



Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

Forest / Forêt

Association CNVC00094

Populus tremuloides / Rosa acicularis – Viburnum edule

Trembling Aspen / Prickly Rose – Squashberry

Peuplier faux-tremble / Rosier aciculaire – Viorne comestible

Subassociations: 94a typic, 94b *Shepherdia canadensis*, 94c *Alnus viridis*, 94d *Amelanchier alnifolia*, 94e *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: M. McLaughlin

Type Description

Concept: CNVC00094 is a boreal hardwood forest Association that ranges from Yukon to Manitoba. The canopy is primarily trembling aspen (*Populus tremuloides*), sometimes with balsam poplar (*P. balsamifera*) as an associate. White spruce (*Picea glauca*) and paper birch (*Betula papyrifera*) are occasionally present. Canopy cover is usually moderately closed but can vary from open to closed. The moderately to well-developed shrub layer typically includes prickly rose (*Rosa acicularis*) and squashberry (*Viburnum edule*), but soapberry (*Shepherdia canadensis*), green alder (*Alnus viridis*) or saskatoon (*Amelanchier alnifolia*) can be dominant. The herb and dwarf shrub layer is well developed and usually includes fireweed (*Chamerion angustifolium*), bunchberry (*Cornus canadensis*), dwarf raspberry (*Rubus pubescens*), cream-coloured vetchling (*Lathyrus ochroleucus*), twinflower (*Linnaea borealis*), northern bedstraw (*Galium boreale*), pink pyrola (*Pyrola asarifolia*), bluejoint reedgrass (*Calamagrostis canadensis*), wild strawberry (*Fragaria virginiana*), wild lily-of-the-valley (*Maianthemum canadense*), arctic sweet coltsfoot (*Petasites frigidus*) and American vetch (*Vicia americana*). The forest floor cover is mainly broad-leaf litter, so the moss layer is virtually nonexistent. CNVC00094 is an early seral condition that typically establishes after fire. It occurs in a region with a subhumid continental climate, usually on mesic, nutrient-medium sites. Five subassociations are distinguished: *typic*, *Shepherdia canadensis*, *Alnus viridis*, *Amelanchier alnifolia* and *Betula papyrifera*.

Vegetation: CNVC00094 is a hardwood forest Association with an open to closed canopy of *Populus tremuloides*. *Populus balsamifera*, *Betula papyrifera* and *Picea glauca* occur on some sites, usually with low cover, although occasionally *B. papyrifera* is codominant (distinguishing a subassociation of the same name). *Rosa acicularis* and *Viburnum edule* are constant species in the moderately to well-developed shrub layer. *Shepherdia canadensis*, *Amelanchier alnifolia*, *Alnus viridis* and *Corylus cornuta* can be abundant when present. The herb and dwarf shrub layer is well developed and commonly includes *Chamerion angustifolium*, *Cornus canadensis*, *Rubus pubescens*, *Lathyrus ochroleucus*, *Linnaea borealis*, *Galium boreale*, *Pyrola asarifolia*, *Calamagrostis canadensis*, *Fragaria virginiana*, *Maianthemum canadense*, *Petasites frigidus*, and *Vicia americana*. *Leymus innovatus* (in the Alberta part of the range) and *Aralia nudicaulis* can be abundant when present. Because of abundant broad-leaf litter on the forest floor, the moss layer is virtually nonexistent. The *Shepherdia canadensis*, *Alnus viridis* and *Amelanchier alnifolia* 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.

		Soil Nutrient Regime		
		Poor	Medium	Rich
Soil Moisture Regime	Dry			
	Mesic			
	Moist			
	Wet			



Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

***Populus tremuloides / Rosa acicularis – Viburnum edule* CNVC00094**

Type Description (cont'd)

Environment: CNVC00094 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 crest or upper to middle-slope topopositions. Soil textures and parent materials are variable, although they are most commonly fine loams or clays derived from morainal or (glacio)lacustrine deposits. Mor humus forms are common, but compared to other boreal forest Associations, moder are relatively frequent.

Dynamics: CNVC00094 is an early seral condition that typically establishes after stand-replacing fire. *Populus tremuloides* and *P. balsamifera* are pioneer species adapted to disturbance. Following any disturbance that does not kill their roots, they can reproduce vegetatively from root suckers. They also produce abundant, light, wind-dispersed seeds that can readily colonize mineral soil seedbeds exposed by disturbance. Both species grow rapidly in full-light conditions but are intolerant of shade so do not replace themselves in a stand without further disturbance. If seed sources are available, shade tolerant and longer-lived conifers (especially *Picea glauca*) can become established in these stands and, in the absence of disturbance, grow into the canopy as the *Populus* spp. decline. After about 100 years, a mid-seral mixedwood Association could develop (e.g., CNVC00095 [*Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule*] in the western part of the range, or CNVC00093 [*Picea glauca – Abies balsamea – Betula papyrifera – Populus tremuloides / Rosa acicularis / Aralia nudicaulis*] in the eastern portion). A disturbance within this timeframe can facilitate CNVC00094 self-replacement.

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: CNVC00094 occurs in the boreal region of western Canada from Yukon to western Manitoba. It also occurs in the Rocky Mountain foothills of Alberta. The *typic* and *Alnus viridis* subassociations occur in Yukon, Alberta and British Columbia (BC). The *Shepherdia canadensis* subassociation is known from BC and Alberta. The *Amelanchier alnifolia* subassociation is recognized in Alberta and Saskatchewan. The *Betula papyrifera* subassociation is only described from BC.

