

TORONTO FIELD NATURALIST

Number 571, April 2010



Canada lousewort (Pedicularis canadensis) photographed by Peter Money (see article page 10)

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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, up to 500 words, of observations on nature in and around Toronto, reviews, poems, sketches, paintings, and photographs of TFN outings (digital or print, include date and place). Include your name, address and phone number so submissions can be acknowledged. Send by mail or email. **Deadline for submissions for May issue:** April 9.

NEWSLETTER COMMITTEE

Jenny Bull (co-editor), Karin Fawthrop, Nancy Fredenburg, Elisabeth Gladstone, Mary Lieberman, Ruth Munson, Toshi Oikawa, Wendy Rothwell (co-editor).

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MEMBERSHIP FEES

\$30 STUDENT, SENIOR SINGLE (65+) \$40 SINGLE, SENIOR FAMILY (2 adults, 65+) \$50 FAMILY (2 adults – same address, children included)

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No GST. 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

2 Carlton St., # 1519, Toronto M5B 1J3

Tel: 416-593-2656

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

The Doug Tarry Young Ornithologists' Workshop, 30 July to 8 August

Applications due 30 April

The Doug Tarry Bird Study Awards foster the development of ornithological interests in Canadian teenagers. Recipients attend a week-long workshop/natural history camp or a monthlong student internship at Long Point Bird Observatory. The workshop focuses on hands-on learning and training in field ornithology. Participants learn how to identify, age and sex birds, and to study their populations and behaviour. Instructors teach the secrets of bird handling and banding techniques, how to prepare specimens for scientific study, and an array of bird censusing techniques. The Award covers all direct costs including accommodation and meals.

For more information go to www.bsc-eoc.org or contact Yousif Attia, Long Point Bird Observatory, Box 160, Port Rowan, ON N0E 1M0; fax: 519-586-3532; lpbo@birdscanada.org

Baillie Birdathon 2010

Want to have a *lot* of fun and help birds and nature at the same time? Do a Birdathon this May! During a 24-hour period in May, participants attempt to find as many bird species as they can, sponsored at a flat rate, or on a per-species basis. Birders can designate a favourite conservation organization to receive a portion of the funds they raise. All contributions to Birdathon are tax-creditable.

To find out more, go to www.bsc-eoc.org/ support/ birdathon/ or contact Bird Studies Canada at birdathon@bsc-eoc.org or 1-888-448-2473.

TFN MEETING

Sunday, April 11, 2010 at 2:30 pm

Disturbing the Disturbed: Using Biological Control to Recover our Invaded Forests

Sandy Smith, Professor, Faculty of Forestry, University of Toronto and international expert on biological control will describe how biological control is used to fight invasive plants and insects

VISITORS WELCOME!

SOCIAL: 2:00 – 2:30 pm

Room 001, Emmanuel College, University of Toronto, 75 Queen's Park Cres. East

Emmanuel College is just south of the Museum subway station exit (east side of Queen's Park). Enter at south end of building, down a few steps on outside stairwell. **Wheelchair entrance**: Second door south on Queen's Park. Elevator inside to the right. Room 001 is one floor below street level.

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

Upcoming TFN Monthly Meeting

May 2 The Appalachians and Their Margins

Peter Money, TFN member, retired geologist, nature photographer and amateur naturalist

Tickets are going fast! Order yours today.

Second Annual Ontario Nature Green Tea

Thursday, April 8, 4 – 6 p.m. The Granite Club, 2350 Bayview Avenue

Acclaimed Canadian writers and naturalists

Margaret Atwood and Graeme Gibson

will remind us of the once-rich diversity of life in our city and talk about our generation's opportunity to protect the wild species and wild places essential to our health and survival

Tea, sandwiches and cakes will be served. No jeans, jackets preferred.

\$50. \$10 parking available on-site.

Presented in sponsorship with Toronto Field Naturalists and the Granite Club Nature Series.

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.

Saturday, ALLAN GARDENS – Nature Arts

Apr. 3 Leader: Nancy Anderson

10:30 am Meet at the entrance to the greenhouses at Carlton St. and Sherbourne St. Bring what you need for

photography, sketching or writing. If you want to experiment with an incised drawing technique bring an empty ball point pen or a pointed chopstick with your drawing materials. Bring anything you wish to

show the group after lunch in a nearby food court.

Wednesday, GARRISON CREEK - Nature and History

Apr. 7 Leader: Ed Freeman

1:30 pm Meet at entrance to Christie subway station. We will wander along Garrison Creek to view what nature

reveals and participants can impart. About 2 hours duration ending in the vicinity of Fort York.

Saturday, THE BEACHES BOARDWALK – Birds

Apr. 10 Leader: Joanne Doucette

1:00 pm Meet outside the Toronto Public Library near the corner of Lee Ave. and Queen St. E. We will look for

winter birds in Kew Gardens, along the boardwalk to Woodbine Beach and Ashbridge's Bay Park and at

the old Greenwood Racetrack site. Bring binoculars.

Sunday, LECTURE – Disturbing the Disturbed: Using Biological Control to Recover Our Invaded

Apr. 11 Forests

2:30 pm Speaker: Sandy Smith, Professor, Faculty of Forestry, University of Toronto

Emmanuel College, 75 Queen's Park Cres. E. See page 3.

Thursday, WILKET CREEK - Nature Walk

Apr. 15 Leader: Charles Chaffey

10:00 am Meet at the northwest corner of Eglinton Ave. E. and Leslie St. Morning only.

Saturday, TORONTO'S FIREHALLS AND GREAT FIRES – Heritage and Architecture

Apr. 17 Leader: Janet Langdon

1:30 pm Meet at the southwest corner of Parliament St. and Front St. E. A historical walk to mark the

anniversaries of Toronto's great fires and the role Toronto's water bodies played. Walk will end at Bay

St. and Wellington St.

Sunday, TOILET TO TAP – Lost Rivers (Earth Day 40)

Apr. 18 Leaders: Helen Mills and John Wilson

2:00 pm Meet at the southwest corner of Coxwell Ave. and Lake Shore Blvd. Follow the "Toilet to Tap" walk in

the Beach neighbourhood, described at www.thirstycitywalks.ca, from Ashbridge's Bay Sewage Treatment Plant to the R.C. Harris Drinking Water Filtration Plant. This walk explores the history of drinking water and sanitation systems in Toronto by using the development of the Beach neighbourhood

as an example. A joint walk with Toronto Green Community and RiverSides.

Tuesday, YORK CEMETERY – Birds

Apr. 20 Leader: Carol Sellers

10:00 am Meet at cemetery entrance on Beecroft Rd at North York Blvd. Bring lunch and binoculars.

Thursday, TFN NATURE RESERVES – Work Party

Apr. 22 For details, see page 7.

