

Appendix 13G Vegetation Tables



Table 13G-1 Special Plant Communities in the Boreal Forest Natural Region

Scientific Name	Common Name	S Rank	Group	Notes
Amelanchier alnifolia/ Arctostaphylos uva-ursi/ Oryzopsis pungens	Saskatoon/common bearberry/ northern rice grass	S2S3	Shrubland	Surrounded by jack pine or aspen stands in Dry Mixedwood Subregion
Carex limosa—Scheuchzeria palustris—Sphagnum majus/S. jensenii/S. riparium	Mud sedge – scheuchzeria – peat mosses	S1	Herbaceous	Sphagnum-dominated, species poor fen with shallow pools in Upper Foothills Subregion
Carex pseudo-cyperus–Calla palustris	Cypress-like sedge – water arum	S1S2	Herbaceous	Edge of open water around parkland sloughs and in southern Boreal Forest Natural Region
Elymus trachycaulus – Distichlis stricta	Slender wheat grass – salt grass	S1	Herbaceous	Occupies eroded solods and saline seeps on glaciolacustrine materials on Salt River Escarpment in Wood Buffalo National Park
Elymus trachycaulus – Hierochloe odorata	Slender wheat grass – sweet grass	SU	Herbaceous	Found in the northwest part of the Boreal Natural Region, including Hay River
Elymus trachycaulus – Koeleria macrantha	Slender wheat grass – June grass	SU	Herbaceous	Occupies level salt plains of the Peace River Lowlands Subregion
Isoetes echinospora	Northern quillwort	S1	Herbaceous	Found near shallow water on sandy substrate in Boreal Forest and Canadian Shield Natural Regions
Larix laricina/Carex prairea	Tamarack/prairie sedge	S1	Forest/ Woodland	Dry Mixedwood wetland community in constant discharge areas
Picea glauca /Alnus tenuifolia–Betula neoalaskana /Equisetum pratense /Hylocomium splendens	White spruce/river alder – Alaska birch/meadow horsetail/stair-step moss	S3	Forest/ Woodland	Boreal Forest silt terrace community along major river valleys



Table 13G-1 Special Plant Communities in the Boreal Forest Natural Region (cont'd)

Scientific Name	Common Name	S Rank	Group	Notes
Picea glauca/Cetraria islandica	White spruce/lichen	S1	Forest/ Woodland	Open park-like white spruce on sandhills with lichen mat dominated by <i>Cetraria islandica</i> . Central Mixedwood or Athabasca South. Typically found far to the NE
Populus balsamifera/Alnus tenuifolia–Cornus stolonifera/Equisetum pratense	Balsam poplar/river alder–red-osier dogwood/meadow horsetail	S3	Forest/ Woodland	Boreal Forest old growth community located on silt terraces along major river valleys of NW Canada
Populus balsamifera/Rhamnus alnifolia/Equisetum arvense	Balsam poplar/alder- leaved buckthorn	S1	Forest/ Woodland	Mature community of level, wet, nutrient-rich sites in central Mixedwood Subregion
Populus balsamifera/Viburnum opulus/Matteuccia struthiopteris	Balsam poplar/high-bush cranberry/ostrich fern	S1S2	Forest/ Woodland	Moist, nutrient-rich community of seepage areas, pitted moraine and glaciofluvial outwash in the Dry and Central Mixedwood Subregions
Populus tremuloides/Rubus parviflorus/Aralia nudicaulis	Aspen/thimbleberry/wild sarsaparilla	S2S3	Forest/ Woodland	Associated with seepage areas related to a layer of reduced permeability in the soil profile that restricts drainage
Populus tremuloides/Salix bebbiana-Corylus cornuta/Calamagrostis canadensis–Matteuccia struthiopteris	Aspen/Bebb's willow– beaked hazelnut/bluejoint–ostrich fern	S1	Forest/ Woodland	Imperfectly drained hygric riparian wet meadows in the Central Mixedwood Subregion
Puccinellia nuttalliana– Suaeda calceoliformis– Spergularia marina barren	Nuttall's salt-meadow grass-western sea-blite- salt-marsh sandy spurry barren	S2	Sparsely vegetated	Commonly associated with hyper-saline salt springs. Documented in the Central Mixedwood Subregion
Salicornia europaea	Samphire	S2	Sparsely vegetated	Occurs in hyper-saline marshes of the Grassland, Parkland, and Boreal Forest Natural Regions
Salix athabascensis string shrubland	Athabasca willow string shrubland	SP	Shrubland	Low hummocks and incipient strings in fens in Wood Buffalo area



