

FIELD BOTANISTS OF ONTARIO

ISSN: 1180-1417



Erythronium americanum

NEWSLETTER

Spring 1993
Volume 6(1)

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UPCOMING FIELD EVENTS

**A CALENDER FOR FIELD TRIPS IN 1993
AND A REGISTRATION FORM FOR ALL EVENTS
IS ENCLOSED WITH THIS NEWSLETTER**

Numbers are limited on all field trips. Register early to avoid disappointment.
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The FBO Annual General Meeting for 1993 is planned for the weekend of September 25-26 at the Royal Botanical Gardens in Hamilton. Further details will be announced in the next newsletter.

**NEWSLETTER**

Published quarterly by the FBO
ISSN: 1180-1417

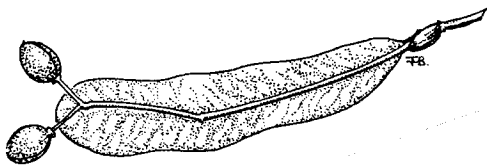
The FBO is a non-profit organization founded in 1984 for those interested in botany and conservation in the province of Ontario.

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FBO NEWSLETTER DRAWINGS

Drawings in this issue of the FBO Newsletter are by Jane Bowles and Christine Kampny.

We are always looking for illustrations for the Newsletter. If you have some drawing skills and would like to make a contribution please send black and white line drawings (no half tones please) to the editor. You do not have to send originals so long as the copy is clean and clear. All published drawings will be acknowledged.



FBO BY-LAW CHANGES

At a recent executive meeting the objectives of the FBO, as stated in Article 2 of the Constitution, were updated. The new objectives are very similar to the previous ones in content, but are worded slightly differently. The new objectives, printed in the FBO promotion pamphlet, are:

- i) to provide opportunities for people to meet and pursue their interests in field botany,
- ii) to provide education in field botany,
- iii) to encourage the exchange of botanical information,
- iv) to increase knowledge and documentation of the flora of Ontario,
- v) to provide botanical expertise to the naturalist community.

All by-law changes will be submitted for ratification at our next general meeting to be held on September 25, 1993 at the Royal Botanical Gardens in Hamilton.

CHANGES TO THE FBO NEWSLETTER

In this issue of the FBO Newsletter we have made a number of small changes, which we hope will provide a better product.

We will now include a Volume and Issue number for each Newsletter. We are starting this volume as number 6 because the Newsletter has appeared regularly in its present format for the last 5 years. The use of a volume and issue number will allow published articles to be cited more precisely.

The FBO Newsletter now has a small editorial board. We are starting a new regular section called "RANGE EXTENSION NOTES" which we hope will provide interest to everyone and encourage contributions from active members. Mike Oldham has joined us as editor of the range extension notes. More information on this new section is given on page 9 as an introduction to the first two articles in this series. If you make any botanical finds of interest, such as new county records, please contribute them so that we can maintain an active column.

Bill Crins will now solicit and handle book reviews for the FBO Newsletter. We hope that by having an editor for reviews and new publications we can provide up to date information on the expanding North American botanical literature.

Jeff Warren will be helping with final proof reading to provide a safety net for the numerous typos and other bloopers which inevitably slip through the editorial fingers.

For the time being Jane Bowles continues as editor, collecting and compiling material and producing the final version.

The FBO Newsletter continues to rely on articles, comments and other contributions from members, so please continue to submit material.

JB

FIELD BOTANISTS OF ONTARIO
Statement of Revenue and Expenses

	January 1 - December 31, 1992		January 1 - December 31, 1991	
Bank balance previous period				\$ 4,070.41
REVENUE				
Memberships	2,726.00		3,156.00	
Field trips	2,075.00		2,085.30	
Workshops	840.00 (1)		700.00	
AGM	800.00		2,305.12	
Donations	638.00 (2)		28.00	
Publications	140.00 (3)		-	
Bank interest	93.77		97.00	
US exchange	35.16	7,347.93	44.39	8,415.81
		\$ 12,200.34		\$ 12,486.22
EXPENSES				
Field trips	1,194.85 (4)		742.35	
Honoraria	1,852.10 (5)		791.54	
Workshops			473.68	
AGM	411.11 (6)		2,968.81	
Newsletter	1,900.00 (7)		1,100.00	
President	299.40		155.78	
Vice President			840.82	
Membership			122.63	
Treasurer	18.07			
FON membership	100.00		100.00	
Trip insurance	315.00		315.00	
Bank charges	20.95	(6,111.48)	23.20	(7,633.81)
Bank balance		\$ 6,088.86 (8)		\$ 4,852.41

