



TORONTO FIELD NATURALIST

Number 686 September 2024



Two Aspects of European Common Blue Butterfly. Photo: Bill Cruttwell

REGULARS

| | |
|-------------------------------|----|
| About TFN | 15 |
| Extracts from Outings Reports | 13 |
| Junior Naturalists | 9 |
| Lecture Notice | 16 |
| Lecture Report | 4 |
| President's Report | 2 |
| TFN Outings Information | 5 |
| Weather (This Time Last Year) | 15 |

FEATURES

| | |
|---|----|
| What is ONCA? | 3 |
| TFN Annual General Meeting notice | 3 |
| When a Tree Falls ... Who Keeps Track? | 6 |
| Goldenrod | 8 |
| Monitoring PSC Sites | 10 |
| Remembering Toshi Oikawa | 10 |
| Goats at Don Valley Brick Works Park | 11 |
| Tree of the Month: Honey Locust (<i>Gleditsia triacanthos</i>) | 12 |
| Focus on Nature: Pinks and Purples | 16 |

PRESIDENT'S REPORT

I hope everyone has had a good summer. At the end of June we concluded our 100th anniversary celebrations, and I would like to thank all the volunteers who helped TFN celebrate this significant milestone.

As we move into our 101st year, our determination remains strong to fulfill our mission – to connect people with nature in the Toronto area, helping them to understand, enjoy, protect and restore our green spaces and the species that inhabit them. Given the weather we have experienced this summer, it is critical that we stay committed to carrying out this mission, and ensure that TFN will be around for many more years.

A key component of this is making sure our organization has the resources and mechanisms in place to guarantee its longevity. To that end, a few years ago the board began the process of ensuring that TFN's operations as a non-profit are using the best practices, making the adjustments necessary to comply with the *Ontario Not-for-Profit Corporations Act* (ONCA). With the help of our ONCA committee and legal counsel, we have determined what we need to do to be compliant with this legislation, and the

practices we need to put in place to protect the organization into the future. At our Annual General Meeting on October 6th, we will present these measures for your approval. Details of the AGM appear on page 3 and will be posted on our *Members Only* website. See also my article about the ONCA on the next page.

A number of years ago we established a Mailed Newsletter Fund to help minimize the impact of increased print and mailing costs for those who subscribe to the print version of our newsletter. Unfortunately, that fund has been depleted, and we are seeking donations to rebuild it. If you would like to help, you can donate to the fund here: [Help Us Help Nature – Toronto Field Naturalists](#).

Finally, we are always on the lookout for new outings leaders. If you would like to learn more, please email volunteering@torontofieldnaturalists.org.

Get outside, enjoy nature, and remember to speak up for nature when the opportunity arises so that we can preserve its beauty for all to enjoy.

Zunaid Khan

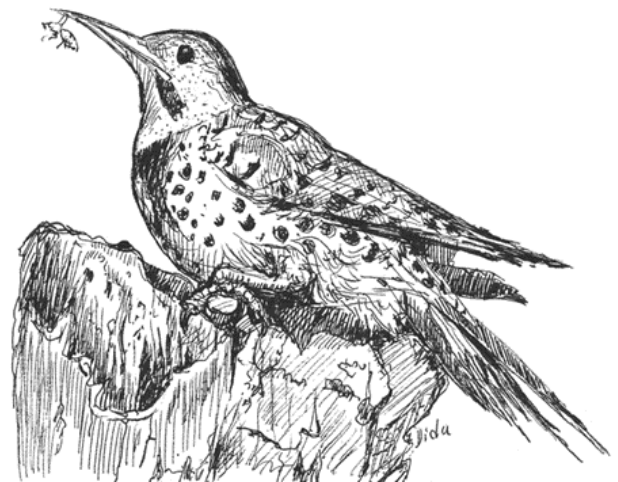
BEING AN ETHICAL NATURE LOVER

Resist the urge to follow wild animals!

Most animals see us as predators, so don't really want us around. Following them when they try to move away can be very stressful for the animal, as it appears they are being stalked.

Following also interrupts feeding or resting behaviours, wastes precious energy, and can expose the animal to predators. You may be moving them from a much-needed hiding spot. Following may even leave young animals vulnerable as the parents move away to protect them from you!

Seeing a wild animal is exciting, but resist the urge to follow them if they move away from you.



Northern Flicker, 1988
Diana Banville
TFN Nature Arts Archive

This is part of a series by TFN's Wildlife Protection Committee.

WHAT IS THE ONTARIO NOT-FOR-PROFIT CORPORATIONS ACT (ONCA)?

All non-profit organizations incorporated in Ontario are governed by the *Ontario Not-for-Profit Corporations Act* (ONCA). A number of years ago this act was updated, and all non-profit corporations are required to be compliant with the revised version of the ONCA by October 22nd, 2024.

TFN's board formed an ONCA committee to review our corporate documents and bylaws in order to ascertain what we needed to do. After the committee's initial review, it was determined we would need to engage a law firm to assist in this process.

On advice of legal counsel, we began with our corporate documents, which had not been updated in over 20 years, because any proposed changes to them would need to be reviewed by the Canada Revenue Agency (CRA) to ensure that they would not affect our charitable status. This could be a lengthy process. As it turned out we did need to update our corporate objects and associated statement of activities that speak to our mandate as a nature conservation non-profit charitable organization.

When our proposed changes were completed and approved by the board, legal counsel submitted them to the CRA on our behalf for review and approval. Unfortunately, the CRA strike created a backlog and this

process took quite some time. Thankfully, the changes were approved by CRA.

We then moved on to review our bylaws to determine what changes were required to be compliant with the ONCA and ensure that we were operating under the best practices of a non-profit organization. This process is now complete, and the proposed changes have been approved by the board.