Table 13G-1 Special Plant Communities in the Boreal Forest Natural Region (cont'd)

Scientific Name	Common Name	S Rank	Group	Notes
Salix drummondiana/Scirpus Drummond's		S1	Shrubland	A Central Mixedwood
microcarpus–Calamagrostis	willow/small-fruited			riparian meadow
canadensis	bulrush-bluejoint			bordering creeks

Source: Allen 2002

Table 13G-2 Rare Natural Plant Communities for the Fort Nelson Forest District, British Columbia

Scientific name	Common name	Biogeoclimatic Zone	Provincial Rank	Provincial Rank
Picea mariana/ Arctostaphylos/ Cladina	Black spruce/ Kinnikinnick/ Cladina	BWBSmw2/ 00	S3	Blue

Source: British Columbia Conservation Data Centre 2002

Table 13G-3 Definitions for Ranks Used in the Alberta Plant Tracking List and Plant Watch List

Provincial Rank	Global Rank	Definition
S1	G1	Five, or less recorded occurrences, or with few individuals remaining.
S2	G2	Six to twenty occurrences or with many individuals in fewer occurrences.
S3	G3	Twenty one to one hundred occurrences and may be rare and local throughout its range, or its range may be restricted (may be abundant at some locations or may be vulnerable to extirpation because of some factor of its biology).
S4	G4	Secure under present conditions and typically with greater than one hundred occurrences or may be fewer with many large populations. May also be rare in parts of its range, especially at the periphery.
S5	G5	Secure under present conditions with greater than one hundred occurrences but may be rare it part of its range, especially at the periphery.

Source: Vujnovic and Gould 2002



Table 13G-4 Rank Definitions Used in British Columbia

Rank	Definition
S1	Critically Imperiled—Critically imperiled because of extreme rarity or some factor that makes it especially vulnerable to extirpation. Typically 5 or fewer occurrences or very few remaining individuals (<1,000).
S2	Imperiled—Imperiled because of rarity or because of some factor that makes it very vulnerable to extirpation. Typically 6 to 20 occurrences or few remaining individuals (1,000 to 3,000).
S3	Vulnerable—Vulnerable because it is rare and uncommon or it is found only in a restricted range (even if abundant at some locations), or because of other factor that makes it vulnerable to extirpation. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals.
S4	Apparently Secure—Uncommon but not rare and usually widespread. Possibly a long-term concern. Usually more than 100 occurrences and more than 10,000 individuals.
S5	Secure—Common, widespread, and abundant. Essentially ineradicable under present conditions. Typically with more than 100 occurrences and more than 10,000 individuals.
S#S#	Range Rank—A numeric range rank (e.g., S2S3) indicates the range of uncertainty about the exact status of the element. Ranges cannot skip more than one rank.

Source: NatureServe Explorer 2001

Table 13G-5 British Columbia Ministries of Sustainable Resource Management and Water, Land and Air Protection Rank Definitions

Rank	Definition
Red	Includes indigenous species or subspecies that have, or are candidates for Extirpated,
list	Endangered, or Threatened status in British Columbia. Extirpated taxa do not exist in
	the wild in British Columbia, but do occur elsewhere. Endangered taxa are facing
	imminent extirpation or extinction. Threatened taxa are likely to become endangered if
	limiting factors are not reversed. Not all Red-listed taxa will necessarily become formally
	designated. Placing taxa on these lists flags them as being at risk and requiring
	investigation.
Blue	Includes any indigenous species or subspecies considered to be Vulnerable in British
list	Columbia. Vulnerable taxa are of special concern because of characteristics that make
	them particularly sensitive to human activities or natural events. Blue-listed taxa are at
	risk, but are not Extirpated, Endangered or Threatened.

