Field Botanists Of Ontario

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Sheep Laurel (*Kalmia angustifolia* L.)
photo by Ed Morris

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Membership in the Field Botanists of Ontario includes subscription to the FBO Newsletter and the privilege of attending field trips and workshops. Annual membership fees are $12 single and $15 family.

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FIELD BOTANISTS of ONTARIO

FIELD BOTANISTS OF ONTARIO NEWSLETTER

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The **deadline** for submissions for **Volume 12(1) - Spring 1999** is **February 28th, 1999**.

Standard source for scientific names of vascular plants:

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

Field Trip Reports:

Leslie Street Spit.

September 12th, 1998.

Tamara Chipperfield is an ecologist with the Toronto Region Conservation Authority (TRCA), and over the past five years has become very familiar with Leslie Street Spit (aka Tommy Thompson Park). The spit was originally planned as a repository for landfill from the 1950's construction boom. Afterwards it would be a large port facility with various embayments surrounded by warehouses. Then, in 1970, the shipping industry crashed and the spit was no longer needed as a port. The port facility gave title of half the land to TRCA and half to the Ministry of Natural Resources who leased it back to the Toronto Harbour Commission.

Management of the spit now follows the 1989 Master Plan (revised in 1994). The Harbour Commission will continue dredging until 2003. Then it is hoped that title to all land will pass to TRCA. Plans are for the whole spit to become an "urban wilderness." There will be no park facilities such as barbecues, picnic tables, permanent washrooms, or roads for automobiles. There will be separate trails for rollerbladers, bicyclists, and naturalists. With the projected waterfront greening, a walking trail will link the spit to the Don Valley.

Despite budget cutbacks, TRCA still has funding for habitat projects. Colonial nesting Common Terns had been losing nests and young to the aggressive Ring-billed Gulls. The installation of several tern rafts designed to exclude the gulls has now resulted in a dramatic increase in tern numbers.

The spit has a wide variety of adventive plants. These are listed in "Plant Communities of the Leslie Street Spit" (1992) by V.J. Higgins, S. Denzel, and N. Fazari. Included amongst these is a colony of Showy Ladies' Slipper (*Cypripedium reginae* Walter) and a patch of Prickly Pear cactus (*Opuntia humifusa* (Raf.) Raf.). A major change since the publication of this excellent booklet has been the incursion of Purple Loosestrife (*Lythrum salicaria* L.). The spit was one of the areas used by biologists to test the efficacy of introduced beetle herbivores. However, 1998 was a dry summer with lower water levels, so it is too early to assess the benefits of the introductions.

A complementary shuttle van provided by TRCA took us to a pedestrian bridge between Peninsulas C and D. Indian Blanket Flower (*Gaillardia aristata* Pursh) dominated over one hectare of land here. Tamara confessed that this plant had been accidentally introduced (before her time) when a so-called "native plant" seed mixture was sown in the area. The plant does provide a novel ground cover and is not spreading. Nowadays, seed mixtures are reviewed more closely.

The use of the spit by animals is as interesting as that by plants. Red Foxes and Racoons, abundant elsewhere in Toronto are scarce on the spit. A pair of Coyotes has displaced foxes for the past six years. Last year they reared six pups. In October, observers noted the adults leading their pups onto the mainland. Racoons only occur when they are released by animal control personnel. They depart immediately for their feeding grounds amongst the city

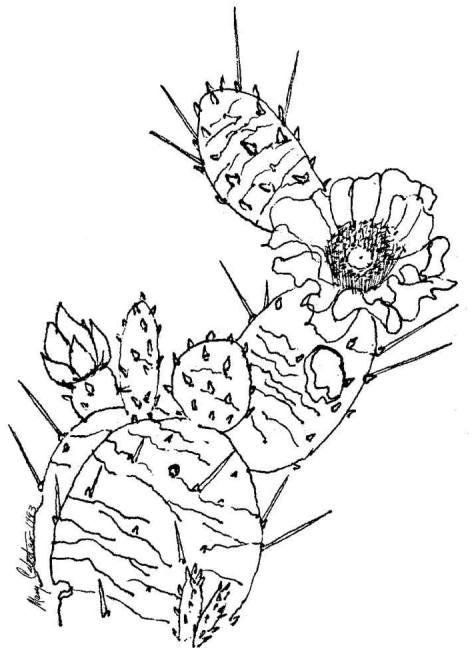
trash cans! Judging by the quantity of their droppings, Eastern Cottontails, formerly scarce in Toronto, have become abundant. There are two active Beaver lodges on the spit—Tamara pointed out that there are at least five shorebank lodges along the lower Humber River. The high populations of Deer Mice and Meadow Voles encourage many species of owls to overwinter on the spit.

Garter Snakes (including the black melanistic phase), Little Brown and Milk Snakes along with American Toad, Green and Leopard Frogs now occur on the spit. The snakes have established a major hibernaculum under the road. In the first few warm days in April and again in late October, the tarmac can be covered with basking snakes.

Tamara led us along a pathway to the Black-crowned Night Heron rookery. Off-limits during the nesting season, we were now able to walk under the large Eastern Cottonwood (*Populus deltoides* Bartram ex Marsh.) grove and study the nests. High nitrogen levels created by the heron guano had permitted a lush monoculture of Stinging Nettle (*Urtica dioica* L.) discouraging some of the shorts-wearing participants. Vast numbers of succulent yellow orb weavers almost blocked passage along the nettle-shrouded trail. "I hate spiders." Tamara admitted, permitting an elderly scribe to break trail.

Sheltered in a sandy clearing amongst some coarse fill was the infamous Leslie Street Prickly Pear. Of uncertain provenance, speculation was the seed had been deposited either with landfill or by a frugivorous human seeking relief in the woods. A waif measuring only a few centimetres, the plant has not changed in the five years that Tamara has studied it. This lent credence to another theory that it was purposely transplanted.

