



Since 1923

TORONTO FIELD NATURALIST

Number 656 December 2020



White-tailed fawn, the East Don. Photo: Frank Miles

REGULARS

About TFN	14
Extracts from Outings Reports	4
For Reading	9
Junior Naturalists	11
Keeping In Touch	15
Lecture Notice	16
Lecture Report	5
President's Report	2
Nature Images Show	11
TFN Outings Information	3
Weather (This Time Last Year)	14
What's New on TFN's website?	7

FEATURES

Tree of the Month: Eastern Hemlock	6
Eels by the Truckload	7
Volunteer Profile: Lynn Miller	8
Tree Planting in Sherwood Park	8
Q&A: Potential prey harassing predators	9
Mushroom Foray at JBNR	10
Toronto Wildflowers: Anemones	12
Remembering Terry Whittam	12

PRESIDENT'S REPORT

Tattered silver maple leaves flutter past the window today. Our grey, wet weather mirrors the global mood; a time of widespread worry and distressing news. How should we respond?

When the going gets tough, we naturalists head outdoors for solace. We go for long walks and use all our senses. We may step into our gardens and putter about. I've given my Solomon's-seal more space and fresh compost. Those chunky dormant rhizomes will sprout exuberantly next May; a good image to contemplate.

But naturalists are doing more than walking and contemplating, and they certainly are not going dormant. This autumn it seems people everywhere are rolling up their sleeves in stewardship, in advocacy and in planting. On a fine Saturday morning recently, I watched our TFN Junior Naturalists as they settled shrubs into a new native garden with an east-end church congregation (see page 11). That project came together thanks to Anne Purvis and a City of Toronto Pollinator grant. In mid-October, another group of TFN volunteers found themselves on a steep hillside in the pouring rain, with a hundred trees to plant. The job got done, as Charles Bruce-Thompson explains on page 8. At the TFN board, portfolios have shifted with new hands on deck. Charles Bruce-Thompson has retired with honours, and we are also sadly losing Liz Menard's wise counsel. We welcome Mark Stewart, our newest board member, who will represent stewardship at our (virtual) roundtable.

Our October Annual General Meeting also brought home how deep our volunteer commitment goes. If you missed

the AGM, you can still enjoy the three-minute wrap-up video of our past year on the Members Only pages of our Website. Prepare to be amazed.

The Toronto Field Naturalists are not labouring alone, of course. We are part of an ever-changing network of groups restoring habitats and biodiversity, often in many-layered partnerships. We can be glad for many local success stories, including those led by others. This fall, for example, Toronto's migrating salmon became social media stars with viewing spots along the Humber, the Don and Highland Creek. People simply like to cheer on the big fish, but the restoration back-story is remarkable too. Atlantic salmon had been part of this region's ecosystem for 12,000 years until being locally extirpated at the end of the nineteenth century. Now, native Atlantic salmon can again be seen in Toronto rivers thanks to a restoration program begun in 2006. Similarly, this newsletter (p. 7) outlines how the American eel, another local endangered species, now depends on human intervention for survival. For TFN members, salmon and eels are compelling case studies we can point to as walk leaders, as educators and as advocates for nature. Each natural history story offers new facets to contemplate as we wander our ravines and shorelines. And each story reminds us how our action and our quiet contemplation reinforce and inform each other. Action and advocacy prod us to observe more carefully; contemplation reminds us to act more wisely.

What stories are you contemplating? How would you like to share them?

Ellen Schwartzel
president@torontofieldnaturalists.org

Tax Deductible Donations

TFN is dependent on membership dues and donations which enable us to help people in Toronto learn about, appreciate and seek to protect our natural heritage.

As a charitable organization we issue receipts for use as deductions on your income tax return.

Donations to the mailed newsletter fund help TFN to offer a reduced mailed newsletter surcharge.

Please make your donation today.

Visit <https://www.canadahelps.org/en/dn/14828> and choose "Mailed Newsletter Fund" or "General" from the list of fund options. Or you may send a cheque to the TFN office (see page 14).

TFN NEWSLETTER SURVEY

A big "thank you" to all who took time to complete our recent survey.

It is gratifying to receive positive feedback, and to know that TFN members are enjoying our publication thanks to those who so generously contribute articles, photos and nature stories.

Your suggestions for improvement are helpful, and we will try to incorporate these.

For a summary of the responses, see <https://torontofieldnaturalists.org/for-members/members-only/newsletter-survey/>

Editor

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://torontofieldnaturalists.org/walks/archive-of-past-walks/>

TO ACCESS OUR WINTER 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 the December 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://torontofieldnaturalists.org/private>

The password was delivered in the email notifying you that the December newsletter is available online. If you have misplaced the password you can request it by emailing membership@torontofieldnaturalists.org.

Walk Leaders Needed

Now that our walking groups are smaller, we would like to offer more walks.

If you enjoy TFN outings, please consider volunteering as a leader. You don't need expert knowledge, just enthusiasm for sharing nature experiences. Our veteran leaders will be happy to mentor you.

To volunteer or obtain more information, email: walks@torontofieldnaturalists.org

Volunteer needed to Co-Chair our Lecture Committee

TFN hosts eight guest lectures per year, using a Zoom format during the pandemic. Our guest presenters are often noted experts, exploring everything from nature in the city to global environmental issues.

The Co-Chairs of our Lecture Committee ensure an intriguing line-up of guest speakers, prepare for an enjoyable Zoom experience for both speakers and audience, and encourage good teamwork for all the volunteers on the Lecture Committee.

If you have strong people skills and enjoy planning events, this volunteer role will be a great fit. Skills with Zoom hosting and spreadsheets are assets, but can be learned.

