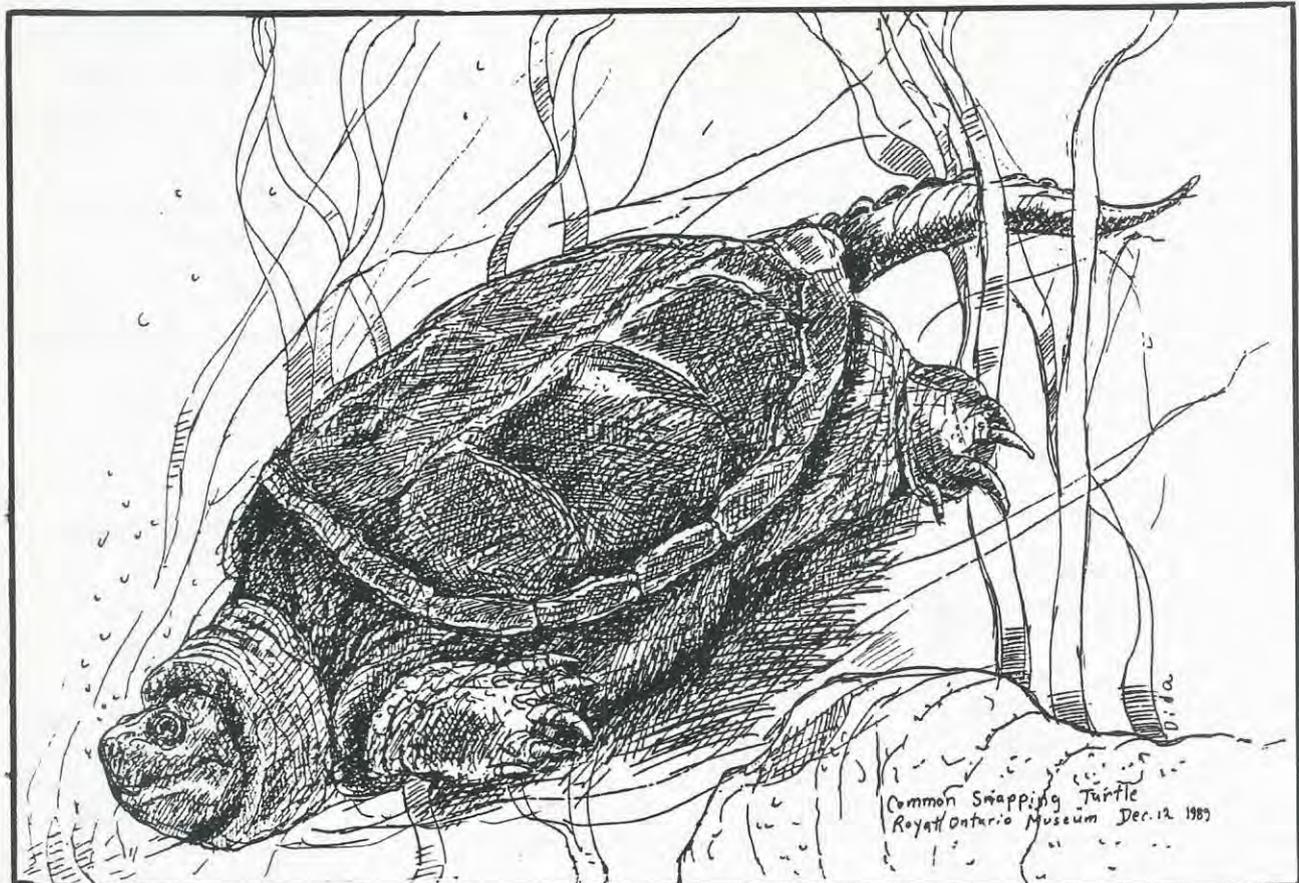


TORONTO FIELD NATURALIST

Number 410

March 1990



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TFN MEETINGS

General Meeting

Monday, March 5 at 8 pm - WHY DO BIRDS SING? (a movie showing nature of bird songs, what songs communicate and how birds develop their songs). The movie will be introduced and commented on by Dr. J. Bruce Falls from the University of Toronto, Zoology Dept.
at 155 College St., 6th floor auditorium

+ from 7 pm to 8 pm - a display of Alf Buchanan's photographs

+ an opportunity to purchase back issues of THE ONTARIO FIELD BIOLOGIST, other TFN publications, hasti-notes, prints of selected newsletter covers, pins, decals and crests

+ easy TTC access (building is one block west of Queen's Park subway stn.)

+ free parking in the Board of Education garage on the west side of McCaul Street just south of College Street

NEXT GENERAL MEETING: Monday, April 2

Larry Sherk of Sheridan Nurseries will talk about Wildflower Gardens

Group Meetings

Monday, March 12 at 7 pm - ENVIRONMENT GROUP MEETING

You've read it in the headlines. You've seen it in the news. Now come out and get the facts straight from the horse's mouth. We're talking about GLOBAL WARMING, of course. Join Environment Canada climatologist Bruce Findlay at our March 12 environmental meeting (the last one of the season). Bruce will explode some myths, tell you if it's really the greenhouse gases that are making oceans rise and deserts grow -- or if it's something else. See you then.

Meet in Room 251 at 155 College Street.

Tuesday, March 13 at 7:30 pm - BOTANY GROUP MEETING

Wayne McShane from Brampton will be showing slides and telling us about Orchids of Ontario.

Meet in Room 251 at 155 College Street.

Wednesday, March 14 at 7:30 pm - BIRD GROUP MEETING

Robin Powell, President of TFN, will show slides of birds from the TFN photo collection. This program was scheduled earlier this year, but due to technical difficulties (no projector) had to be cancelled.

Meet in Room 251 at 155 College Street.

COUNTRYSIDE CODE

Leave nothing but footprints;
Take nothing but memories;
Shoot nothing but pictures;
And kill nothing but time.

from "It's Your Turn -- Coded Message" in BBC WILDLIFE, Vol. 7, No. 4, April 1989

TFN OUTINGS

March

- Saturday MONTGOMERY INN - nature arts Mimico Creek, Etobicoke
 Mar. 3 Leader: Mary Cumming
 10:30 am Meet at the northeast corner of Bloor Street West and Islington
 (just outside Islington station subway exit). Bring sketching
 materials, cameras or just come and enjoy. Lunch optional.
- H 5 Sunday HUMBER VALLEY - nature walk Humber River, York
 Mar. 4 Leader: Ken Cook
 2 pm Meet on the bridge over the Humber River on the north side
 of Lawrence Avenue West, just west of Weston Road. Walk will
 end at a different public transit stop.
- L 6 Wednesday LAKESHORE - nature walk lakeshore, Toronto
 Mar. 7 Leader: volunteer required
 1:30 pm Meet at southeast corner of Queen Street West and Roncesvalles.
 Walk will end at a different public transit stop.
- Saturday LESLIE STREET SPIT - birds Lakeshore, Toronto
 Mar. 10 Leader: Ross Harris
 9 am Meet at the foot of Leslie Street. Wear WARM clothing and
 bring a lunch.
- L 7 Wednesday LAKESHORE - nature walk Lakeshore, Toronto
 Mar. 14 Leader: Dorothy White
 1:30 pm Meet at the southwest corner of Lake Shore Blvd. West and
 Bathurst St. Walk will end at a different public transit
 stop.
- H 6 Sunday HUMBER VALLEY - nature walk Humber River, North York
 March 18 Leader: Mark Kubisz
 2 pm Meet on the bridge over the Humber River, on the north side
 of Albion Road just west of Weston Road. Walk will end at
 a different public transit stop.
- Tuesday BLACK CREEK PIONEER VILLAGE - nature arts Black Creek, North York
 Mar. 20 Leader: Betty Paul
 11 am Meet at the village entrance (south of Steeles Ave. West and
 east of Jane St.) Bring cameras, sketching materials and
 stool or just come and enjoy. Lunch optional.
- L 7 Wednesday LAKESHORE - nature walk Lakeshore, Toronto
 Mar. 21 Leader: volunteer required
 1:30 pm Meet at the foot of Bay St. Walk will end at a different
 public transit stop.
- Sunday WINDFIELD PARK - trees Wilket Creek, North York
 Mar. 25 Leader: Bill Granger
 10:30 am Meet at the park entrance on the south side of York Mills just
 east of Bayview Ave.

FOR INFORMATION ABOUT AIR POLLUTION, CALL 242-9100. ▷

MARCH OUTINGS (cont'd)

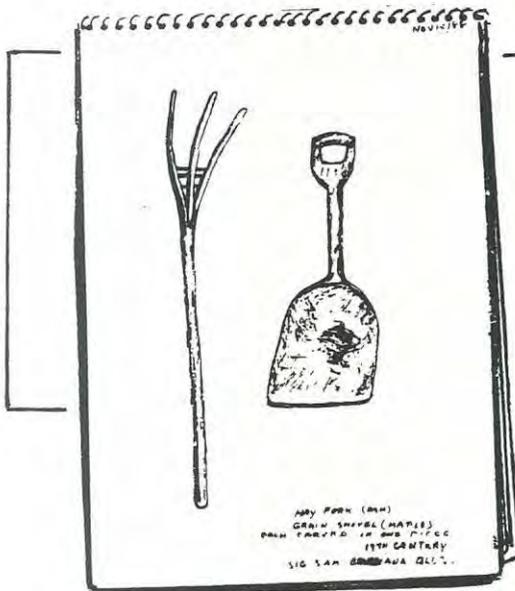
Wednesday MIMICO CREEK - nature walk Mimico Creek, Etobicoke
March 28 Leader: Vera Cooke
2 pm Meet on the east side of Royal York Road at Coney Drive (south
of Bloor St. West) -- just outside Bishop Allan Academy.

Saturday HUMBER BAY PARK - birds Lakeshore, Etobicoke
March 31 Leader: Phil Joiner
9 am Meet at the park entrance on the south side of Lakeshore Road
opposite Parklawn Rd.

□

For Enjoyment of TFN Outings

- Visitors and children are welcome on all outings.
- Outings go whatever the weather.
- All outings are accessible by public transit (TTC 393-4636, Ride Guides are free)
- Metro maps are available for a nominal sum. Do get one!
- Walks are usually at a leisurely pace and begin and end at the same location unless indicated otherwise.
- Note taking, sketching, photography and collecting of litter are encouraged, the collecting of specimens is discouraged.
- Please do not bring pets on outings. Dogs have been found to interfere with the environment, viewing and safety on the trail.
- Useful numbers: Police 967-2222; pollution complaints within Metro 965-9619.



Native trees used for carving utensils in the 19th century included ash and maple, as indicated in this drawing by Joyce Cave made in the Sigmund Samuel building, Canadiana galleries, in November, 1988, on a TFN Nature Arts Outing.

KEEPING IN TOUCH

Nov. 27, 1989

Thank you for your letter of Oct. 21, 1989, regarding the Don River Water Quality Improvement Strategy report.

The Government of Ontario is now awaiting comments on the report from the various agencies, interest groups and municipalities in the Don River watershed. The improvement strategy selected will be based upon the comments received from these groups. Also supporting the strategy will be projects like the development by Ron Kanter, MPP, of a Greater Toronto Greenlands Strategy, and the efforts of the Honourable David Crombie to protect the waterfront for public recreation and enjoyment.

It will take time to achieve the desired changes and ensure long-lasting success in our environmental protection efforts. I appreciate the support, encouragement and involvement of individuals like yourself.

Again, thank you for writing.

David Peterson
The Premier of Ontario

Dec. 11, 1989

Thank you very much for your note regarding our Interim Report released earlier this year. I appreciate your taking the time to let me know that you are in agreement with the recommendations made in it.

As you are also probably aware, the federal government has endorsed these recommendations and, further, the government of the Province of Ontario has asked me to accept similar responsibilities and powers on their behalf. The Commission is now progressing with further study and implementation of the Interim Report recommendations.

Again, many thanks for taking the time to write. Hope this note finds your world going well. Take care.

