Forest / Forêt **Association CNVC00125**

Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea

Trembling Aspen – Jack Pine / Velvet-leaved Blueberry / Lingonberry

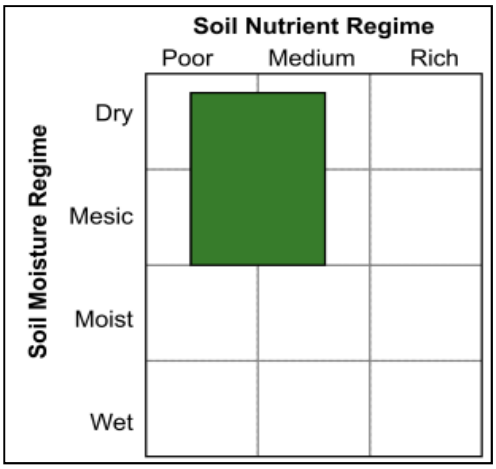
Peuplier faux-tremble – Pin gris / Bleuet fausse-myrtille / Airelle rouge

Subassociations: *125a typic, 125b Alnus viridis, 125c Rhododendron groenlandicum, 125d Picea mariana*

CNVC Alliance: CA00020 *Populus tremuloides – Betula papyrifera – Pinus banksiana (Picea mariana) / Vaccinium myrtilloides / V. vitis-idaea*

CNVC Group: CG0010 Central Boreal Mesic-Moist Black Spruce – Jack Pine Forest

Source: D. Downing



Type Description

Concept: CNVC00125 is a boreal mixedwood forest Association that ranges from Alberta to Ontario. It has a moderately closed to closed canopy of trembling aspen (*Populus tremuloides*) and jack pine (*Pinus banksiana*), but paper birch (*Betula papyrifera*) and/or black spruce (*Picea mariana*) can also be canopy constituents. The shrub layer is usually moderately developed but varies depending on the patchiness of shrubs. It usually includes velvet-leaved blueberry (*Vaccinium myrtilloides*), prickly rose (*Rosa acicularis*) and, in larger canopy openings, trembling aspen saplings. Green alder (*Alnus viridis*), common Labrador tea (*Rhododendron groenlandicum*) and regenerating black spruce dominate the shrub layer of their respective subassociations. The herb and dwarf shrub layer is usually moderately developed; it commonly includes twinflower (*Linnaea borealis*), wild-lily-of-the-valley (*Maianthemum canadense*), lingonberry (*V. vitis-idaea*) and bunchberry (*Cornus canadensis*). The moss layer is poorly to well developed, depending on the amount of broad-leaf litter on the forest floor. It usually includes red-stemmed feathermoss (*Pleurozium schreberi*) and stairstep moss (*Hylocomium splendens*). CNVC00125 is an early seral condition that typically establishes after fire or harvesting. It occurs in a region with a subhumid continental boreal climate and is usually found on dry to mesic, nutrient-poor to medium sites. Four subassociations are distinguished: *typic*, *Alnus viridis, Rhododendron groenlandicum* and *Picea mariana.*

Vegetation: CNVC00125 is a mixedwood forest Association with a moderately closed to closed canopy typically consisting of *Populus tremuloides* and *Pinus banksiana*, sometimes with *Betula papyrifera* and/or *Picea mariana.* The shrub layer is usually moderately developed, depending on the patchiness of shrubs. It typically includes *Vaccinium myrtilloides, Rosa acicularis* and, in larger canopy openings, *P. tremuloides* saplings. *Alnus viridis, Rhododendron groenlandicum* and regenerating *P. mariana* dominate the shrub layers of their respective subassociations. The herb and dwarf shrub layer is moderately developed and usually includes *Linnaea borealis*, *Maianthemum canadense*, *V. vitis-idaea* and *Cornus canadensis*. The moss layer is poorly to well developed and usually includes *Pleurozium schreberi* and *Hylocomium splendens*. The moss layer is typically better developed in stands with less broad-leaf litter (i.e., greater conifer cover).