Notes:

1. R.O.M. Herbarium Workshop and Sedge Workshop at Erindale
2. Includes 2 life memberships (\$476)
3. Willow workshop materials. Refunds of \$70.00 outstanding
4. Includes phone calls, postage, photocopy, FAX, envelopes, food
5. Includes contributions of \$100 each to ROM and U. of T.
6. Includes \$28.84 from 1991 AGM
7. Newsletter account contained \$698.50 (June 19, 1992)
8. Outstanding cheques (13) for \$568.43

**WINTER BOTANY -
THE COLD, HARD FACTS**

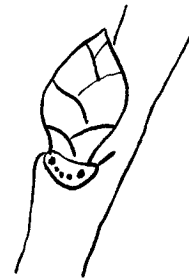
On November 29, 1992, Dr. Jim Eckenwalder, Professor in the University of Toronto, Department of Botany lead a group of stalwart botanists around Mount Pleasant Cemetery in Toronto to introduce them to the concept that trees and shrubs can still be identified in winter even without their leaves. Dr. Eckenwalder is a plant systematist specializing in the family Salicaceae, and the genus *Populus* in particular.

We met at 9:30 am at the cemetery, chosen because of the large number of species that have been planted. After a brief introduction by Deb Metsger, the FBO representative, Jim outlined the characters one can use to assist in the identification of plants in winter. He also mentioned that conifers were simple to identify in winter since they look the same as in summer (thanks for clearing that up, Jim). During the walk around the cemetery, we stopped at several trees and shrubs and Jim pointed out the characters one should observe to aid in the identification of each one.

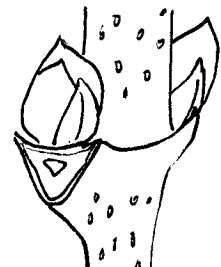
Characters to look at included: form or habit (branching patterns, overall shape of adult specimens, trunk shape), twig anatomy, twig colour and age, bark (smooth, peeling, wrinkled, etc.), residual fruit (if available - preferably not rotted or mummified), leaf scar shapes (at points of attachment to twig) and bundle trace patterns, buds and bud scales. The emphasis here was not to identify the specimen *per se* but to become sensitized to a whole new suite of characters which are generally ignored when looking at plants in the spring and summer.

Around lunch time, we went back to the Earth Sciences Centre of the University of Toronto, home of the Botany Department, for lunch and an afternoon of laboratory examination of twigs collected from several of the taxa observed that morning. Thanks go out to Deb Metsger for having hot coffee available, it was much appreciated.

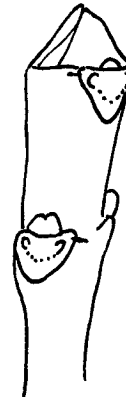
Once in the lab, armed with dissecting microscopes, we set about identifying the twigs to genus. Jim provided us with a "Winter Key to the Woody Plant Genera of Southern Ontario" by Trelease (1931) adapted by Jim for this field trip.



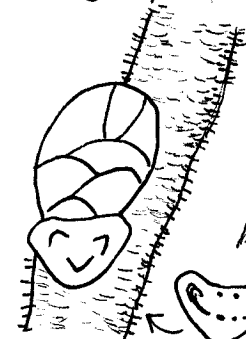
Ulmus



Symphoricarpus



Fraxinus

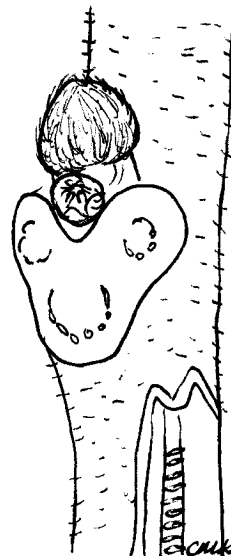


Corylus

key as "3 traces"



