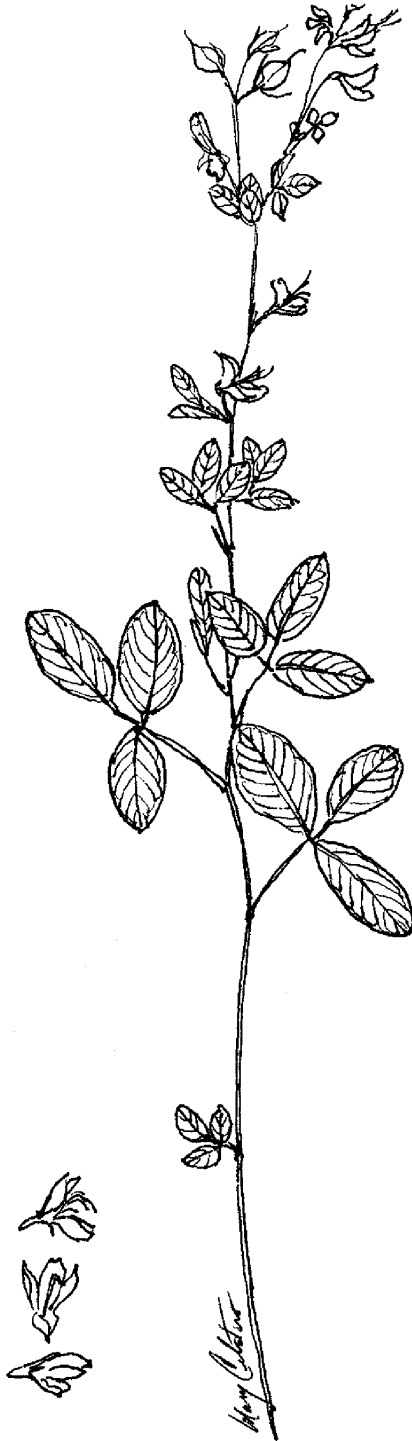


# Field Botanists Of Ontario

## Newsletter

Summer 2000  
Volume 13(2)

ISSN: 1180-1417



**Revenue and Expense Statement:**.....3

**Field Trip Report:**

Awenda Provincial Park (E. Morris).....3

**Feature:**

A Provisional List of the Mosses of Simcoe  
County, Ontario (F.S. Cook).....6

**Review:**

The Goldenrods of Ontario: *Solidago* L.  
and *Euthamia* Nutt. (Third Edition)  
(W. Buck).....9

**Notices:**

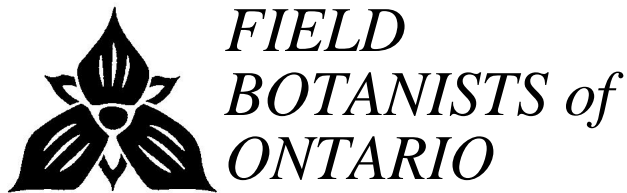
Invasive Plants: Information Request for  
Control and Monitoring Activities  
(E. Haber).....11

FBO Newsletter Volumes 1-12 to be  
Offered as a Package (E. Morris).....11

**More Almost Free Books for Review:**

The Flora of Manitoulin Island (Third Edition)  
(J.K. Morton and J.M. Venn) ..... 12

The Asters, Goldenrods and Fleabanes of  
Grey and Bruce Counties (Bruce-Grey  
Plant Committee)..... 12



**FIELD BOTANISTS OF ONTARIO 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.*

<b>President:</b>	Carole Ann Lacroix, 26 Toronto St., Guelph, Ont. N1E 3E2	(519) 824-3807 botcal@uoguelph.ca
<b>Vice President:</b>	Dirk Janas	(519) 827-1453
<b>Treasurer:</b>	Ilmar Talvila, 12 Cranleigh Crt., Etobicoke, Ont. M9A 3Y3	(416) 231-1752
<b>Secretary:</b>	Jeremy Lundholm	(519) 824-4120 ext. 6008
<b>Past President:</b>	Madeline Austen	(905) 854-4994
<b>Membership:</b>	Bill McIlveen, RR#1, Acton, Ont. L7J 2L7	(519) 853-3948 wmcilveen@aztec-net.com
<b>Field Trips:</b>	Tyler Smith, Royal Botanical Gardens, Box 399, Hamilton, Ont. L8N 3H8	(905) 527-1158 ext. 238 tsmith@rbg.ca
	Sarah Mainguy, RR#3, Guelph, Ont. N1H 6H9	(519) 822-5221 smainguy@ch2m.com
<b>Website:</b>	Kellie Bonnici	(705) 741-3061 kbonnici@home.net
<b>Newsletter Editor:</b>	Ed Morris, Box 2, Site 29, RR#3, Sudbury, Ont. P3E 4N1	(705) 522-9523 edmorris@ican.net
<b>Associate Editor:</b>	Michael J. Oldham	(705) 755-2160

The **deadline** for submissions for **Volume 13(3) - Fall 2000** is **October 14<sup>th</sup>, 2000**.