Interested? Want to learn more? Contact Lynn Miller at volunteering@torontofieldnaturalists.org

EXTRACTS FROM OUTINGS LEADERS' REPORTS

Lower Don Trail, Oct 8. Leader: Vivienne Denton. At the Chester Hill lookout we took in the amazing view – Toronto's high rise buildings on the skyline and the Don Valley transportation network at our feet set against the glorious fall colours of the city's urban forest. A good place to ponder the history of the Don River valley! Descending to the valley, we noted the work of the stewardship group in the Todmorden Wildflower Preserve. Heart-leaved and calico asters, white snakeroot and zigzag goldenrod were in flower in the forest, and we saw a small patch of Gray's sedge (*Carex grayi*) still displaying some of its attractive spiked seeds. On the Lower Don Trail we enjoyed the season's meadowland wildflowers: New England, panicled and heath asters and grass-leaved and Canada goldenrod. Notable bird sightings were Belted Kingfishers near a couple of deep pools, a Great Blue Heron sunning on a branch above a small pond, a Hairy Woodpecker and, very high in the sky, groups of raptors wheeling above the valley.

Bird Photography, Betty Sutherland Trail Park, Oct 10.

Leader: Zunaid Khan. We observed beautiful fall colours and salmon moving up the Don River. Birds sighted included: Mallards, robins, starlings, catbirds, Chipping Sparrow, Song Sparrow, Red-tailed Hawk, crows, and Northern Cardinals.

Trees, Mount Pleasant Cemetery, Oct 13. Leader: Ellen Schwartzel.

Mount Pleasant Cemetery lay tranquil under a blue October sky, cloudless and serene, save for the tractor-mounted leaf-blower shadowing our group. Maples shone crimson and black walnuts spread their golden canopies. We admired several at-risk tree species in the arboretum's collection including cherry birch, red mulberry and cucumber tree. More familiar native trees included white pine, sweetgum, sugar maple, shagbark hickory and catalpa. "Living fossil" trees such as ginkgo and dawn redwood invited us to contemplate geologic time scales. So many tree species to discover; so little time.

Humber River: Hurricane Hazel Anniversary, Oct 17.

Leader: Madeleine McDowell. We did not see any salmon, Great Egrets, Great Blue Heron, Black-crowned Night Heron or Double-crested Cormorants. I was disappointed! No one else was. We saw a great many people fishing and crowds watching for salmon leaping. We saw a very sick and dying raccoon at the retaining

wall by the west bank of the river. I warned people to keep back. There was a beautiful Downy Woodpecker very busy on a rotting standing tree. He could have been a film star! We had a good look at a fruiting vine of wild cucumber hanging over some purple flowering raspberry. Lots of asters and goldenrod but definitely at the end of season. Mallards were floating and paddling and a huge gull perched on a rock midstream flapped its wings and stretched its neck. (I think it was doing an egret imitation.) As we approached the fifth weir about midday we saw a second raccoon walking unsteadily southbound along the retaining wall. When we were about a hundred metres past each other there was a loud shrieking as a woman's dog was attacking it. She had great difficulty controlling the dog but succeeded in hauling it off with the help of bystanders, and the raccoon continued unsteadily on its way. (I spoke to her and recommended a trip to the vet. I

know there is distemper in the GTA.) At Lambton House, the Wildflower Specimen Garden replanting (a TFN-supported project) had just been completed the previous day.

Trinity-Bellwoods Park, Oct 21.

Leader: Linda Klevnick and Paul Overy. We explored the physical setting and history of the land that is now Trinity-Bellwoods Park, from Indigenous presence to the actions of settlers including the establishment of Trinity College. We paid particular attention to the rich diversity of trees (over 50 species) which have survived and arrived in the park. Linda focused on the diverse varieties of pines, maples, oaks and ashes, also highlighting the rare dawn redwood

near the southwest corner and the oldest tree in the park, a bitternut hickory near the tennis courts.

Centennial Park, Oct 24. Leader: Lillian Natalizio.

After admiring a wide view of the park from the top of the ski hill, we visited shagbark hickory and sugar-maple beech woods, remnants of the area's mature hardwood forests, and two artificial wetlands. We saw Virginia mountain mint and sycamore planted along one of the swales and a large stand of grey dogwood. Some zig-zag goldenrod was still blooming in the maple-beech woodland. One-seeded hawthorn is plentiful in the park, naturalized after extensive use as farm hedgerows. Chickadees were seen and heard throughout the park and there were Northern Flickers, Hermit Thrushes and Golden-crowned Kinglets. Four Buffleheads joined dozens of Canada Geese in the large pond, and a Merlin took flight over the ski hill.



Great Blue Heron.

Drawing: Geraldine Goodwin

LECTURE REPORT

James Bay Shorebirds

November 1, 2020

Alexandra (Allie) Anderson, PhD
Avian Ecologist, James Bay Project

Dr Anderson's work with the James Bay Shorebird Project centres on migratory strategies of shorebirds and their flexibility in response to global warming. In her lecture, she gave a compelling overview of shorebirds and took us on a virtual trip to James Bay, detailing discoveries she and her colleagues have made.

Shorebirds or *Charadriiformes*, including plovers, sandpipers and killdeer, have long legs and long bills. They are associated with wetland habitats such as the shorelines of oceans and lakes. Their diet includes fly larvae and other invertebrates. Shorebird populations have decreased by 40% since 1970, and this is of highest concern with respect to those that breed in the Canadian Arctic. They migrate remarkable distances, in some cases to the southern tip of South America, so it is imperative that they stop to rest and refuel with prey throughout their journey. Southern Ontario is a convenient place for this, and we can view them in spring and fall at Colonel Sam Smith Park, Tommy Thompson Park and Ashbridge's Bay. We may see fewer in spring, it is believed because they aim to reach their breeding destination quickly and so spend less time in stopover locations. In autumn there is less urgency to get to wintering areas.

