

TORONTO FIELD NATURALISTS' CLUB

Number 309

October 1977

Visitors welcome!

OCTOBER MEETING

Monday, October 3, 1977, at 8:15 p.m.
at 252 Bloor Street West
(between Bedford Rd. and St. George St.)

Topic: THE PRESERVATION OF NATURAL AREAS IN ONTARIO

Speaker: Malcolm Kirk

Mac Kirk has acted as resource manager for the Grey Bruce Conservation Authority and is past director of the Kortright Centre. He is presently employed with the Ontario Ministry of the Environment.

In an illustrated talk on the natural areas of Ontario he will show the different ways in which some of these areas have been acquired, why they are important, and why there are not more of them. He will also bring us up to date on recent government policies regarding the preservation of natural areas.

NOVEMBER MEETING - Monday, November 7, 1977 at 8:15 p.m.

Program Committee Chairman:
Mrs. Norah Stuart (485-5824)

JUNIOR CLUB Registration meeting. Membership is open to boys and girls from Saturday 8 to 16 years of age. Meet in the Theatre of the Royal Ontario Oct. 1 Museum at 10:00 a.m. (to 12 noon). 10:00 a.m.

BOTANY GROUP Dr. John C. Krug of the University of Toronto Botany Department Thursday will present "Instruction to the Identification of Fleshy Fungi". October 20 Meet in the cafeteria in the basement of Hodgson Public School on 8:00 p.m. Davisville Ave. just east of Mount Pleasant Rd. Enter school at east end. Parking available in schoolyard. Enter from Millwood Rd.

BIRD GROUP Let's take a trip to Florida with Ron Saytar and see some of its Wednesday exquisite birds. Ron has photographed all the heron and egret species. October 26 Meet in St. James Bond United Church on Avenue Rd. just north of 8:00 p.m. Eglinton Ave.

HAVE YOU PAID YOUR MEMBERSHIP FOR 1977/78? (Application on back page)

OCTOBER OUTINGS

Rain or shine!

Visitors welcome!

- Saturday TORONTO ISLAND - Birds
 October 8 Leader: George Fairfield
 9:00 a.m. Meet at the Island Ferry Terminal at the foot of Bay Street to take the first available ferry. Bring your membership card and a lunch.
- Sunday HIGH PARK - Mushrooms
 Oct. 9 Leader: Professor John Morgan-Jones
 10:00 a.m. Meet at the Nature Trail just east of Glendenan (north end of park at Bloor Street). Morning only.
- Sunday HUMBER RIVER - Birds, trees
 Oct. 16 Leader: Herb Elliott, Mary Smith
 9:00 a.m. Meet in parking lot across bridge on east side of Humber River on Old Mill Rd. (east of Old Mill restaurant). Lunch optional.
- Saturday TORONTO LAKESHORE - Birds
 Oct. 22 Leader: John Kelly
 9:00 a.m. Meet in the lakeshore parking lot east of the Humber River and west of Windermere Ave. (opposite the Seaway Hotel). Bring lunch.
- Sunday MOUNT PLEASANT CEMETARY - Trees
 Oct. 23 Leader: Emily Hamilton
 10:00 a.m. Meet at the entrance on the east side of Yonge St. (0.3 mile north of St. Clair subway station). Morning only.
- Saturday EAST DON RAVINE - Nature walk
 Oct. 29 Leader: Henry Fletcher
 10:00 a.m. Meet at the north west corner of Leslie St. and Sheppard Ave. East. The walk will follow the ravine north past Finch Ave. Lunch optional.

Outings Chairman:
 Herb Elliott (763-4869)

TRAVEL INFORMATION

TTC (484-4544)

Island ferry service (367-8193)

→ ttc ride guide - map showing all public transportation routes throughout Metropolitan Toronto - available at any subway station

MANY COURSES AVAILABLE FOR NATURALISTS

Bird Study I. For further information contact the Community Services Division, Sheridan College, 1430 Trafalgar Rd., Oakville, Ont. L6H 2L1 or call Oakville (845-9430); Clarkson (823-9730); or Burlington (632-7081)

Nature and the Environment (7 courses); Outdoor Studies (12 courses). For further information contact the School of Continuing Studies, University of Toronto, 158 St. George St., Toronto, Ont. M5S 2V8 (978-2400)

Applied Agriculture - a program for the novice farmer. For further information contact the Applied Agriculture Program, Office of Continuing Education, Johnston Hall, University of Guelph, Guelph, Ont. N1G 2W1 (519) 824-4120 ext. 3956 - available in Toronto as well as Guelph

PRESIDENT'S REPORT

Winds of change are blowing; birds are migrating; photosynthesis is ceasing; rich colours are appearing; and club activities are starting to intensify. I trust you had an enjoyable summer despite the abundant precipitation. My wife and I tried to escape to the Maritimes; however, even in Nova Scotia and the Gaspé we had to brave the occasional storm. Although far from home we met some of our TFN friends during our wanderings. This is not an uncommon event in our club. You are just as likely to find a fellow club member camped next to you in the boreal forest as you are on a desert plateau.

During the summer while some of us have been travelling, other dedicated members have given their valuable time to various ongoing club activities, projects, and administrative matters. To all of you I would like to express my appreciation for keeping the club running smoothly.

Involvement is the life-blood of the club. It is extremely gratifying to have so many of our members willing to pitch in and help. If you are a new TFN member — you are very welcome. We hope you will enjoy our program to the extent that you will become involved in some of our many activities. October heralds the commencement of several special group activities to which you are cordially invited.