Conservation Status (NatureServe)

Global Conservation Rank: no applicable rank

National Conservation Rank: not yet determined

Subnational Conservation Rank: not yet determined



Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

Forest / Forêt

Association CNVC00094

Populus tremuloides / Rosa acicularis – Viburnum edule
Trembling Aspen / Prickly Rose – Squashberry
Peuplier faux-tremble / Rosier aciculaire – Viorne comestible

Distribution

Countries: Canada

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

Terrestrial Ecozones and Ecoregions of Canada: Boreal Cordillera: Boreal Mountains and Plateaus, Hyland Highland, Liard Basin, Yukon Plateau - North, Yukon-Stikine Highlands, Yukon Southern Lakes; Boreal Plains: Boreal Transition, Clear Hills Upland, Mid-Boreal Lowland, Mid-Boreal Uplands, Muskwa Plateau, Peace Lowland, Wabasca Lowland, Western Alberta Upland, Western Boreal; Boreal Shield; Montane Cordillera: Central Canadian Rocky Mountains, Skeena Mountains; Taiga Plains: Northern Alberta Uplands; Taiga Shield: Tazin Lake Upland

Rowe's Forest Regions and Sections of Canada: Boreal: Alpine Forest - Tundra, Aspen Grove, Athabasca South, Central Yukon, Eastern Yukon, Hay River, Lower Foothills, Manitoba Lowlands, Mixedwood, Northern Foothills, Stikine Plateau, Upper Churchill, Upper Foothills, Upper Liard, Upper Mackenzie

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

Nature Conservancy of Canada Ecoregions: Boreal Cordillera, Boreal Plains, Boreal Shield, Central Interior, Muskwa - Kechika, Taiga Plains, Western Taiga Shield

Ecozones and Ecoregions of the Yukon: Boreal Cordillera: Hyland Highland, Liard Basin, Yukon Plateau - North, Yukon Southern Lakes; Boreal Plains: Muskwa Plateau

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

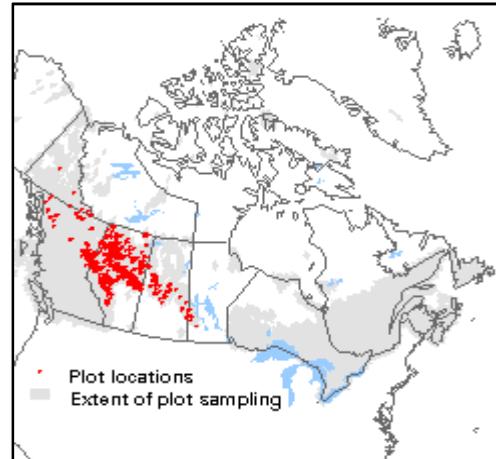
British Columbia Ecoregion Classification (ecoregions): Boreal Mountains and Plateaus, Central Alberta Uplands, Central Canadian Rocky Mountains, Hay-Slave Lowland, Hyland Highland, Liard Basin, Muskwa Plateau, Northern Canadian Rocky Mountains, Peace River Basin, Skeena Mountains, Southern Alberta Upland

Natural Regions and Subregions of Alberta: Boreal Forest: Athabasca Plain, Boreal Subarctic, Central Mixedwood, Dry Mixedwood, Lower Boreal Highlands, Northern Mixedwood, Upper Boreal Highlands; Canadian Shield: Kazan Uplands; Foothills: Lower Foothills, Upper Foothills

Ecozones and Ecoregions of Saskatchewan: Boreal Plain: Boreal Transition, Mid-Boreal Lowland, Mid-Boreal Upland

Ecozones and Ecoregions of Manitoba: Boreal Plains

Manitoba Protected Areas Initiative Natural Regions: Manitoba Lowlands, Western Upland





Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

***Populus tremuloides / Rosa acicularis – Viburnum edule* CNVC00094**

Corresponding Types and Associations

94a typic			
	Yukon	A26	<i>Populus tremuloides / Viburnum edule / Linnaea borealis</i>
	British Columbia	BWBSmw /101\$6B.1	<i>Populus tremuloides – Rosa acicularis – Lathyrus ochroleucus</i>
		BWBSwk 1 /101\$6B.1	<i>Populus tremuloides – Spiraea betulifolia – Vaccinium membranaceum</i>
	Alberta	NN/BH/D/01/02	Aw / low-bush cranberry – rose
		NN/BH/D/01/03	Aw / forb
		NN/BM/D/01/05	Aw / low-bush cranberry
		NN/BM/D/01/06	Aw / rose
		NN/BM/D/01/07	Aw / beaked willow
		NN/BM/D/01/08	Aw / forb
		NN/SB/B/02/02	Aw / rose
		SW/LF/D/02/01	Aw / prickly rose / marsh reed grass
		SW/LF/D/02/02	Aw / low-bush cranberry / wild sarsaparilla
		WC/LF/E/02/04	Aw / low-bush cranberry
		WC/LF/E/02/05	Aw / prickly rose
94b Shepherdia canadensis	British Columbia	BWBSdk /101\$6B.1	<i>Populus tremuloides – Shepherdia canadensis – Viburnum edule</i>
	Alberta	NN/BM/D/01/01	Aw / Canada buffalo-berry
		NN/CS/B/02/01	Aw / Canada buffalo-berry – green alder
		NN/SB/B/02/01	Aw / Canada buffalo-berry
		WC/LF/E/02/01	Aw / Canada buffalo-berry
94c Alnus viridis	Yukon	B25	<i>Populus balsamifera / Alnus viridis – Viburnum edule / Rubus pubescens – Cornus canadensis</i>
	British Columbia	BWBSmk /101\$6B.1	<i>Populus tremuloides – Alnus viridis ssp. crispa – Viburnum edule</i>
		BWBSwk 2 /101\$6B.1	<i>Populus tremuloides – Alnus viridis ssp. sinuata – Viburnum edule</i>
	Alberta	NN/BH/D/01/01	Aw / green alder
		NN/BM/D/01/04	Aw / green alder
		SW/LF/D/02/03	Aw / green alder / wild sarsaparilla
		WC/LF/E/02/03	Aw / green alder
94d Amelanchier alnifolia	Alberta	NN/BM/D/01/02	Aw / saskatoon – pin cherry
		NN/BM/D/01/03	Aw / beaked hazelnut
		WC/LF/E/02/02	Aw / saskatoon
	Saskatchewan	BP6	Trembling aspen / beaked hazel / sarsaparilla: Fresh loamy sand
94e Betula papyrifera	British Columbia	BWBSmk /101\$6B.2	<i>Betula papyrifera – Populus tremuloides – Aralia nudicaulis</i>



Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

Forest / Forêt

Association CNVC00094

Populus tremuloides / Rosa acicularis – Viburnum edule

Trembling Aspen / Prickly Rose – Squashberry

Peuplier faux-tremble / Rosier aciculaire – Viorne comestible

Vegetation Summary*

Species Name [†]	Association CNVC00094		Subassociation 94a typic		Subassociation 94b <i>Shepherdia canadensis</i>	
	1053 plots		557 plots		184 plots	
	% Cover [‡]	% Presence [^]	% Cover [‡]	% Presence [^]	% Cover [‡]	% Presence [^]
Overstory Trees						
<i>Populus tremuloides</i>	48	98	48	99	49	100
<i>Populus balsamifera</i>	11	41	11	45	9	34
<i>Picea glauca</i>	5	33	4	34	4	36
<i>Betula papyrifera</i>	9	21	10	22	5	7
Tree Stratum Cover (P ₁₀ P ₂₅ Mean P ₇₅ P ₉₀) [‡]	(30 40 56 70 80)		(31 40 56 70 79)		(34 43 55 65 76)	
Understory Woody Shrubs and Regenerating Trees						
<i>Rosa acicularis</i>	12	92	14	93	10	93
<i>Viburnum edule</i>	10	83	12	86	6	77
<i>Populus tremuloides</i>	5	55	5	60	4	55
<i>Shepherdia canadensis</i>	12	48	5	47	24	97
<i>Amelanchier alnifolia</i>	5	48	3	49	3	38
<i>Salix bebbiana</i>	6	46	7	53	5	58
<i>Picea glauca</i>	3	39	4	43	4	40
<i>Rubus idaeus</i>	4	37	4	39	3	15
<i>Symphoricarpos albus</i>	3	34	2	36	3	18
<i>Lonicera involucrata</i>	3	33	3	40	3	16
<i>Alnus viridis</i>	18	28	9	20	9	5
<i>Populus balsamifera</i>	3	27	3	33	4	16
<i>Lonicera dioica</i>	2	26	2	27	2	16
<i>Cornus stolonifera</i>	3	23	3	24	3	19
<i>Ribes oxyacanthoides</i>	2	20	2	22	1	14
<i>Ribes triste</i>	2	17	2	15	1	6
<i>Vaccinium myrtilloides</i>	4	14	3	11	5	9
<i>Corylus cornuta</i>	25	12	5	6	2	1
<i>Rosa woodsii</i>	11	11	13	10	11	5
<i>Salix sp.</i>	3	11	3	10	3	4
<i>Salix scouleriana</i>	5	7	4	7	7	10
<i>Prunus virginiana</i>	3	7	2	4	1	2
<i>Prunus pensylvanica</i>	7	6	5	2	2	1
Shrub Stratum Cover (P ₁₀ P ₂₅ Mean P ₇₅ P ₉₀) [‡]	(20 31 51 70 90)		(19 28 46 62 80)		(22 34 53 69 86)	
Understory Herbs and Dwarf Shrubs						
<i>Chamerion angustifolium</i>	6	84	7	88	5	88
<i>Cornus canadensis</i>	7	83	7	83	6	81
<i>Rubus pubescens</i>	4	77	4	82	4	55
<i>Lathyrus ochroleucus</i>	3	76	3	85	3	74
<i>Linnaea borealis</i>	6	74	6	72	7	80
<i>Galium boreale</i>	1	69	2	74	2	64



Canadian National Vegetation Classification (CNVC)

Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

***Populus tremuloides / Rosa acicularis – Viburnum edule* CNVC00094**

Vegetation Summary (cont'd)*

Species Name [†]	Association CNVC00094		Subassociation 94a typic		Subassociation 94b <i>Shepherdia canadensis</i>	
	% Cover [‡]	% Presence [^]	% Cover [‡]	% Presence [^]	% Cover [‡]	% Presence [^]
<i>Pyrola asarifolia</i>	3	66	3	69	2	57
<i>Calamagrostis canadensis</i>	9	64	9	75	6	43
<i>Fragaria virginiana</i>	3	64	2	66	3	61
<i>Maianthemum canadense</i>	2	62	2	64	2	43
<i>Petasites frigidus</i>	2	62	2	70	2	47
<i>Vicia americana</i>	2	61	2	69	2	58
<i>Mertensia paniculata</i>	3	57	3	61	2	46
<i>Sympyotrichum ciliolatum</i>	2	50	2	51	2	46
<i>Aralia nudicaulis</i>	12	49	11	48	8	20
<i>Leymus innovatus</i>	9	47	9	48	11	64
<i>Eurybia conspicua</i>	4	46	5	54	4	43
<i>Orthilia secunda</i>	1	36	1	33	1	49
<i>Achillea millefolium</i>	1	33	1	36	1	40
<i>Mitella nuda</i>	2	30	2	33	2	10
<i>Actaea rubra</i>	1	20	1	22	1	9
<i>Viola renifolia</i>	1	20	1	18	1	13
<i>Equisetum sylvaticum</i>	1	17	1	21	1	12
<i>Galium trifidum</i>	1	15	1	15	1	9
<i>Viola canadensis</i>	2	14	2	15	3	2
<i>Vaccinium vitis-idaea</i>	4	13	4	10	7	15
<i>Arnica cordifolia</i>	4	13	3	14	3	17
<i>Prosartes trachycarpa</i>	1	12	1	10	1	1
<i>Taraxacum officinale</i>	1	12	1	11	1	10
<i>Lysimachia borealis</i>	1	9	1	7	1	1
<i>Arctostaphylos uva-ursi</i>	3	8	3	6	3	22
<i>Oryzopsis asperifolia</i>	3	6	3	4	5	4
<i>Elymus glaucus</i>	3	1	< 1	1	5	2
<i>Viola sp.</i>	1	1	< 1	1	1	1
Herb Stratum Cover (P₁₀ P₂₅ Mean P₇₅ P₉₀)[‡]	(20 33 54 72 99)		(25 38 56 74 99)		(19 30 50 65 86)	

Bryophytes and Lichens

<i>Hylocomium splendens</i>	4	40	5	38	5	58
<i>Pleurozium schreberi</i>	3	31	4	30	4	29
<i>Ptilium crista-castrensis</i>	3	14	2	12	3	13
<i>Brachythecium salebrosum</i>	1	14	1	14	1	13
<i>Pylaisia polyantha</i>	2	9	3	6	2	2
<i>Moss species</i>	3	6	7	1	-	-
<i>Peltigera sp.</i>	1	4	3	1	1	1
<i>Parmelia sulcata</i>	1	4	1	0	-	-

Bryo-Lichen Stratum Cover

(P ₁₀ P ₂₅ Mean P ₇₅ P ₉₀) [‡]	(0 0 5 5 12)	(0 0 5 5 10)	(0 0 6 6 12)
--	--------------	--------------	--------------

* 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 = Xth percentile (e.g., P₁₀ = 10th percentile)



Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

Forest / Forêt

Association CNVC00094

Populus tremuloides / Rosa acicularis – Viburnum edule
Trembling Aspen / Prickly Rose – Squashberry
Peuplier faux-tremble / Rosier aciculaire – Viorne comestible

Vegetation Summary (cont'd)*

Species Name [†]	Subassociation 94c <i>Alnus viridis</i>		Subassociation 94d <i>Amelanchier alnifolia</i>		Subassociation 94e <i>Betula papyrifera</i>	
	148 plots		158 plots		6 plots	
	% Cover [‡]	% Presence [^]	% Cover [‡]	% Presence [^]	% Cover [‡]	% Presence [^]
Overstory Trees						
<i>Populus tremuloides</i>	39	95	56	98	33	67
<i>Populus balsamifera</i>	13	45	8	32	3	33
<i>Picea glauca</i>	4	40	6	19	9	50
<i>Betula papyrifera</i>	10	28	8	28	19	100
Tree Stratum Cover (P ₁₀ P ₂₅ Mean P ₇₅ P ₉₀) [‡]	(26 35 49 61 72)		(36 45 61 75 90)		(30 32 51 66 82)	
Understory Woody Shrubs and Regenerating Trees						
<i>Rosa acicularis</i>	9	89	9	89	12	100
<i>Viburnum edule</i>	9	89	5	77	16	100
<i>Populus tremuloides</i>	6	48	4	46	5	50
<i>Shepherdia canadensis</i>	5	23	4	17	10	33
<i>Amelanchier alnifolia</i>	3	26	12	80	2	50
<i>Salix bebbiana</i>	4	26	5	29	-	-
<i>Picea glauca</i>	3	40	2	22	6	17
<i>Rubus idaeus</i>	5	49	3	45	1	33
<i>Symphoricarpos albus</i>	2	22	3	57	-	-
<i>Lonicera involucrata</i>	4	39	2	25	-	-
<i>Alnus viridis</i>	29	93	9	20	16	67
<i>Populus balsamifera</i>	4	31	2	17	1	17
<i>Lonicera dioica</i>	2	18	2	45	-	-
<i>Cornus stolonifera</i>	5	16	2	32	3	33
<i>Ribes oxyacanthoides</i>	2	18	2	23	1	17
<i>Ribes triste</i>	2	22	1	29	1	33
<i>Vaccinium myrtilloides</i>	5	22	4	22	-	-
<i>Corylus cornuta</i>	7	3	34	53	-	-
<i>Rosa woodsii</i>	6	10	11	23	-	-
<i>Salix sp.</i>	3	12	2	25	< 1	17
<i>Salix scouleriana</i>	6	9	3	1	11	33
<i>Prunus virginiana</i>	3	3	3	28	-	-
<i>Prunus pensylvanica</i>	5	7	8	26	-	-
Shrub Stratum Cover (P ₁₀ P ₂₅ Mean P ₇₅ P ₉₀) [‡]	(29 42 60 75 100)		(17 34 57 85 100)		(15 26 43 61 68)	
Understory Herbs and Dwarf Shrubs						
<i>Chamerion angustifolium</i>	4	87	5	65	1	50
<i>Cornus canadensis</i>	8	89	6	82	4	100
<i>Rubus pubescens</i>	5	82	4	81	2	67
<i>Lathyrus ochroleucus</i>	2	58	4	65	1	33
<i>Linnaea borealis</i>	5	82	6	67	4	83
<i>Galium boreale</i>	2	47	1	77	1	33