Ontario supports hundreds of thousands of migratory shorebirds. Of chief importance to Dr Anderson is the James Bay region otherwise known as the Hudson Bay Lowlands. It is the third largest wetland system in the world, about the size of Japan, and is important for Hudsonian Godwit, Red Knot, Dunlin, Semipalmated Sandpiper and White-rumped Sandpiper.



The James Bay Shorebird Project, which Anderson has been a part of since 2014, was coordinated in 2009 by Environment Canada, the Canadian Wildlife Service and other partnering organizations. Its goals have been to document shorebird species in the region, estimate how many are moving through, and track their movement patterns. Since previous studies were conducted by Environment Canada in the 1970s, significant environmental degradation has occurred, making the work of Anderson and her colleagues all the more pressing. Their fieldwork involves tagging and banding birds, digging through mud to collect samples of prey, and battling huge swathes of mosquitoes.

Their research has shown that marsh flats are significant for shorebird foraging, whereas biologists have traditionally focused on mudflats as a food source. Drought was shown to create unfavorable conditions for shorebirds. They also learned that shorebirds eat very small prey compared to the larger invertebrates found in more temperate areas.

Dr Anderson discussed actions we in southern Ontario can take, collectively and as individuals, to support shorebirds, and her lecture demonstrated why we should. We can minimize disturbances at stopover sites by creating public awareness, protecting and restoring wetlands and coastlines, and supporting conservation efforts by Indigenous, government and non-profit groups. She urged that, on an individual level, we reduce our fossil fuel consumption and use apps like iNaturalist to report and identify shorebirds – data that can be used to monitor trends.

The presentation concluded with ideas about how to restore and protect shorebird habitats and a thought-provoking Q&A segment. The talk can be viewed at: <https://torontofieldnaturalists.org/nov-2020-lecture/>

Keilan Aplin-Siegel

TREE OF THE MONTH: EASTERN HEMLOCK (*TSUGA CANADENSIS*)

Eastern hemlock dominates moister, cooler exposures in the mixed (or Great Lakes-St. Lawrence) forest zone, often on north- or east-facing slopes of ravines or in sites of cold air drainage or accumulation. In these sites, it edges out equally shade-tolerant and shade-casting sugar maple and American beech, which thrive under slightly warmer microclimates that provide a longer effective growing season in the same area. A dramatic example of the microclimatic effect of slope aspect can be seen north of Twyn Rivers Drive in Rouge Urban National Park where a broad tableland lies between the closely seated Rouge and Little Rouge Rivers. The forest communities of the three facets of this interfluvial landscape are in complete contrast with one another. Among other species, hickories occupy the warmer, drier, west-facing slope with its long afternoon insolation, sugar and red maple take the moderate, damp, tableland, and hemlock dominates the cool, moist, east-facing slope, in shadow after a brief morning of sunshine.

Fine individuals or groves, often described as cathedral-like, of hemlock may be found in similar environments in most Toronto ravines. The species is also grown to a modest extent in our cultivated landscape where the only other hemlock you might encounter (and then very rarely) is a western species, mountain hemlock (*Ts. mertensiana*), which looks superficially more like a spruce such as white spruce (*Picea glauca*) than like its eastern relative.

In many respects, eastern hemlock has characteristics that would seem to align it with spruces. The needles are borne on little woody pegs (sterigmata), like spruce and unlike any other genera of the pine family, Pinaceae. The seed cones also seem somewhat spruce-like, though even more like those of tamarack (*Larix laricina*) and other larches, somewhat cigar-shaped before they open and with tightly spiraled, rounded, thin seed scales. Looks can be deceiving, however, and a close

examination of the detailed structure of the seed and pollen cones, and of the pollen and pollination mechanism, reveals that hemlock is actually more closely related to true firs such as balsam fir (*Abies balsamea*) than to spruces.

Eastern hemlock is one of our most graceful-looking trees, a grace that is achieved by an unusual pattern of growth. The leader and tips of the upwardly angled branches all arch gently, rather than growing straight, and then straighten up behind the tip as it continues to elongate with drooping new growth. In most trees with predominantly distichous foliage (with leaves extending out to the sides in a single plane parallel to the ground), this is confined to side branches while the upright shoots, like the main axis, bear spiral foliage instead. In hemlock, however, even the central leader bears flattened, distichous foliage, and the arch that it forms follows the needle arrangement and keeps them initially parallel to the ground.

Flattened needles that are dark green above and with paired, paler, stomatal bands on either side of the midrib below are shared by eastern hemlock with balsam fir and other true firs (*Abies* spp.) and with commonly cultivated yews, such as Japanese yew (*Taxus cuspidata*), but it is unlikely to be confused with either of these genera. While the shorter needles and peg-like sterigmata are distinctive, another trait of most hemlocks, including eastern (but not mountain) hemlock, is really unique to the genus. Needles that are physically attached to the upper side of the twig are not twisted to stick out to the sides but, instead, are flipped upside down along the midrib. Thus, when you look at the top of the twig, these needles immediately stand out because their white stomatal bands are showing, contrasting with the dark green upper-sides of all the other leaves. If you see that, it can only be eastern hemlock.

James Eckenwalder



L to R: Upper side of twig showing glossy green flat needles that are much shorter than those of true firs or yews; Detail of twig showing attachment of needles to woody pegs (sterigmata) and flipping over of leaves attached along the twig's upper surface. Photos by Ron Dengler

Underside of a branch showing stubby needles with prominent white stomatal bands; Mature seed cone at the tip of a twig
Photos by Ken Sproule

EELS BY THE TRUCKLOAD: STRANGE TRAVELS BY A SPECIES AT RISK

Of all migratory journeys, the American eel's life story stands out for epic length and enduring mystery. Now, some eels have truck travel added to their itinerary. Today Torontonians will hardly ever see an eel, but they used to be abundant in our waters. By some estimates they made up over half the fish biomass in areas like the nearshore waters of Lake Ontario. In addition to being key nocturnal predators, eels are important prey for beluga whales of the St Lawrence. For Indigenous peoples, the eel was favoured food, with fatty, high-calorie meat especially valued by travelers.