Standard source for scientific names of vascular plants:

Newmaster, S.G., A. Lehela, P.W.C. Uhlig, S. McMurray and M.J. Oldham. 1998. Ontario Plant List. Ontario Ministry of Natural Resources, Ontario Forest Research Institute, Sault Ste. Marie, Ontario. Forest Research Information Paper No. 123, 550 pp + appendices.



**Cover Illustration:**

Wand-like bush-clover (*Lespedeza intermedia* (S.Watson) Britton) by Mary Celestino. Drawn from the Stone Road Alvar on Pelee Island. The drawing on the left (South Shore, Pelee Island) was also drawn by Mary. ♣

**Editor's comments:**

I was unable to get this newsletter out on time for personal reasons: the death of someone close to me coincided with my beginning a new job with Ontario Parks (Northeast Zone). Not surprisingly then, this newsletter is a little late. ♣ -Ed

## Field Botanists of Ontario Revenue and Expense Statement

January 1 to December 31, 1999

	1999	1998
Bank balance beginning	5820.76	4992.92
<b>REVENUE</b>		
Membership	2423.00	2559.00
Field trips(1)	2063.00	1832.00
Workshop	269.00	0.00
A.G.M.	1350.00	1054.00
Donations(2)	208.00	237.00
Bank interest	9.73	9.33
U.S. exchange	<u>35.94</u>	<u>32.82</u>
	<u>6358.67</u>	<u>5724.15</u>
	12179.43	10717.07
<b>EXPENSE</b>		
Field trips	307.89	115.72
Workshop	235.40	0.00
Honorariums	1100.00	1050.00
A.G.M.-honoraria	300.00	600.00
A.G.M.	1231.83	1110.69
Newsletter(3)	1978.29	1417.13
President	0.00	13.10
Membership	55.63	0.00
Treasurer	24.79	26.67
Trip insurance	459.00	513.00
F.O.N.membership	<u>50.00</u>	<u>50.00</u>
	<u>(5742.83)</u>	<u>(4896.31)</u>
Bank balance ending	6436.60	5820.76

### NOTES

- (1) Includes trip refunds of \$437.00  
 (2) Trip leaders donated \$175.00 in honorariums.  
 (3) Newsletter account was \$700.00 at year-end.

## Field Trip Report:

### **Awenda Provincial Park**

It was a pleasantly sunny day on May 20<sup>th</sup>. We assembled near the main gatehouse at Awenda provincial park, near Penetanguishene on Georgian Bay. It had been an early spring; the leaves on most trees had already fully expanded, and only a few trilliums (*Trillium grandiflorum* (Michx.) Salisb. and *T. erectum* L.) held rather faded petals. Our leader, Anton (Tony) Reznicek had arrived early, and had just finished a private walk-and-stretch session when I arrived. Eventually we were joined by a full compliment of participants, and we made our way down 'the bluff' to a

lower parking lot.

Thousands of years ago, this bluff rose up above the shore of post-glacial lake Algonquin. Our first area to begin botanizing was the former beach below the bluff. Here we found a stoney terrain: the finer material had been washed away by ancient waves. Occasionally, we would find larger glacial erratics too, some as big as half-ton trucks. The former beach was dominated by Sugar Maples and Beech, and the dominant understory plants were trilliums. Tony pointed out the extensive browsing damage that deer had caused to the trilliums, and explained that in some southern parks where deer populations are not limited by hunting or predators, trilliums have all but disappeared. He also explained that one or two seasons of browsing (or picking for that



**Left:** Former beach of post-glacial Lake Algonquin; now colonized maple-beech forest. Note the cluster of large glacial erratics. **Right:** Current beach of Lake Huron. There are large glacial erratics on this beach too. Photos by Ed Morris.

matter) would not kill a trillium plant, although the bulb would get progressively weaker with each browsing event.

We soon began noticing other forest floor species here as well, some of which were approaching the northern limits of their ranges. Blue Cohosh (*Caulophyllum giganteum* (Farw.) Leconte & Blackwell) had all but finished flowering, and Tony explained that this species flowers when its leaves are still folded, whereas the more southern *C. thalictroides* (L.) Michx. (also called Blue Cohosh) blooms after the leaves have expanded. We also encountered:

*Allium tricoccum* Ait.  
Wild Leek

*Anemone acutiloba* (DC.) G. Lawson  
Sharp-lobed Hepatica

*Arisaema triphyllum* (L.) Schott  
Jack-in-the-pulpit

*Hydrophyllum virginianum* L.  
Virginia Water-leaf

*Streptopus roseus* Michx.  
Rose Twisted-stalk

There was much feathery foliage of *Dicentra* in the area. We later found flowers to confirm that Squirrel-corn (*Dicentra canadensis* (Goldie) Walp.) was indeed present. Dutchmen's Breeches (*Dicentra cucullaria* (L.) Bernh.) may have been present as well, but no flowering specimens were found.

