



# TORONTO FIELD NATURALIST

Number 591, November 2012



Staghorn sumac on Toronto Island. Photo: Jenny Bull

## REGULARS

Coming Events	18
Extracts from Outings Reports	8
For Reading	9
From the Archives	17
In the News	16
Keeping in Touch	14
Monthly Meetings Notice	3
Monthly Meeting Report	7
President's Report	6
TFN Outings	4
Weather – This Time Last Year	19

## FEATURES

<b>Are You Gardening with Peat Moss?</b>	<b>5</b>
<b>Ontario Nature Youth Summit 2012</b>	<b>10</b>
<b>Remembering Fred Bodsworth</b>	<b>11</b>
<b>Bird Business</b>	<b>12</b>
<b>Mint Family (Part III)</b>	<b>13</b>
<b>Environmental Commissioner's Report</b>	<b>15</b>
<b>Plants and Drought</b>	<b>19</b>

*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.

ISSN 0820-636X

**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 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 1 MB each. In the accompanying email include location, date and any interesting story or other information associated with the photograph.

**Deadline for submissions for Dec issue: Nov 2**

**NEWSLETTER COMMITTEE**

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

Printing and mailing: Perkins Mailing Services

**BOARD OF DIRECTORS**

President & Outings	Margaret McRae	
Past President	Bob Kortright	
Vice President & Monthly Lectures	Nancy Dengler	
Sec.-Treasurer	Charles Crawford	
Communications	Alexander Cappell	
Membership	Judy Marshall	
Monthly Lectures	Corinne McDonald	
Monthly Lectures	Lavinia Mohr	
Nature Reserves & Outings	Charles Bruce-Thompson	
Outreach	Tom Brown	
Webmaster	Lynn Miller	

**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](http://www.torontofieldnaturalists.org)  
 Email: [office@torontofieldnaturalists.org](mailto:office@torontofieldnaturalists.org)



Left: New England aster (*Symphyotrichum novae-angliae*) and below: heath aster (*Symphyotrichum ericoides*).



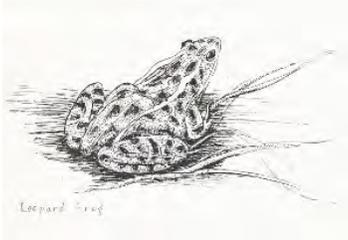
Our asters used to be placed in the genus *Aster*. Recent research has shown that the asters are composed of several distinct groups. As a result, most of our asters have now been placed in the genus *Symphyotrichum*. Flat-topped aster is in the genus *Doelleringia*.

# TFN MEETING

Sunday, November 4, 2012

2:30 pm

## Ontario Reptiles and Amphibians



James Paterson,  
Ontario Reptile and Amphibian Atlas Coordinator,  
Ontario Nature

**VISITORS WELCOME!**

**SOCIAL: 2:00 – 2:30 pm**

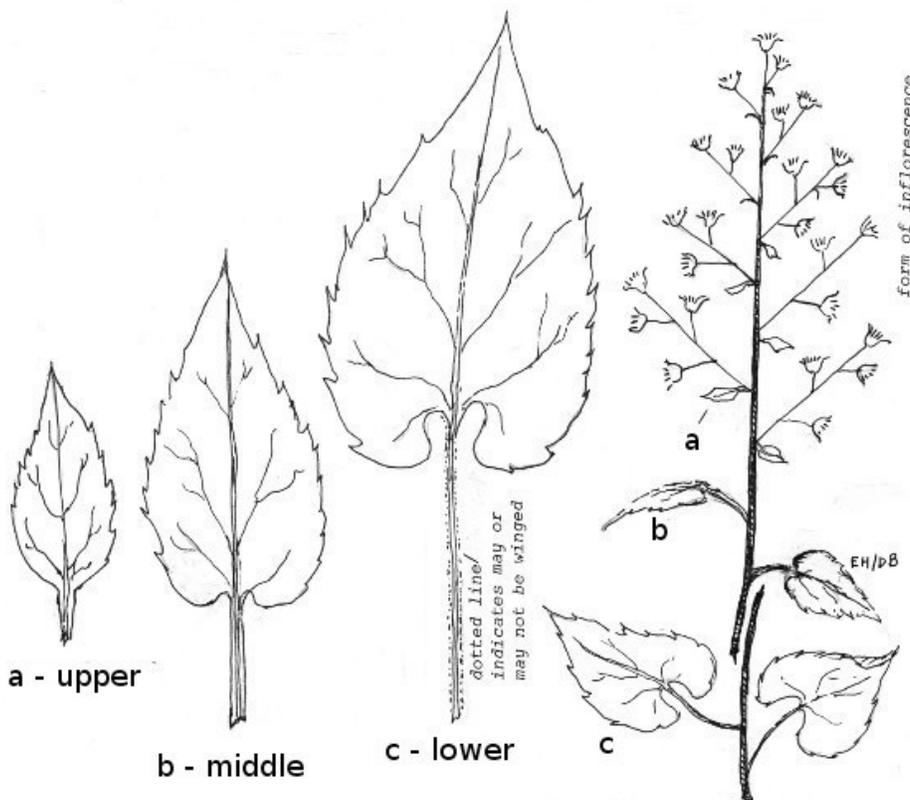
**Room 001, Emmanuel College, University of Toronto, 75 Queen’s Park Cres E**

Emmanuel College is just south of the Museum subway station exit on the east side of Queen’s Park. Enter via the second door south on Queen’s Park, which is wheelchair accessible. There is an 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 Lecture

Dec 2: **Ontario’s Wild Bees**, Laurence Packer, Melittologist and Professor, York University



Heart-leaved aster,  
*Symphiotrichum cordifolium*:  
comparison of upper, middle and  
lower leaves,  
and diagram of structure  
of the inflorescence

Prepared by Emily Hamilton and  
Diana Banville

## 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](http://www.ttc.ca) or 416-393-4636).
- Outings go rain or shine: check the weather by calling 416-661-0123 so you will know what to wear.
- Wear appropriate footwear for walking on trails which may be muddy, steep or uneven.

