



FIELD BOTANISTS of ONTARIO

Newsletter

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Various fungi collected during the foray – Bill Thompson (BT)

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President's Message

It's the middle of January and I'm enjoying looking at winter through the window in the comfort of my living room I can even see a few stems of wildflowers (dead wildflowers) in my garden.

Looking back, I think the FBO had a good year in 2010. I have heard many good comments about our field trips and I enjoyed the trips in which I participated. I wish to thank Leah Lefleur and Sarah Mainguy who did a great job of planning and administrating the field trip program. We also owe a genuine vote of thanks to the trip leaders for the effort they put into leading outstanding trips.

The AGM was success and like all FBO AGM's was unique. I wish to express our thanks to Gord Mitchener for planning and organizing the AGM. We also owe a vote of thanks to the field trip leaders and our speaker. It was great to have Paul Maycock in attendance to receive the Goldie Award.

With the change of editors, we had a few technical problems with publishing the Newsletter, which took some time to solve. However, I think the recent double issue, the first by our new editor, Julia, got us back on track. I thank Julia for her work and our members for their patience.

I think that we can look forward to exciting year for the FBO in 2011.

We are planning to welcome spring 2011 on April 9th and 10th (with an optional workshop on April 11th) at the Canadian Museum of Nature in Ottawa. The Museum is a national treasure and we have received a very warm invitation.

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Standard source for scientific names and authorities 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.

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Field Trip Reports

MacTier Sand Plain, Borrow Pit and Bog July 10th, 2010

To a botanist, the town of Bala has two claims to fame: butter tarts and Atlantic Coastal Plain (ACP) floral affinities. On this outing, FBOers were treated to both as our leader, Bala native Jim Goltz, arrived bearing gifts of butter tarts along with a full menu of botanical goodies for the day.

Jim showed us a surficial geology map for Muskoka delineating the MacTier sand plain. The bedrock of gneiss and granite is impervious so rainwater remains on top of the rock creating an acid substrate which supports a distinctive floral population. On this trip, we would tour some borrow pits, a poor fen, a railroad line, and a bog in search of some of these intriguing plants. Jim pointed out the differences between bogs and fens:

- bogs obtain all nutrients and water from precipitation - sphagnum is the best indicator of a bog
- Fens have running water and are dominated by graminoids, particularly sedges. Poor fens have an acid substrate; rich fens - limestone. With the exception of the shores of Beausoleil Island and the Port Severn area, Muskoka lacks any rich fens. If you want to see a superb rich fen, visit Minesing Swamp in Simcoe County.

Our first stop was Hane's Lake Poor Fen, a lovely wetland covering almost a square kilometre. En route Jim pointed out a few common Muskoka roadside plants: Sweet Vernal Grass (*Anthoxanthum odoratum* SE4), Smooth Juneberry (*Amelanchier laevis* S5) - the commonest of a difficult genus, and Round-leaved Hawthorn (*Crataegus chrysoarpa* S5) - also the commonest of this most difficult genus but identifiable by leaf shape. Many people do not realize we have two almost identical species of Evening Primrose: Small-flowered Evening Primrose (*Oenothera parviflora* S5) with lobed sepal tips, which is more common here than the southern larger-flowered Common Evening Primrose (*Oenothera biennis* S5).

We then plunged into the fen, some of us regretting that we ignored instructions to wear rubber boots. Various dominant plant species created a pattern of greens to the horizon; in the distance, Horned Bladderwort (*Utricularia cornuta* S5 AC) in full bloom created a yellow swath. For

orchid aficionados we observed an abundance of White-fringed Orchid (*Platanthera blephariglottis* S3-4 AC) Grass Pink (*Calopogon tuberosa* S4-5), Rose Pogonia (*Pogonia ophioglossoides* S4-5) and Club Spur Orchid (*Platanthera clavellata* S4-5). Look at the end of the spur to see the club (Jim observed that up close the "really cool flowers seem to be having a bad hair day"). Two similar carices drew our attention - the more northern Yellowish Sedge (*Carex michauxiana* S5) with long beaks right beside the similar but wider leaved Long Sedge (*Carex folliculata* S3 AC). This is the only place Jim knows where both grow together. A lovely patch of beak-rushes included White Beak-rush (*Rhynchospora alba* S5); Small-headed Beak-rush (*R. capitellata* S4 AC) and Brown Beak-rush (*Rhynchospora fusca* S4 AC). All three are common in Muskoka while a fourth, (Capillary Beak-rush *Rhynchospora capillacea* S4), occurs in Muskoka only locally along the shores of Georgian Bay, e.g. at Beausoleil Island. For another interesting comparison we contemplated the narrow-leaved Canadian St. John's-wort (*Hypericum canadense* S4) right beside the sibling but broader leaved Northern St. John's-wort (*Hypericum mutilum* ssp. *boreale* S5). Small Yellow Sedge (*Carex cryptolepis* S5) was a lifer for some of us. Well out in the fen and surrounded by various heaths stood a solitary Scots Pine (*Pinus sylvestris* SE5), one of several invasives we noted. All eight species of Ontario bladderwort occur in Muskoka—we studied most that day. In patches of open water we noted Flat-leaved Bladderwort (*Utricularia intermedia* S5) with bladders on separate stalks. Bog Aster (*Oclemena nemoralis* S5), arguably the loveliest of our asters was already in flower - two weeks earlier than normal, as were several other species we saw that day. We were reluctant to leave the fen, the large numbers of tiny delicately-marked Bog Coppers and Elfin Skimmers being new fauna for many of us.

