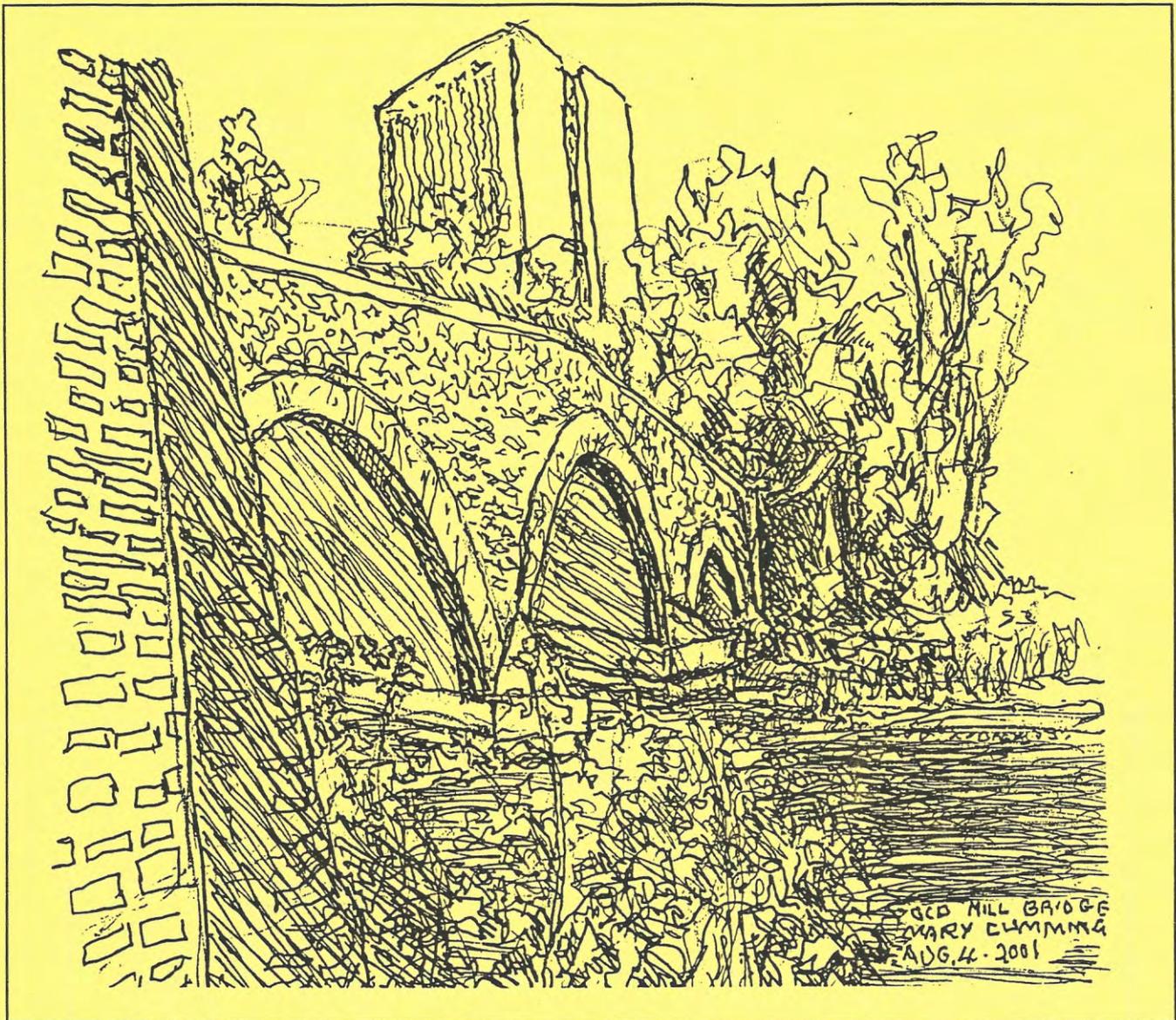


TORONTO FIELD NATURALIST

Number 515

April 2003



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TFN MEETINGS

Sunday, April 6, 2003 - THREE CENTURIES OF BIRD ILLUSTRATION
an illustrated talk by Joan Winearls, former
Map Librarian at the University of Toronto Library

at 2:30 pm

in Emmanuel College
75 Queen's Park Cres. East

VISITORS WELCOME!



Daylight Saving
Time
Begins

We have always depended on paintings and drawings of birds for scientific identification purposes and for our own recreational use in field guides -- even nowadays when photographs of birds are readily available. The painting and drawing of birds has had a long and interesting history and birds have been shown in art from the very beginning. The talk, however, will be a look at the evolution of bird illustration over the past three centuries in British, American and Canadian bird books, including these artists among others: George Edwards, John Gould and Thomas Bewick; Alexander Wilson, John James Audubon and Roger Tory Peterson; Ernest Thompson Seton, Allan Brooks and Terry Shortt.

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

+ memberships and selected publications for sale

NEXT MEETING: Sunday, May 4, 2003

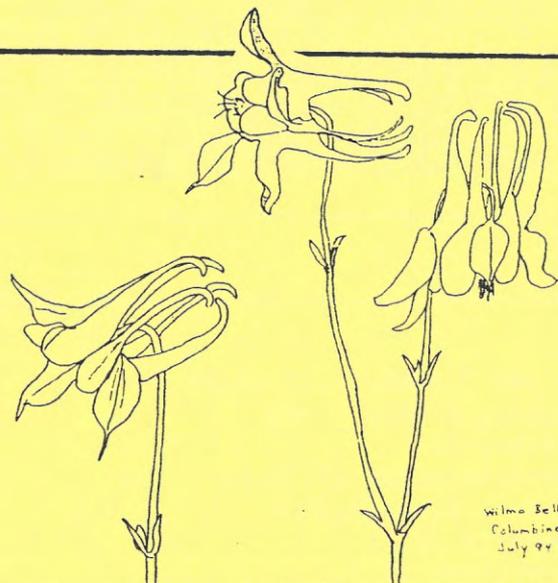


NEXT NEWSLETTER: May (to be mailed in mid April) [Call your local post office if it's late.]



TFN OFFICE: open Friday mornings from 9 am to 12 noon

WILD COLUMBINE is native to Toronto, found in at least 8 different locations. The European columbine escapes from gardens and has been found in Crothers Woods and the Rouge Valley. The columbines belong to the buttercup or crowfoot family which includes many floral configurations. Drawing is by Wilma Bell.



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 ST. JAMES CEMETERY - heritage walk
 April 2 Leader: Ann Scott
 10 am Meet at cemetery gates on the east side of Parliament St.
 just north of Wellesley St. East. Morning only
- Saturday ART GALLERY OF ONTARIO - nature arts
 April 5 Leader: Melanie Milanich
 10:30 am Meet at the gallery entrance on the south side of Dundas St. West
 at McCaul St.
 \$ entry fee 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.
- April 6 TFN MEETING (See page 2 for details.) [Daylight Saving Time begins.]
- Wednesday HUMBER MARSHES - nature walk
 April 9 Leader: Roger Powley
 10 am Meet at the Old Mill subway station. Morning only.
- Saturday HUMBER MARSHES - nature walk
 April 12 Leader: Ron Allan
 1:30 pm Meet at the Old Mill subway station.
- Tuesday GLEN STEWART RAVINE - urban forestry
 April 15 Leader: Bruce Gordon
 10 am Meet at the southwest corner of Kingston Rd. and Beech Ave.
 Morning only.
 Bruce is an urban forestry specialist with the Urban Forestry Division for
 Toronto parks. He will speak for about an hour and show recent planting
 work done in the ravine.
- Saturday ETOBICOKE CREEK - nature walk
 April 19 Leader: Robin Powell
 1:30 pm Meet on the bridge over the creek (on the north side of
 Lake Shore Blvd. West).



FOR MORE OUTINGS AND MEETINGS, SEE PAGES 25-26, and PAGE 4.

