

**Table 01: Plant Species List for Mid-Boreal Lowland**

Species	Common Name	Abundance	Distribution	Habitat
<i>Agropyron pectiniforme</i>	Crested wheat-grass	Scarce	Local	Roadsides in the central area of the Model Forest
<i>Agropyron trachycaulum</i> var. <i>glaucum</i>	Slender wheat-grass	Scarce	Local	Dry, gravelly soils, thickets in the southern half of the Model Forest
<i>Amelanchier humilis</i>	Serviceberry	Scarce	Local but possibly Widespread	Rock outcrops in the northeastern quadrant of the Model Forest. Its occurrence in the Model Forest is at the western limit of its range (Scoggan 1978)
<i>Amorpha canescens</i>	Leadplant	Common	Scattered	Dry sandy soils in open jack pine forest in the southern half of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range
<i>Amphicarpa bracteata</i>	Hog-peanut	Scarce	Local	Sandy soil at forest edge in the southwestern quadrant of the Model Forest but usually prefers moist deciduous forest. Its occurrence in the Model Forest
<i>Anaphalis margaritacea</i>	Pearly everlasting	Common	Widespread	Dry soils in old fields, open jack pine forest, roadsides. Its occurrence in the Model Forest is at the northern limit of its range (Scoggan 1978)
<i>Andropogon gerardii</i>	Big blue-stem	Scarce to abundant	Scattered	Sandy soils of clearings, open ground, roadsides in the southern half of the Model Forest and Quesnel Lake area
<i>Antennaria neglecta</i>	Pussy-toes	Common	Widespread	Rock outcrops, dry sandy soils in clearings and open forest
<i>Antennaria neodioica</i>	Common pussy-toes	Common	Scattered	Rock outcrops and dry sandy soils in clearings
<i>Antennaria plantaginifolia</i>	Plantain-leaved everlasting	Scarce	Local	Dry sandy soils in fields and open forest in the southern half of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range
<i>Apocynum cannabinum</i>	Indian hemp	Scarce	Scattered	Dry soils of open ground and thickets
<i>Arabis glabra</i>	Tower-mustard	Scarce	Scattered	Dry soils in open ground
<i>Artemisia ludoviciana</i> var. <i>gnaphalodes</i>	Prairie sage	Common	Local	Sandy soil in clearings
<i>Artemisia ludoviciana</i> var. <i>pabularis</i>	Prairie sage	-	-	-
<i>Asarum canadense</i>	Wild ginger	Scarce	Scattered	Moist soils in deciduous (often trembling aspen) forest
<i>Asclepias incarnata</i> var. <i>incarnata</i>	Swamp milkweed	Scarce to common	Scattered	Ditches, marshes, wet thickets
<i>Aster lateriflorus</i>	Wood aster	Scarce	Scattered	Forest edges and clearings, roadsides in the southern third of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range
<i>Aster laurentianus</i>	Rayless aster	Scarce	Scattered	Mine tailings
<i>Aster modestus</i>	Large northern aster	Scarce	Local	Wet soils at edge of black spruce forest. A northern extension of its range in eastern Manitoba. Manitoba rare plant (White and Johnson 1980)
<i>Brasenia schreberi</i>	Water-shield	Common	Local	Quiet water of slightly acidic shallow lakes in the southeastern quadrant of the Model Forest. Its occurrence in the Model Forest is at the northwest limit of its range
<i>Brassica kaber</i>	Charlock	Scarce	Scattered	Roadsides
<i>Bromus kalmii</i>	Wild chess	Scarce	Local	Edge of trembling aspen forest in the southern half of the Model Forest
<i>Bromus porteri</i>	Porter's chess	Scarce	Local	Dry to moist soils in thickets in the southern half of the Model Forest
<i>Campanula glomerata</i>	Clustered bellflower	Scarce	Local	In thicket near lakeshore at Long Lake, a remnant of an old garden
<i>Campanula rapunculoides</i>	Creeping bellflower	Scarce	Local	In thicket near lakeshore at Long Lake, a remnant of an old garden
<i>Caragana arborescens</i>	Siberian pea-shrub	-	-	Introduced from Eurasia and cultivated as a hedge in villages and townsites. Occasionally spreading locally. WIN.
<i>Cardamine parviflora</i> var. <i>arenicola</i>	Small bitter-cress	Scarce	Widespread	Sandy soils and rock outcrops in clearings and open forest
<i>Cardamine pratensis</i>	Cuckoo-flower	Scarce	Local	Wet organic soil in black spruce bog in the southwestern quadrant of the Model Forest. Its occurrence in the Model Forest is at the southern limit of its range

**Table 01: Plant Species List for Mid-Boreal Lowland**

Species	Common Name	Abundance	Distribution	Habitat
<i>Carex brevior</i>	Fescue sedge	Scarce	Scattered	Dry soils of open ground in the southern half of the Model Forest. Its occurrence in the Model Forest is at or near the northern limit of its range
<i>Carex buxbaumii</i>	Brown sedge	Scarce	Local	Edge of wet depressions in loamy soil in a recently logged area in the east-central part of the Model Forest
<i>Carex castanea</i>	Chestnut sedge	Scarce	Scattered	Open, damp, grassy places and roadside ditches. Its occurrence in the Model Forest is at the northwestern limit of its range (Scoggan 1978)
<i>Carex crawfordii</i>	Crawford's sedge	Scarce	Widespread	Dry soils of open deciduous forest
<i>Carex gracillima</i>	Slender sedge	Scarce to common	Scattered	Moist clay soils of trembling aspen forest along river valleys in the southern half of the Model Forest. Its occurrence in the Model Forest is at or n
<i>Carex hystricina</i>	Porcupine sedge	Scarce	Local	Wet meadows and shores along the Winnipeg River. Its occurrence in the Model Forest is at or near the northern limit of its range (Scoggan 1978)
<i>Carex intumescens</i> var. <i>fernaldi</i>	Bladder sedge	Common	Widespread	Wet fens and wet soils in clearings in mixed forest
<i>Carex livida</i>	Livid sedge	Common	Local	Open sphagnum bogs
<i>Carex pensylvanica</i>	Sun-loving sedge	Scarce	Local	Dry soils in open forest in the southwestern quadrant of the Model Forest
<i>Carex projecta</i>	Necklace sedge	Scarce	Scattered	Wet to moist soils in open deciduous forest
<i>Carex richardsonii</i>	Richardson's sedge	Common	Scattered	Sandy (usually calcareous) open ground in the southwestern quadrant of the Model Forest
<i>Carex stipata</i>	Awl-fruited sedge	Scarce	Scattered	Pond margins, along wet ditches in the southern half of the Model Forest. Its occurrence is at or near the northern limit of its range (Scoggan 1978)
<i>Carex viridula</i>	Green sedge	Common	Scattered	Damp shores, margins of wet tailing ponds
<i>Carex xerantica</i>	White-scaled sedge	Scarce	Local	Dry soils of open ground in the eastern half of the Model Forest. Its occurrence in the Model Forest is at the northeastern limit of its range (Scogg
<i>Carum carvi</i>	Caraway	Scarce	Widespread	Open grassy areas along roadsides, trails
<i>Ceanothus herbaceus</i>	Narrow-leaved New Jersey tea	Scarce	Local	Dry sandy soils in open jack pine forest in the southwestern quadrant of the Model Forest. Its occurrence in the Model Forest is at the northwestern
<i>Celastrus scandens</i>	Climbing bittersweet	Scarce	Scattered	Moist soils in thickets and deciduous forest in the southern half of the Model Forest. Its occurrence in the Model Forest is at the northern limit of
<i>Chaenorrhinum minus</i>	Dwarf snapdragon	Common	Scattered	Dry sandy and gravelly soil along roadsides in the southwestern quadrant of the Model Forest
<i>Chenopodium glaucum</i> var. <i>salinum</i>	Oak-leaved goosefoot	Common	Scattered	Sandy beaches and mine tailings
<i>Chenopodium leptophyllum</i> var. <i>oblongifolium</i>	Narrow-leaved goosefoot	Scarce	Local	Sandy soils near the southern boundary of the Model Forest
<i>Chrysopsis villosa</i>	Hairy golden aster	Abundant	Local	Depressions among rock outcrops in open jack pine forest near Quesnel Lake. This species of dry prairies and sand dunes had been collected in the are
<i>Circaea quadrisulcata</i> var. <i>canadensis</i>	Tall enchanter's-nightshade	Common	Local	Wet depressions in forest in southern third of the Model Forest
<i>Collinsia parviflora</i>	Blue-eyed Mary	Common	Local	Moist soils of open forest
<i>Convolvulus sepium</i>	Wild morning-glory	Scarce	Local	Lakeshores, thickets
<i>Coronilla varia</i>	Field crown-vetch	Common	Local	Rock outcrops in open jack pine forest at edge of mine tailings in the southeastern quadrant of the Model Forest. Probably persisting from a revegetat
<i>Crataegus succulenta</i>	Long-spined hawthorn	Scarce	Scattered	Dry soils in thickets in the southern third of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range (Scoggan 1978)
<i>Cypripedium acaule</i>	Stemless lady's-slipper	Common	Widespread	Sandy soils in mature jack pine forest
<i>Cypripedium arietinum</i>	Ram's head lady's-slipper	Scarce	Scattered	Moist organic and mineral soils in coniferous forest.

