



Since 1923

TORONTO FIELD NATURALIST

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Wood duck on Grenadier Pond. Photo: Theresa Moore

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PRESIDENT'S REPORT

For weary months, Toronto botanists have had to content themselves with studying bark patterns from the sidewalk. Norway maple... silver maple... Norway maple again. As April unfurls, though, our horizons grow too. In the ravines, we find red osier dogwood glowing, as if lit from within. Patches of bloodroot offer the first blossoms. By mid-April, we are frowning at bold crinkly leaves of garlic mustard. And then suddenly, trilliums.

Toronto Field Naturalists can also welcome several figurative April blossoms, beginning with a new host for our radio show, *Toronto Nature Now*. Thanks to a happy partnership with Ryerson Radio over the past two years, Bryce Turner has admirably hosted nearly 120 episodes, introducing dozens of contributors to the air waves. The topics, ranging widely from the ecological to the quirky, have chalked up over 7,500 cumulative listens in podcast form. Now Bryce is stepping back, and has recruited Pelly Shaw as our new host. Pelly, a news reporter with CJRU, is passionate about nature and the environment, and we are delighted to have her debut in April. Meanwhile, why not browse the wealth of past episodes at <https://tfngo.to/toronto-nature-now> for whimsical refreshers on local nature lore. Our many enthusiastic contributors and Paul Overy, who coordinates it all, are greatly to be thanked for their creativity and vision.

Our April lecture will nudge us towards new thinking on diversity and inclusion in naturalist communities. Toronto is deservedly known as a multicultural metropolis. But is that range of diversity fully reflected on our nature trails?

If not, how do we grow into a more inclusive community? How do we live more fully into our mission of connecting Toronto's people with nature? Join via our Zoom link on April 11 to hear two U of T PhD students explore ideas about nature and belonging, with a focus on Black and immigrant communities. For details, see back cover.

This spring may also bring fresh approaches to Toronto's ravine stewardship groups. TFN hopes very much that the City will agree to an approval framework enabling ravine volunteers to carry out weeding, cleaning and planting with enhanced autonomy. If you enjoy helping on planting days or litter clean-ups, see page 13 to learn what changes are being proposed and how this framework may evolve.

As an example of responsible volunteer stewardship we need look no further than TFN's Cottonwood Flats Monitoring Project. Over a multi-year period, this citizen science project has engaged teams of volunteers to monitor the restoration of a meadowland site in the Don Valley. Thanks to the indefatigable Jason Ramsay-Brown, the data are also crunched and interpreted. On page 12 discover what our most recent data trends reveal about Cottonwood Flats and its evolving plant and animal communities.

Lastly, you are invited to sharpen your pencils – your coloured pencils to be precise. TFN is pleased to offer members a virtual nature drawing course, purely for pleasure. See details below.

Ellen Schwartzel
president@torontofieldnaturalists.org

THE ART OF MINDFUL DRAWING

Guided by art educator and architect Sandra Iskandar, this three-class course provides drawing instruction using pencils. The focus will be on sketching birds. No previous sketching experience necessary!

Class dates are April 10, May 1, June 5, at 3 pm. There is a maximum of 10 participants, so sign up soon by emailing NatureArts@torontofieldnaturalists.org.

TFN PHOTOGRAPHY GROUP

We are happy to announce the launching of a new photography group for TFN members. It is open to photographers of all skill levels and will cover all types of nature photography. The intention is to enable members to gather online, and in person when public health authorities permit. Group activities will include photo-sharing for feedback, tips, photo challenges and workshops. With this group we seek to promote the values of TFN by fostering and promoting the practices of ethical nature photography.

If you are interested in joining this group contact Zunaid Khan at photography@torontofieldnaturalists.org

TFN OUTINGS

**Alert: Walks have been temporarily suspended.
See website for up-to-date information.**

Due to COVID-19 we continue our practice of offering “members only” outings posted on our website. To ensure that groups do not exceed allowed maximums and to facilitate contact tracing should the need arise, members who wish to attend a particular walk must RSVP. The RSVP facility for each walk opens on the website at a random time of day, five days before the date of the walk. Walk leaders will have a list of who RSVPed, and only people on the list will be allowed to participate. Before RSVPing, please review all guidelines on the webpage and carefully review walk descriptions for any additional guidelines specific to that walk.

As we are unable to list walks in the newsletter at present, an Archive of Past Walks is being maintained for your enjoyment: <https://tfngo.to/pastwalks>

TO ACCESS OUR WALKS LIST

Visit the “Members Only” Section
of our Website

TFN LECTURES

The TFN Lecture Series is now being conducted through Zoom technology. On the scheduled date of each lecture, members will be welcomed into the virtual space at 2:30 pm. The host will introduce the lecture and then play the speaker's pre-recorded presentation (approximately 45 minutes) with accompanying visual materials. Following this showing the speaker will be available to answer questions from the audience through Zoom.

The presentation and follow-up question period will subsequently be posted on our website for viewing by all TFN members.

See information about this month's lecture on the back page.

FOR DETAILS ON
HOW TO JOIN THE LECTURE

Visit the “Members Only” Section
of our Website

TO ACCESS THE "MEMBERS ONLY" SECTION VISIT:

<https://tfngo.to/private>

The password was delivered in the email notifying you that the newsletter is available online.

If you have misplaced the password you can request it by emailing membership@torontofieldnaturalists.org.

