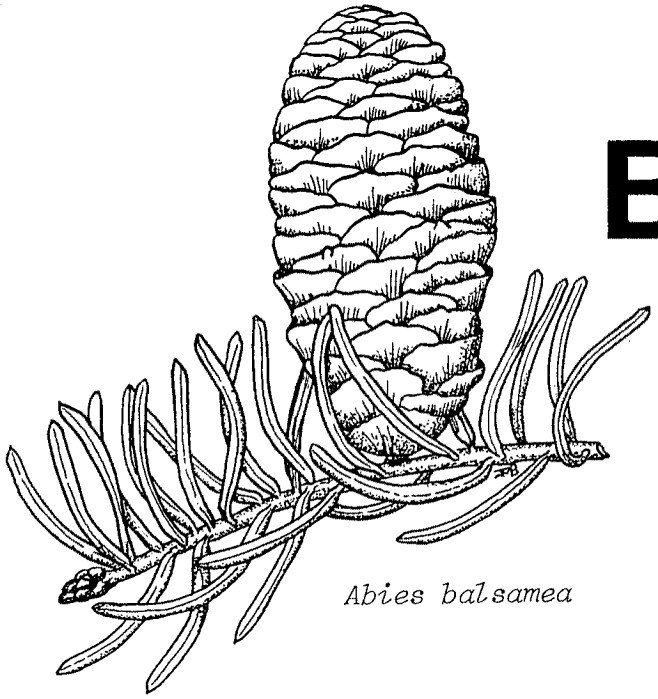


Abies balsamea

FIELD BOTANISTS OF ONTARIO

NEWSLETTER

Winter 1989-90

CONTENTS:

From the President 3
About the Annual General Meeting 3
Obituary: Wilf Botham 4
A Plant Collector's Canon 5
Report of the Walpole Island Field Trip 6
Rare Plant Mapping in southwest Ontario 7
Review of "Haldimand-Norfolk Natural Areas Report" 8
New Restrictions on Wild-Collected Bulb Trade 10
Arboretum in a Toronto Cemetery 10

UPCOMING FIELD TRIPS & WORKSHOPS:

The following is a tentative list of FBO field excursions and workshops for 1990. Mark these dates in your calender and keep them free. Some trips are not yet confirmed and may be subject to change. Other trips may be added after potential leaders have been contacted. Information on the Workshop at U. of T. and the Norfolk County trips are enclosed with this newsletter. You will receive information and application forms for other trips later on.

March 24:	Grasses workshop, Dept. of Botany, Univ. of Toronto.
May 13:	Carolinian Spring in old Norfolk County.
June 15 to 17:	Annual General Meeting and Field Trips, Opinicon.
July 7 & 8:	Prairie Grasses on Walpole Island.
July 21:	Day trip to Big Chute and the Simcoe-Muskoka Region.
August 12:	Ecology & Botany at Saratoga Swamp, Huron County.
October 14:	Shrubs and Trees of the Niagara Peninsula.

FIELD BOTANISTS of ONTARIO

NEWSLETTER
Published quarterly by the FBO.

The FBO is a non-profit organization founded in 1983 for those interested in botany and conservation in the province of Ontario.

President: Don Kirk,
75 Queen Street, GUELPH, Ontario N1E 4R9
Telephone: (519)-837-2935

Vice President: George Bryant,
58 Fairmeadow Ave., WIILOWDALE, Ontario, M2P 1W7
Telephone: (416)-223-6284

Treasurer: Ilmar Talvila,
12 Cranleigh Crt., ISLINGTON, Ontario, M9A 3Y3
Telephone: (416)-231-1752

Data Base/Membership Committee Chairman:
Stephen Gray
35 Gutzman Road, PETAWAWA, Ontario K8H 3G6
Telephone: (613)-687-4739

Secretary: Don Cuddy (613)-258-5953
Past President: Doug Geddes (416)-792-0451
Committee: Judy Hernandez (416)-967-5090
Dorothy Tiedje (519)-542-4537

Editor: Jane Bowles,
RR #3, THORNDALE, Ontario, N0M 2P0
Telephone: (519)-461-1932

!!! DUES MEMBERSHIP DUES !!!

FBO MEMBERSHIP RENEWALS FOR 1990 ARE NOW DUE.

YOUR ADDRESS LABEL WILL BE MARKED "EXP 1989" IF YOU HAVE NOT YET RENEWED YOUR MEMBERSHIP.

