

TORONTO FIELD NATURALIST

Number 405

September 1989



American Goldfinch on Thistle

by Owen Fisher

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TFN MEETINGS

Visitors welcome

General Meetings

Board of Education Centre, 6th Floor Auditorium
155 College Street, at McCaul

- Tuesday, September 5 at 8 pm - TFN ANNUAL GENERAL MEETING
+ TORONTO THE GREEN, an illustrated talk
by Helen Juhola
- + from 7 pm to 8 pm - launching of Bob Johnson's new book
FAMILIAR AMPHIBIANS AND REPTILES OF ONTARIO
(See page 36 for more details.)
- + a display of nature stamps from the collection of Karin Fawthrop
- + an opportunity to purchase TFN publications, hasti-notes, prints of
selected newsletter covers, pins, decals and crests
- + an opportunity to purchase back issues of the ONTARIO FIELD BIOLOGIST (page 36)
- + 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 St. just south of College St.

NEXT GENERAL MEETING: Monday, October 2

Rehabilitation of Urban Streams and Personal Ecology, an illustrated
talk by Glen Harrington

Group Meetings

For those especially interested in birds, monthly meetings will be held
at the Education Centre at 7:30 pm on Oct. 11, Nov. 15, Jan. 10, Feb. 14,
and March 14. For those interested in botany, meetings will be held
Oct. 10, Nov. 14, Jan. 9, Feb. 13, and March 13. Environmental meetings
will be held on Oct. 23, Nov. 13, Jan. 15, Feb. 12 and March 12.

NEWSLETTER COMMITTEE

Helen Juhola (924-5806) 112-51 Alexander St., Toronto M4Y 1B3
Diana Banville (690-1963) 710 - 7 Crescent Place, Toronto M4C 5L7
Eva Davis (694-8928) 203 - 1080 Kingston Rd., Scarborough M1N 1N5
Eileen Mayo (445-4621) 405 - 44 Stubbs Dr., Willowdale M2L 2R3
Toshi Oikawa (425-3161) 1063 Pape Ave., Toronto M4K 3W4
Harold Taylor (225-2649) 264 Horsham Ave., Willowdale M2R 1G4

Please submit notices, reports, articles (up to 1500 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 submission can be acknowledged.

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

	<p>Upcoming TFN</p> <h1 style="margin: 0;">OUTINGS</h1>	
<p>(NO DOGS)</p>	<p>RAIN or  SHINE</p>	<p>Everybody Welcome!</p>

SEPTEMBER

- | | | |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| <p>Saturday
Sept. 2
10:30 am</p> | <p>KEW BEACH - nature arts
Leader: Mary Cumming
Meet on the south side of Queen Street East at Lee Avenue. Bring sketching materials, stool, camera or come and enjoy. Lunch optional.</p> | <p>lakeshore, Toronto</p> |
| <p>Monday
Sept. 4
10 am</p> | <p>DEVIANTS AND EXOTICS - botany
Leaders: Sandy Cappell and Helen Juhola
Meet at the northwest corner of University and Dundas St. W. Morning only.</p> | <p>Toronto</p> |
| <p>Wednesday
Sept. 6
11 am</p> | <p>TORONTO ISLANDS - botany
Leader: Isabel Smith
Meet at the ferry docks at the foot of Bay St. Bring lunch.</p> | <p>lakeshore, Toronto</p> |
| <p>Saturday
Sept. 9
8 am to
6 pm
<u>BUS</u></p> | <p>PRESQU'ILE PROVINCIAL PARK - birds and botany
Leaders: Phil Joiner & Dennis Clarke
Call Kay Lane at 221-6343 if you want to attend. Confirm by sending your cheque, NOT post-dated) to Kay at 564 - 65 Eglerslie Ave., Willowdale M2N 1Y1. Cheque for \$22 should be made payable to TORONTO FIELD NATURALISTS PRESQU'ILE TRIP. Bus leaves southeast corner of Yonge and Old York Mills Rd. (south exit of York Mills subway station). Bring lunch and something to drink. Washrooms on bus.</p> | <p>east of Metro</p> |
| <p>Sunday
Sept. 10
11 am</p> | <p>COL. DANFORTH PARK - botany
Leader: Paul McGaw
Meet at the park entrance on the south side of Kingston Rd. at Col. Danforth Trail. Bring lunch.</p> | <p>Highland Creek, Scarborough</p> |
| <p>Wednesday
Sept. 13
10 am</p> | <p>TAYLOR CREEK - nature walk
Leader: Alf Buchanan
Meet at the Victoria Park subway station. Walk will end at Woodbine Avenue. Bring lunch.</p> | <p>Taylor Creek, East York</p> |
| <p>Sunday
Sept. 17
11 am</p> | <p>ROWNTREE MILLS - birds
Leader: Phil Joiner
Meet at the northwest corner of Islington Ave. and Finch Avenue West. Bring lunch.</p> | <p>Humber, North York</p> |

President's Report

There has been no summer break for a number of key environmental issues:

- Toronto Brickworks: The Metropolitan Toronto and Region Conservation Authority (MTRCA) is to appeal the Ontario Divisional Court order to pay the former owners \$19 million for the site.
- Leslie Street Extension: City of Toronto is preparing a major commitment to fight the extension at an Environmental Assessment hearing this fall.
- Summit on the Environment: the organizers have been persuaded to relocate the conference from the valley floor to the Science Centre. (TFN will have a display at the conference.) [See page 37.]
- East Point Park: MTRCA and their consultants recently revealed the latest proposal for a marina near the mouth of Highland Creek. The Bluffs are going to be excavated for no other apparent reason than to provide fill for the marina. Has MTRCA completely lost sight of their conservation responsibilities?!
- Crombie Commission on the waterfront: TFN made two presentations at the hearings.
- Hinder Estate: acquired by MTRCA to preserve the site from residential development. A significant portion of the site will be developed as parking lots, one for the Jewish Community Centre on the other side of Bathurst Street. [See page 26.]

More and more it seems to me that MTRCA is a major cause rather than a major contributor to the solution of Metro's environmental issues. Greater public (and TFN) pressure must be applied to them to be much more responsive and responsible about environmental protection/conservation. If we were to judge them by their actions alone, MTRCA has become by their own design the major recreation developer in the Metro area. Too often they are a model of insensitivity to the natural environment.

Club business -- we must fill a gap in our ranks. Ross Harris who has ably led the Bird Group for the past two years has resigned. Please contact me or any of your board members if you are prepared to lead the Bird Group.

Robin Powell

Conservation can be defined as "preservation from destructive influences". Governments are a powerful and destructive influence if they fail to legislate to protect the environment, and industry and commerce can -- and frequently do -- wreak havoc on the natural world.

from "Battling for trees and seas" by Ian McIntyre (about WWF) in BBC WILDLIFE, Vol. 6, No. 2, Feb. 1988

AUDITOR'S REPORT

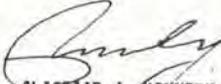
To: MEMBERS OF THE TORONTO FIELD NATURALISTS

I have examined the balance sheet of the Toronto Field Naturalists as at June 30, 1989 and the income statement for the year then ended. My examination included a general review of the accounting procedures and such tests of the accounting records and other supporting evidence as I considered necessary in the circumstances.

Membership fees, donations and other revenues are as shown in the books. These receipts have been tested by me to bank deposits. However, because of their nature, these revenues are not susceptible to complete audit verification.

In my opinion, subject to the limitation of the scope of my audit as explained above, these financial statements present fairly the financial position of the corporation as at June 30, 1989 and the results of its operations for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Toronto, Canada
July 13, 1989


ALISTAIR J. KENNEDY
Chartered Accountant

TORONTO FIELD NATURALISTS
(Incorporated without share capital under the laws
of the Province of Ontario)

BALANCE SHEET
as at June 30, 1989

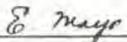
<u>ASSETS</u>		
	1989	1988
Current Assets		
Cash - for general club purposes	\$32,258	\$13,478
Accrued Interest	870	847
Short Term Investments	10,000	20,000
Inventory	2,681	2,639
Photo Library	5,500	4,300
Prepaid Expenses	167	1,788
	<u>\$51,476</u>	<u>\$43,052</u>

<u>LIABILITIES AND EQUITY</u>		
	1989	1988
Current Liabilities		
Accounts Payable	600	630
Membership Fees Received in Advance	11,675	10,855
	<u>12,275</u>	<u>11,485</u>

<u>EQUITY</u>		
	1989	1988
Retained Earnings		
Balance at beginning of year	31,567	27,848
Income (loss) for year	7,634	3,719
	<u>39,201</u>	<u>31,567</u>
	<u>\$51,476</u>	<u>\$43,052</u>
Working Capital: Dollars	39,201	31,567
Ratio	4.19:1	3.74:1

<u>JAMES BAILLIE RESERVE - RESTRICTED FUNDS (Note 1)</u>		
	1989	1988
Current Assets		
Cash (Note 2)	\$79,516	\$14,308
Short Term Investments	-	20,000
Accrued Interest	-	30
	<u>79,516</u>	<u>34,338</u>
Property and Equipment		
Land	109,187	109,187
Building	\$3,050	
Less Accumulated Depreciation	2,500	750
	<u>109,737</u>	<u>109,937</u>
	<u>\$189,253</u>	<u>\$144,275</u>
Equity		
Reserve for future expenditures	79,516	34,338
Property	109,737	109,937
	<u>\$189,253</u>	<u>\$144,275</u>

APPROVED ON BEHALF OF THE BOARD

 (Director)  (Director)

The attached notes are an integral part of these financial statements.

TORONTO FIELD NATURALISTS
COMPARATIVE INCOME STATEMENT
for the year ended June 30, 1989

	1989	1988	1987
REVENUE			
Membership Fees	\$20,225	\$19,500	\$18,975
Publications	891	257	507
Outings	1,048	(335)	97
	<u>\$22,164</u>	<u>\$19,422</u>	<u>\$19,579</u>
EXPENSES			
Junior Club	-	16	627
Meeting Expenses	1,819	1,083	994
Newsletter, printing & mailing	13,742	12,248	10,728
Other printing expenses	514	427	395
Other mailing expenses	1,802	1,615	1,439
Honoraria (Note 3)	600	1,800	2,700
Advertising & Publicity (Note 4)	434	865	959
Donations & affiliation fees	30	30	30
Office supplies	742	1,061	460
Telephone	403	481	370
Storage	-	168	550
Rent (Note 5)	2,004	1,503	-
	<u>\$22,090</u>	<u>\$21,297</u>	<u>\$19,252</u>
Operating Income (loss)	74	(1,875)	327
Interest Income	3,385	2,644	2,291
Net Income (loss) before donations	3,459	769	2,618
Donations	4,175	2,950	1,435
Net Income (loss)	<u>\$7,634</u>	<u>\$3,719</u>	<u>\$4,053</u>

The attached notes are an integral part of these financial statements.

TORONTO FIELD NATURALISTS
NOTES TO FINANCIAL STATEMENTS
AS AT JUNE 30, 1989

Note 1 - ACCOUNTING POLICIES

JAMES BAILLIE NATURE RESERVE

Donations received for the James Baillie Nature Reserve are segregated on the financial statements, and are to be used solely for Reserve purposes. The interest earned on these funds is sufficient to cover the normal operating costs of the Reserve.

