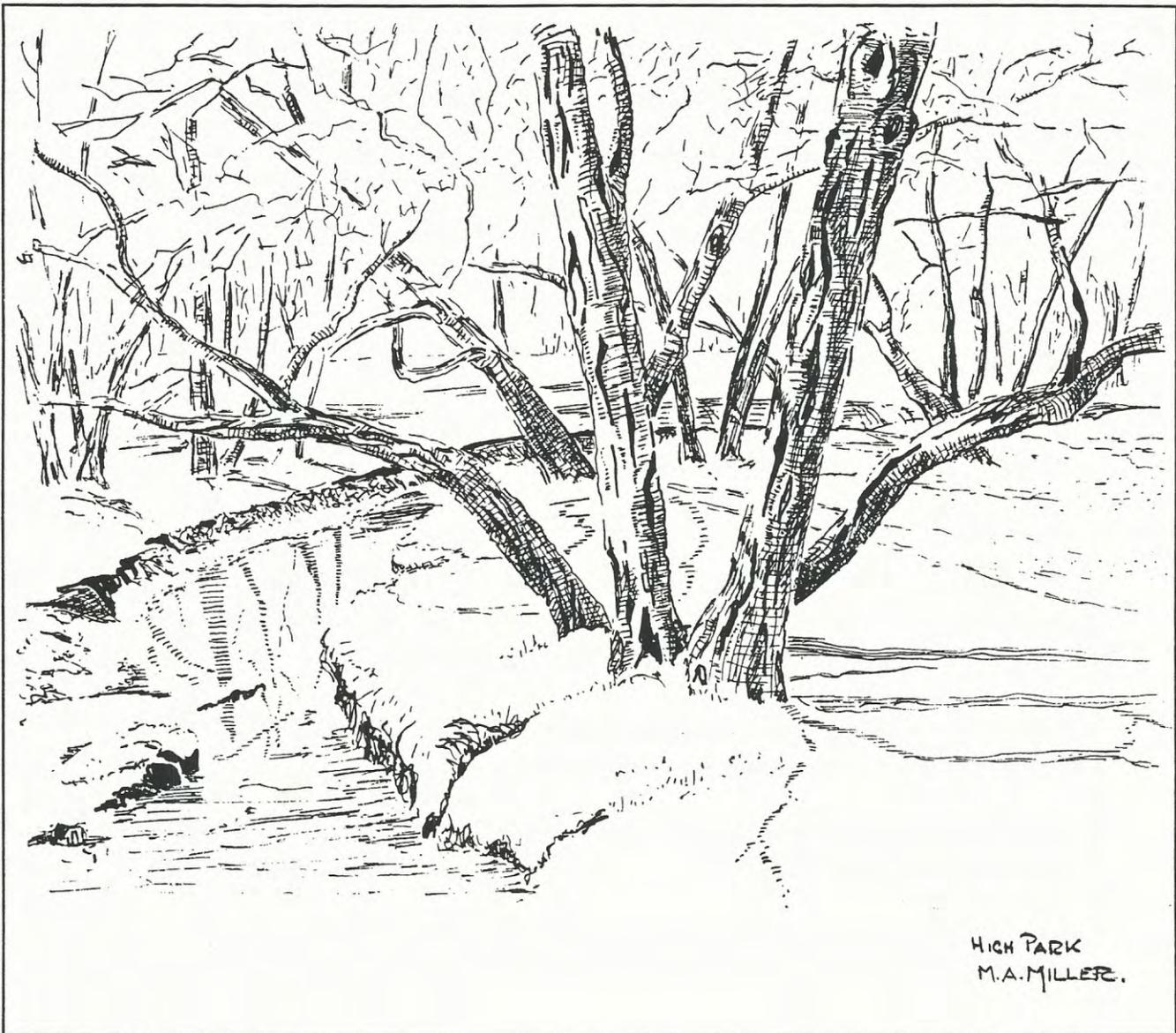


TORONTO FIELD NATURALIST

Number 473

February 1998



HIGH PARK
M.A. MILLER.

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TFN MEETINGS

Sunday, February 1, 1998 - INSECTS IN OUR FORESTS, an illustrated
lecture by Dr. Sandy M. Smith of the
at 2:30 pm University of Toronto

in the Northrop Frye Hall
Victoria University
73 Queen's Park Cres. East

This is a brief perspective on how we have interacted with insects in our forests -- our perceptions, issues and approaches; our transition from pest control to pest management to forest health to insect preservation with emphasis on how human activities in the forest have and will continue to have an influence on insect populations and communities.

+ a social hour beginning at 2 pm with free juice and coffee

+ a quilt raffle ticket sale to benefit Bird Studies Canada. Tickets: \$5.00 each.

NEXT MEETING: Sunday, March 1, 1998

NEXT NEWSLETTER: March 1998 (to be mailed in mid-February)

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
605 - 14 College St.
Toronto, Ontario M5G 1K2

Editor: Helen Juhola; Art Editor: Diana Banville; Assistants during the past year: Jenny Butler, Alexander Cappell, Eva Davis, Karin Fawthrop, Nancy Fredenburg, Eileen Mayo, Joan O'Donnell, Toshi Oikawa

TFN OUTINGS

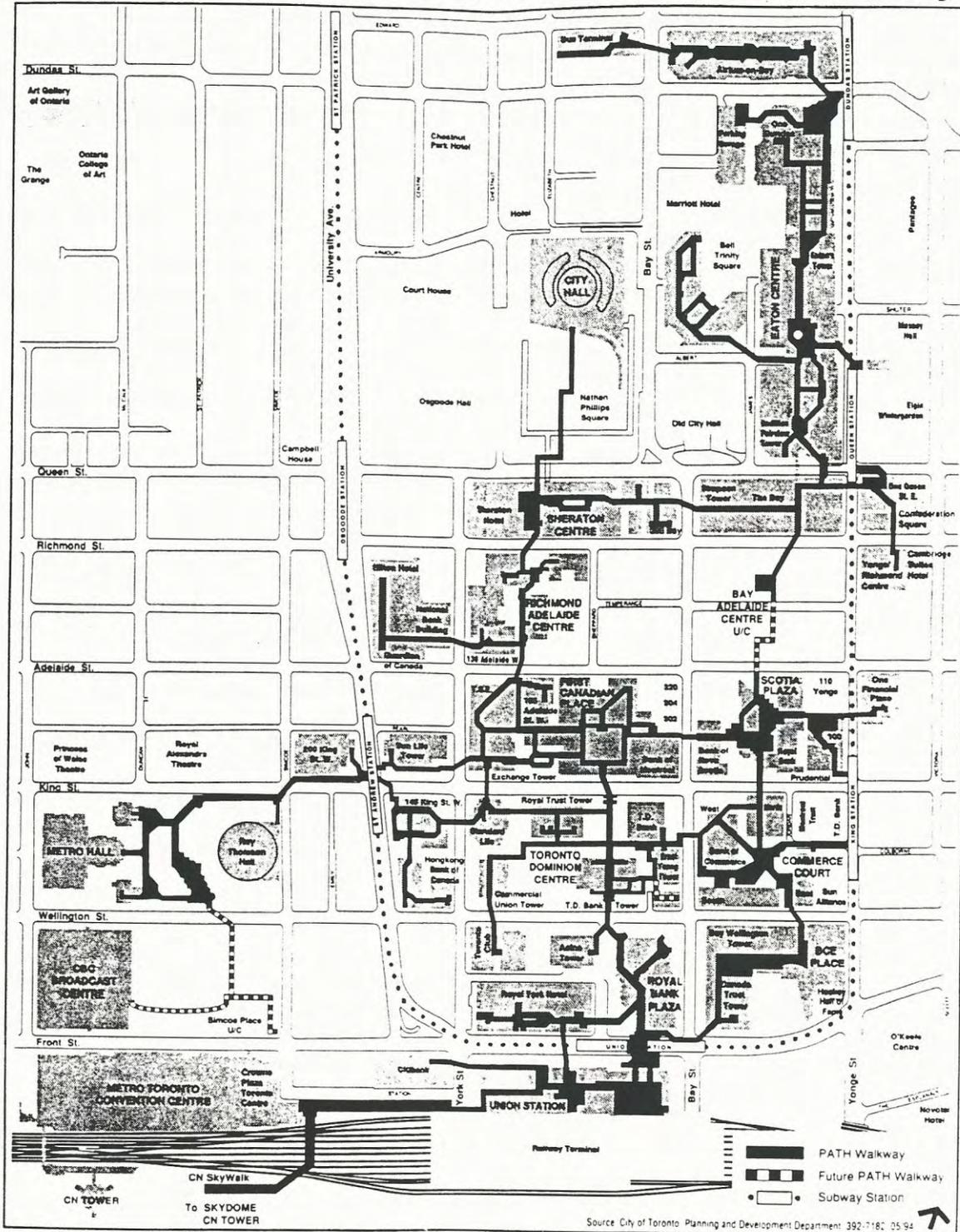
REMEMBER: Children and visitors are welcome on all outings but please, **NO PETS!**
 To get to outings on time, check TTC routes and schedules by calling 393-4636.
 Check the weather by calling 661-0123 so you will know what to wear on outings which go rain or shine.

- 
 Wednesday February 4 10 am THE LIVING MACHINE AT THE BODY SHOP - tour North York
 Leader: Helen Mills
 Call Helen Mills at 781-7663 to sign up and get details about where to meet. Morning only.
 The Body Shop has installed a living machine which uses living plants and animals to transform polluted water into clean drinkable water.
- Saturday Feb. 7 10:30 am BESTVIEW PARK - nature walk East Don, North York
 Leader: Robin Powell
 Meet at the southwest corner of Steeles Ave. East and Leslie St. Bring lunch.
 This could be a rugged walk along a tributary of the East Don River through a mature forest and meadows. Many plants can be recognized at this time of year as well as wintering birds and signs of mammals.
- Wednesday Feb. 11 10 am HUMBER ARBORETUM - nature walk West Humber, Etobicoke
 Leader: George Bryant
 Meet at the arboretum entrance on the south side of Humber College Blvd., west of Hwy. 27. Lunch optional.
 The forested valley lands of the college grounds provide excellent food and shelter for wintering birds. Bring binoculars and notebook.
- Sunday Feb. 15 1 pm WESTERN LAKESHORE - nature walk lakeshore, Toronto/Etobicoke
 Leader: Boris Mather
 Meet at the northeast corner of the Queensway and Windermere Ave.
 We will be walking along the lakeshore to Humber Bay Park and looking at some of the changes and newly created wildlife habitat.
- 
 Tuesday Feb. 17 2 pm to 4 pm DEER PARK LIBRARY - member's photos (nature arts) Toronto
 Leader: Jean Macdonald
 Meet on the second floor of the library which is on the north side of St. Clair Ave. East, one block east of Yonge St.
 Members are invited to bring their own nature photos, up to 20, or just come and enjoy the afternoon. Projector and screen will be provided. If you have questions, call Jean Macdonald at 425-6596.
 

