN's April 2026 lecture on Ants and their biodiversity

Michèle Macartney-Filgate

STEWARDSHIP SEASON

It's that time of year when restoration and stewardship projects start up again and we start looking for volunteers to remove introduced invasive plants, plant native species, and pick up the unsightly and harmful trash that collects in Toronto's natural spaces!

TFN will once again have Team Leaders working with the City's Community Stewardship Program (CSP) at Cottonwood Flats and Humber Arboretum.

Cottonwood Flats has moved to weekly sessions (Tuesdays from 10 am-12 noon). It was combined with Beechwood Wetlands so we'll be looking after both sites. Humber Arboretum has moved to bi-weekly sessions this year on Thursdays, 10 am-12 noon.

If you can't make those session times, check out the CSP website for other stewardship sites around the city. https://tfngo.to/csp

Another great source for stewardship opportunities is the Toronto Nature Stewards (TNS). For the past five years it has been steadily growing from a start of nine sites, and has 53 public sites this year! You are sure to find one close to you and at a time when you can attend.

TNS works under an agreement with the City of Toronto Urban Forestry Division to run a stewardship program on public land in ravines and natural areas without direct City supervision. This is unlike the CSP program, which has city employees supervising sessions along with volunteer Team Leaders. TNS has Lead Stewards who have been trained, follow agreed-upon protocols for ecological restoration, and report all stewardship activities.

Because of this reporting, TNS knows that since 2021, it has hosted over 3,500 events and logged 44,753 hours of volunteer time. Volunteer stewards have removed over 10,000 bags of invasive plants and planted 8,319 native plants. That is impressive!

To volunteer with TNS, go to their website, decide which sites you want to work with, and register to be a steward. https://tfngo.to/tns

TFN's President, Lynn Miller, is Lead Steward at TNS's Northline site and Team Leader at CSP Cottonwood Flats site. She welcomes new volunteers at both!

TFN also holds stewardship events at our private Nature Reserves near Uxbridge. To volunteer to help there, sign up at https://tfngo.to/stewardship.



About to tackle the last stand of phragmites



Planting native species



A deer drops by to check on what we are doing

TFN OUTINGS INFORMATION

The list of walks available to members is posted at the beginning of each month on the *Walks* page of our *Members Only* website (https://tfngo.to/memberswalks) and can be downloaded or printed. You can download a calendar file (.ics) that will add all walks for a month into your calendar.

You are welcome to bring one non-member guest. Listed below are two May outings you might like to consider. **Please refer to the website for meeting location and other details.**

Annual Aggie's Wildflower Walk – Heritage and Wildflowers

Leader: Madeleine McDowell

Sunday, May 10, 1 pm

Outing Description: We'll start at Lambton House with a talk about Agnes Moodie Fitzgibbon and her wildflower illustrations from 1868. Then we'll walk through the Humber Valley, along the ravine, across St Mark's Rd, and into the woods where we'll see Agnes' trilliums emerging at the river.

We'll then follow the pedestrian trail by the Humber back to Lambton House for tea, and spend time in the TFN Wildflower Specimen Garden. (This is a joint outing with Heritage York.)

Outing Details: A 3-hr, 3-km circular route on mostly unpaved but even surfaces, flat with some gentle slopes.

Spring Joys at Todmorden Wetland – a Nature Walk

Leader: Ellen Schwartzel

Friday, May 22, 10 am

Outing Description: Celebrate the International Day of Biodiversity at Todmorden Mills Wildflower Preserve, a small gem of restored valleyland. Todmorden Mills offers the perfect venue to admire plant diversity, and was featured in the *Toronto Star,* June 2025.

Thanks to the vision and tireless efforts of dedicated volunteers over decades, there are hundreds of species of wildflowers, shrubs and trees to enjoy, including spring ephemera. This could be one of the best short walks Toronto has to offer. We may see may-apple, bloodroot, marsh marigold, Virginia waterleaf, wild ginger, trout lily, horsetails, duckweed, leatherleaf shrubs and skunk cabbage in the wetland. There might be ducks at the oxbow pond and other spring migrants. We may hear about new and ongoing projects from one of the site volunteers.

Outing Details: A 2-hr, 1.5-km circular walk on mostly unpaved and uneven surfaces with gentle slopes and some stairs.



White Trillium. Photo: Wendy Rothwell



Marsh Marigold. Photo: Charlotte Broome

GETTING TO KNOW YOUR WALK LEADERS – Part 3



Richard Schwarz

Richard began leading TFN walks in 2025, introducing participants to the worlds of mushrooms and spiders. He can spot and identify even the tiniest specimens to show to the group. You soon realize how much you have been walking past without noticing.

Richard is a member of the Mycological Society of Toronto where he holds identification workshops, assists at the foray tables, and leads mushroom walks.



Madeleine McDowell

Madeleine has been leading TFN walks since 1997!! She has long-running annual walks: Aggie's Wildflowers Mother's Day Walk in May, and Hurricane Hazel Anniversary Walk in October.

Madeleine was chair of the Humber Heritage Committee, so has a wealth of knowledge about the history of the Humber Valley and Lambton Mills – and of the forces that shaped their current green spaces.



Jim and Jane Goad

Jim and Jane started by hosting outings for the TFN's Photography Group before expanding to lead history and wildflower walks in 2025.

As retired educators, they welcome opportunities to offer new learning experiences to others and to learn new things themselves from these interactions.

Outside TFN, they volunteer with the Live Green department of the City of Toronto, which promotes environmental initiatives for the city like recycling, emission controls, pollinator gardens and electric vehicles.



Clara Guadagni

Clara is our newest walk leader. She completed TFN's new Walk Leader Training in 2025 and has been leading walks ever since – with rave reviews from participants.

Clara pulls inspiration from her love of birds and the courses she is taking in U of T's Ecology & Evolutionary Biology program to create interesting topics like *All About Birds: Diversity, Adaptations, and Evolutionary History* and *How Species Survive Winter*.

We look forward to more intriguing walks from her this summer!

TOP REASONS TO PROTECT TORONTO ISLANDS' NATURE – AND SPEAK UP FOR IT!

Toronto Islands are in the news again, with Premier Ford's pronouncement (March 2026) to allow jets at the Island airport – without public consultation or the City's support. Many are alarmed, and much is at stake. As members of Toronto's nature community, we each have a voice. We can speak up for the remarkable biodiversity of Toronto Islands with our social networks and especially through emails to our provincial MPPs. Be sure also to ask your federal MP to take a stand; the federal government has regulatory jurisdiction and influence on airports and waterfront development. To equip you, here are top reasons to love and protect Toronto Islands' nature:

Piping plovers are endangered shorebirds that need sandy beaches for nesting. Amazingly, these beautiful birds have successfully nested several times at Hanlan's Point in recent years (in 2018 and 2022). Learn more about the work of Birds Canada to protect Ontario's Piping Plovers at Birds Canada Piping Plovers.