Following lunch, we motored a short distance to check out the borrow pits. Crossing the CNR main line Jim pointed out some of his discoveries including the recently arrived native but spreading Tall Thoroughwort (*Eupatorium altissimum* S1) and Slender Sedge (*Cyperus lupulinus* S4) (reflexed bracts when mature), both very rare in Muskoka. Roadside grasses included Common Barley (*Hordeum vulgare* SE2), Sand Dropseed (*Sporobolus cryptandrus* S4), Quack Grass (*Elymus repens* SE5), Narrow-leaved Panic Grass (*Panicum linearifolium* S4-5), and Poverty Oat Grass (*Danthonia spicata* S5). High above a Merlin circled lazily while weaving through the graminoids; a Columbine Dusky Wing distracted photographers.



White-fringed Orchid (*Platanthera blephariglottis*) – W.D McIlveen (WDM)

At the edge of an old water-filled pit, we contemplated recent botanical arrivals. These included Pale St. John’s-wort (*Hypericum ellipticum* S5), Rattlesnake Grass (*Glyceria canadensis* S4-5), Blunt Spike-rush (*Eleocharis obtusa* S5), Variegated Horsetail (*Equisetum variegatum* S5), Nodding Ladies’-tresses (*Spiranthes cernua* S5), and Greater Bladderwort (*Utricularia vulgaris* S5); this not in bloom but distinguished by its big dark bladders and alternate leaves. On wet soil the smallest and most common of our spike rushes, Least Spike-rush (*Eleocharis acicularis* S5) created a green carpet. A common aquatic Seven-angled Pipewort (*Eriocaulon aquaticum* S5 AC) features cross striations in roots and pointed blue-green leaves. We ticked off two more St. John’s-worts: Larger Canadian (*Hypericum majus* S5) and Dwarf (*Hypericum mutilum* ssp. *mutilum* S4). Here we learned that Ontario does have a provincial flora or the next best thing to it. It is called Flora of Michigan by E.G. Voss and in Jim’s words “Voss is the best for any identification”.

Two shrubs attracted to the wetland were Bebb’s Willow (*Salix bebbiana* S5), the young specimens with impressed leaves, and the ferociously invasive Glossy Buckthorn (*Frangula alnus* SE5). Carrying on to a sand quarry we noted two arenophiles: Crinkled Hairgrass (*Deschampsia flexuosa* S5) and the appropriately named Old-field Cinquefoil (*Potentilla simplex* S5).

Jim then showed us one of his prized discoveries—a big patch of Long-branched Frostweed (*Helianthemum canadense* S3), the only site for this southern plant in Muskoka. The patch arose when the area was cleared during highway construction. To Jim the big question was whether the plants were introduced then or were already in the seed bank. Frostweed has an interesting flowering cycle. Petals open early in the morning but dehisce by evening. This and Day Lily are the only plants Jim could think of in which flowers last for only one day—this was their first day of blooming with five flowers poking their heads out. Under some scattered White Pines (*Pinus strobus* S5) we observed the basal leaves of Moccasin Flower (*Cypripedium acaule* S5), Pinesap (*Monotropa hypopithys* S5) gone to fruit, and a lover of old-growth pine forest, Pipsissewa (*Chimaphila umbellata* S5), lucky for us still in flower.

Jim now brought us to another one of his finds, an assembly of violets with both Arrow-leaved (*Viola sagittata* var. *ovata* S4) and Woolly Blue (*Viola sororia* S5). If two similar plants co-habitate, Jim looks for hybrids and in this case was successful. The hybrid individual *Viola sagittata* var. *ovata* X *Viola sororia* (not listed in the Ontario Plant List, 1998) shared the hairiness of Arrow-leaved and the cordate leaf of Woolly Blue.



Cladium mariscoides – WDM

The trail took us to a huge sand pit excavated only 20-30 years ago. Dozens, perhaps hundreds, of plant species have taken occupancy. These include many of the fen plants we had seen earlier along with Large Cranberry (*Vaccinium macrocarpon* S4-5), Carolina Yellow-eyed Grass (*Xyris difformis* S3 AC), and European Eyebright (*Euphrasia stricta* SE4). Mugo Pine (*Pinus mugo* SE1) was an interesting and rare invader. A lover of old sand pits, Slender Ladies' Tresses (*Spiranthes lacera* S4-5), with its diagnostic green striped lip, was blooming two weeks early. Returning to the vehicles along a highway shoulder we searched for the southernmost location of Sand Jointweed (*Polygonella articulata* S4). Still very early in the season for this inconspicuous buckwheat, Jim found a few spikes just poking up above the ground.