Prior to our Annual General Meeting (AGM) on October 6th, we will send a letter to all members with details of the proposed changes. In addition, prior to the AGM we will publish an AGM page on the *Members Only* website showing our financial statement for 2023/24 and details on the proposed changes. At the AGM we will present the changes for approval by members.

These are necessary and important changes we need to make to comply with the ONCA and ensure that TFN is operating using the best practices to protect the organization and its assets well into the future. I encourage you to attend the AGM, which will follow a great lecture on the Don River Mouth Naturalization Project.

Zunaid Khan, President

TFN ANNUAL GENERAL MEETING

Sunday, October 6th, 2024 at 3:30 pm via Zoom

We'll welcome our 2024/25 Board of Directors. We will present motions to make TFN compliant with the *Ontario Not-for-Profit Corporations Act* (ONCA) and ensure that we are following the best practices to protect the future of TFN. We'll also thank our terrific volunteers who helped support all of our programs and our 100th anniversary celebrations.

Please mark your calendar and plan to attend! We need a quorum of 50 to vote on core business items.

Here are the zoom details for the AGM:

Join Zoom Meeting <https://us06web.zoom.us/j/87654897851?pwd=I74GTAHUL71AYIfJkCraVkVlwqLubd.1>

Meeting ID: 876 5489 7851 Passcode: 046562

Dial by your location: +1 647 558 0588 Canada

Find your local number: <https://us06web.zoom.us/u/kcDg6RbUYn>

LECTURE REPORT

The Biodiversity Value of Small Natural Spaces in Cities

May 5, 2024

Dr. Lenore Fahrig, Chancellor's Professor of Biology and Gray Merriam Chair in Landscape Ecology, Carleton University

In 1975, Jared Diamond proposed that a single large natural patch of land should have higher biodiversity than a small one. This is valid, but he also proposed that for a given total amount of habitat, a single large patch has greater biodiversity than several small patches. Despite the absence of supporting data, this latter principle has since had a global influence on biodiversity conservation. In 1980, a document providing advice on how countries could best preserve their biodiversity reproduced Diamond's illustration of this second principle. The principle has become implicit in conservation policies worldwide, with both governmental and non-governmental organizations typically favouring protection of larger patches over smaller ones, even multiple small ones.

As shown by Dr. F. Riva, who was a post-doctoral fellow in Dr. Fahrig's lab, this implicit bias has had a large effect on destruction of natural areas worldwide: plots that were forested in 1992 were more likely to be lost by 2020 if they were small rather than large. Globally, we are losing habitat disproportionately from small patches.

Dr. Fahrig and others have empirically addressed the question of whether a single or a few large or largish patches of habitat has more species than several small patches, given the same total area. The results have repeatedly shown that smaller habitats have as much biodiversity as larger ones, or even more, contradicting Diamond's second proposition. In a 1982 review, Simberloff and Abele found not a single case in which one large site unequivocally excelled smaller sites, with many cases in which the smaller sites contained more species than one large site. A 1988 review (Quinn and Harrison) also found that in all instances a divided collection of isolates (patches) contained more species. They introduced the use of Single Large Over Several Small (SLOSS) curves, with cumulative species on one axis and cumulative area on the other, which enables comparison of larger with smaller habitats.

Using SLOSS curves to summarize data, Dr. Fahrig cited her own 2020 review of prior studies. In the vast majority of cases in which there was a difference in biodiversity by patch size (47 out of 75 studies), the advantage was for several small over the few larger areas (39 versus 8 studies), with the five-fold advantage for the smaller patches holding across a wide variety of taxa. Research into why this is the case is ongoing.

Given that total habitat area is more important than the size of the patches that make it up, to maintain or increase biodiversity we need policies that support efforts to protect multiple small areas, no matter how small. Their accumulation gives a biodiversity benefit, and we don't yet know how small is too small. Dr. Riva's studies have included many small patches, extending down to around 0.01 hectares (ha), as well as patches of up to, or even over, 10,000 ha; yet patch size protection criteria often specify minimums of over 100 ha.

Studies in cities have also yielded findings of more species in several small areas than in a few large patches, given the same total area. Examples include butterflies in urban parks in Marseille, birds in urban parks in Seoul, woodland specialist plants in forest patches in Brussels, and grassland plants in Melbourne. There have been similar findings for birds in North American cities. While a lot of these studies have involved parks and protected areas, there has also been work on very small spaces, such as (personal) gardens. Research conducted in Ottawa and Toronto by students in Dr. Fahrig's lab has yielded consistent small patch advantages for lichens, birds, bats, aquatic invertebrates and aquatic plants.

Dr. Fahrig emphasized that loss of habitat has a huge negative impact, and that the focus needs to remain on not losing it, as well as on restoring it. Although the total habitat area is more important than patch size, all natural urban spaces contribute to biodiversity protection, no matter how small. Her talk clearly illustrated the importance of science, and the need to align public policy with empirical results.

Michele Macartney-Filgate

Members can view the lecture [at this link](#).

TFN OUTINGS INFORMATION

A 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 are welcome to bring one non-member guest. Listed below are two September outings you might like to consider.

Corktown Common

Leader: Ellen Schwartzel

Saturday, September 7, 10 am

Meeting Point: At the Distillery District, beside the large abstract sculpture *Still Dancing* outside Balzac's Coffee Shop, 1 Trinity St.

Walk Details: A 3-hr, 3 km circular walk over mostly paved surfaces with gentle and steep slopes, stairs and cobblestones.