Returning to the main road, Tamara discussed a habitat project in which TRCA staff had seeded native aquatics. Triangle Pond is a containment area contaminated by lead and heavy metals from Don River dredgeate. The solution had been to dump one metre of fill over the bottom to create a "finishing lens". The Royal Botanical Gardens supplied aquatic plants for wetland regeneration. They experimented with "bog mats": a 2-inch Lufa sponge-like material that holds the seedlings in place until they root into the sediment below. It is too early to judge the success of the experiment but if successful, it will be employed elsewhere. This would result in the largest wetland regeneration in the Toronto area.



Prickly Pear Cactus (*Opuntia humifusa* (Raf.) Raf.) by Mary Celestino.

Tamara concluded by talking about her hopes for 2003. She believes the many habitat management projects, including Purple Loosestrife repression and colonial nesting management will be positive. She hoped that the urban wilderness idea will continue and that the park will be of greater interest to naturalists and botanists in years to come.

George Bryant

East Point, Toronto.

September 12th, 1998.

East Point Park, which projects out into Lake Ontario, is really an eastern extension of Scarborough Bluffs. The area is bounded by Highland Creek Sewage Treatment Plant on the east, a water treatment plant to the west and the old CN railroad line to the north. Although it is considered a natural site for a park, similar to Bluffer's Park or even Leslie Street Spit, the site has received very little management.

In 1996, Jeff Warren, an ecologist who lives nearby, conducted an environmental study of the area. He prepared a species list and site chronology. He observed then that the site contained a number of different plant communities, but many were being overrun by invasives such as Purple Loosestrife (*Lythrum salicaria* L.) and Common Buckthorn (*Rhamnus cathartica* L.). Clearly, the site needed some internal management. The site did contain some significant species, but most records are now historic.

Jeff started the tour by following a new road which permitted access to the base of the bluff. Along the rim of the bluff there were many Bank Swallow burrows. Slopes here are quite unstable and large clumps of soil were evidence of recent slumpage. Plants typical of the slopes included the eurasian Coltsfoot (*Tussilago fafara* L.) and various asters (*Aster* spp.). For some reason, Russian Thistle (*Salsola kali* L.) used to be abundant, but now had all but disappeared. On the beach were Cocklebur (*Xanthium strumarium* L.), a typical Great Lakes shoreline colonizer along with Beggar Ticks (*Bidens frondosa* L.), and Grass-leaved Goldenrod (*Euthamia graminifolia* (L.) Nutt.) with its big distinct mid-vein. In some years Common Reed (*Phragmites australis* (Cav.) Trin. ex. Steudel) rhizomes will spread several metres, but dry conditions this year had held it in check. Nodding Wild Rye (*Elymus canadensis* L.), a classic Great Lakes shoreline species was abundant. In 1996, Jeff did not observe Sea Rocket (*Cakile edentula* (Bigel.) Hook.); now with the development of beach strands, there were many fine specimens.

Lake Ontario water levels had been high in the early 1990's but had dropped in recent years. Higher water in the spring had created backwater beach strands—dynamic overnight communities, short lived but very productive. In 1996, when Jeff had done his study, the base of the bluff met the lake. There was little beach and no beach strands. Several of these ephemeral strands occur on the east side of Highland Creek and various dragonfly species new to the Durham Region have been discovered.

An interesting plant community had sprung up in these protected beach strands. Species included:

Artemisia biennis Willd.
Wormwood
Cyperus esculentus L.
Yellow Nut-grass
Juncus nodosus L.
Knotted Rush
Potomogeton crispus L. (an aggressive alien, see
Curly Pondweed Catling & Dobson, 1985).
Potomogeton pectinatus L.
Sago Pondweed
Potentilla paradoxa Nutt. (provincially rare,
Bushy Cinquefoil see Riley 1989).
Ranunculus sceleratus L.
Cursed Crowfoot

Moving west along the shore, Jeff pointed to a damp area at the base of the bluff. Here, seepage at the bottom of the slope percolated from the coarse layers of sand. In some years, Nodding Ladies' Tresses (*Spiranthes cernua* (L.) Rich.) were abundant. With a hand lens, Jeff pointed out the hairs on the margins of the lemma which distinguished Hairy Brome (*Bromus ciliatus* L.) from its congeners. Several willow species occurred here including Sandbar (*Salix exigua* Nutt.) Basket (*S. purpurea* L.), Crack (*S. fragilis* L.), Heart-leaved (*S. eriocephala* Michx.) and Bebb's (*S. bebbiana* Sarg.). Heart-leaved, a tall branching shrub favouring wet areas is common in the Toronto area. It is distinguished by its glaucous leaves and prominent kidney-shaped stipules. Bebb's Willow likes stable areas which are less subject to erosion. Leaves of Bebb's Willow have rough leathery upper surfaces and incised veins.

We approached a gentler slope supporting several species of shrubs and trees. Amongst the scattered sumacs, dogwoods and choke cherries, Jeff pointed out Canada Buffalo-berry (*Shepherdia canadensis* (L.) Nutt.) and Western Snowberry (*Symphoricarpus occidentalis* Hook.).

Further west the steep bluff gave way to a vegetated gentle slope on which a narrow valley permitted us to return to the top of the bluff. We ascended a gradient from very wet to dry and passed through a spectacular area of Fringed Gentian (*Gentianopsis crinita* (Froelich) Ma). Jeff said this had been spectacular a few weeks earlier. Heart-leaved Aster (*Aster cordifolius* L.) was a characteristic plant of these open woody slopes. Filling many gaps in the valley were Low Juneberry (*Amelanchier spicata* (Lam.) K. Koch); only recently recognized, the shrub is Regionally Rare in the Toronto area.

We returned to the parking lot via a trail through an open tableland. The most unusual plant here was the white form of Bottle Gentian (*Gentiana andrewsii* Griseb. forma *albiflora*). Other typical plants included Large Purple Agalinis (*Agalinis purpurea* (L.) Pennell) and some well advanced Showy Tick-trefoil (*Desmodium canadense* (L.) DC).