Canadian National Vegetation Classification (CNVC)

Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

***Populus tremuloides / Rosa acicularis – Viburnum edule* CNVC00094**

Vegetation Summary (cont'd)*

Species Name†	Subassociation 94c <i>Alnus viridis</i>		Subassociation 94d <i>Amelanchier alnifolia</i>		Subassociation 94e <i>Betula papyrifera</i>	
	Cover‡	Presence^	Cover‡	Presence^	Cover‡	Presence^
<i>Pyrola asarifolia</i>	3	77	2	58	4	50
<i>Calamagrostis canadensis</i>	13	63	5	54	-	-
<i>Fragaria virginiana</i>	3	60	2	64	1	17
<i>Maianthemum canadense</i>	2	56	2	81	3	67
<i>Petasites frigidus</i>	2	61	2	56	-	-
<i>Vicia americana</i>	2	36	2	59	-	-
<i>Mertensia paniculata</i>	3	54	2	58	< 1	33
<i>Sympyotrichum ciliolatum</i>	2	52	2	53	-	-
<i>Aralia nudicaulis</i>	15	63	10	75	23	100
<i>Leymus innovatus</i>	8	37	5	37	-	-
<i>Eurybia conspicua</i>	3	29	3	40	-	-
<i>Orthilia secunda</i>	1	34	1	28	1	67
<i>Achillea millefolium</i>	1	24	1	26	-	-
<i>Mitella nuda</i>	2	53	1	21	15	17
<i>Actaea rubra</i>	1	26	1	23	1	33
<i>Viola renifolia</i>	1	34	1	22	-	-
<i>Equisetum sylvaticum</i>	1	22	1	6	-	-
<i>Galium trifidum</i>	1	30	1	13	-	-
<i>Viola canadensis</i>	1	3	2	34	-	-
<i>Vaccinium vitis-idaea</i>	4	21	3	13	-	-
<i>Arnica cordifolia</i>	5	22	-	-	-	-
<i>Prosartes trachycarpa</i>	1	9	1	34	-	-
<i>Taraxacum officinale</i>	1	6	1	23	-	-
<i>Lysimachia borealis</i>	2	5	1	30	-	-
<i>Arctostaphylos uva-ursi</i>	5	3	1	4	-	-
<i>Oryzopsis asperifolia</i>	11	1	2	20	-	-
<i>Elymus glaucus</i>	-	-	-	-	3	50
<i>Viola sp.</i>	< 1	4	1	1	3	33
Herb Stratum Cover (P₁₀ P₂₅ Mean P₇₅ P₉₀)[‡]	(24 38 58 81 100)		(12 23 47 70 100)		(22 26 42 59 62)	

Bryophytes and Lichens

<i>Hylocomium splendens</i>	4	41	1	25	13	33
<i>Pleurozium schreberi</i>	3	41	2	29	-	-
<i>Ptilium crista-castrensis</i>	3	24	< 1	9	6	33
<i>Brachythecium salebrosum</i>	2	9	1	23	-	-
<i>Pylaisia polyantha</i>	3	9	2	25	-	-
<i>Moss species</i>	-	-	2	34	< 1	17
<i>Peltigera sp.</i>	< 1	1	1	22	< 1	17
<i>Parmelia sulcata</i>	1	1	1	27	-	-

Bryo-Lichen Stratum Cover

(P ₁₀ P ₂₅ Mean P ₇₅ P ₉₀) [‡]	(0 0 5 7 13)	(0 0 4 6 12)	(0 0 7 4 20)
--	--------------	--------------	--------------

* 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 = Xth percentile (e.g., P₁₀ = 10th percentile)



Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

Forest / Forêt

Association CNVC00094

Populus tremuloides / Rosa acicularis – Viburnum edule

Trembling Aspen / Prickly Rose – Squashberry

Peuplier faux-tremble / Rosier aciculaire – Viorne comestible

Site / Soil Characteristics

Association CNVC00094 1053 plots	Subassociation 94a <i>typic</i> 557 plots	Subassociation 94b <i>Shepherdia canadensis</i> 184 plots
Elevation Range (min–mean–max meters) 185–665–1478 missing data (8)	247–680–1345 missing data (7)	185–621–1092 missing data (7)
Slope Gradient (% frequency) very steep (0) steep (2) moderately steep (4) moderate (6) gentle (21) level (64) missing data (2)	very steep (0) steep (1) moderately steep (3) moderate (5) gentle (22) level (65) missing data (2)	very steep (1) steep (4) moderately steep (6) moderate (5) gentle (12) level (71) missing data (1)
Aspect (% frequency) north (30) east (17) south (17) west (15) level (17) missing data (5)	north (30) east (18) south (17) west (14) level (16) missing data (6)	north (37) east (9) south (18) west (15) level (15) missing data (5)
Meso Topoposition (% frequency) crest / upper (27) mid (26) lower / toe (8) depression (1) level (27) missing data (11)	crest / upper (29) mid (25) lower / toe (8) depression (1) level (29) missing data (8)	crest / upper (23) mid (27) lower / toe (7) depression (1) level (33) missing data (10)
Moisture Regime (% frequency) very dry (0) dry (3) mesic (78) moist (16) missing data (3)	very dry (0) dry (3) mesic (78) moist (17) missing data (2)	very dry (0) dry (2) mesic (82) moist (12) missing data (4)
Nutrient Regime (% frequency) poor (7) medium (67) rich (15) missing data (11)	poor (6) medium (73) rich (16) missing data (4)	poor (9) medium (74) rich (11) missing data (5)



Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

***Populus tremuloides / Rosa acicularis – Viburnum edule* CNVC00094**

Site / Soil Characteristics (cont'd)

	Association CNVC00094	Subassociation 94a <i>typic</i>	Subassociation 94b <i>Shepherdia canadensis</i>
Soil Parent Material (% frequency)	colluvium (3) eolian (6) moraine / till (34) fluvial (9) glaciofluvial (14) lacustrine (6) glaciolacustrine (19) organic (0) anthropogenic (0) missing data (8)	colluvium (4) eolian (6) moraine / till (35) fluvial (8) glaciofluvial (16) lacustrine (6) glaciolacustrine (20) organic (0) anthropogenic (0) missing data (5)	colluvium (3) eolian (3) moraine / till (29) fluvial (2) glaciofluvial (7) lacustrine (4) glaciolacustrine (35) organic (0) anthropogenic (0) missing data (17)
Soil Rooting Zone Substrate (% frequency)	non-soil (3) sandy (9) coarse loamy (9) fine loamy (29) silty (3) clayey (30) organic (0) missing data (18)	non-soil (4) sandy (11) coarse loamy (10) fine loamy (31) silty (2) clayey (30) organic (0) missing data (12)	non-soil (3) sandy (6) coarse loamy (9) fine loamy (24) silty (3) clayey (45) organic (0) missing data (10)
Root Restricting Depth (% frequency)	21 – 99 cm (1) ≥ 100 cm (7) missing data (92)	21 – 99 cm (0) ≥ 100 cm (2) missing data (98)	21 – 99 cm (4) ≥ 100 cm (0) missing data (96)
Humus Form (% frequency)	mor (28) moder (7) mull (1) peatymor (0) missing data (64)	mor (26) moder (6) mull (0) peatymor (1) missing data (68)	mor (23) moder (8) mull (2) peatymor (1) missing data (66)



Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

Forest / Forêt

Association CNVC00094

Populus tremuloides / Rosa acicularis – Viburnum edule

Trembling Aspen / Prickly Rose – Squashberry

Peuplier faux-tremble / Rosier aciculaire – Viorne comestible

Site / Soil Characteristics (cont'd)

Subassociation 94c <i>Alnus viridis</i>	Subassociation 94d <i>Amelanchier alnifolia</i>	Subassociation 94e <i>Betula papyrifera</i>
148 plots	158 plots	6 plots
Elevation Range (min–mean–max meters)		
380–797–1478	272–547–1074	305–468–645
missing data (9)	missing data (10)	missing data (0)
Slope Gradient (% frequency)		
very steep (0)	very steep (0)	very steep (0)
steep (2)	steep (1)	steep (33)
moderately steep (6)	moderately steep (3)	moderately steep (17)
moderate (7)	moderate (6)	moderate (17)
gentle (30)	gentle (18)	gentle (17)
level (49)	level (71)	level (17)
missing data (5)	missing data (1)	missing data (0)
Aspect (% frequency)		
north (26)	north (26)	north (0)
east (20)	east (20)	east (17)
south (18)	south (12)	south (33)
west (13)	west (22)	west (33)
level (17)	level (19)	level (17)
missing data (7)	missing data (1)	missing data (0)
Meso Topoposition (% frequency)		
crest / upper (21)	crest / upper (30)	crest / upper (17)
mid (28)	mid (22)	mid (50)
lower / toe (3)	lower / toe (17)	lower / toe (17)
depression (1)	depression (1)	depression (0)
level (20)	level (24)	level (17)
missing data (26)	missing data (6)	missing data (0)
Moisture Regime (% frequency)		
very dry (0)	very dry (0)	very dry (0)
dry (2)	dry (8)	dry (0)
mesic (79)	mesic (72)	mesic (83)
moist (13)	moist (18)	moist (0)
missing data (6)	missing data (1)	missing data (17)
Nutrient Regime (% frequency)		
poor (9)	poor (3)	poor (17)
medium (67)	medium (37)	medium (33)
rich (16)	rich (17)	rich (17)
missing data (7)	missing data (42)	missing data (33)



Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

***Populus tremuloides / Rosa acicularis – Viburnum edule* CNVC00094**

Site / Soil Characteristics (cont'd)

