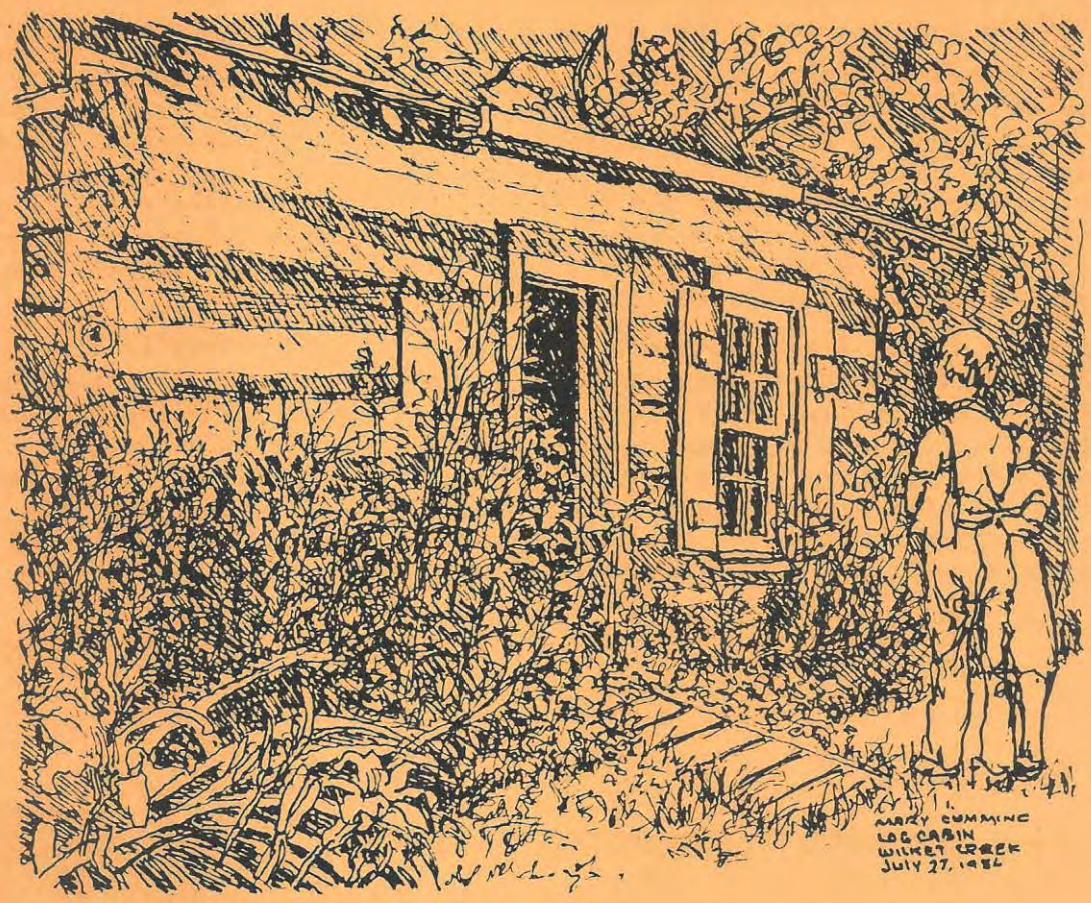
TORONTO FIELD NATURALIST

Number 386, March 1987



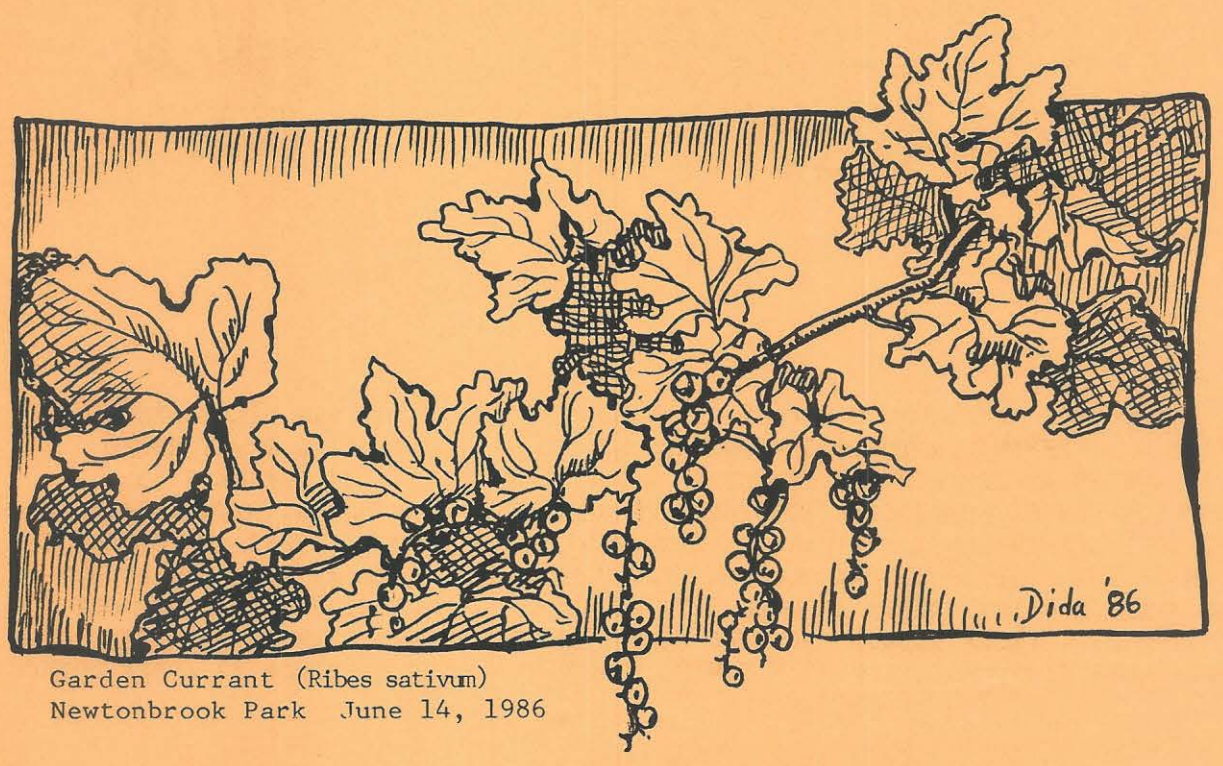
President's Report

For many years now Harold Taylor has been writing the Nature Notes for Art Drysdale's show on CFRB. It has provided a valuable link between the Toronto Field Naturalists and its membership as well as with the general public. It's hard to think of a better way to promote the club and its activities. The show is very popular and ensures a receptive audience. Harold has decided to turn the job of writing the Nature Notes over to Jim Garratt. On behalf of the Board of Directors and the club membership I would like to thank Harold Taylor. We appreciate the time and effort he has contributed.

Our newly formed publicity and promotion committee is off to a good start. So far they've set up two successful displays, one at the Civic Garden Centre for "Birds at the Centre" and another at York University for "Environment Day". The committee, headed by John Loughnan, is responsible for displays, publicizing our meetings and special events and distributing our application forms to libraries, schools, book stores, places we may find people interested in joining the club. If you have ideas or are willing to devote time and energy, I'm sure John would like a call (463-3352).

Environmental issues don't die nor do they just fade away. They'll always be with us. The Leslie Street Spit continues to be a hot issue; Jean Macdonald is keeping an eye on that one for us. She is also representing the club at meetings concerning the High Park Ravine, including two weeks at Ontario Municipal Board hearings. WRAP (Waterfront Remedial Action Plan) is another hot issue. Eva Davis, Karin Fawthrop and Helen Juhola have been attending to that matter. You can keep abreast of these and other environmental issues through the newsletter. Make a phone call, write a letter, lend a hand.

Phil Joiner



Garden Currant (Ribes sativum)
Newtonbrook Park June 14, 1986

(NO DOGS)

Upcoming TFN OUTINGS

RAIN or **SHINE**

Everybody Welcome!

MARCH

Sunday March 1 10 am	BURKE RAVINE - Birds Leader: Howard Battae Meet on the east side of Bayview Avenue at the CNIP overpass (north of Eglinton, south of Lawrence).	West Don tr., North York
Wednesday March 4 1:30 pm	PINE HILLS CEMETERY - nature walk Leader: Eileen Mayo Meet at the Warden subway station exit (southeast corner of Warden and St. Clair Avenue East).	Taylor Creek, Scarborough
Saturday March 7 10 am	JUNIOR DISPLAY DAY AT ROYAL ONTARIO MUSEUM See page 37.	
Sunday March 8 3 pm	JOINT MEETING OF ROYAL CANADIAN INSTITUTE AND TORONTO FIELD NATURALISTS See page 36.	
Wednesday March 11 11 am	YORK CEMETERY - exotic plants Leaders: Eileen and Geoff Chopping Meet at the entrance to the North York City Hall on the west side of Yonge St. several blocks north of Sheppard. Lunch may be obtained in the area afterwards.	North York
Saturday March 14 10 am	METRO ZOO - Nature arts Leader: Betty Paul Meet at the Zoo entrance. Bring sketching materials, camera, stool; lunch optional. Everyone welcome.	Rouge, Scarborough
Sunday March 15 10 am	HUMBER BAY PARK EAST - birds Leader: Marion Strebig Meet at the park entrance on the south side of Lakeshore Blvd. West at Park Lawn Rd.	lakeshore, Etobicoke
Wednesday March 18 1:30 pm	HUMBER BAY PARK EAST - birds Leader: Helen Smith Meet at the park entrance on the south side of Lakeshore Blvd. West at Park Lawn Rd.	lakeshore, Etobicoke

PUBLIC TRANSIT	POLICE [1]	POLLUTION [2]
393-4636	967-2222	956-9619 in Metro 1-800-268-6060 toll free outside Metro

1 See TFN 385, page 23.
2 See page 31.

MARCH OUTINGS (cont'd)

OUT OF TOWN

Saturday March 21 8 am to 6 pm BUS	LONG POINT - swans Leader: Ross Harris Call Eileen Mayo (445-4621) if you want to attend. Confirm by sending a cheque for $20.00 payable to TORONTO FIELD NATURALISTS SWAN OUTING to Eileen at 405 - 44 Stubbs Dr., Willowdale M2L 2R3. Bus leaves promptly from the corner of Old York Mills and Yonge (south exit of York Mills subway station) at 8 am and returns there at 6 pm. Bring lunch and a snack as we will not be stopping where there are restaurants. (Washroom on bus.)	southwest of Metro
Sunday March 22 10 am	MT. PLEASANT CEMETERY - Trees in winter Leader: Emily Hamilton Meet at the cemetery entrance on the east side of Yonge Street north of St. Clair Ave.	Toronto
Wednesday March 25 11 am	MEMBERS' SHOWING - nature arts Leader: Betty Paul Call Betty (224-0793) if you plan to attend. Bring your sketches and sandwiches. Dessert and beverage will be provided.	North York
Sunday March 29 10 am	LESLIE STREET SPIT - birds Leader: Mark Kubisz Meet at the park entrance at the foot of Leslie Street.	lakeshore, Toronto

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URBAN WILDERNESS IN BUFFALO
..... (yes Buffalo!)

How many people know that one of the largest and most exciting expanses of urban wilderness in North America is located in Buffalo? It's called Tifft Farm Nature Preserve, and comprises 264 acres of lakes, marsh, fields, and woods where you can experience the wonders of nature in an urban industrial setting on Buffalo's waterfront. This well-kept secret is a few minutes from the downtown towers, surrounded by dramatic grain elevators. In fact it was never a farm -- it's a former industrial complex of rail and canals!

The city of Buffalo acquired the site in 1972, for use as a refuse dump. Concerned citizens and conservation groups fought the proposal, alerted the city to the site's ecological value, and finally persuaded the city to preserve the area as a sanctuary. Since then it's become better each year as Nature has "developed" the area -- with an enormous variety of plants, birds, and animals to be viewed from its trails, around the lakes, and from the boardwalk through the marsh.

Tifft Farm is open every day, with free guided tours Sundays at 2 pm. For more information (or for a pamphlet showing how to get there), contact the Buffalo Museum of Sciences, Humboldt Parkway, Buffalo, N.Y. U.S.A. 14221, or call the Museum at 716-896-5200 (the Museum administers the site).

Now, if only the Metro Toronto and Region Conservation Authority would treat Toronto's Leslie Street Spit as a similar kind of sanctuary and drop it's plans to develop the Spit ... then at least one Canadian city would have an urban wilderness to rival that of Buffalo! [See page 20 for MTRCA spit plan.]

from URBAN WILDERNESS GARDENERS NEWSLETTER, Vol. 2, Issue 1, Summer 1986

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Keeping In Touch...

Dear Diana: Christmas, 1986

Lots of birds come to visit at my new house - plenty of starlings - and blue jays too. I've been throwing bread to them. Soon I've got to set up feeders and organize the yard...I won't be letting my cat outside to go after the birds - he's safer inside anyway!...P.S. Anyone know where to get peanut meal (or other nut meal) or "Mendalonas" - whatever that is? My starlings like it...

Michelle Renwick

Ed.Note: Quoting from report of Alfred D. Geis in NATURE SOCIETY NEWS Nov./84 on U.S.Fish and Wildlife Study (on what birds eat when they have a choice): "Starlings took few foods, but showed a striking preference for peanut hearts and hulled oats." Note: the researchers didn't say "much" but "few" foods (of those offered).

Dear Mr. Davis, Jan. 8, 1987

Thank you for your letter expressing your concerns over the use of pesticides for vegetation control and in particular the use of 2,4-D.

As you may already be aware, I have placed a moratorium on approving any new pesticides which contain 2,4-D. My decision was based on recent studies on 2,4-D which have called the substance's safety into question.

Health and Welfare Canada has informed me that they will be reviewing their recent studies on 2,4-D and it is hoped that Agriculture Canada will announce their federal regulatory position in advance of the 1987 use season.