There are four subassociations. Compared to the *typic,* the *Alnus viridis* subassociation has higher constancy of *A. viridis* in the shrub layer. The *Rhododendron groenlandicum* subassociation has abundant *R. groenlandicum* in the shrub layer and tends to have greater moss cover, particularly of *H. splendens.* The *Picea mariana* subassociation has a more closed canopy with *P. mariana* as the dominant conifer, as well as a significant presence of regenerating *P. mariana* and *Abies balsamea* in the shrub layer and *Lycopodium annotinum, Aralia nudicaulis* and *Lysimachia borealis* in the herb layer.

Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea
CNVC00125

Type Description (cont'd)

Environment: CNVC00125 occurs in a subhumid continental boreal climate where regional fire cycles are short (<100 years) or intermediate (100-270 years). It is most frequently found on dry to mesic, nutrient-poor to medium sites. Stands are commonly on level sites or gentle to moderate slopes on water-shedding, crest or upper to middle-slope topopositions. Soils are typically deep, rapidly or well-drained sands or coarse loams, derived from morainal, glaciofluvial, fluvial, lacustrine or eolian surficial materials. Mor humus forms are typical.

There are some site distinctions among subassociations. Compared to the *typic,* the *Alnus viridis* subassociation is more common on gentle slopes on crest or upper-slope topopositions, on aspects that are cooler (either north or east-facing) and on glaciofluvial or eolian sands. The *Rhododendron groenlandicum* subassociation usually occurs on level sites and on finer-textured soils than the *typic* subassociation. The *Picea mariana* subassociation is more common on lacustrine sediments than the other subassociations.

Dynamics: CNVC00125 is an early seral condition that typically establishes after stand-replacing fire or harvesting. The main canopy species are adapted to disturbance. Following any disturbance that does not kill their roots, *Populus tremuloides* and *Betula papyrifera* can reproduce vegetatively, *P. tremuloides* from root suckers and *B. papyrifera* from stump sprouts. These species also produce abundant, light, wind-dispersed seeds that can readily colonize mineral soil seedbeds exposed by disturbance. *Pinus banksiana* and *Picea mariana* have cones that open when heated by fire, releasing large quantities of seeds onto fire-prepared seedbeds.

P. tremuloides, B. papyrifera and *P. banksiana* are intolerant of shade so do not replace themselves in a stand without further disturbance. If seed sources are available, shade tolerant conifers (*Picea glauca* and, in the *Picea mariana* subassociation, *Abies balsamea*) can become established in these stands and may grow into the canopy as the pioneer species decline. Over time, a mid-seral mixedwood Association could develop. Within the range of CNVC00125, however, fires are usually frequent enough (<100 years) that succession beyond the early seral stage does not occur.

Jack pine budworm (*Choristoneura pinus pinus*) can reduce growth and cause top kill of *P. banksiana* but does not usually result in widespread tree mortality. Dead wood and needle litter may increase the flammability of these stands.

Forest tent caterpillar (*Malacosoma disstria*) and *Armillaria* root disease (*Armillaria* spp.) can have significant impacts on *P. tremuloides.* Defoliation by the caterpillar can reduce growth, cause dieback and sometimes lead to mortality. *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 understory trees, such as *P. mariana* and *P. glauca*.

Range: CNVC00125 occurs in the boreal region of west-central Canada from Alberta, east of the Rocky Mountain foothills, to north of Lake Nipigon in northwestern Ontario. It is described from the boreal plains in Alberta and Saskatchewan and from the Precambrian Shield in Alberta, Saskatchewan and Ontario. The *Picea mariana* subassociation is only described from northwestern Ontario.

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 – Pin gris / Bleuet fausse-myrtille / Airelle rouge

Distribution

Countries: Canada

Provinces / Territories / States: Alberta, Manitoba, Ontario, Saskatchewan

Terrestrial Ecozones and Ecoregions of Canada: Boreal Plains: Boreal Transition, Mid-Boreal Lowland, Mid-Boreal Uplands, Peace Lowland, Wabasca Lowland, Western Boreal; Boreal Shield: Athabasca Plain, Big Trout Lake, Churchill River Upland, Lac Seul Upland; Taiga Plains: Northern Alberta Uplands; Taiga Shield: Tazin Lake Upland

Rowe's Forest Regions and Sections of Canada: Boreal: Aspen Grove, Athabasca South, Central Plateau, Hay River, Manitoba Lowlands, Mixedwood, Northern Coniferous, Northwestern Transition, Upper Churchill, Upper Mackenzie