	Subassociation 94c <i>Alnus viridis</i>	Subassociation 94d <i>Amelanchier alnifolia</i>	Subassociation 94e <i>Betula papyrifera</i>
Soil Parent Material (% frequency)	colluvium (0) eolian (10) moraine / till (42) fluvial (5) glaciofluvial (16) lacustrine (1) glaciolacustrine (11) organic (0) anthropogenic (0) missing data (15)	colluvium (3) eolian (3) moraine / till (32) fluvial (23) glaciofluvial (16) lacustrine (13) glaciolacustrine (7) organic (1) anthropogenic (1) missing data (2)	colluvium (17) eolian (0) moraine / till (17) fluvial (0) glaciofluvial (17) lacustrine (0) glaciolacustrine (0) organic (0) anthropogenic (0) missing data (50)
Soil Rooting Zone Substrate (% frequency)	non-soil (0) sandy (9) coarse loamy (10) fine loamy (34) silty (6) clayey (24) organic (0) missing data (16)	non-soil (3) sandy (6) coarse loamy (4) fine loamy (21) silty (1) clayey (18) organic (1) missing data (47)	non-soil (17) sandy (0) coarse loamy (17) fine loamy (17) silty (17) clayey (0) organic (0) missing data (33)
Root Restricting Depth (% frequency)	21 – 99 cm (1) ≥ 100 cm (1) missing data (99)	21 – 99 cm (0) ≥ 100 cm (41) missing data (59)	21 – 99 cm (17) ≥ 100 cm (0) missing data (83)
Humus Form (% frequency)	mor (28) moder (11) mull (1) peatymor (0) missing data (59)	mor (43) moder (4) mull (1) peatymor (0) missing data (53)	mor (50) moder (17) mull (0) peatymor (0) missing data (33)



Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

Forest / Forêt

Association CNVC00094

Populus tremuloides / Rosa acicularis – Viburnum edule

Trembling Aspen / Prickly Rose – Squashberry

Peuplier faux-tremble / 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:

CNVC00080 [*Populus tremuloides – P. balsamifera / Lonicera involucrata – Cornus stolonifera / Mertensia paniculata*] occurs on moister, richer sites from British Columbia to western Manitoba. It has greater constancy and cover of *Lonicera involucrata* and *Cornus stolonifera* in the shrub layer.

CNVC00095 [*Populus tremuloides – Picea glauca / Rosa acicularis – Viburnum edule*] is a similar mixedwood Association that occurs on comparable sites in Yukon, British Columbia and Alberta (see Dynamics).

CNVC00263 [*Picea glauca – Populus tremuloides / Rosa acicularis / Aralia nudicaulis*] is a similar mixedwood Association that occurs on comparable sites from Alberta to western Manitoba.

CNVC00265 [*Populus tremuloides / Amelanchier alnifolia / Poaceae*] typically occurs on drier, poorer sites in Saskatchewan and western Manitoba. Its shrub layer has less *Viburnum edule* and *Shepherdia canadensis* and more *Amelanchier alnifolia*, *Corylus cornuta* and *Symphoricarpos albus*. It also has greater constancy of the dwarf shrub *Arctostaphylos uva-ursi*.

CNVC00267 [*Populus tremuloides / Rosa acicularis (Shepherdia canadensis)*] occurs on drier sites north of the range of CNVC00094 in Saskatchewan. It often has *Betula papyrifera* and occasionally *Pinus banksiana* in the overstory, and greater constancy and cover of *Juniperus communis*, *Arctostaphylos uva-ursi*, *Geocaulon lividum* and *Vaccinium vitis-idaea* in the understory.

CNVC00330 [*Populus tremuloides / Shepherdia canadensis / Arctostaphylos uva-ursi*] occurs on drier, poorer sites in Yukon and British Columbia. It has greater constancy and cover of *Juniperus communis*, *Shepherdia canadensis* and *Arctostaphylos uva-ursi* in the shrub and dwarf shrub layers and less *Cornus canadensis*, *Maianthemum canadense*, *Petasites frigidus*, *Rubus pubescens* and *Vicia americana* in the herb and dwarf shrub layer.

CNVC00387 [*Populus tremuloides / Rosa acicularis / Chamerion angustifolium*] occurs on drier, poorer sites in Yukon. It has lower overall shrub cover, with less *Viburnum edule* and greater *Arctostaphylos uva-ursi*, *Cornus canadensis*, *Maianthemum canadense*, *Petasites frigidus*, *Rubus pubescens* and *Vicia americana*.

Related United States National Vegetation Classification Associations:

Relationships with Other Classifications: In southwestern Manitoba, CNVC00094 partially matches the concepts of ES22 [Trembling Aspen on Fresh Coarse Loamy to Silty Soil] and ES32 [Trembling Aspen - Balsam Poplar on Fresh Fine Loamy Soil] from Arnup et al. 2006.

Comments



Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

***Populus tremuloides / Rosa acicularis – Viburnum edule* CNVC00094**

Source Information

Number of source plots for CNVC00094: 1053

Number of source plots for 94a *typic*: 557

Number of source plots for 94b *Shepherdia canadensis*: 184

Number of source plots for 94c *Alnus viridis*: 148

Number of source plots for 94d *Amelanchier alnifolia*: 158

Number of source plots for 94e *Betula papyrifera*: 6

Information Sources:

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

Biogeoclimatic Ecosystem Classification Program of British Columbia. 2015. BECMaster ecosystem plot database [VPro13/MSAccess 2007 format]. W.H. MacKenzie, ed. B.C. Min. For., Lands, and Nat. Res. Ops., Smithers, BC. Available: www.for.gov.bc.ca/hre/becweb/resources/information-requests. (accessed June 2015).

Ecosystem and Landscape Classification Program. 2017. YBECMaster ecosystem plot database [VPro13/MSAccess 2010 format]. Ecol. Land Class. Prog. Dept. Env., Govt. Yukon, Whitehorse, Yukon.

