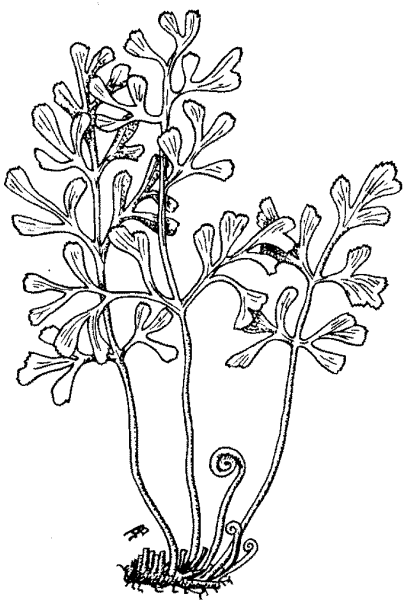


*Asplenium ruta-muraria*

# FIELD BOTANISTS OF ONTARIO

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## NEWSLETTER

**Winter 1988-89**

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**UPCOMING FIELD TRIPS:**

The following is a list of FBO field excursions for 1989. More details are given on the attached flyer. Mark these dates in your calendar and keep them free. Information on the ROM excursion is enclosed with this newsletter. You will receive application forms for other field trips later.

| | |
|---|---|
| February 26: | Royal Ontario Museum Vascular Plant Herbarium, Toronto. |
| April 30: | Carolinian Spring in Norfolk County. |
| May 20 & 21: | Pelee Island Weekend. |
| June 23 -25: | Annual General Meeting and Field Trips, Bruce Peninsula. |
| July 15 & 16: | Barren River Canyon, Ottawa Valley. |
| August 12 or 13: | Atlantic Coastal Plain species in Muskoka. |
| August 26 & 27: | Walpole Island. |
| September 9 & 10: | Highlands of Hastings with a Bryophyte theme. |
| September 17: | Feversham Gorge. |

**FIELD BOTANISTS OF ONTARIO NEWSLETTER**

Published quarterly by the FBO. Botanical information, reports of field events, newsworthy items and any correspondence should be sent to the newsletter committee:

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**58 Fairmeadow Ave.**
**WILLOWDALE,**
**Ontario, M2P 1W7**
**Tel: (416)-223-6284**

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**THORNDALE,**
**Ontario, N0M 2P0**
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The FBO is a non-profit organization founded in 1983 for those interested botany and conservation in the province of Ontario.

For further information contact:

**Doug Geddes (President)**
**45 Massey Street**
**BRAMALEA,**
**Ontario, L6S 2V8**
**Tel: (416)-792-0451**

## PART OF WAINFLEET BOG PRESERVED

The Ministry of Natural Resources announced recently that 207 hectares or 20 percent of the Wainfleet Bog has been purchased from the Erie Peat Company.

The bog, about two kilometres west of Port Colborne and two kilometres north of Lake Erie, is considered an important natural area in the Niagara Peninsula. It covers more than 1,000 hectares, is the fourth largest bog south of the Precambrian Shield and the most southerly bog complex in Ontario.

It is a unique wetland complex in the Niagara area and for that reason the MNR designated the bog as an Area of Natural and Scientific Interest (ANSI) in 1983.

As a matter of historical interest peat extraction from the bog began in the late 1800's, peaked between 1945 and 1958 and has been declining in recent years.

The Ministry points out that the bog has been extensively studied by the scientific community, particularly the Institute of Urban and Environmental Studies at Brock University in St. Catherines. Scientific activity is expected to increase now and groups from the Universities of Western Ontario, Guelph, and Waterloo will likely work in the bog.

## BOOK REVIEW

**Lotschert, Wilhelm & Gerhard Beese (1988) Collins Guide to Tropical Plants. Collins.**

What do *Ananas sativus*, *Citrus deliciosa*, *Cyperus papyrus*, *Dendrocalamus giganteus*, *Ficus aoa*, *Manihot esculenta*, *Monstera deliciosa*, *Oryza sativa*, *Rhizophora mangle*, *Saccharum officinarum*, *Victoria amazonica*, *Yucca elephantipes* and *Zingiber officinale* have in common? The answer is that they, along with an additional 312 plants and 272 accompanying colour photographs, are all described in great detail in this new field guide. In case you were curious the common names of the above are Pineapple, Tangerine, Papyrus, Giant Bamboo, Samoan Fig, Tapioca, Devil's Ivy, Rice, Red Mangrove, Sugar Cane, Royal Water-Lily, Spineless Yucca, and Ginger.