**Table 01: Plant Species List for Mid-Boreal Lowland**

Species	Common Name	Abundance	Distribution	Habitat
<i>Danthonia spicata</i> var. <i>pinetorum</i>	Poverty oat-grass	Scarce	Local	Dry sandy soils in jack pine forest in the southwestern quadrant of the Model Forest
<i>Dianthus plumarius</i>	Cottage pink	Common	Local	Colonizing rock piles at an abandoned mine in the northern half of the Model Forest. A garden-escape. Introduced (S.E. Europe). 93-895.
<i>Dulichium arundinaceum</i>	Three-way sedge	Common	Local	Marshes at margins of ponds and lakes in the southeastern quadrant of the Model Forest
<i>Elymus canadensis</i>	Canada wild rye	Scarce	Scattered	Sand dunes, sandy soils of open ground and mixed forest in the southern half of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range
<i>Elymus virginicus</i> var. <i>submuticus</i>	Virginia wild-rye	Scarce	Local	Moist deciduous forest in the southwestern quadrant of the Model Forest
<i>Equisetum laevigatum</i>	Smooth scouring rush	Common	Scattered	Dry sandy soils of open ground and shores. Its occurrence in the Model Forest is at the northern limit of its range (Flora of North America Editorial)
<i>Erigeron strigosus</i>	Daisy fleabane	Scarce	Scattered	Dry sandy and gravelly soils, rock outcrops of open ground or open mixed forest in the southern half of the Model Forest. Its occurrence in the Model
<i>Eupatorium perfoliatum</i>	Boneset	Scarce to common	Scattered	Wet soils of thickets, marshes and lake shores
<i>Euphorbia serpyllifolia</i>	Thyme-leaved spurge	Scarce	Scattered	Dry sandy soils, clay soils along roadsides and open ground. Its occurrence in the Model Forest is at the northern limit of its range (Scoggan 1978)
<i>Fraxinus nigra</i>	Black ash	Common	Widespread	Wet to moist soils of low ground, river valleys and lakeshores
<i>Galinsoga ciliata</i>	Galinsoga	Scarce	Local	Disturbed ground, roadsides
<i>Galium aparine</i>	Cleavers	Scarce	Local	Thickets and shores in the southern quarter of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range (Scoggan 1978)
<i>Gentiana linearis</i> var. <i>rubricaulis</i>	Closed gentian	Scarce	Scattered	Wet organic soils in swamp birch thickets, wet soils in willow/alder thicket. Its occurrence in the Model Forest at or near the northern limit of its
<i>Gentianella crinata</i> ssp. <i>procera</i>	Fringed gentian	Scarce	Local	Moist soil along roadside
<i>Geranium carolinianum</i>	Carolina wild geranium	Scarce	Local	Rock outcrop in the southern half of the Model Forest
<i>Gerardia tenuiflora</i> var. <i>parviflora</i>	Slender agalinis	Scarce	Local	Dry soils of open ground and open forest, occasionally muddy ground. Its occurrence in the Model Forest is at the northern limit of its range (Scoggan 1978)
<i>Geum rivale</i>	Purple avens	Common	Local	Marshes, wet open ground in the southern half of the Model Forest
<i>Glyceria canadensis</i> var. <i>canadensis</i>	Rattlesnake-grass	Scarce to common	Scattered	Shores of lakes and ponds in the eastern half of the Model Forest. Its occurrence in the Model Forest is at the northwest limit of its range. Manitoba
<i>Grindelia squarrosa</i> var. <i>quasiperennis</i>	Gumweed	Common	Local	Roadsides in the southwestern quadrant of the Model Forest
<i>Gypsophila paniculata</i>	Baby's breath	Common	Local	Dry sandy soils along roadside in the southwestern quadrant of the Model Forest. Introduced (Eurasia).
<i>Helianthemum bicknellii</i>	Frostweed	Common	Scattered	Dry sandy soils in clearings in jack pine forest in the southwestern quadrant of the Model Forest. Its occurrence in the Model Forest is at the north
<i>Helianthus tuberosus</i> var. <i>subcanescens</i>	Jerusalem artichoke	Scarce	Local	Long Lake area. Introduced (s U.S.A. and Tropical America)
<i>Heliopsis helianthoides</i>	Ox-eye	Scarce	Local	Dry sandy soils at forest edge
<i>Hudsonia tomentosa</i>	Beach-heath	Scarce to common	Scattered	Loose sandy soils, often in open jack pine forest. Its occurrence in the northeastern quadrant of the Model Forest is a northern extension of its range
<i>Humulus lupulus</i>	Common hop	Scarce	Local	Low thicket in disturbed open ground
<i>Iva xanthifolia</i>	Marsh-elder	Scarce	Local	Roadsides, streambanks in the southwestern quadrant of the Model Forest. Introduced (w U.S.A.) WIN.
<i>Lactuca canadensis</i> var. <i>longifolia</i>	Tall yellow lettuce	Scarce	Local	Willow fen in northern third of the Model Forest

**Table 01: Plant Species List for Mid-Boreal Lowland**

Species	Common Name	Abundance	Distribution	Habitat
<i>Leesia oryzoides</i>	Rice-cutgrass	Common	Local	marshes in the southern half of the Model Forest
<i>Liatris punctata</i>	Dotted blazingstar	-	-	Sandy soils in open jack pine forest. Reported from Victoria Beach. This location is at the northern limit of its range. Gst. Map record at WIN.
<i>Lobelia cardinalis</i>	Cardinal Flower	-	-	Collected from a roadside ditch north of Lac du Bonnet in the 1930's. A plant of shores, stream and river banks. Its range extends from Minnesota to Michigan to southern Ontario, Quebec, New Brunswick and southwards to Texas and Florida (Scoggan 1978)
<i>Lotus corniculatus</i>	Birdsfoot-trefoil	Scarce	Widespread	Roadsides of highways and well-travelled gravel roads
<i>Lychnis chalconica</i>	Maltese-cross	Scarce	Scattered	Roadsides, thickets in the southern half of the Model Forest. A garden-escape. Introduced (Asia). WIN.
-	Bog club-moss	Common	Local	Moist sandy margin of water-filled depression, surrounded by open willow thicket in the east-central part of the Model Forest
<i>Lycopodium lucidulum</i>	Shining club-moss	Scarce	Scattered	Moist soils of deciduous and mixed forest in the southern half of the Model Forest
<i>Lycopodium tristachyum</i>	Ground-cedar	Scarce	Scattered	Dry sandy soils of open jack pine forest
<i>Lythrum salicaria</i>	Purple loosestrife	Common	Scattered	Observed in the southwestern quadrant of the Model Forest for a number of years along wet ditches from Patricia Beach to Grand Beach Provincial Park
<i>Malaxis unifolia</i>	Green adder's-mouth	Scarce to common	Scattered	Dry soils in trembling aspen-white spruce forest, open sphagnum bogs, sandy pond margins. Its occurrence in the Model Forest is at or near the northern limit of its range
<i>Medicago sativa</i>	Alfalfa	Common	Scattered	Roadsides, disturbed ground in the southern half of the Model Forest. Cultivated in the agricultural area of the Model Forest. Introduced (Eurasia).
<i>Mirabilis nyctaginea</i>	Heart-leaved umbrellawort	Scarce	Local	Dry sandy soils in open ground
<i>Monarda fistulosa</i>	Wild bergamot	-	-	Dry soils in clearings, thickets and open forest. Its occurrence in the Model Forest is at the northern limit of its range. Hpr.
<i>Muhlenbergia racemosa</i>	Marsh muhly	Scarce	Scattered	Sandy soil in open jack pine forest
<i>Myriophyllum farwellii</i>	Farwell watermilfoil	Scarce	Local	Stream with organic substrate covering bedrock in the southeastern corner of the Model Forest. Its occurrence in the Model Forest is a northwestern extension of its range
<i>Nymphaea odorata</i> ssp. <i>odorata</i>	Fragrant water-lily	Scarce	Local	Shallow water with sandy substrate in a lake in Nopiming Provincial Park in the east central area of the Model Forest (see Hutchison 1986)
<i>Nymphaea odorata</i> ssp. <i>tuberosa</i>	Magnolia water-lily	Scarce	Local	lake in the southeastern quadrant of the Model Forest. Its occurrence in the Model Forest is a northern extension of its range (Barker and Barkley)
<i>Onoclea sensibilis</i>	Sensitive fern	Common	Widespread	Wet to moist soils of open deciduous forest
<i>Opuntia fragilis</i>	Brittle prickly-pear	Common to abundant	Scattered	Shallow organic soils in crevices in south-facing rock outcrops along rivers, 3-4 m above the water line (Frego and Staniforth 1986). The occurrence
<i>Osmorhiza claytonii</i>	Sweet cicely	Scarce	Local	Moist soils in deciduous forest at the southern border of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range
<i>Osmunda claytoniana</i>	Interrupted fern	Scarce	Widespread	Moist soils of coniferous forest
<i>Ostrya virginiana</i>	Ironwood	Scarce	Local	Fresh soils in deciduous forest at the southern border of the Model Forest. Its occurrence there is at the northern limit of its range. Manitoba rar
<i>Panicum depauperatum</i> var. <i>depauperatum</i>	Depauperate panic grass	Common	Local	Thin, dry soils among rock outcrops in open jack pine forest. Its occurrence in the Model Forest is at the northern limit of its range (Scoggan 1978)
<i>Panicum depauperatum</i> var. <i>psilophyllum</i>	Depauperate panic grass	Common	Widespread	Sandy soils in open mature jack pine forest, sandy soils in jack pine regeneration after fire, thin soils among rock outcrops. Its occurrence in the
<i>Panicum lanuginosum</i>	Soft millet	Common	Scattered	Sandy soils in mature jack pine forest
<i>Panicum lanuginosum</i> var. <i>implicatum</i>	Soft millet	Common	Scattered	Thin, dry soils among rock outcrops in open mixed forest