David Crombie, Commissioner
Royal Commission on the Future of
the Toronto Waterfront

Dec. 1989

With many happy memories of those summer and early autumn outings with the Toronto Field Naturalists, and appreciation of the warm and friendly welcome you all extended. I felt I learnt so much about the birds and plants. May I offer my number for anyone from TFN passing through London [England].

Brenda Hatcher
Tel: 01-204-8873
London, England

BITING THE HAND

Shrubs planted in King's Lynn, Norfolk, in honour of the Canadian city of Vancouver, which was named after an explorer from King's Lynn, have been eaten by Canada geese.

from the KING'S LYNN ADVERTISER (England), 1989

KEEPING IN TOUCH (cont'd)

Dec. 21, 1989

Thank you for your letter of Aug. 21, 1989 concerning the proposed Trintek Systems (Ontario) Inc. Energy from Waste facility. I apologize for the delay in my response.

I have recently asked Trintek to provide me with additional information. If the proponent of the facility intends to proceed with the proposal, I expect that they will comply with this request. This supplementary information will be further evaluated before a decision regarding the environmental assessment's adequacy is made.

I am forwarding a copy of your submission to the Environmental Assessment Board for their information. Thank you for advising me of your concerns.

Jim Bradley, Minister
Ministry of the Environment, Ont.

Jan. 3, 1990

It has been over a year since I last wrote; much has happened out here in that time.

Jan. 2, 1989 pm: From house windows 15 species, no less than 50 each: robins, juncos and house finches...party broken up by one merlin.

Feb. 1989: Coldest on record; did a great deal of damage. Robins and other birds scrap over bits of apple, hamburg and cornmeal.

March and April: Cooler and damper than normal, birds slow to return. Cold is hard on early gardens.

May to August: First robin fledglings. May 11, starlings a few days later. A total of 14 species nested on or around property. A cougar would drink from our low bird bath on top of our rock garden wall, averaging one night a week through spring and summer. (This in the City of Victoria!)

Sept. 1989: One of our driest on record. Two covey of California quail patrolled the garden.

Oct. to Dec.: After a heavy rain in Nov. and early Dec., it has been about 70% dryer than normal but mild with fog nearly every day; but not much rainfall. Saw a couple of lovely rainbows.

On Dec. 16, for the Christmas Count, got 22 species in the area. Overcast and a poor showing.

Orval Opperthausen
Victoria, B.C.



LICHENS

"Alice" Alga and "Fred" Fungus met at a party and took a liken' to each other. They began living together in a symbiotic relationship, and now their marriage is on the rocks!

from a Bon Echo Provincial Park newsletter, 1989

KEEPING IN TOUCH (cont'd)

Jan. 1990

In the February 1990 issue of the newsletter, Jack Gingrich takes issue with the fourth item in my list of 12 suggestions for saving money and the environment (Sept. 1989 issue). I apologize for the misunderstanding created when I advocated cutting one's lawn twice a week to avoid having to remove the clippings. I have never owned nor will ever own a power mower of any kind and, like Mr. Gingrich, I deplore their use. Although my two lawns are postage stamp sized, I'll challenge anyone who thinks he/she can cut any lawn faster with a noisy polluting power machine than I can with my environmentally friendly push mower -- still the fastest way by far around any patch of grass, modern technology notwithstanding. I hope this explanation will put me back on the right side of the conservation fence.

Al Shaw

Jan. 9, 1990

Thank you for your letter of Oct. 26, in which you express your concern about the effects of stock car races on air quality in the Humber Bay region. Please excuse the delay in my reply.

In Canada, responsibility for controlling air pollution is shared between the federal and provincial governments. The provinces exercise control over emissions from sources within their boundaries, while the federal government is concerned with interprovincial and international air pollution.

The federal government has established national ambient air quality objectives for contaminants, such as sulphur dioxide, carbon monoxide, oxidants (ozone), and nitrogen dioxide. In general, the provinces use provincial legislation to set air quality standards that are in line with national objectives. Based on those standards, air quality in Canada has improved significantly over the last decade.

As the particular concern you raised comes under provincial jurisdiction, I suggest that you contact Mr. Ed Piche, Air Resources Branch, Environmental Services Division, Ministry of the Environment, 135 St. Clair Ave. West, Toronto, Ontario M4V 1P5.

I appreciate your bringing the matter to my attention.

Lucien Bouchard
Minister of the Environment, Canada

▷

You can make a difference! When politicians receive a letter on an issue they perceive it to represent many opinions, not just yours. To them your letter represents the voice of 1,000 more concerned people. So please take the time to write -- MAKE A DIFFERENCE!

from "Letter-Writing Addresses for Conservation Issues by Brian McHattie in THE WOOD DUCK (Hamilton), Vol. 43, No. 1, Sept. 1989

KEEPING IN TOUCH (cont'd)

Jan. 11, 1990

Thank you for your Nov. 14 letter expressing your concern about Ontario Hydro's herbicide use in the East Don Valley. We share your concern for the environment, and are in fact committed to reducing our herbicide use by at least 35 per cent in the next few years.

Unfortunately, Ontario Hydro cannot avoid using herbicides completely. Sometimes the nature of the foliage, or the growth, makes it very difficult to cut vegetation, and we resort to herbicide use. In this instance, staff sprayed the area to remove the abundance of weeds which, when cut, continue to grow and spread. Ontario Hydro is obligated to remove weeds in compliance with the provincial Weed Control Act, particularly near residential areas. The herbicide Killex 500 was applied to a portion of the right-of-way east from Rudington Avenue to Luton Crescent, including the right-of-way east of Luton Crescent. No spray was applied within 10 metres of the watercourse east of Luton Crescent.

I have asked Brian Leonard, our Transmission Line and Forestry Superintendent for that area, to contact you to discuss this matter. Should you wish to call him yourself, his number is 416-222-2571, ext. 309.

Thank you again for your interest and concern.

Robert C. Franklin
President & Chief Executive Officer
Ontario Hydro

Comment: Not good enough Mr. Franklin! Please see extract from news item below from the MONTREAL DAILY NEWS, Aug. 4, 1988 - "Killer spray a favorite" by Denis Marinakis.

H.J.

The chemical 2,4-D, commonly sold under the brand name Killex in Montreal, was cited this week by a leading cancer researcher with Health and Welfare Canada as a likely cause for the doubling of the occurrence and death rates of non-Hodgkin's lymphoma during the past two decades. Extremely effective at killing broad-leaved weeds, the dichlorophenoxy compound is cheap -- \$25 worth will treat a hectare of land. About 5,000 tonnes are sprayed annually in Canada on seven million hectares of agricultural land, city parks, golf courses, residential lawns, commercial forests and under power transmission lines. Killex, manufactured by Ciba-Geigy Canada Ltd., contains at least 95 grams per litre of 2,4-D. Denis Vincent, a pesticide expert with the Montreal Botanical Garden [says] Montreal has not sprayed city parks and other property because "we'd rather live with a few dandelions than expose people and wildlife to the possible dangers".

HELP THE BIRDS WITH GOOD HOUSEKEEPING

If you are feeding the birds this winter don't forget to clean up the seeds and husks that accumulate beneath the feeders. Your housekeeping can help reduce the spread of disease. Also a mild day is a good time to clean feeders with a common household bleach, followed by a thorough rinsing of cold water. (See TFN 403, page 25).

H.T.

KEEPING IN TOUCH (cont'd)

Jan. 24, 1990

Thank you for the pleasure the Toronto Field Naturalists Club has given me over the years. I began to take an interest in nature about 1930, first starting on trees and leaves, also flowers, also through photography, becoming a member of the TFN about that time, single, then a life member.

I would like to express my regards to the memories of the leaders that gave such helping answers over the years -- Stuart Thompson, Jim Baillie, Terry Short, Dr. Fletcher, Dr. (Professor) McIlwraith, Hugh Halliday (his weekly bird column) -- as well as to the leaders of outings I have had the pleasure of attending; also of the meetings. All have given me pleasure. Thank you. Memories that have stayed with me: seeing my first black-and-white warbler, my first cardinal (about 1935) and the barred owl.

W.E. Renison

Jan. 29, 1990

Despite the report of a couple of thousand aftershocks [of the California earthquake], I have not felt even one of them. So our life goes on as before the big event...I see your magazine has a section on birds. If anyone is interested in where your robins go in the winter, you can tell them they arrive here in January. About 100 of them have been holding raucous parties in our persimmon tree --they completely stripped it in two days. Those supposedly dignified birds behave like college students on spring break in Fort Lauderdale. They get thoroughly drunk on berries from the pyrocantha bushes that grow in great profusion around here. Those bushes are often planted along the highways and streets. The drunk birds used to be all over the roads and many were killed by cars. So many people complained that finally the cities around here had their road crews prune off the bright red berries every January just to save the robins.

Mary West
Palo Alto, California

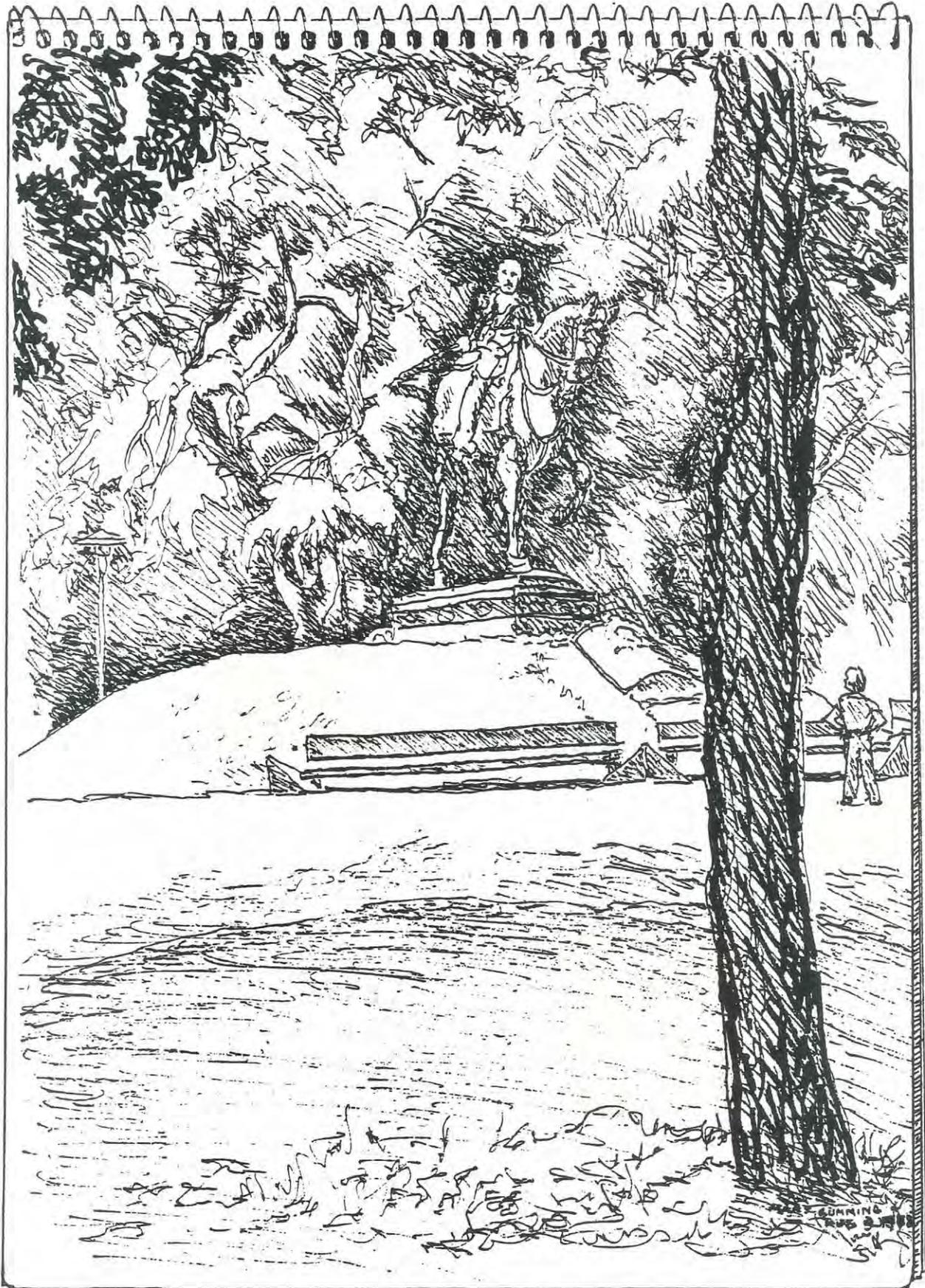
□

Can a stone be on a life list?
This one was slate, I guess,
or shale,
with multi-layers of grey and white
alternating.

