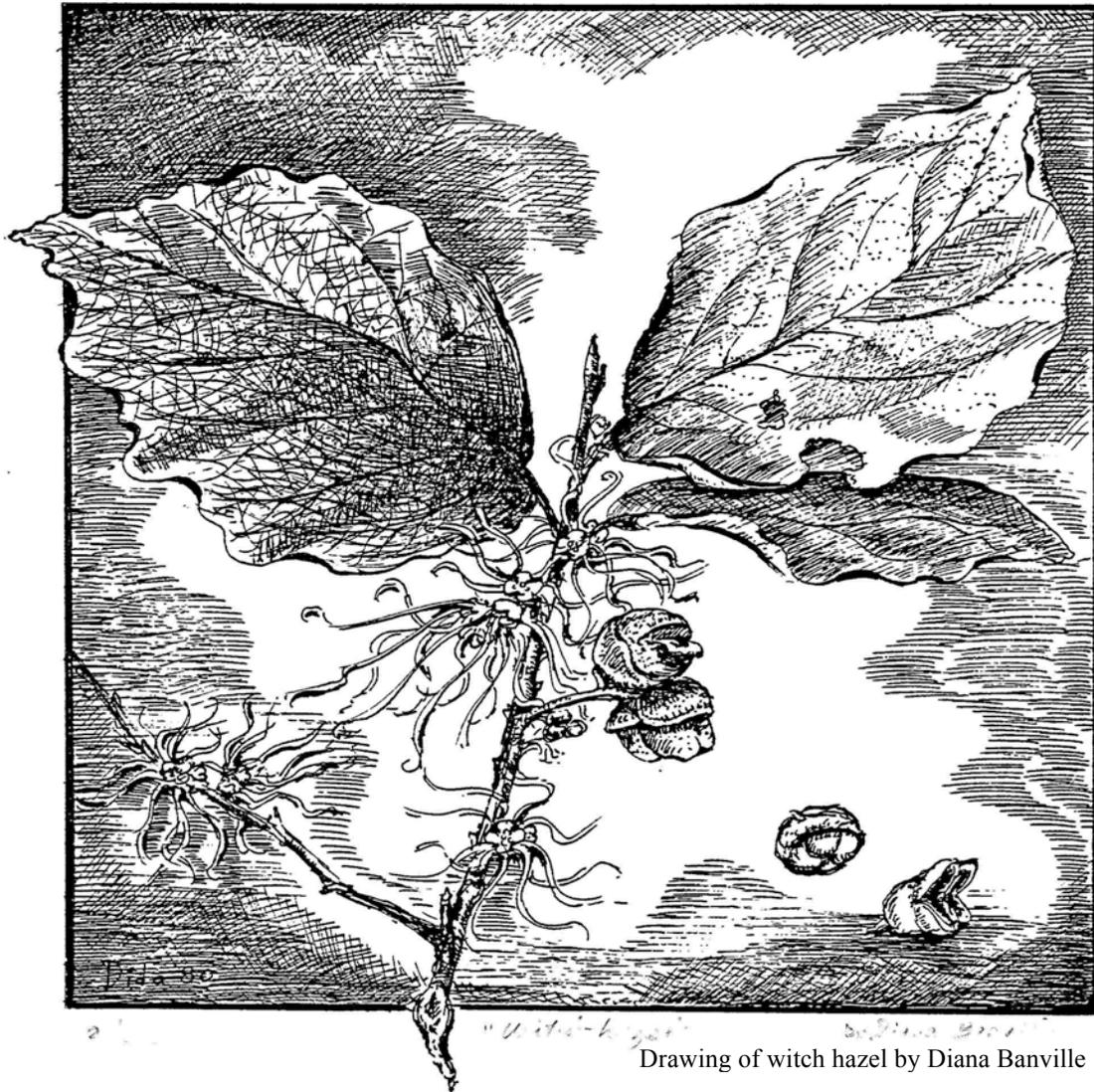


TORONTO FIELD NATURALIST

Number 542

October 2006



Drawing of witch hazel by Diana Banville

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TORONTO FIELD NATURALISTS

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.

ISSN 0820-636X

NEWSLETTER COMMITTEE

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Nancy Fredenburg, Elisabeth Gladstone, Mary
Lieberman, Joanne Lynes, Marilynn Murphy, Toshi
Oikawa, Wendy Rothwell, Jan Sugerman.

Printing and Mailing: Perkins Mailing Services.
Website Manager: George Nassas.

IT'S YOUR NEWSLETTER!

Send us your original writing (up to 500 words) of your thoughts and experiences of nature in and around Toronto. Do you have a favourite natural area in Toronto? Did a TFN outing introduce you to a new park? Tell us about it! Did you see any plants or animals that particularly interested you? Let us know! Tell us what, where and when, and any field guides or other sources consulted.

Also welcome are: reviews, poems, cartoons and sketches, natural history items in the news, and digital photos of TFN outings. Remember that photos will be reproduced in black and white photocopy. Please include your name, address and phone number so submissions can be acknowledged. Newspaper clippings should include source and date.

Unsigned letters or emails will not be read. Attachments to unsigned emails will not be opened.

Note the deadline for submissions of time-sensitive material, e.g., notices of meetings or events. Deadline for November issue: October 2nd, 2006. Send by mail or email.

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

Tel: 416-593-2656

Web: www.torontofieldnaturalists.org

Email: [redacted] or [redacted]

TFN PUBLICATIONS

TORONTO FELD NATURALISTS CLUB HISTORY AND CONSTITUTION 1965	\$2 00
CHECKLIST OF PLANTS IN FOUR TORONTO PARKS WILKET CREEK HIGH PARK HUMBER VALLEY LAMBTON WOODS 1972	\$2 00
TORONTO THE GREEN 1976 Metropolitan Toronto's important natural areas are described and recommendations given for their conservation and management includes maps bibliography and index	\$10 00
TORONTO FELD NATURALISTS RAVINE SURVEYS Survey No 1 -- Chatsworth Ravine 1973 Survey No 2 -- Brookbanks Ravine 1974 Survey No 3 -- Chapman Valley Ravine 1975 Survey No 4 -- Wigmore Ravine 1975 Survey No 5 -- Park Drive Ravine 1976 Survey No 6 -- Burke Ravine 1976 Survey No 7 -- Taylor Creek - Woodbine Bridge Ravines 1977 Survey No 8 -- West Don Valley 1978	ea \$5 00
INDEX OF TFN NEWSLETTERS (1938 to 1978) INDEX OF SINGLE YEARS FROM 1979	\$10 00 ea \$1 00
TORONTO REGIONAL BOARD CHART 1983	\$5 00
A GUIDE TO ONTARIO MOSSES 1985	\$5 00
GUIDE TO TORONTO FELD NATURALISTS' NATURE RESERVES 2001	\$5 00
TORONTO ISLANDS PLANT COMMUNITIES AND NOTEWORTHY SPECIES 1987	\$5 00
TODMORDEN MLLS 1987	\$5 00
VASCULAR PLANTS OF METROPOLITAN TORONTO 1994	\$10 00
TORONTO CHECKLISTS (birds other vertebrates butterflies other invertebrates mosses other plants)	ea 50¢
HUMBER FORKS AT THISTLETON 2000	\$5 00

Add \$2.00 *per item* for postage and handling; no GST.
Order from TFN office, see address below left.

MEMBERSHIP FEES

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

No GST. Tax receipts issued for donations. Membership fees and address changes should be sent to the TFN office.

Please note: It has always been the policy of the Toronto Field Naturalists not to give out its membership list.

TFN MEETING

Sunday, October 1, 2006 at 2:30 pm

The Humber: tales of a Canadian heritage river

Ron Fletcher

Rivers are our lifeblood but are under threat, especially those that flow through urban areas. The Humber River is an essential corridor linking the rural north to Lake Ontario and has been hugely influential in the history of our region. Ron Fletcher is a well-known naturalist with many years experience of interpreting our natural heritage and will draw on his new book on the Humber River to illustrate the history and fate of this famous waterway.

VISITORS WELCOME!

SOCIAL

2:00 - 2:30 pm

Bring your own mug for coffee or juice if you wish,
only paper cups provided.

For more information call the TFN office at (416) 593-2656

**ROOM 001, EMMANUEL COLLEGE
UNIVERSITY OF TORONTO
75 QUEEN'S PARK CRESCENT EAST**

Room 001 is one floor below street level. Entrance at south end of the building, down a few steps on an outside stairwell.

