

TORONTO FIELD NATURALIST

Number 608 December 2014



White-tailed deer photographed by Barry Tocher (see page 14)

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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 February issue, Jan 8

NEWSLETTER COMMITTEE

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

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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.

Please note: TFN does not give out its membership list.

Toronto Field Naturalists

1519-2 Carlton St, Toronto M5B 1J3

Tel: 416-593-2656

Web: www.torontofieldnaturalists.org Email: office@torontofieldnaturalists.org

James L. Baillie Memorial Fund for Bird Research and Preservation (The Baillie Fund)

Bird Studies Canada is accepting applications to the Baillie Fund for 2015. Priority is given to projects that engage the skills and enthusiasm of amateur naturalists and volunteers to help us understand, appreciate, and conserve Canadian birds in their natural environments.

Application deadlines:

Regular Grants

Small Grants

Student Award for
Field Research

December 15, 2014

January 15, 2015

February 15, 2015

For more information visit www.bsc-eoc.org or contact the Baillie Fund Secretary at acoughlan@birdscanada.org or 1-866-518-0212.



TFN MEETING

Sunday, December 7, 2014 2:30 pm

What is Happening with Monarch Butterflies?

Donald Davis, Citizen Scientist, will describe the current situation of the monarch and what we can do to help

VISITORS WELCOME!

SOCIAL: 2:00 - 2:30 pm

Room 003, Northrop Frye Hall, 73 Queen's Park Cres East

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.

Upcoming TFN Lectures

- Feb 1 Mosses, Mooses & Mycorrhizas

 Terry Carleton, Forest Ecology Professor, U of T
- Mar 1 What the *#&! Is a Bioblitz?

 Shawn Blackburn, Programs Coordinator, Toronto Zoo
- Apr 12 Climate Change, Bees & Flowering Plants

 James Thomson & Sheila Colla, Conservation Biologists, U of T
- May 3 Toronto's Urban Forests

 Janet McKay, Executive Director, LEAF

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.

Tues ASHBRIDGE'S BAY – Winter Birds and Nature

Dec 2 Leader: Anne Powell

10:00 am Meet at the southwest corner of Coxwell Ave and Lake Shore Blvd E for a circular walk. Bring binoculars.

Morning only.

Sat PATH WALK – Nature Arts

Dec 6 Leaders: Yoshie Nagata and Joe Bernaske

10:30 am Meet at the food court on the concourse level of Atrium on Bay (Dundas & Bay). We will walk slowly through

PATH (underground walkway) to Maple Leaf Square (south of Union Station) viewing or photographing seasonal

displays in the malls. Bring any work you wish to share with the group after lunch at Maple Leaf Square.

Sun LECTURE: What is Happening with Monarch Butterflies?

Dec 7 Speaker: Donald Davis, Citizen Scientist

2:30 pm Room 003, Northrop Frye Hall, 73 Queens Park Cres E. See page 3.

Tues HUMBER BAY PARK EAST – Birds

Dec 9 Leader: Doug Paton

10:00 am Meet at the southwest corner of Lake Shore Blvd W and Park Lawn Rd. Bring binoculars. Morning only.

Sat LESLIE STREET SPIT – Birds and Plants

Dec 13 Leader: Bob Kortright

10:00 am Meet inside the park entrance at Leslie St and Unwin Ave. Bring lunch and binoculars.

Tues WOODBINE PARK – Weeds in Winter

Dec 16 Leader: Joanne Doucette

1:00 pm Meet at the southeast corner of Coxwell Ave and Eastern Ave for a 3-hr circular walk. Bring binoculars.

Sat SCARBOROUGH HISTORICAL WALK – Nature and Heritage

Dec 20 Leader: Orval White

1:30 pm Meet in front of the Birkdale Community Centre, near the parking lot, 1299 Ellesmere Rd, south side of

Ellesmere, west of Brimley, for a 2.5-hrs loop walk of Birkdale Park, Thompson Memorial Park and a visit to the

Scarborough Historical Museum. (Museum requests voluntary donation.)

Sun A WINTER WALK FOR FOOD AND WATER – Lost Rivers

Dec 21 Leader: Helen Mills and friends

2:00 pm Meet at Berczy Park, on Front St one block east of Yonge St. On the Solstice, join the Lost Rivers family to seek

food, water, love and joy in Old Town Toronto, along the original Lake Ontario shoreline. St Lawrence Market neighbourhood reminds us of food producers who fed early Toronto, and still do. The lake and the lost streams flowing to it recall the brewing and distilling industries and our complicated relationship with clean water. Walk will end at the Distillery District Christmas Market for seasonal good cheer. A joint walk with the Toronto Green

Community.

Tues SHERWOOD PARK – Nature Walk

Dec 23 Leader: John Bacher

10:00 am Meet at the park entrance at the east end of Sherwood Ave for a walk through the forest. Morning only.

Sat DUNLAP OBSERVATORY PROPERTY – Nature Walk

Dec 27 Leader: John Bacher

1:00 pm Meet at the northeast corner of Weldrick St and Yonge St in Richmond Hill for a 3-hr perimeter walk around the

property. Take Viva blue bus from Finch subway station by 12:30 pm.

Tues UPPER NEWTONBROOK CREEK - Nature Walk

Dec 30 Leader: Alexander Cappell

1:30 pm Meet at the northwest corner of Drewry Ave and Yonge St to follow the creek to Finch Ave E and Bayview Ave

(near a coffee shop). Features: a vertical cliff face, an easy ford, a view of the creek from high above and a new

bike path under construction.

Sat THE ART OF NORTH AMERICAN BIRDS – Nature Arts

Jan 3 Leader: Joanne Doucette

1:00 pm Meet at the lobby of the TFN office at 2 Carlton St where Joanne will have a security card for entry to the office.

