

TORONTO FIELD NATURALIST

Number 528

WINTER ISSUE

December 2004



RIVERDALE PARK
site drawing by Mary Anne Miller, 2003

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TFN MEETINGS

Sunday, December 5, 2004 - TORONTO WILDLIFE CENTRE: HELPING PEOPLE AND WILDLIFE IN THE URBAN JUNGLE
at 2:30 pm
at Emmanuel College
75 Queen's Park Cres. East
VISITORS WELCOME!
Suitable for the whole family!

- This presentation will outline some of the challenges facing wildlife in our city, what the staff and volunteers of the Toronto Wildlife Centre do, and how people can help wildlife at their homes and workplaces.

+ a "social hour" with free coffee and juice beginning at 2 pm

NEXT MEETING: Sunday, February 6, 2005

NEXT NEWSLETTER: February (to be mailed in mid-January)

TFN OFFICE HOURS: Friday mornings from 9 am to 12 noon
Memberships, TFN publications, miscellaneous nature books, hasti-notes, art, pins, decals and crests are all available.

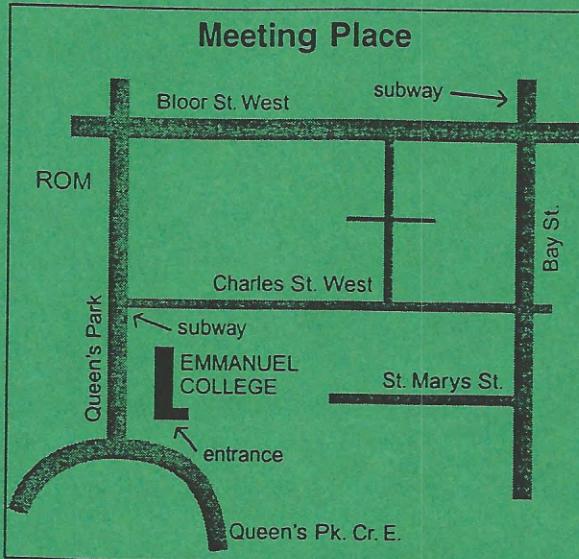
WHEELCHAIR ENTRANCE:

second door south of Charles St. on Queen's Park Crescent East.

Note: Door does not have automatic opener.

Elevator on inside to the right.

Lecture room is one floor below street level.



SOUTH ENTRANCE:

at south end of building, down a few steps of an outside stairwell to reach Electronic Classroom 001.

Some people fear cold and never give it a real chance, like children who won't try a new food. Others, who enjoy winter sports, have at least some tolerance for it, an ability to bundle up, get active, and feel the regenerative thrill of thriving on a cold, snowy day.

from THE WHALE AND THE SUPERCOMPUTER: ON THE NORTHERN FRONT OF CLIMATE CHANGE
by Charles Wohlforth, North Point Press, 2004

FOR ENJOYMENT OF WINTER OUTINGS

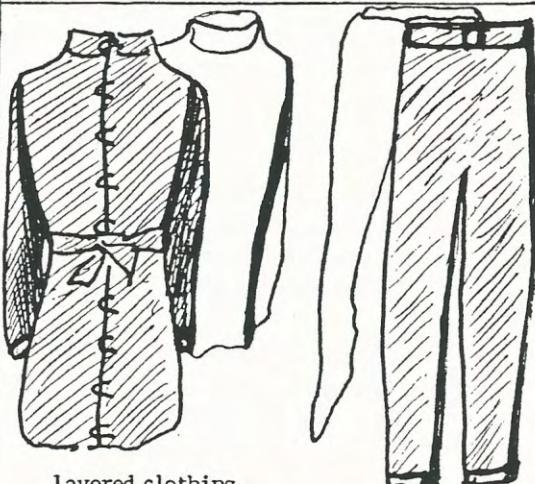
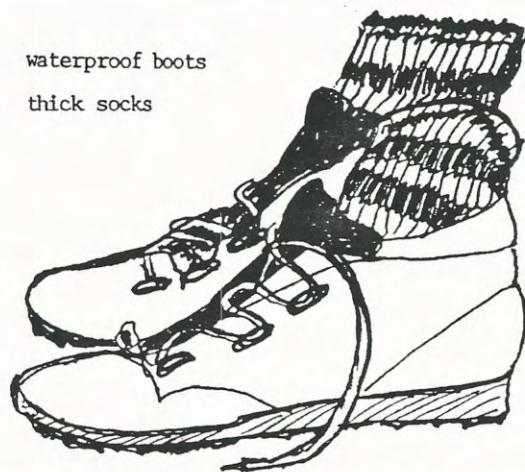
peaked woolly cap with ear muffs



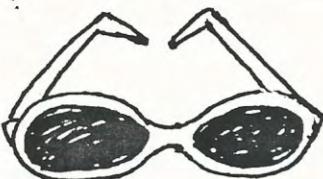
mittens over gloves



waterproof boots
thick socks



layered clothing



sun glasses, if desired

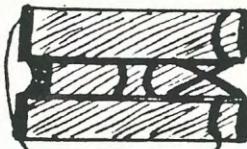
snack



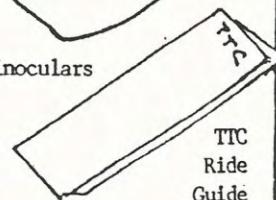
thermos for
hot drink



camera



binoculars



waterproof notebook

Eva Davis

TTC
Ride
Guide

TFN OUTINGS

REMEMBER: Children and visitors are welcome on all outings but please, NO PETS! To get to outings on time, check TTC routes and schedules by calling 416-393-4636. Check the weather by calling 416-661-0123 so you will know what to wear on outings which go rain or shine.

Wednesday	HIGH PARK - nature walk
Dec. 1	Leader: Pat Jones
1 pm	Meet at the park entrance on the south side of Bloor St. West opposite High Park Ave. Bring binoculars.
Saturday	RIVERDALE FARM - nature arts
Dec. 4	Leader: Mary Cumming
10:30 am	Meet at the southeast corner of Sumach St. and Winchester St. Bring what you need for photography, sketching or painting, and anything you wish to show the group when we compare our morning's work after lunch.
December 5	TFN MEETING
Wednesday	ROYAL ONTARIO MUSEUM - tour of green plant herbarium
Dec. 8	Leader: Deb Metzger
2 pm	Meet at the staff entrance at the south side of the Royal Ontario Museum. There is controlled access, so please be on time.
Saturday	ROUGE MARSHES - nature walk
Dec. 11	Leader: Orval White
12:30 pm	Meet at the Glen Rouge parking lot on the south side of Kingston Rd. east of Sheppard Ave. East/Port Union Rd. (Take 85A Sheppard East bus, then walk down the hill.) Bring lunch and binoculars. This will be a three-hour walk.
Wednesday	BELTLINE - nature walk
Dec. 15	Leader: Roger Powley
10 am	Meet at the northeast corner of Caledonia Rd. and Eglinton Ave. West. Bring lunch and binoculars.



- TFN events are conducted by unpaid volunteers.
- The club assumes no responsibility for injuries sustained by anyone participating in our activities.
- Children are welcome at all TFN events, but must be accompanied by an adult.

DECEMBER OUTINGS (cont'd)

Saturday LESLIE STREET SPIT - birds
 Dec. 18 Leader: Doug Paton
 10 am Meet at the park entrance (the foot of Leslie St. at Unwin Ave.)
 all day Bring lunch, binoculars and warm clothing.

Sunday TADDLE, CORKTOWN and SUMACH CREEKS - urban ecology
 Dec. 19 Leaders: Peter Hare, Ian Wheal & Helen Mills
 2 pm Meet at the northwest corner of Richmond St. East and Sherbourne St.
 This is a joint outing with the North Toronto Green Community.

Winter begins Tuesday ALLAN GARDENS - nature walk
 December 21 Leader: Helen Juhola
 2 pm Meet at the greenhouse entrance on the south side of Carlton St. just east of Jarvis St.

Tuesday SAM SMITH PARK - birds
 Dec. 28 Leader: Doug Paton
 10 am Meet at the southwest corner of Lake Shore Blvd. West and Kipling Ave. Bring lunch and binoculars.

.....
 Sunday EAST DON VALLEY - nature walk
 January 2 Leader: Roger Powley
 12:30 pm Meet at the southeast corner of Sheppard Ave. East and Leslie St. Bring a lunch and binoculars.