Wheelchair Entrance: Second door south on Queen's Park Crescent E. Door does not have automatic opener. Elevator is inside to the right.



Next Meeting, November 5, 2006:
The ultimate superorganism: the honeybee

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 by calling 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.

Sunday, October 1 2:00 p.m. 2:30 p.m.	MONTHLY MEETING – see notice on page 3 Social Lecture - The Humber: Tales Of A Canadian Heritage River
Wednesday, October 4 10:30 a.m. – 1:00 p.m.	SETON PARK – Nature Walk –Mushrooms and Plants Leader: Vello Suits Meet at the park entrance on the northwest corner of Eglinton Ave. E. and Leslie St. Morning only.
Saturday, October 7 10:30 a.m.	ASHBRIDGES BAY PARK – Nature Arts Leader: Mary Chris Meet at the southeast corner of Coxwell Ave. and Lake Shore Blvd. E. Bring what you need for photography, painting, sketching or writing and anything you wish to share with the group when we discuss our morning’s work after lunch.
Wednesday, October 11 10:30 a.m.	HUMBER IN THE FALL – Nature Walk Leader: Madeleine McDowell Meet at the Old Mill Subway Station. We will walk up the Humber to Dundas St. W. and back. Salmon should be running, recollections of Hurricane Hazel... Bring binoculars, lunch optional. Duration about 2 1/2 hours.
Sunday, October 15 2:00 p.m.	CASTLE FRANK BROOK – Lost Rivers Walk Leader: Richard Anderson Meet in front of Eglinton West Subway Station. Explore this lost stream and observe how development has changed it. Moderate difficulty. This is a joint outing with Toronto Green Community.
Wednesday, October 18 10:30 a.m.	COLONEL SAMUEL SMITH PARK – Nature Walk Leader: Valerie Allen Meet at the southwest corner of Kipling Ave. and Lake Shore Blvd. W. Bring lunch and binoculars.
Saturday, October 21 10:30 a.m.	EASTERN BEACHES – Nature Walk Leader: Boris Mather Meet at the southwest corner of Coxwell Ave. and Lake Shore Blvd. E. Bring lunch and binoculars.
Wednesday, October 25 10:00 a.m.	WILKET CREEK AND TORONTO BOTANICAL GARDEN – Woody Plants Leader: Tom Atkinson Meet at the southwest corner of Leslie St. and Lawrence Ave. E. Morning only.

Saturday, October 28 10:30 a.m.	EAST DON PARKLANDS – Nature Walk Leader: Mary Taylor Meet at the Leslie St. exit of the Leslie Subway Station on the Sheppard Line. Bring binoculars, if you have them, and a lunch. Extensive wild habitats make this an excellent natural area to explore.
Saturday, October 28 2 p.m.	ASYLUM CREEK – Lost Rivers Walk Leaders: Ian Wheal and Ed Freeman Meet at the southwest corner of Dundas St.W. and Dufferin St. Explore a historically significant creek and area. Moderate difficulty. This is a joint outing with Toronto Green Community.

SOCIALLY RESPONSIBLE INVESTING

The TFN has invested the monies held in the Nature Reserve Fund in two mutual funds that follow the precepts of Socially Responsible Investing. The objective of SRI is to provide competitive investment returns while reflecting socially responsible investment criteria on a range of issues. Investments are not made in the securities of companies that are engaged primarily in the production and distribution of alcohol, tobacco products, pornographic materials, gaming or military weapons

Investments are made in the securities of companies that have socially responsible business practices and:

- engage in environmental practices
- comply with environmental regulations
- respect workers' rights
- encourage equal employment opportunities
- adhere to strong corporate governance practices
- do not support the acts of repressive regimes.

Best of Sector Approach

Certain industries have an environmental impact as a by-product of their production processes. Resource extraction industries are an obvious example. Because it would be imprudent to exclude such large economic segments from a diversified investment portfolio, a "best-of-sector" approach is used. In the resource sector, for example, this involves identifying those companies employing leading environmental practices.

The best-of-sector approach permits investment in companies that are committed to developing sustainable business models.

Michael Jantzi Research Associates Inc. (MJRA)

Established in 1992, MJRA is Canada's leading provider of social investment research and support services. MJRA developed the Jantzi Social Index, Canada's only index of companies that pass a set of broadly based social and environmental screens. MJRA is a founding member of the Sustainable Investment Research International (SiRi) Group, which is a coalition of 12 international research organizations devoted to the global advancement of social investing.

TFN Investments

TFN has chosen to invest in the Phillips, Hager and North Community Value Canadian Equity Fund and the Community Value Bond Fund. The MER is quite low and the returns of the past few years have been comparable with PHN's corresponding non-SRI funds. MJRA has been retained as an advisor to the PHN Community Value Funds.

For more information on Socially Responsible Investing, visit the PHN web site www.phn.com, and/or Google this topic. There is lots of information.

Corley Phillips,
Secretary-Treasurer of TFN

NATURE ARTS

The Newsletter Committee would like to remind participants of Nature Arts outings and other natural history illustrators that we welcome your drawings and photographs for use in the Newsletter. Keep in mind that we hope to publish a colour issue again this year. We also need photos suitable for use on TFN's web site. For example, we would like to feature parks frequented on TFN outings. Photos may be sent electronically or as prints.

PRESIDENT'S REPORT

I am writing this report following the September AGM where the incumbent slate of directors was re-elected. (see page 7). As we start our second year, I would like to thank the board for their committed, reliable and enthusiastic service during the past year, which was a very demanding one. Also I am grateful to the many other members who volunteer their time and energy. The TFN cannot survive without you. In fact, reflecting on the most fundamental challenges facing the board, I have set two goals and objectives for the upcoming year:

1. get more members involved
2. recruit new members.

I believe that getting more members active in the actual running/managing of the TFN is crucial. It will help ease the burden on those already involved, and it will also provide a basis for succession for the various functions. At present we have need of:

- someone interested in working on our slide collection
- someone to enter data on the computer to update our membership files
- someone to help send out renewal notices to lapsed members
- someone(s) to help deliver flyers and brochures to libraries, museums etc.
- someone(s) to help "man" the display boards at events i.e. Heritage Days, Environment Days, Canada Blooms etc. and someone to organize these volunteers
- someone to select drawings/photos from our collection and have cards printed
- someone creative but not necessarily technical. to work with George Nassas (and me) on revamping the website

If any of these interest you, please call, write, email or drop in to the office to let us know what you would like to do.

Another way you can be involved is to actively recruit new members. Our current membership is just under seven hundred but to be financially viable we need **one thousand**. It is possible... we have had as many as fifteen hundred members! The most effective way to increase our numbers is for you to introduce other people to the TFN. Bring them along on an outing or to a lecture, or call and ask us to send them a newsletter (which will have a membership brochure attached) to entice them to join. Our future depends on it. And ultimately more people connected to nature means more people will care for it and the better its chance for survival... a critical factor in this pressing urban environment.

Pinky Franklin

You are invited to

Ontario Nature's 75th Anniversary Gala

on November 14th, 2006 at the ROM.

A limited number of tickets are available at \$85, for \$55 of which a charitable receipt will be issued.

If you are interested, RSVP to Chemayne D'Souza by October 20 at (416)444-8419 or gala@ontarionature.org

TFN BOARD OF DIRECTORS 2006-2007

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Phoebe Cleverley Past President				
Wendy Rothwell Vice President. & Recording Secretary				
Corley Phillips Secretary-Treasurer				
Alexander Cappell Communications				
Nick Eyles Lectures/meetings	HO WK			
Nancy Fredenburg Membership				
Gail Gregory Outings Co-ordinator				
Barry Mitchell				
Ruth Munson Outings Committee				
Jerry Spevak Nature Reserves				
Linda Stemmler				

OTHER VOLUNTEERS REPORTING TO THE BOARD

Jenny Bull Newsletter Editor	HO WK			
Boris Mather Environment Co-ordinator				
George Nassas Webmaster				
Roger Powley Parks Representative				

SNAPPING TURTLE

- drawing by
Eva Davis

MONTHLY LECTURE REPORT

Cannabilistic Spiders, Sunday, September 10, 2006
Maydianne Andrade, University of Toronto

A visit from “Spider Woman”
Reproduce and Die!

Sex and death sell right? Ask any novelist or journalist. But as a focus for sober award-winning university research? University of Toronto zoologist Maydianne Andrade knows all about this, and more, through her research on the mating habits of the Australian redback spider (*Latrodectus hasselti*) and its close relative, the black widow. This was the topic of Professor Andrade’s talk to a TFN audience of over 100 people on Sunday, September 10th, the first of this year’s illustrated monthly lecture series.