AQUATIC SPECIES AT RISK IN THE GREAT LAKES

Presentation by Toronto Zoo Great Lakes Program

Thursday, April 15th at 6:00 pm via Zoom

Speaker: Michelle Anne Olsen, Outreach Technician for Toronto Zoo's Great Lakes Program, who has a passion for conservation education and connecting others with the environment.

Our Great Lakes support a diverse array of plants and animals with rich ecosystems that are unique in the world. They provide us with fresh drinking water, food and recreational opportunities. This session will focus on some of the species at risk in our Great Lakes and our roles as individuals to protect this sensitive ecosystem.

**Details re Zoom access will be posted to
the “members only” section of the TFN website**

NATURE ON THE HILL: TFN'S (VIRTUAL) TRIP TO OTTAWA

Imagine yourself on a snowy February day, magically transported to Parliament Hill, Ottawa and invited to speak for nature in select meetings with federal Members of Parliament. Nature Canada has found a way to make that a (virtual) reality. Nature Canada has engaged volunteers representing 60 nature groups Canada-wide to meet with dozens of MPs and talk about the importance of nature. This year, we two volunteers signed up for TFN's first taste of "Nature on the Hill" <https://tfngo.to/nature-on-the-hill>. Both of us knew Ottawa mainly from the nightly news. How would we fare in the corridors of power? Turns out we were in very good hands.

The Nature Canada team began their "week on the Hill" by connecting us all (via Zoom) in a well-planned orientation. They laid out the goals and context of the "30 by 30" campaign – to protect 30% of Canada's lands and oceans by 2030. That goal needs a firm federal budget commitment of \$4.8 billion over five years, the team stressed. Indigenous-led conservation must also be a core element. Finally, they led us through role-play exercises on how to converse successfully with politicians. Best of all, they armed us with a secret weapon: an oversized button to wear in our meetings with MPs.



The actual meetings were conveniently pre-arranged for us, with MP ridings matched to local nature groups. Having done our homework, including pre-meeting huddles with fellow volunteers, we were ready for Zooming with elected representatives. In our case, we met with Toronto MPs Julie Dabrusin, Nathaniel Erskine-Smith, Ya'ara Saks and Adam Vaughan.

The meetings showed the MPs to be sensitive to the important role protected areas play in helping to address biodiversity loss and climate change. Interestingly, many of them also commented on how the pandemic has highlighted the importance of urban green space. While this is not within federal jurisdiction, it's on their radar.

The outcome for TFN: in meetings with four Toronto-area MPs we were able to introduce the work of TFN and also stress how important nature is to our members. We underscored that federal leadership is vital to protect natural habitats right across this country, from arctic wetlands to Toronto's shorelines. If you would like to join in next year's "Nature on the Hill" campaign, we'd love to have TFN companions to strengthen nature's voice.

Ellen Schwartzel and Laren Stadelman
Contact: president@torontofieldnaturalists.org

LESLIE STREET SPIT CONCERNS

Anyone visiting the Leslie Street Spit this winter may have been intrigued by the appearance of a large white tent at the northern junction of the central spine road and the endikement road. Continuing along the endikement road, visitors would have been further mystified by a large group of vehicles, platforms and other structures east of Cell I. Generators and truck motors were running constantly at both locations, producing noise and fumes. Anyone unlucky enough to have been on the Spit on February 24, 25, 26 or March 1 would have found entry to the endikement road closed to the public.

All this activity was occasioned by a film shoot that took place on the Spit between January and March. Film shoots are nothing new to Toronto, but using the Leslie Street Spit as a location raises serious concerns. The park is a precious urban wilderness and Important Bird Area (IBA), and parts of it are designated Environmentally Sensitive Areas (ESA) – not a place usually associated with the noise, disruption, traffic, habitat destruction and pollution caused by a location shoot on this scale.

Quite how a licence was issued to permit this particular film shoot is something of a mystery. Until recently, such issues were aired before the Tommy Thompson Park User

Group (TTPUG), but the Group was disbanded by the CEO of the Toronto and Region Conservation Authority (TRCA) on October 28, 2020, so this avenue of information no longer exists. Nor was the general public informed. It appears the TRCA and Ports Toronto granted permission, with the TRCA portion of the financial benefit accruing to the park given as justification. The land in question is owned by the Ministry of Natural Resources (MNR) and loaned to Ports Toronto. Ports Toronto is not at all coy about this monetization of the Spit. On their website (<https://www.portstoronto.com/portstoronto/working-with-portstoronto/filming-opportunities.aspx>) they openly invite "filming opportunities" on the Spit for \$2,500 per 12-hour day. According to the TRCA, over the last five years revenue from film shoots has averaged \$5,440 per film for the TRCA, from which TRCA staff monitoring time is paid.

For anyone who values our natural spaces and nature in general, commercial exploitation of this world-renowned urban wilderness amounts to wanton vandalism. It is not as though there are not other suitable city locations that could have been chosen.

continued on next page

LECTURE REPORT

Latest Research on Cormorants and Anthropogenic Debris They Bring to Nests

March 7, 2021

Melina Damian, MES (York), Communications Coordinator for Ontario Nature, Instructor Centennial College on Energy, Environment and Sustainable Development

Environmental scientist and activist Melina Damian's interest in the impact of plastics on the environment began when she was a child and her father told her how plastic straws harmed the animals she loved. Her current research concerns the effect on wildlife of macroplastics (plastic pieces larger than 2.5 cm or the size of a bottle cap).