Thursday MARKET GALLERY - heritage event
 Jan. 6 Leader: Gail Gregory
 2 pm Meet at the southwest corner of Front St. East and Jarvis St. We will have a guided visit to the current display "Reconnecting with the Don: Balancing the Valley". [Free. Bring a friend.]

Saturday DEERPARK LIBRARY - nature arts (photography)
 Jan. 8 Leader: Robin Powell
 2 pm to 4 pm Meet on the second floor of the library which is on the north side of St. Clair Ave. East, one block east of Yonge St. Bring your own nature slides (as many as 20), or just come and enjoy looking. A projector and screen will be provided. If you have any questions, please call the TFN office (416-593-2656). Snap-shots are also welcome.

Sunday WEST DON TRIBUTARIES - nature walk
 Jan. 9 Leader: Alexander Cappell
 2 pm Meet at the northwest corner of Steeles Ave. West and New Westminster Dr. (halfway between Bathurst & Dufferin).

Thursday PROSPECT CEMETERY - trees
 Jan. 13 Leader: Jack Radecki
 10 am Meet at the gates on the north side of St. Clair Ave. West just west of Lansdowne Ave. Bring lunch.

JANUARY OUTINGS (cont'd)

- Saturday WEST LAKESHORE PARKS - birds
Jan. 15 Leader: Valerie Allen
10:30 am Meet at the southeast corner of Lake Shore Blvd. West and
all day Kipling Ave. Bring lunch and binoculars, and warm clothes.
- Sunday MT. PLEASANT CEMETERY - nature walk
Jan. 16 Leader: George Bryant
1 pm Meet at the Davisville subway station.
- Tuesday UNDERGROUND TORONTO - urban landscape
Jan. 18 Leader: Ed Freeman
10 am Meet at the northeast corner of Yonge St. and Queen St. East.
Morning only.
- Sunday GERMAN MILLS PARK - nature walk
Jan. 23 Leader: Theresa Moore
2 pm Meet at the northeast corner of Steeles Ave. East and Leslie St.
- Wednesday HIGH PARK - winter birds
Jan. 26 Leader: Barbara Kalthoff
10 am Meet at the park entrance on the south side of Bloor St. West
opposite High Park Ave. Bring lunch and binoculars and dress
appropriately.
- Sunday G.R. LORD PARK - nature walk
Jan. 30 Leader: Heather Mackey
10 am Meet at the northeast corner of Finch Ave. West and Dufferin St.
Bring lunch and binoculars.

□



T. Hood

PRESIDENT'S REPORT

Several years ago I moved to Mississauga to the community of Port Credit. It was almost inevitable that my interests in natural area preservation shifted west to Peel and Halton Regions. However, there are still natural areas of Toronto that will never cease to be special for me. During the more than thirty years I've wandered the valleys and ravines of Toronto, I have discovered (and sometimes rediscovered) pockets of relatively unspoiled nature. Until very recently I thought the best part of German Mills Creek, a tributary of the East Don River, was in Toronto (of course), north of Old Cummer Road and west of Leslie Street. A call from a TFN member who lives near there corrected that delusion. She drew the TFN's attention to an initiative by York Region and Markham to the development of a master plan for German Mills Settlers Park and that we should get involved. This is the area of German Mills Creek north of Steeles Avenue East and south of John Street in Markham. I've driven along both Steeles and John in this area for decades but could never make the connection to German Mills Creek in Toronto itself. This park consists of formal parkland, a natural riparian zone along German Mills Creek itself, and a large open area that was once a landfill. The development of a master plan, especially for the landfill itself, should be especially challenging. Fortunately there's already strong community interest (the Markham Environmental Alliance) in preserving the remaining natural areas. I will update you once I hear more.

The new provincial Liberal government has done (and probably will do) many things to disappoint those who elected it. However, the recent introduction of legislation for a Toronto Greenbelt should dispel much of the pessimism.

[For more growth in the booming GTA. However, we shouldn't fool ourselves that land on this speculators and developers will just pack their bags and move on. They see will adapt and probably concentrate on marginal lands and infill within page 22.] already urbanized areas. My fear is that in the long run they will leapfrog the Greenbelt and resume business as usual to the north.

Robin Powell



THE AMERICAN KESTREL, a Toronto breeding bird, also passes through as a migrant. In 1998, the High Park Hawkwatch counted 1287 in three months of the fall. It has been reported in Toronto in all months of the year except June, according to TFN's TORONTO REGION RECORDS.

Museum drawing is by Betty Paul.



TFN FEE INCREASE

I have often been asked "how can the TFN possibly provide all the activities it does for the low membership fees it charges?" I reply that we have a large number of volunteers and in total they donate an amazing amount of time, none of which is paid for. However there are some things that cannot be done by volunteers. In order to get 1000 newsletters to members in good time for the activities listed therein we have to use a professional printer and mailer. Also necessary are office rental and insurance. With inflation, our expenses are now running well ahead of our receipts.

Even with an increased membership fee you will still be getting a bargain. At the time of our last increase I calculated the value of the time contributed by all our volunteers. Most of the time was valued at the minimum wage rate so the figures were not inflated. I was shocked. The value of the volunteer time contributed per member was \$335.00. It would be quite a bit higher now, and for an average membership fee of \$25.00.

Consider alternative activities. One evening out costs you more than a whole year's activities with TFN. Even with a much higher membership fee, you have a tremendous bargain.

Aarne Juhola
Secretary-Treasurer



GLIMPSED AT
RIVERDALE Park

(drawing from
memory by
Diana Banville)



EDITORIAL REPORT

Many thanks this past month to Muriel Miville who helped with the typing and to Elizabeth Gladstone who has volunteered to help with the newsletter.

This month, thanks to Wendy Rothwell who has volunteered to help with the typing.

Oh yes, and thanks to those many members who send us newspaper clippings, drawings and stories.

The Editorial Committee

Editor: Helen Juhola

Poetry, Art and Nature Observations: Diana Banville

Assistants: Eva Davis, Karin Fawthrop, Nancy Fredenburg, Elizabeth Gladstone, Toshi Oikawa, Marilynn Murphy, Robin Powell, Wendy Rothwell

Printer: DM Printing

Mailer: Perkins Mailing Services

□

IT'S YOUR NEWSLETTER

Requested: Essays (no longer than 500 words), reviews (no longer than 300 words), poems, cartoons, sketches and newspaper clippings.

Subjects: plants, animals and natural areas in the Toronto region, especially reports of personal experiences with wildlife, including locations, dates, and any sources consulted.

Please include your name, address and telephone number so submissions can be acknowledged. With newspaper clippings, include source and date of each clipping.

Time dated material such as notices of meetings should be submitted at least six weeks before the month in which the event is to take place.

Send material to: Toronto Field Naturalists
2 Carlton St., #1519
Toronto, Ont. M5B 1J3

As individuals, we can make our views known to our political representatives and the media. This holds much more weight than a letter coming from [a] Board.

from "President's Message" by Ann Nightingale in THE VICTORIA NATURALIST, Vol. 60.6, May/June 2004

PROMOTING TFN

A hearty thank you to Nina Carlisle, John Eastwood, Kathleen Fall, Constantine Freire, Elizabeth Gladstone, Mildred Maasland, Melanie Milanich and Andre Vietinghof for sharing their enthusiasm about the TFN and helping to spread the word at various functions in the city.