We can’t duplicate the full complexity of the story that Professor Andrade laid out so clearly for us, but there are a few key points that should be mentioned. It appears that the male redback spider voluntarily gets eaten by the female during mating. Even if the male survives the first time and comes back for more, apparently he’s toast. Why is this? The reason according to Professor Andrade is that reproduction trumps survival and she has determined that this occurs with other animals too. It gives the species a unique advantage over others in the evolutionary race to survive.

Apparently, male spiders actively encourage females to cannibalize them while they mate. Unlike most other sexually cannibalistic species (e.g., praying mantids) where males attempt to escape from the female’s jaws, redback males actually jump onto the female’s mouthparts during copulation (known as male sexual sacrifice). Because of the unique reproductive biology of male spiders, redback males transfer sperm while they are being consumed. Thus, although males give up future reproductive opportunities when they sacrifice themselves, they

achieve fertilizations in their current mating. This is known as “paternity advantage” relative to males who survive but don’t fertilize the female. During fertilization, the male places a plug in one of two entries to the female’s sperm storage apparatus. Thus, if a male returns for a second fertilization (despite injuries sustained during the first fertilization!) and blocks the second entry, he has successfully prevented any other male from fertilizing that female. This is an extreme version of natural selection, sacrificing the individual for the sake of the species and is referred to as “male mating investment”. The male gives his all for the sake of the species, or rather for the sake of passing on his DNA. It is an unusual form of sexual selection where special traits of males are seen by females as being advantageous over others; Charles Darwin was the first to recognize the importance of this trait.

Professor Andrade’s talk was illustrated with an excellent selection of photographs (many taken in her own lab) and even some short videos. The logic of the redback spider’s mating strategies was clearly outlined, step by step, and the appreciative audience asked a number of excellent questions following the presentation.

Her insights into evolution and animal behavior have earned Maydianne Andrade international plaudits, most prominently a Premier’s Excellence Award, and awards from the International Society of Behavioral Ecology, and the Animal Behavior Society (USA). She was also named one of the top 10 Young Scientists of the Year by *Popular Science* magazine for 2005. Her research has been published in leading journals such as *Science*.

Nick Eyles and Barry Mitchell

We would appreciate receiving your ideas for speakers and/or topics for the 2007-8 lecture series.

ECOLOGY TIDBITS

This is the first in what I hope will be a (semi-, perhaps) regular feature reporting juicy nuggets of ecological research that might interest TFN members. I start by looking at a couple of studies recently published in the journal *Ecology* on the effects of invertebrates on plant communities in the northeastern U.S. (both of which should be entirely relevant to us in southern Ontario). This month I tell you about how spiders affect the abundance of different kinds of plants in a meadow; next month I'll tell you about how earthworms mess with forest plants.

Spiders and goldenrod

How do predators affect plant communities? If you've been to Rondeau Provincial Park, you've seen the dramatic effect that deer, in the absence of predators to control their numbers, can have on both the abundance and variety of forest plants. Yale biologist Oswald Schmitz recently discovered that predators can also have subtler but equally interesting effects [Schmitz (2006) "Predators have large effects on ecosystem properties by changing plant diversity, not plant biomass", *Ecology* 87(6): 1432-37].

Schmitz's subjects were not wolves and deer but spiders and grasshoppers. He studied an old field dominated by rough-stemmed goldenrod and Kentucky bluegrass, along with other goldenrods, daisies, hawkweed, cinquefoil, wild carrot, strawberry, clover and black-eyed Susan. To determine the effect of the spiders on the plants, he divided the field up into 30 squares. Ten of the squares he left alone, from 10 he removed all the spiders by hand, and 10 he sprayed with pesticide to kill off both spiders and their prey.

As you might expect, the total plant matter in the sprayed squares (where the plants were not being eaten by insects) was quite a bit more than in the squares with only the spiders removed (where the plants were being eaten but the plant-eating bugs were not).

Surprisingly, though, the amount of plant matter in the "natural" squares was about the same as in the squares with the spiders removed. The effect of the predators, then, was not to reduce the total amount of grazing by the insects. The untreated squares, though, had a greater diversity of plants than either the sprayed or the de-spidered squares.

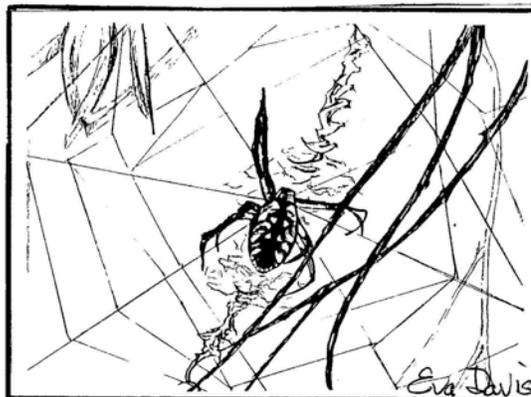
Why was that? Well, in the untreated squares, the rough-stemmed goldenrod tended to form dense tall stands that crowded out other plants. In these stands little light reached the ground, and the level of nitrogen in the soil was also depressed because the goldenrod's leaves are slow to decompose. Another feature of rough-stemmed goldenrod is that it does not provide favorable hunting conditions for spiders. The spiders did not have a big effect on the population of grasshoppers, but they did cause the grasshoppers to hang out in the rough-stemmed goldenrod to avoid getting eaten. As a result, grasshoppers ate just about as much plant matter in the squares with spiders as in the squares without, except that in the spidery squares they mostly ate rough-stemmed goldenrod. This had the effect of keeping the goldenrod in check, allowing a greater variety of plants to flourish. This is a good example of how natural communities are shaped by indirect relationships that are not directly observable.

Allan Greenbaum

THE GOLDEN ORB-WEAVER, or yellow or orange garden spider, sits on her web strengthened by ladder-like "stabilimentum". The female of this species may be an inch or more in length and her markings vary in colour from yellow to orange. The much smaller male is of brownish shades with white markings.

Drawing by Eva Davis.

ref.: THE SPIDER BOOK
by Comstock 1912,
Gertsch rev. 1948



TORONTO TREE PORTRAITS 2007 – PEOPLE AND TREES

Most of us are well aware of the value of trees: ecological, economic, aesthetic – to list a few. In particular, the value of trees in improving our living environment has become more consciously acknowledged than in decades past when trees were, perhaps, taken more for granted. Toronto Tree Portraits 2007 goes beyond celebrating the value of trees, to looking at the role that trees play in people's lives – from childhood and throughout life.

When Vincenzo Pietropaolo was invited to provide the photographs for Toronto Tree Portraits he immediately and enthusiastically agreed. A documentary photographer with five published books and innumerable images reproduced in various publications, Pietropaolo's style often emphasizes relationships. "People routinely interact with trees as part of their every day lives," he explains.

As with any relationships, we all have our own unique experiences and corresponding stories about trees to tell – stories that span a lifetime of memories. Pietropaolo's photographic art, to quote writer Nino Ricci, "makes us stop and look twice. There is the simple content of the photograph... but then there is something else: a resonance." As we view Pietropaolo's images in Toronto Tree Portraits, we are reminded of our own friendships with trees – relationships of timeless quality and priceless value!

Lorraine Johnson was similarly enthusiastic when asked to contribute her writing to the calendar. As she says:

"Toronto's magnificent urban forest just didn't happen – it's the result of planning and foresight, the vision of generations before us who planted trees. And we all have a role to play in keeping our urban forest healthy." Johnson's scripts are delightfully inspiring and entertaining while including a passionate call to action. In the tradition of her book, *The Gardener's Manifesto*, Johnson urges people to commit themselves to urban forest stewardship, offering up meaningful and effective activities for each month of the year.

Astronaut, author and photographer Roberta Bondar shares her unique perspective in the foreword to the calendar: "The photographs in this calendar are of surreal creatures that dig deep into planet Earth and, both magically and majestically, transform soil into extravagant parents that exude grace, steadfastness and loyalty. Looking at these images, we are reminded of respect and why we should never again take the life of a tree for granted."

The 2007 Toronto Tree Portrait Calendar is a continuing celebration of the importance and uniqueness of our city's tree heritage. As well, it explores the nature of relationships between people and trees, uplifting our spirits and inspiring us to action. After all, our friends the trees do need our help!

