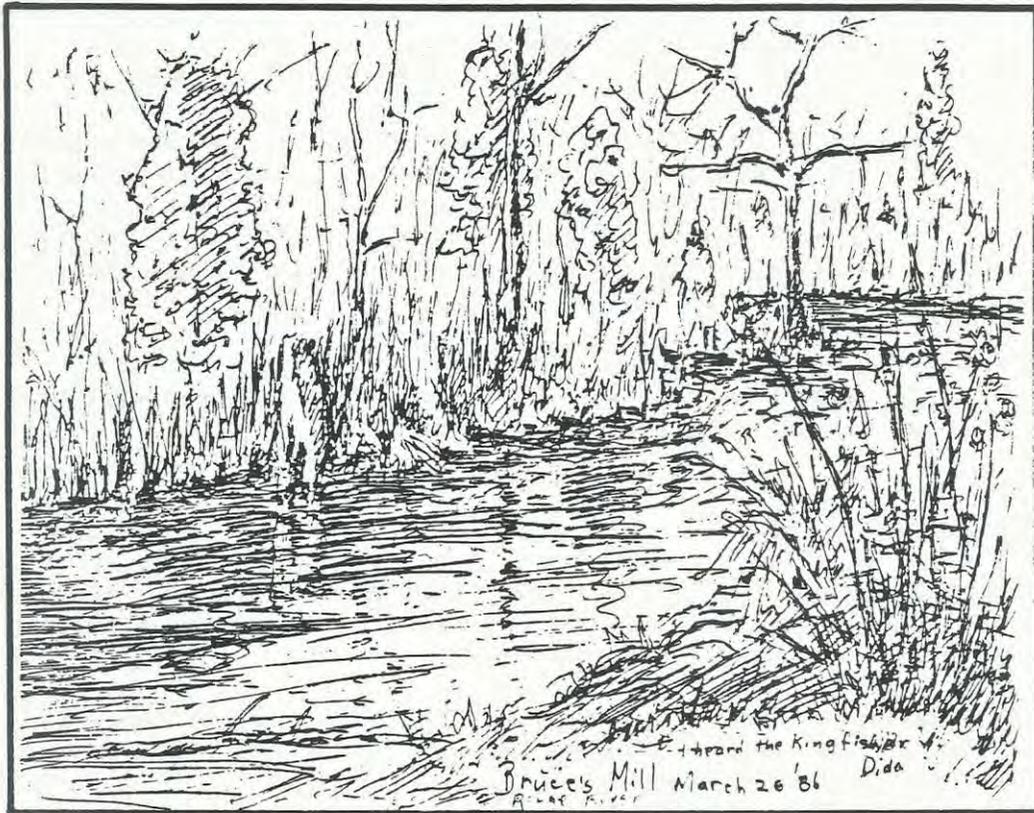


# TORONTO FIELD NATURALIST

Number 418

March 1991



Field sketch from a TFN "Sugaring-Off" Outing

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This newsletter  
is printed on  
recycled paper.

## TFN MEETINGS

### General Meeting

Monday, March 4, 1991 at 155 College Street\*, 6th floor auditorium

7 pm - TFN SOCIAL HOUR - TFN publications, etc. for sale  
- photo display by Alf Buchanan

8 pm - TRAIL OF AN ARTIST-NATURALIST (Ernest Thompson Seton)  
an illustrated lecture by Jack Lord, Head of Education at  
the Royal Botanical Gardens  
- Ernest Thompson Seton (1860-1946), naturalist, writer and  
artist, spent much of his youth exploring and observing the  
wildlife in the Don Valley.

Next General Monthly Meeting: TUESDAY, April 2, 1991

Jerry Belan of the City of Toronto Parks Department will tell us  
about the Master Plan for High Park.

### Group Meetings

Bird Meeting: Wed. March 13 at 7:30 pm at 155 College St.,\* Room 251  
Dr. Baker of the Royal Ontario Museum will talk to us about his work  
on oyster catchers. Everyone welcome!

Botany Meeting: Tuesday, March 19, at 7:30 pm at 155 College St.,\* Room 251  
Dale Hoy will talk to us about Botanizing in Durham Region (our nature  
reserve is in Durham Region). Everyone welcome.

Environment Meeting: Thursday, March 21 at 7:30 pm at 155 College St.,\* Room 251  
Sheila McKay-Kuja of the Nature Conservancy of Canada will talk to us  
about her work with the Ontario Conservation Data Centre. Everyone  
welcome.

\* Easy TTC access (building is one block west of Queen's Park subway station).  
also  
Free parking in the Board of Education garage on the west side of McCaul Street  
just south of College Street.

### Editorial Committee

Helen Juhola (924-5806) 112 - 51 Alexander St., Toronto M4Y 1B3  
Diana Banville (690-1963) 710 - 7 Crescent Place, Toronto M4C 5L7  
Eva Davis (694-8928) 203 - 1080 Kingston Rd., Scarborough M1N 1N5  
Toshi Oikawa (425-3161) 1063 Pape Ave., Toronto M4K 3W4  
Harold Taylor (225-2649) 264 Horsham Ave., Willowdale M2R 1G4

# TFN OUTINGS

## March

- Saturday  
March 2  
2 pm  
NEWTONBROOK UNITED CHURCH - nature photos  
Leader: Joan Patterson  
Meet at the church which is on Cummer Ave., one block east of Yonge Street (north of Finch). Bring a selection of up to 20 of your favourite coloured slides or just come and enjoy the photos. A projector and screen will be provided. Call Joan at 226-6501 if you have any questions.  
This is an opportunity for members to enjoy each others' photos and learn about projects and travels.  
North York
- Sunday  
March 3  
2 pm  
OLD SHORELINE - nature walk  
Leader: Sandy Cappell  
Meet at the Summerhill subway station. Walk will end at a different public transit stop.  
This is part of a series of walks across Metro Toronto, following the ancient Lake Iroquois shoreline. Follow an Indian trail and admire a castle.  
Toronto
- Wednesday  
March 6  
10:30 am  
HOGG'S HOLLOW - nature walk  
Leader: Eileen Mayo  
Meet at the south exit of the York Mills subway stn. (Old York Mills and Yonge). Morning only.  
We will be exploring this historic part of North York and looking for clues to earlier uses of the valley by humans and remnants of the natural features.  
West Don, North York
- Saturday  
March 9  
10 am  
LESLIE STREET SPIT - birds  
Leader: Tim Hough  
Meet at the foot of Leslie Street. Bring lunch and warm clothing.  
This outing is mainly to look for birds -- waterfowl and early migrants.  
Lakeshore, Toronto
- Sunday  
March 10  
10 am  
ROUGE COMMUNITY PARK - nature walk  
Leader: Karin Fawthrop & other directors  
Meet at the Chief Dan George Public School on Generation Blvd., east of Meadowvale Rd. and south of Sheppard Ave. East. Morning only.  
We will be exploring what is left of Centennial Swamp with members of the Scarborough Parks Department and learning about plans for the remaining natural features.  
Scarborough
- Wednesday  
March 13  
10:30 am  
WIGMORE PARK - nature walk  
Leader: Eva Davis  
Meet at the school on the west side of Sloane Avenue, north of Eglinton Ave. East. Lunch optional.  
A chance to look for early signs of spring--migrating birds and early spring flowers and trees. This area was the subject of a TFN ravine study and is part of the Charles Sauriol Conservation Reserve.  
East Don, North York

▷

This birdwatching is not for me -  
that cardinal just said "Chick-a-dee!"

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MARCH OUTINGS (cont'd)

- Sunday  
March 17  
2 pm  
OLD SHORELINE - nature walk  
Leader: Sandy Cappell  
Meet at the northwest corner of Bathurst St. and Davenport Rd.  
Walk will end at a different public transit stop.  
This is another walk in the series, following the ancient Lake Iroquois shoreline across Metro Toronto. On this walk we will be shown the sources of two of Toronto's lost creeks -- Taddle and Garrison. Toronto
- Tuesday  
March 19  
10:30 am  
YORK CEMETERY GREENHOUSES - nature arts  
Leader: Betty Paul  
Meet at the cemetery entrance on the west side of Beecroft Road at North York Blvd. Lunch optional.  
Bring sketching materials and/or cameras, or just come and enjoy. If the weather is not good, the tropical vegetation on display will cheer you; if it's good, you can enjoy the collection of trees as you walk through the cemetery. North York
- Wednesday  
March 20  
10:30 am  
PARK DRIVE RAVINE - nature walk  
Leader: Molly Campbell  
Meet at the Sherbourne St. subway station. Walk may end at a different public transit stop. Lunch optional.  
This area is the subject of one of TFN's ravine studies. Despite being so close to downtown, this deep ravine is an excellent refuge for wildlife. Don tributary, Toronto
- Saturday  
March 23  
10 am  
LOWER DON VALLEY - nature walk  
Leader: Mark Wilson  
Meet at the Broadview subway station. Walk will end at a different public transit stop. Morning only;  
Mark is the Chairman of the "Task Force to Bring Back the Don". He will be showing us some of the work already done by the Task Force and talking to us about the plans. It's your chance to make suggestions too and maybe get involved. Don, Toronto
- Sunday  
March 24  
2 pm  
ETOBICOKE GREENHOUSES - exotic plants  
Leader: Dennis Clarke  
Meet at the greenhouse entrance on Elmcrest Rd. just north of Rathburn Rd.  
A chance to enjoy tropical vegetation, and if the weather is good, we may venture out to observe the first signs of spring along the Etobicoke Creek Valley. Etobicoke Cr., Etobicoke
- Wednesday  
March 27  
10:30 am  
TORONTO ISLANDS - nature walk  
Leader: Anne Millett  
Meet at the ferry docks at the foot of Bay Street in time to take the 10:30 am ferry. Bring lunch.  
Winter waterfowl and migrating landbirds should be on view. Lakeshore, Toronto
- Sunday  
March 31  
10 am  
CEDARVALE RAVINE - birds  
Leader: Herb Elliott  
Meet at the Heath St. exit of the St. Clair West subway station (Spadina line). Morning only.  
As well as sheltering many overwintering birds, this ravine is an important link in the migration corridor provided by the Don Valley and ravines. Don tributary, Toronto

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## PRESIDENT'S REPORT

The Board of Directors' proposal for a fee increase of \$10 for each category of membership was approved by the membership at a Special General Meeting on Feb. 4, 1991. The fee increase becomes effective July 1, 1991.

The possibility of using recycled paper for the TFN newsletter has been under consideration for the past two years. It has been found that recycled paper is now available and is being used for the first time in this newsletter. The paper is 100% recycled, 50% post-consumer de-inked, and 50% post-commercial.