I wished I could read its life story,
but I don't know the language.

I held it in my hand
and carried it a good way.
It was all smooth and rounded.

Sr. Margaret Banville
Hudson Valley



Queen's Park, Toronto, with statue of King Edward VII

BEGINNINGS

As you read Helen Smith's recollections her enthusiasm for wildlife will be quickly apparent. It's an enthusiasm she has nurtured over a lifetime and shared with the TFN members she has led on many club outings. Thank you, Helen, for your story.

H.T.

Orillia, Ontario, was my birthplace, and as my father was a keen canoeist and camper, early on I was exposed to the outdoors, learning a few of the common birds and flowers as well as trees. I remember seeing a bluebird, every May 24, perched on a telephone wire beside the "commons" across the road. But the biggest event was when, in my early teens, a rich great-aunt sent me to a summer camp for girls in Algonquin Park. What joy! So many wonderful things to learn! The "nature counsellor" was Mrs. Stuart Thompson and under her guidance the seed was planted -- my love of birds and flowers. About that time I had Chester Read's "Land Birds" and "Flower Guide" (each 14 X 8 cm) but in Orillia with no binoculars (depression days) and no one to help me, I found it too hard to keep up an interest in birds.

Then, it was down to Toronto, and there, I sure was a fish out of water -- no one to share my love of the outdoors. I remember how I enjoyed morning walks by myself around Queen's Park and the University, after finishing night duty at Toronto General Hospital. Of necessity, other activities took over, but there was always that latent need.

The next big change was wartime service and how I revelled in the wildflowers of England and the continent. Those English country lanes were such a delight. But oh! I wish I had been a birder in those days.

In due time it was back to civilian life in Toronto, finding a place to live, a job, and some kind of outdoor activity. One day I ran into an Army pal who persuaded me to join her in golfing lessons, at the princely sum of \$5.00. I had taken three weekly lessons when I happened to read Jim Baillie's column in the old Toronto Telegram, telling of a Toronto Field Naturalists' outing in High Park the following Saturday. Well, subsequently I found out about, and joined the TFN. The golf lessons and my five dollars were forgotten -- I knew that if I were out on the golf course and saw a bird, down would go the club and up would go the binoculars!

First there were donated field glasses from World War I! Not much help there, but then I was able to buy second-hand binoculars that Jim Baillie arranged. Originally I was going to be the compleat naturalist -- my plan was to spend five years on birds, five years on flowers, etc., etc. Somehow or other I am still on birds, with a smattering of other knowledge picked up along the way, the times when there were no birds.

And now, since retirement, all I can say is -- what a wonderful hobby!

Helen Smith

□

I can recommend being a naturalist to anyone as the best secret of a happy life.

from "The legend of the Green Knight" by Sir David Attenborough in BBC WILDLIFE, Vol. 7, No. 10, October 1989 [advice of Sir Peter Scott]

BIRD REPORT

REGULARLY-OCCURRING SPECIES: Of the 233 listed on the 1985 Toronto Region Bird List, 214 were reported to TFN in 1989 - by individual members (mostly written reports), on TFN Outings Reports (the 52 species were the highest total for any Thanksgiving Toronto Island Outing to date), and through shared lists such as the Christmas Bird Count, the Lake Ontario mid-winter Waterfowl Survey, and those appearing in exchange copies of THE BULLETIN of the Richmond Hill Naturalists. Does anyone know of further sources? Most participants reported date, place, numbers observed, and in many cases notes on behaviour, song, nesting, food, conditions, habitat, status, and if uncommon, identifying feature(s) noticed. Photos and sketches were submitted. Here are just a few samples from the reports:

MUTE SWAN sitting on nest in High Park May 14, on May 20 there were six cygnets, on May 27 four, on July 9 still four (two in grey down, the others largely white).

CANADA GOOSE, first gosling reported May 28, Metro Zoo grounds, first flight after the moult August 6 at Toronto Island. Any earlier dates?

MALLARD, previously scarce in Taylor Creek Park, according to one of the observers (because of feeding) there were four May 16; eight May 17; fifteen Aug. 17; twenty-three Aug. 31; fifty Sept. 13; sixty Oct. 21; thirty-eight Nov. 26; thirteen Dec. 17 (and not taking the strewn corn). Reports of diving (submerging) described, and "rowing" with the wings like a steamer-duck. First ducklings reported May 14 in the West Don. Any earlier dates?

OLDSQUAW numbers were the highest of any species on the Christmas Bird Count: 4,280!

RED-BREASTED MERGANSER, over a thousand were at the Leslie St. Spit Nov. 5.

VIRGINIA RAIL photographed in High Park July 23, slide donated to TFN Photo Library.

KILLDEER apparently nesting on a pebble roof in Pickering, early July.

RING-BILLED GULL courtship reported. Apparent male (larger) offering female tidbits of bread "in a restrained way", calling softly in a nasal tone, she "singing" in high range (apparently squeal, if softly registered, becomes musical). Pair calling in unison with heads raised together, walking together, then dipping bills in water together as if to say "Let's drink to that!" (Notes from March and April at Grenadier Pond and CNE Grounds.) 10,000 estimated June 17 at Leslie Spit.

HERRING GULL is not so common here as it used to be. Only one was reported on Thanksgiving bird outing at the Island, for example. However, 990 were reported on the Christmas Bird Count. By the way, this species has a similar courtship to the ring-billed, according to previous report, except "songs" were loud and the "tidbit" a whole fish.

MOURNING DOVE mutual preening was reported at Todmorden April 15, the birds often closing their nictitating membranes.

GREAT HORNED OWL pair was interacting with RED-TAILED HAWK on May 28 at Humber Arboretum.

RUBY-THROATED HUMMINGBIRD observations included a male feeding off spotted touch-me-not at south Humber Sept. 11, and a nest found on path from Craighigh Gardens on Aug. 11.

BELTED KINGFISHER pair at High Park May 21 was apparently successfully nesting, with "sounds coming from the sandbank".

BIRD REPORT - cont'd

YELLOW-BELLIED SAPSUCKER plumage was described on adult at Todmorden Apr. 15 and on immature at Toronto island Apr. 25.

HAIRY WOODPECKER at Kortright Conservation Area March 6-10 and PILEATED WOODPECKER at Richmond Hill Feb. 12, were witnessed stripping bark from dead hemlocks.

AMERICAN CROW adult and two apparent fledglings rested quietly on a limb at Pine Hills Cemetery on May 30.

AMERICAN ROBIN female chased a male from his foraging-spot on the lawn on Cassandra May 9, foot-fighting in air briefly. Was this the same pair who were raising three large young in the crabapple tree mid-June?

WATER PIPIT flock of about ten was seen at the Donkey Pond on Oct. 2.

CEDAR WAXWING flock of about eight was observed at Taylor Creek Park on "the fen", feeding on last year's highbush cranberries which were still "juicy" on May 24.

EUROPEAN STARLING roosts were reported at Villiers Street, Metro Zoo, and north of Castle Frank Station where the birds were "as thick as raisins" on January 8 between 16:00 and 17:00. Please report any roosts you know about.

WARBLING VIREO and RED-EYED VIREO were not as evident in 1989 as some reporters would have liked. Maybe most of them were at the Island or The Spit...although the Necropolis was popular with the latter species. Did you notice any difference?

WOOD WARBLER notes included comparative songs. All but two of the species on the 1985 checklist were reported.

BROWN-HEADED COWBIRD male, singing to female at Ward's Island May 28 included bill-wiping in the ritual.

HOUSE FINCH female was seen hopping up steps of a veranda in the Dentonia Park area July 4, tugging at fibres of matting. The males were reported in song from Jan. 29 to Oct. 8.

AMERICAN GOLDFINCH was reported in song from Apr. 15 to July 16, even at noon. At other times they were using their questioning "Baby?" call, their tittering "Tee-hee-hee!" flight call or conversational tones. On Aug. 27 a male was noticed at Leslie and Eglinton taking thistleseed and allowing the pappus to float off in the wind. On Aug. 31 a female was noticed on evening-primrose, peeling the seed-capsules part-way down like a banana, exposing seeds, discarding unwanted pieces with a quick shooting motion to the side.

HOUSE SPARROW female on June 8 at Metro Zoo stuffed a large green larva in her bill, cautiously flying from twig to twig and "losing" herself. A male was watching her. On June 13 a female at Crescent Town struck such a larva on the pavement repeatedly, and "chewing" it as if to soften it, stuffed it in her bill in folds and flew off with it.

This was reminiscent of previous Bermuda record of a house sparrow striking a Jamaica anole (lizard) on the road - like famous road-runner!

ABOUT FEEDERS: A report was received comparing the final winter of the past three decades from observer's windows overlooking #7 Humber Marsh. The first two decades a feeding station was kept, on the third, such stations were prohibited. In the winter of 68-69 twenty-nine species were observed, in 78-79, twenty, and in 88-89 again twenty. In the overall picture she didn't feel the feeder made a bit of difference.

UNREPORTED REGULAR-OCCURRING SPECIES:

- Not reported in 1989: TUNDRA SWAN (indefinite), SORA, RED KNOT, YELLOW-BILLED CUCKOO, NORTHERN SAW-WHET OWL, GOLDEN-WINGED WARBLER, LAPLAND LONGSPUR, ORCHARD ORIOLE, COMMON REDPOLL.
- Not reported in 1988 or 1989: LEAST BITTERN, BALD EAGLE, BAIRD'S SAND-PIPER, WILSON'S PHALAROPE, LITTLE GULL, BLACK TERN, LOGGERHEAD SHRIKE, (indefinite), YELLOW-THROATED VIREO, GRASSHOPPER SPARROW, PINE GROSBEEK. Perhaps the latter group is becoming "less regular". Please report if you can help complete the record for 1988 and/or 1989. Please mention distinguishing feature(s) noticed. Do you believe, as more than a few naturalists do, that the diversity and abundance of birdlife is decreasing?