Trip Leader Jim Goltz in the fen - WMD

We then motored to MacTier Bog, the last of Jim's wetland sites. Jim pointed out characteristic sedges: Running Bog Sedge (*Carex oligosperma* S4) and *Carex trisperma* (Three-fruited Sedge S5). Muskoka has more known locations for the elusive Southern Twayblade (*Listera australis* S2 AC), now a month after peak flowering, than any other area in Ontario. Jim made a pointed effort to locate the plant but unlike many of his searches, he was thwarted. FBOers did not share his disappointment as we clambered through the bog for delightful views of Swamp Rose (*Rosa palustris* S5), Bog

Rosemary (*Andromeda polifolia* S5), and Virginia Chain Fern (*Woodwardia virginica* S4 AC). As the afternoon concluded we observed an uncommon Band-winged Meadowhawk and a Broad-winged Hawk flying over - its talons gripping a snake. Many thanks to Jim for sharing some of his botanical treasures with FBOers. 🌿

George Bryant

Awenda Provincial Park August 21st, 2010

Awenda has always been among my favourite Provincial Parks. It has well-spaced campsites, good biking trails, and proximity to our "best" Great Lake, so it was with great delight that I saw a field trip to Awenda on offer this FBO season. Sean Spisani was our very capable field trip guide. He was one of the consultants hired to conduct a Life Science Inventory of Awenda for Ontario Parks and completed more than 30 days in the field, compiling data for the final document. There are 685 plant taxa in Awenda. Of these, about 140 are only found on Giant's Tomb, an island only 2.5 km offshore but very difficult to access, as a shoreline littered with paddles of canoes and kayakers who have tried to make the seeming easy crossing will attest.

Awenda has two key systems. Nipissing Bluff, the edge of an old glacial lake from about 5,000 years ago, separates the upland from the lower seepage zones at the shoreline. This separation is very clearly felt when you bike to the beach (and more so when you bike back up!). Sixteen FBO members began the excursion at the base of the Bluff and set off under grey skies to explore the beach. Here, among the cobble, dominant species include Sand cherry (*Prunus pumila*), Sandbar and Missouri Willows (*Salix exigua*, *S. eriocephala*), and Baltic Rush (*Juncus balticus*). Many of my trip companions remarked that they had seen very few Nodding Ladies-tresses (*Spiranthes cernua*) anywhere this season, yet here it was in profusion.

Sean then took us to a beach along Methodist Point where, under a sign advising us that we were not allowed to be bottomless on the beach (topless apparently allowed), we looked for Stiff Yellow Flax (*Linum medium* var. *medium*), ranked S2 provincially and generally found in shoreline pools. Here it was growing much higher up on the beach, although unfortunately not in flower. As you can see from the photo, we obeyed the sign (at least while the photo was taken!) and set off looking for Beach Pea (*Lathyrus japonicus*) - a shoreline species, Slender Agalinis (*Agalinis*

tenuifolia), and Horned Bladderwort (*Utricularia cornuta*) which, happily, were all in flower. We left this beach to travel to Kettle Beach, a shoreline fen along private property, where Grass of Parnassus (*Parnassia glauca*) greeted us from the ditch, and Shrubby Cinquefoil (*Potentilla fruticosa*), Pitcher Plant (*Sarracenia purpurea*), Sundews (both *Drosera linearis* and *D. rotundifolia*), and Ohio Goldenrod (*Solidago ohioensis*) were quite common in the fen. Keen eyes spotted a False Asphodel which, as is often the case, more closely resembles its latin name *Tofieldia glutinosa* (having a very sticky stem), as well as Meadow Spikemoss (*Selaginella eclipse*), Purple Rattlesnakeroot (*Prenanthes racemosa*), and White Beakrush (*Rhynchospora alba*), all species that had not previously been discovered in the inventory work. On our way out Sean invited us to eat freely of the peppermint (*Mentha piperita*) growing in the pools, one of the non-native species which make up 15% of the species found in the Park. He also shared with us his favourite resource for this ecosystem, [A Great Lakes Wetland Flora](#), by Steve Chadde (\$44 on Amazon for those of you looking to expand your library).



Tall trees at Awenda – Mike McMurtry

Then it was off to the Wendat Trail along Kettle Lake where we checked out an old growth forest, reportedly the

largest old growth parcel in southern Ontario. It is very low in diversity but significant for its structure. Here Sugar Maple (*Acer saccharum*) forms cathedral ceilings, and dendrology work has revealed that some of these trees are more than 250 years old. The ground cover included Wintergreen (*Gaultheria procumbens*), False Sarsaparilla (*Aralia nudicaulis*), and Agrimony (*Agrimonia gryposepala*).

