FIELD BOTANISTS OF ONTARIO

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NEWSLETTER

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Information pertaining to the Annual General Meeting is enclosed in this issue

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NOTICE

Field trip to Nattawasaga Lookout and Singhampton Caves Sunday October 15

is changed to Saturday October 14

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

ILLUSTRATIONS

The drawings in this issue of the FBO Newsletter are by Doug Lockrey and Irene McIlveen. The cover drawing, by Irene McIlveen is Sandbur (*Cenchrus longispinus*).

Torrance Barrens

Muskoka Road 13 is a roller-coaster route of about 40 kilometres that twists through the southern edge of the Canadian Shield from Severn Bridge to Torrance. Most of the road passes through fairly typical Muskoka terrain -- second growth pine, Sugar Maple (*Acer saccharum*) uplands and shrubby fields -- all encroaching the road. About mid-way along this route, there is a very abrupt change in scenery. After ascending a slight rise in the road, a motorist is greeted by an imposing vista of open country with a scattering of oaks. Here the glacier has scoured the bedrock and created rocky outcrops or "balds". In some cases these are devoid of vegetation but in many cases, the shallow soil supports an interesting mix of herbaceous vegetation. Known locally as the Torrance Barrens, this was the destination of an F.B.O. outing on September 12, 1994, led by the writer.

The Torrance Barrens area has long fascinated me, not only for its unusual scenery but also for its unusual plant mixtures. It is set in the heart of the Atlantic Coastal Plain relict flora area. The shorelines of nearby Morrison and Nine-Line Lakes have some of the highest number of Atlantic coastal plain species of any Ontario Lakes. Old glaciation activities and recent beaver construction have altered drainage in the complex, creating a mixture of fens, bogs, swamps, and small lakes. The variety of habitats in this southern shield location has led to a high number of species of breeding birds, reptiles and amphibians for Ontario.

Our group first explored the shores of Highland Pond. The principle tree species are White and Red Oak (*Quercus alba* and *velutina*) and they are stunted and denuded reflecting the severe Gypsy Moth infestation of 1989 and 1990. Atlantic Coastal specialties noted were: Virginia Chain Fern (*Woodwardia virginica*) in some areas a virtual monoculture, Virginia Meadow-beauty (*Rhexia virginica*) and White-fringed Orchid (*Platanthera blephariglottis*), the latter now past flowering.

During a pre-trip scouting expedition to the area, I discovered an unusual diminutive yellow plant. I was delighted to discover it keyed out to Screwstem (*Bartonia virginica*). Apparently this was a new location for this Atlantic Coastal specialty. On our tour, we counted 154 individuals. Also on my scouting trip, I finally stumbled onto the rather well-known and very disjunct station of Three-toothed Cinquefoil (*Potentilla tridentata*). This prostrate perennial was occupying the cracks of a large exposed outcrop of Gneiss. As mapped in Shrubs of Ontario , by Soper and Heimberger, the nearest location for another clump of this diminutive evergreen is Algonquin Park.

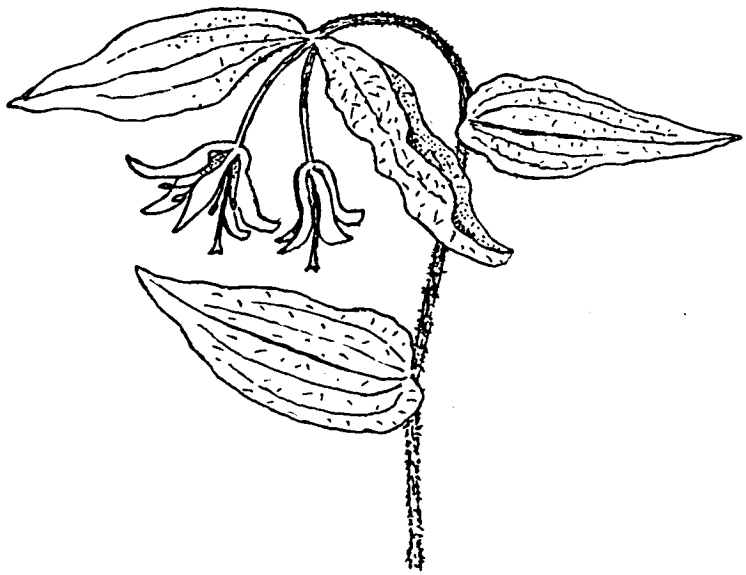
One nearby wet sand excavation site intrigued me. A number of plants seemed unusual; in particular, a very small delicate grass. Fortunately for the group, Bob Bowles was in our midst. In quick order, he identified the grass as Muhly Grass (*Muhlenbergia uniflora*) and then moved on to identify two Beak-rushes (*Rynchospora capitellata* and *R. fusca*) and Yellow-eyed Grass (*Xyris difformis*), every one of which is an Atlantic Coastal Plain specialty.