Walk Description: We'll stroll from the cobblestones of the Distillery District east along Mill Street to Corktown Common, a delightful city park painstakingly transformed from an industrial wasteland into a green urban gem planted entirely with native trees, shrubs and forbs. Corktown Common is typically ablaze with fall asters, goldenrod and other autumn colour at this time of year. The tiny marsh features cattails, pickerel weed and arrowhead. Fall migrant birds might drop by. Corktown Common functions as a flood protection berm, designed to withstand a 500-year flood, but the park also offers wonderful natural habitats, children's play areas and lawns for picnicking. We will double back to the Distillery District, with the option of lunch together at the Mill Street Brew Pub.

TTC: Take the #504 King streetcar eastbound to Parliament St or the #65 Parliament bus southbound to King St. Walk south on Parliament Street, then proceed east on Mill St.

Washrooms: Available along the way.

What to bring: A sun hat, water and a snack.

Walk Leader's Cell Number: (647) 463-5562



Arrowhead and pickerel weed.
Photo: Charlotte Broome

Taylor Creek Park – Early Autumn Wildflowers

Leader: Joanne Doucette

Saturday, September 21, 10 am

Meeting Point: At the entrance to Taylor Creek Park, 260 Dawes Rd, west side.

Walk Details: A 4.5-hr, 10 km linear walk across mostly unpaved but even surfaces with gentle and some steep slopes and stairs. Some areas may be wet or under construction making the use of mobility devices difficult.

Walk Description: This is a longer hike for those interested in learning about the wildflowers of early fall, including asters and goldenrods, while getting some exercise at a relatively gentle pace (about 2 km/hr). Bring your birding skills too, as fall migration will be under way.

TTC: #23 Dawes Rd bus from Main St subway station.

Washrooms: At beginning and end of walk.

What to bring: Water, lunch, hat, magnifying glass if desired (leader will have some extras), field guide, binoculars.

Walk Leader's Cell Phone: (647) 236-4980



New England asters.
Photo: Wendy Rothwell

WHEN A TREE FALLS... WHO KEEPS TRACK?

Trees and infrastructure are intertwined in our city. This is true, not just physically for tree branches and roots, but also from a planning perspective. Toronto's newest transit lines illustrate the resulting tensions, and what's at stake.

Toronto will soon get more than 15 km of new subway line, dubbed the Ontario Line. Measured in rail length, the Ontario Line will amount to nearly a 20% increase in our overall subway infrastructure. So, on the one hand we have the benefits of shifting Toronto towards a more transit-friendly, lower carbon future. On the other hand, we need to appreciate the costs. Metrolinx, the provincial agency building the Ontario Line, has provoked consternation, grief and uproar across town over the last few years, thanks to a consultation approach best described as "build now, ask questions never".

Media attention on Metrolinx has been considerable, focussed mostly on controversial route siting, expropriations, fragmented neighbourhoods, road closures, and painful construction disruptions. Unfortunately, the loss of natural habitats, as new transit routes cut through ravines and natural corridors, has been much less reported, though isolated stories do show up in the media. The 260 trees taken down by Metrolinx in Small's Creek in early 2022 did get coverage in the *Toronto Star*. The dozen or so trees that Metrolinx removed at historic Osgoode Hall in 2023 received huge public outcry. Strangely, when Metrolinx cut over 2,700 trees near Millwood Road in the Don Valley in 2024 to prepare for the Ontario line, only *Spacing Magazine* covered the story. The reporter, Ian Darragh, clearly shocked, described the site as a "moonscape", comparable to logged-over sections of British Columbia.

New transit lines are only part of the story. In reality, the city is a complex, changing patchwork of infrastructure work projects. Trees and natural areas are continually being dug up to service infrastructure running through or under ravines. At any given moment, City departments and utilities have dozens of projects on the go to repair or upgrade sewer, water or other critical infrastructure. For

example, a bit of on-line sleuthing reveals that the newly built Coxwell sewer bypass tunnel involved the removal of about 40 trees, and about 120 trees are slated for removal through the ongoing sewer upgrades along the Don River at Sheppard and Leslie.

We should be asking: what is the bigger picture? A few trees here; a few hundred trees there. The numbers add up. What the public does not have is any kind of cumulative summary of the holes being cut into Toronto's ravine network. What's more, while tree loss may be a convenient way to estimate construction impacts, the full ecological consequences are far more complex and demand that more indicators be studied. Examples abound: nesting sites of owls or bats may be lost; vernal pools filled in; old colonies of trout lily or other spring ephemerals destroyed. We should be asking for full

impacts, not just numbers of trees lost.

As a nature community, TFN should also ask for reports on how well habitats and ecosystems are recovering after restoration. Deep soil compaction, erosion and altered drainage patterns can make areas very hard to restore long-term, no matter how many saplings are planted.

For those concerned about the long-term health of our ravines, the big picture can feel overwhelming. That's why it's so gratifying that individual TFN folks and

other friends of nature are out there, courageously – and courteously – asking nature-focussed questions at public meetings with City councillors and staff, site by site, time and again. This month, we give a special thank you to TFN board member Lynn Short, who attended a City-hosted meeting on the Ontario line back in the spring and shared her summary with TFN. A precis of what she learned is below. Imagine our collective impact if we each attended even one public meeting a year; if we asked about project impacts on local natural areas and if we then shared our findings with the nature community. You can [find your local councillor online](#) and check their newsletter for upcoming public meetings. You can also browse a wide variety of city-wide consultations [at this City of Toronto webpage](#) and register for meetings that interest you. Let's ask questions!



White Cedar stump.

Drawing: Regina Posluns. TFN Nature Arts Archive

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NEWSLETTER COMMITTEE NEWS



On June 27, our newsletter team enjoyed a social get-together on Centre Island where Jenny led us on a delightful walk.

This occasion gave us an opportunity to say farewell to Vivienne Denton who is moving out of town. We are grateful for her valuable contributions to our work over many years, and wish her well in her new home.

Wendy Rothwell

Vivienne Denton, Jenny Bull, Leslie Padorr, Elisabeth Gladstone, Jennifer Smith, Wendy Rothwell.