APRIL OUTINGS (cont'd)

- Monday G.R. LORD PARK - early migrants
April 21 Leader: Carol Sellers
10 am Meet at the northeast corner of Finch Ave. West and Dufferin St.
Bring lunch and binoculars.
- Thursday HIGH PARK - early migrants
April 24 Leader: Boris Mather
10 am Meet at the park entrance on the south side of Bloor St. West
opposite High Park Ave. Morning only. Bring binoculars.
- Saturday ROUGE VALLEY - nature walk
April 26 Leader: Chris Hope
10:30 am Meet at the northeast corner of Sheppard Ave. East and
Meadowvale Rd. Bring lunch and binoculars.
- Sunday EASTERN LAKESHORE & HIGHLAND CREEK - nature walk
April 27 Leader: Orval White
2 pm Meet at the southeast corner of Guildwood Parkway and
Morningside Ave. Bring binoculars.
+
- Sunday TAYLOR/MASSEY CREEK - urban ecology
April 27 Leader: Richard Anderson
2 pm Meet at Wexford United Church which is on the north side of
Lawrence Ave. East at Ellington Dr. (two blocks east of Warden Ave.).
This is a joint outing with the North Toronto Green Community.
- Tuesday GERMAN MILLS - nature walk
April 29 Leader: Theresa Moore
10 am to Meet at the northeast corner of Leslie St. and Steeles Ave. East.
12:30 pm Bring a snack.

□

THANKS FOR THE NEWS! [See pages 16 to 22.]

Thanks to all those members who make this part of the newsletter possible:
Diana Banville, Sheila Bruggeman, Patricia Brind, Harding Bishop,
Alexander Cappell, Jerry Cuccio, Catherine Crawford, Molly Campell,
Karin Fawthrop, Nancy Fredenburg, Ed Freeman, Bob Given, Mary Hunter,
Louise Herzberg, Helen Hansen, Diana Humphrys, Richard Hurlbut,
Aarne Juhola, Sylvia Kaplan, Lys Lawrence, Marilyn Murphy, Alen McCombie,
Mary-Anne Miller, Sylvia Main, Ruth Munson, Jean McGill, Kulli Milles,
Melanie Milanich, Reta McWhinnie, Joan O'Donnell, Louise Orr, Robin Powell,
Lillian Phillips, Sheila Ryan, Grace Somers, Gloria Somerville, Linda Stemmler,
Jerry Shepherd, Arthur Wade, Merle Young, Marjory Tilley, James Thomson,
Andre Vietinghoff, Russell Willcox.

It's amazing, but everyone seems to see something different. Rarely do we
receive more than one copy of a news item. Please keep the information
coming.

H.J.

PRESIDENT'S REPORT

In the fall of 2001, Toronto City Council rejected in a close vote a private sector proposal (+ funding) to study the widening of the Don Valley Parkway. At the time I suspected this proposal would later be revived in some new form. The City recently announced the Don Valley Corridor Transportation Master Plan Study. The study will look at improving transportation operations and person-carrying capacity in the Don Valley Corridor. The outcome of the study will be a phased long-term program of transportation improvements. Some projects within this program may require a Class Environmental Assessment. The study is scheduled for completion by fall 2003. Three agencies are directing the study: the City of Toronto, Toronto Transit Commission, and GO Transit.

Part of the study area, south of Highway 401 and north of Lakeshore Blvd., is of special concern to us. Here the Parkway is close to the lower and East Don Rivers as well as Taylor Creek. I'm worried that among the prominent proposals will be access/exit ramp improvements and especially the addition of extra lanes (these might be dedicated to public transit). Irreversible degradation and loss of valley land natural areas will be the result. These losses would undo the work of many dedicated environmentalists to renaturalize the Don Valley Corridor. Degradation and loss of valley land natural areas are not our only concerns. Increased air pollution will be an inevitable consequence of greater vehicle traffic in central Toronto. There are already serious air pollution problems in the summer months. This is not Smart Growth.

Several open houses will be held, giving the public opportunity to review and comment on the proposals. You can also comment by e-mail (dvcinfo@toronto.ca). As well, you can keep up-to-date on this Master Plan Study by visiting the City of Toronto Web site (www.toronto.ca/planning/dvp.htm).

Two members of the TFN board of directors deserve special mention, Karin Fawthrop and Elaine Farragher. Karin has created an excellent program of speakers for our monthly meetings. Elaine has created and manages a growing Web site for the TFN. Thanks to you both!

Robin Powell

□

TREE PLANTING

The planting of a tree, especially one of the long-lived hardwood trees, is a gift which you can make to posterity at almost no cost, and with almost no trouble, and if the tree takes root it will far outlive the visible effects of any of your other actions, good or evil.

Original source: Tribune magazine, 26 April 1946; title of the column, "A Good Word for the Vicar of Bray". Re-published in collections such as "Shooting an Elephant", "The Orwell Reader" and "Collected Essays, Journalism and Letters of George Orwell, Volume 4, 1945-1950" Secker & Warburg 1945 and Penguin Books 1970, pages 182, 183.

OUTINGS REPORT

Thanks to TFN's able outings committee for another good season:
Helen Mills (North Toronto Green Community lost river walks),
Mary Cumming (Nature Arts), Gail Gregory (mid-week, east of Yonge),
Mary McColl (mid-week, west of Yonge), Diana Karrandjas (weekends,
west of Keele St.), Boris Mather (weekends, east of Victoria Park),
and Alexander Cappell (weekends, between Keele and Victoria Park).
Evening rambles still need an organizer!

A few statistics:

In 2001, TFN had 137 outings with 115 reports returned;
in 2002, TFN had 131 outings with 119 reports returned.
Total number of participants (reported) in 2001 was 2,080;
total in 2002 was 1,920.
Average number of people on outings was 19 in 2001 and 17 in 2002.
The maximum attendance was 44 in 2001 and 42 in 2002; the minimum
(which includes the leader) was 3 in 2001 and 2 in 2002.

If you have suggestions for new outings or would like to lead an outing
or join the outings committee (as organizer of evening rambles), please
call the TFN office at 416-593-2656.

