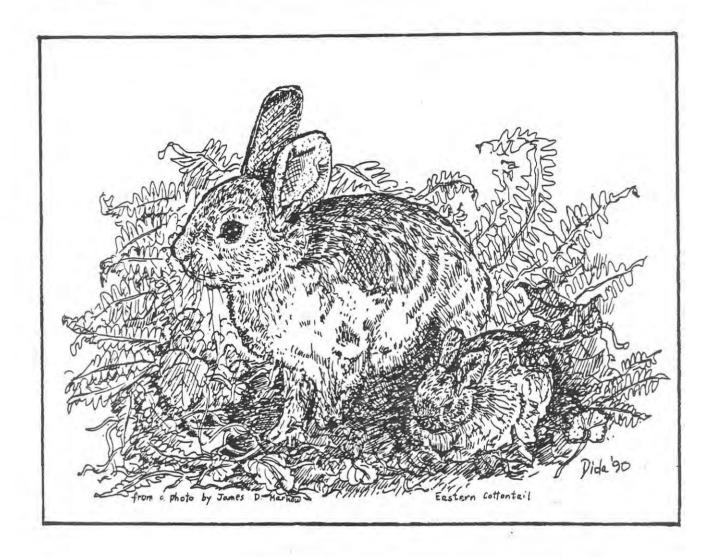
TORONTO FIELD NATURALIST

Number 427 April 1992



Inside

Amphibians & reptiles 9
Birds 2,7,8,9,20,21,22,23
Coming events 28-29
Environmental issues 6-7,10,17-20,24,25
Ethics 17
Fishes 9,18
Invertebrates 9,19,24,26

Mammals 1,9,21,22,26
Plants 5,14-16,17,18,19,24,25,27
Projects 11-12
TFN - meetings 2
nature information centre 11
newsletter submissions 16
outings 3-5
Weather 27

TFN MEETINGS

Monday, April 6, 1992 - MAKING SENSE OF EVOLUTION

at 8 pm

155 College St.

6th floor auditorium

an illustrated lecture by Jack Lord, Manager, Education Services, Royal Botanical Gardens

The concept of biological evolution was not a brilliant new idea conceived by Charles Darwin. As a result of rapidly accumulating evidence, it began to emerge in scientific circles a century before Darwin's voyage on the Beagle. It was simply an idea whose time had come. This talk will take a biographical approach to the emergence of evolutionary theory.

TFN SOCIAL HOUR

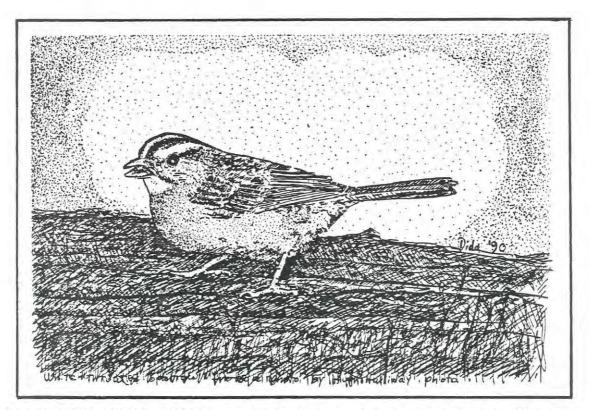
from 7 pm to 8 pm

- memberships and publications for sale
- · a display of Mary Cumming's art

e free coffee

in the foyer outside the auditorium

NEXT MEETING: Monday, May 4, 1992



THE WHITE-THROATED SPARROW, in 1990, was reported most often to TFN in April and the first three weeks of May, and from mid-September to the end of October. A similar pattern was recorded in 1988 and 1989. Fewer reports have been received for the winter months and March, none for the summer months. The drawing is from a Hugh Halliday photo.

TFN OUTINGS

April

	•		
Wednesday April 1	TORONTO ISLAND - nature walk Leader: Ann Millett	lakeshore, Toronto	
10:30 am	Meet at the ferry docks at the foot o optional.	f Bay Street. Lunch	
\$ ferry tickets	A trip to the Island is always a pleasure. From the boat we may see ducks and a view of the gull colony on Muggs Island. On land we may find early migrants resting after their flight across Lake Ontario.		
Saturday	NORTH YORK CENTRAL LIBRARY - nature art	North York	
April 4 10:30 am	Leader: Judy Blonski Meet at the turnstiles in the North Y Bring camera, sketching materials and stool, o optional. (Members' work is often discussed d	r just come and enjoy. Lunch	
Sunday	TORONTO ISLAND - birds	lakeshore, Toronto	
April 5	Leader: Ross Harris		
10:30 am ferry tickets	Meet at the ferry docks at the foot o We are hoping to see migrating waterfowl and l may even see migrating swans.)		
Wednesday	MOCASSIN TRAIL PARK - nature walk	East Don, North York	
April 8	Leader: Siglinde MacKay		
10:30 am	Meet at the southeast corner of Don Mills Road and the Donway		
	East (south of Lawrence Ave. East). A little known section of the East Don where w wildflowers beginning to emerge on the foreste	e may find early migrants and	
Saturday	TODMORDEN MILLS - treasure hunt	Don, East York	
April 11 10 am	Wear solid boots and bring workgloves. Garbag be provided. Washrooms will be open. Morning skumk cabbage and Japanese butterbur in flower of the season, and migrating birds, and to fee	corner of Pottery Road and Broadview Avenue. s and bring workgloves. Garbage bags and refreshments will ashrooms will be open. Morning only. A chance to see and Japanese butterbur in flower, the first snakes and toads and migrating birds, and to feel you are doing your part in ore the Don Valley. * Parking available in valley.	
Sunday	ASHBRIDGES BAY - birding for beginners	lakeshore, Toronto	
April 12 11 am	Leader: Helen Smith Meet at the southeast corner of Queen Ave. Bring lunch. Walk may end at a Those wanting to learn about birdwatching shou bird guide and binoculars and be prepared to 1 migrants along the shoreline.	a different transit stop.	
Wednesday	DOWNSVIEW DELLS - nature walk	Black Creek, North York	
April 15 Leader: Joan O'Donnell			
10:30 am	Meet at the park entrance on the south side of Sheppard Ave. West (between Keele and Jane). Lunch optional.		
	A good place to see early migrants and spring	wildflowers.	

APRIL OUTINGS (cont'd)

Saturday LAVENDER CREEK & SMYTHE PARK - nature walk Black Creek, York April 18 Leader: Gavin Miller 10 am Meet at the northwest corner of St. Clair Ave. West and Keele Street. Lunch optional. Walk will end at a different public transit stop. Since Indians lived along the banks of the Black Creek much has happened to this once lovely valley. We will be exploring a polluted tributary and a restored section of the valley. Skunk cabbages will be flowering and, depending on the weather, toads may be trilling and birds migrating. LESLIE STREET SPIT - birds lakeshore, Toronto Sunday April 19 Leader: Howard Battae 10:30 am Meet at the foot of Leslie Street. Lunch optional. This outing will be to see migrating land birds and waterfowl. A good chance to explore the spit and enjoy the views of Toronto in the distance. METRO ZOO - nature arts Tuesday Rouge, Scarborough April 21 Leader: Alf Buchanan 10:30 am Meet at the zoo entrance on Meadowvale Road north of Sheppard Avenue East. Lunch optional. entrance Bring cameras, sketching material including a stool, or just come and enjoy. fee If the weather is good you may enjoy a visit to the Rouge Valley; if it is poor, the many pavillions allow you to visit the rest of the world -- its plants and animals. Wednesday BROOKBANKS RAVINE - nature walk East Don, North York April 22 Leader: Graham Neville 10:30 am Meet on the south side of York Mills Rd. at Fenside Dr. (just east of the Don Valley Parkway). Lunch optional. Bring along your copy of the TFN ravine study of this area and see if we can find plants and animals not listed. Dandelions and coltsfoot should be flowering and perhaps some native wildflowers. A sheltered ravine with lots of places for birds. Saturday MORNINGSIDE PARK - nature walk Highland Creek, Scarborough April 25 Leader: Phil Joiner 10 am Meet at the park entrance on the west side of Morningside Ave. between Lawrence and Ellesmere. Morning only. This very large, wild park is one of the best places in Metro to see trilliums, and skunk cabbages. Plenty of spring flowers should be up and birds should be moving through. Saturday MT. PLEASANT CEMETERY - Emily Hamilton Memorial Service April 25 Meet on the east side of Mt. Pleasant Road at the cemetery 1:45 pm entrance. Everyone welcome. A memorial service will be held in the cemetery for Emily Hamilton. It will be followed by a walk through the shrub garden where she led her last walk for the Toronto Field Naturalists.