ADDITIONAL SPECIES reported in 1989:

- Casuals and one Accidental: EARED GREBE Nov. 5, Leslie St. Spit (confirmed); GOLDEN EAGLE Aug. 6, Humber Arboretum; PURPLE SANDPIPER Nov. 5, Leslie Street Spit (confirmed); LESSER BLACK-BACKED GULL; BLACK-BACKED WOODPECKER, Richmond Hill; ACADIAN FLYCATCHER May 28, Leslie Street Spit; COMMON RAVEN Feb. 25, New Toronto Hospital grounds (confirmed); ROCK WREN Feb. 25, Lakeshore - New Toronto Hospital area (confirmed "accidental" found its way to its own habitat among 4'+ boulders of the land-fill!); HENSLOW'S SPARROW Sept. 12 ("olive nape and chestnut wings"). We'd like to have more identification information on some of the casuals and even the less common "regulars" reported, such as a diagnostic feature noticed - in appearance, habits, or voice - or additional observer(s) indicated. To say how good a view was enjoyed is not considered a good "record" - use the space and enthusiasm to state what was "diagnostic".
- Uncertain Identifications (questioned by observer): TUNDRA SWAN (a regular-occurring species, "with black bill", at a distance, could be confused with one of the trumpeter swans in breeding program); ARCTIC TERN (an accidental when previously reported, appearing "with orange bill without black tip", could be confused at a distance with a common tern which happens to have only a small dark area on bill-tip.) If possible, look for the most salient distinguishing feature, though often this is just what one cannot see under imperfect conditions. Nevertheless, it's still a good idea to describe what you've seen as best you can. There's nothing wrong with a list with its share of question-marks - shows we're trying to learn. Later that tentative information might be of help.
- Domestic, Hybrid and Breeding Program Birds reported: TRUMPETER SWAN Jan. 8, Jan. 9 (1-5) Leslie St. Spit and lakeshore (confirmed); GREYLAG-DERIVED DOMESTIC/CANADA GOOSE apparent hybrids, Apr. 11, Dec. 9, Harbourfront, Bluffer's Park (described); BARNACLE GOOSE (1) Sept. 25 outside Metro Zoo with wild Canada geese (escapee); MALLARD-DERIVED "PEKING DUCK"/MALLARD/BLACK DUCK apparent hybrids, Jan.-Dec. - e.g. at Bluffer's Park, Humber Flats, Don Valley Brickworks pond, Toronto Islands. Some pure white "Peking Ducks" as well as many colour-combinations described and great diversity in size noted (escapees and hybrids with wildfowl); RING-NECKED TURTLE-DOVE (2) Feb. 3 (associating with mourning doves) (escapees); BUDGERIGAR Mar. 25, Aug. 6, mid-Nov. (at least 1 or 2 on each occasion) associating with house sparrow and other wild birds at Toronto Island and feeders. One observer, fearing pet birds would perish in winter, caught one and later used it in cage to attract another - now has a pair).



BIRD REPORT - cont'd

TORONTO REGION BIRD LIST

There are at present 249 species on our 1985 checklist; of these, 233 are considered common or uncommon "regular-occurring species" (reported to TFN at least ten times in the past decade). The remaining 16 are casuals and accidentals nominated at the time of publication on the strength of one or a few observations but will probably not appear on the next checklist published by TFN, unless a definite trend in occurrence is established by that time. These are KING EIDER, BARROW'S GOLDENEYE; GOLDEN EAGLE, GYRFALCON, KING RAIL, WESTERN SANDPIPER, STILT SANDPIPER, RED-BELLIED & THREE-TOED & BLACK-BACKED WOODPECKERS, BOREAL CHICKADEE, TUFTED TITMOUSE, SEDGE WREN, CERULEAN WARBLER, CLAY-COLOURED SPARROW, HOARY REDPOLL. Let us know if you have reason to believe any of these should be considered "regular-occurring" species of Toronto Region (within a radius of about 50 km of the Royal Ontario Museum). One species is being considered as an addition to the next list, the ORCHARD ORIOLE (bringing the total to 234 regular-occurring species) because it has been reported thirteen times in the 1980's including nesting - although to date we have received no report for 1989.

Besides the 16 casuals on our 1985 list, the TORONTO REGION BIRD CHART 1983 lists 66 others along with the 234 regularly-occurring species. At the back of that booklet there is a list of 32 accidentals and we have records of 10 others. All of these casuals and accidentals and others not on the TFN checklist should be noted on the list or otherwise reported whenever encountered, so that their status can be monitored for possible addition to future checklists. Send your reports - typed or in your best hand, using complete bird-names as shown on the checklist (abbreviated if you wish - as "bl.c.chickadee") of 1990 observations and supplementary 1988 or 1989 information, to me at 710 - 7 Crescent Place, Toronto, Ontario, M4C 5L7. (With all these lists to check, you've got your work cut out for you!)

Diana Banville

IDENTIFICATION AIDS:

TORONTO REGION BIRD CHART 1983 (available from TFN \$2.00)
 TORONTO REGION BIRD LIST 1985 (available from TFN .25 or 5 for \$1.00)
 BIRDS OF NORTH AMERICA Golden Series field guide, 1983
 A FIELD GUIDE TO THE BIRDS (East of the Rockies) Peterson field guide 1980

REPORTERS 1989:

Diana Banville, Kim S. Bond, Molly Campbell, Adele Cassan, Joyce Cave, Dennis Clarke, Margaret Cook, Mary Cumming, Irene Fedun, Saul Glickman, Bruce Gosnell, Bill Granger, Laura Greer, Louise Herzberg, Tim Hough, Helen Huggett, Bob Johnson, Jean McGill, Reta McWhinnie, Katharine Martyn, Melanie Milanich, Norm Murr, Wilf Murray, Joan Patterson, June Rose, Helen Smith, Harold Taylor, Joan Watson, Merle Young, Larisa Zviedris, TFN and Richmond Hill Naturalists leaders and participants and census-takers who made innumerable contributions.

*Robin carolling
 on my balcony-wall - now
 your territory.*

haiku by Diana Banville



Field Drawing by Margaret Bentley, on a Nature arts outing

ENVIRONMENTAL REPORT

"They are not brethren, they are not underlings, they are other nations, caught with ourselves in the net of life and time, fellow prisoners of the splendour and travail of the earth."

The Outermost House, Henry Beston (1928)
Ballantine Books

Kip Parker was our guest speaker January 15, and he closed with the above quote. For those of you who missed the session, Kip is referring to the animal kingdom. His respect for animals has led him through several animal-related jobs including Metro zookeeper and a post with the Toronto Humane Society. But that evening he talked about his newest job as an organizer of a perhaps-soon-to-be animal rehabilitation centre called Wildcare, which was recently granted charitable status and is now awaiting word from the Ministry of Natural Resources about getting a building.

Perhaps the most memorable moments in the evening were not so much about Wildcare's philosophy as they were about Kip's own philosophy of why animal rehabilitation is not just a good idea but is, indeed, our duty.

"Rehab is about the co-existence of wildlife and the urban environment. It is a humane response to a human-caused problem."

Kip says only people think in terms of urban and rural boundaries, animals don't, which is why birds fly into skyscrapers and raccoons become road-kills -- to name only two of the tragedies that occur when man and beast collide.

"Rehab is not a conservation effort. We are not trying to increase the numbers of animals. Rehab is a redressing of the imbalance, a way to lessen the carnage. We try to care for injured, diseased, or orphaned animals and either return them to the wild or find them alternate sanctuary."

One of the key words is try. Kip believes the integrity of the animal is first and foremost. In his view, this rules out preserving the life of an animal that is only a shade of its former self. He terms euthanasia a valid treatment. And that's the tricky part about rehab because the fate of an animal is a judgement call. Kip sums up his stand: "Just because we can save an animal's life, doesn't always mean we should."

The other key words are alternate sanctuary. For instance, what do you do with an owl that can no longer fly, but is otherwise healthy? Wildcare does not believe in using wild animals in education, i.e. showing them in classrooms, because the experience would traumatize them. Alternate sanctuary could also mean the animal becomes a foster parent or is used for breeding purposes, but Kip says those decisions would have to go to the Wildcare board on a case by case basis.

He says in the last 20 years there has been a tremendous growth in North American rehab, particularly in the U.S. where it is a multi-billion dollar business. Canada is seeing its own groundswell of activity. There are small rehab centres all across the country, but many of them are specialized in certain species. Wildcare aims to be the central source of general rehab information, the "missing piece of the puzzle that will join all the others together."

Jennifer Low

□

OUTINGS REPORT

1989

Last year TFN conducted 171 outings! Local "nature walks" accounted for 74 of these and included systematic exploration of the Humber, Don, and West Don Valleys, the lakeshore and Taylor Creek, the eleven summertime "evening rambles" and some "family" outings. (By the way, don't forget children are welcome on all outings. Any problems are mentioned in the wording in the newsletter.) Haunts like Cedarvale Ravine, Sherwood Park, the Beltline, Park Drive, Windfield Park, the cemeteries, Lawrence Pond, the Old Shoreline, Derrydowns, Hogg's Hollow, The Hinder Estate, Newtonbrook, Vyner Ravine, Gwendolen Park, East Metro Corridor, Ramsden Park and Nordheimer Ravine, Downsview Dells, Moore Park Ravine, Rouge Valley, and Garthdale Ravine were visited, and Paul McGaw's Wildflower Garden. Of the Riverdale Animal Farm family outing on January 29, Eileen Mayo said, "This was a delightful outing, with Mark Spurr, husband of the resident superintendent, Judy, leading...There were a number of families visiting the farm who joined the tour from time to time."

Other outings had specific subjects or themes. Thirty outings concentrated on PLANTS, some of them "specializing", such as the two on trees and shrubs, the mushroom outing, the fern outing, the winter weeds outing, and then there was the ambiguous one about "downtown exotics and deviants". Two greenhouses were visited besides the outdoor outings including High Park, Etobicoke Creek, Lawrence Park, Pine Point, East Point, Moatfield, Mount Pleasant Cemetery, Crothers Woods, Warden Woods, Leslie Street Spit, The Lower Don, East Don, and Colonel Danforth Park. Plants represent an entire Kingdom (further Kingdoms if you count the fungi, slime molds, and the rest) but what about birds?

BIRDS represent only one class of the Animal Kingdom yet they account for twenty-seven outings. This year there was one such outing "for beginners only". Birds deserve all these outings though, for they definitely "lead us" to other treasures (don't believe everything you hear about the wendigo bird; we manage to get lost all by ourselves). As well as all the valuable checklists provided with the outing reports on bird observations, many notations were made on other life forms encountered. Since we have had few mammal and amphibian and reptile and fish and invertebrate outings designated as such, these depend on the "nature walks" supplemented by the extra information on bird outing reports (which may be termed "the honeyguide effect" if you want to get technical). The birds led these members to such areas as Humber Bay, Wilket Creek, Lambton Woods, Pine Hills Cemetery, Leslie Street Spit, Humber Marshes and Rowntree Mills Park.

NATURE ARTS outings are held regularly twice monthly, so there were twenty-four of them - including photo showings, gallery tours, craft demonstrations and an arts library visit. (They're apparently still waiting for the musicians to turn up.)

ENVIRONMENT was the theme of eight outings, six devoted to a systematic examination of conditions along Black Creek, and two "treasure hunts" - to clean up Thyra Ravine and Todmorden Mills areas.

HISTORY is always linked with nature. There was the "Heritage Walk" - Castle Frank to Todmorden; "Human and Natural History" dealing with



TFN OUTINGS REPORT - 1989 - cont'd

the "twinning" of the Humber with its Old World counterpart, and "Nature and History" at the Weston Golf and Country Club.

TOURS accounted for some of the outings - such as the R. C. Harris Filtration Plant tour, the North Toronto Sewage Treatment Plant tour, and the Archeological Research Centre tour (which involved some participation), and the visit to Vertebrate Paleontology at the Royal Ontario Museum.

GEOLOGY was the subject of the downtown underground outing (in case you thought it was something sinister).

ARCHEOLOGY was one of the reasons for one OUT-OF-TOWN FIELD TRIP, of which there were eight. Participants went off to Kortright Conservation Area, to London, Ontario, to Tiny Marsh, to Kleinberg, to Crawford Lake, to Rockwood, in search of birds, in search of plants, in search of art, in search of the past, in search of pancakes with maple syrup on them! At TFN Reserve all aspects of nature were studied and recorded. Many species were added to our Jim Baillie checklist.

ENVIRONMENTAL REPORTING, whether it was a theme or not, was repeatedly encountered in the TFN outings reports. This awareness produced valuable information on construction in and about the valleys, pollution, litter, garbage dumping, motor-bike and heavy-vehicle damage, garden dumpings smothering plantlife, removal of understory, discussion of planting policies, gabions, rip-rap, and development threats. Some letters were sent and members urged to write about issues apparent on the outings they attended.

HUMOUR? We can't seem to help it. It's often suggested by the environment: "...the site of the Morningside Golf Course, now a subdivision with street names like 'Harvest Moon'." "...a minefield of dog excrement". On the other hand, we provide each other with lots of material too: "Perhaps I should not be leading, I don't think I'm taken seriously. One person came because he thought the leader was Helen's father - three people came because they thought the leader's name was a misprint." (This last from Aarne Juhola). Maybe we should make humour a theme.

