TORONTO FIELD NATURALIST

Number 601 February 2014

Saw-whet owl photographed at Ashbridges Bay by Lynn Pady

REGULARS

FEATURES

Toronto Field Naturalist is published by the Toronto Field Naturalists, a charitable, non-profit organization, the aims of which are to stimulate public interest in natural history and to encourage the preservation of our natural heritage. Issued monthly September to December and February to May. Views expressed in the Newsletter are not necessarily those of the editor or Toronto Field Naturalists. The Newsletter is printed on 100% recycled paper.

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IT'S YOUR NEWSLETTER!

We welcome contributions of original writing of observations on nature in and around Toronto (up to 500 words). We also welcome reports, reviews, poems, sketches, paintings and digital photographs. Please include "Newsletter" in the subject line when sending by email, or on the envelope if sent by mail.

Please re-name digital photographs with the subject and your name (abbreviations ok); scale your photos *to less than 200kB each*. In the accompanying email include location, date and any interesting story or other information associated with the photograph.

Deadline for submissions for March issue, **January 31**

NEWSLETTER COMMITTEE

Jenny Bull (co-editor), Vivienne Denton, Karin Fawthrop, Nancy Fredenburg, Elisabeth Gladstone, Judy Marshall, Ruth Munson, Toshi Oikawa, Wendy Rothwell (co-editor).

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BOARD OF DIRECTORS

MEMBERSHIP FEES

$20 YOUTH (under 26)
$30 SENIOR SINGLE (65+)
$40 SINGLE, SENIOR FAMILY (2 adults, 65+)
$50 FAMILY (2 adults – same address, children included)

No HST. Tax receipts issued for donations. Send membership fees and address changes to the TFN office.

Toronto Field Naturalists
1519-2 Carlton St, Toronto M5B 1J3

Tel: 416-593-2656
Web: www.torontofieldnaturalists.org
Email: office@torontofieldnaturalists.org

HELP WANTED
AT THE TFN TABLE AND DISPLAY
FOR TWO OUTREACH EVENTS

Saturday, February 22, 10 am – 4 pm - GET THE JUMP ON SPRING
Toronto Botanical Garden, Leslie St. and Lawrence Ave. E. (free parking; TTC accessible)
This is their Annual Horticultural Open House with seminars and displays.

Saturday, February 22, 1 – 4 pm - 4th ANNUAL PARK PEOPLE SUMMIT
Daniels Spectrum, Dundas St. E. and Parliament St. (an interesting place in Regents Park)
We have organized walks for Park People in the past.

If you can help (for part of all of the time) at either of these events, please contact
Stephen Kamnitzer, TFN Outreach Co-ordinator

[redacted]

TFN MEETING

Sunday, February 2, 2014

2:30 pm

The Sky Above: Another Aspect of Our Natural World

Paul Delaney, popular lecturer and Astronomy Professor at York University, will introduce us to the natural world high above.

VISITORS WELCOME!

SOCIAL: 2:00 – 2:30 pm

Room 003, Northrop Frye Bldg, 73 Queen's Park East

Remember this is a new location!!

Immediately southeast of Emmanuel College, south of the Museum subway station exit on the east side of Queen's Park. Enter on either the west or north side of the building. The west entrance is wheelchair accessible.

For information: call 416-593-2656 up to noon on the Friday preceding the lecture.

Next TFN Lecture

Mar 2

In the Eye of the Beholder: A Study of Beauty in the Natural World

Kyle Horner, wildlife photographer, birder and naturalist

LECTURE SUGGESTIONS

Please send your suggestions for speakers for the 2014-15 TFN monthly lecture series to the TFN office (contact info, page 2)

Outings Leaders' Workshop

Saturday February 8, 10 am to 12 noon

S Walter Stewart Library Auditorium,
170 Memorial Park Ave

Leaders, Want-to-be Leaders and Interested Members are all invited
to a program of discussion, questions and ideas on:
Planning * Resources * Safety * Routes * Group Dynamics
Input from leaders AND walkers welcome

Please register as soon as possible

By phone: 416-593-2656 or email:
office@torontofieldnaturalists.org

Workshop Committee: Theresa Moore, Charles Bruce-Thompson, Margaret McRae

TFN OUTINGS

- TFN events are conducted by unpaid volunteers.
- The club assumes no responsibility for injuries sustained by anyone participating in our activities.
- Children and visitors are welcome at all TFN events. Children must be accompanied by an adult.
- If you plan to bring children in a stroller, be aware that there may be steps or other unsuitable terrain.
- Please do not bring pets.
- To get to outings on time, check TTC routes and schedules (www.ttc.ca or 416-393-4636).
- Outings go rain or shine: check the weather by calling 416-661-0123 so you will know what to wear.
- Wear appropriate footwear for walking on trails which may be muddy, steep or uneven.

Sat
Feb 1
1:30 pm

NATURE IMAGES EVENT – Nature Arts
Leaders: Gail Gregory and Lynn Miller
Meet at S Walter Stewart Library, 170 Memorial Park Ave, lower auditorium. Members may bring up to 20 digital photos to show. See notice on page 5.

Sun
Feb 2
2:30 pm

LECTURE – The Sky Above: Another Aspect of our Natural World
Speaker: Paul Delaney
Room 003, Northrop Frye Building, 73 Queen's Park Cres E. See page 3.

Tues
Feb 4
10:00 am

COLONEL SAMUEL SMITH PARK – Birds
Leader: Doug Paton
Meet at the southwest corner of Lake Shore Blvd W and Kipling Ave. Bring binoculars. Morning only.

Thurs
Feb 6
9:00 am

CHARLES FELL NATURE RESERVE – Snowshoe Walk
Leader: Charles Chaffey
By February 3, please e-mail the leader at [redacted] or telephone him and leave a message at [redacted] to arrange carpooling to this Reserve, which is north of Port Perry. State your name, telephone number, whether you can offer rides and how many, or if you need a ride, and where you will be coming from in order to choose locations convenient for pick-up. Because there are no facilities or trails at the Reserve, one should be prepared for about three hours of arduous walking with no opportunity to drop out along the way. Snow-shoes are not obligatory but walking may be difficult without them. Bring lunch with a hot beverage. We should arrive back in Toronto no later than 4 pm.

Sat
Feb 8
10:00 am

OUTINGS LEADERS WORKSHOP
Leaders: Charles Bruce-Thompson and Theresa Moore
Meet at S Walter Stewart Library, 170 Memorial Park Ave at Durant. See page 3 for details.

Sun
Feb 9
10:00 am

ASHBRIDGES BAY – Waterfowl and other Winter Birds
Leaders: Jim and Petra Grass
Meet at the southeast corner of Coxwell Ave and Lake Shore Blvd E. Bring binoculars. The walk will finish around 12:00 noon.