**Table 01: Plant Species List for Mid-Boreal Lowland**

Species	Common Name	Abundance	Distribution	Habitat
<i>Panicum lanuginosum</i> var. <i>septentrionale</i>	Soft millet	Common	Scattered	Sandy soils in open mature jack pine forest, sandy soils in jack pine regeneration after fire. Its occurrence in the Model Forest is at the northern limits of its range
<i>Panicum leibergii</i>	Leiberg's panic grass	Scarce	Scattered	Dry soils of meadows, open forest in the southern half of the Model Forest
<i>Panicum miliaceum</i>	Millet	Scarce	Local	Waste places
<i>Panicum perlongum</i>	Long-stalked panic grass	Common	Local	Dry soil on slope in open jack pine stand at the edge of a bedrock knoll. Its occurrence in the Model Forest is at the northern limit of its range.
<i>Panicum xanthophysum</i>	Yellow panic grass	Common	Widespread	Rock outcrops, sandy soils of mature jack pine forest
<i>Parnassia glauca</i>	Glaucous grass-of-Parnassus	Scarce	Local	Moist to wet calcareous soils in the southwestern quadrant of the Manitoba Model Forest.
<i>Parthenocissus inserta</i>	Large-toothed Virginia creeper	Common	Local	Moist soils of thickets in the southern third of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range (Scoggan 1978)
<i>Parthenocissus quinquefolia</i>	Virginia creeper	Scarce	Scattered	Moist soils of thickets and deciduous forest in the southwestern quadrant of the Model Forest
<i>Pastinaca sativa</i>	Parsnip	Scarce	Scattered	Roadsides and disturbed ground
<i>Pedicularis canadensis</i>	Wood-betony	Common	Local	Sandy and gravelly soils of thickets at the southern edge of the Model Forest. Its occurrence in the Model Forest is at the northern limits of its range
<i>Pedicularis lanceolata</i>	Swamp lousewort	Scarce	Local	Moist soils at edge of trembling aspen forest
<i>Pinus resinosa</i>	Red pine	Scarce	Local	Well-drained sandy soils.
<i>Polygonatum biflorum</i>	Solomon's-seal	Scarce	Local	Dry soils in clearings in deciduous forest in the southern half of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range
<i>Polygonum convolvulus</i>	Wild buckwheat	Scarce	Scattered	Roadsides, thickets, cultivated and disturbed ground in the southern half of the Model Forest
<i>Polygonum sagittatum</i>	Arrow-leaved-tearthumb	Scarce	Scattered	Wet soils in black ash stands, marshes
<i>Polygonum scandens</i>	Climbing false buckwheat	Scarce	Scattered	Moist soils in thickets
<i>Potamogeton obtusifolius</i>	Blunt-leaved pondweed	Scarce	Scattered	Ditches, quiet water of rivers and lakes
<i>Potentilla rivalis</i>	Brook cinquefoil	Scarce	Local	Wet open ground at the southern edge of the Model Forest
<i>Prunus americana</i>	American plum	-	-	-
<i>Prunus nigra</i>	Canada plum	Scarce	Scattered	Thickets, forest edges in the southern half of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range (Scoggan 1978)
<i>Pteridium aquilinum</i> var. <i>latiusculum</i>	Bracken	Common	Widespread	Roadsides, dry soils of thickets and open forest. This variety is at the northwestern limit of its range (Flora of North America Editorial Committee)
<i>Pyrola rotundifolia</i> var. <i>americana</i>	Round-leaved pyrola	Scarce	Scattered	Sandy soils in mature jack pine forest. Its occurrence in the Model Forest is at the northwestern limit of its range. Manitoba rare plant (White and
<i>Rhus glabra</i>	Smooth sumac	Common	Widespread	Open rocky ground. Its occurrence near Bissett on south-facing cliffs is at or near the northern limit of its range (Scoggan 1978, Soper and Heimberg)
<i>Sagittaria rigida</i>	Sessile-fruited arrowhead	Scarce	Scattered	Muddy shores and shallow water. Its occurrence in the Model Forest is at the northern limit of its range (Scoggan 1978). Manitoba rare plant (White
<i>Salix amygdaloides</i>	Peach-leaved willow	Common	Scattered	Moist soils along lakeshores and rivers in the southern half of the Model Forest. Its occurrence in the Model Forest is at or near the northern limit of its range
<i>Salix cordata</i>	Heartleaf willow	Common	Local	Sandy shores and dunes along Lake Winnipeg
<i>Salix fragilis</i>	Crack willow	-	-	Ornamental willow planted in townsites and shelterbelts. Introduced (Europe).
<i>Salix pseudomonticola</i>	Willow	-	-	-
<i>Sambucus racemosa</i> var. <i>pubens</i>	Red-berried elder	Scarce	Local	Rock outcrops in the southern third of the Model Forest

**Table 01: Plant Species List for Mid-Boreal Lowland**

Species	Common Name	Abundance	Distribution	Habitat
<i>Saxifraga virginiensis</i>	Early saxifrage	Scarce	Scattered	Moss covered rocks, wet sands and gravels in the southern half of the Model forest. Its occurrence in the Model Forest is at the northwestern limit of its range
<i>Scirpus fluviatilis</i>	River bulrush	Common to abundant	Scattered	Lakeshores and streams in the southern half of the Model Forest
<i>Secale cereale</i>	Rye	Scarce	Local	Cultivated rye is an occasional escape to roadsides and waste places but rarely becomes established
<i>Sedum hybridum</i>	Stonecrop	Abundant	Local	South-facing rock outcrops in Bissett townsite. Also found growing on rocks by a waterfall at a canoe-only accessible location between Happy and Fry-p
<i>Senecio congestus</i> var. <i>palustris</i>	Marsh-fleabane	Scarce	Local but possibly Widespread	Wet meadows near the southern boundary of the Model Forest
<i>Setaria glauca</i>	Foxtail	Scarce	Local	Roadsides waste places
<i>Setaria viridis</i>	Green foxtail	Scarce	Scattered	Roadsides. Introduced (Eurasia).
<i>Silene antirrhina</i>	Sleepy catchfly	Common	Scattered	Sandy soils of open ground and open forest
<i>Sisyrinchium campestre</i>	Blue-eyed grass	Scarce	Local	Among rock outcrops in mixed forest in the southern half of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range
<i>Smilax herbacea</i> var. <i>lasioneura</i>	Carrion-flower	Scarce	Scattered	Fresh to moist soils in open deciduous forest and thickets in the southern half of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range
<i>Solidago gigantea</i> var. <i>serotina</i>	Late goldenrod	Scarce to common	Widespread	Moist to dry soils along roadsides, edges of deciduous and mixed forests
<i>Solidago spathulata</i> var. <i>neomexicana</i>	Mountain goldenrod	-	-	Open ground
<i>Sparganium chlorocarpum</i>	Stemless bur-reed	Scarce to common	Widespread	Shallow water of rivers and lakes
<i>Sparganium eurycarpum</i>	Broad-fruited bur-reed	Scarce	Local	Shallow water in drainage ditch in the southern half of the Model Forest
<i>Sparganium multipendunculatum</i>	Many stalked bur-reed	Scarce	Scattered	Ponds and lakes
<i>Spiranthes lacera</i> var. <i>lacera</i>	Northern slender ladies'-tresses	Scarce	Widespread	Dry sandy soils of open ground, trail edges
<i>Sporobolus cryptandrus</i>	Sand-drop-seed	Scarce to common	Scattered	Dry sandy soils, often in open jack pine forest in the western half of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range
<i>Stipa spartea</i>	Porcupine grass	Scarce	Local	Dry, sandy soil in open ground in the southwestern quadrant of the Model Forest
<i>Suaeda maritima</i> var. <i>americana</i>	Sea-blite	Common	Scattered	Beaches and mine tailings
<i>Symphoricarpos occidentalis</i>	Wolfberry	-	-	Dry soils in open ground and thickets.
<i>Tanacetum vulgare</i>	Common tansy	Scarce	Widespread	Roadsides, rock piles (mine waste). Introduced (Eurasia).
<i>Taxus canadensis</i>	Ground hemlock	Scarce	Scattered	Wet organic soils of black spruce forest in the northern third of the Model Forest. Its occurrence in the Model Forest is at the northwestern limit of its range
<i>Thuja occidentalis</i>	Eastern white cedar	Scarce to common	Scattered	Fresh to wet, mineral and organic soils, often in association with black spruce and tamarack
<i>Torreyochloa pallida</i> var. <i>fernaldii</i>	Torrey's manna grass	Scarce	Local	Mud flats along river in the northeastern quadrant of the Model Forest
<i>Trillium cernuum</i>	Nodding trillium	Scarce	Widespread	Moist soils in deciduous forest Its occurrence in the Model Forest is at the northern limit of its range
<i>Utricularia minor</i>	Lesser bladderwort	-	-	Reported by Pip (1977) from a roadside drainage ditch through a black spruce wetland in the north-east quadrant of the Model Forest.
<i>Vaccinium caespitosum</i>	Dwarf bilberry	Scarce	Scattered	Rock outcrops and dry sandy soils in open mature jack pine forest

**Table 01: Plant Species List for Mid-Boreal Lowland**

Species	Common Name	Abundance	Distribution	Habitat
<i>Verbascum thapsus</i>	Common mullein	Scarce	Scattered	Roadsides in the southern half of the Model Forest. Introduced (Eurasia).
<i>Viburnum lentago</i>	Nannyberry	Scarce to common	Scattered	Moist, usually clay, soils along riverbanks, deciduous and mixed forest. At or near the northern limit of its range in the Model Forest (Scoggan 1978)
<i>Vicia cracca</i>	Tufted vetch	Scarce	Widespread	Roadsides
<i>Viola canadensis</i> var. <i>rugulosa</i>	Western Canada violet	Scarce	Scattered	Moist soils in mixed forest in the southern half of the Model Forest
<i>Viola pubescens</i>	Downy yellow violet	Scarce	Scattered	Moist soils in deciduous forest in the southern half of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range (Scoggan 1978)
<i>Viola sororia</i>	Woolly blue violet	Scarce	Scattered	Sandy and gravelly soils in thickets and loamy soils on south-facing slopes in young aspen forest in the southern half of the Model Forest. Its occur
<i>Xanthium strumarium</i>	Cocklebur	Scarce	Local	Gravel beach, Lake Winnipeg, in the southwestern quadrant of the Model Forest. Its occurrence in the Model Forest is at the northern limit of its range