As we approached the bluff, we encountered what appeared to be a stream flowing down the hillside. Tony

explained that the stream was actually a spring which flowed 'out' of the hillside. Apparently, the remains of a Huron settlement exists at the top of the bluff, and it is believed that it was the same settlements visited and described by the well known Jesuit Jean Brébeuf. Near the stream were two types of Toothwort: Two-leaved Toothwort (*Cardamine diphylla* (Michx.) Alph. Wood) and Hybrid Cress (*Cardamine x maxima* (Nutt.) Alph. Wood). The other parent of the hybrid, Cut-leaved Toothwort (*Cardamine concatenata* (Michx.) Schwein.), was encountered later.

Not far from the spring, we found a large glacial erratic upon which several forest floor species had established. Some of which were Dewey's Sedge (*Carex deweyana* Schwein.), Squirrel Corn, and Jack-in-the-



Plantain-like Sedge (*Carex plantaginea* Lam.), photo by Ed Morris.



Three types of toothworts. **Left:** *Cardamine diphylla* (Michx.) Alph. Wood. **Middle:** *Cardamine x maxima* (Nutt.) Alph. Wood. **Right:** *Cardamine concatenata* (Michx.) Schwein.). Photos by Ed Morris.

pulpit. A discussion ensued on the dispersal of Jack-in-the-pulpit, and it was decided that squirrels must be instrumental in the dispersal of their fruits. We stumbled a little further through the woods and met with an official trail. Along the side of the trail we found several specimens of the very elegant Northern Maidenhair Fern (*Adiantum pedatum* L.). The trail turned into a stairway and as we ascended the bluff, we encountered the aforementioned Cut-leaved Toothwort, as well as a the unique Plantain-like Sedge (*Carex plantaginea* Lam.) with its wide, light green, thin, rather short leaves: very atypical of a *Carex*. Tony related that he had seen this species used in an European botanical gardens as an unique edging plant.

At the top of the bluff, the forest was noticeably drier and brighter. We found more Striped Maple (*Acer pensylvanicum* L.) than in the lower woodlands; the upland trees were more likely to be retaining a few remaining blooms. Tony explained that while there are many species of striped maples in asia, there is only one in North America. Not far away were Woolly Sweetcicely plants (*Osmorhiza claytonii* (Michx.) C.B. Clarke). Tony explained that the foliage of this species has a carrot-like odour when crushed, while Anise Root (*O. longistylis* (Torr.) DC.), which occurs locally in the area, has a strong licorice odour.

As we looped back to the parking lot, our group became more spread out. Presumably, those who walked the fastest had skipped breakfast. As we linked up with the main road, Tony noted that the park operators had been dumping leaves along the shoulders as a way to control Poison Ivy (*Rhus vernix* L.). Earlier attempts to control it using herbicides (most likely glyphosate) may have actually contributed to its

persistence, since it would have been less sensitive to the herbicide that potentially competitive species. Smothering the road shoulders with leaves appears to be chemical free way of controlling poison ivy, but it also smothers native forest species. However, along the roadsides we did see Canada Violet (*Viola canadensis* L.), Rattlesnake-root (*Prenanthes* sp.), and Mitrewort (*Mitella diphylla* L.). We also noted how few alien species had colonized the roadsides and other disturbed areas within the park.

We moved our vehicles to another parking lot and headed across Methodist Point (an ironic name, considering the past and present French-Catholic presence in the area), to quieter beach for lunch. Our walk brought us past two showy plants: Painted Trillium (*Trillium undulatum* Willd.), which is typically found on the Canadian Shield, and the small, purple Gaywings (*Polygala paucifolia* Willd.).

For our final destination of the day, we drove around



Seaside Arrow-grass (*Triglochin maritimum* L.), photo by Ed Morris.

to the east-most shore of the park. After walking through some mature cedars, we arrived on a stoney beach. The majority of the stones were medium-sized glacial eratics laid over limestone bedrock. We encountered a interesting assortment of alvar, fen, and shoreline plants in the same location. Pitcher plants (*Sarracenia purpurea* L.), Sundews (*Drosera* spp.) were found with Shrubby Cinquefoil (*Potentilla fruticosa* L.), Indian Paintbrush (*Castilleja coccinea* (L.) Spreng.), and Seaside Arrow-grass (*Triglochin maritimum* L.).

A small stream flowed out from the treed fen and onto the stoney beach. Near the tree line we found:

*Caltha palustris* L.  
Marsh Marigold

*Kalmia angustifolia* L.  
Sheep Laurel

*Primula mistassinica* Michx.  
Bird's-eye Primrose

*Rhamnus alnifolia* L'Hér  
Alder-leaved Buckthorn

We also discovered a Red-spotted Newt in this area. There were a few mosses close to the stream. Judy Hernandez directed our attention to an unique looking moss with long, delicate, unbranched shoots. I collected a small piece and had it identified (*Calliergonella cuspidata* (Hedw.) Loeske) by FBO member Peter Beckett (now curator of both the vascular and non-vascular collections at SLU).