Wed
Feb 12
10:00 am

EAST DON RIVER AND NEWTONBROOK CREEK – Nature walk
Leader: Alexander Cappell
Meet at the northwest corner of Sheppard Ave E and Leslie St. We'll see forested slopes in winter, an abandoned flood control weir, a meandering stream bed and a near-vertical, sandy, eroding cliff side (someone's back yard). Finish at a coffee shop at Cummer Ave and Bayview Ave. Duration: 2.5 hrs.

Sat
Feb 15
1:00 pm

HUMBER BAY PARK EAST – Birds and Trees
Leader: Bob Kortright
Meet at the southwest corner of Park Lawn Rd and Lake Shore Blvd W for a loop walk. Bring binoculars.

Sun
Feb 16
2:00 pm

PATHology 2.0 – Manufactured Nature - Lost Rivers Walk
Leaders: John Wilson, Lacey Williams, Helen Mills and friends.
Meet at Metro Hall, southeast corner of King St W and John St. For the second year, in frigid February, our walk will explore the 17 km PATH system that runs beneath the towers of Toronto's central core. We'll search a new part of the PATH for proxies for the lost natural landscape, and seek out examples of evolution in building design that brings living systems and sustainable water use into the built environment. This year's extra challenge – to find vertical rivers. A joint walk with the Toronto Green Community.

Thurs.
Feb 20
10:00 am

PROSPECT CEMETERY – Trees
Leader: Jack Radecki
Meet at the St Clair gates on St Clair Ave W just west of Lansdowne Ave for a loop walk. Morning only.

Sat
Feb 22
1:00 pm

CROTHERS WOODS – A Toronto Carolinian Forest - Tree ID
Leader: Stephen Smith
Meet at the top of the stairs at the corner of Redway Rd and Millwood Rd. We'll walk south along the trails through the forest to Pottery Rd ending at Todmorden Mills, looking at northern and southern forest tree and shrub species in winter conditions. Duration: 3 hrs.

Tues
Feb 25
10:00 am

MOORE PARK RAVINE AND DON VALLEY BRICK WORKS PARK – Nature Walk
Leaders: Wendy Strictland (Natural Environment Specialist, City of Toronto) and Cheryl Post (Parks Program Officer, City of Toronto)
Meet at the northeast corner of Glen Rd and South Dr - accessible by TTC: #82 Rosedale bus from Rosedale subway station or #75 Sherbourne bus from Sherbourne subway station (or a short walk from Sherbourne subway station). Bring crampons or other footwear suitable for icy conditions. The trail can be icy or muddy depending on the weather. Morning only. Hike will end at Don Valley Brickworks Park. A shuttle bus to Broadview subway station is available at Evergreen Brickworks.

NATURE IMAGES EVENT

Digital Photography Show and Art Exhibit Opening

Saturday, February 1, 2014

1:30 - 4:00 pm

Light Refreshments

Auditorium - S. Walter Stewart Library
170 Memorial Park Ave

1 block north of Mortimer,
2 blocks west of Coxwell Ave,
TTC bus north from
Coxwell subway station

Note: Framed works by TFN members will be on display from February 1 to 28.
To ensure your access to the exhibit after February 1, phone the library at
416-396-3975 for hours and program information.

PRESIDENT'S REPORT

As I am starting to write this over the Christmas holiday, I am relieved to have my power back on. The ice storm caused a lack of hydro for three days which was very frustrating and threw me off schedule. It came back on on December 24th about 1:30pm. The indoor temperature got down to 5°. I'm sure many of you had similar experiences.

It has been a busy period since the last newsletter. I attended two meetings about Taylor Massey Creek work, one held by Councillor Janet Davis about many work plans; the other, the beginning of an Environmental Assessment on a master plan to identify immediate restoration needs and establish a prioritized action plan for future channel restoration. The creek needs a lot of work from flooding since 2005. Information is on the city website at toronto.ca/masseycreek

I also attended a meeting held by NoJetsTO in December about the Island Airport.. I am opposed to its expansion and believe it would affect our enjoyment of nature on the lakeshore. (See page 17.)

Our book sale in December was very successful and we made about $500. Thank you to all who participated. We have installed more boardwalks at the Jim Baillie Nature Reserve with two work parties in November and December, and plan a snowshoeing trip to Charles Fell Reserve in February.

I am pleased to advise that we added Anne Powell to our board of directors at our November meeting. She moved to Toronto in 1981 and has been an outings leader for several years specializing in birds. Anne worked in Ontario's energy industry in policy and rate regulation for the Ministry of Energy, Ontario Energy Board and Hydro One. During that time she oversaw diverse areas including financial, economic and legal matters. She has also served on a number of not-for-profit Boards. We are happy to have her join us. This is the first time in many years that we have had a full board.

We are planning several outreach events, with two on February 22: Get the Jump on Spring at the Toronto Botanical Garden and Park People's 4th Annual Summit (see page 2) . We also have the digital images event on February 1 (you are welcome to bring digital photos) and the nature arts show throughout February (see page 5) .

We are preparing to give a supply of newsletters as well as our anniversary presentations to the Ontario Archives and find we are missing some newsletters. We need all of 2001 and 2002, plus 2003 except for October and December, and May 2004. If anyone has spare newsletters for those dates that they are willing to donate, we would like to include them for the archives.

We are starting to book all the walks for the summer season. Let us know if you would like to lead any. All are welcome to attend our leader's workshop on February 8 (see notice on page 3). Please RSVP to the office if you plan to come. We welcome new leaders both for our club walks and for outreach walks and programs.

Margaret McRae

[redacted]

Red berries hang low
From branches burdened with snow
Soon birds flock to eat.

Haiku: Elisabeth Gladstone. Photo: Wendy Rothwell

Toronto Field Naturalists Grants Program

TFN provides funding for projects and programs that further our objectives of connecting people and nature in Toronto.

Please send your **suggestions of nature-related projects and programs** suitable for consideration for the 2014-15 TFN grants program to the TFN office (see contact info on p 2).

MONTHLY MEETING REPORT

The Don River

Sunday December 1, John Wilson, activist and former chair of the Task Force to Bring Back the Don

In his excellent and well illustrated talk, John Wilson shared his passion for and extensive knowledge of the Don River. An MBA from York, he is an independent community engagement specialist. Arriving in Toronto in 1972, he missed nature until friends took him to Wilket Creek and Edwards Gardens, the start of his involvement with the Don. He joined the Task Force to Bring Back the Don in 1995 and chaired it from 2001 to 2011. He has remained involved, including with Waterfront Toronto initiatives in the area surrounding the mouth of the Don. Since 2008 he also has been Program Developer for the Toronto Green Community/Lost Rivers Project.

John put the Don into its regional physiographic setting, spoke of it as known by the Mississauga First Nation, discussed developments since the British arrived, and focussed on present and ongoing problems and progress.