APRIL OUTINGS (cont'd)

Sunday

EAST POINT PARK - nature walk

lakeshore, Scarborough

April 26

Leader: Ken Cook

11 am

Meet at the foot of Morningside Ave. Bring lunch.

A lovely wild place to visit at any time of the year. Service berries and buffalo berry will be blooming on the edge of the bluffs. For those who don't want to climb down to the beach, there are lots of paths and lookouts

to enjoy.

Tuesday

GLEN STEWART RAVINE - birds

Toronto

April 28

Leader: Fred Bodsworth

6:45 pm

Meet at the ravine entrance (south side of Kingston Rd., west of Beech Ave.) This will be the first of our summer evening walks (one a week till mid-August). This will be a leisurely stroll to look for birds. Some wildflowers will be

in bloom in this lovely deep ravine.

Wednesday

HUMBER VALLEY - nature walk

Humber, York

April 29

Leader: Elly Elder

10:30 am

Meet on the north side of Eglinton Ave. West at Emmett Ave.

(west of Jane St.) Walk may end at a different public transit

stop. Lunch optional.

A pleasant valley in which to walk and enjoy migrating birds, early amphibians

and reptiles and spring flowers. One steep hill to climb.

The
PURPLE-LEAF
SAND-CHERRY
(Prunus X cistena)

is often planted in parks in Toronto:

It is a hybrid of sand-cherry and cherry-plum and may have white or rose flowers which come out with the purplish/reddish leaves.

The tiny fruit is hard to find.



KEEPING IN TOUCH

Jan. 27, 1992

Please extend our gratitude to those members of the Toronto Field Naturalists who showed up an hour early at the December meeting to participate in our study of "scenic beauty and old growth". The results of this study will help determine the characteristics of forests that individuals/interest groups find visually appealing, and will provide a better understanding of the issues the Ontario Ministry of Natural Resources will be facing as a conservation strategy for old growth ecosystems is developed.

For the Clubs' services of completing the surveys, please find a cheque for \$195.00 (39 surveys @ \$5.00 each).

The spacious accommodations and large screen certainly made viewing and evaluating four slides at one time very easy. In addition, I enjoyed the opportunity to take in one of your monthly meetings and found Dr. David Gaskin's experience in butterfly conservation fascinating.

Gail Jackson Research Assistant, OMNR

Feb. 12, 1992

I am writing in response to your letter of Jan. 20, 1992, regarding the province's plans to effectively end the lengthy dispute over the Toronto Islands residential community.

It has been the position of this Government to support the continued existence of a residential community on the Islands.

I recognize that this is an important matter, but I believe that the proposed legislation is sensitive to the concerns that you raised. Any further development will occur in the area within the already existing residential community. Any areas that are "environmentally sensitive" will be given due consideration before development occurs.

Thank you for bringing your concerns to my attention.

Dave Cooke, Minister Ministry of Municipal Affairs

Feb. 14, 1992

I am in receipt of your letter dated Feb. 3, 1992 requesting the status of plans to "restore" High Park's natural heritage.

As you are aware, my Department is currently engaged in a comprehensive study of High Park which, among other things, is examining the feasibility of restoring and rehabilitating portions of High Park's natural environment. A major component of this study will involve the public review of draft proposals for management and restoration strategies for the park.

I wish to confirm that a draft document containing restoration and management strategies for the park will be tabled with the Neighbourhoods Committee at its meeting on May 13, 1992. I expect an extensive public

KEEPING IN TOUCH (cont'd)

consultation process to take place during the course of the summer and into the fall. Ideally, the matter would be dealt with by City Council prior to the end of the year.

In the meantime, I will be taking no further action with respect to thinning of trees and will not remove trees unless they are dead, structurally unsound or diseased.

I look forward to the consultation process in order that all points of view with respect to the future of High Park, including the formation of an advisory committee, can be tabled and discussed.

Herb Pirk, Commissioner Dept. of Parks & Recreation City of Toronto

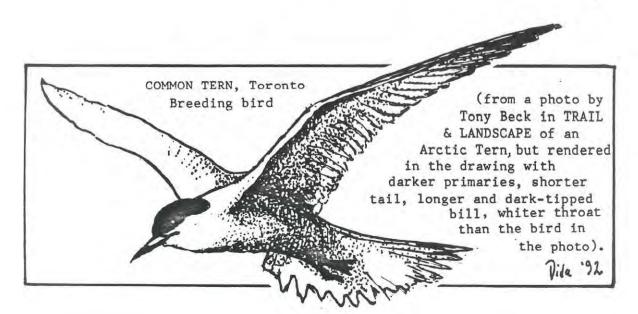
Feb. 27, 1992

Please find attached the Metropolitan Toronto Regional Conservation Authority response to your concerns regarding dumping in the valleylands behind the Hugh McMillan Centre and the Canadian National Institute for the Blind. As you will read, both institutions admit that the practice has occurred and is unacceptable, and they have agreed to inspect the site and reverse the process.

The MTRCA also suggests that if the practice is not rectified to your satisfaction, you may want to contact the respective property owners to organize a community clean-up of the area.

I trust that this course of action meets with your approval. Should you have any further questions or concerns, then feel free to contact my office at your convenience.

Bev Salmon, Metro Councillor North York Centre South



SUMMARY OF 1991 NIAGARA PENINSULA HAWKWATCH

Another spring migration has passed, and with it the 1991 hawkwatch at Beamer Conservation Area above Grimsby, the seventeenth year for this count. What appeared on the surface to be a somewhat uneventful year was actually a very interesting one, with numerous highlights, including record high counts for three species.

A total of 14,951 hawks were tallied between March 1 and May 15. This total was almost identical to the 11 year average (from 1980-90) of 14,971. A total of 29 observers contributed 548.3 hours of observation time. Unfortunately, this was below the 11 year mean of 577.5 hours, and was the second lowest since 1980. All of the observations were from the parking lot at Beamer Conservation Area.

New record high counts were made in 1991 for osprey (46), northern harrier (219), and rough-legged hawk (145). A one day record count for harriers (28) was set April 14. The second highest one day count for rough-legs, on April 12, was two birds shy of the record of 24.

The 17 bald eagles counted this year tied the record from 1989. The eight golden eagles reported were above the 11 year average of six. One other golden eagle was observed April 25 from the lookout at Beamer Point, but was not seen by the counters at the parking lot. Two unidentified eagles were also tallied in 1991. The turkey vulture count of 1,785 was the second highest on record.

Amongst falcons, the five peregrines counted were one below last year's record. Two peregrines occurred on the early date of March 26 and two were also seen on April 4. The 11 merlins were also one bird shy of the record from 1987. The American kestrel total of 180 was well above the 11 year average of 118.

Sharp-shinned hawk numbers, at 3,767, were well below the 11 year average of 4,258, and were almost half of last year's record high count. The northern goshawk total of 20 birds was also well below the 1980-90 mean of 32. Apparently the peak of the ten year cycle for goshawks is still two years away. The Cooper's hawk tally (220) was the third highest ever, although it was down considerably from last year's record (311).

As for buteos, the red-tailed hawk total was slightly above the average of 2,968. The red-shouldered hawk count of 761 was below the 11 year mean of 845, and was almost half of 1990's record high 1,440 birds. The 2,063 broad-winged hawks counted were the second lowest number since 1978. This year's largest flight day was April 25, when 45 percent of the year's total (944) was counted. However, a total of 1,957 unidentified buteos (which, incidentally, made up the majority of this year's record high number of unidentified raptors -- 2,681) were also reported on that day. Presumably most of these unidentified buteos were actually broad-wings flying at a great altitude and beyond definite recognition by the counter. Many thanks to all the volunteer hawk counters.

Rob Dobos

For more information on the Niagara Peninsula Hawkwatch, contact John Stevens, 1365 Bayview Dr., Apt. U3, Toronto M4G 3A5 (484-4079).



TORONTO REGION WILDLIFE REPORT

The number of wildlife reporters for the year 1991 has risen to 82, including seven compilers and columnists whose sources include a great many more reporters who have been thus indirectly involved in TFN records. For instance, nestled among the bird observations in THE BULLETIN of the Richmond Hill Naturalists was

an American porcupine, spotted at the Whitchurch Conservation Area, well within the 48 km radius of the Royal Ontario Museum which constitutes our Toronto Region. Well over 200 reports of observations of MAMMALS were received. Of the 33 species on our TFN Mammal List, 20 were reported in 1991, plus two species not on our list, including the oppossum! It had been reported from near Hamilton. Our report was from Brampton. For the first time, a TFN member reported a groundhog on February 2!

