

TABLE 15. Vegetation table for zonal sites of summer-dry maritime biogeoclimatic units

Biogeoclimatic Unit		CDFmm	CWHdm	CWHmm1	CWHmm2	CWHxm1	CWHxm2	
TREE LAYER	<i>Pseudotsuga menziesii</i>	■	■	■	■	■	■	Douglas-fir
	<i>Thuja plicata</i>	■	■	■	■	■	■	western redcedar
	<i>Abies grandis</i>	■						grand fir
	<i>Acer macrophyllum</i>	■						bigleaf maple
	<i>Cornus nuttallii</i>	■						western flowering dogwood
	<i>Tsuga heterophylla</i>		■	■	■	■	■	western hemlock
	<i>Abies amabilis</i>			■	■	■	■	amabilis fir
	<i>Chamaecyparis nootkatensis</i>				■			yellow-cedar
	<i>Tsuga mertensiana</i>				■			mountain hemlock
	<i>Arbutus menziesii</i>							arbutus
SHRUB LAYER	<i>Gaultheria shallon</i>	■	■	■	■	■	■	salal
	<i>Mahonia nervosa</i>	■						dull Oregon-grape
	<i>Vaccinium parvifolium</i>	■	■	■	■	■	■	red huckleberry
	<i>Rubus ursinus</i>	■	■					trailing blackberry
	<i>Rosa gymnocarpa</i>	■						balhip rose
	<i>Holodiscus discolor</i>	■						ocean spray
	<i>Symphoricarpos mollis</i>	■						trailing snowberry
	<i>Lonicera ciliosa</i>	■						western trumpet honeysuckle
	<i>Symphoricarpos albus</i>	■						common snowberry
	<i>Chimaphila umbellata</i>			■	■	■	■	prince's pine
	<i>Vaccinium alaskaense</i>			■	■	■	■	Alaskan blueberry
	<i>Acer circinatum</i>		■					vine maple
	<i>Vaccinium membranaceum</i>				■	■	■	black huckleberry
	<i>Vaccinium ovalifolium</i>				■	■	■	oval-leaved blueberry
	<i>Philadelphus lewisii</i>							mock-orange
HERB LAYER	<i>Linnaea borealis</i>	■	■	■	■	■	■	twinflower
	<i>Polystichum munitum</i>	■	■					sword fern
	<i>Pteridium aquilinum</i>	■	■					bracken
	<i>Trientalis latifolia</i>	■						broad-leaved starflower
	<i>Achlys triphylla</i>	■			■	■	■	vanilla leaf
	<i>Blechnum spicant</i>				■			deer fern
	<i>Clintonia uniflora</i>				■			queen's cup
	<i>Cornus canadensis</i>							bunchberry
	<i>Rubus pedatus</i>				■			five-leaved bramble
	MOSS LAYER	<i>Hylocomium splendens</i>	■	■	■	■	■	■
<i>Kindbergia oregana</i>		■	■	■	■	■	■	Oregon beaked moss
<i>Rhytidiadelphus triquetrus</i>		■						electrified cat's tail moss
<i>Plagiothecium undulatum</i>			■	■	■	■	■	flat moss
<i>Rhytidiadelphus loreus</i>			■	■	■	■	■	lanky moss
<i>Rhytidiopsis robusta</i>				■	■	■	■	pipecleaner moss

CWHvm2 - occurs adjacent and above to the west; it has:

- rare Fd
- some Yc and Hm (more common on wetter sites)
- rare dull Oregon-grape, vanilla-leaf, and *Kindbergia oregana*

4.6 **CWHmm2** - Montane Moist Maritime Coastal Western Hemlock Variant

DISTRIBUTION: The CWHmm2 occurs at higher elevations along the leeward side of the Vancouver Island Ranges, below the MH zone. Elevational limits range from approximately 700 to 1100 m.

CLIMATE: Compared with the submontane variant, the CWHmm2 has cooler temperatures, shorter growing seasons, and heavier snowfall, with snowpacks persisting throughout the winter. Like the submontane variant, the CWHmm2 has a growing season water deficit from the rainshadow effect of the Vancouver Island mountains. Climatic data are lacking for this variant.

