Forest / Forêt **Association CNVC00095**

Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule

Trembling Aspen – White Spruce / Prickly Rose – Squashberry

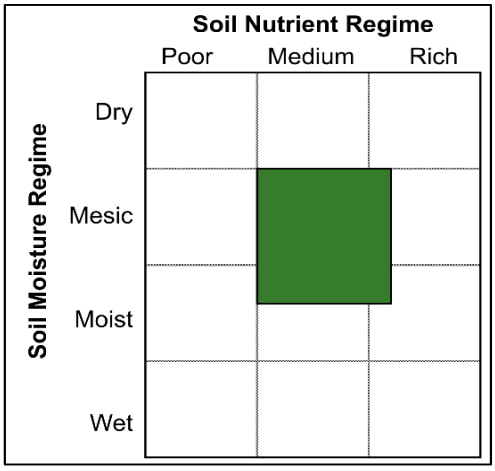
Peuplier faux-tremble – Épinette blanche / Rosier aciculaire – Viorne comestible

Subassociations: *95a typic, 95b Alnus viridis, 95c Shepherdia canadensis, 95d Betula papyrifera*

CNVC Alliance: CA00034 Populus tremuloides (Picea glauca) / Rosa acicularis – Viburnum edule

CNVC Group: CG0014 Cordilleran Boreal Mesic Trembling Aspen – White Spruce Forest

Source: D. Downing



Type Description

Concept: CNVC00095 is a boreal mixedwood forest Association that ranges from Yukon to Alberta. It has a moderately closed to closed canopy made up primarily of trembling aspen (*Populus tremuloides*) and white spruce (*Picea glauca*), although balsam poplar (*Populus balsamifera*), lodgepole pine (*Pinus contorta*) and paper birch (*Betula papyrifera*) are occasionally present. The shrub layer is usually well developed and typically includes prickly rose (*Rosa acicularis*) and squashberry (*Viburnum edule*), although green alder (*Alnus viridis*) or soapberry (*Shepherdia canadensis*) can be dominant shrubs. White spruce and trembling aspen regeneration commonly occurs in the shrub layer. The herb and dwarf shrub layer is well developed and usually includes bunchberry (*Cornus canadensis*), twinflower (*Linnaea borealis),* fireweed (*Chamerion angustifolium*), dwarf raspberry (*Rubus pubescens*), arctic sweet coltsfoot (*Petasites frigidus*), tall bluebells (*Mertensia paniculata*), cream-coloured vetchling (*Lathyrus ochroleucus*), pink pyrola (*Pyrola asarifolia*), wild strawberry *(Fragaria virginiana*) and naked mitrewort (*Mitella nuda*). The moss layer is poorly to well-developed depending on the amount of broad-leaf litter on the forest floor and is dominated by feathermosses (*Hylocomium splendens* and *Pleurozium schreberi*). CNVC00095 is a mid-seral condition that typically succeeds an early seral post-fire hardwood Association. It occurs in a region with a subhumid continental climate, usually on mesic nutrient-medium sites. Four subassociations are recognized: *typic, Alnus viridis, Shepherdia canadensis* and *Betula papyrifera.*

Vegetation: CNVC00095 is a mixedwood forest Association with a moderately closed to closed canopy usually codominated by *Populus tremuloides* and *Picea glauca*. *Populus balsamifera, Pinus contorta* (see Comments) or *Betula papyrifera* occur on some sites, usually with low cover, although occasionally *B. papyrifera* is codominant. *Rosa acicularis* and *Viburnum edule* are constant species in the well-developed shrub layer. *Alnus viridis* and *Shepherdia canadensis* can be abundant when present. Regenerating *P. glauca* and *P. tremuloides* are often present in the shrub layer. The herb and dwarf shrub layer is well developed and commonly includes *Cornus canadensis*, *Linnaea borealis*, *Chamerion angustifolium, Rubus pubescens, Petasites frigidus, Mertensia paniculata, Lathyrus ochroleucus, Pyrola asarifolia, Fragaria virginiana* and *Mitella nuda*. The *Alnus viridis* and *Shepherdia canadensis* subassociations are distinguished from the *typic* by dominance or codominance of these species in the shrub layer, respectively, and the *Betula papyrifera* subassociation by its codominance in the canopy. *Pinus contorta* in the tree layer and *Mitella nuda, Calamagrostis canadensis* and *Arnica cordifolia* are most frequent in the *Alnus viridis* subassociation; *Leymus innovatus* is more common in the *Shepherdia canadensis* subassociation; and *Aralia nudicaulis* occurs with the greatest frequency in the *Betula papyrifera* subassociation. The moss layer is poorly to well developed and usually includes *Hylocomium splendens* and *Pleurozium schreberi.* The moss layer is typically better developed in stands with less broad-leaf litter (i.e., greater conifer cover).

Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule CNVC00095

Type Description (cont'd)

Environment: CNVC00095 occurs in a subhumid continental boreal climate where regional fire cycles are short (<100 years), intermediate (100-270 years) or long (270-500 years). It is found mainly on mesic, nutrient-medium sites. Stands are usually on level sites or gentle slopes on middle to upper-slope or crest topopositions. Soil textures and parent materials are variable, although they are most commonly fine loams to clays derived from morainal or (glacio)lacustrine deposits; coarse loams and sands developed in (glacio)fluvial deposits also occur. Mor humus forms are common, but compared to other boreal forest Associations, moders are relatively frequent.

Dynamics: CNVC00095 is a mid-seral condition that can succeed early seral Associations that establish after fire (e.g., CNVC00094 [*Populus tremuloides / Rosa acicularis – Viburnum edule*]. *Picea glauca* is usually eliminated by fire, but the pioneer species *Populus tremuloides, P. balsamifera* and *Betula papyrifera* are adapted to disturbance. Following any disturbance that does not kill their roots, they can reproduce vegetatively, *B. papyrifera* from stump sprouts and the *Populus* spp. from root suckers. These species also produce abundant, light, wind-dispersed seeds that can readily colonize mineral soil seedbeds exposed by disturbance. These species grow rapidly in full-light conditions but are intolerant of shade so do not replace themselves in a stand without further disturbance. The shade tolerant *Picea glauca* becomes established in these stands when seeds are disseminated from nearby areas, with trees growing into the canopy and forming CNVC00095 as the pioneer hardwood species decline. If seed sources are available, *P. glauca* sometimes re-colonizes at approximately the same time as the hardwoods, but it grows more slowly so usually requires several decades to attain canopy height. Prolonged absence of fire can lead to the development of CNVC00102 [*Picea glauca / Rosa acicularis / Hylocomium splendens*].

Harvesting and natural disturbances, such as outbreaks of spruce budworm (*Choristoneura fumiferana*) or windthrow events, help to maintain CNVC00095 on the landscape. Canopy openings that result from these disturbances can provide opportunities for the hardwood species to regenerate from seeds or sprouts, maintaining the mixedwood condition.

Alnus viridis can form dense thickets in canopy openings, sometimes significantly delaying conifer ingress. Its deep roots can survive even high-severity fires and it responds quickly after disturbance by suckering. Being semi-shade tolerant, it persists as the canopy closes, limiting the available light for plants beneath it.

Forest tent caterpillar (*Malacosoma disstria*) and *Armillaria* root disease (*Armillaria* spp.) can have significant impacts on *Populus* spp. Defoliation by the caterpillar can reduce growth, cause dieback and sometimes lead to mortality, particularly during drought years. *Armillaria* spp. can weaken or kill individual or small groups of trees. Canopy openings that result from insect or pathogen disturbance can promote forest succession by enhancing the growth of *Picea glauca* in the understory.

Range: CNVC00095 occurs in the boreal regions of Yukon, British Columbia (BC) and Alberta as well as the Rocky Mountain foothills of Alberta. The *typic* subassociation occurs in Alberta and BC. The *Alnus viridis* and *Shepherdia canadensis* subassociations are recognized in Alberta and the *Betula papyrifera* subassociation is only described from Yukon.