The Audubon Wildlife Film program takes up a new residency at OISE while Eaton's College Street store undergoes renovation. I hope you will continue to support this excellent film/lecture program which begins Tuesday, October 18 at 8:15 p.m. in the theatre at 252 Bloor Street West. Season tickets for the 5 programs are \$12 (deluxe) and \$11 (orchestra) and are available from
 ▶ Eaton attractions ticket office, 1 Hayter St., Toronto (597-1688).

Did you notice that the complete list of club meeting dates and speakers for this coming year was published in the September club notice? Keep it handy by your calendar for future reference.

During the summer I was involved in several club projects which may be of interest to you. Mike Singleton of the Federation of Ontario Naturalists and I met to discuss the respective roles of the TFNC and the FON in the Federation. There is a concerted effort to promote more effective communication with our parent organization and with other clubs.

I have also been negotiating with Wintario for funds to update and publish a Toronto Birdfinding Guide. Mayor Crombie has endorsed our submission.

Not all news is pleasant. I am very sad to report the death in this past summer of a very dedicated and energetic club member, Mr. Doug Gardiner, our representative on POHAT (Central Waterfront Planning Committee). Doug will be remembered by his friends for his fervent commitment to the protection and preservation of plant and animal communities, particularly along the Metro waterfront and the Leslie Street Spit. May Doug's deeds confirm and strengthen ours.

Ron Thorpe (484-1807)
 President

BIRD CARDS RETURN

Some TFNC members will recall the fun of collecting and trading the cards that came in many kinds of merchandise, often in Dad's cigarettes.

Now, thanks to Church and Dwight Ltd., the Cow Brank Baking Soda people, three sets of bird cards are available. Each card depicts a bird painted by the renowned American artist, Louis Agassiz Fuertes. On the back of each is a short description. In full colour, the cards are extremely attractive: an excellent introduction to the birds.

Two sets of 15 cards, each 2" X 3", are made up mostly of songbirds that can be seen around Toronto. The third set of 10 (2½" X 4") cards of birds of prey has an unusual story.

In the early 1920's ninety bird paintings to be reproduced on the small cards were commissioned by Charles T. Church, Fuertes' friend and fellow conservationist. This was not a new venture for Church and Dwight Ltd. In the 1880's they had brought out their first series of bird cards that carried the appeal, "For the Good of All, Do Not Destroy the Birds". In the years that followed they issued literally millions of cards picturing flowers, fishes, and mammals, as well as birds in the interests of conservation.

Fuertes painted the ninety birds — 30 songbirds, 30 gamebirds, and 30 birds of prey — between 1923 and 1925. The songbirds and gamebirds appeared on cards spreading the conservation message. But the birds of prey were not reproduced. The company was concerned that some of the paintings showing the birds clutching their live prey were too realistic for young collectors and might even hurt the cause of raptor conservation.

For more than fifty years the paintings lay in the company's vaults in New York City, their rich colours protected from the light. In 1975 they were removed to fulfill their original purpose. It was time to remind the public of the precarious state of the valuable predatory birds — the bald eagle, osprey, red-shouldered hawk, and the others. Cards showing the remaining twenty birds of prey painted by Fuertes will be issued in future sets.

Louis Agassiz Fuertes died in 1927, only 53 years of age. He left a rich legacy to all who like birds. To look at a Fuertes painting is to see a bird alive. From his Downy Woodpecker attacking a chunk of suet to his imperious Bald Eagle, you feel that the instant you turn your head the bird may seize the moment to fly off.

A request to Dwight and Church Ltd., 75 The Donway, Don Mills, will bring you the sets of cards as long as supplies last.

Harold Taylor (225-2649)
TFNC Public Relations Chairman

KIRTLAND'S WARBLER NOW A PROTECTED SPECIES

The Kirtland's warbler has become the 13th species to be protected under Ontario's Endangered Species Act. More than a dozen sightings have been reported in Ontario since 1900. The most recent, in June and July of this year, occurred in jack pine stands near Pembroke where a male Kirtland's warbler was photographed, mist-netted and banded. Ministry of Natural Resources biologists are trying to determine whether a small breeding population survives in any of Ontario's jack pine regions.

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

BALANCE SHEET
February 28, 1977

<u>ASSETS</u>	As at Feb. 28, 1977
<u>Current Assets</u>	\$
Cash	2,519
Accounts receivable	1,906
Interest receivable	110
Inventories	2,547
Investments, short-term	4,300
Total Current Assets	<u>11,382</u>
Investments, long-term	2,500
 <u>Property Account</u>	
Land	42,770
Buildings	3,050
Total Property	<u>45,820</u>
Total Assets	<u><u>59,702</u></u>
 <u>LIABILITIES & EQUITY</u>	
<u>Current Liabilities</u>	
Accounts Payable	175
Unexpired subscriptions	1,304
Total	<u>1,479</u>
 <u>Equity</u>	
Opening balance March 1, 1976	55,197
Add: Excess of revenues over expenses - current year	<u>3,026</u>
	<u>58,223</u>
Total	<u><u>59,702</u></u>

TORONTO FIELD NATURALISTS
STATEMENT OF REVENUES AND EXPENSES
FOR THE YEAR ENDED FEBRUARY 28, 1977

	Year ended Feb. 28, 1977
	\$
<u>REVENUES:</u>	
Audubon Wildlife Films (net)	782
Bus Trips (net)	218
Donations	634
Interest and investment income	516
Life memberships	200
Literature sales (net)	1,499
Memberships - regular	9,121
Pin sales (net)	(476)
Total Revenues	<u>12,494</u>
 <u>EXPENSES:</u>	
Advertising and publicity	80
Affiliations and donations	300
Bank charges	15
Junior Field Naturalists	150
Legal (claim settlement credit)	(100)
Meetings expense	1,571
Mortgage interest (claim settlement)	(1,137)
Nature reserve maintenance	311
Office supplies	550
Postage	2,556
Printing	3,056
Salaries and honoraria	2,020
Taxes on property (including credits arising from Forest Management Program, Province of Ontario)	(94)
Telephone	190
	<u>9,468</u>
 EXCESS OF REVENUE OVER EXPENSES	<u><u>3,026</u></u>