Come and view a presentation of three centuries of the art of North American birds. We will look at works by Catesby, Bartram, Blackburne, Bewick, Hokusai, Alexander Wilson, Audubon, Hiroshige, Cassin and many more

... a true feast for the eyes.

Tues COLONEL SAMUEL SMITH PARK – Birds

Jan 6 Leader: Doug Paton

10:00 am Meet at the southwest corner of Lake Shore Blvd W and Kipling Ave. Bring binoculars. Morning only.

Sat TORONTO ISLANDS – Winter Ramble

Jan 10 Leader: Joanne Doucette

12:45 pm Meet at the ferry docks at the foot of Bay St at 12:45 pm in time for the 1 pm ferry. Bring binoculars and money

for ferry. We plan to take the 3:45 pm ferry back. Flat, no stairs, no hills. Can be very cold in January, especially

if the wind is out of the north.

Thurs UNDER AND OVER – Heritage Walk

Jan 15 Leader: Linda McCaffrey

10:30 am Meet at the northwest corner of Yonge St and Dundas St for an expedition through the PATH, under the Gardner

and over the Lakeshore on the new glass bridge, taking note of interesting buildings en route. Circular walk of

about 2 hours, concluding at Yonge and Queen. Part of the route will be at street level.

Sat TODMORDEN MILLS WILDFLOWER PRESERVE – Tree ID

Jan 17 Leader: Stephen Smith

10:00 am Meet in front of the Papermill Theatre, 67 Pottery Rd, just down the hill from Broadview Ave for a winter tree

identification walk. Morning only.

	FOR ENJOYMENT OF WINTER OUTINGS		
	Long underwear	Warm hat	TTC Ríde Guíde
	Layered clothing	Míttens over gloves	Snack
	Waterproof boots	Bínoculars	Thermos for hot drink
	Thíck socks	Camera	Sunglasses
	Icers to prevent falls (see recommendation on page 14)		

PATHOLOGY AND GEOLOGY - Lost Rivers

Jan 18 Leader: John Wilson and friends, including Ed Freeman

2:00 pm Meet at the southeast corner of Adelaide St and Yonge St. For the third year, the Lost Rivers mid-winter walk will

explore the proxies for the natural world that are found in the manufactured landscape of Toronto's underground PATH system. This year part of our journey will focus on the stones that are used in cladding the public spaces along the PATH. We will discuss the species and native habitat of the stones we encounter. A joint outing with the Toronto

Green Community.

Wed CEDARVALE RAVINE – Nature Walk

Jan 21 Leader: Miles Hearn

Sun

10:00 am Meet at the St Clair West subway station, north exit (Tichester Rd) for a circular walk. Morning only.

Sat ALLAN GARDENS – Botany of Tropical Plants

Jan 24 Leader: Nancy Dengler

10:00 am Meet inside the east entrance to the Allan Gardens Conservatory (TTC Carlton streetcar at Jarvis) to tour the

collection of tropical edible plants (banana, papaya, tamarind, akee, coffee), as well as other plants of cultural importance (sacred fig, mahogany, papyrus, agave, cardamom, etc). Dress in layers for the tropical heat and humidity.

About 1 1/2 hours.

Tues LOWER NEWTONBROOK CREEK - Nature Walk

Jan 27 Leader: Alexander Cappell

1:30 pm Meet at the southeast corner of Finch Ave E and Bayview Ave to follow the creek into the East Don River, thence to

Sheppard Ave E and Leslie St (near a coffee shop). Features: two river confluences, an interfluvial ridge, meanders, a

sheer cliff, a view of the East Don from high above, the ruins of an old flood control weir.

Sat NATURE IMAGES SHOW – Nature Photos

Jan 31 Leader: Lynn Miller

1:30 pm Meet at S Walter Stewart Library auditorium, 170 Memorial Park Ave just west of Coxwell Ave.

Members may each bring 20 digital photos to project to the audience. Light refreshments. See notice below.

Nature Images Show

Saturday, January 31, 2015 from 1:30 to 4 pm

Auditorium in S Walter Stewart Library, 170 Memorial Park Ave at Durant Ave.

Light refreshments will be served.

Nature Arts members will be showing their work on tables during the coffee break.

One block north of Mortimer or one block south of Cosburn, 1 block west of Coxwell. Take Coxwell bus to Mortimer or Cosburn Avenues. Street parking available or use small lot behind library.



Grape vine beetle painted by Joanne Doucette

TFN photographers!

Show us what you have discovered! Inspire others with your images of the City's landscapes and biodiversity! Highlight the amount of life there is in the city!

You may bring up to 20 digital photos to show. Please bring images on a USB stick if possible.

TFN volunteers!

Please let us know if you would like to help with this event. We welcome donations of goodies for the refreshment table as well as setup and cleanup. Set-up will begin at 1 pm.

Call Margaret McRae at



PRESIDENT'S REPORT

Last week I attended the opening reception for the new public trail at the Nature Conservancy of Canada's Goldie Feldman Nature Reserve in Happy Valley Forest (see page 12). Along with Charles Chaffey and Charles Bruce-Thompson, I was pleased to be part of this public event and proud that, back in 2011, the TFN had made a significant donation toward the protection of these forests and fields high on the Oak Ridges Moraine. Our contribution is recognized by the TFN logo on the reserve interpretive signs and by a plaque honouring the TFN on a hilltop bench.

I have also felt proud to be actively involved in the TFN Grants Program over the past five years. I joined the TFN board in 2009 shortly after a series of brainstorming sessions had been held to determine how best to use the funds from the Arthur Dvorak bequest. Initial discussions had identified two areas, 1) reaching out to youth and new immigrants and 2) urban nature education, as high priorities for new TFN programs. There was also a feeling that funded projects should be used to raise awareness of the TFN in the broader community. While we wished to enter into new educational programs, there was consensus that our all-volunteer organization lacked expertise for education at this level, and that we did not want to spend the Dvorak funds to hire paid staff. These considerations led to the decision to partner with organizations that already possessed the expertise, and the founding of the TFN grants program in 2010.