Single use plastics are one of the world's biggest environmental challenges. Plastics make up 80% of all anthropogenic debris (pollution by human-generated objects) and take 100 to 1000 years to degrade. Even if we dispose of all our plastics correctly, they can still become waste. Only 9% of all plastic has been recycled and 60% becomes trash. Lightweight plastics are easily transported by wind and rain to storm water drains. COVID is increasing the pressure. 194 billion masks and gloves containing plastics are used globally each month. Recycling alone will not solve the problem.

How do plastics affect wildlife? They contain additive chemicals that leach into the environment. They transport pollutants through absorption and concentrate the contaminants. Bioaccumulation occurs and toxins are concentrated at the top of the food chain. Plastics also transport invasive species between ecosystems.

Between 2014 and 2018, 265 species of birds were entangled by or ingested plastics. If eaten, plastic can obstruct the food passage or decrease the feeding stimulus, as the bird feels "full". Plastics cause stomach ulcers, affect reproduction and energy levels, prompt toxicological responses and cause death. A moving YouTube clip from Chris Jordan's film, *Midway*, highlights the issue of ocean plastic pollution and the environmental tragedy taking place among the albatross on the Midway Islands in the Pacific.

Melina studied the "*Incorporation of Anthropogenic Debris into Double-crested Cormorant Nests in Toronto, Ontario*". This cormorant colony, one of the largest in North America, is in Tommy Thompson Park on the Leslie Street Spit. Her goal was to quantify debris in nests and determine if these cormorants could be used as indicator species for anthropogenic debris.

All 50 nests she examined contained anthropogenic debris. 1435 objects weighing a total of 13.8 kg were removed. The most common of these were plastics. It was hypothesized that debris may resemble organic nesting material (rusted metal/sticks).

These cormorants would not be considered good indicators, however. The Park is a human-made peninsula composed of construction waste, so may not be typical of other colony sites.

The good news is that plastic pollution is easier to understand than other environmental issues. As a result, the Federal Government will ban some single-use plastics by the end of 2021, including grocery bags, straws and takeout containers made of hard-to-recycle (black) plastic. The Government also recommends the use of non-medical COVID-19 masks, and wearing a non-disposable is best.

Melina stressed how we must re-evaluate our consumption habits. We can make changes that reduce our need for plastics, including using refillable water bottles, choosing fruits and vegetables that are not over-packaged, etc. She warned us, however, to beware of the "Personal Carbon Footprint" concept promoted by British Petroleum in 2005. While individual changes are very important, this detracts from holding corporations accountable for their activities. While examining and changing our consumption habits, we must also make our voices heard on this issue in local and federal government consultations.

For information and resources, Google "Toward zero plastic-Canada.ca". To view this lecture, visit <https://tfngo.to/mar2021lecture>.

Nicola Lawrence

LESLIE STREET SPIT CONCERNS *continued*

Further Leslie Street Spit news: The floating pedestrian swing bridge is closed while a replacement bridge is being installed. Completion is slated for April. Until then, the endikement road provides the only access to the southern half of the park (except of course when it is closed for film work). With the combined road traffic from the film shoot, the bridge construction and the Aquatic Park Sailing Club,

the Spit (which theoretically is closed to traffic) resembled the 401 at times. Added to this is the massive increase in public presence on the Spit due to COVID-19, which has led to trail degradation, increased littering, fires and off-trail biking. All these simultaneous shocks to the system amount to a significant and regrettable degradation of the Spit. The city is all the poorer as a result.

Charles Bruce-Thompson

TREE OF THE MONTH: EASTERN COTTONWOOD (*POPULUS DELTOIDES*), REPRODUCTION

Eastern cottonwood is a characteristic floodplain tree that takes advantage of the bright light, abundant moisture and rich nutrients of the riverside environment (“the gift of the Don”). It grows so quickly that, even with a short lifespan for a tree, it becomes one of the largest trees in Ontario, especially in its voluminous, spreading crown. The disadvantage of this environment is its instability. The upstream side of the trunks of cottonwoods growing along the lower Humber River, for instance, bear conspicuous scars where their bark has been scraped away repeatedly by massive ice blocks floating downriver in spring. There is no telling when such trees might be undercut and toppled by particularly violent floods (like the one due to Hurricane Hazel), or even by beavers for whom poplars and willows are favourite foods.

Unlike the intermittent masting reproduction shown by many upland forest trees, there is no boom and bust in seed production of eastern cottonwood. For this species, the uncertainties of the floodplain habitat are accompanied by consistent extravagant annual flowering and fruiting. Like all poplars, eastern cottonwood has separate male and female trees with the female flowering catkins yellowish green and not particularly conspicuous. In contrast, male trees in spring are quite handsome at the onset of flowering, the large, plump, densely-flowered, brilliantly red catkins standing out proudly from the still leafless twigs. After the male catkins are long past, the fruiting catkins of the females become more conspicuous, like strings of green pearls before the pod valves spread open, giving rise to one old common name: necklace poplar.