Alexander Cappell



GARDEN TULIP

Toronto
garden
rooftop

May 15, 2001

Drawn by
Mary Cumming



MARY CUMMING TULIP
MAY 15 2001 ROOFTOP GARDEN

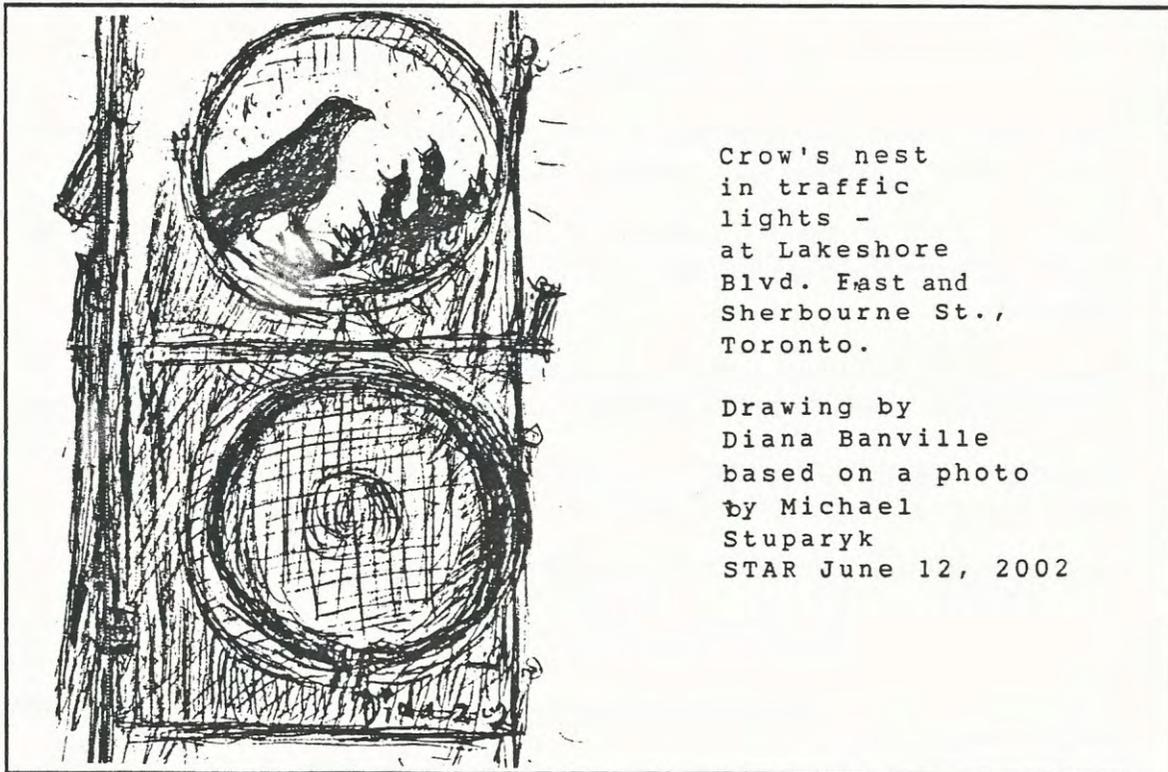
PROJECTS

FIELD STUDY WORKSHOP OFFERED AT LONG POINT

In partnership with the American Birding Association, Bird Studies Canada is proud to be hosting an Institute for Field Ornithology workshop in June 2003 at Long Point Bird Observatory near Port Rowan, Ontario. The week-long workshop "Bird Field Study Research Methods and Citizen Science Projects" is open to all interested. For details visit www.americanbirding.org/programs/eduifowksp10.htm or phone 1-800-850-2473 ext.235.

ATTENTION PARENTS AND KEEN TEEN BIRDERS!

The 2003 Young Ornithologists' Workshop will be held at Long Point Bird Observatory near Port Rowan, Ont. from 2-9 August, 2003. This intensely-packed week of activities focuses on field ornithology and includes bird banding, censusing, field identification, birding trips, bird skinning, guest lectures, and much more. Come and make new friends from across the country with similar interests in the world of birds. Six lucky applicants (ages 13-17) will be selected to attend, and will receive the Doug Tarry Bird Study award to cover all expenses except travel costs. Applications are due 30 April 2003. For additional information and an application form, contact Keith Larson at Bird Studies Canada (e-mail lpbo@bsc-eoc.org), or visit the BSC web site (www.bsc-eoc.org/lpbo/yow.html).

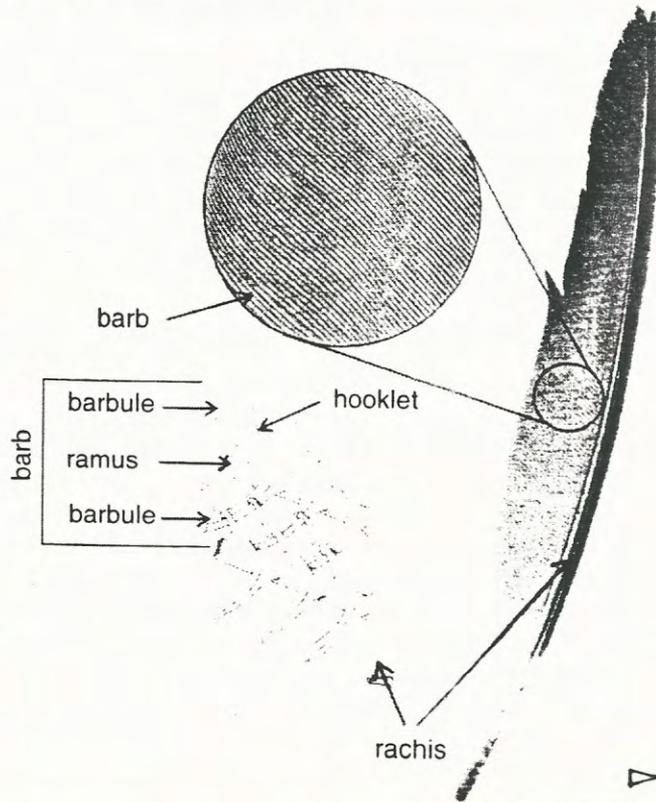


Crow's nest
in traffic
lights -
at Lakeshore
Blvd. East and
Sherbourne St.,
Toronto.

Drawing by
Diana Banville
based on a photo
by Michael
Stuparyk
STAR June 12, 2002

WATCHING DIVING BIRDS - THE PULL OF BUOYANCY

Feather vanes consist of parallel rows of barbs that can be pulled apart and re-zipped together again due to their interlocking system of barbules with hooklets. Each barb consists of a ramus (shaft) and barbules extending to each side. The barbules are of two types, on one side are proximal barbules that have an edge that is curved into a flange, and the other are distal barbules where the under surface forms long hooked appendages or hooklets. Hooklets catch onto the flange of adjacent barbules.



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

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Poetry, Art and Nature Observations: Diana Banville

Assistants: Patricia Brind, Eva Davis, Karin Fawthrop, Nancy Fredenburg,
Toshi Oikawa, Marilyn Murphy, Robin Powell

Printer: DM Printing

Mailer: Perkins Mailing Services

WATCHING DIVING BIRDS (cont'd)

Think of birds, and you think of flight. Birds have evolved to be at home in the air and to soar the sky. Some birds, however, have returned to the sea to exploit the abundance of prey beneath the waves. Think of birds and you also think of light feathers and light bones; just the things that make it difficult to dive beneath the waves.

Try to hold a balloon under water and you will have some idea of the work a bird must do to stay submerged. As much as 95% of the work performed by the hind limbs of some diving ducks is required to resist the pull of buoyancy. Diving birds have to deal with two major sources of buoyancy. The first is the air trapped in their plumage and the second is the air stored in the air sacs of their respiratory system. Air cavities create huge buoyant forces and make it harder for diving birds to stay submerged. Oxygen, however, is essential for a bird's metabolism and trapped air in plumage provides insulation against the cold water. How then, do diving birds find a balance between these opposing constraints? How can they take the air they need while reducing buoyancy?

The feathers of diving birds perform the same function as the feathers of other birds. They provide insulation, repel wind and water, allow flight, and provide differences in colour and form. Feathers insulate by trapping air within a layered structure held in place by a system of barbules and hooklets. These elements, when properly aligned, also restrict the penetration of water. Although birds require oils from the preen gland to maintain and condition their feathers, the water repellency of plumage is the result of the tight association of barbules and hooklets.

Birds can alter the amount of insulation provided by their plumage by adjusting the angle of the feather shaft. This process, called piloerection, increases the amount of air trapped between the layers of feathers. On cold winter mornings, small birds can look almost spherical as they erect their plumage to create a thicker insulation layer.

Piloerection is also very important to diving birds. As well as allowing them to control the thickness of their plumage, it also provides them with a way to reduce buoyancy. Diving birds adjust their buoyancy by compressing their plumage before they dive.

It is common to see cormorants and loons adjust their buoyancy, sometimes sinking so that their backs hardly show above the surface, but other species of diving birds do this as well. By using digital video, I have recorded sequences showing that many other diving birds compress their feathers and adjust their buoyancy before diving. Hooded mergansers not only compress their crest feathers, but they also compress their body plumage and settle deeper into the water as do pied-billed grebes.

▷

DIVING BIRDS (cont'd)

Cormorants and anhingas have gone one step further than most diving birds. They have specially adapted wettable plumage that allows water to penetrate, thus reducing air-induced buoyancy. We often see cormorants perched with wings spread while drying their plumage. It was once thought that the wettable plumage was due to a lack of oil from the preen gland; however, it is now known to result from a structural characteristic of the feathers rather than a lack of oil.

Cormorant and anhinga wing and body feathers are unique because their structure differs from other birds. In these feathers, some of the barbules are lacking hooklets so they are not as tightly bound to adjacent barbules. This structural feature is what allows water to penetrate the plumage. Near the base of the feathers, next to the body, the hooklets are again present and create a water-resistant layer of insulation. Cormorants and anhingas benefit by having wettable plumage that reduces buoyancy while diving, but they suffer the cost of needing to dry their feathers afterwards.