Our last stop was to the site of a tiny prairie plant community beside the railroad tracks. This was not a remnant prairie, but one which had been established accidentally by the railroad. Cinders from the steam locomotives created a very dark soil which heated up quickly in the sun. The sparks from the smokestacks would ignite frequent grass fires. This created perfect conditions for prairie plants, the seeds of which had been transported by the rail traffic. With the demise of the steam locomotive, these prairie conditions had ended. Recentlly the site had been invaded by Purple Loosestrife, Eurasian White Birch (*Betula pendula* Roth), Common Buckthorn (*Rhamnus cathartica* L.), and Swallow-wort (*Cynanchum rossicum* (Kleopov) Borh.), also known as Dog-strangling Vine. Switch Grass (*Panicum virgatum* L.), and Spiked Blazing-Star (*Liatris spicata* (L.) Willd.) were the only two native prairie species left. Rough Dropseed (*Sporobolus asper* (Michx.) Kunth), a nationally rare plant, was now extirpated from this site.

Jeff pointed out the backwash channel from the water filtration plant. Here backwater is flushed into a water treatment pond from whence it is returned to Lake Ontario. A large stand of Common Reed was spreading here. Jeff pointed that the same plant is used in Europe as a polishing agent to treat sewage. Perhaps this procedure could be used in North America as a benign method of handling our waste.[1] Our thanks to Jeff Warren for providing an illuminating tour of an "urban wilderness".

George Bryant

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Riley, J.L. 1989. Distribution and Status of the Vascular Plants of Central Region. Ontario Ministry of Natural Resources, Parks and Recreational Areas Section, OMNR, Open File Ecological Report SR8902, Central Region, Richmond Hill, Ontario. xix+110 pages.

Features:

Notes from an Expedition to Maple Mountain and Adjacent Lakes, Lady Evelyn - Smoothwater Provincial Park.

William Kershaw and Ed Morris

Both Will and I have written in a narrative style. To differentiate between the two narrators, paragraphs written by Will are in a serif font*, while paragraphs written by myself are in a* sans serif font. *Ed*

Lady Evelyn - Smoothwater Provincial Park, established in 1983, is a wilderness class park with an area of 72,400 hectares. It is north-west of the Town of Temagami, and is essentially unreachable by roads, although all terrain vehicles would be capable of entering the park through old trails. The park sits on the Cobalt plate on the Southern Province of the Canadian Shield. Bedrocks in the park are generally nutrient poor. High points in the park are covered by little glacial drift, but valley bottoms have extensive outwash deposits. Some esker fragments occur on the eastern side of the park.

A three day field trip was planned to travel into the eastern side of Lady Evelyn - Smoothwater Provincial Park, June 29th to July 1st, 1998. John Salo, Superintendent of Lady Evelyn - Smoothwater and adjoining Temagami area parks, Roel Teunissen, the Park Management Planner, Ed Morris, a botanist at Laurentian University, and I, Management Planner for Ontario Parks out of Sudbury did this deed.

[1] *The town of Mindemoya on Manitoulin Island uses a constructed wetland as part of their sewage treatment process, and as of 1996, the town of Cobalt was also considering a larger-scale constructed wetland for the same purpose. For more information, I suggest contacting Ed Hanna, J.E. Hanna Associates Inc., 1886 Bowler Drive, Pickering, Ontario. L1V 3E4 -Ed*

The objectives of the trip were manifold. This was an opportunity to spend some time with the Superintendent in the park setting. We wanted to see heritage features and record some current uses on the lakes. We hiked the Maple Mountain trail to climb the fire tower, do portages, and look at select backcountry campsites in this part of the park. This afforded time to discuss planning matters related to the above features as well as mull over access questions. Ed Morris from Laurentian University was invited, as he has expertise in botany and could offer perspectives from that point of view on the above topics. Earlier botanical notes were made by David White in the 1980's.

We *rendez-vous*ed at sunny Finlayson Point Provincial Park just south of Temagami, rearranged our gear somewhat, and drew straws on the flight plan. Ed and I went out first. John and Roel flew in later just before the weather changed. The OMNR Turbo Beaver with the pilot, two passengers, overnight gear, field equipment and a canoe lashed to the pilot side pontoon struts took approximately 30 minutes to fly to Hobart Lake [47°22' N, 80°17' W].

This was my first time in a small plane, and what a treat it was! We flew over the unsightly Sherman Mine north of Lake Temagami, then over regenerating pine forests before reaching the northern section of Lady Evelyn Lake. A very interesting feature on Lady Evelyn Lake was a series of partially submersed sandy ridges [47°23' N, 80°06' W]. I took a photograph of them to Dr. Lang at Laurentian University, and he confirmed my suspicion that they are a partiallty flooded dune system. They certainly invite exploration, as they can be easily reached by canoe via the Montreal River.

I have always been impressed with the extent of the wetlands east of Chris Willis Lake [47°21' W, 80°17' E], which we saw as we flew above.

We landed at Hobart Lake and set up camp in advance of weather which brought in a succession of rain storm cells with a few electrical strikes. We watched this from the cover of a firm tarp … good form! Hobart's eastern campsite on a rock bluff looking west to Maple Mountain was our base for two nights.

Hobart Lake is a shallow, dark coloured warm water lake. Indeed the whole Willow Island drainage that we traveled in, including the Creek, Tupper Lake, Old Bill Lake, and Anvil Lake are dark in colour. This is, no doubt, largely due to the extensive wetland and organic terrain in the Willow Island valley. There is a noticeable variety of terrain and vegetation types from the shore of Willow Island Creek and Tupper Lake to the top of Maple Mountain.

Later that afternoon, approaching thunderstorms only permitted us to explore the eastern shore of Hobart Lake before we were forced back to camp. The dominant plant in shallow water appeared to be Water Horsetail (*Equisetum fluviatile* L.).

Partially Flooded Dune System on Lady Evelyn Lake. Photo by Ed Morris.

Other significant emergent aquatic plants included Floating-leaved Bur Reed (*Sparganium fluctuans* (Morong) Robinson), Northern Beaked Sedge (*Carex rostrata* Stokes), and Northern Mannagrass (*Glyceria borealis* (Nash) Batch.). Occasionally, we encountered Water Shield (*Brasenia schreberi* J.Gmelin) in the stands of Water Horsetail.