It does pay to write letters and make phone calls to the appropriate politicians, property owners/managers, etc. re our concerns. Further to the letters printed in the February newsletter (from Canada Life and the Parks and Recreation Department of Toronto) about the poor condition of two buckeye trees on Simcoe Street and the ginkgos and yellowwoods in front of the Art Gallery on Dundas Street West, a letter has been received from the Art Gallery thanking us for bringing this to their attention. (See page 6 .) Appropriate action to save the trees will be taken. We are also happy to report that the asphalt has been removed from the base of the buckeye trees on Simcoe Street. This has been replaced by earth and brick paving which will allow water to reach the tree roots once again. So letters and phone calls from concerned naturalists have saved several valuable trees.

Eileen Mayo

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*THE AMERICAN KESTREL breeds throughout much of North and South America, avoiding heavily forested areas. Except for a few stragglers, its range is restricted to the New World, though its close relationship to certain Old World "kestrels" has been questioned.*

*Ref.: THE A.O.U. CHECKLIST OF NORTH AMERICAN BIRDS, sixth edition.*

*Drawing by Geraldine Goodwin from a mounted specimen in the Royal Ontario Museum.*



## KEEPING IN TOUCH

Jan. 14, 1991

I received a copy of Richard Ubbens' letter to you concerning the trees in front of the Art Gallery of Ontario and thought that a follow up might be of interest.

Mr. Ubbens was quite correct in his statements. The Yellow Wood and the Ginkgo trees are indeed the property of the Art Gallery and were planted in the mid-70s as part of the Stage II expansion.

He is also correct, and to our chagrin, regarding the pruning and low grade tar application. The pruning was not intentional but occurred due to damage resulting from crane activity associated with the placement of the new Cooling Tower during the 1987-88 winter. As the contractor was held responsible he arranged for pruning and the wound dressing, and it was carried out in a less than competent manner. I suspect that this was partially due to knowledge that expansion was taking place along Dundas Street and the assumption that the trees would be destroyed.

However, most of the Yellow Woods were carefully removed in the late winter (March) 1990 and are in Cedarvale Nurseries where they are being stored and treated and at present seem to be thriving. The trees will be replanted on Beverley Street at the completion of our expansion program as there will be no space left on Dundas.

We anticipate placing one or two Yellow Woods at the south-east corner of Dundas and Beverley, and the Ginkgos at the McCaul Street end of our property will not be touched. I had Cedarvale look at these trees last spring and they concur with Mr. Ubbens in that they appear in good condition.

We do have a regular tree maintenance program especially for the trees surrounding our historic Grange House. We are extremely proud of the Yellow Wood trees and hope that the 1988 glitch has been cured. It taught us that there are times when following construction restoration practices may not be in our best interests.

Should you have any questions please do not hesitate to call me at 971-5363.

John V. Langley  
Project Director, Stage II  
Art Gallery of Ontario

□

### ALUMINUM AND WHALES

At the September meeting of the Stratford Field Naturalists Alan Watson provided a correlation between what is done in Stratford [or anywhere] and its ultimate effect on the Beluga Whales in the St. Lawrence River at the mouth of the Saguenay. As an example he pointed out that even though we are recycling aluminum cans, we are contributing to a health problem with the whales because Alcan has a very large aluminum plant on the upper reaches of the Saguenay. This plant has been putting tons of toxic substances in the river. If we were to use recyclable bottles, we could help to reduce some of the toxic products being added to the environment.

adapted from the STRATFORD FIELD NATURALISTS NEWSLETTER, Oct. 1990

# AMPHIBIAN AND REPTILE REPORT

Toronto, 1990

In 1990, 19 species were observed here (364 animals were seen) between March 19 and October 24 in Metropolitan Toronto. We can summarize the dates of activity for amphibians and reptiles as follows for our area:

<u>Year</u>	<u>Earliest Activity</u>	<u>Latest Activity</u>
1982	not recorded	not recorded
1983	April 5	November 26
1984	April 2	October 16
1985	April 3	November 13
1986	March 29	October 15
1987	March 8	October 30
1988	March 26	November 14
1989	March 27	November 7
1990	March 19/April 15	November 3

The March 19 date for activity in midland painted and snapping turtles is misleading. On that day temperatures were exceptionally warm and rivers were in full flood. There were even reports of leopard frogs calling north of Toronto. After this brief hot spell, temperatures fell and we had an unseasonably cool spring. In fact, no amphibian or reptile activity was recorded again until April 15 when wood frogs and chorus frogs began to call, and garter snakes began emerging from winter hibernacula. The following day leopard frogs joined the chorus, and brown snakes were seen for the first time. Usually, the early breeding amphibians emerge a week before the overwintering snakes; however, the very cold spring delayed emergence of the frogs, and the very warm weather which followed stirred several species into activity at the same time.

You can play a role in determining just how healthy\* our amphibian populations are. Before you receive your next newsletter, our amphibians will be active and calling. Please record the number of animals seen or heard, date, locations, and habitat of amphibians and forward the information to me. These data are valuable, no matter how common the species.

Wood frogs were heard calling first on April 15 compared to April 21 in 1989. These dates are relatively late compared to most years, and are indicative of the relatively cool springs we had in 1989 and 1990. Wood frogs normally call the first week in April. The day after males began calling I watched females full of eggs migrating past me in the late morning.

\*Birds have long been seen as good indicators of environmental problems, but amphibians may be even better indicators at the local level. Birds can fly away, but frogs must face the problems. They are extremely susceptible, being herbivores as tadpoles and predators as adults. Many of them easily absorb contaminants through the skin. Whatever is happening to frogs is happening to them right here -- not in Belize or Brazil, as may be the case with birds.

from "Talk of the Trail - Herps in Hazard" by Frank Graham Jr. in AUDUBON, Nov. 1990

Toads were first heard trilling April 22 (despite our late spring, toads began to call a week earlier in 1990 than in 1989), and continued elsewhere until May 27. These late callers were males who emerged late or were stimulated by rain to call. The first tadpoles were seen May 1, and toadlets emerged by July 1 (June 28 in 1989), although most toadlet sightings were in mid August.

Toads bred in swimming pool covers filled with meltwater again in 1990. Tailed, four-legged toadlets were seen basking on the edge of a pool cover on June 13. Because of the warmer water on the pool cover, these tadpoles were well ahead of their counterparts in a nearby marsh.

Once again map turtles were recorded in the Rouge Valley and a Blanding's turtle was killed by a car on the tablelands adjacent to the Rouge Valley. Blanding's turtles were seen again on the Toronto Islands. What appeared to be a stinkpot turtle was found in the Morningside/Military Trail area in a large pond created where gravel was excavated.

On June 9, one of at least two snapping turtles reported by Jackie Brooks (near the pond at Lawrence Avenue East and the Don Valley Parkway) was noticed "up by the railroad tracks, digging one morning, but mostly seemed to be sunning". She goes on: "I guess I was mistaken, because about a week later (actually June 30) I saw the same spot, with a dug-up area and remnants of white, leathery shells. Raccoons digging up the turtle eggs?"

Most turtle nests are found by predators in the first few weeks after the eggs are laid when the scent of the eggs is strongest. Raccoons take most of the eggs, but skunks and foxes also like to eat turtle eggs. Turtles usually lay eggs in gravel beds beside rivers or in sandy soil near lakes. They particularly like man-made gravel beds along cottage roads, logging roads and railways. Turtles choose well-drained soils, usually in areas with full exposure to the sun. The warmer the eggs, the faster they develop and the more likely the turtles will hatch before killing winter frost arrives. Even so, more than 90% of the eggs laid by turtles are killed by predators or die because the nest site is too cool or wet. Cold or wet conditions will delay the hatching of eggs; turtles which spend the winter in the egg rarely hatch the following spring.

In a previous article (TFN 410) I reported on a snapping turtle which hibernated from Oct. 5 to April 24. Imagine, over six months underground! Actually there were at least four snapping turtles which hibernated in this one square metre of muck about 50 metres from the Rouge River (see TFN 417). They remained immobile, sunning themselves, for five days before moving to the Rouge River. On April 22, Kevin Irie also found a reptile, the eastern garter snake, recently emerged from winter hibernation. The snake was immobile, and in Kevin's words: "was sunning itself; it must have just come out since I could stand right beside it and it didn't move. When I prodded it with a stick, it still did not move anything except its head". Kevin goes on to link the presence of beaver and turtles: "Standing on the north shore, I counted up to eight painted turtles sunning themselves on the logs at the northwest area of the pond (Humber Marshes). Beavers have felled a couple of trees here and the turtles were resting on them".

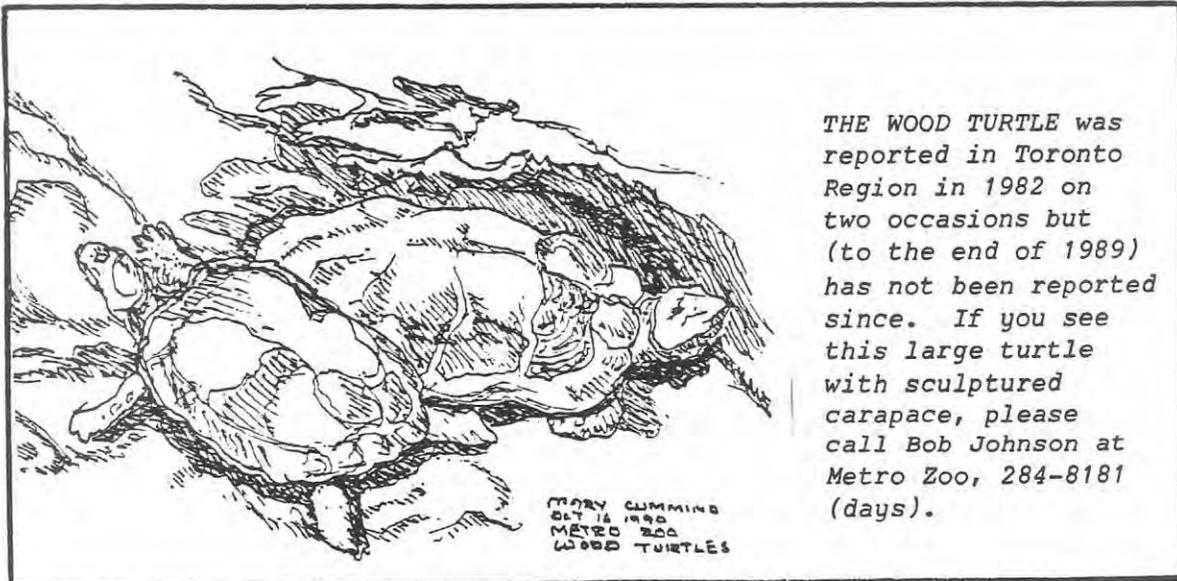
This latter observation is typical for painted turtles which are called basking turtles because of their need for logs or rocks on which they like

## AMPHIBIANS AND REPTILES (1990) - cont'd

to bask. (Helen Huggett saw more than 35 painted turtles basking on Sept. 10!). In fact, placing logs in ponds and marshes is one way to improve habitat for this species. When I am asked to design a pond, I always include logs on which turtles can bask. For turtles to be able to hibernate, ponds must be deep enough that the water will not freeze to the bottom. Turtles also need ponds with a south-facing gravelly area for nesting. I was pleased to read, in a lake-planning document, a recommendation for retaining at least two gravelly shoreline areas for turtle nesting! This goes to prove that the message is getting out. Lakes are homes for loons, beaver, people and REPTILES.