With steam plumes rising,
 a dusting of snow falling,
 cold city morning.

haiku by Arthur Wade,
 February 17, 1997

PATH Toronto's Downtown Walkway



To learn about late-20th century, subterranean Toronto, attend the Feb. 19th outing.

FEBRUARY OUTINGS (cont'd)

- Thursday
Feb. 19
7 pm
UNDERGROUND TORONTO - urban geology
Leader: Ed Freeman
Toronto
Meet at the entrance to the Atrium on the north side of Dundas St. West, just west of Yonge St.
Toronto has miles of underground walkways lined with material from all over the world. Come and learn more about the habitat we have created for ourselves. [See map on page 4.]
- Saturday
Feb. 21
2 pm
to 4 pm
DEER PARK LIBRARY - members' photos (nature arts)
Leader: Robin Powell
Toronto
Meet on the second floor of the library which is on the north side of St. Clair Ave. East, one block east of Yonge St.
Members are invited to bring their own nature photos, up to 20, or just come and enjoy the afternoon. A projector and screen will be provided.
If you have questions, please call Robin Powell at 928-9493.
- +
Saturday
Feb. 21
all day
ROUGE PARK - deer survey
Leader: Sue Russell
Rouge, Scarborough
Call 287-6843 to register for this walk. Bring lunch.
This is an annual event in the Rouge Valley and a chance for members to learn about quadrats and how to use them in other wildlife surveys.
- Sunday
Feb. 22
2 pm
GARRISON CREEK SOURCE - nature walk
Leader: Dick Watts
Toronto
Meet at Humewood Park which is one block north of St. Clair Ave. West, opposite Christie St.
Come and explore the landscape created by the northern branches of the creek's headwaters and the valleys they carved through the Lake Iroquois shore bluff.
- Wednesday
Feb. 25
10:30 am
HIGH PARK - bird study
Leader: Louise Orr
Toronto
Meet at the park entrance on the south side of Bloor St. West opposite High Park Ave. Bring lunch.
Bring binoculars and notebook and be prepared to stop, look and listen for birds in this large park with its many habitats.
- Saturday
Feb. 28
1 pm
NORWAY CREEK - heritage walk
Leader: Ian Wheal
Toronto
Meet at the northwest corner of Woodbine Ave. and Kingston Rd.
We will be looking for traces of another of Toronto's lost creeks, so this will be mostly street walking.

Along the highways
twiggy looking salt-pruned trees
a warning to us.

PRESIDENT'S REPORT

As I sit down to write my February report it's just a few days before Christmas and I'm at my father's home in Brockville, Ont. It doesn't look very Christmas-like yet (no snow on the ground -- perhaps an effect of "El Nino"?), but today's morning temperature of -13°C, while normal here, would probably be termed "bitterly cold" by Toronto weather reporters.

I'd like to begin my report by mentioning that thanks to member Barry Severn, TFN now has a presence on the Internet. In fact, at least a few potential members, mostly of the younger generation, have been enticed to recent outings by information gleaned from Barry's site which can be assessed at: ourworld.compuserve.com/homepages/barrysevern

▷ On behalf of the TFN membership, I thank you for your efforts.

▷ Still more welcome publicity for our club has come from gardening expert and Toronto radio institution, Art Drysdale, who has been plugging our monthly meetings and speakers on his program. Please tune in to "Talk 640" (CHOG Radio, 640 kHz, on your AM dial) at 8 am Saturday mornings. Even if you aren't an avid gardener, I suspect that you will glean much interesting information about plants and the outdoors.

▷ On a less happy note, we learn from the Federation of Ontario Naturalists and the Richmond Hill Naturalists Club of the threats of suburban development to Baker's Woods, a significant farm and sugar bush which has been under the careful stewardship of the Baker family since 1812. It was recently sold to Sugarbush Development Limited whose ultimate goal is development of 7.5 hectares of the 30 hectare (75 acre) site which would probably mean environmental degradation to the remaining portion. This maple/beechn woodlot located at the corner of Bathurst St. and Highway 407 in the City of Vaughan represents high quality upland forest, one of the rarest of our ecosystems south of the Canadian Shield and deserves particular attention for its scientific and educational values in a rapidly urbanizing landscape. Many TFN members will recall visiting this site on our bus excursion through the Don watershed led by Peter Atfield a couple of years ago. Concerns about the continued protection of Baker's Woods may be directed to: Mayor Lorna D. Jackson, City of Vaughan, 2141 Major Mackenzie Dr., Vaughan, Ont. L6A 1T1.

Another threat to the environment, this time in Scarborough, comes from Ontario Hydro who have made a deal with Greywoods Investment Ltd. that would see a 276 ft. wide, 2.5 miles long stretch of the Scarborough Hydro Corridor from Hwy. 401 north to McNicholl Dr. between Pharmacy and Warden sold to that developer. The company plans to develop a single family residential project with a parkland component. This, despite the fact that one of the last resolutions passed by the former Scarborough city council rejected plans to rezone this land for anything but green space. That decision will have to be appealed to the Ontario Municipal Board. Currently the Scarborough Hydro Corridor provides a significant green link through an otherwise heavily urbanized area. I hope to have more to report on this later as I am in contact with Steve Loretto who is spearheading a citizen's campaign to preserve this valuable resource.

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PRESIDENT'S REPORT (cont'd)

President's Field Notes #4, February 1998

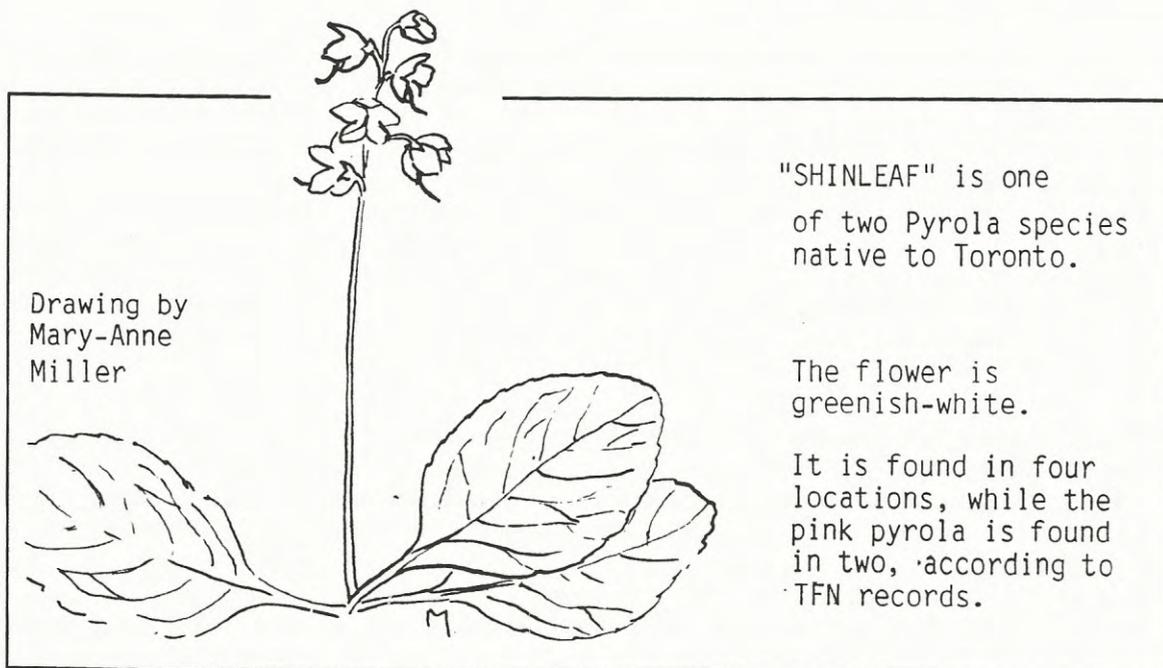
February is a good time to check the shoreline of Lake Ontario in and around the Greater Toronto area for wintering ducks, gulls and other water associated birds. Checking my field notes for February 15, 1997 concerning a Toronto Ornithological Club excursion east of Toronto led by George Bryant, I note Ruddy Duck, Oldsquaw, Buffleheads, Black Ducks and even a Great Blue Heron at Frenchman's Bay, Pickering, along with some tagged Trumpeter Swans which George said were possibly from Wye Marsh. A field near Ajax/Whitby Town Line yielded a Great black-backed Gull.

Closer to home the Toronto Islands and Leslie Street Spit are good for winter gulls including the lightly coloured Glaucous and Iceland Gulls and the distinctive Great black-backed Gulls mixed in with the larger pink-legged Herring Gulls and the smaller, more numerous Ring-billed Gulls. Ducks include Oldsquaws, Buffleheads, Common Goldeneye, Greater and Lesser Scaup and various species of mergansers. Another bonus last year at the Spit was a Snowy Owl which could often be seen on one of the rafts placed as tern nesting sites.

That concludes this month's report. If you have led or are at all interested in leading a TFN walk please keep March 14th open as that is the day set aside for our annual TFN Leadership Training session. As part of our policy of holding this at different locations around the city this year we will meet at the High Park Training Centre. Details will appear in the March newsletter. I hope to see many of you there!

Morris Sorensen

□



OMB UPHOLDS RAVINE BYLAW

In my April 1997 president's column I reported that the owners of several undeveloped lots situated entirely within protected Rosedale ravine lands were itching to get permission to build on these properties. The City of Toronto was reluctant to proscribe development outright because it thought that the Ontario Municipal Board might decide that the City was acting beyond its jurisdiction if it attempted to wipe out all development rights on a parcel of land (in most cases, privately owned ravine slopes are part of parcels that extend from the tableland, so that a rule against disturbing the ravine would apply to only a part of an affected property). City staff suggested that building on the sites wholly within the ravine should be allowed only on condition that the project undergoes an environmental review aimed at "minimizing" damage to the ravine.

Ravine defenders, including the TFN, objected to this suggestion and pointed out that the idea behind the bylaw was to prevent people from building on, clearing, or otherwise wrecking ravine lands that they happened to own. City politicians paid heed to the objections and came up with a scheme that would bar development in the ravines without wiping out the market value of ravine lots. According to the rule they came up with, the owner of a ravine lot could sell it to the owner of an adjacent tableland property. The purchaser could then take the development rights (that is, the "coverage"--the permitted density) belonging to the ravine lot, and add it to the tableland portion of the now-combined property. In effect, if you buy the land within the ravine, you can build more on the land you have outside the ravine.