Eastern Cottonwoods are iconic trees of Toronto Islands, well-suited to the low-lying, sandy soils. Cottonwoods are a Carolinian species, at the northern edge of their range here in Toronto. These stately, fast-growing trees can cope well with occasional flooding. In June, their fruiting catkins pop open to release blizzards of fluffy "cotton," which float on the wind to disperse the minute seeds. Learn more in TFN's April 2021 Newsletter.

Garter snakes are often spotted basking on sandy pathways on the Islands. Safe urban habitats for snakes have become rare, and are all well worth protecting. Garter snakes give birth to live young in August. Both adults and offspring must find crevices below the frost line to survive winter. Learn more in Reptiles and Amphibians of Toronto.

Marram grass is famed for its ability to form and stabilize sand dunes, thanks to root systems that can be five metres long. Torontonians are lucky to still have dunes and marram grass at Hanlan's beach, newly restored at public expense by TRCA and partners. We would have to travel to Sandbanks Provincial Park – 150 km east – to find similar habitats.

Bald eagles began nesting on Toronto Island in 2024 – it was enough of a story that even Canadian Geographic wrote about it. How cool is that?

Fringed Gentians are uncommon wildflowers, but small patches survive in the wet meadows of Ward's Island. Their numbers vary from year to year, affected by water levels and by their biennial life cycle. A few lucky TFNers saw drifts of delicate purple gentians blooming in September 2025. Toronto Island Natural Heritage Background Report 2021.

The Islands are among Toronto's top three bird hotspots: The citizen science website *eBird* has observations of 288 bird species at the Toronto Islands birdwatching hotspot, which is exceeded only by Colonel Sam Smith Park (292 species) and Tommy Thompson Park (310 species). Learn more at Toronto Island Natural Heritage Background Report, 2021.

Common Buckeyes are colourful butterflies breeding annually at Ward's Island and Hanlan's Point. Despite their name, Buckeyes are not common in our area. The Islands are also an excellent place to see many other butterfly species, including monarchs in fall migration; roosts of several thousand have been seen. Learn more in Butterflies of Toronto.

Continued on next page



Piping Plover chick, Hanlan's Point. Photo: Ken Sproule



Eastern cottonwoods and marram grass, Toronto Island. Photo: Jenny Bull

TORONTO ISLANDS' NATURE *continued*

Six Environmentally Significant Areas (ESAs) are scattered across the Islands; indeed, a remarkable 40% of the Island park and open space lands boast this high-quality habitat ranking. Island ESA studies have documented an impressive 85 locally rare plant species, including 12 regionally rare plants. Learn more at Toronto Island Natural Heritage Background Report, 2021.

Biodiversity of such high quality simply does not mix with jet traffic. Continual noise of take-offs and landings would have grave impacts on bird habitats. Jet exhaust fumes would mean spikes in air pollutants across the harbour region. Drift from de-icing sprays would impose damaging glycol pollutants on aquatic habitats. Not to be ignored are the waterfront's growing thousands of human residents, who would also be subjected to added noise, pollutants and congestion, as noted by *Canada's National Observer*.

For context, let's remember that Toronto Island is a municipal park, managed and cared for by the City and its partners. Toronto Island has a new Park Plan, approved by City Council in July 2024, after years of consultations and rewrites. TFN and the Toronto Island Biodiversity Group were vocal at the meetings from 2020 onwards, always making a case for nature.

The Plan as approved aspires to integrate six overarching goals. Especially relevant is a goal to support the Island's natural environment. There are also goals pulling in other directions, especially the goals to enhance visitor experience and to improve access and connection. How to protect fragile Island habitats from the impacts of 1.4 million visitors annually is an increasingly urgent question.

Our nature community must stay vigilant and vocal, because the Plan itself contains no guarantees or guard rails to protect habitat. Everything will depend on how the Plan is interpreted and rolled out over the next 25 years. You can access the Plan online: Toronto Island Park Plan and Projects.

To give legs to the Island Park Plan, the City has set up a dedicated Island staff team, integrating a dizzying number of Island projects and operations, involving numerous city divisions and agencies. Three new stakeholder groups also provide ongoing input and share perspectives via frequent meetings:

- the Indigenous Advisory Circle,
- the Hanlan's Point Working Group (guiding 2SLGBTQ+ projects at Hanlan's),
- the Island Working Group.

This third group clumps together diverse interests, including Island residents, boaters, local businesses, the nature community, plus individual Toronto residents chosen by civic lottery. TFN is represented on the Island Working Group by Ellen Schwartzel.

You can grow your own appreciation of Toronto Island habitats through TFN's guided outings. For example, in 2025 we offered three Island outings. Special kudos if you have already helped in 2026 with TFN's Island spring clean-up, April 24. Another good option is to volunteer with the weekly Saturday morning stewardship team on the Island, through the Toronto Nature Stewards. See details for the Franklin Garden team here.

Ellen Schwartzel



Fringed gentian, Toronto Island. Photo: Ken Sproule



Common Buckeye, Toronto Island. Photo: Ken Sproule

PLANTS AND THEIR INSECT POLLINATORS

Pollination is the process of transferring pollen from anthers to stigmas. Throughout the evolution of flowering plants, insects that carry out pollination have been a major selective force in the evolution of flower shape, colour, scent and food rewards such as nectar and pollen. At the same time, the presence of food rewards strongly influences the evolution of insect size and shape, mouth part modifications, and ability to recognize the signals that point to the location of nectar. The evolution of plants and their insect pollinators is a classic instance of coevolution, where diversification over time of one group of organisms drives diversification of another in a reciprocal way.

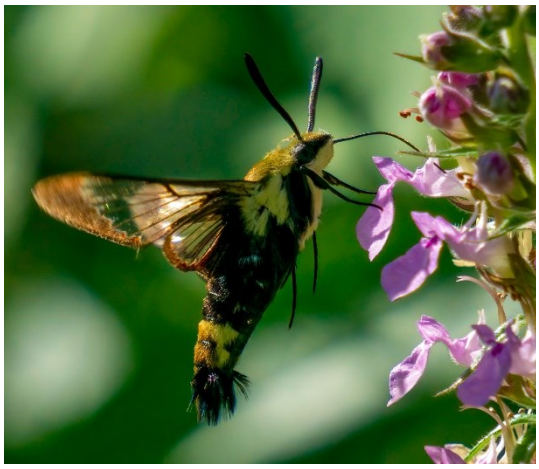
Pollination syndromes are suites of floral traits that are evolutionary adaptations that attract, and provide food for, a specific group of pollinators. For instance, moths are attracted to tubular flowers with pale colours, strong sweet scents emitted at night, and ample nectar. Distantly related groups of plants (for example, those from the mustard and ginger families) have evolved the moth pollination syndrome quite independently.