Saturday, GERMAN MILLS PARK – Nature Walk

Apr. 24 Leader: Theresa Moore

10:00 am Meet at the northeast corner of Leslie St. and Steeles Ave. E. Bring binoculars. Morning only.

+

Saturday, CEDARVALE RAVINE – Mayor Miller's Clean-Up Day

Apr. 24 Leader: Marcus Feak

10:00 am Meet at the Heath St. exit of St. Clair West subway station. Bring boots and gloves. Bags will be

provided. Morning only.

Thursday, ROUGE PARK – Wildflowers and Nature

Apr. 29 Leader: Peter Money

11:00 am Meet at Pearse House, east of first bus stop north of Sheppard Ave. E. on Meadowvale Rd. (currently

Scarborough 86A route from Kennedy Station, but check with TTC). Walk includes trails on some moderately steep slopes. Bring lunch. Binoculars optional but welcomed. Approximately 3 to 4 hours,

depends on what we find.

! TFN APRIL TO MAY VOLUNTEERS NEEDED!

Call the TFN office 416 593 2656 to reserve your shift

Event: TFN Booth at GREEN LIVING SHOW

When? Friday, April 23 to Sunday, April 25, 10:00 a.m. – 9:00 p.m.

Where? Direct Energy Centre, Exhibition Grounds

What? 6 Volunteers needed each day to work a 3.5 hour shift. FREE ADMISSION if you volunteer to

help staff our booth, share your enthusiasm for the TFN and sign up new members.

Event: TFN Booth at INTERNATIONAL MIGRATORY BIRD DAY

When? **Saturday, May 8,** 9:00 a.m. – 4:00 p.m.

Where? Toronto Zoo

What? 4 Volunteers needed to work a 3.5 hour shift (am or pm). FREE ADMISSION if you volunteer to

help staff our booth, share your enthusiasm for the TFN and sign up new members.

Event: TFN Booth at TOMMY THOMPSON PARK SPRING BIRD FESTIVAL

When? **Saturday, May 8,** 7:00 a.m. – 4:00 p.m.

Where? Leslie Street Spit

What? 2 Volunteers needed. FREE ADMISSION. Share your enthusiasm for the TFN and sign up new

members.

PRESIDENT'S REPORT

Spring is in the air! I am writing this report on March 1st, a mild sunny day, having just returned from a pleasant walk in High Park. Despite some snow on the ground, there is a feeling that spring is imminent, reinforced by the cheery singing of cardinals. It is a delight to anticipate the return of spring migrants. We don't have to travel to Presqu'ile, Long Point, Rondeau or Point Pelee, though it's exciting to have them so nearby. Right here in Toronto we have more than a dozen exceptional bird viewing locations, including Toronto Islands, the Leslie Street Spit, Colonel Sam Smith Park, High Park, Ashbridge's Bay and Rouge Park. Some 270 species of birds migrate through the GTA, located at the intersection of the Atlantic and Mississippi Flyways, and 195 species breed in our city.* What better place for birders to live! We also look forward to the blooming of early spring flowers in Toronto's parks and ravines. Thanks to our dedicated and knowledgeable outings leaders, TFN members have opportunities, not only to enjoy these signs of spring in the company of other nature enthusiasts. but also to learn the names and characteristics of our birds and wildflowers. I hope many of you will participate in our April outings.

Long-time members may remember that TFN used to organize day trips by bus outside the City. There have been suggestions recently that we consider reinstating this type of activity, and we are wondering how popular it would be. Many of our members do not have cars and, even if you do, a group tour can be fun. If we arranged such a trip, there would have to be a charge towards transportation costs. Please let us know if this is something that might appeal to you, suggesting possible destinations and advising whether

a Saturday, Sunday or mid-week would be more convenient.

It is exciting that several members enjoyed recent visits to our Nature Reserves (see page 9). Such expeditions, especially in winter, have to be planned at very short notice based on weather, so it is not possible to advertise them in our Newsletter. If you would be interested in joining a future outing to the reserves, please advise Margaret McRae and she will put your name on a list to be contacted when a trip is being planned.

I am very grateful to Pinky Franklin for all she does to promote Toronto Field Naturalists, especially at this busy time of year. Thanks to her enthusiasm, creativity and hard work, and the support of willing volunteers, the TFN is made visible to potential new members, and many are attracted to join. A warm 'thank you' to those who have recently offered to help promote TFN at special events. Dianne Dietrich, Gail Gregory and Elisabeth Gladstone staffed our booth at *Get the Jump on Spring*, signing up 5 new members. Betty McCulloch is organizing the volunteer roster for *Canada Blooms* and Rita Bijons has offered to do this for *The Green Living Show*. Please see page 5 for opportunities to tell others about the benefits of TFN membership.

Thank you also to several members who submitted excellent suggestions for making good use of monies bequeathed to the TFN, as requested in last month's President's Report.

Wendy Rothwell

TFN BOARD NOMINATIONS INVITED

TFN is looking for people with initiative who are willing to devote time to working as members of the Board of Directors. Please send your suggestions to the Chairman of the Nominating Committee, c/o TFN, #1519, 2 Carlton St., Toronto, ON M5B 1J3. The Committee's report will be published in the May newsletter.

VOLUNTEERS NEEDED

If you have:

 basic computer skills and can help keep our members' database up to date,

or

 word-processing skills and would like to help update the TFN's plant list

please phone or e-mail the TFN office.

^{*} Statistics obtained from Birds of Toronto – A Guide to Their Remarkable World (City of Toronto Biodiversity Series)

MONTHLY MEETING REPORT

Towards a Bar-coded World

Sunday, March 7. Paul Hebert, Scientific Director, Canadian Barcode of Life Network and Director, Biodiversity Institute of Ontario, University of Guelph

Last February, Cindy Cartwright spoke to us about hummingbirds in Ontario. She told us how a rufous hummingbird had been identified by bar-coding its DNA from a breast feather which had been frozen to a feeder. Nancy Dengler reminded us of this lovely anecdote during her introduction today because it was to Paul's Biodiversity Institute at the University of Guelph that the little feather was sent.

Today, Paul took us on an extraordinary scientific journey. Over the last 150 years, the study of biodiversity has not kept pace with the strides made in the study of matter and of the cosmos. This is about to change and Paul's excitement was evident as he told us what we can expect. He believes that in 20 years' time, we will have a census of all life, a complete inventory of all the species on our planet. Although the colour and form of organisms are beautiful to behold, morphological taxonomy is no longer adequate for the job. We are now able to build a DNA-based ID system for all eukaryotes. We are building digital directories of DNA bar codes.

