

Field Botanists Of Ontario

Newsletter

Fall 1998
Volume 11(3)

ISSN: 1180-1417



Sneezeweed
(*Helenium autumnale* L.)
by Irene McIlveen

President's Message (1997-1998).
(M. Austen)..... 2

Minutes of the Annual General Meeting..... 3

Field Trip Reports:

Strathroy Conservation Area.
(W. McShane)..... 3

FBO Trip to Ojibway Prairie.
(J. Line)..... 4

Pterophylla Nursery, Haldimand-
Norfolk County. (L. Weber)..... 5

Beverly Swamp & Dundas Valley Rims
(A. Croxall).....

Publication Notice:
Illustrated Companion to Gleason &
Cronquist's Manual of Vascular Plants..... 12

Doggerel Department:

Botanist Bewildered (S.C.T.)..... 12

It's time to renew your membership to the Field Botanists of Ontario!

Field Botanists of Ontario Memberships are due at the beginning of the calendar year. Please help us by using the form enclosed with this newsletter to renew your membership as soon as possible.



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.

President:	Madeline Austen, R.R.#1, Norwood, Ont. K0L 2V0	(705) 639-8957
Vice-President:	Dale Leadbeater	(905) 427-1655
Treasurer:	Ilmar Talvila, 12 Cranleigh Crt., Etobicoke, Ont. M9A 3Y3	(416) 231-1752
Secretary:	Jeremy Lundholm	(905) 572-6142
Past President:	Bob Bowles	(705) 325-3149
Membership:	Bill McIlveen, RR#1, Acton, Ont. N1H 4A6	(519) 853-3948
Field Trips:	Ken Ursic, 296 Suffolk St. W., Guelph, Ont. N1H 2K3	(519) 763-8101
	Sarah Mainguy	(519) 822-5221
Newsletter Editor:	Ed Morris, Box 2, Site 29, RR#3, Sudbury, Ont. P3E 4N1	(705) 522-9523 edmorris@ican.net
Associate Editor:	Michael J. Oldham	(705) 755-2160

The **deadline** for submissions for **Volume 11(4) - Winter 1998-1999** is **December 15th, 1998**.

Standard source for scientific names of vascular plants:

Morton, J.K. and J.M Venn. 1990. A Checklist of the Flora of Ontario: Vascular Plants. University of Waterloo Biology Series Number 34. 218 pp.

President's Message (1997-1998).

The Field Botanists of Ontario has now been in existence for 14 years. This year, like the past, has been another busy one for our group. Field trips in 1998 covered many different themes such as prairie restoration, alvar conservation, and botanical illustration -- and took members to many interesting areas of the province, including less well-known sites such as Selkirk Provincial Park and Campbell Conservation Area. Field trips are always a great learning experience, for participants and leaders alike, and I was glad to hear several members mention this over the summer season.

As always, all members of the board have been very active and extremely supportive. The majority of trip planning and co-ordinating was undertaken by Ken Ursic and Sarah Mainguy who came up with yet another successful line up of trips and enthusiastic leaders. If any members have ideas or suggestions for future field trips, please let us know because planning for next year begins now! Also a

special congratulations is in order for Ken and Margot Ursic, who recently became parents to a healthy, baby boy - Sacha Nevan - on August 12th. Sacha arrived a little early on the scene, much to Ken and Margot's surprise!

This year, we were fortunate to have Dale Leadbeater return to the Board of Directors in the position of Vice President (Dale had stepped down due to other commitments in 1994). The field events, activities, speaker and dinner at this Annual General Meeting (SEE AGM REPORT FOR MORE DETAILS) were a result of Dale's hard work and long hours on the phone planning events. We all owe her a round of thanks for a job well done!

Ed Morris continued to ensure that our newsletters were filled with interesting material and had a professional-look; Bill McIlveen kept tabs on our memberships, Bob Bowles provided useful tips and the advice of experience, Jeremy began his role as secretary (in a raging snowstorm, no less!), and Ilmar kept our finances in order in 1997/1998.

There are many other people who contribute

their time and energy to FBO activities - and who add to the quality of our trips, meetings and newsletters. I would like to thank the many leaders who guided our trips in 1998: David Bradley, Tamara Chipperfield, Chris Early, Mary Gartshore, Bruce Gilman, Anthony Goodban, James Kamstra, Donald Kirk, Jeremy Lundholm, John Miles, John Morton, Paul Pratt, Jim Pringle, Robin Heron Promaine, Steve Varga, Jeff Warren, and Keith Winterhalder; Mike Oldham for his editorial assistance with the newsletter; the many individuals who have authored field trip reports; and those members not already mentioned who also provide valuable contributions to trips as knowledgeable botanists and naturalists.

The Board is always interested in receiving comments and suggestions from the membership which may be helpful in planning field trips, organizing workshops, and increasing awareness regarding conservation and resoration activities. If you have any suggestions, please feel free to contact us at anytime. There is also room on the Board for additional members to help out with various tasks; if anyone is interested, please contact me or other executive members.

On behalf of the Board, I would like to thank all members for your continued participation and support of the FBO and I look forward to seeing you on future outings.