- Sat  
Nov 3  
10:30 am      **TAYLOR CREEK - Nature Arts**  
Leader: Nola McConnan  
Meet at the bus stop at the eastern end of the Woodbine-O'Connor Bridge. We will descend the stairs into the valley and walk towards the forks of the Don where a new trail begins. (Construction in the area prevents us from starting closer.) Bring what you need for sketching, writing or photography. We may ascend the stairs near Coxwell to have lunch and share any recent work you wish to bring.
- Sun  
Nov 4  
2:30 pm      **LECTURE – Ontario Reptiles and Amphibians**  
Speaker: James Paterson, Ontario Reptile and Amphibian Atlas Coordinator, Ontario Nature  
Emmanuel College, 75 Queen's Park Cres E. See page 3.
- Wed  
Nov 7  
1:30 pm      **GARRISON CREEK – Topography – Under the Streets and Back Alleys**  
Leader: Alexander Cappell  
Meet at the northeast corner of College St and Lansdowne Ave. Walk ends near Bloor and Bathurst.
- Sat  
Nov 10  
10:00 am      **COLONEL SAMUEL SMITH PARK – Birds**  
Leader: Wendy Rothwell  
Meet at the southwest corner of Kipling Ave and Lake Shore Blvd W. Bring binoculars. Morning only.
- Sun  
Nov 11  
1:30 pm      **THE BRICKWORKS AND MUD CREEK – Nature and History**  
Leader: Kayoko Smith  
Meet at Castle Frank subway station at 1:30 pm or at the Brickworks Welcome Centre at 2:00 pm. We will investigate lesser-known parts of the brickworks, then proceed along Mud Creek and the Moore Park Ravine to Davisville. You may drop out at the Brickworks. (Shuttle bus available between the Brickworks and Broadview subway station.) Wear comfortable walking shoes and bring water. Washroom available at Brickworks.
- Wed  
Nov 14  
1:30 pm      **QUEEN'S PARK – Trees and Architecture**  
Leader: Richard Partington  
Meet at the eastern entrance of Museum subway station. We will walk south through Victoria University and St. Michael's to the north facades of the Legislature, wind our way back through the park and up Philosopher's Walk to Bloor St, ending at Museum subway station. We will consider points of interest and wonder, both architectural and arboreal. Bring binoculars.
- Sat  
Nov 17  
10:00 am      **SCARBOROUGH BLUFFS – Trees**  
Leader: D. Andrew White  
Meet at the southwest corner of Chine Dr and Kingston Rd. Morning only. A circular walk.
- Sun  
Nov 18  
2:00 pm      **RUSSELL CREEK – Lost Rivers Walk**  
Leaders: Helen Mills and Ian Wheal  
Meet at Harbord St and Bathurst St. This walk traces the line of Russell Creek from its headwaters towards its mouth downtown. A joint outing with the Toronto Green Community.

Wed Nov 21 1:30 pm	<b>THE HILLS AND DALES OF YONGE STREET – Topography</b> Leader: Alexander Cappell Meet at the southeast corner of Yonge St and Heath St E. Walk ends near Yonge and Bloor.
Sat Nov 24 10:30 am	<b>GUILD INN – Birds and Trees</b> Leader: Bob Kortright Meet at the entrance to the Guild Inn at 191 Guildwood Parkway (Morningside 116 bus from Kennedy subway station) for a circular walk. Bring binoculars.
Thurs Nov 29 1:30 pm	<b>GARRISON RAMBLE – Healthy Walk and Some History</b> Leader: Ed Freeman Meet at the Christie subway station and follow Garrison Creek to Fort York and east to Queen’s Quay for coffee or departure.

## ARE YOU GARDENING WITH PEAT?

Nature Manitoba naturalists are very concerned about a proposal to develop a major peat mine in a provincial park. As reported in *Nature Manitoba News* (vol. 4:2): ... Peat mining has no place in an economy that seeks sustainability with a minimum production of greenhouse gases. Peat mining is one of the worst imaginable economic activities for the production of such gases. Peat is one of the most important carbon stores on the planet. In Manitoba, our peatlands represent a 10,000-year accumulation of carbon. Mining a peat bog will, over the course of a few decades, release all this carbon back into the atmosphere.

### **Just Say “No” ... to Peat Moss, by Donna Danyluk, *Nature Manitoba News* (vol 4:3)**

Here are a few basic tips for the home gardener about alternatives to this horticultural product. There are many good resources on the internet: e.g. “For Peat’s Sake” from Green Living and “Does Peat Moss Have a Place in the Ecological Garden?” from Natural Life Magazine.

Compost is a much more effective and beneficial soil amendment than peat moss, which is an inert substance with little or no nutrient value. Leaf mold, produced by the natural decay process of leaves, and well-rotted manure are other good alternatives. When applied as a mulch, peat moss tends to dry out and blow away; use wood chips, compost, leaf mold, grass clippings or straw instead. Coir, the fibrous outer husks of coconut, is becoming more common as an alternative growing medium for starting plants, but is shipped from distant places so is not without an environmental impact.

Commercial potting soils and topsoil mixes, whether in bags or bulk, often contain peat moss. Ask the supplier about the components of their mix, and choose one with the least amount of (or no) peat moss.

If there are better and more sustainable alternatives such as compost, why use peat moss? By not buying one of those big bales at the garden centre, you will be doing your part to reduce the market for a resource that is far more valuable when left in our bogs!



Sphagnum, drawn by Robert Muma

## PRESIDENT'S REPORT

I am pleased to report that Charles Bruce-Thompson and Chuck Crawford have been appointed to the board, and the latter has been appointed Secretary-Treasurer, effective Oct 15. I am also pleased to report that Jan Sugerman has agreed to take over keeping of the TFN's books from Alex Johnstone. Thank you Jan and Chuck for coming forward to take on these very important positions to ensure that our financial resources continue to be safeguarded and accounted for accurately.

As our constitution specifies that the Past President is not eligible for re-election to the board, Wendy Rothwell has also resigned as chair of the Audit and Finance Committee, on the theory that the chair should be a board member in order to report to the board on the activities of the committee. I will chair that committee until the board appoints another member. This would be a good spot to thank Wendy again for the tremendous contributions she makes to the TFN as co-editor of the newsletter and, over the past few years, as President, Past-President, and chair of the Audit and Finance Committee. I could not have completed my term as President without Wendy's support.

By the time you read this, Margaret McRae will have taken over as President during our Annual General Meeting on October 14. I hope you will all give her your full support over the next two years, as she juggles her work for the TFN, the Don Council, the East York Historical Society, her butterflies and garden, and more!

The main official duty of the Past President is to chair the Nominating Committee, which is responsible for nominating the President, Vice-President and directors as necessary. Despite the two additions to the board mentioned above, there remains one vacancy on the board.

Toronto City Council has approved recommendations from the Portlands Acceleration Initiative. This clears the way for the environmental assessment for the lower Don lands to be approved, and for precinct planning to start for Cousins and Polson Quays on the harbour and for the Film Studio district east of the Don Roadway. The report still shows that there is no business case for development of the whole Portlands, but analysis will continue. It appears that we may well get the Don Greenway to Lake Ontario Park via a floodway straight down to the ship channel, but that the new river channel across to the harbor may well require a better fiscal environment before it is implemented.

The Ontario Planning Act requires that the Provincial Policy Statement (PPS) that guides planning in Ontario be revised every five years. The draft revision was posted for comment on the Environmental Bill of Rights Registry (EBR) on September 25. Ontario Nature worked with other green organizations to try to get the revised PPS to reflect our priorities. A series of workshops are being held, including one in Toronto on November 6, where the public can provide feedback on the draft, in addition to comments in the EBR.

The Environmental Commissioner of Ontario has released Part 2 of his annual report. See page 15.

In this my last President's report, I would like to persuade you of the most important changes I think we need to make: reverse the disastrous present course of climate change, end the war on drugs, adopt proportional representation..., but it would be more appropriate to focus on areas closer to the TFN mandate: At the personal level, I would like us all to communicate the importance of protection and enjoyment of nature to everyone we know – nature deficit disorder is real. Support the TFN and other organizations that promote a love of nature, especially Ontario Nature because of its role in influencing provincial policy and supporting Canadian Nature Federation. Write to your city councillor, MPP, and MP on as many issues as you can – such communication can have a significant impact. And finally, enjoy the fascinating and beautiful world of nature in which we are embedded.