PLEASE COMPLETE AND RETURN THE FORM AT THE BACK OF YOUR NEWSLETTER IF YOU HAVE NOT ALREADY DONE SO.

USE SPARE FORMS TO ENCOURAGE FREINDS TO JOIN THE FBO.

Remember that membership rates have been increased to $12.00 SINGLE and $15.00 FAMILY.
New members who joined the FBO on or after September 1 1989 are paid up until the end of 1990.

FROM THE PRESIDENT

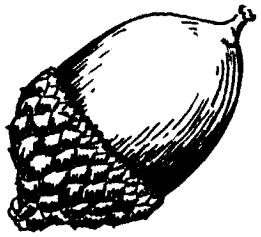
The FBO is starting off the new decade on a good footing with a dedicated Executive and solid membership base. As of December 31st our Data Base/Membership Committee Chairperson reported a total paid up membership of 229, a net increase of 12 over last year. Many new members joined over the past year and we will be making a special effort to contact those whose membership has lapsed. Remember that membership is now based on the calendar year. Those of you who joined after September 1, 1989 will have your membership carried forward through 1990.

All our accounting is now handled by Ilmar Talvilla and our accounts are now based in Toronto. We thank Harry Williams who has acted in the capacity as treasurer since the organization's beginnings back in 1983. As of January 21, 1990, our net balance was $2,628. We expect that the increases in membership fees will help us to cover increased postage costs of the Newsletter and will hopefully enable us to expand its size and scope. The compensation of field trip leaders has worked well and has been especially beneficial in attracting well known botanical experts who have such extremely busy schedules during the field season.

Due to serious illness Bob Hawker has been unable to continue handling the printing and distribution of the newsletter. His commitment to the task has been outstanding and he has kept costs down to a minimum with special copying and postage charges. We wish him the best in his recovery. Our newsletter editor Jane Bowles is currently handling copying and mailing duties, for which we offer our appreciation.

I hope that many of you will be interested in attending our first event of 1990 - a grass and sedge identification workshop to be held at the U. of T. Department of Botany (see the flyer attached). This type of workshop is a first for the FBO. There is no need for some of you to feel intimidated by grasses and sedges. With some basic instruction you will begin to feel comfortable with them and this will hopefully generate more interest and enthusiasm in the field when you begin our outings in the spring.

Donald Kirk



ABOUT THE AGM

This year the Annual General Meeting will be held on the weekend of June 15-17 in Eastern Ontario. We will be staying at **The Opinacon** a gracious old resort know for its good dining. It is located at Chaffey's Locks in the Rideau Lakes.

Saturday field trips will focus on the ecosystems of the Precambrian Frontenac Axis and will include a boat tour of the St. Lawrence Islands National Park. Sunday field trips will be on the alvars and fens in the Napanee limestone plain. Full details and registration forms will appear in the spring newsletter, but reserve this weekend now. It promises to be one of our best AGMs yet!

OBITUARY: WILF BOTHAM

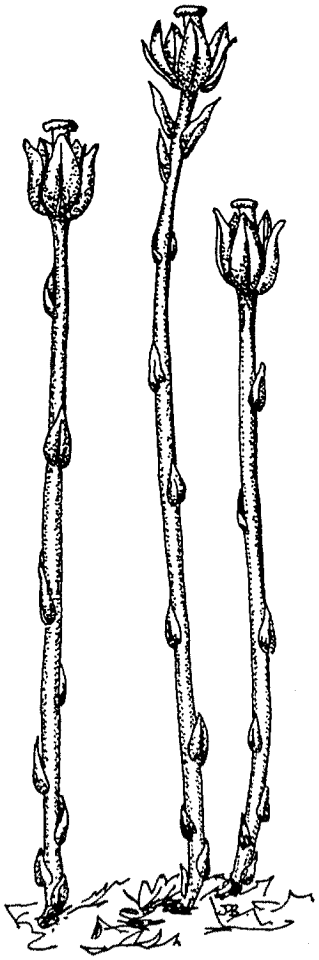
Ontario lost one of its most respected amateur botanists when Wilf Botham was killed in an automobile accident in 1989. Wilf was born on Pelee Island and developed a love of nature at an early age.

Apart from a few years during his youth in Manitoba, Wilf lived in Essex County his entire life. Wilf's plant collections in Essex County span six decades, from his first collections on Pelee Island in 1937. The culmination of his botanical studies in Essex County was the preparation of "Plants of Essex County: a preliminary list", which was published in 1981 by the Essex Region Conservation Authority (and is still available from them at 360 Fairview Avenue West, Essex, Ontario N8M 1Y6, for the reduced price of $5.95).