On the beach, amongst the stones, we recognized Three-square bulrushes (*Scirpus pungens* M.Vahl) from



Sterile Sedge (*Carex sterilis* Willd.). Photo by Ed Morris.

last season's stems, as the new growth was typically less than 10 cm. Tony pointed out a particularly handsome specimen of Sterile Sedge (*Carex sterilis* Willd.), growing in the middle of a large puddle.

We could have spent our entire day at this location, which is probably why Tony took us here last. We had excellent weather, and both the leader and participants were energetic and patient. It was a very memorable trip to a very interesting corner of Ontario. 🌿

Ed Morris

## Feature:

### **A Provisional List of the Mosses of Simcoe County, Ontario.**

F.S. Cook

The following list of mosses is derived from two sources: those listed for Simcoe County in the Checklist of Ontario Mosses by Robert R. Ireland and Roy F. Cain. National Museums of Canada Publications in Botany No. 5. Ottawa. 1975 and those collected by the author to date. The former are indicated in the list by IC, the latter by FC. Those specimens collected by the author are in his herbarium.

Names follow two publications: List of the Mosses of North America North of Mexico by L.E. Anderson, H.A. Crum and W.A. Buck (*The Bryologist* 93(4), 1990). A Checklist of *Sphagnum* in North America North of Mexico by L.E. Anderson (*The Bryologist* 93(4), 1990).

The Simcoe list of 208 species is provisional because further field work and a search of other herbaria will almost certainly discover new species. The genera are listed in alphabetical order.

<i>Abietinella abietina</i> (Hedw.) Fleisch.	IC FC
<i>Aloina brevirostris</i> (Hook. & Grev.) Kindb.	IC
<i>Amblystegium</i>	
<i>serpens</i> (Hedw.) B.S.G.	IC FC
<i>varium</i> (Hedw.) Lindb.	IC FC
<i>Anomodon</i>	
<i>attenuatus</i> (Hedw.) Hub.	IC FC
<i>minor</i> (Hedw.) Furnr.	FC
<i>rostratus</i> (Hedw.) Schimp.	IC FC
<i>viticulosus</i> (Hedw.) Hook. & Tayl.	IC FC

<i>Atrichum</i>		<i>Cirriphyllum piliferum</i> (Hedw.) Grout	FC
<i>altecristatum</i> (Ren. & Card.) Smyth & Smyth	FC		
<i>oerstedianum</i> (C. Mull.) Mitt.	FC	<i>Climacium</i>	
<i>tenellum</i> (Rohl.) B.S.G.	FC	<i>americanum</i> Brid.	IC
<i>Aulacomnium palustre</i> (Hedw.) Schwaegr.	IC FC	<i>dendroides</i> (Hedw.) Web. & Mohr	IC FC
<i>Barbula</i>		<i>Conardia compacta</i> (C. Mull.) Robins.	FC
<i>convoluta</i> Hedw.	IC FC	<i>Cratoneuron filicinum</i> (Hedw.) Spruce	IC FC
<i>unguiculata</i> Hedw.	IC FC	<i>Cyrto-hypnum minutulum</i> (Hedw.) Buck & Crum	FC
<i>Bartramia pomiformis</i> Hedw.	IC FC	<i>Desmatodon obtusifolius</i> (Schwaegr.) Schimp.	FC
<i>Brachythecium</i>		<i>Dicranella</i>	
<i>acuminatum</i> (Hedw.) Aust.	FC	<i>heteromalla</i> (Hedw.) Schimp.	IC FC
<i>calcareum</i> Kindb.	IC FC	<i>varia</i> (Hedw.) Schimp.	FC
<i>campestre</i> (C. Mull.) B.S.G.	FC	<i>Dicranum</i>	
<i>oedipodium</i> (Mitt.) Jaeg.	FC	<i>flagellare</i> Hedw.	IC FC
<i>oxycladon</i> (Brid.) Jaeg.	IC FC	<i>fulvum</i> Hook.	FC
<i>populeum</i> (Hedw.) B.S.G.	IC FC	<i>montanum</i> Hedw.	FC
<i>reflexum</i> (Starke in Web. & Mohr) B.S.G.	IC FC	<i>ontariense</i> Peters.	FC
<i>rivulare</i> B.S.G.	FC	<i>polysetum</i> Sw.	IC FC
<i>rutabulum</i> (Hedw.) B.S.G.	IC FC	<i>scoparium</i> Hedw.	IC FC
<i>salebrosum</i> (Web. & Mohr) B.S.G.	IC FC	<i>undulatum</i> Brid.	FC
<i>turgidum</i> (Hartm.) Kindb.	IC	<i>Didymodon</i>	
<i>velutinum</i> (Hedw.) B.S.G.	IC FC	<i>fallax</i> (Hedw.) Zand.	FC
<i>Brotherella recurvans</i> (Michx.) Fleisch.	FC	<i>rigidulus</i> Hedw.	FC
<i>Bryhnia</i>		<i>Distichium capillaceum</i> (Hedw.) B.S.G.	FC
<i>graminicolor</i> (Brid.) Grout	FC	<i>Ditrichum</i>	
<i>novae-angliae</i> (Sull. & Lesq. in Sull.) Grout	IC FC	<i>flexicaule</i> (Schwaegr.) Hampe	FC
<i>Bryoerythrophyllum recurvirostre</i> (Hedw.) Chen	FC	<i>lineare</i> (Sw.) Lindb.	FC
<i>Bryohaplocladium</i>		<i>pusillum</i> (Hedw.) Hampe	IC FC
<i>microphyllum</i> (Hedw.) Wat. & Iwats.	FC	<i>Drepanocladus</i>	
<i>Bryum</i>		<i>aduncus</i> (Hedw.) Warnst.	IC FC
<i>algovicum</i> Sendtn. ex C. Mull.	FC	<i>capillifolius</i> (Warnst.) Warnst.	IC
<i>argenteum</i> Hedw.	FC		
<i>caespiticium</i> Hedw.	IC FC.		
<i>flaccidum</i> Brid.	FC		
<i>lissae</i> De Not. var. <i>cuspidatum</i> (B.S.G.) Marg.	FC		
<i>pseudotriquetrum</i> (Hedw.) Gaertn. et al.	IC FC		
<i>Callicladium haldanianum</i> (Grev.) Crum	IC FC		
<i>Calliergon</i>			
<i>cordifolium</i> (Hedw.) Kindb.	IC FC		
<i>giganteum</i> (Schimp.) Kindb.	IC FC		
<i>richardsonii</i> (Mitt.) Kindb. in Warnst.	FC		
<i>Calliergonella cuspidata</i> (Hedw.) Loeske.	IC FC		
<i>Campylium</i>			
<i>chrysophyllum</i> (Brid.) J. Lange	IC FC		
<i>hispidulum</i> (Brid.) Mitt.	IC FC		
<i>polygamum</i> (B.S.G.) C. Jens.	FC		
<i>stellatum</i> (Hedw.) C. Jens.	IC FC		
<i>Ceratodon purpureus</i> (Hedw.) Brid.	IC FC		



