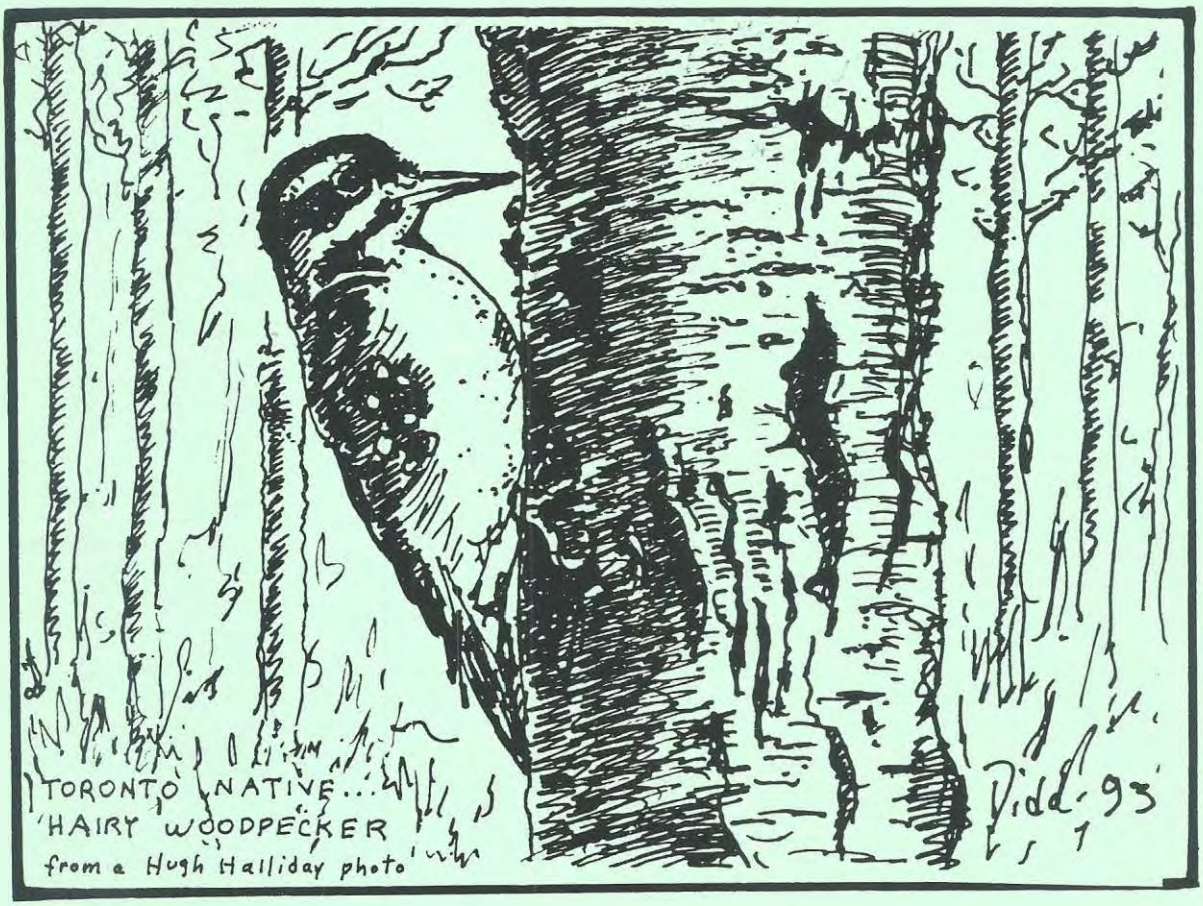
TORONTO FIELD NATURALIST

Number 449 February 1995



Inside

TFN MEETINGS

Sunday, February 5, 1995

at 2:30 pm

in the Northrop Frye Hall
Victoria University

73 Queen's Park Crescent East

- THE GEOLOGICAL HISTORY OF THE TORONTO REGION an illustrated lecture by Dr. Nick Eyles of the University of Toronto
- 1200 million years in 45 minutes -- the focus is on the relevance of knowing about the geological past for understanding current environmental issues such as where to locate landfill sites.

+ social hour starting at 2 pm with free coffee and juice outside the lecture room

+ TFN publications and memberships for sale outside the lecture room, both before and after the lecture.

+ "Always Alice Cards" for sale. To order custom cards, call TFN member Alice Mandryk at 767-6149.

NEXT MEETING: Sunday, March 5, 1995

"Artist at Work" - sketch of Mary Cumming working at the ROM

TFN OUTINGS

REMEMBER: children and visitors are welcome on all outings but, please, NO PETS!

To get to outings on time, check TTC routes and schedules by calling 393-4636.

Check the weather by calling 661-0123 so you'll know what to wear on outings which go rain or shine.

Thursday
Feb. 2
10:30 am

CENTENNIAL PARK - nature walk — Etobicoke Cr., Etobicoke
Leader: Volunteer required
Meet at the northeast corner of Rathburn Rd. and Elmcrest Rd.
Bring lunch.
This large park contains greenhouses, a ski hill built on garbage, a pond and a section of Etobicoke Creek Valley so whatever the weather there are aspects of nature for us to enjoy.

Saturday
Feb. 4
2 pm to
4 pm

DEERPARK LIBRARY - nature photography — Toronto
Leader: Florence Preston
Meet on the second floor of the library which is on the north side of St. Clair Ave. East, just east of Yonge St.
Bring up to 20 of your favourite slides. A projector and screen will be provided. In past years members have shown pictures of trips they've taken, photos of wildflowers, birds, insects, people on outings, whatever. Everyone welcome (with or without pictures to show).

Sunday
Feb. 5
2:30 pm

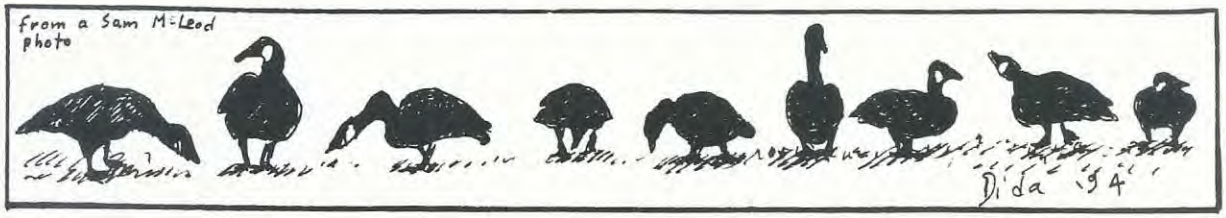
TFN MEETING
See page 2 for details.

Thursday
Feb. 9
1:30 pm

DEERPARK - trees in winter — Toronto
Leader: Peter Hare
Meet at the subway station exit on the south side of St. Clair East just east of Yonge St.
We will be learning about trees and what they look like in winter and how trees survive life in the city.

Saturday
Feb. 11
10 am

MIMICO ESTATES - human & natural history — lakeshore, Etobicoke
Leader: Michael Harrison
Meet at the southwest corner of Royal York Rd. and Lakeshore Blvd. Morning only.
Since the arrival of the Simcoes in 1793 many changes have occurred along the Toronto shoreline of Lake Ontario. More changes are proposed. Come and see what it is like now and learn about its past and future.



FEBRUARY OUTINGS (Cont'd)

Wednesday Feb. 15 2 pm to 4 pm

NORTHERN DISTRICT LIBRARY - nature photography — Toronto
Leader: Alf Buchanan
Meet on the second floor of the library which is on on the north side of Orchard View Blvd. just west of Yonge St. and one block north of Eglinton Ave.
Bring up to 20 slides. A projector and screen will be provided. Share the moments you have preserved -- of trips you have taken or moments in nature that you appreciate. Everyone welcome.

Sunday Feb. 19 1:30 pm

WATER FILTRATION PLANT - facts of urban living — lakeshore, Scarborough
Leader: Paula Davies
Meet at the southeast corner of Queen St. East and Neville Park Blvd.
This is a joint outing with the Friends of the Don East York and will be a tour of the plant from which much of Toronto's drinking water comes from.

Tuesday Feb. 21 10:30 am

ALLAN GARDENS - exotic plants — Toronto
Leader: Arthur Wade
Meet at the entrance to the greenhouses on the south side of Carlton St. just east of Jarvis St.
These greenhouses which are maintained by the City of Toronto Parks and Recreation Department contain a wonderful collection of plants from all over the world, many of which are labelled with species and family names.

Sunday Feb. 26 1:30 pm

BIRKDALE PARK - nature walk — Highland Creek, Scarborough
Leaders: Morris Sorensen & Star Whitmore
Meet at the park entrance on the west side of Brimley Rd. halfway between Lawrence Ave. East and Ellesmere Rd.
This ravine contains much of interest to naturalists -- a fine collection of native and introduced species, shelter for birds in winter and a historic site. Bring cameras, binoculars, notebooks, etc.

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AT METRO ZOO, my glance turned to a garbage can as I finished my lunch. There I saw the head and piercing eyes of a raccoon. He just rested there for a few moments before disappearing into the can again...

Mary Cumming.

PRESIDENT'S REPORT

This month I'm writing about a mammal whose habits we have been privileged to observe at close quarters. Four years ago on a late December evening I heard turkey-like cackles in the valley behind our house. Because Ron didn't know what made the noise either, he taped it. Then later he saw a fox walking past, squalling. Since then we have frequently heard barking in the valley at night and occasionally we've been startled or awakened by loud, hoarse coughs, blood-curdling screams, or horrendous prolonged wails.

Last year in early February the crows were making a loud fuss outside our bedroom. A sleepy fox lay on the slope, yawning and trying to rest, but the pesky crows kept squawking. Evidently a vixen sleeps a lot outdoors in the daytime near the den during the last two weeks of her confinement. The following week she was in the valley yawning, scratching, grooming, sitting in the sun, and curling up - generally behaving like a dog. There were always tracks in the snow, about two inches across and in a dainty single file. A month later we heard a shrill sound at night and saw a pair of foxes outside. One lay down on its side squalling. This is typical submissive behaviour to a dominant animal.

