

Botanical Survey
FOR
**McLellan's Brook,
Pictou County, Nova Scotia**

October 26, 2012

Prepared By:
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Marbicon Inc. was contracted in 2012 to perform a botanical survey of a site located in McLellan's Brook, Pictou County, Nova Scotia, centered at approximately 45° 33' 48" North and 62° 37' 24" West. Figure 1 is an aerial view (Google Earth) of the study area. The site was mostly forested, except for some construction fill areas to the west. Some cut lines through the woods had recently been cleared in an east to west orientation. Highway 104 was a couple hundred metres north of the site.

The site was inventoried by botanist Jim Jotcham on October 19, 2012. The list of plant species identified and their provincial (NSDNR) status is presented in Appendix 1. Identifications and habitat preferences were determined using Roland's Flora of Nova Scotia (Zinck, 1998). The taxon names and S-ranks were taken from ACCDC (2012).

The site was predominantly a young secondary forest (Figure 2), dominated by gray birch (*Betula populifolia*) and trembling aspen (*Populus tremuloides*), with a significant presence of glossy buckthorn (*Frangula alnus*). There were occasional balsam fir (*Abies balsamea*) and white spruce (*Picea glauca*) that changed the local character to that of a mixed-woods habitat (Figure 3). The site was otherwise quite homogeneous. The dominant herb was rough goldenrod (*Solidago rugosa*).

Some deeper ruts in old logging roads exhibited wetland flora, but there were no wetlands on site that were over 100 square metres.

Appendix 1 shows the list of plant species identified on site. It must be noted that no conclusions may be drawn as to the presence or absence of species more easily seen or identified in other seasons.

Appendix 2 is a summary of the botany portion of the report supplied by the Atlantic Canada Conservation Data Centre (ACCDC). Their list includes sub-national (S) ranks. Some of the species and/or synonym scientific names are not found in Zinck (1998), but can usually be found in Hinds (2000). The ACCDC list shown is for all rare flora identified within 100 km, with no sorting by habitat. Hence many of the species are not likely to be seen. In fact, most of the

nearby species records were for riparian or wetland (or at least damp) sites, or they were found in rich mature sugar maple stands. Reviewing the ACCDC list, Blood Milkwort (*Polygala sanguinea*) was recorded in 1922 at an un-forested vacant lot (data not shown) 4 km from the site. This habitat fits the surrounding area, and *Roland's Flora* reports that the species is found in open woods or bush. The species was not seen during this survey.

Blue vervain (*Verbena hastata*) was recorded by ACCDC as being identified at a gravelly river shore in 2003. On this subject site, a number of plants were found in the gravel shoulder of the road just west of the woods by a wet gravel pit dominated by broad-leaved cattail (*Typha latifolia*). Although an S3 species, blue vervain has a DNR Green status.

The ACCDC list of potential species of concern is a long one, and is presented in Appendix 2. The probability of finding the listed species generally decreases as the distance of the recorded sightings from the study site increases. However, exceptions exist. A review of the remainder of the list revealed that none of the additional listed plant species had been identified on the site.

In conclusion, no rare or unusual species or habitats were identified.