Wilf was entirely self-taught as his formal education did not extend beyond primary school. Not only was he an outstanding field botanist, but also an accomplished birder, philosopher, poet, and very knowledgeable naturalist. Wilf was a devoted lister, collector and compiler. As well as a bird life list, he kept lists of all plants and animals he identified, from molluscs, grasshoppers, and mammals to mushrooms, mosses, and vascular plants. His plant collections number in the many thousands. In 1980 he donated 2,500 collections to the National Herbarium (CAN); these collections form the documentation for his flora. Since 1980 Wilf has collected several thousand more plants, mostly from Essex County. These specimens are currently being sorted and labelled, and will be deposited at CAN and the University of Michigan (MICH). His notebooks and journals will be deposited at Point Pelee National Park, a place he visited frequently.

Wilf enthusiastically shared his love of nature with others. His greatest pleasure was in exploring the woodlots and marshes of Essex County, with anyone who shared his interests, looking for plants, birds, and whatever else caught his keen eye and inquisitive mind. Wilf Bothan will be remembered with fondness by all who had the pleasure of meeting him.

Mike Oldham



Monotropa uniflora

A COLLECTOR'S CANON

An article by Julia M. Schaller concerning the ethics of plant collecting appeared in "**Garden**" May/June 1987 and was recently reprinted in "**Clintonia**" the magazine of The Niagara Frontier Botanical Society (Vol: **4(5)**, September 5, 1989, pp. 1-3).

In the article, entitled "At Last, a Plant Collectors' Canon", the findings and recommendations of the Plant Conservation Roundtable, an informal organization founded in 1981, are listed under the title "Plant Conservation Guidelines: Scientists and Teachers".

The Roundtable was set up so that people concerned about plant conservation could meet, exchange information and find assistance in conservation projects. The group was able to examine issues and concerns about indiscriminate collecting and damaging field practices. Seeing a lack of widely accepted rules, Roundtable members released a set of plant collecting guidelines. While the first set of guidelines is aimed at professional scientists, other sets directed at amateurs and those in the nursery trade are being prepared. Although they have no enforcement authority Roundtable members hope that the guidelines will influence collecting behaviour and promote conservation awareness.

The guidelines are listed here with minor modifications, where appropriate, so that they apply to Canada.

1. Know which taxa are locally, provincially and nationally rare.
2. Obtain a permit for collecting on public land and permission from the landowner for collecting on private lands.
3. Collect the minimum amount of material necessary. Use photography or other recording methods where feasible.
4. Avoid collecting from populations with fewer than 100 plants.
5. If you encounter an unfamiliar plant, assume it is rare.
6. When collecting multiple specimens, only collect the number you need. Be sure the plant is abundant enough to ensure that multiple collections are justified.
7. Collect discretely so as not to encourage others to collect indiscriminately. Avoid unnecessary damage to the site.
8. If you discover a rare plant, notify an appropriate conservation official.
9. If you learn that rare or protected taxa or their habitats may be destroyed, notify an appropriate conservation official.
10. Conduct salvage (rescue) projects only in sites that are scheduled for imminent destruction.
11. Care properly for the specimens you collect.
12. If you plan to maintain living plants, collect in a manner to ensure the survival of individual plants.
13. Do not purchase wild-collected plants (or plant parts) especially of rare or protected taxa.
14. When choosing live plant material for use in scientific research use, if possible, plants or plant parts from existing collections or from propagated sources. If you must collect living plants from the wild for scientific research, collect in a manner least likely to damage the wild population.
15. Describe conservation considerations underlying your collecting techniques.
16. Teach your students and others about proper and careful collecting.

WALPOLE ISLAND TRIP

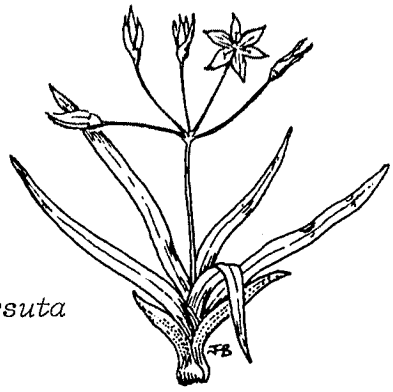
On Saturday August 26 about 20 FBO members met at the Walpole Island Sports Complex and Community Cultural Centre at the start of our two day exploration of the island. The trip, organized by Dorothy Tiedje, was led by Ross Brown who has botanized in the area most of his life. Reta Sands who lives on the island acted as our hostess. Part of the trip fees went towards paying $200 to the Walpole Island Band to help support education programs and protection of the unique island ecosystems.