Kevin Irie reports that he found a single painted turtle resting on the shore of Lake Ontario south of Birchmount Avenue. It was a few feet from the water and did not move when approached. A month later Kevin again found a single turtle crawling out of the water at the same location: "...after several attempts of starts and stops (and once being picked up and turned back to the water by a passerby), it simply turned around and on its own headed back into the lake. I never saw it again. It seemed quite unafraid of people and just waited as people strolled by it, unmoving".

The waters of Lake Ontario are just too cold for our turtles and frogs, except in some shallow bays. I would guess by the location that the turtle Kevin saw is a released pet or one that was washed along the shore from one of our rivermouth marshes. Its apparent tolerance of people could be because of its former life as a pet or because it was just too cold, from exposure in the cold lake, to move very quickly. Reptiles and amphibians obtain their body heat from the environment. In spring, when the water is cold, they sit on logs and rocks or floating rafts of vegetation in order to warm their bodies from the heat of the sun. As the water in marshes and bays warms, the turtles spend less time basking and more time feeding or sheltering in the warmer water. Only recently have turtles moved into Lake Ontario where the bays and lagoons of lakefill spits and parks such



THE WOOD TURTLE was reported in Toronto Region in 1982 on two occasions but (to the end of 1989) has not been reported since. If you see this large turtle with sculptured carapace, please call Bob Johnson at Metro Zoo, 284-8181 (days).

AMPHIBIANS AND REPTILES (1990) - cont'd

as the Leslie Street Spit and Humber Bay Park contain warmer water.

On September 22, "a moderately warm, windy, mostly overcast day", Jackie Brooks found a 75 cm eastern milk snake "lying beside the railroad track (rather sluggish therefore easy to measure and identify, even for me)". Knowing what we do about the reptiles' need for radiant heat, we could guess that this snake was out in the open basking on the warm dark cinders of the railroad. Basking behaviour may increase late in the year when the air is cold and the ground is warm, or when the female snake is incubating eggs or young snakes in her body. Milk snakes prefer to bask under boards, cardboard or, most favoured of all, warm sheets of tin or other metal. However, if these are not available, or not in a sunny exposure, they will bask without protection on paths or hillsides.

Snakes are also vulnerable to predation as they bask after emerging from their winter hibernacula. More than 30 garter snakes were seen doing this at a hibernaculum at Yonge and York Mills in the heart of Metro Toronto! In what appears to be an ideal situation, these snakes were using groundhog burrows to find their way below the frost line. A marshy area full of breeding toads was located at the bottom of the ridge where the groundhog burrows were located, thus providing food for the snakes.

Snapping turtles were observed laying eggs between June 3 and June 8. On September 20, young turtles were seen emerging from a nest on a gravel bar on the banks of the Rouge River. A second set of eggs hatched at this location on September 30. Two turtles were found half way out of their eggs at the bottom of the nest. When removed they appeared to be dead; however, they were left alone and within half an hour they began to move and were later released into the nearby river. It seems that this gravel bar has been a traditional nesting site for snapping turtles for several generations. A snapping turtle was observed near a spring-fed marsh on September 26. In 1989 a snapping turtle was observed digging in for the winter at this same location on October 5. This site is used by four adult turtles.

For the fourth year in a row embracing snapping turtles have been observed in mid-summer. Helen Smith saw two 15-inch turtles "fighting or mating" on August 12. This is not the breeding season for turtles. Undoubtedly they were engaged in some dispute over food or territory.

As in other years northern brown snakes made extensive use of warm roadways as basking sites. Between September 6 and October 24, 32 snakes were found on roads; 21 of these had been killed by cars.

The latest amphibian and reptile activity was observed by Morris Sorensen on November 1 when he saw a northern brown snake, and on November 3 when a garter snake and a green frog were seen on a TFN outing in the Rouge Valley.

Please record any observations of amphibians and reptiles along with the date, location (including side of street or river), number, size, and behaviour (calling, habitat, temperature, or any other relevant information). As well, leaders of field trips should record any amphibians and reptiles encountered on trips. Sightings should be sent to me at the Metro Zoo, P.O. Box 280, West Hill, Ont. M1E 4R5, or call me at 392-5968.



## AMPHIBIANS AND REPTILES (1990) - cont'd

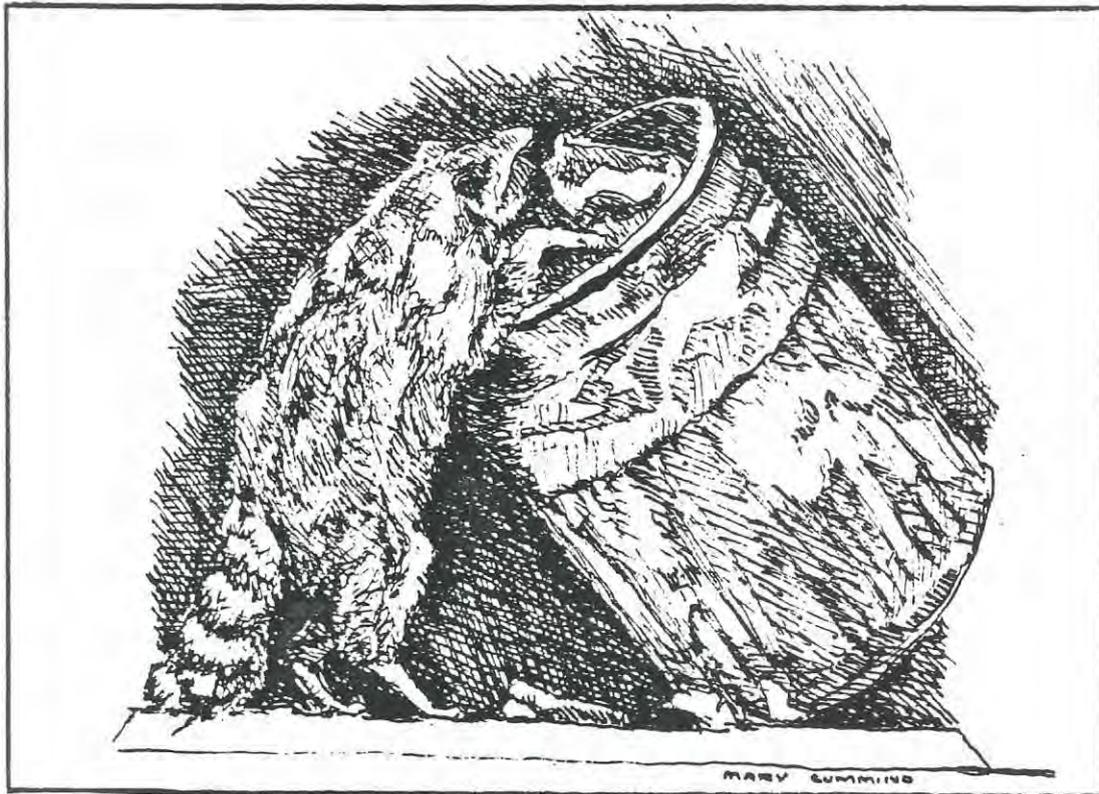
Contributors: Ted Almond, Ken Andrews, Diana Barville, Andrea Beatson, Mark Bonigelli, Jackie Brooks, Molly Campbell, Dennis Clarke, Cassia Devison, Joyce Cave, Irene Fedun, Karin Fawthrop, Judy Hernandez, Helen Huggett, Brian Hearn, Kevin Irie, Helen Juhola, Allan Greenbaum, Robert Marshall, Henny Markus, Gavin Miller, Tom Mason, Ruth Munson, Norm Murr, Paul McGaw, Reta McWhinnie, Joan O'Donnell, Rob Nisbet, Joan Patterson, Donna Rice, Sandra Richardson, Sharon Roberts, Terry Sandler, Helen Smith, Mike Steele, Steve Varga, Merle Young, Sonia Ross.

Species seen: red-spotted newt (2: April 25-July 14), red-back salamander (10: April 27-Oct. 14), American toad (33: April 22 - Oct. 14), gray treefrog (3: April 29-May 22), western chorus frog (7: April 15-May 12), green frog (5: June 6-Nov. 3), leopard frog (6+: April 16-Aug. 29), wood frog (6: April 15-July 14), snapping turtle (22: March 19-Sept. 30), stinkpot turtle (1), midland painted turtle (92: March 19-Oct. 17), Blanding's turtle (4: April 29-June 6), map turtle (1: Sept. 3), red-ear slider (2), eastern milk snake (20: May 9-Sept. 27), northern brown snake (63: April 16-Nov. 1), red-bellied snake (3: July 9-Sept. 28), garter snake (83: April 15-Nov. 3), smooth green snake (1).