Arthur Beauregard
Manager – Toronto Parks & Trees Foundation



TORONTO PARKS AND TREES
FOUNDATION

With a population of more than 2.5 million people, Toronto's nearly 8,000 ha. of public parkland and over 1,500 named parks provide essential public space for play, sports, culture and quiet places to experience nature in the city. The Toronto Parks and Trees Foundation is committed to supporting and enhancing these resources. In an era of growing public use of parks, but declining public funds there is an urgent need to look at how we can invest in our public park system.

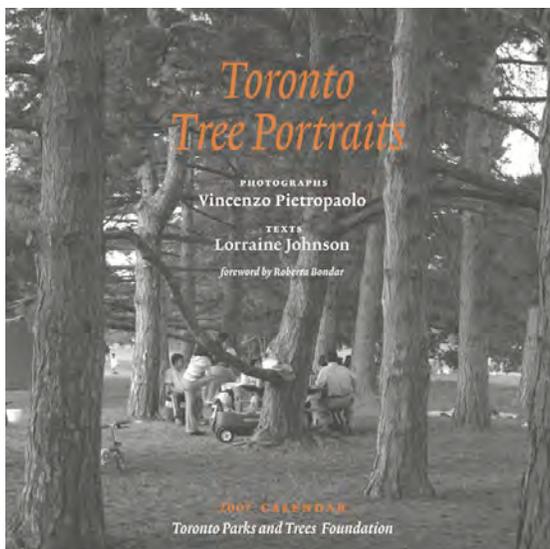
The Foundation is guided by a Board of Directors and we coordinate with City of Toronto Parks, Forestry & Recreation to identify areas of need. Working in partnership with corporations, foundations, private donors, and community groups the Foundation provides a range of enhancements to Toronto's parks that could not otherwise be achieved.

If you would like to know more about our work please call The Toronto Parks and Trees Foundation at (416) 397-5178 or Web site: <http://www.torontoparksandtrees.org>

Charitable Registration 86029 1467 RR0001

Contest

Can you identify the tree pictured here – both its species and location in Toronto? The first 5 correct responses sent to TFN will win a free *2007 Toronto Tree Portraits* calendar. See page 2 for our e-mail and mailing addresses. Deadline: October 31, 2006.



Toronto Tree Portraits 2007 Ordering Information

Similar to past years, the 2007 Toronto Tree Portraits Calendar is conveniently formatted as a self-standing desk calendar. It is square shaped, measuring 7" by 7". The proceeds from sale of the Calendar support the Toronto Parks and Trees Foundation, a non-profit, charitable organization that works with the City of Toronto and community groups to enhance and preserve Toronto's parks and trees.

Reasonably priced at just \$15.00, Toronto Tree Portraits makes an excellent gift. To order, please e-mail lcolacc@toronto.ca, or call the Toronto Parks & Trees Foundation at 416-397-5178. Calendars will be available and shipped from early October and on.

CHESTNUTS AND HORSE-CHESTNUTS

On September 9, 2006, D. Andrew White led a TFN Outing to Mount Pleasant Cemetery. These are some trees in the Cemetery, as described in his web site (www.ontarioprofessionals.com).

Chinkapins & Chestnuts

Chinkapins, chestnuts or *châtaignes* (*Castanea spp.*) are members of the beech-oak family. Though once common in the eastern Carolinian forests, the sweet chestnut (*Castanea dentata*) is now almost forgotten by most



North Americans because the introduced chestnut blight fungus has almost exterminated it. Now North Americans tend to think of horse-chestnuts as 'chestnuts,' but horse-chestnut is a type of buckeye. Chestnut seeds are, like beech nuts and acorns, 'mast' nuts. The word 'mast' refers to nuts eaten by game animals. At one time

chestnuts were a significant part of the diet of the now extinct passenger pigeon (*Ectopistes migratorius*). Turkeys, deer and feral pigs also feasted on chestnuts.

True chestnuts have some characteristics in common with both oaks and beech trees. They have a lanceolate leaf with a toothed margin, like an enlarged beech leaf. The flowers can be either unisexual or bisexual. The staminate flowers are long drooping catkins. Often chestnuts are self-infertile due to the different times in which male and female flowers mature on an individual tree. A chestnut usually must have another chestnut tree of slightly different flower timing as a pollen source. Pollination is essential to successfully produce fruit. The seeds are sets of two to three nuts in a bur-like involucre, like giant beech nuts. The bark is more like oak than beech in texture. The wood, which is of excellent quality, is somewhat like oak in its grain. A few chestnut species can reach 30 metres in height, and have broad spreading crowns. The American sweet chestnut was once an impressive sized tree; now only a few isolated individuals are full sized.

In the Americas the smaller species of chestnut are often called by the Amerindian name of **chinkapin** (or 'chinquapin'). Confusingly, some oaks are also called 'chinkapin oaks'!

Some Eurasian chestnuts are fairly tolerant of the blight fungus. Theoretically their genes could be used to

strengthen the native chestnut. There have been several attempts to create such hybrids with some preliminary success in this regard. In addition, a blight-killing virus is currently being investigated. The *Queen of the Chinkapins* may yet return.

Horse-Chestnut & Buckeyes

Horse-chestnut (*Aesculus hippocastanum*) is not actually a 'chestnut' but a member of the horse-chestnut family or *Hippocastanaceae*. It is a medium sized tree, 25 metres tall at most. Its large compound palmate leaf has 5 to 7 leaflets. These are spirally arranged on very thick twigs with very large buds. The tree flowers in late spring after the leaves have unfurled. Panicles of showy flowers, mostly white with some orange, bloom for a long period in the spring. These insect-pollinated flowers are both male and female. The seeds that develop by late summer are globular shiny nuts, somewhat like a chestnut. Each seed is surrounded by a husk which is covered in short broad spikes. These spikes are not as close-packed as the spikes on real chestnuts.

Horse-chestnut is a Eurasian species of *Aesculus*. There are native American species which are called 'buckeyes'. Most buckeyes are smaller and more southern in their natural range than horse-chestnut. Ohio buckeye (*A. glabra*) is planted in Ontario as a flowering ornamental. It has more slender leaflets than horse-chestnut. Buckeyes have bitter nuts that red and grey squirrels do not like to eat. Like all buckeyes the nuts can be boiled to render them edible, but few people bother. Supposedly, horses don't mind the flavour of the raw nuts, hence the name 'horse chestnuts'.

Buckeye nuts are largely ignored by the grey squirrel (*Sciurus carolinensis*).

However, the fox-squirrel (*Sciurus niger*) does cache buckeye nuts. The large red-grey fox-squirrel plants buckeyes by leaving a few of its 'surplus' nuts in the ground. The fox-squirrel is far more common south of the Great Lakes. It is rare in Ontario's deep south. This could explain why even the winter hardy Ohio buckeye is not native in Ontario.

Horse-chestnut is fairly hardy in an urban environment. It sprouts new stems from branches that are cut off. Even if all greenery is removed, it has a remarkable ability to recuperate.



Drawing by Diana Banville

TOAD FRIENDLY BACKYARDS: HOW TO WELCOME TOADS IN YOUR COMMUNITY

An article by Diana Teal (former Adopt-A-Pond Coordinator at the Toronto Zoo)
extracted from *Amphibian Voice*, Spring 2006

The American toad is a model urban amphibian. It spends most of its adult life on land and thrives in urban gardens. A few toads in your garden are far better than pesticides at keeping unwanted insects under control! Toads, like other amphibians, are carnivorous, eating some of the gardener's worst bug enemies, such as slugs, beetles, cutworms, earwigs, caterpillars and Gypsy moths. In fact, 81% of a toad's diet consists of unwanted insects.

Toad-Friendly Yards

Toads, like all amphibians, require moisture and shelter to survive. This is why toads like to spend hot summer days in damp, dark places, preferably underground. You can create moist areas by having shady areas where dew collects and damp patches of organic soil (e.g. compost) and/or rotting vegetation. Compost not only retains moisture, but also supports many of the insects that toads eat! Toads awaiting cool evening temperatures can also burrow into this loose soil during the heat of the day. Let the edges of your garden grow wild, to provide cover for toads hiding from the hot sun.