The second major source of buoyancy results from a bird's need to carry oxygen to power metabolism. Birds have an efficient respiratory system that includes lungs and 7 to 9 air sacs, some extending into hollow chambers in their bones. These air sacs, if filled to capacity, have the potential of creating large buoyant forces. They cannot dive without oxygen, but they need to mitigate the effect of buoyancy caused by storing oxygen in air spaces.

To solve this problem, diving birds store oxygen within the blood, bound to the haemoglobin molecule, and also within the muscle cells, bound to the myoglobin molecule. Before diving, birds can hyperventilate to saturate their blood and tissues with oxygen and then exhale to reduce the volume of the air sacs.

Watching birds is an enjoyable pastime well rewarded with sights of beautiful or rare species. For those interested in behaviour, birds can provide glimpses of fascinating behaviours that offer insights into how they live, feed, and reproduce. For the curious, watching birds can offer many challenges. We observe, and then we wonder why and how. Why do mergansers drop their crest? Why do cormorants dry their wing? How do feathers keep birds dry? How do loons sink into the water?

from an article by James Clowater in THE VICTORIA NATURALIST, Vol.59.4, Jan./Feb. 2003

□

It is not simply our ability to think, to be rational, that distinguishes humans from other species, but our ability to be irrational -- to put stones in our pockets because we think they are beautiful.

from FOUR WINGS AND A PRAYER: CAUGHT IN THE MYSTERY OF THE MONARCH BUTTERFLY
by Sue Halpern, Alfred A. Knopf, 2001

ICE JAM ON THE HUMBER

During the mid-February thaw, the Humber River at the Baby Point overlook provided one of nature's most spectacular local sights. Where the river widened and shallowed was a winter ice jam such as we have not seen in many years. At the bend of the river enormous hunks of river ice, several feet wide and thick, lay piled in haphazard confusion. Every block of ice showed strata of varying shades from opaque white to murky gray with frozen vegetation embedded in the layers.

From the river, which normally is several feet below the retainer wall in Etienne Brule Park, these huge blocks of ice had been pushed and carried several hundred feet to cover the walking paths and on up to the tree line. Entire branches of trees had been snapped off like twigs. The waterfall at the dam closest to the ice jam was almost frozen solid. The water flow was just audible.

Further upriver the frozen river was showing signs of breakup. Triangular peaks of ice jutted up as the ice prepared to fragment into slabs. Although waterfowl on these bitter days were not as plentiful as in milder years, irregular patches of open water farther upriver contained a few loons still diving in the icy waters, several mergansers taking water baths, and mallards, all of them restricted by the vast stretches of frozen river.

This spring we may find some unusual treasures transported by February's ice jam. Undoubtedly there will be damage, but seeds carried by the ice floes will germinate and new flowers will grace old familiar haunts. Underbrush will be cleared and trees, frozen and buffeted by ice slabs, will show scars as reminders of the harsh season. Finally, we are again struck by the force and strength of nature and of a river that in all seasons fascinates and changes.

Pat Bolton

□

THE BLACKPOLL WARBLER

is a regular migrant through the Toronto area. It has a large range but, like many other warblers, has no breeding status here. Far-northern Ontario nesting areas are shown in the 1987 ATLAS OF THE BREEDING BIRDS OF ONTARIO.



TORONTO RAPTORS

During back-to-back TFN outings we were fortunate to observe two uncommon hawks right in the heart of Toronto.

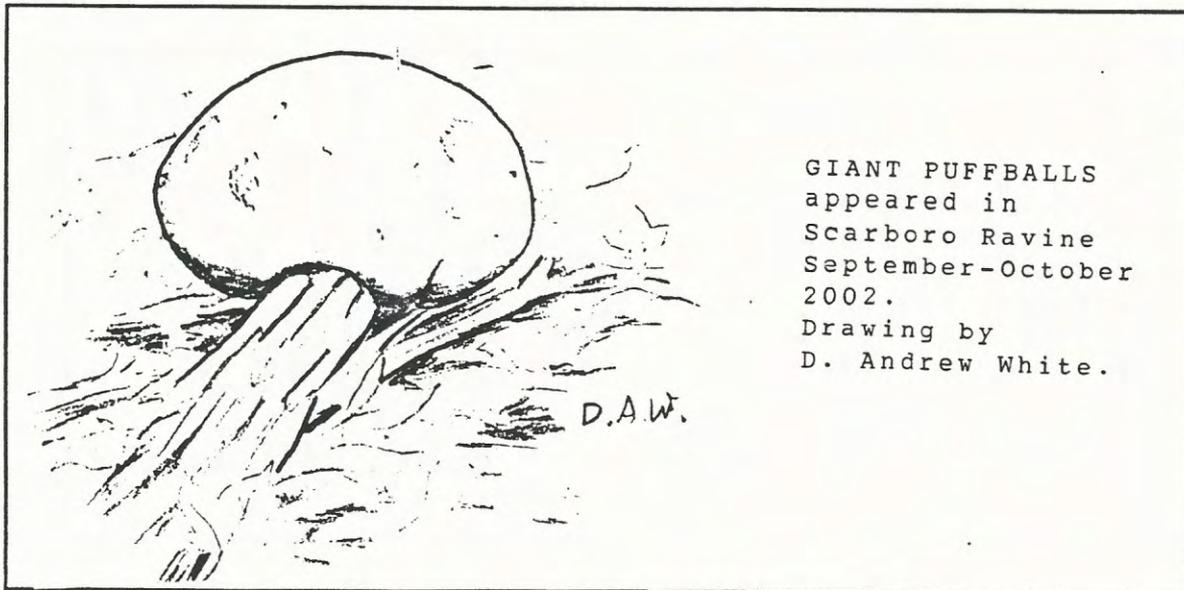
On Wednesday, February 5 in Mount Pleasant Cemetery, I had just finished a discussion on owl-finding techniques. Barry, behind and busy putting the ideas to work, caught up to say "Here's an owl". We had all walked within 20 metres of not an owl, but an immature northern goshawk. It seemed to be imitating an owl, as it remained partly concealed, allowing us all leisurely looks. Given the abundance of grey squirrels, which I believe are its main food, I suspect the bird may remain for a while.

On the following day we explored the abandoned railroad spur line discussed in Roger Powley's article in February. We observed several red-tailed hawks but one was very different. It had a white tail with just a touch of pink near the dark tip. It was a Krider's red-tailed hawk, once considered a species, then a subspecies and now just a distinctive colour variant of the red-tailed hawk. It is not uncommon in the Canadian prairies but rare in the east. In Ontario I have only seen it near the Manitoba border.

Like Roger Powley, we were quite taken by the yet unnamed abandoned railroad, now a public trail. It extends almost from Eglinton to York Mills and provides shrub-filled ditches backed by Douglas firs and many bird feeders. On our day, spring birdsong was limited to cardinals and mourning doves, but judging by the number of nests near Bond Park, breeding birds must be abundant. The best access is from Lawrence Avenue just east of Leslie Street (by the Civic Garden Centre) from whence you can walk 1 3/4 kms north or south. At both ends the spur terminates at live tracks (private property).

George Bryant

□



GIANT PUFFBALLS
appeared in
Scarboro Ravine
September-October
2002.

Drawing by
D. Andrew White.

MORE ABOUT ABANDONED RAILWAY LINES

The abandoned railway line described by Roger Powley in the February issue was built in 1919 by the Canadian Northern Railway. It is approximately 3.5 km long, and it connected the Canadian Northern main line (from Union Station to Capreol) to the main east-west line of the Canadian Pacific Railway through Toronto. The actual crossing of these two lines is south of Lawrence Avenue and east of the Don Valley Parkway, but the CPR tracks are on a bridge 24 metres above the CN tracks and thus an interconnection was not feasible at this crossing.

The Canadian Northern later became part of the Canadian National Railway and, due to the split-up of the CPR system, the corporate name "St. Lawrence and Hudson" is now used for this east-west line. Both of these lines are still active railways; the CN line, for example, is used by GO trains, Via rail and Ontario Northland.