The Life Science Inventory also considered the animal component of Awenda. For instance, they found Northern Flying Squirrels in the old growth canopy (trapped with a mixture of peanut butter and sunflower seeds). Our group did get to see some Awenda fauna as well. We were all delighted to see the immature stage of an Eastern Newt, looking very much like an orange plastic toy dropped by a child on his way back from the beach. A porcupine greeted us from a tree as we entered our final stop of the day, a bog site the Park is hoping to purchase. One of my trip companions advised me that seeing a porcupine is considered lucky by some cultures, and indeed a few minutes later, when quick hands caught a small Smooth Green Snake amongst the Sphagnum, many considered themselves lucky to see this elusive bog resident. Personally I don't consider any day with snakes in it to be a good day, but as I made my way out of the bog, balancing on the tussocks, I did consider myself lucky to have seen such a perfect bog ecosystem filled with Bog Rosemary (*Andromeda polifolia*), Mountain Holly (*Nemopanthus mucronatus*), Sheep Laurel (*Kalmia angustifolia*), Leatherleaf (*Chamaedaphne calyculata*), Small Cranberry (*Vaccinium oxycoccos*), Cottongrass (*Eriophorum vaginatum*), and Virginia Chain Fern (*Woodwardia virginica*) (i.e. good green things that don't slither).

Those who did not have to leave immediately to start the drive home followed Sean out of the Park to a privately owned site where Forked Awn Grass (*Aristida basiramea*), an S1 that does look exactly like its common name, could be found. The wind-propelled seeds of this grass need disturbed ground in order to germinate and this Species at Risk was growing in an area ripped apart by ATV activity. As we contemplated this irony, the grey skies gave way to rain and we ended our day. 🌧️

Andrea Sinclair



Group photo on the beach at Awenda Provincial Park – Andrea Sinclair

Muskoka Mosses September 12th, 2010

On Sunday September 12th, 2010, 12 keen botanists arrived at Walker's Point Community Centre, west of Gravenhurst, to learn about mosses from Allan Aubin. The event was one of four trips planned to coincide with the AGM. Allan Aubin is a retired high school science teacher who took up mosses about 7 years ago after retiring. He is largely self-taught.

The trip started at 10:00 am and participants carpooled to nearby Hardy Lake. Throughout the trip, the sky threatened rain and at one point rain came down prompting all to take shelter under the trees. From the onset, Allan encouraged us to participate by finding mosses, especially those with reproductive capsules, which help with identification. He awarded “gold medals” (chocolate coins) for good finds. Allan pointed out mosses that are distinctive and can be recognized in the field with a hand lens of about 15x power. Along the way, participants were encouraged to use their hand lenses to examine leaf structure and spore capsules.

Polytrichum piliferum, a haircap moss, was observed growing next to the trail. Haircap mosses are so named because their capsule hood (calyptra) is hairy. This upright

(acrocarpus) moss has bluish-green linear-lanceolate leaves with long colourless awns. Unlike other mosses, the haircap mosses have xylem and phloem-like water conducting tissue that assist in water transport and facilitate robust growth even in drier areas.

Later, we saw *Dicranum polysetum*, a broom moss. Broom mosses are so named because many species have long narrow leaves bent to one side, giving it the appearance of a well-used broom. *D. polysetum* is differentiated from other broom mosses by its shiny, wavy leaves, densely hairy (tomentose) stems, and multiple capsule stalks (setae) per plant.

After a few hours in the field, the group stopped for lunch, choosing a scenic location next to Hardy Lake. Lunchtime discussions included sharing references to helpful literature on moss identification and discussions on further learning opportunities including FBO hikes and the annual Crum Bryological Foray. After lunch, the hike officially ended and half the group departed, while the remaining six chose to accompany Allan for a further 3 hours or so through mixed forest rich in mosses. The trail followed along the edge of Hardy Lake and the group was able to observe a loon through the mist.

By the end of the trip the group had seen over 30 species of mosses and gained an understanding of basic moss terminology and resources for further study. A big thank you to Allan for sharing his knowledge and passion on this understudied group. 🌿

Leanne Wallis



Polytrichum juniperinum – Leanne Wallis

...Continued from page 1

FBO member, Jennifer Doubt, the museum's Chief Collections Manager, Botanical Section is doing much of the legwork organizing the program, which will include several speakers, a tour of parts of the museum, field trips, and an optional bryophyte workshop.

The keynote speaker at the banquet will be Dr. Jeffery M. Saarela. Jeffery has many publications to his credit, largely related to the biodiversity of grasses, sedges and their monocot relatives. Some members will also know him as recent vice president of the Canadian Botanical Association (2009-2010). Jeff became a key member of the CMN's Arctic botany research team when he came to the Museum in 2007, carrying on the rich history of northern

botanical exploration that is documented in the National Herbarium of Canada. His keynote address will focus on Arctic botany.

