

TORONTO FIELD NATURALIST

Number 419

April 1991



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This newsletter
is printed on
recycled paper.

TFN MEETING

Tuesday, April 2, 1991 at 155 College Street*, 6th floor auditorium

7 pm - TFN SOCIAL HOUR - TFN publications, art, hasti-notes, pins etc. for sale

- display of Margaret Bentley's art
- sale of Susan Kiil's booklets about the environment and what parents and children can do to help

8 pm - THE HIGH PARK PLANNING STUDY

an illustrated lecture by Jerry Belan, Planner with the City of Toronto Parks and Recreation Department

- The City initiated a comprehensive planning study from which recommendations will be made for park facilities, natural environment, recreation opportunities, operations and maintenance. High Park is one of Toronto's most popular and oldest parks and has been declared an Area of Natural and Scientific Interest by the Province of Ontario's Ministry of Natural Resources. Come and learn about what the City hopes to do to maintain its significance.

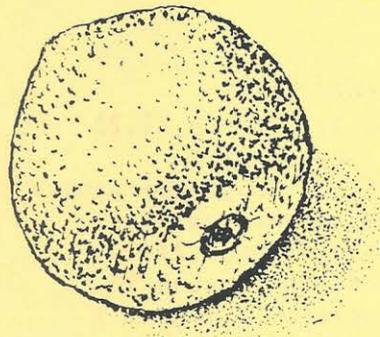
Next meeting: Monday, May 6, 1991

Dr. James D. Eckert of the University of Guelph will be speaking to us about the Herbert Axelrod collection of fossil fish, birds, reptiles, etc.

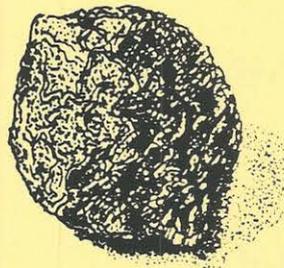
* Easy TTC access (building is one block west of Queen's Park subway station).
also

Free parking in the Board of Education garage on the west side of McCaul Street just south of College Street.

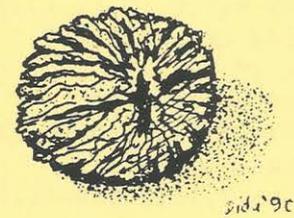
THE BLACK WALNUT is rare as a native tree in Toronto, though it has been planted here. The nutmeats resemble those of English walnuts, but are harder to crack. Scale of drawings is X .75.



The fruit, with husk, is apple green. When rubbed it has the fragrance of lemon.



When shrivelled, husk turns dark brown



Within the husk, is the brown nut, with parallel ridges.

TFN OUTINGS

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April

- Wednesday
April 3
1:30 pm
TAYLOR'S BUSH PARK - nature walk
Leader: Helen Juhola
Taylor Creek, East York
Meet at the southwest corner of Woodbine Ave. and O'Connor Dr. We will be exploring the area reported on in a TFN ravine study published in 1976. We will be looking for changes and may find early flowering coltsfoot and migrating song birds.
- Saturday
April 6
10 am
TODMORDEN MILLS - scavenger hunt
Leader: Morris Sorensen
Don River, East York
Meet at the southeast corner of Broadview Ave. & Pottery Road. Those in cars may meet at the park entrance on Pottery Road at the foot of the hill. Bring lunch, work gloves, waterproof footwear. Drinks will be provided; also, garbage bags. Once again we will be picking up litter from around this historic site in the Don Valley. Before birds begin to nest or flowers emerge from the ground is the best time for a cleanup. For those who want to see the first flower to bloom in Toronto, the skunk cabbages can be viewed. We may even find an early toad or snake, and usually someone finds MONEY (blown off the Don Valley Parkway).
- +
Saturday
April 6
10:30 am
ISLINGTON - nature arts
Leader: Donna McComb
Mimico Creek, Etobicoke
Meet at the northeast corner of Bloor St. West and Islington Ave. Bring sketching materials, camera, or just come and enjoy. Lunch optional. Sketching may take place in the Shipp Centre or in the valley or at the nearby historic Montgomery Inn depending on weather.
- Sunday
April 7
2 pm
IROQUOIS SHORELINE - nature walk
Leader: Ken Cook
Toronto/York
Meet at the southeast corner of St. Clair Ave. West & Caledonia Pk. Rd. Walk will end at a different public transit stop. This is another in our series of walks in which we are learning to read the landscape. We may even see migrating hawks which still follow this ancient shoreline during their migrations.
- Wednesday
April 10
10:30 am
PROSPECT CEMETERY - nature walk
Leader: Cathy Heynes
Toronto/York
Meet at the cemetery entrance on the north side of St. Clair Ave. West opposite Lansdowne Ave. Walk will end at a different public transit stop. Morning only. Cemeteries are great places to learn trees at any time of year (the trees are labelled). This large green space is also very popular with migrating birds.
- Saturday
April 13
10 am
CENTRAL DON VALLEY - nature walk
Leader: Muriel Miville
Don Valley, East York
Meet at the southeast corner of Millwood Road and Overlea Blvd. Walk may end at a different public transit stop. Lunch optional. Some of the best forests in Metro Toronto grow near this corner. The valley here is very deep and the slopes are covered with almost every species of native tree to be found in Metro -- most of them at least 100 years old.

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TFN 419 - 4

APRIL OUTINGS (cont'd)

- Sunday YORK CEMETERY GREENHOUSES - nature walk North York
April 14 Leader: Judy Hernandez
1 pm Meet at the cemetery entrance at the corner of Beecroft Rd.
and North York Blvd.
We will be looking at the exotic plants in the greenhouse and, weather
permitting, we may look at the trees in the cemetery or walk over to the
west end of the cemetery ground to look for signs of spring in the West Don
Valley.
- Tuesday METRO TORONTO ZOO - nature arts Rouge Valley, Scarborough
April 16 Leader: Mary Cumming
10:30 am Meet at the zoo entrance. Lunch optional.
Bring camera, sketching material or just come and enjoy the zoo grounds.
- Wednesday HUMBER VALLEY - nature walk Humber, York, Etobicoke
April 17 Leader: Ann Millett
10:30 am Meet at the Old Mill subway station. Walk may end at a different
public transit stop. Bring lunch.
We will be looking for signs of spring in the valley which is a migration
corridor for birds and a refuge for many of our native spring flowers.
- Sunday ETOBICOKE VALLEY - nature walk Etobicoke Valley, Et.
April 21 Leader: Isabel Smith
11 am Meet at the west end of Rathburn Road. Bring lunch.
This area contains some of the best stands of spring wildflowers and, if we
are lucky, we may find reptiles emerging from their winter hideouts.
- Wednesday COL. DANFORTH PARK - nature walk Highland Creek, Scarborough
April 24 Leader: Karin Fawthrop
10:30 am Meet at the park entrance on the south side of Kingston Road
at Col. Danforth Trail. Bring lunch.
An excellent area for spring wildflowers and migrating birds. This part of
the valley is very deep and wild.
- Saturday ROCKWOOD CONSERVATION AREA - nature walk west of Metro
April 27 Leader: Eva Davis
8:45 am Meet at the York Mills subway station (north exit) to take GO
bus to Rockwood. Bring lunch. Bus returns at 2:35 pm and 5:35 pm.
An excellent area for spring wildflowers as well at the limestone potholes.
- Sunday LAKE IROQUOIS SHORELINE - nature walk
April 28 Leader: Alfred Adamo
2 pm Meet at the southwest corner of Lawrence Avenue West and
Scarlett Road. Walk will end at a different public transit
stop.
Once again we will be following the ancient shoreline of this prehistoric lake.
The shale formations of an even earlier sea are exposed in Chapman Ravine.
Spring flowers and birds will be appreciated too.
- Tuesday GLEN STEWART RAVINE - birds Toronto
April 30 Leader: Fred Bodsworth
6:45 pm Meet on the south side of Kingston Road, west of Beech Ave.
This will be a leisurely walk to look for migrating birds.

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PRESIDENT'S REPORT

Earth Day is being celebrated internationally on Sunday, April 21st, and has special meaning for environmentalists. It evolved from an American Senator's idea in 1970. Its aims are to change individual behaviour and promote environmental activism. In the U.S.A. it has already resulted in the passage of the U.S. Clean Air Act and the establishment of the U.S. Environmental Protection Agency.

The TFN is celebrating Earth Day this year in two ways: on April 6 with another cleanup at Todmorden Mills (see page 3 for details), and accumulating funds for the purchase of additional wetlands to augment our Jim Baillie Nature Reserve, located north of Uxbridge.

