



## APPENDIX B. PRIORITY SPECIES LIST



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

Scientific Name	Common Name	SRank	COSEWIC	SARA	NSESA	Habitat Description
<b>VASCULAR PLANTS</b>						
<i>Agalinis purpurea</i>	Purple False-Foxglove	S2S3	-	-	-	Bogs, calcareous and mafic fens, open floodplain swamps, depression ponds, interdune swales, tidal freshwater marshes and swamps; more numerous in a variety of wet to mesic, open, disturbed habitats, including old fields, clearings, and roadsides. Flowers in late summer to early fall (Digital Atlas of Virginia Forest, nd).
<i>Agalinis purpurea</i> <i>var. parviflora</i>	Small-flowered Purple False Foxglove	S2S3	-	-	-	Sandy soils of stream and lake margins, bogs, and barren (NatureServe, 2021)
<i>Agalinis tenuifolia</i>	Slender Agalinis	S1	-	-	-	Anthropogenic (man-made or disturbed habitats), brackish or salt marshes and flats, fresh tidal marshes or flats, meadows and fields, woodlands <a href="https://gobotany.nativeplanttrust.org/species/agalinis/tenuifolia/">https://gobotany.nativeplanttrust.org/species/agalinis/tenuifolia/</a> ; Exotic to Nova Scotia, <a href="http://www.accdc.com/webranks/NSall.htm">http://www.accdc.com/webranks/NSall.htm</a> .
<i>Ageratina altissima</i> <i>var. altissima</i>	White Snakeroot	S1S2	-	-	-	Grows in moist soils at the edge of fields and forests. Flowers late summer, August and September. Known from Mill Brook, McGahey Brook and a brook near Refugee Cove, all in Cape Chignecto Provincial Park; older collection from Antigonish County. (Munro, Newell and Hill, 2014)
<i>Allium schoenoprasum</i>	Wild Chives	S1?	-	-	-	Wet meadows, rocky or gravelly stream banks and lake shores. Flowering June to August (Flora North America).
<i>Allium schoenoprasum</i> <i>var. sibiricum</i>	Wild Chives	S1?	-	-	-	Wet meadows, rocky or gravelly stream banks and lake shores. Flowering June to August (Flora North America).
<i>Allium tricoccum</i> <i>var. burdickii</i>	Narrow-leaved Wild Leek	S1?	-	-	-	DISTRIBUTION NOT KNOWN IN NS. Dry soil in upland woods. Flowering early June (Flora North America).
<i>Amelanchier fernaldii</i>	Fernald's Serviceberry	S2S3	-	-	-	Thickets, open barrens, shores, and ravines. Occurs mostly in calcareous areas. Grows in riparian and shrub wetlands (Nature Serve Explorer, nd). Flowers June - August (Munro, Newell & Hill, 2014).
<i>Amelanchier spicata</i>	Running Serviceberry	S3S4	-	-	-	Man-made or disturbed habitats, cliffs, balds, ledges, forest edges, grassland, meadows and fields, woodlands (GoBotany, nd). Flowers in the spring (NC State Extension, nd)



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Andersonglossum boreale</i>	Northern Wild Comfrey	S1	-	-	-	A generalist. along the borders of woods and thickets, along trails and pathways through woods, and within upland deciduous woods. It appears to prefer circumneutral or even calcareous areas. The soils are usually sandy or rocky (New York Natural Heritage Program 2005). Rare in open woods and roadsides (Rhoads and Block 2000). Borders, openings, and clearings or under dense shade in coniferous or mixed woods (fir, cedar, spruce, pine, birch, aspen, and occasionally beech and maple), especially in sandy or rocky soil (Voss 1996). Uplands woods (Gleason & Cronquist 1991). Rich woods and thickets (Fernald 1970). flowers of this plant begin to appear mid-May and persist into early July
<i>Anemone virginiana</i>	Virginia Anemone	S3	-	-	-	Calcareous and slate ledges along streams. Intervals and thickets of same. Flowers in early July (Munro, Newell & Hill, 2014)
<i>Anemone virginiana var. alba</i>	Virginia Anemone	S1S2	-	-	-	Calcareous and slate ledges along streams. Intervals and thickets of same. Flowers in early July (Munro, Newell & Hill, 2014)
<i>Angelica atropurpurea</i>	Purple-stemmed Angelica	S3	-	-	-	Grows in swamps, meadows, in ditches and along streams. Flowers late May until September. Very abundant in northern Cape Breton (Munro, Newell & Hill, 2014)
<i>Antennaria parlinii</i>	Parlin's Pussytoes	S2	-	-	-	Found in dry soils of pine and oak forests, pastures, oldfields, and rocky banks. Flowers in June or July. Only known from along the LaHave River (Bridgewater), the Halfway River (Hants County) and from several Kings County locations. More recently found along the Kennetcook River, Hants County and East Branch River John, Pictou County (Munro, Newell and Hill, 2014).
<i>Antennaria parlinii ssp. fallax</i>	Parlin's Pussytoes	S2	-	-	-	Found in dry soils of pine and oak forests, pastures, oldfields, and rocky banks. Flowers in June or July. Only known from along the LaHave River (Bridgewater), the Halfway River (Hants County) and from several Kings County locations. More recently found along the Kennetcook River, Hants County and East Branch River John, Pictou County (Munro, Newell and Hill, 2014).
<i>Asplenium viride</i>	Green Spleenwort	S3	-	-	-	Limestone and other basic rocks (Flora of North America).



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Atriplex glabriuscula</i> var. <i>franktonii</i>	Frankton's Saltbush	S3S4	-	-	-	confined to indigenous salt marsh and beach habitats. It is very common in northern areas, such as the Northumberland Strait region and along Cape Breton's northern coasts. Occasionally seen elsewhere as near Truro and Halifax.
<i>Barbarea orthoceras</i>	American Yellow Rocket	S1	-	-	-	It inhabits ice-scoured river shores on high-pH bedrock or till, and on wet talus in the subalpine zone.
<i>Bartonia virginica</i>	Yellow Bartonia	S3S4	-	-	-	Flowers July to September. Dry barrens, sandy or peaty soils, bogs, lakeshores. Common in the southwestern counties becoming scarcer east to Annapolis and Halifax; St. Peter's area of Cape Breton.
<i>Bidens beckii</i>	Water Beggarticks	S3S4	-	-	-	Found in shallows of sluggish streams and ponds. Flowers during August and September. Scattered throughout but more abundant from Pictou northward. (Munro, Newell and Hill, 2014).
<i>Bidens vulgata</i>	Tall Beggarticks	S3S4	-	-	-	Widely tolerant of habitats, from waste urban ground to dykelands. Scattered from Kings and Cumberland counties to Pictou. Reported to be common at Truro. Flowers through late summer (Munro, Newell & Hill, 2014).
<i>Botrychium lanceolatum</i>	Triangle Moonwort	S2S3	-	-	-	Kentville Ravine (Kings County); Colchester, Cumberland and a few sites in western Cape Breton. Rare where found and of limited distribution in the Northern counties. Found where there are fertile soils on wooded hillsides. Bogs, fens, forests, meadows, fields, swamps and edges of wetlands. This species releases its spores later than most moonworts (July to August) (Minnesota Environment and Natural Resources Trust Fund, Go Botany and Munro et al., 2014).
<i>Botrychium lanceolatum</i> ssp. <i>angustisegmentum</i>	Narrow Triangle Moonwort	S2S3	-	-	-	Kentville Ravine (Kings County); Colchester, Cumberland and a few sites in western Cape Breton. Rare where found and of limited distribution in the Northern counties. Found where there are fertile soils on wooded hillsides. Bogs, fens, forests, meadows, fields, swamps and edges of wetlands. This species releases its spores later than most moonworts (July to August) (Minnesota Environment and Natural Resources Trust Fund, Go Botany and Munro et al., 2014).



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
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<i>Botrychium simplex</i>	Least Moonwort	S2S3	-	-	-	Scattered locations from Yarmouth County to Cape Breton: Cedar Lake (Digby-Yarmouth border), West Berlin (Queens County), Petpeswick and in Antigonish, Victoria and Inverness Counties. Reported from various habitats, usually involving damp or mossy streambanks or lakeshores. Also anthropogenic habitats (man-made or disturbed habitats), meadows and fields. Subspecies: occurs primarily in open sites, including prairies, wetlands, and abandoned mine sites. Spores produced in late May and June (Minnesota DNR, Go Botany and Munro et al., 2014).
<i>Botrychium simplex var. simplex</i>	Least Moonwort	S2S3	-	-	-	Scattered locations from Yarmouth County to Cape Breton: Cedar Lake (Digby-Yarmouth border), West Berlin (Queens County), Petpeswick and in Antigonish, Victoria and Inverness Counties. Reported from various habitats, usually involving damp or mossy streambanks or lakeshores. Also anthropogenic habitats (man-made or disturbed habitats), meadows and fields. Subspecies: occurs primarily in open sites, including prairies, wetlands, and abandoned mine sites. Spores produced in late May and June (Minnesota DNR, Go Botany and Munro et al., 2014).
<i>Bromus latiglumis</i>	Broad-Glumed Brome	S2	-	-	-	Floodplain (River or stream floodplains), forest, shores of rivers or lakes (Go Botany)
<i>Caltha palustris</i>	Yellow Marsh Marigold	S2S3	-	-	-	Restricted to the Northumberland coast, majority found in Inverness county. Grows in open or treed swamps, alder marshes and meadows. Flowers in early June. Restricted to the Northumberland coastal plain: Mabou, Northeast Margaree, Margaree River, Terre Noir. St. Josephdu-Moine, Cheticamp, Pleasant Bay area, all of Inverness County. North shore of Merigomish Island, Pictou County represents the only mainland collection to date
<i>Cardamine dentata</i>	Toothed Bittercress	S1	-	-	-	rare species of calcareous swamps and fens
<i>Cardamine maxima</i>	Large Toothwort	S2	-	-	-	rich, moist forests. Floodplain (river or stream floodplains), forests, talus and rocky slopes
<i>Carex adusta</i>	Lesser Brown Sedge	S2S3	-	-	-	dry open forest or recent clearings (cutblocks) on acidic, gravelly soils. Frequent after fire. Flowering and fruting from June to September (Munro, Newell & Hill, 2014)



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Carex digitalis</i>	Slender Wood Sedge	S1	-	-	-	Generally found in forested habitats: deciduous or mixed deciduous (but focus on richer areas -moist slopes) over a variety of soils. Only found in Keji park at this time. Fruits in early summer. (Munro, Newell & Hill, 2014)
<i>Carex digitalis var. digitalis</i>	Slender Wood Sedge	S1	-	-	-	Generally found in forested habitats: deciduous or mixed deciduous (but focus on richer areas -moist slopes) over a variety of soils. Only found in Keji park at this time. Fruits in early summer. (Munro, Newell & Hill, 2014)
<i>Carex grisea</i>	Inflated Narrow-leaved Sedge	S1	-	-	-	floodplain forest and deciduous woods (Munro, Newell & Hill, 2014)
<i>Carex hirtifolia</i>	Pubescent Sedge	S3	-	-	-	calcareous regions in thickets, deciduous forests and floodplains, forest openings (Illinois Wildflowers, nd). Scattered around the lowlands in the central counties as at Shubenacadie and Brookfield. Also along the Meander and Herbert rivers, Hants Co (Munro, Newell & Hill, 2014)
<i>Carex houghtoniana</i>	Houghton's Sedge	S2S3	-	-	-	sandy soils, along roadsides. Sandy disturbed area.
<i>Carex hystericina</i>	Porcupine Sedge	S2S3	-	-	-	*note: resembles the more common <i>C. lurida</i> , but for the presence of many nerves on the perigynia, extending to the orifice. Habitat: seeps, marshes and shoreline fens. Fruits in late spring to mid-summer. Orange listed (Minnesota Wildflowers, nd)
<i>Carex normalis</i>	a Sedge	S1	-	-	-	Open, often wet, woods, thickets, meadows and roadsides. Fruiting early summer (Flora of North America, nd)
<i>Carex pellita</i>	Woolly Sedge	S2	-	-	-	Wet soils in fields, meadows and marshes, especially in calcareous regions under successional conditions. Flowering and fruiting from May - August. Known only from East River of Pictou, Pictou Co. (Munro, Newell & Hill 2014)
<i>Carex pensylvanica</i>	Pennsylvania Sedge	S1?	-	-	-	Grows in dry, rocky soils as in dry open woodlands. Flowers and fruits produced early to mid-May (Munro, Newell & Hill 2014)
<i>Carex plantaginea</i>	Plantain-Leaved Sedge	S1	-	-	-	Rich, moist, deciduous or mixed deciduous-evergreen forests, on slopes along streams or along edges of moist depressions, southward in mountain gorges. Fruiting in spring (Flora of North America, nd)
<i>Carex rosea</i>	Rosy Sedge	S3	-	-	-	Grows in dry soils beneath deciduous forests and thickets. Flowers from May to early July.



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Carex scirpoidea</i> <i>ssp. scirpoidea</i>	Scirpuslike Sedge	S2S3	-	-	-	Moist alpine meadows, stream banks, and open rocky slopes, thin and rocky soils, rock outcrops, and talus slopes. Flowers June - August (DNR WA, nd)
<i>Carex vacillans</i>	Estuarine Sedge	S1S3	-	-	-	Saline, brackish shores, swales, salt and intertidal marshes. Fruiting in June to August (Flora of North America).
<i>Carex viridula</i> <i>ssp. brachyrrhyncha</i>	Greenish Sedge	S1	-	-	-	Found along river and lake shores (Go Botany).
<i>Carex viridula</i> <i>var. elatior</i>	Greenish Sedge	S1	-	-	-	Moist to wet fens and runnels, on lime-rich soils. Fruiting in July-August (Flora North America).
<i>Carex viridula</i> <i>var. saxilittoralis</i>	Greenish Sedge	S1	-	-	-	Moist to wet, exposed shores and limestone barrens. Fruiting July-August (Flora North America).
<i>Caulophyllum</i> <i>thalictroides</i>	Blue Cohosh	S2S3	-	-	-	Shade-tolerant, restricted to river floodplain deciduous forests. Appears in April, until beginning of June. A wide and patchy distribution over the northern portion of the province from Annapolis River to River Denys in Cape Breton (Munro, Newell & Hill, 2014).
<i>Cerastium</i> <i>arvense ssp. strictum</i>	Matted Field Chickweed	S1?	-	-	-	flowers May until frost. cliffs, talus slopes, quarries, rocky beaches, coastal headlands, and in high-pH and serpentine communities. Compacted soils, especially on moist lawns and other arable land
<i>Ceratophyllum</i> <i>echinatum</i>	Prickly Hornwort	S3	-	-	-	Marshes. A plant more typical of the shallows of acidic water bodies than its congener.
<i>Coleataenia</i> <i>longifolia</i>	Long-leaved Panicgrass	S3S4	-	-	-	Marshes, meadows and fields, shores of rivers or lakes (GO Botany).
<i>Coleataenia</i> <i>longifolia ssp. longifolia</i>	Coastal Plain Panicgrass	S3S4	-	-	-	Marshes, meadows and fields, shores of rivers or lakes (GO Botany).
<i>Comandra</i> <i>umbellata ssp. umbellata</i>	Bastard's Toadflax	S2	-	-	-	Found in swamps and bogs, rich mesic sites, dry, sandy or rocky soils, savannas, early successional forests. Flowers March - August (Flora of North America, nd)
<i>Conioselinum</i> <i>chinense</i>	Chinese Hemlock-parsley	S3	-	-	-	Found in treed swamps, mossy coniferous forest, seepy coastal slopes. Flowers from August to October. Common on Saint Paul Island and infrequent elsewhere (Munro, Newell & Hill, 2014).



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Conopholis americana</i>	American Cancer-root	S2	-	-	-	Reported from the western half of the province - Parasitic plant found in trees, particularly oaks and other deciduous trees - Flowers April to July (Munro, Newell & Hill, 2014)
<i>Crataegus submollis</i>	Quebec Hawthorn	S2?	-	-	-	Anthropogenic (man-made or disturbed habitats), forest edges, meadows and fields, shrublands or thickets. Flowers in June (GoBotany, nd).
<i>Crataegus succulenta</i>	Fleshy Hawthorn	S3S4	-	-	-	Forest edges, forests, meadows and fields. Also found in abandoned farmland, along streams and in forest openings. Flowers in late spring (Natural Resources Canada, nd).
<i>Crataegus succulenta var. succulenta</i>	Fleshy Hawthorn	S3S4	-	-	-	Forest edges, forests, meadows and fields. Also found in abandoned farmland, along streams and in forest openings. Flowers in late spring (Natural Resources Canada, nd).
<i>Cuscuta cephalanthi</i>	Buttonbush Dodder	S2?	-	-	-	Flowers during August and September. Low-lying coastal areas, often seen parasitizing <i>Symphytotrichum novibegii</i> . Anthropogenic (man-made or disturbed habitats), meadows and fields, shores of rivers or lakes, swamps
<i>Cyperus lupulinus ssp. macilentus</i>	Hop Flatsedge	S1	-	-	-	Various well-drained, open places. Fruiting summer (Flora North America).
<i>Cypripedium parviflorum var. makasin</i>	Small Yellow Lady's-Slipper	S2	-	-	-	Mesic to wet fens, prairies, meadows, thickets, open coniferous, and mixed forest. Flowering in May to August (Flora of North America).
<i>Desmodium canadense</i>	Canada Tick-trefoil	S2	-	-	-	Flowers in late July. Riparian, open forests. average to moist sandy or rocky soil; prairies, along shores, along roads, railroads, open woods. Kejimikujik Park to the Pictou County rivers. Rare from Annapolis to Colchester Co.
<i>Dichanthelium linearifolium</i>	Narrow-leaved Panic Grass	S3	-	-	-	Soils both dry and sandy. Flowers and fruiting from July to October (Munro, et al., 2014).
<i>Diphasiastrum complanatum</i>	Northern Ground-cedar	S3S4	-	-	-	Infrequent, scattered through the Cobequid hills southwest to the Annapolis Valley and east to Cape Breton. Deciduous forests and brushy hillsides spreading out into abandoned fields. Anthropogenic (man-made or disturbed habitats) habitats, forest edges, forests, meadows and fields. Flowers from July to October (Minnesota Environment and Natural Resources Trust Fund, Go Botany and Munro et al., 2014).
<i>Diphasiastrum sitchense</i>	Sitka Ground-cedar	S3S4	-	-	-	Has been observed in Kings County to Northern Victoria County. Commonly found on alpine and subalpine barrens or wooded slopes in Northern Nova Scotia. Also found in anthropogenic habitats (man-made or disturbed habitats),





**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						meadows and fields. Subspecies: somewhat rare but widespread ground-cedar hybrid that frequently occurs in the absence of its parents. No sources that state specific flowering time, most likely during the general growing season in Nova Scotia: June to September (Go Botany and Munro et al., 2014).
<i>Diphasiastrum x sabinifolium</i>	Savin-leaved Ground-cedar	S3?	-	-	-	Has been observed in Kings County to Northern Victoria County. Commonly found on alpine and subalpine barrens or wooded slopes in Northern Nova Scotia. Also found in anthropogenic habitats (man-made or disturbed habitats), meadows and fields. Subspecies: somewhat rare but widespread ground-cedar hybrid that frequently occurs in the absence of its parents. No sources that state specific flowering time, most likely during the general growing season in Nova Scotia: June to September (Go Botany and Munro et al., 2014).
<i>Eleocharis flavescens</i>	Pale Spikerush	S3	-	-	-	Bogs, brackish or salt marshes and flats, floodplain (river or stream floodplains), marshes, shores of rivers or lakes, wetland margins (edges of wetlands) (Go Botany).
<i>Eleocharis flavescens var. olivacea</i>	Bright-green Spikerush	S3	-	-	-	Bogs, cold springs, dry stream banks, lake and pond margins, maritime mud flats, marshes, moist meadows, swamps. Fruiting summer-winter (June-November) (Flora North America).
<i>Elymus hystrix</i>	Spreading Wild Rye	S1	-	-	-	Meander River and Five Mile River, Hants Co, and East River of Pictou Co. Wooded lowlands and terraces. Fruiting from June to August (Munro, et al., 2014).
<i>Epilobium lactiflorum</i>	White-flowered Willowherb	S1?	-	-	-	Alpine or subalpine zones, cliffs, balds or ledges, shores of rivers or lakes (GoBotany, nd).
<i>Equisetum pratense</i>	Meadow Horsetail	S3S4	-	-	-	Known to be in several streams in Hants, Colchester and Cumberland counties, in addition to Victoria and Inverness Counties. Uncommon and limited to alluvial thickets, pastures and treed streambanks, including gravelly bars. Flowers mid to late spring (Minnesota Environment and Natural Resources Trust Fund and Munro et al., 2014).
<i>Euphrasia farlowii</i>	Farlow's Eyebright	S1S3	-	-	-	Dry, grassy habitats on sandstone or limestone barrens, rocks, ledges, sandy beaches. <a href="http://beta.floranorthamerica.org/Euphrasia_farlowii">http://beta.floranorthamerica.org/Euphrasia_farlowii</a>
<i>Fagus grandifolia</i>	American Beech	S3S4	-	-	-	Forests
<i>Fallopia scandens</i>	Climbing False Buckwheat	S3S4	-	-	-	Uncommon and local, from Digby to Richmond counties on the northern side of the province - Grows on low ground in riparian



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						zones - Flowers mid-August to October (Munro, Newell & Hill, 2014)
<i>Fimbristylis autumnalis</i>	Slender Fimbry	S1	-	-	-	Moist to wet sands, peats, slits, or clays primarily of disturbed, sunny ground such as seeps, ditches, savanna, stream banks, reservoir drawdowns, and pond shores (Flora of North America)
<i>Fragaria vesca</i>	Woodland Strawberry	S3S4	-	-	-	Forming dense patches in shady forests, ravines. Flowers in June. A white-berried form of this species persists in a number of locations within the province: White Rock, Wolfville, Grand Pré and Barrington. (Munro, Newell & Hill, 2014).
<i>Fragaria vesca ssp. americana</i>	Woodland Strawberry	S3S4	-	-	-	Forming dense patches in shady forests, ravines. Flowers in June. A white-berried form of this species persists in a number of locations within the province: White Rock, Wolfville, Grand Pré and Barrington. (Munro, Newell & Hill, 2014).
<i>Fraxinus nigra</i>	Black Ash	S1S2	Threatened	No Status	Threatened	Black ash is typically found in poorly drained areas that are often seasonally flooded. It is most common on peat and muck soils, but also grows on fine sands over sands and loams. Although this species can tolerate still semi-stagnant conditions, there is a preference for swampy woodland stream and river banks with moving water. It is often associated with species such as Red maple, Speckled alder, Balsam poplar, and Black spruce. The species is shade intolerant, and seedlings, saplings and sprouts tend to regenerate only in partially opened forest canopies.
<i>Fraxinus pennsylvanica</i>	Red Ash	S1	-	-	-	Flowers May - June. Found in riparian and upland forest and shelter belts (Minnesota Wildflowers, nd)
<i>Galium aparine</i>	Common Bedstraw	S3S4	-	-	-	Composts, ballast and waste soils. Flowers from May until July (Munro, Newell & Hill, 2014)
<i>Gentianella amarella ssp. acuta</i>	Northern Gentian	S1	-	-	-	Open and forested river banks, subalpine gullies and brook sides, occurring in regions of high-pH bedrock and/or till.
<i>Goodyera repens</i>	Lesser Rattlesnake-plantain	S3S4	-	-	-	Shady, moist, coniferous or mixed woods, on mossy or humus-covered ground. Sometimes it is found in bogs or cedar swamps. Flowering early July-early September (Flora North America).



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Hepatica americana</i>	Round-lobed Hepatica	S2	-	-	-	Local and rare at Bridgewater, New Minas, Windsor, Pictou, Stewiacke, Antigonish and at a couple of North Mountain sites. Recently discovered along the Cogmagun River, Hants Co. Long known from along the St. Andrews River. Populations at Wolfville and St. Croix appear to be extirpated. Grows in dry, mixed deciduous forests. Flowers in April (Munro, Newell & Hill, 2014)
<i>Hordeum brachyantherum</i>	Meadow Barley	S1	-	-	-	Grows in pastures and along streams and lake shores (Flora of North America).
<i>Hordeum brachyantherum ssp. brachyantherum</i>	Meadow Barley	S1	-	-	-	Grows in pastures and along streams and lake shores (Flora of North America).
<i>Humulus lupulus var. lupuloides</i>	Common Hop	S1?	-	-	-	Anthropogenic (man-made or disturbed habitats), floodplain (river or stream floodplains), forests, shrublands or thickets
<i>Huperzia appressa</i>	Mountain Firmoss	S3S4	-	-	-	Also known as Huperzia appalachiana. In Nova Scotia, known from the Fundy coast, Cumberland County (McAlesse Brook and Moose River) and Kings County (Amethyst Cove). Also a collection from Clyburne Brook, Victoria County. Found on damp acidic granite as on talus slopes or exposed cliffs. Alpine or subalpine zones, cliffs, balds, or ledges, mountain summits and plateaus, ridges or ledges. Flowers from summer to early fall (Minnesota Environment and Natural Resources Trust Fund, Go Botany and Munro et al., 2014).
<i>Huperzia selago</i>	Northern Firmoss	S1?	-	-	-	Limited to the northern half of the province, as far west as Brier Island, Digby County. Many localities clustered about the Bay of Fundy, inland to the south-facing slopes of the Cobequids and along the slopes of northern Cape Breton. Grows in rock crevices along streams and moist ravines. Anthropogenic habitats (man-made or disturbed habitats), cliffs, balds, or ledges, forests, meadows and fields, shores of rivers or lakes. Flowers from summer to early fall (Minnesota Environment and Natural Resources Trust Fund, Go Botany and Munro et al., 2014).
<i>Hylodesmum glutinosum</i>	Large Tick-trefoil	S2	-	-	-	Anthropogenic (man-made or disturbed habitats), cliffs, balds, or ledges, forest edges, forests, ridges or ledges, talus and rocky slopes. Flowers June to August



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Hypericum x dissimulatum</i>	Disguised St. John's-wort	S2S3	-	-	-	Wet mucky soils in lacustrine habitats. Historically collected from Digby to Halifax Co. with a single specimen from each of Pictou and Guysborough counties (Munro, Newell & Hill, 2014).
<i>Juncus alpinoarticulatus</i>	Northern Green Rush	S2	-	-	-	Fen, fresh tidal marshes or flats, marshes, meadows and fields, shores of rivers or lakes. Fruiting mid summer to fall (Go Botany).
<i>Juncus antheratus</i>	Greater Poverty Rush	S1?	-	-	-	Exposed or partially shaded sites in moist or seasonally wet sandy or clay soils. Flowering and fruiting in spring (Flora North America).
<i>Juncus caesariensis</i>	New Jersey Rush	S3	Special Concern	Special Concern	Vulnerable	New Jersey Rush is reported from 16 bogs and fens on the coastal plain of southeastern Cape Breton Island, Nova Scotia. These sites ranged from the Gracieville/Point Michaud area in the south, northeastwards along the coast to Fourchu Bay, a distance of approximately 50 km. Populations also occurred as much as 20 km inland (vicinity of Loch Lomond). The frequent association of this species with animals and lightly used all-terrain-vehicle trails on the edges of bogs and fens suggests a possible dependence on some level of disturbance for the maintenance of open habitat. These disturbances would reduce competition from other species. Seasonal flooding of New Jersey Rush habitats would also prevent the establishment of many species including shrubs.
<i>Juncus stygius ssp. americanus</i>	Moor Rush	S3	-	-	-	Wet moss, bogs and bog-pools. Flowering and fruiting in mid to late summer.
<i>Kalmia procumbens</i>	Alpine Azalea	S1	-	-	-	Alpine or subalpine zones, ridges or ledges
<i>Laportea canadensis</i>	Canada Wood Nettle	S3	-	-	-	Limited to fertile loam or alluvium in deciduous forests and within floodplains. Flowers from July to September (Munro, Newell & Hill, 2014)
<i>Lindernia dubia</i>	Yellow-seeded False Pimperel	S3	-	-	-	Riparian, muddy streambanks, drained ponds. Flowers from late June until frost (Munro, Newell & Hill, 2014)
<i>Liparis loeselii</i>	Loesel's Twayblade	S3S4	-	-	-	Cool, moist ravines, bogs, or fens, wet peaty or sandy meadows, and exposed sand along edges of lakes, often colonizing previously open and disturbed habitats during early and middle stages of reforestation. Flowering May-August (Go Botany).