A DNA bar code is a short, standardized sequence enabling species discrimination in a large block of life. The DNA used for animal life bar codes is part of the mitochondrial genome; it also works for fungi and other organisms distinct from animals and plants. It does not work on land plants although testing on two plastid markers is going well.

Canada is taking a lead role with the work at the Biodiversity Institute of Ontario (www.biodiversity.ca). All day long, they receive a stream of organisms from which they take tissue samples and enter the flow of genomics into their database in addition to photographing the organism and noting its data. After four years, they now have a Barcode of Life database containing 100,000 species open to Institute members (www.boldsystems.org).

They have been able to probe biodiversity. Paul spoke of starting off sampling the moths in his backyard. From there they went to Costa Rica where one park has 10,000 species of moths. The increased numbers of specimens have revealed overlooked species. A neotropical blue skipper butterfly, when bar coded, revealed 10 different species. Although all the adults looked the same, the 10 larvae were different and each fed on a different plant species. Continental campaigns have demonstrated that the bar codes of species specimens from different areas are virtually the same. Species counts using bar coding have shown 100% congruence with taxonomy counts.

Paul ended his talk with an overview of the International Barcode of Life Project (www.ibolproject.org). Over 5 years, the project will collect 5 million specimens to bar code 500,000 species. Students and staff go to Moorea and Churchill (guess where Paul goes) during the summer to gather specimens in accordance with a priority list. Additional work occurs in museums on specimens that are 200 years old, and in the permafrost on 1 million-year-old specimens. Sophisticated equipment and protocols are being developed for the sharing of information. Technologies are evolving so that, for example, it will be possible to identify all species in a slurry of bugs; handheld barcode devices will become the 'Field Guide for the Third Millennium.' Twenty-five nations are currently signed up. This transformative work will lead to a global biodiversity ID system, evolutionary rules, biosurveillance and conservation of life. These are very exciting times.

Corinne McDonald

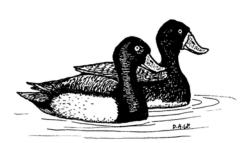
Visit TFN Nature Reserves on Earth Day

A visit/work party is planned for Thursday, April 22. If you would like to participate, please contact Margaret McRae

Car-pooling will be arranged.

EXTRACTS FROM OUTINGS LEADERS' REPORTS

Nature Arts Winter Waterfront Walk, Queen's Quay West, Feb. 6. Leader: Anne Byzko. We observed a female hooded merganser having a meal of fish, possibly a pumpkinseed (see photo next page). A pair of trumpeter swans landed right in front of us looking for a handout. Two rafts of a hundred-plus birds each in the lake, mostly scaups, redheads, longtails and mergansers but they were too far out for a more precise identification of species. There was a new series of



spectacular aerial photographs of natural areas mostly in the north on display along the waterfront.

Greater scaup drawn by D.A. White.

Lost Creek, Trees, Ashbridge's Creek, Feb. 13.
Leader: Joanne Doucette. We traced the route of the buried Ashbridge's Creek from sources near Springdale Ave. to Ashbridge's Bay. We went through 3 brickyard sites along the course of the creek. We identified trees along the way. I showed vintage photographs and maps of the creek before and after landfill operations. We discussed geology including Lake Iroquois, sand bank, springs, and seeps, as well as oak savannah and Monarch Park as a remnant of original forest.

Identifying Trees and Shrubs, Mount Pleasant Cemetery, Feb. 16. Leader: Pleasance **Crawford.** We walked past the ravine of Yellow Creek, the redtailed hawks' nest, and the Massey mausoleum – our goal was Plot V, chosen because it has some of the finest trees in the cemetery. Using a checklist prepared for the walk, we observed as many of the more than 50 tree and shrub species and cultivars as possible before getting thoroughly chilled. We admired the very large sweetgum, broad-spreading cucumber-tree, and shapely Korean evodia, and



Mount Pleasant Cemetery drawn by Mary Anne Miller

were able to identify royal paulownia, Korean stewartia, and old-growth sugar maple not shown on the cemetery's 1995 arboretum plan.

University of Toronto Greenhouses, Feb. 20.
Leader: Nancy Dengler. We started in the xerophyte house, looking at plants with striking adaptations to desert environments such as reduced leaves, photosynthetic stems with low surface to volume ratios, waxy cuticles to reduce water loss, conspicuous hairs to reflect the sun's energy and metabolism that conserves water by opening stomatal pores only at night. The most unusual plant in this collection is *Welwitschia mirabilis* from the Namib desert in southern Africa. This bizarre plant can live up to 1000 years, yet only produces two leaves during its lifetime. The U of T plant is a male, about 75 years old and sporadically produces small pollen cones, indicative that its family is more closely related to conifers than flowering plants.

Another interesting plant, in the temperate greenhouse, is Wollemi pine (*Wollemia nobilis*), the only species in a genus of southern hemisphere conifers that is well-known from the fossil record of 50 million years ago. Amazingly, living Wollemi pines were discovered by Australian park ranger David Noble only 15 years ago. Their location is a well-guarded secret, but plants have been propagated by tissue culture and distributed to botanical gardens around the world. A third notable plant type was the Asian pitcher plant vine (*Nepenthes* sp.). The pitchers that entice, trap, drown and then digest insects are similar in design to our native pitcher

plants, but have an elegant "lid" that opens up as the leaf matures. We noted the large amount of fluid already secreted by the plant in an unopened leaf.

Birds, Wards and Snake Islands, Feb. 27. Leader: Ann Gray. The highlight was seeing a perched adult sharp-shinned hawk for over 10 minutes (we left it perched) so everyone could photograph and study this beautiful hawk. We located an American goldfinch and 2 mourning doves on Algonquin Island to make a total of 25 bird species for the day.

WINTER VISITS TO TFN NATURE RESERVES

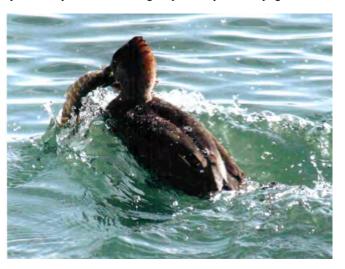
It's a natural question... Why does TFN own nature reserves 60 kilometers north of the city? Well, in purchasing these reserves our TFN predecessors pursued two objectives - to safeguard significant areas of interesting, productive habitats, and, by organizing visits to these lands, to offer its members nature experiences unavailable on our usual outings.

The first objective has been largely met. We now own 440 acres of nature reserves, encompassing quite a variety of southern Ontario habitats. The second objective was pursued with vigour in the past. Recently, interest in trips to the reserves has declined, but some individuals have visited them from time to time. (See George Bryant's account of his exploration of them by canoe in the September 2007 newsletter).