Crossing the bridge onto Walpole Island is like stepping into another country. Provincially rare plants like dense blazing star (*Liatris spicata*), tall iron weed (*Vernonia gigantea*) and Culver's root (*Veronicastrum virginicum*) grow as roadside weeds. Ohio buckeyes (*Aesculus glabra*), Kentucky coffee trees (*Gymnocladus dioica*) and hop trees (*Ptelea trifoliata*) laden with fruit are visible from the road.

On the first day we travelled over the northern half of the island making short stops at "hot spots" to see particular prairie specialists like grey headed cone flower (*Ratibida pinnata*), Riddell's goldenrod (*Solidago riddellii*), Sullivant's milkweed (*Asclepias sullivantii*) and purple Joe-Pye weed (*Eupatorium purpureum*). A bonus at one stop was golden seal (*Hydrastis canadensis*).

Our last foray before lunch was at the Sand Pits, an area disturbed and threatened by extractive activities, but still supporting a bewildering number of rare species. Here highlights included yellow star grass (*Hypoxis hirsuta*) and showy goldenrod (*Solidago speciosa*), the latter not quite out, at their only known Canadian locations. We also watched toad-bugs (*Gelastocoris* sp.) hopping about at the water's edge.

In the adjacent oak savannah we were treated to rough blazing star (*Liatris aspera*), wand-like bush clover (*Lespedeza intermedia*) and both its parents, round-headed bush clover (*L. capitata*) and hairy bush clover (*L. hirta*). Most of us by this time were well covered by the clinging fruits of tick trefoil (*Desmodium canadense*).



Hypoxis hirsuta

By lunch many of us were suffering from "information overload", but a visit to the Penalty Box Restaurant in the Community Cultural Centre restored our energy. By the way, they serve some of the best bean soup in Canada.

In the afternoon most of our time was spent in the famous "*Silphium* Patch" where prairie dock (*Silphium terebinthinaceum*) forms the dominant ground cover against an unlikely back drop of cargo ships apparently sailing through fields only a few hundred metres away. Here for the first time we saw prairie blue aster (*Aster azureus*) fully out and were able to photograph southern slender ladies' tresses (*Spiranthes lacera* var. *gracilis*) in peak condition. On the walk to the *Silphium* Patch we were treated to tall coreopsis (*Coreopsis tripteris*) and false foxglove (*Aureolaria pedicularia*).

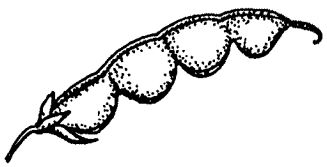
At the last stop in the day a red-headed woodpecker added to the other-than-botanical highlights.

On Saturday evening Ross Brown treated us to a show of his fantastic flower photographs and was able to reinforce what he had already shown us and prepare us for treats to come.

On Sunday we started the day with a visit to the Potawatami Prairie where special attractions included white blazing star and the endangered pink milkwort (*Polygala incarnata*). We continued adding to our tally of provincially rare species and discerned the differences between the three flat-topped goldenrod species growing at this site. By lunch time our list of gerardia species included *Agalinus tenuifolia*, *A. purpurcula*, *A. purpurea*, *A. skinneriana*, *A. gattingeri* and *Aureolaria flava*.

In an area called the Alimant the fast pace continued with several more milkworts, Great Plains ladies' tresses (*Spiranthes magnicamporum*) and leaves of showy lady's slipper (*Cyprepidium reginae*) and small white lady's slipper (*C. candidum*). Both these latter species will have to be looked up again on another trip in the spring. The site also provided tall nut rush (*Scleria triglomerata*) and low nut rush (*S. verticillata*), both rare in Ontario. The trip ended on Sunday afternoon with more prairie species at Nahdee Lane.

Jane M. Bowles
Laurie L. Consaul



RARE SPECIES MAPPING PROJECT

A recent project funded by the wildlife branch of the Ontario Ministry of Natural Resources, Southwestern Region will be of interest to FBO members. In four of the region's five administrative districts the known locations for all occurrences of regionally rare plant and faunal species are being mapped by county.