VEGETATION (Table 15): Forests on zonal sites are dominated by Hw, Ba, Fd, and minor amounts of Yc and Hm (more common at upper elevations and on wetter sites). The understory features abundant Alaskan blueberry and lesser amounts of salal, oval-leaved blueberry, and black huckleberry. *Rhytidiopsis robusta*, *Rhytidiadelphus loreus*, and *Hylocomium splendens* dominate the well-developed moss layer. A history of wildfires has contributed to the relatively large stand component of Fd throughout the CWHmm2.

DISTINGUISHING ADJACENT UNITS FROM THE CWHmm2 (using zonal sites)

CWHxm - occurs below; it has:

- rare Ba and Alaskan blueberry

CWHmm1 - occurs below; it has:

- no Yc or Hm; rare black huckleberry
- some dull Oregon-grape and *Kindbergia oregana*

5.2 Site Classification Grids and Vegetation Summary Tables

TABLE 21. Index of site classification grids

Grid no.	Site category	Biogeoclimatic unit
1	General	CDFmm
2	General	CWHdm
3	General	CWHds1
4	General	CWHds2
5	General	CWHmm1
6	General	CWHmm2
7	General	CWHms1
8	General	CWHms2
9	General	CWHvh1
10	General	CWHvh2
11	General	CWHvm1
12	General	CWHvm2
13	General	CWHwh1
14	General	CWHwh2
15	General	CWHws2
16	General	CWHxm
17	General	ESSFmw
18	General	IDFww
19	General	MHmm1
20	General	MHmm2
21	General	MHwh
22	Special - Floodplains	CDFmm
23	Special - Floodplains	CWHdm,CWHds1,CWHxm
24	Special - Floodplains	CWHds2
25	Special - Floodplains	CWHmm1
26	Special - Floodplains	CWHms1,CWHms2
27	Special - Floodplains	CWHwh1
28	Special - Floodplains	CWHvh1,CWHvh2
29	Special - Floodplains	CWHvm1
30	Special - Floodplains	CWHws2
31	Special - Fluctuat water table	CDFmm
32	Special - Fluctuat. water table	CWHdm, CWHxm
33	Special - Shoreline/ocean spray	CWHwh,CWHvh

6.1.6 Recommended tree species grids

TABLE 24. Index of recommended tree species grids

Grid no.	Site category	Biogeoclimatic unit
1	General	CDFmm
2	General	CWHdm
3	General	CWHds1
4	General	CWHds2
5	General	CWHmm1
6	General	CWHmm2
7	General	CWHms1
8	General	CWHms2
9	General	CWHvh1
10	General	CWHvh2
11	General	CWHvm1
12	General	CWHvm2
13	General	CWHwh1
14	General	CWHwh2
15	General	CWHws2
16	General	CWHxm
17	General	ESSFmw
18	General	IDFww
19	General	MHmm1
20	General	MHmm2
21	General	MHwh
22	Special - Floodplains	CDFmm
23	Special - Floodplains	CWHdm,CWHds1,CWHxm
24	Special - Floodplains	CWHds2
25	Special - Floodplains	CWHmm1
26	Special - Floodplains	CWHms1,CWHms2
27	Special - Floodplains	CWHwh1
28	Special - Floodplains	CWHvh1,CWHvh2
29	Special - Floodplains	CWHvm1
30	Special - Floodplains	CWHws2
31	Special - Fluctuat water table	CDFmm
32	Special - Fluctuat. water table	CWHdm, CWHxm
33	Special - Shoreline/ocean spray	CWHwh,CWHvh

Comments: Grid No. 6 CWHmm2

GENERAL COMMENTS:

- **Se**, **Bp** and **Lw** are recommended on a trial basis
- **Yc** is an alternative to, or may be used with **Cw** throughout the variant, and should replace it at upper elevational limits
- **Cw** is an alternative to **Ba** on nutrient-very poor to medium sites or on steep slopes
- high hazard for white pine blister rust