At a recent Board meeting several of us decided to get a first hand view of the reserves in winter. So, on Sunday, February 21st, Margaret McRae, Bob Kortright, Rachel Gottesman, Marcus Feak and I met at the Jim Baillie reserve. We were joined by Jerry Spevak, a former steward of the reserves who lives in nearby Sunderland. In the 1970s and 1980s, a number of walking trails had been cut through this reserve and a member, Jim Allen, replaced trail markers that had been nailed on the trees with more nature-friendly painted designations.

After surveying the available options, we decided to tackle a trail that is often under water in the spring, summer and fall, thanks to beavers that view parts of

Female hooded merganser catching fish, photographed by Anne Byzko. See Outing Report on previous page.



this reserve as their territory. Only in winter is it possible to walk this trail and, as we discovered, it is not easy even then! Nevertheless, with the aid of the nature reserve booklet (\$5 plus postage from the TFN office) and Jerry's memory of some undocumented loops, we



TFN members at Charles Fell Reserve, March 4, photographed by Norah Jancik

succeeded in walking from the entrance at the north-west corner on Fowler Road, east through the reserve to Uxbridge Brook. We then followed the stream to the south-east corner of the reserve, where we exited and took a snowmobile trail back to Fowler Road.

After lunch, we set off for the 200-acre Charles Fell Reserve, a beautiful stretch of mixed woodland and wetland not far from Sunderland. We spent an hour and a half happily walking on the frozen Layton Creek. Eventually the frozen stream broke up into several tributaries and disappeared. After some thrashing about in alder bushes, we decided to turn back. We noted two large patches (about 10 or 15 feet across) of beatendown snow where it appeared that animals (coyotes?) had jumped around, pouncing repeatedly in about 6 inches of snow on the surface of the ice. There was no sign of a "kill", so we concluded that the coyotes (we could think of no reasonable alternative) were simply engaging in play. In this wonderful setting of cattails. alder, red osier dogwood, lovely graceful grasses, clean snow and a beautiful, bright blue sky overhead, we could understand the impulse.

Continued on page 15

CANADA LOUSEWORT: A TORONTO WILDFLOWER AND RELATIVES

"Wort", according to the Oxford Dictionary, comes from the Old English word wyrt, meaning plant or herb. Lousewort literally means louse-plant. Wyrt has a Germanic origin and is related to the German wurz, meaning root. The generic name for louseworts, Pedicularis, is from the Latin pediculus, meaning louse, essentially a "Latinized" version of the common name. The common name comes from an early superstition that animals who grazed on the common European species (Pedicularis sylvatica) became full of lice. P. sylvatica is a plant of bogs and wet heaths, these forming poor pastures which could lead to weak and unhealthy livestock. The result – an unfortunate name for interesting wildflowers!

The genus *Pedicularis* until recently was classified in the family *Scrophulariaceae* ("figwort" family) which is where you will find it in some field guides published as recently as 2004. As a result of recent molecular genetic studies it has been transferred to the *Orobanchaceae* ("broom-rape" family). This small family consists of plants that are wholly parasitic or partly parasitic (hemiparasites) on the roots of other plants. Parasitism on broom by European members of another genus (*Orobanche*) results in the common name for this family.

About 40 species of *Pedicularis* occur in North America, in environments ranging from wet meadows and streams, to coniferous and deciduous forests, and to Arctic tundra. Many are northern species and some have distributions ranging into Greenland, Svalbard, mainland Europe, or northernmost Asia. I've chosen two species from elsewhere in North America to illustrate variation in the genus. The distinctive *P. groenlandica* ("elephant heads") was photographed on

Pike's Peak, Colorado. It is reported to occur from Greenland across to the Yukon and south in wet montane environments at least as far as California and New Mexico.



P. capitata ("capped lousewort", named because the exceptionally large flowers "cap" the top of the plant) ranges from the Yukon (this photo) to northern Ellesmere Island. Unlike the peculiar P. groenlandica, P. capitata displays the characteristic features of a Pedicularis. Its bilaterally symmetrical flowers have

two fused upper petals which form an overhang (helmet) over the three. also fused, basal petals. These lower petals are a landing pad for pollinating insects. Pedicularis flower colours, depending on the species, range from white to yellow or purplish yellow, to red or reddish purple or reddish brown. Leaves of Pedicularis species characteristically are deeply pinnately lobed and fern-like and occur as basal clusters and as alternate leaves on flower-bearing stalks.



Capped lousewort, Pedicularis capitata

Canada lousewort, P. canadensis, our Toronto species, has yellowish to reddish flowers in compact terminal clusters (see cover photo). Individual flowers are generally about 1.5 to 2 cm. Leaves are typical for the family, fern-like and pinnately lobed. In Canada it occurs in the southern part of the mixed forest zone (Great Lakes St. Lawrence Forest) and in the Carolinian zone. Despite its name it occurs as far south as Florida and east Texas. The ROM Field Guide to Wildflowers of Ontario lists its habitat as being "sandy open oak and oak-pine forests". This is a good summary, but in Toronto it also occurs in other habitats, for example behind the active beach below the cliffs at East Point. In Toronto it certainly is mainly an open forest or forest fringe plant. The TFN's Vascular Plants of Metropolitan Toronto lists it as widespread but uncommon, occurring in Lambton Woods (Humber drainage), Wilket Creek area (Don), East Point (Scarborough Bluffs), High Park and the Rouge Valley. The ROM guide gives the blooming period as May to July. In Toronto, in the southern part of its Canadian range, May-early June is a good time to look. Happy hunting!

Article and photos by Peter Money

Elephanthead lousewort, Pedicularis groenlandica

BIRD OF THE MONTH – BLACK-CROWNED NIGHT-HERON

Although their numbers here have decreased in recent years, Torontonians are fortunate to have Ontario's largest breeding colony of black-crowned night-herons on the Leslie Street Spit. This species breeds in North and South America, Europe, Asia and Africa, but within Ontario it is much less widespread than the familiar great blue heron. These impressive and distinctive birds are much stockier than the great blue heron and lack that extremely long slender neck. Black-crowned night-herons generally sit or stand in such a hunched position as to appear to have no neck

but in the accompanying picture Peter Money caught this heron stretched into a posture we seldom see. The handsome adults have a black back and cap, pale grey wings, white under-parts, yellow legs, red eyes and two long white feathers hanging from the back of the head. Juveniles are brownish and streaked.

Black-crowned night-herons often sit motionless for long periods and even when in full view, can blend in with their surroundings and easily be overlooked. In the early days of my TFN membership, the late Helen Smith sparked my interest

in birds with her infectious enthusiasm and endless patience. During a very memorable spring walk at Toronto Island several black-crowned night-herons were found perched in one area. We were a large group that day and those of us who were novices had missed many tiny flitting birds. Now Helen moved through the group making sure that no one missed these very striking herons. I was astounded to think that so large and obliging a species had entirely escaped my notice until that day.