By mid-April the vixen was lactating. The same day on our first spring walk in the valley, the puppy pulled me over to the den. The foxes had enlarged a former groundhog burrow. There were bits of fur outside the opening and a smell reminiscent of skunk, but not as strong, along the trail where the foxes had marked their scent posts. Ten days afterwards I saw a pup fox chase a rabbit in the valley. In May Ron was startled to see a fox climb two metres up the branches of a spruce tree after a squirrel. The same week on a walk with the dog down the trail from Albion Road at dusk, we saw the parent foxes and five pups coming towards us. One pup came right up to the dog, but I pulled her back. Meanwhile the others had dutifully disappeared into the shrubbery. This brood was an average sized family. By the end of the month mama and some of the pups could often be seen on the lawn next door playing, chasing, rolling, wrestling, and digging holes. Meanwhile the crows and smaller birds set up a hullabaloo. In summer the young were hunting for insects in the earth. Occasionally a fox drank from the birdbath or the soaker hose.

By November they did a lot of hunting in the daytime, chasing and sometimes catching squirrels attracted by our birdfeeder. Unlike other members of the dog family, they hunt alone. Like cats, they sometimes hide in the brush, and stalk their prey, later refusing to share it with other foxes. They are almost as fast as cheetahs, and quicker than wolves or coyotes. We watched incredulously as one ran ten feet up a slanting tree trunk after a squirrel. Their mouths open incredibly wide, enabling them to carry a squirrel easily. We still have as many squirrels as ever, though, so replacements must arrive from nearby areas. The expression "cute like a fox" is well deserved. I noticed one curled up beside the trunk of a tree, apparently napping. Its ears moved a lot, however, and occasionally it was gawking around, or even slowing stretching out for a better look.

These are beautiful animals, fascinating, and sometimes surprising to watch. One fox jumped a foot into the air and then did it again out of sheer exuberance. Another slid along the snow, body outstretched, like an otter. One day Ron was laughing uproariously. He had watched a fox lying

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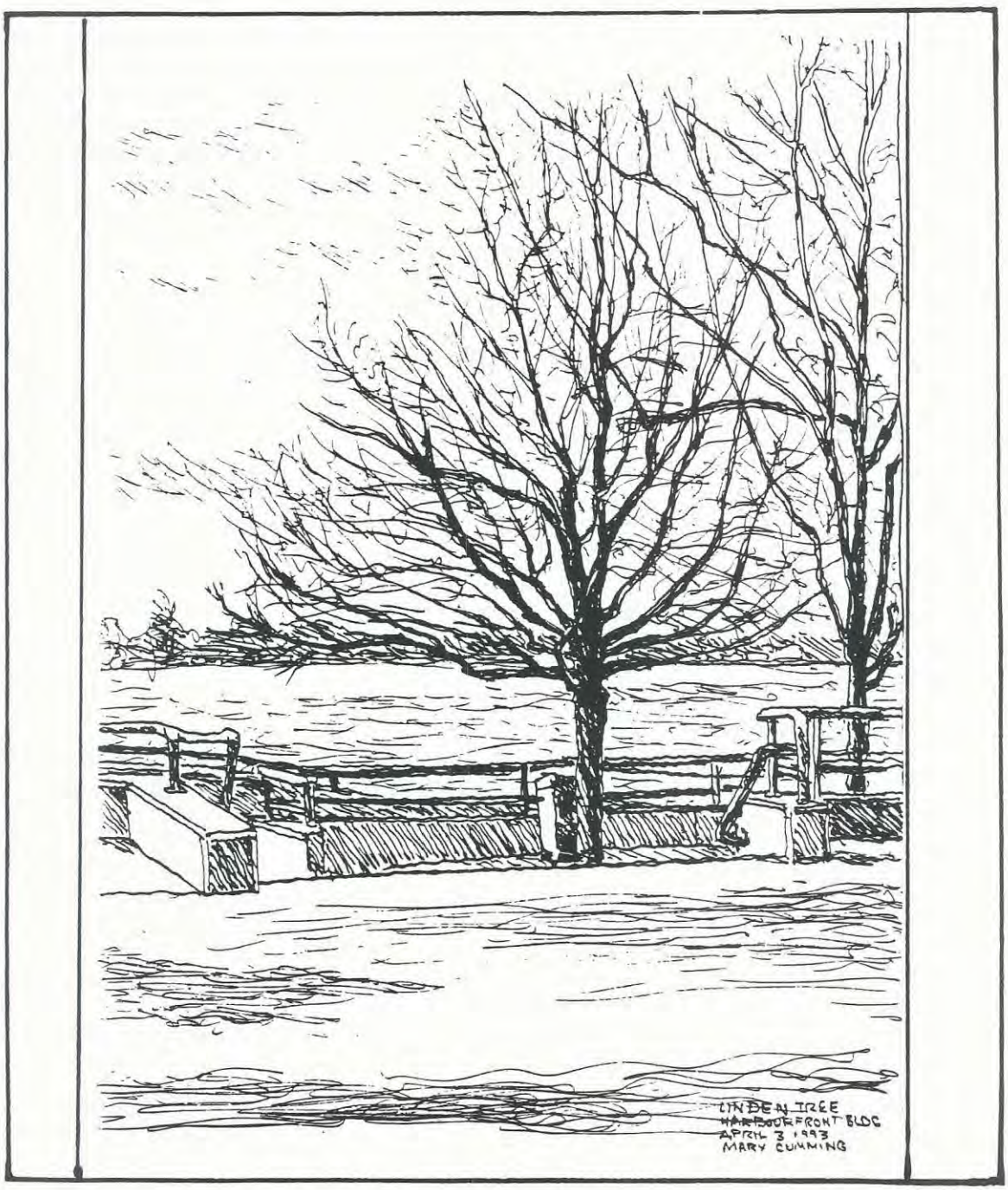
PRESIDENT'S REPORT (Cont'd)

on our ground feeder when another fox crept stealthily from behind and leaped on its back! It appeared suitably startled. Even though these predators may be responsible for the recent absence of female pheasants, we hope they'll stick around.

[An excellent source of information has been the book How To Spot A Fox by J. David Henry, Chapters Publishing Ltd., 1993.]

Joan O'Donnell □



KEEPING IN TOUCH

Nov. 3, 1994

My house backs on a ravine near Highland Creek. This past October and even to the present date (Nov. 2) I have noticed an abnormal number of dragonflies. Most of them are bright red, although a few larger ones are black or dark grey. I was wondering if the extended good weather was hatching them at the wrong time? Most seem to be near the end of their lives and congregate on warm walls and in protected areas. Has anyone else noticed this, and is it unusual to see so many this late in the season?

Warren Bonisteel

Answer: Your observation of so many dragonflies so late in the season this past year was undoubtedly because of the warm fall weather. The Toronto Entomological Association members had noticed many monarch butterflies around into November. Downtown gardens were still blooming until Nov. 23 (and primulas and pansies were seen flowering on Dec. 21). The bright red dragonflies you saw probably belonged to the genus Sympetrum and according to The Audubon Society Field Guide to North American Insects and Spiders, may be seen flying into October. The immature form of these insects lives in water, perhaps in Highland Creek or in wetlands associated with it. The adults emerge to feed and breed until they are eaten by a bird for example or the frost kills them. The insects you saw were seeking the warmest places they could find. Normally they would be scattered about and hidden by vegetation.

H.J.

HYGROPHORUS MUSHROOMS

such as sketched by Joanne Doucette in August, 1993, have been identified in Toronto - at least eight species.

They are often called "waxy-caps" or "wax-gills".

Ref.: AUDUBON FIELD GUIDE TO NORTH AMERICAN MUSHROOMS - Lincoff

OUTINGS REPORT

Sunnyside, February 3, 1994

There never was an outing like this, I can tell you. The weather was awful -- snow, east winds gusting up to 66 mph, with white-outs and windchill in the -30s (°C). Well, I was leading this outing, so I was duty-bound to appear at the appointed meeting place, but expecting a no-show. However, one showed up, saying she always wanted to go on a real *winter outing*, then two more appeared.

All were game and *warmly* dressed, our route was westerly, with the wind at our backs, so we decided to go over to the bridge above the Gardiner Expressway to see if the breakwater was visible. But once on that walk-way the full force of those gusty winds hit us ---WOW! No way would we retrace our steps -- westward it was. Well, open water by the Palais Royale was filled with Canada Geese and Mallards, while on a floating mass of ice-floes, Ring-billed Gulls were sheltering in the lee of the ice-covered breakwater -- the only gulls we saw (and I had been hoping for Great Black-backed Gulls and white-winged gulls such as Glaucous - oh well). Further on, the water this side of the breakwater was open and we saw Mute Swans, more Canada Geese, Redheads, Buffleheads, and Common Mergansers (while we sheltered behind trees to use our binoculars), but no Oldsquaws. Guess the waves were just too rough for them. Indeed, the waves were pounding right over the breakwaters and splashing up against the ice-covered shore -- an awesome sight.

South and west of the Sunnyside Bathing Pavilion, we were fascinated the swirling patterns of sand and snow on the ground, etched by the wind -- "delectable desserts" remarked one, as we carefully went around them -- but who would see them or appreciate them?

On to Ellis Avenue and the south-west corner of Grenadier Pond, which was free of ice. But we didn't linger long because it was impossible to get out of that brutal, face-stinging wind! But we did see a mass of Canada Geese, with Mallards, Northern Shovelers (beautiful with their chestnut flanks), and more Buffleheads. And we sped westerly to catch the bus.

Four crazy people on an unbelievable winter outing. Yes, we survived, laughing at ourselves all the way.

Helen Smith ◻

A full moon shining.
Snowflakes fall on my shoulders -
or it's moon dandruff!