**Table 02: Wildlife Species list for the Mid-Boreal Lowland**

Common Name	Species Name
<b>AMPHIBIANS</b>	
<b>CLASS: AMPHIBIA</b>	
<b>ORDER: CAUDATA (Salamanders)</b>	
Mudpuppy	<i>Necturus maculosus</i>
Blue-spotted Salamander	<i>Ambystoma laterale</i>
<b>ORDER: SALIENTIA (Frogs and Toads)</b>	
American Toad	<i>Bufo americanus</i>
Spring Peeper	<i>Hyla crucifer</i>
Gray Treefrog	<i>Hyla versicolor</i>
Cope's Gray Treefrog	<i>Hyla chrysoscelis</i>
Boreal Chorus Frog	<i>Pseudacris triseriata</i>
Wood Frog	<i>Rana sylvatica</i>
Leopard Frog	<i>Rana pipiens</i>
Green Frog	<i>Rana clamitans</i>
Mink Frog	<i>Rana septentrionalis</i>
<b>LIZARDS AND SNAKES</b>	
<b>CLASS: REPTILIA</b>	
<b>ORDER: TESTUDINES (Turtles)</b>	
Common Snapping Turtle	<i>Chelydra serpentina</i>
Western Painted Turtle	<i>Chrysemys picta</i>
<b>ORDER: SQUAMATA (Lizards and Snakes)</b>	
Red-sided Garter Snake	<i>Thamnophis sirtalis</i>
Red-bellied Snake	<i>Storeria occipitomaculata</i>
<b>BIRDS</b>	
<b>ORDER: GAVIIFORMES (Loons)</b>	
Red-throated Loon	<i>Gavia stellata</i>
Common Loon	<i>Gavia immer</i>
<b>ORDER: PODICIPEDIFORMES (Grebes)</b>	
Pied-billed Grebe	<i>Podilymbus podiceps</i>
Horned Grebe	<i>Podiceps auritus</i>
Red-necked Grebe	<i>Podiceps grisegena</i>
Eared Grebe	<i>Podiceps nigricollis</i>
Western Grebe	<i>Aechmophorus occidentalis</i>
<b>ORDER: PELECANIFORMES (Peleicans)</b>	
American White Pelican	<i>Pelicanus erythrorhynchos</i>
Double-crested Cormorant	<i>Phalacrocorax auritus</i>
<b>ORDER: CICONIIFORMES (Hérons and Bitterns)</b>	
American Bittern	<i>Botaurus lentiginosus</i>
Least Bittern	<i>Ixobrychus exilis</i>
Great Blue Heron	<i>Ardea herodias</i>
Great Egret	<i>Casmerodius albus</i>
Snowy Egret	<i>Egretta thula</i>
Little Blue Heron	<i>Egretta caerulea</i>
Tricolored Heron	<i>Egretta tricolor</i>
Green Heron	<i>Butorides virescens</i>
Black-crowned Night-heron	<i>Nycticorax nycticorax</i>



**Table 02: Wildlife Species list for the Mid-Boreal Lowland**

Common Name	Species Name
Turkey Vulture	<i>Cathartes aura</i>
<b>ORDER: ANSERIFORMES (Waterfowl)</b>	
Greater White-fronted Goose	<i>Anser albifrons</i>
Snow Goose	<i>Chen caerulescens</i>
Ross' Goose	<i>Chen rossii</i>
Canada Goose	<i>Branta canadensis</i>
Trumpeter Swan	<i>Cygnus buccinator</i>
Tundra Swan	<i>Cygnus columbianus</i>
Wood Duck	<i>Aix sponsa</i>
Gadwall	<i>Anas strepera</i>
American Wigeon	<i>Anas americana</i>
American Black Duck	<i>Anas rubripes</i>
Mallard	<i>Anas platyrhynchos</i>
Blue-winged Teal	<i>Anas discors</i>
Northern Shoveller	<i>Anas clypeata</i>
Northern Pintail	<i>Anas acuta</i>
Green-winged Teal	<i>Anas crecca</i>
Canvasback	<i>Aythya valisineria</i>
Redhead	<i>Aythya americana</i>
Ring-necked Duck	<i>Aythya collaris</i>
Greater Scaup	<i>Aythya marila</i>
Lesser Scaup	<i>Aythya affinis</i>
Surf Scoter	<i>Melanitta perspicillata</i>
White-winged Scoter	<i>Melanitta fusca</i>
Black Scoter	<i>Melanitta nigra</i>
Oldsquaw	<i>Clangula hyemalis</i>
Bufflehead	<i>Bucephala albeola</i>
Common Goldeneye	<i>Bucephala clangula</i>
Hooded Merganser	<i>Lophodytes cucullatus</i>
Common Merganser	<i>Mergus merganser</i>
Red-breasted Merganser	<i>Mergus serrator</i>
Ruddy Duck	<i>Oxyura jamaicensis</i>
<b>ORDER: FALCONIFORMES (Hawks and Falcons)</b>	
Osprey	<i>Pandion haliaetus</i>
Bald Eagle	<i>Haliaeetus leucocephalus</i>
Northern Harrier	<i>Circus cyaneus</i>
Sharp-shinned Hawk	<i>Accipiter striatus</i>
Cooper's Hawk	<i>Accipiter cooperii</i>
Northern Goshawk	<i>Accipiter gentilis</i>
Broad-winged Hawk	<i>Buteo platypterus</i>
Swainson's Hawk	<i>Buteo swainsoni</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Ferruginous Hawk	<i>Buteo regalis</i>
Rough-legged hawk	<i>Buteo lagopus</i>
Golden Eagle	<i>Aquila chrysaetos</i>
American Kestrel	<i>Falco sparverius</i>

**Table 02: Wildlife Species list for the Mid-Boreal Lowland**

Common Name	Species Name
Merlin	<i>Falco columbarius</i>
Gyrfalcon	<i>Falco rusticolus</i>
Peregrine Falcon	<i>Falco peregrinus</i>
Prairie Falcon	<i>Falco mexicanus</i>
<b>ORDER: GALLIFORMES (Gallinaceous Birds)</b>	
Gray Partridge	<i>Perdix perdix</i>
Ring-necked Pheasant	<i>Phasianus colchicus</i>
Ruffed Grouse	<i>Bonasa umbellus</i>
Spruce Grouse	<i>Dendragapus canadensis</i>
Willow Ptarmigan	<i>Lagopus lagopus</i>
Sharp-tailed Grouse	<i>Tympanuchus phasianellus</i>
Greater Prairie Chicken	<i>Tympanuchus cupido</i>
Wild Turkey	<i>Meleagris gallopavo</i>
<b>ORDER: GRUIFORMES (Cranes and Allies)</b>	
Yellow Rail	<i>Coturnicops noveboracensis</i>
King Rail	<i>Rallus elegans</i>
Virginia Rail	<i>Rallus limicola</i>
Sora	<i>Porzana carolina</i>
American Coot	<i>Fulica americana</i>
Sandhill Crane	<i>Grus canadensis</i>
Whooping Crane	<i>Grus americana</i>
<b>ORDER: CHARADRIIFORMES (Shorebirds and Gulls)</b>	
Black-bellied Plover	<i>Pluvialis squatarola</i>
American Golden Plover	<i>Pluvialis dominica</i>
Semipalmated Plover	<i>Charadrius semipalmatus</i>
Piping Plover	<i>Charadrius melodus</i>
Killdeer	<i>Charadrius vociferus</i>
American Avocet	<i>Recurvirostra americana</i>
Greater Yellowlegs	<i>Tringa melanoleuca</i>
Lesser Yellowlegs	<i>Tringa flavipes</i>
Solitary Sandpiper	<i>Tringa solitaria</i>
Willet	<i>Catoptrophorus semipalmatus</i>
Spotted Sandpiper	<i>Actitis macularia</i>
Upland Sandpiper	<i>Bartramia longicauda</i>
Eskimo Curlew	<i>Numeniusborealis</i>
Whimbrel	<i>Numenius phaeopus</i>
Long-billed Curlew	<i>Numenius americanus</i>
Hudsonian Godwit	<i>Limosa Haemastica</i>
Marbled Godwit	<i>Limosa fedoa</i>
Ruddy Turnstone	<i>Arenaria interpres</i>
Red Knot	<i>Calidris canutus</i>
Sanderling	<i>Calidris alba</i>
Semipalmated Sandpiper	<i>Calidris pusilla</i>
Least Sandpiper	<i>Calidris minutilla</i>
White-rumped Sandpiper	<i>Calidris fuscicollis</i>
Baird's Sandpiper	<i>Calidris bairdii</i>

**Table 02: Wildlife Species list for the Mid-Boreal Lowland**

Common Name	Species Name
Pectoral Sandpiper	<i>Calidris melanotos</i>
Dunlin	<i>Calidris alpina</i>
Stilt Sandpiper	<i>Calidris himantopus</i>
Buff-breasted Sandpiper	<i>Tryngites subruficollis</i>
Short-billed Dowitcher	<i>Limnodromus griseus</i>
Long-billed Dowitcher	<i>Limnodromus scolopaceus</i>
Common Snipe	<i>Gallinago gallinago</i>
American Woodcock	<i>Scolopax minor</i>
Wilson's Phalarope	<i>Phalaropus tricolor</i>
Red-necked Phalarope	<i>Phalaropus lobatus</i>
Red Phalarope	<i>Phalaropus fulicaria</i>
Parasitic Jaeger	<i>Stercorarius parasiticus</i>
Long-tailed Jaeger	<i>Stercorarius longicaudus</i>
Franklin's Gull	<i>Larus pipixcan</i>
Bonaparte's Gull	<i>Larus philadelphia</i>
Ring-billed Gull	<i>Larus delawarensis</i>
California Gull	<i>Larus californicus</i>
Herring Gull	<i>Larus argentatus</i>
Thayer's Gull	<i>Larus thayeri</i>
Iceland Gull	<i>Larus glaucoides</i>
Glaucous Gull	<i>Larus hyperboreus</i>
Sabine's Gull	<i>Xema sabini</i>
Caspian Tern	<i>Sterna caspia</i>
Common Tern	<i>Sterna hirundo</i>
Arctic Tern	<i>Sterna paradisaea</i>
Forster's Tern	<i>Sterna forsteri</i>
Least Tern	<i>Sterna antillarum</i>
Black Tern	<i>Chlidonias niger</i>
<b>ORDER: COLUMBIFORMES (Doves)</b>	
Rock Dove	<i>Columba livia</i>
Mourning Dove	<i>Zenaida macroura</i>
Passenger Pigeon	<i>Ectopistes migratorius</i>
<b>ORDER: CUCULIFORMES (Cuckoos)</b>	
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>
<b>ORDER: STRIGIFORMES (Owls)</b>	
Barn Owl	<i>Tyto alba</i>
Eastern Screech Owl	<i>Otus asio</i>
Great-horned Owl	<i>Bubo virginianus</i>
Snowy Owl	<i>Nyctea scandiaca</i>
Northern Hawk Owl	<i>Surnia ulula</i>
Burrowing Owl	<i>Athene cunicularia</i>
Barred Owl	<i>Strix varia</i>
Great Gray Owl	<i>Strix nebulosa</i>
Long-eared Owl	<i>Asio otus</i>
Short-eared Owl	<i>Asio flammeus</i>

