

TORONTO FIELD NATURALIST

Number 522

March 2004



Wildwood Pk., Mimico Cr. below Derry Rd.
January 2004

Photograph by Robin Powell

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tfn office hours: Fridays 9 am to 12 noon

TFN MEETINGS

Sunday, March 7, 2004 - THE FLYING SQUIRRELS OF ONTARIO
an illustrated talk by Steve Patterson, a flying
squirrel expert and naturalist.
at 2:30 pm

at Emmanuel College- We will learn about ongoing research on these
75 Queen's Park Cres. East nocturnal animals in Grey and Bruce counties.
Most people have never seen a flying squirrel so
this is a wonderful chance to learn more about
VISITORS WELCOME! them.

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

+ miscellaneous TFN publications for sale

NEXT MEETING: Sunday, April 4, 2004

NEXT NEWSLETTER: APRIL (to be mailed in mid March)

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.

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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.

- Saturday
March 6
2 pm
to 4 pm
- DEER PARK LIBRARY - nature arts (photography)
Leader: Robin Powell
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.
- March 7
- TFN MEETING (See page 2 for details.)
- Tuesday
March 9
10 am
- HIGH PARK - nature walk
Leader: George Bryant
Meet at the park entrance on the south side of Bloor St. West opposite High Park Ave.
Bring binoculars. Morning only. ▷



MARCH OUTINGS (cont'd)

- Saturday
March 13
1:30 pm LAKE IROQUOIS SHORELINE - nature walk
Leader: Ed Freeman
Meet at the Summerhill subway station. Walk will end at Bayview and Moore.
- Tuesday
March 16
10:30 am BLUFFS AND BEACHES - nature walk
Leader: Orval White
Meet at the east end of Guildwood Parkway (at the foot of Morningside Ave.) Bring a snack, binoculars and wear good boots. This will be a 3-hour hike.
- Saturday
March 20
10:30 am WESTERN LAKESHORE - heritage walk
Leader: Bob Given
Meet at the southwest corner of Lake Shore Blvd. West and 42nd St. (at Marie Curtis Park).
Bring binoculars. Walk will end at Sam Smith Park. Morning only.
- +
Saturday
March 20
2 pm DON VALLEY - world water day
Leader: Ed Freeman
Meet at Chorley Park (the east end of Summerhill Ave.)
This walk is a joint outing with the North Toronto Green Community and will end at the Ontario Science Centre.
- Thursday
March 25
10 am HUMBER BAY EAST - waterfowl
Leader: Ann Gray
Meet at the park entrance on the south side of Lake Shore Blvd. West opposite Park Lawn Rd.
Bring lunch and binoculars.
- Saturday
March 27
10 am PARK DRIVE RAVINE - cleanup
Leader: Marit'a Dreger
Meet at the northwest corner of Crescent Rd. and Mt. Pleasant Rd. (Moordale Community Centre).
Bring work gloves and wear sturdy boots. Bags will be provided. This outing will end at 12 noon.
- Sunday
March 28
10 am LAKE IROQUOIS SHORELINE - nature walk
Leader: Ken Cook
Meet at the southwest corner of St. Clair Ave. West and Lansdowne Ave. Morning only.
- Wednesday
March 31
10 am ERNEST THOMPSON SETON PARK - nature walk
Leader: Phoebe Cleverley
Meet on the south side of Eglinton Ave. East at the foot of Leslie St.
Bring lunch and binoculars. We will be walking south. □

FOR MORE OUTINGS AND EVENTS, SEE PAGE 27.

PRESIDENT'S REPORT

We are experiencing the sort of winter I remember when I first came to Toronto over thirty years ago. Unfortunately it's turned out to be a bad year for me to restart winter landscape photography. The wind, cold and snowdrifts have made any photography a miserable struggle. However, I've rediscovered many beautiful winter scenes in Toronto's valleys and ravines. The many snow tracks reveal animal life as in no other season of the year.

When I first started photography in Toronto many decades ago, my goal was to shoot landscape and nature photographs for their artistic merit alone. However, as I wandered the valleys, ravines and lakeshore, I became alarmed at the degraded condition of natural areas. With few exceptions, I've been documenting the changing conditions of Toronto's many natural areas ever since. Weary of photographing the deterioration or destruction of natural areas, I have returned to my original goal. On a clear, mild and snowless day in December, I went to an area of Etobicoke Creek north of Eglinton Avenue West where I knew from experience deer are frequently sighted. It promised to be a good photo outing but it was not to be. Construction had started to twin an existing sewer in the creek valley. In places the entire valley floor on either the Mississauga or Toronto side of the creek had been stripped of vegetation. The extent of vegetation removal was extreme! This area was once an ESA. It's gone forever! Assuming that the Toronto Region Conservation Authority still works to preserve Toronto's remnant natural areas, I felt compelled to complain about the lack of enforcement by the Authority. Returning to old and familiar habits, I took many photos to document the destruction.

On a positive note, the last newsletter was a "first". Thanks to computer manipulation, we are able to incorporate a photograph on the front page. I hope we can duplicate the success.

Robin Powell



HELP CONSERVE INVERTEBRATES

There are important things you can do every day. Pesticides, which often kill many other organisms besides the target pest, are a major threat to invertebrates, so one major thing everyone can do is to support farming without chemical pesticides by choosing organic foods. In the suburbs and rural areas, light pollution is a concern as it attracts insects away from their habitats, disrupts their egg laying, mating, and feeding, and also makes them more susceptible to predation. You can reduce or eliminate outdoor lights or, if necessary, install motion detectors or use yellow lights that don't attract insects. But probably the most important thing you can do is to learn about the invertebrates that live in your area. We save what we care about, so the first step is just getting out there and learning to love the fascinating and often beautiful creatures all around us.

from " Dr. Sacha Spector on Saving the Other 99 Percent" [At the Museum] in
NATURAL HISTORY, Vol. 112, No. 10, Dec. 03/Jan. 04

KEEPING IN TOUCH

December 1, 2003

I've come to realize, by the way, that I rely on the TFN Newsletter for providing a variety of informative news items and articles. I think I may have told you that some of the Ottawa Field Naturalists Club people really respect the TFN Newsletter for precisely that reason: it always seems to be on top of what is going on, especially in the conservation arena.

Christine Hanrahan,
Ottawa

December 3, 2003

WHOLE KERNEL CORN

The house sparrow and starling are unwanted by most conservationists. However, they are prominent birds at many bird feeders in cities. The cardinals and blue jays eat whole-kernel corn. I have not seen it being eaten by house sparrows and starlings.

There is no messy residue of seed hulls from whole-kernel corn. The corn I have tried has large kernels and is sold for feeding ducks.

I have not seen any other potential corn-eating birds in our northern Scarborough yard. I plan to use whole-corn exclusively in our feeder. I ration it to minimize the possible feeding by pigeons.