Since that time, the TFN has provided 36 individual grants to 13 different organizations for projects focusing on connecting children, youth and new immigrants to nature and providing educational materials related to natural

history. Each of these partner organizations has publically acknowledged the TFN's partnership on websites, in printed materials and in press releases, as well as providing reports to the TFN Newsletter. Now I am happy to announce that board member Lavinia Mohr has agreed to be the new chair of the TFN Grants Committee. With the funds currently available, we hope to be able to continue the TFN grants program for two to three more years, but a longer lifetime for the grant partnerships will be dependent on receiving additional donations and bequests.

I am proposing that the TFN board holds a special planning session early in 2015. Our last formal planning session was held almost ten years ago and it seems timely to review our objectives and the programs designed to meet them now. In addition, new provincial legislation, the Ontario Not-for-Profit Corporations Act (ONCA), has precipitated the need to revise the TFN bylaws. Board member Anne Powell is chairing a committee to review and update the TFN objects and bylaws. The planning session will be timed to consider these recommendations, as well as information about membership numbers and finances. We hope to develop some clear longer term goals, including plans for our next milestone anniversary.

As a new president and a fairly recent member of the TFN, I am still feeling my way and learning new things about our organization. I would welcome any suggestions, comments or questions about our current programs and opportunities for new ones from TFN members. Please do not hesitate to contact me by email or telephone.

Nancy Dengler

Tax Deductible Donations

TFN is dependent for funding on membership dues and donations.

We rely on the generosity of our members for special projects and extraordinary expenses.

If you wish to make a donation to TFN this may be done by sending a cheque to the TFN office (see page 2), or go to our web site, www.torontofieldnaturalists.org and click on Donate On-line through CanadaHelps.org

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

A Perfect Holiday Gift

Consider sharing the benefits of TFN membership with your friends!
We are confident that, once they discover the pleasures of our outings, lectures, newsletters and the companionship of other nature-lovers, they will want to renew.

So we are offering a Holiday Special – half the normal membership fee when you, a TFN member, give a gift membership to someone who was not previously a member. This covers newsletters for December thru May, which include outings lists to the end of August.

MONTHLY MEETING REPORT

Origin of Modern Ecosystems

Nov 2. Dr. Jean-Bernard Caron, Curator of Invertebrate Paleontology at the ROM and Associate Professor, Department of Ecology and Evolutionary Biology and Department of Earth Sciences, University of Toronto.

Dr. Caron's fine presentation was greatly enhanced by many superb images of Cambrian fossils and reconstructions of the animals that became fossilized. The fossils he studied are flattened films. Specimens of one species flattened in enough different orientations allowed his knowledgeable palaeontologist/scientific illustrator team to make three-dimensional animated video reconstructions. Many individual species and animal communities were brought to virtual life for us.

Life probably started about four billion years ago. It was simple and microscopic until about 600 million years ago,

the start of the Ediacaran Period, when complex multi-cellular life appeared. A prime location for such life is at Mistaken Point, Newfoundland.

The Cambrian
Period, starting
about 542 million
years ago, saw a
dramatic increase
in the number of
species. The
original evidence
for this increase
came from
Walcott's Quarry, in
Yoho National Park,

Burgess Shale fossil collection site, Marble Canyon, British Columbia

a site in the Middle Cambrian (about 505 million years old) Burgess Shale, excavated by Charles D. Walcott between 1909 and 1924. In 1924 he thought there was probably nothing new to be found.

The ROM started field work in 1975 and has discovered many new species. Early discoveries were in shales forming the floor of Walcott's Quarry and in two sites above the quarry. Following the Burgess Shale laterally resulted in discovery of additional sites nearby and of more species. Field work has been expanded 42 km away in Kootenay National Park, using geologic maps to systematically follow the Burgess Shale. This resulted in a new site, Marble Canyon, which produced at least 12 new

species and 55 taxa. More new species were found near Stanley Glacier. Searching continues for more occurrences.

The reason the Burgess Shale is so important is that it preserves a remarkable assemblage of soft-bodied animals, flattened, but in many cases, extremely well preserved. They were buried by repeated mud flows. Similar deposits, although uncommon, have been found in China, Utah, Northern Greenland and Australia. The conditions that led to the exquisite preservation of these animals are not known elsewhere in the geologic record.

The over 200 species found include some of uncertain affinity to current life and others considered ancestral to such existing groups as molluscs, sponges, arthropods, annelid worms, and vertebrates. The molluses include Nectocaris pteryx, seemingly related to cephalopods, slug-like Wiwaxia corrugata that had scales for protection and a radula (used for rasping food by

modern molluscs). These two species demonstrate considerable early diversity in this phylum. One fossil of *Wiwaxia* has a tiny brachiopod hitchhiking on a scale, probably positive for the brachiopod and neutral for *Wiwaxia*. The arthropods include relatively large predators of the Cambrian seas, such as *Anomalocaris* and *Hurdia*, animals that have been found with ingested remnants of small species, many no bigger than a fingernail. *Hallucigenia sparsa* was a puzzle until better specimens showed its spiny "legs" were in fact back spines; it had been viewed upside down! It is thought to be closely related to modern velvet worms.

EXTRACTS FROM OUTINGS LEADERS' REPORTS

Taylor Creek Park, Sept 28. Leader: Dianne Dietrich.