Toad homes provide shelter for toads, and can be constructed in a variety of ways. "Toad Holes" can be created by digging a hole about 25 cm by 25 cm in the ground, covering the bottom of the hole with sand (for toads to burrow into) and using flat rocks and boards to make sides and a ceiling. A clay drainage pipe (approx. 12 cm long and 7 to 8 cm in diameter), should be placed diagonally into the hole to serve as an entrance tunnel. Be sure to place your Toad Hole in a shady place! Plant some ferns or native wildflowers nearby to help shade the entrance and attract insects. Toads are most active on summer nights, when insects are abundant. Gardening Tip: Plant a fern glade in a moist, shady area of your backyard or school ground. It is the perfect habitat for toads!

A "Toad Abode" can be created with an upside-down clay flower pot. Simply drill a series of holes to create a toad-sized hole along the rim of the clay pot and chip out the drilled section with a hammer. Bury the pot an inch or two into the ground in loose soil (sandy soil is ideal) and make a small tunnel for a doorway. Flower pots should be fairly small, as toads like to feel the

walls on all sides. Small pots also retain moisture more effectively. Be sure to place your "Toad Abode" in a shady spot near a source of water, with the entrance facing north. Place two or three abodes around your yard, as toads will move around to find ideal temperatures and moisture levels.

Toads are terrestrial hibernators. This means that they need loose soil to burrow down below the frost line during the winter months. A "Toad Hibernaculum" can be created by digging a hole about 1 metre in depth and filling it with sand. The surface of the sand should be covered with compost to help the soil retain heat. Toads will also stay in your compost heap over winter. Cover your compost with leaves to provide a frost-free sanctuary for toads.

Toadally Chemical Free Communities!

Pesticides are poisons used to kill insects, weeds and other pests. They include insecticides, fungicides and herbicides.

Amphibians are particularly sensitive to chemical contaminants, both on land and in the water, because chemicals are readily absorbed through their semi-permeable skin. Studies have shown that pesticides have many negative effects on amphibian populations, such as delayed growth and development of tadpoles; paralysis; increased tadpole death; deformities on the tail and limbs; abnormalities of the head, body and tail; and poor reproduction. Many changes in behaviour have also been found to occur, including poor swimming ability and loss of balance. Pesticides also change the quality and quantity of food and habitat for amphibians.

For the love of every living creature, please use alternatives to pesticides in your community!



Drawing by
Diana Banville

USE OF THE INVASIVE PALE SWALLOWWORT BY BIRDS AND SMALL MAMMALS

Article and photographs by Christine Hanrahan, from *Trail & Landscape*, the magazine of The Ottawa Field-Naturalists' Club, September 2006

Pale swallowwort (*Cynanchum rossicum*), also known as Dog-strangling Vine (DSV), is a highly invasive species of natural areas. It can rapidly out-compete existing vegetation thereby reducing overall biodiversity of a site. It can survive in sun and shade, and in damp or dry conditions. Once established, it is extremely hard to eradicate. At the Fletcher Wildlife Garden, the plant is widespread in both wooded and open sites. Various methods of control have been tried at FWG over the last few years including pulling, digging, cutting, mowing and smothering. None has so far proven effective but we need to look at some of these methods over the long term. We are still researching other methods.

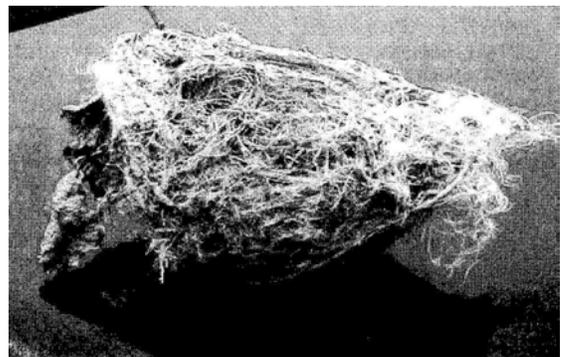
Invasive alien plants have been in this country for decades and in some cases, for centuries, although the incursion of new species has occurred more rapidly in recent times. As they displace native vegetation and change the composition of natural ecosystems, the impact on the fauna is significant. There is no doubt that invasive species present a considerable environmental and economic problem wherever they occur. However, sometimes native species of wildlife have adapted to the invasive alien plants and occasionally appear to have benefited. For example, the adaptation of the Henry's Elfin butterfly to Glossy Buckthorn (*Rhamnus frangula*) has meant an increase in abundance of this species (Layberry, et al. 1998). Many invasive species, such as Purple Loosestrife (*Lythrum salicaria*) are known to attract various insects, and I seem to remember reading that biologists have found 40 species of native wildlife using this plant for various purposes. Locally, beaver were reported eating Purple Loosestrife near the Champlain Bridge (Darbyshire and Consaul, 1999). In light of this and given the abundance of DSV at the Fletcher garden, I wondered if it too was being used by birds or other wildlife for nesting material or some other purpose.

Birds

In 2003 I noticed a Yellow Warbler gathering DSV seed fluff left over from the previous year and incorporating it into its nest. The following year I

found DSV fluff in the nest of a house sparrow. Knowing that many birds will gather material close to their nest site and utilize a variety of items from natural to man-made, it seemed logical they would use at least some parts of this abundant plant when building nests. Between 2002 and 2005 I collected the dislodged nests of various species at FWG and put them in the Interpretive Centre. In early 2006, I began examining the material in these nests. With the expert help of botanist Steven Darbyshire, much of the material in these nests was identified. What was found was very interesting!

Nests of seven species from the FWG were analyzed. Generally only one nest per species was collected, but four yellow warbler nests were examined for a total of eleven nests. Ten of the eleven nests used at least some DSV in their construction, and some were made only from this plant. Both the stem fibre and the fluff were used. The DSV stems provide long flexible fibres, strands of which are readily stripped off the winter-softened stems. The seed pods retain a significant amount of fluff over the winter, providing good lining material at a time when early nesters, especially, may be hard pressed to find other similar stuff from plants such as thistles and milkweeds.



Baltimore Oriole Nest

The Baltimore Oriole nest was made entirely of DSV stem fibre and lined primarily with DSV fluff. The nest was exceptionally strong and even after four years, shows no sign of disintegrating. Only one nest of Warbling Vireo was obtained and it too was constructed largely of DSV stem fibre although, interestingly, no DSV fluff was used as lining.

Every Yellow Warbler nest examined used DSV stem fibre and seed fluff, and one was made almost exclusively from this material. All were lined with, amongst other matter, large quantities of DSV fluff. In one nest, the DSV fluff was packed tightly around other fibres on the inside of the nest, as well as tamped down at the bottom to create a thick lining.



Yellow Warbler Nest

Red-eyed Vireo, House Sparrow, Song Sparrow and Red-winged Blackbird nests all contained varying amounts of DSV stem fibre and/or fluff.

Only the American Goldfinch nest did not contain any DSV. However, goldfinches are a common nesting bird at the garden with four, five or more pairs nesting every

year. Only one nest was examined and it may be that an analysis of more goldfinch nests will show use of DSV.

Mammals

Two large winter nests of meadow voles were found in the Old Field area of the FWG, although distorted and difficult to determine structure. Both were made of approximately 90% DSV stem fibre, fluff and seed pods, and 10% grass. At the bottom of each nest was an exceptionally thick pile of DSV fluff which could have been lining, or a seed stash, although very few seeds were found. Whether the voles were indeed stockpiling DSV seeds (while still attached to the fluff) or whether they were simply using the silky fluff for a snug lining is hard to say. But wouldn't it be interesting if DSV seeds formed part of their diet?

I would be interested in hearing of any other uses by wildlife of the Pale Swallowwort. Please contact me at vanessa@magma.ca

References

Darbyshire, Stephen and Laurie Consaul. 1999 Wildlife sometimes benefits from Purple Loosestrif. *T&L* 33(4):181-184
Layberry, Ross A., Peter W. Hall, J. Donald Lafontaine. 1998. *The Butterflies of Canada*, University of Toronto Press.

RULES TO KEEP "FROGWATCHERS" SAFE

Extracted from *Amphibian Voice*, newsletter of the Adopt-A-Pond Wetland Conservation Programme, Toronto Zoo

It's always a good idea to go to a wetland with another person. But if you are planning on going alone, make sure that you ALWAYS let someone know where you are going and when you plan on getting back.

Muck: Wetlands can sometimes have very deep, soft soils and it can be very easy to get stuck. This is when it can come in handy to have another person around.

Poisonous Plants: Is there poison ivy near your wetland? Make sure that you know what kinds of plants in your area are dangerous to touch, and that you know what they look like.

Deep Water: Sometimes the water in wetlands can be deeper than you might think. Never wade into the water. It is best to observe species from the banks or edges of the wetland.