PROPERTY VALUATION

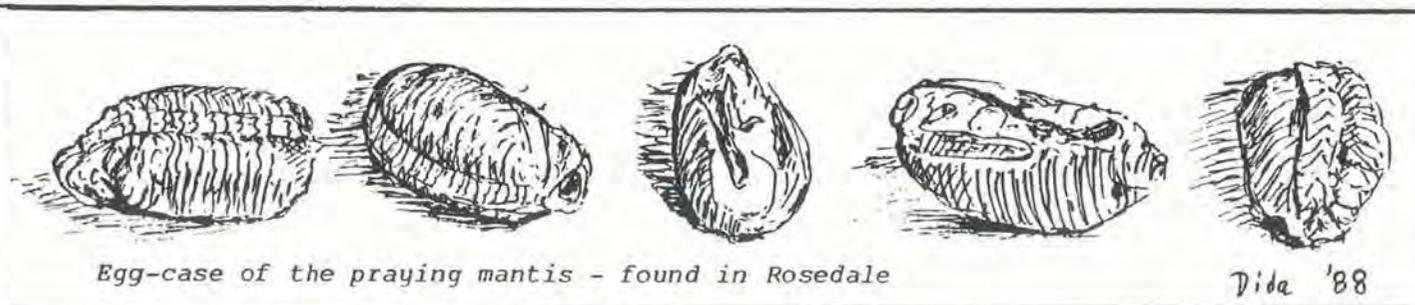
The land and shelter at the Baillie Nature Reserve are recorded at cost. The cost of the shelter is being amortized on a straight line basis over its estimated useful life of 15 years.

Note 2 - During the year, the TPN received an unrestricted bequest of \$35,255. Because of the size, the Board of Directors decided to place it in the Reserve funds for the purchase of additional Nature Reserve lands.

Note 3 - The only honorarium this year is the audit fee.

Note 4 - Slide presentations are made to various organizations, some of which give donations to the TPN. The \$350 received this year was credited to this account reducing the expense by that amount.

Note 5 - TPN has the option to renew the office tenancy for one year from Oct. 1, 1989 at a rental to be determined. This option will be exercised.



Keeping in touch...

Dear Ms. Banville

April 17, 1989

I just read the Toronto Region Bird Report in the latest (May) issue of the TFN. I noticed a request for information on sightings of uncommon species. One of those mentioned is the scarlet tanager. I observed one last May 22 in Sunnybrook Park. It was perched on a branch close to the streambank in the section of the park right below Sunnybrook Medical Centre. This was the first one I had seen, and I was able to observe it for quite a while before it flew off. What a thrill it was! Hope this information is useful.

Vicki Bernstein

Ed Note: We received two further reports of scarlet tanager observations after Vicki's - from Ellen Freeman (May 11 - Moore Park Ravine) and Jackie Brookes (May 15 - Lawrence Park). We had reports of other "feared missing" birds in the "uncommon" category for 1988 from F. W. Lyonde, Miriam Milne, V. R. Carey, and David Worthington. Three great egrets were seen at Rattray Marsh (which is within the 30-mile or 48 km radius of the Royal Ontario Museum considered as "Toronto Region") on August 21; earlier, May 4, one was seen with an "occasional", the snowy egret, beside it on the log, to add to our May 8 record of the snowy at the same location. A solitary vireo was observed in Lambton Woods May 7, golden-winged warbler at Wilket Creek Park May 10, four fox sparrows at Marie Curtis Park April 15 rustling the leaves at the base of a tree, bobolinks on May 7 off Mississauga Road north of Derry Road, and in -15°C weather at 8:30 AM a flock of twenty-five red crossbills feeding on cones in hemlocks at Lambton Woods. We thank all those who responded to our request in 404:15. That looks after eight of the twenty "feared missing" Toronto birds. Anyone for the other twelve?

Dear Diana,

May 10, 1989

...In addition to these notes, perhaps I should also tell you that a pair of red-breasted nuthatches have wintered with me and used my feeder for nuts and suet over many years, including the last winter. They are still with me, and I believe last year they may actually have nested. At least on Sept. 15, 1988, I saw a young bird flying, calling, fluttering, and begging. An adult eventually flew over from another tree. On Sept. 19 and 21 I saw a juvenile begging for food again. Through October I heard nuthatches calling and after I put up my feeder in mid-October, adult red-breasted nuthatches appeared regularly. I intend to watch more closely this year and see if I can detect nesting. Once the feeder goes, however, it is hard to see them - they are still calling now...

Katharine Martyn

▷

*Mother house finch treading air;
father bird scolding me.*

Sr. Margaret Banville

KEEPING IN TOUCH (cont'd)

Dear Mr. Powell:

May 19, 1989

Thank you very much for your letter of April 4, 1989, concerning the site for the Summit on the Environment.

The site for the Summit has been changed and it will now take place in the Don Valley at the Ontario Science Centre.

Thank you again for writing.

Dennis Mills, M.P.
Broadview-Greenwood

P.S. Hope we can count on your active participation. [See page 37.]

Dear Ms Juhola:

June 22, 1989

We would like to thank you for attending and participating in the discussions on our Parks and Open Space Report No. 7 and the use and management of the major river valleys and the waterfront. As staff, we found your ideas and comments most useful and we hope that from your point of view the sessions were informative.

The comments obtained from these meetings augmented by earlier responses to the Parks and Open Space Report will be considered as valuable public input into the Metropolitan Plan Review Program. In the short term, the comments will be examined within the context of the companion background report on the Urban Environment which is presently being prepared. As you will recall, this report will be addressing various matters such as healthy cities, sustainable development, civic design, heritage preservation, and waste management. A policy report specific to the Environment is to be prepared in Phase 2 of the Review Program.

Thank you once again for taking the time to attend the discussion session. If you have any additional comments on the Open Space Report or on the Program itself please forward them to the attention of this Department.

J. Livey, Director-Policy Development
Metropolitan Planning Department

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INDIVIDUALS CAN MAKE A DIFFERENCE!

... Governments dither, but there is nothing to keep us as individuals from voting with our feet. We can do something about global warming, and feel better for doing it. Each time one of us walks someplace instead of driving, that much less poison has been injected into the air we all breathe. (Actually the benefits are multiple. One less car means that the rest of the traffic will move that much more quickly and burn less fuel.) Now suppose two of us walk someplace instead of driving. What if 100 million of us did it just once a day?

from "Phenomena, comment and notes" by John P. Wiley, jr. in SMITHSONIAN, Vol. 20, No. 4, July 1989

Publicity Report

"Toronto the Green" is a slide presentation illustrating Toronto's six main watersheds and their courses into Lake Ontario. The slides take us upstream into the landscape of the rivers and along the waterfront, showing the beauty as well as the destruction caused by industry, developers and the general public. The slides are from the TFN slide library and can be altered to highlight the topic requested. A discussion of the slides completes the presentation.

These were shown by Helen Juhola to 40 members of the Ontario Heritage for Seniors group. They were also shown by Helen at the Leaside United Church, the Toronto French School, located at Bayview and Lawrence Ave., and the Parent-Teachers' environmental evening "Our Beach Environment" at Williamson Public School. Phil Joiner gave a slide presentation to 50 members of the Wesley United Church in Etobicoke on the same subject. Robin Powell presented a slide show illustrating environmental concerns to the University of Toronto outings group.

The display units were well used in a number of areas. Karin Fawthrop took a display to the "Centennial Swamp" meeting in Scarborough. It illustrated the swamp before and after draining. This meeting was attended by about 500 persons. The Scarborough Board of Education held its annual "Environmental Activities Day" which Karin also attended. She used three display units illustrating the need to conserve our natural environment. Displays were also set up at York University's "Environmental Action Day".

The East York Community Development Council invited our attendance with displays emphasizing family outings. The topic, "Parenting: It's a Family Affair", was held at the William Burgess Public School. Melanie Milanich was there and advises that there was a good turnout and considerable interest shown in the event. Melanie was also at our display at the Riverdale Farm, titled "Spring into Nature".

The Kortright Centre had a Family Weekend Birdathon May 12-14. Phil Joiner set up three display units and joined the birdathon day on Sunday. The displays were also used during Environment Week from June 5-9 at the Toronto and North York City Halls. Several hundred application forms were picked up during these presentations and displays.

The Royal Canadian Institute invited us to attend a joint meeting with the Canadian Wildflower Society in February. A display was set up in the entrance to the auditorium, and a brief outline of TFN activities was given to the meeting. As well as reading announcements about our monthly meetings, Art Drysdale read complete articles on "The Bat" and the Environmental Group Report on one of his regular Saturday morning shows on CFRB.

The editors of TORONTO Magazine, published by the GLOBE AND MAIL, featured the Don River in their April issue, expressing concern about the pollution and environmental changes which have occurred over the years. Helen Juhola was invited to visit the Don Valley with Charles Sauriol and helped contribute to the content of the article. TFN photos were used in the article. A Forum on the Don was organized at the Ontario

PUBLICITY (cont'd)

Science Centre as a "meeting ground in which views and information could be exchanged". Helen was invited to show slides illustrating the aesthetics of the river valley. The slides together with her comments were so impressive that when told by the chairman that her time for the presentation was coming to an end, the audience insisted that she continue until all slides were seen and comments heard. Following this, Helen was asked to speak on the same subject to an Environmental Group at Holy Blossom Temple. As a result of the article in which the TFN "cleanups" were noted, several hundred calls were received at the TFN office from people who wanted to help at our Thyra and Todmorden outings. We also received free Glad garbage bags from First Brands (Canada) Corp. and a truck from Industrial Disposal Toronto, a division of Waste Management of Canada Inc., whose employees helped us cart away the garbage at each outing.

At a conference in Ottawa on Heritage Conservation and Sustainable Development, Aarne and Helen Juhola were able to display TFN photos and publications.

It has been a busy, enjoyable and, we hope, a productive six month period from January to June 1989, thanks to the many members who give so willingly of their time and knowledge.

Eileen Mayo

□



THE TFN DISPLAY

GETS AROUND...

There was considerable interest at the Riverdale Farm Festival on September 10, 1988.

This boy was among those who seemed quite absorbed in the material being shown that day.

Nature Arts Group Report

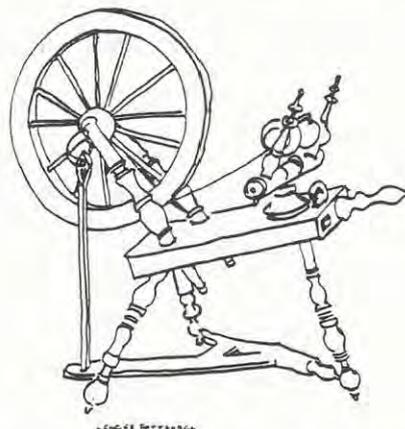
Nature Arts - September-December, 1988

Our first autumn Arts outing, September 3, was to a new location, Thomson Memorial Park - one stop north of Brimley and Lawrence Avenue - but unfortunately the weather was wet. Mary Cumming and one other member were given a guided tour of the Thomson pioneer homestead, a log cabin, blacksmith shop and two-storey house. After lunch by the creek (the rain had stopped) they did some sketching.

October 18 was a first-time visit to Metro Zoo for two new members among the six attending with leader, Leslie Mirylees. Although it was cold and blustery, the maples and other trees in their fall colours were beautiful. The group found the monkeys especially fascinating. Lunch at McDonalds and interesting discussions ended the outing.

November 15 - Sigmund Samuel Canadiana Gallery - a partly sunny, mild day - Diana Banville and eight others were welcomed by the museum staff. After browsing, they settled down to draw furniture - some of it toy furniture. One member who had been fascinated by the spinning wheel in 1986 tried another view of it.