I wish to suggest that you plan to attend this special event.

Work is underway on planning this year's field trips. Unfortunately, I can't even give you a hint as to what will be on the program. The AGM is in the planning stage. No news yet except that it will be in Simcoe.

A personal note - I have been threatening to tour the north shore of Lake Superior for the last four or five years and have yet to make the trip. I have decided that 2011 is the year. I am also being pressured to take a photo workshop on Manitoulin Island. I hope that FBO members will give me their sympathy as I go through the hardship of spending a week on Manitoulin. 🌿

With every good wish for 2011,

Bill



Probable Artist's Conch (*Ganoderma applanatum*) - BT

Mushrooms and Other Fungi October 3rd, 2010

On October 3rd, about a dozen FBO members met at the University of Toronto's Koffler Scientific Reserve in King Township for a mushroom and fungi workshop led by Richard Aaron.



Preview of the catch – BT

Richard is an ardent amateur mycologist and member of the Mycological Society of Toronto who has led similar workshops for groups of varying skill levels throughout southern Ontario. In fact, he was telling us that the University of Toronto was hosting a mushroom walk for the general public later in the fall, and had over 200 people signed up! The FBO workshop was intended for a range of skill levels, from people like me who have long been curious about mushroom ID but have no experience, to those who have been on similar courses in the past and who want to hone their skills further.

The University of Toronto's Koffler Scientific Reserve is a retired horse farm, which Murray and Marvella Koffler donated to the University. We started the day in an old horse barn that had been renovated into a biodiversity laboratory. These facilities were excellent for our purposes; we were able to start and end the day in a classroom, with white board, running water, and access to dissecting scopes if we needed them.

In addition to the laboratory and classroom buildings, the Koffler property includes over 350 hectares of forest and old field, criss-crossed by a network of hiking trails (some public, some available for researchers only), which provided the setting for our hike. In addition to showing us

some interesting fungi, Richard gave us information on their ecology, social history, physiology, and etymology (for example, did you know that the generic epithet for puffballs, *Lycoperdon*, is greek for wolf farts, so named because of the perceived similarity between puffball spore dispersal and canid flatulence?).

Fungal identification provides an interesting challenge to naturalists, and one that Richard thinks is a natural progression for botanists. Since the bulk of the mushroom lifecycle is composed of the underground hyphae, we only see the fruiting body that occurs above the ground. This means that in any given visit to a natural area, we're only able to see the small fraction of the species pool that happens to be fruiting in that given period. Return visits may find significant change in the fruiting bodies visible, even in the same site. This variation and diversity of species within our favourite natural areas should appeal to many naturalists.

Richard started the day with an overview of how to collect and identify mushrooms and other fungi, and provided a handout showing key features and terminology. Mushrooms should be collected in a firm container like a basket or bucket, or placed in wax paper bags if they are fragile. Using a knife, mushrooms should be dug out

completely from the soil or other substrate – some of the diagnostic features are at the base of the fruiting body, and the belief that cutting below the soil level may allow parasites to enter mycelia appears to be unfounded. Key features to look at when identifying mushrooms include: spore colour (which can be determined by laying the mushroom cap on a piece of paper or microscope slide), the presence of a ring or annulus on the stalk, and the way the gills are attached to the stem. Field guides are available, such as George Barron’s excellent guide published by Lone Pine, which provides an overview of the most common and charismatic species. For a full biological inventory however, use of a microscope and technical monographs are necessary.

After a brief introduction, we spread out through the forest with our baskets and collected specimens that attracted our interest. After three hours of collecting (of what I was sure was a basket full of all one species of mushroom), we returned to the classroom and laid our bounty out on the table. Although there were quite a few duplicates of the more common species, we collected 65 species, which ranged from the tiny Pear-shaped Puffball (*Lycoperdon pyriforme*) to the large Artist’s Conk (*Ganoderma applanatum*), and from the pink Wolf’s-milk Slime Mould (*Lycogala epidendrum*), to the yellow Lemon Drops (*Bisporella citrina*), and the Orange Mycena (*Mycena leaiana*).



Resinous Polypore (*Ischnoderma resinosum*) – BT

Notable species we saw that day included the Turkey-tail (*Trametes versicolor*), a common bracket fungus, which is evident from its multicoloured upper surface with concentric stripes, and white underside with pores, as well as the False Turkey-tail (*Stereum ostrea*), which is similar except with a smooth tannish brown underside. We also saw the Brick Top (*Hypholoma sublateritium*) which is an

edible brick-red mushroom found growing on deciduous trees, and didn’t see, but learned about, the Orange Stump Mushroom (*Hypholoma capnoides*) which is a similar brick-red species found only on coniferous trees. We also saw a pinwheel mushroom (*Marasmius rotula*), a member of a genus whose fruiting bodies are able to regenerate after desiccation, allowing them to produce spores again when rain returns after a dry spell.