**Table 02: Wildlife Species list for the Mid-Boreal Lowland**

Common Name	Species Name
Boreal Owl	<i>Aegolius funereus</i>
Northern Saw-whet Owl	<i>Aegolius acadicus</i>
<b>ORDER: CAPRIMULGIFORMES (Goat Suckers)</b>	
Common Nighthawk	<i>Chordeiles minor</i>
Whip-poor-will	<i>Caprimulgus vociferus</i>
<b>ORDER: APODIFORMES (Swifts and Hummingbirds)</b>	
Chimney Swift	<i>Chaetura pelagica</i>
Ruby-throated Hummingbird	<i>Archilochus colubris</i>
Rufous Hummingbird	<i>Selasphorus rufus</i>
<b>ORDER: CORACIIFORMES (Kingfishers)</b>	
Belted Kingfisher	<i>Ceryle alcyon</i>
<b>ORDER: PICIFORMES (Woodpeckers)</b>	
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>
Downy Woodpecker	<i>Picoides pubescens</i>
Hairy Woodpecker	<i>Picoides villosus</i>
Three-toed Woodpecker	<i>Picoides tridactylus</i>
Black-backed Woodpecker	<i>Picoides arctus</i>
Northern Flicker (Yellow-shafted)	<i>Colaptes auratus</i>
Pileated Woodpecker	<i>Dryocopus pileatus</i>
<b>ORDER: PASSERIFORMES (Perching Birds)</b>	
Olive-sided Flycatcher	<i>Contopus borealis</i>
Western Wood-pewee	<i>Contopus sordidulus</i>
Eastern Wood-pewee	<i>Contopus virens</i>
Yellow-bellied Flycatcher	<i>Empidonax flaviventris</i>
Alder Flycatcher	<i>Empidonax alnorum</i>
Willow Flycatcher	<i>Empidonax traillii</i>
Least Flycatcher	<i>Empidonax minimus</i>
Eastern Phoebe	<i>Sayornis phoebe</i>
Great Crested Flycatcher	<i>Myiarchus crinitus</i>
Western Kingbird	<i>Tyrannus verticalis</i>
Eastern Kingbird	<i>Tyrannus tyrannus</i>
Scissor-tailed Flycatcher	<i>Tyrannus forficatus</i>
Loggerhead Shrike	<i>Lanius ludocicianus</i>
Northern Shrike	<i>Lanius excubitor</i>
Yellow-throated Vireo	<i>Vireo flavifrons</i>
Solitary Vireo (*Blue-headed)	<i>Vireo solitarius</i>
Warbling Vireo	<i>Vireo gilvus</i>
Philadelphia Vireo	<i>Vireo philadelphicus</i>
Red-eyed Vireo	<i>Vireo olivaceus</i>
Gray Jay	<i>Perisoreus canadensis</i>
Blue Jay	<i>Cyanocitta cristata</i>
Steller's Jay	<i>Cyanocitta stelleri</i>
Black-billed Magpie	<i>Pica pica</i>
American Crow	<i>Corvus brachyrhynchos</i>

**Table 02: Wildlife Species list for the Mid-Boreal Lowland**

Common Name	Species Name
Common Raven	<i>Corvus corax</i>
Horned Lark	<i>Eremophila alpestris</i>
Purple Martin	<i>Progne subis</i>
Tree Swallow	<i>Tachycineta bicolor</i>
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>
Bank Swallow	<i>Riparia riparia</i>
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
Barn Swallow	<i>Hirundo rustica</i>
Black-capped Chickadee	<i>Poecile atricapillus</i>
Boreal Chickadee	<i>Poecile hudsonicus</i>
Red-breasted Nuthatch	<i>Sitta canadensis</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
Brown Creeper	<i>Certhia americana</i>
House Wren	<i>Troglodytes aedon</i>
Winter Wren	<i>Troglodytes troglodytes</i>
Sedge Wren	<i>Cistothorus platensis</i>
Marsh Wren	<i>Cistothorus palustris</i>
Golden-crowned Kinglet	<i>Regulus satrapa</i>
Ruby-crowned Kinglet	<i>Regulus calendula</i>
Eastern Bluebird	<i>Sialia sialis</i>
Mountain Bluebird	<i>Sialia currucoides</i>
Townsend's Solitaire	<i>Myadestes townsendi</i>
Veery	<i>Catharus fuscescens</i>
Gray-cheeked Thrush	<i>Catharus minimus</i>
Swainson's Thrush	<i>Catharus ustulatus</i>
Hermit Thrush	<i>Catharus guttatus</i>
Wood Thrush	<i>Hylocicla mustelina</i>
American Robin	<i>Turdus migratorius</i>
Varied Thrush	<i>Ixoreus naevius</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
Brown Thrasher	<i>Toxostoma rufum</i>
European Starling	<i>Sturnus vulgaris</i>
American Pipit (Water)	<i>Anthus rubescens</i>
Sprague's Pipit	<i>Anthus spragueii</i>
Bohemian Waxwing	<i>Bombycilla garrulus</i>
Cedar Waxwing	<i>Bombycilla cedrorum</i>
Golden-winged Warbler	<i>Vermivora chrysoptera</i>
Tennessee Warbler	<i>Vermivora peregrina</i>
Orange-crowned Warbler	<i>Vermivora celata</i>
Nashville Warbler	<i>Vermivora ruficapilla</i>
Northern Parula	<i>Parula americana</i>
Yellow Warbler	<i>Dendroica petechia</i>
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>
Magnolia Warbler	<i>Dendroica magnolia</i>
Cape May Warbler	<i>Dendroica tigrina</i>

**Table 02: Wildlife Species list for the Mid-Boreal Lowland**

Common Name	Species Name
Black-throated Blue Warbler	<i>Dendroica caerulescens</i>
Yellow-rumped Warbler	<i>Dendroica coronata</i>
Black-throated Green Warbler	<i>Dendroica virens</i>
Blackburnian Warbler	<i>Dendroica fusca</i>
Pine Warbler	<i>Dendroica pinus</i>
Palm Warbler	<i>Dendroica palmarum</i>
Bay-breasted Warbler	<i>Dendroica castanea</i>
Blackpoll Warbler	<i>Dendroica striata</i>
Cerulean Warbler	<i>Dendroica cerulea</i>
Black-and-white Warbler	<i>Mniotilta varia</i>
American Redstart	<i>Setophaga ruticilla</i>
Ovenbird	<i>Seiurus aurocapillus</i>
Northern Waterthrush	<i>Seiurus noveboracensis</i>
Connecticut Warbler	<i>Oporornis agilis</i>
Mourning Warbler	<i>Oporornis philadelphia</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Wilson's Warbler	<i>Wilsonia pusilla</i>
Canada Warbler	<i>Wilsonia canadensis</i>
Yellow-breasted Chat	<i>Icteria virens</i>
Scarlet Tanager	<i>Piranga olivacea</i>
Eastern Towhee	<i>Pipilo erythrophthalmus</i>
American Tree Sparrow	<i>Spizella arborea</i>
Chipping Sparrow	<i>Spizella passerina</i>
Clay-colored Sparrow	<i>Spizella pallida</i>
Field Sparrow	<i>Spizella pusilla</i>
Vesper Sparrow	<i>Pooecetes gramineus</i>
Lark Sparrow	<i>Chondestes grammacus</i>
Savannah Sparrow	<i>Passerculus sandwichensis</i>
Grasshopper Sparrow	<i>Ammodramus savannarum</i>
Baird's Sparrow	<i>Ammodramus bairdii</i>
LeConte's Sparrow	<i>Ammodramus leconteii</i>
Nelson's Sharp-tailed Sparrow	<i>Ammodramus nelsoni</i>
Fox Sparrow	<i>Passerella iliaca</i>
Song Sparrow	<i>Melospiza melodia</i>
Lincoln's Sparrow	<i>Melospiza lincolnii</i>
Swamp Sparrow	<i>Melospiza georgiana</i>
White-throated Sparrow	<i>Zonotrichia albicollis</i>
Harris' Sparrow	<i>Zonotrichia querula</i>
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>
Golden-crowned Sparrow	<i>Zonotrichia atricapilla</i>
Dark-eyed Junco	<i>Junco hyemalis</i>
Lapland Longspur	<i>Calcarius lapponicus</i>
Smith's Longspur	<i>Calcarius pictus</i>
Chestnut-collared Longspur	<i>Calcarius ornatus</i>
Snow Bunting	<i>Plectrophenax nivalis</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>

**Table 02: Wildlife Species list for the Mid-Boreal Lowland**

<b>Common Name</b>	<b>Species Name</b>
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>
Blue Grosbeak	<i>Guiraca caerulea</i>
Lazuli Bunting	<i>Passerian amoena</i>
Indigo Bunting	<i>Passerian cyanea</i>
Dickcissel	<i>Spiza americana</i>
Bobolink	<i>Dolichonyx oryzivorus</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Eastern Meadowlark	<i>Sturnella magna</i>
Western Meadowlark	<i>Sturnella neglecta</i>
Yellow-headed Blackbird	<i>Xanthocephalus xanthocephalus</i>
Rusty Blackbird	<i>Euphagus carolinus</i>
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>
Common Grackle	<i>Quiscalus quiscula</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Orchard Oriole	<i>Icterus spurius</i>
Baltimore Oriole	<i>Icterus galbula</i>
Gray-crowned Rosy-finch	<i>Leucosticte lephrocotis</i>
Pine Grosbeak	<i>Pinicola enucleator</i>
Purple Finch	<i>Carpodacus purpureus</i>
House Finch	<i>Carpodacus mexicanus</i>
Red Crossbill	<i>Loxia curvirostra</i>
White-winged Crossbill	<i>Loxia leucoptera</i>
Common Redpoll	<i>Carduelis flammea</i>
Hoary Redpoll	<i>Carduelis hornemanni</i>
Pine Siskin	<i>Carduelis pinus</i>
American Goldfinch	<i>Carduelis tristis</i>
Evening Grosbeak	<i>Coccothraustes vespertinus</i>
House Sparrow	<i>Passer domesticus</i>
<b>MAMMALS</b>	
<b>ORDER: INSECTIVORA (Insectivores)</b>	
Masked Shrew	<i>Sorex cinereus</i>
Water Shrew	<i>Sorex palustris</i>
Arctic Shrew	<i>Sorex arcticus</i>
Pygmy Shrew	<i>Sorex hoyi</i>
Northern Short-tailed Shrew	<i>Blarina brevicauda</i>
Star-nosed Mole	<i>Condylura cristata</i>
<b>ORDER: CHIROPTERA (Bats)</b>	
Little Brown Myotis	<i>Myotis lucifugus</i>
Northern Myotis	<i>Myotis septentrionalis</i>
Silver-haired Bat	<i>Lasionycteris noctivagans</i>
Big Brown Bat	<i>Eptesicus fuscus</i>
Eastern Red Bat	<i>Lasiurus borealis</i>
Hoary Bat	<i>Lasiurus cinereus</i>
<b>ORDER: PRIMATES (Humans)</b>	
Human	<i>Homo sapiens</i>
<b>ORDER: LAGOMORPHA (Hares and Rabbits)</b>	