Other plants studied and compared on the barrens included Rock Spike Moss (*Selaginnella rupestris*), Crinkled Hair Grass (*Deschampsia flexuosa*), Tickle Grass (*Agrostis scabra*), Case's Ladies Tresse (*Spiranthes casei*), Pale Corydalis (*Corydalis sempervires*), - still very much in flower, and various goldenrods (*Solidago uliginosa, S. rugosa, S. nemoralis*) and Asters (*Aster ciliolatus, A. puniceus, A.nemoralis*).

Torrance Barrens may be the most extensive oak barren in Ontario. Hiking in this open and relatively undisturbed country can be a real pleasure. Judging by the recent botanical discoveries in some of the Jack Pine barrens near Kaladar, I suspect that the Torrance Barrens still holds some interesting botanical secrets.

Footnote: Under its "Keep It Wild" program, the Ministry of Natural Resources has just proposed the creation of a Conservation Reserve of 1,900 hectares in my favourite botanizing patch.

George Bryant



Disporum lanuginosum

INTRODUCTORY PLANT IDENTIFICATION WORKSHOP

University of Guelph - April 22, 1995

"April showers bring May flowers", so a rainy Saturday in April was an ideal time to attend a workshop on identifying flowering plants. The leader was Carole Ann Lacroix from the University of Guelph Herbarium, assisted by Jane Bowles. The primary aim of the workshop was to show 20 budding botanists, some true novices and others more experienced, how to use keys to identify plants.

Identifications were made by means of the relatively simple key from "Newcomb's Wildflower Guide". In this system, decisions about flower type, plant type and leaf type generate a three-digit number. This number is then used to zero in on the appropriate subset of illustrations and detailed descriptions which are matched with the plant in question. Since even the basic decisions about flowers, plants and leaves require some knowledge of plant anatomy and descriptive terminology, most of the morning was spent reviewing these subjects. For example, to answer Newcomb's question about a flower's regularity and its number of parts, one has to know something about flower parts.

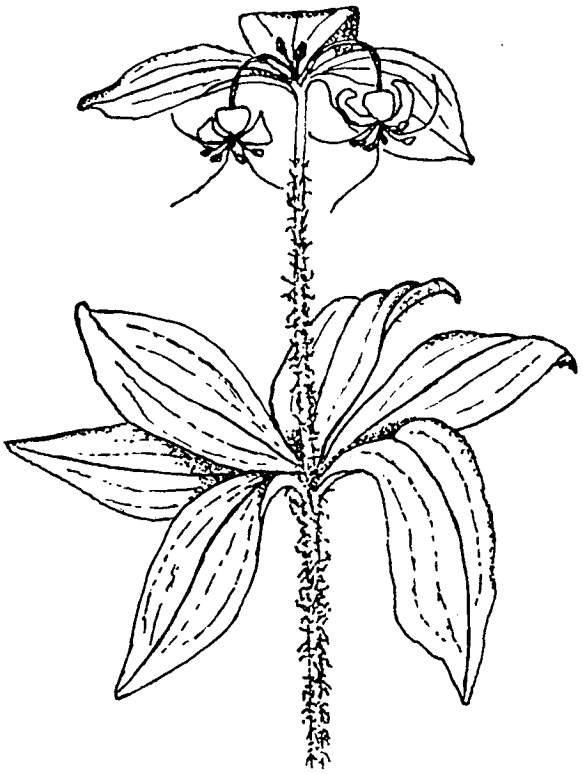
Leaf arrangements and shapes are essential identifying traits. Do the plants have opposite or alternate leaves? How can simple leaves be distinguished from the leaflets of a compound leaf?

Fortified by all this botanical lore, and by lunch, the workshoppers began to tackle the "hands-on" part of the day. A selection of plants was offered for identification, all commonly seen outdoors in flower

at various times of the year. Since most of the species we examined are not usually in bloom in April, we used pressed herbarium specimens, and flowers which had been preserved by freezing. Pressed flowers are three-dimensional objects reduced to two dimensions. Frozen flowers, when thawed, lose all their starch and are left with no well-defined dimensions. However, with only a few gentle nudges from Carole Ann and Jane, we were able to answer the questions in Newcomb's key and make correct identifications (it helped if one were able to identify the plants by sight!).