TORONTO FIELD NATURALISTS

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SOURCE AND USE OF CASH

FOR THE YEAR ENDED FEBRUARY 28, 1977

	Year ended Feb. 28, 1977 \$
CASH PROVIDED BY:	
Excess of revenues over expenses	3,026
Adjustments to convert to cash bases:	
Decrease - Accounts Receivable	97
- Investments, long-term	4,300
	<u>7,423</u>
CASH USED FOR:	
Improvements to property	3,050
Decrease in Accounts Payable	11
Decreases - Unexpired subscriptions	276
Increases - Accounts Receivable	1,905
- Inventories	2,059
- Investments, short-term	49
	<u>7,350</u>
NET INCREASE IN CASH FOR YEAR	73
CASH ON HAND - beginning of year	<u>2,446</u>
- end of year	<u>2,519</u>

AUDITOR'S REPORT

To: MEMBERS OF THE TORONTO FIELD NATURALISTS' CLUB

I have examined the balance sheet of the Toronto Field Naturalists as at February 28, 1977 and the statement of revenue and expenses and source and use of cash for the year ended February 28, 1977. 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.

Memberships, 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 February 28, 1977 and the results of its operation and the source and use of cash for the year ended February 28, 1977, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

TORONTO, ONTARIO
April 23, 1977

Stanley S. A. Gardiner
STANLEY S. A. GARDINER
CHARTERED ACCOUNTANT

DUCK HUNTING — POINT PELEE NATIONAL PARK

The following is a letter dated April 25, 1977 to Mr. Robert Daudlin, M.P., Member for Kent-Essex, from Hon. Warren Allmand, Minister, Indian Affairs and Northern Development.

"I wish to inform you that I have decided to end duck hunting in Point Pelee National Park prior to the 1977 hunting season. I will, therefore, be recommending to Governor in Council that Section 5 of the National Parks Game Regulations be revoked.

For nearly thirty years, Ministers of this Department have been confronted with a rising tide of public protest over this activity which is clearly inappropriate in the context of National Park aims and ideals. Since 1948, there has been a public debate on the subject. On one hand hunting proponents have argued that the Department was committed by previous understanding and tradition to maintain the hunt. On the other hand, the anti-hunting groups have argued it is wrong to have a hunt in an area set aside as a natural heritage area serving as a sanctuary for migratory wildfowl. The weight of argument appears to be on the side of those who oppose the hunt.

I do not dispute that an understanding existed with the Province of Ontario in 1918 whereby some duck hunting would be allowed in Point Pelee National Park. I cannot, however, accept that Parks Canada is forever bound to permit the hunt. On the contrary, I would argue that during the past sixty years, conditions have changed to such an extent that reconsideration of it is not only wise, it is essential.

When the Park was established, more than five hundred acres within the Park boundaries were occupied by subsistence farmers, fishermen, hunters and trappers. For them, the hunt was needed to supplement income from other activities. Even for those living outside the park, hunting was part of their way of life - certainly a sport or recreation, but also a means of putting food on the table. In 1977 in the southern areas of Canada, hunting can only be regarded as a sport or recreation which satisfies the same kind of human interests as do such activities as bird watching, hiking, canoeing or picnicking. Therefore, all these activities must be looked at in the same context. This means taking into account competing demands as well as the question of compatibility of activities with each other and with National Parks purposes.

Changes in regional population and popularity of the park suggest that traditional park uses should receive preference over hunting. Since 1918, the population of the surrounding area has grown by over 400% while annual visitation to the Park has increased from 50,000 in 1928 to more than half a million at present.

The majority of visitors to the park are in family groups who go there to take advantage of the natural setting, open space, and opportunities for outdoor activities. They expect to obtain an outdoor experience which has a refreshing restful quality about it - a quality which is undeniably impaired by the hunting activity when it is in progress. I might also add that during the hunting season there are at least ten visitors for every hunter in the park and that this presents an obvious safety problem in an area as small as Point Pelee.

I regret that this action must be taken without being able to increase opportunities elsewhere for those who have normally hunted in the Park. In fact, the search for some way to provide alternatives for these hunters has been the reason the decision has been delayed as long as it has.

For some years now, park staff have kept careful statistics on the origin, frequency and success of those who hunt the Point Pelee marshes. The information shows that the Park serves only a small group of less than one hundred continuing hunters. Almost 50% of those buying licences each year do so for the first time and will not do so again. Less than fifty hunters of the approximately two hundred who hunt in a given year, have purchased licences in four of the past five years. This would suggest that the hunt is maintained for a very small portion of park users. Moreover, the average hunting frequency of less than three days per season and success rate of approximately five birds per hunter per season do not lend credence to the argument that Point Pelee is significant as a sport hunting opportunity.

You may be aware, Parks Canada officers have tried hard to find alternative hunting opportunities for the Pelee hunters. Over a two year period, a great deal of time has been spent on marshland inventories and analyses and in multi-agency negotiations directed toward the public acquisition of marshland which might be used, in part, for public hunting. This Department was also prepared to make significant funds available for this purpose if the right opportunity presented itself. It did not.