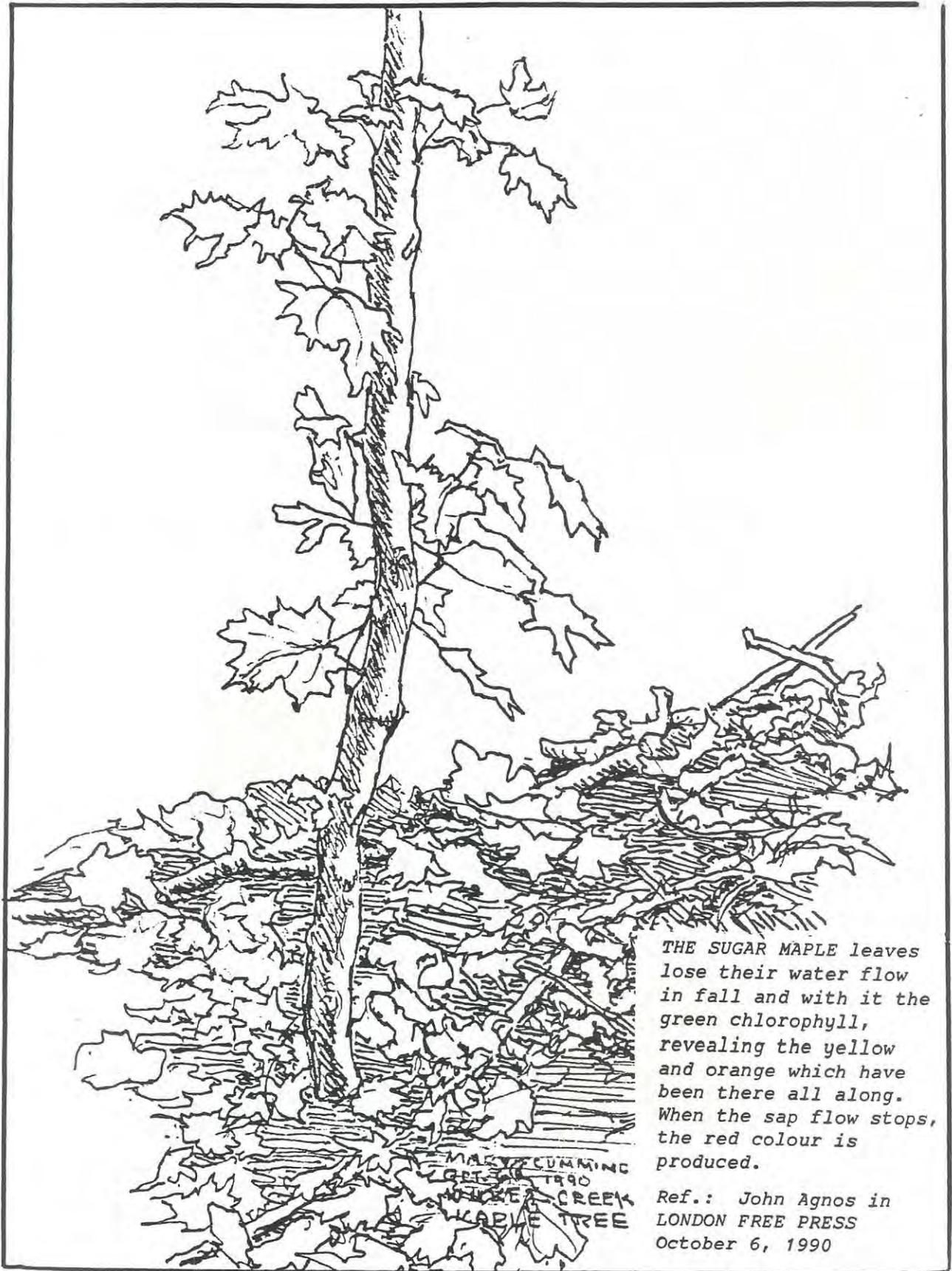
Bob Johnson

Reference: FAMILIAR AMPHIBIANS AND REPTILES OF ONTARIO by Bob Johnson, Natural Heritage/Natural History Inc., 1989, \$9.95 + G.S.T.

□



THE RACCOON in the picture you may recognize as the mounted specimen in the Royal Ontario Museum. It was drawn by Mary Cumming at a TFN nature arts outing there on December 18, 1990.



THE SUGAR MAPLE leaves lose their water flow in fall and with it the green chlorophyll, revealing the yellow and orange which have been there all along. When the sap flow stops, the red colour is produced.

MARY CUMMING  
GETS TO  
WATER CREEK  
MAPLE TREE

Ref.: John Agnos in  
LONDON FREE PRESS  
October 6, 1990

# INVERTEBRATE REPORT

## Metropolitan Toronto

Looking at the number of observations of invertebrates recorded in the 1989 TFN Outings Reports, it becomes evident that TFN members are very interested in this aspect of natural history. Perhaps one should say "these aspects" for many more categories of animal life are involved in these "animals without backbones" than in those with backbones - i.e. the six classes: Fishes, amphibians, reptiles, birds, and mammals. The invertebrates, on the other hand, consist of many phyla (a phylum being a division of the animal kingdom) each of which is composed of a number of classes. It's difficult to decide which of the myriad organisms are appropriate for field naturalists to study, but those phyla with at least one representative readily observable in the field might be considered a rule of thumb. Animals which are parasites at every life-stage and many minute aquatic species are generally considered out-of-bounds. However, some common freshwater aquatic life with representatives over a centimetre in size are suitable for study on pond-life outings. Following are invertebrates which are on Toronto lists in the past or for which we have records or other information on file; most are on the 1913 list, to begin with; other dates and locations are mentioned):

- I. THE SPONGES. Freshwater sponges, 1913 list Sunnyside and Grenadier Pond.
- II. THE JELLYFISHES. Hydra, 1913 list, at Sunnyside.
- III. THE HAIRWORMS. Standing water such as horse-troughs. Observed ca. 1930, Queen St. West.
- IV. THE RIBBON WORMS. *Prostoma rubrum*, with tongue longer than itself, small, common North American species but not on any list. To be looked for in autumn climbing on aquatic plant debris.
- V. THE FLATWORMS. Free-swimming (i.e. not an internal parasite) *Dugesia* not on any list but a common North American species, recognized by protruding "ears", to be looked for underneath submerged objects.
- VI. THE MOSS ANIMALS. 1913 list, in Etobicoke, Humber, and High Park.

At least some representatives of the above six phyla may still be with us. The next three are those which have always been most obvious to us in the field:

- VII. THE MOLLUSCS. Humbug snail, colourfully-striped, introduced and apparently now more prevalent than ever.  
1989: Aug. 23 Pine Hills Cemetery, Taylor Creek, "many clinging to leaves", and Aug. 30 Warden Woods.  
Other snails and clams: 1913, long list, Toronto Bay, Grenadier Pond, Scarboro Bluffs, Don and Humber Rivers, Centre Island, High Park, Etobicoke Creek - most aquatic but including 21 land snails. (An article about the zebra clam, a native of the Caspian Sea, invading the Great Lakes, appears in TFN 405:31,32, 1989.)
- VIII. THE SEGMENTED WORMS. TFN Book Report 327:20-22, 1979, and article 387:24, 1987, illustrated, deal with identification of Toronto species of earthworm. Only records are in connection with American Robin reports! Of aquatic forms, 3 species listed 1913, Toronto Bay, as well as 9 species of leeches Sunnyside, Weston, Humber, Grenadier Pond, Etobicoke.

## Invertebrate Report - cont'd

## IX. THE ARTHROPODS.

- A. Millipedes and relatives. Lack of reporting was lamented in 1913 - the same applies today. ca. 1930: Julid species observed. Do children still find them when they dig? Small, curled-up bright brown millipedes.
- B. Centipedes. 1990: Drawing made from specimen and photograph of the common centipede. No other records on file.
- C. Insects. There are at least sixteen orders of this class of arthropod in Toronto which are readily observable in the field. We have records, reports, and listings for bristletails, springtails, mayflies, dragonflies and relatives, grasshoppers and relatives, termites, stoneflies, earwigs, true bugs, cicadas and relatives, lacewings and relatives, beetles, caddisflies, butterflies and relatives, flies, bees and relatives, and galls caused by insects.
- D. Crustaceans. 33 species listed in 1913 for Toronto and vicinity in several orders, including decapods, schizopods, amphipods, isopods, and phylloporids, among those which are not too minute to study in the field.
- Pill bug (sow bug, wood louse), though it has not been reported it is a common terrestrial isopod in Toronto.
  - Small shrimps such as *Gammarus* reported only as having been in Toronto Bay in the nineteenth century, but some species could still turn up during pond-life outings. Amphipods or "scuds".
- E. Spiders and relatives. In 1913, only 9 parasitic mites listed, and no spider or harvestman (daddy-long-legs) species, as no studies were available. In the leaflet "Household Spiders" by Buckley & Barr, published by the Royal Ontario Museum, five such spiders are illustrated and described, most of which could also be seen outdoors, which all of us have probably seen. A garden spider, the golden orb weaver, ~~has~~ been photographed and drawn (Cover TFN 329 1980); records have been made in Taylor Creek "fen" ca. 1981, and Sept. 14, 1987 - with web "ladder". An orb weaver spider was recorded at East Point Aug. 16, 1989. Spider and daddy-long-legs species were listed in West Don Study, 1978. A spider, taken to be of the nursery-web group, was sketched at Earl Bales Park April 19, 1979, among the hepaticas and dry leaves, purring rhythmically. Black spiders were reported in Buffalo, N.Y., on downtown buildings attracting brown creepers. These were later reported in Toronto as well. (See TFN 395:8, 1988.) An accidental scorpion species (arriving on bananas, or possible pet?) summer, 1987, North York. (See TFN 394:26, 1988.) There are no listings of ticks, but it may be well to be aware of Lyme tick as it is found not too far from here, does transfer to humans from vegetation, and does sometimes carry disease. (See TFN 405:32, 408:30, 1989.) We have no poisonous spiders in Toronto.

From our archives we have drawn on material from Dr. E. M. Walker, Dr. David Barr, Roger Powley, Bill Edmunds, Rein Jaagmundi, Margaret Emminghaus, and Orris Hull. 1989 reporters are: Billie Bridgman, Don Burton, Dennis Clarke, Karin Fawthrop, Betty Greenacre, Helen Juhola, Henny Markus, Eileen Mayo, Paul McGaw, Gavin Miller, Ruth Munson, Joan Patterson, and Don Peuramaki. ▷

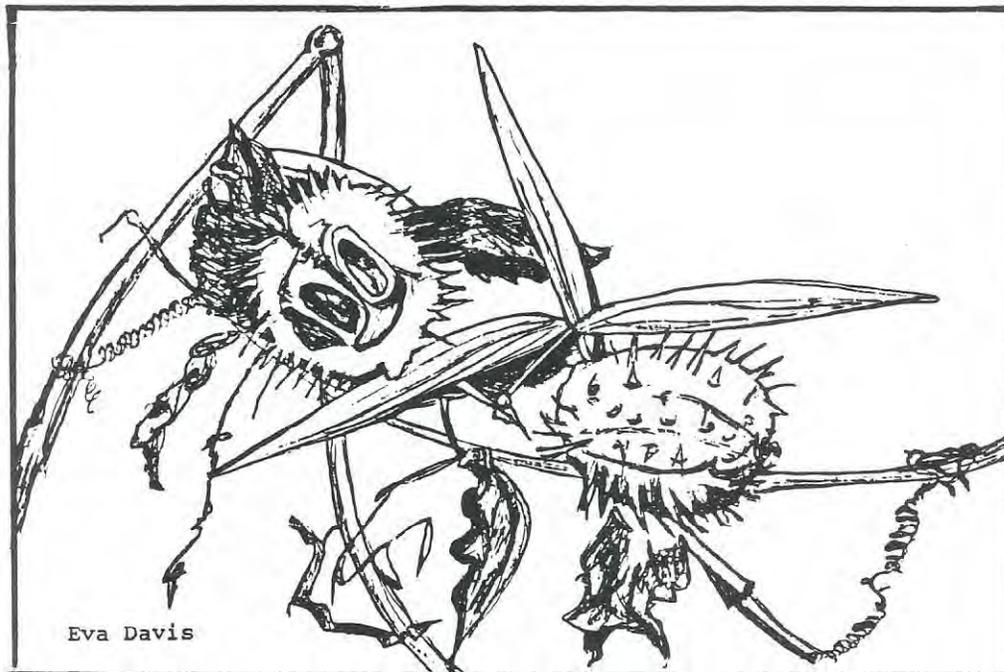
## Invertebrate Report - cont'd

Please report any arthropods you can identify. It doesn't have to be a question of species, but even identifying the larger group it belongs to is a help for the records. Descriptions are also good. We hope eventually to draw up a checklist of invertebrates and will need the help of those interested. Send your reports with your name on each sheet, giving name or description of invertebrates observed, place, and date, to me at #710, 7 Crescent Place, Toronto, Ontario M4C 5L7. We thank all the reporters and those who have provided information in the past.