Best regards,
Madeline Austen

Annual General Meeting Report: 1998.

This year's AGM was a one-day event held on Saturday, September 12th and featured three field trips followed by a social time and various exhibits and demonstrations at Durham College in Oshawa. The event turned out to be a huge success with over 45 members in attendance at the evening program.

The field trips were all well attended despite the weather looking rather foreboding earlier in the morning. James Kamstra led a canoe trip focusing on aquatic vegetation through the Osler Tract, a privately-owned Area of Natural and Scientific Interest (ANSI) on Lake Scugog and one of the largest wetlands in Durham region; Steve Varga led a trip through the Tyrone River Valley, another ANSI, in the vicinity of the Oak Ridges Moraine; and Tamara Chippenfield and Jeff Warren led members on a trip examining lakeshore habitats (both man-made and natural) at the Leslie Street Spit and East Point.

Following the field trips, members met at Durham College and had a chance to socialize and view various demonstrations and displays. Jenny Bull and Tim Dickinson from the Royal Ontario

Museum were on hand to display interactive computer keys which are being developed for various taxa including trees, willows and hawthorns. These keys are in various stages of development but were fun to work through; for those members who were unable to attend the AGM, and have access to the internet, the keys can be found at <http://prod.library.utoronto.ca/polyclave>. Sarah Mainguy was also on hand to help members work through the basics of sedge identification using both herbarium specimens and fresh material.

After a buffet dinner and a short business meeting (see minutes), Dale Leadbeater orchestrated an entertaining and educational slide show/plant quiz. Members were asked to test their botanical knowledge by listing the common and scientific names of plants for the slide show. This was the easy part of the quiz! In Jeopardy-like fashion, members were then asked to write down the desired question relating to the answers that Dale provided while showing each slide. The latter part of the plant quiz was usually the most challenging but also provided the biggest laughs during the take up of the quiz!

Mark Stabb topped off the evening by providing an informative talk discussing the effects of forest fragmentation on Southern Ontario's flora and fauna. His animated presentation focused on the importance of the "heart" (i.e., the forest interior) of woodlands to the integrity of forest ecosystems and, consequently, to forest management.

On behalf of the FBO, I would like to thank everyone mentioned above, together with all those attending this year's AGM, for making this meeting a success. A special thanks is extended to Dale Leadbeater, our Vice-President, for her super job at organizing the event. With any luck, we'll see everyone back and some additional members at next year's AGM.

Madeline Austen

Minutes of the Annual General Meeting.

Durham College, Oshawa.
7:30 pm, September 12th, 1998.

The meeting was called to order by President Madeline Austen; 45 members were in attendance. Members were reminded that the minutes of the 1997 Annual General Meeting were in the Winter 1997 issue of the FBO Newsletter.

President's Message: Madeline provided an overview of FBO events in 1997/1998. (see President's Message).

Membership Report: Bill McIlveen reported that the FBO has 206 memberships in 1998 compared to

210 in 1997 - a drop of only 2%. In terms of actual members there are now 257 members compared to 268 in 1997 - a drop of 5%. The FBO has 26 new or re-instated members, 8 complimentary members, and 4 life members.

Field Trip Report: Sarah Mainguy reported that the 10 trips conducted over the summer period (not including trips associated with the AGM) went well. Some minor problems (e.g., problems with directions to meeting spots) were encountered which inevitably occur, but the executive will make every effort to correct these problems for future trips.

Newsletter Report: Madeline, in the absence of Ed Morris, presented the newsletter report. Ed is always interested in receiving more articles and field trip reports for the newsletter. In particular, it would be nice to receive additional technical reports (e.g., range extensions for plants in Ontario) to help balance the newsletter. (Madeline for Ed Morris)

Treasurer's Report: Ilmar Talvila noted that the FBO finances are all in order and presented the following statement of revenue and expenses. Our net total for September 1998 was \$7,109 compared to \$6,275 at the same time last year. Ilmar recommended that the FBO refrain from making another donation at this point (like last year's \$1500) but expected that at next year's AGM we could consider making another donation to a deserving conservation organization.

Bank balance:	December 31, 1997	\$4,993
	July 31, 1997	\$4,867
Revenue/Deposits	September 8, 1998	\$780
	<u>September 14, 1998</u>	<u>\$2,579</u>
	Total	\$3,359
Expenses	Honoraria	\$675
	<u>Newsletter</u>	<u>\$442</u>
	Total	\$1,117
Net total (September, 1997)		\$6,275
Net total (September, 1998)		\$7,109

Changes to the Executive: Dale Leadbeater returned to the Board (after stepping down due to other commitments in 1994) in the role of Vice President. The executive for 1998/1999 was introduced as follows:

<u>President:</u>	Madeline Austen
<u>Vice-president:</u>	Dale Leadbeater
<u>Past President:</u>	Bob Bowles
<u>Treasurer:</u>	Ilmar Talvila
<u>Secretary:</u>	Jeremy Lundholm
<u>Membership:</u>	Bill McIlveen
<u>Field Trips:</u>	Ken Ursic, Sarah Mainguy
<u>Newsletter:</u>	Ed Morris

Madeline opened the floor for comments and questions from the general membership. The business meeting was adjourned at 8:00 p.m.