Pyrus



Juglans

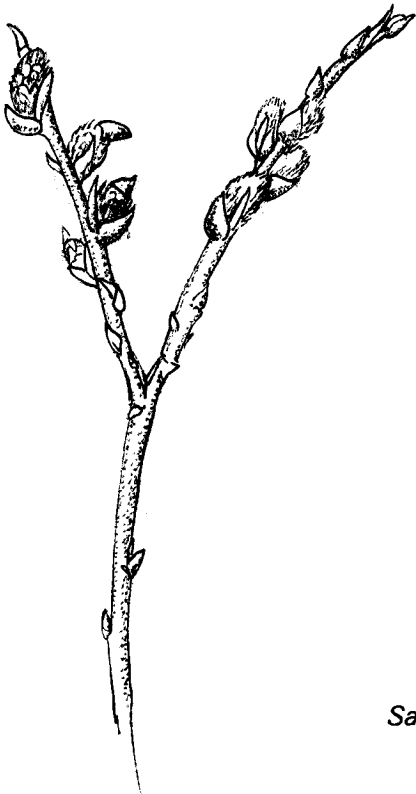
Apart from some discussions as to what constitutes a vascular bundle trace in the leaf scar (see accompanying drawings by Christine Kampny), the key worked reasonably well and most participants found themselves able to get the twig down to genus. Jim provided guidance when we found ourselves going astray and hints where necessary. Some of the taxa identified were *Cornus* (Dogwood), *Ulmus* (Elm), *Fraxinus* (Ash), *Corylus* (Hazel), *Pyrus* (Pear), and *Symphoricarpos* (Snowberry).

Overall, the field trip was extremely informative and enjoyable. If there was a take home message from this trip it would be that there are characters other than just leaf shape and size which will provide clues to the identification of a plant, and even when the leaves are there, these other characters should not be ignored. Our thanks to Dr. Jim Eckenwalder for leading the trip and sharing his insight with us.

Reference:

Trelease, W. 1931. Winter Botany, 3rd. Edition. Dover Publications Inc., N.Y.

Ken Barbour



Salix discolor

**WILLOW WORKSHOP MATERIALS
AVAILABLE**

These excellent materials were prepared by Dr. George Argus for the FBO Workshop in *Salix* identification held in June 1992 at Lake Opinicon.

Copies of the material are available at the unbelievably low price of just **\$10.00!** The materials consist of 93 pages which include:

- keys to pistillate and staminate specimens, including cultivated varieties
- an introduction to *Salix* morphology and a glossary of terms relevant to the genus
- descriptions and illustrations of the major southern Ontario species.

Order directly from:

Ilmar Talvila
12 Cranleigh Crt.
Etobicoke, Ontario
M9A 3Y3

Please enclose a cheque or money order for \$10.00 made out to

Field Botanists of Ontario

IN THE EYE OF THE BEHOLDER

In the early 80's the "sports" known as birding and wildflower listing were exciting new activities for my wife Dolores and me. They are still exciting, of course, but we no longer feel compelled to search the woods, fields, and marshes every weekend, regardless of the weather, as we once did.

On one Sunday afternoon in late July of 1982, we were driving on the country roads of Hillsdale County in southern Michigan, near the Lost Nation Conservation Area, listing blooming wildflowers, in spite of the fact that the heat and humidity were way above normal, even for that time of year. We came to an area, between a succession woods and a farmed field, where the ditch beside the road seemed to have an abundant number of blooming species. I pulled the car over to the side of the road and got out to have a closer look. While standing above the ditch with my ever ready pad and pencil in hand, I noticed a farm house several yards down the road. On the front porch sat a man in his 50's or early 60's and another man in his 20's or early 30's. They were obviously a farmer and his son. No problem there. My previous experiences with the down-to-earth, friendly folks of Hillsdale County gave me no cause to feel like an intruder.

Before I was finished recording the wildflower species before me, the younger man left the porch and started walking toward us. When the man came near I could gauge his size and suddenly became a bit apprehensive. He was huge! His powerful, well sculptured musculature was quite conspicuous because he wore no shirt or undershirt. Well worn working boots and a clean, faded pair of loose fitting jeans (not the too-tight, stylish, teenager's type jeans) were his only attire.