If you are a developer with a parcel of land within a ravine, this is obviously still not as good as being able to build on the land yourself, especially if none of your neighbours are interested in buying you out. But the OMB went along with the City on this one. The decision came just in time, because it means that we can press the new amalgamated council to adopt strong City of Toronto-type ravine bylaws throughout the megacity. On the other hand, amalgamation also gives opponents of strong ravine bylaws an opportunity to have the bylaw wiped out by getting the megacity to adopt a weak uniform ravine bylaw or policy.

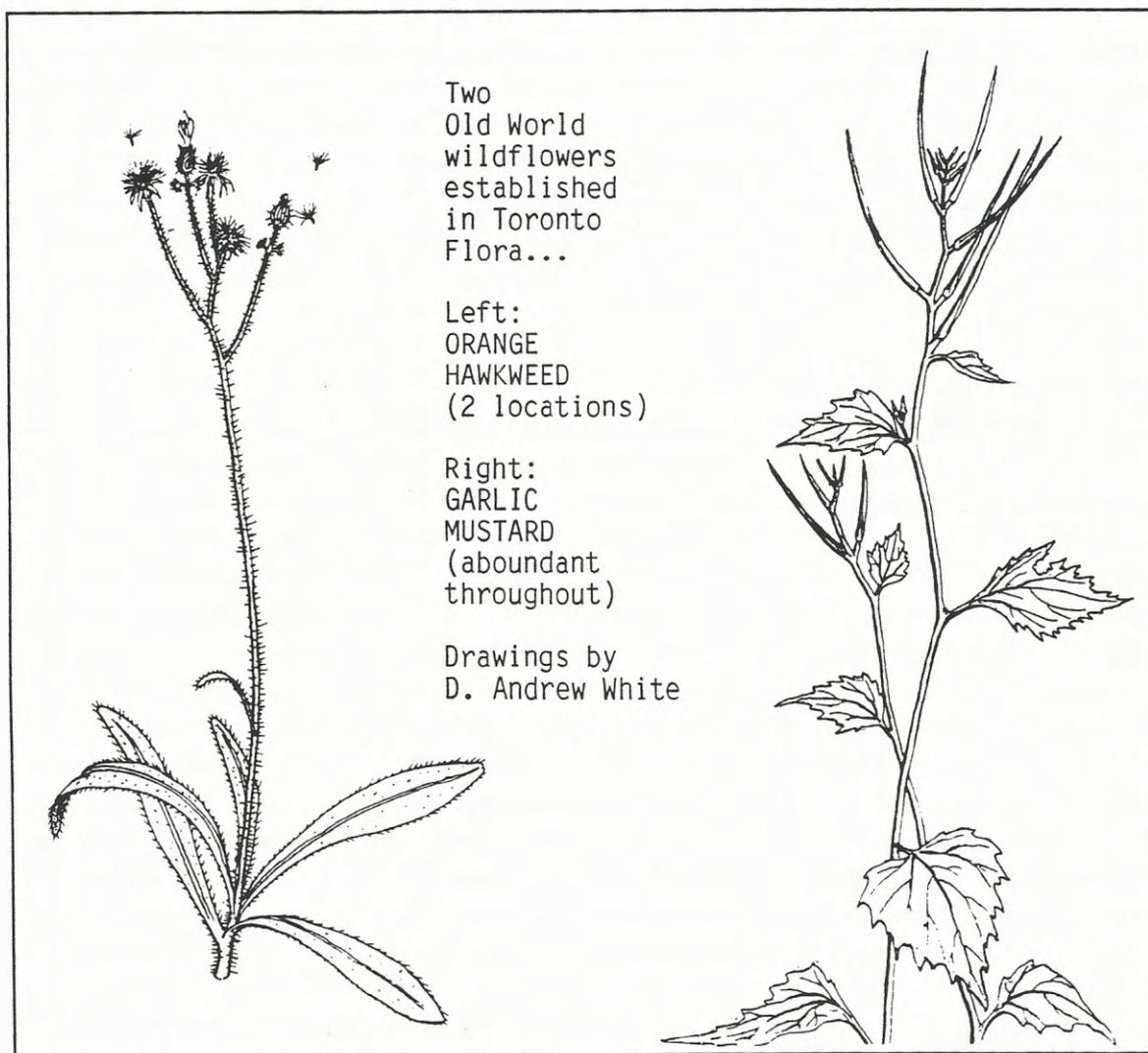
The Rosedale ravine OMB decision was the second time recently that a provincial administrative tribunal has pushed back the limits on what a body under its review could do to protect ravine land. A year or two ago, the Mining and Lands Commissioner (which stands in roughly the same relation to conservation authorities as the OMB does to municipalities) upheld the jurisdiction of the MTRCA to restrict development of privately owned ravine lands in the interests of conservation broadly defined. The case concerned development

OMB UPHOLDS RAVINE BY-LAW (cont'd)

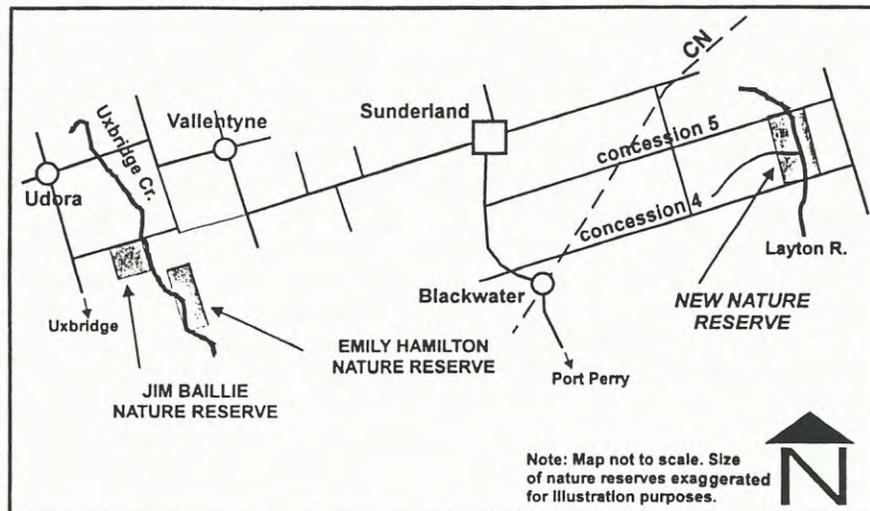
affecting Rainbow Creek, a tributary of the Humber just north of Steeles Ave. Back in the early 1980s, when the MTRCA tried to use its regulatory jurisdiction over valley lands to block development of the old Hinder Estate in the Don valley northeast of Bathurst St. and Sheppard Ave., the Mining and Lands Commissioner ruled that the Conservation Authority could regulate private property only for the purpose of preventing flooding and erosion. In the Hinder decision, it interpreted the expression "conservation of land" in the Conservation Authorities Act narrowly, excluding the conservation of natural amenities or ecological integrity. In the recent Rainbow Creek decision, it interpreted the law more expansively.

Allan Greenbaum and Gavin Miller

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Toronto Field Naturalists - Nature Reserves



At the November special general meeting of the TFN, the majority of the members present approved the purchase of 200 acres of land, east of our 2 existing properties, as our 3rd nature reserve. Early Dec. 1997, the TFN became the proud owners of the new property, mostly wetland, 11 miles north of Port Perry and 9 miles east of Jim Baillie Nature Reserve. This, the fourth purchase of land since 1970, and the others now make up 3 nature reserves with a total area of 362+ acres. It's appropriate at this time to review what we have accomplished and where we might go in the future with the nature reserve program.

ACCOMPLISHMENTS

The **Jim Baillie Nature Reserve** (JBNR) is located 10 miles north of Uxbridge. Direct access to the property is from Fowler's Rd., about 1 mile south of Uxbridge. On the TFN's semi-annual outings to the reserves, it's approximately an hour's drive by bus from the York Mills TTC subway station. In the fall of 1970, 67 acres were purchased at a cost of \$20,000. A further 20 additional acres along the western boundary were purchased in the spring of 1973 at a cost of \$22,500. The money for these purchases was obtained through a fund-raising campaign, a donation from the Canadian National Sportsman's Show, and a mortgage. Uxbridge Cr. runs north along the eastern edge of the combined properties; it runs eventually into Lake Simcoe. The combined properties are essentially a white cedar/balsam fir/paper birch swamp. Most of the land is wet year round; sphagnum moss is abundant. The JBNR is part of an area designated an Environmentally Significant Area (ESA) by the Lake Simcoe Region Conservation Authority and a provincially significant wetland. An interconnected trail system was constructed, as well as a shelter on the western edge of the property. Annual trail maintenance is necessary to keep trails passable. An aerial photographic survey was done. On an annual basis, there is a significant property tax reduction for wetland and wooded areas. The 87 acre nature reserve was named in honour of Jim Baillie who was an assistant curator of ornithology at the ROM and president of the TFN 1952-53.

The **Emily Hamilton Nature Reserve** (EHNR) is located approx. 1 mile directly east of the JBNR. Indirect access is about a mile farther east along Fowler's Rd., then south down a road allowance. It's also accessible via an east-west road allowance along the southern edge of the JBNR; this is usually one of the regular walks during the semi annual outings to the reserves. The 75+ acres of this reserve were purchased in 1987 at a cost of \$66,500. Fortunately, no fund raising was necessary as the TFN had accumulated enough money from unsolicited donations (especially the Charles Fell Foundation) and bequests. No funds were used from the annual memberships! Approximately 1/3 of the property is actively cultivated land; much of the remaining two thirds is an alder swamp which is impassible even in winter (we tried unsuccessfully to reach the southern boundary). Between the farmed land and the alder swamp is a low ridge with white pine/balsam fir/white cedar and a small wet meadow. A small tributary of Uxbridge Cr. runs south west through the wet meadow into the alder swamp. This nature reserve is in the Lake Simcoe watershed. Much of this property is self maintaining due to its inaccessibility, i.e., there is a natural deterrence to trespassing. As with the JBNR, this property is part of an area designated an Environmentally Significant Area (ESA) by the Lake Simcoe Region Conservation Authority and a provincially significant wetland. No trail system(s) have been "constructed" as yet. An aerial photographic survey was also done. On an annual basis, there is a significant property tax reduction for the farmed land as well as the wetland and wooded areas. This second nature reserve was named in honour of Emily Hamilton who was a TFN director, an avid botanist and long-time club volunteer.