The most common species we saw during our hike though was the honey mushroom (*Armillaria mellea* complex), allowing us to gain familiarity with the variation possible within the species. Honey mushroom is a well-known fungus, because of the root rot and crown die back it causes in living trees, its edible fruiting bodies, and the bioluminescence its mycelia give off, known as ‘fox fire’. The largest organism on the planet in fact is thought to be a honey mushroom which covers over 2000 acres and is thought to be over 2,400 years old. Richard also showed us a very similar looking, although highly poisonous, species called Deadly Galerina (*Galerina autumnalis*), and pointed out their diagnostic characteristics. The *Galerina* can be identified by its brown spores (as opposed to white in the *Armillaria*), and thinner cap. When seen together, the differences are quite obvious, yet it is also obvious how an impatient or inexperienced mushroom collector could pick a *Galerina* assuming it to be an *Armillaria*.

We also collected quite a few bright white, edible, fleshy mushrooms growing at the base of trees called Aborted Entolomas. These species are so called because they were long thought to be fruiting bodies of *Entoloma abortivum* who had been attacked by *Armillaria*, resulting in a deformed growth form. More recent research has in fact found the opposite to be the case though, that Aborted Entolomas are in fact *Armillaria* fruiting bodies which are attacked by Entolomas, resulting in deformation. Despite this new knowledge, the common name of ‘Aborted Entoloma’ and scientific name of *Entoloma abortivum* remain in place for these two different species.

The day was an excellent one for fungus collection as it had rained several days of the previous week, and Richard was able to take advantage of the conditions to further feed our interest and enthusiasm for mushrooms and other fungi. 🍄

Bill Thompson

The duff layer

John Goldie Award - 2010

The Field Botanists of Ontario were pleased to present the 2010 John Goldie Award to Dr. Paul Maycock of the Department of Botany, University of Toronto Mississauga (AKA Erindale College) at the 2010 AGM held on September 11, 2010. The award was largely based on his significant long-term contributions involving studies of plant communities in Ontario.



Paul Maycock is presented with the John Goldie Award at the 2010 AGM – WDM

Paul Frederick Maycock was a student of Professor John Curtis at the University of Wisconsin where he received his Ph.D. degree in 1957. Curtis had written the definitive text on the flora of Wisconsin [1]. Paul's own thesis was on the phytosociology of Great Lakes forests [2]. Along the way, he published his first paper on plant communities in Ontario [3]. That was followed by a series of similarly oriented papers on his own and with various students and collaborators that dealt with the same general topic of plant community structure and distribution in Ontario [4, 5, 6, 7, 8, 9]. Paul first accepted a position at McGill University but later moved to University of Toronto Mississauga where he remains as Professor Emeritus in Plant Ecology.

Paul not only worked in Ontario forests but in the forests of Quebec and in mesic, old growth, deciduous forests in different regions of the world including China, Japan, Central Eastern United States, Michigan, Ontario, Slovakia, Czech Republic, Poland, Ukraine, England and Chile [10]. Along the way, he documented the floral composition of 2,704 sites covering 29 plant community types across Ontario and Quebec. This included 660 Boreal Forest sites and 540 Deciduous-Evergreen Coniferous Forest sites.

Although the tallgrass prairie at Windsor had been known since the early visits of David Douglas in 1823 and John Macoun in 1892, it fortuitously had managed to escape several attempts to develop the area for major industry and other urban developments. The City of Windsor acquired the Ojibway Park in 1957. Across the road, the salt company that owned the land had plans afoot to plant trees in the area as they considered that the prairie savannah was just a big field. They thought that the open space was not adequately populated by trees. By another stroke of good fortune, Paul Maycock was in the area at that time in October 1969 and had visited the prairie next to Ojibway Park. He recognized the ecological importance of the prairie and considered it to be 'phenomenal.' He wrote that "The tract appears largely untouched which seems nothing short of a miracle". Paul approached the city's Parks and Recreation Department, the salt company and the Ministry of Natural Resources with his findings, urging that the prairie be protected. This was the start of the collection of properties making up the Ojibway Prairie Complex, now owned by the Province or the City of Windsor, that botanists now recognize as a jewel among ecologically important sites in the province. But if Paul had not been there at that time, most of this complex might have been lost forever. At the presentation, Paul was careful to give credit to the president of the Windsor Salt Company that owned the property at the time for assisting in the process that saw the area protected.

Paul's knowledge and expertise has also been relied upon in the protection of other sites. These include the Creditview Bog (only remaining bog in Mississauga) and the Carolinian Cawthra Woods, also within the City of Mississauga. In each case, a protracted effort was required to preserve these areas from development. Although the protection was costly in terms of time, effort and financial capital, the City of Mississauga would be all the poorer had the sites not been saved. Paul's support in the preservation effort was a key part of the process.