**Table 02: Wildlife Species list for the Mid-Boreal Lowland**

Common Name	Species Name
Snowshoe Hare	<i>Lepus americanus</i>
White-tailed Jack Rabbit	<i>Lepus townsendii</i>
<b>ORDER: RODENTIA (Rodents)</b>	
Eastern Chipmunk	<i>Tamias striatus</i>
Least Chipmunk	<i>Tamias minimus</i>
Woodchuck	<i>Marmota monax</i>
Richardson's Ground Squirrel	<i>Spermophilus richardsonii</i>
Thirteen-lined Ground Squirrel	<i>Spermophilus tridecemlineatus</i>
Franklin's Ground Squirrel	<i>Spermophilus franklinii</i>
Gray or Black Squirrel	<i>Sciurus carolinensis</i>
Fox Squirrel	<i>Sciurus niger</i>
Red Squirrel	<i>Tamiasciurus hudsonicus</i>
Northern Flying Squirrel	<i>Glaucomys sabrinus</i>
Northern Pocket Gopher	<i>Thomomys talpoides</i>
American Beaver	<i>Castor canadensis</i>
Deer Mouse	<i>Peromyscus maniculatus</i>
Southern Red-backed Vole	<i>Clethrionomys gapperi</i>
Southern Bog Lemming	<i>Synaptomys cooperi</i>
Northern Bog Lemming	<i>Synaptomys borealis</i>
Heather Vole	<i>Phenacomys intermedius</i>
Muskrat	<i>Ondatra zibethicus</i>
Meadow Vole	<i>Microtus pennsylvanicus</i>
Norway Rat	<i>Rattus norvegicus</i>
House Mouse	<i>Mus musculus</i>
Meadow Jumping Mouse	<i>Zapus hudsonius</i>
Woodland Jumping Mouse	<i>Napaeozapus insignis</i>
American Porcupine	<i>Erethizon dorsatum</i>
<b>ORDER: CARNIVORA (Carnivores)</b>	
Coyote	<i>Canis latrans</i>
Wolf	<i>Canis lupus</i>
Arctic Fox	<i>Alopex lagopus</i>
Red Fox	<i>Vulpes vulpes</i>
Grey Fox	<i>Urocyon cinereoargenteus</i>
American Black Bear	<i>Ursus americanus</i>
Grizzly Bear	<i>Ursus arctos</i>
Raccoon	<i>Procyon lotor</i>
American Pine Marten	<i>Martes americana</i>
Fisher	<i>Martes pennanti</i>
Ermine	<i>Mustela erminea</i>
Long-tailed Weasel	<i>Mustela frenata</i>
Least Weasel	<i>Mustela nivalis</i>
American Mink	<i>Mustela vison</i>
Wolverine	<i>Gulo gulo</i>
American Badger	<i>Taxidea taxus</i>
Striped Skunk	<i>Mephitis mephitis</i>
River Otter	<i>Lutra canadensis</i>



**Table 02: Wildlife Species list for the Mid-Boreal Lowland**

<b>Common Name</b>	<b>Species Name</b>
Mountain Lion	<i>Felis concolor</i>
Lynx	<i>Lynx lynx</i>
Bobcat	<i>Lynx rufus</i>
<b>ORDER: ARTIODACTYLA (Cloven-hoofed Mammals)</b>	
Woodland Caribou	<i>Rangifer tarandus caribou</i>
White-tailed Deer	<i>Odocoileus virginianus</i>
Moose	<i>Alces alces</i>
American Elk	<i>Cervus elaphus</i>

**Table 03: List of Species of Special Concern in the Churchill River Upland Ecoregion**

Common Name	Scientific Name	Rank
<b>Fungi</b>		
Flooded Jellyskin	<i>Leptogium rivulare</i>	Globally and provincially, the species is not ranked; a rank has not yet been assigned or the species has not been evaluated.
<b>Vascular Plants</b>		
Bog Adder's-mouth	<i>Malaxis paludosa</i>	Globally ranked demonstrably widespread, abundant, secure throughout its range, and provincially ranked very rare in the province.
Few-Flowered Sedge	<i>Carex pauciflora</i>	Globally ranked demonstrably widespread, abundant, secure throughout its range, and provincially ranked uncommon in the province.
Few-Fruited Sedge	<i>Carex oligosperma</i>	Globally ranked demonstrably widespread, abundant and secure throughout its range and provincially ranked uncommon in the province, but status is uncertain.
Fragrant Shield Fern	<i>Dryopteris fragrans</i>	Globally ranked demonstrably widespread, abundant, and secure throughout its range, provincially ranked uncommon to widespread, abundant, and apparently secure throughout the province.
Limestone Oak Fern	<i>Gymnocarpium robertianum</i>	Globally ranked demonstrably widespread, abundant, secure throughout its range, and provincially ranked very rare throughout the province.
Long-Fruited Sedge	<i>Carex michauxiana</i>	Globally ranked demonstrably widespread, abundant, secure throughout its range, and provincially ranked rare throughout the province.
Moor Rush	<i>Juncus stygius ssp. americanus</i>	Globally ranked demonstrably widespread, abundant and secure throughout its range including its subspecies and provincially ranked very rare in the province, but status is uncertain.
Northern Oak Fern	<i>Gymnocarpium jessoense</i>	Globally ranked demonstrably widespread, abundant, and secure throughout its range, provincially ranked uncommon to widespread, abundant, and apparently secure throughout the province.
Northern Woodsia	<i>Woodsia alpina</i>	Globally ranked widespread, abundant, apparently secure throughout its range, and provincially ranked very rare in the province.
Oregon Cliff Fern	<i>Woodsia oregana ssp. cathcartian</i>	Globally ranked demonstrably widespread, abundant, secure throughout its range while its subspecies is widespread, abundant, and apparently secure throughout its range, and provincially ranked very rare in the province.
Pallas Buttercup	<i>Ranunculus pallasii</i>	Globally ranked widespread, abundant, apparently secure throughout its range, and provincially ranked rare in the province.
Round-Leaved Bog Orch	<i>Platanthera orbiculata</i>	Globally ranked demonstrably widespread, abundant, secure throughout its range, and provincially ranked uncommon in the province.
Small Water-Lily	<i>Nymphaea tetragona</i>	Globally ranked demonstrably widespread, abundant, secure throughout its range, and provincially ranked rare throughout the province.
Smooth Woodsia	<i>Woodsia glabella</i>	Globally ranked demonstrably widespread, abundant, apparently secure throughout its range, and provincially ranked rare in the province.
Spatulate Moonwort	<i>Botrychium spathulatum</i>	Globally ranked uncommon throughout its range and provincially ranked very rare in the province.
Wahlenberg's Wood-rus	<i>Luzula wahlenbergii</i>	Globally ranked widespread, abundant, apparently secure throughout its range, and provincially ranked rare in the province
White Beakrush	<i>Rhynchospora alba</i>	Globally ranked demonstrably widespread, abundant and secure throughout its range and provincially ranked uncommon in the province, but status is uncertain.
<b>Vascular Plants</b>		
Boreal Woodland Caribo	<i>Rangifer tarandus caribou</i>	Globally ranked demonstrably widespread, abundant, secure throughout its range while its subspecies is widespread, abundant, and apparently secure throughout its range, provincially ranked widespread, abundant, and apparently secure throughout the province.
Shortjaw Cisco	<i>Coregonus zenithicus</i>	Globally ranked uncommon throughout its range and provincially ranked uncommon in the province.

**Table 04: Water Quality Data from Fire Pond, 2012**

Waterbody	CCME CWQG PAL <sup>a</sup>	MMER <sup>b</sup>	DL	Unit	Fire Pond 6-Jun-12
<b>Conventional Parameters</b>					
Laboratory-Measured pH	6.5 - 9.0	6.0 - 9.5	0.10	pH units	7.20
Hardness (as CaCO <sub>3</sub> )	-	-	0.30	mg/L	21.5
TSS	-	30.00	3	mg/L	3.2
<b>Anions and Nutrients</b>					
Chloride	120 - 640	-	2.0	mg/L	<2.0
Fluoride	0.120	-	0.10	mg/L	<0.10
Ammonia as N	5.74	-	0.050	mg/L	<0.050
Nitrate-N	13 - 550	-	0.10	mg/L	<0.10
Nitrite-N	0.06	-	0.10	mg/L	<0.10
<b>Cyanide</b>					
Free Cyanide	0.005	-	0.0050	mg/L	<0.0050
<b>Total Metals</b>					
Aluminum	0.1	-	0.010	mg/L	0.080
Arsenic	0.005	1.00	0.0010	mg/L	0.0087
Boron	1.5 - 29	-	0.050	mg/L	<0.050
Cadmium	0.009	-	0.000090	mg/L	0.000145
Copper	0.002	0.60	0.0010	mg/L	<0.0010
Iron	0.3	-	0.050	mg/L	0.703
Lead	0.001	0.40	0.0010	mg/L	<0.0010
Mercury	0.000026	-	0.00010	mg/L	<0.00010
Molybdenum	0.073	-	0.0010	mg/L	<0.0010
Nickel	0.025	1.00	0.0020	mg/L	<0.0020
Selenium	0.001	-	0.00040	mg/L	<0.00040
Silver	0.0001	-	0.00010	mg/L	<0.00010
Thallium	0.0008	-	0.00030	mg/L	<0.00030
Uranium	0.015 - 0.03	-	0.00500	mg/L	<0.0050
Zinc	0.03	1.00	0.0030	mg/L	0.0037

Notes:

Where applicable, guidelines are calculated on a site-specific basis. Water quality sample collected by Auriga.