Conservation Status (NatureServe)

Global Conservation Rank: no applicable rank
National Conservation Rank: not yet determined
Subnational Conservation Rank: not yet determined

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Peuplier faux-tremble – Épinette blanche / Rosier aciculaire – Viorne comestible

Distribution

Countries: Canada

Provinces / Territories / States: Alberta, British Columbia, Yukon

Terrestrial Ecozones and Ecoregions of Canada: Boreal Cordillera: Hyland Highland, Klondike Plateau, Liard Basin; Boreal Plains: Boreal Transition, Clear Hills Upland, Mid-Boreal Uplands, Muskwa Plateau, Peace Lowland, Wabasca Lowland, Western Alberta Upland, Western Boreal; Montane Cordillera: Central Canadian Rocky Mountains, Eastern Continental Ranges; Taiga Plains: Northern Alberta Uplands

Rowe's Forest Regions and Sections of Canada: Boreal: Alpine Forest - Tundra, Aspen Grove, Dawson, Hay River, Lower Foothills, Mixedwood, Northern Foothills, Upper Foothills, Upper Liard, Upper Mackenzie

NAAEC CEC Ecoregions of North America (Levels I & II): Northern Forests: Boreal Cordillera, Boreal Plains; Northwestern Forested Mountains: Boreal Cordillera, Western Cordillera; Taiga: Taiga Plains

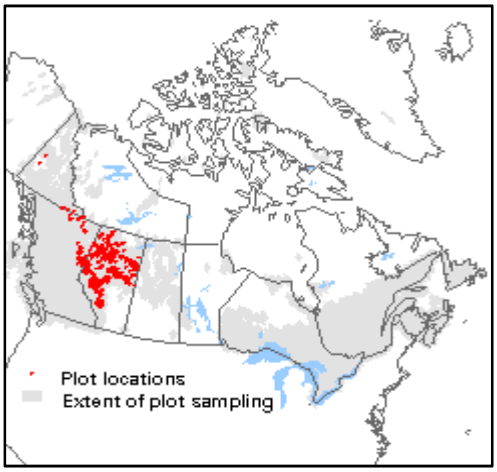
Nature Conservancy of Canada Ecoregions: Boreal Cordillera, Boreal Plains, Canadian Rocky Mountains, Montane Cordillera, Muskwa - Kechika, Taiga Plains, Yukon Plateau and Flats

Ecozones and Ecoregions of the Yukon: Boreal Cordillera: Hyland Highland, Klondike Plateau, Liard Basin; Boreal Plains: Muskwa Plateau

Biogeoclimatic Ecosystem Classification of British Columbia (zones and subzones): BWBSmk, BWBSmw

British Columbia Ecoregion Classification (ecoregions): Boreal Mountains and Plateaus, Central Alberta Uplands, Central Canadian Rocky Mountains, Hay-Slave Lowland, Hyland Highland, Muskwa Plateau, Northern Alberta Upland, Northern Canadian Rocky Mountains, Peace River Basin, Southern Alberta Upland

Natural Regions and Subregions of Alberta: Boreal Forest: Central Mixedwood, Dry Mixedwood, Lower Boreal Highlands, Northern Mixedwood, Upper Boreal Highlands; Foothills: Lower Foothills, Upper Foothills



Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule CNVC00095

Corresponding Types and Associations

95a typic	British Columbia	BWBSmk /101$6M.1	
		BWBSmw /101$6M.1	
	Alberta	NN/BH/D/02/02	Aw – Sw – Sb / low-bush cranberry – rose
		NN/BH/D/02/03	Aw – Sw – Sb / forb
		NN/BH/D/02/04	Aw – Sw – Sb / feather moss
		NN/BM/D/02/04	Aw – Sw / low-bush cranberry
		NN/BM/D/02/05	Aw – Sw / rose
		NN/BM/D/02/06	Aw – Sw / beaked willow
		NN/BM/D/02/07	Aw – Sw / forb
		NN/BM/D/02/09	Aw – Sw / feather moss
		SW/LF/D/03/01	Aw – Sw – Pl / low-bush cranberry / wild sarsaparilla
		SW/LF/D/03/02	Aw – Sw – Pl / prickly rose
		SW/LF/D/03/04	Aw – Sw – Pl / Canada buffalo-berry
		WC/LF/E/03/01	Aw – Sw – Pl / Canada buffalo-berry
		WC/LF/E/03/03	Aw – Sw – Pl / low-bush cranberry
		WC/LF/E/03/04	Aw – Sw – Pl / prickly rose
		WC/LF/E/03/05	Aw – Sw – Pl / fir / feather moss
		WC/LF/E/03/06	Aw – Sw – Pl / feather moss
95b Alnus viridis	Alberta	NN/BH/D/02/01	Aw – Sw – Sb / green alder
		NN/BM/D/02/03	Aw – Sw / green alder
		SW/LF/D/03/03	Aw – Sw – Pl / green alder / wild sarsaparilla
		WC/LF/E/03/02	Aw – Sw – Pl / green alder
		WC/UF/E/02/01	Aw – Sw – Pl / green alder / feather moss
95c Shepherdia canadensis	Alberta	NN/BM/D/02/01	Aw – Sw / Canada buffalo-berry
95d Betula papyrifera	Yukon	ASw21	*Populus tremuloides – Picea glauca / Alnus viridis – Viburnum edule / Rubus pubescens – Cornus canadensis*
		SwW25	*Picea glauca – Betula neoalaskana / Viburnum edule – Rosa aciculatis / Cornus canadensis*