In the interim, I have requested that my Pesticides Advisory Committee choose a panel of international experts (e.g., pathologist, epidemiologists, toxicologist) to review the health and safety concerns of 2,4-D prior to the next use season. On the basis of this review, the Committee is to provide me with recommendations on the use of 2,4-D products in Ontario for 1987.

One of my Ministry's prime concerns is to reduce the pesticide load in the environment. We feel this can be approached from two directions. First, by a search for less toxic, though equally effective chemicals, and secondly, by a much wider use of the technique of integrated pest management. To this end, it is one of the functions of my Pesticides Advisory Committee to oversee the funding of an annual research program having three main objectives: 1) to find alternative pesticides for those deemed environmentally hazardous and thus restricted in use; 2) to determine potential environmental hazards with pesticides currently in use; and 3) to reduce pesticide input into the environment.

In 1985-1986, the disbursement of research funds were as follows:

(i) three grants totalling $27,500 were awarded for studies on development of alternative pesticides for those deemed environmentally hazardous and thus restricted in use;

(ii) seven grants totalling $125,587 were allocated for studies to determine potential environmental hazards with pesticides presently in use;

KEEPING IN TOUCH (cont'd)

(iii) twenty grants totalling $239,439 were allocated for studies aimed at reducing pesticide input into the environment, while still achieving effective pest control.

This government is firmly committed to strong environmental action. I am determined to respond positively to the demands the public makes on us. It is my goal as Minister to see the threats to our environment reduced and eliminated.

Jim Bradley, Minister
Ont. Min. of the Environment

Dear Helen and Aarne, Jan. 13, 1987

Thanks for your letters. People have been very good at keeping in contact, especially around Christmas. And now we have our first Canadian visitors, Edna's sister (a keen 6 am birder) and her husband. The four of us are strung along a log with our feet in the Klinwara river, so please excuse any deficiencies in my handwriting. There's a tiny butterfly on my page with big windows in its wings. It walks with its wings opened but tilted from back to front.

I really appreciate your account of things going on in Toronto. Here, I see the power of man without machines to alter (and largely destroy) his surroundings and it is right up there with machine-aided man, believe me. A bursting birth-rate and the old ways of slash and burn just don't go together now that the death rate is down somewhat (but creeping up again). And while modern farming with 3% of the population providing food for all, may have its disadvantages, so does subsistence farming with 87% definitely NOT providing food for all.

Our work (Edna's and mine) is going well, and we are really enjoying this vacation now. Today we hiked the Klinwara to the natural site of a hot spring, and beyond that, at the confluence with the Bulolo River, we found a stand of bamboo providing a shady bank and a swimming hole beside it. Irresistible. Saw Friendly Fantail, Brahminy Kite, Black Kite, Whistling Kite, Common Sandpiper (Tringa hypoleucos) and a kingfisher that got away, plus any number of butterflies and insects so diverse that after a year every second or third one, almost, seems to be one you've never seen before. Then some Menyamya kids, shy but curious, came by and we had fun walking the stream with them, and trying to pronounce words in their peculiar language, words we'd ask in Pidgin.

The fine reference BIRDS OF NEW GUINEA by Beehler, Pratt and Zimmerman is now at hand, thanks to Bette bringing it from Ottawa. Still hasn't made it to the PNG bookstores it seems. Oriental Cuckoos are making nesting motions in our flower garden, and I saw my first Crested Hawk the other day. Instead of a crest it has a little topknot, very visible when we observed it. Stephanie's Astropic was the last Paradise species I saw. On a hike I organized the other day, in the deep forest, a plant person pointed out a Giant Orchid. (We got away safely, but I didn't get a photo.)

We'll be here another year I think. Then back to Canada but to which city we're not sure. Luckily, we like them all. Hope to get involved in volunteer and interest group associations again -- their near absence here is a screaming void, and shows how important a role is played by an informed and alert citizenry at home. (I suppose nine males out of ten here are on the lookout for birds and animal life. They all have slingshots, or catapults as they are called.)

KEEPING IN TOUCH (cont'd)

Recently, heading in towards a large tufa mound beside a river we came upon a party of young men, half of them with shotguns, shouldering a wild pig they had just killed in the bush. It was HUGE, a real tusker. They were jubilant, and we took their photo as they were heading back to their village to "mumu" it (à la luau in Hawaii).

If I haven't told you that the people here are the most exceptionally friendly, warm-hearted, courteous and helpful to us imaginable, I've missed the main point, and the reward we have in doing a good job for them in town administration and education.

Best regards for a good year in 1987.

Wallace Platts
P.O. Box 75, Wau
Papua New Guinea

Dear Helen, January 15, 1987

About boots! For winter, I recommend Greb boots (or Browning) -- the kind with soft toes and a double lining. They cost about $70.00. Buy them large enough to be able to put a finger between the back of your heel and the boot. Fill the boots with luke warm water and soak the socks you plan to wear with them for an hour. Then put on the socks and the boots and wear them for several hours -- preferably in warm weather as they are both wet. The boots will gradually take on the shape of your feet.

After a few hours of walking around in them, remove the boots and socks and put the boots in a dry (but not hot) place to dry slowly. This will take several days.

At this point, I treat the boots with a leather conditioner. I use Neats Foot Oil and rub it in by hand two or three times over a few days.

The boots should still be big enough to take an inner sole of felt or foam felt. Once these are in you can wear the boots. Lace them, but not too tightly. Leave the top two ties undone.

For spring, summer and fall, I recommend Woolco's Cochise lowcut boots. These cost about $50 to $55. I treat them the same way as my Greb boots.

Howard Battae

Dear Mrs. Juhola: January 22, 1987

I was very pleased to learn of the successful culmination of the longstanding efforts of the Backus Group to formulate and adopt a management plan for Backus Woods. Although it has been a long and sometimes frustrating exercise, I am sure that the achievement is significant. The plan will provide for the protective stewardship that this outstanding forest area so richly deserves. I am also pleased that the Long Point Region Conservation Authority has agreed to convey a conservation easement for Backus Woods embodying this plan to the Ontario Heritage Foundation.

I would like to personally thank you and the Toronto Field Naturalists for your dedicated work while serving on the Backus Group.

Vincent G. Kerrio, Minister
Ont. Min. of Natural Resources

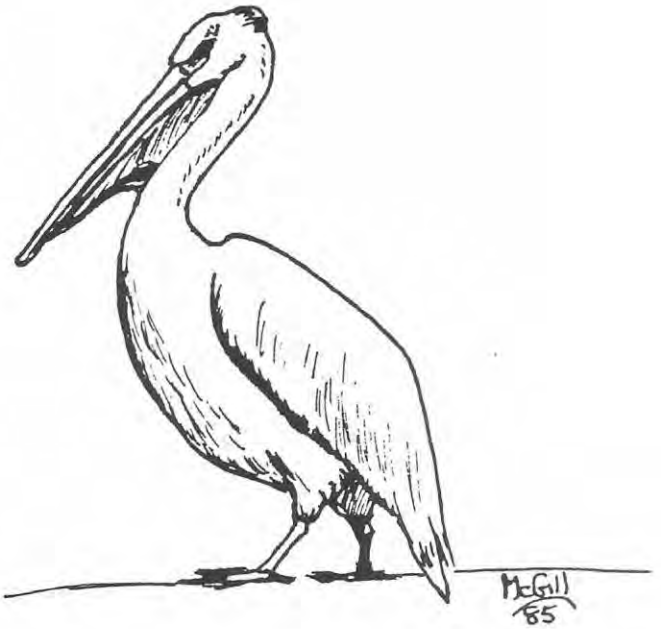
Dear Helen, January 24, 1987

Through reading Joey Slinger's amusing adventures in bird watching in the TORONTO STAR, I discovered a first-rate course in bird biology. Curious about the Cornell University course he wrote of taking, I followed it up after seeing the ad for it in AUDUBON and enrolled in the Laboratory of Ornithology's correspondence course.

It took me a whole year to complete it and receive my certificate, due to my being away from home a good part of the year, but that's one of the benefits of taking a no-deadline correspondence course. One proceeds at one's preferred pace and there's time for much of the supplementary reading suggested.

This is an excellent course from one of the leading North American centers studying bird life. It's college level but there are no entrance requirements. It consists of nine seminars giving a broad view of bird biology and a sound background to launch a novice into the field of ornithology. Back of the course is a hope that those taking it will become champions for the preservation of bird life world-wide.

The course was prepared by the Laboratory of Ornithology staff and scholars with special knowledge of certain aspects of bird life. It is well illustrated with drawings and photos. The nine seminars include the origin and evolution of birds, naming and classification, anatomy, external and internal bird, geographical distribution, migration, behaviour, nesting and care of the young, and a final seminar on birds and man, which includes attracting and enjoying birds.



After studying each seminar, the student completes and mails an assignment to the lab for correction. A certificate is issued when all assignments have been completed. The cost of the course is modest and if the applicant chooses to become a member of the Laboratory of Ornithology, a 10% discount is offered on the home study course, along with a 10% discount on books available from the Crow's Nest Book Shop. As a member, the student receives THE LIVING BIRD QUARTERLY, a glossy, colourful magazine with superb articles. I recommend this course for pleasure, education and as a springboard to active bird watching.

For details, write to the Laboratory of Ornithology, Cornell University, Sapsucker Woods, Ithica, N.Y. 14850. (Telephone 607-256-4017.)

J. McGill

P.S. I found a lot of pleasure in doing little drawings of birds as I went along with the seminars, but I still haven't mastered memorizing the bird's skeleton as a base for drawing birds. The white pelican was done hastily.

OUTINGS REPORT

SPRING 1986 (March, April, May)

In the depth of winter it's exciting to look forward to spring. There are so many beautiful ravines, parks and lakeshore areas in Metropolitan Toronto; what better way is there to get to know them than by joining other TFN members with similar interests. There is something for everyone -- birding, botany, geology, amphibians and reptiles, entomology, sketching and photography. All outings in Metro are accessible by TTC. Van and bus trips out of town leave from subway stations and are available at a reasonable cost.

The month of March sees the return of our common nesting species: American robin, red-winged blackbird, common grackle, song sparrow and possibly killdeer and eastern meadowlark. Diving and dabbling ducks return to the marshes and bays.

A bus outing on March 22 to Aylmer to view migrating swans was an outstanding success. Forty-six species seen included 340 tundra swans, 300 Canada geese, 1 pied bill grebe, 60 northern pintails, 10 American wigeons, 200 canvasback, 100 redhead, 5 ring necked, 20 lesser scaup, 10 common goldeneye, 10 bufflehead, and 20 common mergansers. Fifteen killdeer, 40 common grackles and some 1000 red-winged blackbirds were also sighted.

The Nature Arts group had two outings -- one to the University of Toronto greenhouses. Each person chose a different place to sketch the plants. Lunch was enjoyed in the Hart House cafeteria and there participants compared the various ways each person saw the subjects they had chosen.

The second outing was a tour of the rooms and halls of Hart House where the work of contemporary Canadian artists was displayed. At the end of the tour a juried show of student art work and photography was viewed.

On March 15 an outing was held at Glendon Campus to observe trees. Sugar, silver and Japanese maple, white pine, hemlock, white ash, alternate-leaved dogwood, American elm, black cherry, beech and basswood were identified. Ailanthus, white mulbery, Norway spruce and Austrian pine, as well as osage orange, hop tree, black locust, Kentucky coffee tree and redbud -- the latter two with seeds -- were also observed.

A mini-bus trip to Bruce's Mills on March 24 offered pancakes and maple syrup for lunch. A walk through the woods provided sightings of black capped chickadees, hairy and downy woodpeckers, a northern harrier, Eastern phoebe, white-breasted nuthatch and robins.

The weather in March was mostly cloudy and always windy and cool with temperatures ranging from 0°C to 12°C.

April should bring warmer weather and an influx of bird migration. April 2 was a beautiful spring afternoon, and so clear that the far shore of Lake Ontario could be seen from the Scarborough Bluffs. Birds were not too active but a few were migrating. The meadows were beginning to green up, and coltsfoot were starting to flower at the edge of the bluffs.

A scavenger hunt in Todmorden Mills on April 19 lasted from 10 am to 3 pm. Thirty persons in attendance didn't notice too much of the environment because they were concentrating on what covered it. One hundred and ten green garbage bags filled with litter were collected, 40 tires, 3 shopping carts and one oil tank were picked up. At the same time two of the biggest American toads, one northern brown snake and at least a dozen garter snakes were observed.

SPRING OUTINGS (cont'd)

A minibus outing to Halton Region to see what amphibians and reptiles had come to life was most productive. The leader said "it was an excellent day. To find 15 amphibian/reptile species in one day is exceptional". Owl pellets were found; meadow-rue, coltsfoot, skunk cabbage, hepatica, marsh marigold, spring beauty were in bloom and trout lily and trillium were observed.

Another minibus outing to Ajax/Pickering on April 26 resulted in 54 bird species being identified. A belted kingfisher, tree swallow, winter wren, golden and ruby crowned kinglets, Swainson's thrush, brown thrasher, yellow rumped warbler, chipping, song, swamp and white-throated sparrows, Eastern meadowlark, were some of those identified, as well as 11 species of ducks.

A work day at the Jim Baillie Nature Reserve on April 26 produced an "emergency rest spot" for those who travel the inner trails of the Reserve. A few of the trails were checked and trimmed. Grouse were heard and one was sighted on the road dusting itself. A grey tree frog was found sunning itself. Trilliums were just starting to appear.

The first evening walk of spring was held April 29 in Burke Ravine where 26 bird species were observed. Trilliums were in full bloom -- spring had arrived.

May is "bring lunch" time again with Wednesday outings starting at 11 am. However, on May 1, it was too cold, dark and windy for birds to appear. Migration was stopped for 3 days by cold north winds and ravines were empty of migrating warblers. In Lambton Woods the usual spring flowers were seen: toothwort was plentiful, several large clumps of spring beauty, lots of leaves and seed capsules of bloodroot, but only two flowers, marsh marigold, blue cohosh, plenty of trilliums, trout lilies everywhere and many more species were observed. Wildflowers are at their best this month and provide a colourful and varied carpet in the woodlands.