The headwaters of both the East and West Don are on the south-facing slopes of the Oak Ridges Moraine. Well south of the moraine, bisecting Toronto, are remnants of the shore cliff of Lake Iroquois, a lake existing about 12,500 years ago. Its northeast boundary lacks shore cliffs, as here the lake was dammed by the then margin of the Pleistocene icecap. Shore cliff remnants can be seen on and near the banks of many branches of the Don. Mentioned were Casa Loma and Castle Frank Brook, Mud Creek in the Moore Park Ravine, Sunnybrook Creek, and Taylor-Massey Creek. Charles Sauriol Reserve is a favourite viewing area of the East Don.

The Don, known as the Wonscotanach by the Mississauga, was sold with the surrounding area to the British in 1788. Augustus Jones laid out townships in 1790. His relationship with the Mississauga was cemented by two marriages to First Nation wives. He translated the river's name as "Back Burnt Grounds". Dr Basil Johnston, an expert in Anishinaabe languages, translates it as "burning bright point or peninsula". The Don was particularly valued by the Mississauga for the abundant waterfowl, turtles and fish in its delta marshlands.

Early naturalists noted Cory's Least Bittern in the delta bay area in 1890. By 1900, 20 specimens had been collected (and the population extirpated!). Ironically, the Ashbridges Bay marshes were also "extirpated" by 1930 when the Port Lands and Keating Channel were created.

There is hopeful progress in the Don north of the waterfront area but much remains to be done. The waters of the main branches of the Don have become clean enough that introduced Chinook salmon have been present for the last ten years and seen as far north as Pomona Mills, Thornhill. Much work is needed to restore spawning grounds in small tributaries. Road salt pollution from snow dumps is beginning to be addressed. For example, a dump area between Crothers Woods and the Don is planned to be restored as "Cottonwood Flats." From 1995 to the present there has been naturalization of areas along the Lower Don. The Brick Works area has features designed to help people appreciate the Don, for example the Weston Family Quarry Garden and Ferruccio Sardella's installation "Watershed Consciousness."

In the waterfront area, the 1992 Crombie Royal Commission on the future of the Toronto Waterfront was significant. Waterfront Toronto is now working to revitalize the region surrounding the mouth of the Don. An example is the Corktown Common, on the West Don Lands. This park features playgrounds, diversely planted habitat, an urban prairie, and a large marsh which provides wildlife habitat and floodwater mitigation. The park areas will, hopefully, connect people with nature and make them appreciate its benefits.

Peter Money

Left:
Charles Sauriol Conservation Reserve, East Don.

Photo: John Wilson

Right:
Corktown Common wetland, West Don

Photo: Fred Hainsworth

EXTRACTS FROM OUTINGS LEADERS REPORTS

The Green Line Hydro corridor (Davenport, Caledonia, Dupont, Christie), Oct 20. Leaders: Helen Mills and John Wilson. Our purpose was to discover the potential to re-establish our links to watershed ecology along Hydro rights-of-way. This route is being championed by local "new urbanist" activists as a green thread through a neighbourhood that is changing from industrial employment-residential ("working class") to post-industrial multi-use ("hipster"). From our watershed perspective, we noted the great potential to bridge the watershed boundary between Humber and Don watersheds from human (active recreation trail) and non-human (urban ecological linkage) perspectives. The proximity of Toronto's most notable geological feature (Lake Iroquois shore cliff) adds to the urban ecological significance. The Green Line is something like the Beltline Trail and York Beltline greenbelts in repurposing a utility corridor for "infill" natural restoration and urban open space within neighbourhoods that appear to be parklanddeficient. A Design Competition was awarded recently for various sites along the route, and they would be excellent sites to revisit as they are transformed through thoughtful revitalizing intervention. (See www.greenlinetoronto.ca)

Humber Bay East Park, Oct 29. Leader: Anne Powell. A sunny day following the first overnight fall frost provided a beautiful setting for us to welcome the returning migrating birds back to the park and get one of our last views of flowering native plants. We recorded 23 birds and 24 plants and a lone sulphur butterfly. A highlight was a close view of male hooded mergansers cavorting in one of the ponds.

Toronto Island, Nov 5. Leader: Anne Powell. A beautiful day but with limited birds. We saw workers digging a snake pit to accommodate snakes which would be dislodged by a new walkway to be constructed along the south seawall on Wards Island. The pit was about 4 ft deep, filled with rocks so the snakes could easily move below the frost line during the winter. [See report next page.]

Trees and Architecture, St George St, Nov 13. Leader: Richard Partington. The area is an architectural delight, and the trees aren't bad either. A highlight was the Thomas Fisher rare book library, an entrancing space, serene, half-lit, walls lined floor to ceiling with the knowledge, thinking and wisdom of the ages, one of Toronto's greatest treasures. Wildlife observed included: one dragon, asleep, at the bottom of a staircase; rock pigeons, starlings, house sparrows; grey squirrels and one moose (courtesy of Charles Pachter) at Hoskin and St George.

Rosetta McClain Gardens and Bluffs, Nov 16. Leader: Bob Kortright. A cooperative red-breasted nuthatch flew across the road to be the first bird seen by most. The wind was from the wrong direction to bring hawks along the lakeshore, but the warmth brought out 2 butterflies, including a late red admiral. After walking along the lakeshore to the end of the path near Bluffers Park, viewing a late cormorant and the expected bufflehead, red-breasted mergansers, and long-tailed ducks, we climbed the hill and toured the gardens where a number of the great variety of trees now have labels.

Lost Rivers, Nordheimer Ravine, Nov 17. Leaders: Helen Mills, Susan Berman, Mariko Uda. Susan told us about Wells Hill park as the site of an annual pow-wow, then led the way into the ravine where we explored various sites that she cares for by removal of invasives. Mariko Uda introduced the new Green Map of Ward 21. We explored the geography of the surface water flows above

Continued on next page

Left: Flowers and pods of pale swallowwort or dog-strangling vine from Europe, well-established in Toronto. Drawing by Eva Davis

Above: Swallowwort pod opening to discharge seeds (the swallow effect). Drawing by Diana Banville

Snake Habitat Creation

By Karen McDonald, Restoration Services, Toronto and Region Conservation (TRCA); Warren Hoselton, Parks Forestry and Recreation (PF & R), City of Toronto

The boardwalk on Wards Island was in disrepair and needed to be replaced to accommodate EMS vehicles. Residents in the area expressed concern regarding the timing of the construction in early spring or late fall since they had observed snakes in the area and suspected that overwintering habitat was present in or around the construction area.

Unfortunately, the work couldn't be completed during the summer and a visit to the area on a chilly day in early November confirmed the presence of garter snakes and the likelihood of a snake hibernaculum close-by. Hibernacula are underground cavities used as overwintering dens by several species of snakes, including garter snakes. Hibernacula are often rare, and may be a limiting factor in local snake populations. The good news is that snakes will readily use an artificial hibernaculum, although it can take a few years for them to find it.