(Absent: Charlotte Broome and Kathleen Brooks)

WHEN A TREE FALLS *continued*

Ontario Line Crossing the Don Valley at Millwood Rd – what we've learned so far:

The new 15-km Ontario Line that Metrolinx is building will include an elevated crossing of the Don Valley Parkway at Millwood Road. As part of site preparation, Metrolinx has already cut thousands of trees along the valley, as described in *Spacing Magazine*, May 2024. To help local communities understand the project, Councillor Paula Fletcher hosted a virtual public meeting on April 16, 2024. Peter Tabuns (the local MPP) and Sarah Erhart (School Trustee) also attended.

Navi Tathgar (City Project Manager for Transit Infrastructure Transportation Services) presented the information. To be clear, although this is a Metrolinx project, Metrolinx did not host the meeting or even send a representative. As Peter Tabuns explained, since Metrolinx has not been a good partner in collaboration, the City has had to take the lead to listen to the public's concerns.

Lynn Short, on behalf of TFN, attended this virtual public meeting and shared this update:

"... the good news is that there should be no disruption of the Beechwood Road underpass and access to Cottonwood Flats. These areas are not near the construction site. The only effects experienced might be traffic patterns in the area. The construction of the Cosburn station at Pape will involve work to relocate the sewer (capacity will be upgraded at the time) and the communications/electricity services (Rogers, Bell, Toronto Hydro). This work is predicted to take 4–5 months. It will be focused between

Gamble Ave and Gowan Ave where the station will be located. The Metrolinx Line will be underground north and south of the Cosburn station on Pape.

The line emerges from underground at the Minton Place Portal (see plan on link) west of the Leaside Bridge. <https://www.metrolinx.com/en/projects-and-programs/ontario-line/what-were-building/don-valley-crossings> During construction, parking will be restricted on Minton Place and Hopedale Ave. The line will remain elevated across the Don Valley through Thorncliffe Park. Construction of the Minton Place Portal is expected to take place July 2024 to July 2025. The slope and the houses near where the line exits will be stabilized. This area is not close to Crothers Woods or Cottonwood Flats. The project is expected to be completed by 2030. It is only in the planning stages at this point."

In response to Lynn's questions about project impacts to Crother's Woods, local ponds, wetlands and trees, City staff replied that they were not expecting any major impacts to Crothers Woods. The proposed bridge and elevated guideway will be further east. City staff also noted that Metrolinx does need to implement proper protection measures following the City's specs or bylaws. For trees adjacent to construction area, proper tree protection hoarding must be installed following the City's tree protection specifications. In terms of natural areas, the City and TRCA ask that sediment control measures be installed following the relevant specs to mitigate impacts.

Ellen Schwartzel

See the Metrolinx project description [at this site](#)

For the April 16th meeting about Pape North/Don Valley, view the [recording](#) and the [slide deck](#).

GOLDENROD

Masses of bright yellow goldenrod bloom in fields, stream banks, and disturbed areas in late summer and early fall. Goldenrod often gets a bad rap because it is associated with seasonal allergies. In fact, the allergies are caused by ragweed, an inconspicuous plant that blooms at the same time. Goldenrod itself is vital to the ecosystem.



Photo: K. Eleanor Novak

Many pollinators and predators depend on goldenrod, especially when other food sources are scarce. Its pollen and nectar support honeybees, bumblebees, moths, wasps, and butterflies during the critical autumn months. More than one hundred moth and caterpillar species feed on its leaves, making it a vital food perennial.

The ecology of the ball gall fly (*Eurosta solidaginis*), a goldenrod parasite, is especially fascinating. The adult fly lays its eggs in goldenrod stems, which swell to form characteristic galls. Downy woodpeckers and black-capped chickadees break into the galls and eat the overwintering fly larvae. In some parts of southern Ontario, up to fifty percent of galls are attacked by chickadees. A parasitic wasp also lays its eggs inside the gall, where its larvae eat the gall fly larvae. Finally, stem borer beetles eat both the fly larvae and the gall tissue.

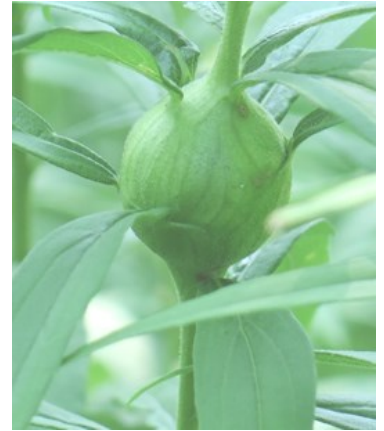


Photo: Wendy Rothwell

Next time you walk through a waist-high field of goldenrod, remember that it's not just a beautiful fall plant. It is a vital part of Toronto's ecosystem.

K. Eleanor Novak

To learn more about goldenrod, check these links:

[VIDEO: Canadian Goldenrod: Garden Hero or Garden Thug?](#)
[Ball Gall Fly](#)

UPCOMING JUNIOR NATURALISTS EVENTS

We're looking forward to another exciting fall program for Toronto Field Naturalist Juniors (aged 6-14 yrs) and 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: juniortfn@torontofieldnaturalists.org

Upcoming events include:

- Sept 7 Sighting and tagging migrating monarch butterflies and observing migrating hawks at Rosetta McClain Gardens
- Sept 14 Early morning hike on the Meadoway with Don Scallen to see spiders with dew on their webs
- Oct 5 To be decided
- Nov 9 Come and learn about the work of the Toronto Wildlife Centre, rescuing and rehabilitating injured wild animals

JUNIOR NATURALISTS



A PERSONAL ENCOUNTER WITH GRAZING GOATS

On June 26, I visited the Evergreen Brick Works to observe the goats that were engaged in a "prescribed grazing" activity. The goatherd, who grew up with goats in Jamaica, was very knowledgeable and friendly, and willingly answered many of my questions.