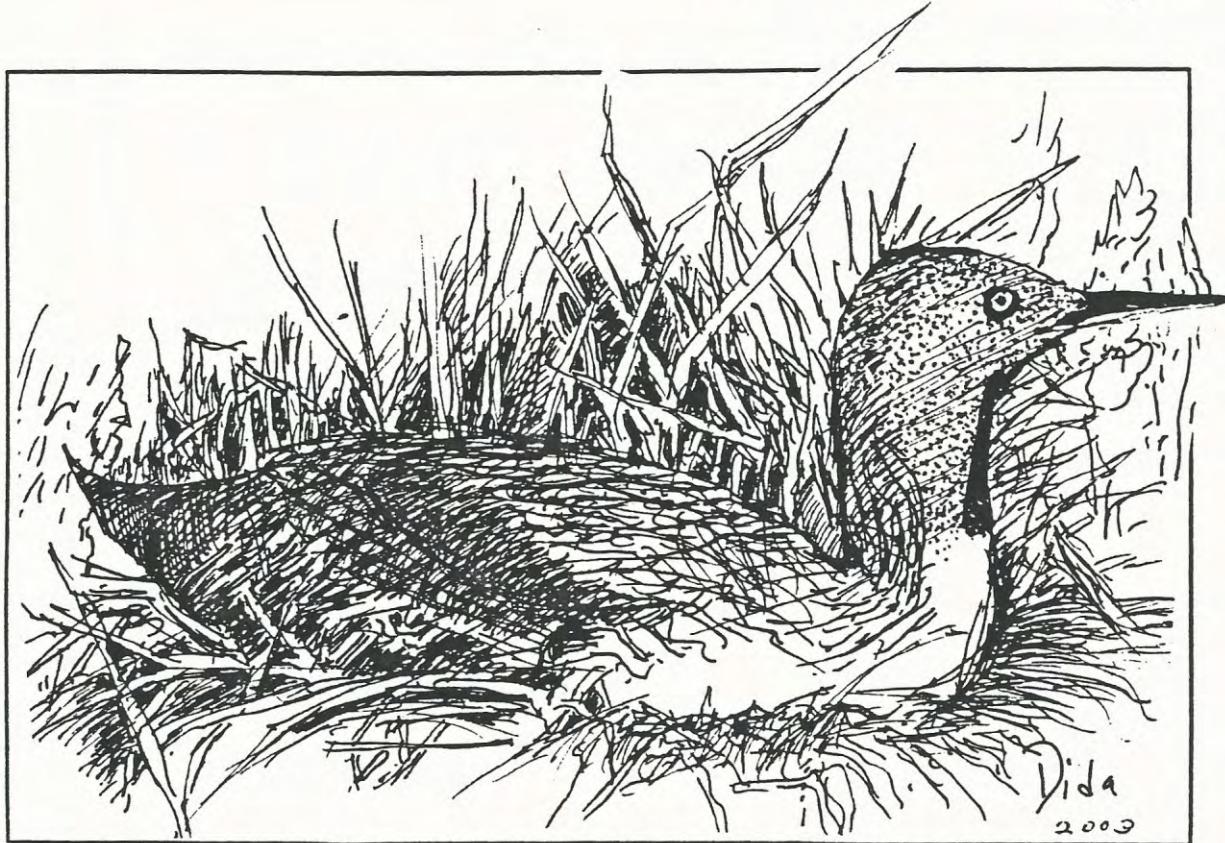
Can you help? Do you have a place in your apartment building ie. laundry room, condominium or local neighbourhood hangout to place a poster promoting the TFN? Please call Pinky Franklin (416)488-3226 or the TFN office (416)593-2656.

The perfect Christmas/holiday gift:

- doesn't need to be gift-wrapped
- is delivered directly to the recipient
- comes 8 times in the year, not just in December
- gives access to over 100 outdoor experiences
- promotes good fellowship with like-minded people
- is informative, educational and entertaining

Give a Toronto Field Naturalists membership.

Pinky Franklin



"Red-throated loon on nest" - drawing by Diana Banville
based on C. Hampson photo

KEEPING IN TOUCH

September 30, 2004

Thank you for participating in our Toronto Region Conservation Day on September 22nd. By all reports the event was a big success. There was a real "buzz" about the office all day that seemed to last through the week.

Our employees were very impressed with the energy of the exhibitors and appreciated the information that they were able to collect to use both in the workplace and at home. I hope that you too felt it was a worthwhile use of your time.

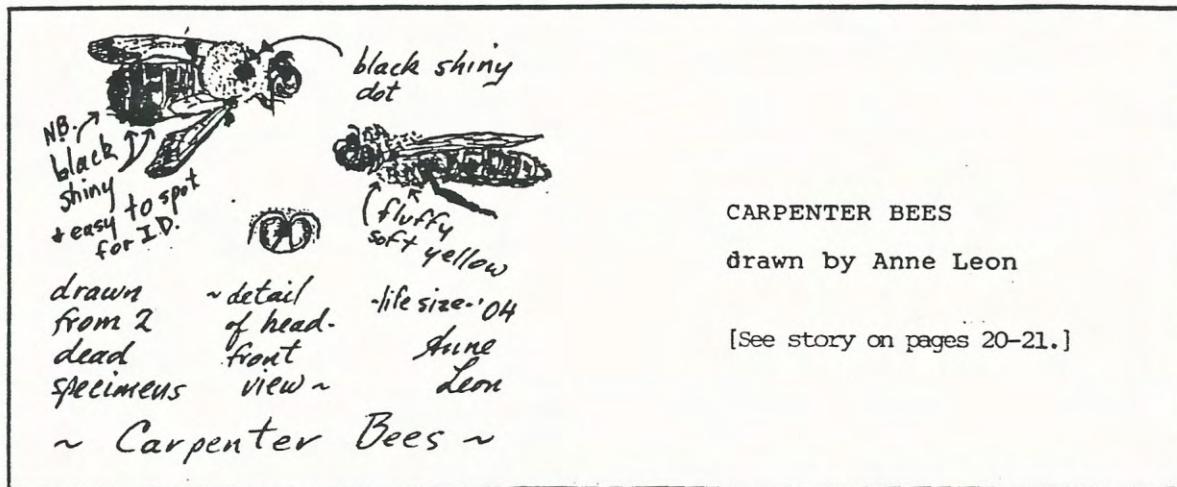
Our Toronto Region Conservation Team, once they had time to relax and reflect on the day's activities, were pleased with the turnout and interest. I do believe that we were able to meet our objective - to "get out the message" about why and how we all can change our habits to conserve energy and appreciate our environment, which in turn might help towards ensuring a healthier future for the next generations.

Although we still have lots to do, we're making people more aware and informed. Again, many thanks to you and your colleagues for helping to make our Conservation Day a meaningful 'catalyst for change'.

Cheryl Ward
Ministry of Community &
Social Services

Comment: Our members carried display units and staffed our information table, talking to visitors and selling publications and memberships.

□



PROJECTS

WINTER WILDFLOWERS OF TORONTO REGION

In December, about 10 late-fall Eurasian wildflower species pop up in bloom. Two native winter wildflowers are found in bloom:

1. witch-hazel - late September till November and even sometimes in December and January.
2. skunk cabbage - March to May but it is said it too, may start to bloom as early as December and January.

► Please look for such wildflowers should conditions be suitable - mark reports with a star symbol and send to the Toronto Field Naturalists office.

Diana Banville

JAMES L. BAILLIE RESEARCH GRANTS AVAILABLE

Each year, Bird Studies Canada's James L. Baillie Memorial Fund provides grants to amateur and professional naturalists for bird research and conservation projects across Canada. Applications are now available for projects to occur in 2005. Regular Grant applications are due 15 December 2004 and Small Grant applications are due 15 January 2005. In addition, the James L. Baillie Student Award for Field Research is awarded each year to a student at a Canadian university. For more details and to obtain application forms, visit www.bsc-eoc.org/organization/jlbfmf.html.

from BIRDWATCH CANADA, Fall 2004, Number 29

A GIFT SUPPORTING A CAUSE

TORONTO TREE PORTRAITS, a 2005 calender, celebrates the importance and uniqueness of our tree heritage with a selection of tree portraits of some of Toronto's most remarkable trees. The annotated tree portraits provide a unique and innovative perspective on Toronto's past and serve as a key to the future. The proceeds from the sale of the calendars will go directly to the Toronto Parks and Trees Foundation, a charitable non-profit organization that was founded in 2002 in response to a growing concern about the state of parks and trees in Toronto.

► The calendar, priced at \$15.00, can be ordered from the Toronto Parks and Trees Foundation, 157 Adelaide St. West, Suite 123, Toronto M5H 4E7 or call 416-397-5178.

►

Spending time outdoors, forced to accept your own small size, you perceive the world as progressively larger and more mysterious. Vulnerability teaches respect for the power and complexity of nature.

from THE WHALE AND THE SUPERCOMPUTER: ON THE NORTHERN FRONT OF CLIMATE CHANGE
by Charles Wohlforth, North Point Press, 2004

PROJECTS (cont'd)

HELP PROTECT THE NIAGARA ESCARPMENT

The Coalition on the Niagara Escarpment (CONE) and Protect Our Water and Environmental Resources (POWER) are participants in a hearing they initiated over a proposal by Dufferin Aggregates to extend its existing quarry operations in Milton, Ont. The existing quarry is already the largest in Canada. If approved the application would allow Dufferin Aggregates to extract 65 million tonnes of aggregate over a 10 to 12 year period from approximately 175 acres of land predominantly located within the Niagara Escarpment Plan Area.

CONE and POWER objections to this proposal relate to appropriate land use planning, issues of water quality and supply, the close proximity of sensitive environmental and water resource features and the adequacy of Dufferin's engineering design.