It was a beautiful day and various groups were using the park, one a large festival. The colours of autumn leaves, though just beginning, were particularly intense – scarlet reds of maples and dogwood, deep wine of white ash. The highlight was watching a great blue heron fishing, at fairly close range, at a hidden pond east of Coxwell. New England, panicled, flat-topped, calico, and heath asters were all in flower as were Canada, zigzag and bluestemmed goldenrods. Also flowering were white snakeroot, Joe-pye weed, Japanese knotweed, Queen Anne's lace, smartweed, bur-marigold, hog peanut, Himalayan balsam and Jerusalem artichoke. Invertebrates included yellow-jacket wasps, bumblebees, flies, bluet damselflies, dragonflies, cabbage white and sulphur butterflies, woolybear caterpillar and cicadas and crickets (both singing). In Victoria Park wetland area and the Coxwell area pond were a sunning painted turtle, green frogs, goldfish/small carp, and many minnow-like blackish fish.

Wilket Creek, Sunnybrook and Serena Gundy Parks, Oct 12. Leader: Ken Sproule. We saw few birds but a number of fungi: bear's head tooth, elm oyster, orange mock oyster, eyelash and lemon drops. Plants seen included white baneberry, bloodroot, wild ginger, Canada mayflower, blue cohosh, beech drops, osage orange and witch hazel. There were numerous signs of erosion along Wilket Creek and the West Don.



Purple fungus photographed by D Andrew White, October 18, Humber Bay Park outing. See also back page.

Leader: D Andrew White. Fungi noted included: fairyring mushrooms (*Marasmius oreades*), pleated parasol mushroom (*Coprinus plicatilus*), silver-leaf fungus (*Stereum purpureum*). There was much evidence of emerald ash borer. We observed green, white and European ash. Almost all native ash were moribund, and healthy trees were either small (< 5 cm DBH) or nonnative (*Fraxinus excelsior*). Most large ash trees were marked with green tags [indicating they were likely treated last summer]. Trees and shrubs also noted included: trembling aspen, buckthorn in fruit, cottonwood, red osier dogwood, Chinese elm, red elm, Siberian elm, spindletree euonymus in fruit, Kentucky coffee-tree,

Plants and Fungi, Humber Bay Park, Oct 18.

Lost Rivers, Doris McCarthy Trail, Gates Gully, Bellamy Ravine, Oct 19. Leader: John Wilson.

(a Viburnum), and weeping, white and pussy willows.

snowberries, staghorn sumac in fruit, highbush cranberry

honey locust, Manitoba and Norway maples, wild or

Russian olive, Austrian and white pine, plane trees,

Participants enjoyed the fall season transition as they walked through diverse beech, maple and oak forest. We saw a "kettle" of 20-odd turkey vultures, a migrating sharp-shinned hawk, a red-tailed hawk, and one participant saw a pileated woodpecker. At the waterfront some got a brief sighting of a mink.

Oak Savannah Plants in Late Fall, High Park, Oct 21. **Leader: Joanne Doucette.** This was a sensory tour of High Park on a cold, wet, windy fall day. The humid atmosphere lent itself to an exploration of the sense of smell through touching and smelling the foliage of a variety of plants including Canada goldenrod, choke cherry, round-headed bush clover, cup plant, switch grass, big bluestem, black oak and others. The sense of smell can be educated to increase the naturalist's awareness of the environment and powers of observation. It is such a tangible vivid sense that it helps us connect to nature in a way that we often forget about. We smelled the rotten odour of the brook-converted-into-stormwater pond on the east side of the park, and a participant shared her childhood memories of the lovely vibrant pond that had been there before the City "improved" it. The fish, tadpoles and frogs are gone, along with the cattails, horsetails and other foliage. A concrete bottom is not conducive to pond life. It made us all think of and treasure a little more what has been left, not just for our enjoyment but also for the life and health of all the other creatures here. We saw a harebell in bloom as well as witch hazel and some asters flowering. I recommend this kind of sensory walk to others and hope to do others in future.

THE BRUISING BOLETE



Boletus subvelutipes resembles a weight lifter. Under its reddish-brown cap hangs a layer of yellow tubes that terminate in deep red pores. The yellow stipe is firm. Despite its macho appearance, it bruises black at the slightest touch. You will find it on the ground beneath both deciduous and coniferous trees with which it has a mycorrhizal association. In other words, both the tree and



fungus benefit from the other's presence by breaking down nutrients so that they can be more easily absorbed by the neighbour. The bolete absorbs methyl mercaptan for the tree. That's a compound in bad breath. But don't eat it. It may cure bad breath, but it causes indigestion.

Harvey Medland





Continued from page 8

Two particularly interesting species to us vertebrates are *Pikaia gracilens* and *Metaspriggina walcotti*. The former, reconstructed using exceptionally well preserved specimens, can be seen to have a notochord, a precursor to a vertebral column (backbone), and a series of segments or muscle bands. *Metaspriggina walcotti* was an enigma until much better preserved specimens were found, at Marble Canyon and nearby. It is now known to be a very primitive fish, up to 10 cm long, which seems to gather in schools.

For more information, see Dr. Caron's award winning *Virtual Museum of Canada website on the Burgess Shale* at www.burgess-shale.rom. on.ca. For information on Dr. Caron, go to www.rom.on.ca/en/collections-research/rom-staff/jean-bernard-caron

The ROM's Gallery of Early Life is in preparation and will show life up to the time of the dinosaurs. This is something to watch for!

Peter Money

Metaspriggina walcotti fossils (below) and reconstruction (above).

OUTREACH PROGRAM REPORT

Some members may not be aware of the extent of the TFN'S Outreach Program which connects the TFN to the wider public by providing leaders to other non-profit groups for nature walks and by having information booths at various nature related public events. This fall we provided leaders to the very active Park People group (www.parkpeople.ca) for various events and also for walks by schools and other groups.

In September, we provided leaders for walks for Valley Park Middle School in East York; Leo Baeck School in Cedarvale Ravine; Chester Le Park Olive Garden at Victoria Park and Finch; Flemingdon Urban Fair Committee in Flemingdon Ravine; and the Birchmount Road Community Group.