The initial phase of the project runs until the end of March and the level of detail and the groups being covered varies according to the state of information already available. Most mapping will be done at a scale of 1:50,00, but a 1:10,000 scale will be used for special areas.

In each county people already familiar with the area are doing the work. Donald Sutherland is covering vascular plants, mammals, birds and herpetofauna in Haldimand-Norfolk Regional Municipality. Dave McLeod is mapping vascular plants in Middlesex and Oxford Counties and Jane Bowles is doing the same in Kent and Elgin. In Essex County Paul Pratt is mapping plants, birds, bats, mammals, herpetofauna and some insect groups. Rare plants in Bruce and Gray Counties are being mapped by Joe Johnston.

Future plans for the information include checklists of plants by county, similar to the one recently completed by John Riley for MNR Central Region. It is also hoped that once the data base is set up it can be continuously updated as new records come in, providing a valuable source of current information for biologists and planners.

If any FBO members have information on rare species locations which may not be available to the project mappers, please contact them as soon as possible to share your knowledge.

HALDIMAND-NORFOLK REPORT REVIEW

Gartshore, M.E., D.A. Sutherland, and J.D. McCracken. 1987. The Natural Areas Inventory of the Regional Municipality of Haldimand-Norfolk. 2 volumes. Norfolk Field Naturalists, Simcoe, Ontario. ($40.00 from The Norfolk Field Naturalists, Box 995, Simcoe, Ontario N3Y 5B3.)

This voluminous two volume report is the finest county or region wide natural areas report completed to date in Ontario. The quantity and quality of information far surpass anything available in similar reports. The Haldimand-Norfolk Natural Areas Inventory (NAI) report presents the findings of a two-year (1985 and 1986) field study of the flora, fauna, and natural areas of Haldimand-Norfolk Regional Municipality. Mary Gartshore, Donald Sutherland, and Jon McCracken, the three principal investigators, are seasoned field biologists, who brought a wealth of expertise and experience to the project. The value of utilizing such highly skilled staff in natural areas surveys is amply demonstrated in the finished product.

Volume one begins with a brief introduction (11 pages) covering the regional setting (physiography, climate, flora and fauna, history, and land uses), methods, and recommendations. Following the introduction are detailed site reports for 41 significant natural areas and briefer site reports for 32 significant sites (significant natural areas had to satisfy two or more of the nine selection criteria, while significant sites typically satisfied the significant species criterion in an outstanding way). Site reports are grouped by township and include a map (topographic map with site boundaries indicated). At the beginning of each township, a map shows the location of the significant natural areas and significant sites within that township. Unfortunately there is no map of the entire regional municipality showing these sites. Another map or at least a list that I would have liked to see is one showing those sites initially considered, but found to be of insufficient quality to warrant inclusion in the NAI report.

Botanists or naturalists living in or visiting Haldimand-Norfolk will find a wealth of information in the site reports on well-known areas such as Backus Woods, Long Point, St. Williams Forest, Spooky Hollow, and Turkey Point. Even more exciting is the information on so many previously undocumented areas. It should be noted that most of these areas are privately owned, and permission of the landowner should always be sought before visiting a site.

Volume one should be a valuable resource document for the Regional Municipality of Haldimand-Norfolk and townships, towns, and cities within its jurisdiction. Hopefully it will provide the impetus for incorporating protective zoning into official plans and zoning bylaws.

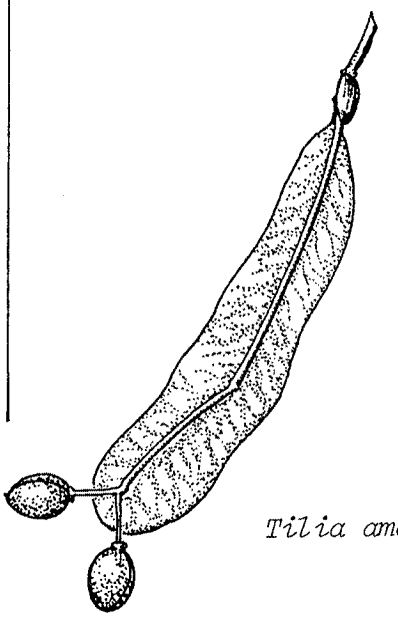
Volume two of the NAI report contains six appendices, one each for vascular plants, butterflies, fishes, herpetofauna, breeding birds, and mammals. Botanists will first turn to the annotated plant checklist, and will not be disappointed. Donald Sutherland has done an excellent job of distilling the existing published information on the region's flora and the 28,902 records gathered by the NAI team (3,777 of which are represented by specimens) into a comprehensive annotated list. This checklist can be considered a flora of Haldimand-Norfolk, and is probably the most detailed and well-documented flora available for any region in southwestern Ontario. The list