Members of the Board of Directors have represented TFN on a number of committees during the past year:

- the Humber Heritage Committee
- the Rouge Watershed Implementation Plan
- the Rouge Community Park (formerly Centennial Swamp)
- Waterfront Remedial Action Plan
- Belt Line lands
- Waterfront Trail
- Natural Area Advisory Committee for Tommy Thompson Park

Since September 1990, letters have been sent on behalf of TFN to:

- ▷ East York conveying our concerns about the proposed Bramalea development on the edge of the West Don Valley
- ▷ the Ministry of Municipal Affairs requesting protection of significant areas on the Oak Ridge Moraine
- ▷ Ontario Hydro outlining our concerns about their new transmission lines north of Metro and their effects on valley lands there
- ▷ the Chairman of the Federal Pesticide Registration Review expressing our concerns
- ▷ the Minister of the Environment of Ontario requesting a complete Environment Assessment of East Point Park (including the area of the proposed baseball diamonds)
- ▷ the City of York supporting their proposed cleanup of Lavender Creek (a tributary of Black Creek)
- ▷ the City of Toronto Parks Dept. supporting their plan to restore High Park's significant natural features as suggested by the province's report of 1989
- ▷ MTRCA encouraging them to purchase the North York hydro substation on Bayview Avenue to maintain the wildlife corridor between Sunnybrook Park and Sherwood Park
- ▷ Ontario Hydro and to North York Hydro requesting they consider donating the hydro substation lands to the Conservation Authority
- ▷ North York suggesting alternatives to the use of pesticides and further education to discourage their use
- ▷ the Minister of the Environment of Ontario expressing our strong concerns about the use of any further lakefill

Issues are not resolved readily or quickly, and you are again urged to express your views in writing or by telephone to your local politicians. Action of this kind can be effective and lead to positive results.

Eileen Mayo, President

□

KEEPING IN TOUCH

Jan. 4, 1991

In Toronto's financial district there are a number of tall structures. First Canadian Place, the Royal Bank Plaza, the Toronto-Dominion Centre, the Commerce Court Tower and BCE Place, among others. Every spring and fall, migrant birds of a great many species collide with these buildings. Such collisions usually occur between 4 am and 9 am, although a limited number continue throughout the day during peak migratory periods. By mid-April, the first casualties may be discovered by anyone who ventures downtown before the sweepers employed by the bank towers have a chance to dispose of the birds' bodies. Mid-August brings the first autumnal casualties.

I have engaged in solitary patrols of the financial district since 1974. In the course of these pre-dawn patrols, I have witnessed the destruction of thousands of birds ranging from owls, hummingbirds and nightjars through woodpeckers, flycatchers, thrushes and wood-warblers to sparrows, orioles and grosbeaks. On occasion, I have found in excess of 200 birds on a single outing. Luckily, a small but considerable proportion are merely stunned, and can be removed from the site for release elsewhere. Even to discover a single live ovenbird, and to rescue it, and to let it go, gladdens the heart in an indescribable way. I have been privileged to capture and free saw-whet owls, American woodcock, Virginia rails, whippoorwills, common flickers and virtually every species of thrush and wood warbler that passes through our region.

The birds which collide with our bank towers migrate by night, although they may be otherwise of diurnal habits. The steady illumination of the towers attracts them, and they dash themselves against the window-glass which often forms the "skin" of the towers from topmost storey to street-level. If not killed at once, they are vulnerable, in their confused state, to rats, gulls, starvation, cars, and the ubiquitous sweepers. Yet many can be captured for removal with relative ease. Paper bags are adequate to accommodate them. I believe that among the membership of the TFN there must be some people willing to get up early enough to rescue birds stranded and endangered in this unpleasant fashion. Apart from the pleasure involved in the act of succouring wild birds and displacing them to points remote from the financial district, there remains the important task of documenting the composition of bird populations waylaid and killed or dazed by towers. The keeping of records is crucial. I can refer to such records to affirm changes including the disastrous decline in numbers of bay-breasted warblers.

I enclose for your perusal a log of birds (and the occasional bat) which I discovered downtown this fall. It is only a partial record. You will see that on some nights only three birds were found, and those dead. But for my part I consider the loss of sleep amply compensated by the rewards to conscience, love and curiosity. Above all, we require witnesses to the often covert destruction of wildlife which this age is not only perpetuating, but also grievously accelerating. Should you wish further information, please contact me.

Eric Miller
43 Huntley St., Toronto M4Y 2K9



Feb. 1991

I was just looking through my copy of TFN, March 1991, and saw the drawing of a great gray owl and the note that said it visited southeastern Ontario in the winters of 1978-79 and 1984-85.

Well, I have one, possibly two coming regularly to my little wildlife sanctuary in Haliburton. A few years ago I purchased 17 acres of forest near Tory Hill, put a little cabin in the centre and put up 5-gallon hanging feeders of all kinds of seeds. I keep these full year round. Also, every two weeks 50 pounds of mixed seeds are scattered around the cabin clearing for the ground feeding birds, mice (of several kinds), voles, chipmunks, etc.

After two years of this the population of everything was way above normal but, as I suspected, eventually predators would discover the surplus and control them, which they are now doing. There are daily and nightly visits by owls, hawks, kestrels, foxes and the odd wolf. At night the ground is alive with several kinds of mice and the owls take sufficient numbers. One evening last winter I was sitting on the porch when I saw a movement at the edge of the clearing. It proved to be a huge great gray owl feeding. I walked slowly over to him (or her) to see what it was eating and was surprised to see it was another bird of prey. The owl was not too concerned about me as I stood about 10 feet away. I wanted to get a sample of the prey as I thought owls only ate mice and prey they could swallow whole. I walked closer and the owl reluctantly flew off to the nearest perch while I quickly snipped off the tail, left wing (right one was mangled) and the lower legs for later identification as these parts would not deprive the owl of much of the meat. As soon as I turned away the owl returned. I spread and dried the parts but I still have no idea what it was as the only pictures I have are of folded wings. The feet are feathered right to the ends of the toes and are smaller than the feet of a red-tailed hawk I have from a road kill. I also found the body of a small bird of prey I think is a kestrel which I have dried.

Ken Coyne

Ed. Note: Anyone finding a dead bird and wishing to have it identified can take it to the Royal Ontario Museum's Department of Ornithology. Prior to delivery place the specimen in a plastic bag and keep in the freezer. The museum will also take isolated feathers and identify the birds from which they came. □

Wildlife gardening may not have saved the whale or the rainforests yet, but it has certainly saved a good many frogs and butterflies and songbirds. Most importantly, it is saving a lot of people from total despair. A great many gardeners now have a real sense of environmental achievement. There is a feeling that here at least an individual can make a difference. And with that as the starting point, it can't be long before we force those politicians to save the wider world, for wildlife and for people.

from "My Piece of the Planet" by Chris Baines in BBC WILDLIFE, Feb. 1989, Vol. 7, No. 1.

BIRD REPORT

1990

More and more reporters these days are using TFN checklists; these are in the same order as our Records forms, making the information so much easier to transfer! Also, check-marks are disappearing in favour of estimates of numbers of a given species. Of the 234 bird species on the list, 222 were reported for the year 1990. The EASTERN BLUEBIRD makes a third thrush family member on the breeding bird list for Metro, joining the American robin and wood thrush. The bluebird boxes in the High Park allotment gardens have been utilized. This brings the total number of breeding birds for Metro to 73. We'd like to establish the BOBOLINK as one of them, and are awaiting confirmation, such as observation of active nest, carrying of nesting material or food, and feeding of fledglings. Could such information, for instance, make a difference in convincing the Toronto Trust Cemeteries to retain their meadows in York Cemetery where there has been much bobolink activity? These meadows could be managed for the growing number of cremations, as a place to scatter or inter the ashes..."the ecosystem approach", according to "Watershed", the report by David Crombie and his Royal Commission on the Future of the Toronto Waterfront.



Eight of the migrating and wintering birds on our list were not reported in 1990: AMERICAN BITTERN, VIRGINIA RAIL, COMMON MOORHEN, WILSON'S PHALAROPE, MARSH WREN, GRASSHOPPER SPARROW, RED CROSSBILL, WHITE-WINGED CROSSBILL. In addition, four have not been reported for the past three years: UPLAND SANDPIPER, HUDSONIAN GODWIT, LITTLE GULL, LOGGERHEAD SHRIKE. Please report any information you may have on these.

We have a list of 39 casuals, hybrids and escapees observed in 1990. In the first category, the GOLDEN EAGLE has been reported 6 times and the RED-BELLIED WOODPECKER 5 times in the year.

There were 75 of us reporting for the year 1990, including four compilers whose reports, along with two newspaper columns, would probably treble the number of participants. Please keep sending your reports* to me at 710 - 7 Crescent Place, Toronto, Ontario, M4C 5L7, throughout the year 1991. Our thanks to all reporters.