Some of the shoreline species on Hobart Lake included:

Calamagrostis canadensis (Michx.) P.Beauv.
Blue-joint
Carex stricta Lam.
Tussock Sedge
Dulichium arundinaceum (L.) Britton
Three-way Sedge
Glyceria canadensis (Michx.) Trin.
Rattlesnake Mannagrass
Iris versicolor L.
Blue Flag
Lysimachia terrestris (L.) BSP.
Swamp Candles
Myrica gale L.
Sweet Gale
Potentilla palustris (L.) Scop.
Marsh Cinquefoil
Scirpus cyperinus (L.) Kunth
Wool Sedge

Once the thunderstorms had passed and we were fed, we were able to explore the north end of Hobart Lake at the entrance of Willow Island Creek. I think I counted about 8 or 9 individual Winter Wrens that were singing around the perimeter of Hobart Lake. It's amazing that something the size of your thumb could have such a long song!

At the mouth of Willow Island Creek there are extensive patches of hair-like Water Bulrush (*Scirpus subterminalis* Torr.) in the flowing water. Yellow Waterlily (*Nuphar variegatum* Engelm. ex. Durand) and Fragrant Waterlily (*Nymphaea odorata* Dryander ex Ait.) are more common in the stands of Water Horsetail which flank the main channel than in other parts of the lake.

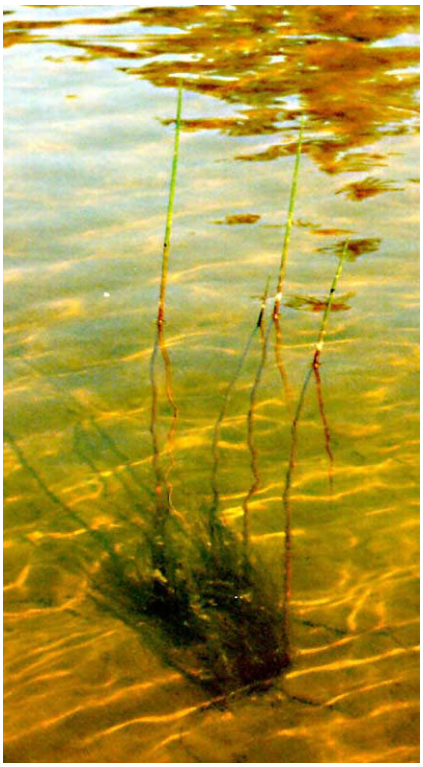
We traveled from here to Maple Mountain on day two [47°24' N, 80°20' W]. The peak of Maple Mountain is 2000 feet above sea-level and is over 1000 feet above Hobart and Tupper Lakes. The weather was hot and our trip had been preceeded by a long dry spell. The sky was noticeably

darkened and we could smell wood smoke from distant wild fires - Timmins and Quebec fires were later reported by the pilot.

Willow Island Creek contained Water Bulrush, Bur Reed, and other species found in Hobart Lake, although there appeared to be much less Water Horsetail. Species which occurred in the creek, but had not been encountered in Hobart Lake included Water Lobelia (*Lobelia dortmanna* L.), Ribbon-leaf Pondweed (*Potamogeton epihydrus* Raf.), and Common Bladderwort (*Utricularia vulgaris* L.). In the creek which flowed out of Tupper Lake, we encountered Marsh Marigold (*Caltha palustris* L.), abundant Bur Reeds and Water Bulrush, and Horned Bladderwort (*Utricularia cornuta* Michx.) and a small, yellow-flowered St. John's-wort (*Hypericum* sp.) on a mossy island which was once an old beaver dam.

As we passed through Tupper Lake [47°23' W, 80°18' W] on the way to the base of the trail up to Maple Mountain, we took a few minutes to examine some of the stands of rushes and Bulrushes. The main bulrush I observed appeared to be Hardstem Bulrush (*Scirpus acutus* Muhl.), with occasional Lake Spike-rush (*Eleocharis palustris* L.) plants at the margins of the stands.

One of the plants which I grabbed and dropped into the bottom of the canoe turned out to be Torrey's Three-square (*Scirpus torreyi* Olney). Historically, Torrey's Three-square had once been considered a rare plant (Scoggan 1978; Argus & White 1977), but not recently as more stations were discovered (Argus & Pryer 1990; Crins 1998, pers. comm.). Most of the readers of this article will be unfamiliar with this species, however, as it only occurs in 3 stations of Simcoe County in all of the former 'Central Region' (Riley 1989). I have checked specimens identified as Common Three-square in the Laurentian University Herbarium (SLU) and am satisfied they all belong to *S. pungens* Vahl. Currently, we have no other specimens of *S. torreyi* at SLU other than those I collected from Tupper Lake, and Riley's Preliminary Checklist for the Sudbury-Sault Ste. Marie Area does not list *S. torreyi* (Riley, 1986). Some characteristics which can be used to distinguish *S. torreyi* from *S. pungens* are green midribs of the scales which subtend each floret, and relatively longer leaves.



Bayonet Rush (*Juncus militaris* Bigel.). Photo by Ed Morris.

A robust rush was present in large stands in the shallow water of Tupper Lake. Although no plants were found to have inflorescences, the robustness of the plants, the habitat, the reddish bases of the stems, and cross-septate leaves hinted that the plants could be Bayonet Rush (*Juncus militaris* Bigel.) At first, I was reluctant to believe it was this species, but Mike Oldham, Don Sutherland, and Bill Crins all confirmed the identification from a photo I had taken of a living plant (M.J. Oldham, pers. comm.; W.J. Crins, pers comm.).