As the pods burst, cottonwoods live up to their name with exuberance – a fact well known to residents of the Toronto Islands who celebrate the annual disappearance of great puffy drifts of cottonwood fluff as it finally gets blown away or plastered to the ground by rainfall after tangling with spider webs and causing fire hazards. The fluff is

technically known as a coma of cottony trichomes or hairs and very much equivalent to the pure cellulose fibres of unrelated commercial cotton. It is central to wind dispersal of the seeds, providing enormous buoyancy over the long haul as well as locally. Unlike most of our trees, fruit maturation is in the spring, and wind dispersal (like the earlier wind pollination) is promoted by relatively free air flow among trees whose canopies have not yet fully expanded. Seeds of eastern cottonwood are tiny and have no dormancy. They germinate quickly if conditions are suitable and soon die if they are not.

Because cottonwood seeds are so small (about 3 mm long and little more than 1 mm in diameter), they have almost no seed reserves to power their tap root through leaf litter and other layers of organic matter. Hence, successful establishment of seedlings occurs primarily on moist mineral substrates such as the scoured sand- and mud-bars of streams and rivers and further out onto portions of their floodplains laid bare by subsidence of spring thaw floodwaters. These are also sunny places, and full sunshine is exactly what the resource-poor seedlings require from the moment they germinate. The cotyledons (seed leaves) are tiny but, fueled by sunshine and moisture, they quickly generate progressively larger foliage leaves as they become stronger and their root system proliferates through the mineral soil. Among the fifteen native and introduced poplar species and hybrids most likely to be seen in the wild or on neighbourhood walks in Ontario, cottonwood is the only one that does NOT sucker and clone habitually. So any first-year eastern cottonwood sprouts you see are almost certain to be seedlings rather than root-borne suckers – as opposed to the situation found in their cousins, the aspens, among whom seedlings are rare and origin as suckers is the norm for young sprouts.

James Eckenwalder



Male catkins just before pollen release



Necklace-like fruit catkins



Seed catkins bursting with fluff

Photos: Ken Sproule

TORONTO'S IRIDACEAE AND RELATIVES: PART II

Following last month's article, another Iridaceae (iris family) member native to Toronto is *Sisyrinchium montanum* (montane or northern blue-eyed grass). This is one of many very similar species that occur in Ontario and elsewhere in North America. All Ontario species occur mainly in sandy open fields. Their flowers, at the top of up to 50 cm-tall grass-like stems, are about 10 to 15 mm wide. They bloom in late spring to mid-summer. The TFN's *Vascular Plants of Metropolitan Toronto* (1994, 2nd ed.) listed our local species as uncommon, but it occurs from the Etobicoke Creek watershed to the Rouge and also at East Point. *The ROM Field Guide to Wildflowers of Ontario*, 2004, shows it occurring in most ecoregions of Ontario. The US Department of Agriculture Plants database shows its range is all of Canada (except Nunavut) and the central and northeastern US.

S. californium (golden- or yellow-eyed grass) is a coastal species of western Canada and the US. I saw it in a lowland drainage ditch on Vancouver Island. It ranges from BC to California. Other "yellow-eyed grasses" are members of a different family, Xyridaceae, genus *Xyris*. Two species of this genus occur in Ontario but not in Toronto. The "yellow-eyed grasses" are a good example of the perils of using common names!

There are iris family species occurring from southernmost BC to California, and also in Patagonia, which were previously classified as *Sisyrinchium* but now are reassigned to genus *Olsynium*. *O. junceum*, a Patagonian species, is very similar to *S. montanum*, apart from its rose-coloured flowers. *O. biflorum* is a white-flowered species found in the same habitat as *O. junceum*.

Consider our local *Sisyrinchium* as representative of these small iris family members and look for it in Toronto.

Article and photos by Peter Money

Clockwise from top:
Blue-eyed grass (*Sisyrinchium montanum*) and detail,
yellow-eyed grass (*S. californium*),
Olsynium junceum,
O. biflorum



THE FLOWERS THAT BLOOM IN THE SPRING *Tra La!*

What a thrill it is, after the long, cold, drab months of winter, to see the first demure snowdrops poking up through the soil, followed soon by a colourful array of crocuses and perhaps a blanket of blue scilla! It's time to get out into the parks and natural areas of the city and become reacquainted with spring wildflowers. Their blooming season is short, so there is no time to lose. But where should we go? And what are we likely to see?

One way to find out is to review the Extracts from Outings Leaders' Reports in past newsletters, available on TFN's website: <https://tfngo.to/newsletter>. If you want to find a particular flower and don't know where or when it might be in bloom, I suggest you check Ken Sproule's excellent website: <http://toronto-wildlife.com/>. If you need help identifying a wildflower you have seen, <https://www.highparkwildflowers.ca/> allows you to search by colour and glean some information about each plant. Once you have the name of a native wildflower, you can search back issues of the newsletter (link above) to read Peter Money's article about it.

The following list of ten wildflowers that bloom in the Toronto area in April or early May shows some places where they have been seen and, if applicable, the newsletter issue in which Peter Money's article appeared.