An outing in the West Don Valley provided some excellent information on photography. Notes were given and a short talk on lighting and the use of reflectors and shadows to improve backgrounds.

Two minibus outings were arranged -- one to Backus Woods and a geology one to the Oak Ridges Moraine.

On May 31 a wildflower outing was held at the Humber Arboretum. This was a joint outing with the Canadian Wildflower Society. Fifty persons attended, 89 specimens of wildflowers, trees and shrubs were identified.

The three spring months of 1986 had 49 outings, with 806 persons attending. Unfortunately four outing reports were not received from the leaders, so the number attending is not accurate.

The pace on our outings is unhurried as we stop to listen and look for birds, examine budding trees and wildflowers as they bloom and change with each season. Every outing provides new information on the flora and fauna of the area, which is so willingly shared by the many knowledgeable members of the Club who lead, participate and organize these year-round events.

Eileen Mayo

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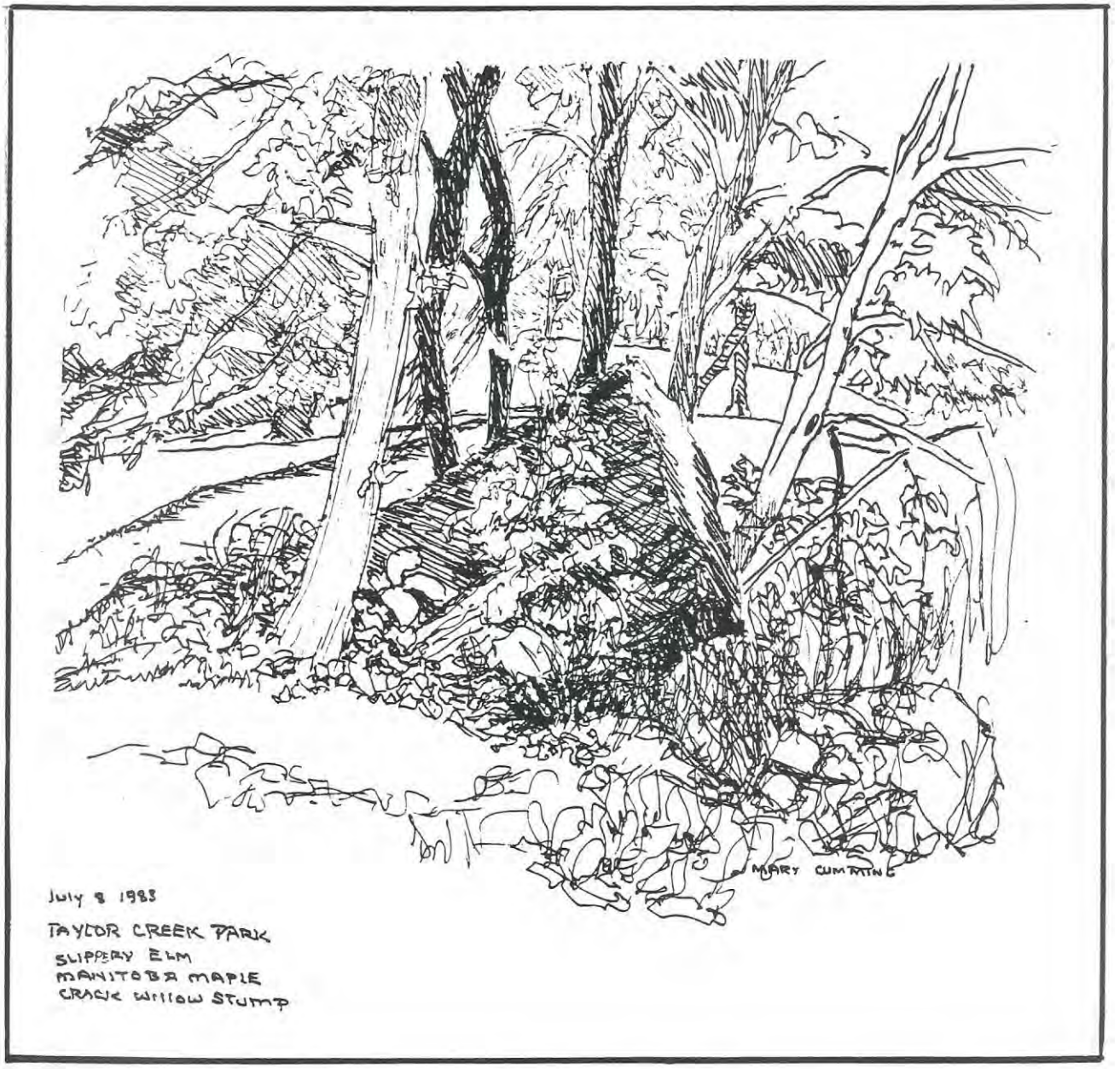
TORONTO REGION Amphibian & Reptile REPORT

MARCH

Activity levels in amphibians and reptiles which hibernate under the ice of ponds increase as they sense the increase in day length. Snakes hibernating in the foundations of old buildings or abandoned wells sense the increasing heat of the stones and walls and begin to make their way to the surface. In warm springs our earliest amphibians may be heard on the last day of the month. The earliest record for any of Toronto's amphibians and reptiles was for painted turtles sunning on a log March 29 and wood frogs and chorus frogs calling March 31.

Please remember to send any observations of amphibians and reptiles to Bob Johnson (284-8181), c/o Metro Toronto Zoo, P.O. Box 280, West Hill M1E 4R5.



A GUIDE TO ANIMAL TRACKING AND BEHAVIOUR by Donald & Lillian Stokes, Little Brown, 1986, 402 pages, bibliography, and index.

Essentially about mammals, this guide concentrates on those which leave tracks (bats not mentioned), though a great deal of other evidence is discussed - such as scats, dens, nests, dams, trails, tunnels, tooth and claw marks, disturbed vegetation, food caches and remains. By process of elimination one learns to identify a species unseen, sometimes with scant evidence. Clues and quick references are given for each species. Even if you already have a guide to animal tracks, it would be well to have this one on hand also, since you will probably find that gaps in the information are filled. Not only are the species dealt with in detail, but the signs as well. Thus if you see a sign and suspect it's of a certain species, you can refer to the species section of the guide; if you have no idea about it, you can refer to the "signs" section, and avail yourself of a wealth of information.

Not only does the guide deal with evidence, but gives life histories as well, including diet, feeding, prey, social behaviour, territory, use of trails, tunnels and burrows, mating, breeding, young, and hibernation. This information provides the background for the whole exercise.

In projects such as this guide, choices have to be made as to what to include. Some of the remote wilderness mammals are not dealt with, such as gray wolf and Canada lynx - though the fisher is included. Comparisons would have been useful of the few wild cats and dogs. The European hare, jumping mice, rats, house mice are not covered, but the other common eastern species are included.

Illustrations include, besides the tracks, range maps and many charming, lively and accurate pencil drawings by Leslie Holt Morrill.

DB

BIRDS OF PREY by John P. S. Mackenzie, Key Porter Books, 1986. Birds of the World Series, 142 pages. No index. No bibliography.

This could probably be described as a smaller coffee-table book, about 30 cm square. Of the 142 pages, there are 20 pages of text - the remainder of full-page colour photographs with accompanying captions.

Though part of the "Birds of the World Series", about eighty percent are North American raptors. The orders and families are in systematic order with readable explanatory text. Isolating "the eagles" as a subgroup within the hawk family is misleading, however, since, for example, the fish eagles are thought to be closer to certain kites than to other "eagles". It would be interesting, if there were a bibliography, to be able to trace the apparently new classification of the lammergeyer (bearded vulture) among the kites.

The photographs include many of the popular close-ups, with heroic-sized saw-whet owls. (Sizes are not given.) Among the spectacular photos, my favourite of all is that of the short-eared owl showing its "ears".

DB

FOR READING (cont'd)

THE BURGESS SHALE by Harry B. Whittington, published by the Geological Survey of Canada and Yale University Press, 1985, U.S. $25.00

The Burgess Shale is a geological formation in the Rocky Mountains. It occupies a high ride in the Yoho National Park near Field, B.C. It is a most memorable assemblage of beautifully preserved marine plants and animals which provide a record of the middle Cambrian Period about 530 million years ago. The deposit preserves biota which lives on the seaward edge of a shallow water, tropical algal bank, and the steep bank face and muddy slope below the bank. The treasure locked in the Burgess shale was first documented by Charles Walcott of the Smithsonian Institute. Dr. Henry Whittington, the author of this book, has been studying the shales since 1966 with the cooperation of the Geological Survey of Canada and National Parks Canada. The book is illustrated by high quality photographs and line drawings. Well-constructed diagrams explain the geological context of the shales and the paleo-environmental setting of the fossils. Whittington provides a summary which should appeal to general readers in the variety of early life on earth.

condensed from a review by Michael E. Taylor in SCIENCE, Vol. 235, No. 4784, Jan. 2, 1987

ENVIRONMENTAL RESOURCE BOOK, 1986, Ontario Environment Network, P.O. Box 125, Station P, Toronto M5S 2Z7, about $4.00

The Ontario Environment Network has published the third edition of its old ENVIRONMENTAL SOURCE BOOK. The new book has been updated and expanded to include 288 environmental organizations -- large organizations, as well as smaller grassroots citizens' groups. The Resource Book lists addresses, the names of contact people, and telephone numbers, as well as providing listings -- by environmental issue -- of hundreds of printed and audio/visual materials available from Network groups.

[from NETWORK NEWS, Fall'86]

RECENTLY PUBLISHED:

* WILD WATERS: CANOEING CANADA'S WILDERNESS RIVERS edited by James Raffan, Key Porter Books, Toronto, 1986, $29.95

* BIRDS OF THE WORLD: BIRDS OF PREY by John P.S. MacKenzie, Key Porter Books, Toronto, 1986, $29.95

* HANDBOOK OF THE CANADIAN ROCKIES (GEOLOGY, PLANTS, ANIMALS, HISTORY, RECREATION from Waterton/Glacier to the Yukon) by Ben Gadd, Corax Press, Box 1557, Jasper, Alberta TOE 1E0, 1986 (860 pages) $25.00

ISLANDS OF GREEN: NATURAL HERITAGE PROTECTION IN ONTARIO by S. Hilts et al, Ontario Heritage Foundation, Toronto, 1986, $11.95

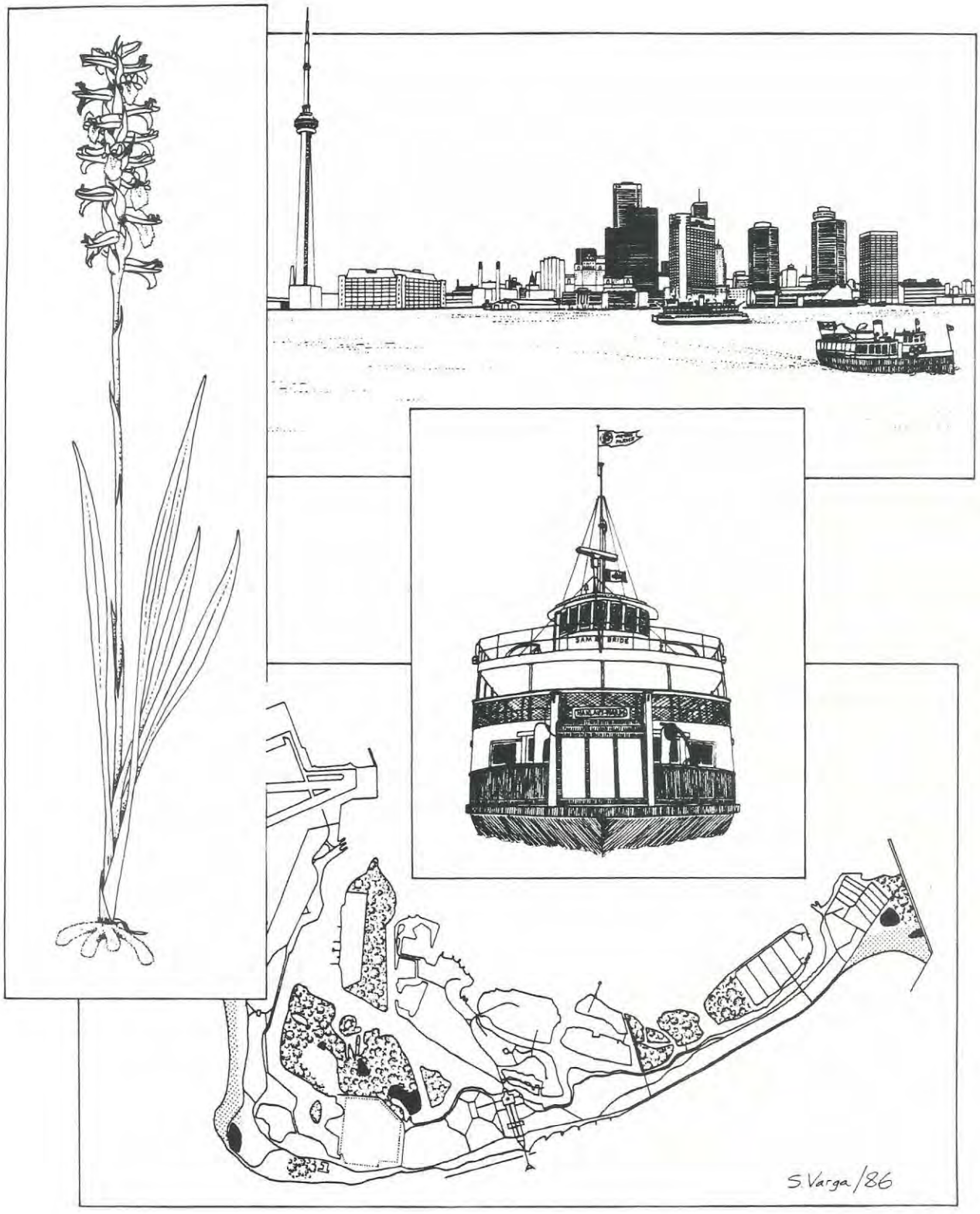
* "Metropolitan Toronto's Urban Forests: History and Future" by J.W. Andresen and W.B. Granger in ARBORICULTURAL JOURNAL, Vol. 10, 1986

* THE ROCKY MOUNTAINS: CREST OF A CONTINENT by J.A. Kraulis, Key Porter Books, 1986 $29.95

TORONTO ISLANDS: PLANT COMMUNITIES AND NOTEWORTHY SPECIES by Steve Varga, Toronto Field Naturalists, 1987, $2.00 (See also page 14.)