In October, we provided leaders for walks in High Park (Sunday Walk); for Toronto Botanical Gardens (at Wilket Creek); for the Scarborough Centre for Healthy Communities; for the Somali Immigrant Aid Organization (in the Humber Valley); for the Thorncliffe Park Womens Committee; and for Friends of Silverview Park at Newtonbrook Park.

We also had information booths at two events: in August at the Tommy Thompson Park Butterfly Festival and in September at the TRCA's Morningside Park Salmon Run.

We would like to thank everybody who helped with the above and to encourage other members to help us in the future.



TFN booth at Tommy Thompson Park Butterfly Festival, August 2014. Photo by Ron Dengler

VOLUNTEERS WANTED

Finding members to help at the events seems to be easier than finding leaders for walks, particularly in some areas. This fall we had to turn down one walk request in the west as we could not find a leader. For each walk, of course, some knowledge of the area is required as well as some familiarity with plants, trees, etc. But you do not need to be an expert. Many of the walkers know nothing, so appreciate any information about what they see on the walks.

Stephen Kamnitzer



EXTRACTS FROM OUTINGS REPORTS continued

Environmental History – Past Climates at the Don Valley Brick Works, Oct 25. Leader: Ed Freeman. This walk, observing fossils and learning about past climates as revealed by the operations of the Brick Works, is well received whenever presented. The present climate offered us good fall colours. The larch were nearly all needle free, and we saw a snapping turtle and a red-tailed hawk.

York University Astronomical Observatory, Oct 28.
Leaders: York University Staff. We looked through the
University's 60 cm Cassegrain reflector-type telescope, which may be
moved manually or by instructions through a computer. We were
given various astronomy facts by the guides. We looked at the moon
and the star Vega, the brightest star in the constellation Lyra, through
the telescope. Vega is about 25 light years away. As the computer
wasn't functioning properly we didn't see as much as we had hoped.
The Observatory is open every Wednesday evening for public
viewing, if anyone wants to go back for another look.

Ed Freeman leading outing at the Brick Works, Oct. 25. Photo Joanne Doucette

GOLDIE FELDMAN RESERVE, HAPPY VALLEY TRAIL OPENING AND RECEPTION

Wednesday, October 22, was the occasion for the ribboncutting ceremony to celebrate the opening of the official trail at the Goldie Feldman Nature Reserve in Happy Valley Forest.

Nancy Dengler, TFN president, Charles Chaffey and Charles Bruce-Thompson attended. Nancy gave a short address to the attendees. Mark Stabb, Central Ontario Program Director for Nature Conservancy of Canada (NCC), officiated.

TFN was invited due to our provision of financial support for the NCC to purchase the Goldie Feldman Nature Reserve, part of the Oak Ridges Moraine. In 2008, TFN had received a major bequest from long-time member Arthur Dvorak, part of which was used in 2011 for this acquisition. This initiative is part of TFN's financial assistance for NCC to protect land in the Happy

Valley Forest, northwest of King City. Located in the upper reaches of the Humber River watershed, the Happy Valley Forest is an old-growth forest in the making, with significant habitat for species-at-risk such as the Acadian flycatcher and the cerulean warbler.

The Goldie Feldman Nature Reserve runs along the crest of the Oak Ridges Moraine, a property with maple-oak woodlands, cedar-shaded springs and cold water creeks. This acquisition literally stopped the backhoes from starting a private housing development.

We walked the trail in glorious late autumn sunshine and were pleased (and surprised) to see that, at the highest point of the trail, a bench had just been installed with a plaque acknowledging TFN's contribution.

Charles Bruce-Thompson





Left: Ribbon cutting ceremony. Right: Nancy Dengler, Charles Chaffey and Charles Bruce-Thompson at the bench on which TFN plaque is installed. Photos by Ron Dengler.

The shadows of the trees of winter, as lovely as the trees themselves!

BUTTERFLY RAISING REPORT

A group of TFN members were authorized by the Ministry of Natural Resources to raise monarch and swallowtail butterflies this year. Fourteen members registered and 12 actually raised some butterflies. For most, it was a new experience. Participants were very pleased with the results and look forward to doing better next year, now that they know what is involved. In total, the group raised 193 monarchs and two black swallowtails. We also tagged 94 monarchs in August and September for their migration.

This year was my second best year ever with more than 100 monarchs raised even though they didn't arrive in Toronto until July. My previous best year was when they arrived two weeks earlier than normal, in early May. We hope they have a good winter in Mexico and better weather for their return in the spring.

The members who raised monarchs successfully this year were Margaret McRae, Jan McDonald, Pierre Robillard, Charles Bruce-Thompson, Paula Davies, Karin Fawthrop, Jason Ramsay-Brown, Jackie Schucknecht, Ken Sproule, Kayoko Smith, Theresa Moore, and Stephen Ward. Margaret McRae and Karin Fawthrop also raised black swallowtails.

We have already had some new people express an interest in doing it next year. We welcome more people to join us but you have to register with me with all your contact information and report back at the end of the season with your results. Feel free to contact me if you are interested or have any questions

Try to attend Don Davis's talk on December 7th for an update on the state of the monarchs.

On October 9, 2014, Environment Canada posted the Management Plan for the Monarch (*Danaus plexippus*) in Canada [Proposed] on the Species at Risk Public Registry (www.registrelepsararegistry.gc.ca/document/default_e.cfm? documentID=1582).

The document is open for a 60-day comment period. The Department will then have 30 days to consider the comments received, after which the final version of the recovery planning document will be posted.

Margaret McRae













From top: Monarch eggs on milkweed, Margaret McRae; caterpillar, Theresa Moore; preparing to pupate, Margaret McRae; pupa, Jackie Schuknecht; butterfly emerging from pupa, Margaret McRae; tagged butterfly, Ken Sproule.