D.B. □



TFN outings are our most popular activity. Will you help lead an outing? You don't have to be an expert -- just keen to share your enjoyment of wildlife. Sandy Cappell (663-7738) would love to hear from you.

SNAPPING TURTLE HIBERNATES IN THE ROUGE VALLEY

When we see a turtle in a swamp we sometimes reduce the swamp and turtle to two simple entities because that is all we see. However, to the turtle there is an infinite variety of muds (thick, creamy muds to slide through, fine silty muds which can be stirred up and then let settle over your body to better hide your predatory intentions, and gravelly muds which can be tunnelled through in order to scrape off that month's worth of algae or just have a good old scratch); rooted plants (edible and inedible, ones that harbour little creepy things to eat and wavy ones that just feel nice as you crawl through them); basking spots (ones that are high and dry, ones that let you sit in the sun but keep your belly wet, ones that are rocky, ones that are woody, ones that are hidden and ones that are fully exposed, ones that other turtles frequent so that you have to take your place in the turtle pile or ones that no other turtle has yet discovered, ones that let you slip off with nary a ripple and ones that announce your displeasure at being disturbed by causing a loud splash as you scurry into the air before landing with all legs flailing, in the water); feeding areas (ones with foods which make you fat before egg laying, ones which clean you out before winter hibernation and ones that harbour food which just tastes good), and so on.

I could even imagine that there is some secret spot the juvenile turtle seeks out to sit and watch, with juvenile fascination, dragonfly larvae stalking the pond bottom, or schools of tadpoles in which to seek a diversion of another kind. Even the pleasurable sensation of water pressure changing as our turtle swims through the water column is beyond our experience. Nonetheless, this is the world of the turtle.

Can you imagine the change in alertness, the flood of sensations penetrating to the being of the turtle as it at first senses a faint smell of fish. Imagine the heightened excitement reinforced by the lengthening neck and hurried pace as the odour of fish becomes stronger, even overwhelming to the creature which may stalk the pond bottom for weeks before a fish dies or is killed. That is another part of the turtle's being -- waiting...waiting for the opportunity to gorge itself and then waiting...waiting again for the next opportunity to feed. We have been too well nursed on the mammalian predators' constant need to hunt and kill to sustain their warm bodies, to truly accept the patient waiting of creatures below the water-smooth film of our local marsh.

To be sure, the snapper will take advantage of the schooling tadpoles or the dragonfly larva so intent on stalking in its own world to notice the beady stare of the predatory turtle. Some would have us believe that snapping turtles rampage through the peaceful marsh consuming rapaciously fish, frogs, and the beloved ducks which have coexisted with the snapping turtle since time's own dawn.

Sometimes an event occurs which affirms one's respect for the diversity of our planet, our lives. One such occurrence, simple in its describing, simple no doubt to this turtle, but profound in its simplicity, follows.

I received a telephone call from Donna Rice, an outdoor educator at Hillside School in Scarborough. One of her colleagues, Brian Hern, had found a snapping turtle which was "entering hibernation", to use their description, in the Rouge Valley.

SNAPPING TURTLES (cont'd)

Sounds simple enough, doesn't it? However, when I went to the location, I was filled with questions. We had a warm October. Why would this turtle begin hibernation in water at 11°C while the air temperature was a relatively warm 18°C? Not only that, but the temperature of the Rouge was also 11°C, the same temperature as the spring it had entered. So why leave the river in the first place? It would seem upon reflection, a little hasty on the part of the turtle, to enter these cool waters while still having access to the warm days of October and the residual heat of the Rouge River itself.

One might guess that some time-tested awareness that late October would likely soon succumb to the cooling effects of cold nights, reduced radiant energy of the sun, and cold rains washing into the rivers, was genetically imprinted on this turtle's behaviour. Turtles hibernate before cold weather and before the last of the warm days have gone. Better to lose the opportunity to feed and store energy than to be trapped by an early frost. Given the cyclical swings in temperature that may occur over hundreds and even thousands of years, the turtle represents a mean of behaviours which will guarantee survival. To be sure some turtles may hibernate earlier and some later, but these will be on the edge of survival -- having some small advantage some years or some decades, but over the centuries the true survivors conservatively stick to the genetically programmed mean.

We might also speculate that the turtle has in fact stored enough energy to "feed" the forty eggs which will be laid the following spring. Once fat stores are replenished, better to conserve them by lowering metabolic rates in cooler spring waters than be trapped in warmed waters with elevated energy consuming metabolic rates and a reduced likelihood of finding that monthly meal.

But there is more! Why is this turtle found fifty metres from the Rouge River in a small spring seepage area that is barely able to support a few struggling cattails? Why indeed? and how did this turtle even find this winter hibernation site as, upon further investigation, the spring has no direct outlet into the Rouge River. It is unlikely that the turtle has wandered randomly overland and chanced upon a spring in which it can spend the winter.

To test the assumption that this might be a population trait which the turtles in this area have acquired over the years, I poked around in the mud to try and locate additional individuals. None was found at this time.

Young turtles tend to disperse in their first year of activity. It is possible that one or more individuals may have, for whatever reason, located this spring and then having survived their first year, returned thereafter. Not all turtles purposely seek out what we would consider to be the best sites to spend the winter. If it works, the turtle will persevere; if not, it perishes.

Perhaps then, there is something about the Rouge River itself which makes it unsuitable for turtles to hibernate in. Perhaps it had something to do with spring runoff? Turtles exposed to the current would be washed out into the lake. Or perhaps the stony river-bed and banks hinder effective tunnelling so that the turtle cannot find its way up under the river-bank.

▷

Turtles will often hibernate tucked up under tree roots which line waterways or they will tunnel into the banks of the river to spend the winter below ground and below the water line. Others will bury themselves in the soft ooze of marshlands. I supposed that the turtle had selected a terrestrial hibernation site which had relatively warm spring water to keep the temperatures at the site above freezing.

To test this supposition, I buried two temperature probes, one in the spring water and the other in the mud in which the turtle had buried itself. Weekly temperatures have been kept by Hillside students who have been amazed to learn that a living creature resides below the frozen ice and snow of the spring.

The temperatures of the turtle in its muddy hibernation spot do remain higher although only by about two degrees centigrade. One cannot say with any degree of confidence that the warmer mud temperatures give any advantage to the turtle. However, it is possible that the turtle will become active before other river turtles because the spring will flow earlier than the ice breakup in the river. Although the flooded river still will not be available to the turtle, it may be that the warm temperatures of the spring marsh will stimulate feeding and reproductive activity earlier than those in the river.

I based my assumptions on the understanding that all turtles will avoid frost by digging deeper into the bottom mud to escape the frost. However, a recent paper has shed new light on the matter. It would appear that the body temperature of hatchling painted turtles exposed to freezing temperatures may decline to a temperature below 0°C but remain at temperatures above those necessary for the freezing of body fluids. That is, these turtles can withstand short term exposure to sub-freezing temperatures for brief periods and tolerate the formation of ice within cells or have a biological anti-freeze to resist freezing. Both mechanisms are known to occur in invertebrates and amphibians. We are still faced with the question of how this turtle found the spring and why it has chosen to leave the Rouge River itself.

I would prefer to believe that this turtle has just chanced upon a good thing and is taking advantage of a retreat that has proved successful in the past. All my theories and measurements are just that. They have meaning for the enquiring mind, but from the turtle's point of view there may be no advantage to this location other than the fact that it has worked before. Given the size of this beast, success must be measured over thirty years or more. Who am I to reason with such success?

Bob Johnson

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And yet, if one looks back at the course of evolution, one sees a strange thing. The successes were so busy being successful, looking good, that all the biggest leaps, the most profound steps, had to be taken by failures.

from THE DREAMS OF DRAGONS: RIDDLES OF NATURAL HISTORY by Lyall Watson, William Morrow Co., Inc., New York, 1987

PLANTS AS POLLUTION FILTERS

The National Aeronautics and Space Administration (NASA) suggests that the following house plants can be used as a natural air filter system:

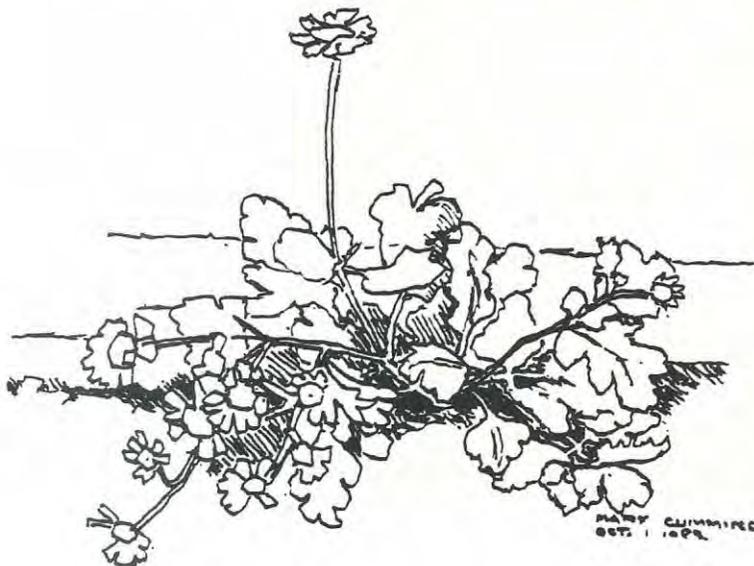
gerbera daisy (*Gerbera jamesonii*)
 golden pothos (*Epipremnum aureus*)
 peace lilies (*Spathiphyllum* spp.)
 English ivy (*Hedera helix*)
 spider plant (*Chlorophytum comosum*)
 bamboo palm (*Chamaedorea erumpens*)
 Madagascar dragon tree (*Dracaena marginata*)
 mass cane (*D. fragrans* 'Massangeana')
D. deremensis 'Warnecki'
 philodendrons
 chrysanthemums

The plants have been found effective indoors in reducing the levels of such common toxic substances as trichloroethylene (TCE), benzene and formaldehyde. About 8 to 15 well-placed plants will significantly improve air quality in the tightly controlled environment of the average energy-efficient home.

TCE, a potent liver carcinogen, is found in inks, paints, lacquers, varnishes and adhesives. Benzene, another organic solvent "organic", is found in inks, paints, oils, plastics, rubber and gasoline and can lead to a wide variety of symptoms from skin irritation, headaches to kidney and liver damage. Formaldehyde, used in foam insulation, particle board, resin-treated paper products (grocery bags, tissues, paper towels and waxed paper) and most cleaning agents, is an irritant to the mucous membranes.

adapted from "NASA researchers say plants are valuable pollution filters" by Jack Lord in PAPPUS, Vol. 9, No. 1, Winter, 1990

□



FEVERFEW in the old-fashioned garden at the TFN Nature Centre, Sunnybrook Park, was sketched by Mary Cumming. It is in the *Chrysanthemum* genus and has been found as a garden escape on Leslie Street Spit. It originated in Europe.
 Ref.: *MANUAL OF VASCULAR PLANTS* - Gleason & Cronquist.