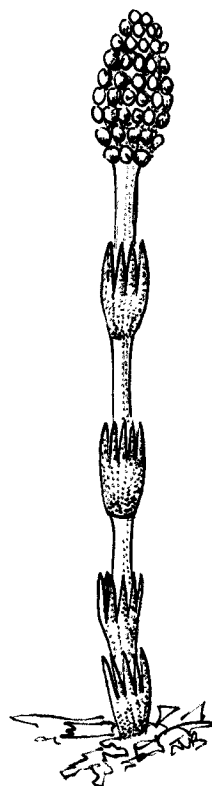
He had a farmer's tan. His hands and the lower part of his face were extremely dark; his forehead and forearms were only lightly tanned; and his upper arms, shoulders, and torso were nearly pure white, indications that he usually wore a hat and a long-sleeved shirt, which he may have occasionally rolled up at the sleeves. He was obviously a hardworking, no-nonsense man.

Although he appeared as if he could lick most wrestling tag teams single-handedly, he queried in a very polite, diffident, almost sheepish manner about the nature of our activities.

"We are seeing how many different kinds of wildflowers we can identify and list in one day," I explained, and showed him the note pad as evidence of my truthfulness.

No longer ill at ease, the gentle giant laughed heartily, while his blue eyes danced. "Oh," he said, "I thought that's what you were doing." Then he turned toward the porch, cupped his hands to his face, and shouted in a booming, baritone voice, "It's okay, Pa. They're just making a list of weeds!"

Kent Glauser



Equisetum arvense

RECENT PUBLICATIONS OF INTEREST TO FIELD BOTANISTS

Crowe, J. 1993. Checklist of the vascular plants of Thunder Bay District. Thunder Bay Field Naturalists, Thunder Bay, Ontario. 51 pp. \$2.00 from Claude Garton Herbarium, Lakehead University, 955 Oliver Road, Thunder Bay, Ontario P7B 5E1.

Contains 1009 species in 116 families, and revised and updated from a list prepared by Claude Garton and members of the Thunder Bay Field Naturalists in 1984.

★ ★ ★ ★ ★ ★ ★ ★

Higgins, V.J., S. Denzel and N. Fazari 1992. Plant communities of the Leslie Street Spit, beginners's guide. Friends of the Spit and the Botany Conservation Group, Department of Botany, University of Toronto. 41 pp. Available from Dr. V. Higgins, Department of Botany, University of Toronto, 25 Willcocks Street, Toronto, Ontario M5S 3B2.

Contains an introduction, history, community descriptions, maps, photographs and a checklist of plants.

★ ★ ★ ★ ★ ★ ★ ★

Haegy, A. (ed.) 1993. The Hamilton-Wentworth Natural Areas Inventory. The Hamilton Naturalists' Club. 2 Volumes, 500 pp. Available in May 1993. \$60.00 (incl. shipping and GST) from Wolfgang Luft, 5045-83 Pinedale Ave., Burlington, Ontario L7L 5J6. Please make cheques payable to the Hamilton Naturalists' Club.

Volume I contains the inventory summary, watershed summaries and species lists, including the first vascular plant checklist for Hamilton-Wentworth. Volume II contains the site summaries.

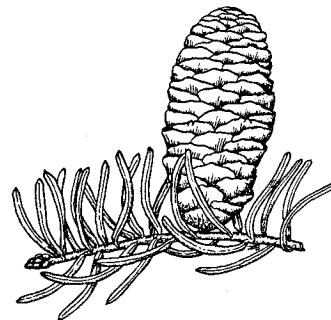
Lewis, J.C. (ed.) 1993 Guide to the natural history of the Niagara Region. Cam Lewis Enterprises, St. Catherines, Ontario. \$26.00 (incl. shipping and GST) from J.C. Lewis, Department of Biological Sciences, Brock University, St. Catherines, Ontario, L2S 3A1.

Includes chapters on the geology, glacial history, soils, palaeontology and archaeology of the Niagara Region as well as ferns, trees, vascular plants, fungi, protozoa, vertebrates (mammals, birds, fish, reptiles and amphibians) and several invertebrate groups from insects to rotifers.

★ ★ ★ ★ ★ ★ ★ ★

McKinney, L.E. 1992. A taxonomic revision of the Acaulescent Violets (*Viola*) of North America. Sida, Botanical Miscellany 7. 60 pp. \$10.00 US from Botanical Research Institute of Texas, 509 Pecan Street, Fort Worth, Texas, USA 76102. Phone (817)-332-441; FAX (817)-332-4112.

Ten species, two subspecies and four varieties are recognized in this treatment of the difficult stemless blue violets. Keys, range maps, descriptions and representative specimen citations are provided. Most of the taxa treated occur in Ontario.