October 26, 2012

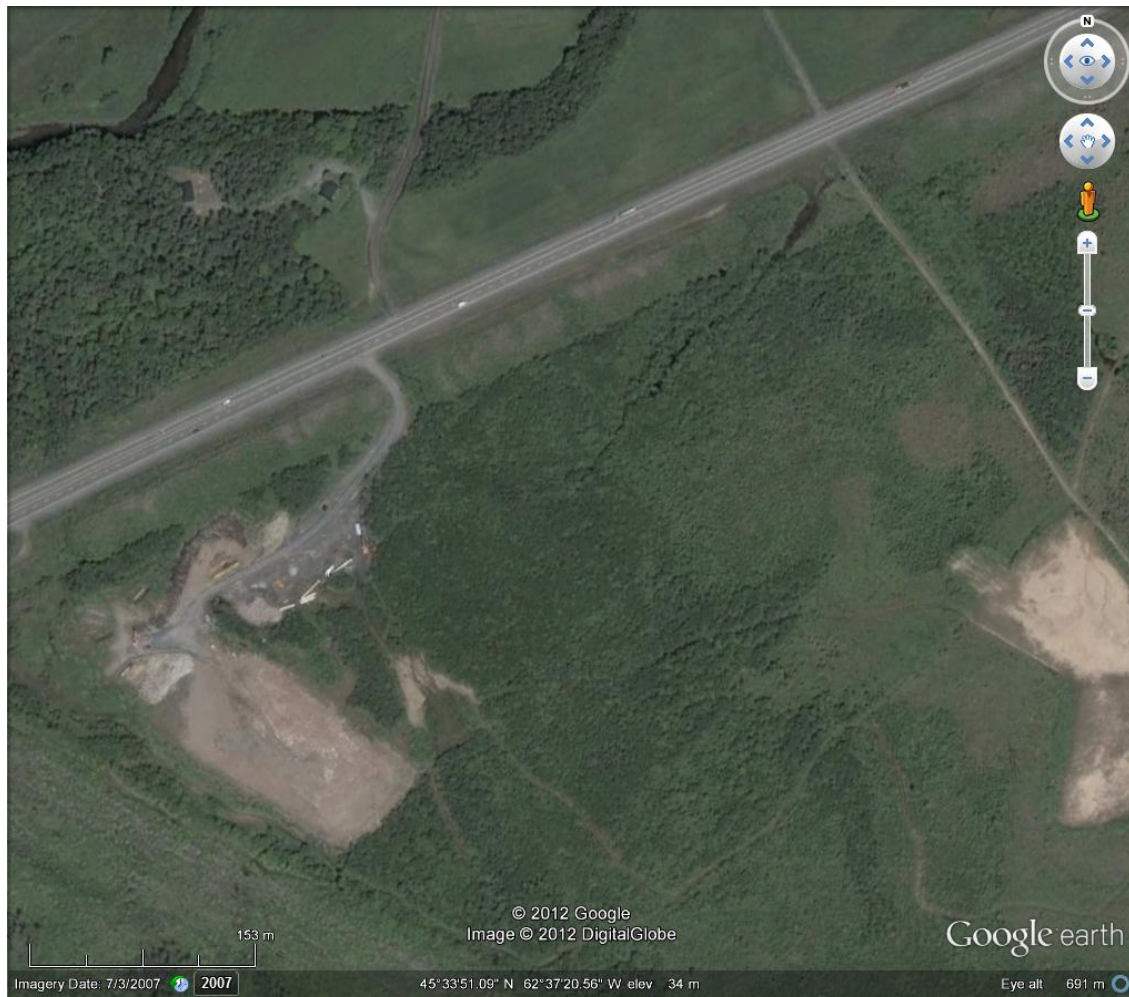


Figure 1. Study site and vicinity. Google Earth Image, 2012. The subject site is in the lower centre of the image. Highway 104 is shown in the upper portion in the image. New Glasgow is to the northwest.



Figure 2. Typical birch thicket common on the site.



Figure 3. Cut line through mixed woods on site.

REFERENCES

Atlantic Canada Conservation Data Centre, 2012:
<http://accdc.com/Products/ranking.html>

Google Earth. 6.2.2.6613. 2012.

Hinds, H.R. 2000. Flora of New Brunswick, 2nd Ed. University of New Brunswick, Fredericton. 699 pp.

NS Department of Natural Resources, 2012:
<http://www.gov.ns.ca/natr/wildlife/genstatus/background.asp#Ranks>

Zinck, M. 1998. Roland's Flora of Nova Scotia. Nimbus Publishing and the Nova Scotia Museum. Halifax, Nova Scotia. 2 Vols, 1297 pp.

Appendix 1: Site vegetation inventory surveyed October 19, 2012.

<u>Scientific Name</u>	<u>Common Name</u>	<u>ACCDC S-rank</u>	<u>DNR Status</u>
<i>Abies balsamea</i>	Balsam Fir	S5	Green
<i>Acer rubrum</i>	Red Maple	S5	Green
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	S5	Green
<i>Calamagrostis canadensis</i>	Blue-Joint Reedgrass	S5	Green
<i>Carex michauxiana</i>	Michaux Sedge	S4	Green
<i>Cornus canadensis</i>	Dwarf Dogwood	S5	Green
<i>Corylus cornuta</i>	Beaked Hazelnut	S5	Green
<i>Diervilla lonicera</i>	Northern Bush-Honeysuckle	S5	Green
<i>Doellingeria umbellata</i>	Parasol White-Top	S5	Green
<i>Dryopteris carthusiana</i>	Spinulose Shield-fern	S5	Green
<i>Eupatorium perfoliatum</i>	Common Boneset	S5	Green
<i>Euthamia graminifolia</i>	Flat-Top Fragrant-Golden-Rod	S5	Green
<i>Fragaria virginiana</i>	Virginia Strawberry	S5	Green
<i>Frangula alnus</i>	Glossy Buckthorn	SE	SE
<i>Galium palustre</i>	Marsh Bedstraw	S5	Green
<i>Hieracium piloselloides</i>	Tall Hawkweed	SE	SE
<i>Juncus effusus</i>	Soft Rush	S5	Green
<i>Linnaea borealis</i>	Twinflower	S5	Green
<i>Maianthemum canadense</i>	Wild Lily-of-The-Valley	S5	Green
<i>Oclemena acuminata</i>	Whorled Aster	S5	Green
<i>Osmunda claytoniana</i>	Interrupted Fern	S5	Green
<i>Picea glauca</i>	White spruce	S5	Green
<i>Populus tremuloides</i>	Quaking Aspen	S5	Green
<i>Potentilla simplex</i>	Old-Field Cinquefoil	S5	Green
<i>Pteridium aquilinum</i>	Bracken Fern	S5	Green
<i>Quercus rubra</i>	Northern Red Oak	S5	Green
<i>Rosa virginiana</i>	Virginia Rose	S5	Green
<i>Rubus allegheniensis</i>	Allegheny Blackberry	S5	Green
<i>Rubus hispidus</i>	Bristly Dewberry	S5	Green
<i>Rubus idaeus</i>	Red Raspberry	S5	Green
<i>Rubus pubescens</i>	Dwarf Red Raspberry	S5	Green
<i>Salix bebbiana</i>	Bebb's Willow	S5	Green
<i>Scirpus cyperinus</i>	Cottongrass Bulrush	S5	Green
<i>Solanum dulcamara</i>	Climbing Nightshade	SE	SE
<i>Symphotrichum lateriflorum</i>	Farewell-Summer	S5	Green
<i>Trientalis borealis</i>	Northern Starflower	S5	Green
<i>Tussilago farfara</i>	Colt's Foot	SE	SE
<i>Typha latifolia</i>	Broad-leaved Cattail	S5	Green
<i>Vaccinium myrtilloides</i>	Velvetleaf Blueberry	S5	Green
<i>Verbena hastata</i>	Blue Vervain	S3	Green
<i>Veronica officinalis</i>	Gypsy-Weed	S5	Green
<i>Viburnum nudum</i>	Possum-Haw Viburnum	S5	Green