Eels were still being fished commercially in Ontario in the 1970s but, after numbers plummeted, they were designated as "endangered" under the Ontario Endangered Species Act. Overfishing and pollution have played roles in the collapse of Ontario's eel populations, but dams are a central factor. The long complex life cycle of eels, and a migration pattern that takes them to the Sargasso Sea near Bermuda to spawn, evolved when rivers ran free. These days two huge hydro-electric dams along the St Lawrence stand in the way. Eel ladders have been installed to aid young eels migrating upstream, but the downstream trip is another story. An estimated 40% of mature eels migrating downstream are killed by turbines.

This fall, we asked Ontario Power Generation (OPG) for an update on eel protection efforts. OPG owns and operates the Canadian half of the Moses Saunders hydro-electric dam near Cornwall. In early November TFN spoke by phone with John Sanna, an OPG Environmental Advisor, whose team had just wrapped up the season's eel transport. It is a remarkable operation involving several OPG staff, 17 commercial eel fishers, a few eel sorters, and two to three truck transports per week. Each truck carries tanks housing over 250 eels. Every eel is a mature female, about a metre long, and intent on reaching the Sargasso Sea. The trucks pick up their wriggling passengers upstream of the Moses Saunders dam and

release them safely downstream of the second massive dam, Beauharnois near Montreal which is operated by Hydro Quebec.

It had been a good year for OPG's eel team, Sanna explained, despite the pandemic. He sounded relieved. They had captured and transported 7,200 adult eels in 27 truckloads. The program has been running since 2008 as a condition of a Water Power Agreement between OPG and the Ontario government. In years past, the team has typically moved about 4,000 eels downstream. This year's high catch is the outcome of an experimental stocking program that released 3.8 million young eels in areas like the Bay of Quinte from 2006-2009. Those eels are now maturing and adding to the natural population. But eel managers no longer favour stocking, Sanna cautioned, since the resulting eels are often under-sized. He observed wryly that his team has an informal motto: "Nothing is easy about eels."

When asked whether screens could be installed to keep eels from being sucked into turbines, Sanna explained that the extremely high flow rate of the St Lawrence makes that impossible. But other approaches are being explored, including arrays of lights to deter eels. OPG and its many partnering agencies will continue with the American Eel Action Plan through to 2029. This plan is evaluated at five-year intervals and findings are shared with the Ontario Ministry of Environment, Conservation and Parks but not with the public. For the near and medium term, Lake Ontario eels will have to truck the highway between Cornwall and Montreal, courtesy of OPG.

Learn more about eels: listen to American Eels, Episode 94 of Toronto Nature Now SoundCloud, a program jointly run by TFN with Ryerson Radio: <https://soundcloud.com/scopeatryerson/toronto-nature-now-ep-94-american-eels>

Ellen Schwartzel

WHAT'S NEW ON TFN'S WEBSITE

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

- Recap of our 2020 AGM
- 100th Episode of Toronto Nature Now
- Recording of the November Lecture
- Info on our upcoming Nature Images Show
- Results from our Newsletter Survey

CITIZEN SCIENCE OPPORTUNITY

Karen J Vanderwolf, MSc, a PhD student at Trent University, invites TFN members to participate in a

National Bat Box Project

For full information visit:

<https://torontofieldnaturalists.org/batbox/>

VOLUNTEER PROFILE: LYNN MILLER

If you are among TFN's 100-plus team of valiant volunteers, Lynn Miller may have been your first contact with the organization. As our volunteer coordinator, Lynn's vital role is to connect names, skills and interests with new volunteer opportunities as they arise. Lynn knows TFN inside and out. She was our webmaster for over ten years and introduced TFN to Facebook, YouTube and Twitter. Lynn has been active on the board since 2009. She also runs the projector for the Nature Images Show. This popular event is normally held in February at S Walter Stewart Library but will go virtual for 2021 (see page 11). Lynn fondly recalls orchestrating several TFN shoreline clean-ups – the kind of roll-up-your-sleeves event that can be especially satisfying to new volunteers.

Lynn's love of nature extends back to her earliest childhood in London, Ontario where woodlands beckoned, an easy bike-ride away, and ponds were full of frogs to chase. Eventually careers took Lynn and her partner to Toronto, though she had misgivings about the big city. Determined to stay connected with nature, Lynn linked first with the Toronto Ornithological Club, guided by her photography background and interest in birds. But one day she ventured on her first TFN guided walk and was hooked. "What's so cool about TFN is that it's great for curious generalists," she notes. "It's not just a focus on birds or insects or fungi; there is a breadth of

interests." Suddenly she was learning names of plants, discovering spring ephemerals and experiencing new perspectives with every walk.



When asked about long-term trends and opportunities for TFN, Lynn is thoughtful. She is heartened to observe more young people volunteering. They seem especially drawn towards projects involving citizen science and are passionate about action on climate change. Those young people are TFN's future. To stay relevant to the next generation of naturalists, TFN's advocacy efforts will also be crucial, especially on urban planning issues like transforming golf courses into public parklands and natural corridors.

Lynn's volunteering spirit extends beyond TFN and engages her with the Toronto Wildlife Centre where she helps with wildlife care twice weekly. No two assignments are the same. Her eyes sparkle as she describes a recent experience holding a Broad-winged Hawk. Another recent event dispatched her to the zoo to gather browse plants such as willow for the discerning palates of zoo animals. But her daily, most restorative nature connection is with Serena Gundy ravine, almost at the doorstep of her home.