includes 1,384 species accepted by the author as occurring in the region, and a useful appendix on 107 excluded species which have been erroneously reported. This appendix is over 150 pages long and contains 22 distribution maps and 19 excellent photographs. Species accounts vary from a half-page or more for several rare species to two or three lines for many common species. The extra detail on rare species includes habitat descriptions, specimen citations, information from the literature, a listing of sites in the region, and information on status elsewhere.

One can always find fault with such a detailed compilation, but any complaints I have with this work are minor, and are directed at format rather than factual content. The small print and two column format were obviously chosen to make the best use of available space, however totally blank pages (about 20 in the plant appendix alone) are scattered throughout both volumes. Pagination is very difficult to follow. Pages with maps or figures are not numbered, nor are the indices at the end of each annotated checklist. The excluded species contained in an appendix to the plant checklist are not included in the index, nor are the pages numbered. These problems detract only slightly from the overall usefulness of the NAI report, and are outweighed by the many positive aspects. The black and white photographs scattered throughout both volumes are of outstanding quality, and add greatly to the document's appearance. Each significant area site report concludes with one or more recommendations. The Haldimand-Norfolk dot distribution maps showing NAI and earlier records which are included in Volume 2, are a useful addition.

I hope the NAI report will serve as a model for future studies, and that the recommendations included in the report will be followed by the individuals and agencies responsible for managing these significant sites. Anyone with an interest in the biota or natural areas of southwestern Ontario will want to own a copy of this report. Get yours before they are all gone!

Michael J. Oldham
District Ecologist
MNR, Aylmer District
353 Talbot Street West
Aylmer, Ontario



Tilia americana

LIMIT ON WILD-COLLECTED BULB TRADE

The 103 nations belonging to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) have recently made significant steps towards protecting certain plant species (West, 1990: BioScience **4(2)**: 90).

Snowdrops (*Galanthus*) and winter daffodil (*Sternbergia*) are now partially protection through trade restrictions. International trade is prohibited in *Cyclamen*, two genera of tropical lady's slipper orchids, and several succulents from Malagasy.

TRAFFIC, the trade monitoring arm of World Wildlife Fund has been sponsoring an investigation on wild bulb trade since 1987 and a report was completed in June 1989. According to this report almost a billion bulbs are imported to North America every year, even though some of the wild populations are threatened by extinction. Most wild-collected bulbs arrive via the Netherlands, but Turkey is the source of snowdrops, winter aconites and winter daffodils. Most wild *Narcissus* bulbs originate in Portugal.

Some wild bulb collection also takes place in the United States. For example data show that 13,000 *Trillium* plants were exported to the Netherlands in 1986/87. Another North American genus of concern is Mariposa lily (*Calochortus*) of which thousand are exported every year.

The WWF report advises buyers to exercise caution and avoid purchasing certain bulbs. If the bulbs are labeled "wild bulbs", "species bulbs" or "botanicals" they may originate from wild sources. If the supplier cannot tell you whether the bulbs were commercially propagated, take your custom elsewhere.

ARBORETUM IN A CEMETERY

When you imagine seeing trees and shrubs in an arboretum, a cemetery may not be the first place that crosses your mind. However a large and fine display of over 500 species is located near downtown Toronto in Mount Pleasant cemetery.

In April 1989 a 40 page Arboretum Guide and Specimen Tree Plan was published for this historic and fascinating cemetery. The guide provides the scientific name, common name and location of 200 genera and countless species and varieties of a wide range of temperate zone trees and shrubs. For example, fifteen species of oak, fourteen species of spruce, 22 of pine and 30 species of maple may be found amongst the tombstones and mausoleums. The guide is provided free for the asking at the cemetery office east of Mount Pleasant Road.

Several thousand people visit the cemetery and tour the grounds each year, but the woody specimens may not be the major attraction. Bright patches of flowers and a variety of monuments, sculptures and sundials coupled with fine vistas make the cemetery a pleasant place for respite from the surrounding metropolis.

You may be interested to know that the remains of 175,000 people rest in the 82 hectares, but there is still room for about 100,000 more!

G.B.