So, to mitigate potential impact to migrating snakes and a possible hibernaculum under the boardwalk, the City of Toronto contacted TRCA to construct a hibernaculum close to the construction area and monitor the construction area for active snakes so they could be removed without harm. City PF & R staff and TRCA Restoration and Environmental Monitoring staff built a small hibernaculum close to the boardwalk, and were just wrapping up when a TFN walk strolled by, so everyone got an impromptu lesson on over-wintering snake habitat! [See report Jan 5 previous page.] TRCA removed 10 garter-snakes and 1 brownsnake from the construction area and guided them to the new hibernaculum. This project is a great example of cooperation and collaboration among residents, different City departments and the TRCA that will allow for overwintering snake habitat to endure on Ward's Island.

Continued from previous page

the sewer and subway. Past the Spadina bridge there are some very beautiful restoration sites on the Winston Churchill Reservoir, and along the ravine edges where they capture surface runoff and some springs. Interesting information about the history of the reservoir and great archival images of the creek were shared.

East Don Parkland, Nov 19. Leader: Stephen Kamnitzer. We noted lots of beaver activity just before and after the pedestrian bridge over the Don at the north end of Pineway Blvd north of Cummer Ave.

Taylor Creek Park, Nov 23. Leader: Dianne Dietrich. We looked at the variety of habitats and viewed restorations of habitats and structures which were underway. This park is used by locals as the fastest way through the ravine to get from one street to another and the many paths attest to this. The loss of bridges no doubt has affected many, thankfully they will be rebuilt. There are many wild and hard-to-access areas despite paths, and there are relatively undisturbed wooded hills and a fen habitat. It is therefore a safe place for much wildlife such as deer, fox and heron (though not in evidence that day). We took a route through a new wetland, successfully maturing, which hosts snapping and painted turtles, breeding mallards, a bullfrog sighted this year, and plantings of natives such as swamp milkweed. Then to Goulding Estate, notable for its historical value and current uses including Children's Peace Theatre. The valley between the house and Dawes Rd has been extensively improved with the removal of hundreds of Norway maples and other invasives and the planting of natives. Unfortunately, Japanese butterbur is running amok in this fairly wet habitat and it is hard to eradicate.

Continued on page 11

WALKING IN NATURE

Look deep, deep, into nature and then you will understand everything better. (Albert Einstein)

Humans are bipeds. One never ceases to be amazed when a tot, formerly grounded, suddenly rears up and takes its first faltering steps to, within months, walk confidently. Human walking is accomplished by the *double pendulum* process. During forward motion, the leg that leaves the ground swings forward from the hip in the first pendulum movement; then that leg strikes the ground with the heel and rolls through to the toe in a motion described as an inverted pendulum. The motion of the two legs is coordinated so that one foot or the other is always on the ground. This process recovers approximately sixty per cent of energy used, due to pendulum dynamics and ground reaction force. The average human walking speed is about 5 km/h, during which 204 calories/hour are used (about the equivalent of that provided by a can of Coke). Interestingly, walking has the highest compliance rate of any exercise.

Sustained walking sessions for a minimum of thirty to sixty minutes a day, five days a week, with a correct walking posture, reduce health risks and have overall health benefits. Walking can reduce the chances of cancer, type 2 diabetes, heart disease, anxiety and depression. In the latter sphere, when you exercise, your body releases chemicals called endorphins. They interact with receptors in your brain to trigger a positive feeling in the body, similar to that of morphine. For example, the feeling that follows a run or workout is often described as "euphoric." That feeling, known as a "runner's high," can be accompanied by a positive and energizing outlook on life.

Endorphins act as analgesics, diminishing pain perception, and also as sedatives. They are manufactured in your brain, spinal cord, and many other parts of the body and released in response to brain chemicals called neurotransmitters. The neuron receptors that endorphins bind to are also the ones that bind some pain medicines. However, unlike morphine, for example, the activation of these receptors by the body's endorphins does not lead to addiction or dependence.

Life expectancy is also increased in walkers, even for individuals suffering from obesity or high blood pressure. Walking also increases bone health, especially strengthening the hip bone, and lowers the more harmful low-density lipoprotein cholesterol while raising the more useful, good, high-density lipoprotein cholesterol. Studies have found that walking may also help prevent dementia and Alzheimer's disease. Apolipoprotein E, variant 4 (Apo E4) is a gene associated with memory loss. Recent studies suggest that Apo E4 may interact in the brain with beta-amyloids, plaque-like substances that clog neurones and may cause memory loss or disorientation. Moderate exercise is proven to reduce Apo E4 levels.

As far as exercise goes, it matters little where you walk, whether round a mall, on the street or at a treadmill, but walking in nature gives added benefits. For example, it will probably expose you to fewer pollutants. People instinctively turn to the outdoors and nature-loving activities as a way of relaxing and enhancing their well-being. Nature can facilitate self-awareness and promote healing. For many the outdoors is a source of inspiration, solace, guidance and regeneration. Being in nature, one becomes aware of the infinite circle of life. There is evidence of decay, destruction and death, but also examples of rejuvenation, restoration, and renewal.

The art of nature walking is in being able to identify the natural world around you. The more you know about your surroundings, the more you will appreciate them. That's why the walks offered by TFN are so good. Observation is the key to changing a simple walk into an engrossing hobby. Nature walking is also an entertaining and effective way to teach children to be observant, while giving them a fuller knowledge of the world around them. For instance, knowing the names of the plants, animals, birds and trees they pass will empower young people and help give them a lifelong connection to, and respect for, living things.

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Drawing by Diana Banville

Outings Reports Extracts continued from page 9

G Ross Lord Park, Nov 30. Leader: Alexander Cappell. There was snow on the ground and some ice. Several Bruce-Trailers with us had much better equipment: leggings (to keep the snow out of their magnificent boots) and walking sticks that telescoped for storage. We headed north across the Finch hydro corridor, visited the above-ground burial chambers of Westminster Cemetery, followed an unnamed rivulet north to Fisherville Creek, which took us west to the West Don River, climbed up to the tableland between the creek and the river, then down to cross the Don to its forested west bank, which rose higher and higher above the riverplain, finally climbing down again just south of Steeles Ave to view a huge, old willow, with a 4 ft diameter trunk covered with galls from the ground up to well over our heads.

Lost Rivers: Yellow Creek & Mud Creek, Dec 14. Leader: Ed Freeman. It was very cold with the wind chill of -21 C. We went along the belt line through Mount Pleasant cemetery to Evergreen Brickworks where we were welcomed with free coffee (much appreciated) and observed the environmental changes over the last 450 million years as shown by the representative layers unearthed at the brick works quarry on display in the Evergreen Welcome Centre.

Birkdale and Thomson Memorial Parks, Dec 21. Leader: Orval White. Light rain. We saw a black duck and chickadees and were given a guided tour of the Scarborough historical museum, including hot cider and muffins from their wood stove.

Ashbridge's Bay, Dec 28. Leader: Bob Kortright. Cold weather the previous week resulted in Coatsworth cut and all bays in the park being uncharacteristically frozen, so waterfowl were mainly seen on the south side of the park. These included red-breasted and common mergansers, scaup, long-tailed ducks, mallards, gadwall, black duck, bufflehead, and common goldeneye. In this area, the ice storm had broken branches mainly of the relatively weak willows and poplars (aspen and cottonwood), since much of the ice in this area melted off the branches immediately after the ice storm before the wind stressed the branches. Landbirds were limited to chickadees, starlings and pigeons.