KEEPING IN TOUCH

This photo of a whitetail buck (see front cover) was taken from our living room window overlooking our back yard in Guildwood Village on October 16, 2014.

Barry and Rochelle Tocher

While strolling in High Park on this beautiful Thanks-giving Saturday, I momentarily joined the group on Hawk Hill and photographed this red-tailed hawk perched in a nearby tree. Another red-tail hovered high above us for quite a long time, then suddenly swooped down at great speed, aiming directly at the one in the tree. There was a loud squawk and they both flew off in different directions.

The hawk-watchers surmised that the percher was a migrant and the attacker a resident defending his territory. It was an exciting spectacle!

Wendy Rothwell



I, who have never written poetry, woke up today with this sentence in my head. Perhaps it is a haiku, influenced by all the haikus I've been exposed to in TFN's monthly publication!

> On small knoll, on country roll, Silence.



At Franklin's Garden on Centre Island in mid-October, I was amazed to see dozens of butterflies – mostly monarchs but also American ladies, red admirals and sulphurs – busily feeding at a new flower bed that's been established especially for pollinators. Although the plants in the bed appear to be mostly non-native or cultivars of native species,



the bees and butterflies weren't complaining. I was able to get at least 16 feeding monarchs in one photograph. I don't know whether monarchs still in Toronto in mid-October will make it to Mexico for the winter. Some new bee condos have also been installed.

Jenny Bull

We recommend ice cleats for walking on snow or ice, particularly Stabilicers (made in Biddeford, Maine) sold by Mountain Equipment Co-op for \$25. They're very good!

Pleasance Crawford and Helen Juhola

TORONTO WILDFLOWERS: BLUEBERRIES AND HUCKLEBERRY

Blueberries belong to the genus *Vaccinium* and huckleberries to the genus *Gaylussacia*, both members of the Heath family (Ericaceae). This large family (124 genera, about 4050 species) is cosmopolitan. A notable genus, not native here, is *Rhododendron*, about 850 species mainly in Asia, but several species native to North America. Rhododendrons, with their showy flowers, are widely grown garden plants.

Vaccinium species – there are about 140 – include those producing blueberries, cranberries, bilberries, and lingonberry. The species reported in the TFN's Vascular Plants of Metropolitan Toronto (1994, 2nd ed.) are V. myrtilloides (velvetleaf blueberry) and V. angustifolium (low sweet blueberry), both listed as uncommon, and V. pallidum (hillside blueberry) listed as rare. All three were recorded in High Park, the source of my images. The latter two were also recorded in the Rouge Valley, occurrences I have not seen. I have not found V. pallidum, distinguished by the very pale colour of the backs of its leaves, in High Park.

My first image – of a white-flowered plant, with some flowers barely tinged with pink – has the characteristics of *V. angustifolium*, including uniformly green smooth leaves and the flower colour. This is, I think, the *V. angustifolium* of the TFN's checklist.

My second image shows a plant with deep pink flowers and with sparse very fine hairs on the leaves and leaf stalks (best seen on leaf margins and on the longest leaf stalk to the right of the flowers). Such fine hairs are characteristic of *V. myrtilloides*. The flower colour, although seemingly unusual for *Vaccinium* species that

produce blueberries, does point to this species. Its flower colours range from greenish white to pink, according to the Flora of North America (FNA).

My third image is of a plant with paler pink flowers, and leaves and stems with, at most, only the occasional hair. The flower colour is wrong for *V. angustifolium*, the almost lack of fine hairs wrong for *V. myrtilloides*. A possible

solution to what this puzzling plant is? *V. myrtilloides* forms hybrids with at least six other *Vaccinium* species, including *V. angustifolium*. Perhaps it is a hybrid (*V. myrtilloides X angustifolium*).

All *Vaccinium* species that produce blueberries form low shrubs, generally about 15 to 60 cm tall, and have bell-shaped flowers about 5 to 6 mm long that occur in clusters. In High Park the *Vaccinium* species can be seen in a narrow transitional zone between woodlands and black oak savannah, particularly in a relatively high area along part of the Black Oak Trail. In the past they have bloomed from late April to early May. Both *V. angustifolium* and *V. myrtilloides* are widespread species. The former occurs from Newfoundland east to Manitoba and through the northeast and north central U.S. and east central U.S. The latter is reported from Labrador to B.C. and in much of the northeastern U.S.

Continued on next page





Top: Low sweet blueberry, *Vaccinium angustifolium*Left: Velvetleaf blueberry, *Vaccinium myrtilloides*Right: *Vaccinium myrtilloides* X *angustifolium* (perhaps)



FROM THE ARCHIVES

From TFN #504, December 2001

A Seasonal Miracle

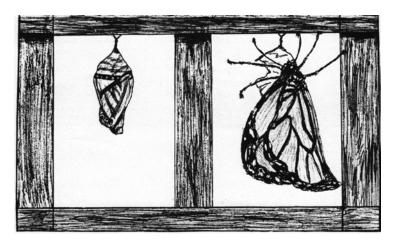
The pupa was suspended from the underside of the stairrail, at just the right height for a small child's eyes to discover what adult vision, feet higher, had overlooked. It was the customary monarch masterpiece: an exquisite blue-green teardrop held together by glittering gold stitches, the black veins of its inhabitant just visible through the jade patina. According to the Peterson guide, monarch development, from egg to caterpillar to pupa to butterfly, takes about a month, so clearly we had arrived at the optimum time for this incredible metamorphosis (August 2001).