The recognition of the work by Paul Maycock by the Field Botanists of Ontario is not the first such acknowledgement of his botanical contributions. In 1999, he was given a

Gold Leaf Award by the Canadian Council on Ecological Areas in recognition of his long-standing contributions and personal dedication to enhancing Ontario's network of conservation areas and protected ecosystems. 🌿

W. D. McIlveen

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VASCAN RELEASED

<http://data.canadensys.net/vascan/>

Canadensys announces the release of VASCAN, the Database of Vascular Plants of Canada, a comprehensive list of all vascular plants reported in Canada, Greenland (Denmark) and Saint Pierre and Miquelon (France).

Canadensys is a Canada-wide effort to unlock the biodiversity information held in biological collections. The network currently includes biological collections from 11 participating universities, five botanical gardens, and two museums, covering insects, fungi and plants. The network is operated from the Biodiversity Centre, Université de Montréal.

The goal of VASCAN is to provide an up-to-date, documented source of the names of vascular plants in Canada, Greenland, and Saint Pierre and Miquelon, both scientific and vernacular. For every species, subspecies and variety, VASCAN provides the accepted scientific name (Latin), the accepted French and English vernacular names, and their synonyms/alternatives in Canada. The distribution status (native, introduced, etc.) of the plant for each province or territory, and the habit (tree, shrub, herb or vine) of the plant in Canada are given. Maps at the provincial/territorial level are provided with an indication of status. For reported hybrids (nothotaxa or hybrid formulas), the parents also are provided. A source is given for each name, classification, and distribution information (still being completed). All taxa are linked to a classification. The following were used: Smith et al. (2006) for ferns, APG III (2009) for flowering plants, and Chase and Reveal (2009) for the higher taxonomy.

It is possible to generate lists in VASCAN using the Checklist builder tool. Data can be downloaded from VASCAN under the Creative Commons (BY-NC) license.

Brouillet, L., F. Coursol, M. Favreau & M. Anions (compilers). 2010+ VASCAN, the Database of Vascular Plants of Canada.

For information: <http://data.canadensys.net/vascan/about>



In Memoriam: Dr. John Morton

Dr. John Morton, Professor Emeritus, University of Waterloo and 2010 Goldie Award Recipient passed away peacefully in his home January 9, 2011. Dr Morton was awarded the Goldie (see FBO Newsletter Vol. 22.1) for his long botanical career; including his contribution to field botany in Ontario with the landmark Flora of Manitoulin Island with long-time research associate Joan Venn.

I have been fortunate to have had the assistance and guidance of Dr Morton at the University of Waterloo Herbarium over the last two decades as an undergrad, grad

and as a professional botanist. He was always curious to see what specimens I was unpacking, whether from Ontario or from Newfoundland. As a novice botanist his avuncular but authoritative presence in the herbarium provided encouragement and guidance at important junctures along the path of my taxonomic skills development – the kind of guidance you could only get from a seasoned career botanist. As I was struggling along with grasses with Britton and Brown, he passed by, poked his head in the office, and said, “What are you using that for? You should be using Voss.” On verification of *Viola* he assured me, “The stemless blues can be very difficult”. At another time, “...keys can lead you very much astray – you have to work with them to get a better sense of what the author had in mind...”. I’m sure that he would be surprised to know that he had such a memorable influence.

I last saw Dr. Morton in the herbarium to take his and Joan Venn’s photo to accompany the Goldie Award write-up in the Newsletter. I was always pleased to know he was just around the corner whenever I dropped in with my plant press. The Herbarium won’t be the same without him. 🌱

Cheryl Hendrickson



Dr. John Morton – Cheryl Hendrickson

Botanical Roots

The Adamson Beech



The Adamson Beech – WDM

There is an interesting old tree located at the Adamson Estate in Mississauga. The site is currently a city park located on the shore of Lake Ontario at 850 Enola Avenue. The park covers 13.3 acres and has several interesting buildings and a small woodlot with some large old trees. The tree of interest in this account is an American Beech (*Fagus grandifolia*). With a reported diameter of 82 cm and a height of 22 meters, it is not that large but it does have a notable history. Because of its proven age and growth characteristics, the tree was one of a number of trees considered for heritage designation by the City of Mississauga in 2008. In order to protect the tree from further vandalism and to mitigate against various hazards, a fence was erected around the tree. As well, an interpretive plaque was installed to raise awareness of the significance of the tree.

Continued on page 13...