The hiking trail along this abandoned line has no public access at the ends of the line when it meets the two active lines. The route used by Roger Powley to get onto the north end requires trespassing on railway property which could result in a fine of \$130. The best access is from Lawrence Avenue about 100 metres east of Leslie Street. This is very close to Edwards Gardens, where there are washrooms. This entry point is roughly halfway between the north and south ends. There is also access from Overland Drive, south of Lawrence, and from a system of walkways in Duncairn and Talwood Parks north of Lawrence. There is also, as Roger mentioned, a gate in the fence near the south end which leads to the parking lot for the Inn-on-the-Park.

Jack Gingrich

□

Soft Evening

Trills of raccoon babies in the night.

Bandits peep out from the oak.

Warm breezes softly touch my skin.

Scent of apple blossoms on the air.

Remembered taste of apple pie.

Diana Karrandjas

BEWARE: INTEREST IN THE ENVIRONMENT CAN BE HAZARDOUS

This is concerning a "scam" -- a telephone call requesting participation in a survey on environmental issues. I complied. I sounded off on important issues of the moment. Apparently this was enough to put me in line for a "prize"! A phone call some time later informed me that my prize was to be delivered that day, to my door.

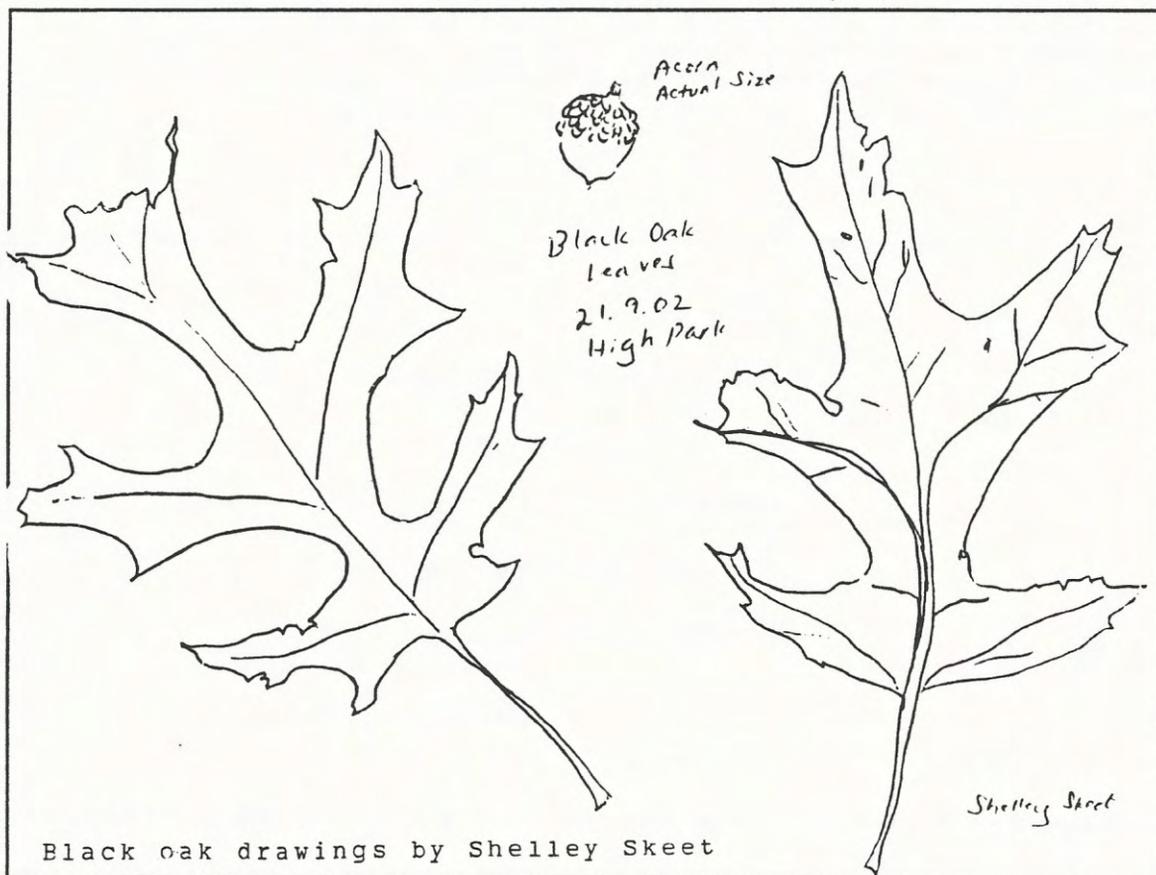
I asked "Was it something personal or for household use?" I asked again when the caller arrived. I was handed a flyer with information about travel to Cuba, Texas, etc. Then the person entered my apartment and proceeded to unpack a vacuum cleaner. When I objected he used my telephone twice (the second time without permission), once to headquarters, "not getting anywhere... leaving now."

I reported the incident to the police. Although it is not illegal I gave my address and when I would be home ... We must learn to be rude. Hang up the phone immediately! Never invite a stranger into your residence. Moral ... Be Aware!

(From one who laughed at the poor souls taken in by the "Bank Inspector Fraud")

ANONYMOUS!
(too embarrassed)

□



PATRIOTISM

PATRIOT: A person who loves his country and will do all he can for it. This is what the dictionary says.

I find more and more this idea being confused with a "follow the leader" philosophy which has nothing to do with patriotism.

To me the prime example of a patriot is a naturalist. This is because they truly love their country. They appreciate not only the landscape, the mountains, the plains, the lakes, the rivers and forests, but they also treasure the flora and fauna within it.

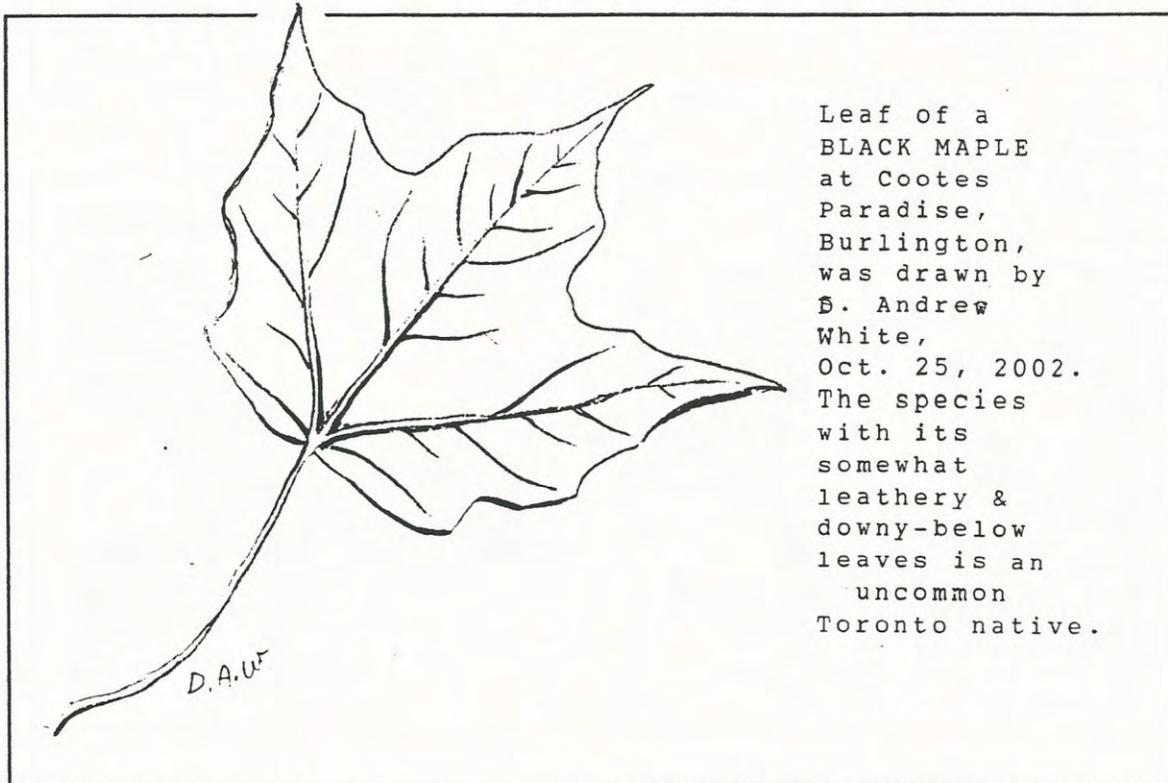
They also try to protect their country more vehemently than any soldier in a war. If an activity is poisoning our land or water the first people to express outrage are our naturalists and environmentalists. We are the ones who are battling to protect our country.