SPECIFIC COMMENTS:

- 01 **Fd** is an alternative to **Hw** on steep, southerly aspects or where local climate is warmer/drier than normal; **Ba** is more suitable on northerly aspects; **Se** is a suitable minor species, particularly on southerly aspects; **Yc** is an alternative to **Cw**
- 02 marginal sites for timber production; **Fd** is an alternative to **Pl**
- 03 **Se** is an alternative to **Fd**; **Lw** is a suitable minor species; **Yc** is an alternative to **Cw**
- 04 **Se** is an alternative to **Fd**; **Pw** or **Lw** are suitable minor species; **Yc** is an alternative to **Cw**
- 05 **Fd** is an alternative to **Ba** on steep southerly aspects; **Bp** is an alternative to **Ba**; **Yc** is an alternative to **Cw**; **Se** or **Pw** are suitable minor species
- 06 **Yc** is an alternative to **Cw**
- 07 n/a
- 08 **Hw** is suitable on sites with thick forest floors (>20cm) or abundant decayed wood, but should not form the leading species; **Yc** is an alternative to **Cw**; **Fd** is a suitable minor species on steep southerly aspects
- 09 marginal sites for timber production; elevated microsites are preferred
- 10 **Pw** is a suitable minor species; elevated microsites are preferred

Grid No. 6

CWHmm2	Montane Moist Maritime CWH Variant
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Soil nutrient regime

		Actual Relative	Very Poor	Poor	Medium	Rich	Very Rich
			A	B	C	D	E
Soil moisture regime	MD	0	02	Pl Fd			
		SD	1	03	Fd(Cw)		04 Fd(Cw)
	SD		2		(Yc)		(PwYc)
	F	3	01	Hw[BaCw] FdYc		05 CwBa[Hw] FdYc(Pw)	
		F	4				
	M	5	06	HwCw[Ba] Yc		08 CwBa	
			VM	6	07	Cw(Yc)	HwYc(Fd)
	W	7		09	Pl(Yc)	10	Cw(HwYc) (Pw)

See comments on facing page

Site series

- | | |
|-----------------------------------|--------------------------------|
| 01 HwBa - Pipecleaner moss | 06 HwBa - Deer fern |
| 02 FdHw - Salal | 07 CwYc - Goldthread |
| 03 HwCw - Salal | 08 BaCw - Salmonberry |
| 04 CwHw - Swordfern | 09 Pl - Sphagnum |
| 05 BaCw - Foamflower | 10 CwSs - Skunk cabbage |

Grid No. 5: CWHmm1

Soil Nutrient Regime

Actual Relative	Soil Nutrient Regime				
	Very Poor A	Poor B	Medium C	Rich D	Very Rich E
MD 0	02 (III) L				
SD 1	03 (III) M/4			04 (III) L	
SD 2					
F 3	01 (II) L			05 (H) H/3	
F 4					
M 5	06 (H) L			07 (H) VH/3	
VM 6					
W 7	11 (IV) L	12 (III) VH/3			

Grid No. 6: CWHmm2

Soil Nutrient Regime

Actual Relative	Soil Nutrient Regime				
	Very Poor A	Poor B	Medium C	Rich D	Very Rich E
MD 0	02 (III) L				
SD 1	03 (III) L			04 (III) L	
SD 2					
F 3	01 (II) L			05 (II) M/3	
F 4					
M 5	06 (II) L			08 (II) H/3	
VM 6	07 (IV) L				
W 7	09 (IV) L	10 (III) H/3			

APPENDIX 8. Correlation of old and new biogeoclimatic and site units.

