Field Botanists of Ontario

Newsletter

Volume 16(4): 2004
ISSN: 1180-1417

Male cones of Jack Pine (*Pinus banksiana* Lamb.). Photo by Bill McIlveen.

FIELD BOTANISTS of ONTARIO

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.

The **deadline** for submissions for **Volume 17(1-2)** is **August 18th, 2004**.

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

Field Botanists of Ontario
Revenue and Expense Statement
January 1 to December 31, 2003.

	2003	2002
Bank Balance Beginning	7078.95	5769.44
REVENUE		
Memberships	2879.00	2565.00
Life Memberships	0.00	500.00
Field Trips	2820.00	1510.00
A.G.M.	1535.00	1505.00
Donations	341.00	165.00
U.S. Exchange	36.58	68.41
Bank Interest	0.03	0.00
Total Revenues	7611.61	6313.41
EXPENSE		
Field Trips	75.00	116.32
Field Trip Honoraria	884.12	600.00
A.G.M. Honoraria		450.00
A.G.M.	1917.29(1)	763.86
Newsletter	828.92(2)	1952.75
Executive	310.14(3)	354.87
Liability Insurance	702.00	637.20
Bank Charges	87.00	128.90
F.O.N. Membership	100.00(4)	0.00
Total Expenses	4904.47	5003.90
Bank Balance Ending	9786.09	7078.95
Increase (Decrease)	2707.14	1309.51

NOTES
(1) AGM honoraria included in total AGM expense
(2) Newsletter float reduced to $600.
(3) Two cheques totalling $118.24 not yet cashed by year end
(4) Included 2002 membership

George Bryant, Treasurer

Auditor's Report to the FBO Board

I have examined the accounts of your Treasurer, George Bryant, and have found everything in perfect order.

I looked at the bank statements, deposit records, donated honoraria cheques, invoices submitted by the Executives and receipts and have found that everything balances to the bank statements and is accurately described in the Revenue and Expense Statement for 2003.

The Treasurer is to be commended for his use of accounting software which greatly lessened the auditing effort required.

According to the generally accepted accounting principles, the Revenue and Expense Statement submitted accurately represents the transactions and financial picture of the Field Botanists of Ontario from January 1 to December 31, 2003.

Respectfully submitted,

Ilmar Talvila

Toronto, February 21, 2004.

Field Trip Reports

Mono Cliffs Provincial Park

June 22nd, 2003.

It was a warm and breezy, sunny day when we embarked upon our hike into Mono Cliffs Provincial Park, northeast of Orangeville, Ontario. Our main purpose of the day was to seek out as many fern species as possible with the help of our leader, Mr. Allan Anderson. Our search was facilitated by the use of the helpful Fern Checklist provided by Mr. Nelson Maher, who we were fortunate enough to have along for the trip. To get to the Bruce Trail within the heart of the park, we first had to cross an agricultural field. This field presented a stark contrast to the adjacent elevated, forested landscape. Not surprisingly, our first fern of the day was Sensitive Fern (*Onoclea sensibilis* L.), which we found growing in a moist area along the trail. Allan pointed out that sporangia of this species are borne on separate fertile fronds that are distinct from their sterile counterparts. Field Horsetail (*Equisetum arvense* L.) was found growing throughout the area. We were informed that the sterile shoots of this species arrive early in the year, while the infertile shoots emerge later.

We made our way further into the park and soon discovered some Marginal Wood-fern (*Dryopteris marginalis* (L.) A. Gray). Provided sporangia are present, Marginal Wood-fern is easily identified by the fact that its sporangia are situated on the edges or margins of the pinnae. Next was Bulblet Fern (*Cystopteris bulbifera* (L.) Bernh.), a fern unique in the fact that it bears bulblets on the underside of the frond. Once these bulbets fall from the plant, they serve as a means of vegetative reproduction and can give rise to new plants if conditions are suitable. During the time of year our field trip took place, the stalk or stipe of Bulblet Fern is usually reddish in colour. The group was aflutter with the prospect of spotting the provincially rare Hart's-tongue Fern (*Asplenium scolopendrium* L. var. *americanum* (Fern.) Kartesz & Gandhi). Allan didn't let us down in this respect as we managed to find a nice population of this species growing on the talus slopes in the deep shade of overhead trees. It was interesting to see that the fronds from last year were still attached on many individual plants.

As we progressed along the trail we came to a point where stairs had been put in place to facilitate access to the upper portions of the escarpment. Certainly this was one trip where the instructions "please bring sturdy hiking boots and a walking stick if necessary" were not just a formality. The placement of the stairs was most fortunate as it allowed us to get up close and personal with Slender Cliffbrake (*Cryptogramma stelleri* (S.G. Gmel.) Prantl.). Allan told us that this species requires seepage areas in conjunction with dolostone ledges/shelves, and is thus often very difficult to find. This species is similar to Sensitive Fern in that its sporangia are borne on separate, distinct fertile fronds. We discovered Fragile Fern (*Cystopteris fragilis* (L.) Bernh.) in close proximity, not surprising considering its similar penchant for dolostone /limestone habitat. Allan told us this species is often confused with Bulblet Fern. We went in for a closer look to see that Fragile Fern's lowest pair of pinnae are shorter than the next three sets of pinnae, which are all similar in length to each other. This differs from the pinnae of Bulblet Fern, in which the lowest pair of pinnae are longest and each subsequent set of pinnae is shorter than the previous set.