Recognizing pollination syndromes is a way of organizing the functional aspects of flower and pollinator diversity. A wide range of pollination syndromes exist, including those evolved in response to animal pollinators (birds, bats and other mammals, insects such as bees, wasps, butterflies, moths, beetles and flies), as well as to non-biological aspects of the environment (wind, water). A few of the insect pollinator syndromes are described below.

Bee pollination. Bees are the most important group of flower-visiting insects and are well-adapted for feeding on nectar and pollen. They have hairy bodies that capture pollen grains and their mouthparts are modified as a sucking tube. Bees use pollen as a food source to feed their larvae and so actively collect pollen grains and carry them to their nests. Bees learn quickly to recognize floral outlines, colours and odors, and perceive ultraviolet light as a distinct colour.

Flowers adapted for bee pollination typically are bright white, yellow or blue, often with patterns (some seen only under UV light) that serve as nectar guides. Flowers provide landing platforms, and produce sweet scents. Many of these flowers have complex three-dimensional shapes that require strong insects, like bees, to push their way in to the hidden source of nectar. These flowers, like beardtongues and viper's bugloss, have arching stamens and pistils, so that pollen is deposited on the bee's back and then scraped off by the sticky stigma of another flower.

Continued on next page



Snowberry clearwing moth feeding on Canada germander sage. Photo: Andrew Interisano



Furrow bees feeding on bull thistle. Photo: Ron Dengler



Tri-colored bumblebee feeding on viper's bugloss. Photo: Ron Dengler

PLANTS AND POLLINATORS *continued*

Other bees tend to be generalists and visit open, flat or bowl-like flowers, such as asters, sunflowers and Queen Anne's lace. These bees typically display flower constancy: when a plant species is in bloom and providing ample nectar and pollen, bees tend to visit only that species, making their own feeding more efficient and increasing the chances of cross pollination for the plant.

Butterfly pollination. Most adult butterflies are avid nectar feeders and have specialized, long, straw-like mouthparts to draw nectar up from deep within the flower. While bees are short-legged and thus come into contact with pollen more readily, the bodies of long-legged butterflies are held farther away from the pollen and are thus less likely to pick up pollen grains. They also lack bees' specialized branched pollen-trapping hairs and don't collect pollen to feed themselves or offspring. Nevertheless, they can inadvertently transfer pollen and thus effect pollination.



Silver-spotted skipper feeding on butterfly bush. Photo: Ron Dengler

Flowers that are adapted for butterfly pollination are usually bright, often red or purple, with a faint, fresh odor, ample but deeply hidden nectar, and a broad landing platform. Examples include Joe-Pye-weed, milkweeds, and asters.

Beetle pollination. The fossil record indicates that beetles have been pollinating flowering plants for more than 100 million years. In the modern era, they are the primary pollinators of numerous basal ('primitive') flowering plants, including water lilies, magnolias and pawpaw. Although beetle pollination is under-studied compared to other pollination syndromes, at least 20% of the estimated 400,000 beetle species living today have been documented as regular flower visitors. They usually feed by a clumsy "mess and soil" technique, munching on petals, pollen and nectar with their unmodified jaws and, inadvertently, transferring pollen as they go.



Goldenrod soldier beetle feeding on Canada goldenrod. Photo: Ron Dengler

Beetle-pollinated flowers are usually large and bowl-shaped with white or green petals. Some flowers have a fruity or foul odour but other beetle-pollinated flowers have no odour at all. Nectar is only sometimes present, but pollen is ample and the main attractant.

Fly pollination. Flies are generalist foragers and have no nests to provision. They aren't as hairy as bees, but still transport plenty of pollen, making them the second-most important group of pollinating insects. Short-tongued hover flies prefer flowers that are open or bowl-shaped with accessible nectar, while long-tongued bee-flies are attracted to the same flowers that appeal to bees and are able to reach hidden nectar with their modified mouth parts. From the perspective of the flowering plant, they are more tolerant of cold than bees and therefore can pollinate early and late in the day when bees are inactive. They also are key pollinators at high elevations and higher latitudes where bees are few. Flower-visiting flies are attracted to flowers that are yellow, white or pink, including common yarrow, goldenrod, asters, and Queen Anne's lace.



Short-tongued hover fly feeding on bur marigold. Photo: Ron Dengler

Continued on next page

PLANTS AND POLLINATORS *continued*

In contrast, carrion flies visit flowers that are typically pale, dark brown or purple and lack nectar guides. Carrion fly flowers emit putrid odours, reminiscent of rotting meat, carrion or dung. These odours are the primary attractant, but are really false advertising because the flies are looking for a site to lay their eggs and only inadvertently transfer pollen while doing so. Carrion fly flowers usually lack nectar, and pollen is limited. Flower shape can be shallow, funnel-like or more complex with a trap. Jack-in-the-pulpit is a good example of carrion fly flower, as it attracts tiny fungus gnats with a mushroom-like scent, and the hooded and slippery spathe of the blossom forms an effective trap.

Overview. Pollination syndromes have been recognized and characterized for over 50 years as a way to organize floral diversity into functional groups. Pollination ecology continues to be a very active field of research, focusing on the refinement of pollination syndromes and the broader significance of plant-pollinator relationships for the whole ecosystem. Questions frequently asked include: What insects pollinate generalist plants such as those in the composite, carrot and mustard families? What are the consequences when multiple pollinators visit the same flowers, or when one pollinator visits multiple plant species? How do pollinators change over the season? What happens to the relationship when a plant species is rare in some years and abundant in others? What are the impacts of drought or soil minerals on nectar abundance and composition? Careful field observation is a way to test the generality of these pollinator syndromes and should provide answers to many of these related questions.

Nancy Dengler



Long-tongued bee-fly feeding on coltsfoot.
Photo: Ron Dengler



The hood-like spathe of Jack-in-the-pulpit traps its tiny fungus gnat pollinators.
Photo: Donata Frank

For further reading:

Dickinson, T., Metsger, D., Bull, J., and R. Dickinson, 2004 *The ROM Field Guide to Wildflowers of Ontario,* ROM/McClelland & Stewart

Bull, J. "Pollination Q&A." *TFN Newsletter* #628, May 2017

Pollinator partnership. https://www.pollinator.org

REMINDER OF CHANGING MEMBERSHIP FEES

Just a reminder that membership fees are going up **effective May 1, 2026**. The reasons for the increase were covered in an article in the February newsletter, page 5.

	Current Fee	New Fee
Family	$50	$65
Senior family	$40	$55
Single	$40	$55
Senior single	$30	$45
Print surcharge	$25	$40

TFN membership continues to be an exceptional value, and we hope you will renew this year. Your membership not only benefits you, but also supports the work TFN does in promoting and protecting nature.