Albert Roffey

□

"WILD GERANIUM"

much admired
Toronto
native
wildflower

field drawing
by Mary Cumming



MARY CUMMING
WILD GERANIUM
MONTGOMERY INN
JUNE 7, 2002

PROJECTS

THE ASIAN LONG-HORNED BEETLE IN ONTARIO

On December 15, 2003, Carolyn King and I attended a meeting put on by the Canadian Food Inspection Agency (CFIA) to educate nature groups about the Asian Long-Horned Beetle (ALHB). The beetle, *Anoplophora glabripennis* or Starry Night Sky Beetle, is a handsome 3 cm long bluish-black longhorn with variable white spotting. Unfortunately it is a major pest of hardwood trees in its native China and has now surfaced in North America. The first North American infestation was discovered in New York in 1996, followed by Chicago (1998), New Jersey (2002) and Toronto/Vaughan (2003). The first discovery in Ontario was in a Waterloo warehouse in August 1998, in packing material from China.

The CFIA estimate that the beetle has been in the Toronto area for 4-6 years. Their surveys have identified a list of preferred host trees: maples, particularly Manitoba maples, top the list, followed by horsechestnut. Willow, elm, birch, sycamore, hackberry, poplar, and mountain ash are also used. An ALHB infestation can kill a healthy mature tree in 4-5 years.

There are no known effective predators of the beetle, even in China. Pheromones don't work, and there are no insecticides that are effective on infested trees. The CFIA control strategy is removal of all host trees within a 400 metre radius of the last known infested tree; this range could be extended to 800 metres. A pesticide, Imidacloprid, is not yet approved for use in Canada, but the approval process is underway and the pesticide could be used as a soil treatment for trees in the 400-800 metre range. Four consecutive years of no beetle sightings are required to declare an area free of infestation. The U.S. procedure of removing only infested trees has not achieved this.

The Asian Long-Horned Beetle seems to have a 1-year life cycle in North America. The egg, which is white and looks like a dried cucumber seed or flattened grain of rice, is laid in a slit in the bark, probably starting in July. It hatches in about 11 days and the early instars feed on the cambium layer. Then the larva moves into the heartwood and feeds until pupation in early spring. The larva is NOT attractive: a 5 cm white grub with some brown on the prothorax. Adults begin to emerge in late May/early June; populations peak in early July. The emergence hole of the adult is quite distinctive; a perfect circle, 1 cm in diameter. Although the adults can fly 300-400 metres, the females seem to prefer to lay their eggs on their "parent" tree. The adult beetle feeds on twigs, petioles, and some foliage and prefers edge habitat and open stands to forest for its feeding and breeding.

What can we as individuals do to stop the beetle in its tracks? Most of us spend a lot of time outdoors. Knowing the ALHB's host tree preferences, we can keep our eyes peeled for signs of the beetle's presence: chewed bark indicating an egg has been laid, thin white eggs in a bark slit, sawdust frass, large round exit holes, the adult beetle itself. While the CFIA climbs trees to survey them, we can use binoculars to check the canopy of mature trees before the foliage emerges. Not that easy, but worth trying. From late May on, we can be especially alert for adult beetles.



ASIAN LONG-HORNED BEETLE (cont'd)

The Asian Long-Horned Beetle is really attractive and normally we'd take a live-and-let-live approach to it. However with no natural controls, its potential for destruction of our hardwood trees is enormous. And the prospect of losing 400-metre swaths of mature trees in the control effort is hard to accept. So let's do what we can as insect spotters. Any sightings should be reported immediately to the CFIA at 1-800-442-2342. In the event of a find, please DO NOT move or transport the beetle or any part of the host tree.

An article by Carol Sellers, in ONTARIO INSECTS, Vol.9, No.2, January 2004



RESERVOIR PARK
a drawing by Mary Anne Miller, 2003

Returning crows call
in outrage to bleak March skies
"Our old landmark gone!"

Haiku by Arthur Wade

referring to CBC tower 1952 - 2002

PROJECTS (cont'd)

SUMMER JOB OPPORTUNITY FOR YOUNG NATURALISTS

Presqu'ile Provincial Park is looking for new, highly-motivated staff between the ages of 16 and 24 for its Natural Heritage Education department this summer. Over the years they have found that the best of their summer naturalists were those who already had a keen interest in natural history. They provide weekly training sessions to help hone natural history skills. For more information contact: Janine Dewit, Natural Heritage Education Leader, Presqu'ile Provincial Park, at (613) 475-4324 ext.225, fax (613) 475-2209, email janine.dewit@mnr.gov.on.ca



"OLD ZOO BUILDING" site drawing by Mary Cumming

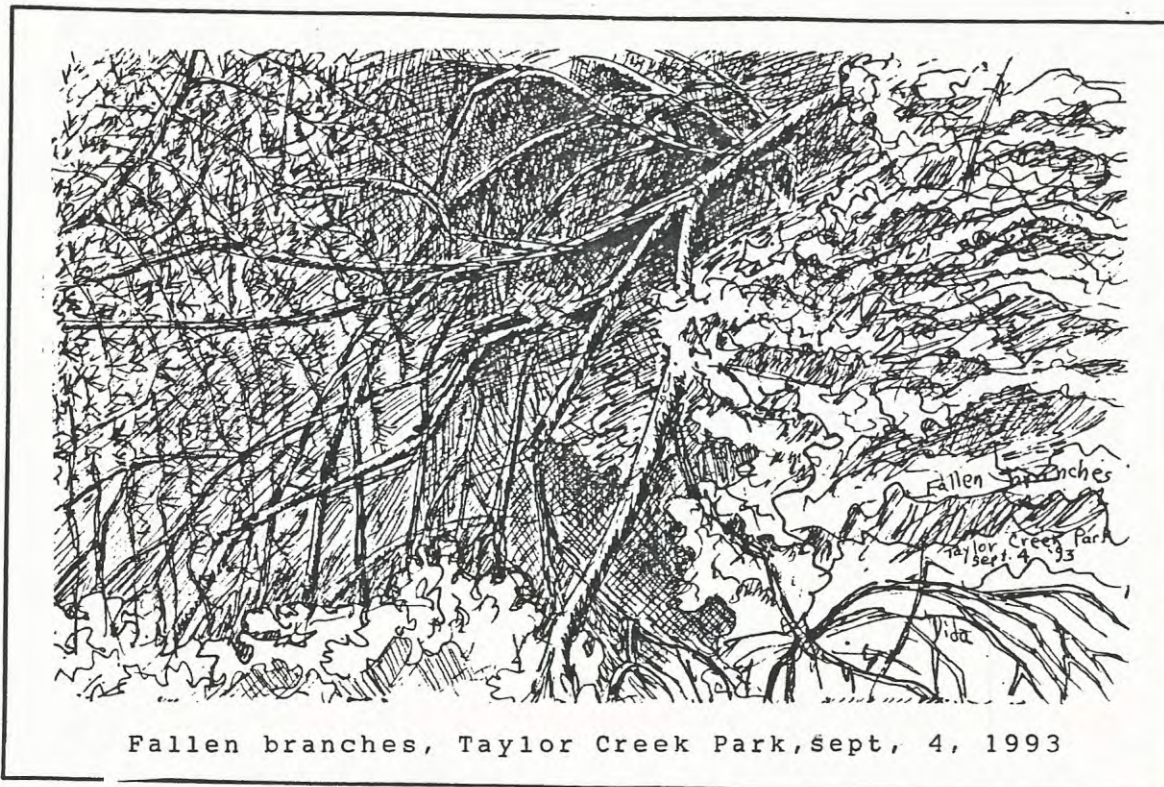
NEW HIKING-BIKING PATH FOR WEST END BELT LINE

The clearing, levelling and paving have been completed on the belt line from Times Rd. north of Eglinton Avenue West to Croham Rd. It is a shame it is not continuous from the old beltline trail but there is quite a long interruption at the Allen Expressway. If you are walking west from the Chaplin Crescent part of the path you are better off to walk north to the Roselawn Avenue bridge when you get to the Allen, and walk west to Walter Saunders Memorial Park. You cannot see it from Roselawn but it is just west of Times Road.