January 7, 1990

Lake Ontario Mid-Winter Waterfowl Inventory

Compiled by W.J. Edmunds

	Presqu'ile	Port Hope	Durham	#1	#2	TO #3	RON #4	TO #5	#6	#7	Subtotal	Hamilton	Niagara	TOTALS
Red-thr. Loon							1				1		1	2
Common Loon												1	1	2
Horned Grebe												1		1
D.C. Cormorant													3	3
Trumpeter Swan				1							1	3		4
Mute Swan				10	2	2		15	34	12	75	14		89
Snow Goose								2	5		7			7
Canada Goose		45	838	2667	335	19	11	560	1785	1506	6883	2059	1144	10969
Wood Duck				2				4			6	2		8
Green-Winged Teal					5	2					7			7
Blue-Winged Teal						2					2			2
Am. Black Duck		36	535	247	105	13	16	62	56	110	609	318	40	1538
Mallard		792	960	1559	365	104	484	1703	1309	707	6231	585	504	9072
Northern Pintail			2	5		1				1	7	26	2	37
Northern Shoveler								2			2	1		3
Gadwall				19		214		21	157	23	434	10		444
Am. Wigeon				1					19		20			20
Canvasback	350													350
Redhead	625				1		3	84	1		89		20	734
Greater Scaup	85	59	23	87	87	45	11	221	88	23	562	712	797	2238
Lesser Scaup				2					1		3	106	5	114
Harlequin Duck									1		1	1		2
Oldsquaw	280	9	5		190	2225	3777	205	117	15	6529	16	232	7071
Wh-Winged Scoter							354				354	37	1	392
Surf Scoter							2				2			2
Com. Goldeneye	142	41	85	67	33	17	21	35	129	180	482	109	681	1540
Bufflehead	14	25	30	67	35	42	60	29	44	66	343	142	90	644
Hooded Merganser				2	1						3	6		9
Com. Merganser	21	47	42	182	19	26	6	3	39	9	284	77	138	609
Red-br Merganser			2	7	31	37	39		4	4	122	25	88	237
Ruddy Duck					1						1			1
American Coot												2		2
Duck sp.			400					2			2		6	408
TOTALS	1517	1054	2922	4925	1210	2749	4785	2948	3789	2656	23062	4253	3753	36561
SPECIES	7	8	10	16	14	14	13	14	16	12	27	22	16	32
Bald Eagle					1					2	3		2	5

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WATERFOWL INVENTORY

Lake Ontario Mid-Winter Waterfowl Inventory

ROUTES AND OBSERVERS:

January 7, 1990

Presqu'île Provincial Park and area: S.Hadlington plus 10 members
of the Presqu'île-Brighton Naturalists Club
(Presqu'île-Brighton Naturalists)

Port Hope area (Wicklów to Wesleyville): E.R.McDonald
(Willow Beach Field Naturalists)

Durham area (Wesleyville to Whitby): M. Bain, D.Calvert, L.Dunfield
(Durham Region Field Naturalists)

Toronto (Toronto Ornithological Club).

Route 1 (Whitby to Rouge R.): R.Nisbet, M.Wilson

Route 2 (Rouge R. to Coatsworth Cut): F.&M.Bodsworth, A.Dobson,
A.&B.Falls

Route 3 (Eastern Headland to Cherry St.): G. + J.Fairfield, D. Burton,
R.Cubitt

Route 4 (Toronto Islands) : G.Coady, B. Edmunds

Route 5 (Parliament St. to Humber R.): B.Jefferson, D.McClement,
T.Lang, V.Higgins, M.Kubisz, H.Smith

Route 6 (Humber R. to Watersedge Park): D.Perks, J.Lamey

Route 7 (Watersedge Park to Bronte): M.DeLorey, M.Ansell, B.Gilmour

Hamilton area (Bronte to 50 Point + Hamilton Bay): G .Naylor plus
25 members of the Hamilton Naturalists Club
(Hamilton Naturalists Club).

Niagara Area (50 Point to Niagara-on-the-Lake): G.Bellerby, J.Black,D.Euler,
M.E.Foley, A.Barnsley, C.Sanderson, B.Ratcliffe
(Peninsula Field Naturalists).

TIME & WEATHER: 8:00 a.m. to 4:00 p.m. The lake was generally open but some channels & bays were icebound; there were strong winds (40Kph) from the SW. The day was generally clear, however large waves on lake restricted visibility of offshore waterfowl. Temperatures were above 'freezing' throughout the day, but it was cold in exposed areas.

REMARKS: This is the 44rd year for the Toronto count and the fourth year that the entire lakeshore from Presqu'île to Niagara-on-the-Lake has been covered.

In the Toronto area, 23062 individuals were seen, from 27 species. Record high numbers were seen for Wood Duck (6), Green-Winged Teal (7), Blue-Winged Teal (2), White-Winged Scoter (354), Surf Scoter (2), and Red-Breasted Merganser (122). High numbers were seen for Mute Swan (75), Mallard (6231), Northern Pintail (7), and Oldsquaw (6529). Low numbers were noted for Canada Goose (6883) and Canvasback (0), with a record low for Greater Scaup (562). The 2 Blue-Winged Teal were the first ever recorded on this count, the Red-Throated Loon was only the third record, and the 2 Surf Scoter were the first since 1976.

Outside the Toronto area, Presqu'île had the only Canvasback (350), Hamilton recorded the only American Coot (2) and Horned Grebe (1), while Niagara-on-the-Lake had the only Double-Crested Cormorant (3). 5 Bald Eagles were also recorded during the census.

For the entire count area, 36561 individuals were found from 32 species.

Thanks to all the clubs and individuals who participated.

Compiler: W.J.Edmunds

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NOMADS OF SOUTHERN ONTARIO

Eleven thousand years ago, the topography of southern Ontario was dominated by a tundra-like environment and a glacier lying north of present-day Lake Simcoe. As the glacier retreated, its melting waters drained into Lake Algonkian (now Georgian Bay and Lake Simcoe) and Lake Iroquois (now Lake Ontario). The terrain was home to herds of caribou, with humans scarcely evident. Two bands of nomads, numbering a mere 15 to 25 related individuals, are believed to have lived on the beach ridges of Lake Algonkian and Lake Iroquois. Traces of their presence have also been found near many of the region's inland kettle lakes.

What was life like for these first known inhabitants of the region? Archaeologists are slowly putting together the story and property owned by the Metropolitan Toronto and Region Conservation Authority has become a crucial resource for finding all the pieces.

The involvement began as lands, which today total 12,000 hectares and make the Authority the largest landowner in the region, were acquired for conservation purposes. These lands are now known to hold an abundance of archaeological sites. The reason is simple: in prehistoric times, the natives gravitated towards the region's rivers and lakes to fill their need for a stable supply of fresh water. In later times, these waters took on added importance as major trade and transportation routes.

As the centuries passed, more and more people were attracted to the area, some fleetingly, others for a very long time, but all left behind important archaeological traces.

As spreading urbanization threatens to obliterate many traditional facets of local life, precious archaeological sites are especially vulnerable. Spanning 11,000 years, they represent the full range of prehistoric human habitation in Ontario, from the caribou-hunting Palaeo-Indians and the hunting/gathering Archaic Indians to the agriculturally based Iroquois, such as the Huron, and, later on, the earliest pioneer settlements.

Each site, whether a small, briefly occupied campsite, a large Iroquoian village with a population of 1,500, or the remains of a historic homestead, is significant since it holds the only record of that occupation. Archaeologists have been particularly interested in the numerous 15th-century Iroquoian villages situated along the Humber and the Don Rivers.

In order to identify and define archaeological sites, a Community Facilities Improvement Grant program was launched by the Ontario Ministry of Culture and Communications in the mid-1980s. The program reflected the government's stated view that archaeological sites are environmentally significant natural resources which should be preserved. As a result, the Authority proposed a three-year Archaeological Resources Project with three important goals: to compile an inventory of prehistoric and historic archaeological sites on Authority lands, to develop a predictive model for locating new sites, and to create an interpretation component.

During inventory, the locations of 37 known sites found prior to 1987 are being confirmed, new sites are located through field investigations of ploughed lands, and all data are recorded and analyzed. On Authority lands, the targeted fields are usually located on the tablelands which abut the major river valley systems.

NOMADS (cont'd)

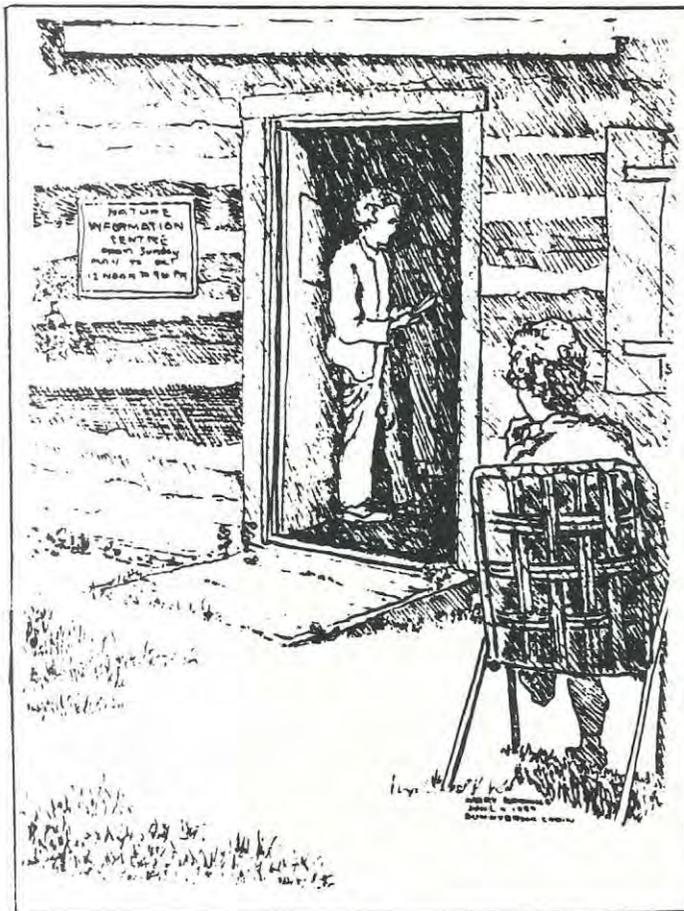
For the field workers, much of their labour is surface collection. They walk, one and a half metres apart, through the ploughed fields, painstakingly looking for artifacts. This simple method turned up 20 new sites in 1987 and 20 more in 1988. The finds translate into the remarkable ratio of one site for every six hectares that have been searched since the project began; this success rate indicates an extremely high potential for the existence of many more sites on Authority lands.

Now the Metropolitan Toronto and Region Conservation Authority is creating a policy for the management of its archaeological resources, to ensure that the sites, and the secrets they hold, will be accessible to future generations.

extracted from "Mapping Man's Traces: Archaeology and the Authority" in FOCUS ON GREENSPACE, (a publication of MIRCA), No. 7, Sept. 1989

*A bridge joins two sides
but disrupts the corridor
it crosses over.*

haiku by Helen Juhola



VOLUNTEERS NEEDED

The TFN Nature Centre, located in Sunnybrook Park, re-opens on Sundays from May 6th to October 8th. Four TFN volunteers are needed each Sunday from 12 noon to 4 pm to interpret TFN objectives and activities and make available appropriate pamphlets to visitors, who number from 10 to 160*.

To participate and meet other TFN members at the Cabin, call Helen Juhola at 924-5806 or Eileen Mayo at 445-4621 as soon as possible.

*A "key" person (one with a key to the Cabin) will be there to explain what is expected of first-time volunteers.