The new nature reserve, **Concession 4, Lot 23 Brock Township**, is located approximately 9 miles directly east of the JBNR. It's readily accessible on the combined outing to the JBNR + EHNR nature reserves. The 200 acre property is a full lot, i.e., it has never been subdivided. There is easy access to the north and south boundaries of the property via concessions 4 and 5; a small overgrown access road off concession 5 exists. The cost of land purchase was \$64,500. Fortunately, no fund raising was necessary as the TFN had accumulated enough money from unsolicited donations (especially the Charles Fell Foundation) and bequests. No funds were used from the annual memberships! Approximately three quarters of the property is open wetland and is thus self maintaining, i.e., it naturally discourages trespassing. The remaining 1/4 is woodland with poplar, cedar and tamarack. The Layton River runs south through the property and then west to join the Nonquon River which then flows into Lake Scugog. This third nature reserve is also designated as a provincially significant wetland and is in the Kawartha watershed. We anticipate that on an annual basis, there will be a significant property tax reduction for the wetland and wooded areas. As yet there is no name for the new reserve. Any suggestions?

WHY IS THE TFN IN THE NATURE RESERVE BUSINESS?

The original initiative to acquire land was started by the 1970 TFN board of directors who wanted to buy a limited use nature reserve to ensure that a piece of land remains free from cultivation or development. The success of the fund raising drives was due largely to membership support and charitable organization status of the TFN which

allowed tax deductible donations. Subsequent boards of directors have maintained the original vision by acquiring nearby land of comparable natural significance. We are very fortunate that the steady flow of money from unsolicited donations has allowed the TFN to acquire the additional properties without resorting to fund raising campaigns. The TFN board of directors does not want to take on any form of debt to buy land for nature reserves.

Wetland has been the property of choice because of its great biodiversity, it is inexpensive, has low cultivation/development potential, and needs protection especially in southern Ontario near such a large urban centre as Toronto; wetlands have another natural advantage in that they are to a large extent self maintaining, i.e., they form a natural deterrence to trespassing.

It is recognized there are a number of approaches to preserving the natural environment, e.g., outright purchase, first right-of-refusal, option to purchase, stewardship, lease, conservation easement, etc. Another option would be to give monies in the nature reserve fund to groups such as the Nature Conservancy or the fund raising arm of MTRCA. From our experience to date, the preferred approach has been to have direct control of the spending of the donated money and acquire properties by outright purchase. It gives the TFN clear title to the property and full control over it. Funds permitting this will remain the approach for the foreseeable future. Another preference is to acquire properties that place little administrative load on board members and require a minimum of ongoing maintenance.

Metro Toronto is the TFN's jurisdiction. Its mission is the protection of the remaining natural environment especially in the ravines and river/creek valleys, and public education about its preservation. Ideally the TFN would like to use the money from unsolicited donations to directly protect by outright purchase significant natural areas within Metro Toronto. This is clearly unaffordable for the TFN. The protection alternatives involve a complexity and administrative overhead that is not supportable by an organization driven totally by volunteer help. However, the TFN is acquiring land within greater Metro Toronto for nature reserves. [See map on page 13.]

THE FUTURE

In 1998, the TFN board of directors will resume its search for land to purchase as suitable addition(s) to our existing nature reserves. Suitable land should be -

- affordable and not involve debt of any form or fund raising activities,
- designated as an ANSI, ESA or provincially/locally significant wetland/woodlot, headwater area or stream corridor,
- contain significantly different habitat(s) than those in the existing nature reserves,
- located near or adjacent to our existing reserves,
- accessible during the semi annual bus trips to the other reserves,
- involve a minimum administrative load on board members and

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- minimum annual maintenance,
- provide members with a piece of unspoiled land where the natural environment can be studied/enjoyed for scientific or aesthetic reasons.

This is an ideal list of conditions. The circumstances of a proposed purchase may require some compromises.

The Jim Baillie Nature Reserve will continue to need annual trail maintenance; replacement of the trail markers and duckboard are becoming a priority. The shelter needs repair to fix minor vandalism. In the longer term, the gate and posts will need to be replaced. In the Emily Hamilton Nature Reserve, we should explore the "construction" of a loop trail in the area of the evergreens south of the cultivated fields. This trail could join with the road allowance that links the Jim Baillie and Emily Hamilton Reserves. Flora and fauna studies should be done.

As most of the new nature reserve is wetland, there are limited opportunities for "construction" of trails except perhaps in the very north east corner. This should be explored. As with the Emily Hamilton Nature Reserve, flora and fauna studies should also be done. An aerial photo survey may be done.

The three nature reserves are by far the largest fixed assets of the TFN. The properties were acquired to give significant natural areas protection in perpetuity and provide members unspoiled land for nature studies or enjoyment. The TFN board of directors would like to hear from members about the existing nature reserves and the future plans for acquiring additional land.

Robin Powell



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**CONSERVATION AUTHORITY LAUNCHES FAUNA CONSERVATION
PRIORITIES PROJECT**

The Toronto and Region Conservation Authority has initiated a project aimed at establishing conservation priority rankings for terrestrial vertebrate fauna (birds, mammals, reptiles and amphibians) in the Toronto area. The project will assign a conservation priority rating to species "of concern" on the basis of standardized criteria. The criteria are as follows: current global, regional and local abundance; global, regional and local population trends; geographical restriction; habitat dependence (whether the animal has specialized habitat requirements); habitat vulnerability (sensitivity to disturbance, etc.); area sensitivity (whether, for example, the species requires large blocks of a certain habitat type, as do some forest-interior birds); dispersal capacity (for example, does the animal easily move around over extensive areas as foxes and crows do, or could it be blocked even by a narrow road, like a salamander); and sensitivity to development (of the animal itself, over and above the sensitivity of its habitat). A number score is assigned for each of these parameters, and these scores are added up to yield an over-all score. The higher the over-all score, the higher the conservation priority.

So far the guidelines are in draft form, and the biologists involved are working out the details of the method. The method has been tried out on a provisional basis for 29 sample species that occur in the Toronto region. The over-all scores range from a low of 6 to a high of 30. Among the 29 species ranked, the lowest scores went to the Red-tailed Hawk, Virginia Opossum and Hoary Bat; the highest scores went to the Red-Shouldered Hawk, Loggerhead Shrike, Wood Thrush, Eastern Newt and Northern Water Snake.

The next stage of the project is to finish hammering out the details of the scoring system and also to finalize a list of species of concern. Species of concern are species breeding in the Toronto region that are rare or may, for one reason or another, be vulnerable to decline. The draft list of species of concern includes 20 mammals, 96 birds and 23 herptiles. Once the list is finalized, the project team will be interested in collecting breeding records for the data base. Watch these pages for further details.

Allan Greenbaum

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TFN BOARD NOMINATIONS INVITED

▷ The TFN is looking for people with initiative who are willing to devote time to working as members of the Board of Directors. Please send your suggestions to Allan Greenbaum, Chairman of the Nominating Committee, c/o TFN, 605 - 14 College St., Toronto, Ont. M5G 1K2. (The report of the Committee will be published in the May newsletter.)

KEEPING IN TOUCH

November 7, 1997

I am sending along some pages from my journal, as you had suggested, that you might want to consider for the TFN newsletter. I would be greatly honoured to share with our members/readers, any of the material. Please choose whatever you prefer, that will reproduce to your standards.

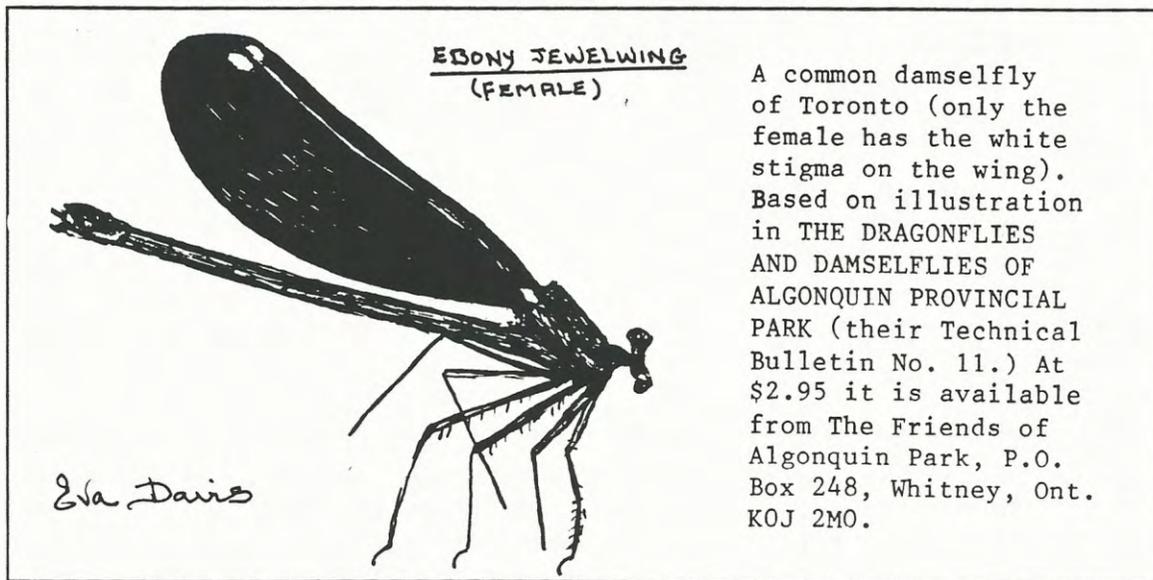
I joined the TFN in January 1996 and have kept this journal ever since. Each entry is dated, of course, and numbered according to my own record. It is a great source of pleasure to refer back to previous outings, to refresh my memory or just to re-enjoy any previous experiences.

Usually, on the same day, or the next day following an outing, I will sit with my journal and jot down whatever highlights I can recall and sketch a quick visual image from memory. I was originally inspired to do this by the first TFN meeting I ever attended -- the speaker was Aleta Karsted talking about her journal, recently published - A PLACE TO WALK. This was perfect timing for me as I embarked into my new-found interest in the adventure and "lore of the amateur field naturalist".

Also at this time I want to say that I find the TFN is an excellent organization in all aspects including administration, planning, publications, community involvement, social responsibility, meetings, outings -- every way. Thank you to all the people whose wonderful efforts make it work so well. This is a very high class club and I believe every member would agree.

[See page 16 for a page of Susan's journal.]

Susan Weiss



Nov. 17, 1997

Any member thinking about becoming a vegetarian (and the topic is about nature -- think of the loss of cod on the east coast and the loss of salmon on the west coast), should contact the Toronto Vegetarian Association at 449-3408.