Haiku by Helen Juhola

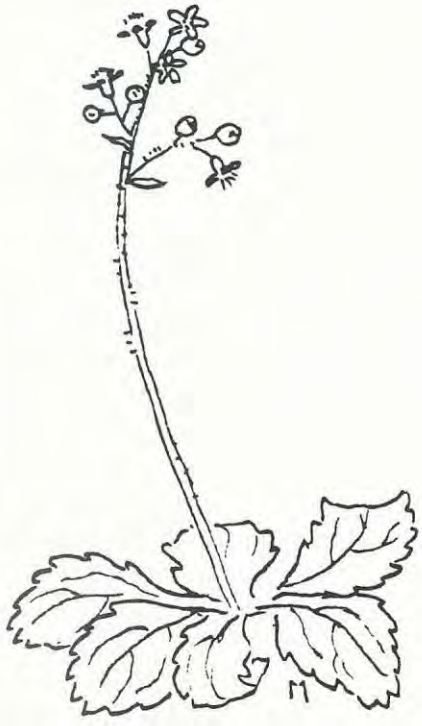
FOR READING

TAKE A HIKE - WALK YORK REGION

This little fifty-page book by Heart Action York Region, is useful to naturalists and others who take day trips within the region. The guide includes brief descriptions of each of 27 trails - none are long-distance. The book states that it is not exhaustive, which is quickly proved on a quick read through the book. The book has a good format, is readable, and includes many full-page area maps. It mentions tree species, landforms, and includes a good index. The two-page master map shows York Region - between the north boundary of Metro and Lake Simcoe. The walking trails are named and marked on the master map in red circles. Unfortunately, the numbers aren't cross referenced and repeated on the more detailed area maps.

The most obvious and serious failing of the book is that it does not show bus stops and/or bus routes, though it shows foot entrances. The region is served by GO bus and by local buses. Heart Action and York Region Public Health, who sponsor this book, should be fully aware of the bad environmental, safety, and health effects of the private car. Transit information should have been included. The book seems very new, but is not dated. It may be obtained by phoning 1-800-267-2328.

Helen Hansen



EARLY SAXIFRAGE

- rare Toronto native

(from the portfolio
FLOWERS OF LONGFORD
by Mary Anne Miller)

Fl. white, 5 pet. yellow stamen
L. basal, hairy stem. to 40 cm.
Hab. dry woods, rocky
Spr.

PROJECTS

PROJECT TANAGER NEEDS VOLUNTEERS

This project is coordinated by the Cornell Lab of Ornithology (CLO), a New York-based bird research centre, and sponsored in part by the National Science Foundation and the National Fish and Wildlife Foundation. Project Tanager is one of several CLO programs that involve bird watchers of all ages and abilities in significant bird research. All Project Tanager participants receive a kit that includes complete instructions, data forms, and a cassette tape that helps you learn to recognize tanager vocalizations. Participants also receive CLOs BIRDSCOPE, a quarterly newsletter, which reports on all of the Cornell Lab of Ornithology's volunteer-based research programs. There is no fee to participate in the project, but donations to help defray the costs of the participant's kit (which costs approximately $15 apiece to produce) are most welcome. To enrol, send your name, address and donation to Project Tanager/BC, Cornell Lab of Ornithology, P.O. Box 11, Ithaca, N.Y. 14851-0011.

ALGONQUIN PARK SEASONAL POSITIONS

From mid-June to Labour Day, park naturalists and museum technicians are needed to help visitors understand and appreciate the natural and human history of the park. Application forms and/or additional information about these positions may be obtained by contacting the Park Naturalist, Ministry of Natural Resources, Box 219, Whitney, Ont. K0J 2M0 (tel. 613-637-2828).

OUTDOOR WRITING AWARDS

The 1994 Greg Clark Award recognizes excellence in writing about Ontario's natural resources.
The Canadian Forest Service - Ontario Journalism award is designed to encourage journalistic excellence in articles relating to Ontario's forests.
Details about both these awards may be obtained from the Canadian Science Writers' Association, Suite 316, 25 Saint Nicholas St., Toronto, Ont. M4Y 1W5.

TFN BOARD NOMINATIONS INVITED

The Toronto Field Naturalists are looking for people with initiative who are willing to devote time to working as members of the Board of Directors. Please send your suggetions to Eileen Mayo, Chairman of the Nominating Committee, c/o TFN, 20 College St., Unit 11, Toronto, Ont. M5G 1K2. (The report of the Nominating Committee will be published in the May newsletter.)

When people ask me how to get a job in the environment, my answer is always the same: every job is in the environment and every job has an environmental impact. Do the job that you're best suited to, and use it to make an environmental contribution.

from "Experts' Choice" by Chris Baines in BBC WILDLIFE, Vol. 12, No. 3, March 1994

PROJECTS (Cont'd)

PARK WATCH

The idea of "Park Watch", along the lines of "Neighbourhood Watch" was suggested for the Operation Plan of the Rouge Valley Park (which has not yet come to fruition as far as we know). Why not apply it to all parks? In the absence of official wardens, TFN members and others wearing a badge could at least serve as an alert and lead to an awareness of all aspects of the park environment. TFN members, even without a badge, are often approached and questioned by park users (perhaps because they're carrying back-packs or binoculars) but wearing a badge could make still more opportunities to spread a good idea or two. A confrontational attitude would not be necessary on a one-to-one basis. The park-watchers would not feel any sense of authority or make such a claim - any more than those who put a Neighbourhood Watch sign in their window. Like those citizens, they might report any serious problems to the appropriate authorities. On the other hand, if the park-watcher, for instance, is greeted by a park-user carrying wildflowers, this might be a chance to explain, in a friendly way, the regulation against picking and cutting in parks. I have found that some people honestly don't know, or they forget.

The park-watcher need not have unlimited knowledge about natural history or municipal planning. Offering a questioner a TFN folder which includes the TFN phone number will look after any question that cannot be answered in the field. Naturally all the usual precautions for walking in parks would have to be followed. Any sincere person could be a park-watcher.

Diana Banville

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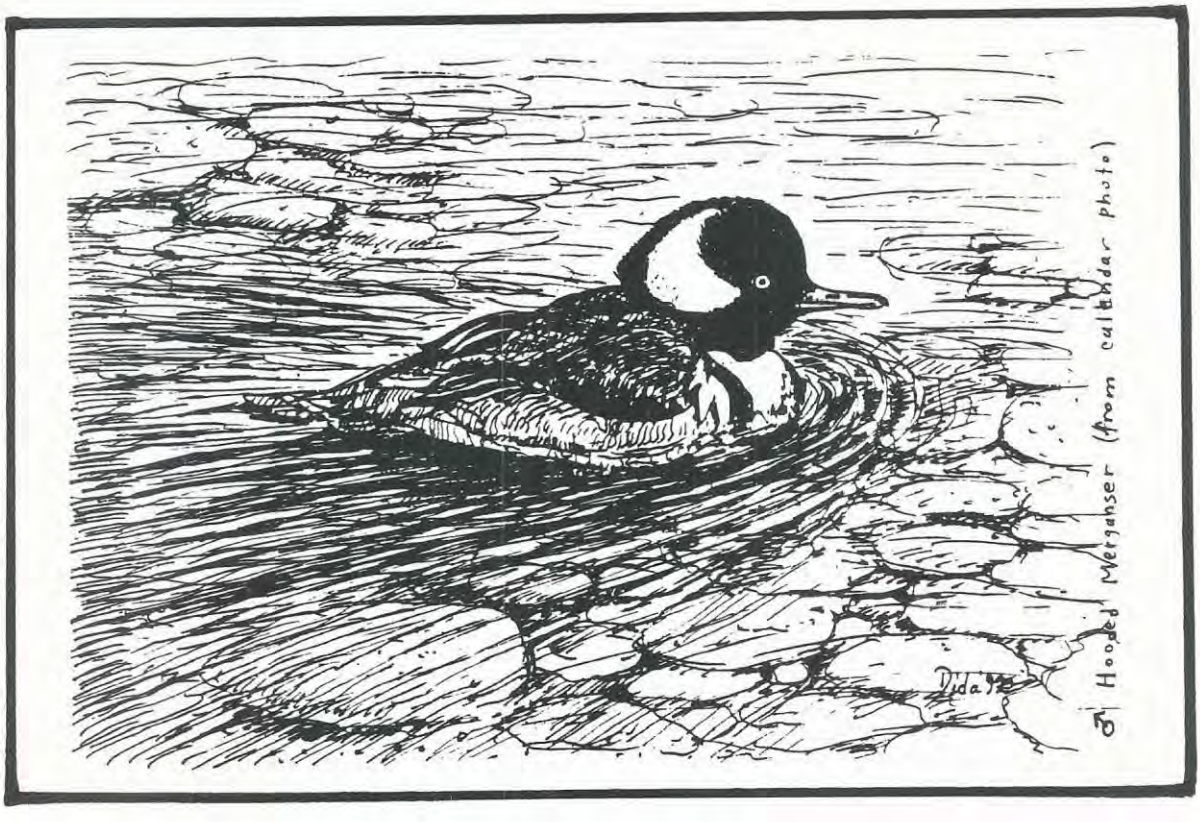
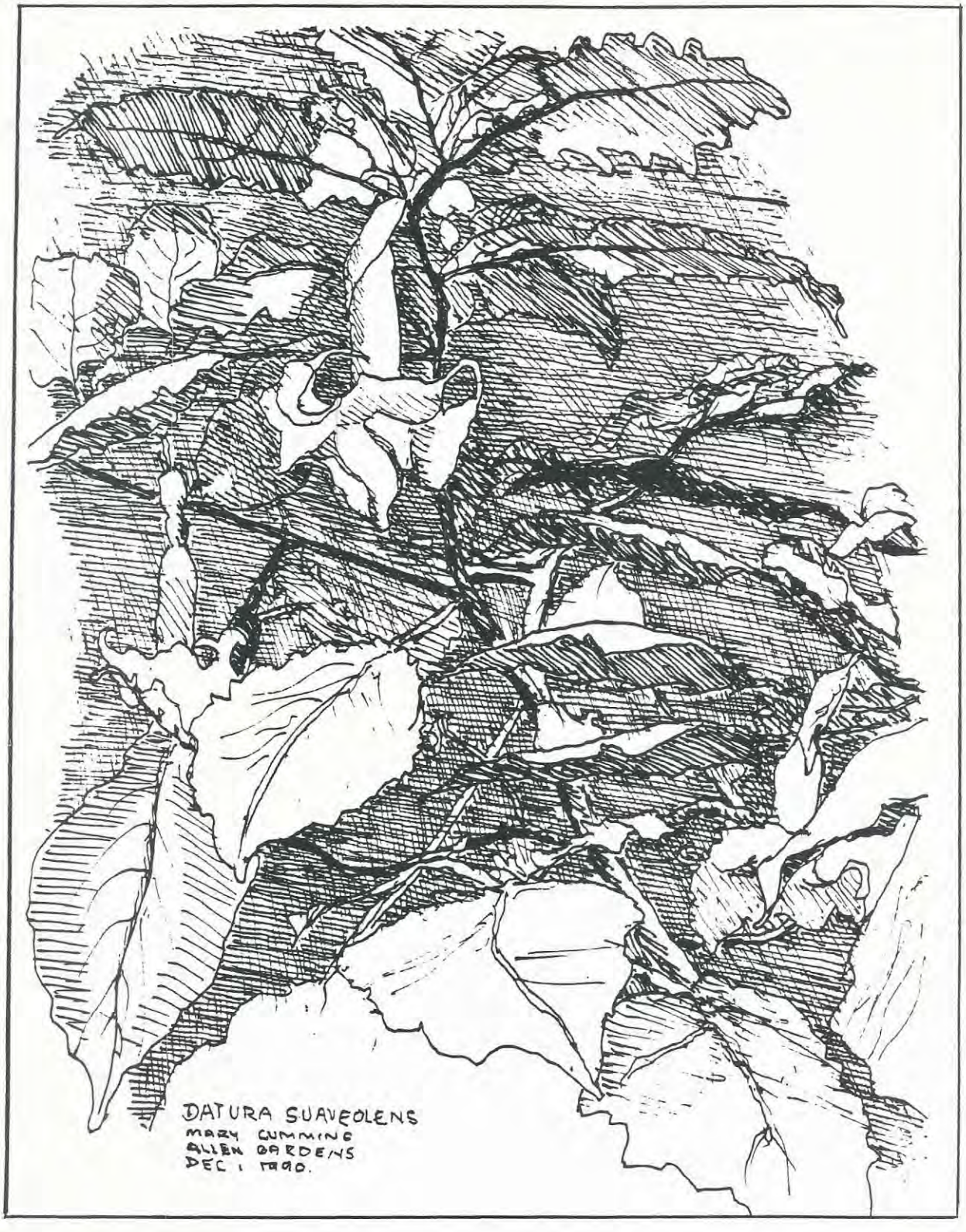