Diana Banville

## ADDITIONAL REFERENCES:

INVERTEBRATES OF NORTH AMERICA, by Lorus and Margery Milne  
 POND LIFE by George K. Reid et al., illustrated in colour, Golden 1967  
 THE NEW FIELD BOOK OF FRESHWATER LIFE by Elsie B. Klots, Putnam rev. 1948  
 THE EARTH WORMS OF ONTARIO by J. W. Reynolds, illustrated, R.O.M. 1977  
 FIELD BOOK OF INSECTS by Frank E. Lutz, Putnam rev. 1948  
 A FIELD GUIDE TO THE INSECTS by Borror & White, Peterson Series 1970  
 TFN RAVINE SURVEYS - Studies No. 6 Burke Ravine, 1976; No. 7, Taylor  
 Creek, 1976; No. 8, West Don, 1978  
 17 TFN OUTINGS REPORTS - 1989  
 27 Articles in TFN and other publications, with bibliographies  
 BUTTERFLIES AND MOTHS by Mitchell & Zim, A Golden Nature Guide



WILD CUCUMBER FRUIT AND SWALLOWWORT PODS. These two vines, in Eva Davis's drawing based on one of her photos, seem to be "mixing it up". The first-mentioned is a familiar native Toronto species and the second an all-too-familiar introduced plant. In this case, though, perhaps it's simply a case of "symbiosis".

CATTAIL MARSHES -- NATURE'S CLEANSERS

While the world searches frantically for answers to pollution problems, nature continues to quietly solve them as it has for thousands of years. Left alone, nature has the ability over time to balance and heal all but the worst insults to the environment. Wetlands and, in particular, cattails are important elements of nature's balance. They provide a distinctive environment that, when encouraged, can offer an economical method of waste water treatment.

In a cattail marsh, water is purified when the plants remove excessive levels of nitrogen and phosphorus. The source of nitrogen and phosphorus based compounds can be diverse. Fertilizers, manure, eroding top soil, domestic sewage or industrial discharge can all be sources. Unchecked, chemical nutrients can stimulate algae growth, choking waterways and eventually creating nuisance odours, lowered oxygen levels and stagnant water conditions that encourage disease.

Cattails are persistent inhabitants of fresh to brackish waters, abundant in temperate, sub-tropical and tropical climates. They develop networks of roots, sometimes forming vast colonies from a single individual plant. During their maximum growth period, cattails will quickly absorb high levels of nitrate, ammonia and phosphate. As the stand grows more dense, it absorbs more nutrients. In three weeks of such rapid growth, the plants can remove up to 90% of the nitrogen and phosphorus in raw sewage. Eventually, under the right conditions, purified water is the result.

During autumn the perennial cattail begins to store sugars and starch in its roots system for early growth in spring. As a result, all but the root system withers and dies. The dead plant material houses nutrients extracted from waste water and in the normal course of events, many of these nutrients would return to the system as detritus. In a managed waste water marsh, excessive nutrients can be removed by harvesting the plants before they wither.

A natural harvest is provided by some marsh residents. White-tailed deer eat leaves and shoots, while muskrat, beaver and certain waterfowl will feed on the tubers and roots. Cattails have also been used to provide emergency forage to livestock in drought years. Cattail diets have been demonstrated to produce satisfactory weight gain in both sheep and cattle.

Though the cattail's ability to purify waste water has only recently been recognized by humans, the plants have long been used in other ways.

Perhaps if some of the more subtle virtues of cattails were better known, the plants would become more common in urban areas where people often mistakenly associate them with stagnant or dirty water. Not only do cattails clean water, but they can actually keep algae growth down by shading the water from the sun and preventing overheating. Last but not least, cattails produce a natural insecticide that, contrary to what most people might believe, will actually discourage the production of mosquitoes in a healthy wetland.

Sandra-Lee Konrad

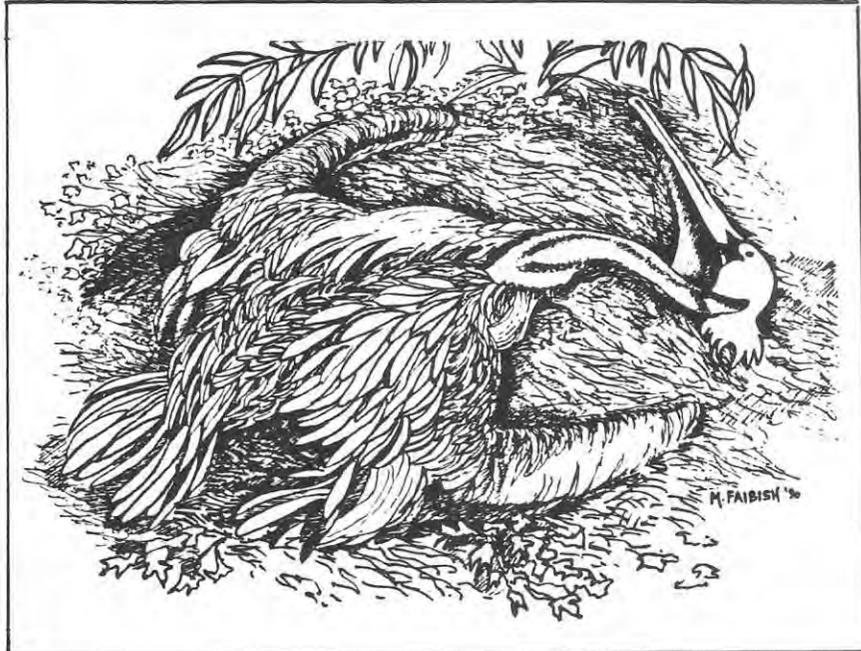
from "Nature Notes" in CONSERVATOR (Ducks Unlimited Canada), Vol. 10, No. 2, 1989

□

## DEATH OF A PELICAN

Recently in Florida we had a dark day in what was otherwise a glorious new experience. Just outside our window, a myriad of birds inhabited a huge swamp oak. Underneath it great blue herons, white egrets, brown pelicans and ducks wandered back and forth or stood quietly contemplating the sky and water.

During a 24-hour period of heavy rain, a lone pelican sat on our wharf, hardly moving. A few of us were conscious of what seemed unusual and sensed that something was wrong. The next morning, the pelican was dead, laid out in a perfect but horrible symmetry under an oleander bush.



The Pelican Society led us to believe that the pelican, like so many birds, was poisoned - not deliberately, because people in Florida have a deep concern for the brown pelican (an endangered species). Many belong to the association that protects them. The poisoning, I was told, occurs through man's negligence - the spoiling of our waters, the spraying of lawns and property. It reminded me of the dead robins I would see as I took a daily walk in Thornhill a few years ago. Many lawn signs indicated that spraying had occurred.

We buried the pelican under the flowering bush where it had chosen to finish its life. And we wondered why otherwise intelligent, law-abiding people don't heed the warnings that poisons kill our wildlife.

Miriam Faibish

Conservation can be said to have an ethic, an agenda for the way people on this planet should behave. Stated briefly, we can say that conservation wishes people to be restrained and cautious in their consumption of natural resources, to see the world as coherent and interconnected, and to be very farsighted -- looking decades or even centuries ahead -- when considering the consequences of their actions.

from "The slums of the Global Village" by Thomas Veltre in BBC WILDLIFE, Vol. 8, No. 5, May 1990

## FROM THE NEWSLETTER

20 YEARS AGO - in the words of editor Elmer Talvila, "One of the liveliest shows at the Zoology Conversat can be seen behind the screen in the lobby of the Ramsay Wright Building. There you can enjoy the antics of eight fascinating bush babies (*Galago senegalensis*) -- five adults and three, "oh so cute", babies. These little creatures from West Africa with owl-like eyes and squirrel-like tails are a kind of lemur ... Since the summer of 1969, University of Toronto biologists have been studying, breeding, and feeding these delightful animals. They thrive on a diet of mealworms, cheese, bonemeal, grasshoppers, and chocolate-coated raisins. Since they are nocturnal, only a dim light is kept on during the day so that they will remain active -- and active they certainly are!"

15 YEARS AGO - Stu Corbett joyfully reported that the mortgage on the Jim Baillie Reserve had been discharged and wrote that, "to our contributors, wherever they reside and whatever they gave, we owe a large vote of thanks. Thank you for turning a dream into a reality." As Stu noted, "Our donors came mainly from Toronto and vicinity, but here is one from Wiarton, another from Saskatoon, and even one from Haines Junction, Yukon."

Harold Taylor

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THE GREAT GRAY OWL is even more "mysterious" than most of its family. A rare bird of the north and high mountains, it likes to nest in "islands" of trees amid the muskeg and to hunt over bogs and fens. This makes it sound like a suitable spooky Hallowe'en symbol but it does not qualify, for it hunts by day.

This species visited southeastern Ontario in the winters of 1978-79 and 1984-85 when vole populations crashed in the north but were plentiful in such areas as Amherst Island near Kingston. There members saw three of them in swamped-over sugar maple bush on March 11, 1979. A large female in her flowing plumage, which she wore like a chiffon mantle, winked down at us from time to time.

Drawing is by Geraldine Goodwin, an interpretation of a photograph, which has caught some of the wind-blown effect in rendering the plumage.

Ref.: ATLAS OF THE BREEDING BIRDS OF ONTARIO  
by Cadman et al. 1987, University of  
Waterloo Press.