For the last several years, a few have remained in Toronto during winter but ice forces most to migrate. In April black-crowned night-herons return to their breeding colonies from wintering grounds in the southern U.S., Mexico and Central America. They construct stick nests in trees, sometimes several nests in one tree and sometimes alongside other heron species. On the Spit, besides thousands of double-crested cormorant nests, there are hundreds of black-crowned night-heron nests as well as those of great

blue herons and since 2002, great egrets.

Black-crowned night-herons feed mainly on fish, but also consume insects, crustaceans, amphibians, small rodents, eggs and sometimes birds such as the young of other herons. Although as the name implies they are most active at night, they sometimes fly during the day, especially in dull weather. In spring you might spot them carrying sticks towards the nesting colony. Much of their day is spent quietly roosting in trees close to the water. Toronto Island and the High Park ponds are

good places to see them.

In Flashing Wings, Richard Saunders described two wonderful evening sightings in the summer of 1944. His nickname for them, "kwoks", refers to the call they often make in flight. "As soon as we entered the Humber valley 'kwoks' began to appear all around. They circled overhead, rose from the reeds, perched in trees, and around the pond. . . Like bomber formations they sailed through the flaming western sky, black against fire-flushed clouds. Seeing us below they would veer sharply, and glide on... Their constant circlings and arrivals made the number seem much greater than it was. In the end

we decided that 18 was probably about right, but there may have been many more." Another evening near the island airport he counted 94 black-crowned night-herons flying overhead from their daytime roosts beside the lagoons. "All were headed for the Humber apparently, where they may have a night roost, or else they were going to feed in the marshes by moonlight."

Since Helen Smith introduced me to the black-crowned night-heron, it has remained one of my favourite birds, easily recognized and very obliging unless disturbed. Look carefully at trees overhanging the water's edge. They are most often seen across the water, on that side of the pond, lagoon or river less accessible to humans. If you hear a "kwok", look up.

Marilynn Murphy

Note: Richard Saunders was the first editor of the TFN Newsletter. His book *Flashing Wings*, published in 1947, can be found through second hand book dealers. Toronto Public Library has reference copies.



Black-crowned night-heron photographed by Peter Money at Centre Island.

KEEPING IN TOUCH

Dead Trees

I question the concern about the native cormorant killing trees on the Leslie Street Spit. In a natural forest there are many dead trees. They are not something we should try to eliminate. When they decay they put nutrients back into the soil and become homes for fungi, insects, red squirrels, rodents etc.

Our Parks Dept. cuts down dead and dying trees in city parks because they fear law suits if a tree blows over and injures someone. They also want to prevent the spread of diseases or insect infestations. Trees on the Spit that are dying because of cormorant droppings or beavers are not in the same category. Most trees on the Spit are fast growing, short-lived species such as cottonwoods.

Property owners in urban areas think dead trees are dangerous and eyesores, so they eliminate them. Many people assume that planet Earth would be much nicer if it were a manicured garden. I prefer a natural forest full of all kinds of life.

We have learned from experience and data that many small bird species have diminishing populations. We have also realized that cavity nesting sites are rare in our cities and on our farmland. It is common sense that, without places to nest, birds cannot breed successfully. While I don't think this is the main reason for the birds' plight, it is a contributing factor.

Black-backed woodpeckers prefer sites where there have been forest fires. It is now commonly understood that fires are natural, and not a bad thing. Just a short time ago, this would have been thought ridiculous. We must change the public's thinking about dead trees in the same way.

Roger Powley



Leucistic mallard

I took this shot of a leucistic mallard on the stoney beach at Ashbridge's Bay on Jan. 12. Perhaps it is the one reported on the OFO website this week. Certainly it is a strange looking bird!!!

Lynn Pady

Oh Canada!

Chickadee at Ashbridge's Bay, photograph by Lynn Pady





Trilliums in Morningside Park photographed by Robin Powell

They're here!

On the other side

Waves of whiteness all around Trilliums blooming.

Haiku by Joe Bernaske

STEWARDSHIP FORUMS: DYING OCEAN, SIGNS OF HOPE

Stewardship Forum 2010

Five TFN members attended this event organized by Toronto Parks and Toronto Region Conservation which took place on Saturday February 27 at the Toronto Botanical Garden (TBG). The theme of the forum this year was water pollution and conservation.

The keynote address was given by Alanna Mitchell on themes covered in her recent book, Sea Sick: the Hidden Crisis in the Global Ocean. Her main point was that a 30% increase in ocean acidity caused by rising CO₂ in the atmosphere is threatening all species that depend on carbonate to build structures such as shells and coral reefs. This increase in acidity compounds the threat posed by other stresses, the most important of which are rising temperatures (due to rising greenhouse gasses) and declining dissolved oxygen levels. Reduced dissolved oxygen is partly due to rising temperature and partly to fertilizer runoff from land. Overfishing is another stress that contributes to potentially drastic losses of biodiversity in the oceans. Death of coral reefs will not only be devastating for biodiversity, but also prevent the reefs from continuing to protect coastlines that are already threatened by rising sea levels.

David Suzuki will be covering themes from Alanna Mitchell's book in four episodes of his show *The Nature of Things* to be broadcast on CBC in March (see CBC.ca for past broadcasts). The principal sign of hope in connection with ocean health is that many people are working hard (so far largely without success), to bring the issue of imminent ocean death to the notice of decision makers.

During the remainder of the day, participants chose among workshops and presentations including: "Walkerton – the need to protect water sources"; "HTO – Toronto's relationship to water"; "Water education, beyond the classroom", a

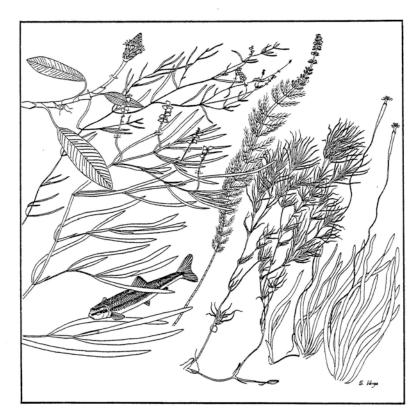
workshop explaining the TBG's Children's Program that introduces nature to underprivileged kids; "Establishing Aquatic Protected Areas"; and a "Thirsty City Walk".

In addition, many participants displayed brochures and other materials promoting organizations or missions they represented. One of these was a notice of the following symposium, which some of us also attended on February 28.