Ellen Schwartzel

TREE PLANTING IN SHERWOOD PARK

The City of Toronto, Urban Forestry, invited TFN to recruit volunteers for a tree planting event in Sherwood Park on October 15 "come rain, come shine." As it turned out, it came rain, in torrents!



Photo: Jim O'Reilly

But the ten intrepid TFN volunteers managed to plant the 100 or so trees and shrubs on a steep hillside (formerly mown grass) in the allotted two hours. We planted sugar maple, white birch, eastern white pine, red oak, alternate-leaved and grey dogwood, bush honeysuckle, witch-hazel, chokecherry and purple flowering raspberry. It helped that most of the volunteers had prior experience and the helpful City staff provided all necessary equipment. So thanks to all the TFN volunteers and to the City staff members.

Although the rain was an inconvenience, it made for perfect planting conditions, with nature doing all the watering for us. It will be interesting to revisit the site in a few years to see how the plants have fared.

Charles Bruce-Thompson

FOR READING

Toronto's Ravines and Urban Forests: Their Natural Heritage and Local History
by Jason Ramsay-Brown, revised edition 2020

Jason Ramsay-Brown has just published a new edition of his attractive and informative book about the ravines and urban forests of Toronto. This book provides beautiful photographs and detailed descriptions of 30 natural areas to visit within Toronto's borders. As Jason says, "Knowing these places is the first step to loving these places."

The foreword to this edition clearly conveys Jason's respect and concern for nature. He asks us to think about the best use of our ravines: "We must consider not only where we wish to go but where nature needs us not to [go] ... in order to maintain our ravines and forests as Toronto's most unique treasures." Some chapters include updates that reflect changes to trails, ecology and other aspects of the various natural areas described. The 2020 edition includes a new chapter about the Meadoway – an on-going project that is transforming a large expanse of power transmission lines and manicured grass into an area that will add 20 km of trails and allow us to bike/walk/run from the Rouge to the Don Rivers, and perhaps beyond. In this edition, the "For Reading" section has been replaced by one page of "Ways you can Help."

This book will be very useful for anyone who enjoys learning more about Toronto's nature, whether on your feet, a bike, or even on your couch.

Note: See Paula Davies' review of the first edition of this book in the Oct 2015 issue of the TFN newsletter [TFNNewsletter#614](#)

Jennifer Smith

Solved – How the World's Great Cities are Fixing the Climate Crisis by David Miller, 2020

David Miller writes from the perspective, not only of Toronto's mayor from 2003 to 2010, but also as an active member and former chair of the C40 Cities Climate Leadership Group representing 94 major city-regions around the world that are committed to achieving carbon neutrality in their jurisdictions by 2050. His premise is that city governments are better positioned than national and regional governments to plan for and implement policies that truly have an impact in combatting pollution and global warming. He records success stories from a variety of cities across six continents:

- Those that have demonstrated how a large-scale switch to renewable sources of energy is possible now, ending or at least drastically reducing reliance on fossil fuels.
- Those that have found effective ways to lower greenhouse gas emissions from existing buildings or demonstrated that we already have the knowledge, technology and other tools we need to build emission-free homes, high-rises and commercial buildings.
- Those that have proved zero-emission public transportation is possible today and how as much as 25% of greenhouse gas emissions in major cities can be addressed through policies that encourage people to opt for low-pollution choices such as electric vehicles and bicycles.
- Those that have lowered greenhouse gas emissions by implementing effective waste management systems.

continued on page 13

Q&A: POTENTIAL PREY HARASSING PREDATORS

Question: Many times I have seen a crow being chased by a number of small birds. Recently I thought I saw a hawk being harassed by several crows. Is this possible and if so does it happen fairly often?

Elisabeth Gladstone

Answer:

Yes, crows and many other species harass hawks, owls and other predators that could be a threat to them or their eggs or young. Owls are a particular target, so a commotion can reveal an owl or a nest/roost. Crows often harass Great Horned Owls to drive them away. I once watched a dozen smaller birds, including chickadees, nuthatches and Downy Woodpeckers, harassing something in a hole in a tree in Taylor Creek Park for at

least 15 minutes. I suspect a Screech Owl's sleep was disturbed, but it probably ignored them until they gave up.

Blackbirds, kingbirds and hummingbirds as well as crows and jays are some of the species often noted for attacking potential predators much bigger than themselves. This mobbing behaviour is not limited to birds: Meerkats mob snakes to let them know that they have been spotted and to drive them away.

I have often wondered how much of the harassment is about reducing a threat and how much is about showing off to a mate or potential mate, or is it perhaps just the fun of being part of a mob?

Bob Kortright

MUSHROOM FORAY AT JIM BAILLIE NATURE RESERVE

On September 30 seven TFN members did a foray along the White Trail on the west side of the reserve identifying and photographing mushrooms. Leader D Andrew White reported the following observations:



← Orange latex or delicious milk-caps (*Larctarius deliciosus*). Fungi with orange latex that stain faintly green when bruised. They are mycorrhizal with conifers, so are often found under pines.

→ Birch bolete (*Leccinum scabrum*) was seen the previous Saturday but not on the foray date. Well camouflaged. Field guides often show brown caps, but very dark capped phases also occur. They are mycorrhizal with birch (*Betula* spp).



← Most likely blewit (*Lepista nuda*). Blewits are saprobes that grow on dead plant material and in histosolic soils. These old specimens looked like honey mushrooms but were growing on organic rich soil, not on deadwood, so were probably faded blewit caps.

→ Hollow-foot bolete (*Suillus cavipes*) or similar species. The hollow stipe was confirmed by picking one specimen. Tamarack (larch) trees were not noted at the time but were likely present.