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Peuplier faux-tremble – Épinette blanche / Rosier aciculaire – Viorne comestible

Vegetation Summary*

	Association CNVC00095 480 plots		Subassociation 95a *typic* 342 plots		Subassociation 95b *Alnus viridis* 80 plots	
Species Name†	% Cover±	% Presence^	% Cover±	% Presence^	% Cover±	% Presence^
Overstory Trees						
Populus tremuloides	**28**	**95**	**29**	**96**	**26**	**99**
Picea glauca	**21**	**90**	**23**	**93**	**15**	**75**
Populus balsamifera	8	31	8	35	8	24
Pinus contorta	18	29	15	24	22	70
Betula papyrifera	8	26	7	25	6	20
Picea mariana	12	14	14	13	9	22
Tree Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})‡	**(30 41 57 72 85)**		**(33 44 59 73 86)**		**(40 51 59 69 79)**	
Understory Woody Shrubs and Regenerating Trees						
Rosa acicularis	**8**	**92**	**8**	**93**	**5**	**91**
Viburnum edule	**10**	**91**	**11**	**91**	**5**	**88**
Picea glauca	5	64	6	67	4	56
Populus tremuloides	4	61	4	63	3	57
Shepherdia canadensis	6	45	5	47	7	17
Alnus viridis	16	41	8	26	**23**	**99**
Lonicera involucrata	4	39	4	42	3	49
Betula papyrifera	3	26	3	26	2	22
Amelanchier alnifolia	3	26	3	27	2	19
Rhododendron groenlandicum	3	24	2	21	4	38
Populus balsamifera	2	23	2	23	2	26
Salix bebbiana	4	22	4	23	4	20
Lonicera dioica	2	22	2	23	1	16
Rubus idaeus	3	21	3	17	3	43
Cornus stolonifera	3	20	3	20	6	6
Ribes oxyacanthoides	2	19	2	18	2	11
Symphoricarpos albus	2	17	2	19	2	6
Ribes lacustre	1	17	2	17	2	20
Vaccinium myrtilloides	4	16	3	14	5	35
Abies lasiocarpa	7	13	8	11	5	24
Spiraea lucida	3	10	4	6	2	35
Salix sp.	4	9	3	8	5	10
Alnus incana	8	7	3	7	26	4
Shrub Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})‡	**(15 24 42 55 77)**		**(13 21 38 50 70)**		**(25 33 50 67 84)**	
Understory Herbs and Dwarf Shrubs						
Cornus canadensis	10	87	10	87	11	86
Linnaea borealis	6	83	6	83	5	84
Chamerion angustifolium	4	82	5	78	4	96

Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule CNVC00095

Vegetation Summary (cont'd)*

	Association CNVC00095		Subassociation 95a *typic*		Subassociation 95b *Alnus viridis*	
Species Name†	% Cover±	% Presence^	% Cover±	% Presence^	% Cover±	% Presence^
Rubus pubescens	5	74	5	73	5	79
Petasites frigidus	3	68	3	71	3	79
Mertensia paniculata	3	67	3	67	2	68
Lathyrus ochroleucus	3	66	3	70	3	55
Pyrola asarifolia	2	66	2	64	3	85
Fragaria virginiana	3	64	3	65	3	73
Mitella nuda	2	62	2	64	2	75
Calamagrostis canadensis	8	59	8	58	7	77
Maianthemum canadense	2	55	2	57	2	57
Galium boreale	1	53	1	57	1	38
Leymus innovatus	9	48	9	49	8	54
Aralia nudicaulis	11	42	10	41	15	46
Symphyotrichum ciliolatum	2	40	2	39	2	49
Orthilia secunda	1	39	1	41	1	31
Eurybia conspicua	3	34	3	33	3	35
Vaccinium vitis-idaea	4	32	4	28	5	52
Vicia americana	2	29	2	32	2	21
Viola renifolia	1	29	1	30	1	31
Arnica cordifolia	3	25	4	19	3	63
Equisetum sylvaticum	1	25	1	27	2	30
Lycopodium annotinum	5	24	5	21	7	43
Actaea rubra	1	22	1	22	1	26
Achillea millefolium	1	20	1	22	1	14
Vaccinium caespitosum	4	18	3	15	3	39
Equisetum arvense	2	15	2	15	1	14
Galium trifidum	1	15	1	15	1	22
Geocaulon lividum	2	11	2	10	2	9
Streptopus amplexifolius	1	8	1	4	1	30
Equisetum scirpoides	2	5	1	3	1	3
Poaceae	2	3	1	1	-	-
Herb Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})‡	**(19 30 53 72 100)**		**(19 30 52 74 100)**		**(31 45 63 80 100)**	
Bryophytes and Lichens						
Hylocomium splendens	23	74	23	78	17	68
Pleurozium schreberi	13	70	13	73	15	76
Ptilium crista-castrensis	6	46	5	46	9	64
Peltigera aphthosa	1	20	1	21	1	13
Peltigera canina	1	13	1	15	1	8
Unknown bryophyte	12	3	-	-	-	-
Bryo-Lichen Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})‡	**(0 5 32 53 85)**		**(0 6 32 54 87)**		**(1 5 32 52 87)**	

* species present in > 20% of sample plots are listed

† see **Botanical Nomenclature** link at http://cnvc-cnvc.ca for botanical sources, synonyms and common names

± average percent cover of a species within the plots in which it occurs (i.e., characteristic cover)

^ percent frequency occurrence for a species within the total plots

‡ $P_x = X^{th}$ percentile (e.g., $P_{10} = 10^{th}$ percentile)

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Vegetation Summary (cont'd)*

	Subassociation 95c *Shepherdia canadensis* 34 plots		Subassociation 95d *Betula papyrifera* 24 plots	
Species Name[†]	% Cover[±]	% Presence^	% Cover[±]	% Presence^
Overstory Trees				
Populus tremuloides	**29**	**100**	**17**	**54**
Picea glauca	**22**	**100**	**11**	**92**
Populus balsamifera	3	24	9	17
Pinus contorta	2	3	6	8
Betula papyrifera	8	6	**13**	**92**
Picea mariana	2	6	1	4
Tree Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})[‡]	**(28 34 52 75 86)**		**(8 17 33 46 68)**	
Understory Woody Shrubs and Regenerating Trees				
Rosa acicularis	**9**	**82**	**13**	**96**
Viburnum edule	**9**	**97**	**15**	**100**
Picea glauca	4	62	9	46
Populus tremuloides	3	62	3	38
Shepherdia canadensis	**16**	**100**	4	21
Alnus viridis	8	18	22	88
Lonicera involucrata	2	18	-	-
Betula papyrifera	2	18	6	63
Amelanchier alnifolia	6	44	1	8
Rhododendron groenlandicum	2	18	3	29
Populus balsamifera	3	26	3	8
Salix bebbiana	3	35	1	4
Lonicera dioica	1	32	1	8
Rubus idaeus	1	18	8	21
Cornus stolonifera	2	32	4	50
Ribes oxyacanthoides	2	44	3	21
Symphoricarpos albus	2	35	-	-
Ribes lacustre	1	9	1	21
Vaccinium myrtilloides	-	-	-	-
Abies lasiocarpa	-	-	2	13
Spiraea lucida	1	3	-	-
Salix sp.	3	9	7	29
Alnus incana	-	-	20	21
Shrub Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})[‡]	**(24 31 47 58 70)**		**(34 44 69 95 99)**	
Understory Herbs and Dwarf Shrubs				
Cornus canadensis	9	82	12	88
Linnaea borealis	8	91	8	58
Chamerion angustifolium	6	97	2	63

Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule CNVC00095

Vegetation Summary (cont'd)*

	Subassociation 95c *Shepherdia canadensis*		Subassociation 95d *Betula papyrifera*	
Species Name[†]	% Cover[±]	% Presence^	% Cover[±]	% Presence^
Rubus pubescens	4	76	10	75
Petasites frigidus	4	44	1	17
Mertensia paniculata	2	65	3	71
Lathyrus ochroleucus	2	85	1	8
Pyrola asarifolia	2	65	1	33
Fragaria virginiana	2	65	1	13
Mitella nuda	2	24	3	46
Calamagrostis canadensis	4	56	1	8
Maianthemum canadense	2	56	1	17
Galium boreale	1	74	1	17
Leymus innovatus	10	62	-	-
Aralia nudicaulis	9	26	5	63
Symphyotrichum ciliolatum	1	47	1	4
Orthilia secunda	1	41	1	29
Eurybia conspicua	3	56	-	-
Vaccinium vitis-idaea	2	26	5	29
Vicia americana	1	32	-	-
Viola renifolia	1	32	1	8
Arnica cordifolia	1	3	10	4
Equisetum sylvaticum	1	3	2	17
Lycopodium annotinum	1	6	2	25
Actaea rubra	1	24	1	17
Achillea millefolium	1	21	1	8
Vaccinium caespitosum	5	15	-	-
Equisetum arvense	1	12	1	29
Galium trifidum	1	3	-	-
Geocaulon lividum	1	12	1	25
Streptopus amplexifolius	-	-	-	-
Equisetum scirpoides	-	-	3	42
Poaceae	-	-	2	38
Herb Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})[‡]	**(23 30 48 59 75)**		**(7 12 35 52 74)**	
Bryophytes and Lichens				
Hylocomium splendens	31	85	28	25
Pleurozium schreberi	9	62	10	13
Ptilium crista-castrensis	3	29	2	17
Peltigera aphthosa	1	26	1	17
Peltigera canina	1	21	-	-
Unknown bryophyte	-	-	12	54
Bryo-Lichen Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})[‡]	**(0 6 35 58 87)**		**(2 5 18 22 40)**	

* species present in > 20% of sample plots are listed

[†] see **Botanical Nomenclature** link at http://cnvc-cnvc.ca for botanical sources, synonyms and common names

[±] average percent cover of a species within the plots in which it occurs (i.e., characteristic cover)

^ percent frequency occurrence for a species within the total plots

[‡] $P_x = X^{th}$ percentile (e.g., $P_{10} = 10^{th}$ percentile)

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Site / Soil Characteristics

	Association CNVC00095	Subassociation 95a *typic*	Subassociation 95b *Alnus viridis*
	480 plots	**342 plots**	**80 plots**
Elevation Range (min–mean–max meters)			
	260–805–1950	260–770–1950	511–1031–1460
	missing data (12)	missing data (9)	missing data (3)
Slope Gradient (% frequency)			
	steep (1)	steep (1)	steep (1)
	moderately steep (4)	moderately steep (4)	moderately steep (4)
	moderate (6)	moderate (5)	moderate (10)
	gentle (25)	gentle (25)	gentle (39)
	level (57)	**level (61)**	**level (46)**
	missing data (7)	missing data (4)	missing data (0)
Aspect (% frequency)			
	north (25)	**north (26)**	**north (26)**
	east (15)	east (16)	east (15)
	south (16)	south (15)	south (23)
	west (17)	west (18)	west (21)
	level (14)	level (16)	level (13)
	missing data (13)	missing data (9)	missing data (3)
Meso Topoposition (% frequency)			
	crest / upper (23)	crest / upper (25)	crest / upper (20)
	mid (26)	mid (25)	**mid (31)**
	lower / toe (6)	lower / toe (8)	lower / toe (3)
	depression (0)	depression (0)	depression (1)
	level (25)	**level (29)**	level (8)
	missing data (19)	missing data (13)	missing data (38)
Moisture Regime (% frequency)			
	dry (1)	dry (1)	dry (0)
	mesic (74)	**mesic (75)**	**mesic (90)**
	moist (20)	moist (24)	moist (10)
	missing data (5)	missing data (1)	missing data (0)
Nutrient Regime (% frequency)			
	poor (6)	poor (6)	poor (9)
	medium (73)	**medium (77)**	**medium (71)**
	rich (15)	rich (15)	rich (20)
	missing data (6)	missing data (2)	missing data (0)

Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule CNVC00095

Site / Soil Characteristics (cont'd)