The hearing which began in January 2004 is still not over as of the end of October. Expenses for CONE and POWER have reached \$130,000 despite the serious and consistent effort of all their expert witnesses to cut costs and donate much of their time and energy.

Although charitable receipts cannot be issued for donations, this is a most worthwhile cause to support. Contributions should be sent to CONE, P.O. Box 389, Acton, Ont. L7J 2M6. Please indicate on your cheque that your contribution is intended for the "Dufferin Appeal".

The Milton Quarry lies in the heart of Halton Forest which is the largest woodland within 100 kilometres of Toronto. The forest is made up of three adjoining "Areas of Natural and Scientific Interest" (ANSIs) covering 6,400 acres. This is the largest tract of natural vegetated landscape south of Grey County. The quarry also lies within a significant headwaters region that includes several tributaries of Sixteen Mile Creek.

extracted from a Fact Sheet provided by CONE



HE IS A BIRD WATCHER [!?!]

Question: What bird-sighting for you would be akin to an NHL scout spotting the next Gretzky?

Answer: We live in the middle of the city so we don't get any really exotic birds, but when I fish in the summer I see a lot of eagles, and I get a big kick out of eagles. Birding is a several billion-dollar U.S. industry with what people spend on binoculars and spotting scopes and the trips they take to see migratory birds -- but I'm not into it that much. I like birds but I also hunt birds, ducks and pheasants in Massachusetts, Manitoba, Alberta and British Columbia. So I'm not a total geek -- I do shoot some of them.

from "The Life of Brian" [former Canucks General Manager (Brian Burke)] by Joe O'Connor
in the NATIONAL POST, Oct. 29, 2004

Lake Ontario Mid-Winter Waterfowl Inventory

January 11, 2004

Compiled by: Bill Edmunds

Species	TORONTO AREA												Hamilton	Niagara	TOTAL	COMMENTS
	Kingston	Quinte	Presqu'ile	Port Hope	Durham	Route1	Route2	Route3	Route4	Route5	Route6	Route7				
Red-throated Loon	1														1	
Common Loon	6							1						1	1	8
Pied-billed Grebe	1													2		3
Horned Grebe	2													1		3
Red-necked Grebe	2								1		1			2	2	6
Double-crested Cormorant	17			1										24	23	65
Tundra Swan	489		2											3		494
Trumpeter Swan	8						15							19	79	106
Mute Swan	47		109	10	3	11	7	26	12	43	141	37	277	101		547
Greater White-Fronted Goose																
Snow Goose							2							1	3	2
Brant																
Canada Goose	24948	257	12	1751	2358	9825	820	180	10	1209	2590	1937	16571	7712	1032	54641
Wood duck							1							1	2	3
Green-winged Teal	4													1	24	29
American Black Duck	2650	11	4	94	49	242		38	17	17	248	202	764	353	44	3969
Mallard	21616	32	2	837	79	1037	390	1072	1035	878	4035	2050	10497	4219	651	37933
Northern Pintail	11					2		1	1					4	21	36
Blue-winged Teal															1	Third Record!
Northern Shoveler									1					3	4	8
Gadwall	444					2	15	4	215	5	64	541	232	1076	45	12
American Wigeon	11					1	1				59	34	94			106
Canvasback	2						1			4		1	6	94		102
Redhead	946		28	2	95	91	4	190		225	764	2212	3486	480		5037
Ring-necked Duck	25							1		1			2	35		62
Tufted Duck																
Greater Scaup	1210		12	43	1476	2129	2	116	644	558	9924	2499	15872	17702		36315
Lesser Scaup	60			2	12	7	5	11	12	8	13	33	89	2131		2294
Scaup sp.													0		6	6
King Eider													1	4	1	6
Harlequin Duck																
Long-tailed Duck	10682	1	1131	68	12	85	609	725	1343	1582	254	2	4600	13624	63	30181
Black Scoter	2													1		3
Surf Scoter	5								1					1	42	
White-winged Scoter	155			2			6	8	12	1	2	5	34	3501	270	3962
Common Goldeneye	10096	100	343	536	1119	1255	120	269	110	89	1331	894	4068	4977	491	21730
Barrow's Goldeneye																
Bufflehead	2709	7	217	170	493	456	54	140	54	257	612	592	2165	776	573	7110
Hooded Merganser	6					1	5		4	5	45	24	1	84	21	113
Common Merganser	9297	4	7	41	21	132	8	5	4	55	167	16	387	679	1110	11546
Red-breasted Merganser	949		3	16	51	28	11	5	19	27	49	3	142	181	735	2077
Ruddy Duck														97		97
American Coot	29										4		4	19	3	55
Swan sp.							5						5			5
Merganser sp.	2737															2737
Duck sp.	1008	35					22		30				52		61	1156
Mallard X Black Duck			2					6		6			12			14
Total Birds	90175	447	1870	3575	5772	15344	2064	3016	3313	5071	20765	10751	60324	56963	5077	224203
Total Species	31	7	12	14	15	19	15	21	15	18	19	18	28	34	14	36
Party-hours	40	6.5	8	14	9.75	8.5	7	7.5	6.5	8	6.5	8	52	21	12.5	163.75
Bald Eagle	24	1											0	1		26

LAKE ONTARIO MID-WINTER WATERFOWL INVENTORY

The weather during the count on Jan. 11, 2004 was "fair to poor", depending on the area. There was steady snowfall for most of the day, along with a strong westerly wind (40-60 km/hr) which resulted in difficult viewing conditions for much of the lake. Some of the eastern areas also experienced slippery roads and had difficulty completing their entire routes. Most bays, channels and inner harbours were completely frozen, so the only waterfowl found were on the exposed open lake. Temperatures ranged from -10°C to -5°C.

This was the 58th "Duck Count" for the Toronto Ornithological Club and the 14th year that the entire Canadian shoreline of Lake Ontario was covered.

Counted were 224,203 waterfowl from 36 species. This is the lowest total since 1998, and is undoubtedly due to the weather conditions. Record high numbers were reported for the following species: Pied-billed Grebe, Red-necked Grebe, Trumpeter Swan, Mute Swan, Canada Goose and Mallard. High numbers were reported for Tundra Swan, Snow Goose, American Black Duck, American Wigeon, and Bufflehead. Low numbers were reported for several species, with Long-tailed Duck having the largest decline; only 30,181 were recorded, which is the lowest since 1995. 26 Bald Eagles were reported, with most (24) being found in the Kingston area.

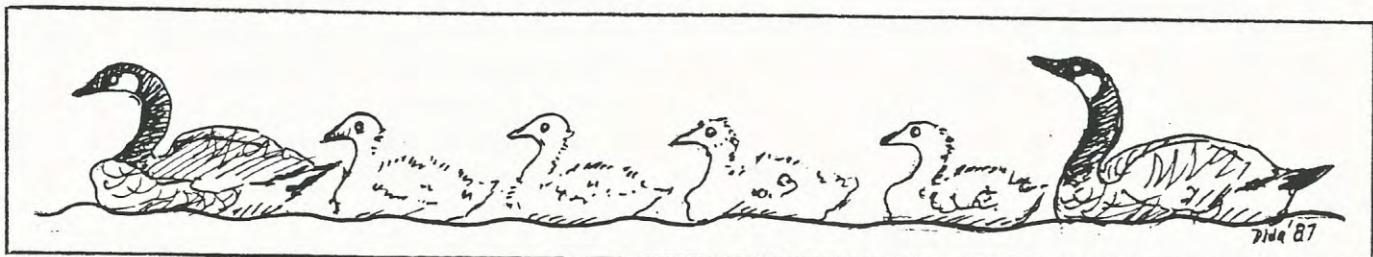
In the Toronto area (Whitby Harbour to Bronte Harbour), 60,324 waterfowl from 28 species were reported. This is the fifth highest total, but lowest since 1999; species with the highest counts were the usual Canada Goose, Greater Scaup, Mallard, Long-tailed Duck, Common Goldeneye, Redhead, Bufflehead and Gadwall (listed in order of abundance). Record high numbers were seen for only Trumpeter Swan, Mute Swan, and Mallard. Only Long-tailed Duck had significantly low numbers. Rarities included 1 Common Loon, 2 Red-necked Grebe, 3 Snow Goose, 1 Wood Duck, 1 Green-winged Teal, 4 Northern Pintail, 4 Northern Shoveler, 6 Canvasback, 2 Ring-necked Duck, 1 King Eider, 1 Surf Scoter, and 4 American Coot.