Strathroy Conservation Area

On the morning of May 31st, 1998 a group of eager field botanists met with Dr. Jim Pringle to explore the Strathroy Conservation Area in Middlesex County. We concentrated our search in a floodplain along the Sydenham River.

Before our trip began, the skies darkened and the rain came down in torrents, but true to form the weather cleared by the time the trip was to start, and rain gear was not required.

Significant species we encountered were:

Allium canadense L. var. *canadense*
Canada Wild Onion

Arisaema dracontium (L.) Schott
Green Dragon

Collinsonia canadensis L.
Horsebalm

Corylus americana Walter
American Hazel

Dioscorea quaternata J. Gmel.
Wild Yam Root

Euonymus obovata Nutt.
Running Strawberry Bush

Menispermum canadense L.
Moonseed

Smilax hispida Muhl.
Bristly Greenbrier

Staphylea trifolia L.
American Bladder-Nut

Trillium flexipes Raf.
Bent Trillium

For most of us, seeing Bent Trillium was the high point of the trip. Although the 100's of plants were well past peak flowering, we noted the sharply declined peducles which placed the flowers below the leaves: difficult for photographers. Superficially, *T. flexipes* resembles *T. cernuum* L. (Nodding Trillium), but it is a more robust plant. In flower, *T. flexipes*

has stamens that are thick and cream coloured. The anther length greatly surpasses the filament length. The deflexed peduncle of *T. flexipes* is also straighter than those of *T. cernuum*.

Trillium flexipes is the common Trillium of the east-central lowlands of the United States west of the Appalachian Mountains and south of the Great Lakes. It has only recently been confirmed in Middlesex and Elgin Counties. Dr. Pringle felt that because of high number of plants and habitat, the Strathroy population of *T. flexipes* is native.

Unfortunately, I could not attend the Newbury component of the trip. Nonetheless, this trip was a fascinating introduction to Carolinian spring in Ontario and we thank Dr. Pringle for being our guide.

Wayne McShane

FBO Trip To Ojibway Prairie

Date: Saturday, July 25, 1998.

Leader: Paul Pratt.

Weather: Hazy, very hot and very humid (surprise!).

A large herd of botanists lazily sauntered single file along the narrow garden paths at a lazy pace. Were we at the Royal Botanical Gardens in Hamilton? No! The Experimental Farm gardens in Ottawa? No! Although I sometimes felt as if I was being led through a demonstration butterfly/prairie garden, we were exploring a natural environment that gardeners could only dream of recreating: the Ojibway Prairie Complex in the City of Windsor.

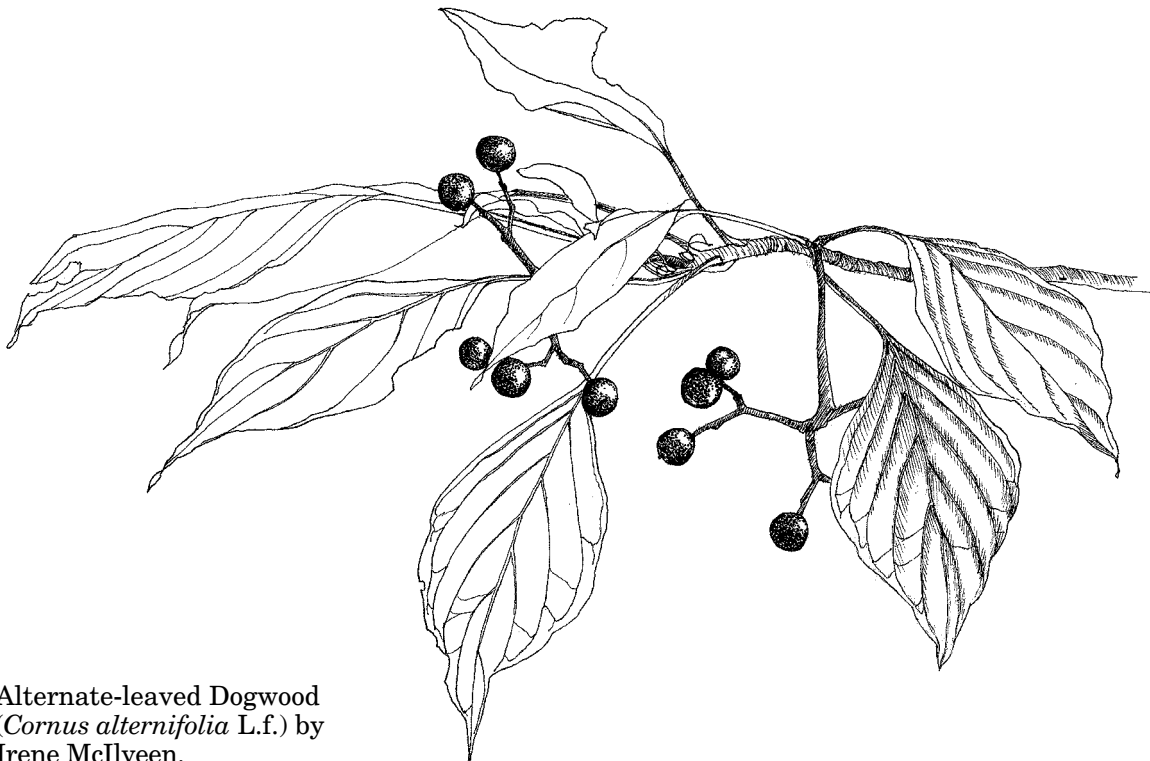
This complex contains unique tall grass prairie, oak savannah and Carolinian woodlands that are rivalled only by Walpole Island in Ontario.