ANGEL'S TRUMPET, grown outdoors in Toronto gardens, is just as spectacular as when grown in a greenhouse. It may be agreeably fragrant in the evening, but poisonous - like its smaller relative, Jimsonweed, which is almost cosmopolitan but not native here, though it's been found growing wild downtown and on north Avenue Road.

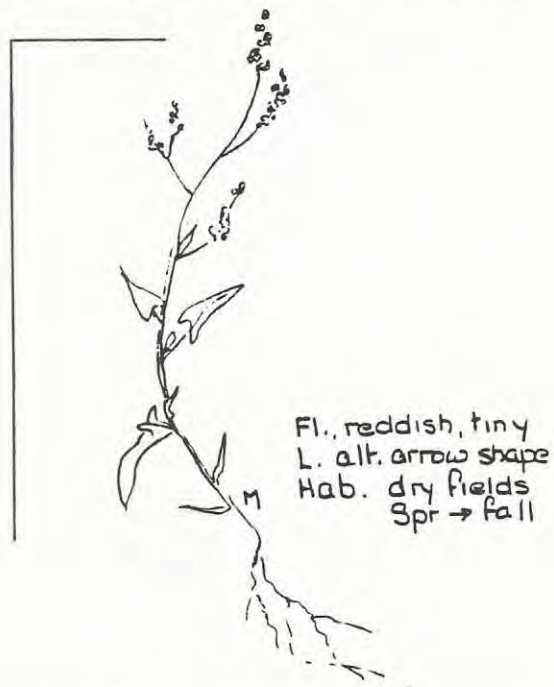
DR. NICK BADENHUIZEN 1910 - 1994

Members may have read in the Globe and Mail on November 5, 1994, of the passing of "Dr Nick" on November 3. He will be greatly missed by those members who recall the informative outings he led on city plants, his favourite theme being "walk-over plants" which contribute such fascinating features and lore. After a distinguished career as a botanist and biochemist, including Chairman of the Botany Department at the University of Toronto, he joined the TFN in 1986. The professor, who was not only a scientist but a field naturalist, walked with us, sharing and enjoying whether he was leading a botany walk or not. He is probably best remembered for his popular "innings" to Allan Gardens and the University of Toronto greenhouses. No doubt he studied the flora wherever he found himself in the world, whether it was his native Holland, South Africa or southeast Asia where, as a prisoner of war, his interest in plants no doubt played a part in his survival. His main research remained starch granules. Dr Nick's slide-talks were among the most popular at our winter slide "innings" and he left us a legacy of Toronto plants in slides which we can use on future such occasions. His articles in the TFN newsletter, for those who wish to re-read them are listed below. (The newsletter collections are at Toronto Public Libraries.)

Diana Banville

Ref: Badenhuizen, N. "Wild Plants in and around Toronto" in TFN 424:21-26 (Dec 1991); 426:20-23 (Mar 1992); 427:14-16 (Apr 1992).

RUMEX ACETOSELLA
Sheep sorrel POLYGONACEAE



SHEEP SORREL originates in Eurasia. Introduced into North America, it has been found in a half-dozen locations in Metro.

(Drawing is from FLOWERS OF LONGFORD by Mary Anne Miller.)

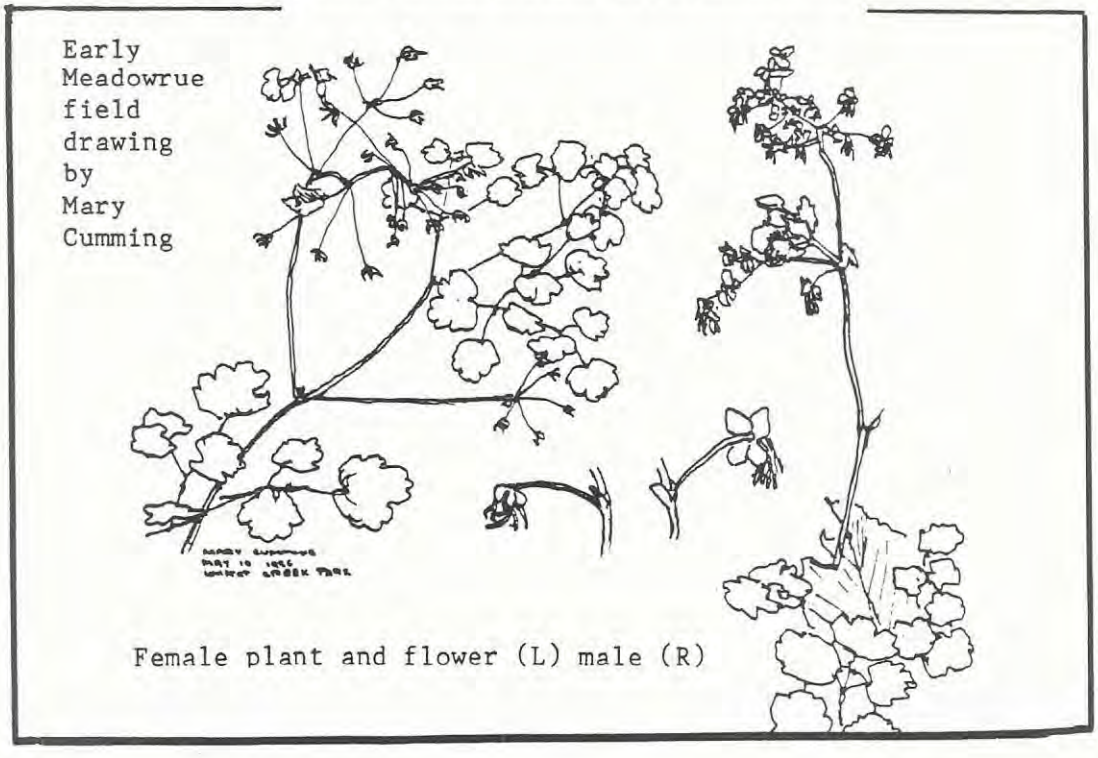
A FEW NOTES ABOUT THE VEGETATION OF SOUTH AFRICA AND HOLLAND

The Cape flora is the richest in the world. The nature reserve on the Cape Peninsula (47,000 ha) has 2,250 indigenous species that grow nowhere else in the world. The flora in the whole Cape Province counts 3,700 species, of which 85% is endemic. Of those, 1,621 species are endangered, with 137 facing extinction. Causes for destruction: damage by fires, floods, droughts, desert encroachment, agriculture, encroachment of Australian plants and Mediterranean pine trees, people collecting. South Africa is in the forefront of preservation with 580 Nature Reserves, including 15 National Parks. In addition there are many private farms that have a policy of protection. Some species that were on the brink of extinction have been saved that way. Whenever land is required for development, people with a permit can come and save valuable species for their garden. Of course, botanical gardens play an important role in preservation, and have also been laid out in specific ecological niches such as Cape Flats and semi-deserts. Ultimately the fate of the vegetation will be dependent on political developments.

In Holland one third of all wild plant species is endangered because of pollution. Of the 1,500 species,55 have become extinct since 1950. Of the remaining species, 486 are endangered. Acid rain is causing havoc in nature reserves, where 165 species will disappear in the near future if nothing is done about it.

N. P. Badenhuizen

Sources: Huntly, Siegfried and Sunter. South African Environments into the 21st Century.
For Holland: FLORON, in cooperation with Rijksherbarium and Natuurmonumenten.



A WILDFLOWER STORY

Hey, I wondered to myself, what is the great fascination? Here I was on a Canadian Nature group trip to the Magdalen Islands, quite a few years ago, and had happily wandered off to do a bit of bird watching. At the periphery of a large field meadow I noticed the rest of the group were spending the entire afternoon in the middle of this field, their noses alternately on the ground or in a field guide, identifying wildflowers. A couple of hours later they had triumphantly keyed out a very large number of local wildflowers (forty-three, I think), many of which even the leader hadn't seen before. Was I impressed!