Outside Toronto there were some excellent sightings.

The next count will take place on Jan. 9, 2005.

from a report compiled by Bill Edmunds in the TORONTO ORNITHOLOGICAL CLUB NEWSLETTER, #143,
March 2004

□



Wild Canada Goose family - Metro Zoo grounds - June 25, 1987

FOR READING

In 1982 I holidayed in Montreal River Harbour. Sloshing barefoot along the Lake Superior shoreline I remarked to a fellow vacationer that it was such a shame stones lost their brilliant hues when dried out. "You should join a rock club", she replied. Thus opened a world of magic. The good woman was Merlin in disguise. I hadn't even known there were such things as rock clubs.

All these years later, still under the spell of this subject, I rely upon the following guides.

MANUAL OF MINERALOGY AFTER JAMES DANA by Cornelius Klein and Cornelius S. Hurlbut, Jr., publishers James Wiley & Sons. James Dana (1813-1895) compiled the original bible. He reprinted it several times, and then it was revised down the years by other authorities. The revision I have was printed in 1985. There will doubtless be a more up-to-date printing. It is a large book, 8" x 11", to be kept in bookcase or on coffee table, for constant reference.

ILLUSTRATED ENCYCLOPEDIA OF MINERALS: A Complete Introduction to the Mineral World, Consultant Editor Dr. Alan Woolley, Hamlyn Publishing Group Ltd., 1990. Also 8" x 11", the text is supported by some 300 illustrations, many in colour.

THE MACMILLAN FIELD GUIDE TO ROCKS AND MINERALS, Pat Bell and David Wright, Macmillan Publishing Co., 1985. Pocket-book size, with over 400 rocks and minerals identified on 63 full-colour plates.

Lastly, the marvelous **GOLDEN GUIDE TO ROCKS AND MINERALS** by Herbert S. Zim and Paul Shaffer, 1957. Obviously long out of print – the disappearance of these hand-sized Golden Guides was an incalculable loss in every field. I can only advise a beginner to keep an eagle eye open for this gem in any and all secondhand bookstores.

One of the first things to do upon deciding to become a "rockhound" is join a rock club – nearly every city has one – not only to attend lectures but in order to get field experience. Working quarries and old mine sites are open only to clubs. Secondly, take a course in elementary mineralogy if this is still being given. I was blessed, at that time, that the University of Toronto ran a wonderful course for beginners.

Years ago my then dentist enquired where I was going for my holidays. Through a mouthful of cotton batten – dentists are oddly given to loquacity once they have rendered you speechless - I spluttered out "Wawa" and got an indignant query back: "Wh'd you want to go THERE for? Nothing but rocks and trees!" I have heard this complaint many times. The protestors appear unaware that without those rocks and trees the human species wouldn't be here. Rocks are the planet's bones. To quote the textbooks, rocks are the solid components of the earth's crust made up of aggregates of minerals, and minerals in their turn are the compounds of elements. Farther than that we cannot go, thank goodness, for no-one has yet found the chemical means of breaking elements down



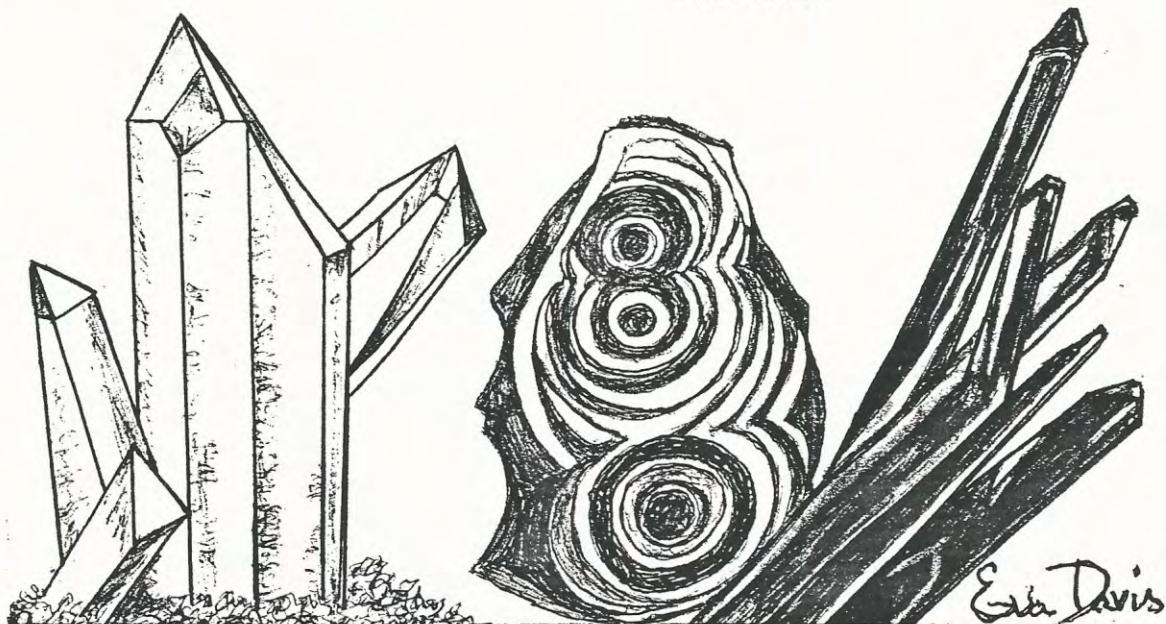
FOR READING (cont'd)

into simpler substances. There are some 3,000+ species of minerals, but again, thank goodness, only those which are common and important to humans – roughly some 100 which make up the rock-forming minerals – are put into a classification scheme.

One of the principal oxides of iron is hematite. I have the prized possession of an "egg" fashioned from smoky quartz encapsulating hematite crystals the vibrant colour of blood. On my only visit to the Maritimes we were taken to the magnesium barrens, great stretches of greenish native rock run through with white veins of magnesium. The principal ores of copper are malachite, chrysocolla and azurite which are prized as ornaments coloured emerald green through to midnight blue. Zinc: its primary mineral is sphalerite which runs from deepest black to deepest bronze. The use of talc is universal and feldspar is used in countless commercial products. Chromium gleams at us from every automobile. Muscovite mica is so called because, being like all micas a platy material, it substituted for glass a century or so ago in Muscovy, and is still used as an electric shield in toasters and ovens. Quartz crystals run our watches. We could not, in short, have "civilization" without minerals. (Lead we have turned into an industrial toxin of our own making from ancient times. Galena, its main mineral source, is actually very beautiful, a steely-silver cubic crystal of great weight.)

Attend rock shows. If you live in Toronto, frequent the mineralogy gallery at the ROM. I nurse the conviction that the ancient fairy tales of little, gnome-like men working devotedly away underground arose from the human conviction that there had to be some guiding, magical beings designing the fantastic beauty of minerals. They were wrong. Nature does it all.

Eva Davis



Rock Crystal (Quartz SiO_4)
Colourless Hexagonal Crystals

Eye Agate (a variety of chalcedony,
a cryptocrystalline quartz)

Stibnite Crystals
(Stibnite Sb_2S_3)
Bladed Metallic
Gray-Black Crystals



BELTLINE PARK ALMOST COMPLETE

In 1971 the City started negotiations to obtain the beltline properties which were not privately owned. The first parcel was from the Allen Expressway to the Moore Park Ravine. This is almost complete except for the Dominion Coal property at Mount Pleasant and Merton Street and a small parcel of land east of Mount Pleasant and north of the cemetery.

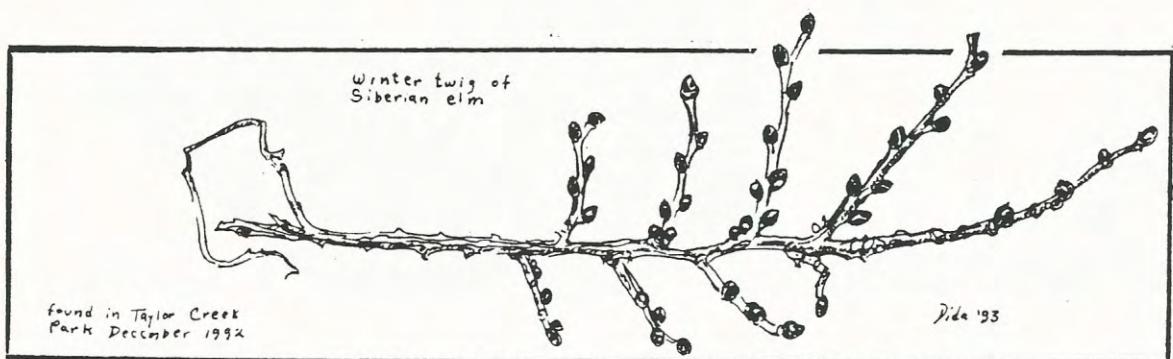
The section from Yonge Street to Mount Pleasant has been landscaped. About 50 trees were planted and many shrubs and flowers. Some tall prairie grasses have been planted as well as coneflowers, day lilies, roses, willows, tartarian maple and spiraea. Although I would prefer more native plants, most of the residents of our street are happy with this improvement. Remember this was a wasteland of parking lots and illegal dumping grounds. The south side of the trail is mostly trees which were seeded from the Arboretum (Mount Pleasant Cemetery). These include Norway maples, horse chestnuts, rowan and European ash. The trail is now open to the public. Just west of the auto repair shop is an exit to Merton Street. This allows people to see the new part and not have to backtrack from a dead end.