The Ojibway Nature Centre was the perfect place to rendez-vous for our trip. Maps and plant lists (including lists of wildflowers currently in bloom) are available here, and displays prepare you for your walk in the prairie. Paul Pratt, who works in the centre was our leader for the day; he gave a brief introduction to the area, warned us of chiggers, and then we were off.



“Anti-chigger Gear” Photo by Paula Davies.

The Ojibway prairie complex really does contain an amazing diversity of plants. Apparently there are 109 provincially rare species in the area!! (Oldham, 1992 & W. Bakowsky, pers. comm.). Why is this area so diverse and rich? Part of the reason must be due to the unique soil profile in the area. Paul said the top 10 feet was sand, followed by a nice thick layer of blue clay until you hit bedrock at 90 feet. This must create perfect moisture



Alternate-leaved Dogwood
(*Cornus alternifolia* L.f.) by
Irene McIlveen.

conditions for these plants. The topography is wanting in the area (a point I was not about to complain about in 35 degree heat!), but what little elevational changes do exist have an impact on the vegetation: Paul said Black Oak (*Quercus velutina* Lam.) and White Oak (*Quercus alba* L.) are on the 2 feet high ridges, whereas Pin Oaks (*Quercus palustris* Muenchh.) dominate the flat lands.

Our morning stroll took place in the Ojibway Prairie Provincial Nature Reserve; however, I think about a third of that time was spent getting there since the ditches along the Titcombe Bikeway were colourful enough to slow us down. An Eastern Tiger Swallowtail (*Papilio glaucus* L.) was feeding on Dense Blazing Star (*Liatris spicata* (L.) Willd.). Dainty white spikes of Culvers Root, (*Veronicastrum virginicum* (L.) Farw.), Flat-topped magenta inflorescences of Tall Ironweed (*Vernonia gigantea* (Walter) Trel. ex Branner & Cov. ssp. *gigantea*)¹, and golden-flowered Tall Wild Sunflower (*Helianthus giganteus* L.) looked dazzling together.

To satisfy our olfactory senses, Paul had us sniff the leaves of Virginia Mountain-mint (*Pycnanthemum virginianum* (L.) Durand & Jackson ex Fern. & Robinson): these leaves have a strong rosemary smell. Mint-sniffing botanists abound! I was also pleased to learn about Gray-headed Coneflower (*Ratibida pinnata* (Vent.) Barnhardt); did you know that their seeds are orange scented?

A botany job in Saskatchewan a few summers ago taught me that prairies are the place to be if you want to immerse yourself in the field of pollination biology and/or lawn-chair insect behaviour. Paul Pratt is living in his niche; not only was he naming off every plant in sight, but he could tell us what butterflies feed on them and what damselfly was in his net. Some samples from the day: Painted Lady butterflies (*Vanessa cardui* L.) feed on Field Thistle (*Cirsium discolor* (Muhl. ex Willd.) Spreng.); Silver Spotted Skippers (*Epargyreus clarus* Cramer) will feed on the weedy Black Locust (*Robinia pseudo-acacia* L.); female Eastern Amberwing Dragonflies (*Perithemis tenera* [Say]) hang out in fields whilst males cruise ponds. He has also inspired me to learn insect calls since he insisted that we were not just hearing a cicada, but a Dog-day Cicada (*Tibicen canicularis* [Harris]) as well as a Snowy Tree Cricket (*Oecanthus fultoni* Walker).

We explored a wet depression in a field; an abbreviated list of what we found follows:

Carex stricta Lam.

Tussock Sedge

Onoclea sensibilis L.

Sensitive Fern

Salix eriocephala Michx.

Missouri Willow

Solidago rigida L.

Stiff-leaved Goldenrod

Spartina pectinata Link

Prairie Cord Grass

Lysimachia quadriflora Sims

Prairie Loosetrife

Thelypteris palustris (Salisb.) Schott
var. *pubescens* (Lawson) Fern.

Marsh Fern

Paul Pratt then pointed out Colic-root (*Aletris farinosa* L.), and said the scientific name apparently means "female slave who grinds corn." As you can imagine, this was received with a variety of reactions! Ken Ursic and I were intrigued by a unique-looking sedge with pronounced triangular stems and hard white nut-like achenes: it turned out to be *Scleria triglomerata* Michx., a very rare species with fewer than 5 locations in Ontario! This was mixed with Monkey flower (*Mimulus ringens* L.), Kalm's Brome (*Bromus kalmii* A. Gray) and the beautiful Greenish Sedge (*Carex viridula* Michx. ssp. *viridula*).