Over 2,000 reports of BIRDS observed have been received so far for the year 1991. Only 10 species on the TFN Bird List have not yet been reported for 1991: least bittern, upland sandpiper, Wilson's phalarope, little gull, black tern, alder flycatcher, loggerhead shrike, western meadowlark, red crossbill and white-winged crossbill. Reports of 36 bird species not on our list have been received for 1991.

Mentioned in 38 TFN reports from outings leaders and other members for 1991 were 6 REPTILES and 5 AMPHIBIANS. These will be sent to Bob Johnson to add to his list. In 11 such reports 5 FISHES were mentioned. Over 200 reports of INVERTEBRATES were received - from early February, 1991, with a greyish spider walking on the snow, through the earthworms of March, mourning-cloaks in April, mayflies in May, painted ladies in June, skippers in July, monarchs in August, orb-weavers in September 1991 and 1991 an

skippers in July, monarchs in August, orb-weavers in September, red admirals in October, fall cankerworms in November and their adult form, the winter moth, in early December, to name a few.

For the year 1992, 18 reporters have sent in their observations so far. Please send in your 1992 observations periodically, if possible, and any notes you may still have on hand for 1991:

Amphibians and reptiles to: Bob Johnson, Metro Zoo, P.O. Box 280,

West Hill, Ont. MIE 4R5.

(phone 392-5900, eves. 839-7139)

Other wildlife, to Diana Banville, Apt. 710 - 7 Crescent Place

Toronto, Ont. M4C 5L7.

By the way, "other wildlife" includes invertebrates. A working list of Toronto butterflies is being prepared. Call 690-1963, if you need a copy. Thanks reporters!

DB

warbling

vireo -

FOR READING

ECO-BLUFF YOUR WAY TO GREENISM by Paul Spencer Wachtel and Jeffrey A. McNeely; Bonus Books, Chicago, Ill., (1991); \$8.95 U.S.

Awash in a sea of depressing statistics, ominous warnings and dire predictions about the environment, it is easy for the average person to become overwhelmed by all of the doom and gloom seriousness. Perhaps a little humour on the subject would provide an antidote while still delivering the message.

This is precisely what environmental authors Wachtel and McNeely have done. In this tongue-in-cheek primer to "green" posturing, we are informed on how to don the "green" garb of the eco-developer, eco-greenie, eco-politician, eco-consumer and others in order to bluff our way to instant eco-credibility. In the process, the contradictions, falsity and ambiguity shine through the humour as was the authors' intention.

So if you're tired of endless facts and figures and hearing debates amongst experts who can't agree on anything, perhaps the solution is to look at the issues in a new light, something which "Eco-Bluff Your Way to Greenism" does in its unique style of humour and well-aimed satire.

Richard Aaron

THE LITTLE OLD LADY RAG

Let us wander by the river where the gabion baskets gleam holding back those boulders in smart array. Strange we once thought pleasant a gamboling little stream but we are old and our values are outdated, so they say.

Let us marvel at the concrete which secures the river's banks, see how well it keeps the river running straight.

Strange we gain no pleasure from those miles of man-made blanks and we cheer the river onwards when it rises in full spate.

Do you see that soil slippage all along the valley rim where the slope is sliding downwards to the road? Strange that we should chuckle, but our wits are growing dim and you TOLD us all that Fill was quite the Mode.

So pardon while we mumble all this antiquated jumble about trees and plants and rivers which you find a pain to hear. Just treat us as old ladies with our platitudes atumble and we'll pin you to the floor in no time flat.

Louise Herzberg

(with apologies to A. B. Paterson)

PROJECTS

BE A V.I.P

It's easy -- just spend a Sunday afternoon in Sunnybrook Park as a TFN volunteer at our Nature Information Centre.

Since 1980 members of TFN have kept the pioneer log cabin open to the public Sunday afternoons. As well as information about our club the cabin contains displays and many free brochures and maps. Toronto Field Naturalists

V.I.P.

(Volunteer In Park)

To operate this program we need five volunteers who are willing to serve as "key" people. (These people are expected to be "on duty" once a month from May to October (5 afternoons) and see that the cabin is opened at 12 noon and closed at 4 pm.) Other volunteers are needed so that we have four members in the cabin each day we are open. We may not appear to "need" four people, but if we are busy, it's a long shift without a break; if we are not busy, it's a great way to spend a few hours meeting fellow TFN members.

So if you're called, please say "yes"; if you're not called, call 968-6255 and we will call you back if you leave your name and number. Remember the cabin (as with all our activities) is open "rain or shine". You don't have to be an expert naturalist. Just encourage the public to look at the pamphlets and displays. You will soon know the answers to the most frequently asked questions: where is the washroom? snackbar? telephone? And you may even enjoy some of the pamphlets and maps and displays!

ETOBICOKE HERITAGE STUDY

The Heritage Etobicoke Foundation with the support of the Government of Ontario through the Ministry of Culture and Communications is pleased to announce a Heritage Study of Etobicoke designed to create a master plan for heritage preservation. Basically it will analyse the current situation and present a report based on input from concerned individuals, groups, and boards. The study will develop objectives, policies and programs to be followed by a final report and awareness campaign. If you have questions, information, or suggestions, please call Jacqui Code at 761-9622. "Our heritage includes tangible elements we can see and feel, such as buildings, artifacts, art and archival collections, archaeological sites and natural heritage sites...".

CITIZENS FOR A LAKESHORE GREENWAY

Citizens for a Lakeshore Greenway are organizing a Scarborough Chapter. People interested in joining a steering committee for a Lakeshore Greenway and Trail should contact Boris Mather (698-6131) or Bill Frankling (535-8118).

PROJECTS (cont'd)

HELP TO PLANT TREE SEEDLINGS

The Ontario Ministry of Natural Resources is asking public support in planting up to 23 million additional tree seedlings which will be made available to eligible individuals, groups and organizations this spring. This year up to 35 million tree seedlings, an increase of 23 million from previous years, will be available to the public for planting. Normally the ministry offers about 12 million tree seedlings to the public each year through sales at local MNR offices and to Ontario's conservation authorities. To qualify, customers must buy a minimum of 300 seedlings at a cost of 10 cents per seedling plus a handling charge and tax. The ministry will then provide additional seedlings at no extra cost. In addition, the trees must be planted on appropriate sites at least two hectares in size, and all sites must be approved by MNR. This initiative was designed -- and its eligibility criteria set -- so as to minimize impacts on private growers. The additional seedlings being made available this year cannot be stored in provincial nurseries for later use, as storage would make them unsuitable for successful planting. In addition, the seedlings must be refrigerated during shipping, and high costs rule out the option of sending the seedlings to other provinces or countries. Persons or groups interested in obtaining tree seedlings, or requiring further information, should contact their local Ministry of Natural Resources district office or the Natural Resources Information Centre, Room M1-73, Macdonald Block, 900 Bay St., Toronto, Ont. M7A 2C1, telephone (416) 314-1553.

adapted from a NEWS RELEASE of the Ontario Ministry of Natural Resources, Feb. 12, 1992

SCARBOROUGH ENVIRONMENTAL ALLIANCE

Individuals and groups are invited to join a Scarborough environmental alliance in order to support and help carry out positive environmental projects within the City of Scarborough. We are currently receiving ideas to celebrate Environment World Day (June 5) and Earth Day (April 22). Our headquarters will be the Community Resource Centre of Scarborough, 2800 Eglinton Ave. East (in the Elaine Plaza at McCowan and Eglinton). Founding members include Save the Rouge Valley System (SRVS), Families Against Toxic Environments (FATE), Womens' Institute (York East district), Earth Day Scarborough, Social Planning Council of Scarborough and Environmental Action Scarborough. For more details, call 267-5972.

CITY OF VAUGHAN GREAT TREE HUNT

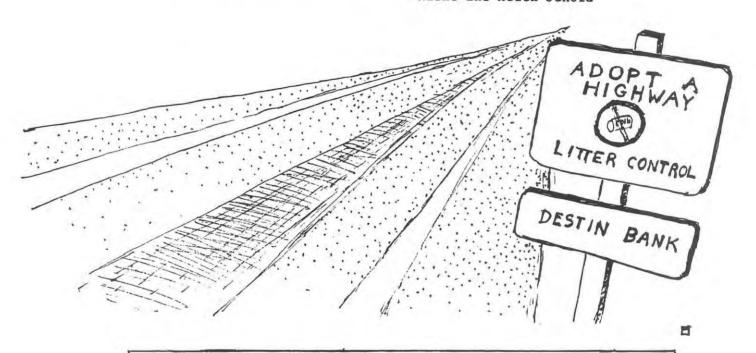
Do you want to help Vaughan find and identify the significant trees in this city? Then enter the GREAT TREE HUNT. Categories include oldest, tallest, most decorative, most unusual, etc. Include a dated photograph, location map, and a 100-word essay describing items of significant interest, historical value, wildlife habitat etc. Deadline: May 25, 1992. For more information call the Vaughan Park Department at 932-8500.

from THE BULLETIN (Richmond Hill Naturalists), No. 326, Dec. 1991

ADOPT A HIGHWAY

Highways in northern Florida have signs reminding drivers that sections of the roadsides have been adopted by local businesses and clubs who are responsible for litter control. It's an idea that seems to work. On a trip to the Destin area in February 1992, we saw very little litter along highways that had been adopted.