Long-tailed ducks. Graphic pencil and digital art by Joanne Doucette

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WALKING IN NATURE *continued*

The benefits of walking for health and in nature were written about by Ralph Waldo Emerson and Henry David Thoreau. But, as we learn more of the scientific bases of these benefits, more and more books, CDs and items are appearing in both newspapers and other publications. A visit to the web, under the heading *Walking in Nature*, provides a revelation.

Malcolm D. Silver. MD

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Transformed. Dan Rubenstein in *Mountain Life,* fall 2013, p 36. (See also born to walk.org)

TORONTO'S SAXIFRAGE FAMILY AND RELATIVES

The Saxifragaceae (saxifrage family) includes about 630 species grouped in 30 to 35 genera. Recent molecular analysis has resulted in revision of genera, including assignment of the genus *Ribes* to a separate family. The saxifrage family is almost entirely confined to the north temperate and arctic zones. One species does occur along the Andes. North America has about 70 *Saxifraga* species, the major genus. Even the Svalbard archipelago, at about 77° to 80° N, has ten *Saxifraga* species. Four saxifrage family species were known in Toronto, all reported locally uncommon or rare. In addition to *Saxifraga* they represent the genera *Tiarella* and *Mitella.*

Tiarella cordifolia (foamflower), locally uncommon, was reported in TFN's *Vascular Plants of Metropolitan Toronto* (2nd ed. 1994) in moist forests in High Park and along the Humber, Don and Rouge valleys. *Tiarella*, according to *The ROM Field Guide to Ontario Wildflowers* (2004), comes from the Greek *tiara* (former meaning "turban") and refers to the shape of the fruit. *Cordifolia* refers to heart-shaped leaves. Foamflower comes from the "foamy" appearance of its long open raceme of flowers, with small (5 to7mm) petals and conspicuous stamens, these on a stem up to 35cm tall.

Locally, it blooms in May. In Ontario, foamflower only occurs in the east, as far north as the Lake Abitibi ecoregion. Its Canadian range is from Nova Scotia to Ontario. Its US range is from the Great Lakes states to states along the Appalachian Mountains.

Mitella diphylla (two-leaved mitrewort or bishop's cap), also locally uncommon, was reported in the Humber, Don and Rouge valleys and at the Scarborough Bluffs. Another species, *M. nuda*, was reported by the TFN as locally rare and in the East Don area and the Rouge valley. I have not found it. *Mitella* comes from the Greek *mitra* (cap). The flowers of *M. diphylla* form an extremely open raceme on an up to 40cm stem. They are only some 3 to 4mm across but have intricately branched petals well worth examining with a hand lens. Locally, *M. diphylla* blooms in May in moist forests. In Ontario it only occurs in the southeast and south-central areas. It has been reported in Quebec and throughout most of the eastern US.

Saxifraga virginiensis (early saxifrage) was reported by the TFN as rare and only in Lambton Park. After repeated unsuccessful searches I think it is locally extirpated. My images are from open woodlands near South Oakville Creek. *The ROM Field Guide* states that saxifrage is from the Greek *saxum* (rock) and *frango* (break). It may refer to the rocky habitat of many but not the local species. The flowers of *S. virginiensis* are 5 to 12mm across, clustered at the top of a stalk up to 40cm. A genus characteristic is numerous stamens, 10 in this species. Locally, it

blooms in April. Its eastern Ontario range is as far north as the Lake Abitibi eco-region and it has been reported in the southern third of northwestern Ontario. It has also been reported in Nunavut, Manitoba, Quebec, New Brunswick and throughout much of the eastern US.

S. virginiensis and two *Saxifraga* species seen on Svalbard illustrate different adaptions for coping with particular environments. *S. oppositifolia* (purple saxifrage) is found high in the Alps and has a circumpolar

distribution including Greenland, Iceland, northernmost Europe, Asia and North America. It occurs in the world's most northerly plant locality, on Greenland, at 83° 15' N. Its range includes polar desert, coped with by a creeping habit and tightly spaced scale-like leaves. Its deeply coloured flowers efficiently absorb energy from the sun so that during the polar spring it blooms earlier than related species. *S. caespitosa* (tufted saxifrage) has a very similar range except not reported from the Alps. Its bright white petals largely reflect the sun's rays so it must rely on its leaves to absorb energy. These, very short-stemmed, glandular-hairy, densely tufted, and occurring in a low mass surrounding the flowers, make this a successful circumpolar species, but blooming later than *S.*

oppositifolia. Our local species, *S. virginiensis*, in a less harsh environment, blooms early by yet another strategy, using large basal leaves to absorb energy.

The Andean species is *S. magellanica* (Magellanic saxifrage), seen at about 51° 30' South. Why is it there when other *Saxifraga* species occur in north temperate or arctic zones? The plausible answer is that migratory birds inadvertently carried seeds from their (northern) summer ranges long enough ago for this species to evolve. This after the last Pleistocene ice sheets melted back from Arctic North America, about 11,000 years ago to the west and more than 8,000 years ago to the east. Although molecular studies are needed to determine the relationships of this and northern species, the only existing arctic species with broadly similar characteristics is *S. caespitosa*, abundant in the summer ranges of likely migratory birds. My image of *S. caespitosa* shows

flowers at their peak. Flowers of this species have reddish tints, like the flowers in my *S. magellanica* image, as they start going to seed. The best comparison between the images is with the least advanced flower (farthest to the right) of the latter species. It seems a reasonable speculation that the Andean species evolved from *S. caespitosa* or they share a recent common ancestor.

The saxifrage family provides major challenges locally. The *Mitellas* can require a sharp eye to find. Foamflower can also be inconspicuous, and I would love to be proven wrong about the local extirpation of early saxifrage. Please photograph any finds and report them to the TFN.

Article and photos by Peter Money

Previous page:
Foamflower, *Tiarella cordifolia*; bishop's cap, *Mitella diphylla*; early saxifrage, *Saxifraga virginiensis*

This page: purple saxifrage, *S. oppositifolia*; tufted saxifrage, *S. caespitosa*; Magellanic saxifrage, *S. magellanica*

TFN SLIDE COLLECTION: UPDATE

Sound the trumpets! A project that the two of us began in late 2006 has finally wound down. For the past seven years, meeting in the TFN office every Thursday morning that we were both in town, we have been working on the TFN Slide Collection.

Mark Sawyer started this remarkable collection of 35-mm colour transparencies in the early 1970s. Robin Powell, who became slide librarian in 1976, helped it grow and organized it into hard-plastic slide sheets and document boxes. And grow it did: In 2006 Aarne Juhola, a past treasurer, estimated that the collection contained some 12,000 slides.