The first duty of the first riser was, accordingly, to check each morning under the stair-rail in the hope that this event would take place before we had to leave, and indeed, three days later it did! I had looked earlier and the pupa appeared quiescent, but sometime after midday our butterfly had decided the time had arrived, and when I looked again at 3 o'clock she was already halfway out of her case. I brought my book and sat beside her, glancing up constantly to perceive the slow emergence of the hunched orange body, the persevering freeing of legs, the long intervals between effort while she recouped her strength, the unfolding of the wings and their very tentative outward flutters. All this took three to four hours, and the rest of the family returned from the village in time

to view her, finally freed but still clasping the unbelievably small and transparently fragile pupa-case.

At 7 o'clock she moved to the other side of the rail to catch the last rays of the sun. It was becoming cool and she was now constantly flexing her wings prior to that first flight. We all went indoors to supper, and as dusk was settling in at 8 o'clock we paid our last visit. But she had already gone! Ultimate destination California? – Mexico? I hoped that, for her first night, she had found a safe haven, and we all wished our monarch bon voyage, a long and happy life, and many broods. She was, we agreed, "only" one of nature's seasonal miracles, but she had certainly brought nature's magic to us.

Eva Davis



Continued from previous page



Black huckleberry, Gaylussacia baccata

Gaylussacia baccata (black huckleberry) is our local species of the 130 in this genus. It is a shrub up to 90 cm tall that, where seen near the Black Oak Trail, was noticeably taller than associated *Vaccinium* species. Its red flowers are about 6 mm long. The image was taken in late May 2000. The TFN reported it as locally uncommon, definitely in High Park and possibly in Lambton Park. I've looked for the latter occurrence without success. This species is reported from Newfoundland to Ontario and in every state of the eastern half of the U.S. except Florida.

A botanical challenge: visit the Black Oak Trail some fine spring day equipped with a good hand lens. Look for *Gaylussacia baccata* and do a survey of *Vaccinium* plants, identifying species (and hybrids?), noting abundance and distribution. Perhaps a project for an aspiring student of botany?

IN THE NEWS

Winter Finch Forecast

Ron Pittaway's annual Winter Finch Forecast is available on the Ontario Field Ornithologists website. The occurrence of grosbeaks, finches, crossbills, redpolls and siskins in southern Ontario depends on the seed crops of trees such as spruce, pine, birch and mountain-ash. If good crops occur in the boreal forest, birds tend to stay put for the winter. If crops are poor, they will move south until good supplies are found. Check out this winter's forecast at www.ofo.ca.



Pine siskin drawn by Diana Banville

Biography of R M Saunders

A biographical article about former TFN president and newsletter editor R M Saunders has been published in the latest edition of *The Canadian Field Naturalist* (Vol 128, No 3, 2014), a publication of Ottawa Field Naturalists Club. "A naturalist for all seasons: Richard Merrill Saunders, 1904–1998" by Philip Collins, commemorates the 110th anniversary of Saunders' birth. Saunders published several books, including *Flashing Wings* (reviewed in TFN #565, September 2009). Collins writes: "One of the great virtues of Saunders' writing is his power to evoke landscape. There is a passage at the beginning of the book in which he details a snow-covered wood of hemlock trees... It is a magical description." See www.ofnc.ca

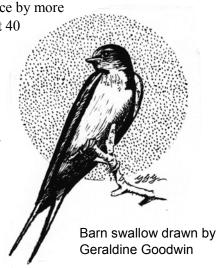
Daylighting Lost Rivers in ON Nature

An article in the fall 2014 issue of *ON Nature* on buried rivers features Helen Mills, "lost rivers" such as Garrison Creek, and the growing interest, since the flood damage of 2013, in "daylighting" buried rivers and re-naturalizing rivers in concrete channels. You can read the article online at onnaturemagazine.com

Ontario Barn Swallow Studies

From Bird Studies Canada: www.bsc-eoc.org
"Barn Swallows are such a common sight in Ontario that
many are surprised to learn this species' population has
declined in the province by more

than 65% over the last 40 years. Habitat loss is considered to be among the possible causes. Since 2012, Bird Studies Canada has been conducting a multi-faceted Barn Swallow project that includes deploying artificial nesting structures and evaluating their success. Eight



structures were installed and monitored over the last two springs, with mixed results. We also partnered with Bird Ecology and Conservation Ontario to study the impact of social attraction on nest site choice using decoys and auditory playback. Bird Studies Canada will use the results of this project to: expand our knowledge of Barn Swallow nesting; further develop habitat loss mitigation strategies; and aid in recovering the Barn Swallow population in Ontario."

Looking for gifts?

See www.bsc-eoc.org/, click on BSC Store

Bird Studies Canada's Project Recovery allows you to adopt a wild bird. Your "adoption fee" enables information on migrant birds to be collected daily, resulting in a database of information critical to conservation planning.

Choose the species you want and receive an 11 x 14 inch adoption certificate featuring a colour photograph of the bird, details of the banding of a real bird (unique to each gift) captured at BSC's Long Point Bird Observatory, and general information about the species' range and habits. If your bird is recovered, they will let you know the details of the recovery, so that you can track your adopted bird's progress. The certificate is a perfect gift for a friend or yourself. And you'll be helping the birds as well.

WEATHER (THIS TIME LAST YEAR)

December 2013

This month will be long remembered among Torontonians for the pre-Christmas ice storm that paralysed large parts of the city over the holiday. Overall the month was also rather cold

The monthly stats show this December to be the coldest since 2000, and it follows a string of mostly warm Decembers. The monthly average temperature downtown was -3.2° (admittedly based on incomplete records at time of writing), while at Pearson it was -4.2°. These values are about 2° below the 30-year average. After a chilly November, the mild period in the first few days of December was deceptive; after reaching 15.6° on the 5th, we had a prolonged sub-freezing spell with intermittent snow from the 10th to 18th.