In Canada the biggest worry we have of invasion is from introductions of alien species from other parts of the world, not from invading armies. We also have to fight our own government most of the time. Think of all the letters you have to mail to our politicians regarding shortsighted decisions they make when pressured by business interests.

Thank God we have some patriots in this country, trying to protect our air, water, forests, and animals. These are our naturalists. Our war is ongoing and never stops.

Roger Powley

□



IN THE NEWS

LAKE WATER TO COOL DOWNTOWN OFFICES

Oxford Properties Group, owned by Canada's third-largest pension fund, and Enwave District Energy Ltd. announced that One University Avenue, an 18-storey building built in 1986, will be connected to the Enwave cooling system this spring.

The Enwave deep-lake water cooling system, said to be the largest of its type in the world, draws cold water from Lake Ontario to provide naturally chilled water to cool buildings, replacing in-house electrical air conditioning systems.

The \$175-million lake cooling system, whose construction began last summer, is capable of cooling 20 million square feet of building space, eliminating the need for more than 35 million kilowatt-hours a year of local coal-fired electricity. Enwave says the emission reduction is equivalent to removing 8,000 cars from the road.

from an article ONLINE UPDATES in the TORONTO STAR, February 28, 2003



Mulberry branchlet and rustic fence. Riverdale Park -
sketched by Diana Banville, October 15, 2002- Nature Arts Outing

IN THE NEWS (cont'd)

TOWER DARKENS TO SPARE BIRDS

The CN Tower dims its lustre for birds or for repairs to lighting. The main reason for switching off the tower's lights is its participation in FLAP -- the voluntary Fatal Light Awareness Program -- in which downtown buildings remain darkened during migration seasons in the spring and fall.

Birds tend to travel in large numbers and they often fly at night or in bad weather. The CN Tower shuts off all unnecessary lights for about a six-to-eight-week period each spring and fall. These lights would otherwise attract and endanger the birds.

According to FLAP, about 10,000 birds a year collide with high-rise towers in the downtown core alone. Typically, the tallest lit structures tend to pose the greatest threat for nighttime collisions. One of them used to be the CN Tower. But since it began keeping light levels down during migration seasons, the birds have almost stopped colliding with the structure.

from an article by Walter Stefaniuk, in the TORONTO STAR, January 29, 2003

LEGGY BIRDS FIND EVERGLADES FULL OF SEXUAL ALLURE

Wading birds inhabiting the Everglades in Florida include snowy egrets, great egrets, white ibises, wood storks and tri-coloured herons. Occasional explosive periods of breeding may be directly related to changes that occur following a severe drought. During a dry spell, many wading birds attempt to nest, and then abandon their sites, or fail to rear young, because there are too few sites and too little food. Huge colonies of more than 4,000 nesting pairs of white ibises, and 1,000 nesting pairs of wood storks were abandoned at several locations within the Everglades during the most recent drought.

Dry spells frequently generate fires, producing ash and other organic nutrients that are released into the otherwise nutrient-poor soils. When the Everglades re-flood a year or so later, the nutrients are rapidly taken up by the vegetation and invertebrates, and fish often become superabundant. Although many fish are killed during a drought as their aquatic world shrinks, smaller fish, such as mosquitofish, can recover by breeding rapidly when the rains come. These smaller fish can breed as frequently as every three months. The larger predatory fish such as largemouth bass, which feed on the smaller fish, take longer to recuperate. Thus the smaller fish have a field day, and the long-legged birds home in on the feast.

The waders fatten up and put vast amounts of energy into reproducing. Ultimately, the cornucopia of invertebrates and fish causes the wader populations to quadruple. Other factors are also involved in population explosions. Last year, a year that did not follow a harsh drought, there were more than 60,000 breeding pairs of wading birds in the Everglades. This is the largest number since 1941. Waders reflect the productivity of local wetlands and are reliable indicators of the health of the Everglades.

from an article by Maxine-Fay Miller, in the GUARDIAN WEEKLY, February 6-12, 2003

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LANCE-LEAVED COREOPSIS, as in Joanne Doucette's drawing, though an Ontario wildflower, is not native within the GTA. Frequently included in packages of wildflower seeds, it has been seen here more often lately. Don't be surprised if it turns up in your garden.

Ref.: DISTRIBUTION AND STATUS OF THE VASCULAR PLANTS OF THE GREATER TORONTO AREA, Steve Varga et al. Aug. 2000.

IN THE NEWS (cont'd)

STOP BUYING BOTTLED WATER

In the U.S., bottled water sales have tripled in the last 10 years, and by 2005, Americans are expected to down 7.2 billion gallons annually. But bottled water takes a heavy toll in terms of manufacturing, packaging waste, and transportation, and is held to looser contamination standards than tap water. There is very little evidence that it is any cleaner or healthier; in fact, many brands are simply filtered tap water. In one case, "spring water" with a label depicting mountains and a lake was actually water from a well in the parking lot of an industrial hazardous waste facility in Massachusetts (the site is no longer used). If tap water doesn't satisfy you, consider investing in a home filter system.

from an article in AMC OUTDOORS MAGAZINE, January/February 2003

COMBATTING THE BATTINESS OF WEST NILE SPRAYING

Toronto Public Health says spraying pesticides is the least desirable way of dealing with mosquitoes, and instead advises people to take preventative measures. Mosquitoes tend to lay their eggs in wet areas, including standing water, so the health department says residents should start by making their neighbourhoods less attractive to mosquitoes by not letting water collect in rain gutters or garbage cans, turning over plastic kiddie pools and wheelbarrows when not in use, and changing stagnant water in birdbaths twice a week.

It also encourages wearing light-coloured, long-sleeved shirts, pants and socks when venturing into mosquito territory.

from an article by Lesly Mayhue, in EYE, October 3, 2002

A TOUGH WINTER

There have been subtle signs of this winter's toughness. Chickadees, for instance, are eating the tiny, red, hairy clusters of berries of the staghorn sumac -- a last-resort food. And there are reports of mice moving indoors, and birds and bats flying down chimneys and flapping around the house.

from an article by Michael Kesterton, in THE GLOBE AND MAIL, February 11, 2003

DISPATCHES FROM THE ARCTIC

Thunder and lightning, once rare, have become commonplace. An eerie warm wind now blows in from the south. Hunters who prided themselves on their ability to read the sky say they no longer can predict the sudden blizzards...

from an article by Michael Kesterton, in THE GLOBE AND MAIL, February 20, 2003

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IN THE NEWS (cont'd)

MONARCHS MAKE DRAMATIC COMEBACK

Scientists are marvelling at the impressive comeback of Monarch butterflies, which once again are carpeting the fir trees of central Mexico. Hard rains and biting cold in the central states of Michoacan and Mexico in January 2002 killed 75 per cent to 80 per cent of the Monarch butterflies that make the more than 3,000-kilometre journey from the eastern United States and Canada. The unprecedented numbers of deaths -- some estimated as many as 500 million butterflies perished -- followed by drought conditions last summer and decreased levels of butterfly sightings in the United States, prompted concern that fewer numbers of the insects would arrive south of the border this year.

But the butterflies came -- en masse. Scientists estimate anywhere from 200 million to more than 500 million monarchs are now hanging in enormous clusters in an 8-hectare area of forest. The annual migration of the butterflies -- they come to Mexico in late October and depart in late March -- is an aesthetic and scientific wonder that has captivated the imagination of scientists, nature lovers and tourists.