When the leader produced his obviously well-worn Newcomb's Wildflower Guide, I decided to acquire one when I retired. This, the leader insisted, was the **only** wildflower field guide I would need for the rest of my life; I could thus dispense with all other guides. So, several years after taking early retirement, I purchased early this summer a Newcomb's. At about the same time I planted some seeds from a packet of "Native Wildflowers Mix" which I had received as a gift from a charitable organization. These seeds were just emerging weeks later in my downtown apartment balcony planter when I left for an extended holiday. A neighbour watered them all summer.

On return in mid-September and semi-confined to my apartment, I consoled myself with the idea of identifying the ten or so blooming plants, using my brand new Newcomb's. Imagine my total frustration when I discovered I couldn't identify a single one! I was almost ready to dispose of this field guide as "not as advertised". However, the flowers were quite pretty and I settled for enjoying them, although it did gall my Scottish sense of thrift.

Five or six weeks later I mentioned my annoying experience to Helen Juhola and we ended by settling down to identify, with the aid of Newcomb's, one late bloomer from Ashbridge's Bay (tumble mustard), and six others (catnip, field pennycress, boneset, white campion, scarlet pimpernel) from our own surrounding gardens (in which we all take great pride). I felt a wonderful sense of accomplishment, especially as today I could identify a dried, pressed specimen in less than two minutes flat with no frustrating flipping of field guide pages either.

This is thus not only a pitch for Newcomb's Wildflower Guide, but also a stern caveat against any of the commercial "Native Wildflower Seed Mixes" that you may be given or even purchase. This way you will avoid misleading "wildflower" identification, as well as risking letting loose some alien plant into local habitat.

Mary Hunter

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ALL THAT LITTER MIGHT WELL HOUSE GOLD...

In the woods last November I picked up a battered plastic bag into which I dropped beer cans, beer bottles, cartons and more plastic. At home I upended the lot, threw out the plastic, and gave a good washing to the bottles. All that remained was dried grass and leaves and I was scooping these up when one of the dead leaves fluttered. Unbelievably - a butterfly! Its wings glistened with tap water, and since it was one of the few chilly nights we had in last year's lingering, halcyon Fall, I did not put it outside but into a pot filled with Dusty Miller. It immediately clutched a branch and hung, resting, a brown leaf dangling amidst the silver-grey.

I was out the following day and when I returned at 11 pm I immediately looked for it. Gone! But only to the window's edge. Next evening I managed to contact Carol Sellers (oh, the benefits of TFN membership! - all these knowledgeable people to hand). She told me I had an Angle Wing, a member of the family of brush-footed butterflies. The spread wings were a dusky orange, with warm brown splashes; the tiny white halfmoon on their dark underside identified my specimen as a Comma. Angle Wings are comparatively long lived butterflies, hibernating throughout winter to emerge and mate the following Spring.

Accordingly, next day I left in Thyra Ravine what I cannot help regarding as My Butterfly, beside an ancient oak surrounded by masses of leaf litter and even some plastic bags should it choose to repeat its housing experiment. (Diana Banville - please keep an eye open next year!) I was sorry to let it go. There is something magical about having a butterfly as a house-guest.

The enigma remains, however. Not how I acquired it - it arrived in that old plastic bag - but how it survived having heavy objects dumped on it as well as gushings of tap water poured over it. How was this small, delicate creature neither squashed nor drowned? Like mushrooms, I must suppose butterflies to be infinitely hardier than they look.

(It also goes to show how collecting litter and bottles can bring its own reward far beyond that of mere environmental self-congratulation.)

Eva Davis

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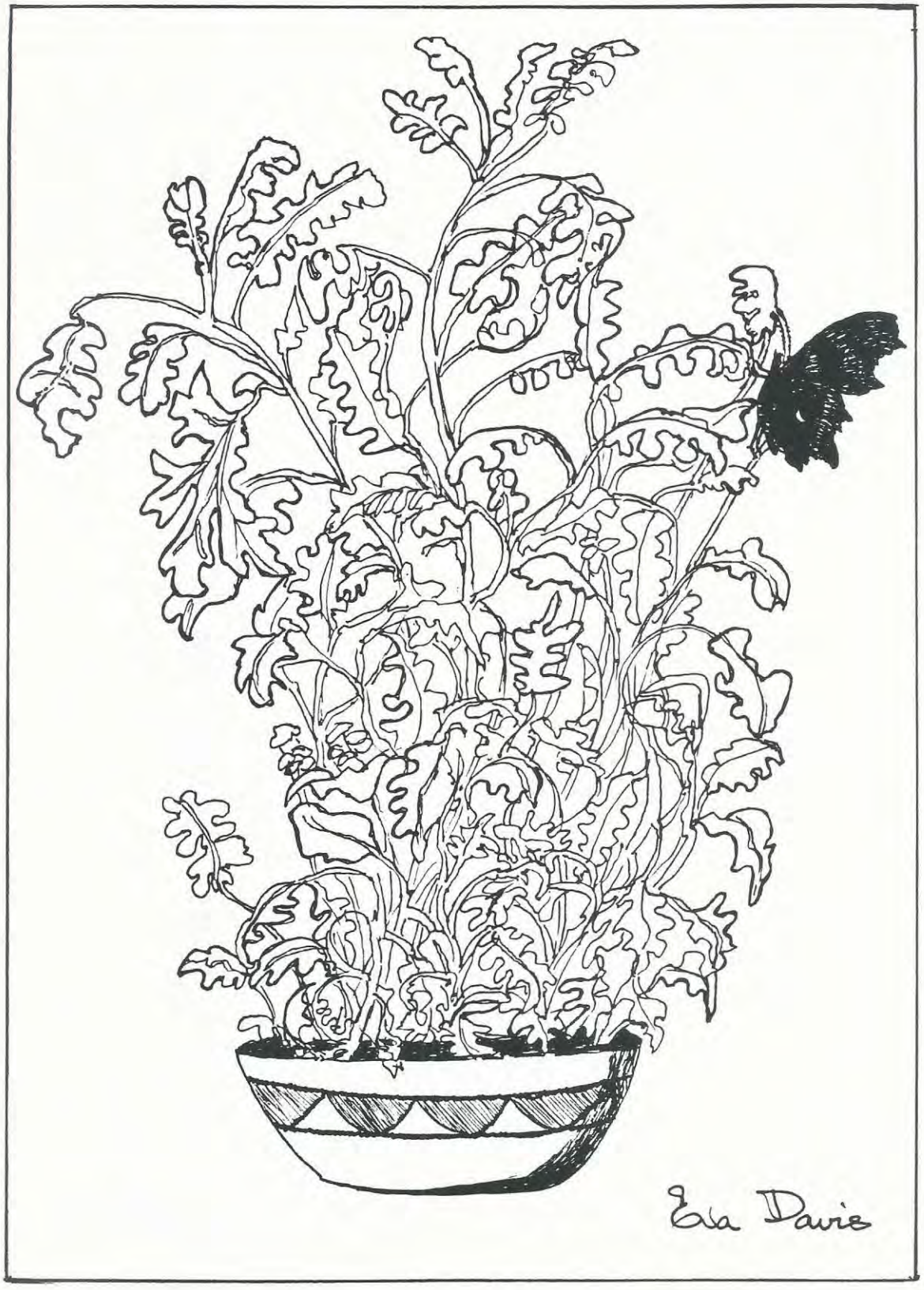
Butterfly
on bachelor's-buttons.
Orange stripes,
white dots,
blue pom-poms.

Hazel Harvey

LITTER (cont'd)



ATTENTION TREE PLANTERS!

...Native trees from a number of sources were lifted complete with soil, which contains mycorrhizal fungi. It was important to do this as all trees live in symbiosis with fungi which break down essential plant food nutrients in the soil and make them available to the host plant. At the same time, the plant re-pays the fungi in kind by supplying it with complex growth substances...In the case of birch, hazel, oak and pine, the fungi form an envelope around the roots...Young saplings, some of them little more than a few years old, were chosen where they could be lifted with as much soil on their roots as possible for successful transplanting. Holes larger than the circumference of the roots were dug and liberal amounts of well-rotted compost incorporated. After planting, the trees were watered to settle them into their new home.

extracted from "Edinburgh's Cryptogamic Garden" by William Tait in THE GARDEN (Journal of the Royal Horticultural Society), Vol.118, Part 10, Oct. 1993