* received by TFN

FOR READING (cont'd)



Cover of Steve Varga's booklet on the Toronto Islands. A resumé of Island history and habitats with pen and ink drawings of the noteworthy plant species.

In The News

PRESERVING THE GENETIC MATERIAL OF PLANTS

Scientists are applying the knowledge of a branch of science called cryogenics to preserve genetic material of plants. The prefix "cryo" comes from a Greek work meaning "cold" or "icy". So cryogenics is a branch of physics dealing with very low temperatures. The new technology uses liquid nitrogen to freeze dormant fruit tree buds which can later be thawed to produced new plants. Scientists of the University of Saskatchewan have used the new technology on 40 apple varieties; for example, red delicious, McIntosh and golden. Cecil Stushnoff, head of the university horticultural department, says that this is the first step towards a national or international repository of plant genetic material. This is horticulturally important for plants that are hard to preserve such as apples. New varieties of apples are developed by grafting buds. Seeds cannot be used to maintain them. At present, apple varieties are preserved in orchards and orchards are susceptible to disease and frosts. Cold resistant varieties of apples were imported to Canada from China and Liberia during the early 1900's and availability of genetic material from these countries can be influenced by politics. Being able to preserve varieties in Canada is a great asset. The dormant buds are removed from trees and dehydrated for 11 days so that excess moisture won't rupture the cell plasma membranes when the bud freezes. After moisture removal, the buds are placed in liquid nitrogen at -196°C. To reverse the process, the buds are thawed overnight to temperatures between 2°C and 4°C, then placed into wet peat moss to restore their moisture content and finally grafted onto trees. The Saskatchewan team are also experimenting with plums, cherries and peaches.

from an article by David Helwig in the GLOBE AND MAIL, Dec. 5, 1986

THE AURORA BOREALIS LIFTS ITS VEIL

New satellite photographs of the aurora borealis may revolutionize thinking about the phenomenon. The photographs were taken by Sweden's first satellite -- the Viking. Put simply, they show the aurora is a spreading blob, not a moving spot. The Viking took a series of photographs every 20 seconds and it was this rapid series which showed how the aurora develops. An aurora occurs when highly charged electrons from the sun smash into highly dilute gases in our upper atmosphere -- 100 km above the earth's surface. These gases glow in the same way that neon lights glow. The Viking was able to measure the electric and magnetic fields in the aurora. The latter are strong enough to corrode metal pipelines. Scientists are delighted with masses of data which Viking sends back to them.

from an article in the GLOBE AND MAIL, Jan. 2, 1987

RED SQUIRREL ROAD A DIPLOMATIC FAUX PAS

An international group, the Union for Conservation of Nature and Natural Resources, has included the Lady Evelyn-Smoothwater Provincial Park on its worldwide list of threatened areas. The threat is posed by the logging road which the Ministry of Natural Resources is backing. Vince Kerrio maintains in a letter to the Union that his ministry was not consulted about listing the area as threatened. Since the Ministry is backing the road, it is not surprising that they were not consulted. Now Vince Kerrio's feathers are ruffled because protocol was not followed ... tch...tch...

See article by David Israelson in the TORONTO STAR, Jan. 6, 1987; also TFN 385, pages 24-25.

IN THE NEWS (cont'd)

THE LOON SCOOPS THE CHANGE

New

Old

Canada will get a loon on its new one dollar coin by default. The Royal Canadian Mint had originally planned to portray a voyageur on its coin and had cut the dies necessary for the coin's production. However, the dies were lost in transit to Winnipeg. The Mint, the RCMP and the courier assigned to deliver the dies to Winnipeg are scrambling to find out what happened. If they have been stolen, the possibility of counterfeit coins looms large. Therefore the design was altered and we get the loon. Robert Carmichael of Echo Bay, Ont., is the lucky designer.

from an article by Andrea McIntosh, the GLOBE AND MAIL, Jan. 9, 1987

LYELL ISLAND'S TREES AND THE FRANKLIN RIVER IN TASMANIA

Recently Thomas McMillan declared that the federal government would not apply pressure to B.C. to force it to save the trees of Lyell Island from logging. Ottawa could, for example, withhold the $150 million which it promised to B.C. for forestry development. It adopted such pressure to force provinces to abide by the Canada Health Act. Why not Lyell Island? The federal government would do well to follow the Australian government. The Tasmanian state government, through the Hydro-Electricity Commission, was hell-bent on a damming on the Franklin River. Along the Franklin River are found limestone caves in which Aborigines lived during an early ice age. The archaeology of the area is of immense significance. The Australian government used World Heritage legislation to obtain an injunction against the Tasmanian government to prevent it from going ahead with its hydro-electric scheme. Now the rivers and forests of southwest Tasmania are safe from state-promoted development. Why can't Ottawa follow Australia's example and preserve Lyell Island from the forest industry?

for McMillan's position on the use of force to save Lyell Island's trees, see the GLOBE AND MAIL, Jan. 12, 1987

LUXURY MARINA SITE LOST TO DEVELOPER

Steve Otto, owner of Bevark Holdings Ltd., has lost his bid to force the Toronto Harbour Commissioners to sell to him 5.7 acres of land west of Cherry Beach. Otto wanted to build a luxury marina there. The THC stated that they would proceed with the deal only if Otto satisfied the Ontario Planning Act and obtained consent from the City of Toronto. Otto took his case to the Ontario Supreme Court. He lost! Take your hats off in a moment of gratitude to the Ontario Supreme Court.

See an article by Thomas Claridge in the GLOBE AND MAIL, Jan. 16, 1987

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IN THE NEWS (cont'd)

BUCKAROO BIOLOGY

Buckaroo biology is what Vernon Thomas feels about the Ministry of Natural Resources' plans to control the Canada Goose population by organized hunt. Thomas is a Guelph zoology professor who has studied the overpopulation of Canada Geese at the Toronto Island Airport. The Guelph hunt will begin this fall in the Guelph Township Park and may be extended to other parks and conservation areas. Craig Selby, the MNR fish and wildlife officer in the Cambride area, feels that the public is fed up with goose droppings and that a controlled kill would reduce the goose population and encourage the geese to migrate. He also maintains that the geese do a great deal of damage to farmers by grazing on their fields. Thomas, on the other hand, maintains that the Canada Geese which reside in the Great Lakes area are different from the migratory geese that breed in Hudson Bay. Local geese don't migrate. Exerting hunting pressure on them will simply move them into nearby parks. Thomas says that farmers can be compensated for any verifiable damage that geese do to their crops and we can employ people to collect goose droppings. He says that you don't cure a wildlife problem by shooting it.

See article by John Harris in the GLOBE AND MAIL, Jan. 16, 1987

A MARINE MOLLUSK AND THE EARTH'S MAGNETIC FIELD

A recent experiment has suggested that a mollusk called Tritonia diomedea can respond to the earth's magnetic field. How the animal's nervous system manages to do this is unknown, but Tritonia diomedea has large and easily observed neurons and this gives researchers the opportunity to study the basis of the animal's orienting. It aligns its body in response to the earth's magnetic field and varies its position according to phases of the moon. Whether the animal does orient this way in its natural habitat is unknown. If it does, what purpose might it serve? Perhaps its orientation takes it into shallow water at the time of the full moon and this facilitates reproduction. Or maybe periodic shifts help it hunt for food.

See SCIENCE, Vo. 235, Jan. 16, 1987

MINISTRY OF NATURAL RESOURCES NABS VENISON DEALERS

Officers of the Ministry of Natural Resources posed as unsuccessful hunters and meat dealers who wanted to purchase venison. Lax bar-room conversation alerted the Minstry to poachers who had set up an illicit venison trade in an area north of Alliston. The Ministry personnel were at first unsuccessful in nabbing the persons involved, although they had come across dead deer. However, when they posed as people interested in buying venison, they were successful. They seized a tonne of venison plus rifles, shotguns and a van. The seized venison was donated to the Salvation Army, the usual procedure with poached game. The poachers will be charged with unlawful hunting of deer and unlawful sale of venison.

See article by Zuchair Kashmeni, the GLOBE AND MAIL, Jan. 20, 1987

Don't forget to send your clippings (including source and date) to Louise Herzberg at 59 Hillside Drive, Toronto M4K 2M1.

ISSUES

FORESTS FOR TOMORROW

Beginning in mid 1987, people in Ontario will have an opportunity to take part in a wide-ranging examination of forestry. As required by the Environmental Assessment Act, the Ministry of Natural Resources of Ontario prepared a Class Environmental Assessment for Timber Management on Crown Lands in Ontario and submitted it for review to the Ministry of the Environment in late 1985. This is the first Class Environmental Assessment to be voluntarily sent to hearings before the Environmental Assessment Board. The environmental assessment of forestry is aimed at all forestry on Crown lands in the province. It is referred to as a "Class" Environmental Assessment because it focuses on the activities that, in the view of the Ministry of Natural Resources, make up sustained-yield timber management, regardless of location in Ontario.

Early in 1986 the Federation of Ontario Naturalists helped to form a coalition of conservation groups to respond to this Class Environmental Assessment. The coalition has been named "Forests for Tomorrow" and includes the Federation of Ontario Naturalists, the Wildlands League, the Sierra Club, Timiskaming Environmental Committee, Pollution Probe and Environment North.

Over the past summer the coalition received confirmation that the Ministry of the Environment would provide "intervenor funding" (financial assistance for persons or groups who want to make representations at hearings). An environmental lawyer, Michelle Swenarchuk of the Canadian Environmental Law Association, has been retained to represent the coalition throughout the hearings. Five forestry experts from across Canada, selected by the coalition, reviewed the Class Environmental Assessment and provided critical information which was later used to develop the coalition's strategy to manage the presentation of evidence at the hearings.

There is general agreement within the coalition, and among the experts it has retained, that the Class Environmental Assessment contains a number of major weaknesses. Of special concern is the way in which the Ministry of Natural Resources has defined the scope of the assessment. A number of activities relate to the utilization of our forest resources, but the Ministry has very narrowly defined the undertaking as "timber management", meaning building roads, logging and protecting the forests from pests, disease and fire. Timber management is obviously a much more specific concern than "forestry management". In the latter, many of the other activities that the Ministry of Natural Resources is charged with administering, for example, fish, wildlife, parks, have a place; in timber management, they don't.

There are a number of ways you can contribute to this examination of forestry:

- Familiarize yourself with the Class Environmental Assessment document. Copies of it may be viewed in the offices of the Ministries of Natural Resources and Environment.
- Prepare a brief on an issue you or your group has identified -- forestry's impact on wildlife, habitat, streams, community life, and so on. If you have several issues and are wondering what to focus on, contact the Federation of Ontario Naturalists (444-8419) for advice.
- If you are aware of any cases of undesirable forestry practices and can document them, please contact the Federation of Ontario Naturalists, 355 Lesmill Rd., Don Mills, Ont. M3B 3W8.

And finally,

ISSUES - Forests (cont'd)

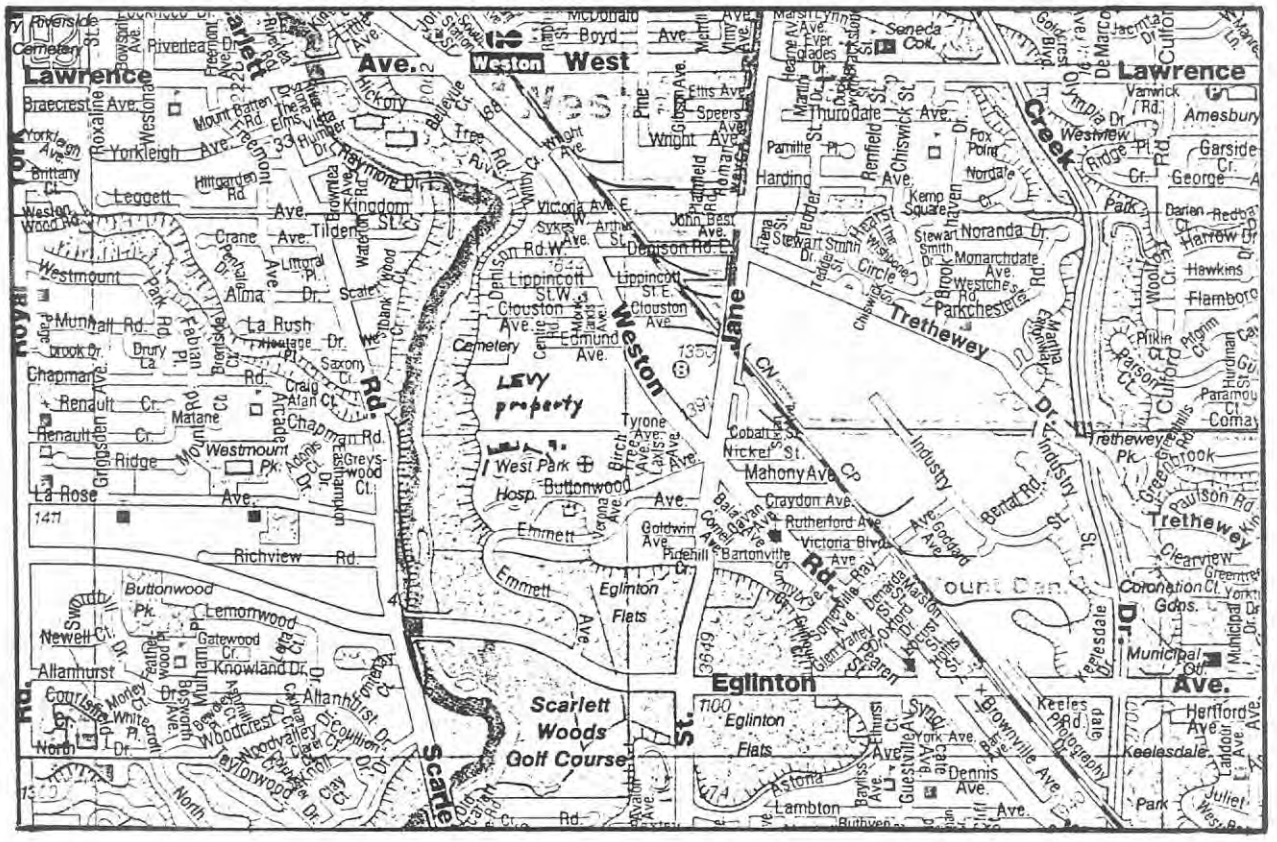
- Attend the hearings in your area. They will be held in Toronto and in centres across Northern Ontario. The locations and dates will be announced by the Ministries of Natural Resources and Environment.