Bob Kortright

### NATURE IMAGES EVENT

#### Art and Photo Exhibit

by TFN members

Saturday, February 2, 2013

We will again be enjoying the auditorium of the S. Walter Stewart Library for an afternoon of projected images by our TFN photographers. In addition we will have the exhibit area in the room for the month of February.

TFN members who wish to hang or display their artwork or photographs in the month-long exhibition should contact Gail Gregor

( [REDACTED] ) by November 30.

Nature Arts Display Committee

## MONTHLY MEETING REPORT

### James Bay and Hudson Bay Birds Sunday October 14. Speaker: Jean Iron

Ontario's tundra coast in Polar Bear Provincial Park along the Hudson Bay coast is the most southerly tundra in the world. This narrow strip of tundra is used by many migratory birds as a summer breeding ground. Ornithographer Jean Iron visited for 4 weeks starting in late June as part of a four-person team surveying the area for the Arctic Shorebird Demographics Network. The camp, 3.5 km from the coast, features a special weather station that measures the temperature of the permafrost. Global warming is giving rise to concerns about the loss of permafrost.

Among the migrating shorebird species spotted along the Hudson Bay were dunlin, whimbrel, killdeer, semi-palmated plovers, American golden plover, least sandpiper, red throated and Pacific loons (this is the Pacific loon's most easterly occurrence) as well as herring gulls. These birds nest on the ground, and have to contend with predators such as the parasitic jaeger (arctic skua) as well as red foxes and grey wolves. The rarity of small mammals makes ground nesting birds a tempting target. Some rely on stillness in their black and white mottled plumage that closely resembles the lichen-covered ground to hide from predators, often but not always successfully. They can be so well camouflaged that Jean and her colleagues had to watch their step carefully so as not to tread on a nest. Others put on noisy elaborate displays including an imitation of a broken wing to attract attention away from the nest.

Some of the many ponds that dot the land are used as food sources by the birds, and others are not. Part of the purpose of the survey was to try to find out why by measuring characteristics such as depth, bottom composition, acidity, temperature and shore vegetation.

Birds of special interest include the western subspecies of the white-crowned sparrow. Both the eastern and western subspecies can be found along Ontario's Hudson Bay coast. It's also the only place in Ontario where Smith's longspur and the willow ptarmigan breed. The area is used by Ontario's tundra woodland caribou who range as far east as the Manitoba border.

The James Bay coast is equal in importance to the Bay of Fundy for migrating birds. Several million southbound migrating shorebirds depend on it. Jean visited there in August as part of a ten year study to count and identify bird populations and determine how long they stay. The main research site is located near Longridge, a long gravel spit not unlike the Leslie Street Spit, where the research team stayed at a Cree spring hunting camp. Two members of the Moose Cree First Nation were among the research team. Surrounding Longridge is an extensive area of tidal mud flats containing the bivalve *Macoma balthica*, crustaceans, worms and fly larvae, all important food items for migrating birds.



Red knot with flag. Photo: Jean Iron

Red knots are of particular interest. The high Arctic population migrates to Europe in the winter, while those that breed in the central Canadian Arctic pass through James Bay to fatten up before continuing on their way to southern Argentina and Chile. This population is endangered because of overharvesting of horseshoe crabs in Delaware Bay in the USA.

The population has declined by 70% in the last 15 or 20 years. The females migrate within a day after laying eggs, leaving the male to look after the young.

An international effort to track red knots has involved attaching tiny colour-coded flags that show where the bird was originally located, and geolocators on the legs of some individuals. The devices record sunrise and sunset times that enable a computer to work out the bird's flight route. The birds have to be trapped to read the data as they are too small to carry an aerial antenna. The geolocators have proven the conjecture that these birds fly across the Amazon on their northbound migration from the southern tip of Argentina. One bird flew 6000 km in 6 days.

Other birds of interest on the James Bay coast include the Hudsonian godwit, the marbled godwit, white-rumped sandpipers, Nelson's sparrow (seen in southern Ontario in the fall migration), Henslow's sparrow (its most northerly sighting) and northern shrike.

Currently the coast of James Bay has no protection. Jean's dream is to see it designated and protected as part of the Western Hemisphere Shorebird Reserve Network. Jean's website is [www.jeaniron.ca](http://www.jeaniron.ca)

## EXTRACTS FROM OUTINGS LEADERS' REPORTS

**Nature Arts, Ward's Island, Sept 1. Leader: Joe Bernaske (Report by Yoshie Nagata).** Many of us observed a green frog sunning itself on a rock, while another frog and tadpoles swam in the same area. We also saw minnows and crayfish. Large sunflowers growing outside the expanded Island Cafe would be good subjects for photography and painting.



Downy woodpecker, Ward's Island, Sept 1 nature arts outing. Spotted by Anna Carr at the eastern end of the island near the boardwalk: "I believe it is a female as males have a red patch on the back of the head."

Note the deeply ridged bark of the crack willow.

**Lichen Identification & Ecology, Tommy Thompson Park, Sept 15. Leader: Matt Brady.** Initially the walk up to Peninsula D proved to have very little presence of lichen activity; however we did locate common goldspeck lichen (*Candelariella vitellina*).

Throughout Peninsula D the group located:

- common greenshield lichen (*Flavoparmelia caperata*)
- bottlebrush shield lichen (*Parmelia squarrosa*)
- powdery goldspeck lichen (*Candelariella efflorescens*)
- hooded rosette lichen (*Phycia adscendens*)
- powder-tipped rosette lichen (*Phycia dubia*)
- hoary rosette lichen (*Phycia aipolia*)
- orange-cored shadow lichen (*Phaeophyscia rubropulchra*)

With some further searching I believe we could possibly find more. Great work everyone! The group came across a couple of very conscientious fishermen on their way out carrying a garbage bag and picking up what they could off the sides of the road. Great to know that they're out there!

**Lost Rivers Walk, Dufferin Creek, York University, Sept 16. Leader: Richard Anderson.** At this stage of the summer the summer flowers in the meadows and butterflies feeding there were quite enchanting, and not really what one expects in the 416. We saw fungi in Boyer woodlot. Meadows in late summer flower with goldenrod, asters, wetlands with cattails, milkweed in seed. The meadows and wetlands in the southeast part of the York Campus are being buried by subway excavation spoil. Some efforts are being made to protect the wetlands for the time being, but this whole section of the campus is slated for development, triggered by the arrival of the subway. The walk was billed as a last-chance-to-see most of the southeast meadow and former watercourse of Dufferin Creek in that section. We also saw monarch butterflies, whites, and red admirals feeding on goldenrod. During walk preparation I saw and photographed a gray hairstreak butterfly. The blue jays were being vocal in the woods and there were half-hearted alarm calls from red-winged blackbirds in the wetlands.

**Étienne Brûlé Park, Sept 18. Leader: Carol Sellers.** Only one participant showed up to walk in the steady rain but we saw 5 great egrets, one black-crowned night-heron and a salmon fin. No butterflies of course!

**Rouge Park Woodland Trail, Sept 23. Leader: Vicki Bondy & Terry Whittham.** In the meadow we were lucky enough to see a deer before it disappeared, as well as turkey vulture, great blue heron, and sharp-shinned hawk. Who said meadows are boring! Bruce (a guest on the hike and a fellow Rouge Park Hike Leader) provided some history of the area when it was a cottage area and campground.