We returned to the Nature Centre for lunch and then drove to Spring Garden Prairie. This area was mostly forested with Carolinian trees such as Sassafras (*Sassafras albidum* (Nutt.) Nees) and Pignut Hickory (*Carya glabra* (Miller) Sweet) and open-grown oaks. Along the path we saw some Shining Sumac (*Rhus copallina* L.) which can be distinguished from other sumacs by its winged stem



Paula Davies poses in front of a colourful display of prairie species at the Ojibway Prairie. Too bad we don't get the newsletter printed in colour.

¹ Obviously a favourite of Asteraceae systematists, judging by the list of authorities!

between the leaflets; the leaves turn brilliant scarlet in the fall.

A species that received attention along the path was some flowering Ohio Spiderwort (*Tradescantia ohioensis* Raf.). It exudes a mucous-slime when picked which Paul Pratt proudly announced gave it its alternate common name: Snotweed. This sends school groups he leads into giggles. Perhaps its a statement about FBO members, or maybe we were suffering from what I call 2 pm food-coma, but we did our fair share of giggling!

We came to an open Black Chokeberry (*Aronia melanocarpa* (Michx.) Elliott) scrubland where Paul showed us some more of Ojibway's specialties. Most impressive was Purple Love Grass (*Eragrostis spectabilis* (Pursh) Steud.) which has large dainty panicles of purple-bracted flowers. As well we saw Fall Witch Grass (*Digitaria cognatum* (Schultes) Pilger). These two grasses are very rare in Ontario. Steeple-bush (*Spiraea tomentosa* L.) and Pale Blueberry (*Vaccinium pallidum* Aiton) were also present.

Judging by my notes, (frostweed *Helianthemum* Que--- Am--- (scribble scribble) *sumer grope* white underneath), I was starting to get a little fatigued by the end of our trip. As we walked back to our cars I think the conversations switched to lighter topics; we had all been saturated by so much new information!

It was truly incredible to see so many wildflowers in bloom at one time in a natural setting. Ojibway Prairie leaves you with the sense that several FBO trips would be needed just to *begin* to grasp its diversity; it is a natural garden to inspire botanists and horticulturists alike. Many thanks to Paul Pratt for sharing his incredible wealth of knowledge of this special Ontario nook.

Reference:

Oldham, M.J. 1992. Rare Plant Lists for Ojibway area and Walpole Island. Memorandum to Paul Prett, OMNR, London. 5pp

Pterophylla Nursery, Haldimand-Norfolk County.

Saturday, July 18th, 1998.

Mary Gartshore and Peter Carsen named their enterprise after the Northern True Katydid (*Pterophylla camellifolia* [Fabricius]). This is a common insect in this area of Ontario, recognized by the loud raucous sound the males make with their forewings. Pterophylla translates to "wing-leaf" and in Mary and Peter's words this name was chosen to remind us that **all** life is connected in ecosystems including insects.

Southern Walsingham consists of rolling sand ridges with savannas at the peak of these ridges.

The soil is as Peter termed it "dry, hot beach sand". This county is heavily farmed with very little old growth forest stands left. Backus Woods which is near to the Gartshore/Carsen farm is a rare example of an area that is still Carolinian in context with species that are typical of this zone. It doesn't take long to realize this is tobacco country - the highest paying cash crop planted in this area. There are also many ginseng operations as well as fruit orchards and vegetables cultivated.

Peter and Mary provide native species that are abundant to uncommon in southern Ontario. Buyers range from local restoration/naturalization projects, community groups to individuals. None of the material is dug from the wild. Seeds are collected from road edges, railways, public, and private lands. Pterophylla nursery offers seeds of prairie grasses and flowers, plants of prairie grasses and flowers, woodland plants, shrubs, vines, and plants from the margins of wetlands.

Our tour began with the greenhouse that is filled with stock plants that are used to fill orders. The greenhouse doors are open during the winter to allow the plants to adapt to seasonal conditions.



Swamp Mallow (*Hibiscus moscheutos* L.)
by Mary Celestino.

Some of the plants and trees we saw:

Biden coronata (L.) Britton
Tickseed-sunflower

Cornus spp.
Dogwoods

Hibiscus moscheutos L.
Swamp Mallow

Iris virginica L.
Pale Flag Iris

Juniperus virginiana L.
Eastern Red Cedar

Platanus occidentalis L.
Black Sycamore

Populus deltoides Bartram ex Marsh.
Eastern Cottonwood

Prunus serotina Ehrh.
Black Cherry

Black Sycamore and Eastern Cottonwood do not sucker, and deer don't normally browse on them.