The offspring of the winter's survivors fly north, creating three to five new generations that scatter throughout the United States east of the Rockies and in Canada. The Monarch's biggest immediate threat is man -- not nature. Illegal logging in and around the Mexican butterfly reserve -- and tree cutting by residents -- is not new; it has been happening for decades. What is alarming is that it appears to be on the rise -- despite years of efforts by government agencies and private organizations to stop it.

from an article by Lisa J. Adams, in the TORONTO STAR, February 21, 2003

CONDO SITE SEEPING GASOLINE

Ontario Environment officials have conceded that gasoline seeping into High Park's Wendigo Creek and Grenadier Pond may be coming from a Bloor St.W. site 30 metres away formerly occupied by a gas station.

The ministry has ordered Context (High Park) Inc., which is building a medium-density condominium on the former gas station site, to figure out exactly where gasoline is moving deep underground, beyond its property, by mid-April and propose a cleanup plan by mid-May. The binding order comes as a vindication to local residents who have called for an environmental assessment for two years. Last July they commissioned a hydrogeologist who recommended a probe to track the contamination.

A ministry spokesperson said the probable link was revealed only recently by 46 monitoring wells Context drilled on the 75-by-35-metre site. Excavation to a depth of 12 metres had found one small area of contamination confined to the site. But recent drilling down to 25 metres showed a plume of gasoline running to the property's south edge and perhaps beyond.

from an article by John Deverell, in the TORONTO STAR, February 25, 2003

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IN THE NEWS (cont'd)

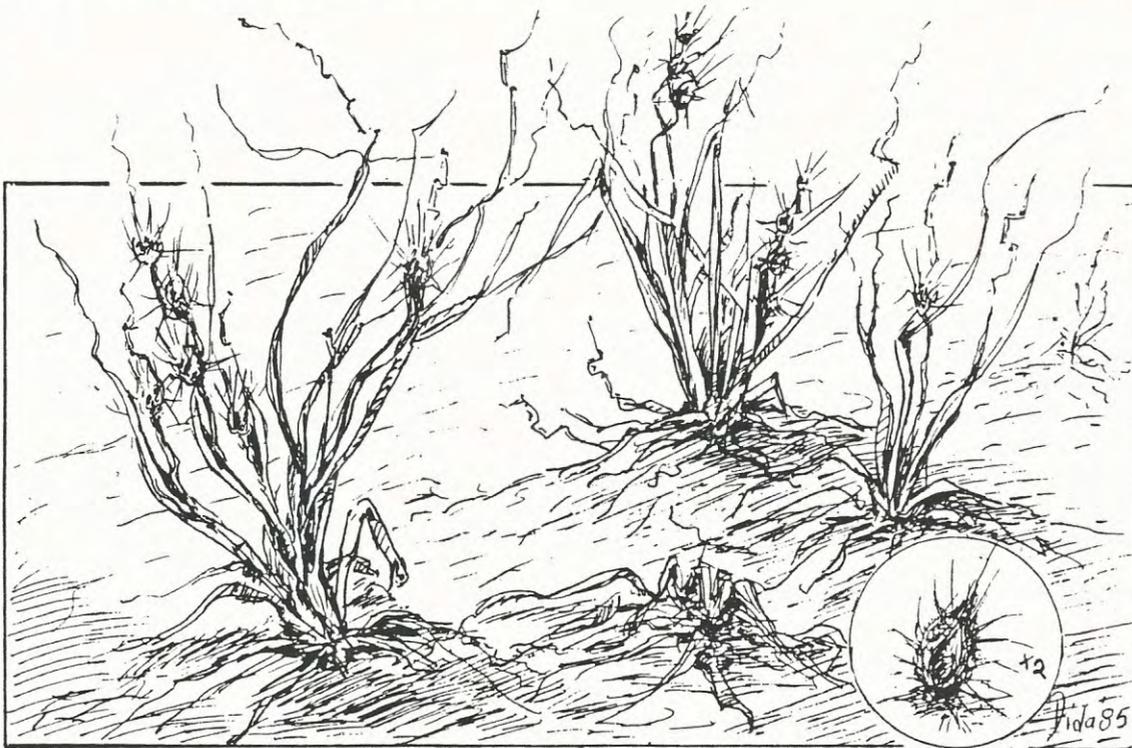
DISEASES ARE RUNNING RIFE IN FOREST REMNANTS

Chopping down trees to build houses and plant crops isn't just damaging the environment -- it's threatening human health, too. Small patches of forest such as those left by housing developers turn out to be breeding grounds for disease.

Breaking up forests into small patches is known to alter populations of animals living there. In the Eastern US, animals such as weasels, foxes and coyotes avoid smaller patches of woodland as there is not enough food there to sustain them. But mice thrive, since most of their predators and competitors leave.

Lyme disease, an infection that is on the rise in the US, is caused by bacteria that live predominantly in white-footed mice. Ticks feeding on the mice pick up the disease and pass it on to people. Plots of less than 2 hectares had on average 3 times as many ticks and 7 times as many infected ticks per square metre as larger patches. In one 1-hectare plot, a staggering 80 per cent of ticks were infected. If more species were around, some ticks would feed off animals that do not carry the Lyme bacteria.

from an article in NEWSIDENTIST, Feb. 8, 2003



LONG-SPINED SANDBUR, an uncommon native Toronto grass, encountered on a trail on a TFN outing. (The untouchable bur which encloses the spikelet had to be combed from our clothes.)
Field drawing by Diana Banville, Lambton Park, 1985. (See also TFN 514:18-19:Mar 2003.)

IN THE NEWS (cont'd)

THE SKY IS RISING

Contrary to Chicken Little's warning, the sky isn't falling -- it's rising, an important part of it, anyway -- the 'tropopause,' the roof of Earth's lower atmosphere. Its rise -- by an average of about 650 feet globally over the past 22 years -- is new evidence for the reality of global warming, scientists say.

from an article by Michael Kesterton in THE GLOBE AND MAIL, Jan. 9, 2003

COUNTING PLANTS

The Missouri Botanical Garden has launched a \$100-million (U.S.) decade-long effort to build a database that will include every tree, grass, flower, fern and moss known to humanity. Its creators hope that the World Plant Checklist will offer scientists and backyard botanists comprehensive information about the nature, range and conservation status of every plant species. There are approximately 400,000 plant species in the world.

from an article by Michael Kesterton in THE GLOBE AND MAIL, Jan. 9, 2003

'NUTTY' SQUIRREL KILLED

A squirrel which terrorized the central English town of Knutsford by attacking people has been shot and killed. The bad-tempered squirrel's reign of terror had made parents frightened to let their children out to play.

from an article in THE TORONTO STAR, November 8, 2002

WEATHER WORRIES

The amount of ice melting from the surface of the Greenland ice sheet broke all known records last year, threatening a rapid rise in sea levels and a return of very cold winters to Britain because of a slowing down in the Gulf Stream. Already the Gulf Stream, which bathes the west coast of Britain in warm water from the Gulf of Mexico and keeps the country much milder than normal for such northern latitudes, is slowing down. A very dramatic melting trend in Greenland has been in progress since 1979. Extreme melt years were 1991, 1995 and 2002.

from an article by Michael Kesterton, in THE GLOBE AND MAIL, Jan. 15, 2003

HUMBER RIVER FISHERY

Government and private agencies have been working to improve the Humber. Last week the upper Humber was stocked with 40,000 brown trout fry. Spawning rainbow trout were spotted in the East Humber upstream from Woodbridge a couple of years ago. [Neither species is native to the Toronto region.]

from an article by Frank Calleja, in THE TORONTO STAR, November 5, 2002

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THE WEATHER (THIS TIME LAST YEAR)

April 2002, Toronto

A heat wave on April 15th - 19th was sandwiched by distinctly chilly and rather wet weather which made for a very strange month more reminiscent of the changeable 1970s than of the more consistent warm conditions of recent years. In fact, it was virtually identical to April 1976 which featured a mid-month heat wave bordered on both sides by cold and some snow.