The legislative mandate of Parks Canada is quite specific. It does not provide for the management of lands for the purpose of public hunting. Accordingly, if we are to help out with an alternative area we require the cooperation of another agency, particularly to take over management of the lands.

Despite negotiations with other Federal agencies, the Provincial Government and local conservation bodies, we could find no way to develop a joint venture consistent with their priorities. I might add, however, that I remain prepared to contribute toward an alternative area should another agency show interest.

Although I recognize that my decision will be greeted with concern by some of your constituents, I also strongly believe that it will receive approval of the majority.

Point Pelee National Park will never achieve widespread acclaim as a great place to hunt ducks but, as a sanctuary for migratory wildfowl, its merits are already well known. Its visibility and its location in a heavily populated area make Point Pelee one of the most important National Parks in our system in terms of fostering among the Canadian people the ideals and attitudes so important for the perpetuation of our natural heritage. I think an end to the hunt can only further that objective."

Globe and Mail (September 7, 1977) "Pelee hunt on, for this year"

"Northern Affairs Minister Warren Allmand admitted his own attempt to halt duck hunting in Point Pelee National Park failed and Government policy now is to continue the hunt until an alternative site is found. ... He said it was on his own initiative an order-in-council was prepared in July that would have banned the hunt this fall, but the motion was turned down by Cabinet. And he added that it was probably Agriculture Minister Eugene Whelan and Daudlin who influenced the Cabinet to oppose the motion. ... Duck season in Point Pelee is due to begin Sept. 24."

Editor's note: Hon. Warren Allmand deserves our encouragement and support now! Letters to Cabinet members letting them know of our disapproval of their action in turning down Allmand's proposal would also be useful at this time.

NATURAL HISTORY OF THE LESLIE STREET SPIT

In 1959 the Toronto Harbour Commissioners began a fill project at the foot of Leslie Street. This eastern headland was to perform the double duty of intercepting easterly winds and waves thereby protecting the vulnerable south shore of the Toronto Islands as well as creating a protected outer harbour. The method chosen to create a protective breakwater involved using clean fill from city excavations, that is, earth, broken concrete, and other clean materials dug up in development projects throughout the city. Various small rocky promontaries form strong points between which curved beaches are forming by a natural process. Part of the fill that contributed to the growth of the spit came from the dredging of the Leslie Street slip at the west end of the turning basin. A major warm water outfall from the Hearne Generating Plant influences the local climate, water currents, and biological productivity of this large protected outer harbour area.

Now this man-made peninsula with its many sandy beaches and shallow bays has been vegetated naturally with 152 species of vascular plants. Of this total, 88 represent introductions into Southern Ontario while the remainder are native. Of the introduced species, 8 are escaped from cultivation. Thus although most of the plants now present on the headland are aggressive and common species in Ontario, a few uncommon native species have become established as well as several that represent first records for the Toronto region.

This area is of considerable botanical interest because a potential exists for the development on the headland of some of the unique littoral plant communities that once existed on the Toronto Island but which now have largely been destroyed. The similar moderate climate of the headland and surrounding lake water makes the restoration of these communities quite feasible. The area is also of interest because so many species have become established in such a short period of time and without direct assistance by man. Aspects of dispersal and colonization would make an interesting study. As well, the vegetation of the headland is important to wildlife; for example, the spit now provides resting and feeding habitat for nearly 200 species of migratory birds. Breeding mammals include muskrat and cottontail rabbits.

The most noteworthy feature of the Leslie Street Spit is that it provides nesting habitat for a number of bird species including two species of gulls and two species of terns. Elsewhere in Lake Ontario the Common Tern is vanishing as a nesting species; however, here it is thriving. Equally interesting is the fact that the Caspian Tern had only one other known nesting place on the lake in 1976.

In all seasons of the year the site is extremely important for wildlife. Its location out into the lake makes it a natural stopping point for migrating birds in the spring and fall. As well, it supports much of the wintering waterfowl population of the Toronto waterfront.

For anyone interested in learning more about this exceptionally interesting area, the following reading is recommended.

- Central Waterfront Planning Committee. 1976. Environmental resources of the Toronto Central Waterfront. Winchell Press, Philadelphia.
- Barnett, J.M. 1971. Ashbridges Bay. Ontario Naturalist 9(4): 24-26.
- Catling, P.M. and S.M. McKay. 1974. On the flora of the Toronto Islands - part 1. Ontario Field Biologist 28(2): 1-27

- Catling, P.M. and S.M. McKay. 1975. Associations of halophytic plants in the Toronto region. Ontario Field Biologist 29(1): 50-55
- Freedman, W. and S.M. McKay. 1977. Waterfowl populations in the vicinity of the Leslie Street Headland, Toronto, Ontario, October 1975 to September 1976. Ontario Field Biologist 31(1): 3-16
- Catling, P.M., K.I. McIntosh, and S.M. McKay. 1977. The vascular plants of the Leslie Street Headland. Ontario Field Biologist 31(1): 23-39
- Fetterolf, P.M. and H. Blokpoel. 1977. Terns and gulls nesting on Toronto's Eastern Headland. Ontario Field Biologist 31(1): 51-52

➔ Copies of the ONTARIO FIELD BIOLOGIST can be purchased from Mrs. Mary Robson, 49 Craighurst Ave., Toronto, Ont. M4R 1J9

Planning for Toronto's waterfront including the Leslie Street spit is carried out by the Central Waterfront Planning Committee, a group made up of representatives from government (City, Metro, and Provincial), and business and industry, ratepayer groups, and recreation groups including the TFNC.