## IN THE NEWS

### HYDRO PLAN TO SAVE TREES A VICTORY

Ontario Hydro's plan to save a woodlot in the Rouge River valley is a major victory for Scarborough as well as the environment. Hydro was ready to chop the woodlot down before local community groups and local politicians began their outcry. Now Hydro plans to span the forest by stringing transmission lines on 80-metre (260-foot) towers. "Super towers" have been used elsewhere in the province to clear shipping lanes and for other reasons, but never before for environmental purposes. The hardwood trees, standing as high as 90 feet (27 metres), belonged to Russell Reesor whose family owned the woodlot since 1850. The land was expropriated for the hydro right-of-way more than three years ago.

adapted from an article by Sterling Taylor in THE TORONTO STAR, Jan. 10, 1991

### MINISTRY APOLOGIZES FOR FELLING ROUGE TREES

The manager of property administration for the government services ministry has apologized for mistakenly bulldozing down more than 1.2 hectares (3 acres) of birch trees in an area of the Rouge River Valley that has been designated to become Canada's largest urban park. He agreed to replant the 1.2 hectares as well as another 4.4 hectares (11 acres) that form part of a former 5.6-hectare (14-acre) tree farm at the Pickering Town Line and Finch Ave. in Scarborough. The ministry will also repair, if necessary, or leave "as is" any buildings, including historic ones, that sit inside the future urban park area. The former tree farm property which contained "scrub" birch trees from 7 to 20 centimetres (3 to 8 inches) in diameter, was being bulldozed because of the liability created by the large holes left behind when the former operator of the farm removed tree stock to be sold.

adapted from an articles by Sterling Taylor in the TORONTO STAR, Jan. 15, 1991

### PICKERING INVITES GRIER TO FOREST FIGHT

Plans to develop a large portion of the Altona Forest area of Pickering have been postponed until the province is given time to comment on this "environmentally significant area". The 134-hectare (330-acre) forest, located near Sheppard Ave. and Altona Rd. in Pickering, is home of such rare birds as the red-shouldered hawk and a range of trees, including oak, maple and birch. Several developers have taken a keen interest in the land since the early 1980s when Pickering approved plans to establish a community there despite that it had been designated as an "environmentally significant area" by the Metropolitan Toronto and Region Conservation Authority.

adapted from an article by Theresa Boyle in the TORONTO STAR - NEIGHBORS EAST EDITION,  
Jan. 3, 1991

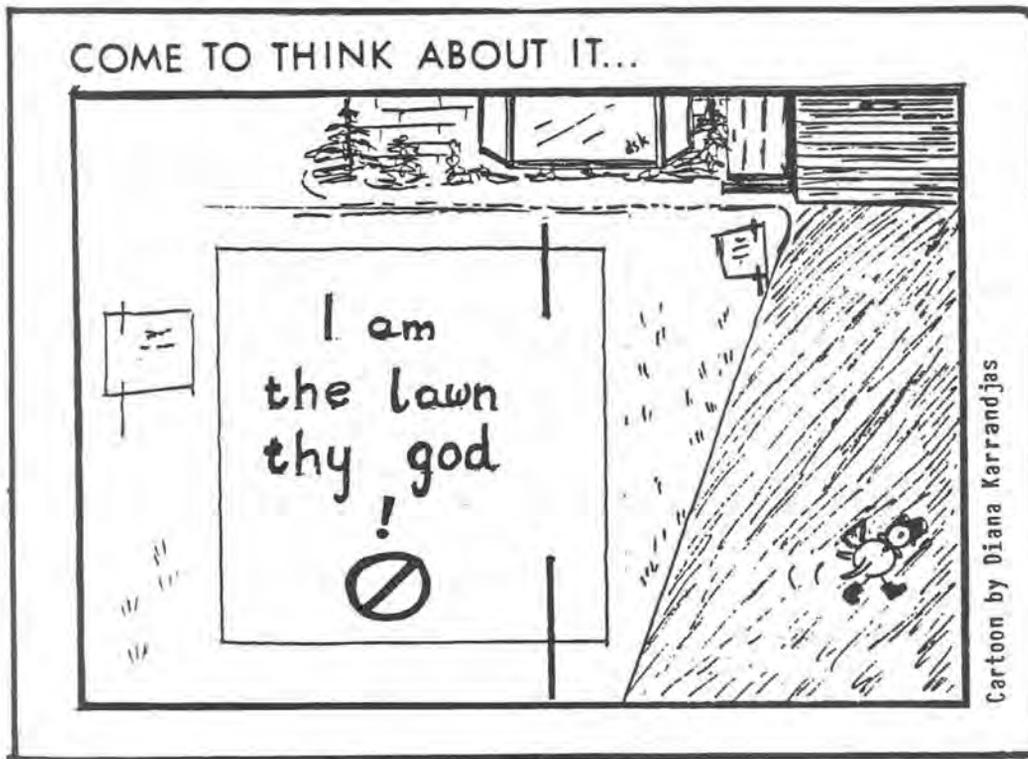
*The patient maple  
gives sap when sun shines in spring,  
intravenously.*

haiku by Helen Juhola

PANEL WANTS PESTICIDE USE CUT BACK

The Pesticide Registration Review Team, a 12-member group that included consumer, environment and chemical industry representatives, has told Ottawa to establish plans to cut pesticide use, as well as finance research on other means of pest control. The Review team, which spent nearly \$3-million and heard 419 presentations, was established two years ago by the federal government in response to public nervousness over the health effects of pesticides -- any chemicals used to control unwanted insects, weeds and fungi. Canadian pesticide sales were about \$900-million in 1989. The most controversial recommendation is for the Agriculture Department to create a Pest Management Regulatory Agency, which would "set targets and establish work plans" for cutting pesticide use in farming, forestry and industry. Homeowners were also included because of pesticide use on lawns to control bugs and weeds. The new agency would licence pesticides and assess their health risks. It would report directly to the Minister of Health and Welfare, rather than to the Agriculture Department, to eliminate conflict of interest concerns. Industry groups that will be affected by any cut in existing pesticide applications greeted the report favourably. The recommendations will spur companies to look for less toxic means to control pests. The proposed changes would lead to a revision of the Pest Control Products Act, the 22-year-old legislation that governs the use of pesticides in Canada.

extracted from an article by Martin Mittelstaedt in THE GLOBE AND MAIL, Jan. 7, 1991



IN THE NEWS (cont'd)

VISITS TO FRAGILE ENVIRONMENTS CAUSING ALARM

There's concern about current increases in tourism to remote and ecologically fragile areas essential to Earth's over-all environment. Hordes of visitors to such areas as the Antarctic, the Amazon and other rain forests, the Galapagos, African wildlife preserves and trails in the Andes and Himalayas could cause irreversible environmental damage, ultimately on a planet-wide scale. The future might be brighter if travellers assume responsibility for preserving nature and the environment. Responsible tourism -- or eco-tourism -- could be a means of countering deterioration of the planet's fragile ecosystems. Tourists are advised to travel with environmentally concerned companies such as the Cousteau Society, Earthwatch, the National Audubon Society and the Sierra Club which advocate a seven-point eco-tourist's code of behaviour:

- Don't disturb fragile habitats in any fashion whatsoever.
- Don't introduce non-native plants or animals.
- Don't dump plastic or other non-biodegradable garbage overboard or leave garbage in areas visited.
- Respect cultural heritage, customs, habits and traditions of indigenous peoples.
- Don't violate personal space of native animals or fragile habitats.
- Don't interfere with protected areas or scientific research.
- Don't collect or buy specimens or products that threaten wildlife and plants with fragile habitats.

adapted from an article by Jennifer Merin in the GLOBE AND MAIL, Jan. 16, 1991

CULTIVATING A TASTE FOR THE EXOTIC

In Canada's banana belt, a relatively balmy strip along the Niagara Peninsula, a few neighbours are engineering something of a green revolution. They are trying to adapt trees normally found in the sunny south of the United States to the rigours of Canada, then selling any that prosper to horticulturally offbeat suburbanites and to farmers keen to grow oddities for their roadside stands. They grow pecans, Japanese heartnuts, hazelnuts, Chinese chestnuts, Persian walnuts, both white and purple figs, persimmons and papaws. Ironically, the ability of southern species to survive in Canada exploits one of the legacies of the most recent Ice Age, the glacial meltwater in the Great Lakes. A narrow band of land along the shores of Lake Ontario and Lake Erie has a favoured microclimate moderated by these bodies of water. The area has a climate similar to that of parts of northern Texas, Oklahoma, Kentucky and West Virginia as well as southern British Columbia, though freak arctic deep freezes can damage tender young trees, and late spring frosts often wreak havoc. One of the self-help groups organized by the rare-fruit gardeners and nut aficionados is the Society of Ontario Nut Growers (SONG) [979 Lakeshore Road, R.R. 3, Niagara-on-the-Lake, Ont. L0S 1J0].

adapted from two articles by Martin Mittelstaedt in THE GLOBE AND MAIL, Dec. 17, 1990

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IN THE NEWS (cont'd)

CONTAMINANTS IN CANADIAN SEABIRDS

Following the marked decline in the population of the northern gannet colony of Bonaventure Island in the 1960s, ornithologists from the Canadian Wildlife Service took samples of eggs from this colony to analyze their contents. In addition to observing cases of very thin shells and birth defects, they detected high levels of persistent contaminants. The substances detected included first-generation synthetic pesticides, organochlorines, such as DDT, dieldrin, chlordan, heptachlor, toxaphene and mirex, and industrial compounds such as PCBs and chlorobenzenes. The State of the Environment Fact Sheet, "Contaminants in Canadian Seabirds", may be obtained from the Corporate Policy Group, Environment Canada, Ottawa, Ont. K1A 0H3.

adapted from STATE OF THE ENVIRONMENT REPORTING, No. 6, Oct. 1990

OMB PROTECTS CLASS ONE WETLAND

In an Ontario Municipal Board (OMB) hearing concerning the Constance Creek Wetland near Ottawa, the central issue was whether a golf course should be built within a wetland which has been ranked as a Class 1 wetland (provincially significant) by the Ministry of Natural Resources. In a decision dated Aug. 29, 1990, the OMB reviewed the evidence from the month long hearing and firmly rejected the golf course proposal on environmental grounds. Accordingly, the Board struck down a municipal by-law that would have authorized the development within the wetland. The OMB stated that "concern for environmental impact is an integral part of land use planning and this Board must recognize and accept that concept in the exercise of its jurisdiction". After the decision was released, the developer charged that "the OMB is not responsive to the people" and stated that "they should abolish the OMB". In fact, the Board did listen to public concerns and the decision should provide assistance to citizens' groups fighting to protect other Ontario wetlands at risk from development.

adapted from an article by Rick Lindgren in INTERVENOR, Vol. 15, Iss. 5, Sept./Oct.1990

DIAZINON FINALLY BANNED FOR TURF BY U.S.A. EPA

A final order banning diazinon use on sod farms and golf courses was issued effective July 12, 1990. It is the first pesticide to be cancelled based solely on risks to birds. Bird kills have occurred in every area of the country and during every month of the year, ranging from one to more than 800 birds per incident.

adapted from an article in INTERVENOR, Vol. 15, Iss. 5, Sept./Oct. 1990

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...ethology is important and interesting. And it applies to humans. I want to know about animals because I want to understand my own behaviour. In protecting animals, we protect ourselves.

from "A cub's-eye view of the glories of the wilderness" (about film-maker Jean-Jacques Arnaud and his newest film 'The Bear') in the GLOBE AND MAIL, Oct. 27, 1989

# PROJECTS

## ONTARIO EASTERN BLUEBIRD SOCIETY

In an effort to promote the conservation of bluebirds in Ontario, the Ontario Eastern Bluebird Society was formed in the fall of 1988. The main objective of the society is "to increase the number of managed nest box trails and to give guidance to new bluebird trail operators". The society is attempting to monitor population trends of bluebirds across Ontario by asking nest box trail operators to keep track of the number of young birds fledged each year from nest boxes.