Appendix 1 (continued)

Rankings:

S4 - Usually widespread, fairly common, and apparently secure with many occurrences, but of longer-term concern (100+ occurrences).

S5 - Widespread, abundant, and secure, under present conditions.

SE - Exotic; an exotic, established in the province; may be native in nearby regions.

Green (Secure) - Species that are not believed to be at risk, or sensitive. This category includes some species that have declined in numbers but remain relatively widespread or abundant.

Appendix 2. Data summary from the Atlantic Canada Conservation Data Centre (ACCDC) report prepared October 15, 2012. Only the botanical information is presented here, and only the nearest record for each species, up to a 100-km radius.

Definitions of Provincial (subnational) ranks - SRANKS

- S1 **Extremely rare:** May be especially vulnerable to extirpation (typically 5 or fewer occurrences or very few remaining individuals).
- S2 **Rare:** May be vulnerable to extirpation due to rarity or other factors (6 to 20 occurrences or few remaining individuals).
- S3 **Uncommon,** or found only in a restricted range, even if abundant at some locations (21 to 100 occurrences).
- S4 **Usually widespread, fairly common,** and apparently secure with many occurrences, but of longer-term concern (e.g., watch list) (100+ occurrences).
- S5 **Widespread, abundant,** and secure, under present conditions.
- S#S# **Numeric range rank:** A range between two consecutive ranks for a species/community. Denotes uncertainty about the exact rarity (e.g., S1S2).
- SH **Historical:** Previously occurred in the province but may have been overlooked during the past 20-70 years. Presence is suspected and will likely be rediscovered; depending on species/community.
- SU **Unrankable:** Possibly in peril, but status is uncertain - need more information.
- SX **Extinct/Extirpated:** believed to be extirpated within the province.
- S? **Unranked:** not yet ranked.
- SA **Accidental:** Accidental or casual, infrequent and far outside usual range. Includes species (usually birds or butterflies) recorded once or twice or only at very great intervals, hundreds or even thousands of miles outside their usual range.
- SE **Exotic:** An exotic established in the province (e.g., Purple Loosestrife or Coltsfoot); may be native in nearby regions.

- SE# **Exotic numeric:** An exotic established in the province that has been assigned a numeric rank.
- SNR **Unranked:** Provincial conservation status not yet assessed.
- SNA **Not Applicable:** A conservation status is not applicable because the species is either: a) exotic, b) not definitively known to occur in the province or c) a hybrid not considered to be conservation significance. A notes field giving the reason or reasons for the SNA rank is included on AC CDC downloadable species lists.
- SP **Potential:** Potentially occurs, but no occurrences have been reported.
- SR **Reported:** reported but without persuasive documentation (e.g., misidentified specimen).
- SRF **Reported falsely:** erroneously reported and the error has persisted in the literature.
- SZ **Zero:** not of practical conservation concern because there are no definable occurrences, although the species is native and appears regularly. An SZ rank is generally used for long distance migrants that pass through the province occasionally.

<u>Scientific Name</u>	<u>Common Name</u>	<u>S-rank</u>	<u>Dist-km</u>
Dichanthelium acuminatum var. lindheimeri	Woolly Panic Grass	S1?	01 ±0.1
Lilium canadense	Canada Lily	S2S3	02 ±0.5
Spiranthes lucida	Shining Ladies'-Tresses	S2	03 ±1
Sisyrinchium angustifolium	Narrow-leaved Blue-eyed-grass	S3S4	04 ±0
Polygala sanguinea	Blood Milkwort	S2S3	04 ±1
Dichanthelium linearifolium	Narrow-leaved Panic Grass	S2?	04 ±10
Hedeoma pulegioides	American False Pennyroyal	S2S3	04 ±5
Carex rosea	Rosy Sedge	S3	05 ±0
Packera paupercula	Balsam Groundsel	S3	05 ±0
Caulophyllum thalictroides	Blue Cohosh	S2	05 ±10
Triosteum aurantiacum	Orange-fruited Tinker's Weed	S2	05 ±10
Carex hirtifolia	Pubescent Sedge	S2S3	06 ±0
Carex pellita	Woolly Sedge	S1	06 ±0
Equisetum variegatum	Variegated Horsetail	S3	06 ±0
Fraxinus nigra	Black Ash	S2S3	06 ±0
Osmorhiza longistylis	Smooth Sweet Cicely	S2	06 ±0
Polygonum pensylvanicum	Pennsylvania Smartweed	S3	06 ±0
Polygonum scandens	Climbing False Buckwheat	S3	06 ±0
Sanguinaria canadensis	Bloodroot	S3S4	06 ±0
Symphyotrichum ciliolatum	Fringed Blue Aster	S2S3	06 ±0
Verbena hastata	Blue Vervain	S3	06 ±0