Skunk-cabbage (*Symplocarpus foetidus*) Growing in wet places, this bizarre native plant, which generates heat to melt surrounding snow, may bloom as early as March. The tiny flowers are located on a round spadix hidden within the large purple and green spathe. The name refers to its obnoxious odour, which is actually more like the smell of rotting meat, attracting pollinating flies and carrion beetles. (LW, WCP/ Mar2012)

Coltsfoot (*Tussilago farfara*) The earliest splashes of colour in early spring are provided by this sunny yellow flower, introduced from Eurasia. Its common name refers to the shape of the leaves, which do not appear until later. (CW, ETSP, HP)

Bloodroot (*Sanguinaria canadensis*) For me, the appearance of this starry native wildflower, a member of the poppy family found in wooded areas, heralds the arrival of spring. Each flower stalk is protectively surrounded by a distinctively-shaped basal leaf. The flowers re-open each day when exposed to the sun, so don't look for them early in the morning. The common name refers to a red sap in the rhizome and stem that Indigenous peoples used as a dye. (ETSP, GMC, HP, TMWP, TCP, TMC/ May2015)

Sharp-lobed hepatica (*Anemone acutiloba*) One of the earliest plants to flower in the spring, this native member of the buttercup family is found in forests. The solitary flower, borne on a silky hairy stem up to 15 cm tall, may be white, pink or blue. (MP, WCP/Apr2016)



From top: Skunk-cabbage (KS)
Coltsfoot (WR)
Bloodroot (WR)
Sharp-lobed hepatica (KS)

CW	Crowther's Woods	TMC	Taylor Massey Creek
ETSP	E T Seton Park	MP	Milne Park
GMC	German Mills Creek	RM	Rattray Marsh
HP	High Park	TMWP	Todmorden Mills Wildflower Preserve
LW	Lambton Woods	WCP	Wilket Creek Park
TCP	Taylor Creek Park		



Lesser celandine (*Ranunculus ficaria*) Patches of this pretty yellow non-native flower are found in shady damp areas. The plant is not related to the greater celandine but is, rather, a member of the buttercup family. (HP, LW)

Marsh marigold (*Caltha palustris*) This native plant, a member of the buttercup family, forms large clumps in wet places. The flower reflects light in the ultra violet range so that the centre parts appear purple to pollinating insects, guiding them to the nectar. (HP/Dec2010)



Wild ginger (*Asarum canadense*) Growing in rich forests, this native plant has inconspicuous maroon-coloured flowers situated near the ground obscured by large heart- or kidney-shaped leaves. The rhizome has a strong ginger-like aroma and taste, but the plant is not related to the spice ginger. (GMC, LW, TCP/ Mar2015)

Virginia spring beauty (*Claytonia virginica*) Favouring forested areas, this native spring ephemeral completes its flowering before the trees leaf out. The flowers, arranged in clusters, have five white or pale pink tepals with pink veins that guide pollinating insects to the nectar. (CW, TCP/Apr2020)



Large-flowered bellwort (*Uvularia grandiflora*) This native plant, a member of the lily family, is found in rich forests. Its drooping, yellow, bell-shaped flowers grow singly or in pairs on stems up to 50 cm tall. (TCP/May2014)



From top: Lesser celandine (WR)
Wild ginger (KS)
Large-flowered bellwort (WR)

From top: Marsh marigold (WR)
Virginia spring beauty (KS)
Trout-lily (WR)

Trout-lily aka Yellow Adder's-Tongue (*Erythronium americanum*) The yellow flowers of this native plant, a member of the lily family found in forest habitat, are borne singly on a stem up to 20 cm tall. Their six tepals curl backwards at maturity. The common name 'trout-lily' is derived from the resemblance of the mottled pattern on the leaves to a speckled trout. (CW, GMC, RM, TMC, TCP/May2012)

The month of May will bring an even greater abundance of spring wildflowers including violets, wood anemone, white trillium, Jack-in-the-Pulpit, two-leaved toothwort, foamflower, starry false Solomon's seal, wild geranium, sarsaparilla, wild blue lupine, and many more. Enjoy!

Wendy Rothwell

VOLUNTEER PROFILE: ANNE PURVIS

Those of you with young children may be familiar with the TFN's Junior Naturalists Program led by Anne Purvis, (together with her husband, Jim). The TFN historically had a very successful Juniors' program that ran for decades between the 1920s and 1960s. Shortly after Anne joined the TFN Board of Directors in 2016, she rebooted the program. She says, "It's been wonderful for me. When I was raising my six children, I was looking for a program like this, where they could meet and interact with other kids." And while COVID-19 has slowed down a lot of things, TFN Junior Naturalists has been thriving through online classes, which ran weekly for 10 weeks in the spring and fall of 2020. They were expanded to include nature art and nature journaling. For those interested, this program will be back in the spring of 2021 (see below)!

Anne has always had a passion for nature and for kids. Her professional work included running workshops with Scientists in School and tutoring. "Growing up, we had a really outdoor life,"

she says. "We got to know all the provincial parks through camping." Anne continues, "As a teenager, I had a friend whose family owned a farm, and the Bruce Trail ran through their property. We used to hike ten days at a time, and ended up doing the whole Trail." Anne also fell in love with birdwatching after a trip to Point Pelée National Park during spring migration. She says, "I just couldn't believe the variety of warblers, and, in those days, there used to be big flocks of red-headed woodpeckers. I was

blown away." She even spent her honeymoon birdwatching at Rondeau Provincial Park.

"I think one of the biggest effects it's had on me is the importance of land use issues," Anne says. "I have a very deep passion about how land is used in Ontario. I wanted to preserve some of that beautiful natural heritage that we have and that, growing up, I had the privilege of experiencing." Anne got her opportunity and, with her husband, purchased a 180-acre property on the Trent River that they have been stewarding for over 30 years, including monitoring, invasive species management and restoration. "I was growing as a naturalist from being on our property a lot and camping and just learning about different things, and I just really wanted to share that with other people."