Aarne and Helen Juhola



MACHINITIS

When those big machines come by cutting, lopping, spraying, I pretend they're little boys, making such a lot of noise, just playing!

When they've put their toys away
I'm hoping and praying,
there'll be something left
at the end of the day!

Diana Banville Taylor Creek Park, May, 1989

Epilogue:
 While my head is still a-whirl,
 then I notice one's a girl.

WILD PLANTS IN AND AROUND TORONTO

Invaders into our streets (continued from TFN 426, page 23)

Since species in the localities we have mentioned (pavement, slopes, gardens, along the streets) change from year to year, it is impossible to give a systematic account of what grows in a city like Toronto. One never knows what species one may encounter next. We will point out a number of species which may turn up anywhere.

First of all there are the thistles which belong to the Compositae. Two of the most bothersome of these have come to us from Europe. They belong to the genus Cirsium which is characterized by feathery hairs on the fruits. In old times these plants were supposedly able to cure varicose veins. Their sharp prickles protect them against browsing. The flowers of Bull Thistle (C. vulgare) have larger heads than those of Canada Thistle (C. arvense), and the stem is winged.

After one year the seedling of the Canada Thistle dies off and further development of the plant is from root buds.

We have already encountered some plants which arrived in Europe as presents from North America; the reverse of that is actually more common. One example, Galinsoga ciliata (the Hairy Galinsoga) came to us from South America and then spread to Europe. Because it is from the subtropics, it is very sensitive to frost. It has small capitula with only five white ligulate flowers and a few tubular flowers in the brown centre. Like other composites we mentioned before (the ragweeds) the reduction in the structure of the capitula is a primitive character which is, as it were, a step back in this highly-developed family. Galinsoga is not common in our streets, but one year a large part of the Ecology Garden on Madison Avenue was full of it.

The best-known example of a North American plant invading Europe is the Canada Fleabane (Erigeron canadensis). It happened in the 17th century and the distribution was fast. Although it is a common species throughout Canada, it seems to struggle for life in Toronto, and most specimens we saw were poorly developed. The plant is a composite, and has many small capitula and narrow leaves.

Most people know the famous monarch butterfly. It is famous because of its migration far south to Mexico. Its caterpillar lives on the Common Milkweed (Asclepias syriaca) which contains a poisonous milky juice. Although the poison does not harm the caterpillar, it accumulates in its body. Birds who try to eat the caterpillars quickly learn their lesson.

Other insects also feed on the leaves of milkweed, and it is interesting that the colour of these insects tends to be the same red as the Monarch butterfly. Other insects visit the reddish flowers searching for nectar (nectar is the sweet secretion from glands in the flowers and becomes honey in the stomach of the bee). While searching, insects may become trapped in one of the five little clamps on the central column in the flower. If the insect is strong enough to escape, it will take with it two clumps of pollen, each on a little stem. If the insect is not strong enough, it will remain trapped and eventually dies. That is why we may find dead flies and even bees in milkweed flowers. However, milkweed does not digest the dead insects; it is not an insectivorous plant.

PLANT INVADERS (cont'd)

The scientific name is a misnomer because milkweed has nothing to do with Syria.

Each flower produces two capsules containing seeds with silky hairs attached. In the 18th century attemps made to spin these hairs into a vegetable silk failed because the fibres are too short and too brittle.

The juice of milkweed contains caoutchouc, but the production of rubber turned out to be too costly, even though the plants do not require much care in cultivation.

We all know the pleasant fragrance of freshly-mown grass. The smell is caused by a substance called cumarin, which is present in high concentrations in some grasses and in a few other plants, amongst them the two species of Melilotus or sweet clover that we may encounter during our walks in the streets. Meli is the Greek word for honey and lootos, the Greek name given to various plants which, for one reason or another, were deemed desirable. Of the two species we have, one has long racemes of white flowers (M. alba); the other has yellow flowers (M. officinalis). Both contain cumarin, the white more than the yellow. Cumarin cannot be smelled in the living plant, but only when the plant is dried. Put a leaf between the pages of a book to experience this. In the living cell cumarin is linked to a sugar (glucose) which can only be liberated by an enzyme. When the cell dies, the enzyme comes in contact with the glucoside. In the living cell the two substances are separated by a membrane around the vacuole, but this barrier disappears when the cell dies.

There are a few yellow compositae that merit mention. Goat's Beard (Tragopogon pratensis) (pratensis = growing in meadows) has some similarities with the Dandelion. The heads are only open in the morning. After 12 noon and when there is no sun, they remain closed. Also, when they are open they follow the path of the sun (heliotropy), except on very hot days. As well, the capitula remain closed while the fruits ripen and when ripe exhibit the same globular hairy formation as the Dandelion. Each individual fruit carries a number of feathery hairs on a stem (the so-called pappus) and this structure acts as a parachute, allowing the fruits to be dispersed by the wind. This explains the name of the plant: tragos = goat and pogon = beard.

While we are looking at yellow Compositae, we should also mention the Sow-Thistles. These plants contain a milky juice. One species, the Smooth Sow-Thistle (Sonchus oleraceus), is a truly noxious weed, difficult to eradicate because of its spreading rhizomes. The flowers are a pale yellow colour. "Oleraceus" means that one can eat the plant as a vegetable, but there is no record that it is actually eaten. The leaves are soft and lobed, with a large terminal lobe and pointed bases. Another species, the Prickly Sow-Thistle (S. asper) (asper = rough) is very similar, but the flowers are a darker yellow, and the leaves are not lobed, but prickly. The leaves clasp the stem with their round bases.

As summer ends and fall approaches, the nights become longer and the days shorter; some plants react to this by flowering. They are called "short-day plants", although it is actually the length of the night (the dark period) which is critical and must not be interrupted. To this group belong the Asters and the Goldenrods, both Compositae. The most common

PLANT INVADERS (cont'd)

Aster in the streets and gardens is A. cordifolius, the Heart-leaved Aster, a North American species with blue or violet ray florets and red disc florets in the middle.

The genus Solidago, or the Goldenrods, is a large and difficult one, but the two most common species in Toronto will be familiar to many people and are easily recognized. One, the Zigzag Goldenrod is conspicuous because of its large leaves, an unusual feature in Solidago species. It has a zigzag stem and is therefore called S. flexicaulis. The other, S. canadensis (Canada Goldenrod) has long narrow leaves and smaller heads. Both are truly North American species.

In one corner Common Mullein (Verbascum thapsus) (Figwort family) and Wormseed Mustard (Erysimum cheiranthoides) (Cheiranthus = wallflower) were growing together. The Mullein was in its first year. Its leaves were arranged in a circular form called a rosette. The next year, a large spike with yellow flowers would grow up, using the food accumulated by the rosette of leaves. The leaves are covered with a woolly layer which under a microscope is seen to consist of tree-like branched hairs, each branch consisting of one cell, truly fascinating structures and very protective.

Not surprisingly the Wormseed Mustard belongs to the Mustard family or Cruciferae. Its long fruits stand erect and are square in cross-section. The petals are yellow, and later even the calyx will become yellow.

This list of plants that grow wild in the streets of Toronto is incomplete and may differ from year to year as we have seen. What is impressive is their ability to adapt to the very special conditions, of which pollution is one. To see them, and even recognize them, can add unexpected pleasure to a walk in the downtown area and increase our awareness of nature around us and its persistence against odds.

Dr. Nick Badenhuizen

Erratum: TFN 426, page 20: Wild Plants In and Around Toronto. "Purslane is also interesting...first observed by Amici of Pisa in 1923" - this should read 1823.

D

NEWSLETTER SUBMISSIONS

Needed: essays (no longer than 500 words), reviews (no longer than 300 words), poems, cartoons, sketches and newspaper clippings

Subjects: plants, animals and natural areas in the Toronto region, especially reports of personal experiences with wildlife

Please include your name, address and telephone number so submissions can be acknowledged. With newspaper clippings include source and date of each clipping.

Time dated material such as notices of meetings should be submitted at least six weeks before the month in which the event is to take place.