The club's representatives are
 Peter Fetterolf - 537-6196 (home), 978-3496 (office)
 Steve Varga - 223-5151
 Janet Rosenberg - 967-0563

More club members are needed who are willing to represent the TFNC on the various waterfront planning groups. If you are at all interested in helping with this important project, call Linda Cardini at 367-7611.

GROUP OUTINGS REPORTS

Toronto Waterfront Group (June 15, 1977) Ten club members met for an outing to the Toronto Islands and discussed forming a waterfront group to participate in the Central Waterfront Planning Committee's planning for Toronto's waterfront. All skills are needed, so if you're interested in the waterfront, contact Linda Cardini at 367-7611 or any of the waterfront representatives mentioned above.

Ravine Group (April 17, 1977) Nine members met at the corner of Don Mills Rd. and York Mills Rd. to explore the valley of the East Don River just east of the Prince Hotel. Many spring flowers and birds were observed. Anyone having data on this area or interested in it should contact the Ravine Group Chairman or Secretary.

Ravine Group (April 21, 1977) With special permission five club members visited a ravine on the property of the Toronto Hunt Club on the edge of the Scarborough Bluffs. As well as many spring flowers, sassafras trees were observed and many species of birds.

West Don Valley (July 23, 1977) Six people attended this outing to explore the valley between Bathurst Street and the property of the North York outdoor education school. This area contains a great variety of habitats as well as a small oxbow lake.

Anyone interested in knowing more about the ravines or having plant or animal lists for specific areas should contact

▷ Jack Cranmer-Byng at 488-3262 or Ruby Rogers at 789-9612.

REPORT ON SPRING OUTINGS 1977

Grimsby and Dundas Marsh (April 9, 1977) A cool but sunny day made this outing enjoyable. A group of 35 people hiked along the escarpment, where they saw a few Red-tailed hawks, Sharp-shinned hawks, and kestrels. A Turkey Vulture flew over as the group left for the Dundas Marsh where many Common Mergansers were seen.

Eastern Lakeshore (April 16, 1977) There were 56 species of birds seen on this trip. Large flocks (300-400 birds) of Ring-billed Gulls were seen. Waterfowl numbers were good (17 species). A Black-capped Chickadee was found excavating a nesting hole.

Nicholson Dam (April 23, 1977) Thirty-three people were on this outing under cloudy skies. They saw four bluebird nests in the 16 boxes that were checked. Bluebirds (2) were heard singing in the area and spring flowers were noticeable.

High Park (April 24, 1977) A pair of Sora Rails put on quite a show for the 33 participants of this outing. Also a Black-crowned Night Heron was seen by everyone. Thirty-nine species were tallied.

Brookbanks Ravine (April 28)

Kortright Waterfowl Area (May 1)

Glen Stewart Ravine (May 3, 1977) This evening walk produced 22 species of birds. Several wildflowers were also abundant.

Glendon Campus (May 5, 1977) Twelve people attended this botany outing. Garlic mustard, buckthorn, hepatica, wild ginger, and dog violet were found.

Fresqu'ile Provincial Park (May 7, 1977) A red crossbill was the most surprising find of this trip. Forty-six species were seen and a good variety of plants.

Norval (May 8, 1977) Twenty-five people enjoyed a sunny day at Norval. Forty-two species of birds were found in the area.

High Park (May 10, 1977) White-crowned Sparrows and White-throated Sparrows were heard singing as well as a Brown Thrasher. A bat and 41 species of birds were located altogether.

Lambton Woods (May 12, 1977) This was a pleasant evening walk with twelve members along. The trilliums were out and the trees and shrubs were coming into leaf.

Wilket Creek (May 19, 1977) A warm evening with 15 people made this outing ideal. Many plant species were seen although the lady-slipper orchid could not be found this year.

Jim Baillie Nature Reserve (May 14, 1977) About 100 people attended the official opening of the Reserve. Mrs. James Baillie and her family were among those who enjoyed the perfect weather for this important event.

Jim Baillie Memorial Nature Walks (May 15, 1977)

Bronte Provincial Park (May 21, 1977) A good number of birds and plants were seen in the area. The weather was fine with a group of 28 taking part in the outing.

Toronto Island (May 22, 1977) Sixty species of birds were seen on this trip. by 50 people with the weather being sunny and warm. It was a great day for "birding".

Moore Park Ravine (Belt Line) (May 24, 1977) This evening walk produced 15 species of birds.

Morningside Park (May 26, 1977) A sunny day brought 16 people on this walk. Herb Robert with white blossoms, a clump of maidenhair fern, and a specimen of bracket fungus (*Polyporus squamosa*) were the highlights of this outing.

Terra Nova (May 28, 1977) Twenty-four people were pleased to find several young and eggs in bluebird boxes in the area. Three Tree Swallow eggs and four young robins were also seen.

East Don (May 29, 1977) Thirty-six species were seen on this outing. A singing Indigo bunting and a Green heron were seen. A good group of 27 people.

Glendon Hall (May 31, 1977) Thirty-two species were seen on this evening walk. The weather was overcast, but 24 people arrived for this walk.

High Park (June 2, 1977)

Lambton Woods (June 4, 1977) On this sunny, warm, early morning hike 32 species of mostly breeding birds were seen and heard.

Palgrave Wildlife Area (June 5, 1977) Thirty people were along on this outing. A Black-billed Magpie was found near the road. Forty-six other species of birds were found as well.

Cudia Park (June 7, 1977) Not too many birds on this trip, but 27 people were there.

Wilket Creek (June 9, 1977) This ecology outing was under clear skies with 28 people. A very worthwhile outing.