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Lorinseria areolata</i>	Netted Chain Fern	S3S4	-	-	-	Bogs, meadows and fields, swamps, wetland margins (edges of wetlands) (Go Botany).
<i>Luzula parviflora ssp. melanocarpa</i>	Black-fruited Woodrush	S3S4	-	-	-	uncommon in damp coniferous or mixed woods, cool ravines and banks (Hinds, 2000)
<i>Lysimachia quadrifolia</i>	Whorled Yellow Loosestrife	S1	-	-	-	Anthropogenic (man-made or disturbed habitats), grassland, woodlands, fens, moist prairies (GoBotany, n.d.). Flowers from July - August (LBJ Wildflower Centre, nd).
<i>Malaxis monophyllos</i>	White Adder's-mouth	S1	-	-	-	Found in Fens, ridges or ledges, swamps with northern white-cedar. Flowering in summer (GoBotany).
<i>Malaxis monophyllos var. brachypoda</i>	North American White Adder's-mouth	S1	-	-	-	Found in swamps and bogs. Flower in summer (Flora fo North America).
<i>Mononeuria groenlandica</i>	Greenland Stitchwort	S3	-	-	-	peak flowering time of two weeks in the middle of July,[4] although it does flower anywhere between June to August. isolated and elevated areas. Thin coarse soil or in cracks of acidic rock on open rocky alpine and sub-alpine areas. Sometimes forming large masses in the appropriate habitat.
<i>Neottia bifolia</i>	Southern Twayblade	S3	-	-	-	Bogs and swamps (Go Botany)
<i>Nuphar microphylla</i>	Small Yellow Pond-lily	S3S4	-	-	-	Ponds, lakes, sluggish streams, sloughs, ditches and occasionally tidal waters. Flowers summer - early fall (Flora of North America, nd)
<i>Oenothera fruticosa</i>	Narrow-leaved Evening Primrose	S2S3	-	-	-	Scattered from Yarmouth to the Northumberland Strait - Found in dry open soil habitats such as old fields, edges of thickets and roadsides - Flowers from June to August (Munro, Newell & Hill, 2014)
<i>Oenothera fruticosa ssp. tetragona</i>	Narrow-leaved Evening Primrose	S2S3	-	-	-	Scattered from Yarmouth to the Northumberland Strait - Found in dry open soil habitats such as old fields, edges of thickets and roadsides - Flowers from June to August (Munro, Newell & Hill, 2014)
<i>Ophioglossum pusillum</i>	Northern Adder's-tongue	S2S3	-	-	-	Known from Yarmouth and Digby Counties; scattered east to Halifax and Amherst; a single Cape Breton record from George River. Found in sterile soils, swamps and sandy or cobbly lakeshores. Anthropogenic habitats (man-made or disturbed habitats), marshes, meadows, fields and edges of wetland margins. Spores produced May to August (Go Botany and Munro et al., 2014).



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Osmorhiza longistylis</i>	Smooth Sweet Cicely	S2S3	-	-	-	Intervale soils where fertility is high; deciduous forests. Flowers Late June to July. Scattered along the North Mountain in Annapolis and Kings counties to Cumberland Cobequids, infrequent in Cape Breton (Munro, Newell and Hill, 2014)
<i>Oxybasis rubra</i>	Red Goosefoot	S2S3	-	-	-	moist, disturbed soils such pond and lake shores, river and creek banks, and mud flats. Flowers July to September
<i>Oxybasis rubra var. rubra</i>	Red Goosefoot	S2S3	-	-	-	In New York, Red Pigweed has been found along the coast in wet interdunal swales, stony beaches, and the shores of coastal ponds, as well as amongst ship ballast and waste places (New York Natural Heritage Program 2010). Salt marshes (Clemants 1992). Salt marshes and brackish soil (Gleason and Cronquist 1991). Waste ground, shores, and river banks (Voss 1985).
<i>Packera paupercula</i>	Balsam Groundsel	S3S4	-	-	-	Confined to calcareous or gypsum soils, on cliffs, talus and outcrops. Flowers in July. Abundant where found but local to Hants Co. north to northern Inverness Co. (Munro, Newell & Hill, 2014).
<i>Packera paupercula var. paupercula</i>	Balsam Groundsel	S3S4	-	-	-	Confined to calcareous or gypsum soils, on cliffs, talus and outcrops. Flowers in July. Abundant where found but local to Hants Co. north to northern Inverness Co. (Munro, Newell & Hill, 2014).
<i>Panicum dichotomiflorum ssp. puritanorum</i>	Spreading Panicgrass	S1?	-	-	-	Flowering and fruiting from June through October
<i>Parnassia parviflora</i>	Small-flowered Grass-of-Parnassus	S1S2	-	-	-	Rocky seeps. Flowers August to September (Jepson Herbarium, 2021)
<i>Persicaria amphibia var. emersa</i>	Long-root Smartweed	S3?	-	-	-	Bloom on moist soil and are terrestrial-adapted. Flower June - September (Flora of North America)
<i>Persicaria arifolia</i>	Halberd-leaved Tearthumb	S3	-	-	-	Found inf shaded swamps, ponds, tidal marshes along rivers, wet ravine in forests. Flowers July - October (Flora of North America, nd)
<i>Persicaria careyi</i>	Carey's Smartweed	S1	-	-	-	Low thickets, swamps, bogs, moist shorelines, clearings, recent burns, cultivated ground. Flowering July - October (Flora of North America, nd)



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Persicaria pennsylvanica</i>	Pennsylvania Smartweed	S3S4	-	-	-	Moist, disturbed places, ditches, riverbanks, cultivated fields, shorelines of ponds and reservoirs. Flowers May - December (Flora of North America, nd)
<i>Pilea pumila</i>	Dwarf Clearweed	S3	-	-	-	Usually grows in cool shady habitats as found on forested slopes of maple-beech, in the centre of the Province. Flowers from July - October. So far only known from West Branch, Pictou Co.; Little River, near Brookfield, Halifax Co.; and along the Herbert River, Hants Co. at Woodville.
<i>Piptatheropsis canadensis</i>	Canada Ricegrass	S3	-	-	-	Dry sandy or gravelly soil. Open woods clearings, pine plantations, barrens, wooded slopes. Fruiting season-July (Minnesota Wildflowers).
<i>Piptatheropsis pungens</i>	Slender Ricegrass	S2	-	-	-	Sandy dry forests and savannas on dunes and plains, usually with aspen, oak, jack pine, and/or red pine; rocky forests and summits; rock barrens (Reznicek, Voss & Walters, 2011).
<i>Plantago rugelii</i>	Rugel's Plantain	S3	-	-	-	Grows in anthropogenic (man-made or disturbed habitat), grassland, meadows, fields (GoBotany, nd)
<i>Platanthera hookeri</i>	Hooker's Orchid	S3	-	-	-	Scattered in most of the province, local in the southwestern counties. So far absent from the eastern shore. Grows in open dry forests of mixed conifers. Flower appear from May to August (Munro, et al., 2014).
<i>Platanthera huronensis</i>	Fragrant Green Orchid	S1S2	-	-	-	No good record found. Habitat are known from streamsides, in wetlands, even forests. Flowers throughout the summer (Munro, et al., 2014).
<i>Platanthera obtusata</i>	Blunt-leaved Orchid	S3S4	-	-	-	Fens, Forests, Meadows field and swamps
<i>Podostemum ceratophyllum</i>	Horn-leaved Riverweed	S1	-	-	-	Medium to fast flowing river bottoms with ledge, cobble or sand substrate (GoBotany, nd)
<i>Polygala sanguinea</i>	Blood Milkwort	S3	-	-	-	Previously documented throughout the central/ northern mainland, usually in scant populations - Prefers acidic or run-out soil as found in fallow fields or brushlands - Flowers from late June into October (Munro, Newell & Hill, 2014)
<i>Polygonum aviculare ssp. buxiforme</i>	Box Knotweed	S2S3	-	-	-	Roadsides, vacant lots, sidewalks, packed and nondrifting sands, borders of marshes and dunes. Flowering July - December (Flora of North America, nd)



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Polygonum aviculare ssp. neglectum</i>	Narrow-leaved Knotweed	S3?	-	-	-	Found in disturbed areas. Flowers June - November (Flora of North America, nd)
<i>Polypodium appalachianum</i>	Appalachian Polypody	S3	-	-	-	Nova Scotia distribution still remains unclear. Habitat is restricted to cliffs, rocky slopes, balds, ridges or ledges and talus. No sources that state specific spore production time, most likely during the general growing season in Nova Scotia: June to September (Go Botany and Munro et al., 2014).
<i>Potamogeton polygonifolius</i>	oblong-leaved pondweed	S1	-	-	-	Occurs in almost any wet or semi-wet oligotrophic and/or acidic habitat so long as flow is not too rapid. It may be found in lakes, slow-flowing rivers, ponds, ditches, seeps and among bog mosses (Wikipedia).
<i>Ranunculus pensylvanicus</i>	Pennsylvania Buttercup	S1	-	-	-	Found in wet fields, ditches, marshes, along shores. Flowers June - August (Minnesota Wildflowers, nd)
<i>Ranunculus sceleratus</i>	Cursed Buttercup	S2	-	-	-	Anthropogenic (man-made or disturbed habitats), fresh tidal marshes or flats, marshes, swamps (GoBotany, n.d.). Flowers May - September (Minnesota Wildflowers, nd)
<i>Ranunculus sceleratus var. sceleratus</i>	Cursed Buttercup	S1S2	-	-	-	Ponds, riverbanks. Flowers from April - June, October (Jepson Herbarium, 2021)
<i>Rhinanthus minor ssp. groenlandicus</i>	Little Yellow Rattle	S1	-	-	-	Grows on disturbed, compacted soils as on roadsides, abandoned fields and the like. Flowers from mid-June through July (Munro, Newell & Hill, 2014)
<i>Rosa acicularis ssp. sayi</i>	Prickly Rose	S1	-	-	-	Across its range, it grows in a wide variety of forested and open habitats, with a wide variety of soil and moisture conditions. Flowers in the spring (Schori, 2003)
<i>Rumex triangulivalvis</i>	Triangular-valve Dock	S2S3	-	-	-	Grows in moist areas and disturbed habitats, meadows and fields (GoBotany, nd)
<i>Salix glauca var. cordifolia</i>	Beautiful Willow	S1	-	-	-	Sand and cobbles among granitic boulders, sandy alluvium, on exposed eskers, scree slopes, Sphagnum bogs, Empetrum heaths, snowbeds. Flowers late May - early July (Flora of North America, nd)
<i>Salix myrtilifolia</i>	Blueberry Willow	S1	-	-	-	Reed bogs, fens, stream banks, subalpine spruce thickets, Pinus contorta woods, sand dunes, coal spoils. Flowers early May - late July (Flora of North America, nd)
<i>Salix serissima</i>	Autumn Willow	S1	-	-	-	Fens, meadows and fields, swamps (GoBotany, nd). Also found in brackish marshy strands, marly lakeshores, treed bogs,





**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						gravelly stream banks, lakeshores. Flowers from early June to early July (Flora of North America, nd).
<i>Samolus parviflorus</i>	Seaside Brookweed	S3	-	-	-	Prefers wet places, shallow water, often on tidal shores. It can also be found in brackish or salt marshes and flats, fresh tidal marshes or flats, riverine (in rivers or streams), swamps (GoBotany, nd; Newell, L. 1977)
<i>Sanicula odorata</i>	Clustered Sanicle	S1S2	-	-	-	Found only on fertile alluvial soils and on intervals. Flowers during July and August. Found at Five Mile River, Hants County, Cornwallis River, Kings County, West River, Pictou County, Salmon River, Colchester County and Southwest Margaree River, Inverness County (Munro, Newell and Hill, 2014).
<i>Saxifraga cernua</i>	Nodding Saxifrage	S1	-	-	-	Imperfectly drained moist areas (near creeks and lakeshores, on moist ledges and in exposed dry sites); acidic, or calcareous, or nitrophilous (often near Thule sites and human habitation), or circum-neutral. Spring to summer flowering time (Aiken et al. 2007)
<i>Saxifraga oppositifolia ssp. oppositifolia</i>	Purple Mountain Saxifrage	S1	-	-	-	Arctic and alpine tundra, mountain ledges, rock crevices, calcareous gravel, raised beach ridges. Flowers spring - summer (Flora of North America, nd)
<i>Sceptridium dissectum</i>	Dissected Moonwort	S3	-	-	-	Frequent in the southwestern counties and scattered eastward to Cape Breton. Not abundant but often seen. Generally in sandy, gravelly, grassy or open soils. Spores from September to November (Munro et al., 2014).
<i>Solidago hispida</i>	Hairy Goldenrod	S1?	-	-	-	Grows in wooded banks and rocky shores. Infrequent, occasionally seen from Yarmouth to Colchester counties (Munro, Newell & Hill, 2014).
<i>Solidago hispida var. hispida</i>	Hairy Goldenrod	S1?	-	-	-	Grows in wooded banks and rocky shores. Infrequent, occasionally seen from Yarmouth to Colchester counties (Munro, Newell & Hill, 2014).
<i>Solidago rugosa var. sphagnophila</i>	Cedar-swamp Goldenrod	S1S3	-	-	-	Frequents waste soils, forests and fallow fields. Flowers late in August through September. Common throughout the province (Munro, Newell & Hill, 2014).
<i>Sparganium androcladum</i>	Branching Bur-Reed	S1	-	-	-	Found in lakes, ponds, rivers or streams or the shore of rivers or lakes (Go Botany).



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Spiranthes lucida</i>	Shining Ladies'-Tresses	S2S3	-	-	-	Few Know locations in central NS. Grows in alluvial soils and damp rocky shores. Found in thickets and meadows. Flowers appear in early July (Munro, et al., 2014).
<i>Symphotrichum boreale</i>	Boreal Aster	S3	-	-	-	Favours lacustrine gravels, streamsides and edges of peatlands. Flowers during August and September . Scattered from Yarmouth to Cape Breton uncommon (Munro, Newell & Hill, 2014).
<i>Symphotrichum ciliolatum</i>	Fringed Blue Aster	S3	-	-	-	Favours open fields, lawns and edges. Flowers during August and September. Scattered from Hants and Colchester counties to Cumberland, Pictou and Inverness counties (Munro, Newell & Hill, 2014).
<i>Thalictrum confine</i>	Northern Meadow-rue	S1	-	-	-	Alluvial or shingly calcareous shores and talus. Flowers June - July (Flora of North America, nd)
<i>Thuja occidentalis</i>	Eastern White Cedar	S2S3	-	-	-	Found in riparian areas along streams, in swamps, along lakeshores, in woodland forests and in old pastures. It is shade-tolerant and typically occurs in cool, moist habitats that are nutrient rich. It does best in moderate drainage conditions that are neither too wet nor dry. Eastern White Cedar is typically observed in cool, moist shaded areas.
<i>Tiarella cordifolia</i>	Heart-leaved Foamflower	S2S3	-	-	-	Alluvial soils, deciduous forests even stony roadsides. Flowers mid-May to mid-June (Munro, Newell & Hill, 2014)
<i>Toxicodendron vernix</i>	Poison Sumac	S1	-	-	-	Usually found in swamps or marshes. Flowers from May to July. Only known in Telfer Lake and Apple Tree Lake in Queens county (Munro, Newell & Hill, 2014)
<i>Trichostema dichotomum</i>	Forked Bluecurls	S1	-	-	-	Relatively new to Nova Scotia. Found in anthropogenic/disturbed habitats, grasslands, meadows and fields, sandplains and barrens (GoBotany, nd). Flowers from August to October (Peterson & McKenny, 1968).
<i>Triosteum aurantiacum var. aurantiacum</i>	Orange-fruited Tinker's Weed	S3	-	-	-	Dry-mesic to mesic forests, woodlands, and forest borders
<i>Utricularia ochroleuca</i>	Yellowish-white Bladderwort	S1	-	-	-	Shallow (generally <30cm) acidic waters. Flowers June - September (Jepson Herbarium, 2021)
<i>Verbena hastata</i>	Blue Vervain	S3S4	-	-	-	Limited to mucky fertile soils, as along floodplains. Flowers during August - September (Munro, Newell & Hill, 2014)
<i>Veronica catenata</i>	Pink Water-Speedwell	S1	-	-	-	Shores of rivers or lakes, wetland margins (edges of wetlands) (GoBotany, nd). Flowers May - September (Minnesota Wildflowers, nd)



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Viola nephrophylla</i>	Northern Bog Violet	S3	-	-	-	Cool, mossy sites: bogs, streamsides and wet woods. Flowers May - July (Munro, Newell & Hill, 2014)
<i>Viola sagittata var. ovata</i>	Arrow-Leaved Violet	S3S4	-	-	-	Open woods and thickets, disturbed ground, roadsides, powerline rights-of-way. Flowers April - June (Flora of North America, nd)
<i>Woodsia glabella</i>	Smooth Cliff Fern	S2S3	-	-	-	Mainland Nova Scotia has a single locality in Jeffers Brook, Cumberland County. The remainder of known sites are in Northern Nova Scotia: Big Southwest Brook, Lockhart Brook, and on Sky Glen Mountain. A very rare fern, only found on vertical cliffs or streamside (e.g. cliffs, balds, or ledges, ridges or ledges). Spores produced in summer to early fall (Minnesota Environment and Natural Resources Trust Fund, Go Botany and Munro et al., 2014).

Scientific Name	Common Name	SRank	COSEWIC	SARA	NSESA	Habitat Description
<b>LICHENS</b>						
<i>Anzia colpodes</i>	Black-foam Lichen	S3	Threatened	Threatened	Threatened	<i>Anzia colpodes</i> requires mature deciduous tree habitats with high humidity and high light levels. The required humidity is supplied by wetlands, nearby brooks, lakes or by the host's position on upland slopes above a water body. Host tree trunks are usually free of dense undergrowth and the lichen usually occurs at or above the height of the undergrowth (in swamps and fens). A few of the <i>Anzia</i> collections from are reported to be from the canopy of Red Maple trees. Recent searches have found that <i>A. colpodes</i> occurs from 20 cm above the ground to 2 m up the tree trunks.
<i>Erioderma pedicellatum</i>	Boreal Felt Lichen	S1	Endangered	Endangered	Endangered	The existing boreal felt lichen occurs within 25 km of the sea coast at an elevation of up to 300 m above sea level and they are found in forested habitats with low open crown closure. Boreal Felt Lichens are typically found in balsam fir stands, on north-facing trunks of mature and overmature trees. Habitat preference for boreal felt lichen is cool and moist and remains relatively constant throughout the year. They are often located on or at the base of slopes with northern or northeastern exposure.



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Pectenia plumbea</i>	Blue Felt Lichen	S3	Special Concern	Special Concern	Vulnerable	The Blue Felt Lichen is usually found on the trunks of old broad-leaved trees growing in moist habitats or close to streams and lake margins. This lichen occurs in coastal suboceanic areas but also some distance inland in damp valleys. It prefers cool, humid woodlands that may be mixed coniferous/hardwood or dominated by deciduous trees. The Blue Felt Lichen seems to prefer mature deciduous trees, particularly maple, ash and yellow birch. At its northerly limit of distribution in Nova Scotia, the Blue Felt Lichen has once been found on moss-covered rocks.
<i>Peltigera hydrothyria</i>	Eastern Waterfan	S1	Threatened	Threatened	Threatened	Eastern Waterfan grows attached to rocks at or below water level in clear, cool, partially shaded streams. Small waterfalls, exposed boulders and sinuous stream configurations create quiet or protected backwaters where the lichen grows outside the main current. In summer, this lichen is often partially or completely exposed during low water flow periods. Partial shade may be needed to help keep humidity high and temperatures low during summer months.
<i>Sclerophora peronella (Atlantic pop.)</i>	Frosted Glass-whiskers (Atlantic population)	S3S4	Special Concern	Special Concern	-	Collections from Nova Scotia were on exposed heartwood of living red maple trees growing in old-growth hardwood stands. Frosted Glass-whiskers grows on old deciduous trees, usually on the exposed heartwood of living trunks and more rarely on bark, in humid and rather shaded situations. This arboreal lichen is often associated with old-growth forests in coastal regions, but it is also found in open forests, in clearings, and on the margins of old deciduous forests (COSEWIC Assessment and Status Report).

**MAMMALS**

<i>Alces alces</i>	Moose	S1	-	-	Endangered	Moose are herbivores who live in boreal and mixed-wood forests. They are often found where there is an abundance of food (twigs, stems, and foliage of young deciduous trees and shrubs). In spring, islands and peninsulas are often used by cows when giving birth. In summer, access to wetlands (and aquatic vegetation) is important.
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**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Lasionycteris noctivagans</i>	Silver-haired Bat	S1M, SUB	-	-	-	Most commonly found in boreal or coniferous and deciduous forests near bodies of water. Summer day roosts are typically under loose bark in trees such as, willows, maple, ash and dead trees. Maternity colonies can be found in cavities in these trees. Uncommonly, they use human structures (garages, sheds, etc). During the winter, these bats have been found in caves and other rocky areas that provide shelter, in tree cavities, and in buildings.
<i>Lasiurus borealis</i>	Eastern Red Bat	S1M, SUB	-	-	-	Lives in forests, forest edges, and hedgerows. It roosts among foliage, usually in deciduous trees, but sometimes roosts in coniferous trees. Rare in heavily urbanized areas.
<i>Lasiurus cinereus</i>	Hoary Bat	S1M, SUB	-	-	-	They prefer deciduous and coniferous trees at the edge of clearings, but have been found in trees in heavy forests, open wooded glades, and shade trees along urban streets and in city parks.
<i>Myotis lucifugus</i>	Little Brown Myotis	S1	Endangered	Endangered	Endangered	Little Brown Myotis is one of the few bat species that uses buildings and other anthropogenic structures (e.g., bat boxes, bridges, and barns) to roost (particularly for maternity roosting), but it will also use cavities of canopy trees, foliage, tree bark, crevices on cliffs, and other structures.
<i>Myotis septentrionalis</i>	Northern Myotis	S1	Endangered	Endangered	Endangered	Northern Myotis may hibernate in cooler sections of a cave. Northern Myotis will generally return to the same hibernaculum, but not always in consecutive years. Northern Myotis roost singly or in small groups and favour tree roosts (under raised bark and in tree cavities and crevices), but they can also be found in anthropogenic structures (e.g., under shingles). Northern Myotis' maternity roosts are strongly associated with forest cover, streams, and tree characteristics (e.g., species, height, diameter, age, and decay). Females prefer to roost in tall, large diameter trees in early- to mid-stages of decay. Maternity colonies in Nova Scotia were generally in larger-than-average trees. Males generally roost alone under raised bark or within cavities of trees in mid-stages of decay.
<i>Pekania pennanti</i>	Fisher	S3	-	-	-	They are often found in deciduous and mixedwood forest stands in the forested region. They can also be found in wetland vegetation types including shrubby swamps, shrubby bogs, and marshes. There is a higher likelihood to find them in harvested stands compared to naturally regenerating stands of similar age.



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Perimyotis subflavus</i>	Tricolored Bat	S1	Endangered	Endangered	Endangered	Tri-colored Bat often select the deepest part of caves or mines where temperature is the least variable, have strong humidity level preferences, and use warmer walls than other species. They have been recorded within any one hibernacula, possibly because they tend to hibernate solitarily (i.e., not in clusters) in the deepest sections of the caves/mines. Tri-colored Bats exhibit high fidelity to hibernacula. Roosts provide thermal regulation, shelter from weather and predation, and can be sites for social interaction. Individuals may switch roosts regularly and therefore, may use a network of roosts in a roosting area. The tendency to switch roosts may depend on species, sex, age, reproductive status, and roost type.
<i>Sorex maritimensis</i>	Maritime Shrew	S3	-	-	-	Often found in marshes and wet meadows The most favoured habitat is the edges of freshwater swamps and marshes which have become overgrown with tangled grass and rushes.
<i>Sorex palustris</i>	American Water Shrew	S3S4	-	-	-	Mostly aquatic, the water shrew lives beneath the overhanging banks and in rock crevices along the edges of swiftly flowing mountain streams. Rhododendron and yellow birch are usually the dominant vegetation in these areas.
<i>Synaptomys cooperi</i>	Southern Bog Lemming	S3	-	-	-	They are often found in sphagnum bogs and low moist places, but they are also found in grasslands, mixed deciduous/coniferous forests, spruce-fir forests, freshwater wetlands, marshes, and meadows. They prefer areas with a thick mat of herbaceous and shrubby vegetation.

**HERPETOFAUNA**



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Chelydra serpentina</i>	Snapping Turtle	S3	Special Concern	Special Concern	Vulnerable	They are common in southwestern Nova Scotia and less common on the northeastern mainland. Although Snapping Turtles occupy a wide variety of habitats, the preferred habitat for this species is characterized by slow-moving water with a soft mud bottom and dense aquatic vegetation. Established populations are most often found in ponds, marshes, swamps, peat bogs, shallow bays, river and lake edges, and slow-moving streams. turtles appear to prefer the following characteristics for their hibernacula: water shallow enough to let the turtle reach the surface to breathe, but deep enough so the water will not freeze to the bottom; a location that is likely to freeze over later in the season and thaw earlier in the spring; a thick layer of mud in which the turtle can bury itself; and additional submerged cover, such as a floating mat of vegetation, roots, stumps, branches or logs, a muskrat dwelling or an overhanging bank.
<i>Chrysemys picta picta</i>	Eastern Painted Turtle	S4	Special Concern	Special Concern	-	Eastern Painted Turtle is found in New Brunswick, Nova Scotia, and the Atlantic coastal states east of the Appalachian Mountains. Painted Turtles occupy slow moving, relatively shallow and well-vegetated wetlands (e.g., swamps, marshes, ponds, fens, bogs, and oxbows) and water bodies (e.g., lakes, rivers, creeks, and streams) with abundant basking sites and organic substrate. These turtles are found in association with submergent aquatic plants, which are used for cover and feeding. The species is semi-tolerant of human-altered landscapes and may occasionally be found occupying urban ponds and lands subject to anthropogenic disturbance (e.g., farm ponds, impoundments, water treatment facilities). Suitable nesting habitat includes open, often south-facing, and sloped areas with sandy-loamy and/or gravel substrate usually within 1200 m of aquatic active season habitats. Painted Turtles overwinter in shallow water with deep sediment (COSEWIC Assessment and Status Report).



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Glyptemys insculpta</i>	Wood Turtle	S2	Threatened	Threatened	Threatened	Wood Turtles are strongly associated with meandering, shallow rivers with sand, gravel, and/or cobble bottoms; these rivers are typically clear, with moderate current and frequent oxbows. Wood Turtles hibernate aquatically in streams and rivers (October to April, depending on location). Overwintering sites are usually on the bottom of deep pools, often with fallen debris that provides structure and prevents dislodging during high flow events. Found throughout the Province with concentrations in Guysborough and Annapolis Counties. Local plants include alders, chokecherry, hawthorn and mixed wood stands of deciduous and coniferous trees. Females lay their eggs in sandy bars along rivers and other gravel areas (driveways, roadsides, borrow pits) in June.
<i>Hemidactylium scutatum</i>	Four-toed Salamander	S3	-	-	-	Four-toed salamanders have specialized habitat requirements which require suitable breeding wetlands within or adjacent to mature forests. They prefer mature, mesic forests with dense canopy cover to preserve body moisture, an abundance of downed woody debris for cover and foraging opportunities, and vernal pools, ponds, bogs, shallow marshes, or other fishless bodies of water for nesting and larval success. Wooded wetlands such as seepage swamps or cedar swamps with many moss mats are ideal. Male adults can be located under leaves, bark, and logs in the upland forest, while females are most often found during the breeding season nesting in moss mats which overhang pools of water. (Harding 1997).