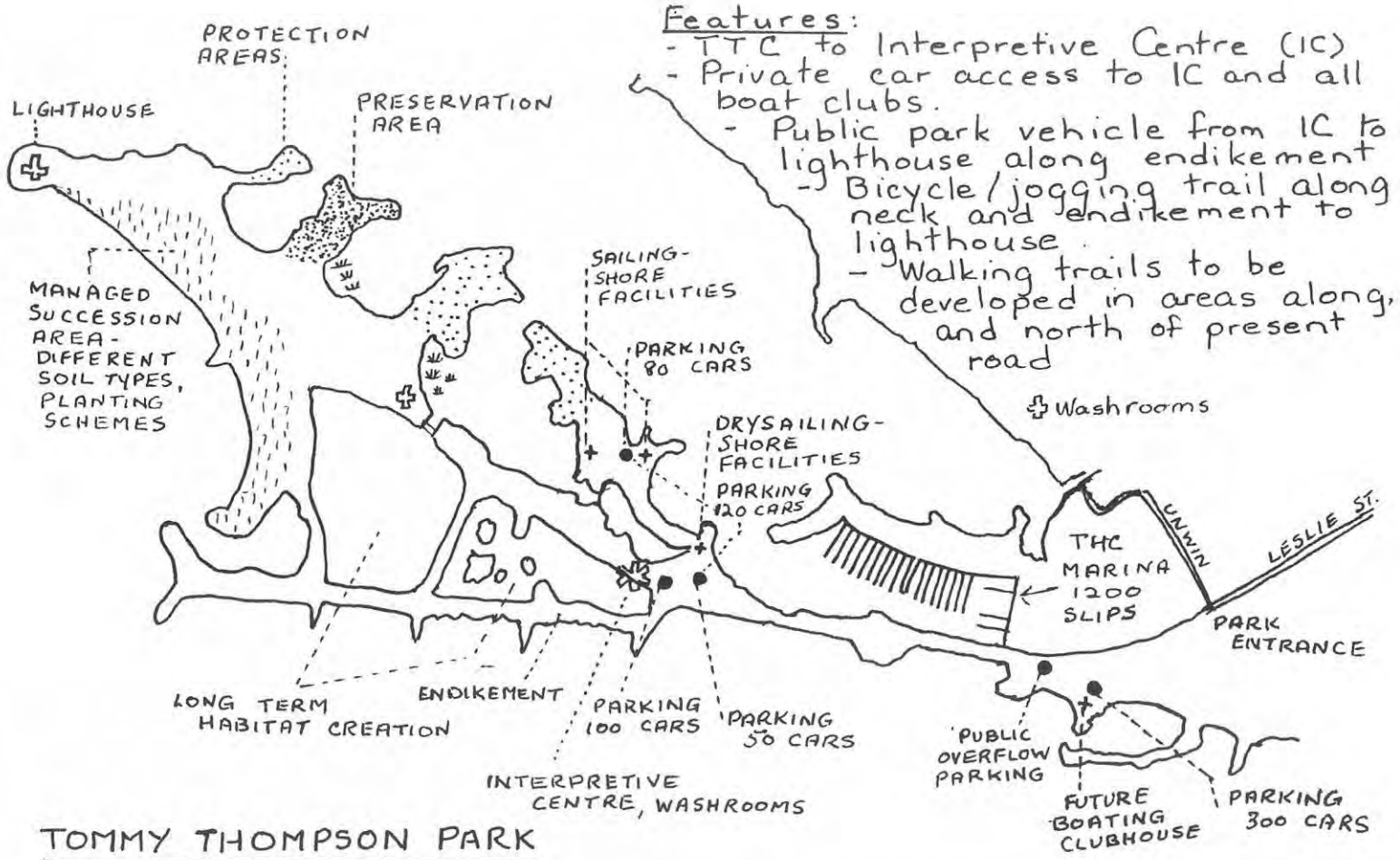
J. Payne and S.H. Montonen
Federation of Ontario Naturalists

LEVY SITE -- FORESIGHT

The Levy Auto Parts site (at Jane Street and Weston Road) has been scheduled for redevelopment for many years. Formal plans have been drawn up to build approximately 18 apartment buildings (ranging from 6 to 22 storeys high) on this 38 acre site. There are to be about 2700 units in total with an expected population increase of 5000 to 6000 people. This proposal would greatly change Weston in general and would have special impact on the area encompassing Sykes, Denison, Lippincott, Clouston and Edmond Streets. This five-block area that dead-ends at the Humber Valley contains 200 years of local and natural history -- ranging from the private cemetery of the Denison family (from 1801) who helped to found Weston to the small wildlife area that thrives in the Humber Valley adjacent to the site.

A public meeting is to be scheduled to allow the developers to present their proposals for community reaction. To find out more details about the meeting and the development plans in general and to express any concerns you have, contact the City of York Planning Department at 394-2607.





TOMMY THOMPSON PARK

On Friday, January 23, the 17 members present, of the 30-member Metropolitan Toronto and Region Conservation Authority Board voted 11 to 6 to approve Concept D of the Tommy Thompson Park Plan. The simplified map above gives the main details of the Plan which is estimated to cost about $6.4 million. MTRCA will prepare a Master Plan based on Concept D and this will be sent to the Metropolitan Toronto Council and the Ministry of Natural Resources for their approvals.

Jean Macdonald

Ed. Note. See page 4 for a different approach.

IN EXCHANGE

A LOG IS A FRIENDLY PLACE

If you are lucky enough to live by the water and a log comes floating in and parks itself on your shore, think twice before you get rid of it. You may be casting off more than you think.

At spring break-up this year the water was higher than usual; logs which had been high and dry for many years were on the move. An old pine, 35 feet long, gnarled and worn into ridges and swirls, came to rest in front of our place. We tied it to a tree until we could decide what to do with it. As the days went by and we looked at the log from our window, it seemed to develop more and more character, and by the end of a week we thought it was quite beautiful. Now of course parting with it was out of the question, so we made it secure. The log now took over that part of the shore, creating a sheltered place between itself and the low, rather crumbly stone wall. Here the water was always calm and soon the bullfrogs came to stay. Later on a little garter snake took up residence among the stones behind the log.

Over the summer many creatures visited our log and found it a friendly place.

If you are a mother merganser trying to look after twenty ducklings who have had you up since the crack of dawn, you are mighty glad to come across a friendly log at 8 am! Out you get, followed by the gang. You settle down, hoping for a nap, but what a fidgety lot they are! Pushing each other and jockeying for position and just when you think they are all settled down, somebody gets an itch under a wing, he starts digging around with his beak and starts a chain reaction so that they all start shoving each other again! After about 15 minutes you decide to take them off down the lake, maybe they are still hungry.

The least sandpiper soon found our log, he ran along it in little spurts and seemed to find some snacks in the crannies. It became quite a popular place, birds dropped in for brief visits, frogs sat on it and one day a saucer-sized snapping turtle had a nap on it.

And if you are a small boy of five or so, you just gravitate to the log first thing every day as if pulled by invisible strings. You walk along it balancing with unconscious grace, to the place where the little snake lives. You hunker down and stare at the stones, and while you wait maybe a shiny blue damselfly will land right before your eyes! Then you spot the old bullfrog, he just has his head poking out of the water and is staring straight at you. You look back at the pile of stones and sure enough, the snake is there. So, now you can start your day. You turn to look out over the lake, sniff the air, see two loons on the water and a heron flying over and realize that you are hungry, but you are glad the people inside never call you to breakfast while you are busy on your log.

Now it is the end of October, a quiet time on the lake. The latest visitor to the log was a mink who ran along it the other day. Soon it will be covered with snow and I suspect that there will be many little footprints to see on this very special log.

an article by M. Withers in THE CHICKADEE, Huntsville Nature Club Notes, Vol. 29, No. 3, Nov. 1986

IN EXCHANGE (cont'd)

DECLINE IS SERIOUS

The Loggerhead Shrike (Lanius ludovicianus) is the only exclusively North American species of a largely Afrotropical family of birds. Although generally regarded as a full species, some authorities regard it as a race of the similar Northern or Great Gray Shrike (L. excubitor), the only other shrike found in Canada. In Canada, it is primarily a breeding bird of the prairie portion of the prairie provinces and of the agricultural belt south of the Great Canadian Shield in southeastern Ontario, southern Quebec and New Brunswick, with few records in British Columbia and rare nesting in Nova Scotia.

Its decline in Ontario was noted about the same time that the blue list of North American birds showing non-cyclical declines was first published, a list on which the species appeared annually, with declines as sharp as 70% reported in some areas. Recent analyses of Christmas Bird Count data and Breeding Bird Survey data have strongly supported the "blue list" designation for North America as a whole, with minor bright spots in southern and western portions of its range in the U.S.A. A recent status study in Canada recommended that it be classed as Threatened in Canada, a designation adopted by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in April 1986. Documentation of such declines in Canada relies primarily on Breeding Bird Survey data and impressions of regional experts. The stronghold of their breeding population in Canada remains on the prairies, where impressions of a decline are widespread. In Alberta, the Edmonton Bird Study Group listed the Loggerhead Shrike among species recommended for a provincial risk list, and although Breeding Bird Survey data from 1966 to 1979 did not show a significant decline in statistical terms, a comparison of 1972-1977 data with figures from 1978-1983 suggests sharp reductions in both southern and central areas. In Saskatchewan, Breeding Bird Surveys average the highest numbers of shrikes per route in Canada, but declines are at a statistically significant level. In the Saskatchewan portion of the Qu'Appelle Valley a definite decrease in numbers since about 1957 was noted. The one bright spot on the prairies appears to be in the extreme southeastern corner of Saskatchewan and southwestern corner of Manitoba.

Breeding bird survey data show a significant decline in Manitoba, Ontario, and few birds are now even sighted annually in Quebec.

The species was evidently never common in the New Brunswick portion of its breeding range and has not been recorded in the Breeding Bird Survey there in recent years. Its Nova Scotia range was at best very localized and probably temporary.

The chief cause(s) of the steady decline of Loggerhead Shrikes remain obscure today. The chief suspects appear to be loss of habitat and chemical contamination, possibly in combination. Natural factors such as predation, weather and competition with other species may play a role, but as these have always been in force seem unlikely explanations in themselves. In Ontario, loss of thorny pastures and roadside hawthorns have long been implicated, a suggestion that is at least partially supported by its current stronghold along the southern edge of the shield, where oldfield habitat with hedgerows and hawthorns can still be found.

As some areas of apparently suitable habitat lack shrikes, habitat loss does not provide a complete explanation for shrike declines. Bent (1950), commenting on the food of one of the races, noted that "Migrant Shrikes" are more insectivorous than the Northern species, a factor that could make it more susceptible to chemical insecticides, and as herbicides are used frequently to clear

IN EXCHANGE - Shrikes (cont'd)

roadside vegetation attractive to this species, these chemicals may also produce undesirable side effects. A study in Illinois indicated an inverse relationship between eggshell thickness in this species and levels of DDT.

Shortly after automobiles came into relatively common usage, Loggerhead Shrikes were found to be susceptible to being killed by them, and this appears to be an important factor currently in parts of Canada.

Clearly, this shrike has declined dramatically in Canada and over most of its range. Studies documenting its current range and investigating possible reasons for its decline are needed urgently if its slide into Threatened status is to be halted before the Endangered stage is reached.