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TORONTO NATIVE

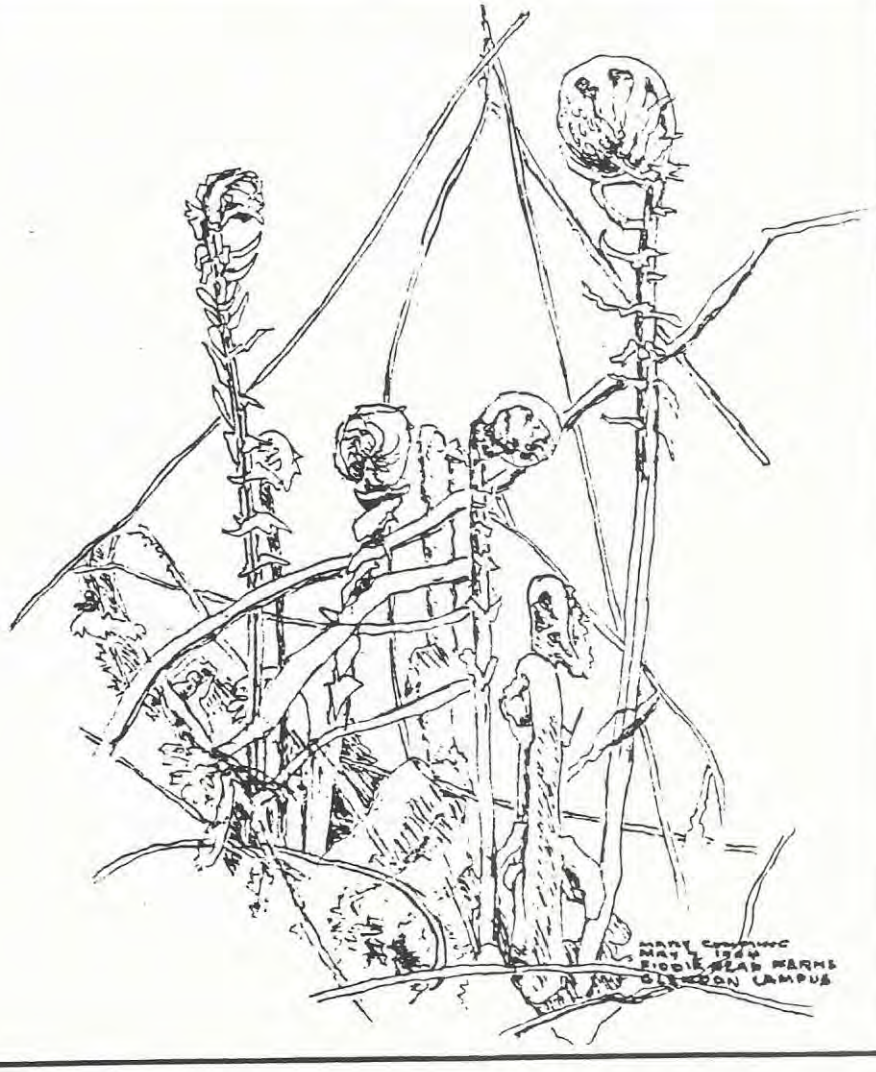
OSTRICH FERN

at the "fiddlehead" stage

West Don

- field drawing by Mary Cumming

on a TFN Nature Arts outing



PROJECT TANAGER GETS RESULTS

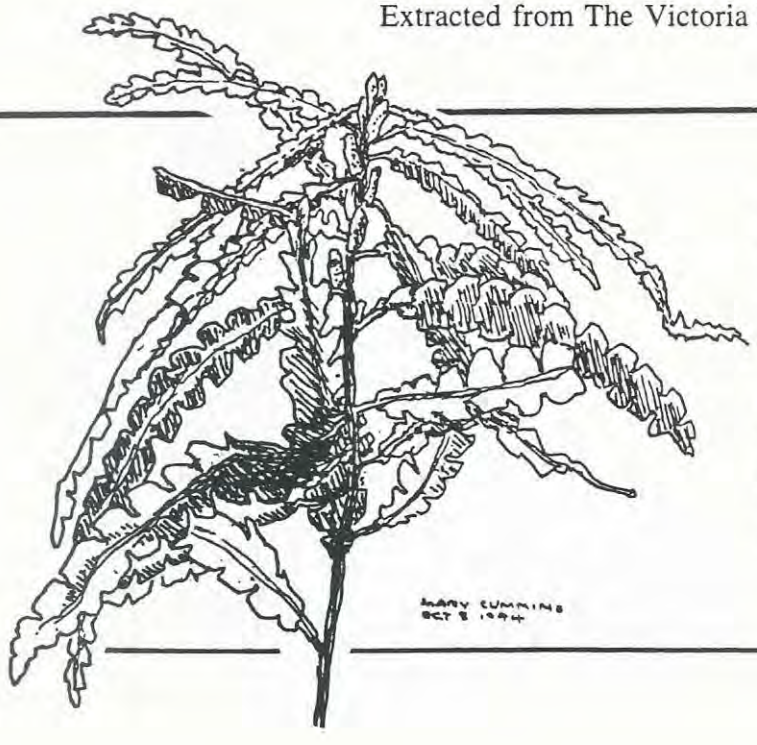
Project Tanager examines the relationship between forest size and breeding success of the tanagers nesting there. Across North America, road building, logging and development have broken large forests into smaller fragments. Scientists have some evidence that Scarlet Tanagers in the eastern United States may not be able to breed in small woodlots. Project Tanager is examining this relationship in more detail.

The project began in the summer of 1992, when coordinators developed the research methods in forests near the lab's headquarters. Last spring they launched a continent-wide pilot study. Seventy teams searched for signs of breeding tanagers in forests of four size classes: 1, 10, 100 and 1,000 hectares (2.5, 25, 250 and 2,500 acres). Their findings support the idea that Scarlet Tanagers are more sensitive to forest fragmentation than are other tanager species.

Participants spotted Scarlet Tanagers in a mere 20 per cent of the 1-hectare forest fragments, compared to 50 per cent of the 10-hectare forests and about 65 per cent of the 100-hectare forests. Furthermore, teams confirmed that Scarlet Tanagers were breeding in 5 to 10 per cent of the 10-hectare (or larger) forests but in none of the 1-hectare plots.

Why do small woodlots make inhospitable homes for nesting tanagers? Scientists think the "edge effect" may be to blame. When a forest is carved into fragments, the distance from the edge of each fragment to its centre is short. Some of the animals that threaten nesting birds -- such as house cats and Brown-headed Cowbirds (notorious nest parasites) - prefer open habitat. They won't go deep into a woods but they will venture in for a short distance. In large forests, tanagers can find a refuge from danger; in small fragments, even the very centre of the forest is near an edge.

Extracted from The Victoria Naturalist Vol. 51.0 (1994)



SWEETFERN

is not a true fern

but a shrub (to 1.5m)

in the bayberry family.

*

A Toronto native, it was drawn in the field by Mary Cumming in High Park.

Ref. MANUAL OF VASCULAR PLANTS by Gleason & Cronquist

EARWIGS: CONFIRMING THE MYTH

Some years ago Ron, I, and his two children were on a summer car camping trip to Arizona. We were just setting out along a mountain trail when it started to rain. After donning my rain jacket and hood, I felt something crawling in my ear. I let out a startled scream, and Ron ran back to find me behaving hysterically. It was a ghastly sensation to feel a creature moving around in the middle of my head! Then it bumped into my eardrum and turned around. Seconds dragged by like hours as I worried about how long it would stay, and whether the insanity would continue. Eventually Ron watched an ugly, inch-long insect crawl out of my ear and drop to the ground. He felt nauseated, but I was mightily relieved!

This happened before earwigs were found in Toronto. But they did occur in Meaford, where the children's mother lived. It might have made its way into our hall closet from their coats. On the other hand, it could have been a local insect.

Since then I've often read that such stories as mine are fictitious. The "Field Guide to the Insects" in the Peterson series states "The name 'earwig' comes from an old superstition that these insects get into people's ears; this belief is without foundation." Another book describes it as absurd. I know better. Even the part about becoming demented is true!

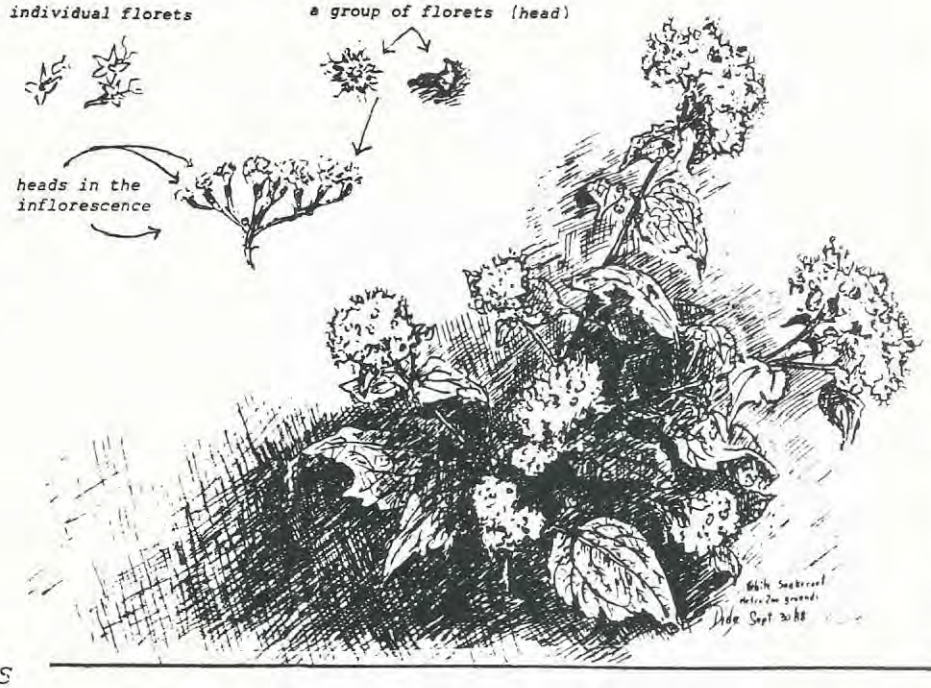
Now, however, I'm getting my revenge. My nightly ritual in the warm months is to visit the deck-planter, soup bowl and flashlight in hand. Any earwigs chomping on the petunias are tipped into a very relaxing hot bath.

Joan O'Donnell □

THOROUGHWORTS, at first glance, look like the flowers of the carrot family, such as Queen Anne's lace, which have graduating radiating flower stems, forming a flat or rounded top (an umbel). They are, in fact, in the daisy family, of which the heads, in this case, are tiny and have graduated alternating stems in the inflorescence, forming a similar top (a corymb).

THE WHITE SNAKEROOT is a common fall-blooming native Toronto thoroughwort, related to Joe Pye weed and boneset.