Ron Singer

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Morningside Park, Saturday, July 26, 1997. Leaders Starr Whit more & I
 Morris Sorenson, Morningside Ave, north of Lawrence Ave, Highland Creek. Mostly
 to look at butterflies, moths, insects, bugs, spiders. I'd a Deepford Pink, minute
 bright magenta with fine white dots on petals, Crown Vetch, seed pods of Swallowwort
 (Dog-Strangling Weed), Silver Spotted Skipper, Cabbage (White) Butterfly, Monarch,
Primrose Moth, Phragmites Grass in leaf stage, Purple Loosestrife, Yellow Loosestr.
 unidentified bird nest on low branch, most plentiful Queen Anne's Lace (Wild Car.)
Nursery Web Spider, Shield Bug. PICNICKED. Ladybird Beetle, 13-spotted,
 2-spotted. Noted single red Flowerette in centre of Queen Anne's Lace, folklore of
 name was Queen was making lace and pricked her finger with the needle, the red
 flowerette is the blood drop. I'd Goldenrod Sphero Gall , in early stage
Red Legged Grasshopper, Crane Fly (making). Phoebe peked a few wild resp.
 and wild blackberries
 and gave some to group.
 I kept the
 species list
 record for this
 walk, to
 help leaders.



MONARCH 
 (or Milkweed)



White Cabbage 

MONARCH migrates 2,000 miles south to Mexico for winter. Last
 caterpillar feeds only on Milkweed, toxic, bad taste is good protection from
 predators, for the caterpillar and the adult.

A LEAF
 FROM
 THE
 NATURE
 NOTEBOOK
 OF
 SUSAN
 WEISS

...reports from the frontline of bog or cliff, meadow, tree or sky are written by the equivalent of war correspondents, often not formally trained journalists or designers but ordinary people observing the often minute changes that are taking place in the natural world. They are like messengers from another planet, and, increasingly, we depend on them to find out what is really going on.

extracted from "BBC WILDLIFE Magazine Awards for the best British Environmental Charity Publications" by John Vidal in BBC WILDLIFE, Vol. 15, No. 9, Sept. 1997

DISCOVERY WALKS

A programme of self-guided walks. Discover how City ravines, parks, gardens and beaches link neighbourhoods. Informative signage will help you experience an area's heritage and environment. This is a new programme of the City of Toronto, Community Services, Parks and Recreation Division.

By now you may have noticed the large interpretive signs and smaller wayfinding disks that are popping up like mushrooms in parks and along streets designated as routes of the six *Discovery Walks*. After years of planning and design, City staff are now installing these signs to mark these walking routes which encompass parks, heritage sites, lost rivers and ravines, interesting Toronto neighbourhoods and streets, waterfront locations and much more. Many of you may have seen the prototype signage at one of the Discovery Walk display booths that were set up at numerous public events across the city during the summer of 1997. To discover each route, all you have to do is follow the wayfinding disks with the Discovery Walk logo on them. [See map and logo on page 18.]

The six Discovery Walks are:

Central Ravines, Belt Line and Gardens Discovery Walk: *Explore wooded Don River ravines and follow a lost historic rail line. Discover industrial heritage and the splendid park-like environment of Mount Pleasant Cemetery.*

Don Valley Hills and Dales Discovery Walk: *Explore the scenic hills and dales of the Don River Valley. Discover panoramic views, an urban farm and the splendid park-like atmosphere of Toronto's oldest cemetery.*

Eastern Ravine and Beaches Discovery Walk: *Follow ravine footpaths and a beach boardwalk. Experience a Great Lake shoreline, gardens and wooded ravine parklands.*

Garrison Creek Discovery Walk: *Trace the path of the buried Garrison Creek Ravine. Explore parklands, traditional neighbourhoods and vibrant main streets.*

Northern Ravines and Gardens Discovery Walk: *Drop out of the City. Follow peaceful Burke Brook to experience enchanting Sherwood Forest, quiet ravines and a spectacular formal garden.*

Western Ravines and Beaches Discovery Walk: *Follow scenic footpaths and a beach boardwalk. Experience natural ponds and marshes, oak woodlands and lakeshore parks.*

On Thursday, December 18, 1997, the City had a media launch for the Discovery Walk programme at Riverdale Farm. Speeches were given by agencies who have participated in the development of these walks, including the Toronto Field Naturalists, Heritage Toronto and the Toronto Public Library Board. After the opening ceremony, Parks and

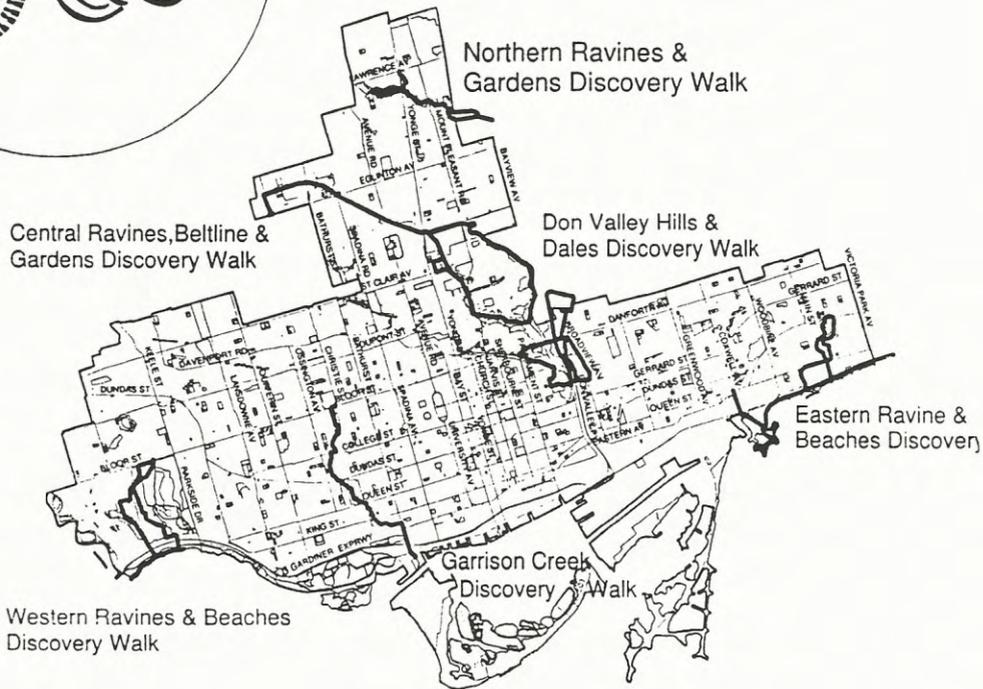


Recreation staff led a symbolic walk along part of the Don Valley Hills and Dales Discovery Walk which included portions of Cabbagetown and the Rosedale Valley. Special public events are being planned this spring to further launch this programme. Watch for additional information in future copies of this TFN newsletter

Over the coming months, Parks and Recreation will be working away on the details of signage for new self-guided walking trails in the downtown and along the waterfront areas of the city. Call 392-1111 for your free copy of brochures for each of the walks.

For further information about this program call me at 392-7264.

Jerry Belan



Toronto
Community Services
Parks and Recreation Division

Discovery Walks



GROUND SPEED ZERO

Remember the Bloor-Islington Peregrine Falcons: Kingsway, Mutual and Toby? [See TFN 469:22-24.] They're "Mimico Creek Kids". Their eyrie commanded an impressive view of the lower reaches of the valley. They learned to fly above it (and learning to fly for a falcon is truly pushing the envelope of flight). I'd like to tell you about one thing I saw Kingsway do that left me shaking my head and mumbling "Incredible!" First some general information about falcon flight. [See also, page 25.]

Peregrines are birds of prey. Their prey is other birds. A strange juxtaposition for bird lovers to watch one bird eat another, but it is part of a natural balance. Peregrines grab or knock their prey right out of the air in mid-flight, and to do this they really have to master fast and manoeuvrable flight. Generally, the Peregrine rises to a lofty altitude, picks out his prey, speeds up with powerful flight strokes, then drops into a stoop. The stoop is a rapid downward plunge where the wings are tucked in to reduce drag, the body is tightened into a perfect aerodynamic shape, and gravity takes over as the accelerating force. This is where the falcon attains incredible speed (two to three hundred km/hr some say). During the stoop he trims his trajectory with minute body and shoulder movements as he attempts to maintain a collision course with the unfortunate object of his attention. I'll spare the faint of heart the details of the blunt trauma of the collision which, if all the flight parameters were set correctly, ensues. But, if there is a miss, the falcon pulls out of the dive and swoops in an upward arch to the right or left. He has to gain altitude, and gain it fast if he wants to get another shot at lunch. To aid in this, he tightens the arch to "snap" upwards, "recycling" some of his downward momentum for the trip back up.

The arched swoop is quite spectacular to watch. If the radius of curvature of the arch were measured along with the mass and velocity of the bird, a bit of applied physics could then be brought to bear on the problem of calculating the incredible forces which act on the falcon's body...and they are quite large. (It is left as an exercise for the reader to derive the general formula for the stress on the falcon's body in the turn¹ - again, we won't even think of the force of impact itself.²)

¹ I've brought you down here to explain a bit of Newtonian physics. You probably remember that Force equals Mass times Acceleration. When travelling at a constant velocity in a circle, it is easily shown that (well, it was easy for Newton to show that) Acceleration is equal to the square of the Velocity divided by Radius of curvature of the circle. Thus, the force, known as Centripetal Force, acting on the bird equals Mass times Velocity squared divided by the Radius. Now let's apply this to what a Peregrine is doing as he comes out of the stoop. We know that Velocity is huge, square it and the result is ...humungous, and it's directly proportional to the Force acting on him in the turn. As for the Radius, any falcon worth his salt tries to decrease this value. He wants a quick snap upwards to get on with a failed attack. What does this mean? From the equation we see that Force is inversely proportional to Radius, i.e., the smaller the radius, the greater the force! We're talking a crushing Force, F , right at the point of turn, although it does dissipate rapidly as the velocity V drops and the turn radius R increases.

² A crude measure of this would be the velocity of the feather's emanating from the point of impact (— bad taste Ken!)

PEREGRINES (cont'd)

Getting back to the *stoop*... it is absolutely amazing to watch. My first thought was: "How do they control it? Lose it at 200 clicks and you're toast." Well, Kingsway showed me a bit about what goes on. I was watching him from the patio of one of the convenient Bloor Street pubs on a windy day. He headed himself into the wind and hovered right above the traffic. He then tucked his wings in as if in a stoop position. It was a bit of a shock at first to see him all tucked up, but as he angled his head down into the wind he was discovering that the shape of his body alone, when set just right, provides lift.