This interest was what initially drew Anne to the TFN. "I think there's a depth of knowledge in TFN which is very prized and which I really appreciate," she says. "When I decided to start the TFN Juniors, I had a vision of a program where kids could learn more about habitats and

creatures, and actually go deeper into nature and understand some of the interconnections." She adds, "I think that probably reflects the TFN as a whole." Anne encourages TFN members to become active volunteers. "It's super-satisfying to get involved and work alongside people," she says. "I certainly welcome anyone who is interested in helping out with the TFN Juniors."

Agneta Szabo

JOIN THE SPRING 2021 ZOOM TFN JUNIOR NATURALISTS' CLASS

Sessions are Wednesday afternoons, 5 to 6 pm, April 7th to June 9th

Share photos, create art and do experiments with fellow junior naturalists!

Meet experts. Explore bird language. Encounter amphibians and turtles.

Register for this free program with Anne Purvis: juniortfn@torontofieldnaturalists.org

JUNIOR NATURALISTS

House Finches Get Ready for Spring

Many of us have had a lot of fun watching rosy House Finches sing from the high perches on the telephone wires that they love. Some of us may have discovered them nesting in hanging planters that we never got around to taking down last fall. At our house we have enjoyed watching the lovely rosy finches land in our cherry tree on their way to the black sunflower seeds in our Yankee Flipper bird feeder.

At this time of year, why do they seem to hang out with those much drabber brown striped sparrows hopping around together on the snow? Oh! That striped bird is the female finch and this is a pair of finches, starting on the long journey to nest-building and raising little ones.



Above: Female House Finch
Photo: Ken Sproule

Right: Male House Finch
Photo: Marianne Crutwell

A pair of House Finches starts 'dating' in February and gradually gets more serious around April. Once a pair has settled on a mate, this pair sticks together for multiple broods and sometimes over many years.

In the American West, where the House Finch came from, the first step in pair bonding occurs when ten or so birds form a circle facing inwards on top of a saguaro cactus. This is called a lek. In our area, this has been observed to take place on top of flat buildings. A pair will fly off from this lek. The female may pick a male based on how red his feathers are. Birds cannot make

this red colour; it comes from the food they eat, so this may show the female that this male is good at finding food.

Then the male sings and does butterfly flight to win the female. He slowly climbs to a height of 20-30 feet and slowly coasts back to the perch singing the whole time. Later in courtship the male will hop closer to a female, drooping his wings and swaying side to side with his tail kept high. He is showing off his fancy rump feathers which are held up higher than his head.



Sometimes he carries nest-building material in his beak.

After a few weeks of going on dates of this sort, the pair starts billing. Please check out the [Juniors blog](#) to see a

cute video of this. As a pair perches together, one bird leans toward the other and gently pecks at its partner's closed beak, giving a soft twittering call. The male pretends to regurgitate food as if he is giving it to the female. The female begs by fluttering her drooped wings, tilting her head up, and giving excited call notes. This encourages the male until he actually gives her food.

Pairs take a long time to decide on a partner but, once they do, they stick together for a long time.

Anne Purvis

Reference: <https://birdsoftheworld.org/bow/species/houfin/cur/introduction>

STORIES FROM COTTONWOOD FLATS

This April marks the fifth year of TFN's Cottonwood Flats Monitoring Project (CFMP), a partnership program with the City of Toronto that works to document biodiversity and trends in species abundance in this part of the Don Valley. Thanks to 50+ TFNers volunteering hundreds of hours of their time over these years, we've more than a few interesting tales to tell!

The story of the Flats is that of many natural areas in Toronto: a post-industrial site stitched back in to our natural mosaic by heavy machinery and native plantings, and connected to a network of trails stretching kilometers in every direction. When restoration was completed in 2014, a snow dump had been transformed into a songbird meadow along the Don, encircled by a paved trail that invites all to visit its splendour.

Without influences like herd grazing and fires, meadows are a transient thing. The valley forest hungers for space, and pioneers such as eastern cottonwoods and green ash, both already present on the site, hurry to consume such an expanse of sunlight. But, in the years it will take them to grow from seedling to tree, many other species have time to rise and fall.

As the trucks trundled away from the Flats in 2014, our more aggressive natives like goldenrod, riverbank grape, and staghorn sumac surged but, alongside them, a cast of invasive exotics made inroads as well. Tansy acts like it owns the place, occupying nine of our ten monitoring plots, with numbers as high as 50% plot coverage in some. Crown vetch explodes in two locations, dominating some 55% of space in one plot. A wave of European buckthorn crawls across our southern-most plots. Of the 104 species of plants catalogued in 2019, some 72 were exotics, and even a cursory scan shows invasives make up the majority of the exotic biomass at the Flats.

White sweet-clover once nipped at tansy's heels for the title of most dominant exotic herb. Dog-strangling vine, however, must have muttered some plant equivalent of "hold my beer" because by 2019 DSV had driven that species into third place. DSV has now colonized the three

plots where it was not present back in 2017, and its population is growing everywhere by leaps and bounds. Adding insult to injury, a specimen of *Vincetoxicum* with pale yellow flowers was discovered here in 2018. This may have been white swallow-wort (*Vincetoxicum hirundinaria*) which, according to the Natural Heritage Information Centre is, "Known in Ontario only from a 1904 specimen collected by William Scott from Niagara Falls (TRT; Macoun 1906, Pringle 1973, Scoggan 1978-1979)". In 2019, for reasons no one can explain, we documented

an unusually high number of crown vetch flowers that were white instead of pink, and also an unusually high number of Queen Anne's lace flowers that were pink instead of white. Such colour variations had not been observed in previous years. I mention it as it's a reminder that such things just happen sometimes, as may have been the case with the pale yellow flowers on that DSV specimen.