Photo by Ed Morris.

<i>Encalypta procera</i> Bruch.	IC FC	<i>Leptodictyum humile</i> (P. Beauv.) Ochyra	IC FC
<i>Entodon cladorrhizans</i> (Hedw.) C. Mull.	FC	<i>riparium</i> (Hedw.) Warnst.	FC
<i>seductrix</i> (Hedw.) C. Mull.	IC FC	<i>Leskea polycarpa</i> Hedw.	IC FC
<i>Ephemerum cohaerans</i> (Hedw.) Hampe	IC	<i>Leucobryum glaucum</i> (Hedw.) Angstr. in Fries	IC FC
<i>crassinervium</i> (Schwaegr.) Hampe	FC	<i>Leucodon brachypus</i> var. <i>andrewsianus</i> Crum & Anderson	IC FC
<i>Eurhynchium hians</i> (Hedw.) Sande Lac.	IC FC	<i>Limprichtia cossonii</i> (Schimp.) Anderson <i>et al.</i>	IC FC
<i>pulchellum</i> (Hedw.) Jenn.	IC FC	<i>revolvens</i> (Sw.) Loeske	FC
<i>Fissidens adianthoides</i> Hedw.	IC FC	<i>Mnium ambiguum</i> H. Mull.	FC
<i>bryoides</i> Hedw.	FC	<i>marginatum</i> (With.) Brid. ex P. Beauv.	FC
<i>dubius</i> P. Beauv.	IC FC	<i>stellare</i> Hedw.	IC FC
<i>grandifrons</i> Brid.	IC FC	<i>Myurella julacea</i> (Schwaegr.) B.S.G.	IC
<i>osmundioides</i> Hedw.	FC	<i>sibirica</i> (C. Mull.) Reim.	FC
<i>taxifolius</i> Hedw.	IC FC	<i>Neckera pennata</i> Hedw.	IC FC
<i>Fontinalis antipyretica</i> Hedw.	IC	<i>Oncophorus wahlenbergii</i> Brid.	IC FC
<i>novae-angliae</i> Sull.	IC	<i>Orthotrichum anomalum</i> Hedw.	FC
<i>Grimmia affinis</i> Hoppe & Hornsch ex Hornsch.	IC FC	<i>obtusifolium</i> Brid.	IC FC
<i>pilifera</i> P. Beauv.	IC FC	<i>Orthotrichum pumilum</i> Sw.	FC
<i>unicolor</i> Hook in Grev.	IC	<i>sordidum</i> Sull. & Lesq. in Aust.	FC
<i>Gymnostomum aeruginosum</i> Sm.	FC	<i>speciosum</i> Nees in Sturm	FC
<i>Hedwigia ciliata</i> (Hedw.) P. Beauv.	IC FC	<i>stellatum</i> Brid.	FC
<i>Helodium blandowii</i> (Web. & Mohr) Warnst.	IC	<i>Oxystegus spiralis</i> (Grout) Crum & Anderson	FC
<i>Herzogiella turfacea</i> (Lindb.) Iwats.	IC FC	<i>tenuirostris</i> (Hook. & Tayl.) A.J. Sm.	FC
<i>Heterocladium dimorphum</i> (Brid.) B.S.G.	FC	<i>Paraleucobryum longifolium</i> (Hedw.) Loeske	FC
<i>Homalia trichomanoides</i> (Hedw.) B.S.G.	FC	<i>Phascum cuspidatum</i> Hedw.	IC FC
<i>Homomallium adnatum</i> (Hedw.) Broth.	FC	<i>floerkianum</i> Web. & Mohr	IC
<i>Hygroamblystegium fluviatile</i> (Hedw.) Loeske	IC FC	<i>Philonotis fontana</i> (Hedw.) Brid.	FC
<i>noterophilum</i> (Sull. & Lesq in Sull.) Warnst.	IC	<i>Physcomitrium pyriforme</i> (Hedw.) Hampe	IC
<i>tenax</i> (Hedw.) Jenn.	IC FC	<i>Plagiomnium ciliare</i> (C. Mull.) T. Kop.	IC FC
<i>Hygrohypnum luridum</i> (Hedw.) Jenn.	FC	<i>cuspidatum</i> (Hedw.) T. Kop.	IC FC
<i>Hylocomium splendens</i> (Hedw.) B.S.G.	IC FC	<i>drummondii</i> (Bruch & Schimp.) T. Kop.	IC
<i>Hymenostylium recurvirostre</i> (Hedw.) Dix.	IC	<i>ellipticum</i> (Brid.) T. Kop.	FC
<i>Hypnum imponens</i> Hedw.	FC	<i>medium</i> (B.S.G.) T. Kop.	FC
<i>lindbergii</i> Mitt.	IC FC	<i>Plagiopus oederiana</i> (Sw.) Crum & Anderson	FC
<i>pallescens</i> (Hedw.) P. Beauv.	IC FC		
<i>pratense</i> (Rabenh.) W. Koch ex Spruce	IC FC		
<i>Leptobryum pyriforme</i> (Hedw.) Wils.	FC		