Much work has to be done to clean up the new path. I presume the paving was done first so trucks can be brought in to carry out all the old tires, bricks and other heavy material I saw along the trail. Tons of material have been dumped illegally. Grass seed has been sprayed and bushes removed, so now the trash is even more noticeable than it was. In time I am sure it will be a great path. It just has to be cleaned and kept that way. I don't think it will be used much to begin with because it is so well concealed. I imagine a new heritage walk could be created if you walked south through Prospect Cemetery. I did such a walk last year and it was interesting.

Roger Powley

□



Field Drawing by Diana Banville

CANOPY LIFE IN THE PARK DRIVE RAVINE

When we moved from a ground floor to a top floor apartment in our building last September, it gave us a great view over the ravine behind us; and with that, a chance to experience some of the things that go on in the deciduous tree canopy in this area.

This ravine, like many, functions as a migration route for many creatures, including hummingbirds; so the first thing I did was put up the feeders. Though they normally pass through this ravine in the last two weeks of August, I thought there might be a few stragglers because spring was late. And, there were; a second set of birds arrived -- three juveniles -- and fed frequently for the next two weeks. Next in line: American goldfinches, which also passed through and stayed awhile, enjoying the neighbour's niger seed. The monarchs were busy this month as well, taking advantage of strong north winds to wend their way along the ravine, then up and over the building and beyond.

After settling into my office which overlooks the ravine, I would look across the canopy from time to time, to see how things were changing with the season. In late September, I noticed a black cherry behind some elms. When its berries turned bright red, a small flock of cedar waxwings appeared and fed on them several times a day -- when the squirrels would let them.

In October, turkey vultures floated by overhead on balmy days, in small groups of three or four. When it got a little cooler, a great horned owl moved into the area, settling into the top of a nearby walnut tree each evening for a good hoot. This year there was no response so it moved on after several weeks. In November, the usual suspects arrived, and put the mesh seed silo and mesh suet feeders to good use. The feisty juncos duked it out with everything on the balcony searching for 'their' fallen seed morsels; while the tiny red-breasted nuthatches berated everything that came near 'their' silo feeder. December brought an additional treat: a northern flicker -- which despite its size, wouldn't come near the suet feeder until it was free. Made the mistake of attaching it to the wall by the bedroom -- haven't needed the alarm since.

All this activity led to the predictable: a sharp-shinned hawk came in for a closer look one morning, choosing the walnut tree as a vantage point. As I watched it through the binoculars, I saw our biggest, fattest squirrel accidentally roller-derby it, as it raced up the tree. What a sight: the jostled hawk, more annoyed than anything, inched away a bit further up the branch; the squirrel froze, then panicked and put it in reverse until it was pressed tight against the trunk. After a few minutes of big thinking, it figured it out and strutted (cautiously) past the harmless hawk en route to bigger and better things. The hawk then flew away to pursue its prey, birds.

I just don't get as much unimportant work done as I used to, in this office -- watching them do their important work.

Marita Dreger

□

STRANGE SIGHTINGS

Recently, while destroying extra copies and working-copies, I came across notations of times of blooming of Toronto wildflowers. These I added to my lists. In the meantime, I kept putting aside notes of interest of some of the plants and couldn't resist sharing them with you:

June 17, 1989: A fascicled plant was found on Leslie Street. Only Dr. Nick Badenhusen was familiar with the phenomenon. It was a lemon-yellow goat's-beard with three flower-heads joined and the stalks forming a strap-shaped "blade", foliage abundant.

August 1974: Among the black-eyed Susans, a "green-eyed Susan" was found. We reasoned that maybe it was a hybrid with leaves of the first-mentioned and disc of the cut-leaved cone-flower which is typically greenish.

October 3, 1996: Stands of 12-foot giant ragweed frequented by birds: red-winged blackbirds, house sparrows and a white-throated sparrow, according to Ann Millett, leader of the Humber Valley TFN outing. The species would be in fruit by then. Perhaps the birds really do consider the genus worthy of its name, "Ambrosia".

Diana Banville

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"FASCICLED
PLANT"
sketched by
Diana
Banville
June, 1989



IN THE NEWS

COURT UPHOLDS CITY BAN ON PESTICIDES

The Ontario Superior Court has upheld the validity of a Toronto bylaw which makes most pesticide use illegal starting April 1. The bylaw was passed by city council last May, and bans pesticides on all private and public property. Croplife Canada, an industry group representing pesticide manufacturers and distributors, challenged the city's legal authority to pass the bylaw. Group members included Dow, Agro Sciences Inc. and Dupont Canada Inc.

Under the bylaw, a pesticide includes any product or substance registered under federal pest control legislation that is used to control, destroy, attract or repel a pest, or for reducing or preventing its "injurious, noxious or troublesome" effects. In passing the bylaw last May, council cited citizen concerns over health risks associated with the use of pesticides in Toronto. The preamble to the bylaw acknowledges that pesticides used in lawn and garden care are known to enter streams and rivers that discharge into Lake Ontario, the source of the city's drinking water.

Instead of framing the bylaw as environmental legislation, the city worded it to make it clear that its aim was the health, safety and wellbeing of the city's inhabitants. In the decision released last month, Justice P. Somers found that there was no conflict between federal or provincial environment legislation and the Toronto bylaw. He ruled the bylaw was within the city's powers ("intra vires") and Croplife's application to quash it was dismissed. Costs were awarded to the city.

Toronto is not alone in its campaign to ban pesticides. Several other Ontario municipalities have similar bylaws, including Caledon, Perth and Thorold. Halifax and about 40 Quebec municipalities also have similar bylaws in place.

Under the Toronto bylaw, pesticides are still permitted within the city for indoor use and for situations directly related to protecting human health, such as purifying drinking water or swimming pools, and controlling or destroying a health hazard such as West Nile virus. For homeowners tempted to use up those old pesticides in the garage or shed, remember the fines can be up to \$250.

extracted from an article by Bob Aaron, in the TORONTO STAR, January 24, 2004

COSTS OF INVASION

The world conservation Union (IUCN) believes that invasive alien species represent the greatest threat to the preservation of global biodiversity, after habitat destruction. The IUCN puts the annual cost of this spreading scourge at around \$400-billion (U.S.) in damage, lost farm yields and control measures, including the use of chemical pesticides and herbicides, which themselves may kill other plants and animals or harm humans.

from Social Studies by Michael Kesterton, in THE GLOBE & MAIL, December 23, 2003



DUCKS ABANDON WINTER MIGRATION

Ducks have found they don't really have to fly south for the winter when they can get all the food they need in Newfoundland parks. Starlings started the trend and ducks quickly caught on to the free food from birdwatchers in the capital. St. John's winter duck population has grown from about 800 belonging to five species a decade ago to more than 2,000 from eight species.

from an article in MEIRO, January 16, 2004

BIRD LOVERS DO BATTLE WITH U.S. MILITARY

Every year, tens of thousands of snow geese and tundra swans fly south from Canada's Arctic coast to spend the winter in a quiet corner of North Carolina. People in the area are very fond of the birds. Farmers plant extra crops to ensure the wintering waterfowl have plenty to eat. They like the birds so much they're taking on the mighty U.S. navy in a battle to protect a refuge. The dispute is over the navy's plan to build a practice runway for pilots learning to land the next generation of ultra-fast, powerful - and very noisy - F/A-18 Super Hornet jet fighters on aircraft carriers. The pilots, flying from a nearby air base, would touch down on the new landing strip, then immediately take off again. At least 84 of these "touch and go" procedures would occur every day; nearly 32,000 a year. Most would be at night.