TABLE A-1. Biogeoclimatic units

New symbol	New name	Old symbol ^a
CDFmm	Moist Maritime CDF	CDFa
CWHdm	Dry Maritime CWH	CWHa2
CWHds1	Southern Dry Submaritime CWH	CWHc1
CWHds2	Central Dry Submaritime CWH	CWHc2, h1, h2
CWHmm1	Submontane Moist Maritime CWH	CWHb3
CWHmm2	Montane Moist Maritime CWH	CWHb4
CWHms1	Southern Moist Submaritime CWH	CWHb5
CWHms2	Central Moist Submaritime CWH	CWHb6, h3
CWHvh1	Southern Very Wet Hypermaritime CWH	CWHd1
CWHvh2	Central Very Wet Hypermaritime CWH	CWHd2, CPH
CWHvm1	Submontane Very Wet Maritime CWH	CWHb1, i1
CWHvm2	Montane Very Wet Maritime CWH	CWHb2, i2
CWHwh1	Submontane Wet Hypermaritime CWH	CWHe1, g1
CWHwh2	Montane Wet Hypermaritime CWH	CWHe2, g2
CWHws2	Montane Wet Submaritime CWH	CWHb7, f2, i3
CWHxm1 ^b	Eastern Very Dry Maritime CWH	CDFb
CWHxm2 ^b	Western Very Dry Maritime CWH	CWHa1
ESSFmw	Moist Warm ESSF	ESSFf
IDFww	Wet Warm IDF	IDFe
MHmm1	Windward Moist Maritime MH	MHa, d
MHmm2	Leeward Moist Maritime MH	MHb, e
MHwh	Wet Hypermaritime MH	MHc, f

^a From Yole *et al.* (1982), Banner, *et al.* 1983, Green, *et al.* (1984), Pojar *et al.* (1988).

^b Combined into CWHxm in this guide because of floristic and management similarities.

APPENDIX 8. (Continued)

TABLE A-2. Site units

New grid # and BGC unit	Old grid # and BGC unit	New sites series #																	
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
1 CDFmm	6 CDF	3	1	2	4	5	6	7	*	*	8	9	*	*	*				
2 CWHdm	8 CWHa2	4	1	2	3	5	6	7	8	*	*	9	10	*	*	*			
3 CWHds1	18 CWHc1	3	1	1/3	2/4 ²	4	5	6	7	*	*	8	9						
4 CWHds2	17 CWHc2	3	1	1/3	2/4 ²	4	5	6	7	*	*	8	9						
5 CWHmm1	11 CWHb3	4	1	2	3	5	6	7	8	*	*	9	10						
6 CWHmm2	12 CWHb4	4	1	2	3	5	6	*	7	8	9								
7 CWHms1 ³	13 CWHb5	4	1	2	5	6	7	8	*	*	9	10							
8 CWHms2 ³	14 CWHb6	4	1	2	5	6	7	8	*	*	9	10							
9,10 CWHvh	18 CWHd	3	1	2	*	*	4	6	*	*	*	5	7	8	*	*	*	*	
11 CWHvm1	9 CWHb1	3	1	2	*	4	5	6	6	7	*	*	*	8	9				
12 CWHvm2	10 CWHb2	3	1	2	*	4	5	6	6	*	7	8							
13,14 CWHwh	*																		
15 CWHws2 ³	15 CWHb7	4	1	2	5	6	7	8	*	*	9	10							
16 CWHxm ⁴	7 CWHa1	4	1	2	3	5	6	7	8	*	*	9	10	*	*	*			
17 ESSFmw ⁵	3 ESSFf	4	1	2	*	6	7	7	9										
18 IDFww ⁶	4,5 IDFe	3	1	1	4	6	6	9											
19 MHmm1	1 MHa	3	1,2 ⁷	4	5	6	5	6	7	8									
20 MHmm2	2 MHb	3	1,2 ⁷	4	5	6	5	6	7	8									
21 MHwh	*																		

* No equivalent in Green *et al.* (1984)