Send material to:

Toronto Field Naturalists 20 College St., Unit 4 Toronto, Ont. M5G 1K2

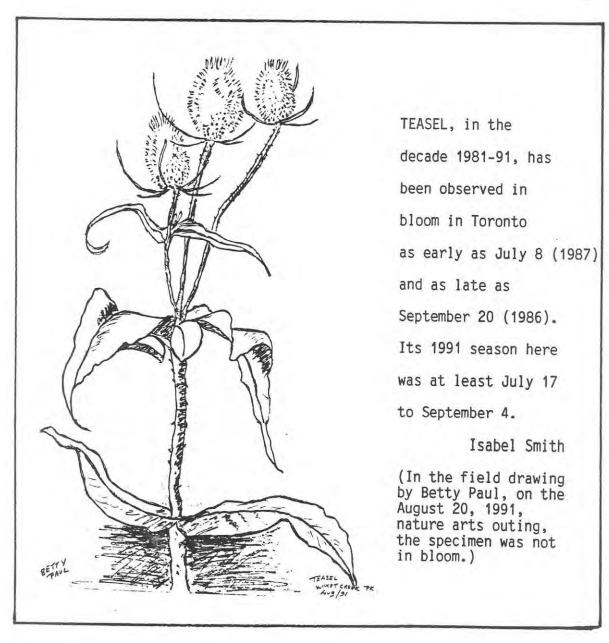
A NATURALIST'S CODE OF ETHICS

A CODE OF CONDUCT FOR WILDLIFE PHOTOGRAPHERS

...It should go further than the obvious, such as not disturbing breeding birds, not harming insects and not picking wildflowers. If you move any animal, even a common little insect, house it properly in transit, return it to where you found it as soon as possible, and let it go safely (for instance, don't release moths in daytime, when they soon get gobbled up by birds). And remember that if anything dies in your hands, you've killed it for your own selfish needs, and this is not tenable.

from "Shhh! It's called Art" by Chris Packham in BBC WILDLIFE, Vol. 6, No. 11, Nov. 1988.

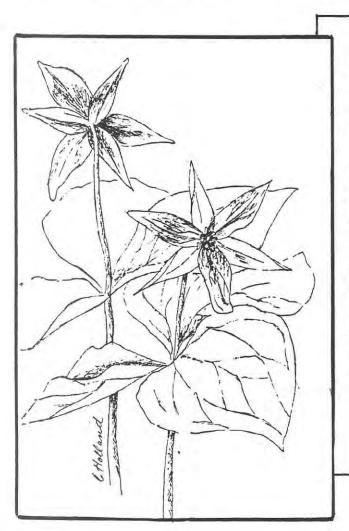
D



GREEN LIGHT FOR YELLOW GRAFFITI

Residents in several Vancouver Island communities have recently witnessed roving bands of students, youths and adults painting yellow fish symbols on local streets. They favour storm drains. Once they have left their mark on the streets, they have been observed delivering brochures door to door. They are all concerned about the effects of urban pollution -specifically storm drain runoff on fish habitat. They are volunteer members of the Vancouver Island Storm Drain Marking Program, and operate with the blessing and financial support of B.C.'s Ministry of Environment and Fisheries and Oceans Canada. The program began on Vancouver Island in 1988 and is now firmly entrenched in 20 communities. The aim is to paint the yellow fish symbol near every storm drain that leads to a fish-bearing stream. Urban streams are the recipients of a variety of man-made toxins, including swimming pool additives, car wash detergent, rug shampoo and discarded household products such as anti-freeze, pesticides and paint thinner. These chemicals make their way to the creek via the storm drain system. Members of the Vancouver Island Storm Drain Marking Program are counting on us to think again before we use a storm drain as a receptacle for household wastes. So are the fish!

adapted from an article by Donald Lowen in THE VICTORIA NATURALIST, Vol. 45.4, Jan./Feb. 1992



RED TRILLIUM, though not as common as the white or large-flowered trillium, is native to Toronto and is to be found in our woodlands.

It is also known as purple trillium and the name "wake-robin", an older English name for "trillium", is more likely to be used locally for the red trillium than for the other species in the genus. It has many names, according to Britton & Brown in AN ILLUSTRATED FLORA OF THE NORTHERN UNITED STATES AND CANADA. If one of them is "ill-scented wake-robin", another is "true-love".

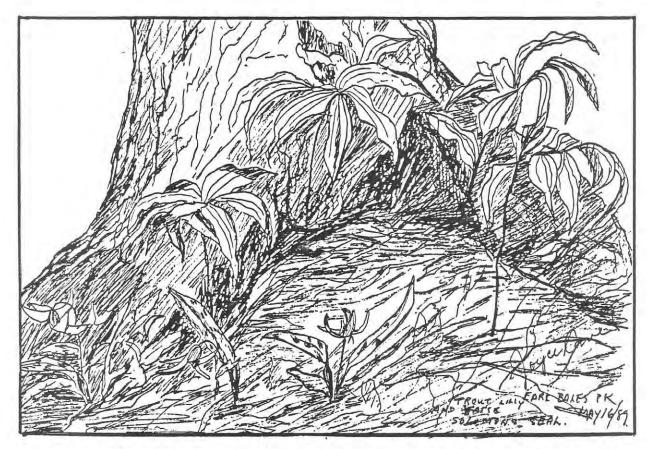
Drawn by Catherine Holland in Brimley Woods, May 17, 1989.

1

SNAIL MYSTERY

While out on a ramble at the base of Long Point during the spring of 1991 I found the shell of a snail I had never seen before. Using THE FRESHWATER MOLLUSCS OF CANADA by Arthur Clarke we were able to identify the species as Cipangopaludina chinesis, the Oriental Mystery Snail, an Asian exotic that has been introduced to Canada. In fact, it has been found in only seven locations in Canada. How did the species end up at Long Point? As it turns out, this is a popular aquarium species and thus was likely dumped in the water. What ecological importance does this species hold? At present Ontario wetlands face the threats of zebra mussels and purple loosestrife. Could another exotic life form further upset the ecological balance?

adapted from an article by Michael Richardson in the Long Point Observatory NEWSLETTER, Vol. 23, No. 3, Autumn 1991



FALSE SOLOMON'S SEAL and YELLOW TROUT-LILY, sketched in the shelter of tree-roots by Joyce Cave, are typical of spring bloom in Earl Bales Park and other areas in the Don Valley, as well as the Humber and Rouge Valleys, and along watercourses of creeks, High Park, and lakeshore locations. Both are native to Toronto, among fifteen other members of the lily family. In mid-May, the false Solomon's seal was not yet in bloom.

Ref. VASCULAR PLANTS OF METROPOLITAN TORONTO
TFN 1990

SAVE THE BIRDS

The slaughter that occurs in the streets of Toronto some nights, spring and fall, can destroy thousands of songbirds. Wrens, thrushes, warblers, vireos, flycatchers, tanagers, grosbeaks...the list goes on and on.

It does not have to happen.

Most native species of songbird, plus some other species, migrate at night, hidden by darkness, although if you can find a quiet place to listen you can hear their calls.

These birds are attracted by lights. Some famous structures, such as the Eiffel Tower, the Washington Monument and the Empire State Building, have been known to kill as many as tens of thousands of birds in a single night. Now, each spring and fall, they douse their lights.

So does Toronto's CN Tower after management there was informed of the problem. Red warning lights for airplanes that flash on briefly are not an issue. The problem, however, is the steady lights, particularly in tall buildings.

Many nights more birds fall exhausted or are mildly injured than die outright. If not rescued, they are swept up, dead or alive, before office workers come to work in the morning.

The solution is simple; turn out the lights in tall buildings each night. If the lights must be on, close the blinds or curtains. Save electricity; save birds.

If you are in a high rise building (even on the lower floors) turn out the lights at night, close blinds or curtains if there are any, and urge others to do the same. If you see tall buildings illuminated past 11 pm, from late April to early June and from mid-August through late October, complain to the management of the building.

an article by Barry Kent MacKay in TAKE ACTION (the newsletter of the Animal Alliance of Canada, 221 Broadview Ave., Suite 101, Toronto, Ont. M4M 2G3;(416) 462-9541)

BALLOONS can be dangerous, so the user is warned at time of purchase in Toronto stores. Packages state: "Do not give balloons to infants under three years old. Young children can choke or suffocate from a whole balloon or a piece of broken balloon." The TFN display visitor, during a Riverdale Animal Farm festival, was old enough. She brought her balloon along.

The caution on the balloon package might well include the hazard to waterfowl ingesting balloons released at celebrations or otherwise carelessly discarded.