Trouble is, the "offsite landing field" would be only 5 kilometres from the Pocosin Lakes National Wildlife Refuge, a 44,000-hectare expanse of lakes, marshes and pine forest that's the winter home for an estimated 100,000 waterfowl. Opposition to the navy's plan is fierce, a surprising development in a state where the military generally enjoys strong support. Along with the environmental considerations, there's a healthy dose of self-interest in the fight to protect the birds. Hopes for economic development hinge on attracting tourists. The refuge and its magnificent birds are a key part of the strategy.

extracted from an article by Peter Gorrie, in the TORONTO STAR, December 26, 2003

MOST DANGEROUS BIRD

The world's most dangerous bird is the southern cassowary. The bird is a native of Australia and New Guinea. In 1995, 80 attacks on hikers and birdwatchers were reported in Queensland; none was fatal, but the risk is serious. An adult southern cassowary can stand six feet tall, run 30 miles perhour, and disembowel a man, woman or child with a slash of one of its four- or five-inch stiletto-sharp middle toenails.

from an article by Michael Kesterton, in the GLOBE AND MAIL, January 3, 2004

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IN THE NEWS (cont'd)

YOUNG SCIENTISTS INVESTIGATE HEALTH OF ECOSYSTEMS

Since September, students of Northern Secondary and Rosedale Heights have been seeking out benthic macroinvertebrates (water bugs) and lichens to identify the big messages that these little creatures are giving us about ecosystem health -- in Burke Brook and Emery Creek, and the air quality around Stan Wadlow Park.

The students are participating in the Citizens' Environment Watch (CEW), a non-profit organization that is the brainchild of Ursula Franklin. CEW's goals are to give communities in Ontario, particularly youth the knowledge and tools they need to determine the general health of local air and water quality to help communities make sense of and share the results of their monitoring, and to support communities as they educate and engage local decision-makers about priority environmental issues, and develop action projects to protect or restore the health of local ecosystems.

There are two programs: Changing Currents (using water bugs to monitor water quality), and Learning Atmospheres (using lichens to monitor air quality).

CEW staff help participants choose local sites to monitor and provide training in sampling methods.

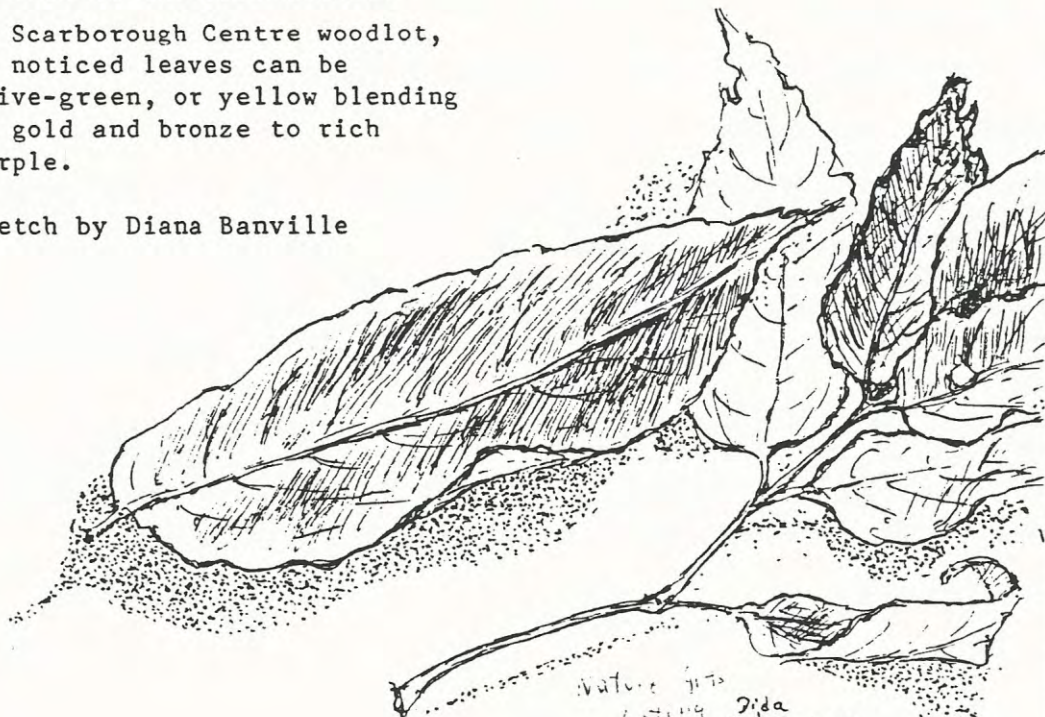
from an article in the TOWN CRIER, Dec. 2003

▽

White ash adds interesting accents to the fall colour.

At Scarborough Centre woodlot, we noticed leaves can be olive-green, or yellow blending to gold and bronze to rich purple.

Sketch by Diana Banville



IN THE NEWS (cont'd)

THOUGHT SO

Ever wonder why spiders don't get caught in their own webs?
The truth is that some spiders do get stuck accidentally.

from an article by Michael Kesterton, in THE GLOBE AND MAIL, September 12, 2003

FLOWER POWER MISSING

One of the more curious things in science happens when a scintillating advance is proclaimed by media everywhere and then, as far as the ordinary person can tell, vanishes.

Consider the lemon-scented geranium. In 1999, research on the plant at the University of Guelph was described as a breakthrough that "will offer significant improvements to the environment" because of the geranium's "uncanny ability to absorb metal and organic pollutants." After the geranium sucked up cadmium, lead, copper and other poisonous metals from the ground, the soil in which the flower was planted was clean enough to grow food in. Moreover, after it was cut down, the geranium's essential oils could be extracted and used to make perfumes.

So where are all the fields of geraniums cleaning and beautifying our polluted landscapes? Nowhere. It is not because geraniums aren't a good soil cleanser -- further studies have found they are also good at removing salt -- but in order for the flower's depolluting power to become practical, it needs to be fully tested. And in order for it to be fully tested, it needs somebody -- industry, government, somebody -- to put up the money to perfect the technology. And nobody has.