Ref.: Gleason & Cronquist MANUAL OF VASCULAR PLANTS



IN THE NEWS

THE MONEY-SAVING BENEFITS OF URBAN FORESTS

Planting trees in cities and suburbs can reap millions of dollars in long-term savings by cutting the cost of heating and cooling buildings, reports the US Forest Service. In a three-year study centred on Chicago, the agency also found that trees absorb significant amounts of air pollution. Researchers estimate that planting 95,000 trees in two counties would result in a net benefit of $38 million (US) over 30 years. Scientists have long known that trees exert a cooling effect on nearby air, absorb pollutants, improve water quality, lessen flooding and abate noise. The US study is believed to be the first to estimate the actual financial benefits from trees, over and above the cost of planting and maintaining them. In the course of their investigation, the researchers also produced an unusually detailed examination of the role of vegetation in an urban-suburban ecosystem. The report recommends the use of "solar friendly" trees, ones with open crowns that drop their leaves early in the fall and sprout them again late in spring. Suggested are ash, Norway maple and poplar. It also advises that trees planted on the northern or northwestern side of homes in many northern areas can turn away chilling winter winds, reducing heating costs. The researchers calculate that the shade of a large street tree situated west of a typical brick residence can reduce air-conditioning needs by 2 to 7 per cent. The study discovered that large trees remove 60 to 70 times more pollution that do small ones. Planting and maintaining the trees for 30 years would cost $21 million, the study found, while the benefits from them would be $59 million, or $402 a tree.

extracted from an article in THE GLOBE AND MAIL, April 6, 1994

AUSTRALIANS UNCOVER 39 PREHISTORIC PINES

Scientists stumbled upon trees believed to have disappeared 150 million years ago in a secluded rain forest. This is probably one of the most significant botanical finds of this century. The trees were found in August in an almost inaccessible part of Wollemi National Park, about 200 kilometres west of Sydney in the Blue Mountains. They have been named the Wollemi Pines. So far only 23 adult trees and 16 juveniles have been found, making it one of the world's rarest plants, comparable to the living fossil finds of the dawn redwood tree in China in 1944. The Wollemi Pines once covered vast areas of the world, but as the climate changed the few remaining trees survived only in this damp, protected gorge. The closest relatives of the Wollemi Pines died out in the Jurassic Period 190 million to 135 million years ago, and the Cretaceous Period, 140 million to 65 million years ago.

extracted from an article in THE GLOBE AND MAIL, Dec. 13, 1994

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IN THE NEWS (cont'd)

SCIENTISTS CREATE GOURMET RABIES VACCINE FOR CITY RACCOONS

In preparation for the release of a new rabies vaccine, researchers in Canada and the United States discovered that city raccoons and country raccoons have different tastes. Rural raccoons will eat just about anything, but urban raccoons have more refined taste habits. Over the past 20 years, raccoon rabies has been moving northward from West Virginia after hunters imported rabid animals from Florida. To stop the spread of rabid animals into Canada and to eliminate the disease where it has taken root in the United Stated, both Canadian and US officials have worked to develop a special anti-rabies vaccine. The easiest way to give the raccoons their medicine is to hide it in something they eat. This is already done routinely in Ontario to control rabies among foxes. Over the past several years, the Ontario Ministry of Natural Resources has considered about 50 different possible flavours of raccoon bait. The winner a ministry technician concocted is a recipe that includes rancid tallow, the wax that is used to coat milk cartons, and ISM - icing sugar flavoured with marshmallows. The rancid tallow smells bad to humans and keeps kids away from the bait, the wax adds a chewiness the animals like, and the raccoons go nuts over marshmallows. Rosedale, Toronto, has an estimated 10,000 to 12,000 raccoons. If 70 per cent of the animals vaccinate themselves it is enough to keep a region free of rabies.

adapted from an article by Stephen Strauss in THE GLOBE AND MAIL, December 14, 1994

THE FOXES ARE MISSING AND I WANT ANSWERS

Knowing foxes, raccoons, skunks and such exist in our community makes us feel better. The city seems more livable when wild life shares it with you. The ravine leading up to Chine Drive is a magic place where the wild plants grow bigger, brighter and fuller. The trees are tall, filled with dense foliage and the enchantment is complete. Foxes thrive here and made their existence known. Last week a man was seen carrying a dead fox. An inspector went to the man's house and was shown the pelts of four foxes, a skunk and some raccoons. The man claims to be a licensed trapper who has permission to trap on two Metro golf courses, but not in our area.

adapted from an article by Dick Singer in the SCARBOROUGH MIRROR, Oct 29-30, 1994

OVER-SEXED AND OVER THERE

Britain's Forestry Authority has commissioned a study to develop a contraceptive for the large number of Canadian grey squirrels that are harming woodlands. The squirrels damage trees by stripping bark from broad-leafed trees and conifers. Officials say grey squirrels were introduced to Britain in 1876 and now number about 2.5 million. The vaccine would prevent pregnancy by causing an immune response in female squirrels against male sperm.

extracted from THE GLOBE AND MAIL, October 22, 1994

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IN THE NEWS (cont'd)

MANMADE WETLAND TO SERVE AS WILDLIFE HABITAT

A new Black Creek wetland area has been created under the hydro towers of the Parkway Belt near the intersection of Jane Street and Steeles Avenue. The wetland, officially opened in September, consists of two ponds, one adjacent to the main branch of the Black Creek and one off the west branch. It was designed as a wildlife habitat and is part of ongoing efforts to rehabilitate the Black Creek by the Black Creek Project (BCP). BCP is a non-profit citizens group dedicated to the rehabilitation and enhancement of the creek, a major tributary of the Humber River. The group was created in 1982 and has been the driving force behind a number of restoration efforts including tree planting, erosion control, litter clean up, public education and wetland creation. It has already successfully created two wetlands, one for flood control and the other for wildlife enhancement. Key components of the ponds are islands which will provide protection for birds from predators. Native plants were then planted in the ponds and the surrounding area by volunteers and members of the Environmental Youth Corps, a government-sponsored program designed to create summer jobs for youth. The plants will provide habitat and cover for wildlife that will live in the wetlands and the nearby valleys. The wetland complex will help enhance the Black Creek valley corridor and possibly provide a link with a park system south of Steeles Avenue.

adapted from an article by Dan O'Reilly in REAL ESTATE NEWS, Oct. 21, 1994

HIGHWAY 407 IS 17 YEARS AHEAD OF SCHEDULE

Highway 407, Ontario's first fully electronic toll highway, is a new 69 kilometre east-west freeway connecting Highways 403 and 48. The Rae government saw that building Highway 407 the old way would take 25 years, so the government initiated a partnership with private companies. The project is managed through an innovative public-private partnership, Canadian Highways International Corporation. By launching this partnership, the Rae government brought the completion date forward to the year 2000 - and saved over $300 million. The need for Highway 407 was first identified in the 1950s. In the 1970s, this route was considered an important part of the Greater Toronto Area traffic corridor. But nothing was done about it. Congestion on the 401 is estimated to cost the transportation industry more than $2 billion in wasted time and lost productivity. The population of the Greater Toronto area is expected to grow by 13.4% in the next decade.

extracted from an article in THE ONTARIO STAR, Winter 1994

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'MINISTRY, SPARE THAT WOODLOT'

Moulton is a postage-stamp bit of forest in southwestern Ontario near Lake Erie facing the prospect of logging. It contains 17 species of endangered, threatened or rare birds, trees, plants and reptiles. And it is one of the few remnants of the Carolinian forest that once blanketed this part of the province between Metro Toronto and Windsor. The province's natural resources ministry - in defiance of its own guidelines - has sanctioned timber cutting on the small but environmentally important woodlot near Long Point, about 30 kilometres southwest of the city of Simcoe. The forest is owned by the Long Point Regional Conservation Authority but managed by the ministry. The eight hectare forest could be logged this winter. Already, the trees destined to fall have been marked by the ministry with a bright yellow splotch, their fate determined by a spurt of spray paint. The logging plan calls for only a small percentage of the forest to be cut -- 224 of 2,842 trees -- but they are among the largest and include red and silver maples, white oak, and American beech. The conservation authority insists the logging should be done this winter when the ground is frozen and there is the least potential to damage the undergrowth. It denies half the forest canopy would be lost. The 32 white oak trees marked for cutting have been dead since a gypsy moth infestation several years ago. (Dead trees, however, provide home to the southern flying squirrel, a species listed as vulnerable.) The natural resources ministry stands to collect $18,000 from the timber operation that would be performed by a privately owned logging company.

adapted from an article by Brian McAndrew in THE TORONTO STAR, Nov. 26, 1994

METRO'S WATER SAFE

Metro Toronto's drinking water meets the Ontario Environment Ministry's guidelines on treated water quality. The R.C. Harris plant and the three other Metro water treatment plants are not included in the 120 Ontario plants with water quality problems cited in the recent report by Ontario auditor Erik Peters. Metro conducts on-going tests to ensure water meets all provincial and federal guidelines. Annually over 250,000 tests are done on samples from Metro's water treatment plants and distribution system. But no matter how many tests Metro conducts, it seems some people are still leery. Studies have shown that 20 per cent of Metro residents drink bottled water. A further 10 per cent have home filters.

extracted from an article in BEACH METRO NEWS, Nov. 22, 1994 ▷

CONTRIBUTORS OF NEWSLETTER CLIPPINGS THIS MONTH: Diana Banville, Shelley Bond, Alexander Cappell, Mary and Nancy Cumming, Don Davis, Karin Fawthrop, Nancy Fredenburg, Eileen Mayo, Alen McCombie, Joan O'Donnell, Jim Purnell, Grace Somers, Arthur Wade.