NEW SECTION: RANGE EXTENSION NOTES

One of the things that motivates the field botanist is the potential for finding a new taxon for their county, favourite park, or other natural area. Every year F.B.O. members make exciting finds like these, and we would like to hear about yours. With this issue we are starting a new feature in the F.B.O. Newsletter on range extensions for Ontario plants. These notes will be simple and short, and, we hope, the sort of article that almost any F.B.O. member can contribute. The notes can be in point form or prose and should be sent to the newsletter editor, Jane Bowles. Mike Oldham and Bill Crins will be assisting Jane in compiling this section of the newsletter.

The following basic information should be included in a range extension note:

1. Scientific, common and family name of the plant.
2. Precise location of the record.
3. Collection and herbarium information. In general, range extensions should be supported by a specimen deposited in a recognized institutional herbarium. In some cases an identifiable photograph deposited in an institutional herbarium will suffice.
4. Collection date.
5. Significance of the record, e.g. new county record, etc. A map can be used to show the new record(s) in relation to previous records of the species.
6. Notes: this can include remarks on identification, local abundance, habitat, etc.

Elymus wiegandii (Poaceae) new to Middlesex and Elgin Counties, Ontario

Jane M. Bowles¹ and Michael J. Oldham²

¹R.R. #3, Thorndale, Ontario, NOM 2P0

²Ontario Ministry of Natural Resources, 353 Talbot Street West, Aylmer, Ontario, N5H 2S8

While conducting a life science inventory of the Thames River Floodplain Area of Natural and Scientific Interest (ANSI) (Bowles 1992), a large, wide-leaved grass resembling *Elymus canadensis* L. (Canada Wild-rye) was discovered. Although somewhat immature, the grass had some characteristics of *Elymus wiegandii* Fernald (Wiegand Wild-rye), a species not mapped from southwestern Ontario by Dore and McNeill (1980) (Figure 1). A specimen was sent to DAO (Agriculture Canada, Ottawa), where it was identified as *E. wiegandii* by Stephen Darbyshire.

A check of the University of Western Ontario (UWO) herbarium revealed a previous southwestern Ontario record filed under *Elymus canadensis*. This specimen was collected from along the Thames River in Elgin County by Bill Stewart in 1971.

Elymus wiegandii is most similar to *E. canadensis*, but it has wider leaves (15-19 mm, vs. usually < 15 mm in *E. canadensis*) which are finely hairy above (vs. glabrous in *E. canadensis*). Keys in Voss (1972) and Dore and McNeill (1980) can be used to distinguish these two grasses. *Elymus wiegandii* appears to be largely a grass of floodplains, while *E. canadensis* is most common on dry, sandy shores, although it sometimes occurs in prairies and along railways.

Dore and McNeill (1980) map this grass from eastern and northern Ontario (Figure 1), although Riley (1989) lists its presence in Peel, Simcoe, York, and Niagara-Haldimand (presumably Niagara, since it is not listed for Haldimand-Norfolk by Sutherland (1987)). *Elymus wiegandii* is considered rare in both central Ontario (Riley 1989) and southwestern Ontario (Oldham 1993)

Specimens

Ontario, **MIDDLESEX COUNTY**, Ekfrid Township, Thames River Floodplain ANSI, 8.0 km south of Melbourne Post Office, mouth of Gentleman Creek at the Thames River, UTM 547323 (map 40I/12), 25 July 1991, J.M. Bowles # JB/AYL/91.122 (DAO).

Ontario, **ELGIN COUNTY**, Dunwich Township, Lot 6, one colony along Thames River at Walker's Bridge, 29 August 1971, W.G. Stewart # 1678 (UWO).

Acknowledgements

We would like to thank Stephen Darbyshire (DAO) for identifying this and other grass collections, and James Phipps (UWO) for providing working space and access to the UWO herbarium.