High Park Stewardship Program - Conserving Nature in Urban Areas

There were four presenters, each of whom discussed a different watershed in the city. Janice Palmer talked about projects of the Don Watershed Regeneration Council and stewardship of Sherwood Park. Colin O'Neill discussed projects of Friends of the Rouge. Garth Riley outlined the mission of Friends of the Spit, and Gary Wilkins of the TRCA outlined his role as Humber Watershed Specialist. After lunch the speakers took questions from the audience including how to engage the public, how to control invasive plants, and many more. It was a busy weekend, but one that provided a lot of food for thought.

Bob Kortright



Aquatic life drawn by S. Varga

FOR READING (AND LISTENING AND VIEWING)

The Singing Life of Birds: The Art and Science of Listening to Birdsong, by Donald Kroodsma, published by Houghton Mifflin Company (482 pages plus CD)

This scholarly (and weighty) book was awarded the 2006 John Burroughs Medal. The author, Donald Kroodsma, professor emeritus at the University of Massachusetts and visiting fellow at the Cornell Laboratory of Ornithology, has studied birdsong for more than 30 years, and his extensive knowledge and enthusiasm shine through every page.

The book opens with a series of sonograms related to the 98 birdsong tracks on the accompanying CD. Kroodsma plays around with song sequences in tables and flow diagrams, or slows down a recording so that we can appreciate the details (for example, a very fast song, or so that we can distinguish between a bird's two voice boxes). Whatever you do, don't put the CD in your player before at least sampling deeper into the book. The CD contains stunning examples of birdsong, but has no pictures and no commentary! For explanation, you absolutely must read the book.

Despite its rather technical start, I found the book totally absorbing due to Kroodsma's personal narrative. He describes in detail each of his forays into the field to record, and frequently tells us what he's thinking or hoping to learn. Of the hermit thrush, he says "I find it difficult to understand why no one has studied the songs of this bird... It is as if these songs were sacred, unapproachable." Later, he laments "What have I done, reducing his ethereal music to a series of black letters on a white page?"

Kroodsma notes how some birds (such as the song

Bridget Stutchbury

discusses the social lives and sexual antics of birds and celebrates the release of her new book

The Bird Detective

Thursday, April 29, 7:30 pm Toronto Botanical Garden 777 Lawrence Ave. East

Coffee provided by Birds and Beans
The Bird Detective is published by Harper Collins Canada

sparrow) repeat one song over and over again, while others (such as the American robin) seldom repeat songs sequentially, and seeks to find reasons for this behaviour. Some of the complexities are amazing: A northern mockingbird was recorded delivering 465 song variations in 26 minutes, during which he imitated many different birds - plus a car siren, washing machine and machine gun! Kroodsma asks "What does he gain by his theft?" and concludes that he's just trying to impress his lady. He also references a Toronto recording by Louise de Kiriline Lawrence (another John Burroughs medal winner) of a red-eyed vireo singing 22,197 songs over a period of 10 hours. Commenting on the few females that sing, Kroodsma tells us that a female cardinal frequently duets with her mate (he concludes that she uses song to control him to bring her food), and that while both male and female owls make the same sounds, the female's pitch is higher despite her greater weight (he wonders if that's because the male has more testosterone).

What I – a total novice – learned was that birdsong, even within species, can be quite different depending on location, time of year and even time of day; that birdsong may be learned at various life stages (e.g. northern cardinal, black-capped chickadee) or DNA-encoded (e.g. sparrow, eastern phoebe); and that, like us, birds may have local dialects. Kroodsma asks why some birds learn while others improvise, and draws his own conclusions. Read the book to the end, and, whether you're a novice or an expert, I'll guarantee you'll learn something and have a new appreciation for birdsong.

Act Now to Save Our Birds

An essay by Margaret Atwood

Highly recommended on Bird Studies Canada website: "Margaret Atwood has written an outstanding article in support of bird and biodiversity conservation. The renowned author is also Joint Honorary President (with her husband, Graeme Gibson) of BirdLife International's Rare Bird Club. The piece is available on the Guardian website, www.guardian.co.uk/books/2010/jan/09/margaret-atwood-birdsreview."

FOR READING, continued

Birds, Birds, Birds: An Indoor Birdwatching Field Trip, by John Feith, available from the author at caculo.com, DVD only, 70 minutes (2005)

This DVD presents a strong contrast to The Singing Life of Birds. Although it too focuses on bird song and includes mnemonics, with over 600 absolutely stunning images (some moving, some still) and sound recordings of 218 different bird species, I found the lack of commentary very disappointing. The alphabetical index and "Sounds Like" menu are helpful features – indeed essential – to using this as a learning guide. For the intermediate birder?

How to Start Watching Birds with Diane Porter, DVD, published by BirdwatchingDotCom.

The production values of this DVD are low (much like an illustrated lecture) and I found the introduction rather tedious. But, with patience, I found that I began to learn something: for example how to use a field guide, recognize field marks, and choose and use binoculars. On balance, this DVD delivers what it promises: a beginner's guide.

Note: each of the books and DVDs listed above is available from the Toronto Public Library.

Mary Lieberman

VISIT TO NATURE RESERVES, continued from page 9

Getting out in the woods and wetlands at this time of year was a treat we all thoroughly enjoyed. What did we see? Well, not surprisingly given the season, very little in the way of wildlife. The forest at the Jim Baillie Reserve is of considerable interest, a mixture of deciduous trees in some areas, but groves of white cedars predominate. We heard crows and chickadees, saw wild turkeys, and the snow was covered with the tracks of deer, mice (deer mice?), squirrels, rabbits (hares?) and one mystery "track". The latter was a well-worn, 6-8 inch wide, circuitous "road" that some critter had built from a hole in the base of one tree to, eventually, a hole in the base of another tree. It was near open water, but too narrow for a beaver, so we speculated it was made by a muskrat, weasel or mink.

Epilogue – Return to Charles Fell Reserve

They say "you can't go back", but we did! Thanks to Margaret McRae's energetic leadership, the small band of the outing described above grew to eleven for a second trip on March 4th, with the addition of Charles Bruce-Thompson, Richard Aaron, Norah Jancik, Ed Freeman, Roger Powley and Charles Chaffey.

This time we met at the Charles Fell Reserve and, walking from north to south with the brisk north wind at our backs, we successfully passed through the alder thickets and picked up the single frozen stream to their south. To our surprise, we came across a long stretch of open water before the stream became hard ice again. Was this a "warm spot" caused by rotting vegetation, or a faster current that wore away the ice? Near the

open water we found a large muskrat home (a "pushup") that appeared to be freshly maintained. After crossing the Charles Fell Reserve in under 90 minutes, we drove back to the north end to explore the extensive woods in the northeast corner. In addition to many cedars, there were very large tamaracks and balsams. We found an old gate, still locked with a padlock and chain, but the fence had pretty much disappeared. Perhaps in the future we may be able to clear the small trees and bushes to provide an access point similar to that at the Jim Baillie Reserve.