IN THE NEWS (cont'd)

AGENCY ACED ARCHEOLOGY, FAILED CHEMISTRY

The Ontario Waste Management Corp., the government agency formed to solve the hazardous waste problem, flunked the environmental assessment last week for neglecting to do enough research on alternatives to burying chloride residues in landfills. Plans to build the waste facility were 14 years in the making and altogether cost $140 million, much of it going to lawyers, consultants and salaries at the crown corporation.

extracted from an article in THE TORONTO STAR, Dec. 3, 1994

'RAIN FOREST' LETS FIRM BREATHE EASIER

Inside Canada Life's new downtown office tower is the Environmental Room, a tropical rain forest recreated inside a ground-floor meeting room of the 12-storey Canada Life headquarters expansion. The 1,600 square foot room contains an astounding 350 species of plants, 45 kinds of fish, 3 species of frogs, 3 types of salamanders, 40 kinds of snails, clams and mussels, up to 40 different types of worms and hundreds of species of insects. The room was designed as a meeting area for up to 30 people, but it might also improve the environment of other parts of the building. Researchers plan to investigate how far the purified air can be dispersed to other parts of the building. The indoor rain forest was created by biologist Wolfgang Amelung, owner of Genetron Systems, an ecological engineering firm.

extracted from an article by Brian McAndrew in the TORONTO STAR, October 14, 1994

A COLLECTIVE VISION FOR URBAN LIFE

The quality of urban life means much more than friendly neighbours, milk and a bowl of chili available at the corner; we should all be able to experience nature within a short walk from where we live, work and play.

extracted from a letter by William B. Granger to THE GLOBE AND MAIL, November 19, 1994

PRESERVING URBAN JUNGLE SHOULD BE JOB ONE

Although many cities seem hopelessly degraded environments, the urban habitat is still the most effective machine for conservation ever invented. To take the simplest example: row houses and apartments, connected by public transit with high-density workplaces. No amount of gimcrackery will ever exceed the built-in efficiencies of that ancient pattern. The frontier of environmentalism is cities.

extracted from an article by John Barber in THE GLOBE AND MAIL, November 18, 1994

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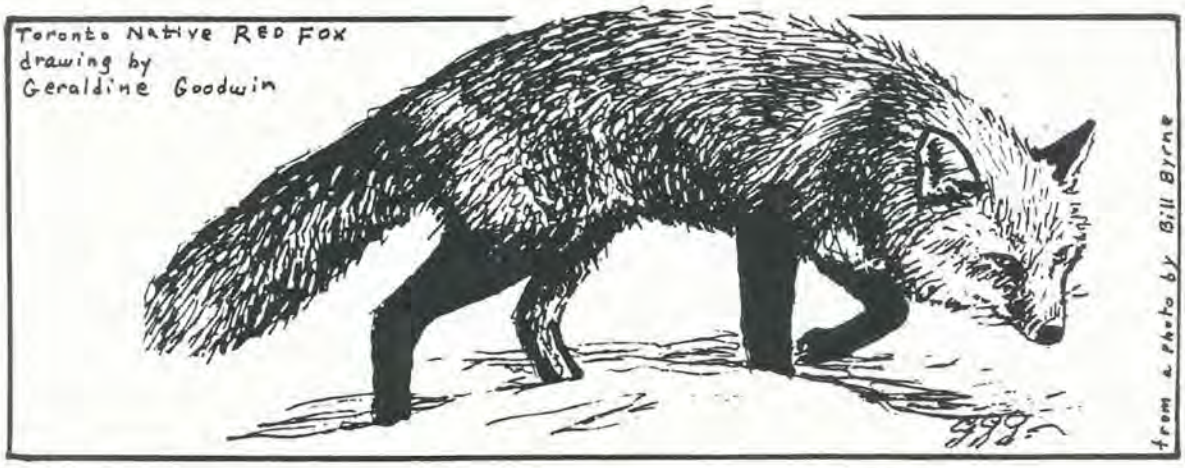
IN THE NEWS (Con't)

HOMEOWNERS HELP IMPROVE WATER QUALITY

Homeowners in Etobicoke are playing a small but important role in a long-term plan to improve the water quality of local riversand creeks, and ultimately Lake Ontario. When a new home is constructed the owner or the builder is not allowed to connect the eavestrough to the storm drain unless it can be proven the run-off will damage the foundation. That's a complete reversal of a policy in effect from 1967 to 1992 that required homeowners to make the connection. The program is an attempt to undo some of the environmental damage created by the massive urbanization and industrialization that's been underway for almost 100 years, but especially since the 1950s. The program is designed to treat storm water as a resource rather than as sewage. The "renaturalization" of Berry Creek is another example of a small local project. This is a small tributary of the Humber River in Rexdale that separates a residential area just north of Rexdale Boulevard from an industrial area. For many years the section of creek between Martin Grove Road and Kipling Avenue was a concrete channel. Two years ago, the works department, with volunteer help from nearby residents, turned the creek back to its natural state. The concrete was torn out and replaced with gabion baskets and large stones placed at key intervals. Trees were also planted on an adjacent berm by residents who have maintained their interest in the creek's health. Etobicoke is pioneering the use of an innovative two-tiered storm pipe system designed to slowly release storm water back into the ground. Storm water is collected by standard drains and then directed into a second pipe. These pipes are perforated with holes and wrapped with a special cloth that allows the water to flow out while catching harmful materials. The drains have been installed on about 12 streets and seem to be working well.

extracted from an article by Dan O'Reilly in REAL ESTATE NEWS, Nov. 18, 1994



IN THE NEWS (cont'd)

CARNIVOROUS EXILE

New Delhi's Press Club has become the home of a large wounded hawk with an injured wing after the city's only bird hospital refused to treat the predator because it is a meat-eater. The clinic, managed by a strictly vegetarian Jain community, only cares for "vegetarian" birds like pigeons, sparrows and parrots. The hawk seems content in its new home, where it is kept uncaged. It is allowed to spend afternoons under a silk tree, and sleeps in a mulberry bush. The hawk has recovered enough to attempt short flights after being fed an unspecified diet.

extracted from the LONDON FREE PRESS, October 15, 1994

LEAD BUCKSHOT TRAGEDY

The World Wildlife Fund (WWF) is calling for a ban on lead shot for hunting and the use of lead sinkers for fishing. The Organization for Economic Cooperation and Development held a workshop on lead in Toronto in September. Researchers presented evidence detailing lead poisoning of wildlife, including the ducks, loons, geese and swans that ingest lead shot that has fallen into wetlands and waterways, and also the raptors, including eagles, hawks, falcons and owls, which eat the poisoned waterfowl. A ban on lead shot for waterfowl hunting has been in place in the United States since 1991. The lead has been replaced by steel and bismuth shot. Some European countries have restricted lead sinkers because of serious impacts on swan populations. One alternative is dense plastic instead of lead. A cross-Canada survey found elevated lead levels in 17 per cent of dabbling ducks and 48 per cent of diving ducks. The WWF estimates that on the basis of 3.5 million ducks bagged each year some 2 trillion lead pellets amounting to 500 tons of lead rain down into Canadian waterfowl habitat every year. Another estimate puts the number of loons killed by lead poisoning at more than 30,000, with hundreds of rare West Coast bald eagles likewise dying. British Columbia has vowed to impose a ban on lead buckshot by next year, and Ontario is considering a ban by 1997.

extracted from an article by Bob Hunter in EYE, October 6, 1994

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... should you think there is going to be some unnecesary, ill-planned encroachment on a valuable piece of habitat, or that some plant or animal is in danger and not receiving sufficient protection, write indignant letters. ...Remember that the animals and plants have no M.P. they can write to; they can't perform sit-down strikes or, indeed, strikes of any sort; they have nobody to speak for them except us, the human beings who share the world with them but do not own it.

extracted from CATCH ME A COLOBUS by Gerald Durrell, Collins, 1972

THE WEATHER (THIS TIME LAST YEAR)

FEBRUARY 1994, Toronto

FEBRUARY was sunny, cold and dry. It was virtually identical to February 1993, milder by a fraction of a degree and with 0.8 hours less sunshine recorded at Toronto City. The mean maximum at Pearson was the lowest since 1979, with even a spell of record warmth which peaked on February 19th-20th. For the second year in a row, there was only a trace of rainfall. Snowfall was close to normal, in the 25-35 cm range. Total precipitation was the lightest since 1989, as low as 20.2 mm at L.B. Pearson International Airport. The first half of the month was very cold, although not extreme compared to January. But it dropped to the coldest February values since 1987, with -23.5°C at Pearson on February 10th. Mild and dry conditions came in thereafter, and soon became record-setting. Pearson hit 12.5°C on February 19th, and 12.4°C the next day, giving the month an amplitude of 36°C. With this warm spell, accompanied by considerable sunshine, the snow cover thinned rather quickly, leaving a patchy cover. However, it turned colder again, and a storm on February 23rd brought snow, blowing snow, and freezing rain. Winds gusted over 80 km/h. The winter (December to February) was the coldest since 1933-34. Lake Ontario was about two-thirds frozen over for a brief period before the big thaw after mid-month.

Gavin Miller ◻

Six-Mile Lake in August - field drawing by Joanne Doucette

COMING EVENTS

Toronto Ornithological Club - Jim Baillie Memorial Bird Walks -
- Sat. Feb. 25 at 9 am (all day) with George Bryant to see winter birds in Durham Region. Meet at the Pickering GO station to form a car pool if necessary. Bring a lunch and dress warmly.

Toronto Entomological Association - meeting - Sat. Feb. 25 at 1 pm in the lecture room of the McLaughlin Planetarium. The subject of this meeting will be Insect Conservation Priorities. The speaker will be Steven Price.

Indoor Air Quality Forum - Sun. Feb. 26 at 1:30 pm at the First Unitarian Church, 175 St. Clair Ave. West (at Avenue Rd.). Free admission.

Kawarthas Nature - Federation of Ontario Naturalists Annual General Meeting and Conference - to be hosted by the Peterborough Field Naturalists at Trent University, May 26, 27, 28, 1995. For details or to register, write to FON Conference '95, c/o Mr. S. Reiten, 541 Arndon Ave., Peterborough, Ont. K9J 4A9.

Great Horned Owl Prowl - Sat. Feb. 11 at 6:30 pm and 9 pm at the Kortright Centre. $7 admission fee. For more details, call 661-6600.

Flying Colours: Design on the Wing - colour photographs of butterflies and butterfly specimens at the Royal Ontario Museum from Sat. Feb. 25 to Sunday, May 7, 1995. Admission: $7. For more details, call 586-8000.

Tommy Thompson Park (Leslie Street Spit) - winter hours (until April) are 9 am to 4:30 pm, weekends and holidays only.

TFN

Heritage Showcase '95 - Feb. 24, 25, & 26 at the Sherway Gardens Mall. TFN will have a display at this three-day event celebrating the human and natural heritage of Metro Toronto. □

IT'S YOUR NEWSLETTER!

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

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

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

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

Send material to: Toronto Field Naturalists
20 College St., Unit 11
Toronto, Ont. M5G 1K2

Newsletter Committee members: Helen Juhola, Diana Banville, Jenny Bull, Eva Davis, Nancy Fredenburg, Eileen Mayo, Joan O'Donnell, Toshi Oikawa.

TFN 449 - 30

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NO G.S.T.

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