INSECT OF THE MONTH: ANTS

Ants (family Formicidae) are a single branch of the aculeate (stinging) wasp family. Although they represent only a fraction of overall Hymenoptera diversity, ants can be found in nearly every terrestrial habitat around the world. Ants are social insects, living in colonies ranging from a few dozen to millions of individuals. They need nests in which to raise broods and, in temperate climates, to overwinter. While the most common perception of an ant nest may be subterranean galleries and chambers, many ants nest in trees and other plants, or at ground level under rocks, logs or leaf litter. Ants in forest or woodland habitats often nest in tree cavities or dead or rotting wood, including branches, stumps or fallen logs.

One such group is the Collared Ants (*Aphaenogaster*), one of the genera in the Myrmicinae subfamily. They can be recognized by a two-segmented waist and a pair of spines on the first abdominal segment. *Aphaenogaster picea* (Pitch-black Collared Ants) are dark brown in colour. Workers measure 4-6 mm in length, with the queen 7-8 mm in length. Colonies have a single queen (monogynous) and up to several hundred workers, nesting in fallen logs, stumps, under rocks or in the ground. *A. picea* colonies are a host for the temporary social parasite *A. tennesseensis* (Tennessee Collared Ant) which is reddish in colour, and slightly larger than its hosts.

Collared Ants are omnivorous, and both of the above-mentioned species forage for insects, particularly termites. *A. tennesseensis* will also tend hemipterans for honeydew. *Aphaenogaster* ants are also the primary seed dispersers of myrmecochorous plants (i.e. bloodroot, trillium, violet, wild ginger) in our woodlands. Workers carry the seeds to the nests for larvae to eat the elaiosomes (lipid-rich appendages). The intact seeds are then discarded, often in a location that reduces predation by rodents and birds, and promotes germination. *Aphaenogaster* ants have a similar mutualistic relationship with oak gall wasps. Some gall wasps produce a cap (kapéllo) on the gall that is nutritionally similar to elaiosomes. When gall-infested leaves fall to the ground, the ants carry the galls to their nests. Larvae consume the kapéllos, and the wasp larvae are left to develop inside their galls in a protected location away from predators and parasites.

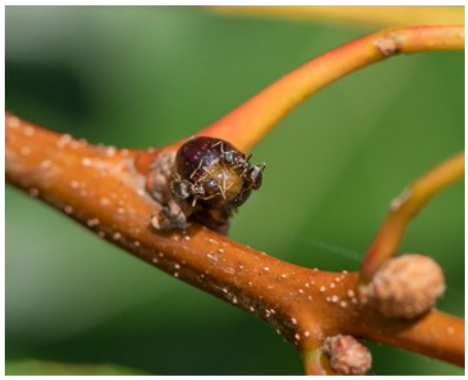
Other woodland ants, Carpenter Ants (genus *Camponotus*) in the Formicinae subfamily, also have a relationship with oak gall wasps. These galls, which develop on twigs and buds, secrete a substance similar to extrafloral nectar that is attractive to carpenter ants. In return, the ants will tend to the galls, keeping other parasitoid insects away. *Camponotus* workers similarly tend aphids, forage for insects, and feed on other plant juices. They nest in rotting or dead wood, chewing nest galleries in branches, logs, tree cavities.

Eastern Black Carpenter Ants (*C. pennsylvanicus*) are relatively large, with queens approximately 2 cm in length, and the largest workers (majors) up to 1.7 cm in length. They are matte black in colour, with light hairs on the gaster (the abdominal segments after the petiole). Colonies are also monogynous, consisting of an average of 2,000 workers. The larger colony size results in greater division of labour, with accompanying variation in size between minors (smaller workers) and majors. Nearctic Carpenter Ants (*C. nearcticus*) are smaller ants, in both body and colony sizes, but their habitats overlap that of *C. pennsylvanicus*. Nearctic Carpenter Ants are a uniform dark brown-black in colour, with workers measuring 4-8 mm in length, queens at 4-10 mm, and colonies containing hundreds of individuals.

Continued on next page



Collared Ant. Photo: From *iNaturalist*



Carpenter Ant workers feeding on oak gall. Photo: Lillian Natalizio



Eastern Black Carpenter Ant. Photo: Ken Sproule

ANTS *continued*

Differentiating Ants from Other Hymenoptera:

Ants retain the basic wasp body plan, so it may be difficult to distinguish them from the winged reproductives (alates). Key features to look for are the ants' smaller compound eyes and elbowed antennae. Ant waists are also segmented, with one or two nodes (petiole, post-petiole).

The majority of ants in Toronto belong to one of three Formicidae subfamilies, differentiated by their defence mechanisms and waist structure.

- Ants in the largest subfamily Myrmicinae have stingers and inject venom, and their wasp-waist is divided into two segments.
- Ants in the subfamily Formicinae have an acidopore, instead of a stinger, from which they spray formic acid, often following a bite. Like ants in the subfamily Dolichoderinae, Formicine ants only have a single waist segment.
- Dolichoderine ants have neither a stinger nor an acidopore. Instead, they have a slit at the tip of the gaster from which they can release offensive chemicals

Lillian Natalizio



Reproductive Ant on Jewelweed.
Photo: Lillian Natalizio

UPCOMING JUNIOR NATURALISTS' EVENTS

We're looking forward to more exciting programs for Toronto Field Naturalist Juniors (aged 6-14 yrs). We hope many of you can join us on Saturday mornings, most often from 10 am until noon. An adult must remain with their children for the duration of the program. Once registered, you will receive invitations to our events with detailed instructions on the location and activities. Register at: https://tfngo.to/join-juniors

May 23:	Join the Toronto Bird Celebration and enjoy the peak of the songbird migration at Colonel Sam Smith Park.
June 6:	Meet Robert and Deirdre Bean at Earl Bales Park; observe active bird boxes and learn about *Nestwatch.*
Sept 12:	Discover the fall birds and butterflies at Todmorden Mills and Crothers Woods
Oct 3:	Experience the Hawk Watch and explore the oak savannah and Grenadier Pond at High Park
Nov 14:	Find the bones inside an owl pellet and reconstruct its rodent prey

JUNIOR NATURALISTS

NORTHERN MOCKINGBIRD

In March, the Toronto Field Naturalist Juniors met at Tommy Thompson Park to learn about identifying different bird species by listening to their songs, and how technology tools like the *Merlin* app can help. However, one bird we saw that day reminded us that you can't always trust your ears to make a positive ID.

Between trees filled with Red-winged Blackbirds, robins and an occasional cardinal, up on a telephone wire, sat a medium-sized grey bird that started to sing. Suddenly, we heard a Mourning Dove cooing, and a Belted Kingfisher singing somewhere unseen; then there was a Killdeer, and a White-throated Sparrow, and then, was that a car alarm? Trying to look for the birds made us realize that the only bird singing was the Northern Mockingbird, which is a mimic. It incorporates into its verbalizations many sounds — from the songs of other birds and sounds of other animals, such as dogs, cats and frogs, to human-created noises like car alarms or sirens.