<i>Anemone virginiana</i>	Virginia Anemone	S2	06 ±1
<i>Potamogeton praelongus</i>	White-stemmed Pondweed	S3?	06 ±5
<i>Botrychium lanceolatum</i> var. <i>angustisegmentum</i>	Triangle Moonwort	S2S3	07 ±0
<i>Botrychium simplex</i>	Least Moonwort	S2S3	07 ±0
<i>Campanula aparinoides</i>	Marsh Bellflower	S3	07 ±0
<i>Juncus dudleyi</i>	Dudley's Rush	S2?	07 ±0
<i>Trisetum spicatum</i>	Narrow False Oats	S3S4	07 ±0
<i>Viola nephrophylla</i>	Northern Bog Violet	S2	07 ±0
<i>Epilobium coloratum</i>	Purple-veined Willowherb	S2?	07 ±1
<i>Desmodium canadense</i>	Canada Tick-trefoil	S1	08 ±0
<i>Lindernia dubia</i>	Yellow-seeded False Pimperel	S3S4	08 ±0
<i>Laportea canadensis</i>	Canada Wood Nettle	S3	10 ±0
<i>Plantago rugelii</i>	Rugel's Plantain	S2	10 ±0
<i>Elymus wiegandii</i>	Wiegand's Wild Rye	S1	10 ±1
<i>Carex lupulina</i>	Hop Sedge	S3	11 ±0
<i>Sanicula odorata</i>	Clustered Sanicle	S1	11 ±0
<i>Cyperus lupulinus</i> ssp. <i>macilentus</i>	Hop Flatsedge	S1	11 ±10
<i>Juncus subcaudatus</i>	Woodland Rush	S3	11 ±10
<i>Pilea pumila</i>	Dwarf Clearweed	S1	11 ±10
<i>Cypripedium parviflorum</i>	Yellow Lady's-slipper	S2S3	12 ±10
<i>Megalodonta beckii</i>	Water Beggarticks	S3	13 ±0.5
<i>Crataegus robinsonii</i>	Robinson's Hawthorn	S1?	14 ±1
<i>Cuscuta cephalanthi</i>	Buttonbush Dodder	S1	14 ±1
<i>Chenopodium rubrum</i>	Red Pigweed	S1?	14 ±10
<i>Agrimonia gryposepala</i>	Hooked Agrimony	S3	15 ±0
<i>Suaeda calceoliformis</i>	Horned Sea-blite	S2S3	15 ±1
<i>Teucrium canadense</i>	Canada Germander	S3	15 ±5
<i>Leptogium teretiusculum</i>	Beaded Jellyskin Lichen	S2S3	16 ±0
<i>Caltha palustris</i>	Yellow Marsh Marigold	S2	16 ±0.1
<i>Carex tuckermanii</i>	Tuckerman's Sedge	S1	16 ±0.1
<i>Elymus hystrix</i> var. <i>bigeloviana</i>	Spreading Wild Rye	S1	16 ±1
<i>Tiarella cordifolia</i>	Heart-leaved Foamflower	S2	16 ±10
<i>Botrychium dissectum</i>	Cut-leaved Moonwort	S3	17 ±1
<i>Cypripedium reginae</i>	Showy Lady's-Slipper	S2	18 ±10
<i>Hudsonia tomentosa</i>	Woolly Beach-heath	S1	18 ±10
<i>Carex tenera</i>	Tender Sedge	S1S2	20 ±5
<i>Conioselinum chinense</i>	Chinese Hemlock-parsley	S2	21 ±5
<i>Platanthera orbiculata</i>	Small Round-leaved Orchid	S3	23 ±0
<i>Oenothera fruticosa</i> ssp. <i>glauca</i>	Narrow-leaved Evening Primrose	S2	24 ±10
<i>Salix pedicellaris</i>	Bog Willow	S2	24 ±10
<i>Atriplex acadiensis</i>	Maritime Saltbush	S1?	25 ±10
<i>Degelia plumbea</i>	Blue Felt Lichen	S2	26 ±0
<i>Cypripedium parviflorum</i> var. <i>pubescens</i>	Yellow Lady's-slipper	S2	26 ±10
<i>Corallorhiza trifida</i>	Early Coralroot	S3	27 ±0
<i>Hepatica nobilis</i> var. <i>obtusata</i>	Round-lobed Hepatica	S1S2	27 ±0