← Pine boletes (*Suillus americanus*). These orange to yellow boletes are mycorrhizal on pines. One large patch was found the previous Saturday but not on the foray date.

→ Poison pie mushrooms (*Heboloma crustuliniforme*). The dull caps, attached gills and stipe of these large flat grey, short-stalked mushrooms most resembled heboloma. This fungus is mycorrhizal with both conifers and hardwoods.



Photos by D Andrew White

Field Guide Review: *Mushrooms of North-eastern North America*, TJ Baroni, 2017

Baroni covers over 500 species (one per page) in impressive detail including alternate or outdated names, with excellent photographs and introductory material. He covers, in much less detail, many similar species in the comments section of species accounts. The index is comprehensive. There is an introduction to each of the 19 sections: boletes, corals, jellies, crusts, toothed fungi, chanterelles, polypores, bird's nests, stinkhorns, puffballs, earthstars, earthballs, cup fungi, morels ... and four groups of gilled mushrooms divided by spore colour (pale, brown,

dark and pinkish) with a one-line description of each genus or group of similar genera in the section.

I would prefer a more detailed introduction to each genus in the body of the text as well. This volume is pretty heavy for a field guide. It is available as an ebook. This is the most comprehensive mushroom guide for Southern Ontario other than online resources such as mycoquebec.org and mushroomexpert.com.

Bob Kortright

JUNIOR NATURALISTS

This fall the TFN Juniors have been hosting another ten-week nature club. Participants from seven TFN families with children aged 6-13 meet via Zoom on Wednesday afternoons from 4:30-5:30. As in the spring, everyone is invited to contribute photos or drawings from nature walks or adventures they have enjoyed during the week. It has been a special time of identifying fungi, plants and insects, and sharing sightings of migratory birds passing through. One Wednesday we dissected acorns to discover the acorn weevil and moth larvae and learn about their amazing life cycles.

Our theme this fall is Nature Journaling. Art educator Sandra Iskandar is taking us on an exciting journey learning to draw, identify and label what we see. We have learned that a nature journal is a creative and personal thing. It is possible to add details about the weather and the light, and personal observations about the mood. Our first journal entry was about staghorn sumac and the second about red oak. My most amazing discovery is how much more you see when you try to draw it - and how much longer you remember it!



On October 24th, several of our TFN Juniors families joined a PollinateTO shrub-planting event at the Church of the Resurrection. We had a lovely day of finding earthworms, cool snails, puffballs and planting Snowberry, Chokeberry, Nannyberry, Purple flowering Raspberry, and Bush Honeysuckle. The Witch Hazel leaves were brilliant yellow and they were covered with tiny yellow flowers. One of our members found a fallen Cedar log and made cordage out of the bark!

Anne Purvis

Nature Images Show

Saturday, February 6, 2021 from 1:30 to 4 pm

Please join us for our first ever virtual Nature Images show!
<https://torontofieldnaturalists.org/NatureImages-2021>

Calling all TFN photographers!

Share your photographs at the Nature Images show! This virtual event opens up more possibilities for display than our traditional slideshow format. Create a video! Add music! Or stay with the tried and true slideshow. It's up to you.

Because of the nature of this event we can't handle "walk in" participants. **If you would like to participate, please email Lynn Miller at volunteering@torontofieldnaturalists.org before the end of January.**



Eastern Bluebird, Carden Alvar.
 Photo: Theresa Moore

TORONTO WILDFLOWERS: ANEMONES

Anemones belong to the large buttercup family, Ranunculaceae, which includes 50 to 60 genera and about 2,500 species. Articles on other family members appeared in the TFN newsletters of 2010 May, 2010 December, 2016 April, 2017 September, 2017 October and 2019 March.

The TFN's *Vascular Plants of Metropolitan Toronto* (1994, 2nd ed.) recorded four species in the genus *Anemone*. I have seen all but one of these, the locally rare *A. cylindrica* which is illustrated in *The ROM Field Guide to Wildflowers of Ontario* (2004). Two of the other species, *A. canadensis* (Canada anemone) and *A. virginiana* (tall anemone or tall thimbleweed), are locally common; the other, *A. quinquefolia* (wood anemone), was recorded as uncommon but in nearly every watershed from Etobicoke Creek to the Rouge and in High Park.

A. canadensis occurs in habitats varying from moist forests to wetlands. Up to 80 cm tall, it has solitary flowers consisting of tepals up to 40 mm wide. It blooms from May to July. It is found throughout most of Ontario (ROM), and across Canada except the Yukon and Labrador, and the U.S. except for the west coast and southern states (U.S. Dept. of Agriculture Plants database).

A. virginiana is an open woodland or meadow species with greenish (illustrated) or white flowers up to 40 mm wide, on stems up to a metre tall. *The ROM Field Guide* shows a nearly white-flowered variety. This is a summer-blooming species. It is found from British Columbia to Newfoundland and most states east of the Rockies (USDA).

A. quinquefolia is a smaller species, up to 30 cm tall, with white or pink-tinted flowers up to 25 mm wide. Normal flowers resemble those of *A. canadensis* but double forms were seen one year in the Rouge. This species blooms in May to June. The USDA shows a range of Alberta to Nova Scotia and the eastern half of the U.S.



Canada
anemone
(*Anemone
canadensis*)
and detail



Thimbleweed (*A. virginiana*)



These are flowers to enjoy both in the spring and summer!

Article and photos by Peter Money



Wood anemone (*A. quinquefolia*)
with detail and double form

REMEMBERING TERRY WHITTAM

We are sorry to learn that former TFN member and outings leader, Terry Whittam, died in September. Terry shared his knowledge and love of nature with everyone – the novice to the experienced – and recently supported Junior Toronto Field Naturalists programs. Birds singing, butterflies fluttering, frogs croaking or bees buzzing made Terry's day! Wanting to make our critters' lives and their environment better, he served as a

conservationist with Rouge National Urban Park and was involved with nature and birding walks, bird count studies and frog watches, and with Monarch Watch, tagging 8000 monarch butterflies at Rosetta McClain Gardens. He got very excited when any of them made it to Mexico. Our critters will miss Terry, as do his family and friends.