**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

*AVIFAUNA*

<i>Accipiter cooperii</i>	Cooper's Hawk	S1?B,SUN,SUM	-	-	-	Not common in Nova Scotia but does breed in the province. Found in mature forest, open woodlands, wood edges and river groves. Nests in coniferous, deciduous and mixed woods, typically those with tall trees and with openings or edge habitat nearby. Also found among trees along rivers through open country, and increasingly in suburbs and cities where tall trees exist for nesting (e.g., parks, open fields and even backyards with feeders). Breeds between April and July (Audubon and The Cornell Lab)
<i>Accipiter gentilis</i>	Northern Goshawk	S3S4	-	-	-	Found in coniferous and mixed forests. Generally restricted to wooded areas (along riparian corridors) but may be in relatively open woods or along edges. Often more common as a breeding bird in mixed woods (e.g., mature and old-growth forests with more than 60% closed canopy). In the East, goshawks seek out nest sites in mixed-hardwood forests where beeches, birch, hemlock and maples dominate. Goshawks often build nests near breaks in the canopy, such as a forest trail, road or opening created by a downed tree and prefer sites with a creek, pond or lake nearby. Breeds between April and July. May mate for life (Audubon and The Cornell Lab).
<i>Actitis macularia</i>	Spotted Sandpiper	S3S4	Spotted Sandpiper	-	-	Common near fresh and saltwater. Habitat includes pebbly lake shores, ponds, and stream sides (and seashores in the winter). Spotted Sandpipers spend the winter along the coasts of North America. During migration and winter, this species is found along the coast on mudflats, beaches, and breakwaters (also found in inland habitats such as sewage ponds and irrigation ditches). Breeds near the edge of fresh water in a wide variety of settings, including lakes, ponds, rivers, and streams (in either open or wooded country). Breeding territories generally need to have a shoreline, a semi-open area for the nest and patches of dense vegetation to conceal the



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						chicks. Breeds between April and July (Audubon and The Cornell Lab).
<i>Aegolius funereus</i>	Boreal Owl	S2?B,SUM M	-	-	-	Year-round resident, mainly in Cape Breton (MBBA, as of July 2021). Does not migrate regularly, but is nomadic and moves outside of range when prey is scarce. Boreal Owls occur in stands of spruce, aspen, poplar, birch and fir in the boreal forest (muskeg, mixed-wood and conifer forests). They also occur in high elevation mountains with subalpine forests in Canada. In the winter, they forage in spruce-fir forests where uncrusted snow under the trees facilitates access to prey. In spring, they often forage in clearcuts and agricultural fields where small mammals are easier to locate. Beginning in late winter or early spring, male sings at night to defend territory and attract a female (Audubon and The Cornell Lab).K
<i>Anas acuta</i>	Northern Pintail	S1B,SUM	-	-	-	Found in marshes, prairies, fresh ponds, lakes and salt bays. Summers in wide variety of open habitats, including prairies, farmland, northern tundra and near bodies of water. Breeds in seasonal wetlands, open areas with short vegetation, wet meadows, grasslands and crop fields. During the nonbreeding season they use flooded and dry agricultural fields, lakes, reservoirs, estuaries, saltmarshes, freshwater and brackish wetlands and bays. Pintails also use different habitats depending on time of day (e.g. tend to forage in wetlands during the day). Breeds between April and July (Audubon and The Cornell Lab)
<i>Antrostomus vociferus</i>	Eastern Whip-Poor-Will	S1?B	Threatened	Threatened	Threatened	Roughly 50% of home ranges consisted of open habitats, used primarily for foraging. Common habitat choices include rock or sand barrens with scattered trees, savannahs, old burns or other disturbed sites in a state of early to mid-forest succession, or open conifer plantations. Accordingly, pine



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						(barrens and plantations), oak (barrens and savannahs), and aspen and birch (early to mid-succession) are common tree species associations. Individuals will often feed in nearby shrubby pastures or wetlands where perches, and power-line and roadway corridors are also occupied. Other necessary habitat elements are thought to involve ground-level vegetation and woodland size. Areas with little ground cover are preferred.
<i>Asio flammeus</i>	Short-eared Owl	S1B	Threatened	Special Concern	-	Short-eared Owls breed primarily in well-drained grasslands near coastal wetlands. In areas with extensive coastlines, some caution is warranted in summarizing breeding habitat as inland marshes and bogs are less frequently monitored and thus may be under-represented in assessments of breeding habitat (COSEWIC Assessment and Status Report).
<i>Asio otus</i>	Long-eared Owl	S2S3	-	-	-	Known to breed throughout Nova Scotia. They occur at elevations ranging from near sea level to above 6,500 feet. May be nomadic at times, moving about in response to changing food supplies. Favored habitat includes dense trees for nesting and roosting and open country (e.g. grasslands and shrublands) for hunting. Inhabits a wide variety of such settings, including forest with extensive meadows to groves of conifers or deciduous trees. Generally, avoids unbroken forest. Known to be an early breeder. Breeds between April and July (Audubon and The Cornell Lab).
<i>Botaurus lentiginosus</i>	American Bittern	S3S4B, S4S5M	-	-	-	Found in marshes and reedy lakes. Breeds in freshwater marshes, mainly large, shallow wetlands with a large amount of tall marsh vegetation (cattails, grasses and sedges) and areas of open shallow water. Sometimes feeds in dry grassy fields. They are rarely seen out in the open, prefers vegetation



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						cover. Breeds between April and July (Audubon and The Cornell Lab)
<i>Branta bernicla</i>	Brant	S3M	-	-	-	Found throughout all of Nova Scotia during migration (winter to spring breeding season). Most migrating and wintering Brant in eastern North America use coastal waters, especially lagoon systems behind barrier beaches, where eelgrass, sedges, and algae are plentiful. When not feeding, Brant roost on mudflats, barrier islands and sand spits near their foraging areas. Breeds between April and July (Audubon and The Cornell Lab)
<i>Bucephala islandica</i>	Barrow's Goldeneye	S1N, SUM	Special Concern	Special Concern	-	Lakes and ponds. They are usually in coniferous or aspen woodlands (elevations of up to about 6,100 feet). They favor shallower waters than Common Goldeneyes. In winter, they live in coastal waters and rivers. Breeds on cold inland waters, such as small lakes, rivers, beaver ponds, mostly in forested country but also in open terrain. In winter they are mainly on shallow, protected coastal waters, such as bays and estuaries. May winter far inland on lakes and rivers, even in very cold regions where hot springs keep water open. Barrow's Goldeneye wintering habitat extends along the shores of the Atlantic provinces.
<i>Buteo lagopus</i>	Rough-legged Hawk	S3N	-	-	-	Common across Nova Scotia during nonbreeding (winter). Spends the winter in open country, including grasslands, coastal prairies, marshes, farmland and dunes. In tree-covered areas they hunt over open bogs and other clearings. Breeds mostly on tundra, in areas having cliffs for nest sites; some breed along northern edge of coniferous forest zone. Rough-legged Hawks breed in open country of the arctic, both in North America and Eurasia. Breeds between April and July. May mate for life (Audubon and The Cornell Lab).
<i>Calcarius lapponicus</i>	Lapland Longspur	S3?N,SU M	-	-	-	They winter in vast agricultural fields that are often devoid of other birdlife in that season in southern area, and head up to



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						the tundra to breed in the summer. Breeds between April and July (Cornell Lab, Audubon).
<i>Cardellina canadensis</i>	Canada Warbler	S3B	Special Concern	Threatened	Endangered	Forest undergrowth, shady thickets. Breeds in mature mixed hardwoods of extensive forests and streamside thickets. Prefers to nest in moist habitat: in luxuriant undergrowth, near swamps, on stream banks, in rhododendron thickets, in deep, rocky ravines and in moist deciduous second-growth.
<i>Cardellina pusilla</i>	Wilson's Warbler	S3B,S5M	-	-	-	Found in thickets along wooded streams, moist tangles, low shrubs, willows, alders. Breeds in thickets, second-growth, bogs, or in alder and willow groves near streams and ponds. In migration and winter, occurs from hot lowland thickets up to cool mountain woods; always in scrubby overgrown clearings and thin woods, not in the interior of dense forest. Breeds between April and July (Cornell Lab, Audubon).
<i>Cathartes aura</i>	Turkey Vulture	S2S3B,S4 S5M	-	-	-	In past was not surveyed/very rare to see Turkey Vultures in Nova Scotia, but as the climate warms, they are now sighted across the province (MBBA and Nova Scotia Bird Society). Look for Turkey Vultures as they soar high over open areas. They are particularly noticeable along roadsides and at landfills. At night, they roost in trees, on rocks and other high secluded spots. Most common over open or semi-open country (including mixed farmland, forest, rangeland and even small offshore islands), especially within a few miles of rocky or wooded areas providing secure nesting sites. Generally avoids densely forested regions. Breeds between April and July (Audubon and The Cornell Lab)
<i>Charadrius vociferus</i>	Killdeer	S3B	-	-	-	Favors fields, sandbars, lawns, riverbanks, coastal estuaries, mudflats and shores. Often found on open ground, such as pastures, plowed fields and large lawns, even at a great distance from water. This species does well in areas disturbed by humans and is commonly spotted on roads, lawns, airports, parking lots, golf courses, fields and in gravel areas. Most successful nesting areas have some shallow water close by or



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						other good feeding area for the chicks. Generally the vegetation in fields inhabited by Killdeer is no taller than one inch. You can find Killdeer near water, but unlike many other shorebirds, they are also common in dry areas. Spring migration is very early, returning to some northern areas in February or March. Breeds between March and July (Audubon and The Cornell Lab).
<i>Chordeiles minor</i>	Common Nighthawk	S3B	Special Concern	Threatened	Threatened	Common Nighthawk breeds in a range of open and partially open habitats, including forest openings and post-fire habitats, prairies, bogs, and rocky or sandy natural habitats, as well as disturbed areas. It is also found in settled areas that meet its habitat needs, those with open areas for foraging and bare or short-cropped surfaces for nesting. The species use of a wide range of habitats makes it difficult to estimate trends in habitat availability, except in urban habitats, where their main nesting sites – flat graveled roofs – are disappearing.
<i>Coccythraustes vespertinus</i>	Evening Grosbeak	S3B,S3N, S3M	Special Concern	Special Concern	Vulnerable	Evening Grosbeak breeding habitat generally includes open, mature mixedwood forests, where fir species and/or White Spruce are dominant, and Spruce Budworm is abundant. Outside the breeding season, the species seems to depend largely on seed crops from various trees such as firs and spruces in the boreal forest but is also attracted to ornamental trees that produce seeds or fruit, and bird feeders stocked with sunflower seeds.
<i>Coccyzus erythrophthalmus</i>	Black-billed Cuckoo	S3B	-	-	-	Black-billed Cuckoos are birds of woodlands and thickets, including aspen, poplar, birch, sugar maple, hickory, hawthorn and willow. They tend to occur more frequently in larger and denser woodlands than the Yellow-billed Cuckoo. On their wintering grounds, they live in forest, woodlands and scrub. A long-distance migrant, going to South America for the winter. Migrates at night; sometimes heard calling in flight overhead at night during the spring. During migration, they seek any kind of dense vegetation cover (e.g., young trees or tall shrubs). Common breeder in Nova Scotia. Breeds mostly in



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						deciduous thickets and shrubby places, often on the edges of woodland or around marshes. Also in second growth of mixed deciduous-coniferous woods, or along their brushy edges. Breeds between April and July (Audubon and The Cornell Lab).
<i>Contopus cooperi</i>	Olive-sided Flycatcher	S3B	Special Concern	Threatened	Threatened	Olive-sided Flycatcher has been widely observed in open coniferous or mixed coniferous forests, often located near water or wetlands with the presence of tall snags or trees from which the species sallies for prey and advertises its territory. Mature conifer stands within patchy landscapes influenced by natural disturbance (e.g., recent burns) support the highest densities of Olive-sided Flycatcher. Nests are generally placed toward the tip of coniferous branches (although other tree types have been used).
<i>Contopus virens</i>	Eastern Wood-Pewee	S3S4B	Special Concern	Special Concern	Vulnerable	The Eastern Wood-pewee is mostly associated with the mid-canopy layer of forest clearings and edges of deciduous and mixed forests. It is most abundant in forest stands of intermediate age and in mature stands with little understory vegetation. During migration, a variety of habitats are used, including forest edges, early and successional clearings.
<i>Coturnicops noveboracensis</i>	Yellow Rail	SUB	Special Concern	Special Concern	-	Yellow rail is distributed along northern Nova Scotia. Nesting Yellow Rails are typically found in marshes dominated by sedges, true grasses, and rushes, where there is little or no standing water (generally 0-12 cm water dept), and where the substrate remains saturated throughout the summer. They can be found in damp fields and meadows, on the floodplains of rivers and streams, in the herbaceous vegetation of bogs, and at the upper levels (drier margins) of estuarine and salt marshes. Nesting habitats usually have a dry mat of dead vegetation from previous growing seasons. A greater diversity of habitat types is used during migration and winter than during the breeding season. In winter, the rails are known to



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						use coastal wetlands and rice fields. (COSEWIC Assessment and Status Report).
<i>Dolichonyx oryzivorus</i>	Bobolink	S3B	Special Concern	Threatened	Vulnerable	Bobolink has nested in forage crops (e.g., hayfields and pastures dominated by a variety of species, such as clover, Timothy, Kentucky Bluegrass, and broadleaved plants). The Bobolink occurs in various grassland habitats including wet prairie, graminoid peatlands and abandoned fields dominated by tall grasses, remnants of uncultivated virgin prairie (tall-grass prairie), no-till cropland, small-grain fields, restored surface mining sites and irrigated fields in arid regions. It is generally not abundant in short-grass prairie, Alfalfa fields, or in row crop monocultures (e.g., corn, soybean, wheat), although its use of Alfalfa may vary by region.
<i>Empidonax traillii</i>	Willow Flycatcher	S2B	-	-	-	Uncommon breeder throughout mainland Nova Scotia, not Cape Breton (MBBA, as of July 2021). In winter, they use shrubby clearings, pastures and woodland edges often near water. Migrates relatively late in spring and early in fall. Breeds in thickets of deciduous trees and shrubs, especially willows, or along woodland edges. Often near streams or marshes and may be found in drier habitats than the Alder Flycatcher. Breeds between April and July (Audubon and The Cornell Lab).
<i>Euphagus carolinus</i>	Rusty Blackbird	S2B	Special Concern	Special Concern	Endangered	Breeding habitat is characterized by coniferous-dominated forests adjacent to wetlands, such as slow-moving streams, peat bogs, sedge meadows, marshes, swamps and beaver ponds. On migration, the Rusty Blackbird is primarily associated with wooded wetlands. In winter, it occurs primarily in lowland forested wetlands, cultivated fields and pecan groves. Suitable habitat for the species appears to be decreasing on its breeding range and wintering grounds, due mainly to the loss and degradation of wetlands by human activities.





**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Fulica americana</i>	American Coot	S1B				The American Coot inhabits a wide variety of freshwater wetlands including prairie potholes, coastal bays, ponds, swamps, marshes, suburban parks, sewage ponds and large lakes (the two main features of their habitat include heavy stands of emergent aquatic vegetation along some portion of a shoreline and some depth of standing water within that vegetation). Seasonal wetlands are used during years of high water, while drought years cause breeding to be limited to permanent wetlands. Migrants sometimes are seen out at sea, quite far from land. Breeds between April and July (Audubon and The Cornell Lab).
<i>Falco sparverius</i>	American Kestrel	S3B,S4S5 M	-	-	-	Breeds in Nova Scotia but also can be a permanent resident. American Kestrels favor open areas with short ground vegetation and sparse trees (e.g., meadows, wood edges, grasslands, deserts, parks, farm fields, cities and suburbs). When breeding, kestrels need access to at least a few trees or structures that provide appropriate nesting cavities. American Kestrels are attracted to many habitats modified by humans, including pastures and parkland, and are often found near areas of human activity including towns and cities. In winter, females may occupy open habitats more so than males. Breeds between April and July (Audubon and The Cornell Lab).
<i>Gallinago delicata</i>	Wilson's Snipe	S3B,S5M	-	-	-	Common across Nova Scotia during breeding and also known as a permanent resident in the southern areas of the province. Wilson's Snipes can be found in all types of wet, marshy settings, including wet fields, bogs, fens, swamps, wet meadows and along muddy edges of rivers and ponds. They avoid areas with tall, dense vegetation, but need patches of cover to hide in and to provide a safe lookout for predators. During the breeding season they are mainly found around fresh marshes and bogs, shrubby streamside's and northern tundra. Breeds between April and July (Audubon and The Cornell Lab).



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Gallinula galeata</i>	Common Gallinule	S1B	-	-	-	Common Gallinules use freshwater and brackish marshes, ponds and lakes that have a mix of submerged, floating, and emergent aquatic vegetation and are open water year-round. They also use artificial aquaculture ponds, rice fields, sewage lagoons and urban stormwater retention ponds. May be on more open ponds with less marsh cover or on still, slow-moving waters. Found with American Coot in many places but requires more marsh growth. Breeds between April and July (Audubon and The Cornell Lab).
<i>Haemorhous purpureus</i>	Purple Finch	S3S4N, S4S5B, S5M	-	-	-	Found throughout the entire province year-round. Purple finches can be found in woods, groves, suburbs. Breeds mostly in coniferous and mixed woods, both in forest interior and along edges. In migration and winter, found in a wide variety of wooded and semi-open areas, including forest, suburbs, swamps, and overgrown fields. Breeding occurs from April to July (The Cornell Lab, Audubon)
<i>Hirundo rustica</i>	Barn Swallow	S3B	Special Concern	Threatened	Endangered	Barn Swallows forage over a wide range of open and semi-open habitats including natural and anthropogenic grasslands, other farmland, open wetlands, open water, savannah, tundra, highways and other cleared right-of-ways, and cities and towns. They avoid forested regions and high mountains. Barn Swallows throughout the world have adapted to nesting in or on human structures, including buildings, barns, bridges, culverts, wells and mine shafts. Use of natural nest sites such as caves or rock cliffs with crevices or ledges protected by overhangs is rarely reported. Nocturnal roosts are typically in reed or cane beds or other dense vegetation, usually in or near water.
<i>Icterus galbula</i>	Baltimore Oriole	S2S3B,SU M	-	-	-	Baltimore Orioles are often very common in open woods and groves in summer. Found in open woods, riverside groves, elms, shade trees. Breeds in deciduous or mixed woodland, generally in open woods or edges rather than interior of dense



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						forest. May be common in trees in towns (Audubon). Breeds between April and July (Audubon and The Cornell Lab).
<i>Ixobrychus exilis</i>	Least Bittern	SUB	Threatened	Threatened		The Least bittern has been observed in every Province in Canada. However, it is only probable to be located in Nova Scotia. The Least Bittern breeds strictly in marshes dominated by emergent vegetation surrounded by areas of open water. Most breeding grounds in Canada are dominated by cattails, but breeding also occurs in areas with other robust emergent plants and in shrubby swamps. The presence of stands of dense vegetation is essential for nesting because the nests of Least Bittern sit on platforms of stiff stems. The nests are almost always within 10 m of open water. This small heron prefers large marshes that have relatively stable water levels throughout the nesting period. Needs for wintering habitat are less specific, and appear to be met by a wide variety of wetlands—not only emergent marshes like those used for breeding, but also brackish and saline swamps (Environment Canada Recovery Strategy)
<i>Lanius borealis</i>	Northern Shrike	S3S4N	-	-	-	They occur in open but brushy habitats, and on calm, sunny days they may sit up on utility wires, bushes, and trees (Cornell Lab). Nests are usually placed in a low tree or large shrub, often in spruce or willow, usually 6-15' above the ground. Breeds between April and July (Audubon and The Cornell Lab).
<i>Limnodromus griseus</i>	Short-billed Dowitcher	S3M	-	-	-	Common migrant in Nova Scotia that prefers coastal habitats. Migrants are opportunistic in their choice of habitat, turning up in man-made environments such as impoundments, sewage ponds and flooded farm fields as well as in muddy margins of rivers, lakes and bays. Migrants also rest on rocky and sandy shorelines (beaches) and occasionally feed in such places, but they forage mostly where there is a fine muddy bottom covered by a few inches of water (pond edges, mudflats and tidal marshes). Breeds far north, mostly in open bogs, marshes



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						and edges of lakes within coniferous forest zone. Breeds between April and July (Audubon and The Cornell Lab).
<i>Limosa haemastica</i>	Hudsonian Godwit	S2S3M	Threatened	-	-	Hudsonian Godwit occurs regularly during breeding or migration in all three territories and in provinces from British Columbia to Québec, as well as occasionally in the fall in all of the Atlantic provinces. Hudsonian Godwit breeds in wetland habitats (sedge meadows and muskeg) in sub-Arctic and Boreal regions. It uses a wide variety of habitats on migration, including freshwater marshes, saline lakes, flooded fields, shallow ponds, coastal wetlands and mudflats (COSEWIC Assessment and Status Report).
<i>Loxia curvirostra</i>	Red Crossbill	S3S4	-	-	-	Found throughout the entire province year-round. Red Crossbills can be found in conifer forests and groves, and breeds in pines (predominately), spruce, hemlock, Douglas-fir, or other evergreens. Breeding occurs from April to July (The Cornell Lab, Audubon)
<i>Mimus polyglottos</i>	Northern Mockingbird	S1B	-	-	-	Year-round resident throughout Nova Scotia, less common in Cape Breton. Found year-round in areas with open ground and shrubby vegetation (e.g. dense, low shrubs - hedges, fruiting bushes and thickets). When foraging on the ground, it prefers grassy areas, rather than bare spots. Common places include roadsides, parkland, cultivated land, suburban areas, woodland edges and in second-growth habitat at low elevations. Breeds between April and July (Audubon and The Cornell Lab).
<i>Molothrus ater</i>	Brown-headed Cowbird	S2B	-	-	-	Found in farms, fields, prairies, wood edges, river groves. Favors open or semi-open country at all seasons. In winter often concentrates in farmland, pastures, or cattle feedlots. More widespread in breeding season, in grassland, brushy country, forest edges, even desert, but tends to avoid dense unbroken forest. Breeds between April and July, and lays eggs in nests of other birds (Audubon and The Cornell Lab).



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Passerella iliaca</i>	Fox Sparrow	S3S4B, S5M	-	-	-	Found year round in Cape Breton, and throughout the migration season (late March and early November) in the rest of the province. Migrates at night. Found in wooded areas, undergrowth, brush. Breeds in brushy areas including woodland edges and clearings, streamside thickets, scrubby second growth, stunted coastal forest. Winters in similar habitats, also in brushy fields, chaparral, well-vegetated suburbs, and parks. Breeds from April to July (The Cornell Lab, Audubon)
<i>Passerina cyanea</i>	Indigo Bunting	S1?B,SUM	-	-	-	This species favors brushy edges rather than unbroken forest. Indigo Buntings breed in brushy and weedy areas. They're common on the edges of woods and fields; along roads, streams, rivers, and powerline cuts; in logged forest plots, brushy canyons, and abandoned fields where shrubby growth is returning. They are also in clearings within deciduous woods, edges of swamps. Breeds between April and July (Audubon and The Cornell Lab).
<i>Perisoreus canadensis</i>	Canada Jay	S3	-	-	-	Year-round resident throughout Nova Scotia and commonly referred to as the Gray Jay. No regular migration. On rare occasions, small invasions of Canada Jays will move a short distance out of boreal forest in winter. Prefers boreal and subalpine forests across northern North America, usually where black or white spruce trees are common (also aspen, white birch, balsam fir, sugar maple, jack pine, red spruce, eastern white cedar, etc.). Found in various kinds of coniferous and mixed forest, but rarely occurs where there are no spruce trees. Mated pairs stay together all year and defend permanent territories. Breeding and nesting for this species begins very early, during late winter, with breeding grounds still snow-covered. Breeds until, approximately, July (Audubon and The Cornell Lab).



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

Petrochelidon pyrrhonota	Cliff Swallow	S2S3B	-	-	-	Breeds throughout Nova Scotia. A long-distance migrant that migrates in flocks, traveling by day. Typically nests in colonies, sometimes with hundreds of nests crowded close together. These colonies are close to a water source, open fields or pastures for foraging, and a source of mud for nest building. Nest site is usually on vertical surface with some overhead shelter. Natural sites were on cliffs. Most sites today are on the sides of buildings, under bridges, in culverts or similar places. They now live in grasslands, towns, broken forest and river edges, but avoid heavy forest and deserts (e.g. open to semi-open land, farms, river bluffs and lakes). Still unaccountably scarce or missing in some seemingly suitable areas. Breeds between April and July (Audubon and The Cornell Lab).
Pheucticus ludovicianus	Rose-breasted Grosbeak	S3B	-	-	-	Look for these birds in forest edges and woodlands. Rose-breasted Grosbeaks breed in moist deciduous forests, deciduous-coniferous forests, thickets, and semi open habitats. They gravitate toward second-growth woods, suburban areas, parks, gardens, and orchards, as well as shrubby forest edges next to streams, ponds, marshes, roads, or pastures. They favor edges or openings with combination of shrubs and tall trees, rather than unbroken forest. Breeds from April to July (The Cornell Lab, Audubon)
Picoides arcticus	Black-backed Woodpecker	S3S4	-	-	-	Known throughout Nova Scotia year-round. Not strictly migratory but may move around in response to changing conditions (e.g. destruction of habitat). Eastern birds occasionally stage southward irruptions in winter, with scattered individuals showing up well south of breeding range. Habitat includes boreal forests of firs and spruces (pine, Douglas-fir, hemlock, tamarack and spruce, especially spruce bogs). Favors areas of dead or dying trees (coniferous and deciduous) and may concentrate at burned or flooded areas with many standing dead trees. Frequents lowlands in the



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						North and mountains in the West. Breeds between April and July (Audubon and The Cornell Lab).
Pinicola enucleator	Pine Grosbeak	S3B, S5N, S5M	-	-	-	Found throughout the province year-round. Pine grosbeaks can be found in conifers; in winter, other trees. Breeds in open coniferous forest, especially of spruce and fir. In winter often found in deciduous trees (especially fruiting trees), also in groves of pines and other conifers. Breeding occurs from April to July (The Cornell Lab, Audubon).
Piranga olivacea	Scarlet Tanager	S2B, SUM	-	-	-	These birds can be found in oak forests in summer, but they often remain out of sight as they forage in the leafy upper branches. Nest site is in tree (usually deciduous), typically 20-30' above ground. Found in forests and shade trees (especially oaks). Breeds mostly in deciduous forest, predominately oaks but also in maple, beech, mixed pine-oak woods, and coniferous woods dominated by pine or hemlock. Breeding Scarlet Tanagers prefer large forest tracts with large trees. During spring and fall they use similar forest habitats as well as open spaces such as parks and gardens. Breeds between April and July (The Cornell Lab, Audubon)
Poecile hudsonicus	Boreal Chickadee	S3	-	-	-	Year-round resident throughout Nova Scotia. Occasional small southward invasions in fall, with a few appearing south of breeding range (similar to Black-capped Chickadees invasions). Boreal Chickadees inhabit mostly mature coniferous forests (sometimes mixed forests), usually spruce and balsam fir, often near water. During late fall and winter irruptions, they tend to be found mostly in areas dominated by coniferous trees. Occurs in low stunted spruces as far North as treeline (e.g. spruce bogs). May mate for life, the birds remaining together all year. Nests in a hole in a tree, either a natural cavity or one they created (or from another species). Breeds between April and July (Audubon and The Cornell Lab).