Hart's-tongue Fern (*Asplenium scolopendrium* L. var. *americanum* (Fern.) Kartesz & Gandhi). Photo by Leslie Collins.

According to sources, the next fern we saw during our walk could quite possibly be Nelson's favourite fern: Maidenhair Fern (*Adiantum pedatum* L.). Unlike any of the ferns we had seen up until this point, fronds of this species bear spreading, branching blades, which splay out much like the digits of a stretched hand. Allan told us that the presence of this species is indicative of a rich duff layer, and that cattle had not been roaming in this part of the forest for a long time. During our hike we soon stumbled upon Evergreen Wood-fern (*Dryopteris intermedia* (Muhlenb. ex Willd.) A. Gray). Last year's fronds were still present on individuals of this species and we were informed by Allan that they will sometimes remain green through the winter. Another evergreen species, Polypody (*Polypodium virginianum* L.), was spotted growing in its preferred habitat, in close proximity to exposed rock. The tiny, delicate Maidenhair Spleenwort (*Asplenium trichomanes* L.) was a beautiful sight to behold. The small size of this species could cause it to be overlooked by many, but not by our dedicated crew of botanists.

Walking along the path, Allan suddenly declared the presence of Lady Fern (*Athryrium filix-femina* (L.) Roth ex Mert.). I asked, "how can you tell it is Lady Fern?" Allan shockingly replied, "you can tell by her hairy legs!" The group was not sure how relevant the fern's shaving habits were to its identification until it was explained that the base of the stalk bears persistent dark brown scales. It wasn't long before

Northern Beech Fern (*Phegopteris connectilis* (Michx.) Watt) was discovered in this fern-rich environment. This species is unique in that its basal pair of pinnae point distinctly forward and downward compared to the rest of the pinnae. Allan pointed out that they resemble the familiar "handlebar moustache." Oak Fern (*Gymnocarpium dryopteris* (L.) Newman), another smaller fern species, was found in a shady, moist area adjacent to the path. This moist area was also home to Spinulose Wood-fern (*Dryopteris carthusiana* (Vill.) H.P. Fuchs), which differs from Evergreen Fern in that the lowest basal pinnule next to the stalk is longer than the neighbouring pinnule.

Smooth Cliffbrake (*Pellaea glabella* Mett. ex Kuhn). Photo by Leslie Collins.

Crested Shield Fern (*Dryopteris cristata* (L.) A. Gray) was found growing in decaying materials next to the path. Allan told us that the fertile fronds of this species tend to be more upright than their sterile counterparts. As well, the pinnae on the fertile fronds are arranged such that they resemble the steps of a ladder. Ostrich Fern (*Matteuccia struthiopteris* (L.) Tod.) was found growing in a low, moist area a few metres from the path. The fronds of this large fern species are tapered at the base and arise in clusters from rhizomes.

At this point the group diverged from the beaten path in search of Walking Fern (*Asplenium rhizophyllum* L.). We found a large colony of it growing on the top of a large boulder. Allan told us that the common name, Walking Fern, was coined as a result of the fact that the tips of its long leaves can root and give rise to a new plant. From below, we continued to explore a western rock face of the escarpment in search of Smooth Cliffbrake (*Pellaea glabella* Mett. ex Kuhn). We weren't disappointed, as we found several individuals of this species growing directly out of the vertical face of the rock. These specimens were not very photogenic as they were well above our heads, but by climbing we discovered a second grouping of them just below the top of the rock face.

As our field trip was drawing to a close, a keen member of the group spotted Rattlesnake Fern (*Botrychium virginianum* (L.) Swartz), named after the fact that its fertile spike is similar in appearance to the rattle of a rattlesnake. Our last fern of the day was Marsh Fern (*Thelypteris palustris* Schott). This species was found growing on the bank of a stream. Allan told us that the pinnules on fertile fronds of this species are pointed, whereas the pinnules on sterile fronds of this species are rounded. The group made its way back out to the parking lot and at this point it was close to 4 p.m.

Other herbaceous species observed and recorded at Mono Cliffs Provincial Park during this field trip included Yellow Trout Lily (*Erythronium americanum* Ker Gawl. ssp. *americanum*), Virginia Waterleaf (*Hydrophyllum virginianum* L.), Canada Waterleaf (*H. canadense* L.), and Wild Ginger (*Asarum canadense* L.).

Leslie Collins

Wasaga Beach Provincial Park

August 10th, 2003.