Betty McCulloch

FOR READING *continued from page 9*

While the title of his book sounds overly optimistic, David Miller says he chose it because it is provocative and because he believes, “The contributions by cities to lowering emissions from electricity generation, transportation, buildings and waste are real. If the best existing strategies are replicated quickly at scale, they can make the material difference needed now by dramatically lowering the emissions that cause climate change.” He ends by challenging us to use our voices, actions and votes to promote these types of actions in our own municipalities.

Wendy Rothwell

***Biodiversity Conservation in Canada: From Theory to Practice* by Richard R Schneider, 2020**

Based on the first three chapters, a scan of the other eight, and book reviews (esp. https://ccte.ca/book/WLA_review.pdf), this appears to be an excellent introduction to conservation in Canada. The companion website www.ccte.ca contains for download the Preface, Table of Contents, Chapter 2 (History of Conservation), three book reviews, and all figures and tables in the book.

TFN has received five copies of this book from the author. We'll keep one in our library and are open to suggestions from members as to where the other four copies can be best used. Please contact Bob Kortright (finance@torontofieldnaturalists.org) with your suggestions.

Bob Kortright

***Beyond the Trees: A journey alone across Canada's Arctic* by Adam Shoalts, 2019**

My husband Jim and I have a habit of reading aloud to each other on car trips. This year we chose this enthralling book by a local Ontario guy. In 1967 people had paddled the routes of voyageurs to celebrate Canada's centennial. Adam Shoalts' goal was to celebrate Canada's 150th birthday and experience the Arctic wilderness 'while it is still there.' From May to September of 2017 he paddled and hiked, alone, 4000 km across the Canadian Arctic from the Dempster Highway in northern Yukon to the hamlet of Baker Lake on an inlet of Hudson's Bay. Over and over in the book his pressing concern about conserving this vast untrammled land comes through.

Adam's trip was full of 'hardship.' He started his journey in the west because the ice goes out there on the lakes and rivers earlier than in the east. Every day would count if he was to finish such a long paddle before winter set in again in September. This meant, however, that he must paddle upstream on four major rivers, including the fast-flowing Mackenzie and the dangerous Coppermine. Managing this involved poling, pulling the canoe from shore and portaging.

Wanting to stay above the Arctic Circle as much as possible, he chose to travel a little known river, the Hare Indian, which is clogged with willows, alders and black spruce. There was still considerable ice on Great Bear Lake when he arrived there in July. And of course, once it warmed up, he was eaten alive by mosquitoes and blackflies. In the eastern Arctic he experienced constant high winds whipping across the landscape, bringing freezing weather in August.

Nature was all around Adam – muskoxen, wolves, grizzly bears, Brant Geese, the northern lights and breath-taking vistas. His joy in connecting with nature in this wild, barren country outstripped any hardship he endured. His only desire is that it be saved in perpetuity.

I found there was a message of compelling and universal significance in this true story. We will have to endure hardship to save nature. It will be buggy in Toronto if we reinstate wetlands, for example. But Adam's experience is a testimony that it is not only necessary, but possible, and deeply fulfilling to do so.

Anne Purvis

***The Secret Islands: An Exploration* by Franklin Russell, 1996**

A collection of stories unified by their connection to islands in Atlantic Canada. Its focus is explorations, not just of these islands and their huge colonies of nesting seabirds, but of island people, especially out-port Newfoundlanders and, to a considerable extent, the author's own psyche.

Although Russell's writing is always vivid, the four chapters about Funk Island, a 300x800-metre triangular slab of granite 50 km NNE of Lumsden, NL, is an especially wonderful account, not just of his trip but also of the island's history, its birds and the fishers who take him there. Funk Island is doubly unique. It was the main North American breeding ground of the original "penguin," the flightless Great Auk, wiped out by fishers, whalers and sealers who stopped by for birds and eggs until they were all gone (around 1800). Now it has the largest colony of Common Murre, about a million birds. Russell learns patience from the fishers who wait days until the wind is right – a 'Funk wind' – before setting out.

Other chapters cover his experiences with gulls on Kent Island, eiders on Hay Island, puffins in Great and Green Islands, Storm-Petrels in Gull Island, and gannets on Bonaventure, Funk, and at Cape St Mary's, NF. The account of the Storm-Petrel colony was particularly memorable because they come to their burrows on the island only at night to avoid gull predation.

Sadly, Franklin Russell died just over 15 months ago, aged 92, 16 years after suffering a stroke (ref [obit](#)).

Bob Kortright

WEATHER (THIS TIME LAST YEAR)

December 2019

Weather was changeable up to the 20th. Temperatures rose to 10° on the 9th, but there were cold periods and a couple of snowfalls. The coldest reading was -18.0° at Buttonville Airport on the 19th. (The Environment Canada office near Steeles and Dufferin dropped to -17.5°.) The period from the 19th through Christmas brought a strong warmup with unusual amounts of sunshine as a high pressure system settled over our area and the Arctic air retreated westward to Alaska. Warmth peaked on the 27th with a high of 11.6° downtown and the cold did not return. Monthly mean temperatures were slightly above normal, with 0.6° downtown and -0.8° at Pearson Airport. Precipitation continued above normal with a total of 81.0 mm downtown (normal is 61.3 mm). Pearson had total precipitation of 71.2 mm (normal is 58.3 mm). Both rainfall and snowfall were above normal. Snowfall came in occasional short bursts between the 1st and 19th. There was snow cover much of the month until a bit before Christmas. Rainfall was brought above normal by a warm weather system on the 29th-31st.