	Association CNVC00095	Subassociation 95a *typic*	Subassociation 95b *Alnus viridis*
Soil Parent Material (% frequency)			
	colluvium (1)	colluvium (1)	colluvium (1)
	eolian (7)	eolian (7)	eolian (9)
	moraine / till (40)	**moraine / till (39)**	**moraine / till (55)**
	fluvial (5)	fluvial (5)	fluvial (4)
	glaciofluvial (15)	glaciofluvial (15)	glaciofluvial (19)
	lacustrine (9)	lacustrine (8)	lacustrine (5)
	glaciolacustrine (13)	glaciolacustrine (15)	glaciolacustrine (6)
	missing data (11)	missing data (10)	missing data (1)
Soil Rooting Zone Substrate (% frequency)			
	non-soil (1)	non-soil (1)	non-soil (1)
	sandy (7)	sandy (9)	sandy (3)
	coarse loamy (9)	coarse loamy (9)	coarse loamy (13)
	fine loamy (34)	**fine loamy (37)**	**fine loamy (33)**
	silty (4)	silty (4)	silty (9)
	clayey (29)	clayey (28)	clayey (26)
	missing data (17)	missing data (13)	missing data (16)
Root Restricting Depth (% frequency)			
	21 – 99 cm (1)	21 – 99 cm (1)	21 – 99 cm (0)
	≥ 100 cm (0)	≥ 100 cm (1)	≥ 100 cm (0)
	missing data (99)	missing data (99)	missing data (100)
Humus Form (% frequency)			
	mor (25)	mor (28)	mor (19)
	moder (5)	moder (6)	moder (5)
	mull (0)	mull (1)	mull (0)
	peatymor (1)	peatymor (0)	peatymor (0)
	missing data (68)	missing data (65)	missing data (76)

Forest / Forêt **Association CNVC00095**

Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule

Trembling Aspen – White Spruce / Prickly Rose – Squashberry

Peuplier faux-tremble – Épinette blanche / Rosier aciculaire – Viorne comestible

Site / Soil Characteristics (cont'd)

	Subassociation 95c *Shepherdia canadensis*	Subassociation 95d *Betula papyrifera*
	34 plots	**24 plots**
Elevation Range (min–mean–max meters)		
	305–594–1100	438–649–790
	missing data (21)	missing data (75)
Slope Gradient (% frequency)		
	steep (0)	steep (13)
	moderately steep (3)	moderately steep (4)
	moderate (0)	moderate (4)
	gentle (12)	gentle (0)
	level (82)	level (4)
	missing data (3)	missing data (75)
Aspect (% frequency)		
	north (32)	north (0)
	east (9)	east (8)
	south (26)	south (0)
	west (6)	west (0)
	level (12)	level (0)
	missing data (15)	missing data (92)
Meso Topoposition (% frequency)		
	crest / upper (26)	crest / upper (4)
	mid (24)	mid (17)
	lower / toe (3)	lower / toe (0)
	depression (0)	depression (0)
	level (44)	level (4)
	missing data (3)	missing data (75)
Moisture Regime (% frequency)		
	dry (3)	dry (4)
	mesic (76)	mesic (13)
	moist (21)	moist (4)
	missing data (0)	missing data (79)
Nutrient Regime (% frequency)		
	poor (3)	poor (4)
	medium (85)	medium (0)
	rich (12)	rich (4)
	missing data (0)	missing data (92)

Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule CNVC00095

Site / Soil Characteristics (cont'd)

	Subassociation 95c *Shepherdia canadensis*	Subassociation 95d *Betula papyrifera*
Soil Parent Material (% frequency)		
	colluvium (0)	colluvium (4)
	eolian (0)	eolian (0)
	moraine / till (50)	moraine / till (0)
	fluvial (6)	fluvial (4)
	glaciofluvial (12)	glaciofluvial (4)
	lacustrine (24)	lacustrine (4)
	glaciolacustrine (9)	glaciolacustrine (0)
	missing data (0)	missing data (83)
Soil Rooting Zone Substrate (% frequency)		
	non-soil (0)	non-soil (4)
	sandy (3)	sandy (0)
	coarse loamy (6)	coarse loamy (0)
	fine loamy (32)	fine loamy (0)
	silty (0)	silty (0)
	clayey (59)	clayey (0)
	missing data (0)	missing data (96)
Root Restricting Depth (% frequency)		
	21 – 99 cm (0)	21 – 99 cm (0)
	≥ 100 cm (0)	≥ 100 cm (0)
	missing data (100)	missing data (100)
Humus Form (% frequency)		
	mor (32)	mor (0)
	moder (3)	moder (0)
	mull (0)	mull (0)
	peatymor (0)	peatymor (8)
	missing data (65)	missing data (92)