William Read, founder of the society, believes that well-managed nest box trails have helped significantly to improve the situation for the eastern bluebird in Ontario. The society membership fee of six dollars covers two issues of the newsletter each year and a copy of each year's summary of the survey of the fledgling results. Anyone interested in the Ontario Eastern Bluebird Society should contact William Read, 165 Green Valley Drive, Unit 2, Kitchener, Ontario N2P 1K3.

from TRAIL AND LANDSCAPE, Vol. 24, No. 4, Oct.-Dec. 1990

## MAMMAL ATLAS

Sponsored by the Federation of Ontario Naturalists, the Ontario Federation of Anglers and Hunters, and the Ministry of Natural Resources, the ATLAS OF THE MAMMALS OF ONTARIO is a project for volunteers to get involved in mapping the distribution of the mammals of this province. From now until 1992, data will be compiled on mammal occurrences from institutions and individuals. Records of everything from wolves in the far north to squirrels in your backyard are of interest. If you would like to get involved, write to Atlas of the Mammals of Ontario, Biology Dept., University of Waterloo, Waterloo, Ont. N2L 3G1.

adapted from "Notes" in SEASONS, Winter 1990



BRUSH WOLF PUP

*Its name suggests its habitat, and Toronto valleys have become more and more suitable as shrubs have taken over in areas formerly cleared of trees. (Now if we can just manage not to "manage" the shrubbery!) Its south-western name "coyote" seems to have become more popular of late. We've had half a dozen reports in the eighties so far for TFN records, most for Metro.*

*(drawing from an NFB photo in THE GREAT LAKES, author R. T. Allen, in the series THE ILLUSTRATED NATURAL HISTORY OF CANADA.)*

### BECOME A FOREST GUARDIAN

A project of the Canadian Parks and Wilderness Society (CPAWS), the Forest Guardians project is designed to encourage and direct the public in forest management, conservation and protection. Begun in November 1989, it is directed by Dr. Peter Quinby, a forest ecologist. The project is supported by contracts from the Environmental Youth Corps Program of the Ontario Ministry of the Environment. With a goal of protecting 12% of representative natural landscapes in Ontario, the Forest Guardians are examining conservation areas and parkland to identify protected forest and old growth stands within the various landscapes. The Forest Guardians wish to encourage public participation and have recruited volunteers to assist in several projects. Volunteer activities include: analysis of forestry impacts on the environment, forest management and conservation research, research expeditions (seasonal), tree planting and urban site clean-ups (seasonal), literature review/reading and report writing, office duties, advocacy work. Anyone interested in this project to help conserve Ontario's forests and to learn more about forest management, please contact Kathy at 972-0868 or write to Forest Guardians, Canadian Parks and Wilderness Society, Suite 1150, 160 Bloor Street East, Toronto M4W 1B9.

Doris Tatay

### PLANET POSTERS PROMOTE GLOBAL STEWARDSHIP

Thanks to an enthusiastic group of adults and students, the striking photographs of the earth taken from Apollo 17 is attracting more and more attention around the world. It reminds all who see it we share a beautiful planet that needs our thoughtful care. This project -- "Our Planet in Every Classroom" -- deserves support. The colourful 18" X 24" posters are printed with no borders or text. You may purchase the posters or your donation will help send posters free of charge to schools, universities, churches, synagogues, prisons, offices, homes...where needed or to expand the project. Income tax receipts are provided for gifts over \$10. This is a tangible way to say we really support the efforts of our young people on behalf of our planet. Write or call "Our Planet in Every Classroom", 92 Shaftesbury Ave., Toronto M4T 1A5. Phone (416)515-0163.

H.T.



### THE REUSABLE REVOLUTION

Have you noticed any change in the procedure and/or attitude at fast food concessions and restaurants with regard to serving on porcelain or glass rather than plastic? In some places, such as THE SECOND CUP, one can have coffee served in a mug, if one ASKS for it. Some servers automatically offer porcelain mugs and glass plates if the order is not "to go". The next step is for the outlets to do this as a policy, whether or not the customer asks. Meanwhile, keep asking - and keep reporting!

Diana Banville

## FOR READING

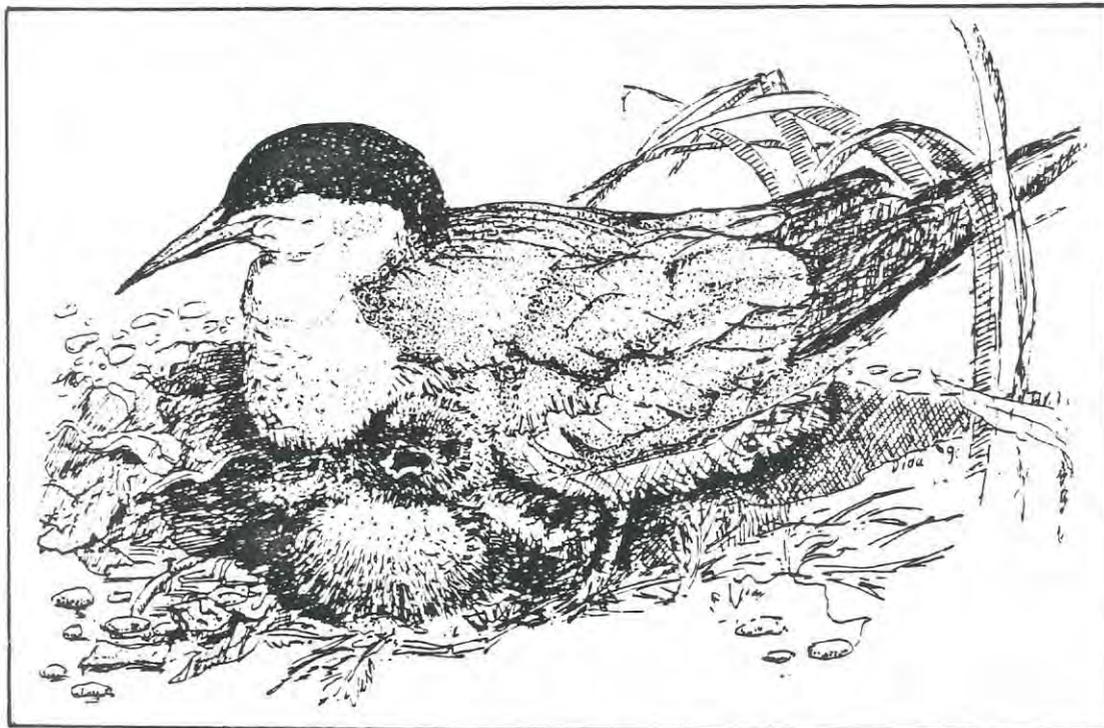
BIRDS OF TORONTO AND VICINITY by Gerald McKeating, Lone Pine Publishing, 1990, 144 pages, illustrated, \$9.95

This slim volume is a colourful introduction to the pleasures of bird-watching in and around Toronto. In the author's words, "It's for people who are not necessarily active birdwatchers, but who just want to know a little bit more about the common birds around them." After an account of the area's varied bird habitats, with a general map, 90 birds are illustrated in colour, one to a page. The accompanying comments about each bird's characteristics will be enjoyed by even experienced birders. Species pictured include those with us the year round (e.g. house finch, northern cardinal, mallard), summer residents (e.g. black tern, yellow warbler, chipping sparrow), winter visitors (e.g. oldsquaw, snowy owl, common redpoll), and those passing through (e.g. white-throated sparrow).

This "gallery" section is followed by much useful information: birding by season, suggestions for attracting birds and for keeping notes, a Federation of Ontario Naturalists' checklist, recommendations for further reading, and a list of naturalists organizations that publicizes the TFN.

Author Gerald McKeating, an avid birder for many years in Southern Ontario, is now an officer with the Canadian Wildlife Service in Edmonton. His very interesting book is illustrated by Ewa Pluciennik, Kitty Ho, and Donna McKinnon.

Harold Taylor



from a photo by Barry Ranford

*THE COMMON TERN* has a population density of more than one hundred pairs in most of the locations in Southern Ontario where it breeds, and more often than not, of less than ten pairs. In contrast to this, in two locations the colonies include over a thousand pairs - these are Port Colborne and the Leslie Street Spit. Ref.: *ATLAS OF THE BREEDING BIRDS OF Ontario*, Cadman et al. 1987.

DB

FOR READING (cont'd)

PRESERVING OUR WORLD by Warner Troyer, Wargeln International Communications Ltd., 1990, paperback, \$9.95 (+ G.S.T.)

I was surprised that this book had been on the shelf for over a month before anyone borrowed it (I was the first). After having read it, that surprise changed to disappointment. This should be COMPULSORY reading for everyone in Canada -- especially our politicians.

In 1963 Secretary-General Perez de Cuellar appointed Madame Gro Harlem Bruntland as chairman of an independent commission "to examine our global economy and development in the harsh light of environmental concern". Her team consisted of representatives from 21 nations including Canada, and they still were able to come up with consensus and an excellent report. Warner Troyer, a veteran journalist has "translated" this document into "basic Canadian" -- a language I (and you?) can easily understand.

Her conclusion, simply put, is that by eliminating poverty and illiteracy you will slow down and stop the birth-rate increase, then be able to relieve the stress on, and save, the environment. Although this is not any easy task when you consider the following facts, it can obviously be done.

- 1) In 1982 in Third World countries, an average of \$10,000 was spent on one soldier while \$90 was spent educating one child.
- 2) Between 1964 and 1983, 75% of all arms exports were to developing nations and those arms made up 50% of all economic development aid.
- 3) Today, globally, 50% of all research and development money (\$100 billion per year) goes into inventing and developing new weapons.
- 4) In 1983 globally we each spent \$45 on military research, \$11 on health research, \$152 to keep military forces, and \$.06 to keep peace.

Based on 1985 arms costs of over \$900 billion worldwide, at this rate

- 1) 12 hours (each year for 5 years) would repair the tropical rain forests (as much as possible).
- 2) 45 hours (each year for 20 years) would roll back the desert advance.
- 3) 10 days (each year for 10 years) would provide safe water for everyone on earth.
- 4) 9 hours (each year) would provide information and birth control devices to everyone in the developing nations.