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

Poocetes gramineus	Vesper Sparrow	S1S2B, SUM	-	-	-	Vesper Sparrows breed in open areas with short, sparse grass, areas where there are a few taller plants for use as song perches, and scattered shrubs including, old fields, pastures, weedy fencelines and roadsides, hayfields, and native grasslands. Can be found in meadows, fields, prairies, roadsides, open grassy or weedy fields. May be in weedy roadsides, gravel pits, stubble fields, grassy areas just above sandy beaches. Breeds from April to July (The Cornell Lab, Audubon).
Rallus limicola	Virginia Rail	S2S3B	-	-	-	Breeds across Nova Scotia, but more common in the northern region. Nests in a variety of marshy situations, mostly fresh, but also brackish marshes near the coast. Where this species and Sora breed in same marshes, Virginia Rail typically nests in drier spots. Often moves into salt marshes in winter. During migration, sometimes found in odd spots, even city streets. Virginia Rails occupy shallow (sometimes deeper) freshwater wetlands with tall stands of cattails and rushes (need areas with standing water typically less than 6 inches deep with a muddy bottom). They are most common in wetlands with 40–70% coverage of tall emergent vegetation, mixed with open water, mudflats and areas with matted vegetation. During the nonbreeding season, Virginia Rails use similar habitat, but may venture into more open areas. Breeds between April and July (Audubon and The Cornell Lab).
Riparia riparia	Bank Swallow	S2B	Threatened	Threatened	-	As with other swallow species, migratory stopover points are usually centred on large marshes where birds roost at night and disperse to forage throughout the day. There is little information available for Bank Swallows in terms of the importance of area requirements of these disparate habitats and their proximity to each other.
Setophaga castanea	Bay-breasted Warbler	S3S4B,S4 S5M	-	-	-	Bay-breasted warblers are found in woodlands and conifers in summer. Usually breeds in northern coniferous forest, in thick





**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						stands of spruce and fir. They are predators of spruce budworm and are abundant in spruce forests during outbreaks. Where spruce is not found, will nest in deciduous or mixed second-growth woods of birches, maples, firs, and pines. Breed from April to July, typically in the latter half of the breeding window (The Cornell Lab, Audubon)
<i>Setophaga pinus</i>	Pine Warbler	S2S3B,S4 S5M	-	-	-	Pine Warblers live in pine or mixed pine-deciduous forest. Also sometimes in cedar or cypress. Various spottings throughout Nova Scotia, generally in the southern portion of the province. Breeds April to July (The Cornell Lab, Audubon)
<i>Setophaga striata</i>	Blackpoll Warbler	S3B,S5M	-	-	-	The blackpoll warbler can be found in conifers; broadleaf trees in migration. Breeds in low northern spruce forest. In migration, moves through forests, parks and gardens, they stop over in scrubby thickets and mature evergreen and deciduous forests. Found in the southern half of Nova Scotia during migration and the northern half during the breeding season. Breeding occurs from April to July (The Cornell Lab, Audubon).
<i>Setophaga tigrina</i>	Cape May Warbler	S3B,SUM	-	-	-	The Cape May Warbler can be found in spruce forest; other trees in migration. Breeds in spruce forest, especially during spruce budworm outbreaks, either in pure stands or mixed with firs or other trees, generally in more open woods or near the forest edge. During migration often favors conifers, but also forages in deciduous trees and thickets. Breeding occurs from April to July (The Cornell Lab, Audubon)
<i>Spinus pinus</i>	Pine Siskin	S3	-	-	-	Found throughout the province year-round. Pine Siskins can be found in conifers, mixed woods, alders, weedy areas. Breeds mostly in coniferous and mixed woods, often around edges or clearings; sometimes in deciduous woods, isolated conifer groves. In migration and winter, many kinds of semi-open areas, woodland edges, weedy fields. Breeding occurs from April to July (The Cornell Lab, Audubon)



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

<i>Toxostoma rufum</i>	Brown Thrasher	S1B	-	-	-	Not common and rarely seen in Nova Scotia, with no recorded sightings in Cape Breton (MBBA, as of July 2021). In eastern North America, Brown Thrashers nest in thickets, brush, shrubbery, hedgerows, forest edges and overgrown clearings in deciduous forest. On rare occasions they breed in backyards and gardens with shrubs and hedges (but in general - areas of dense low growth, especially thickets around edges of deciduous or mixed woods, shrubby edges of swamps or undergrowth in open pine woods). Breeds between April and July (Audubon and The Cornell Lab).
<i>Tringa solitaria</i>	Solitary Sandpiper	S3S4M, SUB	-	-	-	Common migrant in Nova Scotia. A long-distance migrant that mostly migrates alone and at night. They are rarely seen on mudflats or saltmarshes with other shorebirds and will frequent areas with little water in almost any setting, from inner city to forest interior (e.g. fields, ditches, swamps, wooded wetlands at higher elevation, etc.). This bird often stops at lakes, ponds, or streams similar to their nesting habitat (areas with bog habitat and spruce trees), especially where there are extensive muddy margins. Breeds between April and July (Audubon and The Cornell Lab).
<i>Turdus migratorius</i>	American Robin	S3N, S5B	-	-	-	Common in most of Nova Scotia as a year-round resident and for breeding in the very Northern part of the province (mainly Cape Breton). This species occupies many habitat types, such as lawns, farmland, fields, and city parks, as well as in more wild places like woodlands, forests, mountains up to near tree line, recently burned forests and tundra. During winter many robins move to moist woods where berry-producing trees and shrubs are common. Males arrive first in the breeding season. Nests where there are trees and mud for nest-making material. Breeds between April and July (Audubon and The Cornell Lab).
<i>Tyrannus tyrannus</i>	Eastern Kingbird	S3B	-	-	-	Common breeder throughout Nova Scotia. A long-distance migrant that uses many habitats and migrates in flocks. Unlike many of the migratory songbirds, kingbirds may travel mostly



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						by day. The Eastern Kingbird usually breeds in fields with scattered shrubs and trees, in orchards and along forest edges (also clearings, roadsides, parks, newly burned forest, beaver ponds, golf courses and urban environments with tall trees and scattered open spaces). It is drawn to water, often nesting densely in trees that overhang rivers or lakes. In summer, requires open space for hunting. Often common around edges of marshes, farmland and native tallgrass prairie. Breeds between April and July (Audubon and The Cornell Lab).
<i>Vireo gilvus</i>	Warbling Vireo	S1B,SUM	-	-	-	Occurs in deciduous and mixed woods, aspen groves, poplars, shade trees. Breeds in open deciduous or mixed woodland; also in orchards, shade trees of towns (Audubon). They stay high in deciduous treetops (Cornell Lab). Breeds between April and July (Audubon and The Cornell Lab).
<i>Vireo philadelphicus</i>	Philadelphia Vireo	S2?B,SUM M	-	-	-	Occurs in second growth; poplars, willows, alders. Breeds in deciduous and mixed woodlands, especially near their edges, or in the young growth of overgrown pastures. Also nests in willows and alders along streams, lakes, and ponds. Breeds between April and July (Audubon).
<b>INVERTEBRATE</b>						
<i>Bombus bohemicus</i>	Ashton Cuckoo Bumble Bee	S1	Endangered	Endangered	Endangered	Currently, nothing is known about the mating and overwintering habitat requirements for the Gypsy Cuckoo Bumble Bee. Overwintering habitat for bumble bees in Ontario may include rotting logs, leaf litter and mulch, burrows in soil, and garden compost. Forage habitat includes the plant species mentioned below as well as other flowering plants which bloom from early spring (e.g., Willow) to late autumn (e.g., Goldenrod). Forage habitat occurs in old fields, grasslands, dunes, alvars, woodlands (especially in the spring) and road sides.
<i>Bombus suckleyi</i>	Suckley's Cuckoo Bumble Bee	SH	Threatened	Not on Schedule 1	-	Suckley's Cuckoo Bumble Bee occurs in most Canadian ecozone including the Atlantic Maritimes. Suckley's Cuckoo Bumble Bee occurs in diverse habitats including open



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						meadows and prairies, farms and croplands, urban areas, boreal forest, and montane meadows. Records are from sea level to 1200 m although the species could potentially occur at higher elevations where its host(s) occur. In the early spring, hosts typically establish nests in abandoned underground rodent burrows or other dry natural hollows; because Suckley's Cuckoo Bumble Bee is a nest parasite these same host residence sites also serve as its habitat. Adults have been recorded feeding on pollen and nectar from many flowers (COSEWIC Assessment and Status Report).
<i>Bombus terricola</i>	Yellow-banded Bumble Bee	S3	Special Concern	Special Concern	Vulnerable	Habitat generalist within open coniferous, deciduous and mixed-wood forests, wet and dry meadows and prairie grasslands, meadows bordering riparian zones, and along roadsides, urban parks, gardens and agricultural areas, subalpine habitats and more isolated natural areas.
<i>Coccinella transversoguttata</i>	Transverse Lady Beetle	SH	Special Concern	Special Concern	Endangered	The Transverse Lady Beetle is reported to be a habitat generalist occurring within agricultural areas, suburban gardens, parks, coniferous forests, deciduous forests, prairie grasslands, meadows, sand dune edges and riparian areas.
<i>Danaus plexippus</i>	Monarch	S2?B,S3 M	Endangered	Special Concern	Endangered	The breeding habitat of the Eastern and Western populations in Canada is confined to where milkweeds grow, since leaves of these plants are the sole food of the caterpillars. The different species of milkweeds grow in a variety of environments, including meadows in farmlands, along roadsides and in ditches, open wetlands, dry sandy areas, short and tall grass prairie, riverbanks, irrigation ditches, arid valleys, and south-facing hillsides. Milkweeds are also often planted in gardens. The Monarch is known to breed on native milkweeds within their natural ranges. The most commonly used other sources of nectar are goldenrods ( <i>Solidago</i> spp.), asters ( <i>Doellingeria</i> , <i>Eurybia</i> , <i>Oclemea</i> , <i>Symphotrichum</i> and <i>Virgulus</i> ), the introduced Purple Loosestrife ( <i>Lythrum</i>



**SIX MILE BROOK QUARRY EXPANSION PROJECT  
PRIORITY SPECIES LIST**

						salicaria), and various clovers (Trifolium spp. and Melilotus spp.)
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**APPENDIX C. ACCDC REPORT**

# DATA REPORT 7620: Six Mile Brook, NS

Prepared 7 March 2023

by J. Pender, Conservation Data Analyst

## CONTENTS OF REPORT

### 1.0 Preface

1.1 Data List

1.2 Restrictions

1.3 Additional Information

Map 1: Buffered Study Area

### 2.0 Rare and Endangered Species

2.1 Flora

2.2 Fauna

Map 2: Flora and Fauna

### 3.0 Special Areas

3.1 Managed Areas

3.2 Significant Areas

Map 3: Special Areas

### 4.0 Rare Species Lists

4.1 Fauna

4.2 Flora

4.3 Location Sensitive Species

4.4 Source Bibliography

### 5.0 Rare Species within 100 km

5.1 Source Bibliography



**Map 1.** A 100 km buffer around the study area

## 1.0 PREFACE

The Atlantic Canada Conservation Data Centre (AC CDC; [www.accdc.com](http://www.accdc.com)) is part of a network of NatureServe data centres and heritage programs serving 50 states in the U.S.A, 10 provinces and 1 territory in Canada, plus several Central and South American countries. The NatureServe network is more than 30 years old and shares a common conservation data methodology. The AC CDC was founded in 1997, and maintains data for the jurisdictions of New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador. Although a non-governmental agency, the AC CDC is supported by 6 federal agencies and 4 provincial governments, as well as through outside grants and data processing fees.

Upon request and for a fee, the AC CDC queries its database and produces customized reports of the rare and endangered flora and fauna known to occur in or near a specified study area. As a supplement to that data, the AC CDC includes locations of managed areas with some level of protection, and known sites of ecological interest or sensitivity.

### 1.1 DATA LIST

Included datasets:

#### Filename

SixMileBkNS\_7620ob.xls

SixMileBkNS\_7620ob100km.xls

SixMileBkNS\_7620msa.xls

#### Contents

Rare or legally-protected Flora and Fauna in your study area

A list of Rare and legally protected Flora and Fauna within 100 km of your study area

Managed and Biologically Significant Areas in your study area

## 1.2 RESTRICTIONS

The AC CDC makes a strong effort to verify the accuracy of all the data that it manages, but it shall not be held responsible for any inaccuracies in data that it provides. By accepting AC CDC data, recipients assent to the following limits of use:

- a) Data is restricted to use by trained personnel who are sensitive to landowner interests and to potential threats to rare and/or endangered flora and fauna posed by the information provided.
- b) Data is restricted to use by the specified Data User; any third party requiring data must make its own data request.
- c) The AC CDC requires Data Users to cease using and delete data 12 months after receipt, and to make a new request for updated data if necessary at that time.
- d) AC CDC data responses are restricted to the data in our Data System at the time of the data request.
- e) Each record has an estimate of locational uncertainty, which must be referenced in order to understand the record's relevance to a particular location. Please see attached Data Dictionary for details.
- f) AC CDC data responses are not to be construed as exhaustive inventories of taxa in an area.
- g) The absence of a taxon cannot be inferred by its absence in an AC CDC data response.

## 1.3 ADDITIONAL INFORMATION

The accompanying Data Dictionary provides metadata for the data provided.

Please direct any additional questions about AC CDC data to the following individuals:

### Plants, Lichens, Ranking Methods, All other Inquiries

Sean Blaney  
Senior Scientist / Executive Director  
(506) 364-2658  
[sean.blaney@accdc.ca](mailto:sean.blaney@accdc.ca)

### Animals (Fauna)

John Klymko  
Zoologist  
(506) 364-2660  
[john.klymko@accdc.ca](mailto:john.klymko@accdc.ca)

### Data Management, GIS

James Churchill  
Conservation Data Analyst / Field Biologist  
(902) 679-6146  
[james.churchill@accdc.ca](mailto:james.churchill@accdc.ca)

### Billing

Jean Breau  
Financial Manager / Executive Assistant  
(506) 364-2657  
[jean.breau@accdc.ca](mailto:jean.breau@accdc.ca)

Questions on the biology of Federal Species at Risk can be directed to AC CDC: (506) 364-2658, with questions on Species at Risk regulations to: Samara Eaton, Canadian Wildlife Service (NB and PE): (506) 364-5060 or Julie McKnight, Canadian Wildlife Service (NS): (902) 426-4196.

For provincial information about rare taxa and protected areas, or information about game animals, deer yards, old growth forests, archeological sites, fish habitat etc., in New Brunswick, please contact Hubert Askanas, Energy and Resource Development: (506) 453-5873.

For provincial information about rare taxa and protected areas, or information about game animals, deer yards, old growth forests, archeological sites, fish habitat etc., in Nova Scotia, please contact Donna Hurlburt, NS DLF: (902) 679-6886. To determine if location-sensitive species (section 4.3) occur near your study site please contact a NS DLF Regional Biologist:

**Western:** Emma Vost  
(902) 670-8187  
[Emma.Vost@novascotia.ca](mailto:Emma.Vost@novascotia.ca)

**Western:** Sarah Spencer  
(902) 541-0081  
[Sarah.Spencer@novascotia.ca](mailto:Sarah.Spencer@novascotia.ca)

**Central:** Shavonne Meyer  
(902) 893-0816  
[Shavonne.Meyer@novascotia.ca](mailto:Shavonne.Meyer@novascotia.ca)

**Central:** Kimberly George  
(902) 890-1046  
[Kimberly.George@novascotia.ca](mailto:Kimberly.George@novascotia.ca)

**Eastern:** Harrison Moore  
(902) 497-4119  
[Harrison.Moore@novascotia.ca](mailto:Harrison.Moore@novascotia.ca)

**Eastern:** Maureen Cameron-MacMillan  
(902) 295-2554  
[Maureen.Cameron-MacMillan@novascotia.ca](mailto:Maureen.Cameron-MacMillan@novascotia.ca)

**Eastern:** Elizabeth Walsh  
(902) 563-3370  
[Elizabeth.Walsh@novascotia.ca](mailto:Elizabeth.Walsh@novascotia.ca)

For provincial information about rare taxa and protected areas, or information about game animals, fish habitat etc., in Prince Edward Island, please contact Garry Gregory, PEI Dept. of Communities, Land and Environment: (902) 569-7595.



## 2.0 RARE AND ENDANGERED SPECIES

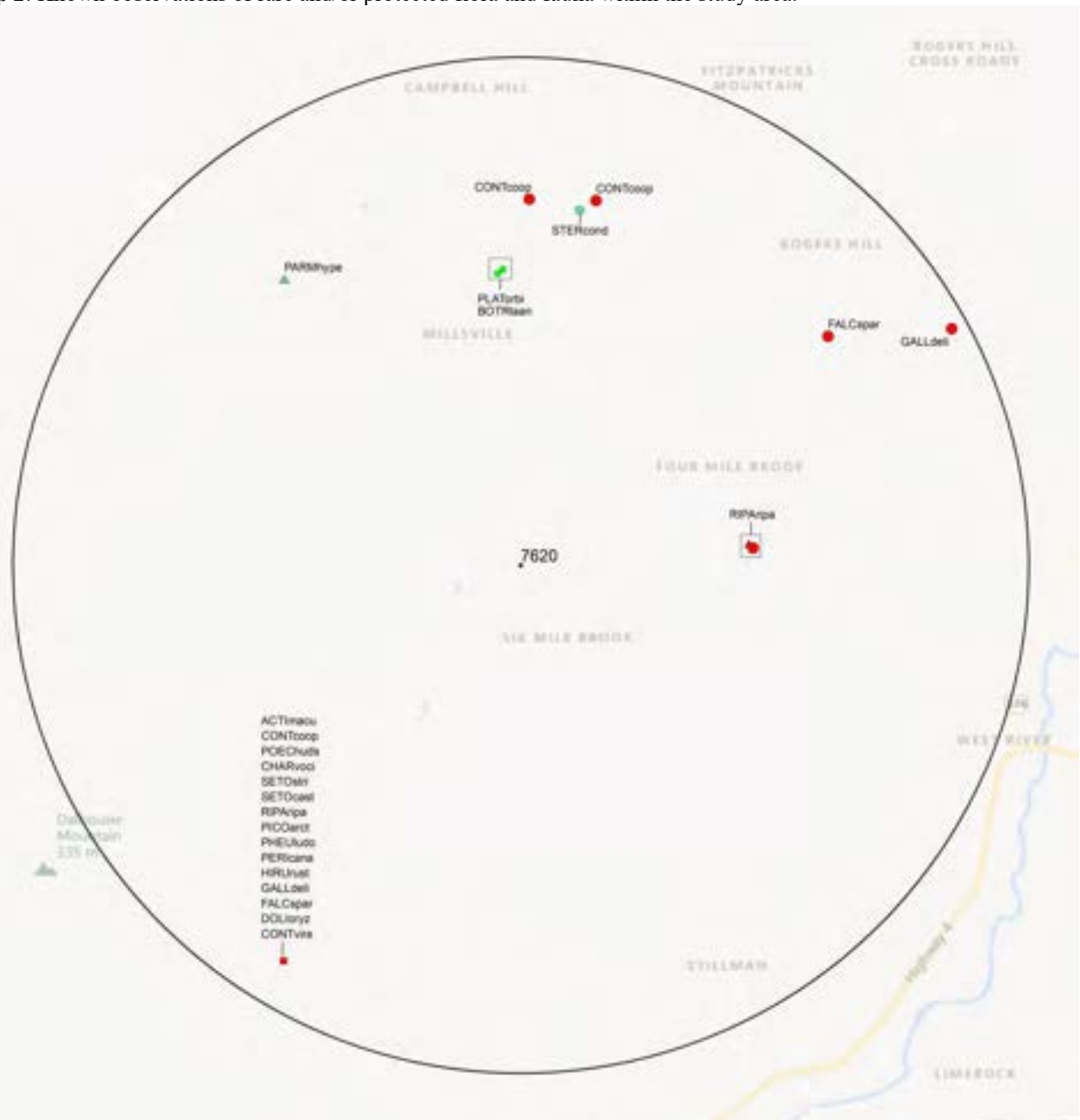
### 2.1 FLORA

The study area contains 2 records of 2 vascular and 2 records of 2 nonvascular flora (Map 2 and attached: \*ob.xls), excluding 'location-sensitive' species.

### 2.2 FAUNA

The study area contains 24 records of 15 vertebrate and no records of invertebrate fauna (Map 2 and attached data files - see 1.1 Data List), excluding 'location-sensitive' species. Please see section 4.3 to determine if 'location-sensitive' species occur near your study site.

**Map 2:** Known observations of rare and/or protected flora and fauna within the study area.



#### RESOLUTION

- 4.7 within 50s of kilometers
- 4.0 within 10s of kilometers
- 3.7 within 5s of kilometers
- △ 3.0 within kilometers
- △ 2.7 within 500s of meters
- ◇ 2.0 within 100s of meters
- ◇ 1.7 within 10s of meters

#### HIGHER TAXON

- vertebrate fauna
- invertebrate fauna
- vascular flora
- nonvascular flora

### 3.0 SPECIAL AREAS

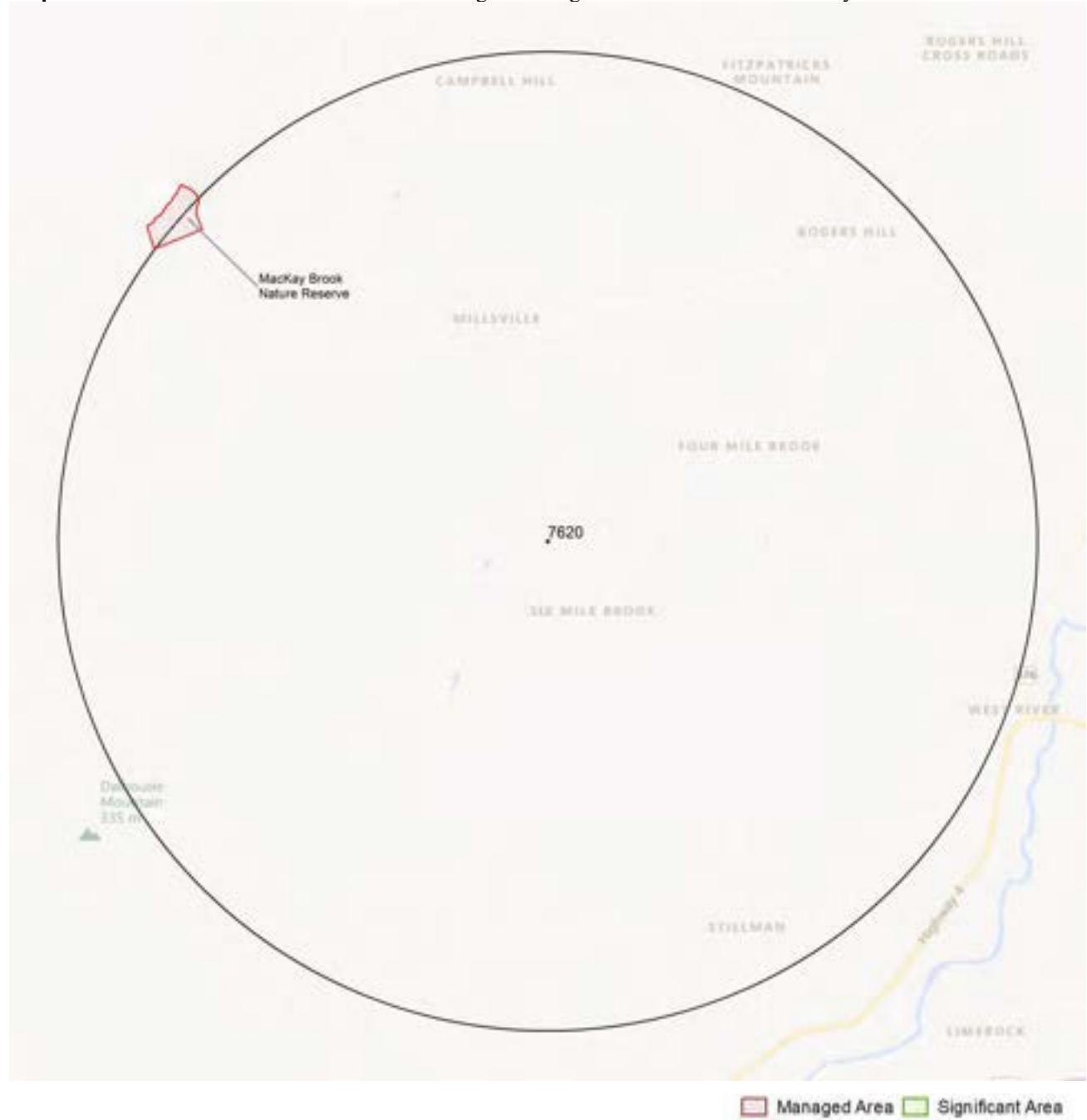
#### 3.1 MANAGED AREAS

The GIS scan identified 1 managed area in the vicinity of the study area (Map 3 and attached file: \*msa.xls).

#### 3.2 SIGNIFICANT AREAS

The GIS scan identified no biologically significant sites in the vicinity of the study area (Map 3).

**Map 3:** Boundaries and/or locations of known Managed and Significant Areas within the study area.



## 4.0 RARE SPECIES LISTS

Rare and/or endangered taxa (excluding “location-sensitive” species, section 4.3) within the study area listed in order of concern, beginning with legally listed taxa, with the number of observations per taxon and the distance in kilometers from study area centroid to the closest observation ( $\pm$  the precision, in km, of the record). [P] = vascular plant, [N] = nonvascular plant, [A] = vertebrate animal, [I] = invertebrate animal, [C] = community. Note: records are from attached files \*ob.xls/\*ob.shp only.

### 4.1 FLORA

	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)
N	<i>Stereocaulon condensatum</i>	Granular Soil Foam Lichen				S2S3	1	3.5 $\pm$ 0.0
N	<i>Parmeliopsis hyperopta</i>	Gray Starburst Lichen				S3S4	1	3.7 $\pm$ 1.0
P	<i>Botrychium lanceolatum</i> ssp. <i>angustisegmentum</i>	Narrow Triangle Moonwort				S2S3	1	2.9 $\pm$ 0.0
P	<i>Platanthera orbiculata</i>	Small Round-leaved Orchid				S3S4	1	2.9 $\pm$ 0.0

### 4.2 FAUNA

	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)
A	<i>Riparia riparia</i>	Bank Swallow	Threatened	Threatened	Endangered	S2B	3	2.3 $\pm$ 0.0
A	<i>Hirundo rustica</i>	Barn Swallow	Special Concern	Threatened	Endangered	S3B	1	4.5 $\pm$ 7.0
A	<i>Contopus cooperi</i>	Olive-sided Flycatcher	Special Concern	Threatened	Threatened	S3B	3	3.6 $\pm$ 0.0
A	<i>Dolichonyx oryzivorus</i>	Bobolink	Special Concern	Threatened	Vulnerable	S3B	1	4.5 $\pm$ 7.0
A	<i>Contopus virens</i>	Eastern Wood-Pewee	Special Concern	Special Concern	Vulnerable	S3S4B	2	4.5 $\pm$ 7.0
A	<i>Perisoreus canadensis</i>	Canada Jay				S3	1	4.5 $\pm$ 7.0
A	<i>Poecile hudsonicus</i>	Boreal Chickadee				S3	2	4.5 $\pm$ 7.0
A	<i>Charadrius vociferus</i>	Killdeer				S3B	1	4.5 $\pm$ 7.0
A	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak				S3B	1	4.5 $\pm$ 7.0
A	<i>Falco sparverius</i>	American Kestrel				S3B,S4S5M	2	3.8 $\pm$ 0.0
A	<i>Gallinago delicata</i>	Wilson's Snipe				S3B,S5M	2	4.5 $\pm$ 7.0
A	<i>Setophaga striata</i>	Blackpoll Warbler				S3B,S5M	1	4.5 $\pm$ 7.0
A	<i>Picoides arcticus</i>	Black-backed Woodpecker				S3S4	1	4.5 $\pm$ 7.0
A	<i>Setophaga castanea</i>	Bay-breasted Warbler				S3S4B,S4S5M	2	4.5 $\pm$ 7.0
A	<i>Actitis macularius</i>	Spotted Sandpiper				S3S4B,S5M	1	4.5 $\pm$ 7.0

### 4.3 LOCATION SENSITIVE SPECIES

The Department of Natural Resources in each Maritimes province considers a number of species “location sensitive”. Concern about exploitation of location-sensitive species precludes inclusion of precise coordinates in this report. Those intersecting your study area are indicated below with “YES”.