Source: Province of British Columbia 2001



Table 13G-6 Rare Vascular Plants in the Wetland Mixedwood Subregion of Alberta

Scientific Name	Common Name	Rank	Habitat Description
Blysmus rufus ((Hudson) Link)	Red bulrush	S1G5	Saline marsh
Botrychium lanceolatum (Gmelin)	•		Mountain slopes in Alberta, although found in open fields and woods, peaty slopes and mountain meadows elsewhere.
Juncus filiformis (L.)	Thread rush	S2S3G5	Fens, marshes, lakeshores and streambanks
Potamogeton foliosus (Raf.)	Leafy pondweed	S2G5	Open water
Potamogeton praelongus (Wulf.)	White-stemmed pondweed	S2G5	Open water
Potentilla multifida (L.)	Branched cinquefoil	S1G5	Open sandy ground, often near streams and lakes
Stellaria crispa (Cham. & Schiecht.)	Wavy-leaved chickweed	S2G5	Moist woods and clearings
Vaccinium uliginosum (L.)	Bog bilberry	S2G5	Bogs

Sources: Kershaw et al. 2002 and ANHIC 2002

Table 13G-7 Rare Vascular Plants in the Fort Nelson Forest District of British Columbia

Scientific Name	Common Name	G Rank	Subnational	BC Status	Habitat Description
Androsace chamaejasme ssp. lehmanniana	Sweet-flowered fairy-candelabra	G5T5	S2S3	Blue	Mesic to dry rocky slopes and meadows. Alpine and subalpine.
Aster puniceus var. puniceus	Purple-stemmed aster	G5T5	S1	Red	Moist streambanks and openings. Montane.
Astragalus umbellatus	Tundra milk-vetch	G4	S2S3	Blue	Moist to mesic meadows, heath, and tundra. Montane to alpine.
Botrychium crenulatum	Dainty moonwort	G3	S2S3	Blue	Marsh meadows and springs. Montane.
Braya purpurascens	Purple braya	G4G5Q	S2S3	Blue	Dry scree. Alpine.
Carex bicolor	Two-coloured sedge	G5	S2S3	Blue	Moist to wet meadows and shoreline. Montane to alpine.
Carex heleonastes	Hudson Bay sedge	G4	S2S3	Blue	Bogs and fens. Montane.
Carex incurviformis var. incurviformis	Curved-spiked sedge	G4G5T4T5	S2S3	Blue	Mesic to dry meadows and rocky slopes. Alpine.



Scientific Name	Common Name	G Rank	Subnational	BC Status	Habitat Description
Carex lapponica	Lapland sedge	G4G5Q	S2S3	Blue	Peat bogs and open bog forest. Montane.
Carex membranacea	Fragile sedge	G5	S2S3	Blue	Fens, bogs, shorelines, wet meadow. Montane to alpine.
Carex misandra	Short-leaved sedge	G5	S2S3	Blue	Dry meadow and rocky slopes. Alpine.
Carex petricosa	Rock-dwelling sedge	G4	S2S3	Blue	Dry gravelly and often calcareous slopes and rock outcrop. Alpine.
Carex rupestris ssp. rupestris	Curly sedge	G5T?	S2S3	Blue	Dry rocky and scree slopes and meadows. Alpine.
Carex tenera	Tender sedge	G5	S2S3	Blue	Mesic to dry meadows, shoreline, and open forest. Steppe and montane.
Chamaerhodos erecta ssp. nuttallii	American chamaerhodos	G5T5	S2S3	Blue	Dry open, sandy or gravelly hills and terraces. Steppe and montane.
Cicuta virosa	European water- hemlock	G4G5	S2S3	Blue	Streambanks, marshes, shores of lakes and ponds. Montane.
Claytonia tuberosa	Tuberous spring beauty	G4	S2S3	Blue	Moist sites. Subalpine and alpine.
Draba alpina	Alpine draba	G4G5	S2S3	Blue	Moist to mesic meadows, rocky slopes, and snowbeds. Subalpine and alpine.
Draba cinerea	Gray-leaved draba	G5	S2S3	Blue	Mesic to dry meadows and cliffs. Alpine.
Draba fladnizensis	Austrian draba	G4	S2S3	Blue	Mesic to dry meadows, cliffs, talus slopes. Subalpine and alpine.
Draba glabella var. glabella	Smooth draba	G4G5T4	S2S3	Blue	Moist to mesic meadows and cliffs. Subalpine and alpine.
Draba lactea	Milky draba	G4	S2S3	Blue	Mesic to dry meadows and cliffs. Subalpine and alpine.
Draba porsildii	Porsild's draba	G3G4	S2S3	Blue	Mesic to dry talus and scree slopes and cliffs. Subalpine to alpine.