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

Nature Conservancy of Canada Ecoregions: Boreal Plains, Boreal Shield, Taiga Plains, Western Taiga Shield

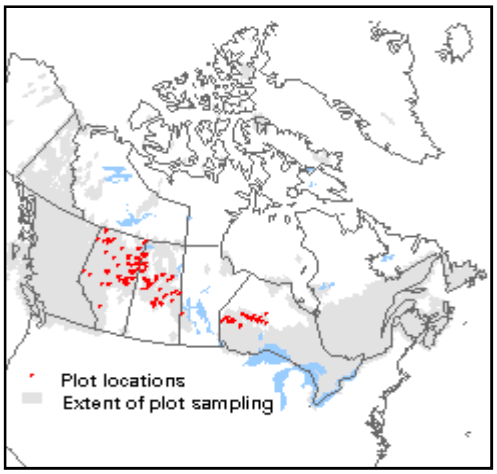
Natural Regions and Subregions of Alberta: Boreal Forest: Athabasca Plain, Boreal Subarctic, Central Mixedwood, Dry Mixedwood, Lower Boreal Highlands, Northern Mixedwood, Upper Boreal Highlands; Canadian Shield: Kazan Uplands

Ecozones and Ecoregions of Saskatchewan: Boreal Plain: Boreal Transition, Mid-Boreal Lowland, Mid-Boreal Upland; Boreal Shield: Athabasca Plain, Churchill River Upland

Ecozones and Ecoregions of Manitoba: Boreal Plains, Boreal Shield

Manitoba Protected Areas Initiative Natural Regions: Manitoba Lowlands, Precambrian Boreal Forest, Western Upland

Ecological Land Classification of Ontario (ecoregions and ecodistricts): 2W-1, 2W-3, 3S-1, 3S-2, 3S-3, 3S-4, 3S-5



Corresponding Types and Associations

125a typic	Alberta	NN/BH/B/01/01	Pj - Aw (Bw) / blueberry - Labrador tea
		NN/BM/B/01/01	Pj - Aw / blueberry - bearberry
		NN/CS/B/01/01	Pj - Aw - Bw / blueberry
		NN/SB/A/02/01	Pl - Aw / bearberry
		NN/SB/B/01/01	Pl - Aw / rose / feather moss
	Saskatchewan	BP4	Jack pine - trembling aspen / feathermoss: Moderately fresh sand
		BS6	Jack pine - trembling aspen / green alder: Moderately fresh loamy sand
125b Alnus viridis	Alberta	NN/BM/B/01/02	Pj - Aw / blueberry - green alder
		NN/CS/B/01/02	Pj - Aw - Bw / Canada buffalo-berry - green alder
125c Rhododendron groenlandicum	Alberta	NN/BM/B/01/03	Pj - Aw / blueberry - Labrador tea
125d Picea mariana	Ontario	BTr7-6	Populus tremuloides - Betula papyrifera - Picea mariana (Pinus banksiana) / Alnus viridis - Vaccinium myrtilloides / Pleurozium schreberi