¹ New site series includes portions of old site units 1 and 3

² New site series includes portions of old site units 2 and 4

³ No new equivalent for old site unit 3

⁴ CWHxm most closely represents the old CWHa1

⁵ No new equivalent for old site units 3, 5, and 8

⁶ No new equivalent for old site units 2, 5, 7, and 8

⁷ New site series includes old site units 1 and 2

TABLE 5.2.1 Distribution of Fen Site Associations by biogeoclimatic zone

	BG PP	BWBS SWB	ESSF	ICH	IDF	MS	SBPS SBS	CDF	CWH	MH
Wf01 Water sedge – Beaked sedge		xx	x	xx	xxx	xxx	xxx		x ⁱ	
Wf02 Scrub birch – Water sedge		xxx	x	xx	xx	xx	xx			
Wf03 Water sedge – Peat-moss			xx				x			
Wf04 Barclay's willow – Water sedge – Glow mosses		x	xxx			x	x			
Wf05 Slender sedge – Common hook-moss		x		xx	xx	xx	xx			
Wf06 Slender sedge – Buckbean		x		x	x		x			
Wf07 Scrub birch – Buckbean – Shore sedge		x		x	x		x			
Wf08 Shore sedge – Buckbean – Hook-moss		x	x		x	x	x			
Wf09 Few-flowered spike-rush – Hook-moss			x			x	x			
Wf10 Hudson Bay clubrush – Red hook-moss							x			
Wf11 Tufted clubrush – Star moss		x	x	x		x	x			
Wf12 Narrow-leaved cotton-grass – Marsh-marigold			xxx							
Wf13 Narrow-leaved cotton-grass – Shore sedge			xx			x				
Wf50 Narrow-leaved cotton-grass – Peat-moss									x	xxx
Wf51 Sitka sedge – Peat-moss				x				xx	xx	
Wf52 Sweet gale – Sitka sedge								xx	xx ^s	
Wf53 Slender sedge – White beak-rush								x	xx ^s	

x = incidental; < 5% of wetlands

i = inland areas only

xx = minor; 5–25% of wetlands

s = southern subzones only

xxx = major; >25% of wetlands

TABLE 5.2.2 Fen Species Importance Table

Species		WF01	WF02	WF03	WF04	WF05	WF06	WF07	WF08
Shrubs	<i>Betula nana</i>								
	<i>Salix barclayi</i>								
	<i>Salix pedicellaris</i>								
	<i>Spiraea douglasii</i>								
	<i>Myrica gale</i>								
Herbs and Dwarf Shrubs	<i>Carex utriculata</i>								
	<i>Carex aquatilis</i>								
Shrubs	<i>Comarum palustre</i>								
	<i>Calamagrostis canadensis</i>								
Shrubs	<i>Carex lasiocarpa</i>								
	<i>Menyanthes trifoliata</i>								
Shrubs	<i>Carex limosa</i>								
	<i>Carex chordorrhiza</i>								
Shrubs	<i>Eleocharis quinqueflora</i>								
	<i>Trichophorum alpinum</i>								
Shrubs	<i>Trichophorum cespitosum</i>								
	<i>Eriophorum angustifolium</i>								
Shrubs	<i>Caltha leptosepala</i>								
	<i>Carex anthoxanthea</i>								
Shrubs	<i>Equisetum fluviatile</i>								
	<i>Carex magellanica</i>								
Shrubs	<i>Carex sitchensis</i>								
	<i>Rhynchospora alba</i>								
Shrubs	<i>Carex livida</i>								
	<i>Eriophorum chamissonis</i>								
Shrubs	<i>Vahlodea atropurpurea</i>								
	<i>Drosera anglica</i>								
Shrubs	<i>Hypericum anagalloides</i>								
	<i>Triantha glutinosa</i>								
Shrubs	<i>Schoenoplectus tabernaemontani</i>								
	<i>Fauria crista-galli</i>								
Shrubs	<i>Senecio triangularis</i>								
	<i>Andromeda polifolia</i>								
Shrubs	<i>Kalmia microphylla</i>								
	<i>Oxycoccus oxycoccus</i>								
Shrubs	<i>Triglochin maritima</i>								
	<i>Drosera rotundifolia</i>								
Shrubs	<i>Leptarrhena pyrolifolia</i>								
	<i>Platanthera dilatata</i>								
Shrubs	<i>Sanguisorba canadensis</i>								
	<i>Utricularia intermedia</i>								
Shrubs	<i>Viola palustris</i>								
	<i>Sphagnum</i> Group I								
Lichens and Mosses	<i>Aulaconnium palustre</i>								
	<i>Drepanocladus</i> spp.								
Lichens and Mosses	<i>Sphagnum</i> Group II								
	<i>Tomentypnum nitens</i>								
Lichens and Mosses	<i>Philonotis fontana</i>								
	<i>Calliergon stramineum</i>								
Lichens and Mosses	<i>Scorpidium</i> spp.								
	<i>Campyllum stellatum</i>								
Lichens and Mosses	<i>Warnstorfia</i> spp.								
	<i>Meesia triquetra</i>								