Presumably, these plants might flower in the event of a draw-down in the water level. Currently, the water level in Tupper Lake is regulated by a beaver dam. The only specimens of *J. militaris* at SLU [017676, 017681] are some which I collected from Axe Lake [45°23' N, 79°30 W], which lies on the Muskoka-Parry Sound District border. However, this species was listed by Riley (1986), and Scoggan (1978) does state that *J. militaris* was collected in the 'Timagami' area: the specimens are at TRT. The distribution of *J. militaris* continues to be monitored by the OMNR's Natural Heritage Information Centre (M.J. Oldham, pers. comm.)

A few sedge species were collected on the mud-flat at the entrance to the trail to Maple Mountain. These were later identified as *Carex cryptolepis* Mack. and *Carex michauxiana* Boeckeler.

The Maple Mountain Trail continues to show unsightly erosional wear, particularly on the eskers. This is degrading the heritage features of the area, not to mention creating a higher risk to safe use of this very visible and traveled part of the park. Old boardwalks are in need of replacement in the wetland crossings, and the metal "ladder" at the ridge face needs to be re-evaluated with an eye to safety. Since, the Maple Mountain Fire Tower is a well known climbing destination, the entire trail and infrastructure must be a priority issue to deal with the rehabilitation of heritage features and visitor safety concerns. This is a great area for a partnership with user groups to help restore the trail they use.

In spite of these problems, there are a high number of interpretive opportunities with the diversity of representative features along the trail. We must get a bryologist to look at the Tupper Lake end of the trail! Mosses and lichen abound in this cool, wet organic site. Painted Trillium (*Trillium undulatum* Willd. - in fruit) was along the trail as was Rattlesnake Plantain (*Goodyera tesselata* Lodd. - in flower) further up in the Maple stands. I photographed a land-snail: I don't see too many of these in my travels this far north. We also cornered a colourful American Toad amongst Three Leaved Soloman's Seal (*Maianthemum trifolium* (L.) Sloboda) and Common Wood Sorrel (*Oxalis acetocella* L. ssp. *montana* (Raf.) Hultén) on the way out.

The contrasts of the top of the trail with the trail head on Tupper Lake always amaze me. Most visitors must pick up the changes in temperature, wind and light, not to mention heart rate - why is that? And, the plants and vegetation reflect all these changes too. The dominant plant on the top of Maple Mountain is Sheep Laurel (*Kalmia angustifolia* L.) and it was in full bloom giving a pink cast to this warmer than normal shrub community on thin soils or rock. I have yet to see another area in Ontario with as much coverage of this community type. This is definitely a provincially significant representative

Sheep Laurel (*Kalmia angustifolia* L.) Community at the Summit of Maple Mountain. Photo by Ed Morris.

feature. I have been here with Doug Hamilton when he worked in the parks program, and was told that Low-bush Blueberry (*Vaccinium angustifolium* Ait.) was much more common here 20 years ago.

The Sheep Laurel Mountain bald heath is most likely a fire dependent community. The shorter Blueberry is being out-competed by the taller Sheep Laurel. Few trees grow here - some suggest that this is due in part to selective cutting by visitors who make cooking and warming fires, but you see little evidence of camp fires. I suspect that recurring wild fire removes larger woody material. We saw some Hawthorn (*Crataegus* sp.) at trailside just above the metal "ladder" on the ridge face.

The views from the Fire Tower are outstanding. One looks to the north west into more maple stands on nearby ridge. Closer to the tower, several aircraft crash sites of different vintage are also still apparent. To the south-west, evidence of a past fire known as the Macpherson Burn can be seen, and the extent of the Sheep Laurel Mountain bald heath is quite evident from this perch. The Willow Island Creek valley with Hobart Lake, Chris Willis Lake, and Willow Island / Lady Evelyn Lake are to the east. Makobe Lake and the Grays system are immediately west.

View of Tupper Lake and Hobart Lake from Summit of Maple Mountain. Photo by Ed Morris

In my recollection, my three comrades essentially ran up the trail to the summit. There was almost no time to write notes as I was struggling to keep up. I was grateful that I was foresighted enough to bring 2 L of drinking water! After we made it to the top, Will, Roel, & John were still energetic enough to climb the fire tower, but my desk-jockey's legs could only deal with level ground for the next half-hour. I used the time to make a species list. Trees and shrubs were stunted and wind-trained, especially the coniferous trees. Much of the hill was dominated by Sheep Laurel. Other species included:

Acer rubrum L.
Red Maple
Alnus viridis (Chaix) DC. ssp. *crispa* (Dryander ex Ait.) Turill
Green Alder
Amelanchier spp.
Serviceberries
Betula papyrifera Marsh.
White Birch
Cornus canadensis L.
Bunchberry
Cypripedium acaule Ait.
Pink Lady's-slipper
Danthonia spicata (L.) F.Beauv.
Poverty Oat-grass
Deschampsia flexuosa (L.) Trin.
Hairgrass
Maianthemum canadense Desf.
Canada Mayflower
Picea mariana (Miller) BSP.
Black Spruce
Pinus banksiana Lam.
Jack Pine
Pinus strobus L.
White Pine
Potentilla tridentata Sol. ex Ait.
Mountain White Potentilla, or Three-toothed Potentilla
Prunus pensylvanica L.f.
Pin Cherry
Pteridium aquilinum (L.) Kuhn
Bracken Fern
Sorbus sp.
Mountain Ash
Vaccinium angustifolium Ait.
Low Sweet Blueberry

The blowdown along the Maple Mountain trail shows a number of things. Rooting is shallow and communities with species like Balsam Fir are susceptible to or are indicators of high frequency disturbances - wind and fire in this case.

We made our back down Maple Mountain to our canoes, and headed back to our campsite. We were ready for a refreshing swim, followed by an even more refreshing nap! The next morning we woke early so that we could catch our plane in Anvil Lake [47°25' N, 80°17' W], a few kilometres north of Hobart Lake.

The portages between Hobart and Anvil Lakes are in typical boreal settings. Nice to see the Larch in wetlands: what a contrast when you think back to the Maple outlier along the Maple Mountain trail! These portages, like many in the Lady Evelyn Smoothwater area have very cobbly and bouldery treads. This is evidence of water erosion as in large river beds. The Willow Island Creek and the Lady Evelyn Rivers follow old meltwater drainages from glacial time, and they can be tricky when wet, or at any

time for that matter, when travelers are heavily loaded.