It was a warm and sunny day when we embarked upon a walking tour of Wasaga Beach Provincial Park. Our leader, Sarah Mainguy, explained that this great deposition of sand was the result of the Nottawasaga Bay area being situated at the end of the sandy "dump" area of old Lake Algonquin. The group decided to start out with a trip to the beach area. We car-pooled to a local visitor centre and made our way to the beach from there. As we walked towards the beach area along a wooded trail she explained that we were passing through Oakview Woods, a remnant Eastern White Cedar-Eastern Hemlock forest on sand. In this location we saw Eastern Bracken-fern (*Pteridium aquilinum* (L.) Kuhn), which she indicated is often found in sandy, dry areas. Common Helleborine (*Epipactis helleborine* (L.) Crantz) was plentiful along the trail. Sarah told us that it is theorized this species made its way overseas because its very fine seeds travel easily in air currents.

Species List for Wasaga Beach Provincial Park – Beach Area

Scientifc Name	Common Name
Agrostis gigantea Roth	Red-top
Ammophila breviligulata Fern.	Short-liguled Beach Grass
Aster laevis L. var. *laevis*	Smooth Blue Aster
Cakile edentula (Bigelow) Hook.	American Sea-rocket
Carex lurida Wahlenb.	Sallow Sedge
Carex vulpinoidea Michx.	Fox Sedge
Cyperus bipartitus Torr.	Umbrella Sedge
Elymus canadensis L.	Canada Wild Rye
Equisetum laevigatum A. Braun	Smooth Scouring-rush
Juncus alpinoarticulatus Chaix	Richardson's Rush
Juncus articulatus L.	Jointed Rush
Juncus balticus Willd.	Baltic Rush
Juncus dudleyi Wiegelb	Dudley's Rush
Juncus nodosus L.	Knotted Rush
Oenothera oakesiana (A. Gray) Robbins ex S. Watson & Coult.	Oakes' Evening-primrose
Panicum virgatum L.	Switch Grass
Polygonum persicaria L.	Lady's Thumb
Potentilla anserina L. ssp. *anserina*	Silverweed
Potentilla fruticosa L. ssp. *floribunda* (Pursh) Elkington	Shrubby Cinquefoil
Prunus pumila L. var. *pumila*	Sand Cherry
Salix cordata Michx.	Heart-leaf Willow
Salix exigua Nutt.	Sandbar Willow
Schizachyrium scoparium (Michx.) Nees	Little Bluestem
Scirpus atrovirens Willd.	Dark-green Bulrush
Scirpus pungens M. Vahl	Common Three Square
Sporobolus cryptandrus (Torr.) A. Gray	Sand Dropseed

Species we saw in the transition zone between the forested area and the beach itself included Bristle-leaved Sedge (*Carex eburnea* Boott)[1], Pinesap (*Monotropa hypopithys* L.) and Common Bearberry (*Arctostaphylos uva-ursi* (L.) Spreng.). Bristle-leaved Sedge is common under Eastern White Cedar and has a very fine, black, sessile spikelet. At the beach itself Sarah pointed out to us that the beach was separated into an upper drier area dominated by grass species and a lower moist area dominated by sedge and rush species.

Our sunny walk along the beach came to a close as we daintily made our way around the edge of the one remaining Wasaga Beach interdunal swales to catch a glimpse of the species growing there. Species found in this habitat by our group included Canada Soapberry (*Shepherdia canadensis* (L.) Nutt.), the white-flowered Sticky False Asphodel (*Tofieldia glutinosa* (Michx.) Pers. ssp. *brevistyla* C. Hitchc.), American Grass-of-parnasus (*Parnassia glauca* Raf.), and Large Yellow Lady's Slipper (*Cypripedium calceolus* L. var. *pubescens* (Willd.) Correll). After this we made our way back to the carpool location and proceeded to the parabolic dunes area.

To get to the parabolic dunes area of Wasaga Beach Provincial Park we first had to trek through an open field. Here we found Kalm's Brome (*Bromus kalmii* A. Gray), Cow-wheat (*Melampyrum lineare* Desr.), Wild Bergamot (*Monarda fistulosa* L.), Bastard Toadflax (*Comandra umbellata* (L.) Nutt.), Field Pussytoes (*Antennaria neglecta* Greene), and White-grained Mountain-rice (*Oryzopsis asperifolia* Michx.). We paused for lunch at picnic tables located at the edge of the forest and took advantage of the dilapidated facilities before continuing on our botanical journey. The dunes were actually quite steep and walking up the first one was quite a challenge. We made our way along the path within the forest and soon stumbled upon more Bracken Fern. It was actually quite breathtaking to see it in such mass quantities blanketing the forest floor. It was one of those times when you know a photograph isn't going to capture exactly what the eye is seeing. We saw Black Huckleberry (*Gaylussacia baccata* (Wangenh.) K. Koch) and Sarah pointed out that this species has shiny leaf scales on the undersides of its leaves. We encountered Common Juniper (*Juniperus communis* L. var. *depressa* Pursh), though we were told that this species is much more plentiful elsewhere in the park. Other species we encountered along the path included Pennsylvania Sedge (*Carex pensylvanica* Lam.), Wintergreen (*Gaultheria procumbens* L.), Wood Betony (*Pedicularis Canadensis* L.), Low Sweet Blueberry (*Vaccinium angustifolium* Aiton), Trailing Arbutus (*Epigaea repens* L.), and Smooth Hairy Goldenrod (*Solidago hispida* Muhlenb. var. *tonsa* Fern.). We were also

[1] Bristle-leaved Sedge does not normally have black spikelets. They are only black when infected with a smut fungus, which is quite common in this species. –M.J. Oldham.

surprised to see Rock Polypody (*Polypodium virginianum* L.), as it is usually found growing on or adjacent to rock substrates. Soon after our arrival to the parabolic dunes it was decided we should turn around. Time was running out and we still hadn't made our way to the sand plains area of the park.