Wf09	Wf10	Wf11	Wf12	Wf13	Wf50	Wf51	Wf52	Wf53	Common Name
									scrub birch
									Barclay's willow
									bog willow
									pink spirea
									sweet gale
									beaked sedge
									water sedge
									marsh cinquefoil
									bluejoint reedgrass
									slender sedge
									buckbean
									shore sedge
									cordroot sedge
									few-flowered spike-rush
									Hudson Bay clubrush
									tufted clubrush
									narrow-leaved cotton-grass
									white mtn. marsh-marigold
									yellow-flowered sedge
									swamp horsetail
									poor sedge
									Sitka sedge
									white beak-rush
									pale sedge
									Chamisso's cotton-grass
									mountain hairgrass
									great sundew
									bog St. John's-wort
									sticky asphodel
									great bulrush
									deer-cabbage
									arrow-leaved groundsel
									bog-rosemary
									western bog-laurel
									bog cranberry
									seaside arrow-grass
									round-leaved sundew
									leatherleaf saxifrage
									fragrant white rein orchid
									Sitka burnet
									flat-leaved bladderwort
									marsh violet
									peat-moss Group I
									glow moss
									hook-mosses
									peat-moss Group II
									golden fuzzy fen moss
									spring moss
									straw spear-moss
									sausage-moss
									yellow star-moss
									hook-mosses
									three-ranked hump-moss

Myrica gale – *Carex sitchensis*

General Description

Sweet gale – Sitka sedge fens are uncommon at low elevations in the Georgia Depression and Coast and Mountains in a wide variety of landscape positions. Sites can be shallowly flooded in the early season but will drop just below the surface for most of the growing season.

Myrica gale and *Spiraea douglasii* form a closed and sometimes dense thicket mostly < 1.5 m in height. *Carex sitchensis* dominates the herb layer but there is a scattering of other species on most sites. Because of flooding, the bryophyte layer is generally sparse but on some sites cover of *Sphagnum* or other moss species may be high.



Peat deposits are mostly shallow, moderately to well decomposed sedge and wood peat. Terric Humisols and Mesisols are common soil types.

Characteristic Vegetation

Tree layer (0 - 0 - 0)

Shrub layer (30 - 60 - 85)

Myrica gale, *Spiraea douglasii*

Herb layer (20 - 35 - 100)

Carex sitchensis

Moss layer (0 - 14 - 60)

Sphagnum spp.

Comments

The *Wf52* Site Association is common as a component of many peatlands in the south Coast. It is most often found in complex with the *Wm50* in more peripheral (and drier) locations but occurs around other Site Associations as well, including estuarine marshes.

Shrub thickets dominated by *Spiraea douglasii* with sparse *Myrica gale* and *Carex* spp. are common in the region where the *Wf52* occurs. These communities are usually on mineral soil and described by the *Ws50* Site Association.