We encountered Smooth Rose (*Rosa blanda* Ait.) and Winterberry (*Ilex verticillata* (L.) A.Gray) on a small island in the creek. Since we were trying to meet a deadline, there was little time to stop and botanize. We did meet our plane at Anvil Lake, and after we taxied to the north end of the main body of the lake, I noticed more Bayonet Rush growing in shallow water above a sandy-lake bottom.

Roel and John were able to stay on Anvil Lake longer as we flew out first. They checked out the access trail and chatted with a canoe camper that we had seen the day before. As we flew out, the smoke in the air was visible and could be smelled over the kerosene-like turbo fuel fumes.

Acknowledgements:

Many thanks to Mike Oldham, Don Sutherland, and Bill Crins for information, opinions, and editorial comments.

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Black Sedge (*Carex atratiformis* Britton) Grows in Lawns in Municipal Parks.

by Allan Harris[2]

Black sedge *(Carex atratiformis* Britton) is a distinctive, tall sedge with deep reddish-black pistillate spikelets on drooping peduncles. It is considered rare in Ontario (Oldham 1996) where it is restricted to a few locations along the north shore of Lake Superior. In 1998, I found two populations growing in an unusual habitat: lawns in municipal parks at Thunder Bay.

Although sometimes considered an arctic-alpine species (Thunder Bay Field Naturalists 1998), the range of *C. atratiformis* is better described as boreal. It extends from the east side of James Bay, through northern Quebec, Labrador, Newfoundland, Nova Scotia, and New Brunswick, and southward to the mountains of northern Maine and New England (Calder 1952). A disjunct population is on Lake Superior in Michigan and Ontario (Scoggan 1978). Six locations for *Carex atratiformis* are represented at the Lakehead University herbarium, extending from just south of the city of Thunder Bay east to St. Ignace Island. [Trowbridge Falls (48°28' N, 89°12' W), Squaw Bay (48°43' N, 88°01' W), Brodeur Island (48°33' N, 88°17' W), Vigars Point (48°34' N, 88°45' W), Brule Bay (48°19' N, 89°13' W), and McKenzie Bay (48°32' N, 88°52' W)]. The Michigan range includes Isle Royale and a few locations on the south shore of Lake Superior (Voss 1972). Typical habitat of *Carex atratiformis* is rock crevices on lakeshores and river banks, cliffs, and borders of woods (Ball and White 1982a, Voss 1972, Calder 1952, C.E. Garton herbarium labels).

A closely related species, *Carex raymondii* Calder, is recognized by Morton and Venn (1990), but is sometimes treated as *C. atratiformis* ssp. *raymondii* (e.g Scoggan 1978). Other authorities don't recognize *C. raymondii* as a valid taxon and consider it synonymous with *C. atratiformis*. Its two-tone spikes and more inflated perigynia, among other characteristics, distinguish it from *C. atratiformis* ssp. *atratiformis* (Calder 1952). *Carex raymondii* ranges from far northern Ontario, west to Alaska and south to southern Alberta and Saskatchewan (Ball and White 1982b, Calder 1952).

In May 1998, I found a population of *C. atratiformis* growing on a lawn at Wild Goose Park, a small recreational park on Lake Superior 7 km east of Thunder Bay (Fig. 1). Approximately 2000 culms in 15 to 20 patches were spread over about 1 ha of lawn. *Carex atratiformis* was most common in shallow depressions in the lawn. Soil in one of the depressions was loamy medium sand. The lawn was maintained in a mown condition although it had not yet been cut that spring (Fig. 2). The lawn is approximately 45 m from a small sandy beach on Lake Superior. Associated

Figure 1. Black Sedge (*Carex atratiformis* Britton) at Wild Goose Park. Photo by Allan Harris.

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vegetation included typical lawn species such as Dandelion (*Taraxacum officinale* G. Weber), Hawkweed (*Hieracium* sp.), Bluegrass (*Poa* sp.), Fescue (*Festuca* sp.) as well as *Carex arctata* Boott. Mature White Spruce (*Picea glauca* (Moench) Voss) and White Birch (*Betula papyrifera* Marshall) are scattered across the lawn. Other interesting species inhabiting the lawn included Norway Sedge (*Carex norvegica* Retz.; also known as *C. media)* (Fig. 3), a northern species and Garber's Sedge (*C. garberi* Fern.), a Great Lakes shoreline species (Voss 1972).

In June 1998, I found another population of *C. atratiformis* in a lawn at Boulevard Lake Park within the Thunder Bay city limits. A municipal strike meant that the lawn hadn't been mown for several weeks, otherwise the plant would have been easily overlooked. Approximately 30 culms were growing in a 2 m^2 area under scattered White Spruce and Balsam Poplar (*Populus balsamifera* L.*)*. Associated plants included Dandelion, Bluegrass, Fescues, and *Carex arctata* Boott.

Both Wild Goose Park and Boulevard Lake Park are close to populations of *Carex atratiformis* in more natural environments. It has been collected approximately 4 km upstream from the Boulevard Lake site on the Current River at Trowbridge Falls. Other species at Trowbridge Falls with arctic-alpine or northern affinities include:

Allium schoenoprasum L.
Chives
Arnica angustifolia M. Vahl
Narrow-leaved Arnica
A. chamissonis Less.
Arnica
A. lonchophylla E.Greene
Arnica
Carex capilliaris L.
Hair-like Sedge
Cystopteris montana (Lam.) Bernh.
Bladder Fern
Erigeron hyssopifolius Michx.
Hyssop Daisy
Euphrasia hudsoniana Fern. & Wieg.
Eyebright
Gymnocarpium jessoense (Koidz.) Koidz.
Oak Fern
Primula mistassinica Michaux
Mistassini Primrose
Trisetum spicatum (L.) K.Richter
Spiked False Oats
Woodsia glabella R.Br.
Smooth Cliff Fern
W. oregana D.Eaton.
Western Cliff Fern

Most of these species inhabit the sedimentary bedrock shelf along the Current River and the cliffs along the gorge. *Carex atratiformis* has also been collected 7 km east of Wild Goose Park along the Lake Superior shore.