Our last stop of the day was the sand plains area of Wasaga Beach Provincial Park. Conveniently enough, this was where we had all parked our cars in the first place. What great planning on Sarah's part! Many members of the group had noticed the Plains Puccoon (*Lithospermum caroliniense* (Walter ex J. Gmel.) MacMill. var. *croceum* (Fern.) Cronq.), Butterfly-weed (*Asclepias tuberosa* L.), New Jersey Tea (*Ceanothus americanus* L.), Spotted Knapweed (*Centaurea maculosa* Lam.) and Indian Grass (*Sorghastrum nutans* (L.) Nash) growing right along the roadside in this location. We proceeded into the forest and encountered more Canada Soapberry. Other species present along the trail included Sweet Fern (*Comptonia peregrina* (L.) J.M. Coult.), Prince's Feather (*Polygonum orientale* L.), Houghton's Cyperus (*Cyperus houghtonii* Torr.), Hill's Thistle (*Cirsium hillii* (Canby) Fern.), Spotted Coral-root (*Corallorhiza maculata* (Raf.) Raf.), Cow-wheat, Pennsylvania Sedge, Silvery-flowered Hay Sedge (*Carex siccata* Dewey), Rocky Mountain Fescue (*Festuca saximontana* Rydb.), Venus'-pride (*Hedyotis longifolia* (Gaertn.) Hook.), Bluets (*Hedyotis caerulea* (L.) Hook.), and Rough Hawkweed (*Hieracium scabrum* Michx.). All in all it was a very successful trip as we managed to see over 60 species in one day.

Leslie Collins

Essays:

These Are a Few of My Favourite Weeds.

George Bryant

Because we do not stop for weeds, they kindly stop for us. This observation can be clearly demonstrated by a mid-summer tour through the pastoral roadsides of Manitoulin Island. In referring to the alien flora of the island, John Morton stated: "They add greatly to the interest and diversity of our flora, as well as to the colour and beauty of the countryside" (Morton & Venn 2000).

Although native plants do merit the greater attention by botanists, the variety, complexity and omnipresence of weeds also provide a rewarding challenge. As a record keeper, I find a greater familiarity with native plants leads to an increasing interest in non-natives. The impact of weeds can vary from providing swathes of purple, yellow or white across large tracts of the landscape to embellishing sidewalk crevices with minuscule green flowers. I have long been fascinated by their evocative common names (Queen Anne's Lace, Fringed Rupturewort, Motherwort), their multi-syllabled scientific names (*Heracleum mantegazzianum* Sommier & Levier) and even their authorities, many being a simple "L." Charles Darwin in The Voyage of the Beagle suggested, "A traveller should be a botanist for in all views, plants form the chief embellishment." In my experience this dictum could be modified to "A botanist should be a weedologist for in most views, weeds form the chief embellishment!"

A weed by any other name (alien, exotic, non-native, adventive) may still be a weed, but a definition is in order. The Ontario Plant List lists all provincial species and is absolute when it comes to weeds—they are ranked SE (exotic).

Compared to native plants, the identification of weeds is often a challenge because many abundant species are not included in the popular Newcomb's Wildflower Guide. On the plus side, the concepts of rare, threatened and endangered and their associated protection measures do not apply to weeds so directions to their sites can be freely given.

Here are some of my favourite weeds, ranked in a weedy random fashion, with the date and location of my first observation, the provincial status and some comments. Those covered in Newcomb are indicated with *!

***Whorled Carpetweed** (*Mollugo verticillata* L.) SE5—July 22, 1991, West Gravenhurst.
I was delighted to recognize this weed while leading an FBO outing. The sole Ontario representative of the tropical Old World family, *Aizoaceae,* it is quite common along old railway tracks.

Bracted Vervain (*Verbena bracteata* Lag. & Rodriguez) S4?—Aug. 11, 1996, West Gravenhurst.
When I first saw this prostrate, hairy plant with tiny blue flowers, I was convinced it was borage. Unsuccessful in placing it in that family or anywhere else, I showed it to Mike Oldham, who immediately set me straight. Apparently native, it behaves like a weed—there is a lovely picture of it in Weeds of the West.

***Scarlet Pimpernel** (*Anagallis arvensis* L.) SE4—July 23, 1998, Islington Avenue.
Dwarf Mallow (*Malva rotundifolia* L.) SE2—July 23, 1998, Islington Avenue.
I mentioned my failure to find Scarlet Pimpernel to Ilmar Talvila who directed me to his bus stop! Unusual for our wildflowers, Scarlet Pimpernel is actually orange—the glossy flowers open up only in full sun. I have seen the blue form in Bermuda and hope eventually to see it in Ontario. Amongst the Scarlet Pimpernels at the bus stop were some apparent Cheeses (*Malva neglecta* Wallr.). A bonus, this plant keyed out to be Dwarf Mallow (*Malva rotundifolia* L.).