Diana Banville

* of birds seen within a radius of 30 miles of the Royal Ontario Museum

□

TO A KILLDEER

"Dear, dear! Oh dear!" Just what's your trouble?
 "Pity ME, pity ME, pity ME!" you say,
 above the beach rubble.

Diana Banville

OUTINGS REPORT

TO LEADERS (AND POTENTIAL LEADERS)

Of the 181 TFN Outings in 1990, 162 reports have been received - THANK YOU! (unless of course you're among the missing - in which case it's never too late to report - but DO do it soon!). A special thanks to the "pinch-hitters" among us. Leaders in 1990 provided, with their reports, 78 formal checklists of plant and animal life observed (55 bird lists, 19 plant lists and 4 vertebrate lists) while many others listed the species informally. These have been invaluable in updating our information for all our natural areas. The formal checklists are appreciated most of all because of the ease with which the information is transferred to our records which are kept in the same order as the checklists. Though any form of expressing NUMBERS of a given species is more acceptable than just a check-mark, we appreciate estimates more than such terms as "a few", "some", "several", "dozens", "many", "lots", "oodles", and "zillions" - and it usually takes less time and space to write "100+" or "-10" or "± 1000. If you don't already use this mode, why not try it?

DB

□

ANCIENT RHYMES FOR NERVOUS TIMES

Bull in Earth's china shop. That's us!
Our history was ever thus.

We raze and plunder, account it clever
To burn the land of the other fellow.
To poison "his" water, pollute "his" air,
To treat "his" world as though it were
Separate from "ours" -- A limitless space
On which to dump our toxic waste.

One planet, you insist? Well, then,
All this comes home to roost again.

A vicious circle! Yet we invite
The blinding fall of nuclear night.
Our chemical obscenities we pour
Into Earth's slowly dying core,
And, hellbent, strive for all we're worth
Towards the matricide of Earth.

To paraphrase a childhood rhyme,
Adapted to this present time:

"All the king's captains and president's men
Will not put our Earth back together again".
Crucial, then, we continue the fight
On Earth's behalf, contribute our mite
To her survival to counter the rot --
This miraculous planet IS all we've got.

Eva Davis

PROJECTS

HELP CANADIAN BIRDS IN TROUBLE

Since 1960, Long Point Bird Observatory (LPBO) has been monitoring the numbers of migrant birds at Long Point on the north shore of Lake Erie. A recent analysis of the information collected indicates that of the 61 species of birds examined, 12 showed steady long-term population declines while only 5 species experienced long-term increases.

Declines are occurring in both long and short distance migrants, suggesting that problems may exist in breeding, migration and wintering areas. Species in decline that winter in the tropics included rose-breasted grosbeak, most of the thrushes and several warblers such as the ovenbird, American redstart and Canada warbler. Species in decline that winter in the southern United States include the white-throated sparrow, rufous-sided towhee and brown thrasher.

As a first step towards the development of effective conservation strategies for the species in decline, the LPBO has embarked on "Project Recovery" to determine where birds banded at Long Point breed and spend the winter, and what migration routes they follow. Supporters of this research endeavour are invited to "adopt" one of 12 designated bird species. For more information on how to become involved contact Project Recovery, LPBO, Box 160, Port Rowan, Ont. NOE 1M0 (519-586-3531).

NIAGARA PENINSULA HAWKWATCH

The hawk watch at Beamer Conservation Area in Grimsby officially begins on March 1. As usual, helpers for the count are needed. You can learn as an assistant or serve as a counter for one or more days between March 1 and May 15. If you want to help, contact Mary Ellen Foley (416)937-7671 or Bruce Duncan (519)622-4709.

HELP THE ROUGE VALLEY CONSERVATION CENTRE TO GROW

Described as a beacon for conservation education, the Rouge Valley Conservation Centre is going ahead. Plans are to set up the Centre in 1992 in Pearse House. This historic house will be relocated but will still be next door to the valley and close to the Metro Zoo. The creation of the Centre requires financial assistance, also contributions of time and skills. If you can help or wish more information, please call 291-1346 or 284-6409. If you prefer to write, send your name, address, and telephone number (business and residence) along with a note on your interest/skills to Rouge Valley Foundation, 362 Dyson Road, Pickering, Ont. L1W 2M9.

From the Past

In an article by E. J. Whittaker, entitled "Injudicious Fossil Collecting" in the CANADIAN FIELD NATURALIST No. 36, page 93, in 1922, it was mentioned that trailing arbutus in certain parts of New York State was extirpated by Girl Guides collecting for gardens, and certain animals of some areas were extirpated by Boy Scouts as a result of a woodcraft and trapping course.

PROJECTS (cont'd)

CAN YOU HELP REHABILITATE WILDLIFE?

The newly-formed Wildcare Rehabilitation Centre (Ontario) happily announces it will be located in two buildings at the Kortright Centre for Conservation on the edge of Metro Toronto. Wildcare, whose focus will be "hands on" rehabilitation of abandoned wildlife, is looking for volunteers with time and skills to offer. For example, it needs plumbers, electricians, and carpenters. As well, it will appreciate donations of office furniture and equipment, kitchen appliances, and other sundry articles. It will also be glad of offers of time to answer an information hotline or to work in the office. If you can help in these or other ways please get in touch with Wildcare, Box 364, King City, Ont. L0G 1K0. (832-6957 or 939-2854)

MISSISSAUGA PUBLIC GARDENS

Mississauga is asking for public assistance in planning and fund-raising for their massive new undertaking of public gardens which will run from Burnhamthorpe Rd., north to Hwy. 403, and includes a stretch of the Credit River on the west, and runs east to the Erindale GO Train station. This marvelous site will include both low wetlands and sloping rises leading to high plateau areas. Both formal and wildflower areas are planned, as well as natural, untouched portions. Look forward to this! Want to help? Telephone Mississauga Garden Council at 416-896-5297.

from THE VILLAGER, Feb. 1991



NATURE INFORMATION CENTRE

Make it your project this summer.

Volunteer to spend at least one Sunday afternoon at the cabin in Sunnybrook Park.

Your chance to:

- meet other members (4 volunteers are present each Sunday afternoon, rain or shine)
- browse through the free maps and brochures provided
- share your interest in natural history with the public

Call the TFN office 968-6255 and leave your name and number or call Helen Juhola at 924-5806.

PUBLICITY REPORT

Since May 1990 TFN displays have been provided as follows:

- "Discovering the Wild Don", a 5-month display of TFN photos and art at Todmorden Mills Museum, about 5000 visitors
- Nature Information Centre in Sunnybrook Park, a joint project with the Metro Parks and Property Department, Sunday afternoons from May to Thanksgiving, about 2000 visitors
- "Discovering Wild Toronto", a month-long display of TFN photos and art at Yorkville Public Library, January
- a display of photos and applications at an East York Parenting Day
- a display of photos and applications at the Etobicoke Parenting Day
- a display of photos and applications for the Scarborough Board of Education
- a day-long display of photos, publications and applications at Cumberland Terrace to celebrate Heritage Day 1991
- a display of TFN tree photographs at the Garden Club of Toronto Flower Show at the Civic Garden Centre, 5 days

We have also tried to provide libraries with copies of our applications, and now have posters advertising our Nature Information Centre which we would like posted. Anyone wanting to help with displays should leave a message with your name and number at the TFN office (968-6255).

H.J. □



CRACK WILLOW (*Salix fragilis*) owes its name to its brittle twigs which often litter the ground. A European species, the familiar large Toronto trees were planted long ago. (Ref. GRAY'S MANUAL)

IN THE NEWS

FALCONS ENJOYING FOOD IN NEW YORK

New York City boasts at least nine pairs of the endangered peregrine falcon, one of the United States' largest concentrations. During the past three years, the falcons have nested atop office towers, churches, bridges and New York Hospital. Officials say the falcons are attracted to the city by food. In addition to its supply of pigeons, starlings and sparrows, the city sits right in the middle of the Atlantic flyway guaranteeing a varied diet.

from THE GLOBE AND MAIL, Jan. 11, 1991

BACK FROM EXTINCTION

A rare butterfly species thought to be extinct for more than 50 years has been rediscovered in a remote area of Oregon's Willamette Valley. The small, delicate Fender's blue butterfly had not been seen since 1937. An entomologist at Oregon State University sighted a colony of the butterflies while hiking near Corvallis, Oregon. The butterfly, *Icaricia icarioides fenderi*, has a wingspan about 2.5 cm across. The male is a brilliant iridescent blue and the female is a dull brown. There are an estimated 800 butterflies in the Oregon colony. Their discoverer plans to petition the United States Fish and Wildlife Service to have the rare butterfly declared a threatened species.

from THE GLOBE AND MAIL, Nov. 24, 1990

WANDERING TEXAS PARK RANGER DISCOVERS UNIQUE YELLOW VIOLET

Folks in Texas crowed about a small colony of yellow violets discovered hanging from a cliff by a park ranger who had lost his way. The rare flower, *Viola guadalupensis*, or Guadalupe Violet, is eligible for listing as a rare or endangered species. This violet appears to be a sturdy survivor of the area's ancient rain forest. Twelve millimetres ($\frac{1}{2}$ in.) in diameter with 15- to 30-centimetre (6- to 12-inch) stems, the flower is distinguished by the shape of its leaves, its leaf hairs and its habitat in the pores of limestone. Most of this species disappeared at least 8,000 years ago. The plant was found on March 22, 1987. It was verified as a species in June and its discovery was announced at a conference on national parks attended by 350 federal officials, scientists and wildlife preservationists. The one small profusion of 35 individual plants with vibrant yellow flowers grows in crevices on a limestone formation on the east rim of the Guadalupe Mountains.

from THE TORONTO STAR, Nov. 1990

FROM THE NEWSLETTER

20 YEARS AGO -- Bill Andrews reported on some of the reasons for purchasing the Jim Baillie Nature Reserve and explained some of the ways it would be useful to the club. John ten Bruggenkate recounted some of the work involved in surveying the reserve.