Most worked in black and white, but one in colour, using felt pens effectively (a handy medium for museums, where ink or water are considered hazardous). One participant preferred to be a viewer and enjoyed the quiet atmosphere of this museum which she had never before visited. At one o'clock we walked together to Hart House and lunched in the Great Hall. We compared all our furniture renditions after lunch, around the table, and then brought out our photographs of vacation trips, including starfish, harbour seals, sea anemones, and our recent sketches - drawings of birds improvised from photographs and impressions of the Royal Winter Fair.



*Spinning-wheel at Canadiana Gallery
by Lenore Patterson.*

On December 3 a group of eleven went to York Cemetery Greenhouse with Annette Wolf, who reported that she "enjoyed leading" the group of sketchers. (If there is anyone else out there who would like to be a leader, you too could find the experience enjoyable.)

We also had photography at the Civic Garden Centre with Betty Greenacre and a "gallery hop" with Mary Cumming, and in December at the Royal Ontario Museum, Marjory Tilley showed us the bat cave and the autumn forest - the two most recent developments there, also the much publicized dinosaurs - "Dinamation" (various animated examples of this form of life). Some time was spent there and, in contrast, in an elegant exhibition of

OUTINGS REPORT - Nature Arts - cont'd

eighteenth century neo-Classical decorative art. Our sketches were shown, around the lunch-table in the cafeteria. This led to a discussion of different media and there was also time to glance through a catalogue of Canadian paintings which were originally executed for the former trans-Canada "Canadian" train, and since that concluded our nature arts outings for 1988, we wished each other the Season's greetings and best wishes for the new year.



Northern Waterthrush from a mounted specimen at the Royal Ontario Museum December, 1988 by Betty Paul.

Joyce Cave

□

LAMENT FOR A POPLAR

*The tallest, straightest tree around -
that's how I knew
I was coming to
the trail to the wild hanging garden
otherwise called 'the fen'.*

*But what is it with me today?
Has it slipped my eye?
Have I passed it by?
But no! In blocks it lies, the sentinel
won't stand again.*

*No orange blaze of authority
to tell us why
it had to die.
Its branches gone, a few leaves cling
to tell us at least one little thing -
what kind of tree it was...*

Well may the aspen tremble.

*Diana Banville
Taylor Creek Park
June 15, 1989*

Beginnings

Clive and Joy Goodwin are known to many of our members through their leadership of study courses and nature tours. As well, Clive has been active in administering the affairs of the Toronto Field Naturalists. He was president in 1970-72, and in the two preceding years was both vice-president and chairman of the Bird Group. From 1971-81 he chaired the editorial committee of the ONTARIO FIELD BIOLOGIST, a journal produced at that time by the Toronto Field Naturalists. Clive is the author of A BIRD-FINDING GUIDE TO ONTARIO (University of Toronto Press, 1982) and of A BIRDFINDING GUIDE TO THE TORONTO REGION (Clive and Joy Goodwin Enterprises Ltd., 1988). Here are the stories of these two very keen naturalists as told by Clive.

H. T.

My first recollection of birdwatching was when I was about seven. In those days we used to live on a little cobbled street in Leeds, then one of the forbidding, black industrial cities of the north of England. Each house had its small cement yard at the back, neatly enclosed by a low brick wall. The wall was too high for a seven-year old to see over, but by climbing up on the dustbin--garbage can--you could lean on the wall and view the wide expanses beyond, all the way over to the walls on the other side of the street.

I can remember perching on this eminence and viewing the house sparrows foraging among the cobbles, and thinking that these seemed very interesting creatures, and that maybe no one knew much about them--which, ironically, was quite true!

My first contact with flora dates from about the same time. At the end of the street were a couple of foundations that had been excavated and then abandoned. These were the "hollows"; the scene of thrilling games of cowboys and Indians, which consisted of pursuing--or being pursued--up and down the slopes, with one's first two fingers transformed into a lethal firearm, and cries of "dah-dah-gotya". If one judged oneself to have been "got", the proper form was to collapse dramatically and roll back down the slope, flattening the vegetation in the process. This consisted entirely of a low herb with feathery leaves, and a pungent smell which clung persistently to clothing when the battle was over.

I know the plant now as rayless chamomile or pineapple weed, but it was the source of endless fascination to me then. Its flowers looked like a daisy, but they never "came out". No one seemed to know why, although I think my mother offered some pithy, if quite inaccurate, comments about the environmental impacts of cowboys and Indians.

My other botanical recollections are less pleasant. On weekends when it wasn't raining we used to visit my aunt, who lived on the outskirts of the city, with a real garden, which had exciting things like earwigs. We then used to go for walks in "the country". It was deemed inappropriate to allow a child simply to romp around on these walks: my mind had to be improved. The procedure was to make a collection of the wildflowers we encountered on each walk, telling me the name of each. The bunch was then taken home and popped into a jam jar, and I would be required to

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BEGINNINGS (cont'd)

name each specimen the following day. This failed completely in its objectives, but had the effect of making me dread the walks, and stimulated my inventiveness in cooking up imaginative diversions, in the hope the ritual would be forgotten that week. Sometimes they even worked.

On one occasion my father was home for one of the walks. Dad was a seafarer and his arrival was always exciting, but better yet his presence assured that the usual ritual was forgotten. I got to walk along with him, and at one point we saw a yellow bird sitting on a wire--probably a yellowhammer. He turned to me and asked if I knew what it was. My heart sank--now they were starting on birds as well! But it turned out that he really wanted to know, and the idea of this omniscient world traveller actually thinking I could tell him something was enormously flattering. I resolved to find out more, without having the faintest idea of how to go about it.

It was a couple of years before these seeds really bore fruit. War had broken out, and it was decided that we would be safer out of the city. By then Dad was no longer at sea, and we moved to a village, renting the last house in a new development which had been halted by the war. The unfinished street ended in a rhubarb field, and all around were other fields. Soon I was vanishing for hours exploring these wonderful new places. I had been given THE OBSERVER'S BOOK OF BIRDS, and I quickly mastered the common ones.

It was probably another two years before I met a retired schoolteacher who actually regarded birdwatching as a worthwhile activity. He was also a knowledgeable botanist, and I discovered that our village, while only a hum-drum place for birds, was an incredibly rich area botanically. Soon birds were forgotten (if only for a while), and I was combing the neighbourhood for plants. My aunt's FLORA was appropriated and its keys effortlessly committed to memory (oh, for some of that easy facility today!). The wonderful field over the road had trembling grass, milkmaids and all the other riches of a traditional British wet meadow, nearby quarries yielded rare and elusive orchids, bicycle trips on the deserted wartime roads to spot further afield opened other horizons--I was hooked!

The next milestone came when I was fifteen. My mother had been rummaging around in a second-hand bookstore in Leeds when she came across a huge tome entitled THE FLORA OF WEST YORKSHIRE by F. Arnold Lees M.R.C.S. Eng., L.R.C.P. Lond. It looked like the answer to a botanist's dream, but it had a certain lack of topicality, having been written in 1888. It was also very expensive. Mum returned home to my Dad and great agonizing ensued: to buy or not to buy! Finally it was reluctantly decided that the element of surprise had to be sacrificed for this, the potential coup of the year. I was despatched down to Leeds to pass judgement.

No book, not even finding my first Peterson field guide years later, ever had the impact on me of Lees' monumental work. Despite its total irrelevance today I still have it. For the first time I really understood why my village was a great place for plants. Not that the understanding came easily--the book taught by assuming one knew, and no Victorian ever used a short word where three long ones would do equally well. But detailed locations were given for all the less common species, together

BEGINNINGS (cont'd)

with their history. If the great botanist Ray had found a plant somewhere in 1775, that was recorded, together with an (!) if it was still there. Who cared if the kids at school thought I was a nut: clearly I was part of a long and honourable tradition!

I was in the air-force before I was reminded of birds, and it took a spring migration jewelled with warblers in a new land to really reinstate them as first love. But by then my beginnings were long past, and all that is another story.

As the sometime writer in our team, I have also been delegated to tell you something about Joy's beginnings. They were very different, as she is both a native Torontonion and a country girl! The corner of Bayview and Finch seems pretty urbanized today, but at that time it was surrounded by fields, the roads were dirt and one walked two miles to school--year-round. But if that seems a little too much country, there was the lovely woodlot just over the farmer's field, with a creek, and a log over it that one could sit on. There came her first contacts with the flowers of the spring woodlands, and these were the kinds of things that developed a deep affection for the out-of-doors.

It was an affection that was to provide a pool of sanity in a pressured world, when Joy's career led to staffing for the nurses at the brand-new Centenary Hospital in Scarborough; at a time when--like today--nurses were in short supply. Up to that point her interests had been quite generalized, but our generation tends to need a purpose in our play, and so birds seemed a good focus. She still recalls her delight at identifying her first kingbird one lunch hour in the valley behind the hospital.

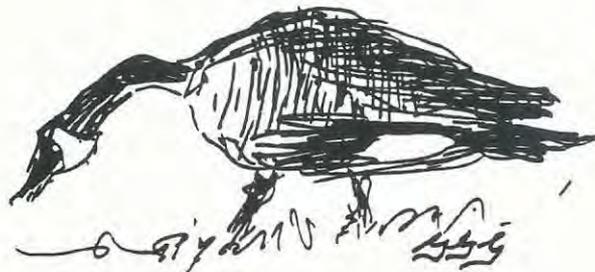
This led in due course to the Toronto Field Naturalists and the Federation of Ontario Naturalists, with trips to Buckhorn Wilderness and the Bruce Peninsula. It was on her second trip there that she heard that one of the bird leaders had seen bluebirds--one of the things she had gone hoping to find. She thought maybe she could join this group to see them, and indeed she did--12 of them in fact, and many other things as well...but all that too is another story.

Clive and Joy Goodwin

□

*A quick sketch of a quick
Canada Goose at Metro Zoo,
captured on paper as it
passed Geraldine Goodwin.*

*Though they may seem tame,
these wild birds are usually
not really "approachable".*



Toronto Region Bird Report

Bird Watching in September

Hawks, warblers and shorebirds are on the move! Some will soon have left us for the year. By early September it becomes difficult to find yellow warblers, black terns and some of our swallows. In general, it is best to look along the waterfront for birds this month. This is where most of the migrants concentrate. Remember, cold fronts trigger migration.

In late August and into the first week or two of September common nighthawks move through the Toronto area in sizeable flocks of up to several hundred birds. I have most often seen them flying by silently on calm evenings, swooping and flycatching. Along the Davenport ridge at Casa Loma, for example, is good. Many other birds migrate along this ridge also. If the weather conditions are right, you can sit down and count the hawks, blue jays and other diurnal migrants flying past. Don Peuramaki mentioned that he has seen nighthawks gathering in the Don Valley near the Bloor Viaduct. Similarly, the Humber Valley and High Park can be good. We usually see nighthawks in one's and two's or only hear them. It is a delight to see large flocks.

If the level of Lake Ontario is still high, you will probably have to go inland for shorebirds. The "Donkey Ponds", located on the west side of Weston Road about half a kilometre south of Major Mackenzie Drive, don't look like much, but a surprising number and variety of shorebirds have been seen there over the years including ruff and Hudsonian godwit! It can be an excellent spot for common snipe too.