Japanese Hedge-parsely (*Torilis japonica* (Houtt.) DC.) SE4—July 5, 2001, Waterford Ponds.
Woodland Chervil (*Anthriscus sylvestris* (L.) Hoffm.) SE4?—June 9, 2003, Owen Sound.
Both of these plants are superficially like Queen

Anne's Lace (*Daucus carota* L.) but peak flowering occurs earlier. Both are also quite invasive with Woodland Chervil covering roadsides around Kingston and Owen Sound.

***Knawel** (*Scleranthus annuus* L.) SE5—July 8, 2002, Hwy. 69 at French River.
I had long sought this weed because of the unusual common name. Superficially it resembles many other weedy pinks. It took me several days to look at my voucher—when I did; I was surprised by its identity.

Whorled Plantain (*Plantago arenaria* Waldst. & Kit.) SE4—August 29, 2002, Grenadier Pond.
Because of the branching habit, this species looks more like a Knapweed (*Centaurea* sp.) than a Plantain. Now that I have a search image, I have found it growing abundantly at several locations in downtown Toronto.

Yellow Alyssum (*Alyssum alyssoides* (L.) L.) SE5—May 15, 1998, Rondeau.
Growing profusely on the beach at Rondeau, this little mustard intrigued me for years before I made the final identification

***Hedge Fumitory** (*Fumaria officinalis* L.) SE3—April 26, 2001, Vale of Avoca.
Winter Aconite (*Eranthis hyemalis* (L.) Salisb.) SE1—April 10, 2001, 50 Point Conservation Area.
These attractive garden escapes were in full flower well before our native spring ephemerals.

Kenilworth-ivy (*Cymbalaria muralis* P. Gaertn. Mey.& Scherb.) SE1—June 17, 1998, Elora Mill.
Very common on European stone buildings, I was delighted to see this clambering snapdragon occupying niches in the walls of the old mill.

Scotch Thistle (*Onopordium acanthium L.)* SE4—July 17, 1998, Guelph Gosling Garden.
This plant may have been much more common in Ontario 100 years ago. The only place I have seen it was in the compost pile near a demonstration weed garden!

Four-leaved Water Clover (*Marsilea quadrifolia* L.) SE1—July 3, 2001, Nanticoke Creek.
Our only persistent weed fern, I first learned of its existence in Nanticoke Creek from an article in a F.O.N. Newsletter many years' ago. We found one or two fronds growing on the east side of the creek near Lake Erie. If you take a canoe, you may find better samples growing on the less-accessible west side.

Costmary (*Balsamita major* Desf.) SE5—July 9, 2002, Mississagi Lighthouse, Manitoulin Island.
Salad Burnet (*Sanguisorba minor* Scop.) SE4—September 15, 2002, Komoka Railroad Prairie
Credit goes to Helen Juhola who has not limited her interests just to wildflowers for recognizing these relicts of pioneer gardens. In both cases, the basal rosettes were the key to identification. I may have difficulties if I ever encounter them in flower.

***Bulbous Buttercup** (*Ranunculus bulbosus* L.) SE3—June 11, Ferndale Flats, Bruce County
English Cowslip (*Primula veris* L.) SE1—June 11, 1003, Hopeness, Bruce County
We were very fortunate to be shown these plants by Joe Johnson. In both cases, they were at their flowering peak. At Ferndale, several pastures were sparkling yellow; near Hopeness, Cowslips occupied more than an acre—both are displays perhaps not matched in their original haunts.

Goat's rue (*Galego officinalis* L.) SE1—September 24, 2003, Gloucester
Woodland Angelica (*Angelica sylvestris* L.) SE1—September 24, 2003, Gloucester
Marsh Sow-thistle (*Sonchus palustris* L.) SE1—September 24, 2003, Gloucester
Articles by Joyce and Allan Reddoch (Goat's Rue) and Dan Brunton (Woodland Angelica, Marsh Sow-thistle) in Trail and Landscape (Ottawa Field Naturalists) allowed us to drive right up to these weeds. Typical of weeds all three species occupy disturbed industrial areas. The Angelica and Sow-thistle are remarkable—larger than their conspecifics and covering several hectares in this Ottawa suburb.

Rush Skeletonweed (*Chondrilla juncea* L.) SE1—September 21, 2001, St. Thomas Railway Yards.
The basal leaves, flower heads and latex sap all resemble those of dandelions, but the overall appearance of the plant is like Mormon Tea (*Ephedra* sp.) a straggly broom-like desert shrub. I had never heard of this plant until I saw the species list of an FBO trip led by Mike Oldham over ten years' ago. The old railway yards are still there, as is the plant.