<i>Viburnum edule</i>	Squashberry	S3	27 ±0
<i>Myriophyllum farwellii</i>	Farwell's Water Milfoil	S2	27 ±10
<i>Platanthera grandiflora</i>	Large Purple Fringed Orchid	S3	28 ±0
<i>Salix petiolaris</i>	Meadow Willow	S3	28 ±0
<i>Sparganium natans</i>	Small Burreed	S3	28 ±1
<i>Carex pensylvanica</i>	Pennsylvania Sedge	S1S2	29 ±0
<i>Carex foenea</i>	Fernald's Hay Sedge	S3?	30 ±0
<i>Hieracium kalmii</i>	Kalm's Hawkweed	S2?	30 ±1
<i>Hieracium robinsonii</i>	Robinson's Hawkweed	S2	30 ±10
<i>Platanthera macrophylla</i>	Large Round-Leaved Orchid	S2	30 ±5
<i>Hieracium paniculatum</i>	Panicled Hawkweed	S3	31 ±0
<i>Vaccinium caespitosum</i>	Dwarf Bilberry	S2	31 ±0
<i>Proserpinaca pectinata</i>	Comb-leaved Mermaidweed	S3	31 ±10
<i>Carex haydenii</i>	Hayden's Sedge	S1	31 ±5
<i>Antennaria parlinii</i>	Parlin's Pussytoes	S1	32 ±0
<i>Primula mistassinica</i>	Mistassini Primrose	S2	32 ±10
<i>Lycopodium complanatum</i>	Northern Clubmoss	S3S4	33 ±0.1
<i>Crataegus submollis</i>	Quebec Hawthorn	S1?	33 ±10
<i>Rudbeckia laciniata</i> var. <i>gaspereauensis</i>	Cut-Leaved Coneflower	S2	34 ±10
<i>Zizia aurea</i>	Golden Alexanders	S1	34 ±10
<i>Carex plantaginea</i>	Plantain-Leaved Sedge	S1	35 ±0
<i>Nephroma bellum</i>	Naked Kidney Lichen	S3?	35 ±0
<i>Ophioglossum pusillum</i>	Northern Adder's-tongue	S2S3	35 ±0
<i>Polypodium appalachianum</i>	Appalachian Polypody	S3?	35 ±0
<i>Pyrola minor</i>	Lesser Pyrola	S2	35 ±0
<i>Lycopodium sabinifolium</i>	Ground-Fir	S3?	35 ±5
<i>Allium tricoccum</i>	Wild Leek	S1	36 ±0.1
<i>Stellaria longifolia</i>	Long-leaved Starwort	S3	36 ±1
<i>Platanthera flava</i>	Tubercled Orchid	S2	36 ±10
<i>Platanthera flava</i> var. <i>herbiola</i>	Tubercled Orchid	S1S2	37 ±0
<i>Bartonia paniculata</i> ssp. <i>paniculata</i>	Branched Bartonia	SNA	37 ±10
<i>Solidago hispida</i>	Hairy Goldenrod	S1?	37 ±10
<i>Bromus latiglumis</i>	Broad-Glumed Brome	S1	38 ±0
<i>Carex garberi</i>	Garber's Sedge	S1	38 ±0
<i>Carex hystericina</i>	Porcupine Sedge	S2	38 ±0
<i>Carex tribuloides</i>	Blunt Broom Sedge	S3?	38 ±1
<i>Lycopodiella appressa</i>	Southern Bog Clubmoss	S3S4	38 ±1
<i>Potamogeton obtusifolius</i>	Blunt-leaved Pondweed	S2S3	38 ±1
<i>Rudbeckia laciniata</i>	Cut-Leaved Coneflower	S2	39 ±0
<i>Veronica serpyllifolia</i> ssp. <i>humifusa</i>	Thyme-Leaved Speedwell	S2S3	39 ±0
<i>Luzula parviflora</i>	Small-flowered Woodrush	S3S4	40 ±0
<i>Pyrola asarifolia</i>	Pink Pyrola	S3	40 ±0
<i>Eleocharis ovata</i>	Ovate Spikerush	S2?	40 ±0.5
<i>Dryopteris fragrans</i> var. <i>remotiuscula</i>	Fragrant Wood Fern	S2	40 ±10
<i>Hieracium kalmii</i> var. <i>kalmii</i>	Kalm's Hawkweed	S2?	40 ±5