Ross Harris

Rare Red-Shouldered Hawks Nesting in Maple District

The Ontario Ministry of Natural Resources in cooperation with the Lake Simcoe Region Conservation Authority is conducting a survey of red-shouldered hawks nesting in Maple District (Regional Municipalities of Peel, York, Durham) in 1989. The purpose is to find active nests and to identify important features of breeding habitat. This information will be used to develop habitat management guidelines for the protection of nests and nesting habitat. Field staff are checking documented nesting sites and areas where the birds have been sighted to search for active nests. In a preliminary survey in 1988, this method revealed 14 active nests and an additional 11 areas where nesting likely occurred.

The red-shouldered hawk is nationally and provincially rare, although it was once the most common large, soaring hawk in eastern North America. Drastic population declines have occurred throughout most of its range since the 1950s, following widespread pesticide use and continued loss or change of habitat. Red-shouldered hawks require dense, mature hardwood forest near creeks, rivers, swamps, or marshes.

The red-shouldered hawk is interesting for a number of reasons. It is very vocal and performs fascinating aerial courtship displays involving soaring by the pair, calling, and diving from great heights over the nesting area. Good nesting areas may be used by a succession of pairs for decades. Unlike more secretive hawks, the red-shouldered hawk

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BIRD REPORT (cont'd)

frequently nests in close proximity to houses if disturbance to the habitat and nest site is minimal. Loss of red-shouldered hawks from an area is a symptom of habitat change, which might lead to the loss of other species using similar habitats (e.g., barred owl, pileated woodpecker, goshawk).

Distinguishing features of an adult red-shouldered hawk in flight are its large size (only slightly smaller than the red-tailed hawk), tail marked with wide black and narrow white bands, uniformly pale breast with reddish bands, and a crescent-shaped translucent panel near the tip of each wing. A black and white checkerboard pattern on folded wings and reddish shoulders may be visible on perched birds. The loud, "kee-aah kee-aah" call is distinctive.

You can help to protect the habitat for this interesting species by reporting nests or sightings of red-shouldered hawks to the District Office. For more information, or to report the locations of nests or sightings of the birds, please contact Angus Norman or Dr. Kandyd Szuba of the Ministry of Natural Resources, Maple, Ont. (416) 832-2861.

a press release of the Ontario Ministry of Natural Resources, July 20/89

from CONSERVATION CLIPS,
Vol. 8, No. 3, 1988
(Lake Simcoe Conservation
Authority)

What Do You Do When You Find A Band?

When you find a band on a dead bird, return it with the following information: Your printed name and address, all numbers and letters on the band, the date and exact location where the bird was found, the species plus age and sex of the bird if possible and how the bird was found or killed.

Place all this information on a card and mail this with the recovered band to the Canadian Bird Banding Office, Canadian Wildlife Service, Ottawa, Ontario, K1A 0E7. Upon receipt of your recovery report, a Certificate of Appreciation will be sent to you with information on where the bird was banded, by whom, and the kind of bird it was. The bander will also be told where and when you found the band.

SOCIETY OF CANADIAN ORNITHOLOGISTS

The Society of Canadian Ornithologists is a non-profit organization for the advancement of all aspects of ornithology in Canada. The society which has approximately 300 members across Canada, both amateur and professional, publishes PICOIDES twice a year, bringing people across the country up to date with ornithological concerns and events in their areas and elsewhere.

Memberships (regular - \$10; sustaining - \$25) can be obtained from Philip H.R. Stepney, Membership Secretary, SCO, Provincial Museum of Alberta, 12845 - 102 Avenue, Edmonton, Alberta T5N 0M6.

Toronto Region Mammal Report

Every year we see more mammal species. In 1988 twenty-one species were reported:

- SHORTTAIL SHREW - two dead, one of them at Highland Creek.
- MOLE SP - mounds and trails identified in the Rouge Valley and on Flemington Park Golf Course trails.
- BAT SPP - Brimley & St. Clair apparently Little Brown and at Rushton Road possibly Big Brown. Not as many reports as in other years.
- SHORTTAIL WEASEL (Ermine) - one at Richmond Hill, hunting, on July 2.
- MINK - Amos Pond, Pickering, in and out of water, and dragging prey.
- RACCOON - at many locations, including Rosedale, Todmorden, Don Valley near the Parkway, Rouge Valley, Rushton Road, Humber Marshes, Taylor Creek, Richmond Hill, Thornhill, Kortright Conservation Area, Leslie Street Spit, Leaside, Metro Zoo grounds, Guildwood, and Rowntree Mills. Every size from "baby" to very large adult was mentioned. Behaviour was reported and several skulls were found.
- STRIPED SKUNK - reported only from Vaughan and Richmond Hill - from Metro, not a smell!
- RED FOX - reported from Moore Park, Rosedale Golf Course, Pine Hills, Richmond Hill (chased by a crow), Rosedale area (carrying a dead grey squirrel), and Leslie Street Spit.
- COYOTE (brush wolf) - a sighting of a healthy looking individual at Richmond Hill, and "apparent evidence" in the form of scat on a hard-to-reach trail on the Rouge cliffs. (On these occasions - if not squeamish - you can measure using a stick or string. Tracks should also be measured; it helps a lot when you come to look them up in the field guides.)
- GROUNDHOG (woodchuck) - at many locations. We did not have a March report as in '86 and '87. The first was April 2 on the Ontario Science Centre grounds, the last October 9 at Richmond Hill. (We should really have a contest for the earliest and latest sighting each year of this famous hibernating species.)
- EASTERN CHIPMUNK - The first sighting for this small hibernating cousin of the groundhog was March 8 at Vaughan and the last (by the same observer) on October 9 at Richmond Hill. It was sketched in Metro Zoo grounds where it was plentiful, as at High Park. It was also reported from Muir Gardens, Lynde Shores, Kortright Conservation Area, Wilket Creek and Taylor Creek.
- EASTERN GREY SQUIRREL - first report January 3 and last December 31 - an all-year-round denizen. Dozens of reports on various colour phases - the grey, the black, the rufous, and the variegated individuals, all of this same species called "grey". Some notes were made about the white ear-backs in winter of our subspecies. By March 16 at Allan Gardens there was an individual with some white remaining on one ear only. On March 24 an individual at Taylor Creek still had some white on the ears. Then came the many entries about moulting.

In June at at High Park an individual with pink showing may have indicated the presence of mange. By September notes were about thickening pelage. Still richer coats were noted in October. By October 27, one individual at Taylor Creek had some white showing on ear-backs but its grey-phase companions had none as yet. Reports about diet included peanuts and ice-cream. At Thomson Memorial Park one climbed up the observer's clothes seeking food-scraps. Basking, digging, and interacting in trees was reported on. At Toronto Island an adult was observed moving its pink-footed young, carrying one in its mouth, moving very fast up a tree in early May.

RED SQUIRREL - Not only did we receive reports for this species from ten locations in 1988, but some observers with gardens updated our records of previous years. In the York Cemetery area in Willowdale, where pines had been cut down, an individual was observed taking refuge under parked cars. Three reports mentioned sunflower seeds being taken from below bird-feeders. Harvesting of shrivelled apples and cones of Norway and blue spruce was noted. Competition with grey squirrel was mentioned in two reports, both of which tended to stress the importance of conifers to the red squirrel. Chatter was heard from Scots and Austrian pines in Highland Creek. One or more frequent a Willowdale neighbourhood where eastern white cedar and Norway spruce have been planted. Other locations were Bayview/Lawrence, Port Credit, Richmond Hill, Vaughan, Lynde Shores, Thistletown, and Kortright Conservation Area.

BEAVER - making a lot of news lately. The one which made a lodge on the western lakeshore was reported by members and there were Humber Valley sightings and evidence. Now, of course, we find this species is in Taylor Creek as well.

WHITE-FOOTED MOUSE/DEER MOUSE - one was reported eating millet from a window-tray at Bathurst and Eglinton and two dead individuals from Todmorden Mills and Cedarvale Ravine. (On these occasions, note whether tail is bi-coloured, sharply contrasting darker above than below. If it is, then it's a deer mouse, but if the colour demarcation is not clear, it is a white-footed. Recent field-guides indicate coat-colour is variable in both species.)

MEADOW VOLE - reported at Richmond Hill, Leslie Street Spit, and a dead individual at Dentonia Park Golf Course.

MUSKRAT - was reported at Toronto Islands, Smythe Park, High Park, Humber, and Kortright Conservation Area, feeding, preening, and tracks. In late May to mid-June, as many as three together were observed.

NORWAY RAT (brown rat) - The bird-feeding station at Taylor Creek by Crescent Town where one was seen last year has been discontinued. Individuals were reported this year at Grenadier Pond and Leslie Street Spit (the latter cream-coloured with dark eyes).

HOUSE MOUSE - Only one tiny "freeloading" individual was observed at Metro Zoo.

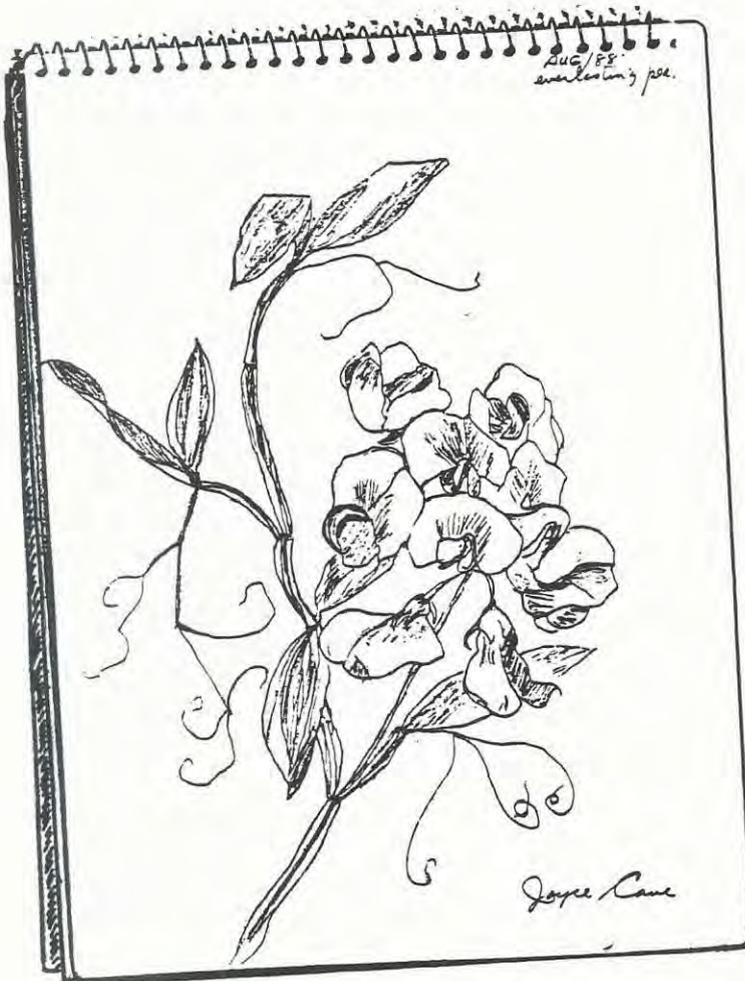
EASTERN COTTONTAIL - was seen on TFN outings at Etobicoke Creek and Windfield Park, and rabbit signs were noticed in Humber Valley. Other locations were Humber Marshes, Leslie Street Spit, Richmond Hill, Toronto Islands; many sightings in all seasons.

WHITETAIL DEER - twenty-two individuals were counted from January to August in Richmond Hill, at one time a resting herd of seven, at another three crossing railway tracks. Six were seen in Thistletown, and there were three reports from the Rouge Valley.