**Field Botanists of Ontario
Revenue and Expense Statement
January 1, 2009 - December 31 2009**

	2009	2008
Bank Balance Beginning	\$ 15,128.99	\$ 13,164.33
Revenue		
Life Memberships	\$ 250.00	\$ 1,000.00
Field Trips	\$ 2,333.00	\$ 2,210.00
Annual General Meeting	\$ 1,800.00	\$ 1,470.00
Donations	\$ 415.00	\$ 627.00
US Exchange	\$ 3.48	\$ 3.91
Bank Credit	\$ 49.50	\$ 27.04
Bank Interest	\$ -	\$ -
Newsletter Float	\$ -	\$ -
Membership 2009	\$ 3,974.50	\$ 3,660.19
Anniversary Meeting 2009	\$ 1,855.00	
Total Revenues	\$ 10,680.48	\$ 8,998.14
Expense		
Field Trips	\$ 344.49	\$ 226.90
Field Trip Refunds	\$ -	\$ -
Field Trip Honoraria	\$ 1,528.19	\$ 900.00
AGM Honoraria	\$ 400.00	\$ 500.00
AGM Expenses	\$ 736.34	\$ 1,286.40
Newsletter Expenses	\$ 2,197.24	\$ 2,096.08
Newsletter Honorarium	\$ 200.00	\$ 500.00
Membership Expenses	\$ 322.17	\$ 13.34
Executive	\$ 183.08	\$ 62.35
Liability Insurance	\$ 834.84	\$ 1,063.80
Bank Charges	\$ 31.14	
Returned Cheque		\$ -
FON Membership	\$ 150.00	\$ -
Newsletter Float		
Anniversary Meeting 2009	\$ 3,392.31	200.00
Total Expenses	\$ 10,319.80	\$ 7,033.48
Bank Balance Ending	\$ 15,489.67	\$ 15,128.99
Gain	\$ 360.68	\$ 1,964.66

W. Draper Treasurer

Auditor's Report

TO: Members of the Field Botanists of Ontario

I have reviewed the Field Botanists of Ontario accounts as at December 31, 2009 as prepared by your Treasurer, Bill Draper, and determined that all is in order.

In the course of this review, I examined the bank statements, bank deposit records, donated cheques, board expenses and all receipts. It is my conclusion that the accounts balance with the bank statements and are accurately described in the Revenues and Expense Statement for 2009.

In my opinion, the Revenue and Expense Statement for 2009 accurately represents the transactions and financial position of the Field Botanists of Ontario as at December 31, 2009 and the results of its operations for the year then ended.

Respectfully submitted



George Bryant
Toronto

July 02, 2011

...Continued from page 11

The tree once had the initials and date "W.E.D., 1801" carved into the trunk but over time, the initials have faded. It is suspected that the carver was a British Lieutenant William Derenczy who was stationed at Fort York and who for some reason blazed his mark on the tree while travelling the shores of Lake Ontario. If the tree was large enough to attract the attention of the Lieutenant and sustain the graffiti of the time, it must have already been of some

moderate size over 200 years ago. The condition of the tree though makes it impossible to make an accurate age determination.

The tree had developed extensive heart rot and was mostly hollow. Unfortunately, the tree was subjected to vandalism on May 16, 2005 when a fire was set in the cavity of the trunk. This fire did not kill the tree but neither did it do much to enhance its structural integrity. When I was first

introduced to the tree a few years ago, it was rather lopsided with only one large living branch leaning out over the driveway to the southwest. Late this fall, I observed that the one remaining branch had been removed, presumably because of safety concerns. It is quite obvious that the branch in question had developed a rather significant amount of heart rot as well. It was very sad to see the tree in this condition without any obvious living branches remaining. When spring returns, perhaps there will still be some life in the old fellow and possibly some sprouts will develop to ultimately become a new tree. Beech trees that are cut will often produce suckers from the stump. Whether a tree of this vintage can still do the same has yet to be determined.

The Adamson Estate is part of the land parcel that was granted to Joseph Cawthra in 1804 (note that this land grant, or purchase, post-dates the date of the carving of the initials). This was shortly after the land in the area had been purchased from the Mississauga Indians that were the last native inhabitants of the area. The deeding to the property was not completed until 1809. The land remained in the hands of successive generations of the Cawthra family up until recent times though the clearing and farming was carried out by other people under the

Cawthras' direction. The larger portion of the property includes Cawthra Woods, located east of Cawthra Road just south of the Queen Elizabeth Way. The portion of the land that makes up the Adamson Estate (on the lakeshore) fell into the possession of Algar Adamson through his marriage to a great granddaughter of Joseph Cawthra. He was responsible for building the large Flemish style mansion that remains as a main feature of the site. The main house is presently occupied by the Cawthra-Adamson Division of the Royal Conservatory of Music.

Both Cawthra Woods and the Adamson Estate eventually became the property of the City of Mississauga. The grounds and gardens of the Adamson Estate are open to the public and the Waterfront Trail crosses through it. If you wish to see the Adamson Beech tree, or at least what remains of it, look for a small fenced area immediately adjacent to the old barn (built in 1870). It would be a wonderful sight indeed if new sprouts appear on the stump in the next growing season. 🌱

W. D. McIlveen



The Adamson Estate - WDM