Luther Marsh (June 11, 1977)

Bruce Trail (June 11, 1977)

Halton County Forest (June 18, 1977) This outing was apparently rained out.

Vandorf Bog (June 19, 1977)

Jim Baillie Nature Reserve (June 25, 1977)

Obviously reports were not received for all outings. Normally leaders are expected to submit a written report on any outing they lead. Reports should include weather, number attending, lists of plants and/or animals observed, date and location of outing, and suggestions for improvements or other outings.

If you have any ideas about outings or comments you want to make about them, why not call the Outings Chairman and discuss them with him.

Outings Chairman:
Herb Elliott (763-4869)

Wetland Preservation: Your Responsibility. available from the Federation of Ontario Naturalists, 1262 Don Mills Rd., Don Mills, Ont. M3B 2W7 (444-8419) This free pamphlet tells why marshes are important and what we as citizens can do about helping preserve them.

A Walk in the Forest at Sherwood Park. available from the Ontario Forestry Association, 150 Consumers Rd., Ste. 209, Willowdale, Ont. (493-4565). This free booklet carries a strong conservation message.

STUDY OF ROUGE RIVER WATERSHED

During the summer an environmental study of the Rouge River watershed was carried out by students of Ryerson College under the direction of Dr. Bill Konrad, Professor of Urban Planning. The study was aimed at providing a comprehensive data base for the entire watershed (not just the river valleys), which will provide environmental information about all parts of this region. The Rouge system extends from the eastern boundary of Metro at its mouth, northwards as far as the Oak Ridges moraine north of Richmond Hill and Stouffville.

The study has identified and mapped a series of the natural features of the region, including its geology, soils, agricultural capability, hydrology, vegetation and fauna. It has also recorded the modifications to the area caused by man, whether already completed or planned for the future. These include urban development, highways, sewers and pipelines. One of the most serious threats comes from the Durham trunk sewer, now being constructed from Richmond Hill to Duffin Creek. Official plans in various municipalities also foresee the possibility of major population increases and new developments in a number of areas.

The study does not make recommendations on its findings, but documents the information in an admirably comprehensive way. The data is there for us as a club to use in whatever way is appropriate. The TFNC will shortly have a copy of the report.

Henry Fletcher (282-2478)

IS THE HIGHLAND CREEK TRYING TO TELL US SOMETHING?

The following is a letter to the Scarborough Mayor and Council and Planning Board from Lois James after serious flooding of the creek during 1976 and 1977.

"Most naturalists understand that man planning against nature will eventually be a costly business. When the costs come rolling downstream who is left to pick up the tab?

- not the policy makers who approved, last summer, without environmental qualifications, a Drainage Policy for Scarborough, which says: "All existing natural watercourses should continue to serve as major storm water drainage routes as urbanization of the watershed develops ... Council should recognize and accept the changes in the characteristics in these streams due to development as being inevitable".
- not the planners who approved the urban development in the headwaters areas of Malvern and Agincourt.
- not the developers and contractors who paved the watershed
- not the works engineers who dutifully channellized or piped the streams and tributaries.

No, none of these. It is society which suffers -- loss of public monies spent for rehabilitation; loss of the quality of the natural resources which are destroyed, both for citizens of today and for posterity; loss of confidence in the powers that be, who seem to resist recommendations given by knowledgeable groups such as the Toronto Field Naturalists.

Forty copies of a TFN publication TORONTO THE GREEN were sent to officials at the Scarborough Civic Centre last summer. There were at least eight recommendations in this report that deserved serious attention from Borough staff, Committees, Boards and Council. How many of the recommendations have been adopted to date? The citizens' conservation group "Save the Rouge Valley System" and a representative from Toronto Field Naturalists pleaded with Planning Board last summer to take

some definite stand toward some protection of sensitive natural areas. We have heard of no progress one year later. SRVS is painfully aware that the same things could happen to the Rouge as happen to the Highland Creek unless we radically change our attitude toward the environment. The Highland Creek is telling us that time is running out on old formula solutions to urban problems. Respect for and cooperation with nature is the only moral course of action. "

Lois James (284-6409)

OAK RIDGES MORAINÉ

The Ministry of Natural Resources of Ontario is conducting an ecological survey of a portion of the Oak Ridges Moraine, a prominent physiographic feature near Toronto. The study was prompted by the recognition of the moraine as an important water recharge area, associated with significant fish and wildlife resources.

Anyone having any information about the mammals, birds, reptiles, and amphibians in the moraine should contact
 ▷ Marion Tunney, Ministry of Natural Resources, Maple District (832-2261 ext. 294)

VALLEY LAND STUDIES

Metropolitan Toronto and Region Conservation Authority (MTRCA) under the Ontario government's Experience 77 program hired seven students to take a biophysical inventory of Metro's major river valleys in preparation for Metro's official plan. (TFNC publications were used as resource material by the students.) The Ministry of the Environment had 37 students doing similar work at other sites in Metro's valleys. As well, nine students were hired by the Toronto Anglers and Hunters Association to clean up Black Creek. The project was a pilot for a province-wide program "Save our Streams", and was financed by Canada Manpower Young Canada Works Program.

The Metropolitan Toronto Planning Department is also preparing a report on Metro's valley lands.

TORONTO ISLAND AIRPORT SITE

At public meetings in April and May the TFNC as well as several civic groups, rate-payers, provincial organizations, and individuals agreed on the following principles regarding the Toronto Island Airport Site:

- 1) no objections to the present use of the site
 - 2) opposed use of site as a STOL airport
 - 3) any alternate use should be as parkland for people
-

VOLUNTEERS NEEDED!