15 YEARS AGO -- Mark Sawyer agreed to be the club's first curator of its slide and photograph collection.

H.T.

IN THE NEWS (cont'd)

TUNNEL OF LOVE

The Mountain Pygmy-possum (*Burramys parvus*) is one of Australia's most threatened small marsupials. The entire habitat available to the species is a mere 12 square kilometres. The species has been the subject of intense study since 1966 when it was first discovered. Before then it was known only from fossil remains. Adult female Mountain Pygmy-possums live sedentary lives in high-altitude areas that provide good food and shelter, while adult males move to and from these areas, generally from lower slopes, via natural rock scree. Redevelopment of the ski resort where these animals were found had the effect of inhibiting the dispersal of males to and from the females' territory further up the slope. Adult males were remaining at female breeding areas during the non-breeding winter season and the number of females surviving winter had seriously declined. In October 1985, a funnel-shaped, 60-metre long corridor of basalt rocks leading to two adjacent rock-filled tunnels was constructed beneath the Alpine Way. The idea was to provide a suitable habitat corridor for the Mountain Pygmy-possum. Within two weeks of installation of the "tunnel of love", Mountain Pygmy-possums were recorded using the tunnel and within a relatively short period of time, the composition of the disturbed population returned to that found in undisturbed areas. It appears that segregation of the sexes in the non-breeding season is an integral part of the social organization of this species. Tunnels under roads have been used previously to conserve wildlife such as badgers, big game and amphibians, but the speed with which the tunnels were used and the apparent reversion to a natural population structure have no parallels elsewhere. [Roadsigns (showing two animals mating) are used to warn motorists that Mountain Pygmy-possums cross at night to mate.]

from AUSTRALIAN NATURAL HISTORY, Vol. 23, No. 7, Summer 1990

TREE SEEDS SENT OVERSEAS TO HELP PRESERVE SPECIES

Worried that forests are dying in heavily polluted North America, some arborists are sending tree seeds to New Zealand, hoping that the offspring from the resulting plants will be available for use in Canada and the United States decades from now if the environment is returned to good health. The experiment began last year with the shipment of several thousand sugar maple seeds to a group of environmentally minded farmers and gardeners in the Southern Hemisphere. This spring, some of the millions of seeds from red maple trees will be gathered and sent to New Zealand, part of a larger effort that might eventually include seeds from wild cherry, beech, oak and other trees. With luck, the genetic material sent to New Zealand for safekeeping will never be needed. Some arborists question the utility of trying to save North American flora by shipping examples of it to New Zealand. Instead, they argue that environmentalists should help reduce the human impact on the forest, making the tree-saving project unnecessary. Besides the obvious step of reducing pollution, forests could be strengthened through better land-use practices. One problem is that many forests are isolated islands of trees within a sea of agricultural land, unlike the continuous forest that once existed. Consequently, genetic diversity is suffering because

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IN THE NEWS (cont'd)

of the meagre amount of cross-breeding between trees from different areas. Rural forests could be connected through greenbelts, which would act like genetic highways for the dispersal of seeds. This would also allow species adapted to more southerly climates to move north, if the greenhouse effect changes the climate significantly.

from an article by Martin Mittelstaedt in THE GLOBE AND MAIL, Feb. 9, 1991

NORTH YORK SCHOOL BOARD CHOOSES LAWN CARE OVER PESTICIDES

The North York Board of Education will be practicing "good lawn care" as an alternative to the spraying of the controversial pesticide 2,4-D to control weeds in North York schoolyards. The board rejected alternative options for weed control, which included paving over lawns and using other chemical pesticides, instead opting for an improvement of agricultural practices in North York schoolyards. As well, the school board will encourage community groups to become involved in manual weed removal programs.

from the NORTH YORK MIRROR, Feb. 3, 1991

CANADIAN ACTIVISTS SIGNAL VICTORY IN FIGHT AGAINST ACID RAIN

The Canadian Coalition on Acid Rain is winding down after a decade of activity on an issue which, more than any other, came to symbolize environmental degradation for the Canadian public. The quantity of sulphur dioxide -- the prime cause of acid rain and snow -- spewing from smelters, industrial smokestacks and coal power plants fell 12.5 per cent in Eastern North America from 1980 to 1987. These drops have begun to cut the acid levels in rain and snow by as much as 30 per cent in some areas of Eastern Canada, according to the 1990 report of a federal-provincial research and monitoring co-ordination committee. The decline in acid precipitation will be even more dramatic after 1995, when the effect of Canadian and U.S. control programs on acid-causing emissions finally begin to bite. Over the past decade, the coalition spent about \$3-million, two-thirds of it from private individuals and foundations and the balance from government agencies. The coalition lobbied Canadian and U.S. governments, preferring the quiet, legislative route to headline-grabbing tactics. Although rain and snow will continue to be more acidic than normal even after the controls are fully implemented, the planned sulphur-dioxide reductions mean that vast areas formerly injured by this pollutant will recover to some semblance of good health. The acid-rain fight was a political eye opener. Even in Canada, where control measures were relatively easy to achieve, politicians tended toward green rhetoric but offered little in the way of hard action.

adapted from an article by Martin Mittelstaedt in THE GLOBE AND MAIL, Feb. 19, 1991

The sharp ear listens.
Out of unsuspecting mouths
issue forth haiku.

haiku by Ruth Munson

BUT WOOD IS A NATURAL SUBSTANCE -- "ISN'T IT?"

And if natural, then safe? Not if treated to prevent fungal growth and insect damage which is what is done with most wood today. Treated with what? Principally with three chemicals:

Pentachlorophenol, or Penta, which causes cancer and birth defects. It contains hexachlorobenzene and a form of dioxin.

Creosote from distilled coal tar, carcinogenic and the possible cause of genetic damage.

Inorganic Arsenicals which are carcinogenic and may cause birth defects and genetic mutations.

These chemicals leach, under pressure of wind and rain. Penta-treated wood may release toxic vapours for more than seven years. An American study found that nearly 85% of Americans excreted Penta in their bloodstream. Each of these chemicals enters through handling and inhalation. All three are used by certified pesticide applicators in lawn "care".

A list of products containing them is necessarily incomplete, but formidable: children's sandboxes and playgrounds, feed storage and raw products crates, dimensional lumber, feed troughs, fence posts, house-decks, latticework, lawn furniture, livestock pens, log homes, particle board, plywood and window sills.

Although not required to do so in Canada, manufacturers claim they provide distributors with safety information. This seldom reaches the buying public, but the warnings include the following: treated wood must not be used for counter tops, cutting boards, beehives, or storing of human or animal food; where it can come in contact with water; all exposed surfaces should be sealed with two coats of shellac, varnish or urethane; machining treated wood should be done outdoor with the worker using mask and goggles; exposed skin should be washed, especially before eating or drinking; work clothes should be washed separately; sawdust and construction debris should be placed in an approved landfill; treated wood should never be burned, the fumes being highly toxic.