The city has also made a trail west of the Allen Expressway over to Caledonia. Unfortunately there is a gap in the trail at the Allen for a few blocks. The future plan is to somehow connect the west end of the trail to the Black Creek valley and then to the Humber bike paths. This will be a challenge.

The Beltline Park is one of the best kept secrets in Toronto. As a Toronto resident all my life, I never knew about it until I moved into the area. The section running parallel to Chaplin Crescent is the most beautiful. Large crack willows form a bower over the path and it is used by many joggers, cyclists and hikers. I have heard Robert Bateman talking about his childhood memories of the Beltline in the '30s when the trains still ran and a creek was present. It was much wilder then, but fewer people got to enjoy it.

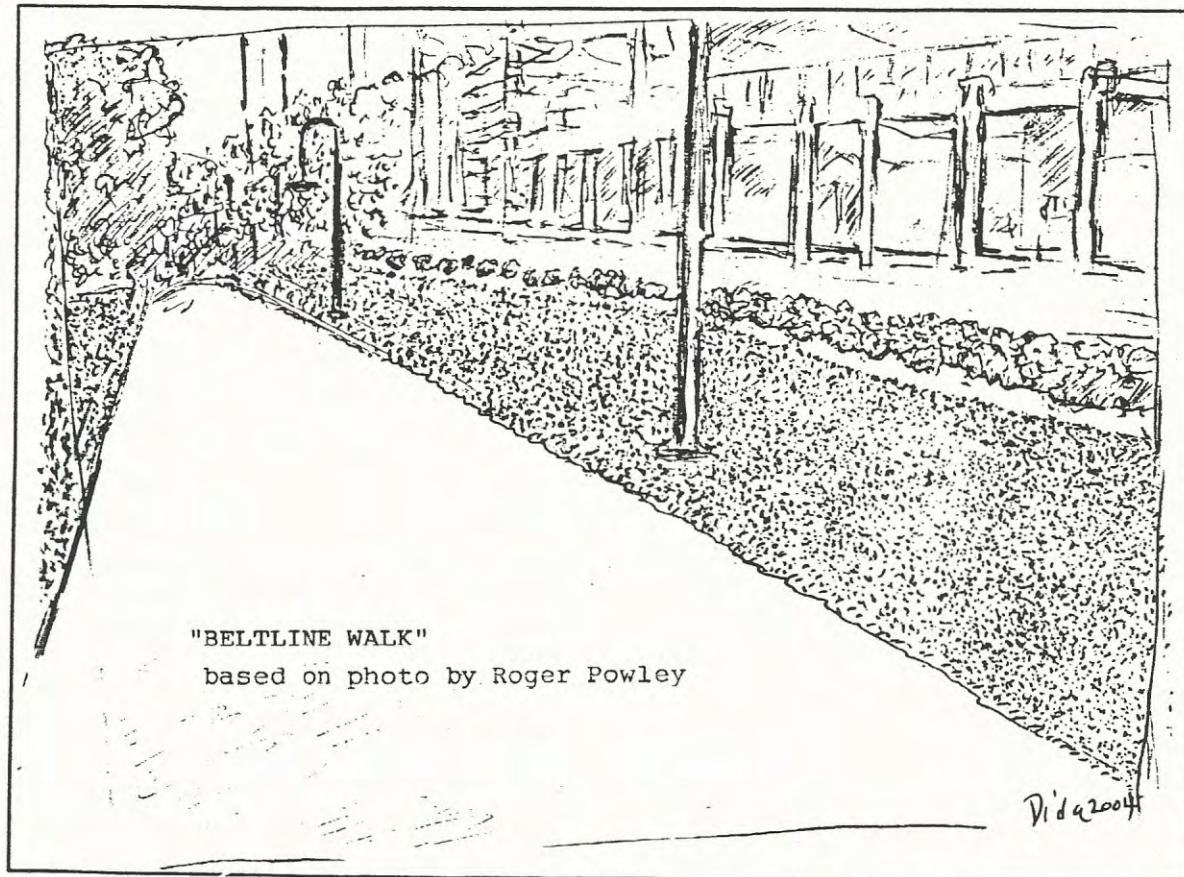
Roger Powley



WILDLIFE IN ROSEDALE

At the bus stop on MacLennan Drive there is a newspaper box. A lady walked up to the box, glanced at the headlines and settled down to wait for the bus. She was joined by a slim man in a dark suit with a black briefcase and a newspaper in his other hand. He glanced at the Star box and began to examine his own folded newspaper. At this point, a black squirrel with a huge nut in its mouth came hopping nonchalantly across the road. Also at the same moment, a large SUV came down the road. The two people at the bus stop watched intently at what was shaping up to be a disaster. The SUV driver saw the squirrel and stopped, just a matter of three feet away. The squirrel **sat down** on the road and looked up at the SUV with the nut still in its mouth. The driver and people waiting at the bus stop all burst out laughing. The driver finally tooted the horn gently, the squirrel turned around and went back where he had come from, and the driver moved on smiling. The lady at the stop said: "I think that is a very young squirrel." The man said: "And he's not going to get much older either."

Jane Beecroft □



MORE ADVENTURES WITH CARPENTER BEES

Carpenter bees came into my life several years ago. When I sat on the deck of our house in Scarborough I could hear a gentle scratchy-like noise, then sawdust-like pieces would float down. I did not think about this much, except to wish for quiet, until we noticed vertical streaks of a yellow waxy substance on the windows.

We searched for the cause. From our second storey window we could see a circular hole in the cedar trim and a bee circling until it found the hole and then entering it. I identified it as a carpenter bee by its shiny abdomen.

I felt very protective of these bees and enjoyed watching them. During their courting they would swoop down to near ground level, ignoring anyone in their path. This was a bit alarming even though I'd read these bees did not attack people. I was worried one of us would step off the edge of the deck as the pair careened toward us, but no accident occurred.

Once the bees were paired and settled the male constantly patrolled and any insect less than 20 feet from their hole was immediately seen off.

Drips of wax (actually "bee bread"), a mixture of pollen and regurgitated nectar that serves as food when the eggs hatch, spilled out of the hole, and some built up on the window.

During the winter we saw no activity, but I pictured the young snugly secure in the cedar plank.

The next summer we had a few more bees and a few more messy windows. This was a nuisance but one we and the window cleaner could live with. This went on for several years, and I was pleased when some of the new colonizers settled in areas which did not have windows below them.

As the years went by we had more holes and more bees and more messy windows. A bee flew at the window cleaner who was cleaning from a ladder two and a half floors up. He was at risk because it was difficult for him to avoid the upset bees. Sadly, we decided to use a pesticide, but after one ineffective try we stopped. We could not do it. We do have a pesticide-free garden and were upset that we had even considered using a pesticide.

I called Ottawa's Pest Management Regulatory Agency, part of Health Canada, for help in removing the bees without killing them. I was told carpenter bees are great pollinators for the fruit industry. I was asked to protect them if I could and was sent an information sheet.

I called a beekeeper, but there was no help there.

By hanging out the window, my husband blocked the holes with caulking. This was soon eaten away. We tried staining the wood, but the bees stayed. (Years later a friend said it was paint we should have tried -- not stain.)

I made a butterfly net with a plastic bag stretched over a wire coat hanger, but once I caught a bee (which was easy during mating season when they swoop down), I couldn't think of any safe way to transfer it to the car to drive it somewhere else. So I let it go. ▷

CARPENTER BEES (cont'd)

Then came the woodpecker. That turned the tide for me. To be awakened four hours too early and then to have to work out what was so noisily attacking our house was just not on. The cedar around the top level of our house was attacked regularly. The long gashes from the pecking seemed to follow the bees' tunnels.