<i>Parnassia palustris</i> var. <i>parviflora</i>	Marsh Grass-of-Parnassus	S2	41 ±1
<i>Dichanthelium clandestinum</i>	Deer-tongue Panic Grass	S3	43 ±0
<i>Juncus vaseyi</i>	Vasey's Rush	S1	43 ±0
<i>Trisetum spicatum</i>	Narrow False Oats	S3S4	43 ±0
<i>Erigeron hyssopifolius</i>	Hyssop-leaved Fleabane	S3	43 ±0.1
<i>Anemone virginiana</i> var. <i>alba</i>	Virginia Anemone	S1S2	43 ±10
<i>Floerkea proserpinacoides</i>	False Mermaidweed	S2	43 ±10
<i>Ranunculus flammula</i> var. <i>flammula</i>	Lesser Spearwort	S2	43 ±10
<i>Viola canadensis</i>	Canada Violet	S1	43 ±10
<i>Arabis drummondii</i>	Drummond's Rockcress	S2	44 ±0
<i>Collema furfuraceum</i>	Blistered Tarpaper Lichen	S3?	44 ±0
<i>Cryptogramma stelleri</i>	Steller's Rockbrake	S1	44 ±0
<i>Leptogium corticola</i>	Blistered Jellyskin Lichen	S2S3	44 ±0
<i>Sticta fuliginosa</i>	Peppered Moon Lichen	S3?	44 ±0
<i>Chamaesyce polygonifolia</i>	Seaside Spurge	S2	44 ±1
<i>Carex bebbii</i>	Bebb's Sedge	S1S2	45 ±0
<i>Liparis loeselii</i>	Loesel's Twayblade	S2	45 ±5
<i>Ranunculus gmelinii</i>	Gmelin's Water Buttercup	S2	45 ±5
<i>Equisetum hyemale</i> var. <i>affine</i>	Common Scouring-rush	S3S4	46 ±0
<i>Atriplex franktonii</i>	Frankton's Saltbush	S3S4	46 ±1
<i>Polygonum arifolium</i>	Halberd-leaved Tearthumb	S2	46 ±1
<i>Equisetum pratense</i>	Meadow Horsetail	S2	47 ±0
<i>Equisetum scirpoides</i>	Dwarf Scouring-Rush	S3S4	47 ±0
<i>Angelica atropurpurea</i>	Purple-stemmed Angelica	S2	47 ±1
<i>Goodyera repens</i>	Lesser Rattlesnake-plantain	S2	47 ±1
<i>Equisetum variegatum</i>	Variegated Horsetail	S3	48 ±0
<i>Proserpinaca palustris</i> var. <i>crebra</i>	Marsh Mermaidweed	S3	48 ±0
<i>Rhamnus alnifolia</i>	Alder-leaved Buckthorn	S3	48 ±0
<i>Anemone quinquefolia</i>	Wood Anemone	S2	48 ±0.1
<i>Cardamine pratensis</i>	Cuckoo Flower	S1	48 ±0.1
<i>Amelanchier stolonifera</i>	Running Serviceberry	S1?	48 ±1
<i>Carex cryptolepis</i>	Hidden-scaled Sedge	S3?	49 ±0
<i>Galium labradoricum</i>	Labrador Bedstraw	S2	49 ±0
<i>Myriophyllum verticillatum</i>	Whorled Water Milfoil	S2	49 ±0
<i>Rosa palustris</i>	Swamp Rose	S3	49 ±0
<i>Cystopteris bulbifera</i>	Bulblet Bladder Fern	S3S4	49 ±0.1
<i>Carex wiegandii</i>	Wiegand's Sedge	S1	49 ±5
<i>Humulus lupulus</i> var. <i>lupuloides</i>	Common Hop	S1?	49 ±5
<i>Cinna arundinacea</i>	Sweet Wood Reed Grass	S1	50 ±0
<i>Myriophyllum sibiricum</i>	Siberian Water Milfoil	S3S4	50 ±0
<i>Platanthera hookeri</i>	Hooker's Orchid	S3	50 ±0
<i>Polygonum robustius</i>	Stout Smartweed	S3S4	50 ±0
<i>Proserpinaca palustris</i>	Marsh Mermaidweed	S3	50 ±0
<i>Eleocharis olivacea</i>	Yellow Spikerush	S2S3	50 ±0.1
<i>Limosella australis</i>	Southern Mudwort	S2	50 ±1

<i>Asclepias incarnata</i>	Swamp Milkweed	S3	50 ±10
<i>Huperzia selago</i>	Northern Firmoss	S1S3	50 ±10
<i>Ceratophyllum echinatum</i>	Prickly Hornwort	S2?	51 ±0
<i>Potamogeton zosteriformis</i>	Flat-stemmed Pondweed	S2S3	51 ±0
<i>Scirpus pedicellatus</i>	Stalked Bulrush	S1	51 ±0
<i>Samolus valerandi</i> ssp. <i>parviflorus</i>	Seaside Brookweed	S2	51 ±1
<i>Allium schoenoprasum</i> var. <i>sibiricum</i>	Wild Chives	S2	52 ±10
<i>Erigeron philadelphicus</i>	Philadelphia Fleabane	S2	52 ±10
<i>Polygonum buxiforme</i>	Small's Knotweed	S2S3	52 ±10
<i>Senecio pseudoarnica</i>	Seabeach Ragwort	S2	52 ±10
<i>Symphyotrichum boreale</i>	Boreal Aster	S2?	52 ±10
<i>Lycopodium sitchense</i>	Sitka Clubmoss	S3?	52 ±5
<i>Carex peckii</i>	Peck's Sedge	S2?	53 ±0.1
<i>Ditrichum rhynchostegium</i>	a Moss	S1	53 ±0.1
<i>Carex adusta</i>	Lesser Brown Sedge	S2S3	53 ±10
<i>Erioderma pedicellatum</i> (Atlantic pop.)	Boreal Felt Lichen - Atlantic pop.	S1S2	53 ±10
<i>Carex argyrantha</i>	Silvery-flowered Sedge	S1	54 ±5
<i>Ribes americanum</i>	Wild Black Currant	S1	54 ±5
<i>Carex grisea</i>	Inflated Narrow-leaved Sedge	S1	55 ±0
<i>Gratiola neglecta</i>	Clammy Hedge-Hyssop	S1S2	55 ±0.1
<i>Thuja occidentalis</i>	Eastern White Cedar	S1S2	55 ±0.5
<i>Bidens hyperborea</i>	Estuary Beggarticks	S1	55 ±1
<i>Iris prismatica</i>	Slender Blue Flag	S1	55 ±10
<i>Potamogeton richardsonii</i>	Richardson's Pondweed	S2S3	56 ±1
<i>Anemone virginiana</i> var. <i>virginiana</i>	Virginia Anemone	S2	56 ±10
<i>Betula michauxii</i>	Newfoundland Dwarf Birch	S2	56 ±10
<i>Eriophorum gracile</i>	Slender Cottongrass	S2	56 ±10
<i>Potamogeton friesii</i>	Fries' Pondweed	S2	56 ±10
<i>Utricularia gibba</i>	Humped Bladderwort	S3S4	56 ±10
<i>Carex eburnea</i>	Bristle-leaved Sedge	S3	56 ±5
<i>Potamogeton pulcher</i>	Spotted Pondweed	S1S2	56 ±5
<i>Fuscopannaria leucosticta</i>	Rimmed Shingles Lichen	S1S2	58 ±0
<i>Galium aparine</i>	Common Bedstraw	S1	58 ±0
<i>Adiantum pedatum</i>	Northern Maidenhair Fern	S1	58 ±1
<i>Ageratina altissima</i>	White Snakeroot	S1	59 ±10
<i>Suaeda maritima</i> ssp. <i>richii</i>	White Sea-blite	S1	59 ±10
<i>Carex comosa</i>	Bearded Sedge	S2	60 ±10
<i>Impatiens pallida</i>	Pale Jewelweed	S2	62 ±10
<i>Juncus greenei</i>	Greene's Rush	S1S2	62 ±5
<i>Pseudognaphalium obtusifolium</i>	Eastern Cudweed	S1	63 ±1
<i>Carex alopecoidea</i>	Foxtail Sedge	S1	65 ±0.5
<i>Carex vacillans</i>	Estuarine Sedge	S1S3	65 ±0.5
<i>Piptatherum canadense</i>	Canada Rice Grass	S2	65 ±1
<i>Carex tinctoria</i>	Tinged Sedge	S1	66 ±1
<i>Comandra umbellata</i>	Bastard's Toadflax	S2	66 ±10