IN EXCHANGE

TFN receives a number of publications from other organizations. Members may borrow them. Every year or so back issues are collected and deposited in the Fisher Rare Book Room of the Robarts Library where they are used to complete sets kept for reference. Sources and titles of material available follow:

PAPPUS (Royal Botanical Gardens), Burlington
TRELIS (Civic Garden Centre), North York
THE GREAT LAKES REPORTER (The Centre for the Great Lakes), Chicago, Ill.
CONE (Coalition on the Niagara Escarpment), Toronto
ONTARIO RECYCLING UPDATE (Recycling Council of Ontario), Toronto
EARTHWORDS (Friends of the Earth), Ottawa
ONTARIO CONSERVATION NEWS (The Conservation Council of Ontario), Toronto
INTERVENOR (Canadian Environmental Law Association), Toronto
PROBE POST (Pollution Probe), Toronto
THE VICTORIA NATURALIST (Victoria Natural History Society), Victoria, B.C.
BULLETIN (Saint John Naturalists' Club), St. John, N.B.
ISLAND NATURALIST (The Prince Edward Island Natural History Society), P.E.I.
NEWS OF THE ROUGE (Save the Rouge Valley System), Scarborough
THE KINGFISHER (The Black Creek Project), North York
FRIENDS OF THE SPIT (Friends of the Spit), (Leslie Street Spit), Toronto
URBAN WILDERNESS GARDENERS (Urban Wilderness Gardeners), Toronto
TOMMY THOMPSON PARK (Metro Toronto & Region Conservation Authority -MTRCA), N.Y.
THE BLUEBILL (Kingston Field Naturalists)
THE BLUE HERON (The Brereton Field Naturalists of Barrie), Barrie
THE CHICKADEE (Huntsville Nature Club), Huntsville
STRATFORD FIELD NATURALISTS NEWSLETTER), Stratford
NEWSLETTER (Kawartha Field Naturalists), Fenelon Falls
NEWSLETTER (Saugeen Field Naturalists)
ERMINE (The Orillia Naturalists' Club), Orillia
THE ORCHID (The Peterborough Field Naturalists), Peterborough
THE CARDINAL (The McIlwraith Field Naturalists of London), London
PEEP (Kirkland Lake Nature Club), Virginiatown
THE GUELPH FIELD NATURALIST (Guelph Field Naturalists), Guelph
EARTHWAYS (Lambton Wildlife Incorporated), Sarnia
PENINSULA NATURALIST (Peninsula Field Naturalists), St. Catharines
TRAIL AND LANDSCAPE (The Ottawa Field-Naturalists' Club), Ottawa
NATURE NORTHWEST (Thunder Bay Field Naturalists), Thunder Bay
THE BULLETIN (Richmond Hill Naturalists), Richmond Hill
THE WOOD DUCK (Hamilton Naturalists' Club)
LONG POINT BIRD OBSERVATORY NEWSLETTER (L.P.B.O.), Port Rowan
WILDFLOWER (The Canadian Wildflower Society), Toronto
HARTS TONGUE HERALD (Owen Sound Field Naturalists), Owen Sound

Other titles received from time to time are:

NETWORK NEWS (Ontario Environment Network), SEASONS (Federation of Ontario Naturalists), THE RAVEN (Park News Algonquin - MNR), CONSERVATION CLIPS (Lake Simcoe Region Conservation Authority), TEA LEAVES (Toronto Environmental Alliance), THREATENED PLANTS NEWSLETTER (World Conservation Monitoring Centre), NATIONAL HERITAGE FORUM NEWS (Waterloo), NATURE CANADA (Canadian Nature Federation- Ottawa) and others.

H.J.

□

OYSTERS ON KINGSTON ROAD

Well -- oyster mushrooms (*Pleurotus ostreatus*), which are almost as unlikely in this location as the molluscs themselves. I came across these in November, three huge clumps fruiting mightily from a two-foot high wall composed of square cut-logs. This served as a divider on the cement lot of a vehicle repairs business. When I got one flourishing growth home by the end of the day, it had become soggy but nevertheless produced a distinct, creamy spore print some 12 hours later. By the time I posted this to Jack Parkin, who lives in my part of the city, the print had faded to a wet-looking grey. Mr. Parkin made the identification of *Pleurotus ostreatus* and said that the print was in reality palest lilac. The spores have the shape of wild rice grains. The mycelium (the "roots" of the fungi) had been in the tree from which the logs were cut and although these had been treated with the preservative pentatetrachloride (resulting in the "green wood" that is ubiquitous nowadays), this obviously had not killed it. A spell of moist, warmish weather had been all that was necessary.

Dead wood is composed mainly of cellulose, hemicellulose and lignin, all constituting carbon. Wood in the early stages of decay, however, contains very little nitrogen and *Pleurotus ostreatus* needs nitrogen to make all its proteins, including the enzymes which break down wood. Nematodes (tiny roundworms) fill the nitrogen gap, consisting as they do of proteins and amino acids. Thus the mushroom gets its balanced diet of carbohydrate from cellulose and protein from assimilation of the nematodes. It achieves the latter through its hyphae (the long, threadlike cells which collectively make up the mycelium) which first paralyse a worm by means of a toxin-laden droplet and then enter the nematode's mouth. They continue to spread inside the unfortunate creature, which is digested by enzymes given out by the *Pleurotus* hyphae, the victim being consumed while "fresh" and before microbial degeneration.

Hyphae Entrapment of
Nematode

Copied from photograph
from Thorn & Barron,
Science 224:76-78, 1984.

E.D.



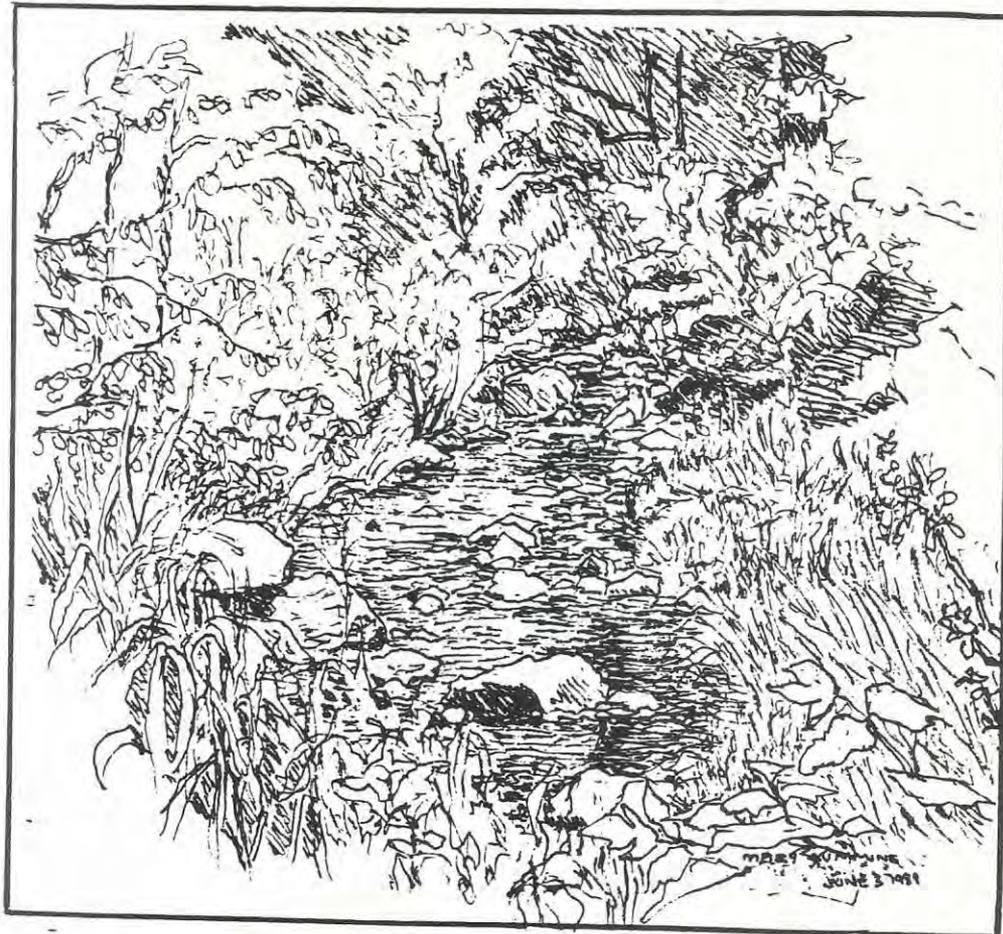
OYSTER MUSHROOMS (cont'd)

The oyster mushroom is much sought after. Orson Miller's guide rates it "edible, choice". Jack Parkin, however, warned against consumption of the specimen I discovered, loaded as it had to be with all the pollutants of the city and its traffic.

I was delighted by this find in such an area, but then the positively Grand Guignol design of Pleurotus lifestyle does put it high on the list of formidable Survivors. The specimens offered the same surprise as the finding of seemingly fragile fungi bursting through cement floor and sidewalk which other members might have observed in the city. We stomp around laying our will on the face of the land and remaking Nature to suit our specifications, so that a manifestation of the Third Kingdom going unstoppably about its business is something I find comforting. Perhaps we won't be allowed to derail everything after all!

Eva Davis

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THE WEST DON VALLEY, drawn by Mary Cumming in the field, on a TFN Nature Arts Outing. In this habitat at least 10 species of mammals and 50 species of birds have been known to breed, according to TFN's Ravine Survey Study No. 8 published in 1978.

IN THE NEWS

FOSSIL COLLECTION DONATED TO GUELPH UNIVERSITY

Gentleman, explorer, scientist and author Herbert Axelrod has donated a fish fossil collection valued at more than \$24-million to the University of Guelph. The fossils, dated at between 100 million and 130 million years old, were collected from the Santana formation in northeastern Brazil. The donation includes between 15,000 and 20,000 fossils, mostly fish, and a cash gift of \$25,000 (U.S.) for a curator to catalogue the collection which also includes fossils of plants, insects, birds, reptiles and unidentified small animal species from Brazil. The collection gives opportunities for ichthyologists to study the evolution of fish, genetics, development, behavior, reproductions and ecology.

adapted from an article by Nina Aprile in the GLOBE AND MAIL, Dec. 14, 1989

DOMTAR PLANT MAY BE PARK SITE

An industrial plant in the lower Don Valley may be replaced by grass, trees and nature trails. The Metro Toronto and Region Conservation Authority (MTRCA) has tentatively agreed to purchase the Domtar Inc. paper plant alongside the Don Valley Parkway. The plant is south of Millwood Road and north of the parkway's Bayview-Bloor exit. Along with a previous approval to expropriate the Don Valley brickworks on the other side of the Don and farther south, the Domtar agreement would leave the valley with just one remaining industry, Polyresins Inc., Domtar's neighbor. Officials are negotiating with Polyresins Inc. about a purchase of that site, but no deal has been reached. The Domtar purchase calls for the conservation authority to pay \$5.2 million for the 6.6 hectare (17.3-acre) site.

adapted from an article by Jim Byers in the TORONTO STAR, Oct. 24, 1989

PRIVATE FUNDING ASSISTS MTRCA IN ACQUIRING HEADWATERS PROPERTY

The Metropolitan Toronto and Region Conservation Authority has purchased a significant parcel of forested land in the Oak Ridges Moraine Complex, using private funds. Trees for Today and Tomorrow donated \$200,000 toward the purchase of 52.4 hectares of the Osler property which adjoins Glen Major Forest and Wildlife Area. The property lies north of Pickering and east of Stouffville in an environmentally significant area. The Oak Ridges Moraine Complex is the largest glacial formation in southern Ontario, stretching from the Niagara Escarpment across the northern boundary of the Authority's jurisdiction. It is the headwaters area for the Humber, Don and Rouge rivers and Duffins Creek.

adapted from a press release of MTRCA, Jan. 19, 1990

WHOOPING CRANE NUMBERS UP FOR 7TH STRAIGHT YEAR

The population of the endangered whooping crane in Wood Buffalo National Park in Canada's North has increased for the seventh straight year. The latest statistics show an increase of eight birds -- to 146 -- over 1988. The North American bird is the rarest of the world's cranes.

adapted from an article in the GLOBE AND MAIL, Jan. 15, 1990



IN THE NEWS (cont'd)

BUSH CONSIDERING NEW LEVY ON RAW MATERIALS

U.S. President George Bush is considering a levy on certain raw materials to encourage industrial recycling. A fee for each ton of materials such as glass, paper and aluminum is likely to be included. The aim of the raw materials proposal would be to provide an incentive for industries to use recycled goods, which would be exempt from the levy. The idea involves more of a "user fee" than a tax.

from an article in the GLOBE AND MAIL, Jan. 4, 1990

WHISTLEBLOWER PROVISION OF ENVIRONMENT PROTECTION ACT WORKS

A company convicted of polluting, which fired a worker who cooperated with Environment Ontario investigators, has been ordered to pay the man compensation. Section 134(b) of the Environmental Protection Act (EPA) makes it an offence for a company to fire or discipline a worker who reports spills or environmental problems to the ministry.