Literature Cited

- Bowles, J.M. 1992. Thames River Floodplain Area of Natural and Scientific Interest (A.N.S.I.). Part II: The Inventory Report. Ontario Ministry of Natural Resources, Aylmer. vi + 152 pp.
- Dore, W.G. and J. McNeill. 1980. Grasses of Ontario. Monograph 26, Research Branch, Agriculture Canada, Ottawa. 566 pp.
- Oldham, M.J. 1993. Distribution and Status of the Vascular Plants of Southwestern Ontario. February 1993 DRAFT. Ontario Ministry of Natural Resources, Aylmer. xix + 150 pp.
- Riley, J.L. 1989. Distribution and Status of the Vascular Plants of Central Region, Ontario Ministry of Natural Resources. Parks and Recreational Areas Section, OMNR, Open File Ecological Report SR8902, Central Region, Richmond Hill, Ontario. xix + 110 pp.
- Sutherland, D.A. 1987. Annotated Checklist of the Plants of Haldimand-Norfolk. 152 pages in "The Natural Areas Inventory of the Regional Municipality of Haldimand-Norfolk. Volume II: Annotated Checklists". Norfolk Field Naturalists, Simcoe, Ontario.
- Voss, E.G. 1972. Michigan Flora. Part 1. Gymnosperms and Monocots. Cranbrook Institute of Science, Bloomfield Hills, and University of Michigan Herbarium, Ann Arbor. xv + 488 pp.

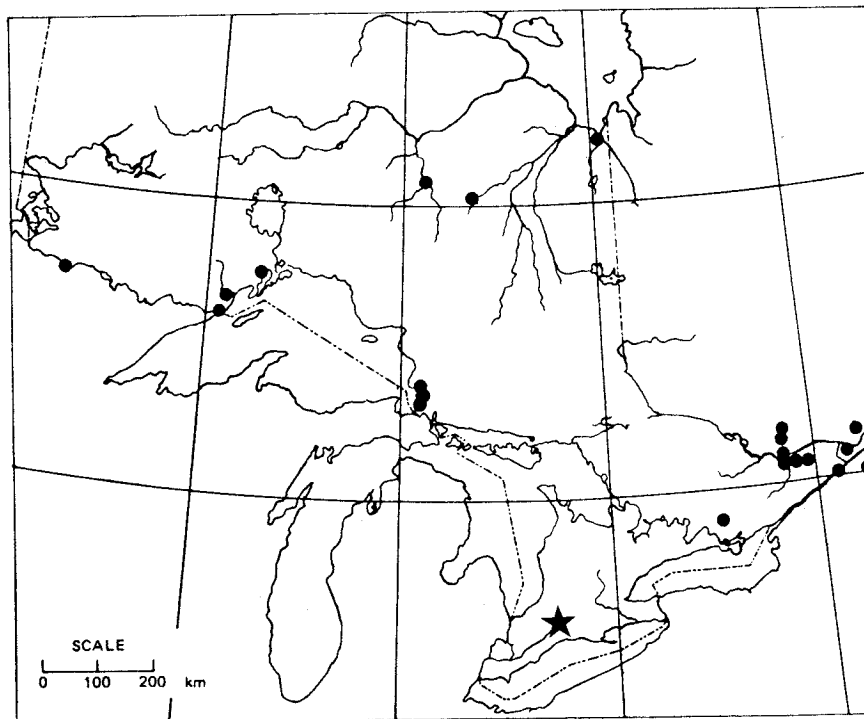


Figure 1: Range of *Elymus wiegandii* in Ontario. Adapted from Dore and McNeill (1980).

● previous records; ★ new locations reported here.

Note: The two new locations are not separated at this scale.

Leucospora multifida (Scrophulariaceae) new to Middlesex and Elgin Counties, Ontario

Michael J. Oldham¹ and Dave McLeod²

¹Ontario Ministry of Natural Resources, 353 Talbot Street West, Aylmer, Ontario, N5H 2S8

²92 Stroud Crescent, Unit 48, London, Ontario, N6E 1Y8

During the Field Botanists of Ontario fieldtrip to the St. Thomas Railway Yards in August 1992, a small member of the Scrophulariaceae, *Leucospora multifida* (Michaux) Nutt. (= *Conohea multifida* Michaux), was found (McShane 1993). This provincially rare plant (White & Maher 1983) is known as a native species in Ontario only on Pelee Island, where it grows primarily on alvars. One other colony is known in the province, at Middlemiss, Middlesex County, where a small population was discovered along the Canadian National railway in 1988 (Figure 1). Both populations away from Pelee Island are in highly disturbed situations, and were presumably introduced by railway traffic.

Specimens

Ontario, **MIDDLESEX COUNTY**, Ekfrid Township, Canadian National railway tracks at Middlemiss, small colony in gravel below railway tracks, 8 September 1988, M.J. Oldham # 8689 & M. Delisle-Oldham (CAN, MICH, TRTE).