"Look mom, no wings!"

"Now you watch yourself playing over heavy traffic, Kingsway."

Then, with staccato-like flicks of only his shoulders and subtle movements of his feathers, he stabilized himself as the wind velocity changed. When a prolonged gust came up, he trimmed his shape and hovered, not going forward, not going sideways, not going up or not going down, and not using his wings. He was learning the flight dynamics of a controlled stoop at "Ground Speed Zero!" — *Incredible!*

Military designers use this micro variation of flight surface geometry in the most modern of aircraft. This renders the plane unflyable by humans, only computers can perform the necessary control. (Kingsway could help them, I bet.)

Accounts are sketchy but unfortunately Kingsway was hospitalized in August. He was the first offspring of Alberta, his mother, to leave the nest. I still remember the excitement of the parents as he fledged. They exuded pride watching him on his first flight. This was followed by the "pit of the stomach" fear you could sense they experienced when he was seemingly lost. Finally, you could share their thankful joy upon finding him again — safe. Unfortunately, Kingsway was found walking somewhere in Etobicoke. Although his wing was not fractured it was the reason he couldn't fly. He was taken to Guelph for observation and rehabilitation. Doctors at first attributed the injury to soft tissue damage, but later found the problem to be a "green" fracture of the metacarpal (could our boy have done something rash?³) A green fracture occurs when a supple young bone is bent to a point of distortion without cracking. At the time this was written (second week of September 1997) he was still being cared for, a couple of weeks longer than the original estimate. I can now report that near the end of September, he was taken back to the nest site and reunited with his mother Alberta, who was still there. He took off like a shot, seemingly well recovered. Not much has been seen of him since.

It is now evident to me that Peregrines must rear three or four chicks each brood if

³ If you followed the math above, I speculate that Kingsway was experimenting with big V 's and little R 's and his young bone just couldn't handle the massive F . Actually, since this type of injury is a result of a sustained force applied for a period of time, he may have been trying to avoid an obstruction. In that case, even if V dropped, if R was forced to be smaller, F would remain fairly constant and result in bone distortion — a painful and debilitating injury no matter how it occurred.



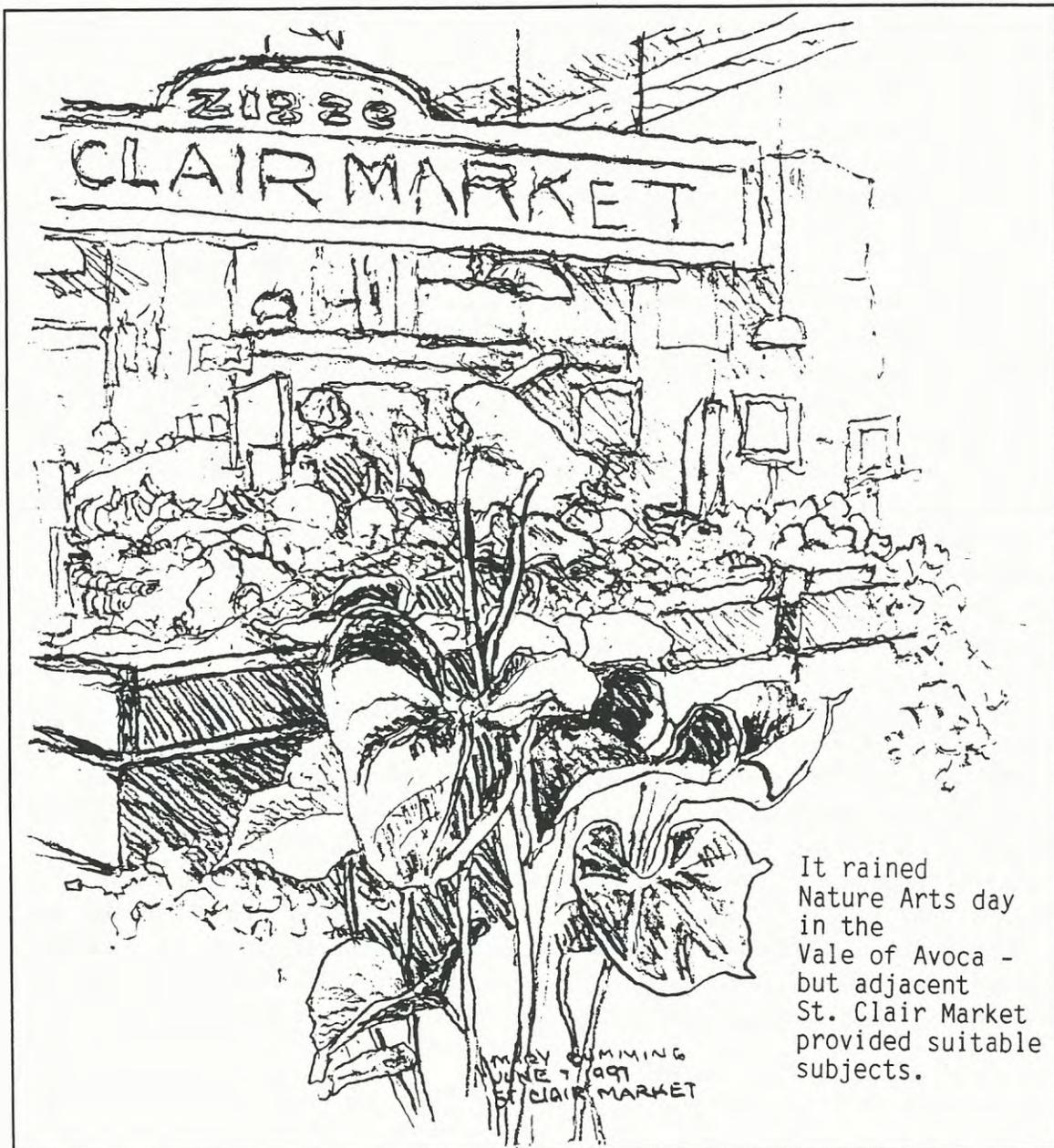
PEREGRINES (cont'd)

they have any hope of getting one or two on to the next generation. Estimates vary, but 60% to 70% of the young don't survive the first year. Hitting cliffs on the initial flights isn't the only problem, it's dangerous out there for daredevil flyers pushing the envelope. Humans are again helping all they can, so that two or three of these city broods make it to maturity. If more people become aware of the plight of Peregrines, there is hope that their population will eventually stabilize.

I wish I had seen more of Kingsway. Everyone wishes that they could fly at some point in their lives. If I could, I'd want to fly just like him...well, then again, I'm not really a "push the envelope" type of guy.

Ken Cook

□



Some squirrely questions ???

The other day, when I let the dog into the garden, there were three black squirrels coming across the lawn to check out my bird feeders. Of course, she took after them and they beat the retreat up the ginkgo tree. Each climbed to a different height and out along a branch towards the corkscrew willow in the yard behind. The squirrel on the lowest branch had no trouble reaching the tip and leaping to the tip of a willow branch. Then the squirrel on the branch immediately above prepared to do the same. Meantime, when the uppermost one reached the outer end of its branch, he (she ?) found it to be very thin and bending precariously. As it hung on for dear life, it looked down to see what its chums were doing. When it saw squirrel number two make a successful leap, it climbed back to the trunk and down to a lower and more substantial branch, from which it too made a successful jump. The question then crossed my mind : were the squirrels on the lower branches familiar with the routine and the uppermost one a novice ? Was the latter learning by watching and imitating ? Was it a case of squirrle see is squirrle do ? Today, however, I saw a lone black squirrel make the same mistake of climbing too high in the ginkgo, and having to back down. Had the novice forgotten its lesson at first, then remembered after a moment's reflection ? Or was this another greenhorn solving the problem on its own ?

Why is it that the black colour of the eastern gray squirrel, *Sciurus carolinensis*, is the dominant one in southern Ontario ? Has our squirrel population been so isolated from those in neighbouring states, as to allow the gene for black to become more frequent than it is in other areas ? Does black fur have some advantage in our particular environment ? One day a year or so ago, as I was walking the dog along Hillcrest Avenue, I spotted a tiny paw coming out of a hole in a silver maple tree at about eye level. As I watched, out came a small black squirrel. Then another little black one put its paw out and prodded the first one to make room so it could follow. Finally out came a little gray one. Apparently this was a litter and 2 or 3 is the norm for the species. Perhaps that was their first venture out of the nest to see where Mom had gone ! It would be nice to have some more observations on the ratio of black to gray in litters.

Is the population of the little red squirrel, *Tamiasciurus hudsonicus*, increasing in parts of Toronto ? I am seeing them more often in my garden and the neighbours' in recent years, and in other locations around Bayview Village subdivision. I also have reliable reports of sightings from friends in the vicinity of Willowdale and Finch Avenues. Could this be due to the fact that the many Austrian pines and other conifers, which were planted as this area was urbanized 40 to 50 years ago, are now mature and bearing heavy crops of cones ? The speed with which the red squirrels travel through tree branches, along telephone wires, and over the ground is astounding. And do they ever terrorize the black ones ? It's a regular David versus Goliath match – with Goliath retreating post haste !

Alen McCombie, December 26, 1997

□

ONE CALL IS NOT ENOUGH

TFN's hard-working volunteer, Helen Juhola, says that being a good citizen is a full-time job. How true. Being a good citizen is indeed time-consuming.

For well over ten years I've participated with groups and activists on the environment and public health. The issues involve pesticide spraying, land use, car emissions, etc., etc. One learns much from trying to get information from public officials.

A recent example concerns five to seven newly destroyed mature conifers outside a house in our neighbourhood. On September 5, I called city hall to ask whether the trees were on private land or on the road allowance. A few days later I was told by a friendly, talkative public employee at city hall, who checked the location, that the trees were on private land. Weeks later I phoned the same department about three other trees that were destroyed in another nearby location. I was told by a different employee that the three trees were Chinese elms and were cut down by the city because they were harming underground cables and pipes. In passing, I asked about the conifers that I'd inquired about earlier. The man quickly checked the records and said that the conifers had been on the road allowance, and that the city cut them down because they were dying. I got two totally different answers about the same incident. Therefore I'm forced to decide which one I believe, and in this case, the second answer seems believable. From our observation, my family and I believe the conifers were on the street allowance, and perhaps the new owners of the house (recently remodelled) asked that the trees be destroyed because they caused too much shade. The house is bordered on three or four sides by mature trees. One can understand their wish for sunlight, but was I misled when I first asked for public information?