The publication of this book fills a void which has been very apparent to anyone with an interest in botany who happens to be in a tropical country. Various booklets such as "Fifty Common Trees of Hawaii" or "East African Flowering Shrubs" might be picked up at the airport, but these were very incomplete and relevant to only one locality. This book covers not only the spectacular and colourful ornamentals but also the economic plants. In addition to a botanical description the systematic relationships of each plant are given, together with the meaning of its name, its flowering time, origin, distribution and ecological requirements.

Perhaps the most interesting part of the book is the discussion of the economic plants. Here details of their use and an account of their distribution and production are provided. For example, the treatise on Bananas (Plantains) *Musa* spp., discusses the history, varieties, cultivation and production per country. (Did you know that the leaf of *Musa ingens* can be up to 15 meters long?).

As a field guide the photographs alone make the book worth the price. The quality of reproduction is excellent. As might be expected, the photographs are dominated by bright tropical colours - reds, greens and blues. Simply by reviewing the photographs it becomes possible to identify many plants which hitherto were familiar, but of unknown name. From one trip to Allen Gardens to the next trip to the Caribbean we may forget whether we are looking at an *Anthurium*, Crown-of-Thorns, *Heliconia*, Bird-of-Paradise, or Flame of the Woods but this book is able to provide the answer readily and may even be used as a check-list. The colour photographs really are a joy to study and should enable a casual tourist to identify a wide variety of plants. To a naturalist and a tropical traveller as well as a professional botanist, this book may become indispensable.

George Bryant

## HONOUR ROLL OF ONTARIO TREES

This is an annual publication prepared by the Ontario Forestry Association. Since the Honour Roll started in 1967 it has enjoyed extensive volunteer input by professional foresters as well as individuals with an interest in Ontario trees.

The project was launched in Centennial year with an appeal for help from the general public. They responded with an overwhelming number of letters, photographs, measurements and newspaper clippings. For ten years (1973 to 1983) FBO and OFA member Albert Butwick computed the nominations and personally went out to measure many of these trees.

To obtain entry in the Honour Roll a tree has to be of significant size - generally one of the three largest of that species in the province. A consistent rating system was devised which assigns a certain number of points to each tree based on the diameter at breast height and the height. According to this system, the largest tree in Ontario is an American sycamore (*Platanus occidentalis*) growing on the banks of the Sydenham River just south of the town of Alvinston in Lambton County. This tree has a dbh of 263 centimetres, a height of 29.9 metres and was accorded a point total of 786. By contrast, the smallest tree attained only 2 points. It is a wild plum (*Prunus americana*) with a diameter of 7.5 centimetres, and a height of 3 metres. It is located somewhere in Seneca Township, Haldimand-Norfolk Region and was nominated by W.A. Gilmour in 1982.

Between the largest and the smallest species there are a great number of interesting and unusual records. Since the climate in southern Ontario accommodates a wider variety of tree species, most of the 170 plus entries are concentrated here. Perhaps because of its long history and quiet development, the small town of Niagara-on-the Lake can lay claim to six large trees. These include a 31.4 metre high white ash at 407 King Street, a 14 m Ohio buckeye at 1122 Lakeshore Road, and a 24.2 m European white willow on Johnson Street.

The publication is split into three parts: Trees Native or Naturalized in Ontario, Noteworthy Exotic Trees and Trees of Special Interest. This last section is the most recent and perhaps the most interesting. It includes the Newton Apple - a descendant of that famous tree in England, the Macintosh Apple in Dundela - the only known grafts of the original tree, and the Muir Maple - the tree that inspired Alexander Muir to compose "The Maple Leaf Forever". Other unusual trees include two sugar maples grafted together at a height of 3.6 metres, two eastern white pines joined together by the fusion of two branches at a height of 7.6 metres and the "Octopus Tree" - a peculiar sugar maple which has developed a profusion of large branches from the lower stem many of them bending into the earth and emerging a few metres away!

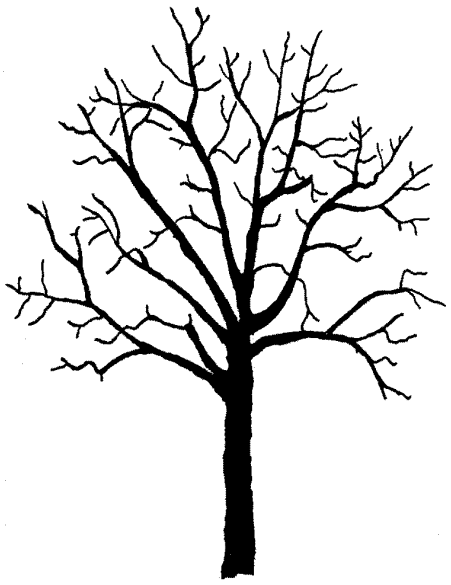
It is the goal of the Ontario Forestry Association to publish an illustrated book of the Honour Roll of Ontario Trees that would parallel the companion treatises from other provinces - Great Trees of New Brunswick, Alberta and Manitoba. Ultimately the goal is to produce a hardbound illustrated compendium of the large trees of Canada.