An alternative is the use of cedar which is a naturally weather-resistant wood. All wood should be kept off the ground to prevent dampness. Paint and natural preservatives can replace chemical treatment.

adapted by Eva Davis from an article in the INTERVENOR (CELA), Vol. 13, Iss.4, July/August 1988

STUDY LINKS CANCER TO MAGNETIC FIELDS

A U.S. survey that calls magnetic fields from electric power lines a "possible cause of cancer has given heightened urgency to a growing effort to settle the issue. The Environmental Protection Agency concluded in a draft report that several studies "show a consistent pattern of response which suggests a causal link" between power lines around homes and cancer. Large-scale studies now under way -- one involving 23,000 people -- may provide a definitive answer in two or three years.

from the LONDON FREE PRESS, Jan. 12, 1991

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WILDLIFE ON THE DANFORTH

One day in May [1990], along the Danforth, I encountered a group whose centre was a young woman clutching a bird. She kept placing the little creature on the soil of a tree-planter, but each time the bird keeled over and lay panting, eyes closed. My time being my own (the best thing about retirement), I took the casualty to an animal hospital just past Main station. The day was one of those blinding spurts of summer which May produced and bird and I retreated to the cool dimness of the clinic waiting-room. By the time a cat and a dog had been treated, my charge had stopped panting and kept opening an astonished eye, head cocked, as if to query what she was doing there? I will let the knowledgeable deduce which bird I literally had in hand. She was sparrow-sized with palest buff, streaked breast; olive-brown back; pink legs; eye-ring; and lovely orange crown. She was what, in the woods, people hear frequently but see rarely. (Helen Juhola says the only time she has viewed one at close quarters was when she, too, came upon an injured specimen on Church Street.) Aficionados will, of course, long since have exclaimed: "Oven-bird!"

The nice vet (shades of "All Creatures") agreed to house her, but separate from his other avian patients "in case she carried a virus". When I later delivered a packet of mealworms as payment I learned she had survived and been freed. A heartening outcome. The Toronto Humane Society on River Street now have a wildlife treatment centre which is good news since not all clinics will accept animals other than domestic pets, and injured wildlife until recently had few places of succour.

Now, whenever I hear the distinctive "Teacher, Teacher, TEACHER", I will match the sound with the vision of a beautiful little being.

Eva Davis

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This Month's Cover:

EASTERN CHIPMUNK

by Geraldine Goodwin

(from her own photos taken in Metro Zoo core woods)

This species, the darling of park-goers, is not usually to be seen in the winter months, as it is a true hibernator. Most observations in Toronto are from mid-April until late October.

Please report observations made outside of this period. A few mavericks have been recorded as early as March 8 (1988) and

as late as December 13 (1989). According to Gavin Miller's "The Weather This Time Last Year" in TFN 402:41, March, 1988, was comparatively dry, snow-free, and sunnier than normal.





Wending my way through the park one day to record the plant and animal life at a favourite wild spot, I found there a makeshift structure which had been erected, apparently by older children, of discarded plastic materials. I tried to dismantle it, leaving it in a condition which would do the least environmental harm, until I could get some help. Some weeks later, I revisited the area and found my "shelter-tree" - a young paper birch - had been cut down. It was just across the trail from the children's "hideout", to which I turned and found the little birch lying on its side, together with a young maple and some elm branches, piled together to form, with the help of a plastic tarpaulin, some kind of wigwam! I regretted having interfered in the first place.

Dragging out the remains of the plastic material, as far as the nearest waste bin, I encountered no park personnel to whom I could report the matter. I thought of calling some parks authority, but past experiences made me hesitate. There was the apathy and worse than that, the complaint could be used as an excuse to develop the wild parts of the park. This has happened and is happening. People collecting plants has been given as an excuse for a "park presence which will enable the authority to cut down hundreds of trees and all the understorey which goes with them, to develop it. How can we criticize children for cutting down a few trees when authorities are doing it on a large scale?

We need a new logic in our parks departments and conservation authorities. The "park presence" should be a warden in each park who patrols the area on foot - with walkie-talkie and whistle - or whatever he or she needs to communicate with parks authorities or police. This person could be any one eager to learn about the beauty, variety and value of our natural areas, who likes and knows how to handle people, and would enjoy answering their questions and motivating them to respect nature. A warden might have several part-time or volunteer rangers as assistants. This is something which would take some organization, but the money saved on reduction of mowed areas and elimination of spraying might be used to help pay for it, and possibly the same personnel. Think how much safer people, especially women and children, would feel in our parks. They would see the warden and rangers about - and so would the mischief-makers. Coupled with appropriate signs and notices, wardens could even be the answer to the speeding-cyclist problem.

Yes, a new logic is needed in our urban parks where we now have asphalt roads and vehicular traffic but at the same time wild areas which we want to protect. Please, parks departments, we don't want development but we want wardens.

Diana Banville

□

*Diamond-spangled webs
crowning the teasel-heads -
a trillion tiny tiaras!*

Eva Davis

YIELD RIGHT OF WAY TO WILDLIFE

The little sign on the right is a car sticker available at the Everglades in Florida. Such a sign could also be handed out to drivers in Ontario, especially those driving rural roads.

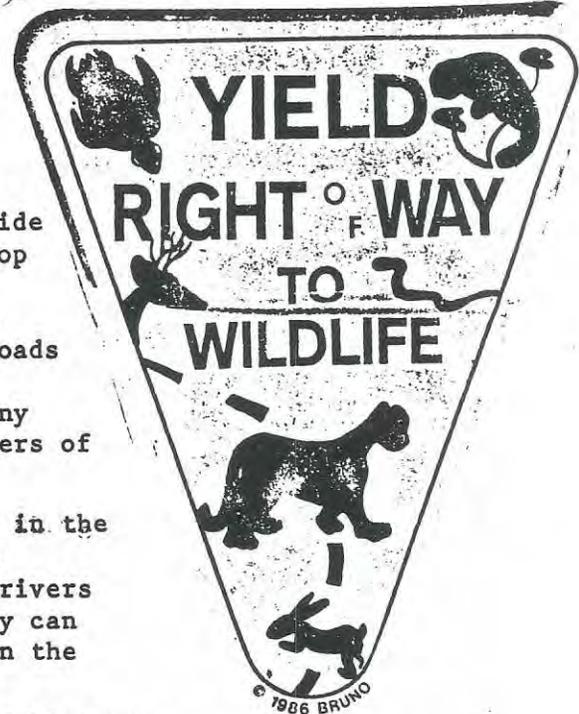
Many young animals can be found alongside our roads. Newly-fledged swallows swoop from wires, seemingly unaware of the hazards of vehicular traffic. We have noticed many dead swallows along the roads here in Muskoka. Frogs and toads are frequent on the roads after a rain. Many turtles lay eggs in June on the shoulders of the roads.

As more roads and structures are built in the countryside, our wildlife becomes more vulnerable to passing vehicles whose drivers appear to be unaware of the damage they can inflict on young, inexperienced and, in the case of turtles, slow-moving species.

Roadkills are frequent along high speed highways. However, the carnage is every bit as evident on the rural roads. With a little understanding on the part of the driving public, it could be prevented by careful and considerate driving during the early spring and summer.

A sign such as the one above on the dashboard is a handy reminder to the driver to slow down and watch out for wildlife that is sharing the road with the vehicle.

You might cut this one out for your car -- and remember to "Yield Right of Way to Wildlife".



Sylvia M. Purdon-Maguire
Sparrow Lake

□

"The day we cap emissions is the day we cease to grow,"
so says the world's great king of power
in this its desperate hour.

And so...
to the sacred cow that's known as Growth
we all must take a solemn oath?

As if we didn't know,
whether or not we make a fuss,
in the end IT'S UP TO US!

Diana Banville
July, 1990

PLANT TOXIN RESEARCHERS SUGGEST CAUTION FOR HOME GARDENERS

If a species is to thrive it must clearly have some means of protecting itself against destruction, and this can often mean simply proliferating in such vast numbers that for the entire species to be destroyed would be inconceivable. But such defensive measures have evolved to protect individuals, too, and in plants, for example, such strategies can take the form of producing substances that make them unpalatable to grazing animals or to insect larvae.

Several years ago it was found that substances called psoralens, which are commonly found in two families, the Umbelliferae (Parsley family) and the Rutaceae (Rue family), serve to protect the plants against some insects. Researchers at Cornell University showed that psoralens -- substances related to coumarin, the familiar sweet, pungent aroma of new-mown hay -- can poison a caterpillar by combining with its DNA in the presence of the ultraviolet component of sunlight, thereby preventing it from maturing to the adult form.

But bacteria and fungi landing on a plant's surface also pose a threat, and recent studies by Dr. Alicja Zobel and Prof. Stewart Brown at Trent University, using plants from the RBG collection, have been shedding light on the role of psoralens in meeting this threat. Their studies have shown these compounds to have antimicrobial action, and in a number of species a substantial percentage of the total psoralen content is on the surface, held in an easily removed wax coating.

The amount on the surface is especially high -- over 50% of the total -- in two species of *Ruta*, including the common garden herb, rue (*R. graveolens*), and a close relative, *R. chalapensis*, but it was also substantial in a common Canadian wild plant, the cow parsnip (*heracleum lanatum*), and its close European relative *H. mantegazzianum*. Lesser but easily detectable amounts of psoralens were found on the surface of *Peucedanum officinale*, a herb used in folk medicine, in *Dictamnus albus*, and in six other species cultivated at RBG. These substances can act as a first line of defence against would-be microbial invaders landing on the plant's surface.