Six plant species, belonging to four families, came under our scrutiny. These were: Tall Buttercup (*Ranunculus acris*), Marsh Marigold (*Caltha palustris*), Dutchman's Breeches (*Dicentra cucullaria*),Chokecherry (*Prunus virginiana*), Jerusalem Artichoke (*Helianthus tuberosus*) and Yellow Goatsbeard (*Tragopogon pratensis*). One of the most fascinating flowers were the Dutchman's Breeches, whose highly irregular flowers are a good example of how basic flower parts can be arranged in a very different way.

Barbara Bain



Medeola virginiana

Exploring Spring in Springwater Forest
May 14, 1995

As an extension of the April 22 workshop at the University of Guelph, nine avid hikers-cum-botanists, under the leadership of Jane Bowles, trekked several kilometres along trails through the mature Beech/Maple and mixed woods of Springwater Conservation Area, south of Aylmer. The primary purpose was to put Newcomb's Wildflower Guide to the test. The abundance and variation of rich spring flora enabled us to attest to the value of the book. Jane's keen eye and directive assistance made this aspect of the day most successful.

In spite of many stops due to the proliferation of flowering herbs and shrubs we had time to identify several birds, notably Red-eyed Vireo, Wood Thrush and Northern Oriole, and to appreciate Green Frogs, Bullfrog and Wood Frog, American Toad, Painted Turtle and Map Turtle.

The weather fluctuated from a cool and windy overcast start, through mild intermittent sun and clouds with threat of rain (that never materialized), to a somewhat hot and humid sunny late afternoon.

Jane's anecdotes and informative factual asides about many plants were much appreciated. I noted the enthusiasm of participants when she helped them recognize the compound leaf of Blue Cohosh (*Caulophyllum thalictroides*) and Early Meadow Rue

(*Thalictrum dioicum*). It was pointed out that Jack-in-the-pulpit (*Arisaema triphyllum*) could be male or female, and that sex reversion does occur. That did it! We enjoyed one member of the group inspecting Jacks (or Jills!) throughout the day.

A humorous happening took place after a wind-blown Tilley hat landed in marsh water. As it started to sink in a mass of watercress, thanks to a long stick and Jane's rubber boots, it was retrieved. The grateful owner gingerly placed the wet hat on his head, straps in place.

We used Newcomb's for identifying some violets, but, realizing the brevity of description and missing info on hybrids, it was suggested that stemless/basal leaf-only violets be called "pages 28 to 32 Violas ", and stemmed alternate-leaved violets be called "page 54 to 56 Violas"! Nonetheless we were confident in our identification of Stemless Blue Violet (*Viola adunca*) growing in dry, sandy soil, and Dog Violet (*V. conspersa*) in wet woods.

Among the plants which were in great profusion were Skunk Cabbage (*Symplocarpus foetidus*), May Apple (*Podophyllum peltatum*), Garlic Mustard (*Alliaria petiolata*) and Large-flowered Trillium (*Trillium grandiflorum*). Occasionally we came across trillium flowers with various patterns of white and green flowers, apparently a result by infection of a mycoplasm spread by leafhoppers.

Several Carolinian species were noteworthy: Yellow Mandarin (*Disporum languinosum*), Spicebush (*Lindera benzoin*), Ginseng (*Panax quiquefolius*), a few Tulip Trees (*Liriodendron tulipifera*) and the aforementioned May-apple. There were very few Broad-leaved Spring Beauties (*Claytonia caroliniana*), yet an abundance of non-carolinian Narrow-leaved Spring Beauty (*C. virginica*), an oddity to me, as the reverse is true in Durham County.

Had this excursion been devoted to sedge or fern lovers they would have enjoyed themselves. Among the eight Carex species Jane pointed out were *C.hirtifolia, C.x copulata* and *C.woodii*. A growth of Wood Rush (*Luzula acuminata*) intrigued many. Perhaps Cinnamon Fern (*Osmunda cinnamomea*) was the "best" find among many ferns.

A few of the numerous other plants that we examined were Wild Ginger (*Asarum canadense*), Wood Nettle (*Laportea canadensis*), Gold-thread (*Coptis trifolia ssp. groenlandica*), Running Strawberry-bush (*Euonymus obovata*), Leatherwood (*Dirca palustris*), Silky Dogwood (*Cornus amomum ssp. amomum*), Indian Cucumber-root (*Medeola virginiana*). Sweet Cicely (*Osmorhiza claytonii*), the intriguing Beech-drops (*Epifagus virginiana*) and Ground-cover Partridgeberry (*Mitchella repens*).

This was a most rewarding day. We thank Jane for sharing her knowledge with us and making certain that our eyes were constantly alert.

Doug Lockrey

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