Carex atratiformis appears to be prospering in these municipal parks despite lawn mowing, trampling, and other human disturbance. Although *C. atratiformis* has apparently not been noted from weedy habitats, its western counterpart *C. raymondii*, is known from roadsides, moist fields and disturbed soil (Calder 1952, Scoggan 1957). Mowing may in fact improve habitat by reducing competition from other plants, even though in many years the culms may be cut off before the seeds mature. These populations were able to persist when the parks were established or invaded from nearby natural populations.

Figure 2. Lawn at Wild Goose Park. *Carex atratiformis* spikelets are visible as black dots. Photo by Allan Harris.

Other municipal parks along the Lake Superior shore may also support *Carex atratiformis* along with other interesting shoreline species and arctic-alpine disjuncts. Late May (before mowing commences!) might be the best time to search.

Acknowledgements

I thank Wasyl Bakowsky, Jennifer Line, Mike Oldham, and an anonymous reviewer for comments.

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Figure 3. Norway Sedge (*Carex norvegica)* at Wild Goose Park. Photo by Allan Harris.

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Letters & Notices:

Invitation to Second Information Centre Algonquin Park Forest Managment Plan.

On behalf of the Local Citizens Committee and the Forest Management Planning Team, I would like to take this opportunity to invite you to our upcoming second series of forest management plan information centres.

In October of this year, we held our first information centres to seek your comments on the preliminary work done on the preparation of the 2000-2020 forest managment plan for Algonquin Park Forest. This work included the analysis of management alternatives, areas eligible for harvest, renewal and tending operations over the 20 year plan period, optional areas for harvest operations for the five year plan term 2000-2005, and a report of past forest operations.

Using comments from this first information centre, work has been proceeding on identifying the areas propoased for harvest renewal and tending operations, preparing the silicultural ground rules, as well as the proposed methods for protecting values.

A major componenet of the planning process is your input. The second set of information centres eneable the Local Citizens Committee and Planning Team to present the work done to date and listen to your opinions and concerns.

Following this second set of information centres, there are two more opportunities for public input - the draft plan review and plan inspection. The last two opportunities are not public meetings, but rather an opportunity for an individual to sit down and review the draft plan. Copies are available for review in Huntsville, Pembroke, Ottawa, Toronto, and Peterborough.

...I urge you to attend and speak with the members of your Local Citizens Committee and Forest Managment Planning Team about the matters that are of concern to you. Your comments are important and we look forward to discussing them with you.

I hope to see you there.

yours truly,
John Winters
Park Superintendent
& District Manager
Algonquin Provincial Park

All information centres will be held from 2 pm to 8 pm.

Monday, February 15, 1999.
Huntsville Centennial Centre, 20 Park Road, Auditorium A, Huntsville, Ontario.

Tuesday, February 16, 1999.
Mattawa Legion Hall, Mattawa, Ontario.

Monday, February 22, 1999
Pembroke Catering Hall, 311 Julien Street, Pembroke, Ontario.

Wednesday, February 24, 1999.
Barry's Bay Legion Hall, Barry's Bay, Ontario.

Should you be unable to attend the information centres/public meetings, or wish to contribute information after the information centres have been completed, you can review and comment on the displayed material by arranging an appointment (including an appoinment during non-business hours) with either John Winters, Park Superintendent and District Manager at (613) 637-2780 ext. 334. Carl Corbett (Algonquin Forestry Authority) at (705) 789-9647, or Peter Dawson (OMNR) at (613) 732-5555.

To anyone familiar with *Gentiana rubricaulis* Schwein.

I have only encountered a single population of *G. rubricaulis* by Caledon Lake in Peel County. I have two questions:

1) The population here departs from the standard descriptions in corolla shape and colour (see table). Are these significant?

2) At Caledon Lake, where a private cottage community adjoins conservation lands, the community mows swaths through the private and CA lands for ski trails. The genetian appears to benefit from these openings. Because

it does not appear in the popular amatuer field guides (Peterson, Audobon, Newcombe, Rickett, Mathews), I assume it is rare. Does the Credit River Conservation Authority know what it is protecting? Having once met a trail-maker from the cottage community who knew no botany, I suspect the community for its part is unaware.

Alan Proctor
111 Wyndcliff Cres., Toronto, Ontario. M4A 2J9

We can at least confirm that G. rubricaulis is known in Peel and Wellington counties, as well as Grey, Bruce, and Manitoulin Island. You are correct in your assumption that it is rare in Ontario, even in the counties those counties listed above.

Because there are discrepencies between the Caledon Lake population and the descriptions in the two manuals you cited, it was very prudent of you to supply photos with your letter. Webber (1984) does report that G. rubricaulis is "fairly common in thickets south of Caledon Lake," so your identification is probably correct. We have supplied some references which should be available at University libraries etc... which may interest Gentiana enthusiasts.

We will also be sending a few copies of this newsletter to the Credit River Conservation (Authority). -Eds

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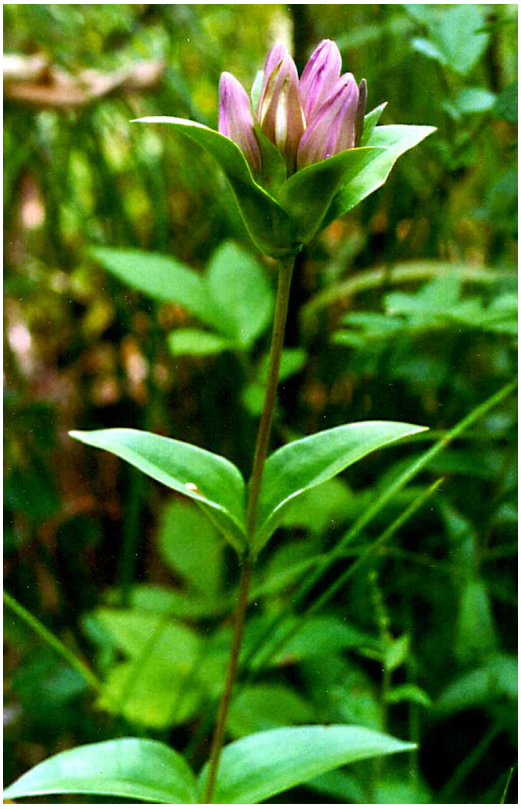

Closed Gentian (*Gentiana rubricaulis* Schwein.). Photo by Alan Proctor.