Wetland Edatopic Grid

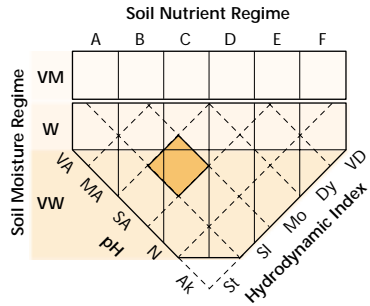


TABLE 5.2.1 Distribution of Fen Site Associations by biogeoclimatic zone

	BG PP	BWBS SWB	ESSF	ICH	IDF	MS	SBPS SBS	CDF	CWH	MH
Wf01 Water sedge – Beaked sedge		xx	x	xx	xxx	xxx	xxx		x ⁱ	
Wf02 Scrub birch – Water sedge		xxx	x	xx	xx	xx	xx			
Wf03 Water sedge – Peat-moss			xx				x			
Wf04 Barclay's willow – Water sedge – Glow mosses		x	xxx			x	x			
Wf05 Slender sedge – Common hook-moss		x		xx	xx	xx	xx			
Wf06 Slender sedge – Buckbean		x		x	x		x			
Wf07 Scrub birch – Buckbean – Shore sedge		x		x	x		x			
Wf08 Shore sedge – Buckbean – Hook-moss		x	x		x	x	x			
Wf09 Few-flowered spike-rush – Hook-moss			x			x	x			
Wf10 Hudson Bay clubrush – Red hook-moss							x			
Wf11 Tufted clubrush – Star moss		x	x	x		x	x			
Wf12 Narrow-leaved cotton-grass – Marsh-marigold			xxx							
Wf13 Narrow-leaved cotton-grass – Shore sedge			xx			x				
Wf50 Narrow-leaved cotton-grass – Peat-moss									x	xxx
Wf51 Sitka sedge – Peat-moss				x				xx	xx	
Wf52 Sweet gale – Sitka sedge								xx	xx ^s	
Wf53 Slender sedge – White beak-rush								x	xx ^s	

x = incidental; < 5% of wetlands

i = inland areas only

xx = minor; 5–25% of wetlands

s = southern subzones only

xxx = major; >25% of wetlands

TABLE 5.2.2 Fen Species Importance Table

Species		WF01	WF02	WF03	WF04	WF05	WF06	WF07	WF08
Shrubs	<i>Betula nana</i>								
	<i>Salix barclayi</i>								
	<i>Salix pedicellaris</i>								
	<i>Spiraea douglasii</i>								
	<i>Myrica gale</i>								
Herbs and Dwarf Shrubs	<i>Carex utriculata</i>								
	<i>Carex aquatilis</i>								
Shrubs	<i>Comarum palustre</i>								
	<i>Calamagrostis canadensis</i>								
Shrubs	<i>Carex lasiocarpa</i>								
	<i>Menyanthes trifoliata</i>								
Shrubs	<i>Carex limosa</i>								
	<i>Carex chordorrhiza</i>								
Shrubs	<i>Eleocharis quinqueflora</i>								
	<i>Trichophorum alpinum</i>								
Shrubs	<i>Trichophorum cespitosum</i>								
	<i>Eriophorum angustifolium</i>								
Shrubs	<i>Caltha leptosepala</i>								
	<i>Carex anthoxanthea</i>								
Shrubs	<i>Equisetum fluviatile</i>								
	<i>Carex magellanica</i>								
Shrubs	<i>Carex sitchensis</i>								
	<i>Rhynchospora alba</i>								
Shrubs	<i>Carex livida</i>								
	<i>Eriophorum chamissonis</i>								
Shrubs	<i>Vahlodea atropurpurea</i>								
	<i>Drosera anglica</i>								
Shrubs	<i>Hypericum anagalloides</i>								
	<i>Triantha glutinosa</i>								
Shrubs	<i>Schoenoplectus tabernaemontani</i>								
	<i>Fauria crista-galli</i>								
Shrubs	<i>Senecio triangularis</i>								
	<i>Andromeda polifolia</i>								
Shrubs	<i>Kalmia microphylla</i>								
	<i>Oxycoccus oxycoccus</i>								
Shrubs	<i>Triglochin maritima</i>								
	<i>Drosera rotundifolia</i>								
Shrubs	<i>Leptarrhena pyrolifolia</i>								
	<i>Platanthera dilatata</i>								
Shrubs	<i>Sanguisorba canadensis</i>								
	<i>Utricularia intermedia</i>								
Shrubs	<i>Viola palustris</i>								
	<i>Sphagnum Group I</i>								
Lichens and Mosses	<i>Aulaacomnium palustre</i>								
	<i>Drepanocladus spp.</i>								
Lichens and Mosses	<i>Sphagnum Group II</i>								
	<i>Tomentypnum nitens</i>								
Lichens and Mosses	<i>Philonotis fontana</i>								
	<i>Calliergon stramineum</i>								
Lichens and Mosses	<i>Scorpidium spp.</i>								
	<i>Campyllum stellatum</i>								
Lichens and Mosses	<i>Warnstorfia spp.</i>								
	<i>Meesia triquetra</i>								