Martin K. McNicholl

from ISLAND NATURALIST (Prince Edward Island Natural History Society), No. 91, Nov.-Dec. 1986

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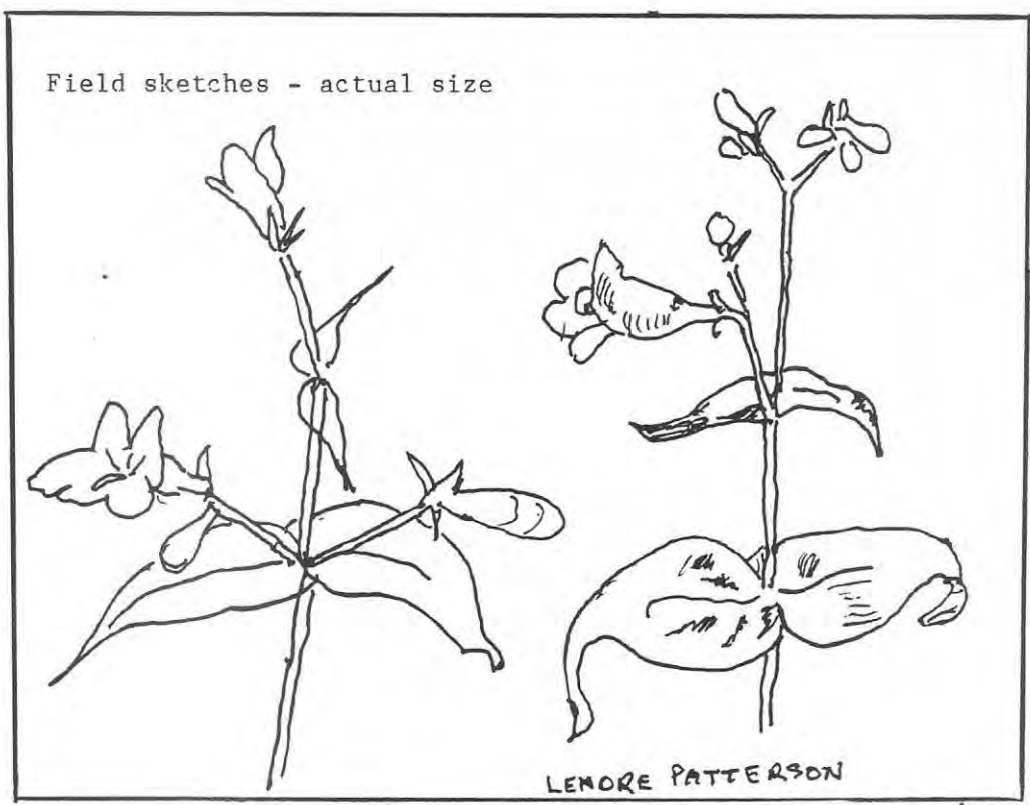
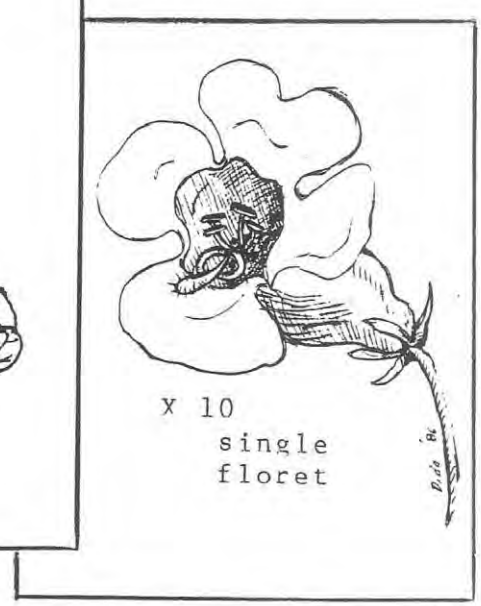
SOMETHING TO WATCH FOR!

The original range of foxglove, or white, beardtongue, a member of the figwort family, was the Mississippi basin. Its presence in Toronto was first recorded in the literature when it was found growing on the Leslie Street spit in 1980. This past summer more specimens were found growing in Vyner Ravine in North York, in an undisturbed (unmown) area. Vyner Ravine is located along a tributary of the East Don River.

Helen Juhola



Foxglove beardtongue (Penstemon digitalis) found on TFN Outing to Vyner Ravine, June 11, 1986



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MOTHS, MITES, BATS...

Sue Hubbell in "A Country Year" writes delightfully of moths, mites and bats. Her cousin has an academic specialty and it is the somewhat rarefied study of moth ear mites! This enables Mrs. Hubbell to enlarge on one aspect of the life cycle of night-flying moths favoured by hungry bats.

Night moths can hear the high pitched squeaks of bats, and certain moths can make noises which the bats, in turn, can detect. It is supposed that these specific moths broadcast gastric discouragement to the bats.

This defence mechanism, however, only functions in working partnership with another creature--the moth ear mite. The mite is harmful to its host's hearing and risks rendering the moth deaf, thus placing both moth and mite in jeopardy.

During egg-laying time, the mites--arachnids so minute that they are barely visible to the human eye--seek out the moth's ear, a warm and protected hide-away. Egg-laying upsets the balance of the moth's hearing apparatus, and if the mites laid eggs in both ears, they would rapidly render their host stone-deaf and bat-vulnerable.

So the first mite breaks trail, rather like a lead skier, and all following mites single-file it to the same ear, where they do their laying.

This leaves the moth's opposite ear free of invasive tactics, thus giving the moth a chance to continue to hear bats while the eggs are hatching.

(I cannot resist toying with the notion that the mites, in turn, possibly play host to creatures even smaller, in yet another example of Nature's Chinese-box complexity. Like many people, I can fairly easily "accept" the phenomenon of the ever-increasing magnitude of things, each object going one better than its predecessor. What is beyond my capacity to envisage is the fact of things getting progressively smaller until they apparently disappear. I understand that the electron microscope enables us to see individual atomic clusters. Something I have only heard described as an H.R.T.E.M., developed in the last ten years, enables us to photograph individual atoms. Is there a bottom line, a "final" product? Perhaps the scientists in our association would enlarge upon this? I, for one, would be grateful.)

Eva Davis

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Red-tailed hawk soaring
riding air currents above.
Ground squirrel cowers.

haiku by J. Kenneth Cook

CARNIVORES

The third of the six orders of mammals in the Toronto Region is that of the carnivores.

Skunks, as well as other "un-weasel-like" groups are in the weasel family which is usually called "the mustelids", a word which, however, also suggests "weasel-ness".

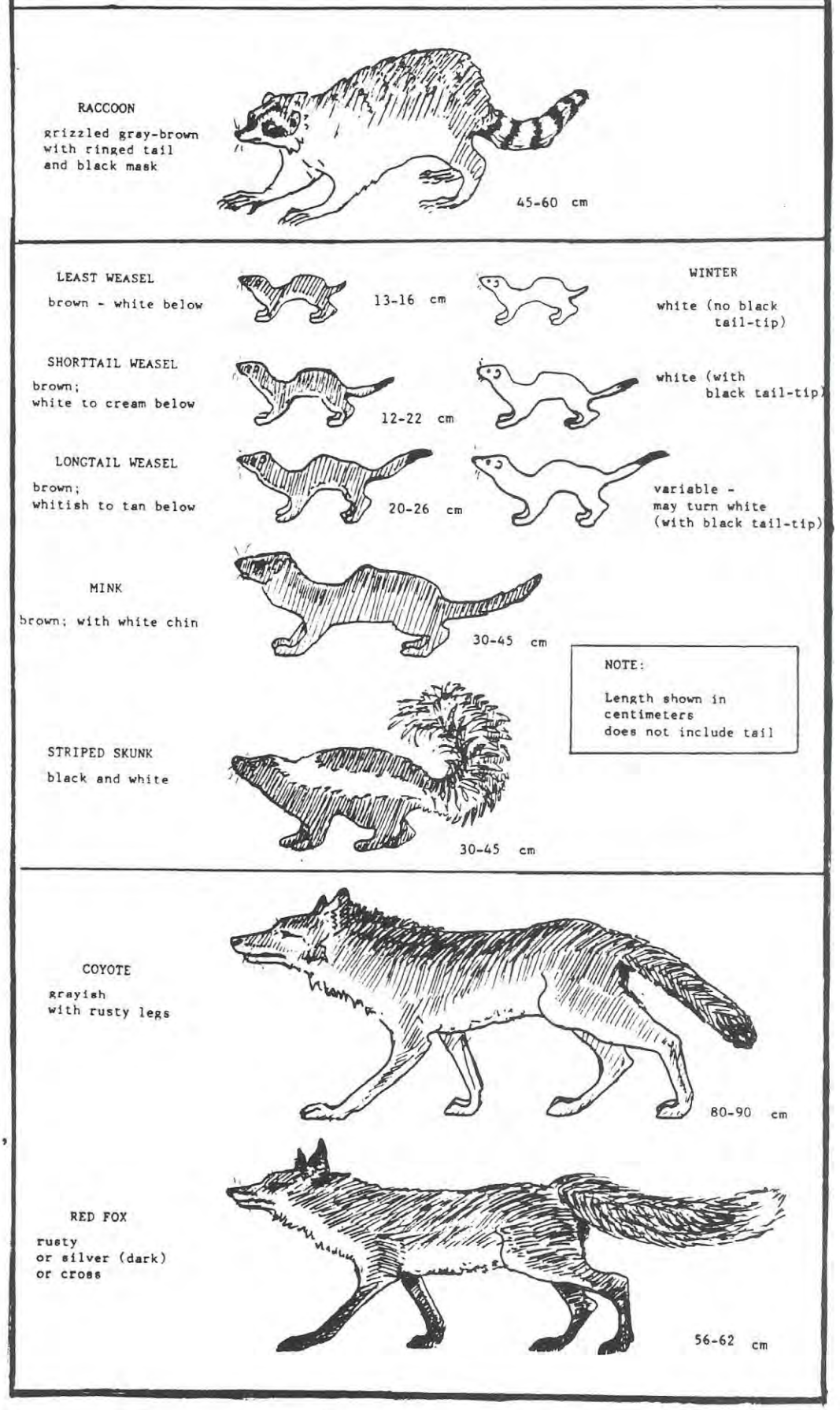
The cat family follows that of the dogs. Domestic cats and dogs are often encountered in Toronto natural areas, freely wandering, the dogs sometimes in packs.

All the pictured carnivores are native species, three being circumpolar - the shorttail weasel (stoat or ermine), the least weasel, and according to recent reclassification, the red fox.

Diana Banville

Ref.: See TFN 381:20 SEPT. 1986

THREE FAMILIES: RACCOONS, WEASELS, DOGS



THERE IS SOMETHING FISHY IN OUR RIVERS AND CREEKS!

For the first time in my life I saw a large salmon in one of Metro's creeks this fall. Not the same species which inhabited our creeks and rivers more than 100 years ago but, nevertheless, a large fish swimming upstream in November answering an urgent call to buck the current.

On November 10, 1986 I saw a large fish pulled out of Etobicoke Creek just north of Lakeshore Blvd. According to the fisherman who caught it, it weighed 25 lb and was a chinook salmon.

Chinook are also called "king" or "spring" salmon. The scientific name for this species means "hooked snout" which is what the fish had. The natural range of this species is the Pacific Ocean from Central California north to Alaska and south to North China. Usually the fish spend three to seven years at sea before returning to the river of their birth to reproduce and die.

Since 1969 the Ontario Ministry of Natural Resources has been releasing spring, coho and chinook fry into streams that flow into the western basin of Lake Ontario. According to the Ministry there is very little successful natural reproduction of these fish because they have not yet adapted to a lifetime in fresh water.

Hey, maybe that's why we are so generous with the salt on the streets in winter! We are just trying to help the salmon feel more at home in Lake Ontario.

Helen Juhola

For further reading:

FISHES OF ONTARIO by H.H. MacKay, Ont. Dept. of Lands and Forests, 1963

"Pacific salmon's role in Lake Ontario" by Allan Wainio in ONTARIO FISH AND WILDLIFE REVIEW, Vol. 18, No. 4, 1979

"Restocking our waters" by Fisheries Branch Staff in ONTARIO FISH AND WILDLIFE REVIEW, Vol. 19, No. 4

□

March in, March!
Month of returning robins,
killdeer calling,
and running sap from maples,
warm winds bringing hawks,
whistling swans,
and dripping eaves.

Helen Juhola

THE FLOWERS THAT BLOOM IN THE SPRING - TRA LA!

The snow is blowing all around the house, the temperature is -12°C but who cares, the seed catalogues have arrived. With a crackling fire and a comfortable chair, winter disappears in the planning and dreaming of lush green and colourful beauty in the garden next summer. As a matter of fact, the dream garden is, in many ways, superior to the real one. There are no biting, sucking and chewing insects tearing the flowers and their leaves to shreds. There is no mold, no black spot to disfigure the foliage; everything planted comes up and blooms superbly. With this perfect garden in the mind's eye it is tempting for the armchair gardener to add more and more varieties to the growing seed order.

Now that wildflower gardening has become so popular perhaps a packet or two of Thalictrum dioicum (Early Meadowrue), Lilium canadense (Canada Lily) or even better, the once widespread Epigaea repens (Trailing Arbutus) can also be ordered from the ever-increasing nurseries featuring wildflower seeds.

However, there are a couple of concerns in ordering wildflower seed, even for the armchair gardener and especially for naturalists and conservationists. The first question is, where did the seed house or nursery get their seeds? Did they tramp heavily through the woods and sensitive areas foraging for seeds or, even worse, did they dig up the wild plants and take them back to the nursery for propagation? Many an observer has seen favourite stands of wild orchids or lilies, for instance, reduced to a few holes in the ground overnight and many another knows just how hard it is for even the gardener/conservationist to resist the temptation to try transplanting 'just one' from the woods to the garden. Fortunately now, most commercial wildflower growers are not only aware of the ethics of conservation but also of straight-forward economics. As one nursery man said, "Why would I pay the high costs of digging plants from the wild when I can raise wildflowers from seed or from vegetative cuttings and divisions that are hardier specimens and cheaper to produce?" Most seed houses will state clearly that their seed comes from their own fields or from local natural areas where permission to gather has been obtained and those are the ones who should get the orders.

The other question about wildflower seeds is whether amateur growers can get the seeds to germinate and, that accomplished, grow them successfully. Several catalogues include growing instructions, from very minimal to quite precise. The ultimate propagator's aid is the DIRECTORY TO RESOURCES ON WILDFLOWER PROPAGATION prepared by the Missouri Botanical Garden. It is a comprehensive manual on growing wildflowers from seeds for every landform region in the United States. Most Canadian wildflowers can be found covered in Section I which includes the northeast United States. The Directory can be ordered from the National Council of State Garden Clubs, Inc., 4401 Magnolia Ave., St. Louis, Missouri 63110. Many wildflower seed sources are also listed but as the date of publication is 1981 it is possible that several are no longer in business.