*Continued on next page*



Common greenshield lichen. Photo: Matt Brady

## FOR READING

**Peregrine Falcon by P. Sterling-Aird**  
Firefly books, 2012, 128pp, \$25 hardcover

Falcons fascinate many of us, and no falcon more so than the peregrine – the most widespread raptor, the fastest animal in the world, which after being almost wiped out by DDT now nests among us, feasting mainly on that other habitué of our urban artificial cliffs, the rock pigeon. They are still rare enough to grab our attention whenever we see or hear them overhead or through the window.

This book celebrates the peregrine, with lots of information about hunting, feeding, breeding, competitors and other threats, but also provides interesting background on the rest of the family – other falcons and caracaras, and their slightly more distant relatives, the forest falcons and laughing falcon – a family now known to be more closely related to parrots and passerines than to other birds. The book surmises that falcons are more closely related to owls than to hawks – a contention not supported in the Tree of Life (tolweb.org), a respected taxonomy website.

Since the author includes many of his own observations



Peregrine falcon, photographed by Norah Jancik

from the UK, there is a strong British flavour to the material, but there is little reason to believe that our peregrines behave much differently. Although too specialized for inclusion in my library, this is a beautiful and interesting book.

Bob Kortright

*Continued from previous page.*

**East Don River south, Sept 29. Leader: Charles Chaffey.** Michaelmas daisies on Michaelmas Day – it was the perfect time for asters. Michaelmas daisies or New England asters with the largest and deepest purple flower heads were blooming alongside heath asters with the smallest and whitest heads, producing hybrids (*Symphiotrichum amethystinum*), with heads exactly intermediate in size and colour, in two places. Panicked and heart-leaved asters were also in bloom; all these asters are *Symphiotrichums*, which tend to lose their lower stem leaves by flowering time; in contrast the tall flat-topped aster (*Doellingeria*) had all its leaves down

to the base of the stem.

We paused for some time at the Canadian Northern railway embankment to look at asters and *Eupatoriums*. Continuing westward up the wooded hill in which wreath (*Solidago caesia*) and zig-zag (*S. flexicaulis*) goldenrods were blooming, we came out just east of the Don Valley Parkway into a sunny area with different asters. We passed by the Elevated Wetlands, and turned inland past a red oak with a huge trunk and followed a winding trail with many ups and downs back to the north side of Taylor Creek.



From left: flat-topped white aster (Diana Banville); wreath and zig-zag goldenrods (Mary Cummings and Betty Paol)

## ONTARIO NATURE'S THIRD YOUTH SUMMIT A SUCCESS!

By Sarah Hedges, Nature Guardians Coordinator, Ontario Nature

For the third year in a row, Ontario Nature's Youth Summit was a great success! The Youth Summit is a key part of the Nature Guardians program which aims to give young people of diverse backgrounds opportunities to experience and connect with nature. The Ontario Nature Youth Council was very excited to be involved with the planning of the Summit including the theme, venue, speakers, workshops and activities, and also acted as the hosts for the weekend. The goal of the Youth Summit was to develop an understanding of biodiversity and environmental justice issues among youth who attended, as well as to inspire the drive and ability among Summit participants to take action and leadership in their own communities.

From September 28-30, 2012, seventy-five youths from forty communities across the province attended the Youth Summit for Biodiversity & Environmental Justice. These young leaders participated in a variety of outdoor activities and workshops on topics including: reptiles and amphibians, bird box building, climate justice, global governance, forest and fresh water foods, cross-cultural understanding of biodiversity, and much more. With such a diversity of activities and workshops, there was certainly something for everyone.

Simon Jackson, founder and chair of the Spirit Bear Youth Coalition, delivered an inspirational keynote speech that highlighted the importance of perseverance and working together to achieve conservation goals. Youth participants got to exert their energy in a fun four-way team challenge, early morning canoeing, group games and plenty of nature hikes.

Lucy from Toronto shared that "this weekend was one of the most refreshing, memorable, inspirational moments that I have been fortunate enough to experience. I've met so many amazing people who all have stories to tell about places they've been and people they've met. One of the most memorable moments of this weekend was the canoe trip (my first ever!), the Great Group Challenge and being immersed in nature overall. I want to remember the lingering sense of inspiration that I've gathered from this one fleeting weekend, the feeling that I want to make a difference to do everything in my power to protect our beautiful Earth."

The Youth Summit would not have been such a success without the support of the Toronto Field Naturalists. By sponsoring 15 youth from the Greater Toronto Area to attend, TFN gave these young leaders the opportunity to take part in a one-of-a-kind event and learn about how they can contribute to the conservation movement in their communities and beyond. TFN's generous donation helped to make the Summit an event the youth will not forget. We greatly appreciate TFN's contribution and thank you for inspiring and empowering Ontario's young environmental leaders.

To see more photos or learn more about the Youth Summit or Nature Guardians program, go to Ontario Nature's webpage at [www.ontarionature.org/connect/nature\\_guardians/biodiversity\\_summit.php](http://www.ontarionature.org/connect/nature_guardians/biodiversity_summit.php).



Early morning canoeing and bird-watching

## REMEMBERING FRED BODSWORTH

You will have heard that Fred Bodsworth, author of *Last of the Curlews*, died recently. Remembering Fred, former president Helen Juhola said: “Not only was Fred Bodsworth president of TFN (1960-1962), but he was also TFN’s celebrity naturalist in Toronto’s 1984 Sesquicentennial celebration walk at the Leslie St Spit. More than 700 people attended the event which Fred led with his usual enthusiasm and knowledge.”

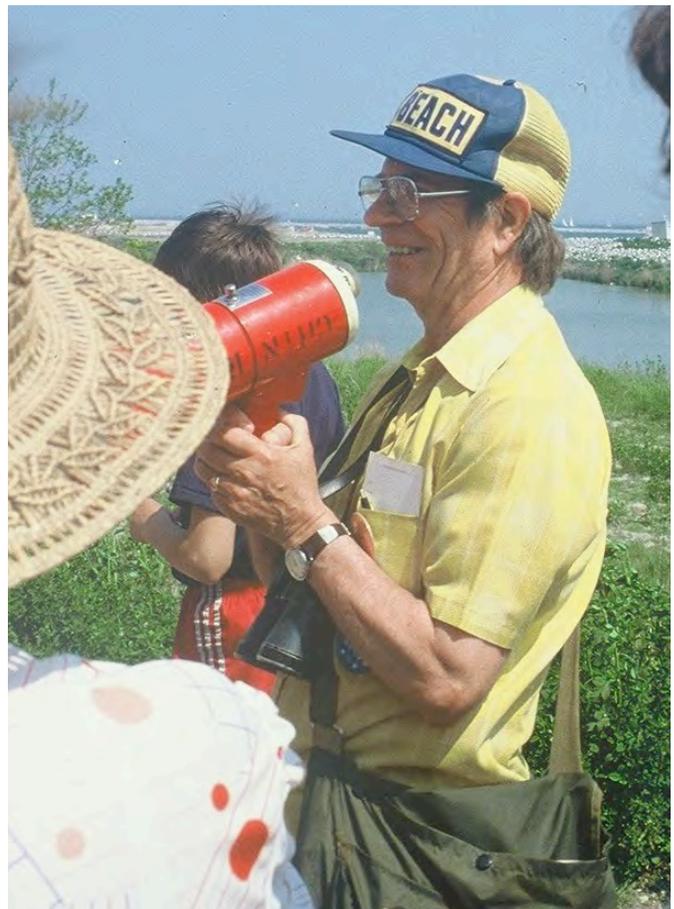
The walk took place on June 10 and was TFN’s contribution to the City of Toronto Sesquicentennial (150th anniversary) celebrations. A special pamphlet was written for the event by Helen Juhola. Mary Smith, TFN president at the time, wrote in the newsletter: “This was the first time many [people] had seen the Toronto Islands ‘from the outside’.” TTC buses brought people to the spit. Following the walk, many participants became TFN members.