***Queen-of-the-prairie** (*Filipendula rubra* (Hill) Robinson) SE1—July 8, 1998, West Gravenhurst
This is a stunning native prairie species once popular in Ontario pioneer gardens. It was planted at several locations along Highway 169 west of Gravenhurst. Given the right conditions in the odd year, some of these perennials will produce a large magenta inflorescence during the first week of July.

***Corn Cockle** (*Agrostemma githago* L.) SE3
***Caraway** (*Carum carvi* L.) SE1?
Ball Mustard (*Neslia paniculata* (L.) Desv.)SE3
***Ragged Robin** (*Lychnis flos-cuculi* L.) SE1
Black Henbane (*Hyoscyamus niger* L.) SE1
Many of my favourite plants are those for which the search is still on. Some of the examples above may represent a declining Ontario species, now being out-competed by more aggressive weeds. If you know of a good location for them, let me know before it is too late.

George Bryant
bryant@sympatico.ca

Morton, J.K. and J.M. Venn. 2000. The Flora of Manitoulin Island and the Adjacent Islands of Lake Huron, Georgian Bay and the North Channel. (3 ed.). Department of Biology, University of Waterloo, Waterloo, Ontario.

Explaining the Dog in Dogwood

Alan Procter

For the last one hundred years and more The Oxford English Dictionary (OED) has maintained that the word Dogwood (*Cornus*) derives from Dog, the animal. The OED, now twenty volumes in size (1989), with over two million quotations to illustrate its definitions, is generally considered the final authority in the field.

However, on January 8, 2004, in response to my written submission, Katrin Thier, an editor with OED, replied "... I have added your letter to our files, so we can implement your suggestion."

My suggestion was to start with M.L. Fernald (1950) who maintains that Dogwood derives from Dagwood, meaning skewerwood; and with D.J. Mabberly (1997) who claims Dogs mean skewers. The difficulty here however is that these words, with these meanings, have never appeared in the written record of the English language.

Nevertheless there is a persuasive case that these botanists are right. The Old English word Dalc or Dolc, first emerging into the written record around 1000 A.D., was applied to any number of small cylindrical objects, pins and various tools of wood or metal. The word survives in the German and Dutch words for dagger: Dolch; Dolk; and in the English word Dog meaning railway spike, or else a staple-shaped-clasp used in construction with timbers; or a few specialized tools.

The principal Dogwood of Europe, *Cornus sanguinea* L., historically provided wood for skewers, spindles, shuttles, bobbins, pegs, pestles, and cogs for wooden gearing in mills. None of these objects were themselves called Dogs, but all had the cylindric or pointed characteristics of the original Dalc. Hence, Dog-wood: the wood used for dog-concept objects.

This summarizes my arguments submitted to the OED editor. Her reply encourages me to believe that the confusion over the origins of Dogwood, such as puzzled Soper & Heimburger (1982) or Eastman (1992), will finally be put to rest.

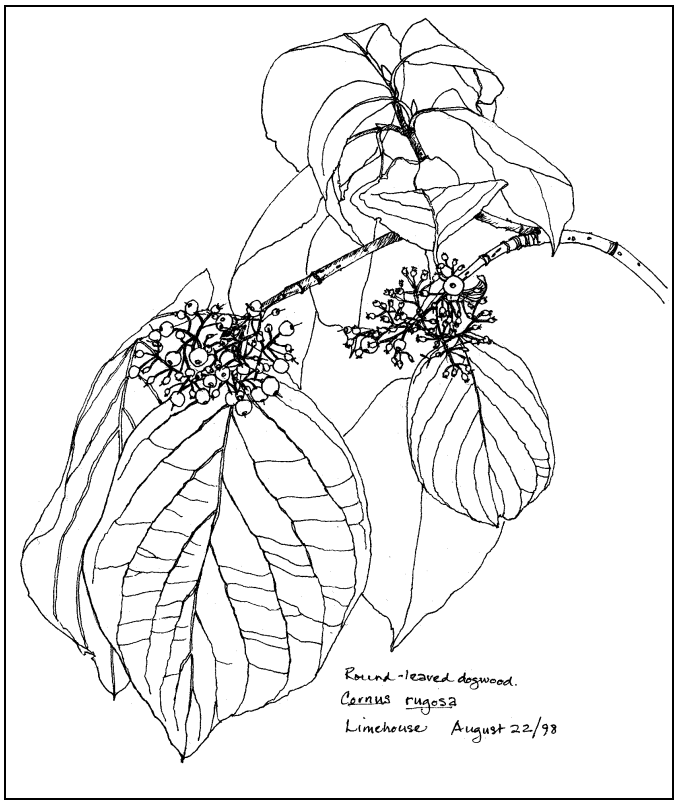
> "My own off-the-wall theory, based on experience in cutting survey lines ... the fetid smell of the fresh-cut wood, strongly resembling the odor of dog feces."
>
> -Eastman (1992) is writing of a North American species.

J. Eastman, J. 1992. Forest and Thicket, Stackpole Books. p. 72.

Fernald, M.L. 1950. Gray's Manual of Botany, 8th ed., Portland, p. 1105.

Mabberly, D.J. 1997. The Plant-Book (2 ed.), Cambridge, p. 184.