- To keep our large club functioning properly, we need volunteers for all kinds of activities. If you are interested in helping either regularly or occasionally,
 ▷ please call Muriel Miville, our Volunteer Coordinator, at 463-8066. Even if you volunteered last year, please let Muriel know if you are willing to continue.

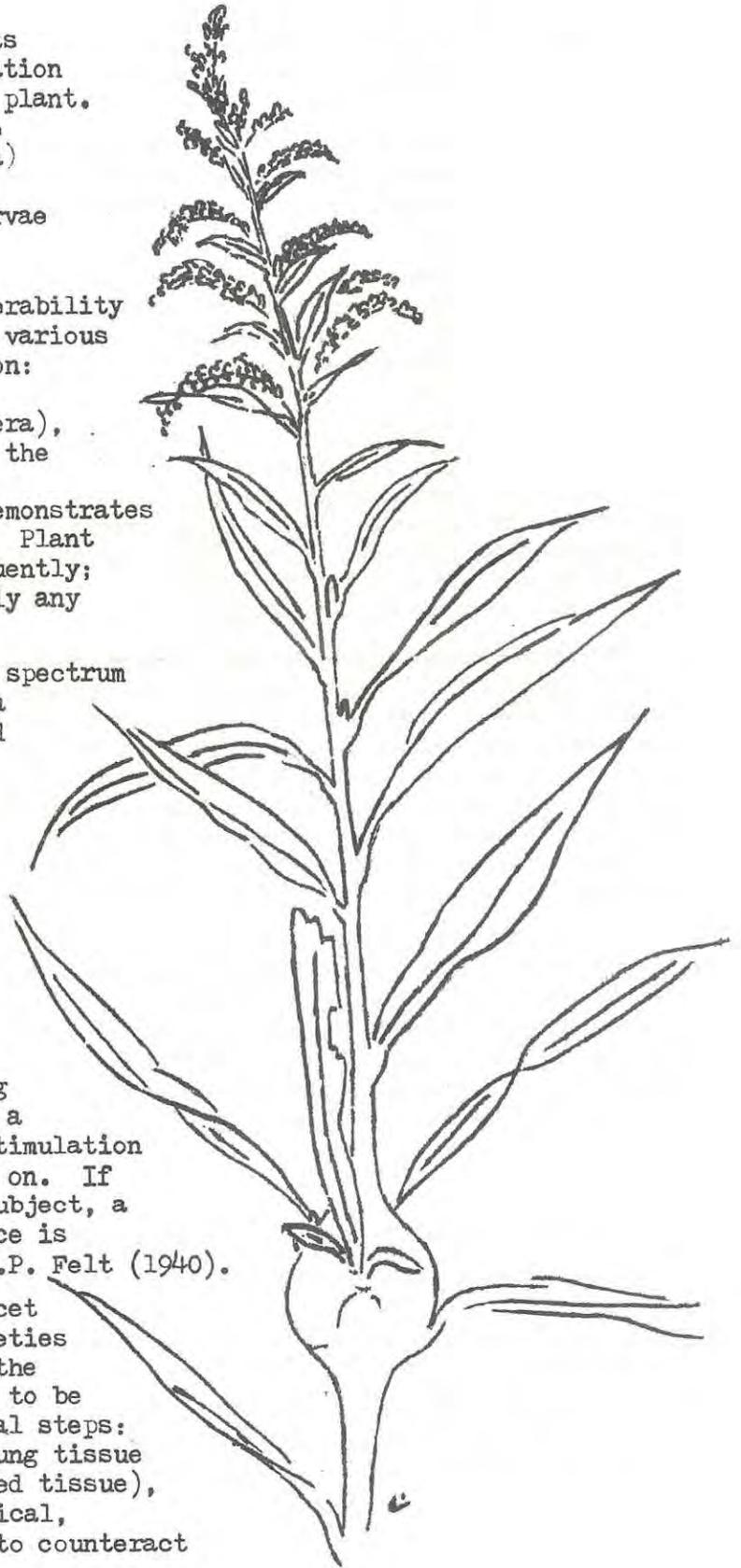
PLANT GALLS INDUCED BY INSECTS

A number of plant-feeding insects have evolved the remarkable association of gall formation on their hosting plant. This refined behaviour provides the insect (or more commonly, the larva) with shelter as well as nutrition. Sedentary insects and sedentary larvae that have come to utilize galls in their feeding habit gain survival advantages which offset their vulnerability as stationary feeders. Insects of various groups have adopted this association: they are members of the wasp order (Hymenoptera), the fly order (Diptera), the beetle order (Coleoptera), and the bug order (Hemiptera). The wide occurrence of this feeding habit demonstrates the ecological significance of it. Plant galls caused by insects occur frequently; one may find various galls in nearly any natural stand of vegetation.

Galls can range through a large spectrum of complexity. A good example of a highly complex gall structure found in North America is that of the oak-apple gall, produced by a wasp. This gall when it "ripens" falls off the leaf on which it was formed and will actually root! On the other extreme is the simple pouch formed by aphids on various host plants. Willows host various insect galls of which the cabbage-like gall is the most stunning. Goldenrod is very susceptible to several galling insects. Spruce trees can produce a bizarre "pineapple-like" gall on stimulation by aphids. The list can go on and on. If the reader is interested in this subject, a book which is available as reference is "Plant Galls and Gall Makers" by E.P. Felt (1940).

I think that the most unique facet of gall formation is that all varieties of galls appear to be produced in the same manner. Gall formation seems to be the result of three basic ecological steps:

- 1) The insect feeds on suitable young tissue (i.e. relatively undifferentiated tissue),
- 2) The plant exudes a defence chemical,
- 3) The insect secretes a chemical to counteract the plant's defence.