Clothing and other stuff: There are some basic items that you should always have with you:

- Field guides can help you identify whatever species you may encounter
- Long pants and shirts: Even when it's hot out, it's a good idea to wear long sleeves and pants. This helps protect your skin from sunburn, insect bites and scratches.
- Hat: A hat with a wide brim can keep your face from getting sunburned
- Sun screen: No one likes a sunburn! Make sure that you wear sunscreen on any exposed skin.
- Insect Repellant: Wetlands are good places for frogs and toads, but they are also a good place for biting insects.

If you wear bug spray, remember to wash your hands thoroughly before you handle frogs, toads or tadpoles.

Now that you know the rules for looking for frogs and toads, you are ready to be an official FrogWatcher. Visit Adopt-a-Pond's website www.torontozoo.com/adoptapond to learn more about how you and your family can become FrogWatchers.

BRACKET FUNGI

Unlike familiar mushrooms, bracket fungi possess pores not gills and grow on trees and logs, not on the ground. There are four prolific common species.



Artists' Conk (*Ganoderma applanatum*) is a perennial that grows on living trees and freshly cut logs and it increases in size by growing a new outer ring each year. It has a dull brown surface and an underside of creamy pores so minute that some people enjoy drawing pictures on it, hence the common name. Not striking in itself, it does produce a cloud of rust-coloured spores.

Chicken of the Woods, Sulphur Shelf (*Polyporus sulphureus* or *Laetiporus sulphureus*), rated in Roger Phillips' *Mushrooms of North America* as "the most popular edible polypore." It fruits on dead or living conifers from May to November.



Dyrad's Saddle (*Polyporus squamosus*) has creamy oval shelves covered in brown blotches. It fruits in spring and fall and can enlarge to soup-plate size.



Hemlock Varnish Shelf (*Ganoderma tsugae*), is maroon-brown and aptly named for it does look as though it has been lacquered. The similar *G. lucidum* grows on deciduous trees and has an interesting history. It is called Reishi in the stores, though the Chinese know it as Ling Chih and use it like ginseng. In the time of the Emperors it bore the legend of being the Mushroom of Immortality. If a peasant was caught with a cache which he was not in the process of delivering to the royal household, it was as much as his life was worth.

There are, of course, many other striking species in this enormous group. There are the lovely little Turkey Tails (*Trametes versicolor*) which make clusters of small shelves in bands of brown to orange-red or gray to blue-green, usually covering logs. There is the Red-banded Polypore (*Fomitopsis pinicola*) which fruits all year and Beefsteak Fungus (*Fistulina hepatica*), with flesh containing a blood-like sap "reminiscent of raw meat" (Phillips).

There is the Cinnabar Polypore (*Pycnoporas cinnabarinus*) with its brilliant orange-red pores and the Hoof or Tinder Fungus (*Fomes fomentarius*) which looks exactly like a hoof and is second only to birch shavings for starting a camp fire. The White Cheese Polypore (*Trametes albellus* or *T. chioneus*) is credited with smelling fruity rather than cheesy while the strange little ground-dwellers the Carnation Fungus (*Thelephoras carophyllea*) and the Earth Fan (*T. terrestris*) both look like small chocolate-coloured versions of their common names.

And then, of course, there are all the other species in the bracket family. Add in the coral fungi, tooth fungi, jelly fungi, sac family, boletes and the multitude of gilled mushrooms and one could say that nature certainly went overboard in the variety and ingenuity of fungal design. No wonder those who make the discovering and identifying of fungi their profession as well as their hobby favour taking just one group and making it their specialty.

Article and drawings by Eva Davis

Remember! Don't eat any mushrooms unless you are an expert in their identification. Eds.

KEEPING IN TOUCH

Sorry I'm late. Only just got your card, and got to the page in the magazine reminding me at the same time! I panicked that my membership was late, as I love choosing walks. Then I remembered the Internet! Phew! Fabulous walk with Carol Sellers; so caring and so knowledgeable. I'm now caring for six monarch caterpillars, and feel like a happy child! Thanks to Carol for saying it was O.K. to collect the eggs and minute caterpillars as a rescue mission. Thank goodness I grow milkweed ... Didn't know the caterpillars would shed. Thanks to one and all at TFN.

Ann Leon

These shots were taken at 7:00 pm at a distance of 15 to 20 feet, Aug 8/06. Location - Don River close to east end of Wynford Dr. Felled tree on plateau approx 20 feet higher than river bed. I haven't sighted the beaver since Aug 8. With no more felled trees at site, they obviously have moved on. There were a total of 6 - one adult and five kits.

Norman McTague



While cycling along Humber Bay this morning, (Aug. 22) in Toronto, I spotted a barnacle goose "grazing" among a group of Canada geese. I did not realize at the time what type of goose it was or I would have paid attention to see if it was banded or not. My wife, daughter and I have also seen what appears to be an otter on two occasions at Humber Bay, once on land, and once swimming. At first we thought it might be an escaped ferret, but it was too robust. It was definitely not a beaver or muskrat. Also last night (Aug. 21) I spotted a merlin hunting some pigeons among a group of high-rises at Martin Grove and Eglinton in Toronto.

David Meyler

Re: Sept. 5 walk to Sam Smith Park led by Don Burton

It was a warm cloudy day and a dozen or so bird enthusiasts came out to look for fall warblers in Sam Smith Park, but were in for a real surprise. When birding, there is always the likelihood of a pleasant encounter with a bird one has not seen before. After 30 years of birding in the Toronto area this does not happen very often. The most one expects is to get a good look at something which has been seen only at a distance in the past. One does not think you will see a tropical stranger in Canada in the autumn.

While in the park I met an old birding buddy. He had to get back to work and so rode off on his bike. After a few minutes he reappeared with an excited look on his face and told me of a strange bird he could not identify. He led me up the path and the bird was still in the location he had seen it. There walking in the short grass eating the seeds from the prostrate knotweed was a yellow bird about the size of a cowbird with a finch's beak and a golden orange on its head. It sure was a bird I had never seen before. No one in the group that saw it had any idea what it might be but we suspected it may have been blown north from the Caribbean. I described it to Carol Sellers and she phoned me up after we went home and said she thought it might be a Saffron Finch. This is a native South American bird but has been introduced into Jamaica and Central America. I googled up the name and a photograph came up on the computer. That was it for sure. I had no doubt, but Carol said I should double check my South American bird book just to make sure there was not a similar species. There was not. I have encountered

KEEPING IN TOUCH, continued ...

tropical birds before on walks but they were all cage birds. Parrots, budgies and things you see in the pet stores. I don't think this bird was an escapee. It makes you wonder how a tiny bird could come so far away from his home. It was a fascinating discovery and a gorgeous bird.

Roger Powley

We are privileged, in Toronto, to have so many natural areas where we can get away from the asphalt, be surrounded by woodlands and enjoy a great variety of plants, birds and intriguing tiny creatures.

On Labour Day, a friend and I set off to explore a park which was new to us – the East Don Parklands where a footpath meanders along the East Don between Finch and Sheppard. We were delighted by the many wildflowers and, being novices, got satisfaction from being able to identify some of them (wild teasel, jewelweed, New England aster, Canada goldenrod, black-eyed Susan, brown knapweed, Joe Pye weed, common tansy, common evening primrose), poring over our field guide and wishing we had a TFN outings leader along to assist us. Was that tall yellow flower Jerusalem artichoke? ... woodland sunflower? As we



Drawing of Black and White Warbler by A. Power

enjoyed our picnic lunch beside a picturesque pond where mallards swam lazily, we admired magnificent deep pink water lilies and wondered why we couldn't find them in our field guides. We were concerned to see such an infestation of dog-strangling vine. Is it going to choke out all the other plants which give us so much pleasure?

It was fun to photograph a snail laboriously carrying its shell across the footpath, to watch bees, butterflies and dragonflies, and to listen to the sounds of crickets and cicadas. We spotted a few birds – goldfinches, blue jays and chickadees, a Hairy Woodpecker, a cardinal and, the greatest treat for me, a beautiful Black and White Warbler.

Among the many people enjoying the park on the holiday Monday, it was gratifying to see a group of teenaged boys being led on an adventurous exploration of nature, hunting for snakes and obviously having a great time. I had pangs of regret that the TFN no longer has a Toronto Junior Field Naturalists' Club to foster a love of nature in young people.

I'm pleased to see there will be a TFN outing to the East Don Parkland on October 28th, and hope some of you will enjoy it as much as we did.