I visited Home Depot, but they had not heard of carpenter bees and couldn't offer any help. I still did not want to kill them. Then it dawned on me that the open gashes meant that there were no eggs left! So we had aluminium put over the cedar trim which left about twenty mature pairs of bees homeless.

This fall I was so happy to see many carpenter bees feeding on the flowers of the garlic chives, but where they live I do not know. We now have an intact house and sleep well. However, we still live with wasps' clay tubes on the frame of the front door and a window frame of my husband's den.

We still live with mice under the kitchen sink. The humane trap continues to be placed there, and the deer mice may have been joined by a house mouse. No amount of searching and caulking can keep them out. I'd hoped the roof check during the \$900 carpenter bee aluminium job might have closed up the entry point, but no luck.

Anne Leon

Reference: Common-Sense Pest Control by W. Olkowski, Sheila Daar and H. Olkowski (a FINE GARDENING book) □



"MUTE SWAN" , site sketch by Diana Banville

IN THE NEWS

CITY PASSES TREE-CUTTING BAN

After an exhaustive six-hour debate, local councillors agreed on Sept. 30 to do what they could to save neighbourhood trees by passing a bylaw that would prevent them from being unnecessarily chopped down.

From now on, anybody wishing to take a tree down on private property must apply for a permit and hire an arborist. Property owners can cut the tree down if it is deemed to be dangerous, rotten or destructive. If someone wants to add an addition to their home and wants to remove healthy mature trees to do so, a community consultation meeting will be scheduled and city council will debate whether or not to issue the permit.

There are strict fines for those caught illegally cutting down trees on their property. Property owners will be fined a minimum of \$10,000 for their first offence and a minimum \$25,000 for their next conviction. Developers who offend will face a minimum fine of \$50,000 for their first offence and \$100,000 thereafter.

from an article by Sandie Benitah in the TOWN CRIER, October 2004

GRITS FREEZE 1.8 M ACRES AS GREENBELT

Ontario's Liberal government delighted environmentalists, appalled property developers and spooked farmers with the introduction of legislation that will create a continuous 1.8 million acre protected greenbelt stretching from the Niagara River to the outskirts of Peterborough.

While no land will be expropriated under the plan, all property that is not currently zoned for development within the 325-kilometre-long arc will be designated "protected countryside". Within that designated area, existing agricultural, environmentally sensitive and recreational lands will be shielded from further development. The boundaries of existing towns, villages and hamlets inside the area will also be frozen although they may be allowed to expand modestly once every 10 years when the overall plan is automatically reviewed.

The government plans to bring in legislation creating the greenbelt by Dec. 16, the day the province's one-year moratorium on development in the area expires.

The new greenbelt adds one million new acres of forest, agricultural land, vineyards and headwaters to the 800,000 acres already protected on the Oak Ridges Moraine and the Niagara Escarpment.

The government proposal will be the subject of consultations in the coming weeks.

from an article by April Lindgren in the NATIONAL POST, Oct. 29, 2004



IN THE NEWS (cont'd)

SALMON-WATCHING TIME IN GTA PARKS

You don't need to travel to the wilds of British Columbia to see one of Canada's great natural miracles. Even seasoned urbanites should be able to spot spawning Chinook salmon swimming upstream from Lake Ontario through the rivers and creeks in Toronto-area parks. But the fish are most plentiful in a spot on the Crédit River.

The salmon take two days to swim nine kilometres from the lake to this spot behind the Kraft Canada mill in Streetsville, where they can be seen massed in rocky, shallow water below a dam they can't jump. It took 20 minutes yesterday for ministry staff to net 30 salmon, which are then contained in pens as the first step in a project that keeps Lake Ontario stocked for sport fishing. Kraft has just renewed an agreement, which has been in effect since 1982, allowing the government to use the mill-side site to collect fish eggs and milt (sperm).

Ministry workers will be harvesting fish on the Credit for about a week. Once the fish are penned, a quick blow to the head kills them, so that eggs can be harvested from the females and milt from the males. About 900,000 of the yellow, pearl-like eggs are harvested annually. The eggs and milt are then taken to a hatchery near Stouffville for fertilization. About May 1, the young fish, called fry, weighing about 5 grams, are released into the rivers and streams that feed Lake Ontario.

Because the Chinook are not native to Lake Ontario, the ministry tries to control the population by introducing a controlled amount of fry to stock the lake for fishing. Once the eggs have been harvested, a number of fish are tested for contaminants and sent to the University of Guelph to be checked for diseases and other health indicators. The remaining fish are tossed back into the river where they are eaten by animals or decompose.

The Chinooks, now about midway through spawning season, will be followed by the Coho salmon in about two weeks. There might be 300 to 500 salmon on the Humber River. A good place to observe the fish is on the Humber River near the Old Mill Restaurant. They can also be seen in the Don River near Pottery Rd., Bronte Creek Provincial Park, Oshawa and Bowmanville creeks, and the Rouge River at Twyn Rivers Dr. in Rouge Park.

from an article by Tess Kalinowski in the TORONTO STAR, October 13, 2004

►

Here they come again
More short take-offs and landings.
Flocks of long-tailed ducks.

Helen Juhola
December 2002

IN THE NEWS (cont'd)

GIVING THE EAST END A BOOST

The restoration and official opening of the facility now called the Allan Gardens Children's Conservatory took place in October. The conservatory was constructed in 1932 and was donated by the University of Toronto. The beautiful botany greenhouse -- which will serve as an attraction for locals and tourists and be used as an environmental teaching centre for children -- was relocated from U of T's St. George campus and placed in its new home at Carlton and Jarvis Streets last year.

from an article by Tanya Enberg in "24 HOURS", October 14, 2004

WOODBRIDGE OPENS CENTRE

A \$23-million Woodbridge education centre that will care for injured wild animals marks its official opening. The Earth Rangers Centre, located in the Kortright Centre for Conservation, will treat more than 5,000 critters and serve as a youth environmental education centre.

from an article in "24 HOURS", October 14, 2004



WILD ABOUT TURKEYS

Historical accounts show that wild turkeys existed only in the western half of southern Ontario, and that they were eliminated by 1902 through hunting and habitat destruction. Now, there are more than 25,000 wild turkeys ranging throughout all of southern Ontario, all of them descendants of the 274 turkeys obtained by the Ministry of Natural Resources from the United States and released between 1984 and 1987. One of the prime reasons for bringing the turkeys into Ontario was to give hunters something to shoot. As the ministry proudly claims in an information bulletin, turkey hunters spend almost \$2 million a year "on travel, supplies and services directly connected with turkey hunting in Ontario."

Although wild turkeys can live from nine to twelve years, the average life expectancy is only about 18 months. Fewer than half of the turkey eggs survive to hatch, and a high percentage of the chicks are killed during their first two weeks.

from an article by Cameron Smith in the TORONTO STAR, October 2, 2004



Woodpeckers have arrived in large numbers in the Windsor area as part of nature's response to the presence of ash borers.

from "Munch" by Bob Burtt in the KITCHENER-WATERLOO RECORD, April 17, 2004

IN THE NEWS (cont'd)

THE IRISH EXAMPLE

Concerned about litter in their cities, the Irish government introduced a tax on the plastic bags provided by most retail stores, especially grocery stores. The results were impressive. Most stores switched to biodegradable paper or heavier, multiple use plastic bags. Almost 90 per cent of the one-use bags disappeared.

from an article by David Perry in THE BOTTOM LINE, mid-September 2004

STORM WARNINGS ON WIND ENERGY

Research on potential problems with wind energy seems to be happening everywhere except Canada. The most recent example involves troubling results published in the "Journal Of The Geophysical Research." Using a computer model of a large-scale wind farm in Oklahoma, U.S. researchers at Princeton and Duke universities found that massed wind turbines will likely have a significant effect on the local meteorological conditions, especially in the daytime. Under certain conditions, the increased atmosphere turbulence triggered greater surface drying. With the Prairies becoming increasingly drought-prone, adding vast swaths of turbines might exact an environmental price well beyond more dead birds.

from THE TORONTO STAR, October 23, 2004



WILDLIFE HOSPITAL STRUGGLING TO READY NEW HOME

Founded in 1993 by wildlife expert Karvonen, the Toronto Wildlife Centre is a non-profit organization that relies on public donations and grants from corporations and foundations for its relatively small \$700,000 annual budget. The centre tends to sick and injured animals and operates a hotline for the public to call with questions or concerns about wildlife in and around the GTA. They also take referrals from veterinary clinics, pet stores, police and the Ministry of Natural Resources. The centre gets by with 18 full-time staff trained in dealing with wildlife, 30 volunteers with varying degrees of expertise in animal care, and 100 other volunteers who handle such tasks as driving. Supervisors on the floor of the clinic often have to oversee several hundred animals at any given time; and the hotline fields 30,000 calls a year. Anyone willing to lend a hand can call the centre's hotline at 416-631-0662. [To find out more attend our Dec. 5 meeting (page 2).]

from an article by Tabassum Siddiqui in the TORONTO STAR, July 30, 2004



IN THE NEWS (cont'd)

OLDEST FIELD TEST PROVES ITS WORTH

The world's longest continually running experiment has revealed traces of plutonium in British soil from nuclear tests in the Nevada desert 50 years ago. The amounts are "very, very small" and pose no danger.