As yet there are very few Canadian catalogues that feature wildflower seeds. The Rocky Mountain Seed Service, Box 215, Golden, B.C. V0A 1H0 lists British Columbia native seeds, 121 varieties, at $1.25 a packet. Many native B.C. flowers are also native in Ontario and it is hard to choose which of the interesting shrub and plant seeds there might be room for in the garden.

Keith Somers Trees Limited, 10 Tillson Ave., Tillsonburg, Ont. N4G 2Z6, although a specialist in tree stock, has a short list of native tree and nut seeds that are tempting. Will we live long enough to grow some trees in the garden from seed? Come to think of it, that fir tree that appeared where the Christmas tree

WILDFLOWER SEEDS (cont'd)

branches protect the tender perennials each year is now eighteen inches high after four years! Keith Somers also includes a very few wildflower seeds in his catalogue, Jack-in-the-pulpit, Water Iris, Wild Rose.

C.A. Cruickshank Inc., the bulb specialists at 1015 Mt. Pleasant Rd., Toronto have always included a wide range of garden seeds in their spring catalogue. This year, under new management, they are Canadian representatives for Thompson and Morgan Seeds, one of the largest and best known seed houses for quality seed and interesting varieties. Thompson and Morgan include a few of the more common wildflower seeds in their catalogue, but you have to hunt for them through the brightly illustrated flower seed pages. For a true catalogue officianado this just adds to the enjoyment but one's faith is shaken a bit to read that the White Trillium (T. grandiflorum) is described as the Wake Robin! Oh well, perhaps they are new to wildflowers.

Aimers have been offering wildflower seeds in mixed packages for the last few years. This year, although the catalogue is not yet out, they say that they have new packets containing just native or native and naturalized seeds. Naturalized is what wildflower books call 'escapes' or 'aliens'. All packages list the varieties of seeds (mixed with vermiculite for easy sowing) contained within. Aimers Seeds, Cotswolds, The Green Lane, R.R.1, King, Ont. L0G 1K0.

For the widest of named variety seeds it seems that wildflower growers must look to the United States. The American Rock Garden Society has an excellent selection for knowledgeable gardeners. Their listed seeds are part of a members' exchange program of rock garden seeds, (many wildflowers fit into this category) and the seeds are available to donors of seeds and members from A.R.G.S. Seed Exchange, c/o Tam Hartell, 331 Earlham Terrace, Philadelphia, Pa. 19144.

The Prairie Nursery, P.O. Box 365, Westfield, Wisconsin 53964, with both spring and fall editions of their catalogue, offers many of the familiar and not so familiar meadow flowers and grasses. Their booklets are attractive with black and white sketches, their plant descriptions are good but their growing instructions are just the very basic. The prices of Prairie Nursery seeds depend on the rarity of the plant.

Midwest Wildflowers, Box 64, Rockton, Illinois 61072 has a most comprehensive list of species (over 150) available for 50¢ (U.S.), a package with a minimum order of $2.40. The catalogue and seed list is available for 50¢ (U.S.) and general instructions for growing the flowers are sent with an order.

The Vermont Wildflower Farm, Route 7, Charlote, Vt. 05445, looks like a very attractive place to visit near Lake Champlain and not far from the Shelbourne Museum. Like Aimers in Canada, they sell mixed packages for seeding meadows 250 square feet and up. As well, they also carry single variety packages for many meadow 'escapes', Daisy, Black-eyed Susan, Cornflower, Bouncing Bet and, would you believe, Chicory?

By far the best wildflower catalogue comes from the New England Wildflower Society. Almost all their seeds are collected from the Society's beautiful wildflower sanctuary -- Garden in the Woods. Any wildflower enthusiast travelling in the Boston area should not miss a visit to this fascinating and lovely garden and teaching facility.

Each variety of seed from the Garden in the Woods Catalogue is listed with its botanical and common name and a code letter which refers back to one of nine suggested germination methods. The Society also warns the prospective grower

WILDFLOWER SEEDS (cont'd)

that their seeds are 'open-pollinated' and there is the distinct possibility that they may have hybridized with similar species grown nearby. Non-members of the New England Wildflower Society may order seeds for $1.25 (U.S.) a packet, by March 15, and the catalogue may be obtained by sending a business-size, self-addressed, stamped (39¢ U.S.) envelope to: Seeds, New England Wildflower Society, Garden in the Woods, Hemenway Road, Framingham, Ma. 01701.

Finally, there are many excellent books available to help growers make a success of their newly ordered seeds. A good selection can be found in the Civic Garden Centre Library as well as a few seed catalogues. The library is open to everyone and members ($10.00 a year) may borrow books. A handy, instructive guide is the booklet, GROWING WILDFLOWERS, published by the Garden Club of Toronto and available for $2.00 from the Garden Club at the Civic Garden Centre, 777 Lawrence Ave. East, Don Mills, Ont. M3C 1P2.

Gail Rhynard of the Canadian Wildflower Society is co-ordinating a wildflower seed catalogue for the Society and would appreciate hearing of any sources not listed in this article. Send information to 125 Golfview Ave., Toronto M4E 2K6.

Helen Skinner

JUST HURRY

Hurry, hurry, hurry
Squirrel,
roads aren't meant for you.
Hurry, hurry, hurry,
Squirrel,
I hope that you get through.

These cars are aimed for business,
Squirrel,
you're small and nondescript,
and PEOPLE drive these cars,
dear Squirrel,
their consciousness not tripped
by souls as rare as yours.

So hurry, hurry, hurry,
Squirrel,
my heart runs there with you.
I worry, worry, worry,
Squirrel,
Oh scurry, scurry - do!

Karen Parker

...A ROSE BY ANY OTHER NAME...

The law declares that ignorance is no excuse (something I've always found hard to fathom).

An old saying declares a little knowledge to be a dangerous thing.

My own experience is that both can be downright embarrassing.

I work an allotment garden, courtesy of a kindly lady with a woodlot abutting on her property. She has been letting this land to apartment dwellers for years. To reach it, we follow a narrow pathway bordered by back lawns on one side and a hilly slope up to our landlady's own garden on the other. Things have occasionally been thrown into this area from undeclared sources.

Two years ago I found a potted plant on the path. Lying on its side, a tall and bushy growth (about 3'). A week later it was still there. Anything that could survive, discarded and unwatered in the midst of summer, deserved rescue. I made off with it.

On the first leg of my homeward journey, nobody in the bus paid much attention to what was on my lap. The subway trip down to Bloor was a different story. People of my age tend to be interested in plants. They notice, ask about them, practically stroke them. This time it was the young folk who noticed. One girl froze in the act of leaving the train and nearly got jammed between closing doors. Another young woman beamed. When I changed to the East/West line, I became even more popular. A man tossed his shoulder-length hair in my direction, another winked! All seemed to be reacting to some masonic signal that I was "one of them".

By the time I lined up for my final bus, I was thoroughly bewildered. A youth sidled out of the queue and asked, in a stealthy aside, what was the name of the plant I carried? "I don't know," I jollied back, "I just found it in a ravine!" Satisfied (-why?), he faded back into the crowd. Once boarded, a young woman sitting next to me put the same question, and then -- unable to bear my innocence -- whispered what anyone reading this will long since have guessed: it was a thriving marijuana. Once the word was actually pronounced, I became the recipient of animated advice on how to make marijuana cookies, how to get the plant indoors without being picked up by roving police, never to burn it, in whatever fashion or receptacle, to get rid of it since the smell would envelop the entire highrise. By the time I left the bus I had provided jollification and the chance of one-upmanship to a goodly number of people.

I didn't put my trophy on the balcony because I would have had the problem of disposing of it when it grew too big. I didn't nurture it indoors, for the same reason.

I left the poor thing to die slowly, a daily reproach.

For those as ignorant as I had been as to what a marijuana plant looks like, it is a very pretty growth indeed. What a silly burden we humans place upon the impartiality of Nature. I found it interesting, if depressing, that youngsters who wouldn't know an oak from a palm tree, could recognize this by its leaves from the other end of a subway car.

Eva Davis

□

This Month's Cover

Our cover shows the Log Cabin which is operated as a Nature Information Centre by the TFN from the first Sunday in May until Thanksgiving. This is your opportun[illegible] volunteer for any Sunday from noon-4 p.m. Members answer questions [illegible] the public on the Parks system, bicycle routes, TFN outings, etc., as well as [illegible]ibuting maps and TFN literature. The team consists of four members. Jo[illegible] for a friendly and informative afternoon amidst Sunnybrook's stately surroun[illegible]gs. Phone Eileen Mayo - 445-4621.

AS OTHERS SEE US...

In an informative article by Mr. Peter Crossley entitled "TORONTO--DISCOVER THE FEELING!", the city's many attractions are given credit.

[illegible]st its numerous offerings, all the way from sophisticated living to island [illegible] from sports to art, from ethnic to native cultures, he points out that [illegible]an Toronto maintains 8,700 acres of parkland throughout the city". He [illegible] some of these green areas, and beneath a photograph of the bridge in Edw[illegible]dens the caption runs:

> "Edward's Gardens is a naturalist's paradise, with its well laid-out gardens and horticultural displays."

How Parks administration would like to see us in this appreciative and civilized role instead of the ungrateful and pesky characters that we are. Alas, Mr. Crossley's "naturalist" is not ours.
The breed he has in mind is surely arboriculturist or horticulturalist, or just plain garden-lover. Nothing wrong with that, and naturalists can be both. My variety of naturalist, however, is grateful enough for all the ravines and wildlands Nature has lavished upon Toronto to be urgently desirous that they be left...natural. Just that. Less manicuring and "managing". More of Nature going through her age-old and wayward motions. No pleasing us! This is, after all, what the battles over the Spit and the Rouge are all about.

(Perhaps we should take Mr. Crossley on a real naturalists's trek sometime.)

Eva Davis

HELP STAMP OUT POLLUTION

If you observe (smell) any discharge (smoke, liquid) to the natural environment that might cause adverse effects, call the Spills Action Centre of the Ontario Ministry of the Environment. In Metro Toronto, call 956-9619; outside Metro, call 1-800-268-6060 (a toll free number from anywhere in the province). You should be able to get a response at both these numbers 24 hours a day, 7 days a week.

Point Pelee? Or...

PELEE ISLAND

For those who have made the trip to Point Pelee, especially in the spring, and each year find that it is becoming so crowded that there seem to be more birders than birds, you might consider an alternative - Pelee Island.

Having read an article in the TORONTO STAR in the fall about Pelee Island, my wife and I decided to see it for ourselves. We were delighted with its sharp contrast with Point Pelee. Here, on the Island, it was very peaceful and quiet. During the time we were there, from a Monday to Thursday in May, we met only three other birders - a young man who had come from a Federation of Ontario Naturalists' gathering at Rondeau, and a man and wife who had left their car in Kingsville and were travelling around the Island on bicycles.

The Island has many unusual features. It is really below lake level, and much of the perimeter is protected by huge piles of stone taken from a local quarry which, in itself, is a pretty place to visit. Deep canals have been dug throughout the Island, and the earth taken from the canals has been piled up to form dykes, which become the roads to drive on. Four pumping stations remove the water from the canals, if they become too full. We arrived just after there had been four inches of rain in a five-hour period, so the canals were full.

The Island is famous for its vineyards, and the wine is processed at Kingsville. Plans are under way for a winery to be established on the Island as well. The wine is available at the local liquor store, and at the hotel, if you eat there.

There are many birding areas of interest. On the north tip of the Island is Lighthouse Point, where Lake Henry Marsh is located. We couldn't explore that as fully as we would have liked, for the recent rains made the trails too soggy. We did see countless cormorant nests in the trees offshore.

At the south end, we found Fish Point a better choice, where a slow ramble through the woods beside another marsh (Fox Pond) led us to the warblers and other woodland birds. No doubt earlier in the spring this nature reserve would be a good spot for ducks. We also saw a great egret there, which was nice.

The Sheridan Point area, west of the docks, has the ruins of the original Vin Villa winery, and the tangled brush and uprooted tree stumps proved good for wrens and bluebirds.

There is a wide variety of accommodation - Pelee Island Hotel (where we stayed and had excellent meals), West View Motel (which also had a restaurant),and several bed-and-breakfast places. The Pelee Island Chamber of Commerce, Pelee Island NOR 1MO, will gladly provide all the information required.

The ferry service operates from both Leamington and Kingsville. For current schedules phone (519) 724-2115, or write Pelee Island Transportation, Pelee Island NOR 1MO. Rates for us were $7.50 for a car and $1.75 for senior citizens. Because of limited space on the ferry, advance booking is needed for a car. Travel time on the ferry is 2-1/2 hours.

The Island is not really for a one-day visit, although the ferry does leave Leamington at 9:00 am and return at 4:00 pm. One could make such a visit part of a trip including Point Pelee, but to see it properly one should stay a few days. Then one can enjoy the birds, the flowers, masses of lilacs growing wild, and the solitude which the Island has to offer.

Don Carmichael

THE BIRD LIFE OF COZUMEL, YUCATAN AND BELIZE

In January, 1980, I stopped watching the starlings in my backyard, and flew to the comparatively wild island of Cozumel. Before landing I caught a good view of it, with its shrubby jungle and sandy beaches, surrounded by aquamarine sea. Our hotel was looking on to the plaza at San Miguel where great-tailed grackles (Quiscalus mexicanus) sported beneath the fig and orange trees. Here everyone strolls and there are curious little handcraft stores around the square.

We made a quick reconnoitre by foot before the sun sank with a green flash over the sea at six PM. The tropical kingbird (Tyrannus melancholicus) and tropical mockingbird (Mimus gilvus) were common, and we saw the black catbird (Melanoptila glabirostris). Among the roadside grasses were flocks of yellow-faced grassquits (Tiaris olivacea). Many species of wood-warblers were in the tropical trees, the most common being the American redstart. Several green-breasted mangos (Anthracorax prevostii - a hummingbird) were visiting the exotic blooms. In all I saw thirty-five species which was a good start to the trip.