Another consequence of the ability of psoralens to react with DNA in the presence of ultraviolet radiation is contact dermatitis on mammalian skin. Children and those persons with sensitive skin are particularly susceptible to this condition, which results when the skin contacts the plant and is then exposed for some time to bright sunlight. A rash develops, and in severe cases unsightly and irritating blisters erupt. Workers at RBG have contracted such a dermatitis from the *Dictamnus* mentioned above.

The agent causing dermatitis on human skin was long assumed to be the juice released from inside psoralen-containing plants after damage from handling, but the findings of Zobel and Brown show that this is not necessarily the case. Merely brushing against the surface of some plants can transfer enough of these readily removed psoralens to cause trouble. The researchers suggest that farmers and gardeners who handle such plants as parsnips, rue, and other members of the plant families in question should either wear gloves or wash their hands well before prolonged exposure to sunlight.

A particularly notorious source of problems is celery infected by "pink rot", a fungus disease which induces the celery to form large amounts of psoralens. Infected celery in the garden should be handled with great care, and the

PLANT TOXINS (cont'd)

occasional patches of pink rot seen on supermarket celery should be cut off and discarded without being touched.

from PAPPUS (a quarterly publication from the Royal Botanical Gardens), Vol. 8, No. 4, Spring 1989

Comment: The preceding article explains one of the reasons that TFN members are urged to wear long trousers and long-sleeved shirts during summer outings. It is very easy, when we are out walking in natural areas during hot summer days, to brush up against some of these plants. The combination of sunlight, wet bodies and these plants can result in a severe rash. It's just not worth taking the chance.

H.J.

□



THE NORTHERN RED OAK, a familiar native, is shown in this field sketch by Mary Cumming with developing acorns. When mature, in this species, acorns are usually longer than broad. Their scaly cups may be saucer- or top-shaped.

Ref.: MANUAL OF VASCULAR PLANTS by Gleason & Cronquist

COLUMBINES

Growing up to 1 metre in height, wild columbine may be found in rich woodlands throughout our area. Everyone is familiar with buttercups, and a particular image springs to mind at the mention of the Ranunculaceae (Buttercup or Crowfoot family). Though it may not seem to bear a close family resemblance, columbine does indeed belong to this group of plants. Its four petals are formed into long tubular spurs, the upper tip of each being filled with sweet nectar. The intensity of the red colour of the petals is quite variable, but they are usually lined in yellow. A cluster of stamens and pistils protrudes from each flower.

The columbines provide an excellent opportunity to study pollination ecology. First, consider the differences between *Aquilegia canadensis*, ours, and the European or garden columbine (*A. vulgaris*). Though structurally similar, the two species differ in many ways. The flowers of European columbine range from blue to pink, compared to the red of ours. Its spurs are much shorter, and it has a larger mouth. These differences have not occurred by chance: they reflect differing habitat pressures as each species evolved and this has led to two distinctly different pollination strategies. Wild columbine has evolved the red colour and deep spur suited to pollination by hummingbirds. Even the timing of its bloom coincides with the birds' return from winter haunts. Hummingbirds are not found in Europe. Garden columbine is adapted instead to the size, shape and feeding habits of bees. This does not mean that the nectar of our wild columbine is not utilized by bees: they overcome the problem of access to the nectar by biting their way through the spurs! Take a close look at a patch of wild columbine flowers in the spring: you'll often find the spurs riddled with holes. One may also notice evidence of nibbling on the leaves. This species has another close animal relationship. One of our local butterflies, the Columbine Dusky Wing, lays its eggs only on columbine plants as its caterpillars will eat the foliage of no other species.

adapted from "This Native Plant" by Barbara McKean in PAPPUS (RBG), Vol. 8, No. 4, Spring 1989



□
 THE RUBY-THROATED HUMMINGBIRD female makes a tiny nest, diameter up to 5 cm outside, 2 cm inside, secured with spiders' silk. In winter bird nests are conspicuous and can be examined without fear of disrupting breeding. Report any you see - more data is needed. Illustration actual size. (Drawn from a Hugh Halliday photo.)

Ref.: Peck & James
 BREEDING BIRDS OF ONTARIO

PLANT PITFALLS

Varying English names of species have always caused confusion (not that scientific names are entirely exempt from this charge). In the one-sheet folder, TORONTO PLANT LIST 1990 (the new compact model of the 108-page booklet, VASCULAR PLANTS OF METROPOLITAN TORONTO 1990) the following three rare plants (for Metro) have been confused with certain common plants because of English-name usage:

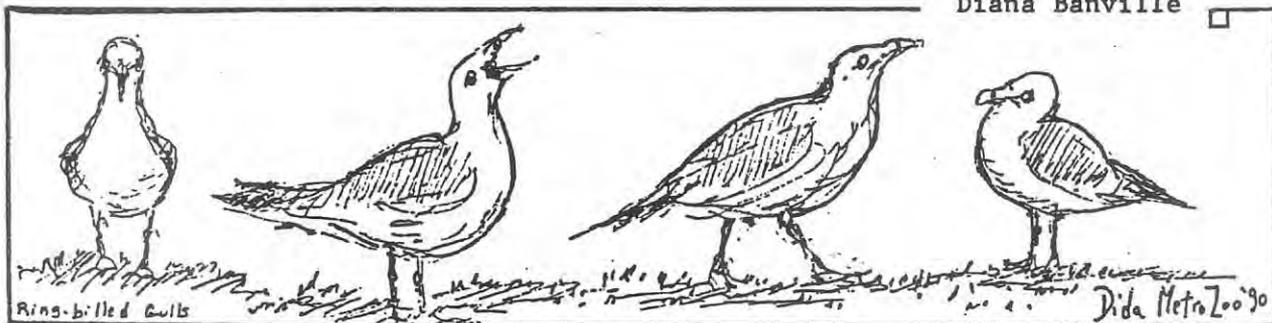
COMMON VIRGINIA CREEPER is not "common" here. In fact, a comparatively southern plant, it is probably planted in only a few locations, such as cemeteries. The plant most often called "Virginia Creeper" here, in the field, is the very common, native species listed in recent checklists as "THICKET CREEPER". As well as growing naturally, it is frequently planted. We have just not been used to calling it "thicket creeper" which you can readily identify by its lack of a suction disc on the tendril; the more southern species has this disc.

BLACK SWALLOWWORT has a flower which is "distinctly hairy" in the throat. We have had no clear reports of this feature to date. Formerly, we had the impression that only one species of this genus had escaped from experimental projects but it turned out there were several, and that the one in Metro was the PALE SWALLOWWORT, which has a flower varying in colour from pale tan to dark brownish purple, and has a smooth throat. Flower colour is not very helpful in the identification of swallowworts, in spite of the names (See TFN 324:21 1979).

FIELD THISTLE has been reported only from East Point in Metro to date, and is rare even there. The flower-heads tend to be quite large and the leaves tend to be woolly underneath. Its name has been confused with the CREEPING or CANADA THISTLE, not a native of Canada, yet quite familiar here with its numerous small flower-heads, in some lists also designated as "field thistle", but in the Toronto list as "CREEPING THISTLE".

If you can't find the name of the plant you're looking for in the TORONTO PLANT LIST, check with VASCULAR PLANTS OF METROPOLITAN TORONTO, if you have a copy, or call me at 690-1963. We're making a few extra notations in the folder when next it's printed. In the meantime, you may wish to make a mental note of the above pairs of problem plant-names. By the way, while you're at it, note that there's another name to add to the "supplementary list" on the folder - in the Gentian family, centaury has been found growing along the central lakeshore.

Diana Banville



THE RING-BILLED GULL, so common in Toronto, like the Canada goose, offers a good opportunity for practice in sketching birdlife.

WHAT TO DO WITH THAT ARTIFACT

You don't have to be an archaeologist to find an artifact. One of the most interesting finds in Canada's history was made by accident in 1867 when a Pembroke boy picked up an object in his field. It proved to be the astrolabe which Champlain lost in 1615. So too, naturalists, while out walking, may turn up artifacts or objects of historical significance. When this happens, they may wonder what is it, to whom does it belong and what is to be done with it.

First, what is an artifact? To an archaeologist, an artifact is any object that has been made or worked on by human hands. It need not necessarily be ancient or excavated. To illustrate this, there is a certain field near the Humber River where there can be found a pepsi can, a sarsaparilla bottle, sherds of nineteenth century earthenware, a brass button, several worked bone scrapers, a scatter of Huron pottery and projectile points within a few centimetres of the surface. All of these are artifacts. The artifacts that TFN members might obtain would be classed as surface finds. (Excavating for artifacts is strictly illegal unless a provincial licence is granted.)