First, the two of us assessed the collection. We found that it represents the work of 44 photographers – most of them past and present TFN members. The earliest original images are those of the Don Valley taken in the 1950s by Alen McCombie, Ed Waltho, and Mel Whiteside. The most recent are those taken in 2004 by Robin Powell and Lou Wise. The most valuable, both historically and monetarily, are perhaps the nearly 800 taken for the TFN by the noted aerial photographer Lou Wise. Shot between 1987 and 2004, they document the Rouge River, the Toronto lakeshore, the Steeles Avenue corridor, and the TFN nature reserves.

Arial photo by Lou Wise of the East Don River south of Eglinton

Upon consideration, we felt that the TFN Slide Collection was significant enough to conserve and record – especially at a time when most TFN photographers were going digital. We decided that we needed to address the issues of long-term preservation and ease of access. Accordingly, we consulted first with Internet sources and then with Deb Metsger and Maggie Dickson of the ROM Herbarium. Deb and Maggie advised us on archival products and filing methods, as well as on sources for current nomenclature.

Expanding upon Robin Powell's categories, we organized the slides into People, Places, Flora, and Fauna. **People** covers TFN activities: Junior Naturalists, Nature Arts, Offices, Outings, Outreach, and Publications. **Places** are Toronto's six major watersheds and three lost creeks, the lakeshore, the Steeles Avenue corridor, miscellaneous Toronto scenes, and the TFN nature reserves. Sticking with tradition, we organized **Fauna** systematically following TFN's most recent checklists, and **Flora** semi-systematically: in other words the broad systematic groups included in flora (which includes plants *and* fungi) are alphabetical by family, genus, and species.

Following Internet and ROM advice and using the above categories, we placed the slides in PrintFile archival preservers. We then hung the preservers in specially purchased metal file cabinets in the office.

Next came the most daunting undertaking: making the slides easy to retrieve by creating and entering them in a searchable database. Since neither of us knew much about this, we were grateful when Jenny Bull volunteered to help, creating an Access file for the database and teaching us to use it. At this point Robin Powell, Ken Cook, and Chuck Crawford also gave good advice.

We began data entry in spring 2008 and continued well into 2013. Sitting side by side and working with a light box, a magnifying glass, a group of maps, and the office computer, we looked at every single **People** and **Places** image and entered a detailed description in the database. By mid-October, 2012, Jenny could write, "It's wonderful to be able to search the database to find slides. I tracked down two of Fred Bodsworth last week." By December of that year, we reported to TFN president Margaret McRae, "We entered slide #8000 today!"

The very last slide in the database is #8391. Thus, counting **Flora** and **Fauna** (which we did not feel it necessary to enter because they are straightforward to find), the total number of slides is about 13,000, remarkably close to Aarne Juhola's original estimate.

Our final task, begun in mid-2013 and completed in November, was to add file tabs, sheet numbers, and labels: anything that might help others retrieve and refile slides with ease and accuracy. When a slide is borrowed a paper slip, showing who has borrowed it and when, is inserted in the slide sleeve. If, over time, users suggest further aids to navigation, we will be glad to incorporate them. For now, though, we are finished.

Pinky Franklin was TFN president when we began the project. It continued through the presidencies of Wendy Rothwell, Bob Kortright, and Margaret McRae. During those years we often joked that we would still be working on the TFN Slide Collection when we turned 100. We are delighted to report that we have now revised that estimate.

Pleasance Crawford and Helen Juhola

OWLS IN TORONTO

Any day you see an owl is a lucky day – predators are always much less common than prey, and owls are largely nocturnal, camouflaged, and normally well hidden. The odds of seeing an owl this winter are greater than in most, due to what is said to be "likely the largest southward and most widespread movement of Snowy Owls in the past 4 decades" (Di Labio, Ontbirds 2013, Dec 23).

Although there have been many sightings in December, it is hard to predict how many will remain here through the winter – many may continue further south. Nine other kinds of owls can be seen in or near Toronto (excluding the endangered barn and burrowing owls, which have not been seen in Toronto for many years). Of these, great horned and eastern screech owls nest regularly and are resident in Toronto. Northern saw-whet owls (see photo on front cover) come through Toronto in the fall. Some stay the winter, but most move further south. Long-eared, short-eared and barred nest in the GTA (and have nested in Toronto), but are mostly seen here in winter, when numbers are augmented by migrants from the north. Snowy, and occasionally great gray, boreal and northern hawk owls come south in winter when there is a lack of their preferred food up north, so numbers vary a lot from year to year. However, only snowy, northern hawk and short-eared owls are easy to find when they are around - the others are more strictly nocturnal, and also more hidden in woods.

Where and how to find them: Because owls are easily stressed, before looking for owls, please review the Ontario birding code of ethics: www.ofo.ca/ofo-docs/Code_of_Ethics.pdf, and follow it. Rare owls are most easily found by following directions posted by others who have already found them. The common Toronto sources for bird sightings are ebird.ca (select Explore data), ontbirds (mail-archive.com/birdalert@ontbirds.ca), and Toronto and Southern Ontario Birding (outdoorontario.net/birds).

To find an owl on your own, it helps to know as much about them as possible. Snowy and short-eared owls are found in open habitat. In Toronto, Sam Smith and Downsview parks and the endikement on the east side of the Leslie Street Spit are good for these. Other owls (except the rare northern hawk owl) are found in woods, generally resting during the day. Whitewash down a trunk may reveal a favourite roost site. Screech owls are usually hidden in cavities until dark. Other small owls often hide in dense evergreens. They are so good at hiding that I have spent 20 minutes looking for one after being told which tree to look in. Smaller birds, especially crows, will often mob an owl, especially the great horned owl, when they find it, so following their commotion may reveal an owl. Listening for their calls is another way of detecting owls, especially once the breeding season starts (in February for the great horned owl).

Bob Kortright

Great gray owl (top left), Georgina township, barred owl (right) and long-eared owl (bottom left), Leslie Street Spit. Photos by Lynn Pady.

A MESSAGE FROM THE ENVIRONMENTAL COMMISSIONER OF ONTARIO

Ontario's *Environmental Bill of Rights* 20 years old

This month, Ontarians can celebrate the 20th anniversary of the ***Environmental Bill of Rights, 1993*** (*EBR*). The *EBR* was ground-breaking legislation when it was first enacted, and it remains unique in the world to this day – other jurisdictions do not offer their residents a comparable set of rights. The *EBR* affirms that Ontario residents have a right to know about – and have a say in – decisions that affect the environment. The law also created a set of tools to provide public participation, transparency and accountability in government's decision-making. These tools include applications for review and investigation, the Environmental Registry, and the position of the Environmental Commissioner of Ontario.