I asked if the goats would just excrete the seeds of invasive plants causing the problem to start again. He explained that, since goats are ruminants, by the time the seeds are excreted they have been through so many stomachs and so much mashing and digesting that there are no viable seeds left; the excrement only enriches the soil. When birds eat seeds, however, they tend to go right through their stomachs so that invasives can be spread.

He told me there is an alpha nanny goat. When she decides it's time for the goats to resume grazing after a rest, she will lead them in a pattern around the prescribed area. Two young goats were butting heads in a lackadaisical way, apparently practising but not fighting.

Goats will happily eat lots of plants shunned by other animals. For example, they can destroy buckthorn trees, which are invasive and create many problems for plants around them. Bigger male goats can be useful in

pulling down tall branches that smaller goats then munch on.

Correspondence with staff at *Goats in the City* informed me that goats will eat dog-strangling vine. Though it is not their preferred food, they may consume it when more palatable options are not available. They can also safely eat stinging nettle, being adept at avoiding the stings. There are certain plants they tend to avoid due to taste or toxicity. These may include some types of ornamental plants, highly toxic plants such as yew, and some tough, fibrous plants. However, their preferences vary depending on the availability of other forage options.

Three goats grazing nearby were wearing collars. When asked about this, the goatherd smiled fondly and said these goats were "naughty". One even wears a GPS device! When it escapes the boundary of the goat farm, he sends up a drone to locate the escapee. It's interesting to contemplate the use of this modern device alongside the ancient practice of goat herding.

I'm really glad I went to the Brick Works to witness this project.

Article and photos by Jennifer Smith

To read about TFN's involvement in the goat grazing project, see article on page 11.

TFN HELPS TO IMPLEMENT MONITORING AT CSP SITES

Earlier this year, the City of Toronto's Natural Environment and Community Programs (NECP) section of Urban Forestry requested assistance from TFN in establishing a long-term ecological monitoring program for assessing vegetation biodiversity at their Community Stewardship Program (CSP) sites. Since then, we've been working together to establish plots and protocols that empower volunteer stewards and citizen scientists to create and maintain an inventory of flora present. Over time, this inventory will be used to assess overall trends in species richness and abundance, and will demonstrate the impact of volunteer stewardship on habitat quality.

This project is a natural evolution of the work TFN has been doing with NECP at Cottonwood Flats over the last several years. In 2017, we established a long-term monitoring project at the Flats, which is now in its eighth year of activity. In 2022, TFN agreed to serve as Team Leaders for a new CSP Team there, helping to protect and restore local habitat by planting natives, casting seeds, pulling invasives, picking up litter and more! These experiences, and lessons learned, will now be applied at CSP sites throughout the city.

This summer TFN volunteers established a permanent 20 m x 20 m monitoring plot at each of four CSP sites: Beechwood Wetland, Cottonwood Flats, Don Valley Brick Works Park, and Nordheimer Ravine. Until October, TFN volunteers will conduct vegetation assessments of each plot to establish an *Official Flora Inventory* of the species present and their estimated coverage. This inventory will be used to inform monitoring activities by CSP volunteers at each site starting in 2025.

The primary monitoring protocol that TFN has developed for CSP volunteers is unique. The typical CSP volunteer was likely drawn to that program by a desire to "get their hands dirty" helping nature through activities like plantings and invasive removal. The value of ecological monitoring may not be immediately appreciated by everyone and may take some time to develop. Furthermore, volunteers may not feel their flora identification skills are adequate or wide-ranging enough to make meaningful contributions to monitoring activities or may simply be uninterested in participating. For these reasons, ongoing monitoring efforts by CSP volunteers will take a flexible and "bite sized" approach. Their monitoring sessions will be very short, with each volunteer focusing on only a single species, and will be timed to occur when such species are easiest to accurately identify. Guided by TFN's *Official Flora Inventory* and the in-the-field knowledge provided by City Staff and CSP Team Leaders, we expect wholesome and meaningful data to be efficiently captured over the course of their stewardship season while at the same time developing volunteer interest and skills.

Next year, TFN will establish plots at the five remaining CSP sites: Crothers Woods, Humber Bay Butterfly Habitat, Milne Hollow, Riverdale Park East, and Humber Arboretum (where, as at Cottonwood Flats, TFN also serves as CSP Team Leaders). As this year has already proved, our success in 2025 will not be possible without the enthusiasm and expertise of TFN volunteers. If you might be interested in volunteering on this project please reach out to stewardship@torontofieldnaturalists.org.

Jason Ramsay-Brown

REMEMBERING TOSHI OIKAWA

Toshi Oikawa passed away on July 21, 2024 just a day short of her 98th birthday. Toshi was a valued member of TFN's Newsletter Committee for 30 years, from 1988 until 2018, and we have happy memories of working with her at our editorial meetings in the Carlton Street office. Likely few of us were aware of her many varied interests and important contributions to the community, revealed in her obituary. <https://obituaries.thestar.com/obituary/toshiko-oikawa-1090409610>. Hers was a life well-lived.



GOATS AT DON VALLEY BRICK WORKS PARK

On June 25 and 26, the City of Toronto's Prescribed Grazing Pilot Project was activated at Don Valley Brick Works Park (DVBWP). A herd of some 60 goats was released into a fenced-in meadow area and left to feed in an intensive two-day grazing session meant to address encroachment by woody and invasive plant species. Like many Torontonians, Toronto Field Naturalists were pretty excited to see the goats in action – albeit for a few additional reasons than those of the general public!