### From the notice in the *Toronto Star*:

Fred was a self-taught scientist with an insatiable curiosity for the natural world and a life-long passion for birds... Charitable donations can be made to Ontario Nature, Bird Studies Canada or Canadian Nature Conservancy.

**Glenn Coady of OntBirds wrote:** Fred made incalculable contributions to natural history in Ontario. As a young boy, he traded a pair of his skates and a bicycle pump for his first butterfly guide. In 1949, he discovered the first Hooded Warbler nest for Canada. He was a long-time Director and former President (1965-1967) of the Federation of Ontario Naturalists (now Ontario Nature), an Honorary Director (since 1970) of the Long Point Bird Observatory and Bird Studies Canada, and Chair of the Board of Trustees of the James L. Baillie Memorial Fund for Ornithology (1975-1989) - very appropriate, since Jim Baillie had been a friend of Fred’s for several decades.

His most celebrated book, *Last of the Curlews*, sold over 3 million copies, has never been out of print, was a Readers’ Digest novel selection, translated into 12 languages, and adapted as an animated film that won an Emmy Award for Outstanding Achievement in Children’s Programming in 1973. The novel, with over 40 illustrations by artist and naturalist Terry Shortt,



Participants on the Leslie St Spit Sesquicentennial walk, listening to leader Fred Bodsworth (with megaphone).  
Photo: Mary Smith

provides a fictionalized account of the last pair of Eskimo Curlews. It was immediately received enthusiastically by the public. It has since been widely cited as one of the finest pieces of natural history-based fiction ever written. The book’s genius is that it transforms the reader’s appreciation for the extraordinary life experiences that migratory birds encounter and the challenges they must overcome on a daily basis. It uses the tragic story of the Eskimo Curlew as a parable to impart a sense of both the gravity of extinction and the sinister role played by the often wanton hand of mankind on the natural world.

See also:

**Nature Canada:** [naturecanadablog.blogspot.ca/2012/in-memory-of-fred-bodsworth.html](http://naturecanadablog.blogspot.ca/2012/in-memory-of-fred-bodsworth.html)

**Toronto Star:** [www.thestar.com/news/gta/article/1260411--obituary-fred-bodsworth-author-of-last-of-the-curlews-93](http://www.thestar.com/news/gta/article/1260411--obituary-fred-bodsworth-author-of-last-of-the-curlews-93)

## BIRD BUSINESS

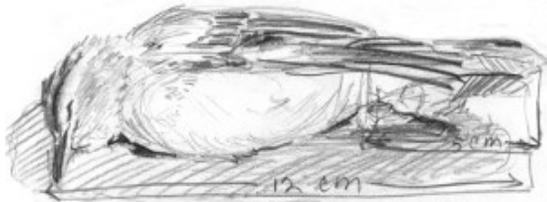
### Bird Death Pipes

Extracted from Audubon California report seen in *The Victoria Naturalist*, Spring 2012

Hollow metal and plastic (PVC) pipes and posts are found throughout the world and serve a variety of purposes. Any open top vertical pipe can be a death trap to birds and other wildlife. Death pipes are everywhere. One 6" fallen irrigation pipe was found to contain the remains of over 200 dead birds. Birds get trapped in all types of pipes including pipes as small as 1.5" diameter.

This is a nearly invisible problem. Unlike birds colliding with buildings, windows or other structures, birds trapped in pipes end up dying a slow death completely unnoticed. Pipes immediately attract curious birds. Dead birds were found in 3" steel pipes that were leaned against a building for only a few days. It is not just cavity nesters. Forty-five species of birds (and several species of lizards and small mammals) have been documented being trapped in pipes.

Remove any pipe that can be removed – this is a permanent solution! Permanently cap or fill pipes that can't be removed. Residential rooftop plumbing and heating vents protruding from rooftops that must remain open to vent properly, can have vented caps installed. Steel pipe used for fence posts can be capped with off-the-shelf caps available at hardware stores.



Drawing of window-killed bird by Diana Banville

### FLAP reports on new window treatments

From *Touching Down*, Fall 2012

While collisions with mirrored office buildings and tall lit structures account for a significant number of bird deaths annually, cumulatively bird strikes at houses, cottages, garages and other smaller buildings are responsible for a far greater percentage of mortality. We all have a responsibility to protect migratory birds, and there are now lots of options to help us do that.

**Feather Friendly® Technologies** ([www.featherfriendly.org](http://www.featherfriendly.org)) has a do-it-yourself kit that uses the same bird-strike solution proven to work on commercial buildings. The kit includes marker tape, measuring strips and installation instructions. **Amercian Bird**

**Conservancy** ([www.abcbirdtape.org](http://www.abcbirdtape.org) or **Wild Birds Unlimited**, 5468 Dundas Street West) has developed a tape with which homeowners can create their own aesthetic. **Acopian BirdSavers** ([www.birdsavers.com](http://www.birdsavers.com)) has a system of nylon parachute chord hung outside the glass for purchase and also provide directions to build your own.

### Project FeederWatch

Saturday, November 10, 2012 to Friday, April 5, 2013  
[www.birdscanada.org](http://www.birdscanada.org)

Taking part is easy! Just count the numbers and kinds of birds at your feeders, and enter the information on the FeederWatch website (or on printed forms). You will be helping scientists at Bird Studies Canada and the Cornell Lab of Ornithology to track changes in bird numbers and movements. For information on participating and previous years' results, visit [www.bsc-eoc.org](http://www.bsc-eoc.org) or call 1-888-448-2473 / 519-586-3531

### 113th Christmas Bird Count

December 14, 2012 through January 5, 2013

Conducted on any one day, counts are carried out within a 24-km diameter circle that stays the same from year to year. Christmas counts are generally group efforts, though single-observer counts can and do happen. They are organized at the local level, usually by a birding club or naturalists organization. For information on participating and previous years' results, see Toronto Ornithological Club at [www.torontobirding.ca](http://www.torontobirding.ca) and Bird Studies Canada at [www.bsc-eoc.org/](http://www.bsc-eoc.org/)

### Christmas Bird Count for Children

BirdWatch Canada, #59, Spring 2012  
[www.birdcanada.com](http://www.birdcanada.com)

Begun in California in 2007 with the aim of including families and children in this important Citizen Science event, CBC4Kids became a Canadian event two years ago with a children's count in Ontario. Last year there were several counts across the country, including one in Ashbridges Bay. CBC4Kids includes a bird identification and binocular workshop to prepare participants for observing and identifying birds. Each participant is part of a small team led by an experienced birder that records the number of bird species and individuals along a pre-determined survey route. Teams re-group to tally their results and learn the importance of Citizen Science monitoring for bird conservation. If you are interested in organizing an event in your area, contact Bird Studies Canada for more information, [jallair@birdscanada.org](mailto:jallair@birdscanada.org) or 519-586-3531 ext. 117.