On March 14, 1189 Bakelite Thermosets Ltd., was fined \$100,000 after being convicted of three counts under the Ontario Water Resources Act and the EPA. The Belleville chemical manufacturer pleaded guilty to all three counts, which included burning naphthalene wastes in an unsuitable incinerator; permitting the discharge of phenolic wastes into the Bay of Quinte; and failing to keep records of PCB wastes stored on its premises. An environmental technician for Bakelite, who was a key witness during the company's trial, was one of four company employees instructed by Bakelite's plant manager to conceal and destroy documents relating to environmental matters, took the documents home and later gave them to ministry investigators.

adapted from a news release from the Ontario Ministry of the Environment, Dec. 19, 1989

MIGRATING OPOSSUM FINDS WAY TO OAKVILLE

An opossum wandered into an Oakville house last week through an open window where it played possum in a cosy basket used by cats. Ontario's natural resources ministry has confirmed the nocturnal creatures are moving north beyond their normal range. Their numbers are booming in the St. Catharines and Cambridge areas, where road kills are common and they sometimes get into household garbage. The slow-moving creatures are harmless to humans if left alone and are not known for carrying rabies. Opossums are native to some parts of southern Ontario and are more common in the U.S. But in recent years they've invaded new territory and are rapidly multiplying. Several sightings have been reported near Metro. Mild winters have aided their population explosion. They're opportunistic feeders and can always find a nice warm spot for a nest, such as under a porch. The cat-sized animals are marsupials. Females carry their young in a pouch. They can hang by their tails from trees and have long, pointed noses, naked ears and grayish fur. Opossum is an Algonquin word meaning "white animal".

adapted from an article by Mike Funston in the TORONTO STAR, Dec. 11, 1989

THE WEATHER (THIS TIME LAST YEAR)

March 1989, Toronto

The month was cool and dry. The mean temperatures of -0.7°C downtown and -2.1°C at the airport were the lowest since 1984. Total precipitation was 36.8 mm at the airport and 38.3 mm downtown, almost as dry as in 1988 and about half of normal. It was the fourth consecutive drier-than-normal month. Sunshine was close to average.

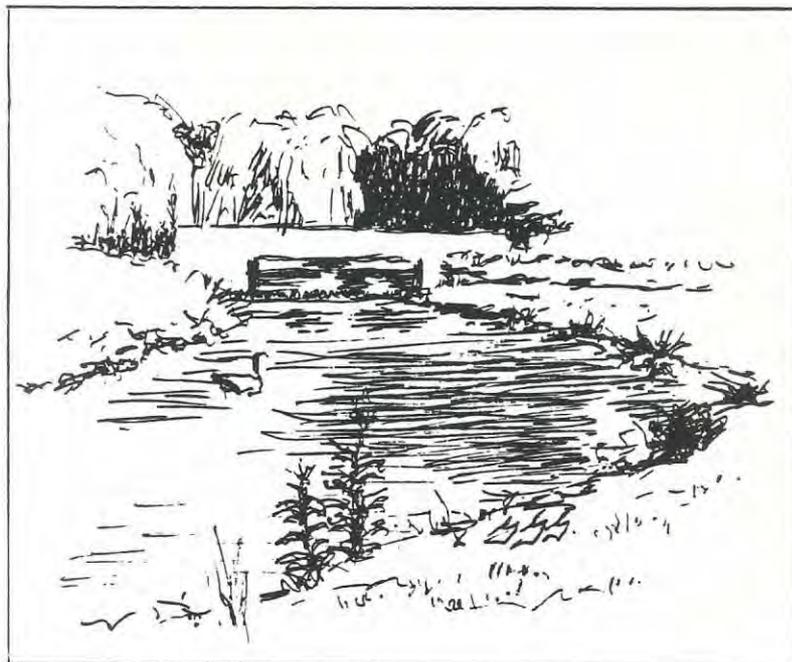
The month opened with some very cold weather as a slow-moving weather system brought a little freezing rain on March 4th with extremely cold weather over the Prairies and the Northwest Territories. Temperatures in the balmy teens were only about 100 kilometres to the south. After this storm, arctic high pressure eased its way into the Toronto area; the minimum of -19.1°C downtown on March 7th was the coldest for any March since 1967. And, aside from a brief incursion of mild southwest winds on March 14th-15th, stagnating, moderated arctic air dominated the weather from then to March 23rd. The worst winter storm of the season hit on March 16th to 17th, with 10-15 cm of snow and copious freezing rain. Some of this snow persisted in pockets in city ravines until mid-April.

Improved conditions began to arrive on the Easter weekend, and on Easter Monday, a surge of warmth hit suddenly. Temperatures away from Lake Ontario rose above 20°C and records were set at the airport with 21.8°C on March 28th. Cool, damp, and drizzly weather came for the last three days of the month, and we missed a wet snowstorm which passed to the south.

To sum up: cool, dry, but with enough variety to be interesting. After a dry 1988 and a dry winter, with only the fall having seasonable precipitation, there is the possibility of long-term drought exacerbation occurring in 1989. But this is likely to be forestalled by a very cool, wet late spring and summer.

Gavin Miller

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AT METRO ZOO...
not everything is
in cages. The
site drawing by
Geraldine Goodwin
shows an area
favoured by
families of wild
Canada geese and
muskrats. It is
within the
Rouge Valley
system.

COMING EVENTS

Willowdale Gem and Mineral Show - at Armour Heights Community Centre (Avenue Road and Wilson Avenue), March 17 (10 am to 6 pm) and March 18 (11 am to 5 pm).

Toronto Entomological (Insects) Association monthly meeting - at the McLaughlin Planetarium on Saturday, March 24 at 1 pm.

Maple Syrup time - at Kortright, Crawford Lake, Wye Marsh, Sheppard's Bush Conservation Area. Call any of our local conservation authorities to check dates and times.

Winter Hike at Todmorden Mills - Sunday, February 25 at 2 pm to 4 pm; nature stroll for one hour followed by activities, games and crafts (focus will be on winter birds), fun for the whole family; admission free if you bring any of the following: plastic soft drink bottle (empty), film cannister (empty), onion bag, a smile; small fee for any materials used. For more information call 425-2250.

Our Gardening Heritage - The Art and Architecture of English Gardens will be presented at the Civic Garden Centre on March 21 and March 22 at 7:30 pm. Admission is \$10 per evening. Call 445-1552.

Sunday afternoon lectures - provided by the Royal Canadian Institute at the Medical Sciences Building (northwest of College and University). Call 928-2096 for details. Free.

March 4 at 3 pm - A tale of two ponds: urban impacts on aquatic ecosystems, an illustrated lecture by Ann Zimmerman

March 11 at 3 pm - Energy, resources and ecology (recycling etc.) an illustrated lecture by James E. Guillet

A course about those smaller spring birds such as flycatchers, sparrows, black birds and swallows - March 10 and 17 from 9:30 am to 3 pm; a course on birdsong identification - March 24 and 31 from 9:30 am to 3 pm; a course on birding in spring - March 27 to April 17. Call 249-9503 for details.

Canadian Organic Growers, Toronto Chapter Conference: Gardening without Chemicals on March 31 from 9 am to 5 pm at the Civic Garden Centre. Topics include: Risks of using synthetic chemicals, Lawn alternatives (gardening with native plants) etc. Registration before Mar. 15 is \$25 for non-members of COG, \$20 for members & students; after Mar. 15, \$30 and \$25. Send payment to COG at 6 Yarmouth Gardens, Toronto M6G 1W4 or call 535-7683 for more details.

City of Toronto Task Force on the Don meetings: Feb. 19 at 7 pm in Room 6 at Toronto City Hall and March 21 at 7 pm in Room 6. Anyone interested in "Bringing Back the Don" is welcome to attend.

University of Guelph Open House - March 10 & 11. This includes the Wild Bird Clinic and Wildlife Rehabilitation Centre.

COMING EVENTS (cont'd)

Selected plates from John James Audubon's BIRDS OF AMERICA will be on display from Feb. 24 to Apr. 28 at the Metropolitan Toronto Reference Library on Yonge just north of Bloor. (Valued at \$4-million (U.S.)), Audubon's book has been fully restored over the past three years.

Flower Show at Toronto City Hall, March 18 to 25, in the Rotunda, free

Naturalists' Workshop at Queen's University Biological Station north of Kingston, Ont., May 19 - 26. For more information and registration form write to Naturalists' Workshop, Queen's University Biological Station, P.O. Box 31, R.R. #1, Elgin, Ont. K0G 1E0.

Help Wanted

Todmorden Mills Museum needs volunteers to assist with nature and/or history oriented nature programs (mostly during the week). You may choose to work either directly with the children (nature walks, living history demonstrations, etc.), behind the scenes or both. Staff training and a job description are provided. We are located on Pottery Road in the Don Valley, easily accessible by public transit. For further details, please call the Museum Education Co-ordinator at 425-2250.

LIFE

*In an amazing fastness I live
Not getting anywhere,
standing still,
like a hummingbird
at the nectar-spill.*

Larisa Zviedris

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Harold Taylor (225-2649) 264 Horsham Ave., Willowdale M2R 1G4

Please submit notices, reports, articles (up to 1,500 words in length) and illustrations at least six weeks before the month in which the event is to take place or the material is required to appear. Please include address and telephone number so submissions can be acknowledged.

Send news clippings to Louise Herzberg, 59 Hillside Dr., Toronto M4K 2M1

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OTHER PUBLICATIONS

<p>TORONTO FIELD NATURALISTS' CLUB: ITS HISTORY AND CONSTITUTION, 1965 \$.50</p> <p>CHECKLIST OF PLANTS IN FOUR TORONTO PARKS: WILKET CREEK, HIGH PARK, HUMBER VALLEY, LAMBTON WOODS, 197250</p> <p>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 2.50</p> <p>FIELD CHECKLIST OF PLANTS OF SOUTHERN ONTARIO, 1977 5/\$1.00 or25 ea.</p> <p>TORONTO FIELD NATURALISTS' RAVINE SURVEYS 2.00 ea. Survey #1 - Chatsworth Ravine, 1973 Survey #2 - Brookbanks Ravine, 1974 Survey #3 - Chapman Valley Ravine, 1975 Survey #4 - Wigmore Ravine, 1975 Survey #5 - Park Drive Ravine, 1976 Survey #6 - Burke Ravine, 1976 Survey #7 - Taylor Creek-Woodbine Bridge Ravines, 1977 Survey #8 - West Don Valley, 1978</p>	<p>INDEX OF TFN NEWSLETTERS (1938-1978) 10.00</p> <p>ANNUAL TFN INDEX25 ea.</p> <p>TORONTO REGION BIRD CHART, 1983 .. 2.00</p> <p>A GRAPHIC GUIDE TO ONTARIO MOSSES, 1985 2.00</p> <p>TORONTO REGION VERTEBRATE LIST (fishes, amphibians, reptiles, mammals), 1985 5/\$1.00 or25 ea.</p> <p>TORONTO REGION BIRD LIST, 1985 .. 5/\$1.00 or25 ea.</p> <p>GUIDE TO THE TORONTO NATURALISTS' NATURE RESERVE, LEASKDALE, ONT., 1986 2.00</p> <p>TORONTO ISLANDS: PLANT COMMUNITIES AND NOTEWORTHY SPECIES, 1987 ... 2.00</p> <p>TODMORDEN MILLS, 1987 2.00</p> <p>All publications are available at the monthly general meetings or may be ordered from Toronto Field Naturalists, 20 College St., Suite 4, Toronto, Ontario M5G 1K2. (Add \$1.00 per item for postage and handling.)</p>
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MEMBERSHIP FEES

- \$20 FAMILY (2 adults - same address, children included)
- \$15 SINGLE, SENIOR FAMILY
- \$10 STUDENT, SENIOR SINGLE
- Tax receipts issued for donations

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