#### Nova Scotia

Scientific Name	Common Name	SARA	Prov Legal Prot	Known within the Study Site?
<i>Fraxinus nigra</i>	Black Ash		Threatened	No
<i>Emydoidea blandingii</i>	Blanding's Turtle - Nova Scotia pop.	Endangered	Endangered	No
<i>Glyptemys insculpta</i>	Wood Turtle	Threatened	Threatened	No
<i>Falco peregrinus pop. 1</i>	Peregrine Falcon - anatum/tundrius pop.		Vulnerable	No
<i>Bat hibernaculum or bat species occurrence</i>		[Endangered] <sup>1</sup>	[Endangered] <sup>1</sup>	No

<sup>1</sup> *Myotis lucifugus* (Little Brown Myotis), *Myotis septentrionalis* (Long-eared Myotis), and *Perimyotis subflavus* (Tri-colored Bat or Eastern Pipistrelle) are all Endangered under the Federal Species at Risk Act and the NS Endangered Species Act.

### 4.4 SOURCE BIBLIOGRAPHY

The recipient of these data shall acknowledge the AC CDC and the data sources listed below in any documents, reports, publications or presentations, in which this dataset makes a significant contribution.

# recs	CITATION
20	Lepage, D. 2014. Maritime Breeding Bird Atlas Database. Bird Studies Canada, Sackville NB, 407,838 recs.
4	Blaney, C.S.; Spicer, C.D.; Mazerolle, D.M. 2005. Fieldwork 2005. Atlantic Canada Conservation Data Centre. Sackville NB, 2333 recs.
2	eBird. 2020. eBird Basic Dataset. Version: EBD_relNov-2019. Ithaca, New York. Nov 2019, Cape Breton Bras d'Or Lakes Watershed subset. Cornell Lab of Ornithology.
1	Canadian Wildlife Service. 2019. Canadian Protected and Conserved Areas Database (CPCAD). December 2019. ECCC. <a href="https://www.canada.ca/en/environment-climate-change/services/national-wildlife-areas/protected-conserved-areas-database.html">https://www.canada.ca/en/environment-climate-change/services/national-wildlife-areas/protected-conserved-areas-database.html</a> .
1	Munro, Marian K. Nova Scotia Provincial Museum of Natural History Herbarium Database. Nova Scotia Provincial Museum of Natural History, Halifax, Nova Scotia. 2014.
1	Munro, Marian K. Tracked lichen specimens, Nova Scotia Provincial Museum of Natural History Herbarium. Atlantic Canada Conservation Data Centre. 2019.

## 5.0 RARE SPECIES WITHIN 100 KM

A 100 km buffer around the study area contains 48611 records of 135 vertebrate and 1032 records of 60 invertebrate fauna; 6009 records of 257 vascular and 2571 records of 137 nonvascular flora (attached: \*ob100km.xls).

Taxa within 100 km of the study site that are rare and/or endangered in the province in which the study site occurs (including “location-sensitive” species). All ranks correspond to the province in which the study site falls, even for out-of-province records. Taxa are listed in order of concern, beginning with legally listed taxa, with the number of observations per taxon and the distance in kilometers from study area centroid to the closest observation ( $\pm$  the precision, in km, of the record).

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Myotis lucifugus</i>	Little Brown Myotis	Endangered	Endangered	Endangered	S1	95	9.6 $\pm$ 0.0	NS
A	<i>Myotis septentrionalis</i>	Northern Myotis	Endangered	Endangered	Endangered	S1	90	52.1 $\pm$ 1.0	PE
A	<i>Perimyotis subflavus</i>	Tricolored Bat	Endangered	Endangered	Endangered	S1	5	61.0 $\pm$ 5.0	NS
A	<i>Salmo salar pop. 1</i>	Atlantic Salmon - Inner Bay of Fundy population	Endangered	Endangered		S1	22	21.3 $\pm$ 0.0	NS
A	<i>Salmo salar pop. 6</i>	Atlantic Salmon - Nova Scotia Southern Upland population	Endangered			S1	31	37.2 $\pm$ 0.0	NS
A	<i>Charadrius melodus melodus</i>	Piping Plover melodus subspecies	Endangered	Endangered	Endangered	S1B	2603	18.1 $\pm$ 0.0	NS
A	<i>Sterna dougallii</i>	Roseate Tern	Endangered	Endangered	Endangered	S1B	22	87.0 $\pm$ 0.0	NS
A	<i>Morone saxatilis pop. 2</i>	Striped Bass - Bay of Fundy population	Endangered			S2S3B,S2S3N	2	77.6 $\pm$ 0.0	NS
A	<i>Catharus bicknelli</i>	Bicknell's Thrush	Threatened	Threatened	Endangered	S1B	1	80.8 $\pm$ 7.0	NS
A	<i>Asio flammeus</i>	Short-eared Owl	Threatened	Special Concern		S1B	9	18.1 $\pm$ 7.0	NS
A	<i>Glyptemys insculpta</i>	Wood Turtle	Threatened	Threatened	Threatened	S2	4461	9.5 $\pm$ 5.0	NS
A	<i>Riparia riparia</i>	Bank Swallow	Threatened	Threatened	Endangered	S2B	2461	2.3 $\pm$ 0.0	NS
A	<i>Chaetura pelagica</i>	Chimney Swift	Threatened	Threatened	Endangered	S2S3B,S1M	639	9.8 $\pm$ 7.0	NS
A	<i>Limosa haemastica</i>	Hudsonian Godwit	Threatened			S2S3M	370	43.8 $\pm$ 0.0	NS
A	<i>Acipenser oxyrinchus</i>	Atlantic Sturgeon	Threatened			S2S3N	2	64.5 $\pm$ 0.0	NS
A	<i>Hydrobates leucorhous</i>	Leach's Storm-Petrel	Threatened			S3B	44	87.9 $\pm$ 7.0	NS
A	<i>Tringa flavipes</i>	Lesser Yellowlegs	Threatened			S3M	1427	15.6 $\pm$ 0.0	NS
A	<i>Anguilla rostrata</i>	American Eel	Threatened			S3N	67	35.5 $\pm$ 0.0	NS
A	<i>Hylocichla mustelina</i>	Wood Thrush	Threatened	Threatened		SUB	36	9.8 $\pm$ 0.0	NS
A	<i>Salmo salar pop. 12</i>	Atlantic Salmon - Gaspe - Southern Gulf of St. Lawrence population	Special Concern			S1	47	5.6 $\pm$ 0.0	NS
A	<i>Antrostomus vociferus</i>	Eastern Whip-Poor-Will	Special Concern	Threatened	Threatened	S1?B	7	67.7 $\pm$ 7.0	NS
A	<i>Passerculus sandwichensis princeps</i>	Ipswich Sparrow	Special Concern	Special Concern		S1B	1	91.9 $\pm$ 0.0	NS
A	<i>Bucephala islandica</i>	Barrow's Goldeneye	Special Concern	Special Concern		S1N,SUM	13	20.6 $\pm$ 0.0	NS
A	<i>Euphagus carolinus</i>	Rusty Blackbird	Special Concern	Special Concern	Endangered	S2B	269	12.9 $\pm$ 7.0	NS
A	<i>Phalaropus lobatus</i>	Red-necked Phalarope	Special Concern	Special Concern		S2S3M	11	55.0 $\pm$ 0.0	NS
A	<i>Morone saxatilis pop. 1</i>	Striped Bass - Southern Gulf of St. Lawrence population	Special Concern			S2S3N	1	77.0 $\pm$ 1.0	NS
A	<i>Histrionicus histrionicus pop. 1</i>	Harlequin Duck - Eastern population	Special Concern	Special Concern	Endangered	S2S3N,SUM	24	58.7 $\pm$ 0.0	PE
A	<i>Chelydra serpentina</i>	Snapping Turtle	Special Concern	Special Concern	Vulnerable	S3	79	10.3 $\pm$ 0.0	NS
A	<i>Hirundo rustica</i>	Barn Swallow	Special Concern	Threatened	Endangered	S3B	1552	4.5 $\pm$ 7.0	NS
A	<i>Cardellina canadensis</i>	Canada Warbler	Special Concern	Threatened	Endangered	S3B	1095	6.5 $\pm$ 7.0	NS
A	<i>Chordeiles minor</i>	Common Nighthawk	Special Concern	Threatened	Threatened	S3B	374	6.5 $\pm$ 7.0	NS
A	<i>Contopus cooperi</i>	Olive-sided Flycatcher	Special Concern	Threatened	Threatened	S3B	1249	3.6 $\pm$ 0.0	NS
A	<i>Dolichonyx oryzivorus</i>	Bobolink	Special Concern	Threatened	Vulnerable	S3B	1331	4.5 $\pm$ 7.0	NS
A	<i>Coccothraustes vespertinus</i>	Evening Grosbeak	Special Concern	Special Concern	Vulnerable	S3B,S3N,S3M	779	6.5 $\pm$ 7.0	NS
A	<i>Podiceps auritus</i>	Horned Grebe	Special Concern	Special Concern		S3N,SUM	9	79.5 $\pm$ 0.0	NS
A	<i>Contopus virens</i>	Eastern Wood-Pewee	Special Concern	Special Concern	Vulnerable	S3S4B	1254	4.5 $\pm$ 7.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Phocoena phocoena</i>	Harbour Porpoise	Special Concern			S4	1	88.8 ± 5.0	PE
A	<i>Chrysemys picta picta</i>	Eastern Painted Turtle	Special Concern	Special Concern		S4	61	19.0 ± 1.0	NS
A	<i>Accipiter cooperii</i>	Cooper's Hawk	Not At Risk			S1?B,SUN,SUM	2	8.6 ± 7.0	NS
A	<i>Fulica americana</i>	American Coot	Not At Risk			S1B	17	14.1 ± 7.0	NS
A	<i>Chlidonias niger</i>	Black Tern	Not At Risk			S1B	1	90.0 ± 0.0	NS
A	<i>Falco peregrinus pop. 1</i>	Peregrine Falcon - anatum/tundrius	Not At Risk	Special Concern	Vulnerable	S1B,SUM	25	65.9 ± 0.0	PE
A	<i>Sorex dispar</i>	Long-tailed Shrew	Not At Risk			S2	1	65.2 ± 0.0	NS
A	<i>Aegolius funereus</i>	Boreal Owl	Not At Risk			S2?B,SUM	14	12.6 ± 0.0	NS
A	<i>Globicephala melas</i>	Long-finned Pilot Whale	Not At Risk			S2S3	1	66.4 ± 100.0	NS
A	<i>Hemidactylium scutatum</i>	Four-toed Salamander	Not At Risk			S3	8	30.2 ± 0.0	NS
A	<i>Sterna hirundo</i>	Common Tern	Not At Risk			S3B	489	9.8 ± 7.0	NS
A	<i>Sialia sialis</i>	Eastern Bluebird	Not At Risk			S3B	62	13.6 ± 0.0	NS
A	<i>Buteo lagopus</i>	Rough-legged Hawk	Not At Risk			S3N	4	60.7 ± 0.0	PE
A	<i>Accipiter gentilis</i>	Northern Goshawk	Not At Risk			S3S4	139	8.6 ± 7.0	NS
A	<i>Lagenorhynchus acutus</i>	Atlantic White-sided Dolphin	Not At Risk			S3S4	3	65.1 ± 0.0	NS
A	<i>Ammospiza nelsoni</i>	Nelson's Sparrow	Not At Risk			S3S4B	284	17.8 ± 7.0	NS
A	<i>Calidris canutus rufa</i>	Red Knot rufa subspecies	E,SC	Endangered	Endangered	S2M	477	15.6 ± 0.0	NS
A	<i>Morone saxatilis</i>	Striped Bass	E,SC			S2S3B,S2S3N	4	58.4 ± 1.0	NS
A	<i>Alces alces americana</i>	Moose			Endangered	S1	133	5.8 ± 0.0	NS
A	<i>Picoides dorsalis</i>	American Three-toed Woodpecker				S1?	8	72.0 ± 7.0	NS
A	<i>Passerina cyanea</i>	Indigo Bunting				S1?B,SUM	16	42.8 ± 0.0	NS
A	<i>Nycticorax nycticorax</i>	Black-crowned Night-heron				S1B	1	79.3 ± 7.0	NS
A	<i>Oxyura jamaicensis</i>	Ruddy Duck				S1B	12	67.8 ± 7.0	NS
A	<i>Gallinula galeata</i>	Common Gallinule				S1B	12	13.8 ± 7.0	NS
A	<i>Myiarchus crinitus</i>	Great Crested Flycatcher				S1B	15	8.6 ± 7.0	NS
A	<i>Cistothorus palustris</i>	Marsh Wren				S1B	1	89.5 ± 3.0	NB
A	<i>Mimus polyglottos</i>	Northern Mockingbird				S1B	38	18.1 ± 7.0	NS
A	<i>Toxostoma rufum</i>	Brown Thrasher				S1B	10	18.1 ± 7.0	NS
A	<i>Charadrius semipalmatus</i>	Semipalmated Plover				S1B,S4M	1723	16.0 ± 0.0	NS
A	<i>Calidris minutilla</i>	Least Sandpiper				S1B,S4M	1063	15.6 ± 0.0	NS
A	<i>Anas acuta</i>	Northern Pintail				S1B,SUM	60	34.5 ± 0.0	NS
A	<i>Vireo gilvus</i>	Warbling Vireo				S1B,SUM	20	20.3 ± 7.0	NS
A	<i>Vespertilionidae sp.</i>	bat species				S1S2	77	5.6 ± 0.0	NS
A	<i>Poocetes gramineus</i>	Vesper Sparrow				S1S2B,SUM	57	12.9 ± 7.0	NS
A	<i>Vireo philadelphicus</i>	Philadelphia Vireo				S2?B,SUM	83	23.3 ± 0.0	NS
A	<i>Fratercula arctica</i>	Atlantic Puffin				S2B	3	87.5 ± 0.0	NB
A	<i>Empidonax traillii</i>	Willow Flycatcher				S2B	19	23.2 ± 7.0	NS
A	<i>Molothrus ater</i>	Brown-headed Cowbird				S2B	183	6.5 ± 7.0	NS
A	<i>Spatula clypeata</i>	Northern Shoveler				S2B,SUM	32	54.8 ± 7.0	NS
A	<i>Mareca strepera</i>	Gadwall				S2B,SUM	78	33.4 ± 0.0	NS
A	<i>Piranga olivacea</i>	Scarlet Tanager				S2B,SUM	14	9.8 ± 7.0	NS
A	<i>Calidris alba</i>	Sanderling				S2N,S3M	937	18.1 ± 0.0	NS
A	<i>Asio otus</i>	Long-eared Owl				S2S3	34	23.7 ± 0.0	NS
A	<i>Rallus limicola</i>	Virginia Rail				S2S3B	51	20.3 ± 7.0	NS
A	<i>Rissa tridactyla</i>	Black-legged Kittiwake				S2S3B	1	30.7 ± 0.0	NS
A	<i>Petrochelidon pyrrhonota</i>	Cliff Swallow				S2S3B	319	8.6 ± 7.0	NS
A	<i>Phalacrocorax carbo</i>	Great Cormorant				S2S3B,S2S3N	215	36.9 ± 7.0	PE
A	<i>Cathartes aura</i>	Turkey Vulture				S2S3B,S4S5M	8	68.0 ± 0.0	PE
A	<i>Setophaga pinus</i>	Pine Warbler				S2S3B,S4S5M	15	8.6 ± 7.0	NS
A	<i>Bucephala clangula</i>	Common Goldeneye				S2S3B,S5N,S5M	173	15.8 ± 13.0	NS
A	<i>Icterus galbula</i>	Baltimore Oriole				S2S3B,SUM	61	9.8 ± 7.0	NS
A	<i>Pluvialis dominica</i>	American Golden-Plover				S2S3M	163	16.0 ± 0.0	NS
A	<i>Numenius phaeopus hudsonicus</i>	Whimbrel				S2S3M	211	22.1 ± 0.0	NS
A	<i>Perisoreus canadensis</i>	Canada Jay				S3	583	4.5 ± 7.0	NS
A	<i>Poecile hudsonicus</i>	Boreal Chickadee				S3	946	4.5 ± 7.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Spinus pinus</i>	Pine Siskin				S3	531	6.5 ± 7.0	NS
A	<i>Salvelinus fontinalis</i>	Brook Trout				S3	66	5.6 ± 0.0	NS
A	<i>Salvelinus namaycush</i>	Lake Trout				S3	2	47.5 ± 0.0	NS
A	<i>Pekania pennanti</i>	Fisher				S3	6	17.3 ± 0.0	NS
A	<i>Calcarius lapponicus</i>	Lapland Longspur				S3?N,SUM	3	79.4 ± 0.0	NS
A	<i>Spatula discors</i>	Blue-winged Teal				S3B	321	6.5 ± 7.0	NS
A	<i>Charadrius vociferus</i>	Killdeer				S3B	752	4.5 ± 7.0	NS
A	<i>Tringa semipalmata</i>	Willet				S3B	1960	9.8 ± 7.0	NS
A	<i>Sterna paradisaea</i>	Arctic Tern				S3B	51	72.8 ± 7.0	NS
A	<i>Coccyzus erythrophthalmus</i>	Black-billed Cuckoo				S3B	129	8.6 ± 7.0	NS
A	<i>Tyrannus tyrannus</i>	Eastern Kingbird				S3B	365	6.5 ± 7.0	NS
A	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak				S3B	835	4.5 ± 7.0	NS
A	<i>Alosa pseudoharengus</i>	Alewife				S3B	24	5.6 ± 0.0	NS
A	<i>Somateria mollissima</i>	Common Eider				S3B,S3M,S3N	341	27.9 ± 11.0	NS
A	<i>Tringa melanoleuca</i>	Greater Yellowlegs				S3B,S4M	2368	15.6 ± 0.0	NS
A	<i>Falco sparverius</i>	American Kestrel				S3B,S4S5M	560	3.8 ± 0.0	NS
A	<i>Gallinago delicata</i>	Wilson's Snipe				S3B,S5M	1050	4.5 ± 7.0	NS
A	<i>Setophaga striata</i>	Blackpoll Warbler				S3B,S5M	101	4.5 ± 7.0	NS
A	<i>Cardellina pusilla</i>	Wilson's Warbler				S3B,S5M	101	16.3 ± 7.0	NS
A	<i>Pinicola enucleator</i>	Pine Grosbeak				S3B,S5N,S5M	117	9.8 ± 7.0	NS
A	<i>Setophaga tigrina</i>	Cape May Warbler				S3B,SUM	320	6.5 ± 7.0	NS
A	<i>Branta bernicla</i>	Brant				S3M	8	77.7 ± 0.0	NS
A	<i>Pluvialis squatarola</i>	Black-bellied Plover				S3M	2032	18.1 ± 0.0	NS
A	<i>Arenaria interpres</i>	Ruddy Turnstone				S3M	872	18.1 ± 0.0	NS
A	<i>Calidris pusilla</i>	Semipalmated Sandpiper				S3M	1685	16.0 ± 0.0	NS
A	<i>Calidris melanotos</i>	Pectoral Sandpiper				S3M	173	18.1 ± 0.0	NS
A	<i>Limnodromus griseus</i>	Short-billed Dowitcher				S3M	1023	18.1 ± 0.0	NS
A	<i>Chroicocephalus ridibundus</i>	Black-headed Gull				S3N	15	72.2 ± 0.0	NS
A	<i>Picoides arcticus</i>	Black-backed Woodpecker				S3S4	183	4.5 ± 7.0	NS
A	<i>Loxia curvirostra</i>	Red Crossbill				S3S4	153	6.5 ± 7.0	NS
A	<i>Sorex palustris</i>	American Water Shrew				S3S4	6	63.8 ± 0.0	PE
A	<i>Botaurus lentiginosus</i>	American Bittern				S3S4B,S4S5M	474	6.5 ± 7.0	NS
A	<i>Setophaga castanea</i>	Bay-breasted Warbler				S3S4B,S4S5M	672	4.5 ± 7.0	NS
A	<i>Actitis macularius</i>	Spotted Sandpiper				S3S4B,S5M	895	4.5 ± 7.0	NS
A	<i>Leiothlypis peregrina</i>	Tennessee Warbler				S3S4B,S5M	690	6.5 ± 7.0	NS
A	<i>Passerella iliaca</i>	Fox Sparrow				S3S4B,S5M	73	19.1 ± 0.0	NS
A	<i>Mergus serrator</i>	Red-breasted Merganser				S3S4B,S5M,S5N	104	9.8 ± 7.0	NS
A	<i>Calidris maritima</i>	Purple Sandpiper				S3S4N	30	22.1 ± 0.0	NS
A	<i>Lanius borealis</i>	Northern Shrike				S3S4N	4	74.8 ± 0.0	PE
A	<i>Morus bassanus</i>	Northern Gannet				SHB	43	26.0 ± 4.0	NS
A	<i>Aythya americana</i>	Redhead				SHB	3	96.8 ± 0.0	PE
A	<i>Leucophaeus atricilla</i>	Laughing Gull				SHB	4	90.2 ± 0.0	NS
A	<i>Progne subis</i>	Purple Martin				SHB	8	74.1 ± 7.0	NS
A	<i>Eremophila alpestris</i>	Horned Lark				SHB,S4S5N,S5M	8	56.6 ± 7.0	PE
I	<i>Bombus bohemicus</i>	Ashton Cuckoo Bumble Bee	Endangered	Endangered	Endangered	S1	32	31.5 ± 5.0	NS
I	<i>Danaus plexippus</i>	Monarch	Endangered	Special Concern	Endangered	S2?B,S3M	114	5.4 ± 0.0	NS
I	<i>Barnea truncata</i>	Atlantic Mud-piddock	Threatened	Threatened		S1	1	71.8 ± 1.0	NS
I	<i>Bombus suckleyi</i>	Suckley's Cuckoo Bumble Bee	Threatened			SH	1	38.7 ± 5.0	NS
I	<i>Alasmidonta varicosa</i>	Brook Floater	Special Concern	Special Concern	Threatened	S3	16	45.3 ± 0.0	NS
I	<i>Bombus terricola</i>	Yellow-banded Bumble Bee	Special Concern	Special Concern	Vulnerable	S3	116	10.3 ± 5.0	NS
I	<i>Coccinella transversoguttata richardsoni</i>	Transverse Lady Beetle	Special Concern		Endangered	SH	7	7.6 ± 2.0	NS
I	<i>Gomphurus ventricosus</i>	Skillet Clubtail	Special Concern	Endangered		SH	1	88.5 ± 0.0	NS
I	<i>Erora laeta</i>	Early Hairstreak				S1	1	76.2 ± 0.0	PE
I	<i>Atlanticoncha ochracea</i>	Tidewater Mucket				S1	1	96.8 ± 0.0	NS
I	<i>Polygonia satyrus</i>	Satyr Comma				S1?	16	34.4 ± 5.0	NS
I	<i>Euphyes bimacula</i>	Two-spotted Skipper				S1S2	2	38.2 ± 0.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
	<i>Boloria chariclea</i>	Arctic Fritillary				S1S2	1	33.6 ± 2.0	NS
	<i>Tharsalea dospassosi</i>	Maritime Copper				S2	76	18.6 ± 1.0	NS
	<i>Satyrium acadica</i>	Acadian Hairstreak				S2	15	16.7 ± 2.0	NS
	<i>Neurocordulia michaeli</i>	Broad-tailed Shadowdragon				S2	26	42.4 ± 0.0	NS
	<i>Coenagrion resolutum</i>	Taiga Bluet				S2	50	49.3 ± 1.0	PE
	<i>Margaritifera margaritifera</i>	Eastern Pearlshell				S2	154	5.8 ± 0.0	NS
	<i>Pantala hymenaea</i>	Spot-Winged Glider				S2?B	1	77.3 ± 1.0	NS
	<i>Nymphalis l-album</i>	Compton Tortoiseshell				S2S3	9	19.0 ± 2.0	NS
	<i>Aglais milberti</i>	Milbert's Tortoiseshell				S2S3	16	19.0 ± 2.0	NS
	<i>Aglais milberti milberti</i>	Milbert's Tortoise Shell				S2S3	3	51.7 ± 0.0	NS
	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail				S2S3	8	53.6 ± 0.0	NS
	<i>Somatochlora kennedyi</i>	Kennedy's Emerald				S2S3	2	79.9 ± 1.0	PE
	<i>Somatochlora williamsoni</i>	Williamson's Emerald				S2S3	12	82.7 ± 0.0	PE
	<i>Williamsonia fletcheri</i>	Ebony Boghaunter				S2S3	4	50.6 ± 0.0	NS
	<i>Stylurus scudderi</i>	Zebra Clubtail				S2S3	4	78.0 ± 0.0	NS
	<i>Alasmidonta undulata</i>	Triangle Floater				S2S3	19	41.3 ± 0.0	NS
	<i>Astyleiopus variegatus</i>	Variiegated Long-horned Beetle				S3	1	95.8 ± 0.0	NS
	<i>Naemia seriata</i>	Seaside Lady Beetle				S3	1	70.9 ± 0.0	NS
	<i>Chilocorus stigma</i>	Twice-stabbed Lady Beetle				S3	1	73.0 ± 0.0	PE
	<i>Monochamus marmorator</i>	Balsam Fir Sawyer				S3	2	38.5 ± 0.0	NS
	<i>Satyrium calanus</i>	Banded Hairstreak				S3	3	20.4 ± 2.0	NS
	<i>Callophrys lanoraieensis</i>	Bog Elfin				S3	6	36.8 ± 0.0	NS
	<i>Phanogomphus descriptus</i>	Harpoon Clubtail				S3	4	58.8 ± 1.0	NS
	<i>Ophiogomphus aspersus</i>	Brook Snaketail				S3	4	76.1 ± 0.0	NS
	<i>Ophiogomphus mainensis</i>	Maine Snaketail				S3	14	39.2 ± 0.0	NS
	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail				S3	55	53.0 ± 0.0	NS
	<i>Epitheca princeps</i>	Prince Baskettail				S3	11	50.7 ± 0.0	NS
	<i>Somatochlora forcipata</i>	Forcinate Emerald				S3	3	73.6 ± 1.0	PE
	<i>Enallagma vernale</i>	Vernal Bluet				S3	4	58.8 ± 1.0	NS
	<i>Strophitus undulatus</i>	Creeper				S3	6	78.2 ± 1.0	NS
	<i>Polygonia interrogationis</i>	Question Mark				S3B	48	16.7 ± 2.0	NS
	<i>Cecropterus pylades</i>	Northern Cloudywing				S3S4	27	7.7 ± 0.0	NS
	<i>Amblyscirtes hegon</i>	Pepper and Salt Skipper				S3S4	12	16.7 ± 2.0	NS
	<i>Cupido comyntas</i>	Eastern Tailed Blue				S3S4	3	43.3 ± 0.0	NS
	<i>Argynnis aphrodite</i>	Aphrodite Fritillary				S3S4	23	22.8 ± 100.0	NS
	<i>Polygonia faunus</i>	Green Comma				S3S4	18	19.0 ± 2.0	NS
	<i>Oeneis jutta</i>	Jutta Arctic				S3S4	8	39.8 ± 0.0	NS
	<i>Aeshna clepsydra</i>	Mottled Darner				S3S4	4	80.6 ± 1.0	NS
	<i>Aeshna constricta</i>	Lance-Tipped Darner				S3S4	28	16.8 ± 1.0	NS
	<i>Boyeria grafiana</i>	Ocellated Darner				S3S4	11	51.7 ± 0.0	NS
	<i>Gomphaeschna furcillata</i>	Harlequin Darner				S3S4	3	70.8 ± 0.0	PE
	<i>Somatochlora franklini</i>	Delicate Emerald				S3S4	6	59.9 ± 1.0	NS
	<i>Nannothemis bella</i>	Elfin Skimmer				S3S4	3	94.3 ± 1.0	NS
	<i>Sympetrum danae</i>	Black Meadowhawk				S3S4	7	71.8 ± 1.0	NS
	<i>Amphiagrion saucium</i>	Eastern Red Damsel				S3S4	2	23.8 ± 0.0	NS
	<i>Sphaerophoria pyrrhina</i>	Violaceous Globetail				SH	1	39.1 ± 5.0	NS
	<i>Icaricia saepiolus</i>	Greenish Blue				SH	3	20.1 ± 2.0	NS
	<i>Polygonia gracilis</i>	Hoary Comma				SH	2	19.0 ± 2.0	NS
N	<i>Erioderma mollissimum</i>	Graceful Felt Lichen	Endangered	Endangered	Endangered	S1	30	67.4 ± 0.0	NS
N	<i>Erioderma pedicellatum</i> (Atlantic pop.)	Boreal Felt Lichen - Atlantic pop.	Endangered	Endangered	Endangered	S1	523	56.0 ± 0.0	NS
N	<i>Peltigera hydrothyria</i>	Eastern Waterfan	Threatened	Threatened	Threatened	S1	34	8.7 ± 0.0	NS
N	<i>Pannaria lurida</i>	Wrinkled Shingle Lichen	Threatened	Threatened	Threatened	S2S3	24	68.1 ± 1.0	NS
N	<i>Anzia colpodes</i>	Black-foam Lichen	Threatened	Threatened	Threatened	S3	33	40.5 ± 0.0	NS
N	<i>Fuscopannaria leucosticta</i>	White-rimmed Shingle Lichen	Threatened			S3	6	60.4 ± 0.0	NS
N	<i>Heterodermia squamulosa</i>	Scaly Fringe Lichen	Threatened			S3	8	77.4 ± 0.0	NS