Forest / Forêt **Association CNVC00095**

Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule

Trembling Aspen – White Spruce / Prickly Rose – Squashberry

Peuplier faux-tremble – Épinette blanche / Rosier aciculaire – Viorne comestible

Additional Characteristics

Species of High Conservation Concern:

Non-native Species:

Management Issues:

Type Statistics

Internal Similarity: **Confidence:**

Strength:

Related Concepts

Similar CNVC Associations:

CNVC00083 [*Picea glauca – Populus tremuloides - P. balsamifera / Lonicera involucrata / Rubus pubescens*] occurs on moister, richer sites in the same range. It has greater constancy and cover of *Populus balsamifera* in the tree layer and more *Lonicera involucrata* in the shrub layer.

CNVC00091 [*Populus tremuloides – Picea glauca – Pinus contorta / Leymus innovatus*] occurs on comparable boreal sites in British Columbia and Alberta. It has greater constancy of *Pinus contorta* in the overstory and lower shrub and herb diversity with lower constancy and cover of *Viburnum edule* and greater *Arctostaphylos uva-ursi* and *Leymus innovatus*.

CNVC00093 [*Picea glauca – Abies balsamea – Betula papyrifera – Populus tremuloides / Rosa acicularis / Aralia nudicaulis*] occurs on comparable boreal sites from Alberta to western Manitoba. It has greater *Abies balsamea* and *Betula papyrifera* in the overstory, a shrub layer with abundant regenerating *A. balsamea*, and less *Chamerion angustifolium* and *Lathyrus ochroleucus* in the herb layer.

CNVC00094 [*Populus tremuloides / Rosa acicularis – Viburnum edule*] is a similar hardwood Association that occurs on comparable sites in the same range (see Dynamics).

CNVC00263 [*Picea glauca – Populus tremuloides / Rosa acicularis / Aralia nudicaulis*] occurs on similar boreal sites from Alberta to western Manitoba. It has less *Chamerion angustifolium, Lathyrus ochroleucus* and *Leymus innovatus* in the herb layer.

CNVC00406 [*Populus tremuloides – Picea glauca / Shepherdia canadensis / Mertensia paniculata*] occurs on comparable boreal sites in Yukon. It has a shrub layer with less *Viburnum edule* and more *Shepherdia canadensis* and a herb and dwarf shrub layer with greater constancy and cover of *Arctostaphylos uva-ursi* and less of *Cornus canadensis, Fragaria virginiana, Lathyrus ochroleucus, Mitella nuda, Petasites frigidus* and *Rubus pubescens*.

Related United States National Vegetation Classification Associations:

Relationships with Other Classifications:

Comments

Pinus contorta here refers to var. *latifolia* (lodgepole pine).

Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule CNVC00095

Source Information

Number of source plots for CNVC00095: 480
Number of source plots for 95a *typic*: 342
Number of source plots for 95b *Alnus viridis*: 80
Number of source plots for 95c *Shepherdia canadensis*: 34
Number of source plots for 95d *Betula papyrifera*: 24
Information Sources:

Alberta Environment and Parks. 2014. Ecological Site Information System (ESIS). Govt. AB, Edmonton, AB.

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Description Authors: K. Chapman, K. Baldwin and D. Downing
Date of Concept: February, 2013
Date of Description: February, 2013

Classification References:

Archibald, J.H.; Klappstein, G.D.; Corns, I.G.W. 1996. Field guide to ecosites of southwestern Alberta. Nat. Resour. Can., Can. For. Ser., North. For. Centre, Edmonton, AB. Spec. Rep. 8.

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Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule CNVC00095

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The information contained in this factsheet is based on data and expert knowledge that is current to the date of description. As new information becomes available, the factsheet will be updated.

For more information about the contents of this factsheet and definitions of attribute names and data classes, see the **Understanding the Factsheet** link at http//cnvc-cnvc.ca.

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