So the lemon-scented geranium beautifies gardens, and polluted fields remain polluted.

from an article by Stephen Strauss, in THE GLOBE AND MAIL, November 8, 2003

SQUIRRELS' POOR MEMORY A GOOD THING

The faulty memories of gray squirrels turn out to be good for forests, but the nut-hoarding habits of their red cousins are not. The bane of backyard bird feeders, the ubiquitous gray squirrel buries walnuts, acorns and other nuts across the landscape in a pattern called "scatter hoarding". Some nuts are forgotten and have a chance to germinate and sprout into black walnut, oak and hickory trees needed to regenerate steadily retreating hardwood forests.

The red squirrel usually piles nuts in a few above-ground caches, where the seeds dry out or are eaten. Seven times as many walnuts gathered by gray squirrels germinate compared with walnuts hoarded by red squirrels.

from an article from Reuters News Agency, in THE TORONTO STAR, November 29, 2003

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IN THE NEWS (cont'd)

MOTHER NATURE NEEDS MORE CITY BOYS AND GIRLS

What is happening to our urban children? Many of them seem to have lost any connection that ever existed between themselves and nature. But for the artificial excursions to the country to ski or attend a tennis camp, this next generation does not know what the natural world could possibly mean to them. They have not explored their own potentially deep connection with trees or plants, or considered the fragility of the precious resource of water.

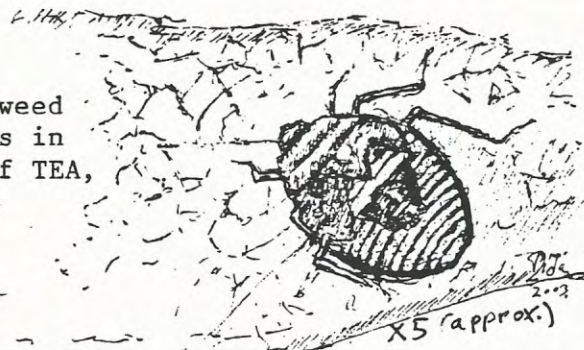
How can we possibly expect them to have any concerns that ensure the perpetuity of green spaces, clean air and water if their lives have so little to do with the earth that sustains us? What hope is there for their children's children if they have not held a horse chestnut in their fist and contemplated its remarkable spikiness, or climbed into the canopy of a maple tree and imagined other worlds, or studied the metamorphosis of a dragonfly along a riverbed? Many of our urban children cannot imagine that being idle on a lazy summer afternoon while bathing in a cacophony of insect melodies could add anything of value to their lives.

It behooves parents to be more vigilant, to ensure that their sons and daughters walk in the natural world and learn to feel the peace that can only come when one makes meaningful connections with the planet that sustains us. In a society that seemingly has everything, we have not given our children nature. In fact, we are actually perpetuating its disappearance. We have not invited our youngest generation to climb a tree and feel the firm rub of old bark that allows us to know humility.

We have not pulled them away from the television or computer and brought them out onto the lawn to gaze at the stars after night has fallen. We have not taken them to an orchard (where wasps buzz), to pick a family's supply of McIntosh or Lobo or Cortland apples for their lunches for the weeks to come. We have done them a terrible disservice, and we have shortchanged our own society.

extracted from an article by Deborah Banks, in THE GLOBE AND MAIL, November 4, 2003

Immature stinkbug on Joe-Pye-weed
based on a photo by Bob Bowles in
ONTARIO INSECTS, newsletter of TEA,
Vol. 9, No. 1, Sept. 2003



IN THE NEWS (cont'd)

CLOSE-UP: THE BIG PIPE

Fearing the construction of York Region's "Big Pipe" will bleed streams dry and destroy fish habitats, environmentalists are demanding the new sewer be plugged up before another inch is built. They insist the \$800-million project needs a full environmental assessment to determine the true impact of pumping billions of litres of water from the ground to lay the sewer. Regional officials readily admit the problem.

The huge, gravity-fed sewer, which will stretch from the east side of Lake Simcoe to Lake Ontario, is being built to serve one of the fastest-growing regions in the country. With huge growth in York Region in recent years, the population is expected to almost double to 1.3 million by 2026. The existing system, which was built in the 1970s under Yonge St. and serves Vaughan, Markham, Richmond Hill, Aurora and Newmarket, is pretty much at capacity. A new twin sewer, under Leslie St., is needed to accommodate emerging subdivisions and industries north to Holland Landing. Rural communities like King City and Whitchurch-Stouffville will also hook in.

When it's built, the Big Pipe will move up to 740 million litres of raw sewage each day to the Pickering treatment plant on Lake Ontario. The region began construction of trunk sewer in Markham in 2000. About 4 kilometres have been built south of Highway 407 in Box Grove, along 9th Line to Major Mackenzie Dr. Eventually, the sewer will be extended to Whitchurch-Stouffville. Another 2.5 kilometres runs along 16th Ave., ending at Stone Mason Dr. That section is to be continued west some 7 kilometres to Woodbine Ave.

To build the first phase of the 16th Ave. section, a tunnel had to be burrowed as deep as 50 metres into the ground to make way for the 2.7-metre-diameter concrete pipe -- big enough to drive a car through. Millions of litres of groundwater had to be pumped out and discharged into streams and storm sewers so tunnelling could be done safely.

Problems began surfacing early in 2002, when wells several kilometres from the site began to dry up. As work continued and millions more litres of water were sucked from aquifers -- underground lakes and rivers -- the area of impact spread. Within months, rural Markham residents living north of major Mackenzie Dr. began complaining about well levels dropping dramatically and dirty water. They couldn't drink it, cook with it, or bathe in it.

More than 15 billion litres of water have been drained since construction began. At least twice that amount will be sucked out before the 16th Ave. project reaches Woodbine, a project that will take three years to finish. Work on that phase is on hold, but water continues to gush from the ground to protect the integrity of the first section of the tunnel. The region has installed temporary holding tanks at homes and farms with dry wells. For months, residents had to rely on water delivered by trucks. Many said it smelled and was undrinkable.

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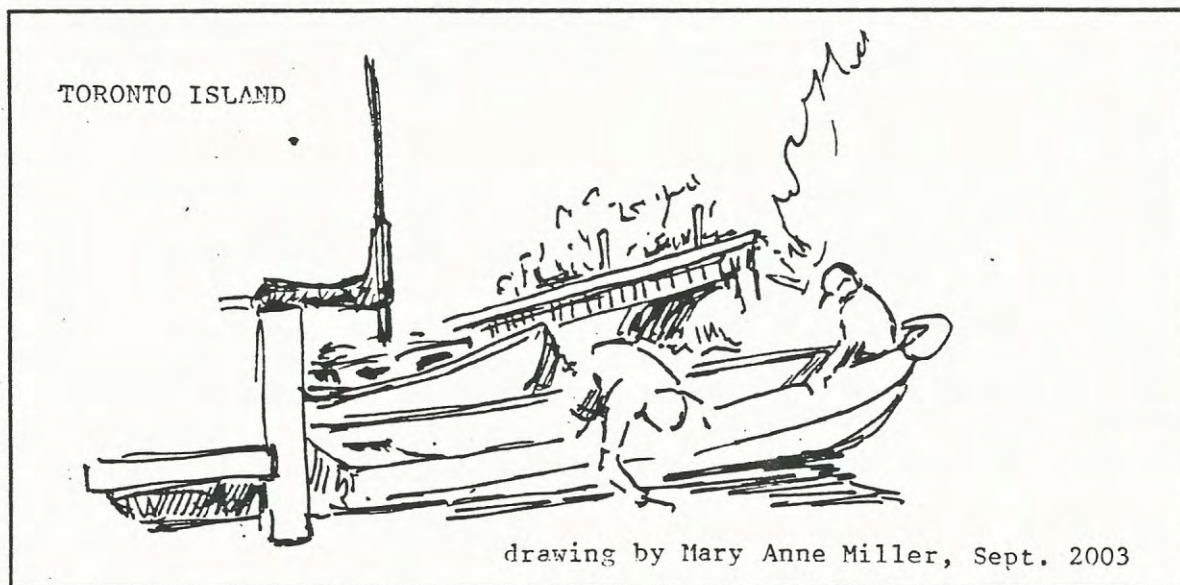
IN THE NEWS (The Big Pipe) (Cont'd)