These two walks have reminded us of the great potential for education and enjoyment presented by our nature reserves. Please consider joining our work party on April 22 (see page 7 for details).

Barry Mitchell

See picture gallery on page 19

Red-Headed Woodpeckers and Common Nighthawks

When you see or hear these birds, please report the location to 905-862-2642 or todd.farrell@natureconservancy.ca

If possible photograph the bird.

For more information see www.natureconservancy.ca/rlpji

Your sighting will be used to further the conservation and recovery of these at-risk birds

IN THE NEWS

Proposed Greenbelt expansion to include Don and Humber River Valleys

Extracted from an Ontario government news release, Feb. 26, www.news.ontario.ca/newsroom/en/

Toronto's Don and Humber River Valleys could soon be permanently protected as part of the Greenbelt. With the Greenbelt celebrating its fifth anniversary this week, Toronto City Council has unanimously declared its intention to apply to expand the Greenbelt in Toronto beyond the current Rouge River Park. The proposed additions run through some of Canada's most densely populated urban areas. In Toronto, the Don and Humber Rivers account for 90 km of waterways. Ontario's Greenbelt Plan recognizes the importance of the Don and Humber River Valleys as key watersheds that connect the Greenbelt to the Great Lakes. The Greenbelt permanently protects 1.8 million acres of agricultural and environmentally sensitive land around the Greater Golden Horseshoe. Growing the Greenbelt is part of Ontario's plan to protect the environment and develop a prosperous sustainable economy. Research shows that the Greenbelt contributes essential ecosystem services and benefits worth \$2.6 billion. In 2008, the province developed criteria for municipalities that want to add lands to the Greenbelt.

Road Salt and Cars Produce Extreme Water Contamination in Frenchman's Bay

Adapted from a Mar.2 news release from University of Toronto Scarborough, at www.news.utoronto.ca.

A study published in *Sedimentary Geology* by geology professor and former TFN board member Nick Eyles and his student at the U of T Scarborough reports that the levels of contamination to water and sediment in Frenchman's Bay, Pickering, greatly exceed provincial water quality standards, in some cases by as much as 250 per cent. This is largely due to large amounts of road salt applied in winter, especially to Highway 401, the study finds. "We now know that 3,600 tonnes of road salt end up in this small lagoon every winter from direct runoff in creeks and effectively poison it for the rest of the year. The future of Frenchman's Bay is not bright, but this also affects the Great Lakes," Eyles said. The authors also found that levels of other urban contaminants such as metals, E. coli and coliform were all elevated well above Canadian water quality standards. A decline in ecosystem diversity in Frenchman's Bay is also noted in the report, reflected in the absence of fish in creeks, significant changes in the age structure of fish populations and a much lowered diversity of aquatic species. The report highlights the

loss of wetlands by urban runoff. The City of Pickering has created a Waterfront Committee that is considering the implications of the report to decide on future steps.

New research on purple loosestrife at U of T

Extracted from a Feb.26 news release from the University of Toronto, www.news.utoronto.ca.

Purple loosestrife (*Lythrum salicaria*) has been heading north since it was first introduced from Europe to the eastern seaboard 150 years ago. It destroys wildlife habitats by displacing native vegetation that provides food, shelter and breeding areas for wildlife. In urban areas, it invades ditches where it can block or disrupt water flow. Plants can produce as many as three million seeds a year. But it may have a vulnerability after all: the northern climate and a shorter growing season. Robert Colautti, from the Dept. of Ecology and Evolutionary Ecology, found that adapting to the north carries a severe reproductive penalty that may limit its spread. The authors used modelling and experimental studies of 20 purple loosestrife populations along a 1,200 km latitudinal gradient from Maryland to Timmins, representing a one-month difference in growing season. They found that northern populations have become locally adapted and flower earlier in response to a shorter growing season. However, early flowering plants are smaller in size because the genes that cause early flowering also reduce plant size. The lower seed production is likely to limit the spread of purple loosestrife in northern regions because smaller plants have reduced seed production. The results are published online in the Proceedings of the Royal Society of London, series B (rspb.royalsocietypublishing.org).

Legal action launched over bird kills at GTA office complex

Extracted from a Mar. 9 news release at Ontario Nature, www.ontarionature.org.

Eco-justice lawyers and Ontario Nature have launched a prosecution alleging that a Toronto property developer and manager caused the death of hundreds of migratory birds (including species already in decline) in 2008 and 2009 when the birds struck the highly reflective windows of its office complex in Scarborough. FLAP (Fatal Light Awareness Program) has documented at least 7,000 dead and injured birds from the site over the last decade. Up to 1 billion birds are killed every year by flying into buildings in North America, with an estimate of 1 million in Toronto, particularly during spring and fall migrations.

FROM THE ARCHIVES

From Toronto Field Naturalists Newsletter, number 411, April 1990

Lure Butterflies to Your Yard

The concept of butterfly gardening is not new; it is a very popular pastime in England and the United States. Winston Churchill was probably the most famous butterfly gardener of this century. The gardens of Buckingham Palace have become famous because they provide sanctuary for many rare British butterflies.

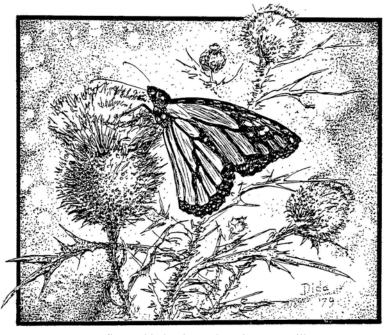
You can attract as many as 50 different types of butterflies to your yard, simply by adding a few new plants to your garden. The secret lies in providing a wide variety of flowers and shrubs. Shade-tolerant plants are as important as those that thrive in the sun. Annuals, perennials, shrubs and trees will all provide food for butterflies. Flower colour is important too: some butterflies prefer oranges, reds and yellows; others are attracted to white, purples and blues. As a rule, simple flowers, rather than fancy double hybrids, are more attractive to butterflies. Try butterfly milkweed, arabis, sweet rocket, honesty, sweet William, white alyssum, cosmos, coreopsis, phlox, daisies, catnip, heliotrope, sea holly, asters, stocks, zinnias, yarrow, globe thistles, lavender, thyme, stonecrops, sweet woodruff, candytuft, verbena and gaillardia.

Some shrubs and small trees that are popular with many butterflies include butterfly bush, common lilac, mock orange, beauty bush, blackberry, potentilla, honeysuckle, hawthorn, weigela, sumac, rose of Sharon, spirea, privet, pussy willow and viburnum. Try growing some of these plants in masses, rather than as single specimens; the measure of your success will be the number and variety of butterflies you can lure to your yard.