<sup>a</sup> Canadian Council of Ministers of Environment's Canadian Water Quality Guidelines (CWQG) for the Protection of Freshwater Aquatic Life (CCME, 2011a).

<sup>b</sup> Maximum Authorized Concentration in a Grab Sample; Fisheries Act Metal Mining Effluent Regulations (Government of Canada, 2002).

<sup>c</sup> Ammonia guideline is not applied to Stall Lake, where pH is outside of the guidelines.

DL = detection limit; BOD = biochemical oxygen demand; TDS = total dissolved solids; TSS = total suspended solids; TKN = total Kjeldahl nitrogen; TP = total phosphorus; TOC = total organic carbon; µmhos/cm = micromhos per centimetre; mg/L = milligrams per Litre; TCU = true color unit; NTU = Nephelometric Turbidity Units; µg/L = micrograms per Litre.

Exceeds CWQG

Exceeds MMER

**Table 005: Sediment Quality in Fire Pond, September 2012**

Waterbody Station ID Date	SQG-RP <sup>a</sup>	CSQG <sup>b</sup>		DL	Fire Pond	
		ISQG	PEL		FP-01	
					24-Sep-2012 16:00	
<b>In situ Measurements</b>						
Depth (m)	-	-	-	-	0.25	0.60
Water Temperature (°C)	-	-	-	0.01	10.1	10.1
pH	-	-	-	0.02	6.86	6.82
ORP (mV)	-	-	-	0.10	166.4	168.8
Specific Conductivity (mS/cm)	-	-	-	0.001	0.030	0.030
Turbidity (NTU)	-	-	-	0.1	1.2	1.4
Dissolved Oxygen (mg/L)	-	-	-	0.1	94.3	93.7
Dissolved Oxygen (%)	-	-	-	0.01	10.6	10.6
<b>Physical Tests</b>						
% Sand (2.0mm - 0.05mm)	-	-	-	0.1	<0.10	
% Silt (0.05mm - 2um)	-	-	-	0.1	76.2	
% Clay (<2um)	-	-	-	0.1	23.7	
Texture	-	-	-	-	Silt loam	
<b>Metals</b>						
Aluminum	-	-	-	500	7860	
Antimony	20	-	-	0.1	0.2	
Arsenic	12	<b>5.9</b>	<u>17.0</u>	0.1	<b>48.5</b>	
Barium	500	-	-	0.5	64.1	
Beryllium	4	-	-	0.1	0.15	
Bismuth	-	-	-	0.02	0.171	
Boron	-	-	-	10	<10	
Cadmium	10	<b>0.6</b>	<u>3.5</u>	0.02	<b>0.768</b>	
Calcium	-	-	-	100	8320	
Chromium	64	<b>37.3</b>	<u>90.0</u>	1	16.5	
Cobalt	50	-	-	0.02	7.51	
Copper	63	<b>35.7</b>	<u>197</u>	1	27.8	
Iron	-	-	-	25	9020	
Lead	140	<b>35.0</b>	<u>91.3</u>	0.2	21.9	
Magnesium	-	-	-	10	2610	
Manganese	-	-	-	0.5	244	
Mercury	6.6	<b>0.17</b>	<u>0.486</u>	0.05	0.146	
Molybdenum	10	-	-	0.02	1.3	
Nickel	50	-	-	0.5	15.7	
Phosphorus	-	-	-	100	660	
Potassium	-	-	-	25	846	
Selenium	1	-	-	0.5	0.57	
Silver	20	-	-	0.1	<0.10	
Sodium	-	-	-	10	266	
Strontium	-	-	-	0.1	25.9	
Thallium	1	-	-	0.1	0.11	
Tin	50	-	-	5	<5.0	
Titanium	-	-	-	0.5	114	
Uranium	23	-	-	0.02	1.07	
Vanadium	130	-	-	0.5	18.1	
Zinc	200	<b>123</b>	<u>315</u>	10	115	

Notes:

<sup>a</sup> CCME Soil Quality Guidelines for the Protection of Environmental and Human Health – Residential and Parkland Use (SQG-RP) (CCME 2011c)

<sup>b</sup> CCME Canadian Sediment Quality Guidelines (CSQG) for the protection of aquatic life (CCME, 2011b)

All concentrations in milligrams per kilogram dry weight (mg/kg dw) except where noted.

ISQG = interim sediment quality guideline; PEL = probable effects level; DL = detection limit; % = percent.

Exceeds SQG-RP	Exceeds ISQG	Exceeds PEL
----------------	--------------	-------------

**Table 06: List of Fish Species with Potential to Occur Within the Project Region**

Family Name	Common Name	Species Name	Churchill River	Nelson River
Petromyzontidae	Silver Lamprey	<i>Ichthyomyzon unicuspis</i>	N	N
Acipenseridae	Lake Sturgeon	<i>Acipenser fulvescens</i>	N	N
Hiodontidae	Mooneye	<i>Hiodon tergisus</i>	0	N
Cyprinidae	Lake Chub	<i>Couesius plumbeus</i>	N	N
	Carp	<i>Cyprinus carpio</i>	0	I
	Pearl Dace	<i>Margariscus margarita</i>	0	N
	Emerald Shiner	<i>Notropis atherinoides</i>	N	N
	Blacknose Shiner	<i>Notropis heterolepis</i>	0	N
	Spottail Shiner	<i>Notropis hudsonius</i>	N	N
	Fathead Minnow	<i>Pimephales promelas</i>	0	N
	Longnose Dace	<i>Rhinichthys cataractae</i>	N	N
Catostomidae	Longnose Sucker	<i>Catostomus catostomus</i>	N	N
	White Sucker	<i>Catostomus commersoni</i>	N	N
	Shorthead Redhorse	<i>Moxostoma erythrum</i>	0	N
Ictaluridae	Channel Catfish	<i>Ictalurus punctatus</i>	0	R
Esocidae	Northern Pike	<i>Esox lucius</i>	N	N
Osmeridae	Rainbow Smelt	<i>Osmerus mordax</i>	I/A	I
Salmonidae	Cisco	<i>Coregonus artedi</i>	N/A	N
	Lake Whitefish	<i>Coregonus clupeaformis</i>	N/A	N
	Shortjaw Cisco	<i>Coregonus zenithicus</i>	N	0
	Round Whitefish	<i>Prosopium cylindraceum</i>	R	0
	Arctic Grayling	<i>Thymallus arcticus</i>	N	0
	Rainbow Trout	<i>Oncorhynchus mykiss</i>	I	I
	Arctic Char	<i>Salvelinus alpinus</i>	N/A/R	0
	Brook Trout	<i>Salvelinus fontinalis</i>	N/A	N
	Lake Trout	<i>Salvelinus namaycush</i>	N	N
Percopsidae	Trout-perch	<i>Percopsis omiscomaycus</i>	N	N
Gadidae	Burbot	<i>Lota lota</i>	N	N
Gasterosteidae	Brook Stickleback	<i>Culaea inconstans</i>	N	N
	Ninespine Stickleback	<i>Pungitius pungitius</i>	N/A	N
Cottidae	Slimy Sculpin	<i>Cottus cognatus</i>	N	N
	Spoonhead Sculpin	<i>Cottus ricei</i>	N	0
	Deepwater Sculpin	<i>Myoxocephalus thompsoni</i>	R	0
Percidae	Iowa Darter	<i>Etheostoma exile</i>	N	0
	Johnny Darter	<i>Etheostoma nigrum</i>	N	N
	Yellow Perch	<i>Perca flavescens</i>	N	N
	River Darter	<i>Percina shumardi</i>	0	N
	Sauger	<i>Sander canadensis</i>	N	N
	Walleye	<i>Sander vitreus</i>	N	N
Sciaenidae	Freshwater Drum	<i>Aplodinotus grunniens</i>	0	N

Notes: Estuarine species are excluded from this list. N = native; I = introduced; 0 = not previously captured in this watershed; R = rare; A = anadromous population only. Stewart Watkinson 2004.

**Table 07: Fishing Effort in Fire Pond, Supporting Information**

Fishing Method	Station ID	Start UTM (14U)		End UTM (14U)		Depth (m)	Set					Pull					Riparian Vegetation	Cover				Substrate
		Northing	Easting	Northing	Easting		Date	Time	Water Temp. (°C)	pH	Sp. Cond. (µS/cm)	Date	Time	Water Temp. (°C)	pH	Sp. Cond. (µS/cm)		OHV	SM	SWD	LWD	
Minnow Trap	FP-MT01	6100510	373271	-	-	0.45	24-Sep-12	14:47	10.3	8.54	37	25-Sep-12	11:50	10.1	8.53	45	Grasses; Wetland	30	10	-	-	100
	FP-MT02	6100497	373149	-	-	0.9	24-Sep-12	14:58	10.3	8.40	37	25-Sep-12	12:30	10.1	8.21	35	Grasses; Wetland	25	5	-	-	100
	FP-MT03	6100401	373209	-	-	0.6	24-Sep-12	15:01	10.5	7.99	41	25-Sep-12	12:40	10.5	8.02	37	Shrub; Mixed Forest	50	-	-	20	100
	FP-MT04	6100353	373296	-	-	0.45	24-Sep-12	15:08	10.5	8.18	-	25-Sep-12	12:51	10.6	7.97	35	Shrub; Wetland	50	2	5	-	100
	FP-MT05	6100466	373322	-	-	0.5	24-Sep-12	15:14	10.7	7.95	37	25-Sep-12	11:28	10.1	8.31	36	Grasses; Wetland	25	2	-	5	100
Small Gang Gill Net	FP-GN01	6100419	373189	6100422	373232	0.5 - 1.6	24-Sep-12	15:25	10.3	7.74	37	25-Sep-12	12:16	10.3	8.08	37	Shrub	5	1	-	5	100

Notes:  
 Sp. Cond. (µS/cm) = specific conductance in microSeimens per centimetre; OHV = overhanging vegetation; SM = submergent vegetation; SWD = small woody debris; LWD = large woody debris