As interest develops in the Honour Roll, it is hoped that future edi-

tions will provide more precise locations and more entries. For now tree enthusiasts have the challenge of locating some of the trees on the Honour Roll. The tallest tree in Ontario is a 45 metre white pine somewhere in Haliburton County and the rarest tree may be a 26 metre high Chestnut in Burford Township, Brant County. Fortunately not all locations represent a challenge. The largest eastern red cedar is located at 873 Montgomery Drive, Ancaster, the broadest black oak at 116 Sherman Street, Kingsville and for fans of Norway maples, the biggest one in the province is in the front yard at 95 Hincks Street, St. Thomas.

Further information about the Honour Roll of Ontario Trees or about other programmes of the Ontario Forestry Association can be obtained by writing to:

**Ontario Forestry Association**
**150 Consumers Road, Suite 209**
**WILLOWDALE, Ontario, M2J 1P9**



## MNR RESPONDS TO FBO AGM QUERIES

As a result of questions raised by FBO members at our annual general meeting in Dorset this spring, President Doug Geddes received a letter from Mr. Paul King, Program Coordinator of the Crown Land as a Development Tool project of the Ministry of Natural Resources. In part, his letter states:

"I discussed your proposal regarding the appointment of representatives of your organization to the six primary development area's implementation teams with the CLADT program's steering committee. I regret to advise you it has been decided at this time that due to the size of these teams, the membership will not be expanded further.

"However, this is not to suggest that organizations such as yours do not have a role to play in commenting on proposals for the development of Crown Land. Since proposed land uses are evaluated on a case-by-case basis through our district and regional offices, the Field Botanists of Ontario may wish to consider appointing a liaison person to each of the six primary development areas whose principal role would be to provide input into the review process. These persons should contact our district managers in the respective primary development areas to make further arrangements regarding their role."

Anyone interested should contact Doug Geddes for more information.



FIELD TRIP

## OUTING REPORTS

Our goal for this newsletter is to have a report of every F.B.O. outing. Ideally one of the participants (not the leader) would provide us with a short article (up to 500 words) on the expedition.

The report should include the date, location, name of leader, weather, number of people in attendance, places visited, and interesting areas and species. As well comments on trip highlights such as any surprises or amusing incidents are worth recording. Often there will be well deserved complimentary and appreciative remarks about the leader's contribution. We look forward to receiving members' reports just as we envy some of the experiences they relate.

## MANITOULIN ISLAND TRIP

Some 30 FBO members took advantage of the unique opportunity of spending 4 days in the field with John Morton and Joan Venn, authors of "The Flora of Manitoulin Island" with coloured illustrations by Don Gunn. (Available for $20.00 post free from the Department of Biology, University of Waterloo, N2l 3G1.)

John has been studying the area since 1976. He knows every plant, when and where they appear and disappear, and whether by wind, waves, bird or man. Having read the comprehensive and fascinating introduction, John's slide lecture was an ideal preparation for the survey of what has been called "The Great American Rendez-vous of Plants". The geology of the area consists of

limestone rocks overlying the granite and quartzite of the Precambrian Shield. The two types of limestone are the hard Silurian dolomite and the softer, older Ordovician limestone both of which have been scoured by glaciers. The the climate is greatly influenced by the area being in a continental interior and in the centre of the huge Great Lakes System. The rich vegetation results from the interaction of climate, geology and the varied habitats eg. shoreline, forest, grassland, wetland, rocky areas, cliffs, disturbed and cultivated lands. Prof. Morton arranged an itinerary that had us visit eleven sites from the top of the Cup and Saucer Bluffs to the bog-fen-cedar swamps of Misery Bay.

We did not see all the 1167 recorded species, it only seemed that way as we moved through each area at a comfortable pace. An interesting statistic is that Manitoulin has representatives of 28% of the flora of Canada in an area occupying only 0.028% of the country.