Wendy Rothwell

Ed: Have you discovered a "new" park recently? Do you have a park in your neighbourhood which TFN members might enjoy? Have you been on a "special" TFN outing? If so, please share this with your fellow members by submitting a short item for the newsletter.

On a warm fall day
 Massed orange butterflies
 Monarch pollution

Haiku by Aarne Juhola

September 7, 2006 - "biggest day ever" for Monarchs along Toronto waterfront

FROM THE ARCHIVES

Beginnings: TFN Newsletter No. 2, October 1938

“The enthusiastic reception accorded the first issue of the Newsletter has been very gratifying. It seems to meet a real need. May it continue to arouse your interest in the Club, and in the world of nature about us all”.

ed. note: The first issue of the TFN Newsletter was 2 pages, the second was 3 pages. We have grown!

50 years ago: TFN Newsletter No. 144, December 1956

“Most readers of the Newsletter will by this time have heard of the extraordinary invasion of three-toed woodpeckers which is taking place in the Toronto region and throughout Southern Ontario this winter. At the time of writing (December 3) more than forty reports of Arctic three-toeds have come from the Toronto area, and at least 3 American three-toeds have been seen here, the first of this species since 1901. The Arctic three-toeds began to appear early in October; the first American Three-toeds turned up at Highland Creek (Maple Creek Farm) on November 11, and was found by George Fairfield.”

Ed. note: Arctic three-toed woodpecker is now known as black-backed woodpecker.

30 years ago: letter dated October 4, 1976 printed in TFN Newsletter No. 302, November 1976

“Council (Borough of Etobicoke) . . . adopted the following recommendation of its General Committee . . . that the report *Toronto the Green*, a publication of the Toronto Field Naturalists' Club dated 1976 be supported in principle and considered during the ongoing studies of open space and valley lands and wherein a more natural regeneration of plants in selected areas of Etobicoke valley lands is outlined, be adopted.”

Ed. note: *Toronto the Green* was first published by TFN in 1976 and was revised in 1992.

Thanksgiving Day 1977: from an article by Helen M. Smith in TFN newsletter No. 311, December 1977

“And what a Thanksgiving Day! To see that sun the whole day after weeks of rain and cloud - it made me feel so glad to be alive! Having occasion to be at home during the day, I flung open all the windows to let in the sights and sounds of the Humber ‘wilderness area’ ravine the apartment overlooks. Man sounds - planes, the distant squeal of tires, the drone of boats on the river, the happy sound of folks on the Humber banks - these only intruded momentarily. The rustle of leaves in the breeze made a perfect backdrop for the many bird calls the whole day long.

First thing in the morning and right through the day, White-throated Sparrows called to each other with their soft 'lisp' as they moved from tree to tree or fed on the wild bird seed tossed out. Occasionally their loud clear 'tchak' alarm note could be heard, and once, their whispered autumn ‘I love Canada, Canada’. (There's another reason the white-throat is one of my favourite birds.) Several times when I'd spot the striped head of one on the grass I'd think the chipmunk was visiting again - but no show.

All day little Brown Creepers with their high thin ‘see’, tirelessly dropped to tree base, ascended the tree, then dropped to the next tree. ‘Fee-bee, fee-bee’! made me reach for binoculars, and there was the Eastern Phoebe, momentarily sitting upright on a bare branch before he darted off for an insect. Yes, the sun had brought out insects. . . . Such a day! So many extra dividends! Praise God for this Thanksgiving Day, for ears to hear, and eyes to see.”

Monarchs ... a poem by Joanne Lynes

It's just by chance
we are here

A cool breeze
to catch a wing
upon a current of air

Light shines upon
hopeful smiling thoughts



Drawing by Diana Banville

A butterfly on a thistle
orange on purple

Half a dozen monarchs
they've returned this year

Sunshine glimmers through
my mind

A confusion of
disappointments
and twittering dreams

IN THE NEWS

Each month, a number of articles cross the editor's desk, some of them sent in by you, our members. Here are a couple from this month's postbag.

The Monarch Invasion

Frances Money drew our attention to this item by Dennis Barry in *Thickson's Woods Newsletter* (summer 2006). Frances said she and Peter really enjoyed seeing many Monarch butterflies on Toronto Islands (especially Hanlan's Point) on Thursday, September 7. In granting us permission to use his article, Dennis Barry said, "The TFN and its members have always been among the staunchest supporters of Thickson's Woods. Much of what has been accomplished here is due to your efforts. Many thanks!!"

2006 will be remembered as the summer of the monarchs. This year, by early August, large numbers were gathering almost every day to roost in sheltered spots in Thickson's Woods. Like many species of butterflies, monarchs are vividly coloured when their wings are open to reveal the upper side, but become nearly invisible with wings folded when roosting. One morning shortly after sunrise, I went to search. At first glance it seemed there were no butterflies. Then a black squirrel raced up a small mountain maple, shaking the leaves, and a cloud of monarchs, a hundred or more, exploded from among the foliage and milled about in the opening before settling back onto new perches. Soon all was still again, but a careful look with binoculars revealed several groups of twenty to forty hanging in densely packed clumps. Within a week, numbers had swelled to tens of thousands, with single trees festooned with thousands of monarchs.

These butterflies will arrive in the fir forests in the high mountains of central Mexico in November, having migrated some four thousand kilometers. Monarchs can migrate as much as 100 miles in a day, fly at 30 miles per hour, and reach altitudes of up to 10,000 feet. Unlike migrating birds, as they move farther south, they actually gain weight to sustain them during winter dormancy.

The surroundings in Mexico are somewhat similar to Thickson's Woods, with openings in the canopy allowing some sunlight to penetrate to the forest floor, and surrounding trees providing shelter from strong winds. Overnight temperatures drop below freezing. Monarchs become inactive below 55 degrees Fahrenheit and become torpid below 40 degrees. This allows them to conserve energy and survive until

spring. They cluster on a few chosen trees, several million to a tree. The drooped folded wings of those on the outside of a cluster shed rain so that inner individuals stay dry.

In February or early March they begin to move north and east. Most will lay eggs on new growing milkweed plants and die, but a few make it much farther north before starting a new generation. Newly emerged butterflies from southern regions move farther north to add to the growing numbers in southern Ontario.

Where have all the sparrows gone?

Another TFN member sent us an article by Jay Ingram from the August 19, 2006, Toronto Star, on the disappearing house sparrow.

Ingram writes about the dramatic decline in the number of House Sparrows in England and North America. He speculates on the causes: an old theory was that the decline was due to the loss of food sources since farmers no longer keep horse feed in their barns – but that couldn't account for the decline in cities. A newer theory is that the sparrows are deliberately keeping themselves slim in order to avoid predators such as Sparrow Hawks and domestic cats – staying light and fast, but being unable to survive the winter when there's less food around.

According to other sources, the Breeding Bird Survey conducted annually in England records a 62 per cent decline in the number of House Sparrows since 1966. One London Borough even has them on an 'endangered species' list! The situation isn't quite so well documented in Canada, where House Sparrows are a rather maligned species

(having been introduced from Europe in the last century). Jon McCracken, of Bird Studies Canada, is quoted in an article by CBC reporter Mary Wiens, as saying that the decline is happening all over the world, and that something's wrong. But what?



Drawing by Joanne Doucette

IN THE NEWS continued...

Peregrine falcons make for special guests at the Sheraton hotel

An article by Andre Blonde in *grapevine* (Downtown Toronto's Community Press), August 2006 (reprinted with permission)

I had an extraordinary encounter last March as I stepped out of my apartment and into a gentle snowfall. As I looked up into the wafts of white fluff, hoping it would be the last of the year, I stopped in my tracks. What I had taken for snowflakes were in fact feathers. The cause of the explosion was a large, fierce-looking bird feeding on a pigeon while perched in a chestnut tree.

Fast forward to July and I find myself on the 43rd floor of the Sheraton Hotel with members of the Canadian Peregrine Foundation (CPF). The CPF is concerned with the welfare of birds of prey at risk, such as hawks, eagles and owls. Peregrine Falcons, however, are of particular importance because they act as a barometer for the health of our environment. The decline of the peregrine and other species was a wake-up call regarding the profound impact of pollution in the health of the planet. Exposure to pesticides inhibited the species' ability to breed, and by 1980 the peregrine was specified endangered in Canada and the U.S. Today, peregrine populations have started to recover, thanks to the North American ban on DDT and the efforts of the CPF and other organizations. There are now 60 to 70 peregrine pairs in Ontario – compared to 1980 when there were no breeding peregrines in the province at all.