Wf09	Wf10	Wf11	Wf12	Wf13	Wf50	Wf51	Wf52	Wf53	Common Name
									scrub birch
									Barclay's willow
									bog willow
									pink spirea
									sweet gale
									beaked sedge
									water sedge
									marsh cinquefoil
									bluejoint reedgrass
									slender sedge
									buckbean
									shore sedge
									cordroot sedge
									few-flowered spike-rush
									Hudson Bay clubrush
									tufted clubrush
									narrow-leaved cotton-grass
									white mtn. marsh-marigold
									yellow-flowered sedge
									swamp horsetail
									poor sedge
									Sitka sedge
									white beak-rush
									pale sedge
									Chamisso's cotton-grass
									mountain hairgrass
									great sundew
									bog St. John's-wort
									sticky asphodel
									great bulrush
									deer-cabbage
									arrow-leaved groundsel
									bog-rosemary
									western bog-laurel
									bog cranberry
									seaside arrow-grass
									round-leaved sundew
									leatherleaf saxifrage
									fragrant white rein orchid
									Sitka burnet
									flat-leaved bladderwort
									marsh violet
									peat-moss Group I
									glow moss
									hook-mosses
									peat-moss Group II
									golden fuzzy fen moss
									spring moss
									straw spear-moss
									sausage-moss
									yellow star-moss
									hook-mosses
									three-ranked hump-moss

Carex lasiocarpa – *Rhynchospora alba*

General Description

Slender sedge – White beak-rush fens occur in the Georgia Depression at elevations below 600 m. The **Wf53** requires permanently saturated soils and is tolerant of prolonged shallow inundation. Lake margins are the most common location but some isolated basins may also have suitable conditions.



Carex lasiocarpa is always abundant and dominant. *Rhynchospora alba* and scattered low-growing *Myrica gale* occur on most sites. However, wetter sites often lack these species and have aquatic species such as *Nuphar lutea*, *Brasenia schreberi*, or *Menyanthes trifoliata* instead. *Schoenoplectus acutus* grows in more alkaline examples of the **Wf53**.

Soils are shallow mesic or humic peat of sedge or limnic origin. Terric Mesisols and Humisols are common soil types.

Characteristic Vegetation

- Tree layer** (0 - 0 - 0)
- Shrub layer** (0 - 3 - 10)
Myrica gale
- Herb layer** (60 - 80 - 85)
Carex lasiocarpa, *Rhynchospora alba*
- Moss layer** (0 - 2 - 8)

Comments

Coastal *Carex lasiocarpa* stands occur on a range of ecological conditions from semi-terrestrial to shallowly flooded and marsh-like peatlands. Ceska (1978) observed variants of this unit: a typical with *Rhynchospora alba*, a limose variant with *Nuphar lutea*, a minerice variant with *Dulichium arundinaceum* and *Schoenoplectus acutus*, and a higher-elevation variant with *Carex limosa*. With sufficient additional data, several more specific classification units based on the presence of additional dominants might be indicated. *Carex lasiocarpa* communities with abundant *Spiraea douglasii* and *Myrica gale* occur on drier and hummocky sites (see additional units).

The **Wf52** is similar but grows on drier and more acidic sites than the **Wf53**. The **Wf53** is analogous to the **Wf05** of the Interior but has little or no moss cover and includes coastal species.

Wetland Edatopic Grid