Total precipitation for the month was just slightly above normal at 60-65 mm, with rainfall being about 45 mm and snowfall varying between 30 cm at the airport and 49 cm downtown. But the big story was the ice storm which occurred when warm Gulf of Mexico air flowed over a shallow layer of trapped cold air along a semistationary front from the 19th to 22nd. A couple of pulses of rain along this front resulted in a total of 40

A brief thaw in mid-January seen on Centre Island, January 12, 2014. Photo by Jenny Bull.

mm of accumulation. The result was that about 300,000 people were without power in Toronto alone, almost 70,000 of them still without power on Christmas Eve. Recovery was basically complete by New Year's 2014. Tree damage in some neighbourhoods was severe with many trees down and an enormous number of them with major limb damage. Trees along streets, in backyards and disturbed habitats were more affected than mature native stands in ravines and woodlots. The effects of the ice storm were worst in areas north of the Iroquois shorebluff hill (which lies between Bloor and St. Clair). The areas below the hill and closer to the lake warmed up briefly enough on the 22nd that ice accumulation on aerial

surfaces such as wires and branches was able to melt or at least slough off. In suburban areas, the ice remained into the new year, as it also did on roads and sidewalks everywhere, including the downtown core.

The storm drew comparisons with the January 1998 storm that hit eastern Ontario, Quebec, New England, and the Maritimes, but the 1998 storm was in fact much more severe. However, looking at Toronto specifically, it was the worst ice storm since at least 14th January 1968, when there was a one-day dump of 30 mm of freezing rain followed by 30 cm of snow and a sharp cold snap.

January 2014

January continued the impressive series of cold months that began in November, especially impressive for the persistent pattern. The month was the coldest in 5 years,

with temperatures averaging about 3° to 4° below normal and repeated cold snaps with six days recording readings below -20° at Pearson Airport. The most intense of these was dubbed "The Polar Vortex" across central and eastern North America. This is somewhat of a misnomer, as the actual Polar Vortex is a constant feature of the atmosphere, centred in the arctic regions. What did happen – and it happens with every strong cold outbreak is that a ripple or lobe

of the vortex dipped down into our area. In any case, this event brought the most severe cold to east-central North America since January 1994. The minimum temperature reached -24.2° on January 7th, with a daytime high of -17.3°. Comparable readings were last observed in 2005, but the wind chill this time was extreme and the experience was repeated several times (on the 2nd to 3rd, 20th to 23rd, and 28th to 29th) almost as intensely. At least during the 6th-7th outbreak, ice was observed down to the Gulf of Mexico, although Florida itself was spared. The monthly mean temperature was -8.7° at Pearson Airport, the coldest January since 2009 which had -8.8°.

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.

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.

- Dec 7. High Park through the Ages. Dave Berndorff
- Dec 21. Holiday Hike to Colborne Lodge. Walking Tours committee

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.

Rouge Park Weekly Guided Nature Walks

Explore Rouge Park's trails with a Hike Ontario certified volunteer leader.

Information: visit www rougepark.com/hike, e-mail hike@rougepark.com or phone 905-713-3184, Monday thru Thursday.

The Market Gallery

To Jan 17, 2015. South St Lawrence Market, 2nd floor, 95 Front St E. Free. Toronto does her Bit – The Home Front in the Great War. Gallery closed Sun, Mon and holidays. Information: www facebook.com/TorontoMarketGallery

Harbourfront Centre

To June 2015. No Flat City, Toronto's Incomparable Terrain. A photographic exhibit of the GTA landscape.

Toronto Entomogical Association

Sat Jan 24, 1:15 pm. Title TBA. Room 206, Victoria College. Info. www.ontarioinsects.org

Lost Rivers Walks

Information: www.lostrivers.ca. Walking tours limited to 20 participants. Pre-registration is not required but, to ensure a spot on the tour, please email in advance to info@labspacestudio.com.

Sat Dec 13, 1 pm. Wetlands and Ponds of High Park-Swansea. 19th Century cultivators, geologists and naturalists. (2 1/2 hrs) Leader: Ian Wheal. Meet at the southwest corner of Bloor St W and High Park Ave.

Royal Canadian Institute for the Advancement of Science (RCI) - Lectures

Sundays at 2 pm (doors open at 1:15) unless otherwise noted. Macleod Auditorium, Medical Sciences Building, University of Toronto, 1 King's College Circle (nearest subway Queen's Park Station) Info: royalcanadianinstitute.org

Ed Freeman and Ian Wheal Urban Heritage Walk

Sat Dec 6, 1 pm. Canadian Pacific Railways Donlands 'extensive' forest and Canadian National Railways Leaside shops, sites named after Henry King Wicksteed (1855-1927) CNR engineer and first aerial railway photographer. Meet at the main entrance to the Ontario Science Centre, west side of Don Mills Rd south of Eglinton Ave E. This 2 1/2-hr walk will end at Longo's Food Market, Laird Dr, 5 blocks south of Eglinton Ave E.

WEATHER *continued*

Other parts of the world, such as Europe and California, had warmer than usual conditions.

We did have a January thaw on the 10th to 14th, which prevented the month from being one of the top ten or twenty cold months; temperatures rose to 7.5° on the 14th. This was not, however, enough to clear the ice accumulation of the December freezing rain storm from the sidewalks, and snow cover remained all month – an unusual occurrence in recent years. Snowfall itself was

33.3 cm downtown and 32.0 cm at Pearson Airport, just marginally above normal. Combined with modest rainfall (in the 12 to 16 mm range), total precipitation was slightly below normal (46.2 mm downtown and 46.6 mm at Pearson Airport). There just wasn't a lot of warm, moisture-laden air moving north to provide heavy precipitation. Instead, the freezing rain that we had in Toronto in December fell along the Gulf Coast (28th to 30th January)!

Gavin Miller

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Great egret photographed by D Andrew White, October 18 outing at Humber Bay Park