Think what 13 days worth of money stolen from the military could do for the earth. Can we afford not to lobby our politicians? afford not to tell our children? This report is full of acts and ideas -- many too many for me to summarize here. Do get it off your library shelf or spend \$9.95 to acquire a copy.

a review by Ed Gillan in THE BULLETIN (Richmond Hill), No. 319, Jan. 1991

□



*HAIRY WILLOWHERB, originating in Eurasia and north Africa, fares well in Toronto as an introduced plant.*

## THE WEATHER (THIS TIME LAST YEAR)

March 1990, Toronto

March featured a freak early-season warm spell that sent temperatures soaring above 20°C on the earliest dates for Toronto ever! Aside from the warm spell, March 13th-17th, the month was cool to seasonable, but the overall mean temperatures were about 1.5°C above normal, the warmest since 1987. It was dry for the third year in a row, and sunshine was about 18 hours above normal. Winds were slightly lighter than normal.

From March 3rd to March 7th, there was a stretch of cold but fair weather, followed by a steady warming trend under a building upper-level ridge. The warmth peaked out on March 13th with 20.4°C downtown, 21.4°C at the airport, and 20.9°C at the mid-town location of Arlington Avenue. Temperatures in the upper teens continued on March 14th-15th, with 20.4°C at Arlington Avenue on March 15th.

The cold front arrived on March 17th; it brought some severe thunderstorm activity in the U.S.A. but was almost dry in Toronto. The rest of March was unremarkable with a few minor disturbances every few days and light precipitation.

(The weather observer was in Seoul, Korea, during the warm spell, and thanks are owing to Paul Allen who recorded the weather from February 25th to March 17th. The weather in Korea was much more settled, with sunny and hazy skies for the first ten days or so, followed by more unsettled conditions with a couple of days of rain; there was wet snow mixed with rain on March 17th. Temperatures were generally 5°C to 12°C in the daytime, and near freezing at night.)

Gavin Miller

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*PALE SWALLOWWORT. Our species, which runs rampant in Toronto ravines, is different from the "black swallowwort" which occurs around Kingston. The flowers may be tan to brownish purple, and not hairy inside like the black swallowwort. Both species were inadvertently introduced as they escaped from experimental projects, apparently before the beginning of the 20th Century.*

*Field sketch by Lenore Patterson, June 13, 1987, on the slope by the Ontario Science Centre.*

*For the full story, see Emily Hamilton's article in a 1979 issue of the newsletter, TFN 324:21.*



## COMING EVENTS

Mineral Exploration Classes - basic course, no charge, free literature, everyone welcome - in Ontario Room, Macdonald Block, 900 Bay Street at Wellesley from 7 pm to 10 pm from Monday March 11 to Thursday, March 14. Enquiries: 416-362-1969.

Young Naturalists Camps - for Juniors ages 11 and 12 from Aug. 18 to Aug. 24 for \$300 at Camp Iawah on Wolfe Lake north of Kingston (the Frontenac Axis)  
for Intermediates ages 13 and 14 from Aug. 18 to Aug. 24 for \$325 at Five Oaks Centre on the banks of the Grand River northwest of Brantford (Ontario's Deep South)  
for Seniors ages 15 and 16 from July 6 to July 13 for \$350 at the Bruce County Board of Education Outdoor Education Centre (The Bruce)  
Young Ornithologists Workshop for ages 14 to 17 years for \$350 at the Long Point Bird Observatory's Old Cut Field Station (Discovering the World of Birds)  
Write to FON Membership Trips, 428 Falconer St., Port Elgin, Ont. NOH 2C2 before April 1, 1991.

Introduction to Study of Wildflowers - a five week course on Tuesday evenings from 7 pm to 10 pm from March 26 to April 23 for \$65 (\$33 for seniors). Contact Rosemary Gaymer, Integrated Interests, P.O. Box 152, Oakville, Ont. L6K 3K8

Ministry of Natural Resources Wildlife Viewing Day - at Humber Bay Park East on Sunday, March 24 from 10 am to about 3 pm. Arrive any time. For more details call 832-2761. (Leaders: Clive & Joy Goodwin)

Return of the Swans - Sat. March 16 or Sat. March 23 at Long Point area. Register with LPBO/FON Membership Trips, P.O. Box 1647, Port Elgin, Ont. NOH 2C0. (Cost:\$25)

Birding in Cuba with LPBO from March 23 to March 30 for \$1273 or \$1414. Enquiries: Cuba Trips, LPBO, P.O. Box 160, Port Rowan, Ont. NOE 1M0

Free Science Lectures - Sundays at 3 pm in the Medical Sciences Auditorium (U. of T.), free. Sponsored by the Royal Canadian Institute 928-2096.  
March 3 - Insect neurobiology: the pesticide connection with Ian Orchard  
March 10 - Canadian engineering education: old images, new approaches with Peter M. Wright  
March 17 - Reflections on the future of engineering with Ursula M. Franklin

Maple Syrup Time - at Wye Marsh on March 23 and 24  
- at Crawford Lake Conservation Area on March 17  
- at Mountsberg Wildlife Centre from March 3 to April 14  
- also at the Royal Botanical Gardens in Hamilton  
- and at the Kortright Centre on the Humber River north of Toronto

Wildflower Gardening in Downtown Gardens, an illustrated lecture by Jim Hodgins, editor of the Canadian Wildflower Society's WILDFLOWER.

## COMING EVENTS (cont'd)

This first meeting of the Toronto West Chapter of the Canadian Wildflower Society is being held on Saturday, March 2 from 1 to 4 pm at the Palmerston Library Theatre (560 Palmerston Ave.), 2 blocks west of Bathurst St., 1 block north of Bloor St. West. For more information call Janet Sugerman at 535-3830.

Ferns and fern allies - a workshop - Saturday, March 2 at University of Guelph with Dr. Don Britton, sponsored by Field Botanists of Ontario. For more information call Don Kirk, 75 Queen St., Guelph N1E 4R9 or call him at 519-837-2935. (\$20 + membership - \$12 regular, \$15 family)

Toronto Entomologists' Association (insects) - monthly meeting will be held on Saturday, March 23 at 1 pm in the McLaughlin Planetarium.

Todmorden Mills Adventure - March Break Program for children 5 to 12 years old - March 12 and 14. Call 425-2250 for further information.

Task Force to Bring Back the Don - monthly meeting - March 19 at 6:30 pm in Toronto City Hall. Everyone welcome.

The Garden Club of Toronto Flower Show "If I had a dream..." at the Civic Garden Centre, Feb. 27 to March 3, 1991. (Wed., Thurs. Fri. 10 am to 8 pm; Sat. & Sun. 10 am to 6 pm). Admission: Adult \$6.50, Senior and Student \$5.50, Children 5 to 12 \$1.00, under 5 free.

Naturalists' Workshop (Theme - Disturbed vs Undisturbed Habitats), May 18-25, 1991 at the Queen's University Biological Station on Lake Opinicon, one of the Rideau Lakes, north of Kingston. Cost for high school and university students: \$310.30; for adults: \$438.70. Two scholarships available, for either students or seniors. Fee includes accommodation, food, local transport and tuition (including a manual). Free transport is also provided on request from and to Kingston or Elgin. Contact Queen's University Biological Station, P.O. Box 31, R.R. #1, Elgin, Ont. K0G 1E0 or call (613)359-5629.

Holiday ideas: We receive brochures from time to time regarding travel opportunities; for example, Baldwins' Guest House on Grand Manan Is., N.B. If you want further information, call Diana Banville who keeps a folder containing various travel brochures.

Federation of Ontario Naturalists Annual Conference and General Meeting - "Blue Lakes and Rocky Shores", May 17 - 19, 1991 at the YMCA Geneva Conference Centre, hosted by the Orillia Naturalists. For more information call the FON office at 416-444-8419.

Canadian Nature Federation 20th Annual Conference - "Flowing Through Alberta" - July 4-7, 1991 at Red Deer Alberta. Contact Box 2980, Lacombe, Alberta TOC 1S0.

**TORONTO FIELD NATURALISTS**

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

(416)968-6255

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**TORONTO FIELD NATURALIST**

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**OTHER PUBLICATIONS**

<p>TORONTO FIELD NATURALISTS' CLUB: ITS HISTORY AND CONSTITUTION, 1965 ..... \$ .50</p> <p>CHECKLIST OF PLANTS IN FOUR TORONTO PARKS: WILKET CREEK, HIGH PARK, HUMBER VALLEY, LAMBTON WOODS, 1972 ..... .50</p> <p>TORONTO THE GREEN, 1976 Metropolitan Toronto's important natural areas are described and recommendations given for their conservation and management: includes maps, bibliography and index ..... 2.50</p> <p>FIELD CHECKLIST OF PLANTS OF SOUTHERN ONTARIO, 1977 ..... 5/\$1.00 or ..... .25 ea.</p> <p>TORONTO FIELD NATURALISTS' RAVINE SURVEYS ..... 2.00 ea. Survey #1 - Chatsworth Ravine, 1973 Survey #2 - Brookbanks Ravine, 1974 Survey #3 - Chapman Valley Ravine, 1975 Survey #4 - Wignmore Ravine, 1975 Survey #5 - Park Drive Ravine, 1976 Survey #6 - Burke Ravine, 1976 Survey #7 - Taylor Creek - Woodbine Bridge Ravines, 1977 Survey #8 - West Don Valley, 1978</p> <p>INDEX OF TFN NEWSLETTERS (1938-1978) ..... 10.00</p>	<p>ANNUAL TFN INDEX ..... .25 ea.</p> <p>TORONTO REGION BIRD CHART, 1983 ..... 2.00</p> <p>A GRAPHIC GUIDE TO ONTARIO MOSSSES, 1985 ..... 2.00</p> <p>TORONTO REGION VERTEBRATE LIST (fishes, amphibians, reptiles, mammals), 1985 ..... .5/\$1.00 or ..... .25 ea.</p> <p>TORONTO REGION BIRD LIST 1985 . 5/1.00 or ..... .25 ea.</p> <p>GUIDE TO THE TORONTO NATURA- LISTS' NATURE RESERVE, LEASKDALE, ONT., 1986 ..... 2.00</p> <p>TORONTO ISLANDS: PLANT COMMUNI- TIES AND NOTEWORTHY SPECIES, 1987 ..... 2.00</p> <p>TODMORDEN MILLS, 1987 ..... 2.00</p> <p>VASCULAR PLANTS OF METROPOLITAN TORONTO, 1990 .. 5.00</p> <hr/> <p>All publications are available at the monthly general meetings or may be ordered from Toronto Field Naturalists, 20 College St., Suite 4, Toronto, Ontario M5G 1K2. (Add \$1.00 per item for postage and handling.)</p>
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**MEMBERSHIP FEES**

- \$20 FAMILY (2 adults - same address, children included)
  - \$15 SINGLE, SENIOR FAMILY
  - \$10 STUDENT, SENIOR SINGLE
- Tax receipts issued for donations

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