## TORONTO WILDFLOWERS: MINT FAMILY (PART III)

To recap from Parts I and II, the Lamiaceae (mint family) is large and diverse (nearly 6900 species, 233 genera). This article includes three species found on shores and in wet thickets, two known to occur locally.

The classification of the genus *Stachys* (hedge-nettles) is, to say the least, highly confusing. The herbarium at the University of Michigan describes the genus as “difficult” and as a result there are many synonyms and confusing use of common names. Fortunately, there are only two species in the GTA other than garden escapes: *S. palustris* (marsh hedge-nettle) and *S. hispida* (rough hedge-nettle).

*S. hispida* was listed as possibly present at East Point in the TFN’s *Vascular Plants of Metropolitan Toronto* (2nd ed. 1994) but is now likely extirpated in Toronto and rare in the GTA according to the Ministry of Natural Resources’ (MNR’s) unpublished *Distribution and Status of Vascular Plants in the Greater Toronto Area* (2000).

*S. palustris* was reported as uncommon from Marie Curtis Park, Toronto Island and possibly East Point in TFN’s *Vascular Plants*. It is now listed as rare throughout Toronto and the GTA by MNR (2000). It is probably introduced to our area.

The image of *S. palustris* on the left below is from the Rouge Valley, taken in August 1998, a locality not included in the TFN’s *Vascular Plants*. The centre image of *S. palustris* is a close-up of a flower on a plant on a road verge on the Toronto Islands. Both have 1 to 1.5 cm flowers in leaf axils but their flowers have different colour patterns.

*Teucrium canadense* (wood germander or sage), pictured below right, is uncommon in Toronto. It was reported from the Etobicoke Creek area, Leslie Street Spit, Toronto Islands, and the Rouge Valley. It is a summer-blooming species up to 1m tall with 1 to 2 cm flowers in a narrow raceme up to 20 cm long. In southeastern Ontario it occurs as far north as the Georgian Bay ecoregion. This wide-ranging species has been recorded from Quebec to BC and Oregon and, to the south, from Florida to Arizona. North America has seven other *Teucrium* species.

Good luck in finding *Stachys palustris* and *Teucrium canadense* in Toronto.

Peter Money



Left and below: hedge-nettle, *Stachys palustris*:

on left: from the Rouge Valley  
below: from Toronto Island

Right: Wood germander or sage, *Teucrium canadense*



## KEEPING IN TOUCH



American Robin photographed by Norah Jancik

### Where have all the robins gone?

Since the early spring, I have not seen any robins in my neighbourhood. Other years my garden has been full of robins. They have always loved splashing up a storm in my 2 bird baths. My neighbours also say they have not seen any robins. Has anyone in the Field Naturalists noticed this?

Mara Glebovs

Having just read Mara's note, I'm wondering if the robins came to my neighbourhood, the Bayview/Eglinton area. In 35 years, I've never seen so many robins as this year.

We've always had lots of squirrels and raccoons in our garden. This year, we have a groundhog living under our compost bin (handy to the food supply!) My neighbour has a skunk under her porch. And last year, we had a visit from an opossum. City living at its finest!

Mary Lieberman

The very dry spring led to lower than normal populations of many insects, which would have made it difficult for many birds to raise their young at that time. However, August was much better (wetter), and many robins likely raised another brood then – their numbers will recover.

Bob Kortright

### Unforgettable!

My first view of trillium woods was from the window of the train taking us from Montreal, where we had landed, to Toronto. "What are those flowers?" I asked.

Nobody knew. Nobody cared. I couldn't wait to get into the woods and walk amongst them, as I had done in the bluebell woods of my native Wales. I had yet to learn two facts of Canadian forests: black flies and mosquitoes!! But the vision remained.

Another glory: the cardinal flowers. One is a flame. A field-full is a conflagration! Seen once only in all the years, in a wet meadow in Northern Ontario.

From plants to animals: The red fox I encountered in long grass; the young deer viewing me as I came to from an afternoon snooze on the banks of the Rouge on a boiling afternoon; the doe behind a conifer in Mississauga Cemetery – I could have reached out and patted her; the bear with whom I rifled a wild raspberry patch until we became aware of each other.

Wonders indeed! In old age I am grateful for memories. And for the TFN Newsletter. And for the wild life which occasionally comes to me, like the bat which decided to slide under *my* front door, rather than all the others it might have chosen, which I was able to capture and release into the night.

It's a wonderful world. Between climate warming and nuclear threats, we should grab it while we can!!

Eva Davis



### Is this a mink?

This little guy is under my shed. He looks like a mink. I'm at Laird and Eglinton.

Lynn Miller

Ed: There is an ongoing debate whether this is a mink or possibly an escaped pet ferret.

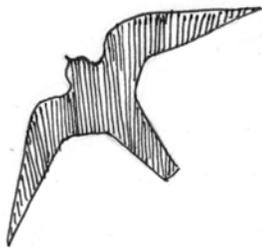
## ENVIRONMENTAL COMMISSIONER OF ONTARIO: REPORT PART 2

Extracted from press releases from the Ontario Environmental Commissioner, Gord Miller, on Part 2 of his annual report to the legislature, *2011/12 Annual Report (Part 2), Losing Our Touch*. For further information, see [www.eco.on.ca](http://www.eco.on.ca)

There are some positive developments to report: We have some improvements in fisheries management and the Ministry of Natural Resources (MNR) has even discovered in Algonquin Park a surviving population of a species of fish thought extinct. Fire management in parks has a better plan. With some caveats I acknowledge that there are somewhat better wind turbine rules to protect birds and bats [see below] and the MTO's new transit-supportive planning guidelines are an improvement. However, after those points are listed my ability to praise government accomplishments in the environmental field gets a bit limited.

In this reporting period we saw no bold new legislation to tackle the challenges of our time. This report is full of examples of stumbles and retreats in the implementation of programs and initiatives

that were seemingly well conceived and used to work acceptably. In Part 1, I documented the failures of various ministries to meet their statutory process obligations under the Environmental Bill of Rights, 1993. Here in Part 2, I report on the strange changes to the Ontario Wildlife Damage Compensation Program, which seems to anticipate the farming of our wild birds and animals. I am at a loss to explain the reasoning behind the "bait and switch" approach used when MNR posted a proposal to give farmers relief from restrictions on haying related to eastern meadowlark, and then issued a decision that gave residential developers a broad exemption from restrictions in the Endangered Species Act, 2007 relating to both the meadowlark and the bobolink. Neither do I understand how MNR can completely fail to implement something as critical as the Provincial Wildlife Population Monitoring Program. Similarly, I question how the Ministry of the Environment can confirm to people they are being adversely affected by industrial dust emissions and then allow the problem to persist for years. Yet again, the government has tinkered with the Low Water Response Plan but we remain without the timely ability to respond to increasingly frequent droughts, which threaten our aquatic ecosystems, water supplies and food crops.



### **Birds and Bats Need More Protection from Wind**

**Power:** The Ontario government should put additional areas of the province off-limits to wind power projects to safeguard birds, bats and their habitats, says Ontario's Environmental Commissioner Gord Miller.