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A comparison between *G. rubricaulis* plants observed at Caledon Lake vs. descriptions from two major sources.

	Gleason & Cronquist	Gray	Caledon Lake Population
Corolla	narrowly open	subcylindric, with erect or slightly incurved lobes.	closed with vertical folds.
	pale below, generally suffused with blue upwards.	blue-violet	any combination of mauve, brown, white, rose, violet; rarely with different combinations in the same inflorescence.
Calyx		with broad rectangular sinuses	narrow rectangular
Inflorescences:		Sometimes with 1 or 2 flowers axillary.	terminal only.
Leaves:	pale green		full green.

In all other respects, the plants matched the descriptions of Gleason & Cronquist and Gray.

Lost Copies of a Gem Found!

The New York Botanical Garden just found a batch of books that had been stored (i.e. lost) of the publication "The Native Orchids of the U.S. and Canada Excluding Florida" by Luer (1975). Copies may be ordered by credit card for $41.00 + $7.30 s/h, or $48.30 (US) total. This excellent reference which is only temporarily available! The NYBG phone number is (718) 817-8700; ask for the scientific books department.

Northeastern Fern Identifier CD-ROM now available.

Northeastern Fern Identifier by R.S. Mitchell, R.S., L. Danahaer, ande G. Steves. 1998. CD disc with instruction booklet, 91 text screens, and over 150 photos. For PC-compatible computers only. This publication covers an area from Newfoundland to Maryland and includes 70 species. The price is $19.95 (U.S.) plus shipping and handling. For more information, contact New York State Museum Publications, 3140 CEC, Albany, NY, 12230. R.S. Mitchell can be contacted at rmitche3@mail.nysed.gov

Editorial:

Lands for Life: is it Too Late to Comment?

Lands for Life was an attempt by the current Provincial Government to address some very admirable goals with respect to land use in North Central, North Eastern, and North Western Ontario. They were:

> *completing Ontario's system of Provincial Parks and other protected areas.
> *recognizing the land use planning needs of the resource-based tourism industry.
> *providing the forest, mining, and other resource industries with greater land and resource use certainty.
> *enhancing angling, hunting, and other Crown land recreation opportunities.

In February 1997, the Minister of Natural Resources (Chris Hodgson at the time) set up three "Round Tables" of about 15 members each to:

> *consider how the Government's four objectives could best be achieved, while considering other land and resource uses.
> *undertake a wide-ranging public consultation.
> *make recommendations to the Minister, including a draft regional land use strategy.

Sounds great doesn't it? Well, it didn't work out so nicely. The round table public consultations were dominated by aggressive public interest groups, and members of the general public were intimidated from participating. Furthermore, people such as myself, who depend on the resource industries for employment, are not completely free to speak our mind at these meetings for fear that future employment opportunities might be jeopardized.

The Consolidated Recommendations (1998) cites that "each Round Table's Draft Land Use Planning Recommendations generally represented a consensus of its members." However, a number of members of each Round Table had resigned over the 22 month period, including one of the chairs. Two members from the Boreal West Region, both of whom were private tourism operators, independently submitted their own recommendations to the Minister late last year, as they felt their concerns were being ignored by other members of the Round Table. In effect, the consensus method of approving recommendations effectively gave industry representatives on each round table a veto over recommendations that would limit the operation of their particular industry.

Back in October, when the Lands for Life Reports and Consolidated Reports were released, the general public was told that comments would not be accepted past November 30th, 1998. Since it took some time for the general public to actually get enough copies of the reports, there was a significant call on the Minister to extend this deadline period. The 'new' OMNR Minister Snobelen did not extend the deadline, but said he would continue to accept letters after November 30th. To me, this would indicate that the deadline was somewhat meaningless anyway.

I believe the Provincial Government is generally unhappy with the Lands for Life process. It has created divisions between parties that will impede resolution of land use planning on Crown Lands, rather than creating an atmosphere that encourages greater cooperation between interested parties. It is now a politically dangerous issue for them, as whatever they do will be controversial with industry, fishing and hunting organizations, and/or people who believe in greater conservation strategies than were recommended in the reports.

I also believe that letters to the Minister or MPP's will make a difference, even at this time. The Provincial Government has not shown signs that they are close to adopting any policies based on these reports. Letters to the Minister can be short or long depending on your own perspective of the situation, but they all count. Think of it as a renewal of your licence to Complain About the Government!

The consolidated report is available online at www.mnr.gov.on.ca/MNR/lfl, as well as a multitude of detailed maps of Ontario showing proposed land use activities. You will need a computer with a reasonably fast internet connection to view/print these files. If you do not have access to the internet, your MPP's office, public and university libraries are other good places to track down information.

You may also be interested in visiting a interenet site posted by the Partnership for Public Lands. They have proposed their own "Planning for Prosperity" report to the Provincial Government. The internet address is www.web.net/wild/. They have attempted to demostrate that more land could be protected and employment levels could be maintained or increased in resource dependent communities.

Much of the information presented here comes directly from the Consolidated Recommendations and news reports from local radio stations in Sudbury, Ontario, as well as from guest speakers from a recent conference in Sudbury.

I have purposely limited my comments on the contents and recommendations of the report itself, but anyone who wishes to discuss/debate the matter with me is welcome. My address, phone number, and email address appear on the inside of the front cover.

Ed Morris
B.Sc. (Agr.) Resources Management

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