Second, to whom does the artifact belong? Let us assume that we are dealing with a casual surface find, one that does not involve trespassing or "pot-hunting". According to Bill Fox, Provincial Archaeologist with the Ministry of Culture and Communications, the claim to ownership proceeds in descending order from 1) the original owners or their descendants, 2) the owner of the property concerned, 3) the government, if special legal or cultural issues warrant, 4) the finder. While this is a guideline, to be decided according to the circumstances of each case, it does set out the "pecking order" regarding rights to ownership. In many ways, the principles are very similar to dealing with a lost article. The government often takes the role of the common sense arbiter in sensitive cases in order to protect individual rights. They can assure people with collections that they will not be seized just because they have been brought forward. In fact, archaeologists rely on data from such local collections as they attempt to reconstruct the past. Still, for some unexplained reason, farmers' collections are always stored in cigar boxes.

Third, we consider what is to be done with the find. Even the normal person's train of thought may pass through the following options:

- 1) tuck this "trophy" away and say nothing
 - 2) return later with friends and digging tools
 - 3) send it off to the regional museum
 - 4) report the find and its location to a qualified archaeologist.
- Hopefully, the first two can be dispensed with quickly. The last two options are certainly the only responsible ones to consider.

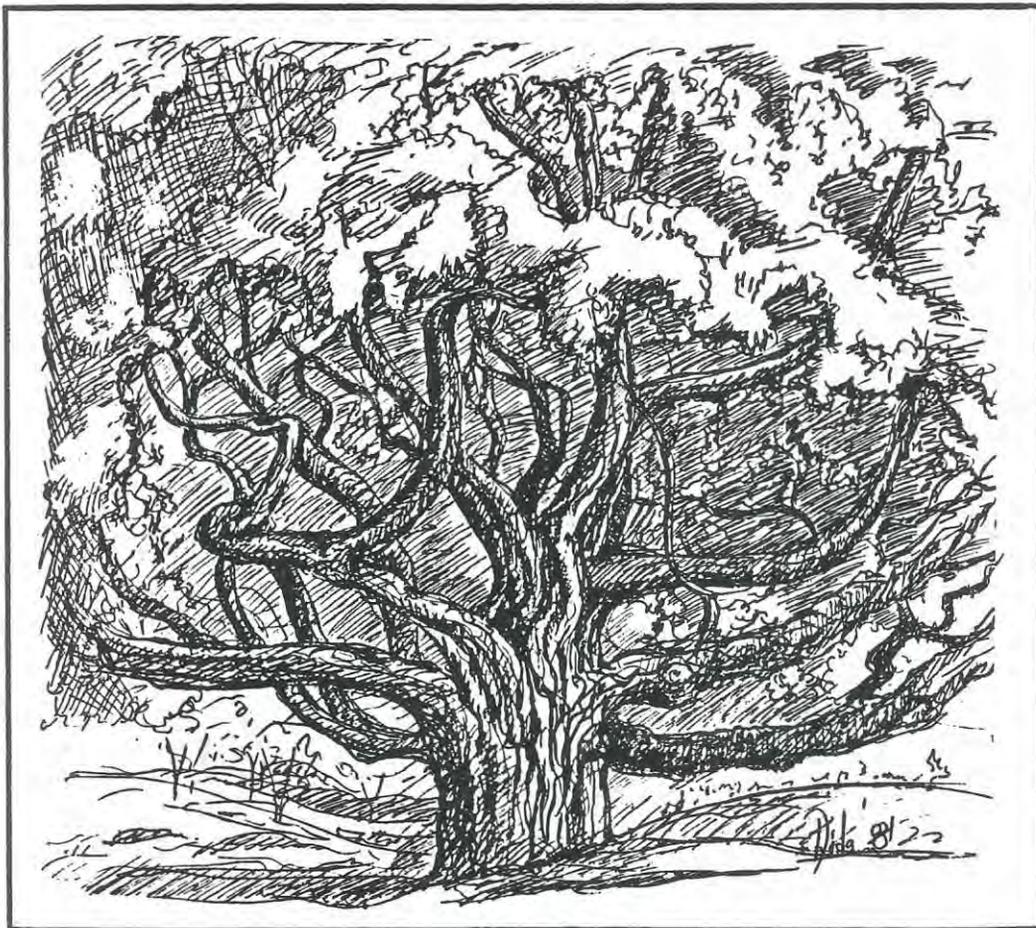
Then, to maximize the scientific usefulness of the find, there are several steps which should be taken by the finder. Choosing the right institution or archaeologist is important. Select the museum that has a mandate to study local history and archaeology. For example, specialty museums or historic houses will not accept artifacts. In selecting the archaeologists, search out the one whose specialty is

ARTIFACTS (cont'd)

best suited to the artifact -- either, historical, for European objects or prehistorical, for native objects. When submitting the artifact include all of the relevant information about the find, the location and a map, if possible. It is essential that the name and address of the finder be included for future reference and acknowledgement.

Lastly, follow the artifact through the research and report stage. This is when the information locked up in the artifact begins to be revealed. The archaeologist will be glad to provide a progress report, if asked. It is through an understanding of the artifact's function in its original context that we can form a direct bond with the past. Finding the artifact is not the significant discovery. It is just the first step towards many new discoveries.

Bill Frankling



THE NORTHERN RED OAK, when open grown, develops a short, sturdy trunk. As a forest tree, it has a straight trunk free of branches for half or more of its height, according to Hosie in NATIVE TREES OF CANADA. The tree in the field drawing is the famous "climbing tree" of High Park, cut down in November, 1983. (See TFN issues 361 and 362, 1984.)

DB

THE WEATHER (THIS TIME LAST YEAR)

April 1990, Toronto

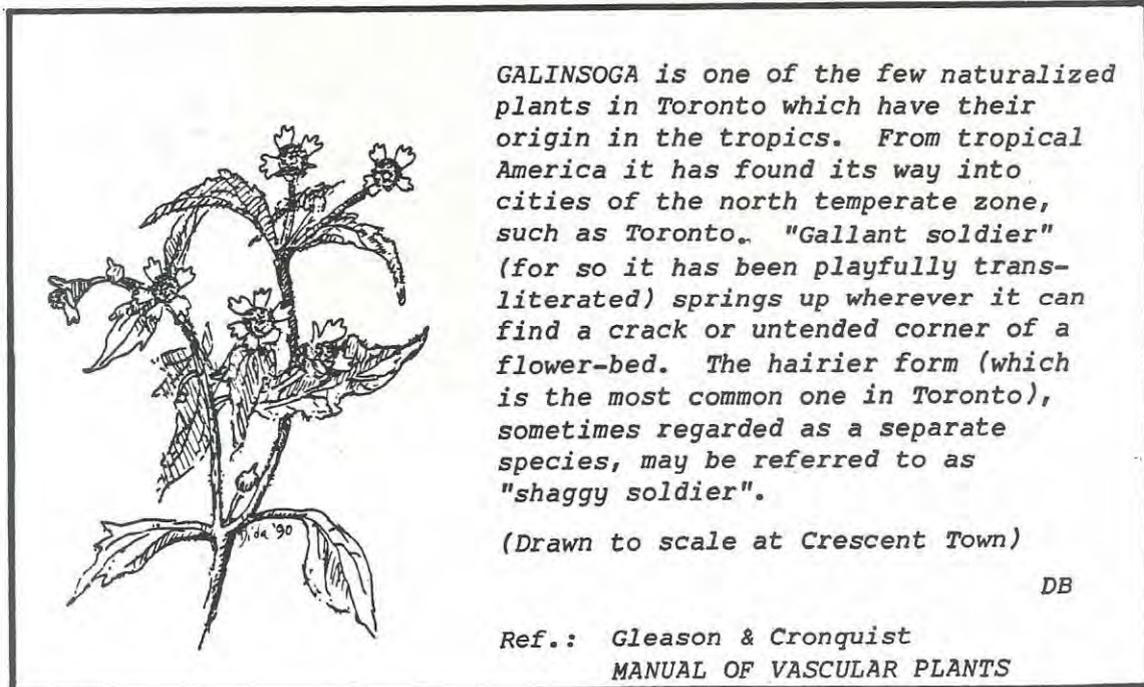
The first three weeks of April were distinctly cloudier and colder than normal. Flurries fell as late as April 17, and temperatures stayed below 17°C. This part of April was dominated by a trough over eastern North America. It resembled April 1989. However, the change-over after that was dramatic. A ridge built up in the upper atmosphere, and pleasant, near 20°C weather of April 21-24 gave way to a full-scale heatwave of the kind we normally get in July.