Last year, City of Toronto Forestry Staff requested TFN's participation in creating and curating an inventory of flora and fauna biodiversity at the grazing site prior to, and following, the introduction of prescribed grazing. TFN volunteers have since conducted periodic site assessments, guided by monitoring protocols that tightly align with those we developed in partnership with City of Toronto Forestry staff as a part of our ongoing Cottonwood Flats Monitoring Project.

TFN was on the scene within days of the goats' departure to survey the aftermath. While it is too early to tell long-term impact, the immediate results were both interesting and suggestive. The grazers' preference for particular species was quite obvious. Buckthorn (*Rhamnus cathartica*) was a clear favourite, with seedlings and saplings impossible to find and more mature specimens stripped entirely everywhere a goat could reach. Similarly,

their distaste for certain species was equally easy to see. Common milkweed (*Asclepias syriaca*) seemed totally off the menu, although populations did suffer from some trampling damage.

Prescribed grazing is not being evaluated as a universal replacement for more traditional management practices such as mowing, but rather as an integrative management tool with its own most effective niches, benefits and challenges. These include reduced carbon emissions, noise pollution and reliance on mechanical equipment, as well as reduced impacts to ground nesting/burrowing/slow moving animal species. Furthermore, goats are way more fun to watch than a lawn mower, opening significant opportunities for public education and engagement around the importance of meadow habitat and the evolutionary role of natural grazing.

TFN will continue with monitoring at DVBWP this year and next. The data we collect and compile will be used to help assess overall trends in vegetation and to examine whether the introduction of grazers produces a net positive impact on suppressing unwanted or invasive vegetation. If you might be interested in helping our efforts in 2025, please contact stewardship@torontofieldnaturalists.org.

Jason Ramsay-Brown



TFN volunteers, Anna Waldvogel and Jason Ramsay-Brown, conducting an assessment on June 9, 2024.
Photo: Matt Forsythe, City of Toronto.



Goats showing their obvious enthusiasm for buckthorn!
Photo: Jason Ramsay-Brown.

TREE OF THE MONTH: HONEY LOCUST (*GLEDITSIA TRIACANTHOS*)

No other local tree is as reminiscent of an African savannah acacia as is honey locust, though it has no more than a family relationship to those gameland icons. While a few honey locust cultivars are pyramidal or globular in form, its usual somewhat flat-topped and -bottomed, spreading crown shape makes it an excellent shade tree. Thus this species is, by far, our most common tree member of the legume family (Leguminosae or Fabaceae) in cultivation. While unmistakably placed among the legumes by its pea pods, when present, honey locust has many distinctive features that are all its own.

The pods themselves are by far the largest among all our legumes, whether woody or herbaceous. Depending on how many seeds the dark brown, leathery mature pods contain, they may range up to 40 cm long and are typically 1½ to-2½ cm wide, with broadly sweeping, graceful twists and curves. These pods are thought to have been dispersed originally by the now extinct ice age megafauna of mastodons, ground sloths, giant bison and others that once roamed across eastern North America. The pods may also impress by occasionally emerging right out of the trunk in an arrangement called cauliflory (“stem-flowering”). More frequently, this tendency is expressed on the “old wood” of two- or three-year-old branchlets, when dormant buds become active, even though they are embedded in one or more years (even decades) of bark development.

Then there are the thorns. The uppermost in a whole stack of superposed buds above the leaf scar may grow out either as a reproductive shoot or as a thorn, reflecting a common evolutionary origin of thorns from highly modified inflorescences. Happily, thorns are not often found in our cultivated street and yard honey locusts, which almost all belong to a formally designated forma *inermis* (“unarmed”), an entirely thornless genetic mutant that has been developed into today’s plethora of different cultivars. Honey locust in the wild, however, including in its limited native range in southwestern Ontario, is a different story. These can be among the most fiercely defended of all North American trees. Young thorns on new growth are daunting enough: 5 to 6 cm long, shiny bright red, hard, thick, and sharp, usually with one or more prickle-like branches. Over time, these defenses become stronger, with larger and more intricately branched thorns. A mature trunk may be as densely surrounded by a thicket of thorns as Sleeping Beauty in repose in her cursed castle. The most elaborated of these trunk thorns can reach as much as 30 cm long.

Unlike any of our other legumes, honey locust annually bears two different kinds of compound leaves, often connected by a few transitional forms. Leaves that are once-pinnate emerge from the winter buds as the spring flush of growth (and thus are referred to as preformed leaves). These are followed by bipinnate leaves produced *de novo* during the course of the growing season (neoformed). One popular cultivar, ‘Sunburst’, has left the green foliage of wild trees behind, if only seasonally. In the spring, this cultivar, and others like it, have bright golden-green foliage before finally turning the normal dark green by late summer. Then, like all honey locusts, they turn a rich yellow in fall.



Honey locust tree with flat, widely spreading crown. Photo: Ken Sproule



Immature pods borne on old wood. Photo: Ken Sproule



Honey locust shoot with pinnate, bipinnate and transitional leaves. Photo: Ron Dengler



Fall colour. Photo: Ken Sproule

continued on next page.

TREE *continued*

While the pods of honey locust place it squarely among the legumes, it belongs to the largely tropical subfamily Caesalpinoideae and not to the “typical” legume subfamily Papilionoideae (aka Faboideae), so its flowers are not of the sweet pea form found “only” in tens of thousands of lupines, beans, peas, vetches, clovers and other papilionoid legumes worldwide. In contrast to the extreme right/left bilateral symmetry (zygomorphy) of pea flowers, with just a single plane of mirror imagery, honey locust flowers are radially symmetrical, so all five (or sometimes just three or four) sepals, petals, and stamens look alike. Most honey locust trees have either strictly male or female inflorescences, but some individuals carry both. The majority of cultivars bear only male racemes (5 to 7 cm long), or have very few female ones (7 to 9 cm long), so most street and yard trees lack the characteristic pods.