<i>Halenia deflexa</i>	Spurred Gentian	S2S3	67 ±1
<i>Vallisneria americana</i>	Wild Celery	S2	67 ±1
<i>Carex houghtoniana</i>	Houghton's Sedge	S2?	68 ±5
<i>Lobelia spicata</i>	Pale-Spiked Lobelia	S1	69 ±10
<i>Schoenoplectus robustus</i>	Sturdy Bulrush	S1?	69 ±10
<i>Anzia colpodes</i>	Black-foam Lichen	S3?	71 ±0
<i>Physconia detersa</i>	Bottlebrush Frost Lichen	S2S3	71 ±0
<i>Asclepias incarnata</i> ssp. <i>pulchra</i>	Swamp Milkweed	S2S3	71 ±1
<i>Erioderma mollissimum</i>	Graceful Felt Lichen	S1S2	72 ±0.1
<i>Carex atlantica</i> ssp. <i>capillacea</i>	Atlantic Sedge	S2	72 ±10
<i>Aloina rigida</i>	Aloe-Like Rigid Screw Moss	S1	73 ±0.1
<i>Collema nigrescens</i>	Blistered Tarpaper Lichen	S2S3	73 ±0.1
<i>Cypripedium arietinum</i>	Ram's-Head Lady's-Slipper	S1	73 ±0.1
<i>Isoetes acadensis</i>	Acadian Quillwort	S3	73 ±1
<i>Betula pumila</i>	Bog Birch	S2	74 ±0
<i>Stellaria humifusa</i>	Saltmarsh Starwort	S2	74 ±0.1
<i>Epilobium strictum</i>	Downy Willowherb	S3	74 ±0.5
<i>Geocaulon lividum</i>	Northern Comandra	S3	75 ±0.1
<i>Dirca palustris</i>	Eastern Leatherwood	S1	75 ±10
<i>Panicum tuckermanii</i>	Tuckerman's Panic Grass	S2S3	76 ±0
<i>Peltigera collina</i>	Tree Pelt Lichen	S2S3	76 ±0.1
<i>Woodsia glabella</i>	Smooth Cliff Fern	S2	76 ±10
<i>Calamagrostis stricta</i>	Slim-stemmed Reed Grass	S2S3	77 ±0
<i>Ranunculus pennsylvanicus</i>	Pennsylvania Buttercup	S1	77 ±0
<i>Solidago simplex</i> var. <i>randii</i>	Sticky Goldenrod	SH	77 ±1
<i>Vaccinium boreale</i>	Northern Blueberry	S2	77 ±1
<i>Cochlearia tridactylites</i>	Limestone Scurvy-grass	S1	79 ±10
<i>Potamogeton nodosus</i>	Long-leaved Pondweed	S1	79 ±5
<i>Equisetum hyemale</i>	Common Scouring-rush	S3S4	80 ±1
<i>Asplenium trichomanes-ramosum</i>	Green Spleenwort	S2	80 ±10
<i>Calliergon giganteum</i>	Giant Spear Moss	S2?	81 ±1
<i>Viola sagittata</i> var. <i>ovata</i>	Arrow-Leaved Violet	S1?	82 ±1
<i>Anemone canadensis</i>	Canada Anemone	S2	83 ±0.1
<i>Isoetes prototypus</i>	Prototype Quillwort	S2	83 ±0.1
<i>Lactuca hirsuta</i> var. <i>sanguinea</i>	Hairy Lettuce	SH	84 ±5
<i>Schizaea pusilla</i>	Little Curlygrass Fern	S3	85 ±0
<i>Goodyera pubescens</i>	Downy Rattlesnake-Plantain	S2	85 ±1
<i>Hypericum dissimulatum</i>	Disguised St John's-wort	S2S3	85 ±10
<i>Minuartia groenlandica</i>	Greenland Stitchwort	S2	85 ±10
<i>Rumex salicifolius</i> var. <i>mexicanus</i>	Triangular-valve Dock	S2	85 ±10
<i>Empetrum eamesii</i> ssp. <i>eamesii</i>	Pink Crowberry	S2	85 ±5
<i>Galium boreale</i>	Northern Bedstraw	S2	85 ±5
<i>Listera australis</i>	Southern Twayblade	S1	86 ±0
<i>Coeloglossum viride</i> var. <i>virescens</i>	Long-bracted Frog Orchid	S2S3	86 ±0.1
<i>Festuca subverticillata</i>	Nodding Fescue	S1	86 ±1