The next morning we went further afield into the shrubby jungle of the island and began to see exciting species such as the American pygmy kingfisher (Chloroceryle aenea), a brilliant emerald green and orange. Only five inches long, he must eat tiny fish. I found the northern cardinals (Cardinalis cardinalis) a much deeper red than those in Ontario. I was impressed with the striped-headed tanager (Spindatus zena) as well as a flycatcher, the bright-rumped attila (Attila spadiceus), and the white-collared seedeater (Sporophila torqueola).

There were many air plants (bromeliads) growing on the trees, competing for the sunshine - some with leaves resembling those of their relative, the pineapple. Under the trees were water catchment areas, from which shorebirds and gallinules flew up. Roseate spoonbills flew over and high above magnificent frigatebirds. A very loud squawking noise announced the arrival of a pair of yellow-lored parrots (Amazona xantholora) at the top of the tallest tree.

After breakfast we crossed the island to the south and west shores. On the [illegible] we stopped at several lovely lagoons covered in tropical water lilies, [illegible]ding their heads high above the water. Northern jacanas padded across the [illegible]y-pads. Gallinules and coots were numerous.

There was virtually no one on the lovely beaches where wild lavender grows, scenting the air. Every fifty yards we saw a tropical kingbird perched high on the shrubs surveying its territory. At one place brahma cattle were seen under the palmettos, each with a pair of cattle egrets in attendance. We swam in the emerald sea.

On the way back we stopped at a seawater lagoon where we could see clearly parrot fish, groupers, angel fish and pilot fish. In a tree close by was a golden warbler [a form of the yellow warbler], with its reddish cap, just a few feet away. I loved the island, but we left it by ferry the next day.

While waiting for our baggage to be transported to Puerto Juarez, some of us took a passenger ferry to Playa del Carmen. We changed under the palms and swam in the blue-green sea. Every seventh wave was a breaker. One caught us unawares, and we hurtled over and over to be washed up in the sand laughing, with sargasso anklets and necklaces.

A pack of dogs invaded the beach; one group member was bit, which spoiled her day. We waited in a palm-frond-lined Spanish-speaking restaurant until it closed. On the street we waited and waited. But the day ended well at a

The Bird Life of Cozumel, Yucatan, and Belize - cont'd

palace-like hotel - Villa Arqueologica - at Coba, Yucatan, where a profusion of Mayan ruins had been uncovered in the previous seven years from the jungle growth. In front of the hotel is an extensive lake which is thought originally to have been a Mayan limestone quarry. The local people live in Robinson Crusoe style huts made of poles lashed together and topped with thatch. Turkeys, pigs and chickens wander in and out.

When we surfaced at six we were aware of the melodious blackbirds (Dives dives) singing, "What cheer what cheer what cheer!" in the fruit trees; they really ARE melodious. The trees were alive with anis, social flycatchers (Myiozetetes similis), and orioles. The lake was alive with herons, bitterns, rare rails, egrets, and an anhinga. Masses of Vaux's swifts (Chaetura vauxi) fluttered over; we could hear their wings. Exploring the impressive ruins we saw a keel-billed toucan (Ramphastos sulfuratus), boat-billed flycatchers (Megarynchus pitangua), and scrub euphonias (Euphonia affinis - a small tanager).

The next morning we risked the ticks in the grass, and walked along the edge of the lake. The bird that impressed me most was the squirrel cuckoo (Piaya cayana), running along a branch like a squirrel before flying off. A great egret was standing frozen in the reeds; then his head darted forward and he caught a fish. The masked tityra (Tityra fasciata - a flycatcher) had a katydid in its beak. I saw my first trogon, the citreoline (Trogon citreolus). As we walked along, Jim Yaki was making the plaintive call "hoo-oo!" of the thicket tinamou (Crypturellus cinnamomeus). We heard the bird answering him.

After breakfast we left for the ancient ruined citadel of Tulum by the sea. It was very hot. We ate juicy tangelos and drank cooled coconut milk. The sea was brilliant, and brilliant red some of our noses. From Tulum we drove down to Chetumal on the Mexican border with Belize, watching for Mexican government beehives on the way. A pair of orange-breasted falcons (Falco deiroleucus) were observed nesting in a tree on the roadside. We also saw more trogons and at least two laughing falcons (Herpetotheres cachinnans). Two jabirus (Jabiru mycteria) flew over, a large water-beetle fell on me out of a tree, and our leader was tick-bitten; otherwise, our border-crossing was uneventful.

We entered Belize on its wide, sugar-cane-bordered road. The dwellings and the people were poor and charming. We stopped to watch snail kites (Rostrhamus sociabilis). Further on in a field up to fifty scissor-tailed flycatchers were perched. There was also a fork-tailed flycatcher. Vermilion flycatchers were sitting in the shrubs. At a swamp with water lettuce we observed purple gallinules and jacanas.

Even in the harbour I managed to see pelicans and a black hawk-eagle (Spizaetus tyrranus), after the others had left for Tikal.

Joy Pocklington

Ed.Note: Names are from the A.O.U. Check-List of North American Birds, Sixth Edition, 1983.

The Weather This Time Last Year

March, 1986, City of Toronto

March, in contrast to February, was a month of wild extremes in Toronto and in the rest of southern Ontario. Lester B. Pearson International Airport ranged from -20.0° to +24.5°, a difference of 44.5 Celsius degrees. Mean temperatures were, overall, about 1.5° above average as the warm eventually won over the cold. It was the warmest March since 1979. Precipitation was slightly below normal again, due to a moderate shortfall of snow. Sunshine was slightly above the average. Winds were fairly light although there were some gusty days.

The calm of the early part of the month was disrupted by an "Alberta Clipper" on the 6th, which dropped temperatures below normal and brought with it the last real snow of the season. Afterwards, record cold covered the region; Toronto City only reached -12.0°, the coldest daytime high for any March since 1980. A moderating trend immediately following the cold wave was responsible for a week of cloudy weather with intermittent freezing rain and fog. On the 19th, the temperature was in the 15° range but a cold front that very afternoon caused it to plunge; the next day Toronto City had a high of only -10.1°. Less than a week later, it was close to 20°. The latter part of the month was glorious with the highest temperatures since 1946 and with lots of sun. On Easter Sunday, it was 24.5° at the L. B. Pearson Airport and 23.6° downtown; even lakefront Pickering was 23.6°. This heat wave arrived, complete with a thunderstorm, on Easter morning.

March, 1986 will not be forgotten easily by amateur weather observers.

Gavin Miller

Poison ivy and Virginia creeper growing together among grasses
Taylor Creek Park, August 12, 1986

COMING EVENTS

Royal Canadian Institute lectures on Sunday afternoons at 3:00 p.m. in the Medical Sciences Auditorium, University of Toronto. Admission free. For further information, call 928-2096.

March 1 - THE TECHNOLOGICAL REVOLUTION AND HEALTH CARE
Robert A. Fuller, Vice-Pres., Johnson & Johnson, New Brunswick, N. J.

March 8 - A SECOND CHANCE FOR OWLS: OPTIONS FOR USE OF AN OVERLOOKED WILDLIFE RESOURCE - James L. and Katherine McKeever, The Owl Rehabilitation Research Foundation, Vineland Station, Ontario
Joint meeting with the Toronto Field Naturalists

March 15 - THE CITY GREEN - OLD HABITS AND NEW DIRECTIONS
Roy Merrens, Ph.d., Prof. of Geography and of Environmental Studies, York University

March 22 - LIGHT, LASERS AND LIVING COLOUR THROUGH THE CENTURIES
Geraldine A. Kenney-Wallace, Ph.D., Prof. of Chem. and of Physics, University of Toronto

THE MOON, a lecture by Dr. David Strangway, President, University of British Columbia, will be aired on CJRT-FM (92.1 on the dial) on March 4 at 9:30 p.m. This is one of a series entitled SPEAKING OF SCIENCE which is produced by the Royal Canadian Institute.

OWL OUTING on Sunday, March 8, 12 noon to just after dark, sponsored by the Toronto Ornithological Club, led by Hugh Currie. Meet in the parking lot west of York Mills subway station. Car pool. Bring lunch or snack. Free.

NATURAL HISTORY TOURS and FIELD TRIPS, operated by Rosemary Gaymer, a past president of TFN is being announced. The first trip is a Lake Erie Week at the end of April this year. Attention will be given to birds as well as to general ecology, flowers, trees and shrubs, insects, fungi and mammals. To register for the mailing list, call 844-8332 or write to P.O. Box 152, OAKVILLE, Ont. L6J 4Z5.

NATURE AND CAMERA HIKE with Paul Harpley on Saturday, March 7 at 2:00 p.m. Meet at Hillside School, Finch and Meadowvale Rd. (half-mile north of Zoo bus terminus). No charge. For information, call Lois James at 284-6409.

INSECTS, a film to be shown at the Royal Ontario Museum on Saturday, Feb. 28 at 2:00 p.m. will be introduced by Dr. David Barr of the Curatorial staff of the ROM.

THE BLACK CREEK PROJECT meeting will be held on March 18 at 7:30 p.m. at the Mount Dennis Community Centre, 4 Hollis St., Weston (Weston Rd. and Eglinton). Regular meeting dates are the third Wednesday of every second month.

MAPLE SYRUP TIME at the Royal Botanical Gardens in Burlington, Saturdays and Sundays, March 14 to April 12. The Rock Chapel sugar shanty will be open from 10:00 a.m. to 4:00 p.m. Sugaring techniques will be discussed and tree tapping will be demonstrated. Call (416) 527-1158 for more detail.

And at BRUCE'S MILL, Maple Syrup Time is from March 23 to April 10. Pancakes and maple syrup are available for lunch. The mill is located northeast of Toronto at Woodbine and the Stouffville side road. For further details, call the Metropolitan Toronto and Region Conservation Authority at (416) 661-6600.

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TFN MEETINGS

Visitors welcome

GENERAL MEETINGS

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

Monday, March 2, 1987 at 8:00 p.m. (Coffee at 7:15)
BIRDS OF JAMES BAY - Doug McRae, Head of Visitor Services, Presqu'ile Provincial Park. James Bay acts as one of the most significant migration funnels for birds in North America. The migration, as well as the part weather plays in the movement, will be discussed.

Monday, April 6 at 8:00 p.m. (Coffee at 7:15)
PROJECT ANTARCTICA: A NATURALIST'S VIEW OF THE ANTARCTIC
- Jean Macdonald, Past President, Toronto Field Naturalists

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*Free parking in the Board of Education Garage on McCaul Street, just below College.

TFN publications, hasti-notes, prints of selected newsletter covers, pins and crests are for sale at the General Meetings.

GROUP MEETINGS

Bird Group: Fifth in a series of five lectures on shorebirds, Wednesday, March 11 at 7:30 p.m. at the Board of Education Centre, 6th Floor Auditorium.

Botany Group: WILD ROSE COUNTRY: A TOUR OF THE NATURAL AREAS IN ALBERTA. A slide show by Joyce Gould, Tuesday, March 10 (not Thursday) at 7:30 p.m., Room 203, Botany Bldg., University of Toronto.

Environmental Group: INVENTORY OF TORONTO PARKS AND RAVINES - Barbara Ubbens, City of Toronto Parks and Recreation Dept., Thursday, March 26 at 7:30 p.m. Room 252, Board of Education Centre.

Junior Club: DISPLAY DAY, Saturday, March 7 at 10:00 a.m. in the Royal Ontario Museum. Passes for entrance are available by calling 960-9860.

This is the Month for making Maple Sugar, a hot sun and frosty nights cause the Sap to flow most. Slits are cut in the bark of the Trees & wooden troughs set under the Tree into which the Sap -- a clear sweet water -- runs. It is collected from a number of trees & boiled in large Kettles till it becomes of a hard consistence.

from MRS. SIMCOE'S DIARY edited by M.Q. Innis, Macmillan of Canada, Toronto, 1965

SKY NOTES

On March 15, the sun will rise at 6:33 am and set at 6:23 pm. The moon will be full at 8:13 am though it will not rise until 6:44 pm.

TORONTO FIELD NATURALISTS
83 Joicey Boulevard
Toronto, Ontario M5M 2T4

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TORONTO FIELD NATURALIST

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

Members are encouraged to submit notices, reports, articles up to 1,500 words in length and illustrations at least six weeks before the month in which the event is to take place or the material is required to appear.

Other Publications

TORONTO FIELD NATURALISTS' CLUB: ITS HISTORY AND CONSTITUTION by R.M. Saunders, 1965 ..... $ .50

CHECKLIST OF PLANTS IN FOUR TORONTO PARKS: WILKET CREEK, HIGH PARK, HUMBER VALLEY, LAMBTON WOODS, 1972 ..... .50

TORONTO THE GREEN, 1976
Metropolitan Toronto's important natural areas are described and recommendations given for their conservation and management; includes maps, bibliography and index 2.50

FIELD CHECKLIST OF PLANTS OF SOUTHERN ONTARIO, 1977 ....5/$1.00 or ..... .25 ea.

TORONTO REGION VERTEBRATE LIST (fishes, amphibians,reptiles,mammals),1985 5/$1.00 or .25 ea.

TORONTO REGION BIRD LIST, 1985 5/$1.00 or . .25 ea.

TORONTO FIELD NATURALISTS' RAVINE SURVEYS. $ 2.00 ea.
- Survey #1-Chatsworth Ravine, 1973
- Survey #2-Brookbanks Ravine, 1974
- Survey #3-Chapman Valley Ravine, 1975
- Survey #4-Wigmore Ravine, 1975
- Survey #5-Park Drive Ravine, 1976
- Survey #6-Burke Ravine, 1977
- Survey #7-Taylor Creek-Woodbine Bridge Ravines, 1977
- Survey #8-West Don Valley, 1978

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TORONTO REGION BIRD CHART, 1983 ..... 2.00

A GRAPHIC GUIDE TO ONTARIO MOSSES, 1985. 2.00

GUIDE TO TORONTO FIELD NATURALISTS' NATURE RESERVE, Leaskdale, Ontario, 1986 2.00

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