When water complaints began flooding in, Markham council demanded the province withhold the region's permit to siphon more water from the ground until residents' problems were sorted out. Without the water-taking permit, construction could not continue on the pipe to Woodbine Avenue. Markham's demands were heard. York was ordered to prepare mitigation plans to satisfy regulatory agencies, including the provincial environment ministry, the federal Department of Fisheries and Oceans and the Toronto Region Conservation Authority, that construction of the Markham sewer wouldn't harm watercourses or fish habitats.

The region and its consultants have been working feverishly to come up with those plans. The region is using a new tool that wasn't available when the sewer project first began -- a high-tech computer mapping system that simulates what's under the ground. One proposal being considered is piping some groundwater from 16th Ave. north, to replenish streams dried by de-watering. Another would see the cold groundwater heated before it is released into streams to protect delicate aquatic ecosystems. Neither has ever been tried in the field, so there's no way of knowing whether the ideas will work or what the impact would be. A comprehensive environmental assessment would show that. It also would find that water being pulled, at breakneck speed, from deep in the ground is saturated with high concentrations of minerals such as iron and cadmium.

These minerals pollute streams in discharge areas like Stone Mason Dr., where groundwater is being discharged into Robinson Creek, which flows into the Rouge. The mineral-laden water changes the chemistry of streams and tributaries and fish habitat. In nature, minerals are filtered out over the course of hundreds of years as groundwater slowly percolating to the surface.

extracted from an article by Leslie Ferenc, in the TORONTO STAR, January 3, 2004



IN THE NEWS (cont'd)

WINDBLOWN RAIN

Scientists have long assumed that raindrops fall in a "uniformly random" pattern which averages out over large areas. This mistaken hypothesis is built into modern weather prediction. However, McGill researchers have discovered after 11 years of analysis that rain falls in complex eddies and whirlpools. This is consistent with patterns in wind turbulence and can therefore be described by mathematicians' chaos theory. Smooth, constant rain does not exist.

from Social Studies by Michael Kesterton, in THE GLOBE & MAIL, November 3, 2003

RACCOONS VS. SONGBIRDS?

Songbirds are in trouble throughout the eastern United States, and new research suggests raccoons are a major part of the problem. Raccoons love eggs, and an Illinois study shows that populations of birds with low nests have been dropping since raccoon populations began rising in the early 1980s.

from Social Studies by Michael Kesterton, in THE GLOBE & MAIL, November 24, 2003

WORLD O' BRIGHT FISH

Goldfish are not the dummies they are made out to be. Scientists at Plymouth University in England have successfully trained goldfish to push a lever to get food, and -- get this -- to do it at the same hour every day. And the fish remember what they have been taught for months.

The idea of fish being dimwitted creatures with three-second memories has been blown out of the water by British biologists. Now it's thought they have impressive long-term memories, plus social intelligence and cunning. They recognize fish in their shoal, monitor others' prestige and track relationships. They also co-operate to catch food and see predators, and their ability to learn is said to be as good as land-dwelling vertebrates.

from Social Studies by Michael Kesterton, in THE GLOBE & MAIL, December 11, 2003

ENDANGERED SOIL?

Of the 13,129 soil 'series', or species, that occur in the United States, 4,540 are classified as 'rare' (having a total area of less than 2,500 acres) or 'rare-unique' (present in only one state and having a total area of less than 25,000 acres).

If more than 50 per cent of a rare or rare-unique soil has been lost to incursions such as housing, highways, or agribusiness, the soil should be considered endangered....Unusual soil types [are] often the substrate for rare plants. Alter the soil and the ecosystem changes.

from Social Studies by Michael Kesterton, in THE GLOBE & MAIL, December 12, 2003

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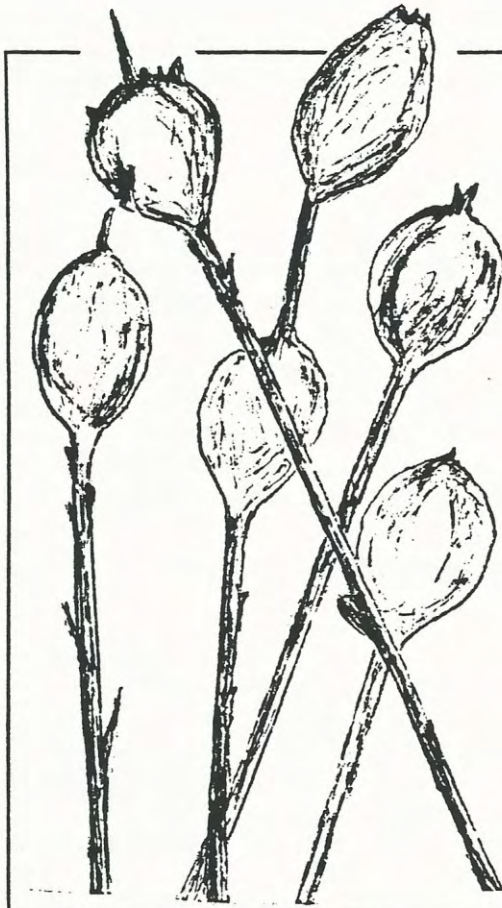
IN THE NEWS (cont'd)

WORM INVASION THREATENS GOBLINS [a native fern]

New research conducted in northern Minnesota suggests that earthworms are making life difficult for native plants. The problem is that these plants evolved in a worm-free environment. If there were ever any worms native to Canada and the northern United States, they were killed off during the ice ages. It's a little-known fact that the earthworms that now populate our soil are recent immigrants, introduced by European settlers in the last 500 years.

While earthworms are destroying the growing conditions required by [native plants] they may be making our forests more susceptible to invasion by exotic plant species. The invasion of natural habitats by earthworms may enable aggressive exotic plant species such as garlic mustard and Norway maple to get established. The earthworms may be disrupting the reproduction of native plant species with seeds adapted to germinate in darkness beneath the leaf litter which is now thinner because of the invading earthworms.

from an article by Tyler Smith, in THE WOODDUCK, September 2003



GOLDENROD GALLS

I remember one February when the collection of goldenrod galls, which I had in a dry-flower arrangement, suddenly "bloomed" -- that is, the room's warmth awakened the gall inhabitants and I found my living room windows one day covered in small fly-like insects. They were quite innocuous, seeking only the light and leaving the rest of the house severely alone. I could not release them to the unspring-like outside and could only leave them to demise slowly of warmth and false hope.