<i>Plagiothecium</i>		<i>Sphagnum</i> (continued)	
<i>cavifolium</i> (Brid.) Iwats.	IC FC	<i>russowii</i> Warnst.	FC
<i>denticulatum</i> (Hedw.) B.S.G.	IC FC	<i>squarrosum</i> Crome	IC FC
<i>laetum</i> B.S.G.	IC FC	<i>subsecundum</i> Nees in Sturm	FC
<i>Platydictya confervoides</i> (Brid.) Crum	FC	<i>tenerum</i> Sull. & Lesq. in Sull. in Gray	FC
<i>Platygyrium repens</i> (Brid.) B.S.G.	IC FC	<i>teres</i> (Schimp.) Angstr. in Hartm.	FC
<i>Pleurozium schreberi</i> (Brid.) Mitt.	IC FC	<i>warnstorffii</i> Russ.	FC
<i>Pohlia</i>		<i>wulfianum</i> Girg.	FC
<i>nutans</i> (Hedw.) Lindb.	IC FC	<i>Taxiphyllum deplanatum</i> (Bruch & Schimp. ex Sull.) Fleisch.	IC FC
<i>wahlenbergii</i> (Web. & Mohr) Andrews	FC	<i>Tetraphis pellucida</i> Hedw.	FC
<i>Polytrichum</i>		<i>Thamnobryum alleghaniense</i> (C. Mull.) Nieuwl.	FC
<i>commune</i> Hedw.	IC FC	<i>Thuidium</i>	
<i>juniperinum</i> Hedw.	IC FC	<i>delicatulum</i> (Hedw.) B.S.G.	IC FC
<i>ohioense</i> Ren. & Card.	IC FC	<i>philibertii</i> Limpr.	FC
<i>piliferum</i> Hedw.	IC FC	<i>recognitum</i> (Hedw.) Lindb.	IC FC
<i>strictum</i> Brid.	FC	<i>Timmia megapolitana</i> Hedw.	FC
<i>Pottia</i>		<i>Tomenthypnum nitens</i> (Hedw.) Loeske	IC
<i>davalliana</i> (Sm. in Drake) C. Jens.	IC	<i>Tortella</i>	
<i>truncata</i> (Hedw.) Furnr. ex B.S.G.	FC	<i>inclinata</i> (Hedw. f.) Limpr.	FC
<i>Pterigynandrum filiforme</i> Hedw.	FC	<i>tortuosa</i> (Hedw.) Limpr.	FC
<i>Ptilium crista-castrensis</i> (Hedw.) De Not.	IC FC	<i>Tortula</i>	
<i>Pylaisiella selwynii</i> (Kindb.) Crum et al.	IC FC	<i>cainii</i> Crum & Anderson	IC
<i>Racomitrium</i>		<i>mucronifolia</i> Schwaegr.	IC FC
<i>ericoides</i> (Web. ex Brid.) Brid.	IC FC	<i>ruralis</i> Gaertn. et al.	IC FC
<i>lanuginosum</i> (Hedw.) Brid.	IC	<i>Trematodon ambiguus</i> (Hedw.) Hornsch.	IC
<i>Rhizomnium</i>		<i>Uloa</i>	
<i>appalachianum</i> T. Kop.	FC	<i>crispa</i> (Hedw.) Brid.	IC FC
<i>magnifolium</i> (Horik.) T. Kop.	FC	<i>hutchinsiae</i> (Sm.) Hammar	IC FC
<i>punctatum</i> (Hedw.) T. Kop.	IC FC	<i>Warnstorfia</i>	
<i>Rhodobryum ontariense</i> (Kindb.) Par. in Kindb.	IC FC	<i>exannulata</i> (B.S.G.) Loeske	IC
<i>Rhytidiadelphus triquetrus</i> (Hedw.) Warnst.	IC FC	<i>fluitans</i> (Hedw.) Loeske	FC
<i>Sanionia uncinata</i> (Hedw.) Loeske	FC		♣
<i>Schistidium</i>			
<i>apocarpum</i> (Hedw.) B.S.G.	FC		
<i>rivulare</i> (Brid.) Podp.	IC FC		
<i>Sphagnum</i>			
<i>angustifolium</i> (C.Jens. ex Russ.) C.Jens. in Tolf	FC		
<i>capillifolium</i> (Ehrh.) Hedw.	IC FC		
<i>centrale</i> C. Jens. in Arnell & C. Jens.	FC		
<i>cuspidatum</i> Ehrh. ex Hoffm.	FC		
<i>fallax</i> (Klinggr.) Klinggr.	FC		
<i>fimbriatum</i> Wils. in Wils. & Hook. f in Hook. f	IC FC		
<i>fuscum</i> (Schimp.) Klinggr.	FC		
<i>girgensohnii</i> Russ.	FC		
<i>magellanicum</i> Brid.	FC		
<i>recurvum</i> P. Beauv.	FC		
<i>riparium</i> Angstr.	FC		