Soper, J.H. & M.L. Heimburger. 1982. Shrubs of Ontario. Royal Ontario Museum. P. 342.



A Tale of Two Cemeteries[2]

Diana Storen

I would like to dedicate this column to my friend Ann Fowle, botanist, environmental activist and the personification of the phrase "Think globally, act locally", who died on February 28, 2004 at the age of 81.

Once upon a time there were two cemeteries. Both of them could be found near the small village of Castleton, in the county known as Northumberland.

The first cemetery lay at the edge of the Oak Ridges Moraine. He was as happy as a graveyard could be. Although he was no longer used for burials, many people came to visit him anyway. Some paid their respects to their ancestors. Others studied the inscriptions on his headstones. And quite a few examined the unique plants that grew on his plots. What they found excited them. He became famous - for a cemetery, that is.

He received donations and grants to be used for his restoration. He watched contentedly as gravel paths were laid around the vegetation. He was glad when people cut down some of his pines, because these newly planted trees created too much shade. The sun shone on his undisturbed flora and it flourished. Weeds were removed. Majestic tall

[2] This column was originally published in the Cobourg Daily Star on April 16th, 2004.

grasses swayed in the fragrant breezes. Animals thrived in their natural habitat.

A sign posted at his entrance told the story of his success. When his name was affixed to the big wooden gate he almost burst with pride.

He had lots of visitors. All of them appreciated what they saw. No one damaged him. No one left garbage. There were no more field parties. He was as pleased as a graveyard could be.

His name was Red Cloud.

The second cemetery lay in the Oak Ridges Moraine. He was a very sad and lonely little graveyard. Almost no one came to visit him. A handful of people recognized the rare indigenous plants and grasses that grew among his monuments. Experts as well as amateur conservationists talked about his potential and said that he should be protected. A television crew made a short documentary about him.

But mowers arrived anyway. Throbbing motors shattered the country stillness. Lethal blades beheaded his Prairie Buttercups and Wild Lupines. They levelled his tasty pink Wild Bergamot, scattering its browsing bees. They chopped down his Big Bluestem and Indian Grass, leaving him barren and vulnerable to vandals.

He felt betrayed. He felt abandoned. But he did not feel ashamed. He was proud of his pioneer heritage.

His memory wasn't what it used to be, but he was pretty sure that at one time he had been bigger. He wanted to cry when the fence went up around him. Because many of his stones had been destroyed or stolen, he worried that unmarked graves had been left outside the barrier. An archeologist agreed with him, which cheered him up, until he realized that the new boundaries probably still wouldn't include all of those laid to rest in his soil. There was nothing that he could do about it. And this made him even more unhappy.

His name was Russ' Creek.

Next Thursday is Earth Day. The phrase "Think globally, act locally," associated with French-born American microbiologist René Jules Dubos, could well be the theme of this annual worldwide event. On April 22nd, over 500 million people in more than 180 countries will take part in various projects that address local environmental issues.

Saving the tallgrass prairie ecosystem at Russ' Creek would be, in my opinion, a very worthwhile undertaking. Less than one per cent of original prairie is left in Canada. Even more alarming is the fact that only about 1/1000 of one per cent (.001%) of the Rice Lake Plains Tallgrass Prairie remains today. When it's gone, it's gone…forever. Along with the wildflowers, shrubs, trees, birds, insects and reptiles that make it their home.

I firmly believe that the survival of our planet depends on the fragile interconnectedness of all organisms. Imagine a series of chains attached to each other. When one link breaks, the entire structure becomes weaker. In the same way, every time we allow a species to become extinct, the vitality of life's gossamer web is diminished. When this happens, we lose more than a plant or an animal: we lose a part of ourselves, too.

And that makes me feel very sad.

To learn more about prairies, to ask questions or to express your concerns, visit these websites:

www.tallgrassontario.org

www.grca.on.ca
(The Ganaraska Region Conservation Authority)

www.ltc.on.ca
(Lower Trent Conservation)

Announcements

The FBO Website Has Been Updated!

Check out our website at "http://www.trentu.ca/fbo/" for the latest information on field trips, registration, newsletters and membership. If you would like to submit digital photos from field trips, interesting links, or if you have any ideas for improving the website, email Melinda at plantgirl2002@hotmail.com.

Northern Ontario Plant Database Website.

Sue Meades

Algoma University College and its 18 partners are please to announce the launch of the Northern Ontario Plant Database (NOPD) Website, located at <http://www.northernontarioflora.ca>.

The NOPD project began in May 2002 with a generous award from the Ontario Living Legacy Trust of $125,000 over 2 years. The original educational partners included Algoma University College, Lakehead University, Lake Superior State University, and Sault College of Applied Arts and Technologies. In December 2003, the project received an additional $25,800 to bring Laurentian and Nipissing Universities, and the Royal Ontario Museum Herbarium (TRT) into the partnership. Government partners include the Great Lakes Forestry Centre (GLFC-CFS), which supplies office and computer support for the project, Ontario Forest Research Institute (OFRI-OMNR), Quetico Provincial Park, Northeastern Ontario Provincial Parks, Sault Ste. Marie OMNR District Office (OMNR-SSM), and the Natural Heritage Information Centre (NHIC-OMNR). Industry partners include BioForest Technologies, Clergue Forest Management, and Superior Land Management (Sault Ste. Marie), Borealis Forestry and GIS Services (Wawa), and Northern Bioscience

(Thunder Bay). The Sault Naturalists of Ontario and Michigan (SNATS) represent the public sector.