IN THE NEWS

DONATION TO PRESERVE PARK

The Samuel McLaughlin family has given \$500,000 to the Conservation Foundation of Greater Toronto for the purchase of land in the Oak Ridges Moraine area north of Toronto,

from the GLOBE AND MAIL, Dec. 17, 1991

ESCAPE THREATENS WILDLIFE

Conservation officials are trying to assess the threat to Ontario wildlife after nearly 100 deer believed to be infected with a parasite known as muscle worm escaped from an abattoir Dec. 10. The red deer were part of a herd of 1,000 shipped to Ontario from a deer farm in New Brunswick earlier this month where they were being held in quarantine.

from the GLOBE AND MAIL, Dec. 11, 1991

COYOTES PERISHING

A parasite that feeds on animal flesh may have affected up to 50 per cent of the coyotes in Manitoba. Biologists say that sarcoptic mange causes the animals to lose fur and results in a slow death.

from the GLOBE AND MAIL, Feb. 1, 1992

NEWCOMERS TO METRO GO NUTS OVER THE SQUIRRELS IN OUR PARKS

What is it about Metro that impresses newcomers arriving from abroad to make Metro their home? Yes, our squirrels are a big hit with many immigrants. Recent arrivals just love to feed those pesky rodents that dig up our tulip bulbs and raid our bird feeders. Seems city-dwelling squirrels are seldom seen in Europe or Asia.

And you know what one newcomer from Southeast Asia marvelled at this summer? "I love those exquisite yellow flowers all over the lawns. What do you call them?" Dandelions.

adapted from an article by George Gamester in the TORONTO STAR, Dec. 9, 1991

KITE STRING ALMOST END OF GREAT HORNED OWL

A couple of nature lovers in Waterloo Park spotted a great horned owl dangling from a kite string caught between two trees more than 10 metres (32 feet) above ground. They enlisted the aid of the nearest fire station. A firefighter wearing leather mitts for protection from the owl's talons grabbed theowl's legs, put a burlap sack over its head and cut the string. The owl was then put in a cardboard box and taken to the wild bird clinic at the University of Guelph. Aside from some bruising and feather damage, the bird was stable and eating well at the clinic. Officials hope to release the owl in Waterloo Park after it recovers.

from the LONDON FREE PRESS, Dec. 29, 1991

WATCH THE BIRDIE -- WITHOUT BINOCULARS!

Holidaymakers heading for Spain to study the bird life there have been warned they risk arrest if they use binoculars in a wildlife area. Unless people hold a special permit, using binoculars to look at certain birds in a zone around Madrid is now an offense. "It's a well-intentioned measure aimed at preventing rarities, like eagles and vultures, being disturbed at their nests by irresponsible people. The absurdity is that you first have to look at a bird to identify it before you know whether it is on the protected list -- and if it is you have then broken the law."

FROM GREENOCK TELEGRAPH, July 19, 1990

WELL-FED HOUSE CATS BLAMED ON DEMISE OF BIRDS

Well-fed cats, in densities far beyond those of natural predators, may be killing millions of American songbirds annually. A University of Wisconsin study estimates that the state's 1.2 million rural cats kill close to a million songbirds per year. Those figures were for relatively light densities of rural cats -- up to 57 cats per square mile. Estimates place the number of cats at 50 million to 60 million across the United States. If only 40 million of those were able to hunt, and if only one in 10 killed a bird each day, that would still tally 4 million songbirds a day. It's natural that cats prey on birds, but the densities that cats live in are unnatural. No natural predators -- foxes, skunks, raccoons, oppossums -- occur in such densities. Add to that the fact that most house cats are well-fed, and you have a creature that is always at the top of its game. Natural predators, when prey runs short, become less efficient killers. House cats are nearly always efficient.

from the TORONTO STAR, Dec. 27, 1991

TO HUNT, OR NOT TO HUNT?

Even though the vast majority of people eat meat, many have a distaste for hunting. Surveys have shown that more than 90 per cent of the population does not hunt and about 30 per cent are strongly opposed to the activity in any form. Of the 27 million people who live in Canada, it is estimated abut 22,000 hunt at least occasionally. Every year, Canadian hunters kill about 1 million ducks. A duck migrating south has roughly a one in four chance of being shot by a hunter.

extracted from an article by Peter Cheney in the TORONTO STAR, Dec. 8, 1991

BAT PACT

In London in late November, 11 nations signed the Agreement on the Conservation of Bats in Europe. Set up under the Bonn Convention on migratory species, the agreement obliges its members -- Belgium, Denmark, Finland, Germany, Greece, Ireland, Luxembourg, the Netherlands, Norway, Sweden and the UK -- to protect bats in the various ways that bats can be protected: finding out where they are and conserving their habitats, studying them, controlling pesticides and stopping people from killing them.

from BBC WILDLIFE, Vol. 10, No. 1, Jan. 1992

OVERHAULING THE MIGRATORY BIRDS CONVENTION

In the early part of this century, North Americans began to take an interest in the welfare of birds. One result was the Migratory Birds Convention (MBC), legislation enacted between Canada and the United States in 1916 to protect species shared by both countries. Despite many changes over the years in the problems birds face, that original legislation has never been amended. Now the Canadian Wildlife Service (CWS) is seeking to develop a national position before entering into negotiations with the United States, probably in late 1992. To develop a Canadian consensus, the CWS requested input from some native, sportsmen and environmental groups. The Canadian Nature Federation and the International Council for Bird Preservation - Canada submitted a joint brief to CWS stressing the need for habitat conservation. The two groups argued that protective legislation no matter how tough, would be of little use if birds did not have the habitats they needed to support them. Habitat loss is presently the most prominent cause of population declines. The brief also recommended stronger protection for endangered species, and the inclusion of all those migratory species not currently covered by the convention. They insist that all hunting of migratory birds be brought under the convention. This would include the setting and enforcement of open seasons and bag limits for the currently unregulated murre hunt off the East Coast and the illegal spring hunt in the North. The two groups called for an MBC update to recognize and regulate the newest technologies used in the often controversial control of nuisance birds. While culls were normally carried out in the past by shooting individual members of a species, modern control methods often involve poisons and other techniques that could have a widespread effect on the surrounding ecosystem.

extracted from the NATURE SOCIETY NEWS, Jan. 1992 (as adapted from NATURE ALERT, a CNF publication)

HOW THOSE MAGNIFICENT RED SUNSETS ARE MADE

Have you noticed how the sky seems unusually red at sunset and sunrise? You aren't alone. Volcanic ash and sulphur dioxide from the Philippines' Mount Pinatubo eruption last June have now spread worldwide and are creating the rosy glow everywhere. Normally, a cloudless sunset or sunrise is a blend of blue, pale yellow and gray with just the zone closest to the horizon sometimes glowing orange or red. Not so with the recent glorious red and brilliant orange sunrises and sunsets that cover a good chunk of the sky. Nothing like it has been seen since 1982-83, when ash from the Mexican volcano El Chichon spread around the globe. Tiny volcanic particles are just the right size to scatter red light from the sun high into the sky. Not only are the sunsets and sunrises redder, they last longer because Pinatubo's dust scatters the red glow over a far larger area than normal. It's pretty, but stargazers have to wait longer for the sky to get dark. And the sky doesn't get as dark as it did before the Pinatubo blast. Volcanic ash acts like a thin veil creating a haze layer that brightens the night sky slightly. Certain types of observing and photography at major observatories have been halted.

from an article by Terence Dickinson in the TORONTO STAR, Dec. 1, 1991

CALL OF THE WILD RETURNING TO HUMBER RIVER SITE

An abandoned gravel pit on the banks of the Humber River is being rescued from the ravages of erosion in order to give nature a second chance and to demonstrate advanced methods of gravel pit rehabilitation. The 15-hectare site at Rutherford and Islington roads in Vaughan is part of a major rehabilitation effort being undertaken by the Aggregate Producers' Association of Ontario in partnership with the Ontario Ministry of Natural Resources. The Metropolitan Toronto and Region Conservation Authority which manages the neighbouring Boyd Conservation Area and the Conservation Council of Ontario are also involved in the project. On October 19, the Conservation Council assembled a team of volunteers to plant cattails, day lilies, and irises in the wetland part of the site.

extracted from an article in the ONTARIO CONSERVATION NEWS, Vol. 19, No. 1, Nov./Dec. 1991

RADICAL NEW BEHAVIOUR NEEDED TO PREVENT SKIN CANCER

To minimize chances of developing cancer as a result of depletion of the ozone layer over large parts of Canada, the Canadian Dermatological Association is recommending the following:

- that women carry parasols while walking on the beach
- that tennis players wear long-sleeved shirts and pants
- · clothes should cover the skin when people are in direct sunlight
- · school playgrounds should be rebuilt to provide more shaded areas
- schools should reschedule noon-time soccer games and other athletic events to early morning or late afternoon
- babies under one year old should not be exposed to direct sunlight. In Canada the danger from sunburn is from May to August from about 10 am to 2 pm every sunny day.