Northern Mockingbird. Photo: Ken Sproule

Northern Mockingbirds can learn approximately 200 different songs over their lifetime, with older birds having a larger repertoire than younger ones. Scientists believe that the females prefer males that have a larger, more varied repertoire, so adding the songs of other birds, as well as sounds frequently occurring in their environment, is helpful in attracting a mate.

While one of the more famous mimics, the Northern Mockingbird isn't the only species capable of imitating other birds. Others of the Mimidae family are mimics as well, including the Gray Catbird. Brown Thrashers, at 1,000 songs, hold the record for the largest repertoire in North America, Even birds that you might not think of as mimics, such as Blue Jays and crows, can imitate other birds. Blue Jays frequently mimic Red-tailed Hawks, sometimes to warn other birds that there is a predator in the area, and sometimes to scare off birds (or squirrels) from a food source.

So go out and take a listen to the birds this spring. You might be surprised to find out who's doing the singing. And a car alarm? It might just be the Northern Mockingbird.

Vanessa McMain

THE CEDAR WAXWINGS' COURTSHIP DANCE

May – the month Toronto waits for all year long! Blossoms gather at branch tips, insects drift into the warming air, and birds that only weeks ago sang from bare perches now move through a fuller, more layered world. Courtship, once announced in song, begins to take on quieter, more intricate forms. Among the most elegant of these is that of the Cedar Waxwing.

On an overcast day last spring, I caught a charming moment between two waxwings perched high in a cottonwood tree*. Between them passed a small green capsule – one of the tree's seed pods, not yet opened.

One bird hopped toward the other and offered the capsule. The gesture was reciprocated – the gift accepted, a hop away, then offered back. Again, and again, the object moved between them, each exchange marked by a small sideways step, sometimes with bills touching, as though tracing a shared rhythm.



Cedar Waxwings courtship display. Photo: Kaliopi Nikitas

Each time the item changed bills, the receiving bird turned its head slightly away before offering it back – a consistent, almost deliberate gesture, as though the exchange required both presentation and pause.

This behaviour – often called the "courtship hop" or "courtship dance" – typically involves the passing of a small item: a berry, a flower petal or an insect. The offering is exchanged back and forth, sometimes dozens of times, before the sequence ends, often with the female consuming it. The repetition is part of the ritual – a quiet, bond-building exchange between two birds on the verge of pairing.

Watching them, I was reminded of a minuet: small, deliberate steps, a gentle advance and retreat – each movement measured and responsive to the other.

Visually, they seem almost designed for such moments. With their silky plumage, masked faces, and bright yellow tail tips, waxwings carry an understated elegance that sets them apart. In soft light, they can appear almost unreal, as though dressed for a masked ball. As the two birds passed that small green capsule back and forth, their movements felt choreographed, almost ceremonial, yet easy to miss if you weren't looking directly at them.

Unlike many songbirds, Cedar Waxwings nest later in the season, often waiting until late May or June when fruit and insects are more reliably available. Their timing, like their behaviour, feels attuned to abundance – arriving, not at the first sign of spring but when the landscape has begun to offer something to share.

As waxwings move through Toronto's treetops this month, their presence may first be noticed as a soft, high call or the sudden appearance of a small flock settling into a tree. If you pause long enough, you may witness something quieter: two birds facing one another, a small object between them, a gentle step forward and back.

A simple exchange, repeated, until it becomes something more.

You can view Kaliopi's video of this behaviour at:
https://www.youtube.com/watch?v=EHPqy8Vb2_0

Reflection Prompt

If you come across a group of Cedar Waxwings, take a moment to look more closely at the individuals within it. Courtship does not always happen apart from the flock; it can unfold right in the midst of it, easy to overlook unless you linger.

What happens when your attention shifts from the group to the quiet exchange within it?

Kaliopi Nikitas

*Correction: I have now learned that the tree referred to in this article and in my video is actually a black walnut, from which the waxwing is offering a flower.

You can follow Kaliopi at:
https://www.youtube.com/@BirdingwithKaliopi

AT THE TABLE: FOUR CITY PROJECTS TFN IS FIGHTING FOR RIGHT NOW

Most of our members know Toronto Field Naturalists for our wonderful guided walks, photography and education programs. But there is a lot of work happening behind the scenes. Our Advocacy Committee works tirelessly to encourage environmental change in four key ways:

1. **Stewarding Tips:** Encouraging behavioural changes that protect our local ecosystems.
2. **Mobilizing:** Asking members to take direct action, such as signing petitions or writing to representatives.
3. **Amplifying:** Boosting the "Take Action" initiatives of like-minded environmental organizations.
4. **Voices at the Table:** Sitting on City committees to advocate for nature-based solutions in urban planning.

While the first three points are visible in our newsletters, today I want to pull back the curtain on point number four. Because of our long history with city-run programs, TFN is a trusted voice often consulted on major municipal projects.

Here are four critical projects where TFN is currently at the table:

- *Toronto Island Master Plan*: The Island holds six of the city's 89 Environmentally Significant Areas (ESAs). We have been at the City's Master Plan tables, speaking up for the Island's amazing, fragile habitats since the fall of 2020, and have kept our members engaged through blogs such as this one.

- *Scarborough Bluffs West Project*: In partnership with the City and the TRCA, we are engaged in the Environmental Assessment for the western bluffs. Our goal is to ensure that the sensitive shoreline and the two ESAs (Scarborough Bluffs Sequence and Bellamy Ravine/Sylvan Park) are properly protected as waterfront access is improved.

- *Queen's Park North Revitalization*: As the city's oldest park undergoes a $50 million revitalization, TFN is working to ensure its most important features – the old-growth trees – are maintained. We are advocating for new native species and the protection of the critical forest understory.

- *Tommy Thompson Park Visitor Experience Plan*: As visitor numbers grow, we are working with the city to manage the "human footprint." We want to reduce user conflicts and improve the experience while ensuring the natural habitats remain the priority.

Advocacy of this type is about playing the long game – sitting through many meetings and raising concerns to influence the final direction of a project. It can be frustrating, so it is important to keep a positive attitude. Spending time in nature is the best source of energy, but I also rely on two other sources that share positive environmental news to show what is possible: *Your Monthly Dose of Good News* (which covers environmental and medical wins) and the *Reasons to be Cheerful* website, which highlights positive change around the world.

Advocacy isn't always fast, but it is essential. We are proud to be the voice for the trees, the bluffs, and the ESAs that make Toronto a 'City within a Park.'

Peter Smith

IMPROVED TTC ACCESS INTO HIGH PARK

Since limitations to vehicle access to High Park were introduced a couple of years ago, it has been difficult for many people to access the park.

TTC has announced that bus route 203 will service the "High Park Loop", travelling from the accessible High Park subway station south on West Road, returning north on Colborne Lodge Drive from 8 am to 7 pm, enabling visitors to reach the centre of the park. For details see: https://tfngo.to/bus203.

From March 15 to October 31, this service will apply on weekends and holidays.

From May 4 to September 4, it will also apply on weekdays.