For the past 14 years of my appointment , I have been privileged to see an ongoing dialogue unfold between the public and the government ministries entrusted with the stewardship of our common natural environment. Thousands of people use the Environmental Registry each year to comment on government initiatives, ranging from technical compliance rules to sweeping policies on land use. Communities and individuals have also weighed in on permits and licences issued for every corner of the province, commenting on concerns such as local air and water quality, habitat protection and noise. Ontarians have also used *EBR* applications and appeals to convince the government to reform legislation, change approvals, and bring in new environmental protections. The protection of the Oak Ridges Moraine in 2001 and the overhaul of Ontario's law on protected areas in 2006 are just two examples of the Ontario public using the *EBR* as a catalyst for environmental change.

Our website, www.eco.on.ca, is the main source of information about the *EBR* and the work of my office. We also regularly reach out through presentations and workshops. I'd like to encourage members of the Toronto Field Naturalists (and all Ontarians) to exercise their *EBR* rights, and to keep exploring new avenues towards protecting, conserving and restoring our natural environment.

Gord Miller
Environmental Commissioner of Ontario

Ontario's *Endangered Species Act*

Part of my job as Environmental Commissioner is to speak up when I see serious mismanagement of Ontario's natural resources. The mismanagement of Ontario's endangered species legislation was the topic of my November Special Report.

My report spells out how Ontario's ***Endangered Species Act, 2007***, has been undermined by new regulation. In theory, Ontario's endangered and threatened species are protected from being killed or harmed, and damage to their habitats is also prohibited. In practice, unfortunately, many activities are now exempted from needing permits before they harm endangered species or their habitats. For example, the full protections of the law no longer apply to forestry, pits and quarries, hydro-electric dams and infrastructure construction – activities that historically contributed to species becoming threatened in the first place. By eliminating the permit process, the Ministry of Natural Resources (MNR) has shed its ability to say 'no' to a proposed activity, no matter how harmful it may be to an imperilled species. And since proponents don't have to file any monitoring reports with the ministry, MNR will be blind to the effectiveness of its new rules.

I am also concerned that MNR has been evading its responsibilities since the *ESA* came into effect in 2008. The Ministry had five years to ensure that recovery plans were completed for 155 species at risk, but nearly half of them have been delayed, often with dubious explanations. Under the regulations that came into force last July, the public has lost its rights as well. Proposals to harm endangered species or their habitats will no longer show up on the Environmental Registry, so the public won't have any ability to know or comment. When MNR posted its proposal to change species protection in On-tario, more than 10,000 Ontarians responded, so I know that Ontarians want the right to comment on this important issue.

You can read my full report, *Laying Siege to the Last Line of Defence*, at the ECO's website (www.eco.on.ca), or e-mail to request a printed copy.

Gord Miller
Environmental Commissioner of Ontario

Ontario's *Endangered Species Act*

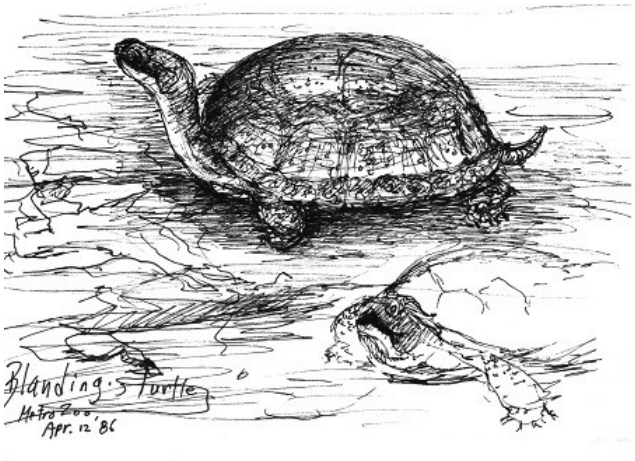
As we have reported in previous newsletters, Ontario's *Endangered Species Act* has been drastically weakened by changes in regulations. As a result Ontario Nature (ON) and Wildlands League, represented by Ecojustice, are suing the government. An affidavit has been filed and ON is waiting for a response from the government.

As described in the Environmental Commissioner's message on the previous page, the new regulatory changes harm species by allowing major industries to avoid strict standards intended to protect at-risk species and their habitats.

Please support Ontario Nature's action by contacting the Premier and your MPP and expressing your views on the changes to this important piece of legislation.

For more information on Ontario Nature and Endangered Species, visit ontarionature.org/protect/campaigns/endangered_species.php

Contact info for provincial legislature:
Legislative Assembly of Ontario: ontla.on.ca/lao/en/members/
or call 416-325-7500



Blanding's turtle drawn by Diana Banville at the Zoo. Blanding's turtle is one of Ontario's 155 at-risk species.

Proposed Expansion of Island Airport

You may already know that there is a proposal to expand the Toronto Island airport by lengthening the runway and allowing jets. This will likely result in an increase in flights. The airport is close to a growing neighbourhood, including a school and community centre. The City's Health Department has stated its concern about the effect of current and increased pollution and noise on human health. City staff are concerned about the potential cost to the City of new road infrastructure, estimated between $180 to $300 million, due to extra road traffic in the neighbourhood.

As naturalists, our main concern is the impact on the wildlife that lives and breeds along the waterfront. In 1976, TFN vigorously opposed the original commercialization of the Island airport, arguing that the location was completely unsuitable for such use. Even without expansion, the airport already impacts the enjoyment of nature due to noise and pollution at Hanlan's Point, Olympic Island, Coronation Park, Little Norway Park, the Music Garden and other parks along the inner harbour. (Unknown is the effect of jets taking off and landing on an extended runway built out towards the new 7-acre park planned for the east end of Ontario Place.) TRCA has submitted a letter to the City stating their concern that more take-offs and landings so close to the Leslie Street Spit's "increasing populations of large flocking birds" may have negative implications for this Globally Significant Important Bird Area, as designated by BirdLife International. As there is no Wildlife Plan being presented with the expansion proposal, any possible implications remain completely unknown.

We urge you to let your councillor and the mayor know your views about the proposed expansion before the Executive Committee of City Council considers the proposal again on February 4.

For contact info, visit toronto.ca or call 311 or email 311@toronto.ca.

View staff report at toronto.ca/legdocs/mmis/2013/ex/bgrd/backgroundfile-64318.pdf
View TRCA letter at toronto.ca/legdocs/mmis/2013/ex/bgrd/backgroundfile-64324.pdf

TFN GRANT REPORT—HIGH PARK NATURE CENTRE

By Jon Hayes, Family Programs Coordinator

We've really been looking. As soon as the cold weather hit we started scanning the trees for those wonderful feathered friends: the owls. Last winter and spring we were treated to frequent sightings of great-horned owls and barred owls. Occasionally we saw a northern saw-whet or an eastern screech too. Amazingly, we do get to see all 4 species in High Park!

Searching for roosting owls is one of the many winter thrills we experience with the kids in our Nature Clubs. If this winter is anything like last we may find regurgitated pellets packed with what usually turns out to be rodent bones and fur. The pure awe that children have as they dissect these treasures is as genuine as the night is long, and usually turns into intriguing conversations about food webs and predator-prey relationships.