We have numbers on file in most cases and much more detail on all the species reported. PARTICIPANTS were: Diana Banville, Dan Bone, Molly Campbell, Adele Cassan, Eva Davis, Karin Fawthrop, Irene Fedun, Louise Goldberg, Geraldine Goodwin, Allan Greenbaum, Cathy Heynes, Verna Higgins, Helen Huggett, Bob Johnson, Helen Juhola, Anna Leggat, Jean Macdonald, Eileen Mayo, Paul McGaw, Reta McWhinnie, Gavin Miller, Marg Mossman, Robert Muma, Ruth Munson, Norm Murr, Joan O'Donnell, Joan Patterson, Betty Paul, Don Peuramaki, Margaret Shanks, Helen Smith, Isabel Smith, Mike Somers, David Stone, Martha Wallace, Larisa Zviedris.

SEND YOUR REPORTS TO ME AT Apt. 710, 7 Crescent Place, Toronto, Ontario M4C 5L7. Thanks for all reports received in 1988. Diana Banville

FIELD GUIDES: Burt & Grossenheider A FIELD GUIDE TO THE MAMMALS
 Burt, William H. MAMMALS OF THE GREAT LAKES REGION
 Murie, Olaus J. A FIELD GUIDE TO ANIMAL TRACKS
 Stokes, D. & L. A GUIDE TO ANIMAL TRACKING AND
 BEHAVIOUR



EVERLASTING PEA
 is a garden-escape,
 originally from Europe,
 which has been found
 in Black Creek area,
 Wigmore Park, and
 Warden Woods.

Note the winged stems
 and leaves with only
 one pair of leaflets,
 unlike the marsh
 vetchling which has
 two to four pairs.

Field-sketch
 by Joyce Cave

THE SWEET TOOTH OF FLYING SQUIRRELS

Cottagers are among the select few with the regular opportunity to see and know flying squirrels. As Tony Beck reported in TRAIL AND LANDSCAPE (1986), both the northern flying squirrel (*Glaucomys sabrinus*) and the southern flying squirrel (*G. volans*) can be attracted to cottage "bird" feeders in wooded areas in the Ottawa region. This is also true in the Muskoka region. At one time, maple syrup producers regularly reported close encounters with flying squirrels as well. Unfortunately, most of these squirrels were dead--drowned and limp in open-topped sap buckets. Once common equipment in sugar bushes, sap buckets acted as reservoirs of sweet food for flying squirrels following long, food-poor winters. A slip into the liquid often meant death by drowning or freezing.

Maple sap is often listed as a food source of both northern and southern flying squirrels in Canada and the United States, presumably due to the squirrels' discovery in sap buckets. Now that plastic tubing has replaced most bucket operations, mortality in maple sap is rare. But, is the flying squirrel's sweet tooth only directed towards sap buckets? Food habits of both species are basically omnivorous and opportunistic, except in winter. Northern flying squirrels are thought to rely more upon fungi and arboreal lichens at that time, while southern flying squirrels depend upon stored caches of hickory, oak and other tree seeds.

Nancy Wells-Gosling, a flying squirrel aficionado, reported seeing northern flying squirrels gnawing for sap in maple trees in the spring (4), as red squirrels are known to do. Two other Michigan biologists, in an intriguing paper documented all species that used or visited selected sapsucker feeding trees in northern lower Michigan (2). While sitting behind blinds, they observed 33 bird species feeding on insects and sap at holes drilled by yellow-bellied sapsuckers. In late July 1963, they first observed northern flying squirrels visiting the holes. Using flashlights and infra-red scopes, they noted that the squirrels lapped the sap from the holes, licked it from the bark, or even enlarged the holes themselves to increase sap flow. In a review of the literature, they found no reference to southern flying squirrels eating sap.

On the evening of 15 July 1986, Kevin Kavanagh and I were searching for southern flying squirrels along a trail in Backus Woods, a large and fairly mature tract of Carolinian forest in the Regional Municipality of Haldimand-Norfolk, Ontario. We were using a spotlight with a portable 12 V gel-acid battery to locate the squirrels and/or their orange eyeshine. At about midnight, we encountered one individual flying squirrel feeding on a *Russula* fungus growing out of the trail. It retreated through the foliage of adjacent saplings and drew our attention to another flying squirrel at the base of a mature white oak. This second squirrel quickly withdrew to the opposite side of the tree when we approached, but it returned within 30 seconds to the moss-covered tree base, now 0.5 m from me (and my camera).

The squirrel commenced moving its incisors in a vigorous vertical motion between elevated striations in the oak bark, and readily lapped up the sap that emerged. Bits of moss and bark were removed from two grooves over a one-hour period, the largest groove being 5 mm wide and 50 mm long.

FLYING SQUIRRELS (cont'd)

When the squirrel glanced over its shoulder at us, sap would foam from the groove with an audible hiss that appeared to stimulate the squirrel to greater diligence in its digging. Besides ignoring human observers, the squirrel also appeared oblivious to the fact that a barred owl and a great horned owl were both calling in the vicinity. After an hour's observation, however, Kevin noticed that the squirrel appeared nervous and hesitant in its feeding only when the owls ceased calling and were thus "unlocatable".

Carriion beetles, craneflies, ants, mosquitoes, moths and other insects were also attracted to the oak sap, but were ignored at the time by the flying squirrel. However, moth wings and other insect remains were discovered beneath the groove the following morning. The Michigan observers noted that the northern flying squirrel preyed heavily on the numerous moths attracted to the sapsucker holes. Much like sapsuckers, flying squirrels will use sap holes or tree wounds for a dual purpose-- as a source of both energy-rich sap and protein-rich insects.

In compiling the literature records and observations for a status report on the southern flying squirrel (3), I realized that "sugared" trees used for moth collecting in the summer were a potential source of observations. Moth collectors spread sticky mixtures of water, sugar, molasses, even beer on tree bark to attract moths, and inadvertently entice flying squirrels to feed on the sweet material and some prize moth specimens. Squirrels are often tame at these times and can occasionally be captured.

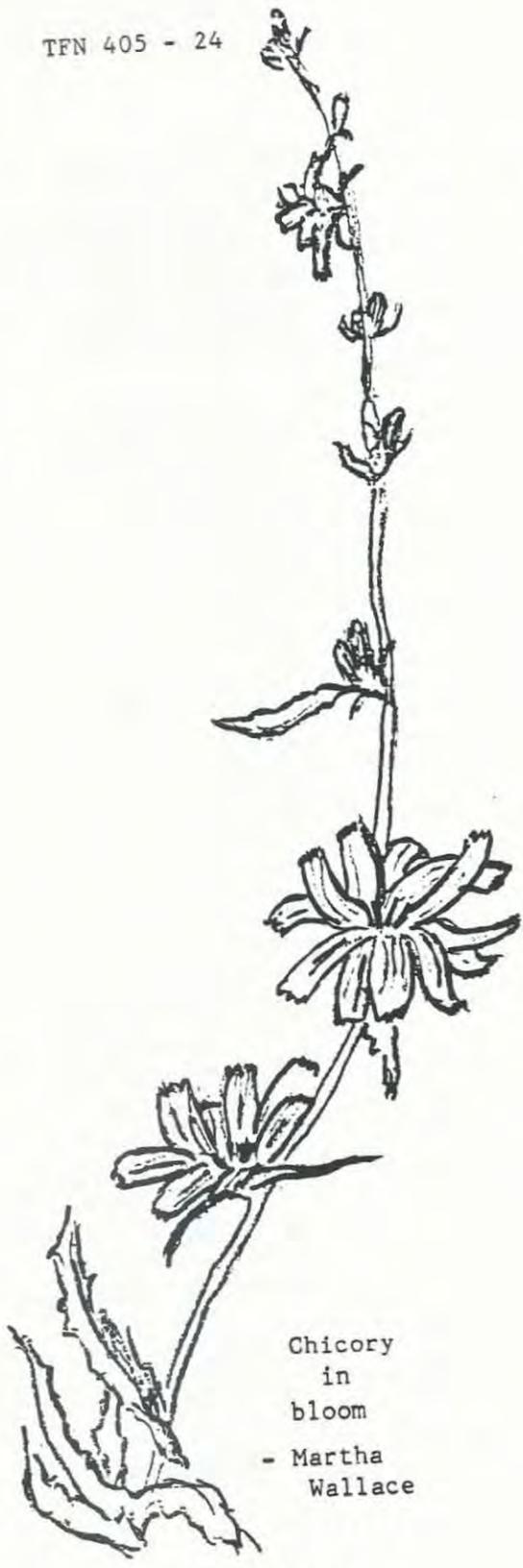
Field biologists and naturalists may be able to take advantage of the flying squirrel's sweet tooth to help determine whether the elusive night gliders exist in a given forest stand. Baiting an area with some (very) sweet material may bring the squirrels out into the open, for observation and species confirmation. Tony Beck (1) published useful photographs to aid in this endeavour. A couple of hours just after sunset over a few nights may be all that is needed, although more effort may be necessary. Such observations would be especially interesting from the Toronto region. The northern and southern flying squirrels are supposedly sympatric in the area, with the southern species reaching its northern limit in local forests. Studies of micro-distribution may help determine to what extent these species actually cohabit forests and potentially compete for resources such as food and tree cavities.

Mark Stabb work 965-4252
home 531-3527

Literature cited:

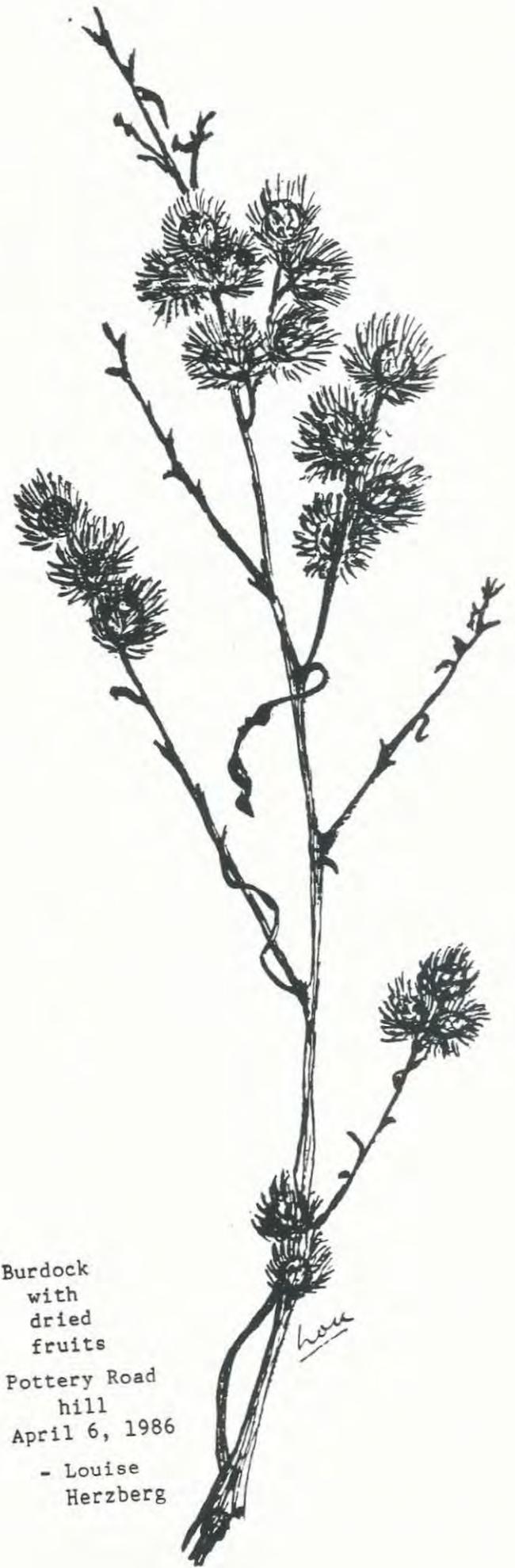
1. Beck, T. 1986. Flying squirrels at the feeder. TRAIL AND LANDSCAPE 20(5):200-204.
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3. Stabb, M. 1987. The status of the southern flying squirrel (*Glaucomys volans*) in Canada. Unpublished report to the Ontario Ministry of Natural Resources. 83 pp.
4. Well-Gosling, N.M. 1985. Flying squirrels: gliders in the dark. Smithsonian Institution Press, Washington, D.C. 128 pp.