## Review:

### **The Goldenrods of Ontario: *Solidago L. and Euthamia Nutt.* (Third Edition).**

Wayne Buck

Semple, John C., Gordon S. Ringius and Jie Jay Zhang. 1999. The goldenrods of Ontario: *Solidago L. and Euthamia Nutt.* 3rd Edition Univ. Waterloo Biol. Ser. 39: 1-90. Publication date: 1 November 1999.

If you are interested in goldenrods and live in or near Ontario; this is the book for you. It covers the 30 species known to inhabit Ontario. Several are rare; found in only one or two locations. (e.g. *S. ulmifolia*). The book is a paperback, so it is light in mass; and thin. This makes it easy to carry in a backpack. Its dimensions of 19.5 cm x 25.5 cm make it less suitable to carry in jacket or pant pockets. But the larger size allows the detailed black and white [illustrations] to be much larger than would be otherwise possible.

Each species has a full page illustrating the following:

- Habit: a sketch of the entire plant showing the morphology of roots, stems, leaves, and flowers.
- Mid-stem leaf: showing both upper and lower leaf surfaces.
- Head: the florets.
- Mid-series phyllary: showing an enlargement of the shape and the appearance of the chlorophyllous zone.
- Mature achene with disc corolla.
- Map of Ontario showing distribution.

I found these illustrations, drawn by John Semple, to be most helpful in identification.

The text is found on the facing page; a very handy feature not found in many guides. The information given includes:

- The scientific and common name(s) as well as the French name in many cases.

#### •Morphology describing:

Stem	Basal & lower stem leaves
Upper stem leaves	Capitulescence
Involucre	Ray florets
Disc florets	Achenes
Chromosome numbers	Habitat
Comments	

The glossary in the back is helpful if you are not familiar with some of the terms used in this book. (e.g. thyriform, canescent). There is also a page in the front illustrating many of the terms. The index is easy to use, containing scientific, common, and where applicable, French names. The key is virtually unchanged from the second edition except for the inclusion of *Euthamia gymnospermoides*. Not being a skilled botanist, I found the key difficult to use, but that was not its fault.

The third edition includes 6 pages of coloured illustrations of 28 species of goldenrods. Semple has proposed one new name. He proposes changing the name of *Solidago ptarmicoides* to *Solidago asteroides* to reflect the findings of Nesom 1993 and Zhang 1996. This edition also includes *Euthamia gymnospermoides*, [which did not appear in] the second edition. *S. hispida* var. *huronensis* and *S. hispida* var. *lanata* are both given a more detailed treatment in the third edition.

On p. 58 it states that a population of *S. ulmifolia* found near London in 1935 had not yet been confirmed. It was my understanding that this population has been confirmed.