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N	<i>Pectenia plumbea</i>	Blue Felt Lichen	Special Concern	Special Concern	Vulnerable	S3	170	15.0 ± 0.0	NS
N	<i>Sclerophora peronella</i> (Atlantic pop.)	Frosted Glass-whiskers (Atlantic population)	Special Concern	Special Concern		S3S4	25	63.8 ± 0.0	NS
N	<i>Pseudevernia cladonia</i>	Ghost Antler Lichen	Not At Risk			S2S3	7	60.7 ± 1.0	NS
N	<i>Fissidens exilis</i>	Pygmy Pocket Moss	Not At Risk			S3	6	37.3 ± 0.0	NS
N	<i>Chaenotheca servitii</i>	Flexuous Golden Stubble	Data Deficient			S1	1	52.9 ± 1.0	NS
N	<i>Erioderma pedicellatum</i>	Boreal Felt Lichen	E,SC		Endangered	S1	1	67.3 ± 0.0	NS
N	<i>Tetradontium brownianum</i>	Little Georgia				S1	1	98.3 ± 0.0	NS
N	<i>Cyrto-hypnum minutulum</i>	Tiny Cedar Moss				S1	1	53.1 ± 0.0	NS
N	<i>Blennothallia crispa</i>	Crinkled Jelly Lichen				S1	1	98.7 ± 0.0	NS
N	<i>Cladonia brevis</i>	Short Peg Lichen				S1	1	95.7 ± 4.0	PE
N	<i>Scytinium schraderi</i>	Wrinkled Jellyskin Lichen				S1	1	62.3 ± 0.0	NS
N	<i>Lichina confinis</i>	Marine Seaweed Lichen				S1	2	90.5 ± 2.0	NS
N	<i>Polychidium muscicola</i>	Eyed Mossthorns Woollybear Lichen				S1	1	48.4 ± 0.0	NS
N	<i>Peltigera lepidophora</i>	Scaly Pelt Lichen				S1	2	47.7 ± 0.0	PE
N	<i>Hypogymnia hultenii</i>	Powdered Honeycomb Lichen				S1	9	91.2 ± 0.0	NS
N	<i>Calypogeia neogaea</i>	Common Pouchwort				S1?	1	90.0 ± 0.0	NS
N	<i>Aloina rigida</i>	Aloe-Like Rigid Screw Moss				S1?	2	50.4 ± 0.0	NS
N	<i>Brachythecium erythrorrhizon</i>	Taiga Ragged Moss				S1?	2	91.5 ± 0.0	PE
N	<i>Campylostelium saxicola</i>	a Moss				S1?	2	75.9 ± 0.0	PE
N	<i>Tortula obtusifolia</i>	a Moss				S1?	3	36.4 ± 2.0	NS
N	<i>Didymodon tophaceus</i>	Olive Beard Moss				S1?	2	98.6 ± 4.0	NS
N	<i>Schistostega pennata</i>	Luminous Moss				S1?	1	98.1 ± 0.0	NS
N	<i>Enchylium limosum</i>	Lime-loving Tarpaper Lichen				S1?	2	73.8 ± 0.0	PE
N	<i>Scytinium intermedium</i>	Forty-five Jellyskin Lichen				S1?	2	77.5 ± 4.0	NS
N	<i>Arrhenopterum heterostichum</i>	One-sided Groove Moss				S1S2	1	91.5 ± 1.0	NS
N	<i>Plagiothecium latebricola</i>	Alder Silk Moss				S1S2	1	94.7 ± 3.0	NS
N	<i>Seligeria donniana</i>	Donian Beardless Moss				S1S2	1	99.5 ± 3.0	NS
N	<i>Sematophyllum marylandicum</i>	a Moss				S1S2	1	92.2 ± 6.0	NS
N	<i>Timmia megapolitana</i>	Metropolitan Timmia Moss				S1S2	3	49.9 ± 0.0	NS
N	<i>Pseudotaxiphyllum distichaceum</i>	a Moss				S1S2	2	95.5 ± 0.0	NS
N	<i>Haplocladium microphyllum</i>	Tiny-leaved Haplocladium Moss				S1S2	1	55.5 ± 5.0	NS
N	<i>Placidium squamulosum</i>	Limy Soil Stipplescale Lichen				S1S2	1	51.5 ± 6.0	NS
N	<i>Cladonia labradorica</i>	Labrador Lichen				S1S2	1	100.0 ± 0.0	NS
N	<i>Peltigera ponojensis</i>	Pale-bellied Pelt Lichen				S1S2	1	15.6 ± 0.0	NS
N	<i>Pilophorus cereolus</i>	Powdered Matchstick Lichen				S1S2	1	81.0 ± 3.0	NS
N	<i>Parmeliella parvula</i>	Poor-man's Shingles Lichen				S1S2	14	73.6 ± 0.0	NS
N	<i>Heterodermia galactophylla</i>	Branching Fringe Lichen				S1S3	2	61.6 ± 0.0	NS
N	<i>Peltigera neckeri</i>	Black-saddle Pelt Lichen				S1S3	2	70.7 ± 0.0	NS
N	<i>Stereocaulon grande</i>	Grand Foam Lichen				S1S3	1	51.0 ± 0.0	NS
N	<i>Anacamptodon splachnoides</i>	a Moss				S2	1	94.7 ± 3.0	NS
N	<i>Sphagnum platyphyllum</i>	Flat-leaved Peat Moss				S2	2	98.1 ± 3.0	NS
N	<i>Sphagnum subnitens</i>	Lustrous Peat Moss				S2	1	93.6 ± 2.0	NS
N	<i>Scytinium imbricatum</i>	Scaly Jellyskin Lichen				S2	1	85.3 ± 4.0	NS
N	<i>Nephroma resupinatum</i>	a lichen				S2	2	87.7 ± 0.0	NS
N	<i>Placynthium flabellusum</i>	Scaly Ink Lichen				S2	1	78.5 ± 17.0	NS
N	<i>Anaptychia crinalis</i>	Hanging Fringed Lichen				S2	2	95.7 ± 4.0	PE
N	<i>Riccardia multifida</i>	Delicate Germanderwort				S2?	2	71.7 ± 0.0	NS
N	<i>Anomodon viticulosus</i>	a Moss				S2?	1	50.6 ± 5.0	NS
N	<i>Atrichum angustatum</i>	Lesser Smoothcap Moss				S2?	3	30.6 ± 2.0	NS

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N	<i>Drepanocladus polygamus</i>	Polygamous Hook Moss				S2?	4	82.3 ± 0.0	PE
N	<i>Ditrichum rhynchostegium</i>	a Moss				S2?	1	47.2 ± 0.0	PE
N	<i>Kiaeria starkei</i>	Starke's Fork Moss				S2?	1	91.5 ± 10.0	NS
N	<i>Philonotis marchica</i>	a Moss				S2?	3	29.6 ± 0.0	NS
N	<i>Platydictya jungermannioides</i>	False Willow Moss				S2?	3	71.1 ± 0.0	NS
N	<i>Saelania glaucescens</i>	Blue Dew Moss				S2?	1	27.3 ± 0.0	NS
N	<i>Cyrtomnium hymenophylloides</i>	Short-pointed Lantern Moss				S2?	1	27.3 ± 0.0	NS
N	<i>Platylomella lescurii</i>	a Moss				S2?	1	95.4 ± 0.0	NS
N	<i>Oxyrrhynchium hians</i>	Light Beaked Moss				S2S3	1	68.7 ± 25.0	NS
N	<i>Platydictya subtilis</i>	Bark Willow Moss				S2S3	3	75.9 ± 0.0	PE
N	<i>Moelleropsis nebulosa</i>	Blue-gray Moss Shingle Lichen				S2S3	58	54.9 ± 0.0	NS
N	<i>Moelleropsis nebulosa ssp. frullaniae</i>	Blue-gray Moss Shingle Lichen				S2S3	3	73.5 ± 0.0	NS
N	<i>Ramalina thrausta</i>	Angelhair Ramalina Lichen				S2S3	15	36.1 ± 0.0	NS
N	<i>Collema leptaleum</i>	Crumpled Bat's Wing Lichen				S2S3	81	49.3 ± 0.0	PE
N	<i>Usnea ceratina</i>	Warty Beard Lichen				S2S3	1	91.2 ± 0.0	NS
N	<i>Usnea rubicunda</i>	Red Beard Lichen				S2S3	2	38.9 ± 0.0	NS
N	<i>Ahtiana aurescens</i>	Eastern Candlewax Lichen				S2S3	7	36.0 ± 6.0	NS
N	<i>Cladonia incrassata</i>	Powder-foot British Soldiers Lichen				S2S3	1	71.9 ± 0.0	NS
N	<i>Cladonia parasitica</i>	Fence-rail Lichen				S2S3	1	64.1 ± 1.0	NS
N	<i>Scytinium tenuissimum</i>	Birdnest Jellyskin Lichen				S2S3	16	39.1 ± 0.0	NS
N	<i>Melanohalea septentrionalis</i>	Northern Camouflage Lichen				S2S3	2	89.8 ± 0.0	PE
N	<i>Myelochroa aurulenta</i>	Powdery Axil-bristle Lichen				S2S3	1	37.2 ± 0.0	NS
N	<i>Parmelia fertilis</i>	Fertile Shield Lichen				S2S3	10	27.7 ± 0.0	NS
N	<i>Hypotrachyna minarum</i>	Hairless-spined Shield Lichen				S2S3	1	85.8 ± 0.0	NS
N	<i>Parmeliopsis ambigua</i>	Green Starburst Lichen				S2S3	4	17.3 ± 1.0	NS
N	<i>Fuscopannaria soredata</i>	a Lichen				S2S3	6	60.6 ± 0.0	NS
N	<i>Stereocaulon condensatum</i>	Granular Soil Foam Lichen				S2S3	10	3.5 ± 0.0	NS
N	<i>Physcia subtilis</i>	Slender Rosette Lichen				S2S3	1	79.0 ± 0.0	NS
N	<i>Cladonia coccifera</i>	Eastern Boreal Pixie-cup Lichen				S2S3	2	52.4 ± 1.0	NS
N	<i>Cladonia deformis</i>	Lesser Sulphur-cup Lichen				S2S3	2	79.2 ± 0.0	PE
N	<i>Ephemerum serratum</i>	a Moss				S3	2	19.7 ± 3.0	NS
N	<i>Fissidens taxifolius</i>	Yew-leaved Pocket Moss				S3	2	8.1 ± 0.0	NS
N	<i>Anomodon tristis</i>	a Moss				S3	3	77.8 ± 0.0	NS
N	<i>Sphagnum contortum</i>	Twisted Peat Moss				S3	4	90.3 ± 4.0	NS
N	<i>Tetraplodon angustatus</i>	Toothed-leaved Nitrogen Moss				S3	3	74.1 ± 0.0	NS
N	<i>Rostania occultata</i>	Crusted Tarpaper Lichen				S3	5	66.9 ± 0.0	PE
N	<i>Collema nigrescens</i>	Blistered Tarpaper Lichen				S3	17	50.9 ± 2.0	NS
N	<i>Solorina saccata</i>	Woodland Owl Lichen				S3	7	64.0 ± 0.0	NS
N	<i>Fuscopannaria ahlneri</i>	Corrugated Shingles Lichen				S3	87	16.9 ± 0.0	NS
N	<i>Scytinium lichenoides</i>	Tattered Jellyskin Lichen				S3	28	47.4 ± 0.0	NS
N	<i>Leptogium milligranum</i>	Stretched Jellyskin Lichen				S3	9	51.0 ± 0.0	NS
N	<i>Nephroma bellum</i>	Naked Kidney Lichen				S3	8	30.4 ± 0.0	NS
N	<i>Placynthium nigrum</i>	Common Ink Lichen				S3	4	51.4 ± 0.0	NS
N	<i>Platismatia norvegica</i>	Oldgrowth Rag Lichen				S3	1	97.3 ± 0.0	NS
N	<i>Ephebe lanata</i>	Waterside Rockshag Lichen				S3	2	48.4 ± 0.0	NS
N	<i>Phaeophyscia adiastrum</i>	Powder-tipped Shadow Lichen				S3	4	52.6 ± 0.0	PE
N	<i>Phaeophyscia pusilloides</i>	Pompom-tipped Shadow Lichen				S3	12	6.0 ± 0.0	NS
N	<i>Peltigera collina</i>	Tree Pelt Lichen				S3	16	29.2 ± 0.0	NS

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N	<i>Barbula convoluta</i>	Lesser Bird's-claw Beard Moss				S3?	1	46.9 ± 0.0	PE
N	<i>Calliergon giganteum</i>	Giant Spear Moss				S3?	1	78.9 ± 2.0	PE
N	<i>Elodium blandowii</i>	Blandow's Bog Moss				S3?	2	7.0 ± 3.0	NS
N	<i>Mnium stellare</i>	Star Leafy Moss				S3?	1	91.5 ± 1.0	NS
N	<i>Sphagnum lindbergii</i>	Lindberg's Peat Moss				S3?	1	92.8 ± 0.0	NS
N	<i>Sphagnum riparium</i>	Streamside Peat Moss				S3?	2	79.0 ± 0.0	NS
N	<i>Cladonia stygia</i>	Black-footed Reindeer Lichen				S3?	5	76.0 ± 0.0	NS
N	<i>Encalypta procera</i>	Slender Extinguisher Moss				S3S4	5	76.6 ± 0.0	NS
N	<i>Myurella julacea</i>	Small Mouse-tail Moss				S3S4	1	27.3 ± 0.0	NS
N	<i>Splachnum ampullaceum</i>	Cruet Dung Moss				S3S4	2	67.2 ± 0.0	NS
N	<i>Thamnobryum alleghaniense</i>	a Moss				S3S4	3	76.2 ± 0.0	NS
N	<i>Tomentypnum nitens</i>	Golden Fuzzy Fen Moss				S3S4	2	81.5 ± 0.0	PE
N	<i>Schistidium agassizii</i>	Elf Bloom Moss				S3S4	2	83.9 ± 0.0	NS
N	<i>Hylocomiastrum pyrenaicum</i>	a Feather Moss				S3S4	1	99.5 ± 3.0	NS
N	<i>Bryoria pseudofuscescens</i>	Mountain Horsehair Lichen				S3S4	17	53.6 ± 0.0	PE
N	<i>Enchylium tenax</i>	Soil Tarpaper Lichen				S3S4	7	47.4 ± 0.0	NS
N	<i>Sticta fuliginosa</i>	Peppered Moon Lichen				S3S4	52	16.0 ± 1.0	NS
N	<i>Arctoparmelia incurva</i>	Finger Ring Lichen				S3S4	10	83.5 ± 0.0	NS
N	<i>Scytinium teretiusculum</i>	Curly Jellyskin Lichen				S3S4	14	28.5 ± 0.0	NS
N	<i>Leptogium acadense</i>	Acadian Jellyskin Lichen				S3S4	28	21.1 ± 0.0	NS
N	<i>Scytinium subtile</i>	Appressed Jellyskin Lichen				S3S4	36	50.0 ± 0.0	NS
N	<i>Vahlia leucophaea</i>	Shelter Shingle Lichen				S3S4	9	54.8 ± 0.0	NS
N	<i>Heterodermia speciosa</i>	Powdered Fringe Lichen				S3S4	20	16.6 ± 3.0	NS
N	<i>Leptogium corticola</i>	Blistered Jellyskin Lichen				S3S4	35	52.4 ± 0.0	NS
N	<i>Melanohalea olivacea</i>	Spotted Camouflage Lichen				S3S4	6	16.6 ± 3.0	NS
N	<i>Parmeliopsis hyperopta</i>	Gray Starburst Lichen				S3S4	5	3.7 ± 1.0	NS
N	<i>Parmotrema perlatum</i>	Powdered Ruffle Lichen				S3S4	1	84.4 ± 0.0	NS
N	<i>Peltigera hymenina</i>	Cloudy Pelt Lichen				S3S4	1	82.5 ± 1.0	NS
N	<i>Coccocarpia palmicola</i>	Salted Shell Lichen				S3S4	733	40.3 ± 0.0	NS
N	<i>Physcia tenella</i>	Fringed Rosette Lichen				S3S4	8	53.4 ± 0.0	PE
N	<i>Anaptychia palmulata</i>	Shaggy Fringed Lichen				S3S4	61	35.2 ± 0.0	NS
N	<i>Evernia prunastri</i>	Valley Oakmoss Lichen				S3S4	32	8.0 ± 5.0	NS
N	<i>Heterodermia neglecta</i>	Fringe Lichen				S3S4	57	13.1 ± 0.0	NS
P	<i>Fraxinus nigra</i>	Black Ash	Threatened		Threatened	S1S2	452	9.0 ± 0.0	NS
P	<i>Bartonia paniculata ssp. paniculata</i>	Branched Bartonia	Threatened	Threatened		SNA	1	44.6 ± 10.0	NS
P	<i>Lilaeopsis chinensis</i>	Eastern Lilaeopsis	Special Concern	Special Concern	Vulnerable	S3	17	70.9 ± 0.0	NS
P	<i>Isoetes prototypus</i>	Prototype Quillwort	Special Concern	Special Concern	Vulnerable	S3	13	60.7 ± 0.0	NS
P	<i>Floerkea proserpinacoides</i>	False Mermaidweed	Not At Risk			S2S3	3	32.7 ± 7.0	NS
P	<i>Acer saccharinum</i>	Silver Maple				S1	1	96.9 ± 20.0	PE
P	<i>Nabalus racemosus</i>	Glaucous Rattlesnakeroot				S1	1	96.9 ± 20.0	PE
P	<i>Cochlearia tridactylites</i>	Limestone Scurvy-grass				S1	5	95.0 ± 0.0	NS
P	<i>Lobelia spicata</i>	Pale-Spiked Lobelia				S1	6	49.7 ± 7.0	NS
P	<i>Stellaria crassifolia</i>	Fleshy Stitchwort				S1	1	92.4 ± 5.0	PE
P	<i>Hudsonia tomentosa</i>	Woolly Beach-heath				S1	55	28.3 ± 7.0	NS
P	<i>Callitriche hermaphroditica</i>	Northern Water-starwort				S1	6	91.3 ± 0.0	PE
P	<i>Elatine americana</i>	American Waterwort				S1	1	78.9 ± 0.0	NS
P	<i>Ribes americanum</i>	Wild Black Currant				S1	2	38.6 ± 5.0	NS
P	<i>Fraxinus pennsylvanica</i>	Red Ash				S1	6	60.4 ± 0.0	NS
P	<i>Persicaria careyi</i>	Carey's Smartweed				S1	1	52.3 ± 3.0	NS
P	<i>Ranunculus pensylvanicus</i>	Pennsylvania Buttercup				S1	31	53.8 ± 0.0	NS
P	<i>Salix myrtilifolia</i>	Blueberry Willow				S1	1	69.1 ± 0.0	NS
P	<i>Salix serissima</i>	Autumn Willow				S1	2	69.1 ± 0.0	NS
P	<i>Carex alopecoidea</i>	Foxtail Sedge				S1	2	87.5 ± 0.0	NS
P	<i>Carex garberi</i>	Garber's Sedge				S1	4	22.7 ± 0.0	NS
P	<i>Carex ormostachya</i>	Necklace Spike Sedge				S1	1	94.8 ± 1.0	NB

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Carex plantaginea</i>	Plantain-Leaved Sedge				S1	4	32.3 ± 0.0	NS
P	<i>Carex prairea</i>	Prairie Sedge				S1	1	82.5 ± 0.0	PE
P	<i>Carex tinctoria</i>	Tinged Sedge				S1	4	87.5 ± 1.0	NS
P	<i>Carex viridula</i> var. <i>saxillitoralis</i>	Greenish Sedge				S1	4	92.2 ± 0.0	NS
P	<i>Carex grisea</i>	Inflated Narrow-leaved Sedge				S1	6	77.2 ± 0.0	NS
P	<i>Cyperus lupulinus</i> ssp. <i>macilentus</i>	Hop Flatsedge				S1	15	21.6 ± 0.0	NS
P	<i>Scirpus atrovirens</i>	Dark-green Bulrush				S1	2	62.7 ± 0.0	NS
P	<i>Blysmopsis rufa</i>	Red Bulrush				S1	1	93.9 ± 5.0	PE
P	<i>Iris prismatica</i>	Slender Blue Flag				S1	2	73.3 ± 1.0	NS
P	<i>Juncus vaseyi</i>	Vasey Rush				S1	4	27.2 ± 0.0	NS
P	<i>Malaxis monophyllus</i> var. <i>brachypoda</i>	North American White Adder's-mouth				S1	3	90.5 ± 1.0	NS
P	<i>Elymus hystrix</i>	Spreading Wild Rye				S1	4	31.1 ± 1.0	NS
P	<i>Potamogeton nodosus</i>	Long-leaved Pondweed				S1	1	97.0 ± 5.0	NS
P	<i>Adiantum pedatum</i>	Northern Maidenhair Fern				S1	1	39.6 ± 1.0	NS
P	<i>Solidago hispida</i>	Hairy Goldenrod				S1?	1	51.9 ± 7.0	NS
P	<i>Suaeda rolandii</i>	Roland's Sea-Blite				S1?	1	82.0 ± 2.0	NS
P	<i>Carex pensylvanica</i>	Pennsylvania Sedge				S1?	3	54.6 ± 3.0	NS
P	<i>Carex rostrata</i>	Narrow-leaved Beaked Sedge				S1?	1	96.8 ± 5.0	PE
P	<i>Bolboschoenus robustus</i>	Sturdy Bulrush				S1?	2	49.7 ± 7.0	NS
P	<i>Allium schoenoprasum</i>	Wild Chives				S1?	4	17.3 ± 3.0	NS
P	<i>Allium schoenoprasum</i> var. <i>sibiricum</i>	Wild Chives				S1?	1	40.2 ± 7.0	NS
P	<i>Cypripedium arietinum</i>	Ram's-Head Lady's-Slipper			Endangered	S1S2	13	50.5 ± 0.0	NS
P	<i>Sanicula odorata</i>	Clustered Sanicle				S1S2	4	6.2 ± 10.0	NS
P	<i>Ageratina altissima</i>	White Snakeroot				S1S2	2	77.8 ± 1.0	NS
P	<i>Proserpinaca intermedia</i>	Intermediate Mermaidweed				S1S2	1	73.0 ± 0.0	NS
P	<i>Anemone virginiana</i> var. <i>alba</i>	Virginia Anemone				S1S2	5	30.3 ± 5.0	NS
P	<i>Parnassia parviflora</i>	Small-flowered Grass-of-Parnassus				S1S2	1	60.5 ± 1.0	NS
P	<i>Carex haydenii</i>	Hayden's Sedge				S1S2	4	38.5 ± 1.0	NS
P	<i>Platanthera huronensis</i>	Fragrant Green Orchid				S1S2	5	57.8 ± 10.0	NS
P	<i>Calamagrostis stricta</i> ssp. <i>stricta</i>	Slim-stemmed Reed Grass				S1S2	26	73.9 ± 0.0	PE
P	<i>Carex vacillans</i>	Estuarine Sedge				S1S3	3	87.5 ± 0.0	NS
P	<i>Zizia aurea</i>	Golden Alexanders				S2	47	21.8 ± 1.0	NS
P	<i>Antennaria parlinii</i> ssp. <i>fallax</i>	Parlin's Pussytoes				S2	4	10.9 ± 0.0	NS
P	<i>Rudbeckia laciniata</i>	Cut-Leaved Coneflower				S2	25	18.5 ± 0.0	NS
P	<i>Arabis pycnocarpa</i>	Cream-flowered Rockcress				S2	1	95.1 ± 0.0	NS
P	<i>Hudsonia ericoides</i>	Pinebarren Golden Heather				S2	3	93.9 ± 5.0	PE
P	<i>Desmodium canadense</i>	Canada Tick-trefoil				S2	20	19.9 ± 0.0	NS
P	<i>Anemonastrum canadense</i>	Canada Anemone				S2	1	37.2 ± 0.0	NS
P	<i>Hepatica americana</i>	Round-lobed Hepatica				S2	27	5.3 ± 0.0	NS
P	<i>Galium boreale</i>	Northern Bedstraw				S2	7	60.8 ± 5.0	NS
P	<i>Comandra umbellata</i>	Bastard's Toadflax				S2	51	83.8 ± 5.0	NS
P	<i>Gratiola neglecta</i>	Clammy Hedge-Hyssop				S2	5	44.9 ± 0.0	NS
P	<i>Dirca palustris</i>	Eastern Leatherwood				S2	5	68.5 ± 7.0	NS
P	<i>Carex chordorrhiza</i>	Creeping Sedge				S2	1	87.8 ± 1.0	PE
P	<i>Carex gynocrates</i>	Northern Bog Sedge				S2	2	69.1 ± 0.0	NS
P	<i>Carex pellita</i>	Woolly Sedge				S2	12	19.2 ± 0.0	NS
P	<i>Carex livida</i>	Livid Sedge				S2	14	51.9 ± 0.0	NS
P	<i>Juncus greenii</i>	Greene's Rush				S2	7	62.5 ± 1.0	NS
P	<i>Juncus alpinoarticulatus</i> ssp.	Northern Green Rush				S2	7	90.7 ± 3.0	PE