EXTRACTS FROM OUTINGS LEADERS' REPORTS

Humber River Trail, Scarlett Mills to Old Mill, March 20. Leader: Lillian Natalizio. On this first day of spring, the rain stopped just in time for the start of the walk, but the water was still flowing rapidly in the Humber River, and puddles and mud were plentiful. We followed the trail from Scarlett Rd, with a short detour through Lambton Woods, to Etienne Brulé Park.

There was a small group of Common Mergansers with two female Common Goldeneyes around Scarlett Mills Park, but other waterfowl seemed to be avoiding the river. We saw Hairy and Downy Woodpeckers, and dozens of robins, some of which were singing, along with several cardinals. Large numbers of male Red-winged Blackbirds were making by far the most noise. Also heard were a few crows, a pair of ravens, and a few Red-bellied Woodpeckers. We had a brief sighting of a coyote, and there was fresh evidence of beaver activity both at Lambton Woods and near Magwood Park.



Skunk Cabbage:
Photo: Myrna Markovitch

Some silver maples had started flowering, and skunk cabbages had emerged along streams and swamp sites.

East Don Parklands, March 29. Leader: Zunaid Khan. We explored meadows, wetlands and forested areas, and discussed work being done in the area by Toronto Water and Urban Forestry. Proceeding towards Finch Avenue, we talked about buckthorn removal and the impact of phragmites on wetlands.

Sightings included Red-tailed Hawk, Northern Cardinals, Blue Jays, Mallards, American Kestrel, Brown Creeper, Hairy and Downy Woodpeckers, robins, White-breasted Nuthatch and Black-capped Chickadees.



American Kestrel
Photo: Chris Sasakai

Celebrating Women on the Lanes Place (Subway Series), April 4. Leader: Joanne Doucette. The Markham St entrance to the subway has a large Anishinaabe mural featuring, among other things, a bear and her cubs. So I told the Mi'kmaq story of *The Little Lost Boy and the Bears* (very different from *Goldilocks and the Three Bears*).



Joanne Doucette sharing Mi'kmaq story.
Photo: Paul Overy.

We talked about our first lane – Eleanor Ross Lane – and then moved south. The first hour of our walk was under a cloudy, dark sky. Then the heavens opened and the winds blew, scattering loose objects, leaves, etc., so we were not able to cover all the lanes, but did stop at Loretto, Elizabeth Balmer, Alan Borovy, Jewish Folk Choir and a few others. We saw black locust, honey locust and silver maple trees. People were interested in the symbiotic relationship between mammoths and the honey locust. Despite the weather, it was a great group and an interesting experience.

LOOKING BACK 50 YEARS: REFLECTIONS ON THE APRIL 1976 NEWSLETTER

A dip into our newsletter for April 1976 – a date plucked from a hat, so to speak – shows that Toronto Field Naturalists, both then and now, encourage the love and protection of our natural world while having a bit of fun as well.

Learning about nature: The featured column *Identi-points for the Beginning Birder* gave dedicated novices a detailed checklist of birds' physical characteristics, calls, and behaviours. Not only would this help with their identification, but it would also show new birders just what to look for and what information was less important.

Now: Today's instant ID using a smart phone might be faster, but does it enable a new birder to gain the ability to distinguish different species? Perhaps the many excellent field guides now available and websites such as the *Merlin Bird ID* app are more beneficial for long-term learning.

Sharing a love of nature: Long before PowerPoint presentations, members enjoyed nature-based slide shows. The April '76 issue announced a meeting to demonstrate using a multi-projector set-up and other equipment to enhance public slide presentations.

Now: With the benefit of technology, we are able to give professional quality presentations at public libraries (such as the one about Toronto's ravines given by Ellen Schwartzel in March) and to reach a broad audience via Zoom with our monthly lectures.



Goldfinches feeding. Photo: June D'Souza

Junior Club: The newsletter announced this group's monthly meeting at the ROM. Originally formed in 1923, the Junior Club was instrumental in inspiring many future naturalists.

Now: Thanks to the dedicated leadership of Anne and Jim Purvis, we have a thriving Junior Naturalists program of monthly field trips that aim to ignite in young people an appreciation of nature and a desire to protect it.

Environmental Awareness and Advocacy: In his *President's Corner* column, Bill Andrews encouraged members to urge their federal, provincial and municipal representatives to protect the environmentally valuable Oshawa Second Marsh from secretive and aggressive plans to expand Oshawa Harbour. Interestingly, he noted that letters from individual concerned citizens would be taken more seriously than those from a nature group.

Now: Oshawa Second Marsh is a well-recognized wildlife refuge adjacent to McLaughlin Bay Wildlife Reserve. This success story should give encouragement to TFN in our continuing efforts to preserve Ontario Place, Toronto Islands and other natural areas.

News: The April '76 newsletter re-published news that both Rennie and High Parks had lost much of their amphibian and aquatic life, due to toxic spills (Rennie) and reed habitat destruction resulting from Parks Department "improvements" of the water's edge with stones (High Park).

Now: The stones have since been removed and the area remediated. However, today we are faced with the challenge of eradicating phragmites. Also, in her Outings Leaders Report of a recent walk in High Park, Ellen Schwartzel drew attention to a decline in the diversity of fish in Grenadier Pond in recent decades, and the death of dozens of fish in the melting ice on the pond in March 2025 – a sign of winterkill (page 12 of April 2026 newsletter).

***At This Particular Moment*:** In his article in the April '76 newsletter, Harold Garner decried the tendency of some naturalists to focus too much on the numbers of species sighted. He recommended taking time to observe interesting aspects of nature happening at the moment, such as "two goldfinch, males in changing colour plumage, clinging precariously to the top of a weed, feeding on the seeds".

Now: Kaliopi Nikitas' bird articles not only inform us about the appearance and behaviours of birds, but also share magical moments she has experienced watching them.

These are only a few of the items from the April '76 newsletter https://tfngo.to/april1976newsletter. It is interesting to note that, while some of our methods may now be different, our objectives are the same, and we face similar challenges.

Charlotte Broome and Wendy Rothwell

IN THE NEWS

Conservation Successes

The Spring 2026 issue of *ON Nature* notes two recent conservation successes: the protection of the Carden Alvar (in the Kawarthas) and the expansion of Sauble Dunes Nature Reserve (near Lake Huron).

Carden Alvar Saved from Solar Power Development: With its flat limestone landscape unimpeded by trees, the Carden Alvar seemed the perfect place for an industrial solar park, until Couchiching Conservancy, several groups in Ontario Nature's Nature Network and the local community banded together to protect the unique and fragile ecosystem.