extracted from an article by Robert Matas in the GLOBE AND MAIL, Feb. 12, 1992

MINISTRY CANCELS SPRAYING PROGRAMS FOR GYPSY MOTH AND BUDWORM

The Ministry of Natural Resources has cancelled its 1992 spraying programs for spruce and jack pine budworm and gypsy moth. MNR is reallocating about \$3.8 million in funding for these spraying programs to other higherpriority initiatives in its forestry program. In the past 10 years of research into the effects of gypsy moth in Ontario, MNR and Forestry Canada have observed that this insect has had very little impact on forests. Tree mortality in infested stands has been similar to natural mortality in forest stands. MNR will replace the private-land gypsy moth spraying program by offering municipalities a co-operative Forest Health Information and Awareness Program. The new program will be offered in 1992 to the 24 municipalities that were taking part in the private land spraying program. The information program will be expanded to more municipalities in 1993. The information program will help landowners become more aware of factors that may affect the health of their trees, and inform them about what they can do to help keep their trees healthy. It will teach landowners about such factors as drought, insects and diseases, and human activities that affect the health of the forest.

extracted from a NEWS RELEASE of the Ontario Ministry of Natural Resources, Feb. 13, 1992

WILDFLOWERS GALORE

About 85 Girl Guides, their leaders and parents took part in a massive wildflower planting at Bluffer's Park on October 5, 1991. Some 1,500 to 1,800 plants were placed on the slope near the road leading to the beach. Frank Kershaw of Metro Toronto Parks and Property Department said the hillside will bloom next spring with blackeyed Susans, purple bergamots and other sun-loving species.

an article by John Beaufoy in the BLUFFS MONITOR (Birch Cliff News), Nov. 1991

HOUSING COULD DESTROY MARSH

Pickering naturalists are determined to fight plans for development near the Lynde Shores Conservation Area -- a class-one wetland. The proposed area for development, east of the marsh, has been slated for apartment buildings. If zoning is approved, 6,700 people could become neighbours to the natural wetland. The land to be developed is owned by the Ministry of Government Services. Naturalists would rather see the land used for industrial development because this would not create as much of a population threat to the marsh. The official plans of Durham Region and the town of Whitby have not been completed so now is the time to turn it around.

extracted from an article in the TORONTO STAR, Feb. 6, 1992

OLD DUMP SITE UNSAFE

Residents of North York's Bluehaven community, near Finch and Islington Aves., are demanding an environmental assessment of a former dump site before a 166-unit, 14-storey non-profit housing project proceeds. Public hearings weren't held because the land is zoned for high density residential development. The old residential and commercial garbage dump, on the banks of the Humber River bordering North York and Etobicoke, hasn't been used since the early 1960s, but area residents still complain about the smell of rotting trash every summer. They also say that Bluehaven public school was closed 10 years ago after methane gas was found leaking into the basement.

extacted from an article by Stan Josey in the TORONTO STAR, Jan. 30, 1992

THE ICE AGE COMETH AFTER WARMING, STUDY FINDS

The greenhouse effect is likely to usher in a new Ice Age. First it will get warmer. Then it will get a whole lot colder. So cold, in fact, that giant ice sheets will start crawling south again. This finding by two scientists is based on an analysis of earlier episodes of global warming using ancient fossils in Europe and North America. They found that ice sheets grew in the Arctic region during periods when global temperatures have increased. However, it will take centuries before the climate starts cooling down and about 10,000 years or so before the next Ice Age reaches its peak. During the last Ice Age, which ended about 10,000 years ago, the polar icecap reached as far south as Long Island, N.Y. Because of the greenhouse effect much more moisture enters the air, making it possible for snow to occur and build up. It is thought that previous ice ages have been caused by changes in the amount of sunlight reaching the Earth's polar regions.

extracted from an article by Jim Detjen in the TORONTO STAR, Feb. 8, 1992

410 MILLION-YEAR-OLD SCORPION OLDEST DISCOVERED IN CANADA

The scorpion, discovered in October, 1991, in Toronto, is the first fossil scorpion ever found in Ontario, the oldest known from Canada, and among the largest of any age in the world. It was discovered by a stonemason building a stone wall in Toronto. On one of the blocks there was an unusual marking -- the outline of a bizarre creature about 9 cm long. The stone was taken to the Royal Ontario Museum where the creature was identified as a fossil scorpion about 410 million years old. It is now on display among recent acquisitions on the ground floor of the museum. The oldest true fossil scorpions previously known from North America come from rocks of the Bertie Formation in upper New York state, which are interpreted as being Lake Silurian in age. The ROM's new scorpion is from a quarry near Wiarton or Owen Sound, where rocks of the Eramosa Member are interpreted to be of Middle Silurian age, or slightly older than those from New York. Complete specimens discovered in New York are only about 3 cm in total length, with pincers half a centimetre long. The Ontario specimen is huge in comparison, about 9 cm long minus its tail, with 3 cm long pincers. A formidable beast by any standards, it probably represents a new species. The fossil scorpion lived and died in an ancient sea and has been entombed in the rock for 410 million years before being exposed by quarrying. Only a twist of fate and a pair of sharp eyes prevented it from being buried once again.

from a press relase of the Royal Ontario Museum, Feb. 24, 1992

THE ZOO-POO GUIDE

Granada TV's THE CREEN LIFE GUIDE got right back to basics when they examined the relative values of different types of animal manure. Chester Zoo provided a wide variety of samples. Apparently the by-products of an elephant as a pet are far superior to those of a tiger!

from the AMATEUR GARDENING magazine, Feb. 1, 1992

DOG DEATHS

Dogs whose owners use a herbicide containing 2,4-D are up to twice as likely to develop lymphatic cancer, which suggests the common chemical may pose a health hazard to humans. Researchers at the U.S. National Cancer Institute report that the risk of Lymphoma among dogs is reduced if the chemical is used less frequently.

from the GLOBE AND MAIL, Feb. 15, 1992

... Nature still sets outer boundaries on human productivity, and the most powerful peoples will tend to be those in command of the best real estate. From that point of view it's tragic to see modern societies repeating the ecological mismanagement of the past, with much more powerful tools of destruction in the hands of far more people. It's as if we hadn't already run that particular film many times before in human history, and as if we didn't know the inevitable outcome...

from "Pat Rat Historians" by Jared Diamond in NATURAL HISTORY, Feb. 1991

THE WEATHER (THIS TIME LAST YEAR)

April 1991, Toronto

This was another month of above-normal temperatures and heavy rain. Temperatures averaged a degree or two above normal. Rainfall (and total precipitation) was the highest on record at L.B. Pearson International Airport and, since 1929, downtown. Downtown recorded 133.8 mm of precipitation. Snowfall was negligible, coming with a freak thunderstorm in chilly, unstable air on April Fool's Day.

The noteworthy weather events were the hot day on April 7th, followed by heavy thunderstorm activity, August-style, the next two days; and the long rain which began at 7 pm on April 19th and ended mid-afternoon on April 22. There were only short breaks in this rain.

The early warm spell brought temperatures as high as 28°C to the Toronto area, perhaps unprecedented for so early in the season. Thunderstorm activity on April 8th-9th brought about 45 mm of rain. The long rainy period brought about another 40 mm, accompanied by rather chilly conditions.

April ended with sunny, fairly warm weather in the low twenties.

Gavin Miller

LARGE-FLOWERED BELLWORT (Uvularia grandiflora) is one of two species in its genus with perfoliate leaves. The Peterson/McKenney FIELD GUIDE TO WILDFLOWERS, which has been of great value to TFN field botanists. is misleading in this case, describing the leaves as clasping the stem; it's because of this that the plant has often been misidentified. The large-flowered (U.grandiflora) is native to our region but the other perfoliate bellwort (U.perfoliata) is not.