The funding from Toronto Field Naturalists allows us to create rich outdoor opportunities for these young people. From babies to teens, the youth who attend our Nature Clubs gain experience in stewardship practices, plant and animal identification, hiking responsibly and simply being outside. Nature-lovers of all ages come to our programs. But it is the kids who are our most dedicated nature explorers, questioners, and even educators.

Small Wonders is our newest Nature Club. We noticed that 5 and 6 year-olds needed a weekend club to come to without their parents. The program filled instantly and every other Saturday this Fall there was a merry band of 16 little ones collecting leaves, finding snakes, stalking squirrels, planting native grasses and calling birds. Small Wonders is full again for Winter and will continue in the Spring. The kids are small, but their wonder is humungous.

Of course, the Family Nature Walks are fun and informative (and affordable!) outings that offer something for kids, parents and grandparents alike. Our nature interpreters adore bringing folks into the forests to show what High Park has to offer. We host 6 Family Nature Walks every season thanks to Toronto Field Naturalist funding. Tons of Toronto families came out this fall to learn how to use a map and compass to orienteer their way through the wilds of High Park. Our annual "Hawk Watch" Family Nature Walk led people to Hawk Hill to meet the official hawk watchers. Our winter lineup of walks is posted at www.highparknaturecentre.com

We also had a great turnout at the "Know Your Nature" hike led by the always-passionate High Park Rangers youth naturalist group. These dedicated 12-16 year-olds met weekly after school to perform valuable stewardship service to the park such as removal of invasive buckthorn shrubs from the Black Oak Savannah and rehabilitating our woodlands with dogwood, witch hazel and white oaks. In their spare time they also led a Family Nature Walk. This year they taught a group of over 15 people about the Laurentian River, black-knot fungus, burls growing on willow, and red-backed salamanders.

As winter begins, we have total faith that our young people will find the owls of High Park and make some other important discoveries along the way. This winter our Nature Clubs will be monitoring the bird populations as a part of Project Feederwatch, snowshoeing, keeping nature journals (as inspired by naturalist Clare Walker Leslie) and keeping the chickadees and nuthatches well-fed. We at the High Park Nature Centre believe that children will grow up to protect what they care about most. Thanks to support from Toronto Field Naturalists, we are able to ensure that children have ample opportunity to explore and care for nature right here in the city.

Thank You!

Laurentian River Did you know that an ancient underground river flows beneath High Park? The High Park Rangers can teach you a ton, including where water from this river flows above-ground in High Park.
Photo by Irena Wilk

WEATHER (THIS TIME LAST YEAR)

FEBRUARY 2013

We finally had an extended period of winter weather, starting in late January and continuing most of this month. The monthly mean temperature was close to or just slightly below normal (-3.0 downtown and -4.6 at Pearson Airport). Unlike January, there were few temperature extremes, but there was an active storm track that made snow the really big story.

A block-buster snowstorm that affected the lower Great Lakes all the way to the east coast hit on February 7th-8th. In New England, the storm was epic with amounts sometimes measured in meters. Toronto got a good dump of 25.0 cm at Pearson and (closer to Lake Ontario) a downtown total of 36.5 cm. The snow pack lasted the rest of the month and into March in spite of a few moderate thaws (we got up to 7-8 on Feb 11th). It was refreshed by several other smaller snowfalls, notably on the 26th-28th.

Pearson Airport had its third-snowiest February on record with 63.5 cm (the record was 2008 with 76.8 cm) and its fourth-wettest with 92.0 mm of total precipitation. Sunshine was somewhat below normal with 82.2 hours recorded.

Gavin Miller

COMING EVENTS

If you plan to attend any of these events, we recommend that you contact the organizing group beforehand to confirm time and place.

Jim Baillie Memorial Bird Walks – Toronto Ornithological Club
Aimed at the intermediate birder, but beginners also welcome. Free to the public. Information: www.torontobirding.ca

- Sat Feb 1, 9 am – late afternoon. Amherst Island near Kingston, Ontario – owls, waterfowl, pheasant, raptors. Leader: Justin Peter. Meet at the Amherst Island ferry dock near Millhaven (south from exit 593 off Hwy 401. Ferry costs $9 per car. Dress warmly and wear boots suitable for walking in snow. Bring lunch, snacks, hot beverage in thermos. **Pre-register by Jan 31** by contacting Justin Peter at [redacted].

High Park Walking Tours
1st and 3rd Sundays of each month, 10:30 am to noon. Meet at the benches across the road south of Grenadier Restaurant. Information: 416-392-6916 or walkingtours@highpark.org or www highpark.org.

- Feb 2. The Naked Trees of Winter, Toronto Urban Forestry
- Feb 16. Do You Know the Park? Walking Tours Committee

Science on Sundays
Royal Canadian Institute, JJR MacLeod Auditorium, Medical Sciences Bldg, University of Toronto, 1 King's College Circle, 3 pm. Free. Information www royalcanadianinstitute.org or 416-977-2983.

- Feb 2. Algorithmic Thinking in Mathematics. Speaker: Stan Wagon, Math & Computer Science, Macalester College, St Paul, MN
- Feb 9. The Chelyabinski Airburst Decoded: Impact Hazards from Small Asteroids. Speaker: Peter G. Brown, PhD, Dept of Physics and Astronomy, UWO
- Feb 16. Born a Queen or Born a Worker? Genes, Brains and Behaviour of Honey Bees. Speaker: Amro Zayed, PhD., Dept of Biology, York U

2014 Great Lakes Wetlands Day
Feb 4: The History and Future of our wetlands in the Great Lakes basin. Keynote speaker: John Riley, chief science advisor for Nature Conservancy of Canada. Great Lakes Conservation Action Plan. Radisson Hotel. Info or to register ($$), visit glwcap.ca.

Lost Rivers Walks
Information: www.lostrivers.ca

- Sat Feb 15, 2 pm. Lost Shoreline, Fishing Stations and Wetlands of Ashbridges Bay. Leader: Ian Wheal. Meet at the northeast corner of Queen St E and Leslie St. Walk will end in Toronto Beach.
- Sun Feb 23, 2 pm. A topography walk - Lost or hidden evidence of Iroquois Shoreline features. Leader: Ian Wheal. Meet at Christie subway station. Walk will end near St.Clair Ave W and Caledonia Rd.

Ian Wheal Walks

- Mon Feb 17, 1 pm. Sir Sandford Fleming Trail, Don River to Earlscourt Park (Corso Italia). A 14 km geology-topography hike. Meet at the entrance to Castle Frank subway station. Duration: 4 hours.
- Sat Feb 22, 1 pm. Carpathian Mountain Peoples – Urban ecology. Meet at the northeast corner of Bathurst St and College St. Walk will end near Earlscourt Park.

Toronto Field Naturalists
1519—2 Carlton St.,
Toronto, Ontario, M5B 1J3

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Silver maple buds photographed by Lynn Pady at Mount Pleasant Cemetery
December 27, 2013 after the ice storm