2019 – Annual

The year was relatively cool and wet. The annual mean temperature was 8.9° downtown and 8.1° at Pearson (about 0.5° to 1° below the 30-year average). It was the coolest year since 2014 (i.e. since before the 2015-2016 El Niño), particularly in late winter, late spring and late fall. Precipitation was 908.5 mm downtown and 950.4 mm at Pearson (normal is around 800 mm). It was wet much of the year, especially in the spring.

January 2020

January was wet, grey and somewhat mild. Arctic air was confined well to the north by a strong jet stream flowing in a straight line west to east – a northern hemisphere weather pattern known as a “positive Arctic oscillation.”

The warm weather carrying over from December peaked on January 11th with record high temperatures for the day in the 11-12° range. The highest reading was 12.0° at the Environment Canada office. Moderately cold weather came mid-month, the lowest readings on the 17th and 20th. The Environment Canada office once again had the most extreme reading: -17.0° on the 20th. Downtown bottomed out at -13.6° on the 17th and Pearson at -15.6° on the 20th. In most years, even recently, we hit -20° at least once. This year was more reminiscent of the very mild Januaries of 2017, 2016, 2012, 2006 and 2002. January 2020 had a mean temperature of -1.5° at Pearson and -0.5° downtown, about 3° above normal (more like 3.5° above at Pearson) and the warmest for January since 2006 when it averaged above freezing.

Total precipitation was about twice normal – 131.4 mm at Pearson and 126.3 mm downtown. Not all of this was rain. Surprisingly snowfall was just above normal with 30.4 cm at Pearson (normal is 29.2 cm). There were several days with notable snowfall, especially the 18th. The ground in the city was snow-covered from the 18th-25th.

Gavin Miller

ABOUT TFN

TFN is a charitable, non-profit organization.

BOARD OF DIRECTORS

President: Ellen Schwartzel
 Past-President, TFN Archives: Jason Ramsay-Brown
 Secretary-Treasurer: Bob Kortright
 Vice-President, Promotions & Outreach: Zunaid Khan
 Junior Naturalists: Anne Purvis
 Lectures: Alex Wellington
 Newsletter: Jim Eckenwalder
 Stewardship: Mark Stewart
 Volunteers: Lynn Miller
 Walks & Outings: Kayoko Smith

NEWSLETTER

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

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

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

Submissions deadline for Feb. issue: Jan 4

CONTACT US:

Telephone: 416-593-2656

Website: <http://www.torontofieldnaturalists.org>

Email: office@torontofieldnaturalists.org

See email addresses for specific queries at: <https://torontofieldnaturalists.org/about-tfn/contact-us/>

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.

Wildlife Photographer of the Year 2020

This popular annual exhibit will be on display at the Royal Ontario Museum from November 21 until May 20, 2121.

KEEPING IN TOUCH



This melanistic red fox was photographed by Ken Sproule in Col Sam Smith Park on Oct 26.

Melanism is caused by the increased presence of a black-colored pigment, melanin, in the skin or hair. Black foxes, also called (confusingly) silver foxes, are becoming quite common in Toronto, one in every five having this recessive trait according to some estimates. Other examples of melanistic or “black morph” animals you can see around Toronto are melanistic garter snakes and, of course, our ubiquitous black squirrels.

Charles Bruce-Thompson

On October 19 Kathleen Brooks wrote:

We didn't have to worry about staying six feet away from this guy yesterday. He was in our local cemetery, the Toronto Necropolis, where my friend and I often walk. Other walkers say there are 11 coyotes resident at the nearby St James Cemetery, where we saw two young ones a few days ago. Thrilling!

The city is so beautiful now. I look back on the last few months and realize we have walked through all the phases of growth to hibernation, and all of it lovely.



Eastern Meadowlark at Carden Alvar,
Photo: Lynn Pady

Lynn Pady shared this good news from Carden Alvar: “The horrific plan by owners of a huge piece of property in the middle of the Carden Alvar to turn it into a gun club and shooting range has been thwarted, thanks to a massive amount of incredibly hard work by many folks involved with the Couchiching Conservancy and Nature Conservancy of Canada (NCC).”

About Carden Alvar:

This magical place in the Kawartha region “supports some of the highest quality and most extensive alvar habitat on the planet within a mosaic of grassland, wetland and forest. ... It has been designated as an Important Bird and Biodiversity Area, an Area of Natural and Scientific Interest and contains globally rare alvar habitat and species. ... It is recognized worldwide as a destination for birdwatching due to the large number and diversity of grassland birds, including Grasshopper Sparrow, Bobolink, Upland Sandpiper, Field Sparrow, Eastern Meadowlark and Eastern Loggerhead Shrike.” (NCC). To learn more, visit [NCC Carden Alvar](#) Ed

Toronto Field Naturalists
2 – 2449 Yonge St.,
Toronto, Ontario, M4P 2E7

Publications Mail
Registration No. 40049590

TFN LECTURE

Sunday, December 6 at 2:30pm

See page 3 for information about lectures via Zoom

Rethinking Beauty: Inspiring Gardeners in a Changing World



Paul Zammit, professor of Horticulture, Niagara College and former Director of Horticulture at Toronto Botanical Garden, will examine the important role of private and public gardens and share his views on what makes a garden beautiful.

Upcoming lectures:

Feb 7: Salamander-eating Pitcher Plants, Patrick Moldowan, University of Toronto PhD candidate

Mar 7: Plastic Waste used by Nest-building Cormorants at Leslie Street Spit, Melina Damian, professor, Centennial College and communications coordinator, Ontario Nature

Apr 11: Making Nature and the Outdoors More Welcoming for Black People and Recent Immigrants, Jacqueline Scott and Ambika Tenneti, University of Toronto PhD students