Eva Davis

IN THE NEWS (cont'd)

ANCIENT MAN HURT CLIMATE

Measurements of ancient air bubbles trapped in Antarctic ice indicate humans have been changing the global climate since thousands of years before the industrial revolution.

Beginning 8,000 years ago, atmospheric levels of carbon dioxide began to rise as man began clearing forests, planting crops and raising livestock. Methane levels started rising 3,000 years later. The combined increases of the two gases implicated in global warming were steady and staved off what should have been significant natural cooling.

The changes also disrupted regular patterns that dominated the 400,000 years of atmospheric history that scientists have teased from samples of ancient ice. Scientists had assumed it was only with the onset of the factory age that human activity had any significant effect on the global climate.

from an article from Associated Press, in THE TORONTO SUN, December 26, 2003

WORLD O'DIETS

A seed-only diet places [American] goldfinches in an exclusive club -- almost all birds, at least during their breeding season, eat insects. This diet has unique ramifications. It makes goldfinches a lousy host for cowbirds (parasites that lay eggs in the nests of other birds) because young cowbirds fed only seeds die after a few days.

from Social Studies by Michael Kesterton, in THE GLOBE AND MAIL, October 29, 2003

OWWWWWL

A team of birders was banding an immature snowy owl. Everyone relaxed, but no one was quite ready to release the bird, and wanted to admire him first. His wildness might be changed or compromised, but perched unblinking, staring at the few remaining people surrounding him, his dignity remained. Serene, he was passed to another person. In an instant too fast to follow, one of the owl's legs flexed, its foot sought a perch and the new man's knees began to buckle. His head tipped. He moaned. The talons of the snowy's left foot had gone right between the bones, all the way through the man's palm.

from Social Studies by Michael Kesterton, in THE GLOBE AND MAIL, October 30, 2003

FINE VIOLIN WEATHER?

A minor ice age gripped Europe from the mid-1400s until the mid-1800s. This slowed tree growth and yielded uncommonly dense Alpine spruce. Researchers suggest that this gave the wood used by Italian violin-makers special acoustic properties -- and produced a heavenly sound. The ice age reached its coldest point during a 70-year period from 1645 to 1715. Antonio Stradivari produced his most prized and valued string instruments from 1700 to 1720.

from Social Studies by Michael Kesterton, in THE GLOBE AND MAIL, December 4, 2003

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IN THE NEWS (cont'd)

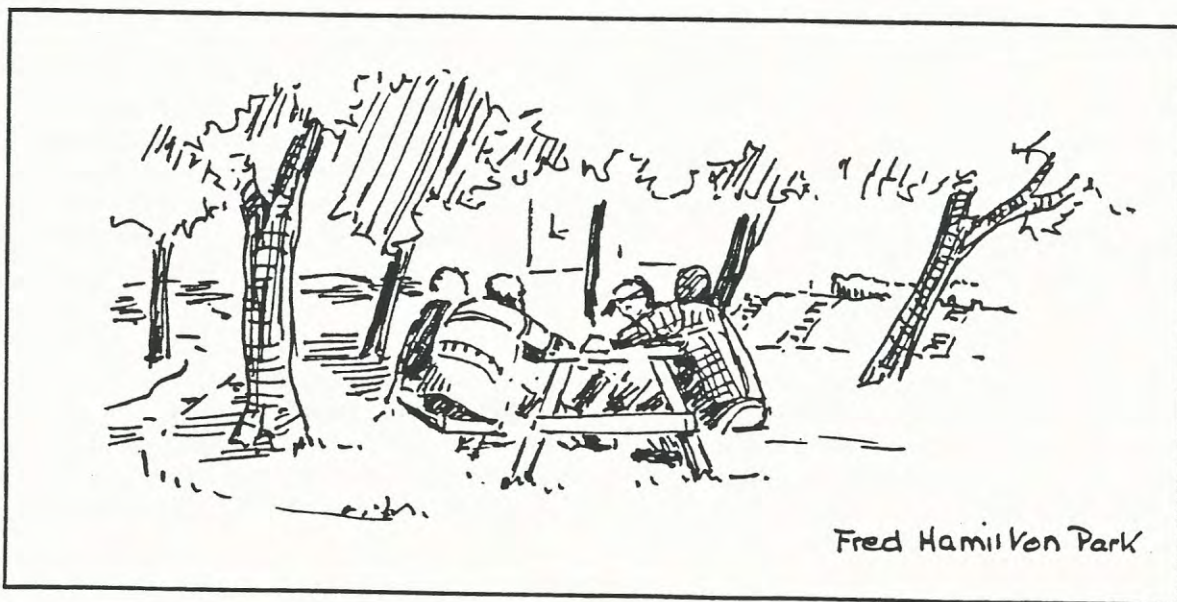
ARCTIC LAKE POLLUTION GOES BACK CENTURIES

Centuries before European settlers began dumping sewage and fertilizer into Canada's waters, prehistoric Inuit hunters transformed a pristine Arctic lake into a slimy, moss-choked waste disposal site. Decaying whale bones and organic waste from whales, seals and other slaughtered animals fertilized an unnamed lake in the Arctic just as the dumping of phosphate detergents into the Great Lakes did in the 1960s and '70s. And the lake has still not returned to its original condition, even though the Inuit whalers left around 1600.

Polar regions are one of the best places to look for evidence of climate impact and environmental change from human interference because their ecology is so sensitive, with many forms of life just barely managing to survive. The lake's algae population today continues to be different from other high Arctic lakes because the water contains higher levels of calcium and phosphorus, a legacy from four centuries of whale slaughtering and mounds of still-decaying whale bones.

A research team tracked the lake's changing ecology through 800 years using an alternate method based on radioactive decay of lead in the lake sediments. A Queen's scientist pioneered study of diatoms, single-celled algae living inside protective silica casings, as a way to reconstruct past ecological conditions in the Arctic. The mix of different kinds of diatoms preserved in lake sediments reflects changes in climate and other local environmental conditions. In a current study, the researchers painstakingly counted the occurrence of 35 different diatom species through a core that preserved eight centuries in sediments 23 centimetres deep.

from an article by Peter Calamai, in the TORONTO STAR, January 27, 2004



FRED HAMILTON PARK, Toronto
site drawing by Mary Anne Miller, 2003

IN THE NEWS (cont'd)

MOURNING DOVE DISEASE OUTBREAK AT BRAMPTON

In the period between September 12 and October 9, 2003, an unusually high number of dead or dying mourning doves was noted at Brampton. During this period, daily counts of new dead birds were made in the area of Rossett Crescent (near Queen Street and McLaughlin Street). The numbers of dead birds found daily ranged from 1 to 11 and the cumulative total for the four-week period was 128. No new dead birds were noted after October 9.

At Rockwood in 2003, a number of mourning doves were also found dead or ill at approximately the same time as the dying birds were noted in Brampton. The number of birds was much less than at Brampton but the circumstances were generally similar. Dead birds were collected on July 27, August 15 and September 19, 2003 at Rockwood and were submitted to the Wild Bird Clinic at the University of Guelph for autopsy. The examination confirmed that three of the four birds in the sample had died from Trichomoniasis (J. Drake, pers. comm.). A previous episode of Trichomoniasis in mourning doves in our area had been noted and confirmed at Norval in 1999.