Even a tree with a full crop of pods will have fewer than expected from the number of female flowers produced. Out of a couple of dozen flowers in a raceme, only one to

three will normally ripen into pods, while the others are aborted whether pollinated or not. This wholesale reduction in the number of resource intensive fruits actually reaching maturity is often found in insect-pollinated trees, where an initial mass display is thought to make the tree more obvious and attractive to pollinators.



Radially symmetrical male flowers in a raceme. Photo: Ken Sproule

Originally primarily a floodplain species, honey locust has proven so adaptable to the many, often contradictory, stresses of urban conditions that it has become one of our most common street and shade trees, especially after the wholesale breeding of thorn-less and pod-less cultivars after the Second World War. While all of the full-size honey locust cultivars make handsome shade trees, one caution is in order. Do not park a car, bicycle or stroller under it at certain times of year because it is very attractive to a fair number of herbivorous insects. Some of these drop sticky exudate during their active feeding period. You don't want to have to clean that stuff off your precious modes of transportation.

James Eckenwalder

EXTRACTS FROM OUTINGS LEADERS REPORTS

Colonel Samuel Smith Park - Birds, May 2. Leader: David Creelman. Birding in May is always interesting.

Add a surprisingly warm, sunny day, and some birds, and the recipe produces a great walk in the park. It wasn't a peak migration day, but we spotted a rarely seen Least Bittern. Among Red-necked Grebes we found a Western Grebe, far from where it should be. We saw an assortment of warblers in colourful breeding plumage. Some other species seen: White-throated Sparrow, Black-throated Green Warbler, Northern Parula, Yellow-rumped Warbler and dozens more, from woodpeckers to ducks.



Least Bittern, Col. Sam Smith Park, May 2018.

Photo: Ken Sproule

The Nature of St John of Norway, May 18. Leader: Joanne Doucette. We started at the cemetery entrance on

Kingston Road and walked through the cemetery to the site of the first church (torn down 1927) and the oldest graves. On the way we spotted a pair of courting Mourning Doves – how appropriate for a cemetery! I talked about the symbolism of mourning as it is expressed in trees, including the weeping willow, the yew and the Norway spruce. St John of Norway Cemetery and Necropolis began as the graveyard for St John the Baptist Church in the Village of Norway in 1850. The area was originally part of Gerrard Prairie

and was oak savannah. We stopped at a very large, old red oak that may well have been growing in open grassland when the cemetery was founded.

EXTRACTS *continued*

Tree identification was an important component of the walk, but knitting it into human culture and history gave a richer context. Land surface (geomorphology) featured on the walk. Much of the cemetery is hilly and there is a deep ravine through which Tomlin's Creek (a branch of Small's Pond) once flowed. In 1936 workers diverted the creek through a series of catch basins into a culvert under a new paved roadway following its original course. So we were, in a sense, walking on water.

Toronto Islands – Hanlan's Point 100th Anniversary Walk, May 23. Leaders: Charles Bruce-Thompson and Zunaid Khan. We enjoyed a beautiful morning

observing plants, birds and other wildlife. We discussed TFN's long connection to the islands and our involvement in trying to ensure that the Toronto Island Master Plan, currently in development, seeks to put nature first. Wildlife observations included, as well as frogs and toads, Double-crested Cormorants, Red-winged Blackbirds, Mallards, Ring-billed Gulls, Common Terns, Killdeer, Spotted Sandpipers, Great Egrets, American Goldfinch, Barn Swallows, Tree Swallows, Mourning Dove, Yellow Warblers, Eastern Kingbirds, House Sparrows, Warbling Vireos, Baltimore Oriole, Chimney Swifts, Cedar Waxwings, Mute Swans, Canada Geese, Black-crowned Night Heron, Turkey Vultures, American Robins, Northern Cardinal, Common Grackle, Herring Gulls and, near Gibraltar Point, several non-breeding adult and juvenile Bonaparte's Gulls.



Black-crowned Night Heron on Toronto Island.

Photo: Norah Jancik

High Park to Old Mill - 100th Anniversary Walk. June 18. Leaders: Zunaid Khan and Lillian Natalizio.

We discussed the history of High Park and the first TFN "field trip" on April 26th, 1924 led by Stuart Thompson (nephew of E.T. Seton) which was the inspiration for this, the final of our series of 100th anniversary walks. We proceeded south on the east side of the park to the lower ponds, along the south perimeter to Grenadier Pond and Ellis Avenue. We then followed the waterfront trail, crossed the Humber Bridge and walked north beside the Humber towards the Humber Marshes, ending at Old Mill subway station. We were grateful for a breeze on a very hot and humid day. Sightings included red admiral and cabbage white butterflies, Dekay's brown snake, painted turtle, mallards, Wood Ducks, robins, Red-winged

Blackbirds, Tree Swallows, Song Sparrow, Barn Swallows, Great Egret, Great Blue Heron, Ring-billed Gulls, Turkey Vulture, Red-tailed Hawk, Mourning Dove, Double-crested Cormorants, Mute Swan, Belted Kingfisher, Hairy and Downy Woodpeckers and Canada Geese.

Bermondsey Rd at Sunrise Ave – Northline restoration and trees, June 23. Leader: Lynn Miller.

There was a good turnout of people eager to explore this bit of wilderness in the city. We walked among the over 3000 native trees planted in the 1990s, and viewed more recent stewardship efforts. This small plot comprises grasslands, wooded areas and wetlands. Participants were shown where invasive species including phragmites and buckthorn were being removed, and native species like wild bergamot, ostrich ferns, and Joe-pye weed were being reintroduced. Sunshine and a bit of wind to keep the insects away enriched the experience.