At the Sheraton, CPF members gather to witness a banding of a peregrine fledgling named Micah. The process – and ceremony – of securing metal identification bands around a bird's leg has become an annual event where peregrine falcon pairs have established nests.

“The banding is important for monitoring and identifying the sex, age and health of the birds,” says CPF founder Bruce Nash. “It helps us through some of the challenges of the fledge watches, when these young birds take their first jumps and often end up on the ground in those maiden voyages.” The young peregrine falcon is just as vulnerable in the city as in the wild. During maiden flights, fledges come down softly because they are feathered, but they are still at risk from the hazards of the city streets and require repeated rescues. During the fledge stage there is a 60% mortality occurrence. In the

wild, peregrines suffer a mortality rate of up to 90% in their first year, as they are highly susceptible to other predators, such as owls, eagles, foxes and raccoons. “That’s why the fledge watch is so important at the various sites in Ontario” Nash says. “If we can rescue a bird and keep it aloft in those first half dozen or so maiden flights, we can help it beat the better part of that first 60% mortality in its first years.

Micah’s family built their nest on a ledge of the Sheraton’s 43rd floor. This peregrine family is unusual because the father, Wind Whistler, has another family a few blocks away at 18 King Street. Peregrine males are very supportive partners, helping to incubate eggs and provide food, and Wind Whistler has been doing so for both nests. The running joke in the CPF is that this two-timer has a wife on King Street and a girlfriend at the Sheraton Hotel. Jokes aside, what makes the two families unique is the proximity of the two nest sites. These birds are incredibly territorial, and do not tolerate other peregrines in their neighbourhood. These nests have been established for several years now, and it is remarkable that the nests have continued to produce and the birds haven’t killed each other. That the birds continue to tolerate each other is most fortunate, and Nash suspects it is because of the interaction between Whistler and the two females. “When these young juveniles take their first flight, it’s usually in a helter skelter state. They’re all over the place, explains Bruce Nash. “We have juveniles that have managed to keep on their side of the invisible line separating the territories between the two families.”

It’s not just CPF volunteers who are keeping a close eye on the Sheraton nest. Across Canada and the USA, both scientists and enthusiasts are watching the progress of Micah via two web cams, trained above the nest on the hotel ledge. Peregrine juveniles start to fly when they are 40 days old.

To keep up to date on Micah’s progress or for a closer look at the downtown peregrine nests you can visit the web cam pages at the CPF web site www.peregrine-foundation.ca. If you spot a peregrine or any other bird of prey, the site has an identification page and there are regular posts of sightings around the City.

The Foundation welcomes public support and interest, and is always in need of volunteers, especially during the fledge season.



Drawing by
Diana Banville

WEATHER (THIS TIME LAST YEAR)

October, 2005

October was the mildest since 2000 in spite of a strong cooling trend through the month.

The month was divided into three parts. The first six days of the month were summer-like, with continuous sunshine and temperatures rising into the mid-twenties. Fog and haze were prevalent at times.

The period from the 7th-19th was a transitional time, with some rains, a period of overcast weather from a deep flow originating off the Atlantic, and then a series of cold fronts and high winds from a building trough.

The last third of the month was the first extended cool period Toronto has had since May. Temperatures below 10°, considerable cloud cover, and northerly winds prevailed. From the 22nd-28th, it stayed below 10°. Minimum temperatures nonetheless remained relatively high, with freezing being barely attained at Pearson Airport.

The monthly temperature downtown was 11.8° as opposed to the long-term average of 10.6°, while at Pearson the mean was 11.1° (normal 8.9°).

Total rainfall of 47.4 mm downtown and 46.0 mm at Pearson was about 15-20 mm below normal. This was in spite of the increasingly active, blustery weather and two mid-month thunderstorms.

Gavin Miller

FOR READING

Alien Species and Evolution: the evolutionary ecology of exotic plants, animals, microbes and interacting native species by George W. Cox, Island Press, 2004

Anyone seriously wondering about the effects of alien species on the natural environment will find this book of interest. Many interesting examples discussed. Much to think about.

The Cancer-smart Consumer Guide 2005, published by the Labour Environmental Alliance Society, 1203 – 207 West Hastings St., Vancouver, B.C., V6B 1H7. 604-669-1921. info@leas.ca www.leas.ca

Find out about pesticides, cleaning products, food, personal care products, plastics, etc. Specific products are identified and chemicals to be avoided noted. Yes, pesticides are unhealthy, but so are many other products we use every day.

Wild Orchids of the Canadian Maritimes and Northern Great Lakes Region by Paul Martin Brown with drawings by Stan Folsom, University Press of Florida, 1-800-226-3822 www.upf.com

The publisher says: “More than 60 native orchid species can be found in the fields and forests of the Canadian Maritimes and shorelines of the northern Great Lakes, and this indispensable guide is your key to finding them all!” Geographical coverage includes Lake Ontario’s north shore.

Above three suggestions submitted by Helen Juhola

The Essential Aldo Leopold: Quotations and Commentaries edited by Curt Meine and Richard L. Knight, University of Wisconsin Press, 2006, paperback.

“The writings of Aldo Leopold, from conservation education to wildlife ecology, from wilderness protection to soil and water conservation, continue to have a profound influence on those seeking to understand the earth and its care.”

COMING EVENTS

Toronto Ornithological Club – Jim Baille Memorial Bird Walks

Aimed at the intermediate birder, but beginners are welcome. Free. If you have questions about any TOC activities, please feel free to contact us at info@torontobirding.ca or, for further information, visit www.torontobirding.ca/events.html

- Saturday, October 7, 8:00 a.m. (all day), Toronto Islands – “Late Migration” – Leader Herb Elliott. Meet at Toronto Islands Ferry Docks at the foot of Bay St. to catch the 8:15 am ferry to Hanlan’s Point. Bring a lunch.

Toronto Public Space Committee.

Sunday, October 15, noon. Human River Parade. Come and join the Toronto Public Space Committee wearing your best blue on October 15, for the second annual Human River. A fun-filled afternoon of music-making, performance and parade that follows the path of the buried Garrison Creek. With everyone wearing blue, we become a human river bringing the Garrison Creek back to life! The event starts at 12 noon in the Christie Pits Gazebo with music and craft making. The parade will begin around 1 p.m. winding through the city to end at Fort York around 4 p.m. Easy walking.

Toronto Entomologists’ Association (TEA)

Saturday, October 21, 1 p.m. – Insects of the Costa Rican Cloud Forest . Speaker Jessica Grealey. Meeting takes place at University of Toronto in Northrop Frye Hall, Room 113. For information visit www.ontarioinsects.org

Annual Chrysanthemum Show – “A Walk in the Woods”

October 20 to 29, 10 a.m. – 8 p.m. Gage Park, Hamilton. Admission \$2 to \$3. For more information visit www.hamilton.ca/mumshow or phone Sheila Munday at (905) 546-2424, ext. 4179.

Don Watershed Networking Forum

Thursday, October 12, 6 p.m. – 9:30 p.m. Please RSVP by Sept. 18 by calling (416) 661-6600, ext. 5283 or e-mail Amy Thurston at athurston@trca.on.ca. Indicate which organization you will be representing at the forum. This forum will focus on watershed management activities in the Don watershed. Location: St. John’s York Mills Anglican Church Auditorium, 19 Don Ridge Drive, North York. (York Mills subway station).

High Park

Sunday, October 1, 12 noon – 4:30 p.m. – Harvest Festival and Native Plant Sale at Colborne Lodge.

Walks and Events at the Brickworks

Visit www.evergreen.ca

Royal Canadian Institute lecture series

Lectures are held at 3 p.m. at the J.J.R. Macleod Auditorium, Medical Sciences Building, University of Toronto, 1 King’s College Circle, Toronto. For information, call (416) 977-2983.

- Sunday, October 15 – *Stem Cells: The Possibilities for Regenerative Cell Therapy*. Speaker: Ian Rogers
- Sunday, October 22 – *Science, Technology, Society and the Environment: Education for the New Millenium*. Speaker: Erminia Pedtretti
- Sunday, October 29 – *The Curious World of Probabilities*. Speaker: Jeffrey S. Rosenthal.

Toronto Historical Association

Saturday, October 21, 11 a.m. to 4 p.m. at Tollkeeper’s Cottage, Bathurst & Davenport – a heritage apple and pumpkin sale, baking and jams for sale. For information, call (416) 515-7546.

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