Scientific Name	Common Name	G Rank	Subnational	BC Status	Habitat Description
Elymus calderi	Calder's wildrye	G?	S2S3	Blue	Mesic to dry sandy or gravelly river terraces, floodplains and grassy slopes. Montane.
Elymus sibiricus	Siberian wildrye	G?	S2S3	Blue	Mesic sandy or gravelly river bars and floodplains. Montane.
Epilobium davuricum	Northern swamp willowherb	G5	S2S3	Blue	Wet meadows and bogs. Montane and subalpine.
Epilobium hornemannii ssp. behringianum	Hornemann's willowherb	G5T4	S2S3	Blue	Wet to moist rocky cliffs, meadows, thickets, and riverbanks. Montane.
Epilobium leptocarpum	Small-fruited willowherb	G5	S2S3	Blue	Moist meadows and streambanks. Montane to alpine.
Eriophorum vaginatum ssp. vaginatum	Sheathed cotton- grass	G5T?	S3	Blue	Bog, marsh, and wet meadow. Montane to alpine.
Eutrema edwardsii	Edwards wallflower	G4	S2S3	Blue	Dry talus slopes. Subalpine and alpine.
Galium labradoricum	Northern bog bedstraw	G5	S2S3	Blue	Bogs, wet meadow, and moist forest. Montane.
Glyceria pulchella	Slender mannagrass	G5	S2S3	Blue	Streamsides, marshes, lakeshores and ponds. Montane.
Gymnocarpium jessoense ssp. parvulum	Nahanni oak fern	G5T4	S2S3	Blue	Moist, cool shale or limestone slopes. Montane and subalpine.
Impatiens aurella	Orange touch-me- not	G4?	S2S3	Blue	Streambanks and meadows. Steppe and lower montane.
Juncus albescens	Whitish rush	G5	S2S3	Blue	Wet calcareous fen. Montane.
Juncus arcticus ssp. alaskanus	Arctic rush	G5T?	S2S3	Blue	Tidal flats and lakeshores. Lowland to montane.
Kobresia sibirica	Siberian kobresia	G5	S2S3	Blue	Bogs, wet to dry meadows, and shrubby slopes. Upper montane to alpine.
Lesquerella arctica var. arctica	Arctic bladderpod	G4T4	S2S3	Blue	Mesic to dry gravel bars, river terraces, and scree and rocky slopes. Montane to alpine.



Scientific Name	Common Name	G Rank	Subnational	BC Status	Habitat Description
Leucanthemum	Entire-leaved	G5	S2S3	Blue	Moist to mesic gravel
integrifolium	daisy				sites. Alpine.
Lomatogonium	Marsh felwort	G5	S2S3	Blue	Wet to moist fens,
rotatum					meadows and
					shorelines. Montane to
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		0000	D.	alpine.
Lupinus kuschei	Yukon lupine	G3	S2S3	Blue	Mesic to dry, gravelly
					or rocky openings and
					lodgepole pine forest. Montane and alpine
					pumice fields.
Luzula confusa	Northern wood-	G5	S2S3	Blue	Dry to moist rocky cliffs
Luzuia Corriusa	rush	03	3233	Dide	and slopes. Alpine.
Luzula kjellmaniana	Kjellman's wood-	G?	S2S3	Blue	Dry meadows and
Luzula Njelli lialila lia	rush	0.	0200	Dide	rocky slopes. Alpine.
Luzula nivalis	Arctic wood-rush	G5	S2S3	Blue	Moist meadows,
	7 0 0		3233	2.6.0	shrubby slopes, and
					snowbed site.
					Subalpine and alpine.
Luzula rufescens	Rusty wood-rush	G5	S2S3	Blue	Dry to mesic open
					forests and forest
					margin, gravel bars,
					riverbanks, and edges
					of wetlands. Montane.
Malaxis	White adder's-	G4	S2S3	Blue	Moist forests, mudflats,
brachypoda	mouth orchid				fens and streambanks.
1. C	D 1 14 ()	0.4	0000	DI.	Lowland and montane.
Minuartia	Rocky Mountain	G4	S2S3	Blue	Dry calcareous,
austromontana	sandwort				gravelly to rocky
Minuartia alagana	Northern sandwort	G4G5	S2S3	Blue	slopes. Alpine. Moist meadows and
Minuartia elegans	Northern Sandwort	0405	3233	Diue	slopes. Alpine.
Minuartia stricta	Rock sandwort	G5	S2S3	Blue	Mesic gravel
Williadrila Stricta	TOOK Sandwort	00	0200	Diac	floodplains, rocky
					slopes and meadows.
					Subalpine and alpine.
Minuartia	Yukon sandwort	G3G4	S2S3	Blue	Dry rocky slopes and
yukonensis					meadows. Alpine.
Muhlenbergia	Marsh muhly	G5	S3	Blue	Wet to moist
glomerata	_				meadows,
					streambanks, bogs,
					irrigation ditches, lake
					margins and hot
					springs. Steppe and
]	montane.