Ontario, **ELGIN COUNTY**, Southwold Township, abandoned Chesapeake and Ohio railway yard, 3 km southwest of St. Thomas Post Office, uncommon in gravel of abandoned railway yard, 15 August 1992, M.J. Oldham # 14176 & F.B.O. fieldtrip (MICH, UWO).

Literature Cited

McShane, E. 1993. St. Thomas Railway Yards. Field Botanists of Ontario Newsletter, Winter 1992/93. Pages 10-11.
White, D.J. and R.V. Maher. 1983. *Leucospora multifida* (Michx.) Nutt. Scrophulariaceae. 1 page in "Atlas of the Rare Vascular Plants of Ontario. Part 2". National Museum of Natural Sciences, Ottawa. Looseleaf.

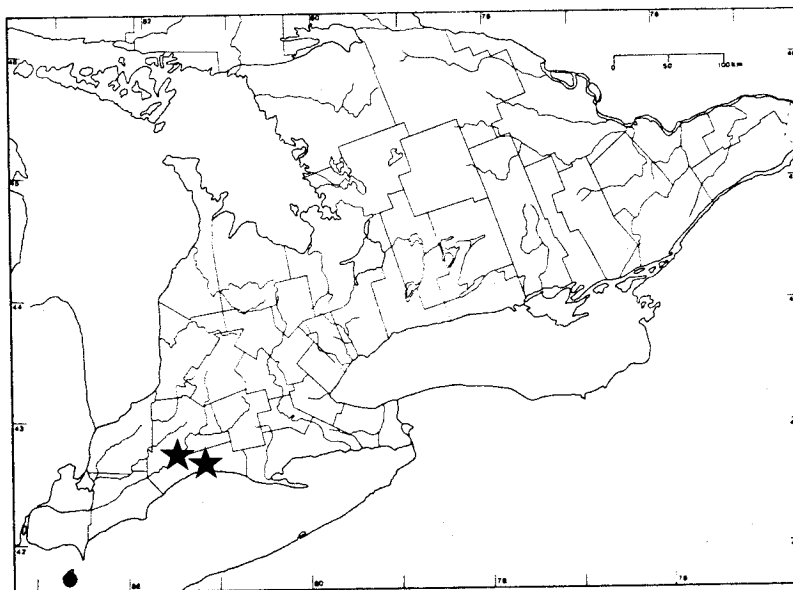


Figure 1: Range of *Leucospora multifida* in Ontario. Adapted from White and Maher (1983).
● previous records; ★ new locations reported here.

NEW PUBLICATIONS ON BRYOPHYTES AND LICHENS

Ireland, R. R. and L.M. Ley. 1992. Atlas of Ontario mosses. *Sylogues* 70. Canadian Museum of Nature. v + 138 pp. \$12.78 (Canadian) or \$15.95 (non-Canadian) from Canadian Museum of Nature, Direct Mail Section, P.O. Box 3443, Station D, Ottawa, Ontario K1P 6P4.

This volume contains 490 dot maps showing the known occurrence of moss species in Ontario.



Stewart, W.G. 1992. Mosses, liverworts and lichens of Elgin County, Ontario. Privately published by W.G. Stewart, St. Thomas, Ontario. Available from W.G. Stewart, 6 Yarwood Street, St. Thomas, Ontario N5P 2Y3.

The text is revised and updated from an article which appeared in *The Ontario Field Biologist* 30(2): 17-41. A total of 200 mosses, 41 liverworts and 79 lichens are listed.



Wong, P.Y. and I.M. Brodo. 1992. The lichens of southern Ontario, Canada. *Sylogues* 69. Canadian Museum of Nature. 79 pp. \$6.25 + \$2.50 from Canadian Museum of Nature, Direct Mail Section, P.O. Box 3443, Station D, Ottawa, Ontario K1P 6P4.

Treats 482 lichen taxa in 131 genera. Frequency, habitat, substrate and counties of occurrence are given for each taxon, as well as Taxonomic comments for many. Keys to species of some genera are also included to supplement or update the keys in Brodo's "Lichens of the Ottawa region".



Membership in the Field Botanists of Ontario includes subscription to the FBO Newsletter and the privilege of attending field trips and workshops. Annual Membership Fees are \$12.00 single and \$15.00 family.

Send applications for membership to:

W.D. McIlveen
Membership Chairman
R.R. #1, Acton, Ontario L7J 2L7