Contrary to popular belief, butterflies do not harm flowers or vegetables; they usually visit to sip nectar from flowers – just as honeybees do. In fact, butterflies are excellent pollinators and can improve your fruit and vegetable production. At times their larvae do cause damage in the garden; but most have very special food requirements such as grasses, common weeds and wildflowers. However, the cabbage white butterfly can be a pest. Its larvae eat plants in the cabbage family. If caterpillars are causing problems in your garden, it may be best to pick them off your plants; spraying is not recommended because it can harm beneficial insects as well.

Over the years, experiment with different colour and plant combinations to find out which plants are best for your area. All that remains is to purchase a field guide to butterflies, and sit back and see who drops in for a visit.

Adapted from an interview with Katherine Dunster, Newsclips, University of Guelph in TRELLIS, May 1989 (Civic Garden Centre).



Butterfly on thistle, drawn by Diana Banville

COMING EVENTS

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

Jim Baillie Memorial Bird Walks - Toronto Ornithological Club

These outings are aimed at the intermediate birder, but beginners are also welcome. They are free to the public and no advance registration is required.

- Sat. Apr. 24, 9 am early afternoon. "Little Gulls and Other Migrants." Oshawa Second Marsh. Leader: Tyler Hoar. Meet in west parking lot at GM Headquarters in Oshawa. Exit from Highway 401 at Harmony Rd. (Exit #419). Go south on Farewell St. to Colonel Sam Dr., then east to GM Headquarters. Bring lunch.
- Sun. Apr. 25, 8 am early afternoon. "Early Migrants." Leslie Street Spit. Leader: Hugh Currie. Meet at the foot of Leslie Street. Bring lunch.

Toronto Entomologists' Association (TEA)

Sat. Apr. 24, 1:15 pm. "Conservation of Imperiled Butterflies," Adrienne Brewster, Executive Director & Curator, Wings of Paradise Butterfly Conservatory. Room 206, Victoria College. Information: www.ontarioinsects.org

North American Native Plant Society (NANPS)

Wed. Apr. 7, 7:30 pm. "Rare Native Plant Gems - Species at Risk." Speaker: Jane Bowles. Toronto Botanical Gardens, 777 Lawrence Ave. E. Members \$8/non-members \$12. Information: www.nanps.org. 416-631-4438.

High Park Walking Tours

2nd and 4th Sundays of each month, 10:30 am – noon. Meet at the benches across the road south of Grenadier Restaurant. Donations welcomed. Information: 416-392-1748 ext. 5 or walkingtours@highpark.org or www.highpark.org

- Apr. 11. Grenadier Pond Awakes for the Spring. Leader: Christine Tu.
- Apr. 25. Lost Waterways. Leader: Leo DeSorcy (may last up to 3 hours).

Rouge Valley Guided Nature Walks

Sun. Apr. 25, 1:30 pm. Meet at east end of parking lot at Rouge Beach Marsh, 195 Rouge Hills Dr. at Lawrence Ave. E. Information: www.rougevalleynaturalists.com/upcoming events or 416-282-8265.

Green Living Show

Fri. Apr. 23 – Sun. Apr. 25, 10 am – 9 pm. Find out how "Green Goes with Everything You Do". Direct Energy Centre, Exhibition Grounds. See page 5.

Earth Day 2010

Fri. Apr. 23 Mayor David Miller's Cleanup Day. Information: www.toronto.ca/litter/index

Sun. Apr. 25, 12 noon – 4 pm. Earth Day Celebrations, Todmorden Mills Heritage Museum & Arts Centre, 67 Pottery Rd. Discover what you can do to help the planet! Participate in creating collaborative, environmentally friendly artwork. Learn about the impact of industrialization on our landscape through a special guided tour of the site. Free.

Lost Rivers Walks

Sat. Apr. 3, 2 pm. Parson's Creek and area. Leader: Ian Wheal. Meet at the northwest corner of Caledonia Rd. and Eglinton Ave. W. Information: www.lostrivers.ca

lan Wheal Walk

Fri. Apr. 2, 11 am. Corso Italia to Little Italy (old TTC streetcar line). Meet at the southwest corner of St. Clair Ave. W. and Lansdowne Ave.

The Ontario Insect Fair

Sat. Apr. 24, 10 am – 4 pm. Show and sale of worldwide exotic butterflies, moths, beetles and other dried insects. Toronto Botanical Gardens, 777 Lawrence Ave. E. (at Leslie). Free. Information: www.thornesinsects.com

Heritage Trees – Preserve our Natural Roots

A 52-minute presentation on how a tree is designated as a heritage tree. Edith George. Information: researcher1@sympatico.ca

- Tue. Apr. 13, 7 9 pm. Annette Public Library, 145 Annette St.
- Wed. Apr. 21, 2 4 pm (Seniors) Centennial Public Library, 578 Finch Ave. W.
- Thur. Apr. 22, 5 7 pm (Youth) Centennial Public Library, 578 Finch Ave. W.

WEATHER (THIS TIME LAST YEAR)

April 2009

April was slightly warmer than normal though typically changeable and fairly wet. The monthly average temperature was 8.5° downtown and 7.8° at Pearson Airport, about 1° above normal. The coldest temperature was -3.3° downtown and -3.9° at Pearson on the 3rd. This came after an episode of heavy rain that ended the mild spell of late March (again, typical).

Dry and uneventful weather prevailed for a couple of weeks generally with gradually rising temperatures. It began to get unsettled again. A surge of warm air brought a twin peak of temperature on the 25th and 27th. Pearson's highest temperature of 27.9° on the 25th was the warmest for any April day since 2002. Downtown's peak came on the 27th, with a high of 26.8°. In between, a brief cold front on the evening of

the 25th brought sharp thunderstorms and high winds that brought down trees. Pearson reported a gust of 115 km/h.

Total precipitation was 133.6 mm at Pearson Airport, the most since 1992. Downtown had 123.8 mm, the most since 1991. Almost all of it was rain; snowfall was scanty at 2.0 cm downtown and 3.8 cm at Pearson Airport. The season's total snowfall at Pearson was 153.7 cm, well above the normal of 119.4 cm but short of last year's 194 cm. The winter of 2008-2009 had a very heavy start but petered out in February.

The warm weather of late April meant that vegetation was slightly but not unusually more advanced than average at month's end.

Gavin Miller



Photo gallery of Nature Reserve visits. Centre photo taken on February 21 at Jim Baillie Reserve by Barry Mitchell. Remaining photos taken on March 4 at Charles Fell Reserve by Barry Mitchell (Layton River and milkweed) and Margaret McRae (tracks of frolicking coyotes and fruticose lichen).

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

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Uxbridge Creek, Jim Baillie Nature Reserve, February 21, 2010, photographed by Margaret McRae