Despite all this, our native flora does make progress. New England asters appeared in 2018. Heath aster steadily spreads from plot to plot, growing in number.

Sandbar willows have expanded handsomely in one of our central plots. Tall goldenrod endured a one-two punch by drought and fungal leaf spotting with only a momentary stagger. Common milkweed pops up where and when it can.

Our volunteers spend as much time monitoring fauna as flora at the Flats, and are seldom disappointed. From beavers who felled some 20 trees in 2017 to white-tailed deer who bedded down in our plots no fewer than 14 times in July 2019, the Flats draw in creatures both great and small. Cottontails warren and breed in the concrete slabs in plot 7. Voles nibble on green ash saplings. Garter snakes and American toads haunt the grasses and underbrush. All the while, more than a dozen species of butterfly from show-stopping monarchs and eastern tiger swallowtails to the more understated West Virginia whites and little wood satyrs, flit across the tansy and goldenrod.

continued on next page



TFN volunteer Agneta Szabo and staghorn sumac

RAVINE VOLUNTEERS HOPE FOR MORE AUTONOMY

Toronto's ravines and natural areas are wonderful features in our urban fabric. We are blessed with 11,000 hectares of ravine lands, and 60% of those lands are in public ownership. But they are under intense pressure from overuse, invasive species and litter, as well as nearby development and infrastructure projects. City staff and City budgets alone can never hope to deliver all the care that our ravines need and deserve.

Toronto volunteer groups (TFN not least among them) have a strong track record of caring for Toronto's natural areas, from planting events and clean-up days to adopting patches for long-term stewardship. Unfortunately, the requirement for approval and ongoing oversight by City staff has been a bottleneck to scaling up projects. There are simply not enough City staff to oversee all the clean-ups, invasive control and plantings that volunteer groups would and could carry out.

Now a number of people and groups have proposed that the City expand stewardship by offering more autonomy (via a comprehensive permit), to groups obeying agreed-upon conditions. The groups would be led by trained, qualified leaders. The conditions would be in a manual. A draft version of the manual (about 30 pages) was prepared by volunteers, including several TFN members. The proposal was submitted to the City in late 2020. On November 25, City Council directed the Manager of Parks, Forestry and Recreation to review the

manual, consult with the authors, and report back by second quarter 2021 on how to implement expanded, independent stewardship and what it would mean. Of course the vital work of caring for our natural areas necessitates good connections with the City. City Council had a long list of questions, including whether the City will have adequate staffing and budget to make the concept work. Volunteers hope that skills and expertise of City staff can be leveraged to scale up volunteer efforts and restore more of our natural areas. The demand for expanding stewardship has been increasing as we recognize the ecological imperative and the social benefits of our natural areas.

The group now named "Toronto Nature Stewards" is preparing the ground (figuratively speaking) for City Council to approve the volunteer-led stewardship approach, hopefully later this spring. TFN has been supporting the initiative at City Hall. Many TFN members are already knowledgeable, for example, about invasive plants. A survey a few years ago clearly indicated that members wanted more action for the natural environment. This is a direct action initiative! If you are interested, think about adopting a patch of ravine or natural area that needs your help. We hope there will soon be more information about how to get started.

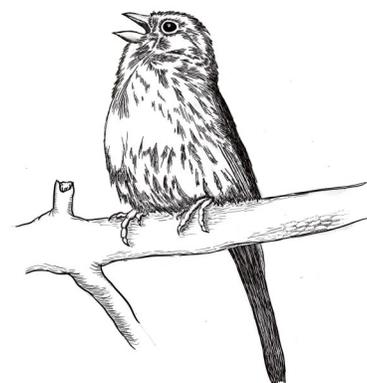
Ellen Schwartzel

STORIES OF COTTONWOOD FLATS *continued*

The Flats' most novel feature is a one-acre parcel fully enclosed by a three-beam fence – an experiment in encouraging ground-nesting birds to make use of the site. For this reason, bird-watching is a huge part of CFMP. While we've yet to be rewarded by the likes of Killdeer or Spotted Sandpiper, our occasional sightings of Chimney Swifts and of Red-winged Blackbirds harassing Red-tailed Hawks bring their own joy. We're almost always treated to the trills of Song Sparrows and flashes of yellow gifted by American Goldfinch. Cedar Waxwings, Blue Jays, Brown-headed Cowbirds, and Northern Cardinals visit us from time to time, as do Downy and Hairy Woodpeckers. And the Tree Swallows that regularly dive-bomb volunteers who tread too close to their nests insist they get mention here as well.

Visitors to the Flats in 2020 will have noticed that the City recently finished construction of a new wetland feature at the southern end of the site. Our monitoring plots are well-distanced from the construction zone, but we certainly expect to see an impact on our study results in coming

years. What previously unseen wildlife might now find the Flats attractive? Could new plant species have caught a ride in on the tire treads of excavators and pickup trucks? And, just as interesting, will the siren call of this new feature help break the previous record for most number of humans (190) or dogs (76) visiting the Flats in a two-hour period? Only time will tell.