Scientific Name	Common Name	G Rank	Subnational	BC Status	Habitat Description
Oxytropis arctica	Arctic locoweed	G4?	S2S3	Blue	Dry to mesic sand and gravel bars, rocky ridges and alpine tundra. Montane to alpine.
Oxytropis jordalii ssp. davisii	Davis' locoweed	G4T3	S3	Blue	Mesic to dry meadows, gravel bars, forest openings, turfy heath and tundra. Montane to alpine.
Oxytropis jordalii ssp. jordalii	Jordal's locoweed	G4T4	S2S3	Blue	Mesic to dry meadows, gravel bars, forest openings, turfy heath and tundra. Montane to alpine.
Oxytropis maydelliana	Maydell's locoweed	G5	S2S3	Blue	Moist to mesic meadows, turfy tundra, rocky ridges and slopes. Montane to alpine.
Oxytropis scammaniana	Scamman's locoweed	G3G4	S2S3	Blue	Mesic to dry stony slopes, heath and tundra. Alpine.
Pedicularis parviflora ssp. parviflora	small-flowered lousewort	G4T4	S3	Blue	Wet meadows, fens and bogs. Montane and subalpine.
Penstemon gormanii	Gorman's penstemon	G4	S2S3	Blue	Dry rocky slopes, sand dunes, sandy or gravelly river terraces, clearings, and cutbanks. Montane.
Physaria didymocarpa var. didymocarpa	Common twinpod	G5T4	S2S3	Blue	Dry grassland, shrubland, and rocky slopes. Steppe and montane.
Pinguicula villosa	Hairy butterwort	G4	S2S3	Blue	Bogs and ponds. Lowland and montane.
Pinus banksiana	Jack pine	G5	S2S3	Blue	Dry slopes. Montane.
Poa abbreviata ssp. pattersonii	Abbreviated bluegrass	G5T5	S2S3	Blue	Mesic to moist fellfields and rocky slopes (open limestone). Alpine.
Polemonium boreale	Northern Jacob's- ladder	G5	S2S3	Blue	Mesic to dry meadows, tundra, scree, and rock outcrop. Montane to alpine.