Trichomoniasis, caused by the protozoan parasite *Trichomonas gallinae* (also known as *T. columbae*), is a disease that is particularly prevalent in mourning doves and other dove species. It does infect other bird species (e.g. raptors, chickens, turkeys, cage birds) from time to time including raptors that might feed on infected doves. The disease has a world-wide distribution (e.g. United Kingdom, Malaysia, North America), in fact, anywhere that birds are found. It may have become established in North America when certain bird species were introduced from Europe.

The organism can exist in many birds for much of their lives without causing any health problems but, periodically, outbreaks of the disease involving virulent strains of the parasite do occur. Sometimes the number of birds involved in the outbreaks is very large but smaller episodes are likely not reported. The literature includes reference to tens of thousands of mourning doves dying in the southeastern United States in 1949-1951. In 1950-1951, 25-50,000 mourning doves were noted as dying each year and this number was thought to have been a gross underestimate of the scale of deaths. In 1988, at least 16,000 band-tailed pigeons died in California. While these numbers may appear high, they are rather small compared with the numbers of birds killed by hunters. The annual harvest of mourning doves in the United States is in excess of 40,000,000 per year causing this target species to have by far the highest hunting mortality of any type of game bird or animal including ducks, geese, rabbits and squirrels.

The situation at Brampton is likely typical of many outbreaks of the disease. The flock includes perhaps 5-600 birds that come to roost overnight in a remnant woodlot along Fletcher's Creek. This brings the birds into close proximity where the disease can be readily spread from infected individuals. The organism is spread among adult birds through faecal material at feeders and in water.

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MOURNING DOVE DISEASE (cont'd) - IN THE NEWS (cont'd)

While little can be done to control the disease with respect to the natural habits of the birds (i.e. mating, roosting, feeding of young), proper hygiene at feeding stations (regular cleaning and sanitizing of feeders) may help to break the disease cycle. We would like to learn about the incidence of similar problems with wildlife in our area so that these can be documented whenever they might occur.

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- McIlveen, W.D. 1999. Trichomonas among us. The Esquesing (Newsletter of Halton/North Peel Naturalist Club) Vol.34, No.3. pp.8.
- Rupier, D.J. and W.M.Harmon. 1988. Trichomoniasis. Chapter 25. Field Manual of Wildlife Diseases, Birds. pp.201-206.

from an article by W. D. McIlveen and E. Schenk, in THE ESQUESING, January-February 2004



A planting of Saskatoon berry in flower at Harbourfront sketched by Diana Banville at a TFN Nature Arts outing. A western serviceberry.

THE WEATHER (THIS TIME LAST YEAR)

March 2003, Toronto

The month was divided quite dramatically down the middle. The first half was exceptionally cold and fairly snowy. The second half was quiet and mild with occasional rainy periods.

The outstanding cold period early in the month culminated in a minimum of -23.1°C downtown and -24.7°C at Pearson Airport on March 3rd. This was a cold snap of 19th century proportions. It was the fifth coldest ever reading for March downtown and the lowest since March 5th, 1872. Pearson had its second-coldest March temperature ever, after March 3rd, 1950, when it hit -28.9°C . Ironically, no daily records were broken because the earlier monthly records were on March 3rd also. Changeable but still rather wintry weather persisted up to March 14th, with many more minuses than pluses, some snow, and some sun. Then came the big thaw, and temperatures soared into the mid or even upper teens. On March 17th, Pearson hit 18.6°C over snow-covered, frozen ground. The ground took a while to thaw and warm up, and snowdrops were blooming in the last few days of the month -- compared to mid-February, which was not unusual for recent, milder years. Finally, at the very end of the month, there was a trend back to cooler conditions again.

Although it really began to feel like spring in the last two weeks of the month, the temperature averaged marginally below normal for the month, the lowest since 1997. Precipitation was somewhat light, with a shortfall of rain and slightly above-normal snowfall. Because of the quieter period from March 14th-23th, March winds averaged lighter than average: 17.5 km/h at Toronto Island (normal 19.8 km/h), and 14.8 km/h at Pearson Airport (normal 17.1 km/h). These were the lightest winds since 1995 and 1979 respectively.

Winter 2002-2003 ended up being relatively severe, in contrast to 2001-2002, which was exceptionally mild. The period from November to March averaged -3.0°C at Pearson Airport, so it was the coldest winter since 1995-1996, which averaged -3.9°C .

Gavin Miller

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WILDLIFE IS GOOD FOR YOU

Research shows places which attract birds, butterflies, other insects and a range of plants help to relieve stress, reduce anxiety and promote well-being. One mental health group says increased contact with nature can improve the quality of life and our ability to cope with change.

from "Watching Brief" by A. Kirby in BBC WILDLIFE, Vol. 22, #1, Jan. 2004

COMING EVENTS

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

- Sat. March 6 from 9 am (all day) with Ron Scovell to see waterfowl from Toronto to Burlington. Meet in the parking lot at Humber Bay East to car pool. Bring a lunch and dress warmly.

Royal Canadian Institute - Sunday afternoon lectures on science - free

- March 7 at 3 pm - Let's Talk Science - for young people ages 7-12 accompanied by an adult. The lecture is at the Medical Sciences Building, 1 King's College Circle. Call 416-977-2983 for details.

Toronto Entomologists' Association - meeting

- Sat. March 27 at 1 pm in Room 432 in the Ramsey Wright Zoology Building, 25 Harbord St. at St. George St. The subject is a Student Symposium. Postdoctoral fellows, graduate students and senior undergraduate students will present their research on insects with a talk or poster. Everybody welcome. Call 905-727-6993 for details about the club.

Citizens Concerned About the Future of the Etobicoke Waterfront

- Sunday, March 28 from 9 am to 11 am with Glenn Coady at Humber Bay East Park to see birds. Free. Rain or shine. Everyone welcome. Call 416-252-7047 for more information about this group.

Federation of Ontario Naturalists Annual General Meeting and Gathering

- Sat. May 29 at Black Creek Pioneer Village, Toronto
Call 416-444-8419 for more information.

Presqu'ile Provincial Park - Waterfowl Festival - March 13,14 and March 20, 21 from 10 am to 4 pm daily. For more information call 613-475-4324.

Niagara Peninsula Hawkwatch at Beamer Memorial Conservation Area, on the escarpment above Grimsby from March 1 to May 15.

Ian Wheal heritage walks

- Sat. Mar. 6 at 1:30 pm - Sumach Creek. Meet at the northeast corner of Queen St. East and Sumach St. Call 416-570-6415 for more details.
- Sun. Mar. 28 at 2 pm - Reconnecting Toronto to its Waterfront. Meet at the southwest corner of Front St. West and Simcoe St. Call 416-482-3032 for more details.

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ON ENVIRONMENTAL ACTIVISM

Be a watchdog, keep your eyes wide open, and be ready to pounce.
Be very courteous, very brief, very articulate, very focussed.
And most important: Don't ever quit.

from "Queen of the Escarpment" by Linda Pim in SEASONS, Vol. 43, No. 3, Aug. 2003

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