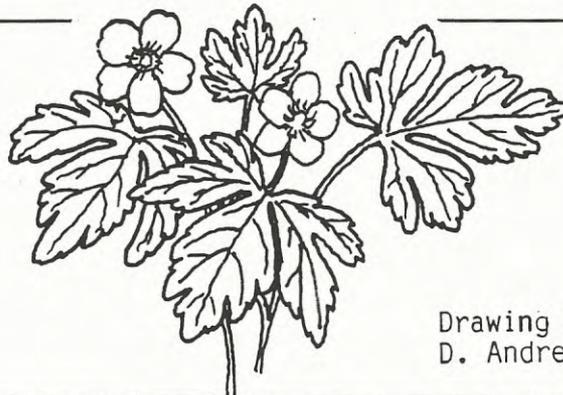
I've pondered which is the best source when seeking information — bureaucrats or politicians. I think one needs to ask both — perhaps several times, over several days or weeks.

The simple lesson here is that one must make several inquiries on any one matter — whether it's trees, land use, or a bus schedule. One call is not enough.

Helen Hansen

□

THE AMERICAN
WOOD ANEMONE,
a native Toronto
wildflower,
though it cannot
be described as
"common", it is
found in all
watersheds,
except Mimico
Creek,



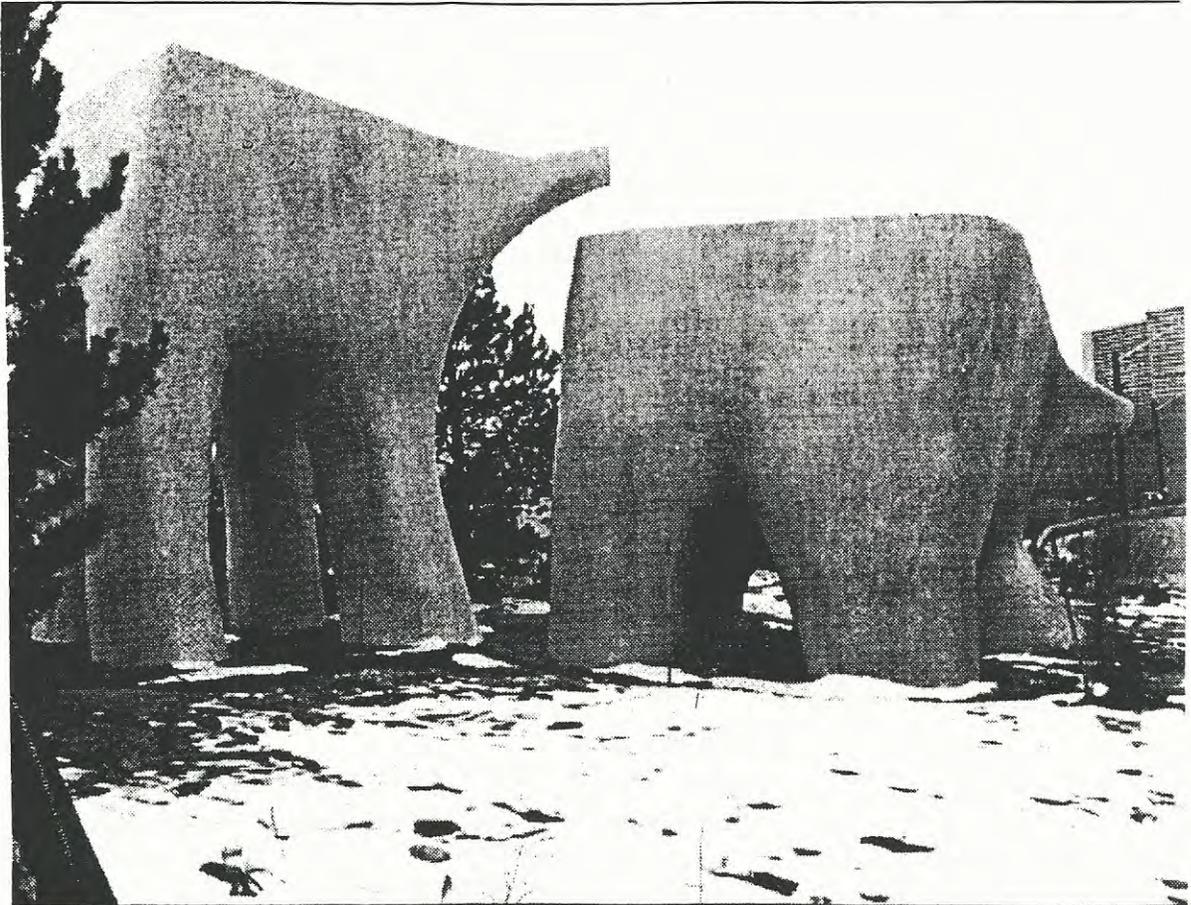
Drawing by
D. Andrew White

IN THE NEWS

ART, SCIENCE, TECHNOLOGY COMBINE IN DON RIVER PROJECT

Poised overlooking the forks of the Don are two massive, 30-foot grey sculptures resembling the bottom half of an elephant. They are the work of Noel Harding, an internationally recognized artist who has teamed up with the Canadian Plastic Industry Organization, to create the Elevated Wetlands. Essentially the works are giant plastic planters that will use waste plastic to filter water drawn from the river with the help of a solar powered pump. The artist developed a prototype in 1996 and began production of the actual sculpture in October. Harding and his team will take a break from construction during the winter months but then complete the project in 1998.

extracted from an article in the LEASIDE TOWN CRIER, Nov. 1997



CONTRIBUTORS TO NEWS CLIPPING COLLECTION: Diana Banville, Alexander Cappell, S. Bond, Mary Cumming, Nancy Cumming, Phoebe Cleverly, Catherine Crawford, Earl Dillon, Karin Fawthrop, Nancy Fredenburg, Mary Hunter, Helen Hansen, Louise Herzberg, Eileen Mayo, Alen McCombie, Ruth Munson, Jean McGill, Joan O'Donnell, Louise Orr, Betty Paul, Jim Purnell, Grace Somers, Gloria Somerville, Marjory Tilley, Mary Thomson, Arthur Wade, Starr Whitmore, Mel Whiteside

IN THE NEWS (cont'd)

EXPERTS AMAZED BY PEREGRINE'S FLYING ABILITY

An Alberta peregrine falcon tagged with a satellite transmitter has astounded wildlife scientists by covering as much as 1,400 kilometres in three days in her migration south. On August 20, the satellite located her 37 kilometres northwest of her nest over Robertson Lake. Within a week, she was near North Battleford, Sask., then about 100 kilometres east of Saskatoon three days later. That meant she'd flown more than 900 kilometres in just 10 days. From the Saskatoon area, she headed due south, and fast. By Sept. 2, she was south of Pierre, S.D., then south of Oklahoma City on Sept. 5. That had her averaging 330 kilometres a day. On Sept. 8, the satellite had her 70 kilometres east of Austin, Tex., then 80 kilometres south of Veracruz, Mexico -- a straight line distance of 1,400 kilometres in three days. Given that she almost certainly followed the coastline, scientists estimate that she had been travelling more than 500 kilometres a day. [See also, pages 19-21.]

extracted from an article in the LONDON FREE PRESS, Sept. 27, 1997

SALMON MAY HAVE A FUTURE IN LAKE ONTARIO

The Atlantic salmon, once abundant in Lake Ontario, vanished around the turn of the century due to exploitation and habitat destruction. Dams blocked access to the spawning grounds and clear cutting to the river banks caused erosion, siltation and elevated water temperatures. Even the extensive rehabilitation efforts by Samuel Wilmot, Canada's first fish culturist, were doomed to fail before the turn of the century. The only place in the province where the introduction of Atlantic salmon has been an unqualified success is in Trout Lake near North Bay. That stock was wiped out some years ago due to a chemical spill in the only spawning stream but all is well again following the recent seeding of salmon fingerlings. But now it looks like Atlantic salmon might have a bright future in Lake Ontario. Members of the Credit River Anglers have witnessed salmon spawning. Unlike Pacific salmon, the Atlantics don't necessarily die after spawning and will frequently return to reproduce more than once.

extracted from an article by John Power in THE TORONTO STAR, Dec. 10, 1997

BUTTERFLIES

About \$1-billion (U.S.) is spent annually worldwide to purchase butterflies, according to a Pennsylvania butterfly farmer. North American butterfly growers are dwarfed by about two dozen large suppliers in Malaysia, Taiwan, Costa Rica and other foreign countries.

extracted from "Social Studies" by Michael Kesterton in the GLOBE AND MAIL, Oct. 22, 1997

Oh, two mourning doves
against the pines! They have just
folded themselves in.

haiku by Diana Banville

AFTER YEARS OF DELAYS, THE JOLLY MILLER IS SOLD

The Jolly Miller, North York's oldest tavern [located in the West Don Valley], has finally closed its doors to patrons. The landmarks and its surrounding piece of land have been sold to the City of North York. The land will now undergo a complete re-landscaping and an upgraded drainage system will be installed and a public parking lot will be opened to service the nearby York Mills subway station. Meanwhile the city has begun to look for a respectable tenant to restore and use the Jolly Miller building which has been there for 150 years. The city plans to use the funds collected by the new parking lot to finance the deal. Once the money has been fully recovered, the land will be developed and turned into additional parkland. Any profits acquired will go to the new city of Toronto.

extracted from an article by Allan Weiss in the BAYVIEW POST, Dec. 1997

CREEK FACELIFT ALMOST COMPLETE

In the late 1950s, a two-kilometre section of Highland Creek from Highway 401 and McCowan Rd. to Progress Ave. and Markham Rd. was diverted and narrowed by development. This resulted in a loss of vegetation and wildlife. Now a \$2 million project taken on by the City of Scarborough is attempting to restore the creek to its former state. The creek is to be widened to cut down on erosion and restore the waterway's natural meandering pattern. New pools and wetlands have also been created to provide a home for fish and other wildlife. The next step is to plant vegetation in the spring to make the creek appear to be more than the ditch it is now. Cat-tails and bulrushes will be planted; also, cedars, poplars, willows and dogwood.

extracted from an article by Peter Krivel in the TORONTO STAR, Dec. 11, 1997

LOGGING ON HOLD AT CAWTHRA BUSH

Mississauga city officials have confirmed there won't be any further logging in Cawthra Bush. The 40-hectare woodlot, located in the heart of the city, will essentially be left alone, at least for the next five years, while parks staff study the woodland further and prepare a long-range master plan. The city-owned bush, located south of the Queen Elizabeth Way, east of Cawthra Rd., became the focus of controversy in recent years when the municipality logged some old trees to build a watermain through the area. Recently, the discovery there of a provincially rare amphibian, the Jefferson salamander, was verified through testing by the University of Guelph. The species is found only in a few areas of the province.

extracted from an article by Mike Funston in the TORONTO STAR, Nov. 20, 1997

□

Innocent wildlife,
their habitat under siege,
pathetically watch.