"I fully support wind power. Together with energy conservation, renewable sources of energy are necessary to reduce our reliance on fossil fuels," says Miller. "However, the use of wind power must be balanced by the equally important goal of protecting birds and bats. To accomplish that goal, we need to be smarter about where we place wind power facilities."

The government has released guidelines for evaluating and reducing harmful effects on birds, bats and their habitats during the planning, construction and operation of wind power projects, ... but "there are some significant shortcomings in the guidelines that continue to put birds and bats at risk."

### **Lack of protection for migratory bat species:**

Approximately 75% of documented bat fatalities at wind turbines in North America are migratory bats, yet the guidelines lack any criteria for identifying and avoiding bat migratory stopover areas during the selection of wind power sites. Three out of the eight species of Ontario's bats are migratory.

### **Development in Important Bird Areas (IBA) not prohibited:**

IBAs are designated, using internationally accepted standards, as key areas supporting specific groups of birds. There are no special rules to prevent wind power development in Ontario's 70 IBAs.

**No consideration of cumulative effects:** Wind power project sites are evaluated and approved on an individual basis, with no regard for the potential cumulative effects on birds or bats from other nearby wind power facilities or other potential sources of bird and bat mortality.

"The MNR should rectify these shortcomings," says Miller "and prohibit new wind power development within Ontario's IBAs." IBAs, such as Point Pelee and the Leslie St Spit, cover only about 2% of Ontario in total.

For more information, read section 3.2 of the report "New Wind Power Rules to Protect Birds and Bats."

## IN THE NEWS

### Warmer temperatures affect early-breeding frogs

News release from BSC at [www.bsc-eoc.org/organization/bscnews.html](http://www.bsc-eoc.org/organization/bscnews.html)

Researchers from the Ontario Ministry of Natural Resources (OMNR) and Bird Studies Canada (BSC) recently published an article in the journal *Herpetological Conservation and Biology* showing that warming spring temperatures appear to be advancing the peak calling of frog species that breed early in the year, but not in those that breed late. Using data from BSC's Great Lakes Marsh Monitoring Program for the Lake Simcoe watershed in Ontario, the authors found that peak calling of northern leopard frog, spring peeper, and wood frog became earlier by roughly 10-20 days between 1995 and 2008. Peak calling also



Gray tree frog, drawn by Eva Davis

became earlier in gray tree frog and American toad, although the results were not statistically significant, whereas green frog and bullfrog showed non-significant trends toward

later calling. When combined with a climate change model, the data suggest that the difference in peak calling, and therefore egg-laying, between early-breeding and late-breeding species may increase by an additional 30% between now and the year 2100. The ramifications of this large change in the frog community are unclear. Early-breeding species may be better off, as they track changing temperatures, but late-breeding species may end up laying eggs too late for maximum success.

### Rabies: Still a concern; rarely an issue

From Toronto Wildlife Centre at [www.torontowildlifecentre.com](http://www.torontowildlifecentre.com)

Rabies is spread through saliva by biting; contact through an open cut; contact through mucous membranes (mouth, nasal cavity, eyes). It is fatal if untreated. **The good news: It's rarer than you might think!** The Ministry of Natural Resources (MNR) have done a great job vaccinating using methods like aerial vaccine baiting (dropping tasty pellets filled with the rabies vaccine from planes. The animal is vaccinated when it eats the pellet). Because of this work, the

number of wild animal rabies cases in the targeted species (foxes, raccoons and skunks) has been reduced by 99% since the early 90s. Toronto Wildlife Centre supports this effort by vaccinating all raccoons, foxes, skunks, and bats in our care before they are released. **The bad news: Rabies still exists.** The MNR has not been able to mass vaccinate the bat population because it's hard to put the vaccine in something a bat will eat. It is still unlikely that you will come across a rabid bat. However, the MNR recommends extreme caution when handling bats. If you find an injured bat, or a bat inside, call TWC or your local rehabilitator. If you wake up with a bat in your room, contact your closest health care provider immediately. Bats have small teeth and claws and bites can go undetected. If there is a chance you have been bitten by a bat, you need to seek medical advice as soon as possible. Rabid bats are not aggressive; they have difficulty flying and seem sluggish. **In general: Don't panic.** While it is very unlikely that you will be exposed to rabies virus, remember that any mammal can get/have rabies (opossums seem to be immune, but this is unconfirmed.) Don't feed them, or encourage tame behaviour (keeping a wild animal as a pet is illegal and dangerous). If you see a wild animal that you think is acting oddly, call Toronto Wildlife Centre or your local rehabilitator for guidance.

### Raccoon roundworm

An article in the *Toronto Star*, June 17, by Margaret Bream, described the effect of raccoon roundworm on squirrels. The roundworm is passed on through raccoon feces and can be fatal to mammals. Infection in humans is rare, most often affecting small children who may put dirt or animal feces in their mouths.

To read the article, "Beware a staggering squirrel in your backyard," see [www.thestar.com/news/insight/article/1212665](http://www.thestar.com/news/insight/article/1212665).



Raccoon drawn by Geraldine Goodwin

## FROM THE ARCHIVES

From TFN Newsletter #131, March 1955

**Book Review: *Last of the Curlews* by Fred Bodsworth. Illustrated by T.M. Shortt.**  
Dodd, Mead and Co., New York, 1955. pp 128.  
Price \$3.50.

Few people who pick up this elegant little volume can fail to be aware that they have in their hands a superb example of fine bookmaking. Seldom in the flood of present-day books do we see such a sample of good workmanship. The quality of paper, the clear, bold type, the wide-margined pages, the dignified yet delicately lovely cover, all combine to make a book of physical beauty for which the publishers must certainly be warmly congratulated.

It nowise detracts from the merit of Mr. Bodsworth's creative tale to say that the first thing that strikes the person who picks up this volume, after the appearance of the book, is the really striking attractiveness of the illustrations. Terry Shortt has caught the spirit of Bodsworth's saga of the curlew to perfection, and in so doing has added extraordinary vividness and vitality to an already robust and moving story. It is incredible that such a sense of movement, of freedom, of grace, of danger, of joy and suffering, of the living experience of

wild creatures can be conveyed in black and white drawings. Yet so it is as anyone who turns these pages must confess.

The story is not long. It need not be. Indeed it would be spoiled if it were. For as it stands it is an artistic gem. A sad story it is, the epic of the last of the Eskimo curlews, who in his exciting months of life lives the tragic life and death of a creature now gone into oblivion. Imaginatively told, with a poignant sensitivity to the dumb suffering of the last of the race, this prose epic takes the reader into the creature's mind, yet it never makes a human out of the tragic bird. In this Bodsworth has achieved a triumph.

All the way through, as a book, in the illustrations, as a story, this is a work of art.

R.M. Saunders

Ed. This classic book, including the original illustrations, with an afterword by Graeme Gibson, was re-published in paperback by McClelland & Stewart in 1995 and 2010

Eskimo Curlew, sketched by Diana Banville from a photo "Last Ever Seen?" by Barry Kent MacKay, 2001, from Toronto Ornithological Club newsletter # 152, illustrating Glenn Coady's account of the 50th anniversary of the famous book *Last of the Curlews*, by Fred Bodsworth, a past-president of TFN.



### Project Passenger Pigeon

A new website is providing information about the passenger pigeon in preparation for the 100-year anniversary of its extinction in 1914. Its aim is "to promote the conservation of species and habitat, strengthen the relationship between people and nature, and foster the sustainable use of natural resources."