Prof. Morton identifies 9 floristic regions listed as follows:

1. The Northern Mixed Forest Element
2. The Great Lakes Element
3. The Boreal Forest Element
4. The Eastern Deciduous Forest Element
5. The Prairie Element
6. The Western or Cordilleron Element
7. The Arctic Element
8. The Maritime Element
9. The Alien Element

The flora belonging to the Prairie, Western and Maritime Elements gave us more examples of what Tony Reznicek showed us at the recent Annual General Meeting in Dorset.

Of the species confined to the Great Lakes we saw Ohio goldenrod (*Solidago ohioensis*), Pitcher's thistle (*Cirsium pitcheri*), Hill's thistle (*C. hillii*), Manitoulin gold (*Hymenoxis acaulis* var *glabra*) and fringed gentian (*Gentianopsis virgata*). We saw the maritime sea arrow grass (*Triglochin maritime*). Other standouts were western rock cress (*Arabis holboellia*) (a western disjunct), glabrous fruited whitlow grass (*Draba glabella*), cut leaf germander (*Tuecrium bodrys*), the rare green spleenwort (*Asplenium viride*), wall rue (*Asplenium ruta-muraria*) the only recorded downy mint (*Mentha dumentorium*) in North America, purple cliff brake (*Pellaea atropurpurea*), pale plantain (*Plantago rugellii*), grass of Parnassus (*Parnassia glauca*) small grass of Parnassus (*P. parviflora*), and the rare sedge *Carex richardsonii*.

Ted Rosen

## NEW SITES FOR WALL-RUE

Wall-rue (*Asplenium ruta-muraria*) is considered rare in Canada. The Atlas of Rare Vascular Plants in Ontario shows seven existing stations. Two are on Manitoulin Island and five are at the top of the Bruce Peninsula. It is a small fern belonging to the same genus as green, maidenhair and ebony spleenworts (*Asplenium viride*, *A. trichomanes*, and *A. platyneuron*) and occurs on cliffs and in crevices of very dry limestone rocks.

We understand that not one, but perhaps two, new stations were located for this much sought after plant this summer. Although the precise locations are not known, it is understood that one is near Warsaw and the other is somewhere near Big Rideau Lake. At this rate perhaps other rocky gorges in Grey or Bruce county may also harbour this secretive cliff-dweller.

## *ARETHUSA* IN NORTHWOOD BOG

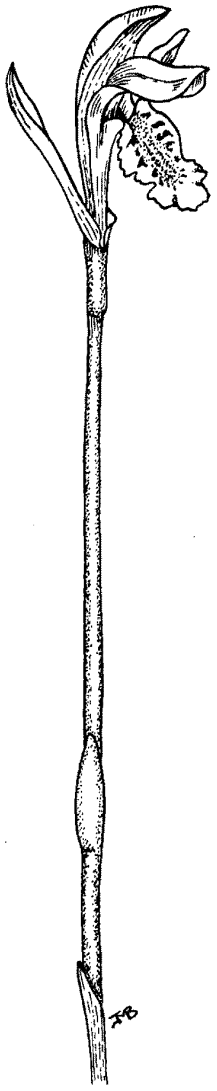
Located near Thunder Bay, this bog has long been renowned as a botanist's delight. It possibly rivals Purdon Conservation Area in terms of a profusion of orchids. In the case of Northwood Bog however, the abundant orchids are not showy lady's slippers (*Cypripedium reginae*), but dragon's mouth (*Arethusa bulbosa*). In early July this spectacular orchid covers the bog like a pink carpet.

*Arethusa* is one of our most spectacular native orchids - rivalling or even surpasing calypso (*Calyoso bulbosa*) in this honour.

## WHAT'S NOT IN A NAME?

Why is it that North American names for natural hot spots are so pedestrian? Among the best we can offer are Alfred Bog, Bruce Peninsula, Axe Lake, Minesing Swamp and Carden Alvar. Compare these to some of the delights of the English country-side. Names such as Rutland Waters, Norfolk Broads, Wicken Fen, Ouse Washes, Eye Brook Reservoir, Hornsea Mere, Dinton Pastures, Sevenoaks Gravel-Pits, and Leighton Moss slip trippingly off the tongue. These place names are so visual and evocative that they may go part of the way to explaining why the British have been successful in preserving a lot of their country-side.

Perhaps we should be taking a second look at some of the informal place names being given to developing natural areas before they become completely accepted through popular usage?



*Arethusa bulbosa*

## REMINDER!!!! MEMBERSHIP RENEWALS

**It is now time to renew your FBO membership for 1989 if you have not already done so. Enclosed is a membership questionnaire (either with or without a renewal notice) and a membership application. Please fill in the questionnaire and return it as soon as possible. Give the membership application to a friend who wants to join the FBO. You must be an FBO member to attend the outings.**