**Table 08: Fire Pond Fish Biological Information, September 2012**

Station	Panel (mm)	Species	Number	Total Length (mm)	Fate	DELTs	Comment
FP-MT05	-	Brook Stickleback	001	59	Metals	None	Photo
FP-MT05	-	Brook Stickleback	002	56	Metals	None	-
FP-MT05	-	Brook Stickleback	003	59	Metals	None	-
FP-MT05	-	Brook Stickleback	004	52	Metals	None	-
FP-MT05	-	Brook Stickleback	005	48	Metals	None	-
FP-MT05	-	Brook Stickleback	006	52	Metals	None	-
FP-MT05	-	Brook Stickleback	007	50	Metals	None	-
FP-MT01	-	Brook Stickleback	008	63	Metals	None	-
FP-MT01	-	Brook Stickleback	009	65	Metals	None	Photo (typical healthy individual)
FP-MT01	-	Brook Stickleback	010	64	Metals	None	-
FP-MT01	-	Brook Stickleback	011	64	Metals	None	-
FP-MT01	-	Brook Stickleback	012	48	Released	None	-
FP-MT01	-	Brook Stickleback	013	47	Released	None	-
FP-MT01	-	Brook Stickleback	014	46	Released	None	-
FP-MT01	-	Brook Stickleback	015	49	Released	None	-
FP-MT01	-	Brook Stickleback	016	51	Released	None	-
FP-MT01	-	Brook Stickleback	017	60	Released	None	-
FP-MT01	-	Brook Stickleback	018	49	Released	None	-
FP-MT01	-	Brook Stickleback	019	60	Released	None	-
FP-MT01	-	Brook Stickleback	020	48	Released	None	-
FP-MT01	-	Brook Stickleback	021	58	Released	None	-
FP-MT01	-	Brook Stickleback	022	62	Released	None	-
FP-MT01	-	Brook Stickleback	023	48	Released	None	-
FP-MT01	-	Brook Stickleback	024	50	Released	None	-
FP-MT01	-	Brook Stickleback	025	55	Released	None	-
FP-MT01	-	Brook Stickleback	026	58	Released	Tumor	Photo (tumor)
FP-MT01	-	Brook Stickleback	027	50	Released	None	-
FP-MT01	-	Brook Stickleback	028	52	Released	None	-
FP-MT01	-	Brook Stickleback	029	60	Released	None	-
FP-MT01	-	Brook Stickleback	030	53	Released	None	-
FP-MT01	-	Brook Stickleback	031	62	Metals	None	-
FP-MT01	-	Brook Stickleback	032	65	Metals	None	-
FP-MT01	-	Brook Stickleback	033	54	Released	None	-
FP-MT01	-	Brook Stickleback	034	55	Released	None	-
FP-MT01	-	Brook Stickleback	035	58	Released	None	-
FP-MT01	-	Brook Stickleback	036	52	Released	None	-
FP-MT01	-	Brook Stickleback	037	56	Released	None	-
FP-MT01	-	Brook Stickleback	038	53	Released	None	-
FP-MT01	-	Brook Stickleback	039	52	Released	None	-
FP-MT01	-	Brook Stickleback	040	52	Released	None	-
FP-MT01	-	Brook Stickleback	041	52	Released	None	-

Notes:

Scale not functional, collected only total length in millimetres from first 103 individuals. DELTs = deformities, erosion, lesions, tumors (i.e., external health characteristics).

**Table 08: Fire Pond Fish Biological Information, September 2012**

Station	Panel (mm)	Species	Number	Total Length (mm)	Fate	DELTs	Comment
FP-MT01	-	Brook Stickleback	042	63	Released	None	-
FP-MT01	-	Brook Stickleback	043	61	Released	None	-
FP-MT01	-	Brook Stickleback	044	48	Released	None	-
FP-MT01	-	Brook Stickleback	045	56	Released	None	-
FP-MT01	-	Brook Stickleback	046	55	Released	None	-
FP-MT01	-	Brook Stickleback	047	66	Metals	None	-
FP-MT01	-	Brook Stickleback	048	50	Released	None	-
FP-MT01	-	Brook Stickleback	049	49	Released	None	-
FP-MT01	-	Brook Stickleback	050	49	Released	None	-
FP-MT01	-	Brook Stickleback	051	65	Released	None	-
FP-MT01	-	Brook Stickleback	052	52	Released	None	-
FP-MT01	-	Brook Stickleback	053	50	Released	None	-
FP-MT01	-	Brook Stickleback	054	54	Released	None	-
FP-MT01	-	Brook Stickleback	055	50	Released	None	-
FP-MT01	-	Brook Stickleback	056	55	Released	None	-
FP-MT01	-	Brook Stickleback	057	60	Released	None	-
FP-MT01	-	Brook Stickleback	058	52	Released	None	-
FP-MT01	-	Brook Stickleback	059	49	Released	None	-
FP-MT01	-	Brook Stickleback	060	54	Released	None	-
FP-MT01	-	Brook Stickleback	061	52	Released	None	-
FP-MT01	-	Brook Stickleback	062	51	Released	None	-
FP-MT01	-	Brook Stickleback	063	51	Released	None	-
FP-MT01	-	Brook Stickleback	064	55	Released	None	-
FP-MT01	-	Brook Stickleback	065	50	Released	None	-
FP-MT01	-	Brook Stickleback	066	63	Released	None	-
FP-MT01	-	Brook Stickleback	067	55	Released	None	-
FP-GN01	13	Brook Stickleback	068	59	Released	None	-
FP-GN01	13	Brook Stickleback	069	62	Released	None	-
FP-GN01	13	Brook Stickleback	070	57	Released	None	-
FP-GN01	13	Brook Stickleback	071	58	Released	None	-
FP-MT02	-	Brook Stickleback	072	65	Released	None	-
FP-MT02	-	Brook Stickleback	073	63	Released	None	-
FP-MT02	-	Brook Stickleback	074	52	Released	None	-
FP-MT02	-	Brook Stickleback	075	60	Released	None	-
FP-MT02	-	Brook Stickleback	076	53	Released	None	-
FP-MT02	-	Brook Stickleback	077	55	Released	None	Photo (colour variation)
FP-MT02	-	Brook Stickleback	078	55	Released	None	-
FP-MT02	-	Brook Stickleback	079	55	Released	None	-
FP-MT03	-	Brook Stickleback	080	55	Released	None	-
FP-MT03	-	Brook Stickleback	081	57	Released	None	-
FP-MT03	-	Brook Stickleback	082	54	Released	None	-

Notes:

Scale not functional, collected only total length in millimetres from first 103 individuals. DELTs = deformities, erosion, lesions, tumors (i.e., external health characteristics).



**Table 08: Fire Pond Fish Biological Information, September 2012**

Station	Panel (mm)	Species	Number	Total Length (mm)	Fate	DELTs	Comment
FP-MT03	-	Brook Stickleback	083	48	Released	None	-
FP-MT03	-	Brook Stickleback	084	61	Released	None	-
FP-MT03	-	Brook Stickleback	085	58	Released	None	-
FP-MT03	-	Brook Stickleback	086	63	Released	None	-
FP-MT03	-	Brook Stickleback	087	50	Released	None	-
FP-MT03	-	Brook Stickleback	088	53	Released	None	-
FP-MT03	-	Brook Stickleback	089	49	Released	None	-
FP-MT03	-	Brook Stickleback	090	55	Released	None	-
FP-MT03	-	Brook Stickleback	091	59	Released	None	-
FP-MT03	-	Brook Stickleback	092	52	Released	None	-
FP-MT03	-	Brook Stickleback	093	52	Released	None	-
FP-MT03	-	Brook Stickleback	094	60	Released	None	-
FP-MT03	-	Brook Stickleback	095	52	Released	None	-
FP-MT03	-	Brook Stickleback	096	50	Released	None	-
FP-MT03	-	Brook Stickleback	097	55	Released	None	-
FP-MT03	-	Brook Stickleback	098	60	Released	None	-
FP-MT03	-	Brook Stickleback	099	51	Released	None	-
FP-MT03	-	Brook Stickleback	100	63	Released	None	-
FP-MT03	-	Brook Stickleback	101	51	Released	None	-
FP-MT03	-	Brook Stickleback	102	52	Released	None	-
FP-MT03	-	Brook Stickleback	103	50	Released	None	-

*Notes:*

Scale not functional, collected only total length in millimetres from first 103 individuals. DELTs = deformities, erosion, lesions, tumors (i.e., external health characteristics).

**Table 09: Detailed Stream Assessment Information**

Crossing ID	KM from Sherridon Road	UTM (14U)		Water Physiochemistry			Channel Width (m)	Water Depth (m)	Substrate	Riparian Vegetation	Cover (%)			Unique Features	Nearby Waterbodies		Culvert				Comments
		Northing	Easting	Water Temp. (°C)	pH	Cond. (µS/cm)					SWD	UCB	IV		Upstream	Downstream	Number	Diameter (m)	Embedded?	Perched?	
PLM-04	1.7	6099720	366684	12.1	8.08	66	-	0.37 to 0.55	-	Grasses; Flooded Terrestrial Vegetation	-	-	-	Beaver lodge on south side of road; isolated ponded areas on north side of road.	Lilyroot Lake (48.5 ha)	Bess Lake (260.6 ha)	1	0.61	No	Yes	South end of culvert perched 0.3m; north side of culvert destroyed.
PLM-03	5.5	6100440	369368	11.9	7.98	47	0.5 to 6.52	0.07 to 0.77	80% organic; 20% sand	Bullrushes; Grasses	0	10	5	Beaver dam underneath bridge; small riffle over dam.	Archie Lake (100.5 ha)	Jay Lake (141.7 ha)	0	-	-	-	Bridge width 6.23 m; fishing effort (backpack electrofisher) captured no fish on the downstream side of the bridge.
PLM-02	7.9	6100163	371243	-	-	-	-	-	-	Shrubs; Grasses	-	-	-	None.	None	None	1	unknown	Yes	No	Culvert is crushed and partially buried; very shallow; no fish habitat, no connectivity.
PLM-01	8.4	6100278	371693	7.91	7.91	41	-	0.1 to 1	Organic over sand/gravel	Grasses	5	0	0	Beaver dam in creek on south side of road.	Small Lake (28.8 ha)	Jay Lake (141.7 ha)	1	0.3	No	Yes	At winter road crossing, no fish habitat, shallow, no connectivity.

Notes: (µS/cm) = specific conductance in microSiemens per centimetre; SWD = small woody debris; UCB = undercut banks; IV = instream vegetation; - = not applicable.