IDEAS FOR NATURE WALKS IN TORONTO

**Great Country Walks
Around Toronto
within reach of public
transit**

by Elliott Katz

40th anniversary edition
available in paperback,
ebook and audio book
formats.

Whether you are a nature lover looking for fresh opportunities to explore Toronto's natural spaces, or a current or aspiring TFN walk leader wanting to expand your repertoire, this newly updated guide may be just what you are looking for.

Originally published in 1984 describing 14 walks, this 40th anniversary edition has been expanded to include 22 of Toronto's best and most scenic country trails through ravines, river valleys and along Lake Ontario. Each route is fully detailed and illustrated with an easy-to-read map as well as information on how to reach the trail by public transit or car.

WEATHER (THIS TIME LAST YEAR)

September 2023

September was a warm, dry month – the second-driest on record at Pearson Airport after 1960. Total rainfall there was only 11.2 mm, about one-sixth of normal. Pearson's data record goes back to 1938. Meanwhile, downtown has a much longer record going back to 1840, and September was the 6th driest on record, with 11.9 mm. Temperature anomalies were less extreme, but still in the range of 0.7° to 1.5° above normal. Downtown had a mean monthly temperature of 19.3° (normal is 18.0°), while Pearson had a mean of 18.8° (normal is 17.3°).

Labour Day and back-to-school week featured one of the few heat waves of the summer. In fact, Labour Day, September 4th, was the hottest day of the summer. Downtown had a high temperature of 32.9° and Pearson reached 34.0°. There were readings as high as 34.5° in Oakville. Thereafter, temperatures dropped to mostly seasonable or just slightly warmer than normal with almost continuous sunshine. There were a few seasonably cool nights with the lowest temperatures coming on the 20th with 9.5° downtown, 7.1° at Pearson and 5.8° at Buttonville Airport in Markham.

Gavin Miller

TFN LECTURES

Each year TFN offers eight free talks by noted experts, exploring everything from nature in the city to global environmental issues. Talks are presented Sunday afternoons at 2:30 pm, from September to May. They are usually 45 minutes in length followed by discussion. Visitors are 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 September 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: 811 1868 6769 Passcode: 623376

ABOUT TFN

TFN is a volunteer-run non-profit nature conservation organization.

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NEWSLETTER

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

Submissions deadline for October: Sept 3

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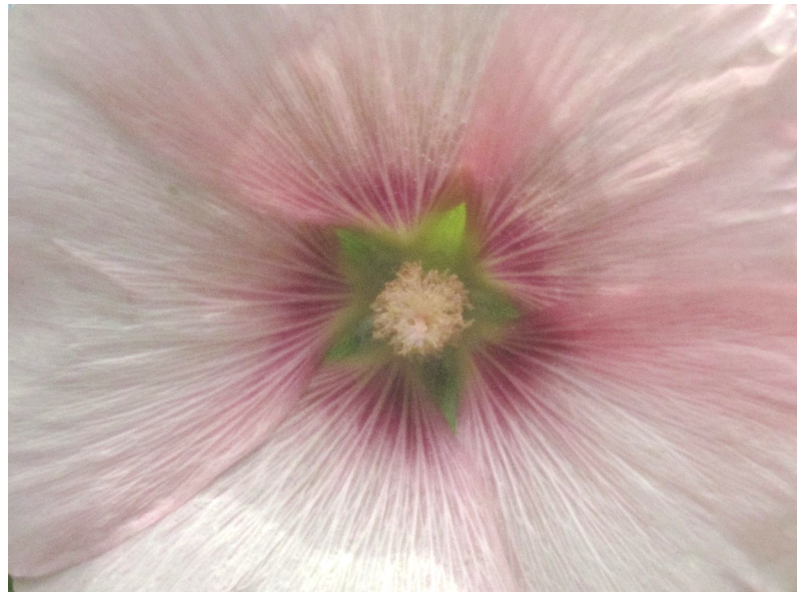
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FOCUS ON NATURE

The July challenge for TFN's Photography Group, *Pinks and Purples*, inspired this image entitled *Leading Lines* submitted by Charlotte Broome.

When I looked closely at the inside of a hollyhock blossom in High Park, subtle tints of pinks and purples unfolded artistically outwards from the purple fans near the centre through increasingly paler pinks toward the edges. The texture of the petals created leading lines from dark to light without any intervention from me. I simply cropped out the background blue sky and petal edges to focus attention on the colours.

Charlotte Broome



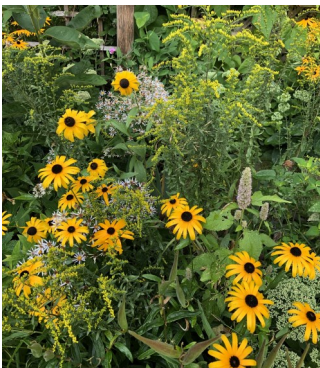
If you would like to join the Photography Group, email photography@torontofieldnaturalists.org.

TFN LECTURE

Sunday, September 8 at 2:30 pm

Via Zoom. See page 15 for information

Mitigating Climate Change: What Households Can Do



Native flower garden.
Photo: Ellen Schwartzel

Following last April's panel on "*The Impacts of a Changing Climate on Toronto's Nature*", an expert panel will address how Toronto households can reduce their greenhouse gas emissions and help communities adapt to warmer and more extreme weather by planting gardens and engaging in urban forest stewardship.

Panelists will include Abraham Wairisal, Senior Energy Consultant, City of Toronto, and Janet McKay, Executive Director, Local Enhancement & Appreciation of Forests (LEAF).

Upcoming Lectures:

Oct 6 *Don Mouth Renaturalization*: Ken Dion, Waterfront Toronto

Nov 3 *Raptors: their Fascinating World*: Catherine Manschot, Niagara Peninsula:Hawkwatch Committee