The execution of these steps produces a side effect resulting in gall growth.

As the insect larva or adult feeds on plant tissue it tears it. Ruptured plant membranes release compounds known as quinones, which act to "tan" plant tissue (effectively to produce scar tissue) and so prevent infection or loss of further plant fluid.

Quinones are very toxic compounds and so plant feeding insects have a salivary enzyme to counteract them. This enzyme is called polyphenol oxidase (or PPO). Thus by neutralizing the plant's defence chemicals the insect is able to continue feeding with no ill effects.

I mentioned that all plant-feeding insects use PPO, but gall-forming insects are so due to their long-term secretion of PPO in a single area. Sedentary larvae and adults prolong feeding in a limited area of plant tissue and cause a local acute chemical overdose by continuous secretion of the substance. This overdose has dramatic effects on the plant's chemistry.

Heavy concentrations of PPO will stimulate the production of an important plant hormone, indole acetic acid (or IAA). Indole acetic acid is responsible for directing plant growth and development patterns. Normally, growing points and sexual structures produce high levels of IAA in the plant. These high levels stimulate the transport of nutrients to nourish these fast growing areas as well as initiating differentiating patterns of tissues to produce either vegetative structures or fruiting structures.

The local stimulation of IAA production caused by PPO, secreted in the saliva of the insect, will cause the affected tissue to act like a growing point. Enlarged cells or abnormally high numbers of cells will be produced in a limited area where the insect feeds. The area may be simply just this swelled structure or it could develop into a fruit-like structure (if the stimulation is strong enough). In both cases these structures are only within the plant's total genetic capabilities and so the only part the insect plays in the structure formation is that of external stimulation. In effect the insect is using the plant's language to tell it to build it a home to feed it more nutrients.

In conclusion, we see that insect galls are basically a normal food-feeder relationship. The insect gains food, certainly, and also a home but what of the plant? Well, the plant benefits in the fact that it contains the insect so that primary tissue damage is limited. This prevents other invaders from getting to the plant. Gall formation is a beautiful ecological relationship where an optimum compromise is achieved to allow the coexistence of both predator and prey.

Peter Toivonen
University of Guelph

(drawing of goldenrod and gall by Edna Cartwright)

Ontario Weeds by J.F. Alex and C.M. Switzer, published by the Ministry of Agriculture and Food, Ontario

This recent publication is available for \$2.50 each from the Ontario Government Bookshop, 880 Bay Street. Included in it are descriptions, illustrations and keys to the identification of about 270 of Ontario's most important weeds.

THE TORONTO JUNIOR FIELD NATURALISTS' CLUB

Since 1931 the Toronto Field Naturalists' Club has sponsored a junior club known as the Toronto Junior Field Naturalists' Club. Membership is open to boys and girls from 8 to 16 years of age. The main purpose of the junior club is to encourage children to take an interest in nature and further their understanding of it. Meetings are held once a month — usually on the first Saturday of each month from October to May in the theatre of the Royal Ontario Museum (southwest corner of Bloor St. and Avenue Rd.). From 10:00 a.m. to 11:00 a.m. presentations are given by members, and nature films are shown. At 11:00 a.m. the children join in smaller interest groups under the supervision of older leaders. Many times this involves field outings to various areas in the Toronto region.

In the spring an all-day annual field trip to one of the conservation areas near the city takes place. Once a year the junior club publishes a magazine called "Flight". It contains poems, quizzes, drawings and stories all prepared by the members themselves. The magazine has proven to be a significant publication.

Anyone wanting further information about the club, please contact the director,
 ▽ John Martin, 98 Nealon Ave., Toronto M4K 1Z4 (tel. 425-3417).

HAVE YOU RENEWED YOUR MEMBERSHIP?

TFNC WHO'S WHO

Membership secretary,
publication sales,
information

Mrs. Ida Hanson 488-7304
83 Joicey Blvd.
Toronto, Ont. M5M 2T4

President: Ron Thorpe - 484-1807

Vice President: Wes Hancock - 757-5518

Past President: Bill Andrews - 425-4607

Board Secretary: Carole Parsons - 494-8487

Treasurer: Helen Yemen - 783-2155

Members of the Board:

Linda Cardini - 924-5008

Bill Freedman - 978-3547 (days)

John Lowe-Wylde - 284-5628

Reta McWhinnie - 421-4537

Mac Smith - 225-3208

Henry Fletcher - 282-2478

Helen Juhola - 924-5806

Sheila McKay - 266-7504

Joan O'Donnell - 745-9111

Bird Group Chairman: Red Mason - 621-3905

Botany Group Chairman: Wes Hancock - 757-5518

Ravine Group Chairman: Jack Cranmer-Byng - 488-3262

Ravine Group Secretary: Ruby Rogers - 789-9612

Newsletter mailing (change of address, etc.): Lorelei Owen - 225-2205

Newsletter preparation: Helen Juhola, 51 Alexander St. Apt. 112, Toronto M4Y 1B3

To: Toronto Field Naturalists' Club
83 Joicey Blvd., Toronto, Ont. M5M 2T4

Date _____

I/We would like to () join or () renew membership.

Name _____

Telephone _____

(work) _____

Address _____

Postal Code _____

Category: () Single \$7.00, () Family (adults) \$10.00

() Full-time student (16 or over) \$2.00, () Corresponding (those living
more than 30 miles from the Royal Ontario Museum) \$3.00

Senior Citizens, 65 or over:

() Single \$4.00, () Family \$6.00, () Corresponding \$2.00