Cold and unsettled conditions prevailed for the first week, with a general snow fall on April 2nd. By April 11th, a building upper ridge and frontal boundary moved into the area bringing mild conditions, fog and frequent showers. Thunderstorms occurred on April 12th. The warm front finally cleared southern Ontario definitively on the evening of April 15th. Temperatures peaked at 29.6°C at Pearson Airport on April 16th and 26.7°C downtown a day later. This was pretty much of the same intensity as 1976, but a few degrees cooler (although ten days earlier) than the April 1990 heatwave which saw temperatures crest at more than 30°C. The heat quickly ended, however, and by April 22nd a centimetre or two of wet snow covered the vegetation just starting to emerge. Again, this almost perfectly matched the 1976 scenario, which featured a post-heatwave snowfall on April 24th. An upper level trough ensured fairly cool, wet, unsettled conditions the remainder of April.

What does it all add up to? April's mean temperature (downtown) was 8.3°C as opposed to the 1971-2000 normal of 7.6°C, but it was cooler than the recent warm period of 1998-2002 which had an April mean of 8.8°C. Snowfall was the highest since 1996 with 16.6 cm downtown and 12.2 cm at Pearson. It was wet overall with above-average rainfall too -- beneficial after the almost snowless winter. Total precipitation was 103.2 mm at Pearson and 110.8 mm downtown, about 30-40 mm more than normal, and the most since 1992 at Pearson and 1991 downtown.

Gavin Miller

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THINK BEFORE YOU FLY!

Air travel's all the rage these days -- it's cheap, and its emissions are excluded from the Kyoto Protocol targets. Who cares if it's changing the world's climate more than anything else we do? Demand is only growing because prices are so low, because aviation fuel isn't taxed. ... The availability of cheap air transport currently enjoyed by the public is a very recent phenomenon. It is not a traditional 'right' in any sense, but a privilege enjoyed by the global elite. Climate change, by contrast, will affect every person.

from an article by Jonathan Porritt in BBC WILDLIFE, Feb. 2003, Vol. 21, No. 2

COMING EVENTS

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

- Sat. April 26 at 8 am (all day) with Hugh Currie to see early migrants at the Leslie St. Spit. Meet at the foot of Leslie St. Bring lunch.

High Park Sunday afternoon walking tours

- Sunday April 6 at 1:15 pm - High Park's Natural & Human History
 - Sunday April 13 at 9 am - The Birds of Spring (bring binoculars)
 - Sunday April 27 at 1:15 pm - Earth Day at Colborne Lodge* [no walk]
- Walks begin just south of the Grenadier Cafe and Teahouse in High Park.
Call 416-392-1748 or 416-392-6916 for more information. \$2 donation.

Rouge Valley Conservation Centre

- April 13 - Meadows and Wetlands - begins at 1 pm
 - April 24 - Wetland and frog watch with Mark Carroll - begins at 7:30 pm
- Meet at the Pearse House on the east side of Meadowvale Rd, north of Sheppard Ave. East. Call 416-282-8265 for more information.

Toronto Entomologists' Association

- Saturday April 26 at 1 pm in Room 119, Northrop Frye Hall, 73 Queen's Park Cres. East. - Diversity and Ecology of Ontario's Dragonflies and Damselflies, an illustrated talk by Colin Jones. Call 905-727-6993 for more information.

Ian Wheal Heritage Walks

- Sat. April 12 at 1:30 pm - Toronto's Railway Esplanade. Meet at the southeast corner of Queen St. East and River St.
- Sat. April 26 at 1:30 pm - High Park's Mineral Springs. Meet at the Quebec Ave. entrance/exit of the High Park subway station.

North York Horticultural Society

- Mon. April 28 at 8 pm at St. Luke's Lutheran Church, 3200 Bayview Ave. (just north of Finch Ave. East) - an illustrated talk by Peter Iveson on the Gardens of Quebec. Call 416-229-9914 for more information.

Society of Ontario Nut Growers (SONG)

- Sat. April 26 (all day) Spring Auction of nut trees, uncommon fruit and ornamental trees as well as seeds and nuts. Call 905-934-6887 for more information. Event takes place at the Civic Garden Centre.

Niagara Peninsula Hawkwatch

- March 1 to May 15 at Beamer Memorial Conservation Area on the escarpment above Grimsby. Days with southeast winds are best. For more details call 905-648-3737.

Citizens Concerned About the Future of the Etobicoke Waterfront

- Sat. April 26 from 9 am to 11 am - bird walk at Col. Sam Smith Park. Call 416-252-7047 for more details.

▷ *TFN VOLUNTEERS needed to help with TFN Earth Day display. Call 416-232-9241 ▷

COMING EVENTS (cont'd)

Friends of Don East

- April 5 at 10 am - cleanup at Todmorden
 - April 23 - evening stroll from 6 pm to 7 pm followed by a meeting at Todmorden
 - April 26 - cleanup at Taylor/Massey Creek
- Call 416-466-9153 for more information.

Humber Heritage

- Agnes Moodie Fitzgibbon wildflower walk - Sun. April 27 at 1:30 pm beginning at Lambton House, south of Dundas St. West just east of the Humber River.

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BIRD BANDING

The modern practice of bird banding may have originated with the great Audubon himself, who in 1804 attached silver threads to the legs of nesting phoebes to find out if the same birds came back the following year. (They did.) Since then, scientists have been solving some of the most intriguing mysteries of avian wildlife -- among them how long birds live, whether they keep the same mates year after year -- through recovery of birds with bands.

Experienced researchers with government permits trap birds in near-invisible nets of silk or nylon. They untangle the captive birds, band them on the spot, and then release them unharmed. In addition a few bird rehabilitators who have qualified for permits band the birds they return to the wild. In either case, the details of where and when each bird is banded, together with its number, is sent to the Bird Banding Laboratory, a central clearinghouse of information in Laurel, Maryland.

Banding birds is the easy part. The chances of ever coming across a banded bird again are slim indeed. There are simply too many birds in the world, and too few banders. Of the 1.1 million birds banded in North America each year, hardly 5 percent are ever seen again. Most of these are recaptured in some other researcher's mist net. Occasionally a banded bird is found dead and the number reported to the Bird Banding Lab. If members of the public happen upon a banded bird and transmit the number to the Bird Banding Lab, they will be told where, when and why the bird was banded.

from RED-TAILS IN LOVE: A WILDLIFE DRAMA IN CENTRAL PARK by Marie Winn, Vintage Books, N.Y. 1998/1999

Restless with April
pigeons swirling city skies
pretend migrations.

Haiku by Arthur F. Wade

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OTHER PUBLICATIONS

TORONTO FIELD NATURALISTS CLUB: ITS HISTORY AND CONSTITUTION, 1965\$ 2.00	TORONTO REGION BIRD CHART, 1983.....\$ 4.00
CHECKLIST OF PLANTS IN FOUR TORONTO PARKS; WILKET CREEK, HIGH PARK, HUMBER VALLEY, LAMBTON WOODS, 1972\$ 2.00	A GRAPHIC GUIDE TO ONTARIO MOSSES, 1985\$ 4.00
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\$ 8.00	GUIDE TO TORONTO FIELD NATURALISTS' NATURE RESERVES, 2001\$ 4.00
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Survey #2 - Brookbanks Ravine, 1974	VASCULAR PLANTS OF METROPOLITAN TORONTO, 1994 ...\$ 8.00
Survey #3 - Chapman Valley Ravine, 1975	TORONTO CHECKLISTS (birds, other vertebrates, butterflies, other invertebrates, mosses, other plants)each 50¢
Survey #4 - Wigmore Ravine, 1975	TORONTO ROCKS, 1998.....\$ 8.00
Survey #5 - Park Drive Ravine, 1976	HUMBER FORKS AT THISTLETOWN, 2000\$ 4.00
Survey #6 - Burke Ravine, 1976	
Survey #7 - Taylor Creek-Woodbine Bridge Ravines, 1977	NO G.S.T.
Survey #8 - West Don Valley, 1978	All publications may be ordered from Toronto Field Naturalists, 2 Carlton St., #1519, Toronto, Ontario M5B 1J3. (Add \$2.00 per item for postage and handling).
INDEX OF TFN NEWSLETTERS (1938 to present).....\$10.00	

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

MEMBERSHIP FEES (No G.S.T.)

\$30 FAMILY (2 adults - same address, children included)
 \$25 SINGLE, SENIOR FAMILY
 \$20 STUDENT, SENIOR SINGLE
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