adapted with permission from TRAIL AND LANDSCAPE, 22(4):163-164. □



Chicory
in
bloom
- Martha
Wallace

Martha Wallace



Burdock
with
dried
fruits
Pottery Road
hill
April 6, 1986
- Louise
Herzberg

herz

ISSUES

Trintek Returns

Nobody misses the Commissioners Street Incinerator and its unpleasant emissions. Unfortunately, emissions may yet return to South Riverdale. Even while Metro is discussing turning the old Commissioners Street plant into a transfer station, a new incinerator is rearing its stack. TSI Trintek is planning to build a garbage incinerator near the corner of Logan and Commissioners in the eastern waterfront. The Ministry of the Environment released its comments on the Environmental Assessment document that was submitted by Trintek in June. With this review the whole proposal can proceed to a hearing. If successful at the hearing Trintek will likely have the approvals it needs to build the plant. Formally, the plant is being called an Energy From Waste (EFW) facility. The burning of garbage, around 150,000 tonnes per year, will provide steam for the Paperboard Industries plant beside it (formerly Belkin Paperboard). In fact, most of its revenue will probably come from tipping fees, payments people will make to dump their garbage at the plant. The revenue from selling energy will likely amount to only about a quarter of its income. The plume from this plant which is expected to contain dioxins and heavy metals will spread pollutants over the St. Lawrence Neighbourhood, Ward 7, Riverdale and the Beaches.

The owners were able to secure a \$400,000 grant from the Provincial Ministry of the Environment to write their environmental assessment documents. Citizen's groups aren't being supported to the same extent in their fight to oppose this proposal.

Even with this substantial gift Trintek's Environmental Assessment documents were not given a glowing review by the Ministry of the Environment staff. In their comments they note that "Concerns still exist regarding the technical quality of the EA (Environmental Assessment) document." and further that "...subsection 5(3) of the Environmental Assessment Act has not been met." This subsection of the Act is the basis for evaluating such documents. Even with these flaws it is possible for the matter to go forward to a hearing.

In 1988 the City of Toronto adopted a position in opposition to the construction of this plant. The City informed the Provincial government that they would help Citizens for a Safe Environment and the community to compile and present a rebuttal to the Trintek proposal. The City's Public Health Department prepared a report last summer noting that five Provincial air monitoring stations in the area of the plant showed readings indicating that "...air quality in the vicinity of the plant has exceeded provincial criteria." This means that the level of pollutants already exceeds Provincial guidelines. It further notes that the Trintek plant should be taking care to keep lead and particulate emissions as low as possible because "the South Riverdale area has been, and continues to be, exposed to other emissions of lead and particulates."

Citizens for a Safe Environment is urging the Minister to send Trintek back to the word processor to prepare a document that at least meets the requirements of the Act. People concerned about this plant can write to the Minister of the Environment and ask him to stop this proposal



ISSUES (cont'd)

from going forward until Trintek fully complies with legal requirements for a thorough study. This community has successfully stopped two incinerators in the past few years. Trintek should be added to our list.

To contact the Minister of the Environment write:



It's up to you

The Honourable Jim Bradley
Minister of the Environment
135 St. Clair Ave. West, 15th floor
Toronto, Ont. M4V 1P5

a press release from Citizens for a Safe Environment, June 30, 1989
(for further information contact Peter Tabuns at 860-1889 or 465-1366)

□

SO MUCH ASPHALT SONG

*So much asphalt down in the park,
down in the lowlands low,
causing run-off from dawn until the dark,
when it rains upon the lowland floodplains,
when it rains upon the lowlands low.*

*We'll put more asphalt down there today,
down in the lowlands low.
"It's for the handicapped", that's what we'll say,
"to go down into the lowland playgrounds
that we'll open in the lowlands low."*

*Up spake the handicapped, up spake they,
"We care about the lowlands low.
Don't make US your crutch, we pray,
to help you destroy the wetlands and their life,
to help you spoil the lowlands low!"*

Diana Banville

*(parody on
traditional ballad
THE GOLDEN VANITY)*

The above was inspired by Metro Parks' determination to construct a road and two parking lots in the recently acquired Hinder Estate.

□

Ethics

SAVE THE ENVIRONMENT AND MONEY

The following list of suggestions will, I hope, be of use to members who may be eager to do things to protect the environment but who may not know that there are many easy ways to help which will be both good for the environment and will save them money:

1. Save plastic shopping bags to use and re-use on subsequent shopping trips and do not accept additional bags until present supply wears out.
2. Direct old clothing which is still usable to charitable organizations.
3. Make every material possession last longer, or, if you are really tired of it, give it to someone who can make use of it if it has no re-sale value.
4. Cut your lawn twice a week and clippings need never be removed.
5. Don't open refrigerator doors too often and don't leave them open for unnecessarily long periods of time.
6. If a room will be unoccupied for 5 minutes or longer, turn off the lights in that room.
7. Turn thermostat to no more than 20°C (68°F) and wear a sweater if you find it uncomfortable.
8. Buy fuel-efficient cars; drive less (especially in town*); do not drive at excessive speeds and do not accelerate too rapidly; have regular engine tune-ups (your car will last longer and so will you). Your gas consumption will decline considerably, thereby reducing air pollution.
9. If you use paper towels just to dry your hands, put them into a bag by the sink and use them to wipe up spills around the kitchen rather than using a fresh clean towel for this purpose.
10. Use bread wrappers as lunch bags or as containers for fruit, vegetables, etc. on picnics. Clear plastic bags from supermarkets can be used for this purpose too after rinsing once, or they can be used for storing dry items. They can be put in cupboards or drawers and their contents will be easily identifiable without opening.
11. Use scrap paper for notes and shopping lists and use until filled up.
- *12. Walk, bicycle or take public transit, use bundle buggy for short shopping trips and small loads.

Al Shaw

□

*Does the tireless bumble-bee sigh
when lighting on a purple thistle,
as she surveys each flower and bristle,
"Oh, not another compositae?"*

Molly Campbell

ON DOMINION OVER NATURE

If you open your King James Bible at the very first page, you will come upon this passage (Genesis 1.26-28):

And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. So God created man in his own image, in the image of God created he him; male and female created he them. And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.

These verses, so familiar to us as inhabitants of a country with deep roots in Christianity, are not often fully appreciated. Remember the relative helplessness of man in comparison with other creatures. Our species has no tusks, claws, fangs, poison glands, or other natural weapons; we have no defensive armour; nor is our size unchallengeable. Our reflexes are poor compared to those of most animals, and so are our senses. In many ways, we are the most vulnerable and weak of organic forms. Yet, as the Bible points out, we rule and are fit to rule. Mighty oxen and elephants allow themselves to be tamed by us; the fierce wild dog is domesticated to become our guardian and friend; even the mighty wild cats rarely attack us; the soil yields to our agricultural efforts. It is as if nature had a built-in deference to the needs of man; as if human beings had been set above, and granted 'dominion' over, a large part of Creation. From the point of view of early Mediterranean civilization, struggling to establish itself in an untamed world, what a blessing this submission of nature must have seemed! No wonder mankind was extolled by Genesis as a species created 'in the image of God'!

There is more to these verses, however. Historically, their importance goes beyond the expression of marvel at the superior position of the human race. For, ever since the Bible established itself as the sacred text of Christian Europe, one particular section of the human race - Western civilization - has been able to point to these Biblical verses to justify its unprecedented expansive activity. The felling of vast tracts of forest which made possible the civilization of Mediaeval Europe, the voyaging to all the corners of the globe in the Renaissance, the colonizing of the New World, the building of great canals and locks to establish the St. Lawrence Seaway - all could be seen as appropriate expressions of the Biblical idea of man's dominion. Therefore, for as long as the dominating activities of Western civilization could be perceived as good, the Biblical teaching seemed to endorse Western civilization as the one in which humanity, by thoroughly conquering nature, had attained its divine peak.

However, recently, just as the dark side of human dominion - the nuclear threat, the destruction of species and habitats, the exhaustion of mineral resources, and so on - has become apparent, voices have been raised against Western civilization: against its science and technology, and

ON DOMINION OVER NATURE - cont'd

against the teaching of the Bible. The Bible, it is alleged by many, has taught Western man to ravage, to waste, to pollute, to annihilate; by setting up man as a god on earth, by teaching man to exercise an unlimited dominion over nature, the Bible has generated attitudes which endanger the survival of our planet. Lynn White, the mediaeval historian, put it this way (See SCIENCE, March 10, 1967, 1203-1207): "...modern technology is at least partly to be explained as...[the] realization of the Christian dogma of man's transcendence of, and rightful mastery over, nature. But, as we now recognize...technology... [gives] mankind powers which, to judge by many of the ecologic effects, are out of control. If so, Christianity bears a huge burden of guilt." Concurring with White on this point are Buddhist scholar Daisetz Suzuki and historian Arnold Toynbee, counter-culture writer Theodore Roszak and landscape architect Ian McHarg. According to them, the Bible is the problem; Eastern and pagan religions, in contrast with the Bible's aggressiveness, preach a more harmonious vision of man and nature and are hence superior.

Are these charges justified? We have to hesitate. Certainly it is true that Western civilization, especially since the time of Francis Bacon, has *interpreted* the Biblical injunction in a particularly aggressive way. Certainly the idea of 'harmony with nature' has been pushed aside in favour of the idea of 'conquering nature'. To this extent Christian cultures are guilty. But is this 'conquest' the notion intended by Genesis or by the Bible as a whole?

Two points must be kept in mind. First, the Hebrew words translated as 'have dominion over' (*radah*) and 'subdue' (*kabash*) need not mean 'conquer' and 'harshly treat'. They may mean simply 'exercise authority' and 'control'. It is therefore possible to interpret Genesis as a teaching about a firm but gentle governance of nature rather than as a harsh repression or destruction of it. This, of course, is consistent with the Biblical teaching that the righteous king does not abuse his subjects but in fact guides and nurtures them.

Second, in the context of Israelite practice, the human dominion spoken of in Genesis is limited by respect for other natural beings: Mosaic laws demand that the land be released from cultivation every seventh year (Leviticus 25.1-12), that an ox treading out the grain not be muzzled (Deuteronomy 25.4), that a goat be not boiled in its mother's milk (Deuteronomy 14.21), that fruit trees be not used for siege engines (Deuteronomy 20.19), and so on. For the Bible, man has the privilege of using natural beings, but must also respect them; he may not do *anything* he wishes. In this respect, the Bible is not inferior to the Eastern or pagan teachings with which it is often unfavourably compared.