The readings from April 25-28 were, downtown: 31.2°C, 30.8°C, 27.2°C, 25.8°C, 26.7°C; at the airport: 31.1°C, 30.4°C, 30.3°C, 28.1°C, 25.6°C. At Arlington Avenue, affected by the urban heat island but set back from the lake breezes, the temperature soared to 31.9°C on April 25 and 31.1°C on April 26! (The all-time record for any April in the Toronto area was 32.2°C on April 22, 1842.) The heat wave ended gradually with a southeasterly flow and slowly cooling temperatures; a decisive cold front did not arrive until May 1st.

The month's overall averages were strongly skewed by the heat wave. In spite of the earlier unsettled and cold weather, it was the warmest and sunniest April since 1987, with sunshine hours about 13 above normal and temperatures a good 2°C above normal. Snowfall was negligible (in spite of frequent trace flurries up to April 17th), and the month was drier than the long-term average for the seventh year in a row. The wind pattern was unusual; Lester B. Pearson Airport had the windiest April since 1982, but at Toronto Island along the waterfront, winds averaged below normal. Perhaps this is because there were strong west winds at times through the month, but these were suppressed by a local easterly lake effect.

Gavin Miller

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GALINSOGA is one of the few naturalized plants in Toronto which have their origin in the tropics. From tropical America it has found its way into cities of the north temperate zone, such as Toronto. "Gallant soldier" (for so it has been playfully transliterated) springs up wherever it can find a crack or untended corner of a flower-bed. The hairier form (which is the most common one in Toronto), sometimes regarded as a separate species, may be referred to as "shaggy soldier".

(Drawn to scale at Crescent Town)

DB

Ref.: Gleason & Cronquist
MANUAL OF VASCULAR PLANTS

COMING EVENTS

JIM BAILLIE MEMORIAL BIRD WALK - Early spring migration at the Leslie Street spit at 8 am. This all-day hike will be led by Herb Elliott. Meet at the foot of Leslie Street. Bring lunch. Sponsored by the Toronto Ornithological Club. [Saturday, April 20]

Spring auction of nut trees, nut seed, nut tree books, crafts and cookery at the Civic Garden Centre (Lawrence and Leslie). An activity of the Society of Ontario Nut Growers. Auction begins at 1:15 pm and goes to 4 pm. [Saturday, April 13]

Hometown Birds - an exhibition of original Audubon prints featuring birds found in and around Metro Toronto from Feb. 23 to April 21 at the Metro Toronto Reference Library Gallery, 789 Yonge St. Also Birds in Wood, an exhibit of wood carving on the second floor of the library.

Exhibition of Watercolours by Leslie Mirylees at Todmorden Gallery on Pottery Road - April 13 and 14 and April 20 and 21, 2 pm to 5 pm.

Frogwatcher's hike at Mountsberg Wildlife Centre on April 26 from 7 pm to 10 pm. Call to register (416-854-2276).

Blue Planet - a space film about earth - in the Cinesphere at Ontario Place from April 3 to April 28. Admission fee. Call 965-7711.

From the Ground Up - a new gardening program at the Civic Garden Centre, on Sunday, April 21. Registration fee \$40. Call 445-1552 to register.

Earth Day Tree Planting in the Don Valley (north of Uplands Golf Course, south of Hwy #7) with the Thornhill/Vaughan Residents and the Friends of the Don in York Region. Sunday, April 21 native trees and shrubs will be planted along the banks of the Don River to help shade the stream, prevent erosion and increase wildlife habitat. For more details call Margaret Cranmer-Byng at 731-6628.

Black Creek Project Tree Planting - Saturday, April 20 from 10 am to 4 pm at the Edgely Woodlot on Black Creek (northeast corner of Jane St. and Hwy. #7). Bring work gloves, boots, shovels and buckets. Planting will take place, rain or shine.

Pond songs at Kortright's Peeper Ponds - Saturday, April 13, 7 pm to 9 pm. Call 416-832-2289 for advance registration and tickets.

Nature discovery walk at Kortright Centre, April 20-21, Apr. 27-28 at 11:30 am; walk to McMichael from Kortright April 21 and 28, from 10:30 am to 3:30 pm. Call 832-2289 for registration and tickets.

WHEELCHAIR ACCESS



In some areas that you may wish to visit on your own, it may be possible to view wildlife from a wheelchair or a car. When we have this information, our comments on the area will be accompanied by this symbol - Whenever possible, we will include a telephone number so that you may check conditions before going.



H.T.

COMING EVENTS (cont'd)

SOME WILDLIFE AREAS TO VISIT THIS SPRING

These areas are within easy driving distance of Toronto. Why not pack a lunch and make it a family outing to any of these attractive spots.

RATTRAY MARSH

Wetland habitat. Ducks mid-April to May and October to Early November. Songbirds mid-April to May. Frogs and turtles during the summer. Call (416)670-1615.

In Mississauga, from the intersection of Lakeshore Rd. W (Hwy 2) and Southdown Rd., travel east on Lakeshore Rd. 2 km to Bexhill Rd. Turn south and travel to the dead end of Bexhill Rd. Park on Bexhill Rd. or Gatehouse Dr.



CREDIT RIVER AT ERINDALE PARK

Forested river valley habitat. Spawning rainbow trout during April. Chinook salmon September to mid-October. Coho salmon October to November. In Mississauga, from the intersection of Erin Mills Parkway and Dundas St. (Hwy 5), travel east on Dundas St. 1.1 km to Erindale Park. Short walk to the river bank to watch fish.



MOUNTSBERG CONSERVATION AREA

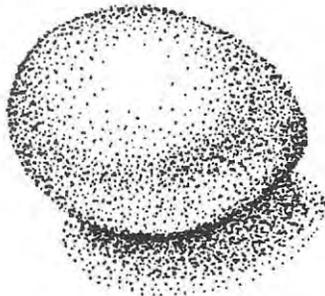
Wetland, forest and field habitat. Waterfowl mid April to May and October to mid-November. Injured owls and hawks are housed at the conservation area and can be seen up close. A good place to improve your identification skills. Nature centre and viewing tower. Canoeing permitted on the reservoir after June 28. Call (416)854-2276. Entrance fee.

From the village of Campbellville, travel west on Campbell Rd. 9 5.6 km to Millborough Line. Turn north and travel to the conservation area.

HALTON REGION AGREEMENT FOREST

Forest and wetland habitat. Excellent viewing for songbirds year round but best mid-April to September. Turkey vultures during the summer. Deer and rabbits throughout the year. Hunting on some days in the fall. From Milton, travel north to Hwy 25 to Campbellville Rd. 9. Turn west and travel 3.5 km to 6th Line. Turn north and travel 3.2 or 3.6 km to small parking lots.

[This information adapted from WHERE TO SEE WILDLIFE IN SOUTH CENTRAL ONTARIO, published by the Ontario Ministry of Natural Resources. Copies of this booklet may be obtained from the Ministry, Queen's park, Toronto. Call 965-2000.]



A RUFFED GROUSE EGG was found under a pine tree in the Boyd Conservation Area. It may have been laid there by the hen as she usually does choose a location under a tree, but she normally builds a nest - a deep hollow in the ground lined with whatever leaves are handy - and lays nine to twelve eggs in it. This egg, drawn to actual size,

was all alone. Its colour was pale beige with white flecks - paler than the illustration in A FIELD GUIDE TO THE NESTS, EGGS AND NESTLINGS OF NORTH AMERICAN BIRDS by Colin Harrison.

DB

COMING EVENTS (cont'd)

WHERE TO SEE FISH THIS SPRING

The Ontario Ministry of Natural Resources says that within the next few weeks many of Ontario's sport fish will enter shallow water areas for spawning and this provides the perfect opportunity to see them in their natural habitat. Trips to see the fish can be great outings for the family. Here are a few places to go:

Talbot River: near the town of Gamebridge just off Highway 48. Walleye enter the river to spawn and congregate below the dam. Fish up to 15 pounds are readily seen from the river banks. Spawning times are weather dependent, but usually occur during the first two weeks of April.

Lake Ontario Rivers. Springtime brings large rainbow trout from the lake in to spawn in many rivers in the greater Toronto area. These include Duffins Creek in Pickering, the Rouge River in Scarborough, and the Credit River in Mississauga. For the best viewing, look for natural or man-made barriers where fish are forced to jump. Rainbow trout spawn from the last few days of March through to the third week in April.

Lake Simcoe tributary streams. Many slow-moving rivers, canals, etc. around Lake Simcoe are spawning sites for northern pike. Large pike can be seen lurking in the grassy beds at the edges of these streams as soon as the ice has opened up from the mouths of the streams, usually in early April.

The Ministry adds that you should remember that the fish are not to be disturbed in any way. These fish are in for their annual spawning time and they are there insuring that you will have fish to watch for years to come.

□

NEWSLETTER SUBMISSIONS

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

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

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

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

Send material to: Toronto Field Naturalists
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Toronto, Ont. M5G 1K2

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