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P	<i>americanus</i>								
P	<i>Luzula spicata</i>	Spiked Woodrush				S2	1	77.3 ± 0.0	NS
P	<i>Allium tricoccum</i>	Wild Leek				S2	8	18.3 ± 0.0	NS
P	<i>Lilium canadense</i>	Canada Lily				S2	109	5.8 ± 6.0	NS
P	<i>Cypripedium parviflorum var. pubescens</i>	Yellow Lady's-slipper				S2	37	17.8 ± 7.0	NS
P	<i>Cypripedium reginae</i>	Showy Lady's-Slipper				S2	68	12.3 ± 0.0	NS
P	<i>Platanthera flava var. herbiola</i>	Pale Green Orchid				S2	8	16.2 ± 0.0	NS
P	<i>Platanthera macrophylla</i>	Large Round-Leaved Orchid				S2	13	9.2 ± 5.0	NS
P	<i>Bromus latiglumis</i>	Broad-Glumed Brome				S2	33	35.1 ± 0.0	NS
P	<i>Cinna arundinacea</i>	Sweet Wood Reed Grass				S2	19	42.0 ± 0.0	NS
P	<i>Elymus wiegandii</i>	Wiegand's Wild Rye				S2	20	11.4 ± 0.0	NS
P	<i>Festuca subverticillata</i>	Nodding Fescue				S2	5	68.5 ± 1.0	NS
P	<i>Cryptogramma stelleri</i>	Steller's Rockbrake				S2	1	80.6 ± 0.0	NS
P	<i>Cuscuta cephalanthi</i>	Buttonbush Dodder				S2?	7	13.9 ± 1.0	NS
P	<i>Rumex persicarioides</i>	Peach-leaved Dock				S2?	5	68.9 ± 5.0	PE
P	<i>Crataegus submollis</i>	Quebec Hawthorn				S2?	6	36.4 ± 5.0	NS
P	<i>Carex peckii</i>	White-Tinged Sedge				S2?	3	34.3 ± 0.0	NS
P	<i>Thuja occidentalis</i>	Eastern White Cedar			Vulnerable	S2S3	937	59.4 ± 0.0	NS
P	<i>Osmorhiza longistylis</i>	Smooth Sweet Cicely				S2S3	18	9.9 ± 0.0	NS
P	<i>Bidens hyperborea</i>	Estuary Beggarticks				S2S3	3	72.1 ± 0.0	NS
P	<i>Erigeron philadelphicus</i>	Philadelphia Fleabane				S2S3	5	48.5 ± 5.0	NS
P	<i>Lactuca hirsuta</i>	Hairy Lettuce				S2S3	3	72.0 ± 5.0	PE
P	<i>Impatiens pallida</i>	Pale Jewelweed				S2S3	3	48.4 ± 0.0	NS
P	<i>Caulophyllum thalictroides</i>	Blue Cohosh				S2S3	58	18.2 ± 0.0	NS
P	<i>Boechera stricta</i>	Drummond's Rockcress				S2S3	8	28.0 ± 0.0	NS
P	<i>Stellaria humifusa</i>	Saltmarsh Starwort				S2S3	10	70.0 ± 1.0	PE
P	<i>Oxybasis rubra</i>	Red Goosefoot				S2S3	9	18.2 ± 0.0	NS
P	<i>Hypericum majus</i>	Large St John's-wort				S2S3	24	53.2 ± 0.0	NS
P	<i>Hypericum x dissimulatum</i>	Disguised St. John's-wort				S2S3	5	61.8 ± 1.0	NS
P	<i>Empetrum atropurpureum</i>	Purple Crowberry				S2S3	5	91.5 ± 5.0	PE
P	<i>Euphorbia polygonifolia</i>	Seaside Spurge				S2S3	13	42.4 ± 1.0	PE
P	<i>Myriophyllum farwellii</i>	Farwell's Water Milfoil				S2S3	9	41.7 ± 0.0	NS
P	<i>Hedeoma pulegioides</i>	American False Pennyroyal				S2S3	7	20.3 ± 5.0	NS
P	<i>Oenothera fruticosa ssp. tetragona</i>	Narrow-leaved Evening Primrose				S2S3	3	18.6 ± 7.0	NS
P	<i>Polygonum aviculare ssp. buxiforme</i>	Box Knotweed				S2S3	5	20.7 ± 0.0	NS
P	<i>Polygonum oxyspermum ssp. raii</i>	Ray's Knotweed				S2S3	4	90.3 ± 5.0	PE
P	<i>Rumex triangulivalvis</i>	Triangular-valve Dock				S2S3	7	54.4 ± 0.0	NS
P	<i>Primula mistassinica</i>	Mistassini Primrose				S2S3	16	29.5 ± 0.0	NS
P	<i>Anemone quinquefolia</i>	Wood Anemone				S2S3	20	41.7 ± 0.0	NS
P	<i>Caltha palustris</i>	Yellow Marsh Marigold				S2S3	53	35.5 ± 0.0	NS
P	<i>Amelanchier fernaldii</i>	Fernald's Serviceberry				S2S3	3	86.2 ± 5.0	NS
P	<i>Potentilla canadensis</i>	Canada Cinquefoil				S2S3	1	58.3 ± 5.0	NS
P	<i>Galium obtusum</i>	Blunt-leaved Bedstraw				S2S3	1	94.8 ± 1.0	NB
P	<i>Salix pellita</i>	Satiny Willow				S2S3	5	44.7 ± 0.0	NS
P	<i>Tiarella cordifolia</i>	Heart-leaved Foamflower				S2S3	222	9.3 ± 0.0	NS
P	<i>Agalinis purpurea var. parviflora</i>	Small-flowered Purple False Foxglove				S2S3	12	14.8 ± 0.0	NS
P	<i>Boehmeria cylindrica</i>	Small-spike False-nettle				S2S3	2	78.8 ± 0.0	NS
P	<i>Carex adusta</i>	Lesser Brown Sedge				S2S3	6	39.0 ± 0.0	NS
P	<i>Carex capillaris</i>	Hairlike Sedge				S2S3	1	96.0 ± 0.0	NS
P	<i>Carex comosa</i>	Bearded Sedge				S2S3	6	44.6 ± 7.0	NS
P	<i>Carex houghtoniana</i>	Houghton's Sedge				S2S3	5	54.5 ± 1.0	NS
P	<i>Carex hystericina</i>	Porcupine Sedge				S2S3	7	19.2 ± 0.0	NS

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P	<i>Eleocharis ovata</i>	Ovate Spikerush				S2S3	7	17.9 ± 0.0	NS
P	<i>Scirpus pedicellatus</i>	Stalked Bulrush				S2S3	7	42.9 ± 0.0	NS
P	<i>Vallisneria americana</i>	Wild Celery				S2S3	7	52.6 ± 1.0	NS
P	<i>Juncus ranarius</i>	Seaside Rush				S2S3	1	95.8 ± 25.0	PE
P	<i>Goodyera pubescens</i>	Downy Rattlesnake-Plantain				S2S3	2	74.4 ± 1.0	NS
P	<i>Spiranthes casei</i> var. <i>novaescotiae</i>	Case's Ladies'-Tresses				S2S3	2	85.2 ± 0.0	PE
P	<i>Spiranthes lucida</i>	Shining Ladies'-Tresses				S2S3	22	16.7 ± 5.0	NS
P	<i>Calamagrostis stricta</i>	Slim-stemmed Reed Grass				S2S3	11	74.9 ± 0.0	PE
P	<i>Potamogeton friesii</i>	Fries' Pondweed				S2S3	19	36.1 ± 5.0	NS
P	<i>Woodsia glabella</i>	Smooth Cliff Fern				S2S3	1	56.5 ± 1.0	NS
P	<i>Botrychium lanceolatum</i> ssp. <i>angustisegmentum</i>	Narrow Triangle Moonwort				S2S3	9	2.9 ± 0.0	NS
P	<i>Botrychium simplex</i>	Least Moonwort				S2S3	3	29.1 ± 0.0	NS
P	<i>Ophioglossum pusillum</i>	Northern Adder's-tongue				S2S3	7	12.1 ± 0.0	NS
P	<i>Potamogeton pulcher</i>	Spotted Pondweed			Vulnerable	S3	3	51.8 ± 2.0	NS
P	<i>Angelica atropurpurea</i>	Purple-stemmed Angelica				S3	8	43.3 ± 0.0	NS
P	<i>Conioselinum chinense</i>	Chinese Hemlock-parsley				S3	3	6.7 ± 5.0	NS
P	<i>Hieracium robinsonii</i>	Robinson's Hawkweed				S3	3	12.6 ± 7.0	NS
P	<i>Senecio pseudoarnica</i>	Seabeach Ragwort				S3	15	40.2 ± 7.0	NS
P	<i>Symphyotrichum boreale</i>	Boreal Aster				S3	59	40.2 ± 7.0	NS
P	<i>Symphyotrichum ciliolatum</i>	Fringed Blue Aster				S3	20	19.5 ± 0.0	NS
P	<i>Betula michauxii</i>	Michaux's Dwarf Birch				S3	32	57.6 ± 0.0	NS
P	<i>Betula pumila</i>	Bog Birch				S3	35	69.5 ± 0.0	NS
P	<i>Cardamine parviflora</i>	Small-flowered Bittercress				S3	4	93.5 ± 0.0	NS
P	<i>Palustricodon aparinoides</i>	Marsh Bellflower				S3	36	6.1 ± 0.0	NS
P	<i>Mononeuria groenlandica</i>	Greenland Stitchwort				S3	2	82.6 ± 0.0	NS
P	<i>Sagina nodosa</i>	Knotted Pearlwort				S3	9	91.9 ± 0.0	NS
P	<i>Sagina nodosa</i> ssp. <i>borealis</i>	Knotted Pearlwort				S3	9	90.7 ± 0.0	NS
P	<i>Stellaria longifolia</i>	Long-leaved Starwort				S3	18	15.3 ± 0.0	NS
P	<i>Ceratophyllum echinatum</i>	Prickly Hornwort				S3	13	42.0 ± 0.0	NS
P	<i>Triosteum aurantiacum</i>	Orange-fruited Tinker's Weed				S3	99	15.4 ± 0.0	NS
P	<i>Viburnum edule</i>	Squashberry				S3	3	5.3 ± 0.0	NS
P	<i>Crassula aquatica</i>	Water Pygmyweed				S3	6	86.0 ± 5.0	PE
P	<i>Empetrum eamesii</i>	Pink Crowberry				S3	12	68.6 ± 5.0	PE
P	<i>Halenia deflexa</i>	Spurred Gentian				S3	1	86.7 ± 1.0	NS
P	<i>Geranium bicknellii</i>	Bicknell's Crane's-bill				S3	5	50.8 ± 2.0	NS
P	<i>Myriophyllum verticillatum</i>	Whorled Water Milfoil				S3	2	42.3 ± 0.0	NS
P	<i>Epilobium strictum</i>	Downy Willowherb				S3	48	38.1 ± 5.0	NS
P	<i>Polygala sanguinea</i>	Blood Milkwort				S3	20	9.0 ± 0.0	NS
P	<i>Persicaria arifolia</i>	Halberd-leaved Tearthumb				S3	30	38.4 ± 0.0	NS
P	<i>Plantago rugelii</i>	Rugel's Plantain				S3	7	13.3 ± 0.0	NS
P	<i>Samolus parviflorus</i>	Seaside Brookweed				S3	22	55.3 ± 0.0	NS
P	<i>Pyrola minor</i>	Lesser Pyrola				S3	2	12.4 ± 0.0	NS
P	<i>Anemone virginiana</i>	Virginia Anemone				S3	28	19.9 ± 1.0	NS
P	<i>Galium labradoricum</i>	Labrador Bedstraw				S3	103	41.1 ± 0.0	NS
P	<i>Salix pedicellaris</i>	Bog Willow				S3	55	23.9 ± 7.0	NS
P	<i>Salix sericea</i>	Silky Willow				S3	1	90.5 ± 1.0	NS
P	<i>Lindernia dubia</i>	Yellow-seeded False Pimperel				S3	46	13.0 ± 0.0	NS
P	<i>Laportea canadensis</i>	Canada Wood Nettle				S3	46	13.1 ± 0.0	NS
P	<i>Pilea pumila</i>	Dwarf Clearweed				S3	29	36.8 ± 6.0	NS
P	<i>Viola nephrophylla</i>	Northern Bog Violet				S3	10	12.1 ± 1.0	NS
P	<i>Carex bebbii</i>	Bebb's Sedge				S3	20	28.1 ± 0.0	NS
P	<i>Carex castanea</i>	Chestnut Sedge				S3	26	62.6 ± 0.0	NS
P	<i>Carex cryptolepis</i>	Hidden-scaled Sedge				S3	13	41.8 ± 0.0	NS
P	<i>Carex eburnea</i>	Bristle-leaved Sedge				S3	33	47.4 ± 0.0	NS

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P	<i>Carex hirtifolia</i>	Pubescent Sedge				S3	44	12.7 ± 0.0	NS
P	<i>Carex lupulina</i>	Hop Sedge				S3	30	6.6 ± 0.0	NS
P	<i>Carex rosea</i>	Rosy Sedge				S3	20	5.3 ± 0.0	NS
P	<i>Carex tenera</i>	Tender Sedge				S3	8	6.3 ± 1.0	NS
P	<i>Carex tribuloides</i>	Blunt Broom Sedge				S3	12	19.2 ± 2.0	NS
P	<i>Carex tuckermanii</i>	Tuckerman's Sedge				S3	12	6.8 ± 0.0	NS
P	<i>Eleocharis nitida</i>	Quill Spikerush				S3	4	83.5 ± 7.0	NS
P	<i>Eleocharis flavescens</i> var. <i>olivacea</i>	Bright-green Spikerush				S3	7	41.7 ± 0.0	NS
P	<i>Eleocharis quinqueflora</i>	Few-flowered Spikerush				S3	1	97.0 ± 3.0	PE
P	<i>Eriophorum gracile</i>	Slender Cottongrass				S3	14	38.3 ± 10.0	NS
P	<i>Schoenoplectus americanus</i>	Olney's Bulrush				S3	1	77.3 ± 0.0	NS
P	<i>Coeloglossum viride</i>	Long-bracted Frog Orchid				S3	1	64.7 ± 0.0	NS
P	<i>Cypripedium parviflorum</i>	Yellow Lady's-slipper				S3	26	12.2 ± 0.0	NS
P	<i>Neottia bifolia</i>	Southern Twayblade				S3	25	28.6 ± 0.0	NS
P	<i>Platanthera grandiflora</i>	Large Purple Fringed Orchid				S3	132	9.0 ± 0.0	NS
P	<i>Platanthera hookeri</i>	Hooker's Orchid				S3	17	50.5 ± 0.0	NS
P	<i>Dichanthelium linearifolium</i>	Narrow-leaved Panic Grass				S3	4	18.1 ± 7.0	NS
P	<i>Piptatheropsis canadensis</i>	Canada Ricegrass				S3	9	45.5 ± 1.0	NS
P	<i>Poa glauca</i>	Glaucous Blue Grass				S3	1	96.0 ± 0.0	NS
P	<i>Stuckenia filiformis</i>	Thread-leaved Pondweed				S3	7	81.1 ± 0.0	PE
P	<i>Potamogeton praelongus</i>	White-stemmed Pondweed				S3	43	17.7 ± 1.0	NS
P	<i>Potamogeton richardsonii</i>	Richardson's Pondweed				S3	6	12.9 ± 7.0	NS
P	<i>Potamogeton zosteriformis</i>	Flat-stemmed Pondweed				S3	16	43.3 ± 0.0	NS
P	<i>Asplenium viride</i>	Green Spleenwort				S3	9	62.5 ± 7.0	NS
P	<i>Dryopteris fragrans</i>	Fragrant Wood Fern				S3	7	26.3 ± 7.0	NS
P	<i>Sceptridium dissectum</i>	Dissected Moonwort				S3	6	11.6 ± 5.0	NS
P	<i>Polypodium appalachianum</i>	Appalachian Polypody				S3	13	12.8 ± 0.0	NS
P	<i>Persicaria amphibia</i> var. <i>emersa</i>	Long-root Smartweed				S3?	3	65.2 ± 0.0	NS
P	<i>Spiranthes ochroleuca</i>	Yellow Ladies'-tresses				S3?	13	25.1 ± 0.0	NS
P	<i>Diphasiastrum x sabinifolium</i>	Savin-leaved Ground-cedar				S3?	14	20.5 ± 0.0	NS
P	<i>Bidens vulgata</i>	Tall Beggarticks				S3S4	5	29.7 ± 0.0	NS
P	<i>Erigeron hyssopifolius</i>	Hyssop-leaved Fleabane				S3S4	36	56.6 ± 0.0	NS
P	<i>Hieracium paniculatum</i>	Panicled Hawkweed				S3S4	6	10.1 ± 0.0	NS
P	<i>Bidens beckii</i>	Water Beggarticks				S3S4	13	25.9 ± 0.0	NS
P	<i>Packera paupercula</i>	Balsam Groundsel				S3S4	75	20.0 ± 0.0	NS
P	<i>Atriplex glabriuscula</i> var. <i>franktonii</i>	Frankton's Saltbush				S3S4	7	27.0 ± 2.0	NS
P	<i>Vaccinium boreale</i>	Northern Blueberry				S3S4	4	90.7 ± 0.0	NS
P	<i>Vaccinium cespitosum</i>	Dwarf Bilberry				S3S4	54	26.7 ± 0.0	NS
P	<i>Vaccinium corymbosum</i>	Highbush Blueberry				S3S4	1	96.4 ± 3.0	PE
P	<i>Fagus grandifolia</i>	American Beech				S3S4	213	5.6 ± 1.0	NS
P	<i>Bartonia virginica</i>	Yellow Bartonia				S3S4	1	90.5 ± 7.0	NS
P	<i>Proserpinaca pectinata</i>	Comb-leaved Mermaidweed				S3S4	2	40.7 ± 1.0	NS
P	<i>Decodon verticillatus</i>	Swamp Loosestrife				S3S4	1	89.3 ± 0.0	PE
P	<i>Nuphar microphylla</i>	Small Yellow Pond-lily				S3S4	3	12.7 ± 2.0	NS
P	<i>Persicaria pensylvanica</i>	Pennsylvania Smartweed				S3S4	22	12.1 ± 0.0	NS
P	<i>Fallopia scandens</i>	Climbing False Buckwheat				S3S4	46	13.1 ± 0.0	NS
P	<i>Rumex pallidus</i>	Seabeach Dock				S3S4	2	76.6 ± 0.0	NS
P	<i>Pyrola asarifolia</i>	Pink Pyrola				S3S4	16	23.3 ± 0.0	NS
P	<i>Endotropis alnifolia</i>	alder-leaved buckthorn				S3S4	284	41.1 ± 0.0	NS
P	<i>Amelanchier spicata</i>	Running Serviceberry				S3S4	13	10.0 ± 2.0	NS
P	<i>Crataegus succulenta</i>	Fleshy Hawthorn				S3S4	5	80.4 ± 5.0	PE
P	<i>Fragaria vesca</i> ssp. <i>americana</i>	Woodland Strawberry				S3S4	68	23.1 ± 1.0	NS
P	<i>Fragaria vesca</i>	Woodland Strawberry				S3S4	1	62.7 ± 0.0	NS
P	<i>Galium aparine</i>	Common Bedstraw				S3S4	16	39.1 ± 4.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Geocaulon lividum</i>	Northern Comandra				S3S4	17	57.4 ± 0.0	NS
P	<i>Limosella australis</i>	Southern Mudwort				S3S4	45	52.0 ± 1.0	PE
P	<i>Ulmus americana</i>	White Elm				S3S4	87	6.3 ± 2.0	NS
P	<i>Verbena hastata</i>	Blue Vervain				S3S4	210	5.4 ± 0.0	NS
P	<i>Viola sagittata var. ovata</i>	Arrow-Leaved Violet				S3S4	4	70.3 ± 1.0	PE
P	<i>Viola selkirkii</i>	Great-Spurred Violet				S3S4	4	64.7 ± 0.0	NS
P	<i>Symplocarpus foetidus</i>	Eastern Skunk Cabbage				S3S4	19	92.7 ± 0.0	NB
P	<i>Carex argyrantha</i>	Silvery-flowered Sedge				S3S4	1	57.2 ± 5.0	PE
P	<i>Triglochin gaspensis</i>	Gasp Arrowgrass				S3S4	24	90.5 ± 0.0	NS
P	<i>Juncus acuminatus</i>	Sharp-Fruit Rush				S3S4	3	64.1 ± 0.0	NS
P	<i>Juncus subcaudatus</i>	Woods-Rush				S3S4	19	19.6 ± 5.0	NS
P	<i>Luzula parviflora ssp. melanocarpa</i>	Black-fruited Woodrush				S3S4	5	57.6 ± 0.0	NS
P	<i>Goodyera repens</i>	Lesser Rattlesnake-plantain				S3S4	9	43.0 ± 1.0	PE
P	<i>Liparis loeselii</i>	Loesel's Twayblade				S3S4	23	43.5 ± 5.0	PE
P	<i>Platanthera obtusata</i>	Blunt-leaved Orchid				S3S4	6	65.6 ± 1.0	NS
P	<i>Platanthera orbiculata</i>	Small Round-leaved Orchid				S3S4	39	2.9 ± 0.0	NS
P	<i>Alopecurus aequalis</i>	Short-awned Foxtail				S3S4	26	33.1 ± 1.0	NS
P	<i>Dichanthelium clandestinum</i>	Deer-tongue Panic Grass				S3S4	119	59.9 ± 0.0	NS
P	<i>Panicum philadelphicum</i>	Philadelphia Panicgrass				S3S4	11	53.0 ± 0.0	NS
P	<i>Koeleria spicata</i>	Narrow False Oats				S3S4	9	20.3 ± 0.0	NS
P	<i>Equisetum pratense</i>	Meadow Horsetail				S3S4	10	30.1 ± 0.0	NS
P	<i>Diphasiastrum complanatum</i>	Northern Ground-cedar				S3S4	12	28.3 ± 0.0	NS
P	<i>Diphasiastrum sitchense</i>	Sitka Ground-cedar				S3S4	7	31.8 ± 5.0	NS
P	<i>Huperzia appressa</i>	Mountain Firmoss				S3S4	7	30.8 ± 5.0	NS
P	<i>Sceptridium multifidum</i>	Leathery Moonwort				S3S4	23	19.9 ± 0.0	NS
P	<i>Botrychium matricariifolium</i>	Daisy-leaved Moonwort				S3S4	17	12.4 ± 10.0	NS
P	<i>Viola canadensis</i>	Canada Violet				SH	1	32.7 ± 7.0	NS

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The recipient of these data shall acknowledge the AC CDC and the data sources listed below in any documents, reports, publications or presentations, in which this dataset makes a significant contribution.