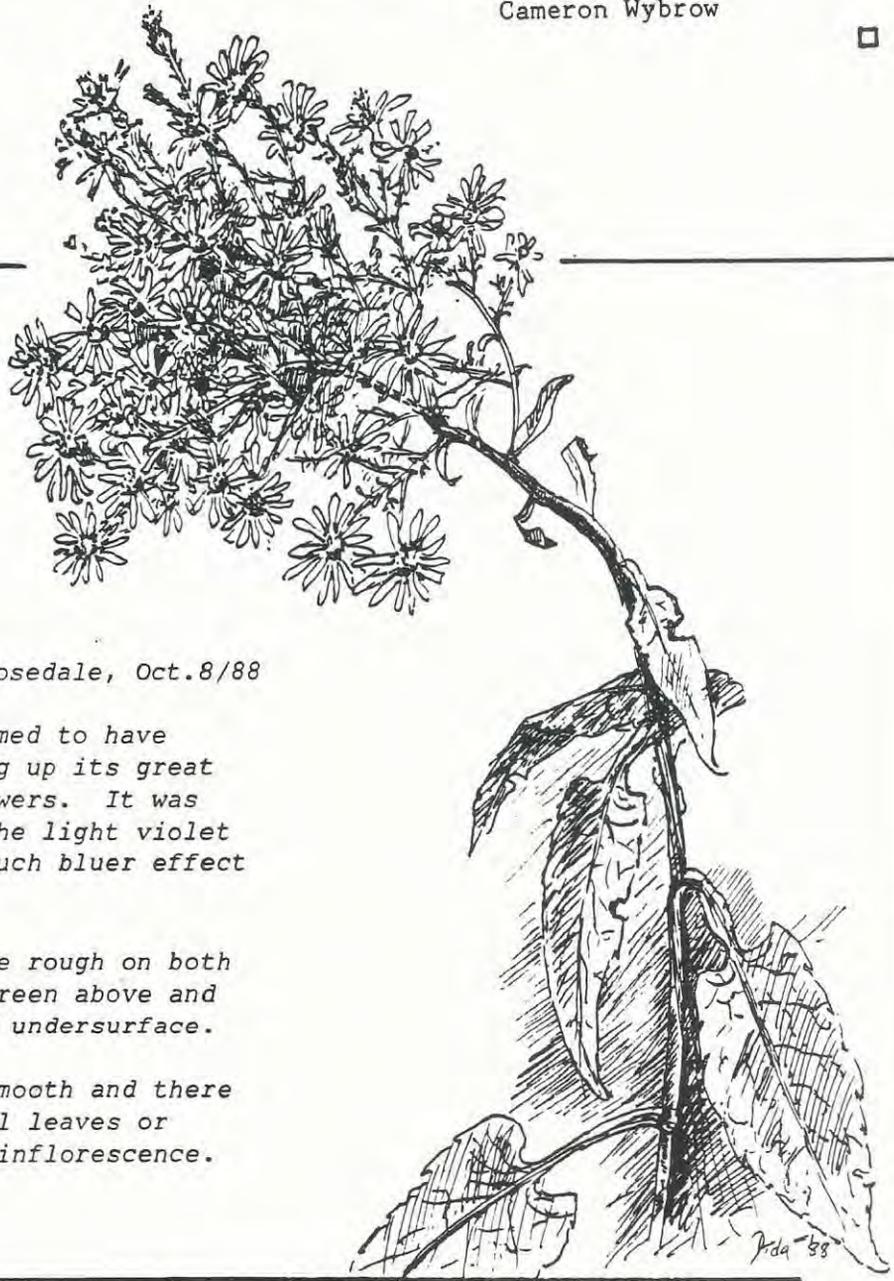
It seems, then, that to blame all modern environmental problems on the Bible is unjust. Certainly, out of context, the Genesis passage can be used, and has been used, to justify an unlimited dominion for Western man. This, however, should be a warning that sacred scriptures can be used in selective ways to promote damaging forms of human behaviour; it should not be used to reject the Bible. We have to remember that, until modern times, Western environmental practices were not, on the whole, more damaging than those of Eastern cultures which had other sacred

ON DOMINION OVER NATURE - cont'd

scriptures. The presence of the Bible, therefore, cannot have been the decisive factor generating the modern environmental crisis. Rather, it seems to be the theme of 'conquering' nature which has disrupted the natural balances existing between human and other beings.

The modern West indeed has a religion which despises nature; that religion, however, is not Christianity, but the worship of technological progress, and its prophet was not Moses, but Frances Bacon. If we wish to maintain a healthy relationship with our natural environment, we have to question our four-hundred-year-old love affair with the idea of subjecting nature to our every whim, and consider the possibility that nature exists for itself as much as for us.

Cameron Wybrow



AZURE ASTER, Rosedale, Oct. 8/88

This aster seemed to have trouble holding up its great panicle of flowers. It was aromatic and the light violet petals had a much bluer effect in the field.

The leaves were rough on both sides - dark green above and lighter on the undersurface.

The stem was smooth and there were many small leaves or bracts in the inflorescence.

IN THE NEWS

GREAT LAKES INVADED

A small striped mollusc, the zebra clam, native to the Caspian Sea, appeared in western Lake Erie during the summer of 1988 and has since been reported in the Detroit River and Lake St. Clair. Also the river ruffe, a European perch-like fish, was discovered in Duluth Harbour on Lake Superior, and a macroorganism known colloquially as the "spiny water flea" has been found throughout the Lakes system. Previous invaders have included the notorious sea lamprey and alewife, the Asian clam, and several plant species. A prime suspect in such invasions is ships' ballast; another is private aquaculture. The grass carp and at least one fish disease have been introduced into the Lakes as a result of private fish stocking and breeding.

The Great Lakes Fishery Commission is trying to stem the tide of invaders. Last year the Commission lobbied the coast guards and federal governments of Canada and the U.S. to restrict or eliminate the dumping of ballast from other continents in the Lakes. As a result, Canada's Coast Guard has agreed to ask the captains of ships entering the St. Lawrence to exchange freshwater ballast from other ecosystems for salt water. Saltwater organisms are far less likely to survive in the Lakes than those from other lakes or rivers. The Fishery Commission has also begun work on convincing the various governments on the Lakes to tighten and rationalize regulation of aquaculture.

adapted from "Efforts underway to control invasions" in THE GREAT LAKES REPORTER, Vol. 6, No. 2, March/April 1989

POINT PELEE ANNUAL HUNT ENDED

Duck hunting will no longer be permitted in Point Pelee National Park, Environment Minister Lucien Bouchard announced yesterday. The annual fall duck hunt was the last recreational hunting allowed in any of Canada's national parks. Last year, 265 hunters shot 1,300 ducks in the park which is world-renowned for its bird life. "Such activity is inconsistent with the National Parks Act and is, from now on, prohibited," Mr. Bouchard said in a speech given to a reception last night. An order in council permitting the hunt was rescinded in 1942. Yet to this day, for one reason or another, the federal government has delayed acting to stop the only sport hunting activity in any national park. A spokesman for the Ontario Federation of Anglers and Hunters called the decision "terrible news". Dr. Terry Quinney, co-ordinator of fish and wildlife services for the federation, said, "Hunting both inside and outside the park is a biologically sound activity." It was limited to certain sites and days of the week.

adapted from "Point Pelee ends annual hunt" in the GLOBE AND MAIL, June 7, 1989

Comment: Members are urged to write to Hon. Lucien Bouchard, Minister of the Environment, Ottawa, Ont. K1A 0H3 and commend him on making this long-awaited decision. We believe that the primary objective of parks is to ensure the preservation, not the exploitation, of wildlife.

IN THE NEWS (cont'd)

LYME DISEASE

Researchers at Harvard University say that an outbreak of Lyme disease can occur anywhere that deer are plentiful. Since 1975, about 20,000 cases of this incapacitating disease have been diagnosed in North America. This usually non-fatal disease has symptoms including skin rash, fevers, arthritic pain, heart and neurological problems and fatigue. The disease is caused by a bacterium which is carried by the tick *Ixodes dammini* which feeds on warm-blooded animals, including deer, birds and humans.

In Canada, the largest concentration of ticks has been found in the Long Point area on Lake Erie. It is recommended that people who go into wooded or grassy areas between May and August in infected regions should wear clothes with long sleeves and should tuck their pants into their socks to prevent ticks from attaching themselves to exposed skin. The use of insect repellent is also helpful. People should also regularly check their clothes and skin for any sign of these tiny oval-shaped arthropods.

Lyme disease is not known to be contagious, however, it can be transmitted by pregnant mothers to their unborn children, causing permanent damage later in the child's life. When detected in its early stages, this disease can be treated effectively with antibiotics. The threat of this disease should be taken seriously by naturalists who frequent areas where deer are plentiful, such as Long Point.

from THE WOOD DUCK (Hamilton), Vol. 42, No. 8, April 1989

ATLANTIC SALMON IN LAKE ONTARIO

In a continuing project to re-introduce Atlantic salmon to Lake Ontario, 63,000 Atlantic salmon smolts were stocked in the Credit River and Wilmot Creek by the Ontario Ministry of Natural Resources during the last week of April and first week of May, 1989.

The salmon smolts, weighing approximately 50 to 60 grams (2 ounces) are expected to grow to 3.5 to 9 kilograms (8 to 20 pounds) before returning to their home rivers to spawn in the early 1990s.

To ensure the fish survive to begin spawning, all fishing for Atlantic salmon smolts is prohibited by the Fisheries Act of Canada. The Ministry of Natural Resources is also recommending that anglers catching any Atlantic salmon immediately return the fish alive to the water to allow it to spawn and reproduce naturally. The maximum penalty for unlawfully fishing for and possessing overlimits of Atlantic salmon is a \$5000.00 fine and/or 6 months in jail and includes possible forfeiture of any equipment used to catch or transport these fish.

Atlantic salmon are similar in shape to Pacific salmon but have a white mouth, dark fins and cross shaped markings on their sides. Smolts have recognizable large black spots on the gill covers. Most often confused with Brown trout, Atlantic salmon can be distinguished by counting anal fin rays. Brown trout have 9; Atlantic salmon have 11.

adapted from a News Release from the Ministry of Natural Resources, May 30, 1989. For more information, contact Tim Rance at 832-7230.

IN THE NEWS (cont'd)

MINISTRY OF THE ENVIRONMENT COMMITS ADDITIONAL \$185,000 TO IMPROVE
METRO REGION'S RIVER VALLEYS

The Ontario Environment Ministry will spend \$185,000 this year to help the Metropolitan Toronto and Region Conservation Authority improve the quality of Toronto's urban rivers and their valleys. The Ministry and the Conservation Authority have signed an agreement which calls for erosion control and a tree-planting project to help restore fish habitats on the Don and Rouge Rivers. Under the agreement, the ministry will provide \$100,000 to reduce erosion and sedimentation in those areas of the Don and Rouge rivers where the MTRCA plans to improve fish habitats. Another \$65,000 is earmarked to plant trees and shrubs in upstream and middle regions of the Don Valley. These plantings along the shore will create shade which results in cooler water temperatures and more favorable conditions for fish and other aquatic life. Some of these trees and shrubs will be planted in the new Charles Sauriol Conservation Reserve on the banks of the East Don River. The conservation area will extend from the forks of the Don River north to Lawrence Avenue. The reserve will be officially dedicated this fall.

Another \$20,000 will be used to promote public awareness of the sources and impacts of water pollution and encourage public involvement in protecting the city's urban rivers and valleys. The Ministry is also taking other steps to restore Metro-area water quality. The Ministry will retain a consultant to develop an unmanned, continuous spill detection device to detect and characterize spills at major storm outfalls and tributary streams. The Ministry plans to run a demonstration project next year, then deploy a number of the devices, using the results to identify and abate dumping incidents, spills and intermittent pollution sources.