To check out the pigeon's history in Ontario, visit [www.passengerpigeon.org/states/Ontario.html](http://www.passengerpigeon.org/states/Ontario.html)

## 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.

### Toronto Entomologists' Association

Sat Nov 17, 1:30 pm. Monarch Conservation: The Challenges Ahead. Speaker: Orley "Chip" Taylor. ROM Theatre. Enter through group entrance, off Queen's Park at the south end of the museum. Information: [www.ontarioinsects.org](http://www.ontarioinsects.org).

### Science on Sundays

Sundays at 3 pm. Macleod Auditorium, Medical Sciences Bldg, University of Toronto, 1 King's College Circle. Information: [www.royalcanadianinstitute.org](http://www.royalcanadianinstitute.org).

- Nov 11. Energy for the Next Generation: A Reality Check. Speaker: Andrew D Miall, PhD, Dept. of Earth Sciences, U of T.
- Nov 18. Function and Aesthetics of the 19th Century Scientific Apparatus: A Show and Tell. Speaker C Douglas Creelman, Professor Emeritus, Dept of Psychology, U of T.
- Nov 25. Planetary Magnetism: Unlocking the Secrets of Planetary Interiors. Speaker: Sabine Stanley, PhD, Dept of Physics, U of T.

### Evergreen Brick Works (EBW) - Nature and Heritage Hikes

Sundays, 9 am - noon. Information: [ebw.evergreen.ca/whats-on/recreation/nature-and-heritage](http://ebw.evergreen.ca/whats-on/recreation/nature-and-heritage)

- Nov 4. Healthy Hike: Taylor Creek. Meet at Victoria Park subway station (east side of Victoria Park Ave beneath the rail tracks). A 3-hour walk finishing at EBW.
- Nov 11. Returning to Nature in Your City. A 2-hour circular walk through Moore Park Ravine and Rosedale. Meet at EBW.

### 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: 416-392-0729 ext 4 or [walkingtours@highpark.org](mailto:walkingtours@highpark.org) or [www.highpark.org](http://www.highpark.org)

- Nov 4. Scavenger Hunt. Walking Tours Committee.
- Nov 18. Art of the Park. Taylor Clarke Burke.

### Thickson's Woods Land Trust

Sat Nov 3, 9 am. (Rain dates: Sun Nov 4 or Sat Nov 10.) Garlic mustard and dog-strangling vine removal blitz.

From Hwy 401 in Whitby, follow Thickson Rd south of Wentworth St to Waterfront Trail. Meet at the entrance to Waterfront Trail near the big green Thickson's Woods Nature Reserve sign.

### Rouge Park Weekly Guided Nature Walks

Explore Rouge Park's trails with a Hike Ontario certified volunteer leader. Information: visit [www.rougepark.com/hike](http://www.rougepark.com/hike), e-mail [hike@rougepark.com](mailto:hike@rougepark.com) or phone 905-713-3184 Monday thru Thursday.

### The Market Gallery

To Mar 2, 2013. South St. Lawrence Market, 2nd floor, 95 Front St E. The Water Czar: R.C. Harris Works for Toronto, 1912-45. The exhibition will chronicle his unprecedented and unmatched 33-year career as head of the City's works department through archival photos, maps and plans, and by artefacts rarely or never seen before. Note: gallery closed Sun, Mon, and holidays. Information: [www.toronto.ca/culture/the\\_market\\_gallery/index.htm](http://www.toronto.ca/culture/the_market_gallery/index.htm) or 416-392-7604.

### Harbourfront Centre

Through June 2013. Uncharted Waters: Toronto's Enigmatic Harbour. An outdoor photography exhibition that explores the spectacular environmental and cultural resource that is the harbour of Toronto. Information: [harbourfrontcentre.com/visualarts](http://harbourfrontcentre.com/visualarts)

### Lost Rivers Walks

Information: [www.lostrivers.ca](http://www.lostrivers.ca)

- Sun Nov 11, 2 pm. On Sacred Ground: Memorial walk to the Great War war horse site, now community garden. Leader: Ian Wheal. Meet at the northeast corner of Dundas St W and Runnymede Rd.
- Sat Nov 17, 2 pm. Lost Ponds and Wetlands of East York. A walk of former wetlands in or near East York prior to 1924. Leader: Ian Wheal. Meet at the entrance to Broadview subway station.

## WEATHER (THIS TIME LAST YEAR)

### November 2011

After a bit of changeability in October, November settled into a uniformly mild pattern with long mild spells in the mid-teens interrupted by brief cold fronts that brought temperatures down to near (but not below) normal for a couple of days at a time. Temperatures peaked at 18.8° (Pearson) on the 2nd and 17.1° (downtown) on the 7th, but rose into the mid-teens as late as the 25th. The coldest period was the 21st-22nd, when it dropped to -3.6° at Pearson and just -1.2° downtown. It was the warmest November since 2001 and the second warmest on record at Pearson Airport (in 2011 the mean temperature was 6.6°, 2.8° above the 1981-2010 normal; and in 2001, the mean was 7.2°).

Overall, the pattern was very similar to 2001 with a far-north jet stream and no real cold outbreaks or weather of real interest.

Precipitation was in the 90-100 mm range, about 20-25 mm above the long-term average. Rain fell on several discrete occasions, and conditions for the month were actually a little sunnier than normal (113.5 hours as opposed to 91.0). Over half of the rain fell on one occasion, the 29th-30th. This episode resulted in the only snow this month as well, about 1 cm on the last day of the month preventing it from being entirely snow-free as well as mild.

Gavin Miller

## PLANTS AND DROUGHT

If you did not water your gardens during this summer's aridity you may have noticed leaves turning brown or dropping-off; these changes were caused by heat stress. This year's drought had even more devastating effects on crops in the US mid-west that will affect the price of goods to be purchased in our supermarkets.

Scientists at the Salk Institute for Biological Studies have discovered a key genetic switch by which plants control their response to ethylene gas, a natural plant hormone best known for its ability to ripen fruit, but which, under stress conditions, can cause wilted leaves, premature aging and spoilage from over-ripening. Plants sense, or smell, ethylene; ethylene sensors in them send a signal to the nucleus, which initiates genetic programs so the plant can make changes according to the conditions it faces. These scientists identified the functions of a number of key regulators in the ethylene



signaling pathway, including the protein EIN2 (ethylene insensitive 2). This protein, located in the endoplasmic reticulum (the part of the cell that facilitates protein transport within the cell), plays an essential role in ethylene signaling. The protein's function, however, remains enigmatic. Understanding the mechanism may lead to new methods that help plants thrive in tough conditions. Basic knowledge of the precise mechanism will lead to better ways to control these processes in crop plants.

Malcolm Silver

### Reference:

Hong Qiao, Zhouxin Shen, Shao-shan Carol Huang, Robert J. Schmitz, Mark A. Urich, Steven P. Briggs, and Joseph R. Ecker. **Processing and Subcellular Trafficking of ER-Tethered EIN2 Control Response to Ethylene Gas.** *Science*, 30 August 2012

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

**Publications Mail**  
Registration No. 40049590



Twelve-spot skimmer dragonfly photographed in High Park,  
July 2012 by Audrey Maureen Richstone