McLaughlan, M.S.; Wright, R.A.; Jiricka, R.D. 2010. Saskatchewan Forest Ecosystem Classification [Data set]. Sask. Min. Environ. For. Serv., Prince Albert, SK.

Concept Authors: L. Allen, J. Archibald, K. Baldwin, K. Chapman, N. Flynn, C. Kennedy, W. Mackenzie, K. McKenna, M. McLaughlan, D. Meidinger

Description Authors: K. Chapman, K. Baldwin and D. Downing

Date of Concept: March, 2012

Date of Description: November, 2017

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.

Beckingham, J.D.; Archibald, J.H. 1996. Field guide to ecosites of northern Alberta. Nat. Resour. Can., Can. For. Serv., North. For. Centre, Edmonton, AB. Spec. Rep. 5.

Beckingham, J.D.; Corns, I.G.W.; Archibald, J.H. 1996. Field guide to ecosites of west-central Alberta. Nat. Resour. Can., Can. For. Serv., North. For. Centre, Edmonton, AB. Spec. Rep. 9.

DeLong, C.; Banner, A.; MacKenzie, W.H.; Rogers, B.J.; Kaytor, B. 2011. A field guide to ecosystem identification for the Boreal White and Black Spruce zone of British Columbia. B.C. Min. For. Range, For. Sci. Prog., Victoria, BC. Land Manage. Handb. No. 65.

McLaughlan, M.S.; Wright, R.A.; Jiricka, R.D. 2010. Field guide to the ecosites of Saskatchewan's provincial forests. Sask. Min. Environ., For. Serv., Prince Albert, SK.

Meidinger, D.; Kennedy, C.E.; McKenna, K. 2017. In prep. Boreal treed vegetation associations of Yukon factsheets. Ecol. Land Class. Prog. Dept. Env. Govt. Yukon, Whitehorse, Yukon.

Characterization References:

Andison, D.W. 1998. Temporal patterns of age-class distributions on foothills landscapes in Alberta. Ecography 21(5):543-550.

Arnup, R.W.; LeBlanc, P.A.; Becker, G. 2006. Field Guide to Ecosites of the Mid-Boreal Upland Ecoregion of Manitoba. Louisiana-Pacific Canada Ltd, For. Resour. Div. and Man. Conserv., For. Branch, Swan River and Winnipeg, MB.

Bergeron, Y.; Chen, H.Y.H.; Kenkel, N.C.; Leduc, A.; Macdonald, S.E. 2014. Boreal mixedwood stand dynamics: ecological processes underlying multiple pathways. For. Chron. 90(2):202-213.

Boulanger, Y.; Gauthier, S.; Burton, P.J. 2014. A refinement of models projecting future Canadian fire regimes using homogeneous fire regime zones. Can. J. For. Res. 44(4):365-376.



Canadian National Vegetation Classification (CNVC) Classification nationale de la végétation du Canada (CNVC)

<http://cnvc-cnvc.ca>

***Populus tremuloides / Rosa acicularis – Viburnum edule* CNVC00094**

Characterization References (cont'd):

- Greene, D.F.; Zasada, J.C.; Sirois, L.; Kneeshaw, D.; Morin, H.; Charron, I.; Simard, M.J. 1999. A review of the regeneration dynamics of North American boreal forest tree species. *Can. J. For. Res.* 29:824-839.
- Howard, J.L. 1996. *Populus tremuloides*. In: Fire Effects Information System. U.S. Dept. Agric., For. Serv., Rocky Mt. Res. Stn., Fire Sci. Lab., Missoula, MT, US. Available: <http://www.fs.fed.us/database/feis/plants/tree/poptre/all.html> (accessed: May 27, 2015).
- Kabzems, A.; Kosowan, A.L.; Harris, W.C. 1986. Mixedwood section in an ecological perspective: Saskatchewan. 2nd ed. Can. For. Serv., Northwest Reg., Edmonton, AB. Canada-Saskatchewan For. Resour. Dev. Agreement Tech. Bull. No. 8.
- Kenkel, N.C.; Walker, D.J.; Watson, P.R.; Caners, R.T; Lastra, R.A. 1997. Vegetation dynamics in boreal forest ecosystems. *Coenoses* 12(2-3):97-108.
- Parisien, M.A.; Hirsch, K.G.; Lavoie, S.G.; Todd, J.B.; Kafka, V.G. 2004. Saskatchewan fire regime analysis. Can. For. Serv., North. For. Centre, Edmonton, AB. Info. Rep. NOR-X-394.
- Stockdale, C. 2014. Fire regimes of western boreal Canada and the foothills of Alberta. A discussion document and literature review for the LANDWEB Project.
- Zoladeski, C.A.; Wickware, G.M.; Delorme, R.J.; Sims, R.A.; Corns, I.G.W. 1995. Forest ecosystem classification for Manitoba: field guide. Nat. Res. Can., Can. For. Serv., North. For. Centre, Edmonton, AB. Special Rep. 2.

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>.

Suggested Citation: K. Chapman, K. Baldwin and D. Downing. *Populus tremuloides / Rosa acicularis – Viburnum edule* [online]. Sault Ste. Marie, Ontario, Canada: Canadian National Vegetation Classification. November, 2017; generated Nov-07-2017; cited ENTER DATE ACCESSED. 15 p. Canadian National Vegetation Classification Association: CNVC00094. Available from <http://cnvc-cnvc.ca>. System Requirements: Adobe Acrobat Reader v. 7.0 or higher. ISSN 1916-3266.