Scientific Name	Common Name	G Rank	Subnational	BC Status	Habitat Description
Polemonium occidentale ssp. occidentale	Western Jacob's- ladder	G5?T5?	S2S3	Blue	Wet to moist swamp, streambanks, meadows, and thickets. Steppe to subalpine.
Potamogeton perfoliatus	Perfoliate pondweed	G5	S2S3	Blue	Lakes. Montane.
Potentilla biflora	Two-flowered cinquefoil	G4G5	S2S3	Blue	Dry to mesic rocky slopes. Subalpine and alpine.
Ranunculus sulphureus	Sulphur buttercup	G5	S2S3	Blue	Moist to wet meadow, tundra, mossy seepage areas, and scree. Alpine.
Rumex arcticus	Arctic dock	G5	S3	Blue	Moist to wet meadows, streambanks, and forest openings. Montane to subalpine.
Salix petiolaris	Meadow willow	G5	S2S3	Blue	Wet thickets. Lower montane.
Salix raupii	Raup's willow	G2	S1	Blue	Moist thickets, open forests, and gravel floodplain. Montane.
Salix serissima	Autumn willow	G4	S2S3	Blue	Wet meadow, thicket, and fens. Montane.
Sarracenia purpurea ssp. gibbosa	Common pitcher- plant	G5T5	S2S3	Blue	Bogs and fens. Montane.
Saxifraga hieraciifolia var. hieraciifolia	Hawkweed-leaved saxifrage	G4T?	S2S3	Blue	Moist to wet meadow and solifluction slopes. Alpine.
Saxifraga hirculus ssp. hirculus	Yellow marsh saxifrage	G5T?	S2S3	Blue	Wet meadow and bog. Alpine.
Senecio atropurpureus	Purple-haired groundsel	G5	S2S3	Blue	Wet to moist bogs, fens, and meadows. Montane to alpine.
Senecio congestus	Marsh fleabane	G5	S2S3	Blue	Wet to moist streambanks, lakeshores, ponds, and marshes. Montane.
Senecio sheldonensis	Mount Sheldon butterweed	G5	S2S3	Blue	Wet to moist meadows and forest openings. Montane to Alpine.
Senecio yukonensis	Yukon groundsel	G4G5Q	S2S3	Blue	Moist fellfields and snowbed sites. Alpine.
Silene involucrata ssp. involucrata	Arctic campion	G5T5	S2S3	Blue	Mesic meadows and rocky cliffs. Alpine.



Scientific Name	Common Name	G Rank	Subnational	BC Status	Habitat Description
Silene repens	Pink campion	G5	S2S3	Blue	Dry meadows and open forests. Montane to alpine.
Silene taimyrensis	Taimyr campion	G4?	S2S3	Blue	Dry open calcareous slopes. Montane to alpine.
Sphenopholis intermedia	Slender wedgegrass	G5	S2	Red	Moist meadows and streambanks, shallow ponds and hot springs. Steppe and montane.
Sphenopholis obtusata	Prairie wedgegrass	G5	S1	Red	Moist meadows, streambanks, shallow ponds and hot springs. Steppe and montane.
Tofieldia coccinea	Northern false asphodel	G5	S2S3	Blue	Dry to mesic meadows, rocky slopes, and tundra. Montane to alpine.
Trichophorum pumilum	Dwarf clubrush	G5	S2S3	Blue	Bogs, lakeshores, fens, and wet meadows. Subalpine and alpine.
Woodsia alpina	Alpine cliff fern	G4	S2S3	Blue	Moist, calcareous rocks. Montane and subalpine.

Sources: BC CDC 2002; Douglas et al. 1998a, b; 1999a, b; 2000, 2001a, b.



Table 13G-8 Detailed Description of Biophysical Conditions of Site Series in the Mapped Corridor

		Site Site	Site			Site Modifier ¹					Typical Soil	
Zone	Subzone	Series Number	Series Name	Series Symbol	Site Series Name	Typical Site Description	1	2	3	4	Structure Stage	Moisture Regime
BWBS	mw	2	00	AH	Mountain alder - Alaska paper birch – Beaked sedge - Horsetail	Not available					2,3a,3b	
BWBS	mw	2	01	AM	SwAt – Step moss	Gentle slope; deep, medium - textured soils	d	j	m		2,3,4,5,6,7	mesic
BWBS	mw	2	08	BS	Sb – Cloudberry - Sphagnum	Organic bog wetland	d	j	р		2,3,4,5,6,7	hygric - subhydric
BWBS	mw	2	00	SG	Sedge - Grass fen	Herbaceous wetlands					2	
BWBS	mw	2	05	SH	Sw – Currant - Horsetail	Gentle slope to level; moist, receiving sites, deep coarse - textured soil	С	d	j		2,3,4,5,6,7	subhygric
BWBS	mw	2	10	ТВ	Lt – Buckbean	Organic fen wetland; medium to rich nutrient regime	d	j	р		2,3,4,5,6,7	hygric - subhydric

Source: Ministry ftp://ftp.env.gov.bc.ca/dist/wis/tem/mapcodes nov2001.xls

Notes: Modifier codes:

c - coarse-textured soils

d - deep soil (greater than 100 cm to bedrock)

j - gentle slope (less than 25 percent in the Interior and less than 35 percent in the CWH, CDF, and MH zones)

m - medium-textured soils

p - peaty material (deep organics over mineral materials)