Ref.: MANUAL OF VASCULAR PLANTS by Gleason & Cronquist. and NEWCOMBE'S WILDFLOWER GUIDE



COMING EVENTS

- Toronto Ornithological Club outing for the intermediate birder: Early Migration at the Leslie Street Spit Saturday, April 25 at 8 am (all day) with leader Herb Elliott. Meet at the foot of Leslie Street and bring a lunch. Free to the public.
- The Walker Mineralogical Club monthly meeting April 14 at 8 pm at the McLaughlin Planetarium lecture room.
- Toronto Entomologists' Association meeting Saturday, April 25 at 1 pm at the McLaughlin Planetarium in the lecture room.
- The Canadian Nature Federation Annual General Meeting and Conference in Quebec City August 13-16. For information write to Richard Favreau, Union quebecoise pour la conservation de la nature, 160 76th Street East, Charlesbourg, Quebec G1H 7H5 (418-628-9600).
- Dr. Jane Goodall will be giving an illustrated lecture about "My Life with the Chimpanzees" on Thursday, May 7, at 7:30 pm at Convocation Hall, 31 King's College Circle. Tickets are \$20 or \$17.50 and are available at all Ticketmaster outlets, or by writing to Zoocheck Canada, 5334 Yonge St. Suite 1830, Willowdale M2N 6M2. Reserved seating only.
- Dr. Birute Galdikas will be giving a lecture about "Orangutans in Borneo: Survival or Extinction?" on Friday, June 5 at 8 pm at the Trinity St. Pauls United Church, 427 Bloor St. West. Tickets at \$14.50 each and are available from Ticketmaster outlets or Zoocheck Canada (see above).
- Birdsong Workstation a new display at the Royal Ontario Museum opens April 15.
- Kortright Centre for Conservation April 4-5, 10 am to 4 pm Celebration of National Wildlife Week; April 17-20, 10 am to 4 pm Special on Wildlife Plantings; April 26, 10:30 am to 3:30 pm Walk to McMichael. For more information or advance tickets, call (416) 832-2289; also, April 25 from 7 pm to 9 pm Pond Songs.
- Canadian Wildflower Society Plant Sale (native wildflowers, trees and shrubs) Sat. April 25 from 10 am to 4 pm at the Civic Garden Centre, 777 Lawrence Ave. East at Leslie St.
- Canadian Wildflower Society Metro Wildflower Garden Tour May 23.

 Tickets available at Plant Sale (see above) or by calling Carolyn King (222-5736) or Paul McGaw (261-6272). Tickets are \$5.00 each for CWS members; \$10.00 each for the general public.
- The Belt Line Park an illustrated talk by staff of the Planning and Development Department and Parks and Recreation Department, City of Toronto, March 25 at 7:30 pm at Northern District Library, 40 Orchard View Blvd., (Yonge and Eglinton). Free.

COMING EVENTS (cont'd)

- Naturalists' Workshop, May 23-30, 1992, at Queen's University Biological Station, P.O. Box 31, R.R. #1, Elgin, Ont. KOG 1EO. \$454.75 includes accommodation, food, local transport and tuition (includes a manual).
- Waterfowl Viewing Sunday, April 12 from 7 am to 11 am at Holland Marsh Provincial Wildlife Area guided 1-hour hikes with biologists from Ducks Unlimited, Ministry of Natural Resources, and the Lake Simcoe Region Conservation Authority. Free. For more information call 416-895-1281or416-773-6482.
- Maplefest March 21 & 22, March 28 & 29, April 4 & 5 from 9 am to 4 pm at Sheppard's Bush Conservation Area, Aurora, Ont. Admission fee. Call 416-895-1281 or 416-773-6482 for details.
- Through the Garden Gate (The Gardens of Lawrence Park), a tour of 16 private Toronto gardens on Saturday, June 13th and Sunday, June 14th, noon to 4 pm. Admission: \$15. For tickets contact the Civic Garden Centre, 777 Lawrence Ave. East, North York M3C 1P2 or call 397-1340.
- Magnificent Minerals a semi-permanent display featuring over 200 minerals from all over the world begins March 27 at the Royal Ontario Museum. Admission fee. Call 416-586-5549 for details.
- Long Point Bird Observatory 22nd Annual General Meeting April 25 & 26 at Backus Conservation Education Centre, Port Rowan. Program includes field trips, afternoon workshops and Kay McKeever talking about "Sex Lives of Owls". Fee for banquet tickets. For more information call Anne Marie Taylor at (519)586-3531 for write to LPBO, P.O. Box 160, Port Rowan, Ont. NOE 1MO.
- International Symposium and Workshop on the Conservation and Research of the Eastern Massasauga Rattlesnake at Metro Toronto Zoo May 8 & 9. Papers are solicited. Abstracts must be submitted by March 20, 1992. For further information contact Bob Johnson, Curator of Amphibians and Reptiles, Metro Toronto Zoo, P.O. Box 280, West Hill, Ont. MIE 4R5 or call (416)392-5968.
- East York Hiking Club meeting Wednesday, April 15 at 7:30 pm at S.Walter Stewart Library (downstairs), 170 Memorial Park Ave., East York. Visitors are welcome to attend. Topic is Trees: who needs them an illustrated talk by Michael White, member of the Task Force to Bring Back the Don. Admission: a donation
- Waste Not a 13-week series of half-hour programs on TVOntario starting March 3 at 7:30 pm. Will include everything from tips to attitudes on the important topic of "waste".
- Geology and spring wildflower walk through the Rouge River Valley with Dr. Sydney Lumbers and Dr. Tim Dickinson Sat. May 9. Tickets \$30.00. For more information call 586-5797.

TORONTO FIELD NATURALISTS

20 College St., Suite 4 Toronto, Ontario M5G 1K2

(416) 968-6255

Publications Mail Registration No. 6669

TORONTO FIELD NATURALIST

Published eight times a year by the Toronto Field Naturalists, a charitable, non-profit organization, the aims of which are to stimulate public interest in natural history and to encourage the preservation of our natural heritage.

OTHER PUBLICATIONS

10		
	TORONTO FIELD NATURALISTS CLUB:	INDEX OF TFN NEWSLETTERS (1938 to present)
١	ITS HISTORY AND CONSTITUTION, 1965\$ 2.00	, , , , , , , , , , , , , , , , , , , ,
ı	710110101171110 00110111 011011, 1000	TORONTO REGION BIRD CHART, 1983
١	CHECKLIST OF PLANTS IN FOUR TORONTO PARKS:	TOTION OF TEGION BIND OF MATTI, 1988
Ì		A GRAPHIC GUIDE TO ONTARIO MOSSES, 1985
ł	WILKET CREEK, HIGH PARK, HUMBER VALLEY,	A divitilo dolbe to civianio woodes, 1965
I	LAMBTON WOODS, 1972 \$ 2.00	CHIDE TO THE TODONTO FIELD MATHEMALICTO
١		GUIDE TO THE TORONTO FIELD NATURALISTS'
I	TORONTO THE GREEN, 1976	NATURE RESERVE, LEASKDALE, ONT., 1986\$
	Metropolitan Toronto's important natural areas	
	are described and recommendations given for	TORONTO ISLANDS: PLANT COMMUNITIES AND
1	their conservation and management;	NOTEWORTHY SPECIES, 1987\$
1	includes maps, bibliography and index\$ 5.00	
1		TODMORDEN MILLS, 1987\$
1	TORONTO FIELD NATURALISTS' RAVINE SURVEYS ea \$ 4.00	
ı	Survey #1 - Chatsworth Ravine, 1973	VASCULAR PLANTS OF METROPOLITAN TORONTO, 1990 \$
1	Survey #2 - Brookbanks Ravine, 1974	
1	Survey #3 - Chapman Valley Ravine, 1975	NO G.S.T.
	Survey #4 - Wigmore Ravine, 1975	110 0.0.11
	Survey #5 - Park Drive Ravine, 1976	All publications are available at the monthly general meetings or may be
1		ordered from Toronto Field Naturalists, 20 College St., Suite 4, Toronto,
1	Survey #6 - Burke Ravine, 1976	Ontario, M5G 1K2. (Add \$2.00 per item for postage and handling).
	Survey #7 - Taylor Creek-Woodbine Bridge	Ontailo, wiso The. (Add \$2.00 per item for postage and nandling).
1	Ravines, 1977	

i	
	INDEX OF TFN NEWSLETTERS (1938 to present) \$ 10.00
	TORONTO REGION BIRD CHART, 1983 \$ 4.00
	A GRAPHIC GUIDE TO ONTARIO MOSSES, 1985 \$ 4.00
	GUIDE TO THE TORONTO FIELD NATURALISTS' NATURE RESERVE, LEASKDALE, ONT., 1986
	TORONTO ISLANDS: PLANT COMMUNITIES AND NOTEWORTHY SPECIES, 1987\$ 4.00
	TODMORDEN MILLS, 1987
	VASCULAR PLANTS OF METROPOLITAN TORONTO, 1990 \$ 8.00
	NO G.S.T.
	All publications are available at the monthly general meetings or may be

MEMBERSHIP FEES (No G.S.T.)

\$30 FAMILY (2 adults - same address, children included) \$25 SINGLE, SENIOR FAMILY \$20 STUDENT, SENIOR SINGLE Tax receipts issued for donations

Membership fees and address changes should be sent to: 20 College St., Suite 4, Toronto, Ontario M5G 1K2



Survey #8 - West Don Valley, 1978