It was 160 years ago that John Bennet Lawes, the owner of the Rothamstead Estate, appointed a researcher to take soil samples to measure the effect of fertilizers on crop yields. The experiment has been going ever since. And the soil samples, which have been stored since the project began, have enabled scientists to study the impact on the soil of such diverse environmental influences as the industrial revolution, nuclear weapons tests and accidents like Chernobyl.

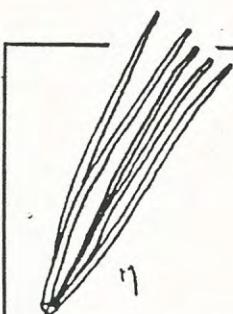
Scientists at the Geosciences Advisory Unit at Southampton University in southern England are using the archive to produce a record of nuclear fallout in the U.K. "They have provided us with the first evidence that plutonium from the Nevada Desert tests in 1952 and 1953 contaminated northwest Europe," said Ian Croudace of the Southampton Oceanographic Centre.

from an article in the TORONTO STAR, October 9, 2004

INDUSTRIAL POLLUTERS TO FACE TOUGH FINES

Ontario companies responsible for spills that damage the environment will have to pay immediate penalties of as much as \$100,000 a day under legislation proposed by the provincial government. Under the new law, penalties can be levied by the Ministry of the Environment rather than by the courts, with charges of up to \$20,000 per day for individuals and \$100,000 for corporations. The law will also pose tougher penalties on corporate officers and directors, including jail terms of as long as five years for convictions, the government said. The message to polluters is simple: You spill, you pay.

from an article by Joe Schneider in the NATIONAL POST, October 9th 2004



EASTERN WHITE PINE NEEDLES are five-to-a-bundle, as illustrated by Mary Anne Miller. The red pine (our other Toronto native) as well as the four pines commonly planted here - all have needles two-to-a-bundle. In an arboretum - such as Mount Pleasant Cemetery - with any luck, other five-needled or three-needled species will be labelled. Illustration by Mary Anne Miller.

THE WEATHER (THIS TIME LAST YEAR)

December 2003, Toronto

December was a quiet, fairly mild month. Temperatures were about 2.5°C to 3°C , above normal but still about 2°C below the record warm December of 2001, so it did not feel unusual. Snowfall was slightly lighter than usual and rainfall somewhat heavier, yielding near-normal precipitation. The coldest weather -- and it wasn't really all that cold with the lowest readings being -8.4°C downtown and -10.8°C at Pearson Airport -- occurred in the first two weeks of the month. Snow cover was transitory and only occurred mid-month. There was no snow cover after December 22nd and temperatures were generally above freezing over the Christmas holiday period, peaking at 9°C on a couple of days. The period between Christmas and New Year's was notable for its sunny, mild conditions.

January 2004, Toronto

A dramatic change-over occurred early in the month. Record warmth at the beginning of January gave way to persistent moderate to severe cold, so that it ended up being the coldest month in ten years! It averaged -8.4°C downtown and -9.4°C at Pearson -- about 4°C below the 30-year average downtown and 3°C below normal at Pearson.

The mild conditions from December at first continued and indeed intensified, finally peaking on January 3rd. It hit 13.3°C downtown and 13.8°C at Pearson Airport. These were the warmest January readings since 1996. A series of cold fronts then followed with temperatures dropping as low as -22.1°C downtown on January 9th and -24.3°C at Pearson Airport. These were the coldest January readings since 1999 downtown and 1994 at the airport. Strangely, this pattern change was not associated with dramatic storminess in the Toronto area. Once the cold air settled in for the month, however, there were a number of snowfalls as storm systems followed the active jet stream to the south. The snowfall on January 26th-27th was the heaviest, and had some lake enhancement. 31.6 cm fell at Pearson Airport.

Other noteworthy wintry statistics:

- Pearson Airport had 8 days where temperatures dropped to -20°C or below: January 9th, 10th, 13th, 14th, 15th, 16th, 24th and 25th.
- Total snowfall at Pearson was 63.2 cm, about twice normal and the highest since 1999. However, it was not the snowiest month of any since then; 63.8 cm fell in December 2000.

Gavin Miller



COMING EVENTS

Toronto Ornithological Club - Jim Baillie Memorial Bird Walks - aimed at the intermediate birder, but beginners are also welcome. Free.

- Sat. Dec. 11 at 8:30 am (all day) - Waterfowl - West Toronto Lakeshore and beyond with Dave Milsom. Meet in the parking lot at Humber Bay Park East. Bring a lunch. Carpool if necessary.
- Sun. Jan. 16 at 1:30 pm till sunset- Gulls and waterfowl at Sunnyside with Glenn Coady. Meet in the Sunnyside parking lot at the foot of Windermere Ave. Dress warmly.

Toronto Entomologists' Association meeting

- Sat. Jan. 22 at 1 pm in Northrop Frye Hall, Room 113, 73 Queen's Park Cres. East. Topic is "Hot on the trail of the migratory monarch" with Don Davis. For more information call 905-727-6993.

City of Toronto Archives

- Signs of Urban Life: A History of Visual Communication in Toronto 255 spadina Rd., north of Dupont. Call 416-397-5000 for more details.

Citizens Concerned About the Future of the Etobicoke Waterfront

- Sat. Dec. 4 from 9 am to 11 am - Humber Bay Park East with Ron Scovell. Meet in the south parking lot.
For more information call 416-252-7047.

Rouge Valley Conservation Centre

- Guided theme hike - Dec. 12
- Nature notes - Dec. 30

Events take place at the Pearse House, 1749 Meadowvale Rd.
For more information call 416-282-8265.

Royal Canadian Institute

- Sun. Jan. 16 Sunday afternoon lecture series* on science begins.
Call 416-977-2983 for more details.

The Nature of High Park - a symposium on natural environment studies, hosted by the High Park Community Advisory Council, on Sat. Jan. 22 from 1 pm to 4 pm in the Swansea Town Hall, 95 Lavinia St. Speakers will cover topics including prescribed burns, black oak regeneration, underground rivers, dragonflies and breeding birds. Everyone welcome. Free. Call George Bryant at 416-762-7941 for more information.

Few places remain in the developed world where a naturalist can rest easy about the future habitats and species or of landscapes that conjure the spirit of the wild.

from IRELAND: A SMITHSONIAN NATURAL HISTORY by M. Viney, Smithsonian Books, Washington/London, 2003

COMING EVENTS (cont'd)

Ian Wheal heritage walks (Call 416-570-6415 for more details.)

- Sat. Dec. 4 at 1:30 pm - Liberty Street. Meet at the southeast corner of King St. West and Dufferin St.
 - Sat. Dec. 11 at 1:30 pm - Humber River South. Meet at the Old Mill subway station.
 - Sun. Dec. 26 at 1 pm - Lower Garrison Creek. Meet at the southwest corner of King St. West and Bathurst St.
 - Friday Dec. 31 a 1 pm - Toronto Islands. Meet at the ferry docks at the foot of Bay St.
 - Sat. Jan. 1 - 1:30 pm - Hastings Creek. Meet at the Donlands subway station.
 - Sat. Jan. 8 at 1:30 pm - Toronto Path Underground. Meet at the southeast corner of Queen and Yonge.
 - Sat. Jan. 22 at 1 pm - Toronto Lakeshore/High Park southwest. Meet at the foot of Roncesvalles St.
- + Jan. 16 at 2 pm - Lower Garrison Creek. Meet at the northwest corner of Bathurst St. and King St. West. This is an outing of the North Toronto Green Community. □



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