Digital ink drawing of a Song Sparrow by David Wallace-Barr

For those of you interested in learning more about our discoveries in the Flats, detailed annual reports of our efforts are available on our website at <https://tfngo.to/cfmp/>. If you're interested in volunteering with the project, please drop us a line at cfmp@torontofieldnaturalists.org.

Jason Ramsay-Brown

WEATHER (THIS TIME LAST YEAR)

April 2020

For the first time since November, Toronto had an extended period of colder-than-normal weather. It was the third April in a row with below-normal mean temperatures, though only by one degree. Downtown had a mean temperature of 6.6° and Pearson Airport a mean of 5.9°. The big story wasn't a significant cold snap as in 2018 or chilly rain as in 2019, but rather a failure to warm up. Somewhat mild and uneventful weather continued from March into early April, but a notable trend to colder weather set in after the 13th. The cold weather that arrived wasn't unusual, but it never really departed. As a result, April had the lowest monthly maximum temperature in decades. At Pearson, the warmest it got all month was 14.8° on the 13th, while downtown the highest reading

was 14.7° on the 8th. It was the lowest monthly maximum for any April at Pearson.

In fact, the month was more pleasant than the above description might imply. Sunshine was plentiful (though it is no longer measured in Toronto). Bright days with extremely good visibility were prevalent. This could have been aided by the reduced industrial and transportation activity due to the COVID-19 pandemic restrictions. It was also dry, as the pattern reversal that flipped away from the mild, wet winter conditions kept active weather suppressed to the south most of the month. Downtown had 56.5 mm of precipitation and Pearson had 41.0 mm. Normal amounts are around 80 mm. Snowfall was negligible; 0.4 cm fell at Pearson.

Gavin Miller

WHAT'S NEW ON TFN'S WEBSITE

Visit today and discover all this and more at <https://tfngo.to/for-members>

- Recording of the March Lecture
- Over 30 edits and revisions all across the website!
- New Junior Naturalists' blog posts

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NEWSLETTER

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Address: 2 – 2449 Yonge St, Toronto M4P 2E7. The office is normally open 9:30 am to noon on Fridays.

Note: If you wish to drop by on Friday, please phone first to ensure that someone will be there.

KEEPING IN TOUCH



My husband and I are participating in this year's *FeederWatch* program hosted by Birds Canada and the Cornell Lab of Ornithology. For two days a week over 21 weeks, we observe, count and submit our findings of birds seen at our feeder. We have a perfect vantage point from our bedroom window and a window sill on which I place my binoculars, camera and a cup of coffee as I sit for whatever time I can commit. One day in February I noticed, landing on our suet feeder, a bird I was not used to seeing. Since it settled nicely for a while, I took many pictures. The coordinator for *FeederWatch* at Birds Canada was able to identify it as a Northern Mockingbird. I had previously observed this bird on a TFN walk, but it had been far away and the lighting was poor, so I would never have recognized it as the same bird. Through this program, we have been able to identify three birds not recognized by us before. *FeederWatch* continues until the first week of April.

Myrna Markovich

A delightful encounter

Squirrels, chipmunks, coyotes and even foxes are seen in High Park. But a *Peromyscus leucopus*? There it was – a lively white-footed mouse wearing a white undercoat, grey/brown topcoat, shiny black eyes and a whip-like tail – darting about the depressions left by footprints in the snow as I strolled through the black oak savannah on a mid-February Sunday afternoon. Undeterred by my presence and my camera, it nibbled on something I couldn't see and broke off small pieces of crusted snow to eat, much like a Popsicle. When it stopped to break off another bite, it curled its long tail around its feet; when it moved, its tail followed behind, doubling the length of the little mouse. It kept on nibbling even when a man walked by with his dog. I thanked him for grabbing onto the dog's collar before it spied and chased the mouse. I watched for a few more moments until it dodged through more snow depressions and disappeared into dried grasses under the trees.



Charlotte Broome



This little Eastern Screech Owl is a charmer! This is the sixth year I've seen it, same hole, same tree. Whenever I see it I feel a sense of calm ... and that's pretty darn nice during these challenging times.

Lynn Pady

The Call of Nature

Better late in the season than not at all, I found a detailed list of washroom facilities in Toronto parks and public buildings open this winter. Too few for the whole city, but still, we are grateful for the winterized washrooms and additional portable toilets. Here is the link: <https://tfngo.to/washrooms>. Hope other TFN members may find this useful.

Paul Overy



Correction

In our report of the Nature Images Show in the March newsletter, we misidentified this turtle photographed by Mac Marzolini. It is a yellow-bellied slider.

Ed

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TFN LECTURE

Sunday, April 11 at 2:30 pm

See page 3 for information about lectures via Zoom

Nature: The who, the what and the where



Ambika Tenneti, PhD candidate, Daniels Forestry, U of T, and Jacqueline L Scott, PhD student, Social Justice Education, OISE, U of T, will explore ways in which ideas about the “what” and “where” of nature and “who belongs there” have been shaped by power and privilege. Their talk will focus on how we can make nature more welcoming for Black and immigrant communities.

Upcoming lecture:

May 2: Toronto’s Water, Energy and Waste Systems: Where does it all come from? Where does it all go? Mariko Uda, PhD