We then went outside to look at a plot where the farms seed producers were found. In order to grow native species on farmland, several steps can be taken to prepare the soil so that pesticides can be kept to a minimum. Topsoil is removed, as it is too weedy. Compost and wood chips are then added to compensate. Adding oat hulls will help soak up nitrogen which is always in excess in cultivated soils due to heavy application. You must reduce the nitrogen content in soil before attempting to grow prairie species. Fields are mowed then burned in early spring. Burning will eliminate woody species as well as noxious weeds from establishing. Burning will also help reduce nitrates. It will blacken the soil, but will increase nutrient levels as well as generating heat in spring to give seeds a head start.

For storm water management, Heath Aster (*Aster ericoides* L.) and Azure Aster (*Aster oolentangiensis* Riddell) were recommended. Virginia Mountain Mint (*Pycnanthemum virginianum* (L.) Durand & Jackson ex Fern. & Robinson) prefers wetter areas. This mint is attracting beekeepers and seed can sell for \$900/lb. Peter informed us that it has been shown in studies that this mountain mint produces 10 times the nectar that the nearest plant in the study had produced. It is, however, labour intensive to prepare these seeds. The flowers are difficult to clean and contain few seeds. Other plants we observed in the plot where Flowering Spurge (*Euphorbia corollata* L.), which is a very hardy plant. Tick-trefoils (*Desmodium* spp.) are excellent for storm water areas, as they establish easily (almost every seed will grow) and are very hardy. Indian Grass (*Sorghastrum nutans* (L.) Nash) is handy for wind buffers and hedges.

We also saw Gray Goldenrod (*Solidago nemoralis* Aiton), Butterflyweed (*Asclepias tuberosa* L.), Round-headed Bushclover (*Lespedeza capitata* Michx.), and Blue Vervain (*Verbena hastata* L.).

On to the garden shade house, which was made completely from recycled materials. This structure creates a shaded, humid, calm environment where Mary and Peter were starting tree seedlings. Alternate-Leaf Dogwoods (*Cornus alternifolia* L.) were pruned for apical dominance. Single strong stems are better for restoration sites as they have better survival rates. Pruning halfway will strengthen the central stem and allow the tree to grow stronger. Peter and Mary have found that Red Hickory (*Carya glabra* (Miller) Sweet) seems to grow better in mixed species groupings. This is especially true when hickory is grouped with berry producing trees. The seedlings of Red Mulberry (*Morus rubra* L.) were completely native. Foreign trees are currently choking them out. We also saw Spicebush (*Lindera benzoin* (L.) Blume), Tulip tree (*Liriodendron tulipifera* L.) and American Chestnut (*Castanea dentata* (Marsh.) Borkh.).

We ventured out to another plot where we saw Dwarf Chinquapin Oak (*Quercus prinoides* Willd.), which is accustomed to hot dry sandy conditions. This is a good hardy shrub that will bear acorns every year and provides protein rich animal feed. You can prune to increase production. Horsetweed (*Conyza canadensis* (L.) Cronq.) is an early colonizer that doesn't form a dense mass and will allow trees



Indian Grass (*Sorghastrum nutans* (L.) Nash)
photo by Ed Morris

to establish. Once shaded it will die out, as it does not compete well. This plant is a good soil holder so it is a good choice for restoration projects. Pasture rose (*Rosa carolina* L.) takes two years to germinate. Side-oats Grama (*Bouteloua curtipendula* (Michx.) Torr.) can be used as an alternative to a common lawn. Let it grow high then mow. It tends to be green even in very dry conditions. New Jersey Tea (*Ceanothus americanus* L.) is excellent for attracting butterflies. Ox-eye (*Heliopsis helianthoides* (L.) Sweet) is used for many community projects as it is hard to kill, grows fast and produces flowers. Waxy Meadowrue (*Thalictrum revolutum* DC.) is used for local projects only and prefers high dry sand prairies. Intermediate Bush Clover (*Lespedeza violacea* (L.) Pers.) is used for quail feed. Goldfinches, Chipping and Song Sparrows love the Woodland Sunflower (*Helianthus divaricatus* L.). New England Aster (*Aster novae-angliae* L.), Wild Bergamont (*Monarda fistulosa* L.), and Horsemint (*Monarda punctata* L.) were also in abundance.

There has been much interest in Switchgrass (*Panicum virgatum* L.) of late in terms of ethanol production. In the United States ethanol is being extracted from corn or wheat kernels. This is largely inefficient. Switchgrass, on the other hand, can be used more economically as the entire plant is used to produce ethanol. Weeding, pesticides, fertilizers



Round-headed Bushclover
(*Lespedeza capitata* Michx.)
Photo by Ed Morris

and irrigation are unnecessary. At the end of the season, seeds can be collected first then the biomass can be taken every year for ethanol production. One hectare could translate to 250 000 km for a fuel-efficient car. Much work still has to be done in this area, but there certainly seems to be potential here.

This is the age of biotechnology where patented seeds are genetically engineered to grow only when paired with specific herbicides and pesticides. This farm is operated with no fertilizer, no irrigation, and very little to no pesticides. Their plants do well because as natural species, they have adapted over hundreds of years to the soil, climate and precipitation of this area. The idea of reintroducing native species is starting to take off with native plant landscaping. If anyone is interested in purchasing native plants from Mary and Peter or consulting them on ecological restoration and naturalisation they can be reached at (519) 586-3985 or gartcar@kwic.com

Lisa Weber

Beverly Swamp and Dundas Valley.