I find this an excellent guide for anyone, amateur or professional, who wants to be able to identify goldenrods. It follows exactly the same format as its companion volume, the *Asters of Ontario*. I carry both on every field trip. 🌿

Both are available from:

**Biology Series, Dept. of Biology,  
University of Waterloo, Waterloo, ON.  
N2L 3G1**

## **Notices:**

### **Invasive Plants: Information Request for Control and Monitoring Activities.**

The Coordinator of the Invasive Plants of Canada Project (IPCAN) would like to receive notification of control and monitoring activities that have been undertaken by groups such as naturalist clubs, trail associations, OMNR, Conservation Areas and parks managers and municipalities. As part of its activities, the IPCAN Project fosters a better understanding of the problem of spread and impact of invasive exotics through information exchange. In addition to the fact sheets, survey reports, links and other documents provided on the IPCAN web site, the project undertakes to promote local actions by publishing news of activities by local groups. We welcome short information articles on monitoring and control actions that are being taken. Respondents should provide a brief outline of the nature and extent of the problem, who is doing the work, what specific actions are or have been taken and the results of control actions. Such articles will be placed on the regional news section for Ontario. Receipt of articles is preferred by e-mail so that a digital copy is available for transformation into a web document. Written communications, however, will also be accepted. Colour photos are particularly welcome and, if suitable, will be scanned for inclusion in the article. News of the arrival and spread of new exotics in an area are also of importance for wide dissemination and can serve as part of an early warning system.

Readers with internet access are encouraged to read the Survey 2000 report on the IPCAN web site and especially the overview of the Bow River Project in Alberta. This is found in the section on 'Provincial Agencies' and 'Joint Ventures.' It is a very interesting collaborative, community and multi-agency program that promotes the conservation of riparian areas through educational initiatives and invasive plants control.

**Erich Haber, Coordinator, IPCAN Project,  
National Botanical Services, 604 Wavell Ave.,**

**Ottawa. K2A 3A8**

**[ehaber@magi.com](mailto:ehaber@magi.com)**

**<http://infoweb.magi.com/~ehaber/ipcan.html>**

### **FBO Newsletter Volumes 1-12 to be Offered as a Package.**

I currently have several boxes of FBO Newsletter back-issues. I don't have the necessary space to store them, and I don't have the time to offer individual reprints for sale. Instead, I hope to donate complete bound and indexed sets of them to Ontario's University Libraries and the National Herbarium (DAO) in Ottawa. I estimate that 17 full sets would be needed, each of which would exceed 550 pages. Because I don't have sufficient numbers of all issues, there would still be some printing costs to the FBO associated with the donation: about \$300.

It occurred to me that some FBO members might wish to purchase such sets for their personal collections, while others might simply wish to obtain the index alone. Additionally, some organizations or institutions might be interested in obtaining sets of our newsletters. Any profits made from these purchases could be used to off-set the costs preparing the donated sets.

I would like some volunteers to help put together the index. I have a number of issues indexed already, but getting help with the index will accelerate the process. Please call or email me at the number/address listed on page 2. Hopefully, we will be ready in time to combine the 2001 membership renewal form with a bound-newsletter or newsletter index order form. My latest estimate of the cost of bound sets of newsletters is \$45 including shipping within Canada. Indices would probably cost about \$5 including shipping within Canada. ♣

Ed Morris



Yellow Horse Gentian (*Triostema angustifolium* L.),  
by Mary Celestino.

## More 'Almost Free' Books for Review.

With almost every newsletter now, there seem to be new books freely available to FBO members who agree to prepare a review for the FBO Newsletter. In cases where more than one person expresses interest in reviewing a particular book, the recipient is chosen by drawing names from a hat. Some restrictions apply. ❁

-Ed

### **The Flora of Manitoulin Island (Third Edition).**

Morton, J.K. and J.M. Venn. 2000. The Flora of Manitoulin Island. University of Waterloo Biology Series, Number 40, Waterloo, Ontario. 376 pp.

The duo of Morton and Venn have updated their well known Flora of Manitoulin. A plastic spiral bound copy

of the book has been given to the FBO for review. Those wishing to order copies may order from the following address:

**Biology Series, Dept. of Biology,  
University of Waterloo, Waterloo, ON.  
N2L 3G1**

Spiral Bound     \$27.50+\$7.50 s/h + \$2.45 GST = \$37.45  
Harbound         \$40.00 +\$7.50 s/h + \$3.33 GST = \$50.83

International orders must pay an additional \$2.50 for s/h, but are exempt for GST.

Make cheque/money orders payable to the "University of Waterloo."



### **Asters, Goldenrods and Fleabanes of Grey and Bruce Counties.**

Bruce-Grey Plant Committee. 2000. The Asters, Goldenrods and Fleabanes of Grey and Bruce Counties. Owen Sound Field Naturalists, Stan Brown Printers Limited, Owen Sound, Ontario. 56 pp.

This is a 56-page book which describes and tells how to identify some 34 local species in these three, closely related groups. These plants include many of those which make late summer and fall so colourful in this area. The book has a full-colour cover, and many black-and-white diagrams. A simplified key to aid in identification is included. A free copy of this book is available to anyone agreeing to write a review for the FBO newsletter.

Single copies (\$8 + \$1 for mail orders) or wholesale orders may be obtained from:

**Bruce Grey Plant Committee,  
c/o Owen Sound Field Naturalists,  
Box 401, Owen Sound, Ontario,  
N4K 5P7**

Make cheque/money orders payable to the "Bruce Grey Plant Committee."