<i>Scrophularia lanceolata</i>	Lance-leaved Figwort	S1	86 ±10
<i>Pseudevernia cladonia</i>	Ghost Antler Lichen	S2S3	87 ±0
<i>Sphagnum wulfianum</i>	Wulf's Peat Moss	S2S3	87 ±0.1
<i>Spiranthes ochroleuca</i>	Yellow Ladies'-tresses	S1	88 ±0.1
<i>Calamagrostis stricta</i> var. <i>stricta</i>	Slim-stemmed Reed Grass	S2S3	89 ±0
<i>Stuckenia filiformis</i>	Thread-leaved Pondweed	S1	89 ±0
<i>Sparganium hyperboreum</i>	Northern Burreed	S1S2	90 ±0.1
<i>Malaxis brachypoda</i>	White Adder's-Mouth	S1	90 ±10
<i>Campylostelium saxicola</i>	a Moss	S1S2	91 ±1
<i>Platydictya subtilis</i>	Bark Willow Moss	S1S2	91 ±1
<i>Hypericum majus</i>	Large St John's-wort	S1?	92 ±0
<i>Polygonum raii</i>	Sharp-fruited Knotweed	S2S3	92 ±1
<i>Crassula aquatica</i>	Water Pygmyweed	S1	92 ±5
<i>Lilaeopsis chinensis</i>	Eastern Lilaeopsis	S2	94 ±0
<i>Sagina nodosa</i> ssp. <i>borealis</i>	Knotted Pearlwort	S1S2	94 ±5
<i>Triglochin gaspensis</i>	Gaspé Arrowgrass	S2S3	94 ±5
<i>Callitriche hermaphroditica</i>	Northern Water-starwort	S1S2	95 ±0
<i>Carex chordorrhiza</i>	Creeping Sedge	S1	95 ±1
<i>Elodea nuttallii</i>	Nuttall's Waterweed	S1	95 ±1
<i>Stuckenia filiformis</i> ssp. <i>alpina</i>	Thread-leaved Pondweed	S1	95 ±1
<i>Carex livida</i>	Livid Sedge	S1	95 ±5
<i>Stellaria crassifolia</i>	Fleshy Stitchwort	SH	95 ±5
<i>Decodon verticillatus</i>	Swamp Loosestrife	S1	96 ±0
<i>Empetrum eamesii</i>	Pink Crowberry	S2	96 ±0
<i>Hudsonia ericoides</i>	Pinebarren Golden Heather	S1	96 ±0
<i>Asplenium trichomanes</i>	Maidenhair Spleenwort	S2	96 ±0.1
<i>Sagina nodosa</i>	Knotted Pearlwort	S1S2	96 ±0.5
<i>Bartonia virginica</i>	Yellow Bartonia	S3	96 ±10
<i>Carex rostrata</i>	Narrow-leaved Beaked Sedge	S1	96 ±5
<i>Amelanchier fernaldii</i>	Fernald's Serviceberry	S1	97 ±0.5
<i>Salix pellita</i>	Satiny Willow	S2S3	97 ±1
<i>Goodyera oblongifolia</i>	Menzies' Rattlesnake-plantain	S1	98 ±0.1
<i>Montia fontana</i>	Water Blinks	S1	98 ±1
<i>Eriophorum chamissonis</i>	Russet Cotton-Grass	S1S2	99 ±0
<i>Botrychium lanceolatum</i>	Triangle Moonwort	S1S2	99 ±0.1
<i>Juglans cinerea</i>	Butternut	SNA	99 ±0.1
<i>Empetrum eamesii</i> ssp. <i>atropurpureum</i>	Pink Crowberry	S2	99 ±5
<i>Rumex fueginus</i>	Tierra del Fuego Dock	S1S2	100 ±0
<i>Alopecurus aequalis</i>	Short-awned Foxtail	S2S3	100 ±10
<i>Eleocharis nitida</i>	Quill Spikerush	S3	100 ±10