On August 1st, 21 participants including trip leader Anthony Goodban and FBO newsletter editor Ed Morris left Freelon (a few kilometres south-east of Guelph off of Highway 6) for our first area of exploration a portion of the large Beverly Swamp.

We plunged into the swamp, expecting to be instantly attacked by hordes of mosquitoes. However, it had been so dry up to this point in the summer that few were encountered. The swamp contains a number of species, some regionally rare, associated with northern coniferous swamps, including:

Carex magellanica Lam. ssp. *irrigua* (Wahl.) Hiit.

Stunted Sedge

Cornus canadensis L.

Bunchberry

Ledum groenlandicum Oeder

Labrador Tea

Nemopanthus mucronatus (L.) Loes.

Mountain Holly

Solidago uliginosa Nutt.

Bog Goldenrod

Vaccinium corymbosum L.

Highbush Blueberry

In close proximity to White Adder's-mouth (*Malaxis monophylos* (L.) Sw. ssp. *brachypoda* (A. Gray) A.&D. Löve) was a clump of Loesel's Twayblade (*Liparisloeselii* (L.) Rich. ex Lindley). In an adjacent field we observed an introduced, but rare sedge (*Carex flacca* Schreber) and Pale-leaved

Sunflower (*Helianthus strumosus* L.).

At the next site, the Kirkwall Alvar, we looked at False Pennyroyal, (*Trichostema brachiatum* L.), which grows almost exclusively on alvars. Other plants observed here were:

Penstemon digitalis Nutt. ex Sims
Foxglove Beardtongue

Quercus muehlenbergii Engelm.
Chinquapin Oak

Tilia americana L.
Basswood

Triosteum aurantiacum E.Bickn.
Horse-gentian

Zanthoxylum americanum Miller
Prickly Ash

We then convoyed to an area of valley rims where we observed a very large American Chestnut (*Castanea dentata* (Marsh.) Borkh.). Nearby we also observed:

Agrimonia gryposepala Wallr.
Honewort

Collinsonia canadensis L.
Horse-balm

Hamamelis virginiana L.
Witch-hazel

Laportea canadensis (L.) Wedd.
Wood Nettle

Phyrma leptostachya L.
Lopseed

Pilea pumila (L.) A.Gray
Clearweed

Sassafras albidum (Nutt.) Nees
Sassafras

Symplocarpus foetidus (L.) Salisb. ex Nutt.
Skunk Cabbage

Vitis aestivalis Michx.
Summer Grape

This area harbours some large specimens of Wild Black Cherry (*Prunus serotina* Ehrh.) and White Oak (*Quercus alba* L.).

Our final destination was the Ancaster Prairie to observe the results of some preliminary restoration work. The flora consisted of:

Andropogon gerardii Vitman
Big Bluestem

Aster oolentangiensis Riddell
Azure Aster

Aster urophyllus Lindl.
Arrow-leaved Aster

Carex bicknellii Britton
Bicknell's Sedge

Lespedeza capitata Michx.
Round-headed Bushclover

Monarda fistulosa L.
Wild Bergamot

Schizachyrium scoparium (Michx.) Nees
Little Bluestem

Sorghastrum nutans (L.) Nash
Indian Grass

Anthony pointed out how Sassafras and Grey Dogwood (*Cornus foemina* Miller ssp. *racemosa* (Lam.) J.S. Wilson) had been encroaching on the prairie, and how sections of the the prairie would be burnt on a rotational basis to shift environmental conditions to favour the prairie species.[†] Thanks to Anthony for showing us a diversity of environments in the Hamilton-Wentworth Region. The day was full of highlights and new experiences for all involved.

A. Croxall

Publication Notice:

The Illustrated Companion to Gleason & Cronquist's Manual of Vascular Plants of Northeastern North America and Adjacent Canada is now available. The price is \$125.00 (US\$) plus \$12.55 (US\$) postage and handling. The Manual of Vascular Plants and the Illustrated Companion can purchased together for \$150.00 (US\$) plus \$14.35 (US\$) postage and handling. Visa or Master Card are accepted; fax your card number and expiration date along with your order to (718) 817-8842, or you may send a check or money order (drawn on a US bank only) to:

The New York Botanical Garden
Scientific Publications Dept.
Bronx, NY 10458

If you have any questions, phone Barbara Rosenberg at (718) 817-8721.

[†] Anthony also asked all of the potential gardeners among us not to return to the site and collect seed: the seed is needed in the prairie. -Ed.

Editor's Comments:

In the last issue, Vol. 11, No.2, I wrote a field trip report for a hastily organized trip to Pukaskwa National Park. I lamented at the time that the photos I had taken were not available in time to be included within the article. Since I am two pages short of text, I have printed some of them at the end of this newsletter. There is also a photo from a recent trip to Temagami.