The Ministry is also developing standards for the design of stormwater pollution control facilities such as retention ponds and buffer strips along watercourses to reduce runoff. These standards will become the Ministry's guidelines for future developments, and would benefit Metro waterways as they were applied to upstream developments.

In addition, the Ministry allocated \$9.25 million in 1988-89 to support Metro waterways cleanup projects such as sewage plant improvements, and detection and removal of illegal sewer line cross connections. As well, retention tanks now planned will keep the Eastern Beaches open following rainstorms which can now cause them to be closed to swimmers. The Ministry is also helping MTRCA clean up river valleys in the Toronto area. The Conservation Authority employs 13 members of the Environmental Youth Corps on the project. "We are committed to helping Metro Toronto restore the city's rivers to their natural balance. This agreement with the Conservation Authority complements other programs to reduce, and eventually end, the pollution of these rivers," said Environment Minister Jim Bradley.

a News Release of the Ministry of the Environment, Aug. 1, 1989

IN THE NEWS (cont'd)

REPATRIATING CANADIAN LANDS

U.S. owners of Canadian natural habitat who wish to donate it for conservation will be able to put the land back into Canadian hands. The land can be donated to the Nature Conservancy (U.S.) and then transferred to the Nature Conservancy of Canada. Two such projects currently underway in Georgian Bay, Ontario, are valued at more than \$1 million.

from the NATURE CONSERVANCY OF CANADA NEWSLETTER, Spring 1988

DON'T INHALE BRACKEN SPORES

Britain's safety watchdog has warned of possible links between exposure to bracken and cancer in humans. The Health and Safety Executive stresses that ramblers and strollers are not at serious risk should they walk through areas of bracken. However, they should take care not to inhale airborne spores produced by bracken between July and October. Studies of cancer among animals suggest that the spores are the most carcinogenic parts of the bracken. They probably contain minute amounts of three carcinogens: ptaquiloside, shikimik acid and quercetin.

from "Heathlands of England harbour cancer spores" in NEW SCIENTIST, April 14, 1988

BEAVER FEVER INFECTION SPREADING IN METRO

Once found only in Third World countries, a little-known intestinal infection referred to as beaver fever has become common in Canada. Almost 500 cases a year of giardiasis are reported in Toronto which makes beaver fever marginally more widespread than salmonella gastrointestinal infection. The disease was tagged with the name beaver fever in 1982, when beaver excrement in a creek contaminated drinking water in Banff, Alberta, causing an outbreak. The symptoms -- weak appetite, weight loss, cramps, abdominal pain, vomiting and diarrhea -- are a nuisance but the disease normally isn't life-threatening. Antibiotics can kill the parasite that causes the ailment in about a week.

from the TORONTO STAR, April 13, 1989 (an article by Suzanne Steel)

THANKS, CLIPPERS!

This section of the newsletter is created each month from clippings of news items sent to the editorial committee. We are particularly interested in receiving articles in which TFN is mentioned or any aspect of Metro natural history and environmental issues (especially those affecting Metro's natural areas). Thanks to the following clippers: Mary Avison, Liz Ball, Diana Banville, Sandy Cappell, Annabel Cathral, Karin Fawthrop, Nancy Fredenburg, Saul Glickman, Helen Hanson, Louise Herzberg, Grant Hurlburt, Eileen Mayo, Dorothy Marshall, Miriam Milne, Melanie Milanich, Jean McGill, Jean Macdonald, Lee Jackson, Helen Juhola, O'Shea, Alex Otten, Don Roebuck, Marjory Tilley, Marilouise Stonehouse, Catherine Rand, F. Ruskin Willcox, Helen King, Mary Louise Stewart, Joan Patterson, Merle Young, Nan Schofield, Edith Cosens.

Don't forget to include the source and date of each news item.

HJ

The weather this time last year

September 1988, Toronto

September was a fine, sunny month even though mean temperatures were marginally below normal. Sunshine hours at 225.5 were the highest since 1983. Precipitation was slightly above normal, but this was mostly due to two heavy rainfalls late on Sept. 3rd and overnight on Sept. 16-17th.

The month did not begin on a promising note as a strong disturbance on Sept. 3rd-4th brought heavy rain on the evening of Sept. 3rd and a powerful cold front a day later. The maximum on Sept. 4th was only 14.5°C downtown -- the lowest for that day on record and quite possibly an early-season record as well. However, high pressure and seasonably comfortable temperatures prevailed the rest of the month with occasional weak frontal passages providing some diversion. No heat-waves or further cold outbreaks of any consequence occurred. There was a humid and warm spell mid-month but otherwise it was rather dry, unlike most recent Septembers.

Gavin Miller

□

*Rain, this autumn day
but still -
the song of sparrows!*

haiku by Christine Hanrahan

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Sky Notes

For the past two years, a popular Newsletter feature has been "Sky Notes", written by Jeff Nadir. We are sorry to say Jeff has informed us he will no longer be writing these articles on the evening sky. Thanks, Jeff, for a job well done! Your "notes" will be missed.

Jeff suggests that sky-watcher readers look at the following publications:

Grey, Mary, "Stargazing". In the Globe and Mail on the last Saturday of each month.

Bishop, Roy L. (editor), Observer's Handbook, Royal Astronomical Society of Canada. Annual book, about 200 pages. Assumes some knowledge of astronomy.

Ottewell, Guy, Astronomical Calendar, Department of Physics, Furman University. Annual book, about 70 pages.

Ridpath, Ian & Tirion, Wil, The Monthly Sky Guide, Cambridge University Press, 1987, 63 pages. Covers the years 1988-92. Focuses on stars and constellations.

Ottewell, Guy, Astronomical Companion, Department of Physics, Furman University, 1983, 73 pages. General book on astronomy.

H.T.



JOURNALS STILL AVAILABLE

THE ONTARIO FIELD BIOLOGIST, a natural history journal, was published twice a year by the Toronto Field Naturalists. It carried articles by John Riley, Craig Campbell, Alan Wormington, and many other well-known naturalists and biologists.

Although the journal has ceased publication, 17 back issues are still available for \$3.00 each. Articles cover a wide range of topics: the butterflies of Pt. Pelee National Park, cacti of Ontario, mushrooms and bryophytes of Elgin County, and much more.

Issues still available are: Vol. 30 (1) [1976], Vol. 31 (2), and all from Vol. 32 [1978] to Vol. 38 [1984].

Copies may be purchased at TFN monthly meetings.

Judy Hernandez

NEW BOOK ON AMPHIBIANS AND REPTILES

The successor to TFN's "Amphibians and Reptiles in Metropolitan Toronto: 1982 Inventory and Guide" by Bob Johnson is now available. FAMILIAR AMPHIBIANS AND REPTILES OF ONTARIO by Bob Johnson, published by Natural Heritage/Natural History Inc., was partially funded by an Ontario Heritage Grant to the Toronto Field Naturalists. Copies will be available at the TFN September meeting (see page 2) for \$9.95 each. Come at 7 pm and meet the author, publisher, etc.

COMING EVENTS

COMING EVENTS

"OUR WORLD" THE SUMMIT ON THE ENVIRONMENT in the Don Valley, Toronto, will take place from September 10 to 17, 1989 at the Ontario Science Centre. Watch your newspaper for details of the week's events that are open to the public.

Sunday, Sept, 10 at 8 am - Shorebirds and other migrants at Leslie Street Spit with Tim Sabo of the Toronto Ornithological Club (TOC). Bring lunch. Meet in the parking lot at base of spit.

Tuesday, Sept. 12 at 7:30 pm - Open House to discuss initial site analysis of DON VALLEY BRICK WORKS property, at Leaside Memorial Gardens, corner of Millwood Road and Southvale Drive.

Saturday, Sept. 16 (10 am to 8 pm) and Sunday, Sept. 17 (11 am to 5 pm) - Scarborough Gem and Mineral Exhibition at the Mid-Scarborough Community Centre, 2467 Eglinton Ave. East at Kennedy Road.

Saturday, Sept. 16 at 8 am to noon - Fall migrants at High Park with Bob Yukich. Meet in the parking lot at the entrance off Bloor Street at High Park Ave.

Monday, Sept. 18 from noon to 9 pm - Mycological Society of Toronto Fungi Fair at the Civic Garden Centre, 777 Lawrence Ave. East (at Leslie).

Saturday, Sept. 30 - New Discovery Trail opens at Ontario Science Centre, 770 Don Mills Road at Eglinton Ave. East.

Courses of Study

Bird Study Course 1 at Sheridan College, Main Campus, Oakville, Rosemary Gaymer. Two semesters, 12 weeks each, 7:30 to 10 pm, Wednesdays. This introductory course to birdwatching, and to the study of birds in general, starts September 1989. Registration begins in August. Early registration advised. For further information re exact dates, rates, etc., contact Community Services Division, Sheridan College, 1430 Trafalgar Rd., Oakville, Ont. L6H 2L1. Telephone 842-8800 Oakville; 823-9730 Streetsville; 632-7081 Burlington. Rosemary's mailing address: P.O. Box 152, Oakville, Ont. L6J 4Z5.

Many courses of interest to naturalists are available. Try the University of Toronto, Civic Garden Centre, George Brown College, Centennial College, local high schools, Humber College, Royal Botanical Gardens in Burlington, Royal Ontario Museum, York University.



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OTHER PUBLICATIONS

TORONTO FIELD NATURALISTS' CLUB: ITS HISTORY AND CONSTITUTION, 1965\$.50	ANNUAL TFN INDEX25ea.
CHECKLIST OF PLANTS IN FOUR TORONTO PARKS: WILKET CREEK, HIGH PARK, HUMBER VALLEY, LAMBTON WOODS, 197250	AMPHIBIANS AND REPTILES OF METRO TORONTO, 1983 2.00
TORONTO THE GREEN, 1976 Metropolitan Toronto's important natural areas are described and recommendations given for their conservation and management; includes maps, bibliography and index 2.50	TORONTO REGION BIRD CHART, 1983 2.00
FIELD CHECKLIST OF PLANTS OF SOUTHERN ONTARIO, 1977 5/\$1.00 or25ea.	A GRAPHIC GUIDE TO ONTARIO MOSSES, 1985 .. 2.00
TORONTO FIELD NATURALISTS' RAVINE SURVEYS 2.00ea.	TORONTO REGION VERTEBRATE LIST (fishes, amphibians, reptiles, mammals), 1985 ... 5/\$1.00 or25ea.
Survey #1 - Chatsworth Ravine, 1973	TORONTO REGION BIRD LIST, 1985 ... 5/\$1.00 or25ea.
Survey #2 - Brookbanks Ravine, 1974	GUIDE TO THE TORONTO FIELD NATURALISTS' NATURE RESERVE, LEASKDALE, ONT., 1986 2.00
Survey #3 - Chapman Valley Ravine, 1975	TORONTO ISLANDS: PLANT COMMUNITIES AND NOTEWORTHY SPECIES, 1987 2.00
Survey #4 - Wigmore Ravine, 1975	TODMORDEN MILLS, 1987 2.00
Survey #5 - Park Drive Ravine, 1976	
Survey #6 - Burke Ravine, 1976	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.)
Survey #7 - Taylor Creek-Woodbine Bridge Ravines, 1977	
Survey #8 - West Don Valley, 1978	
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