See: Group successfully defends Carden Alvar. *ON Nature*, Spring 2026, p. 35 https://catalog.ontarionature.org/spring-2026/page/34-35

Sauble Dunes Nature Reserve Protects Additional Sensitive Areas: Originally a memorial donation of 51 hectares, recent donations have allowed the globally rare coastal dune habitat of Sauble Dunes Nature Reserve to expand. Its 77.8 hectares now encompass not only the dunes which gave the area its name, but also mixed forests and wetlands of fens and swales. Ontario Nature, Owen Sound Field Naturalists, Saugeen Ojibway Nation and local volunteers will steward the delicate ecosystems to control invasive species and help at-risk species. The public will not have access to these protected, easily damaged lands.

See: Sauble Dunes Nature Reserve expands northward. *ON Nature*, Spring 2026, p. 16-17 https://catalog.ontarionature.org/spring-2026/page/16-17

Raccoons just like to solve puzzles

Raccoons have long been known for their curiosity, intelligence, and hand dexterity, all of which they use to raid 'raccoon-proof' garbage bins, among other activities. But is food their only motivation?

In a UBC study, captive raccoons given a multi-access puzzle box with one marshmallow inside quickly figured out ways of getting to the reward – then continued to investigate any remaining knobs, sliding doors, handles and latches seemingly just for the sake of doing so. The puzzle box had nine entry points, ranging in difficulty from easy to challenging. As the 20-minute test sessions became harder, many raccoons returned to their tried-and-true methods of reaching the marshmallow but, notably, others explored the more difficult solutions.

The study's authors described this behaviour as 'information foraging', as no bonus food was given for their continuing work on the puzzle. They suggest that this curiosity, along with their sensitive forepaws, gives raccoons an advantage as they adapt to human-influenced environments. It is not known to what extent wild raccoons may share these traits, but previous research has confirmed that they also problem-solve.

The study was published in the journal *Animal Behaviour*.

Source (with video): https://tfngo.to/raccoonslikepuzzles

Charlotte Broome

PHARMACISTS' SERVICES

Did you know that pharmacists can prescribe medications for some common ailments that might affect people who spend time outdoors?

Specifically, pharmacists can now offer prescriptions for:

- tick bites (post-exposure prophylaxis to prevent Lyme disease)
- sprains and strains (musculoskeletal)
- insect bites and hives
- hay fever (allergic rhinitis)
- dermatitis (atopic, eczema, allergic and contact)

You need to show your OHIP card, and the cost of the medication is either paid directly or through your drug benefits plan.

For other ailments that pharmacists can treat, see: https://tfngo.to/pharmacistservices

Lynn Miller

WEATHER THIS TIME LAST YEAR

May, 2025

May featured relatively cool and wet conditions. This was in contrast to the hot, dry conditions that were found in the Prairie Provinces and contributed to severe forest fires reminiscent of 2023. The monthly mean temperatures, 13.6˚ downtown and 13.2˚ at Pearson Airport, were about 0.7˚ – 1.0˚ below the 30-year average and well below the trend line of rapid warming since 2015. Rainfall was 98.9 mm downtown and 78.3 mm at Pearson. This was 27 mm above normal downtown and 4.5 mm above normal at Pearson. While neither the temperature nor rainfall had big deviations, it *felt* cool and wet, largely because of cool weather in the first and final thirds of the month. A warmer period mid-month, just preceding the Victoria Day weekend, partly offset this.

The highest temperature for May was 27.5˚ on the 16th at Pearson. This marked the eastern edge of the Prairie heatwave, which diminished in intensity as it moved east and faded. Winnipeg attained a staggering 36.9˚ on May 13th: an early-season record. The GTA's coolest reading was 2.0˚ in North York on May 9th. It got down to 3.2˚ as late as May 20th at Pearson. Heavy rain and chilly east winds on the 21st to 23rd brought upwards of 50 mm of rain downtown – somewhat less further away from Lake Ontario – and daytime temperatures below 10˚. The high was 9.2 downtown.

These conditions reminded me a bit of 1980, which also featured anomalous heat in the Prairie Provinces with forest fires and chilly late spring conditions in Ontario. Winnipeg also hit 37˚ in May 1980 (a few days later than in 2025) but the spring heatwave lasted longer that year.

June, 2025

June was changeable and generally dry. Cool weather at the beginning and middle of the month was offset by a short but intense heat wave from the 22nd-25th, which brought monthly averages slightly above normal. The average temperature was 20.9˚ at both Pearson and downtown, which is 1.4˚ above normal for Pearson and 1.0˚ above normal downtown.

Total precipitation was 29.5 mm downtown, significantly below the normal of 79.8 mm. Pearson was a bit wetter, with 55.7 mm (normal is 79.9 mm). Much of the rain fell on the 18th. We had forest fire smoke at times, notably on the 2nd-3rd. This seems to be a regular feature in recent years.

There was quite a range of temperature. We had the coolest June mornings since the 1990s on the 1st and 2nd. Pearson dropped to 4.9˚ on the 1st (coldest June temperature since 1994), while downtown dropped to 6.6˚ on the 2nd, the lowest since 1998. North York got as low as 4.0˚. On the other hand, the heat wave peaked with a new monthly record set downtown of 36.5˚ on the 24th (which broke the 1964 record by one tenth of a degree). Pearson hit 36.0˚ on the 23rd – not a monthly record, but close to the 36.7˚ set in 1952. There were cloudy and much cooler conditions from the 26th to 30th.

July, 2025

July was fairly hot with variable rainfall. Areas to the west and northeast were wetter, while downtown was relatively dry.

Around half of the days had maximum temperatures in the low 30s (16 days downtown and 13 days at Pearson – somewhat unusual because downtown tends to have lower maximum temperatures in summer, being closer to the lake). These days were dispersed evenly through the month. The hottest reading was 35.5˚ in North York on the 24th, while Pearson's hottest was 34.5˚ on the 6th. Downtown's highest reading was 33.3˚ on the 27th. Thus, persistence rather than record-breaking temperatures was the predominant theme of the month. We had breaks on the 7th-9th, 17th-23rd, and 31st. The intrusion of cooler air just after mid-month provided our lowest readings on the 18th: 14.5˚ downtown, 13.3˚ at Pearson, and down to 9.6˚ at King City North. The monthly mean temperature was 24.4˚ downtown, tied with several other years (including as far back as 1868) for 6th place. Pearson had a mean of 23.9˚. These means are 1.7˚ and 1.6˚ above the 30-year average respectively (1996-2025).

Downtown was the driest weather station with 52.3 mm total rainfall, which came after a dry June. The 30-year average is 77.8 mm. On the other hand, Pearson had 96.1 mm, which is slightly above normal, and King City North had 132.0 mm. Most of the rain came during the cool intrusion, when the dominant subtropical high pressure was pushed aside allowing frontal systems to arrive. Most of the month's rain fell during a morning thunderstorm on the 20th: 31.5 mm downtown and 48.1 mm at Pearson. Thus, some neighbourhoods were falling into drought, while others remained fairly green.