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13	Robinson, S.L. 2015. 2014 field data.
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12	Plissner, J.H. & Haig, S.M. 1997. 1996 International piping plover census. US Geological Survey, Corvallis OR, 231 pp.
12	Spicer, C.D. 2002. Fieldwork 2002. Atlantic Canada Conservation Data Centre. Sackville NB, 211 recs.
11	Downes, C. 1998-2000. Breeding Bird Survey Data. Canadian Wildlife Service, Ottawa, 111 recs.
11	Klymko, J. 2021. Atlantic Canada Conservation Data Centre zoological fieldwork 2020. Atlantic Canada Conservation Data Centre.
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10	Bateman, M.C. 2001. Coastal Waterfowl Surveys Database, 1965-2001. Canadian Wildlife Service, Sackville, 667 recs.
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8	Cameron, R.P. 2012. Rob Cameron 2012 vascular plant data. NS Department of Environment, 30 recs.
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8	Porter, Caitlin. 2021. Field data for 2020 in various locations across the Maritimes. Atlantic Canada Conservation Data Centre, 3977 records.
7	Basquill, S.P. 2003. Fieldwork 2003. Atlantic Canada Conservation Data Centre, Sackville NB, 69 recs.
7	Belland, R.J. 2012. PEI moss records from Devonian Botanical Garden. DBG Cryptogam Database, Web site: <a href="https://secure.devonian.ualberta.ca/bryo_search.php">https://secure.devonian.ualberta.ca/bryo_search.php</a> 748 recs.
7	Benjamin, L.K. 2009. Boreal Felt Lichen, Mountain Avens, Orchid and other recent records. Nova Scotia Dept Natural Resources, 105 recs.
7	Brazner, J. 2016. Nova Scotia Forested Wetland Bird Surveys. Nova Scotia Department of Lands and Forestry.
7	Cameron, B. 2006. Hepatica americana Survey at Scotia Mine Site in Gays River, and Discovery of Three Yellow-listed Species. Conestoga-Rovers and Associates, (a consulting firm), october 25. 7 recs.
7	Harding, R.W. 2008. Harding Personal Insect Collection 1999-2007. R.W. Harding, 309 recs.
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7	Sabine, D.L. 2013. Dwaine Sabine butterfly records, 2009 and earlier.
7	Taylor, B.R., and Tam, J.C. 2012. Local distribution of the rare plant <i>Triosteum aurantiacum</i> in northeastern Nova Scotia, Canada. <i>Rhodora</i> , 114(960): 366-382.
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6	Gallop, John. 2021. Sheet Harbour rare lichen observations. McCallum Environmental.
6	Hall, R. 2008. Rare plant records in old fieldbook notes from Truro area. Pers. comm. to C.S. Blaney. 6 recs, 6 recs.
6	Kelly, G. 2005. <i>Fraxinus nigra</i> . Dept of Agriculture, Fisheries, Aquaculture & Forestry. Pers. comm. to C.S. Blaney, Mar. 2, 11 recs.
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5	Bryson, I. 2020. Nova Scotia and Newfoundland rare species observations, 2018-2020. Nova Scotia Environment.
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5	Erskine, A.J. 1999. Maritime Nest Records Scheme (MNRS) 1937-1999. Canadian Wildlife Service, Sackville, 313 recs.
5	Feltham, Carter. 2022. Monarch ( <i>Danaus plexippus</i> ) and Milkweed MTRI records from the 2022 Field Season. Mersey Tobeatic Research Institute.
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5	Majka, C.G. 2008. Lepidoptera at St Patricks, 1993-2007. Pers. comm. to R. Curley, 8 Jan. 29 recs, 29 recs.
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5	Smith, M.E.M. 2008. AgCan Collection. Agriculture Canada, Charlottetown PE, 44 recs.
5	Towell, C. 2014. 2014 Northern Goshawk and Common Nighthawk email reports, NS. NS Department of Natural Resources.
5	Walker, J. 2017. Bird inventories at French River, NS, and Memramcook, NB, for Nature Conservancy of Canada. Pers. comm. to AC CDC.
4	Blaney, C.S. 2016. Atlantic Canada Conservation Data Centre Fieldwork 2016. Atlantic Canada Conservation Data Centre, 6719 recs.
4	Bredin, K.A. 2002. NS Freshwater Mussel Fieldwork. Atlantic Canada Conservation Data Centre, 30 recs.
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4	O'Neil, S. 1998. Atlantic Salmon: Eastern Shore Nova Scotia SFA 20. Dept of Fisheries & Oceans, Atlantic Region, Science. Stock Status Report D3-10. 4 recs.
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3	Benedict, B. Connell Herbarium Specimens (Data) . University New Brunswick, Fredericton. 2003.
3	Benjamin, L.K. 2006. <i>Cyripedium arietinum</i> . Pers. comm. to D. Mazerolle. 9 recs, 9 recs.
3	Blaney, C.S. Miscellaneous specimens received by ACCDC (botany). Various persons. 2001-08.
3	Boyne, A.W. & Grecian, V.D. 1999. Tern Surveys. Canadian Wildlife Service, Sackville, unpublished data. 23 recs.
3	Brunelle, P.-M. (compiler). 2010. ADIP/MDDS Odonata Database: NB, NS Update 1900-09. Atlantic Dragonfly Inventory Program (ADIP), 935 recs.
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3	Clayden, S.R. 2007. NBM Science Collections databases: vascular plants. New Brunswick Museum, Saint John NB, download Mar. 2007, 6914 recs.
3	Gagnon, J. 2004. Specimen data from 2002 visit to Prince Edward Island. , 104 recs.
3	Klymko, J.J.D. 2011. Insect fieldwork & submissions, 2010. Atlantic Canada Conservation Data Centre. Sackville NB, 742 recs.
3	Mersey Tobeatic Research Institute. 2022. Nova Scotia Bobolink observations. pers. comm. to J. Churchill.
3	Neily, T.H. & Pepper, C.; Toms, B. 2018. Nova Scotia lichen database Update. Mersey Tobeatic Research Institute, 14 recs.
3	Neily, T.H. 2016. Email communication (May 6, 2016) to Sean Blaney regarding <i>Fissidens exilis</i> observations made in 2016 in Nova Scotia. Pers. Comm., 3 recs.
3	Parker, M. 2016. Wood turtle ( <i>Glyptemys insculpta</i> ) Visual Surveys at Black, Wallace, Musquodobit and Sackville Rivers, Nova Scotia. East Coast Aquatics Inc., 3 records.
3	Standley, L.A. 2002. <i>Carex haydenii</i> in Nova Scotia. , Pers. comm. to C.S. Blaney. 4 recs.
3	Thompson, R. 2018. Williamsdale Quarry Expansion Project, NS, Environmental Assessment rare plants. Dexter Construction Company Limited.
2	Amirault, D.L. 2003. 2003 Peregrine Falcon Survey. Canadian Wildlife Service, Sackville, unpublished data. 7 recs.
2	Basquill, S.P. 2012. 2012 Bryophyte specimen data. Nova Scotia Department of Natural Resources, 37 recs.
2	Basquill, S.P., Porter, C. 2019. Bryophyte and lichen specimens submitted to the E.C. Smith Herbarium. NS Department of Lands and Forestry.
2	Benjamin, L.K. 2009. NSDNR Fieldwork & Consultants Reports. Nova Scotia Dept Natural Resources, 143 recs.
2	Cameron, B. 2005. <i>C. palmicola</i> , <i>E. pedicellatum</i> records from Sixth Lake. Pers. comm. to C.S. Blaney. 3 recs, 3 recs.
2	Cameron, R.P. 2012. Additional rare plant records, 2009. , 7 recs.
2	Chapman, Cody. Unreported Species at Risk Records across Nova Scotia. Chapman, Cody, 5 records.
2	COSEWIC (Committee on the Status of Wildlife in Canada). 2013. COSEWIC Assessment and Status Report on the Eastern Waterflea <i>Peltigera hydrothyrta</i> in Canada. COSEWIC, 46 pp.
2	Curley, F.R. 2003. Glen Kelly records for <i>Betula pumila</i> & <i>Asclepias syriaca</i> on PEI. , Pers. comm. to C.S. Blaney. 9 recs.
2	de Graaf, M.; Miller, D. 2020. Records of <i>Cyripedium reginae</i> and <i>Equisetum variegatum</i> from CFI property at Scoudouc Road and <i>Symplocarpus foetidus</i> from CFI properties at Upper Cape, Westmorland County, NB. pers. comm. (ed.) Community Forests International, 4 records.
2	Frittaion, C. 2012. NSNT 2012 Field Observations. Nova Scotia Nature Trust, Pers comm. to S. Blaney Feb. 7, 34 recs.
2	Giroux, P. 2013. Personal communication concerning species at risk in and around PEI NP, PE. Winter 2013. Pers. comm.
2	Hill, N. 2003. <i>Floerkea proserpinacoides</i> at Heatherdale, Antigonish Co. 2002. , Pers. comm. to C.S. Blaney. 2 recs.
2	Layberry, R.A. 2012. Lepidopteran records for the Maritimes, 1974-2008. Layberry Collection, 1060 recs.
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2	Neily, T.H.; Smith, C.; Whitman, E. 2011. NCC Logging Lake (Halifax Co. NS) properties baseline survey data. Nature Conservancy of Canada, 2 recs.
2	Speers, L. 2001. Butterflies of Canada database. Agriculture & Agri-Food Canada, Biological Resources Program, Ottawa, 190 recs.
2	Thomas, H.H., Jones, G.S. & Diblee, R.L. 1980. <i>Sorex palustris</i> on Prince Edward Island. Can. Field Nat., vol 94:329-331. 2 recs.
2	Webster, R.P. & Edsall, J. 2007. 2005 New Brunswick Rare Butterfly Survey. Environmental Trust Fund, unpublished report, 232 recs.
2	Whittam, R.M. 1999. Status Report on the Roseate Tern (update) in Canada. Committee on the Status of Endangered Wildlife in Canada, 36 recs.
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1	Amirault, D.L. 2005. 2005 Peregrine Falcon Survey. Canadian Wildlife Service, Sackville, unpublished data. 27 recs.
1	Amiro, Peter G. 1998. Atlantic Salmon: Inner Bay of Fundy SFA 22 & part of SFA 23. Dept of Fisheries & Oceans, Atlantic Region, Science Stock Status Report D3-12. 4 recs.
1	Atlantic Canada Bank Swallow Working Group. 2022. 2021 Bank Swallow colony records. Birds Canada.
1	Basquill, S.P. 2009. 2009 field observations. Nova Scotia Dept of Natural Resources.
1	Bateman, M.C. & Prescott, W.H. 1984. The Mammals of Prince Edward Island National Park. Canadian Wildlife Service, vol 2:5. 3 recs.
1	Belland, R.J. 2012. PEI moss records from New York Botanical Garden. NYBG Virtual Herbarium, Web site: <a href="http://sciweb.nybg.org/science2/vii2.asp">http://sciweb.nybg.org/science2/vii2.asp</a> 135 recs.
1	Belliveau, A.G. E.C. Smith Herbarium Specimen Database 2019. E.C. Smith Herbarium, Acadia University. 2019.
1	Benedict, B. Connell Herbarium Specimens. University New Brunswick, Fredericton. 2003.
1	Blaney, C.S. & Mazerolle, D.M. 2011. Field data from NCC properties at Musquash Harbour NB & Goose Lake NS. Atlantic Canada Conservation Data Centre, 1739 recs.
1	Bonnyman, Vanessa. 2021. Eastern Wood-Pewee Observation on Bonshaw Trail, PEI.
1	Bruce, J. 2014. 2014 Wood Turtle email report, Nine Mile River, NS. NS Department of Natural Resources.
1	Cairns, D. 1998. Atlantic Salmon: Prince Edward Island SFA 17. Dept of Fisheries & Oceans, Atlantic Region, Science. Stock Status Report D3-07. 1 rec.
1	Cameron, R.P. 2009. Nova Scotia nonvascular plant observations, 1995-2007. Nova Scotia Dept Natural Resources, 27 recs.
1	Christie, D.S. 2000. Christmas Bird Count Data, 1997-2000. Nature NB, 54 recs.
1	Churchill, J.L. 2018. Atlantic Canada Conservation Data Centre Fieldwork 2018. Atlantic Canada Conservation Data Centre, 907 recs.
1	Clayden, S.R. 2006. <i>Pseudevernia cladonia</i> records. NB Museum. Pers. comm. to S. Blaney, Dec, 4 recs.
1	Clayden, S.R. 2020. Email to Sean Blaney regarding <i>Pilophorus cereus</i> and <i>P. fibula</i> at Fidele Lake area, Charlotte County, NB. pers. comm., 2 records.
1	Curley, F.R. 2021. <i>Nymphalis l-album</i> record from near Belfast PEI. Pers. comm. to J. Klymko.
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1	Gagnon, J. 2003. Prince Edward Island plant records. Societe de la faune et des parcs Quebec, 13 recs.
1	Golder Associates Ltd. 2021. Black Ash location from Goff's Quarry Expansion Environment Assessment, 2017. Golder Associates Ltd., 1 record.
1	Harling, L. & Silva, M. 2004. Abundance & species richness of shrews within forested habitats on PEI. Am. Midl. Nat., 151:399-407. 2 recs.
1	Harris, Megan. 2018. Miscellaneous Sorex palustris record. Pers. comm. to S. Blaney.
1	Haughian, S.R. 2018. Description of Fuscopannaria leucosticta field work in 2017. New Brunswick Museum, 314 recs.
1	Hill, N.M. 2021. Observation of Carex haydenii and black ash near Marshy Hope and Ponhook Lake. pers. comm.
1	Hinds, H.R. 1989. Greenwich, Blooming Point plant collections in Plant locations. Pers. Comm. to Robin Day (Ag. Can). 2pp, 8 recs, 8 recs.
1	Honeyman, K. 2019. Unique Areas Database, 2018. J.D. Irving Ltd.
1	Jacques Whitford Ltd. 2003. Cananda Lily location. Pers. Comm. to S. Blaney. 2pp, 1 rec, 1 rec.
1	Jardine, Don. 2022. Email to AC CDC reporting an Evening Grosbeak Sighting in Winsloe South, PEI. pers. comm.
1	Kelly, Glen 2004. Botanical records from 2004 PEI Forestry fieldwork. Dept of Environment, Energy & Forestry, 71 recs.
1	Klymko, J. Henry Hensel's Butterfly Collection Database. Atlantic Canada Conservation Data Centre. 2016.
1	Klymko, J. Partial database of the Agriculture Canada Charlottetown Research Station Insect Collection butterfly specimens. Atlantic Canada Conservation Data Centre. 2016.
1	Klymko, J.J.D. 2010. Miscellaneous observations reported to ACCDC (zoology). Pers. comm. from various persons, 3 recs.
1	Klymko, J.J.D. 2012. Insect field work & submissions. Atlantic Canada Conservation Data Centre, 852 recs.
1	Macauley, M. 2008. Email to Sean Blaney regarding rich hardwood floodplain site at Howards Pool, Wallace River, NS.
1	MacAuley, M. 2020. Email to Sean Blaney regarding Agalinis paupercula var. parviflora at Malagash Station, NS. pers. comm., 2 records.
1	MacPhail, V. Bee and syrphid specimens from MSc research. Pers. comm., J. Klymko. 2006.
1	MacQuarrie, K. and R. Sharkie. 2004. Plant lists for selected areas at Brackley and Dalvay, Prince Edward Island National Park. Island Nature Trust, 168 recs.
1	Mazerolle, D.M. 2005. Bouctouche Irving Eco-Centre rare coastal plant fieldwork results 2004-05. Irving Eco-centre, la Dune du Bouctouche, 174 recs.
1	McAlpine, D.F. 1998. NBM Science Collections databases to 1998. New Brunswick Museum, Saint John NB, 241 recs.
1	McNeil, J.A. 2019. Snapping Turtle records, 2019. Mersey Tobeatic Research Institute.
1	Neily, P.D. Plant Specimens. Nova Scotia Dept Natural Resources, Truro. 2006.
1	Neily, T.H. & Pepper, C.; Toms, B. 2019. Boreal Felt Lichen Observation, April 2019. Mersey Tobeatic Research Institute.
1	Neily, T.H. 2013. Email communication to Sean Blaney regarding Agalinis paupercula observations made in 2013 in Nova Scotia. , 1 rec.
1	Oehlke, W. 1999. Record of Polygonia satyrus from Prince Edward Island. <a href="http://www.silkmoths.bizland.com/ppsatyr.htm">http://www.silkmoths.bizland.com/ppsatyr.htm</a> .
1	Parker, M. 2018. East Coast Aquatics ACCDC 2018 Report. East Coast Aquatics, 12 records.
1	Parks Canada. 2010. Specimens in or near National Parks in Atlantic Canada. Canadian National Museum, 3925 recs.
1	Payzant, P. 2018. Satyr Comma record from Bible Hill, NS. <a href="https://novascotiabutterflies.ca">https://novascotiabutterflies.ca</a> .
1	Quigley, E.J. 2021. Email to Sean Blaney regarding Eastern White Cedar (Thuja occidentalis) stand near Shinimicas Bridge. NSDLF, 1 record.
1	Robinson, C.B. 1907. Early intervale flora of eastern Nova Scotia. Transactions of the Nova Scotia Institute of Science, 10:502-506. 1 rec.
1	Sabine, M. 2016. NB DNR staff incidental Black Ash observations. New Brunswick Department of Natural Resources.
1	Shortt, R. UNB specimen data for various tracked species formerly considered secure. Connell Memorial Herbarium, UNB, Fredericton NB. 2019.
1	Skevington, Jeffrey H. 2020. Syrphid records used for the Field Guide to the Flower Flies of Northeastern North America. Canadian National Collection of Insects.
1	Stephen Freeman. 2022. New location for Black Ash in Queens County, NS. Personal communication, 2.
1	te Raa, J. 2016. Island Naturalist. Nature PEI, 219.
1	Williams, M. Cape Breton University Digital Herbarium. Cape Breton University Digital Herbarium. 2013.
1	Wilson, G. 2013. 2013 Snapping Turtle email report, Wentworth, NS. Pers. comm.



**APPENDIX D. PLANT LIST**



SIX MILE BROOK QUARRY EXPANSION PROJECT  
VASCULAR PLANT, LICHEN, AND BRYOPHYTE LIST

Scientific Name	Common Name	SRank	SARA	NSESA	Invasive (Yes/No)
<i>Galium mollugo</i>	Smooth Bedstraw	SNA	-	-	No
<i>Ribes hirtellum</i>	Smooth Gooseberry	S5	-	-	No
<i>Viola cucullata</i>	Marsh Blue Violet	S5	-	-	No
<i>Cardamine pensylvanica</i>	Pennsylvania Bittercress	S5	-	-	No
<i>Alnus alnobetula</i>	Green Alder	S5	-	-	No
<i>Carex intumescens</i>	Bladder Sedge	S5	-	-	No
<i>Carex interior</i>	Inland Sedge	S4S5	-	-	No
<i>Carex leptalea</i>	Bristly-stalked Sedge	S5	-	-	No
<i>Chrysosplenium americanum</i>	American Golden Saxifrage	S5	-	-	No
<i>Carex gynandra</i>	Nodding Sedge	S5	-	-	No
<i>Equisetum sylvaticum</i>	Woodland Horsetail	S5	-	-	No
<i>Ribes lacustre</i>	Bristly Black Currant	S5	-	-	No
<i>Senecio vulgaris</i>	Common Ragwort	SNA	-	-	No
<i>Cornus canadensis</i>	Bunchberry	S5	-	-	No
<i>Juncus effusus</i>	Soft Rush	S5	-	-	No
<i>Typha latifolia</i>	Broad-leaved Cattail	S5	-	-	No
<i>Myosotis spp.</i>	Forget me not	-	-	-	-
<i>Carex stipata</i>	Awl-fruited Sedge	S5	-	-	No
<i>Claytosmunda claytoniana</i>	Interrupted Fern	S5	-	-	No
<i>Pinus strobus</i>	Eastern White Pine	S5	-	-	No
<i>Linnaea borealis</i>	Twinflower	S5	-	-	No
<i>Mitchella repens</i>	Partridgeberry	S5	-	-	No
<i>Spiraea alba</i>	White Meadowsweet	S5	-	-	No
<i>Ilex mucronata</i>	Mountain Holly	S5	-	-	No
<i>Chamaedaphne calyculata</i>	Leatherleaf	S5	-	-	No
<i>Frangula alnus</i>	Glossy Buckthorn	SNA	-	-	Yes
<i>Scirpus cyperinus</i>	Common Woolly Bulrush	S5	-	-	No
<i>Scirpus microcarpus</i>	Small-fruited Bulrush	S5	-	-	No





SIX MILE BROOK QUARRY EXPANSION PROJECT  
VASCULAR PLANT, LICHEN, AND BRYOPHYTE LIST

Scientific Name	Common Name	SRank	SARA	NSESA	Invasive (Yes/No)
<i>Athyrium filix-femina</i>	Common Lady Fern	S5	-	-	No
<i>Carex disperma</i>	Two-seeded Sedge	S5	-	-	No
<i>Persicaria sagittata</i>	Arrow-leaved Smartweed	S5	-	-	No
<i>Viola macloskeyi</i>	Small White Violet	S5	-	-	No
<i>Gaylussacia baccata</i>	Black Huckleberry	S5	-	-	No
<i>Cornus sericea</i>	Red Osier Dogwood	S5	-	-	No
<i>Monotropa uniflora</i>	Convulsion-Root	S5	-	-	No
<i>Viburnum cassinoides</i>	Northern Wild Raisin	S5	-	-	No
<i>Ostrya virginiana</i>	Ironwood	S4S5	-	-	No
<i>Cornus alternifolia</i>	Alternate-leaved Dogwood	S5	-	-	No
<i>Populus grandidentata</i>	Large-toothed Aspen	S5	-	-	No
<i>Populus tremuloides</i>	Trembling Aspen	S5	-	-	No
<i>Betula alleghaniensis</i>	Yellow Birch	S5	-	-	No
<i>Betula papyrifera</i>	Paper Birch	S5	-	-	No
<i>Acer saccharum</i>	Sugar Maple	S4S5	-	-	No
<i>Maianthemum racemosum</i>	Large False Solomon's Seal	S4S5	-	-	No
<i>Fraxinus americana</i>	White Ash	S4	-	-	No
<i>Diervilla lonicera</i>	Northern Bush Honeysuckle	S5	-	-	No
<i>Prunus serotina</i>	Black Cherry	S5	-	-	No
<i>Hieracium lachenalii</i>	Common Hawkweed	SNA	-	-	No
<i>Ranunculus repens</i>	Creeping Buttercup	SNA	-	-	Yes
<i>Impatiens spp.</i>	Jewelweed spp.	-	-	-	-
<i>Corylus cornuta ssp. cornuta</i>	Beaked Hazelnut	S5	-	-	No
<i>Matteuccia struthiopteris</i>	Ostrich Fern	S5	-	-	No
<i>Solidago flexicaulis</i>	Zigzag Goldenrod	S5	-	-	No
<i>Thalictrum pubescens</i>	Tall Meadow-Rue	S5	-	-	No
<i>Equisetum pratense</i>	<b>Meadow Horsetail</b>	<b>S3S4</b>	-	-	<b>No</b>
<i>Tussilago farfara</i>	Coltsfoot	SNA	-	-	Yes



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<i>Carex scabrata</i>	Rough Sedge	S5	-	-	No
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	SNA	-	-	Yes
<i>Galium spp.</i>	Bedstraw	-	-	-	-
<i>Carex gracillima</i>	Graceful Sedge	S5	-	-	No
<i>Dennstaedtia punctilobula</i>	Eastern Hay-Scented Fern	S5	-	-	No
<i>Lathyrus spp.</i>	Vetchling	-	-	-	-
<i>Tsuga canadensis</i>	Eastern Hemlock	S4	-	-	No
<i>Trillium cernuum</i>	Nodding Trillium	S4	-	-	No
<i>Abies balsamea</i>	Balsam Fir	S5	-	-	No
<i>Polystichum acrostichoides</i>	Christmas Fern	S5	-	-	No
<i>Viburnum lantanoides</i>	Hobblebush	S4	-	-	No
<i>Picea rubens</i>	Red Spruce	S5	-	-	No
<i>Acer pensylvanicum</i>	Striped Maple	S5	-	-	No
<i>Ranunculus recurvatus</i>	Hooked Buttercup	S4	-	-	No
<i>Onoclea sensibilis</i>	Sensitive Fern	S5	-	-	No
<i>Geranium robertianum</i>	Herb Robert	S4	-	-	No
<i>Nabalus altissimus</i>	Tall Rattlesnakeroot	S5	-	-	No
<i>Taraxacum officinale</i>	Common Dandelion	SNA	-	-	No
<i>Rumex obtusifolius</i>	Bitter Dock	SNA	-	-	No
<i>Fragaria virginiana</i>	Wild Strawberry	S5	-	-	No
<i>Rubus idaeus</i>	Red Raspberry	S5	-	-	No
<i>Chamaenerion angustifolium ssp. angustifolium</i>	Fireweed	SNA	-	-	No
<i>Aquilegia vulgaris</i>	European Columbine	SNA	-	-	No
<i>Salix eriocephala</i>	Cottony Willow	S5	-	-	No
<i>Geum rivale</i>	Water Avens	S5	-	-	No
<i>Geum macrophyllum</i>	Large-Leaved Avens	S5	-	-	No
<i>Clintonia borealis</i>	Yellow Bluebead Lily	S5	-	-	No
<i>Maianthemum canadense</i>	Wild Lily-of-The-Valley	S5	-	-	No



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<i>Pteridium aquilinum</i>	Bracken Fern	S5	-	-	No
<i>Lysimachia borealis</i>	Northern Starflower	S5	-	-	No
<i>Gymnocarpium dryopteris</i>	Common Oak Fern	S5	-	-	No
<i>Sambucus canadensis</i>	Common Elderberry	S5	-	-	No
<i>Solanum dulcamara</i>	Bittersweet Nightshade	SNA	-	-	No
<i>Betula populifolia</i>	Gray Birch	S5	-	-	No
<i>Acer rubrum</i>	Red Maple	S5	-	-	No
<i>Amelanchier spp.</i>	Serviceberry	-	-	-	-
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	S5	-	-	No
<i>Amauropeta noveboracensis</i>	New York Fern	S5	-	-	No
<i>Sorbus decora</i>	Showy Mountain Ash	S4	-	-	No
<b><i>Fagus grandifolia</i></b>	<b>American Beech</b>	<b>S3S4</b>	-	-	<b>No</b>
<i>Lonicera canadensis</i>	Canada Fly Honeysuckle	S5	-	-	No
<i>Medeola virginiana</i>	Cucumber Root	S5	-	-	No
<i>Dryopteris carthusiana</i>	Spinulose Wood Fern	S5	-	-	No
<i>Carex arctata</i>	Black Sedge	S5	-	-	No
<i>Anaphalis margaritacea</i>	Pearly Everlasting	S5	-	-	No
<i>Alnus incana</i>	Speckled Alder	S5	-	-	No
<i>Carduus spp.</i>	Thistle	-	-	-	-
<i>Rosa multiflora</i>	Multiflora Rose	SNA	-	-	Yes
<i>Lupinus spp.</i>	Lupine	-	-	-	-
<i>Rubus canadensis</i>	Smooth Blackberry	S5	-	-	No
<i>Sisyrinchium montanum</i>	Mountain Blue-eyed-grass	S5	-	-	No
<i>Vaccinium angustifolium</i>	Late Lowbush Blueberry	S5	-	-	No
<i>Veronica serpyllifolia</i>	Thyme-Leaved Speedwell	SU	-	-	No
<i>Plantago lanceolata</i>	English Plantain	SNA	-	-	No
<i>Sambucus racemosa</i>	Red Elderberry	S5	-	-	No
<i>Ribes glandulosum</i>	Skunk Currant	S5	-	-	No



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Scientific Name	Common Name	SRank	SARA	NSESA	Invasive (Yes/No)
<i>Osmundastrum cinnamomeum</i>	Cinnamon Fern	S5	-	-	No
<i>Prunus nigra</i>	Canada Plum	SNA	-	-	No
<i>Oenothera biennis</i>	Common Evening Primrose	S5	-	-	No
<i>Morella pensylvanica</i>	Northern Bayberry	S5	-	-	No
<i>Malus domestica</i>	Common Apple	SNA	-	-	No
<i>Dryopteris cristata</i>	Crested Wood Fern	S5	-	-	No
<i>Oxalis montana</i>	Common Wood Sorrel	S5	-	-	No
<i>Plantago major</i>	Common Plantain	SNA	-	-	No
<i>Trifolium pratense</i>	Red Clover	SNA	-	-	No
<i>Hypericum perforatum</i>	Common St. John's-wort	SNA	-	-	No
<i>Bellis perennis</i>	English Daisy	SNA	-	-	No
<i>Crataegus monogyna</i>	English Hawthorn	SNA	-	-	Yes
<i>Verbascum thapsus</i>	Common Muellin	SNA	-	-	No
<i>Achillea millefolium</i>	Common Yarrow	SNA	-	-	No
<i>Daucus carota</i>	Queen Anne's Lace	SNA	-	-	No
<i>Symphotrichum lateriflorum</i>	Calico Aster	S5	-	-	0
<i>Solidago rugosa</i>	Rough-stemmed Goldenrod	S5	-	-	No
<i>Oclemena acuminata</i>	Whorled Wood Aster	S5	-	-	No
<i>Oclemena nemoralis</i>	Bog Aster	S5	-	-	No
<i>Solidago puberula</i>	Downy Goldenrod	S5	-	-	No
<i>Juncus effusus</i>	Soft Rush	S5	-	-	Yes
<i>Vicia cracca</i>	Tufted Vetch	SNA	-	-	0
<i>Rudbeckia hirta</i>	Black-Eyed Susan	SNA	-	-	No
<i>Symphotrichum novi-belgii</i> var. <i>crenifolium</i>	New York Aster	SNR	-	-	0
<i>Solanum dulcamara</i>	Bittersweet Nightshade	SNA	-	-	No
<i>Cornus alternifolia</i>	Alternate-leaved Dogwood	S5	-	-	No
<i>Cornus sericea</i>	Red Osier Dogwood	S5	-	-	No
<i>Persicaria sagittata</i>	Arrow-leaved Smartweed	S5	-	-	No



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Scientific Name	Common Name	SRank	SARA	NSESA	Invasive (Yes/No)
<i>Potentilla argentea</i>	Silvery Cinquefoil	SNA	-	-	No
<i>Chelone glabra</i>	White Turtlehead	S5	-	-	Yes
<i>Saponaria officinalis</i>	Bouncing-Bet	SNA	-	-	No
<i>Spiranthes cernua</i>	Nodding Ladies'-Tresses	S4?	-	-	No
<i>Mentha</i> sp.			-	-	
<i>Juncus</i> sp.	-	-	-	-	-
<i>Dryopteris</i> sp.			-	-	
<i>Chrysanthemum</i> spp.	-		-	-	
<i>Potentilla</i> spp.			-	-	
Lichens					
<i>Melanholeana septentrionalis</i>	Northern Camouflage Lichen	S2S3			
<i>Fuscopannaria sorediata</i>		S2S3	-	-	
<i>Melanohalea olivacea</i>	Spotted Camouflage Lichen	S3S4	-	-	
<i>Stereocaulon dactylophyllum</i>	Finger Foam Lichen	S5			
<i>Lobaria pulmonaria</i>	Lungwort Lichen	S5			
<i>Lobaria scrobiculata</i>	Textured Lungwort Lichen	S5			
<i>Cladonia boryi</i>	Fishnet Lichen	S5			
<i>Ricasolia quercizans</i>	Smooth Lung lichen	S5			
<i>Menegazzia subsimilis</i>	Tree Flute lichen	S4S5			
<i>Cladonia macilenta</i>	Lipstick Powderhorn Lichen	S4S5			
<i>Cladonia rei</i>	Wand Lichen	S5			
<i>Cladonia stellaris</i>	Star-tipped Reindeer Lichen	S5			
<i>Pseudocyphellaria holarctica</i>	Yellow Specklebelly Lichen	S5			
<i>Parmelia sulcata</i>	Hammered shield lichen	S5			
<i>Parmelia squarrosa</i>	Bottlebrush Shield Lichen	S5			
<i>Protopannaria pezizoides</i>	Brown-gray Moss-shingle Lichen	S5			
<i>Lecanora caesiorubella</i>	A Lichen	S5			
<i>Dibaeis baeomyces</i>	Methuselah's beard lichen	S5	-	-	-



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VASCULAR PLANT, LICHEN, AND BRYOPHYTE LIST

Scientific Name	Common Name	SRank	SARA	NSESA	Invasive (Yes/No)
<i>Cladonia uncialis</i>	Thorn Lichen	S5	-	-	-
<i>Cladonia verticillata</i>	Ladder Lichen	S5	-	-	-
<i>Peltigera aphthosa</i>	Common Freckle Pelt Lichen	S5	-	-	-
Bryophytes					
<i>Pleurozium schreberi</i>	Red-stemmed Feather Moss	S5	-	-	-
<i>Hylocomium splendens</i>	Stairstep Moss	S5	-	-	-
<i>Sphagnum capillifolium</i>	Northern Peatmoss	S5	-	-	-
<i>Polytrichum commune</i>	Common Haircap Moss	S5	-	-	-
<i>Bazzania tribolata</i>	Three-lobed Whipwort	S5	-	-	-

NOTE: Priority species are **bolded**.



<i>Fuscopannaria soorediata</i>	A Lichen	S2S3
<i>Melanholeana septrentionalis</i>	Northern Camouflage Lichen	S2S3
<i>Stereocaulon dactylophyllum</i>	Finger Foam Lichen	S5
<i>Lobaria pulmonaria</i>	Lungwort Lichen	S5
<i>Lobaria scrobiculata</i>	Textured Lungwort Lichen	S5
<i>Cladonia boryi</i>	Fishnet Lichen	S5
<i>Ricasolia quercizans</i>	Smooth Lung lichen	S5
<i>Menegazzia subsimilis</i>	Tree Flute lichen	S4S5
<i>Cladonia macilenta</i>	Lipstick Powderhorn Lichen	S4S5
<i>Cladonia rei</i>	Wand Lichen	S5
<i>Cladonia stellaris</i>	Star-tipped Reindeer Lichen	S5
<i>Pseudocyphellaria holarctica</i>	Yellow Specklebelly Lichen	S5
<i>Parmelia sulcata</i>	Hammered shield lichen	S5
<i>Parmelia squarrosa</i>	Bottlebrush Shield Lichen	S5
<i>Protopannaria pezizoides</i>	Brown-gray Moss-shingle Lichen	S5
<i>Lecanora caesiorubella</i>	A Lichen	S5
<i>Hypogymnia physodes</i>	Monk's hood Lichen	S5
<i>Dibaeis baeomyces</i>	Methuselah's beard lichen	S5
<i>Cladonia uncialis</i>	Thorn Lichen	S5



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VASCULAR PLANT, LICHEN, AND BRYOPHYTE LIST

<i>Cladonia verticillata</i>	Ladder Lichen	S5
<i>Peltigera aphthosa</i>	Common Freckle Pelt Lichen	S5