The primary goal of the Northern Ontario Plant Database Project is to provide universal access to data contained within the herbaria of northern Ontario educational and government institutions. An herbarium is a collection of dried plant specimens. Each specimen is labelled with the scientific name and information such as the location and habitat of where the plant was collected, the name of the collector, and the date it was collected. Lakehead University has the largest herbarium, with over 105,000 specimens; about half of which are from northern Ontario. Other institutions house between 1,000 and 20,000 specimens. Bringing the Royal Ontario Museum into the partnership will add valuable data on northern Ontario collections, particularly from surveys sponsored by the Museum, which were conducted around Lake Superior in the 1930s.

The NOPD provides biosystematic support essential for studying the biodiversity of northern Ontario. Herbarium specimens serve as a permanent record of plant distributions. Documenting the present and historical location of plant species provides a basis for tracking changes in plant distributions, which is particularly important in managing endangered and threatened species, introduced invasive species, indicators of specific forest types, or species that may be useful in monitoring the long-term effects of climate change. Data on over 2800 vascular plant species, including ferns, conifers, and flowering plants, is included in the database. Current scientific names and over 12,000 synonyms (former names), as well as English and French common names are provided. Quick searches can be done by plant family or genus name, and an advanced search option allows access to information based on common name, collector, or location.

Under the name of each plant species, links are provided to existing records in each herbarium. Links also are included to descriptions and images of plants in northern Ontario, which will be useful to foresters, wood lot owners, students, and the general public interested in learning more about the northern Ontario flora. Staff at the NOPD are currently editing the data supplied by partner herbaria for consistency in format and accuracy of location prior to its inclusion in the database. By the end of the summer, information on 46,00-50,000 herbarium specimens will be accessible through the Northern Ontario Plant Database, some dating back to 1890. In addition to the herbarium data, webpages are included on plant terminology, nomenclature, biographies of collector whose specimens are deposited in northern Ontario herbaria, and other plant-related links, making the NOPD a useful tool to students in botany and natural resources programs. Funding through Great Lakes Forestry Centre and HRDC will enable the project to continue throughout 2004, during which time data and descriptive information will be added weekly.

Project leader Susan J. Meades, an adjunct professor at Algoma University, is particularly pleased with the educational opportunities this project has offered to students in northern Ontario. Over the course of the project, 20 students have been employed at 7 different educational institutions. Their duties included scientific data entry and editing, reorganization of herbarium collections, field collection and identification, pressing and mounting of new specimens, and scientific database and website design and construction. And, as part of their future course work in plant systematics, biology students at Algoma University will have the opportunity to research and add new descriptions and images of select plant species to the NOPD.

We invite all interested parties to visit the NOPD website and learn more about the information contained within the herbaria of northern Ontario and its flora. Please contact Susan Meades at <herbaria@NRCan.gc.ca> for further information.

FBO Newsletter Editor Prepares to Step Down.

Ed Morris

After serving for nearly eight years as newsletter editor, I have decided to step aside as soon as a replacement may be found. I originally became interested in becoming editor after reading Jim Pringle's article "What is cow cabbage?" in the Spring of 1996. He was requesting information about a plant named in a family history "Pioneers in the Queen's Bush" written by my great aunt, Florence Fee. We learned it was most likely Virginia Water-leaf (*Hydrophyllum virginianum* L.).

Serving as editor and an executive member has been a very rewarding experience. I've met many friends and professional contacts, become a little more proficient with the English language, and learned much more about Ontario's flora. I should specifically thank Mike Oldham and Al Harris for acting as associate editors. Through email and fax they have offered their botanical and grammatical knowledge to our benefit. Someday, I hope to meet these gentlemen.

A mentor of mine has a favorite saying: The road to hell is paved with good intentions. This seems to sum up my last few years as editor. I can no longer make the time needed to give the newsletter the attention it deserves. Even the simplest tasks seem to get delayed for weeks. Moreover, what used to be a passion has now become a chore, mainly because I am always behind schedule. The time has come to find someone new with fresh enthusiasm and ideas.

So thank you Aunt Florence for connecting me to the FBO. I will stay on until a replacement is found, and will continue to be an active member however I may.

Field Botanists of Ontario Executive (2004).

Back Row: Nick Hodges, George Bryant, Mary Ann Johnson, Dirk Janas, Carole Ann Lacroix, Bill McIlveen, Bob Bowles; **Front Row:** Dan Barcza, Melinda Thompson, Sarah Mainguy, Bill Draper. **Absent:** Ed Morris.

Pin Cherry (*Prunus pensylvanica* L. f.). Photo by Bill McIlveen.