Continued on next page

SHARING NATURE ENCOUNTERS



As a child and teenager I spent hours and hours lying flat on my back, well away from a Killdeer's nest as she sat on her eggs and cared for her hatchlings. She knew I was there but, as years went by, she simply ignored me. This didn't lure me into going closer; my parents had told me that might cause her to abandon her nest.

This recent painting, done in Corel PhotoPaint, took me three weeks and over 100,000 individual strokes of the digital paintbrush. No AI was used. It is based on my memory and dozens of photos, plus a few videos. If you enlarge the image you will see the brush strokes and the great variety of colours. I work this way because it allows me to apply layer upon layer of colour, making the work more complex and vibrant, while taking me further and further away from my sources and into a more dream-like world.

Joanne Doucette

Mouse vs. Cheetah

One night in late February, when there was an icy crust on the snow, I saw a mouse zipping around in our back yard. It was taking a zigzag route, and each zig or zag was three or four feet long, and was executed by the mouse in, I would say, less than half a second.

The cheetah, the world's fastest quadruped, has been clocked at 70 mph, or 103 feet per second, and since it has a body length of about four feet, that works out to 26 body lengths per second. This mouse, I would say, had a body length of about two inches. So, for a three-foot zig or zag, it was doing at least 36 body lengths per second, and, for a four-foot one, at least 48 body lengths per second. It was amazing. Zip, zip!

Don Roebuck

WEATHER *continued*

July did not bring severe thunderstorms, although there was a decaying squall line on the 24th. Smoke from forest fires in Saskatchewan, Manitoba, and northwestern Ontario showed up from time to time, notably on the 14th to 15th.

August, 2025

August was hot and humid with occasional forest fire smoke for the first half of the month, but turned much cooler during the second half. Of the first 16 days, six had a high of 30˚ or more, with the hottest weather on the 10th-12th. Pearson hit 34.7˚ on the 12th.

A sharp turn to cooler, wetter weather occurred after the 16th, with cold fronts, occasional rain, and cloud cover. By the 28th-29th, we had some of the coolest August days in years, with high temperatures below 20˚ and minima below 10˚. Downtown's low of 9.3˚ on the 29th was the lowest reading for August since 2000. King City North had a minimum of 6.6˚. Overall, things balanced out, and August had a mean temperature at or just below average. Downtown's mean was 21.7˚ (the same as last year and 0.3˚ below normal), while Pearson had a mean of 21.4˚, exactly on the 30-year average.

Total rainfall was also close to normal: 57.9 mm downtown (just 6 mm below normal) and 66.7 mm at Pearson (1 mm below normal).

Summary:

The summer as a whole was relatively warm, with a mean temperature for June to August of 22.3˚ downtown and 22.0˚ at Pearson. These values are not quite a degree above the average of the past 30 years, and are in the top eight to twelve summers on record. Rainfall was near normal at Pearson with 218.5 mm (average is 227.4 mm) but drier downtown with 139.7 mm (average is 221.8 mm). It was the driest summer downtown since 2007, which had 110.7 mm. As a result we had local drought stress across the Toronto area. Even in places that had closer to normal rainfall, there was high evaporative demand during the longer dry periods.

Gavin Miller

ABOUT TFN

TFN is a volunteer-run non-profit nature conservation organization.
We connect people with nature in the Toronto area, helping them to understand, enjoy, and protect Toronto's green spaces and the species that inhabit them.

BOARD OF DIRECTORS

President, Outings and Volunteer Coordinator:	Lynn Miller
Past President:	Zunaid Khan
Treasurer:	Fatima Abrar
Vice-President:	TBD
Advocacy:	Michèle Macartney-Filgate
Junior Naturalists:	Allison Best
Lectures:	Phillip Jessup
Stewardship:	Lillian Natalizio

At Large: Donata Frank, Jessica Iraci, Lam Tran, Lynn Short, May Massijeh,

NEWSLETTER

Toronto Field Naturalist (ISSN 0820-636X) is printed on 100% recycled paper. Printing: Digital Edge Printing & Media Services.

Views expressed in the newsletter are not necessarily those of the editor or Toronto Field Naturalists.

Members are encouraged to contribute letters, short articles and digital images. Please email to: newsletter@torontofieldnaturalists.org

Submissions deadline for September: August 4

CONTACT US:

Email: office@torontofieldnaturalists.org
Email addresses for specific queries: https://torontofieldnaturalists.org/about-tfn/contact-us/
Website: https://www.torontofieldnaturalists.org
Mailing Address: 2 St Clair Ave W, 18th Floor, Toronto, ON, M4V 1L5

TFN LECTURES

Each year TFN offers eight free talks (from September to May) by noted experts, exploring everything from nature in the city to global environmental issues. Starting in March 2026, these talks will be presented Tuesday evenings at 7 pm. They are usually 45 minutes in length followed by discussion. Visitors are always welcome. TFN Members have access to recordings of past lectures via our *Members Only* website.

Learn about this month's lecture on the back page.

You may join the May lecture via Zoom. The link will be posted on the Lectures page of TFN's *Members Only* and public websites. If you prefer, you can dial in to the lecture by phone:

Dial in: 1 780 666 0144 Meeting ID: 870 8511 3902 Passcode: 434210

FOCUS ON NATURE – CIRCLES AND OVALS

The March challenge for TFN's Photography Group was Circles and Ovals. This exceptional image of the moon was created by Gerry Zeit.



March 1st was cold and crisp with temperatures dipping to -19˚ overnight. The moon shone full and bright in the clear sky and I could make out several features of the cratered surface. This idea of circles within circles turned out to be a common theme when the group gathered by Zoom to share our images. I took about 20 shots that night, both for the photo challenge and as practice for the eclipse, due a few nights later.

This image was taken with a Canon R7, cropped sensor camera, tripod-mounted with image stabilization turned off. I used a Sigma zoom at 600 mm and selected a raw image taken at F11, 1/500 sec and 1600 ISO. I processed the raw image with DXO PureRAW5 to reduce noise and made some other minor corrections before moving on to Lightroom. There I cropped the image to fill the frame, converted it to monochrome and finally adjusted the exposure, contrast, highlights and shadows to bring up as much surface detail as I was able.

I especially like how the craters on the bottom surface of the image stand in relief, being captured at such a low angle.

Gerry Zeit

If you would like to join the Photography Group, email photography@torontofieldnaturalists.org.

TFN LECTURE

Tuesday, May 5, 7 pm - via Zoom. See page 23 for information

The Role of Toronto's Tree Canopy in Urban Resilience



Kim Statham, Director of Urban Forestry for the City of Toronto, will provide an overview of the City's tree planting and stewardship programs, examine the health and maintenance of the urban tree canopy within the context of intensification pressures and competing infrastructure demands. She will also explore the City's approach to native species selection and the use of locally sourced seed stock as part of its long-term strategy for urban forest resilience.

Upcoming Lecture:

Tuesday, Sept. 8, 7 pm. The Wild is Calling – Reconnecting to Nature, Right Where We Live.
Dr Nadina Galle