Haiku by Ken Cook

THE WEATHER (THIS TIME LAST YEAR)

February 1997, Toronto

February was mild and wet as the jet stream steered storms to our west, allowing tropical air from the Gulf of Mexico to move northeastwards. (It remained cold in the west.) Mean temperatures were almost 3°C above normal and the highest in six years. Rainfall was two to three times normal with snowfall being variable. Snowfall was below normal at Pearson airport but above normal downtown due to a big discrepancy between snowfall amounts during a snowstorm on Feb. 16th.

Conditions were not unusual, with fairly seasonable fluctuations, up to Feb. 16th when there was a brief cold outbreak preceded by a snowfall. Immediately thereafter, warm air from the southwest surged in, and the temperature at Pearson Airport rose from -20.9°C early on Feb. 17th to +9.4°C late on Feb. 18th. A second warm front brought a truly tropical airmass to the lower Great Lakes for Feb. 21st: Pearson airport recorded 12.9°C and downtown 11.2°C. Heavy rain preceded the peak of the warmth with more showers in the afternoon (over 30 mm of rain downtown). At this time, it reached the incredible low 20s (°C) at Buffalo! Another incursion of mild air, less extreme, came on Feb. 26-27th, which clinched the strong mild anomaly for the month. Rainfall downtown of over 70 mm was the most since 1938; the one day fall of 35 mm on Feb. 20th-21st was the most for a February day since 1925. The month's total precipitation (downtown) of 99.4 mm was almost double the normal and the most since 1965. Sunshine was 77 hours as opposed to the normal 113, the lowest in 11 years. This concluded one of the most overcast 3-month periods in Toronto's history (the last 3-month period with so little sunshine was Nov. 1977- Jan. 1978).

Gavin Miller



COMING EVENTS

Toronto Ornithological Club - Jim Baillie Memorial Bird Walks - aimed at the intermediate birder, but beginners are also welcome. Free.

- Sat. Feb. 14 at 9 am (all day) with George Bryant - "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 Entomologists' Association - monthly meetings. Call Alan Hanks at 905-727-6993 for details.

Mycological Society of Toronto - monthly meetings - Feb. 16 at 7:45 pm in the Civic Garden Centre auditorium (Leslie & Lawrence) with Cameron Currie talking about "Fungus Farmers Underfoot: Ants eat Fungi too. Call HI-FUNGI for further questions.

Royal Canadian Institute - free lectures - Sundays at 3 pm at the Macleod Auditorium, Medical Sciences Bldg., 1 King's College Circle.

- Jan. 25 - Life below 0°C: how to freeze without really dying
- Feb. 1 - a Universe of colour
- Feb. 8 - Beyond the plate tectonics revolution: toward a unified theory of global geophysics?
- Feb. 15 - Turning sows' ears into silk organs
- Feb. 22 - Quark: the big and the small of it. Poking the building blocks of matter

TFN
display

Heritage Showcase at the Scarborough Town Centre - Feb. 20 from 9:30 am to 9 pm, Feb. 21 from 9:30 am to 6 pm and Feb. 22 from 12 noon to 5 pm. Volunteers are needed for the TFN display. Call Alexander Cappell at 663-7738 to let him know when you can help out.

The Market Gallery - St. James and its Neighbours: Georgian Unity and Victorian Diversity - until March 1. Call 392-7604 for times the gallery is open. Many interesting maps included in this exhibit.

Black Creek Project - monthly meetings. Call 661-6600, extension 364 for details.

Federation of Ontario Naturalists 1998 Annual General Meeting and Conference - May 29-31 at the University of Guelph, Guelph, Ont. Call 444-8419 for more information.

The Urban Naturalist - bus trip to Butterfly Conservatory (Niagara Falls) on Feb. 21; Early Birders at Thomson Memorial Park on April 4; Trout Lilies and Trilliums: a celebration of spring at Wilket Creek Park on May 3. For information about these and other travel information call Morris Sorensen at 755-6030.

Natural History Tours with George Bryant - includes Lake Ontario Birds, Feb. 15; Venezuela Eclipse, Feb. 21-Mar. 6; etc. Call George Bryant at 223-6922 for details about these and other trips. ▽

COMING EVENTS (cont'd)

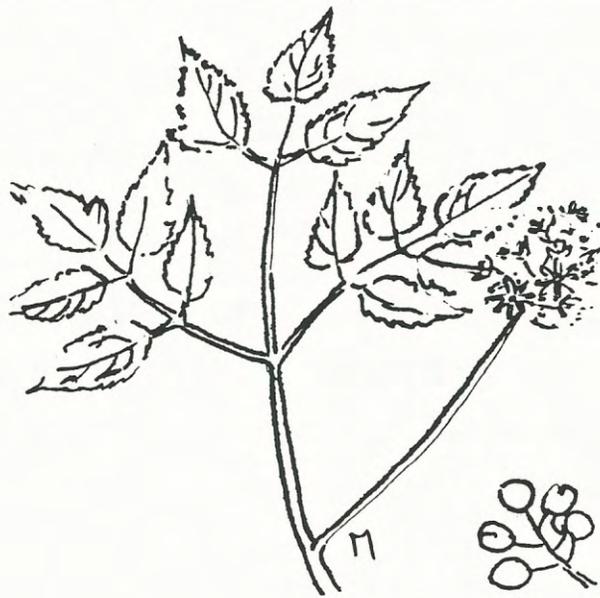
High Park Winter Walking Tours - moderately paced walks which may go on uncleared trails. All walks begin at the south side of the Grenadier Restaurant in High Park at 1:15 pm. Dress warmly. Walks take about 2 hours, ending with an optional visit to Colborne Lodge for a warm drink. \$2 donation is suggested.

- Jan. 25 - Colborne Lodge Skate and Bake
- Feb. 8 - Winter Landscapes - Bring your camera
- Feb. 22 - Identifying Trees in Winter

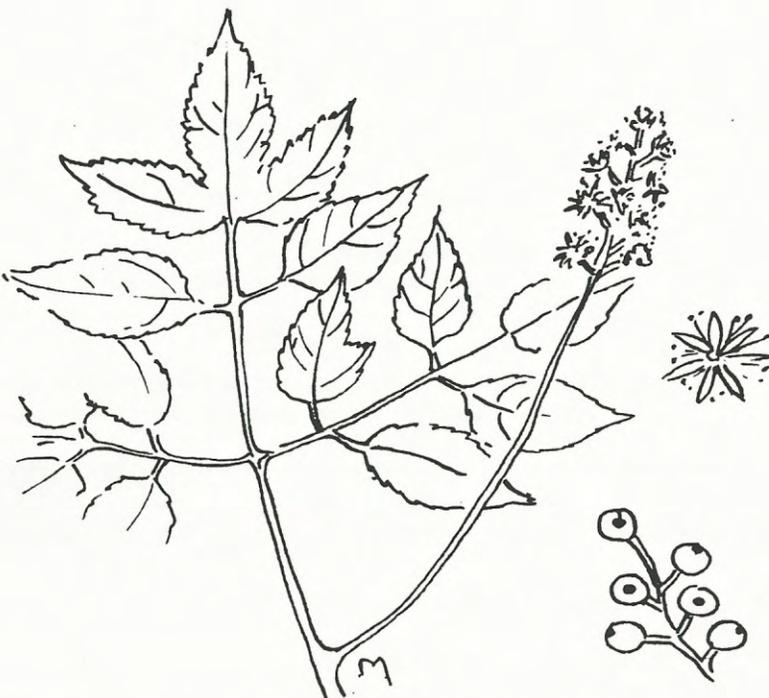
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TWO NATIVE
TORONTO
BANEERRIES

(Drawings by
Mary Anne Miller)



↑
Red baneberry
(berry: red
with thin stalk)



← Doll's-eyes
(berry: white
with black dot
and thick stalk)

TORONTO FIELD NATURALISTS

605-14 College St.
Toronto, Ontario M5G 1K2

(416) 968-6255

Publications Mail
Registration No.
6669

MR. & MRS. A. O. JUHOLA
112-51 ALEXANDER ST.
TORONTO ON
M4Y 1B3

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TORONTO FIELD NATURALIST

Published by the Toronto Field Naturalists, a charitable, non-profit organization, the aims of which are to stimulate public interest in natural history and to encourage the preservation of our natural heritage. Issued monthly September to December and February to May.

OTHER PUBLICATIONS

TORONTO FIELD NATURALISTS CLUB: ITS HISTORY AND CONSTITUTION, 1965\$ 2.00	INDEX OF TFN NEWSLETTERS (1938 to present).....\$10.00
CHECKLIST OF PLANTS IN FOUR TORONTO PARKS; WILKET CREEK, HIGH PARK, HUMBER VALLEY, LAMBTON WOODS, 1972\$ 2.00	TORONTO REGION BIRD CHART, 1983.....\$ 4.00
TORONTO THE GREEN, 1976 Metropolitan Toronto's important natural areas are described and recommendations given for their conservation and management; includes maps, bibliography and index\$ 8.00	A GRAPHIC GUIDE TO ONTARIO MOSSES, 1985\$ 4.00
TORONTO FIELD NATURALISTS' RAVINE SURVEYS.....ea \$ 4.00	GUIDE TO TORONTO FIELD NATURALISTS' NATURE RESERVE, LEASKDALE, ONT., 1986\$ 4.00
Survey #1 - Chatsworth Ravine, 1973	TORONTO ISLANDS: PLANT COMMUNITIES AND NOTEWORTHY SPECIES, 1987\$ 4.00
Survey #2 - Brookbanks Ravine, 1974	TODMORDEN MILLS, 1987.....\$ 4.00
Survey #3 - Chapman Valley Ravine, 1975	VASCULAR PLANTS OF METROPOLITAN TORONTO, 1994 ...\$ 8.00
Survey #4 - Wigmore Ravine, 1975	TORONTO CHECKLISTS (birds, other vertebrates, butterflies, other invertebrates, mosses, other plants)each 50c
Survey #5 - Park Drive Ravine, 1976	NO G.S.T.
Survey #6 - Burke Ravine, 1976	All publications may be ordered from Toronto Field Naturalists, 605-14 College St., Toronto, Ontario M5G 1K2. (Add \$2.00 per item for postage and handling).
Survey #7 - Taylor Creek-Woodbine Bridge Ravines, 1977	
Survey #8 - West Don Valley, 1978	

MEMBERSHIP FEES (No G.S.T.)

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