The newsletter has been criticized lately for including mainly field trip reports and few articles. The reason for this is fairly simple: I have not received any articles or reviews lately. Why? Because there is little incentive for members or non-members to write articles for the newsletter, so they generally don't. Looking back at previous issues, it is apparent that most of the 'technical' articles have been published by a small group of people, and it is not fair to expect them to consistently write something for each issue. I will be raising this issue with the executive at an upcoming meeting, and I honestly believe we can identify some ways to attract more quality content.

On a related matter, I find it disturbing that our newest members often find themselves accepting the task of writing field trip reports on their first FBO outing. They are typically quite intimidated at the out-set, and perhaps take on the challenge because they are worried that it would be 'their fault' if the trip were delayed while we sort-out who will write the trip report. It is important that someone's first FBO field trip be a pleasant experience, otherwise it may be their last! For this reason, I would hope that more experienced trip-goers make an effort to write the field trip reports, or provide assistance to beginners who have accepted the responsibility.

In the adjacent column is a poem written by an FBO member. The first few stanzas are a rebuttal to a footnote I wrote defending the FBO policy regarding picking and/or collecting specimens while on field trips. The last two stanzas of the poem will give you some insight into one person's experience on their first field trip.

If you have any comments with respect to the content of the newsletter, I would be anxious to hear from you. Feel free to disagree with me. Your input will directly influence the future of the FBO Newsletter, whatever we choose to call it.

On a more positive note, a few more submissions have trickled in regarding a new name for the newsletter: "It's in our Nature," "Rooting Around," and "Plant Places." Of those that I have received, one or two stand out as definite possibilities, but I am not yet at the point of putting together a short-list of potential names, mainly because of the over-all lack of response. Please feel free to send me additional suggestions through the mail or via email (see page 2 for addresses).

Ed Morris

Doggerel Department:**Botanist Bewildered**

The footnote (Volume 10, page 5)
From Ed's own trusted pen
Advises conscious botanists
Kneel at each specimen.

(Botanists unconscious, Ed?)
In spite of years of scouting
I never yet encountered one.
- Perhaps on our next outing?)

All eight of us are conscious
Yet none of us gets down
On hand and knee, the sedge to see
In water deep and brown

But words of wisdom fill the air,
Pronouncements erudite.
We're much impressed with learnedness
Dispensed with such delight.

The hapless neophyte stands by,
Her ignorance manifest.
In vain she tries to look as wise.
(And conscious) as the rest.

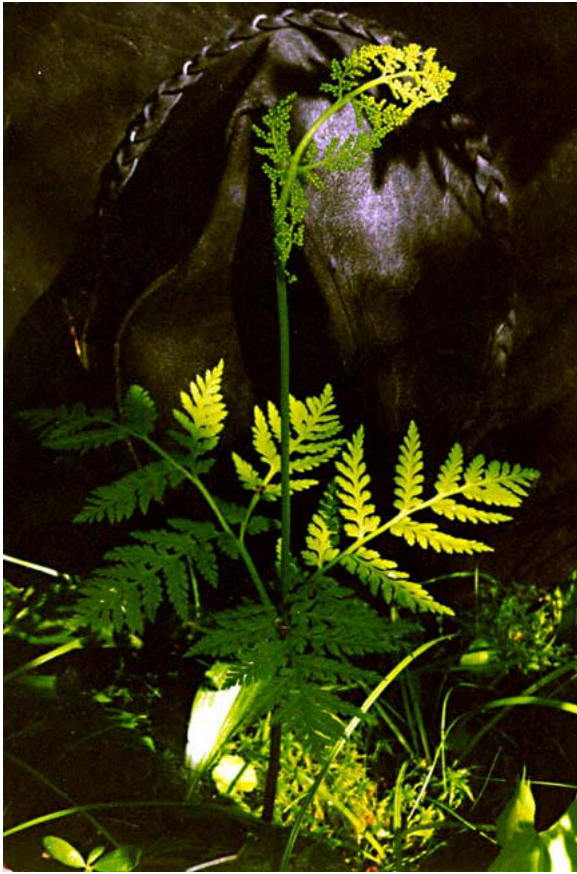
One question hammers in her head,
But better to keep mum
Than let them know she's stupid.
(What's the Paraguay *Mnium*???)

S.C.T.
Conscious Botanist

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 single and \$15 family.

Send applications for membership to:

W.D. McIlveen
Membership Committee Chair,
RR#1, Acton, Ontario.
L7J 2L7



Rattlesnake Fern (*Botrychium virginianum* (L.) Sw.)
Photo by Ed Morris, near Temagami, July 1998.



Rusty Cliff-fern (*Woodsia ilvensis* (L.) R.Br.) [top]
and Smooth Cliff-fern (*Woodsia glabella* R. Br.) [below].
Photo by Ed Morris, Pukaskwa National Park, June 1998.



White Alpine Saxifrage (*Saxifraga aizoon* Jacq.) [above left
and right]. Photo by Ed Morris, Pukaskwa National Park,
June 1998.



Franklin's Lady's-slipper (*Cypripedium
passerinum* Richardson). Photo by Ed Morris,
Pic River Dunes, June 1998.