Forest / Forêt **Association CNVC00125**

Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea

Trembling Aspen – Jack Pine / Velvet-leaved Blueberry / Lingonberry

Peuplier faux-tremble – Pin gris / Bleuet fausse-myrtille / Airelle rouge

Vegetation Summary*

	Association CNVC00125		Subassociation 125a *typic*		Subassociation 125b *Alnus viridis*	
	194 plots		**94 plots**		**39 plots**	
Species Name[T]	% Cover[±]	% Presence^	% Cover[±]	% Presence^	% Cover[±]	% Presence^
Overstory Trees						
Populus tremuloides	**29**	**89**	**20**	**89**	**19**	**72**
Pinus banksiana	**26**	**86**	**30**	**98**	**28**	**100**
Picea mariana	17	45	15	36	13	18
Betula papyrifera	15	43	11	37	12	51
Picea glauca	10	20	12	28	6	23
Populus balsamifera	13	3	32	2	5	5
Tree Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})[‡]	**(30 42 62 82 96)**		**(27 35 57 73 95)**		**(20 34 52 66 78)**	
Understory Woody Shrubs and Regenerating Trees						
Vaccinium myrtilloides	**7**	**80**	**7**	**81**	**8**	**72**
Alnus viridis	16	62	13	49	**15**	**97**
Populus tremuloides	3	59	3	55	4	46
Rosa acicularis	3	58	3	53	3	69
Betula papyrifera	5	49	2	36	2	51
Rhododendron groenlandicum	9	47	5	41	10	36
Picea mariana	10	44	3	23	4	31
Viburnum edule	2	34	2	21	3	33
Picea glauca	4	26	5	32	2	38
Amelanchier alnifolia	2	23	2	23	1	18
Abies balsamea	12	19	1	4	1	3
Salix bebbiana	4	18	3	12	4	23
Salix sp.	2	17	2	33	2	5
Pinus banksiana	2	16	1	18	3	18
Shepherdia canadensis	6	14	6	14	7	23
Sorbus decora	1	12	-	-	-	-
Prunus pensylvanica	2	11	< 1	10	2	23
Diervilla lonicera	8	10	1	1	-	-
Populus balsamifera	1	9	< 1	9	2	10
Ribes triste	4	7	1	1	-	-
Shrub Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})[‡]	**(7 14 37 56 76)**		**(5 9 25 36 59)**		**(10 20 36 46 72)**	
Understory Herbs and Dwarf Shrubs						
Linnaea borealis	4	73	3	68	6	72
Maianthemum canadense	2	67	2	65	2	64
Vaccinium vitis-idaea	**9**	**62**	**8**	**69**	**14**	**90**
Cornus canadensis	8	62	4	55	6	44
Chamerion angustifolium	2	50	2	51	2	51
Aralia nudicaulis	6	43	3	31	5	41

Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea
CNVC00125

Vegetation Summary (cont'd)*

	Association CNVC00125		Subassociation 125a *typic*		Subassociation 125b *Alnus viridis*	
Species Name[†]	% Cover[±]	% Presence^	% Cover[±]	% Presence^	% Cover[±]	% Presence^
Orthilia secunda	1	43	1	40	1	49
Lycopodium annotinum	10	36	2	22	4	18
Lysimachia borealis	1	34	1	29	1	10
Arctostaphylos uva-ursi	10	31	8	40	15	51
Goodyera repens	< 1	28	1	22	1	5
Rubus pubescens	3	27	1	17	3	18
Pyrola asarifolia	1	25	1	23	1	18
Fragaria virginiana	2	23	1	24	2	28
Diphasiastrum complanatum	4	22	2	15	2	15
Leymus innovatus	5	21	5	22	5	41
Geocaulon lividum	2	21	1	19	3	44
Galium boreale	1	20	1	28	2	33
Petasites frigidus	3	19	2	11	2	13
Poaceae	7	17	8	31	-	-
Equisetum sylvaticum	1	16	1	12	2	10
Clintonia borealis	3	15	-	-	-	-
Lathyrus ochroleucus	2	15	2	16	2	26
Pyrola chlorantha	1	15	1	9	1	15
Lycopodium clavatum	4	14	1	2	1	3
Lycopodium dendroideum	2	14	1	1	1	13
Viola renifolia	1	14	1	5	1	10
Calamagrostis canadensis	2	12	1	15	5	15
Mertensia paniculata	1	12	1	10	1	3
Campanula sp.	1	10	1	10	1	23
Mitella nuda	3	9	1	2	1	5
Achillea millefolium	1	9	1	12	1	13
Platanthera orbiculata	< 1	9	-	-	-	-
Piptatheropsis pungens	2	8	1	3	3	31
Gaultheria hispidula	2	8	-	-	-	-
Coptis trifolia	1	8	1	1	1	3
Anemone multifida	1	6	1	3	1	21
Herb Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})[‡]	**(4 14 35 52 81)**		**(2 9 25 34 57)**		**(14 22 44 64 86)**	
Bryophytes and Lichens						
Pleurozium schreberi	21	87	20	84	13	74
Hylocomium splendens	8	74	6	72	8	56
Cladonia sp.	2	50	2	67	7	18
Ptilium crista-castrensis	5	49	2	40	5	26
Dicranum polysetum	2	49	1	35	3	33
Cladina mitis	7	38	6	47	12	44
Dicranum sp.	1	26	1	51	5	5
Cladina rangiferina	2	24	1	24	11	18
Evernia mesomorpha	1	20	1	40	-	-
Parmelia sulcata	1	19	1	38	-	-
Sanionia uncinata	< 1	19	1	19	1	3

Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea
CNVC00125

Vegetation Summary (cont'd)*

	Association CNVC00125		Subassociation 125a *typic*		Subassociation 125b *Alnus viridis*	
Species Name†	% Cover±	% Presence^	% Cover±	% Presence^	% Cover±	% Presence^
Polytrichum juniperinum	1	17	1	20	2	13
Hypogymnia physodes	1	17	1	35	-	-
Peltigera aphthosa	1	16	1	16	2	13
Brachythecium salebrosum	1	16	1	20	-	-
Polytrichum sp.	1	16	1	34	-	-
Peltigera sp.	1	15	1	31	-	-
Vulpicida pinastri	1	13	1	28	-	-
Pylaisia polyantha	1	12	1	21	2	8
Peltigera canina	1	10	1	7	1	8
Usnea hirta	1	10	1	21	-	-
Usnea subfloridana	1	10	1	20	-	-
Dicranum ontariense	< 1	10	-	-	-	-
Rhytidiadelphus triquetrus	1	9	-	-	-	-
Dicranum fuscescens	< 1	9	1	4	1	3
Brachythecium acuminatum	< 1	6	-	-	-	-
Aulacomnium palustre	1	5	1	7	-	-
Bryo-Lichen Stratum Cover						
(P_{10} P_{25} Mean P_{75} P_{90})‡	**(4 9 36 57 79)**		**(5 8 32 57 77)**		**(2 5 27 46 53)**	

* 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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Peuplier faux-tremble – Pin gris / Bleuet fausse-myrtille / Airelle rouge

Vegetation Summary (cont'd)*

	Subassociation 125c *Rhododendron groenlandicum*		Subassociation 125d *Picea mariana*	
	7 plots		**54 plots**	
Species Name[T]	% Cover[±]	% Presence[^]	% Cover[±]	% Presence[^]
Overstory Trees				
Populus tremuloides	**27**	**100**	**50**	**100**
Pinus banksiana	**27**	**86**	**13**	**54**
Picea mariana	13	29	**18**	**81**
Betula papyrifera	8	43	24	48
Picea glauca	7	57	-	-
Populus balsamifera	4	29	-	-
Tree Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})[‡]	**(41 47 61 74 77)**		**(56 71 80 94 100)**	
Understory Woody Shrubs and Regenerating Trees				
Vaccinium myrtilloides	**10**	**71**	**5**	**87**
Alnus viridis	5	14	19	67
Populus tremuloides	5	71	3	74
Rosa acicularis	4	86	4	56
Betula papyrifera	2	29	9	72
Rhododendron groenlandicum	**20**	**100**	11	57
Picea mariana	4	43	**14**	**91**
Viburnum edule	6	29	2	57
Picea glauca	11	57	0	2
Amelanchier alnifolia	-	-	1	30
Abies balsamea	-	-	14	59
Salix bebbiana	4	43	5	20
Salix sp.	-	-	-	-
Pinus banksiana	1	29	1	9
Shepherdia canadensis	5	71	-	-
Sorbus decora	-	-	1	44
Prunus pensylvanica	-	-	5	7
Diervilla lonicera	-	-	9	35
Populus balsamifera	2	43	0	4
Ribes triste	-	-	4	24
Shrub Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})[‡]	**(26 35 49 66 78)**		**(19 36 57 78 97)**	
Understory Herbs and Dwarf Shrubs				
Linnaea borealis	4	57	4	85
Maianthemum canadense	2	43	2	76
Vaccinium vitis-idaea	**12**	**86**	**1**	**28**
Cornus canadensis	17	71	12	85
Chamerion angustifolium	4	100	1	41
Aralia nudicaulis	-	-	9	70

Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea
CNVC00125

Vegetation Summary (cont'd)*

Species Name†	Subassociation 125c *Rhododendron groenlandicum* % Cover±	Subassociation 125c *Rhododendron groenlandicum* % Presence^	Subassociation 125d *Picea mariana* % Cover±	Subassociation 125d *Picea mariana* % Presence^
Orthilia secunda	1	29	1	44
Lycopodium annotinum	4	29	16	72
Lysimachia borealis	-	-	2	65
Arctostaphylos uva-ursi	6	29	0	2
Goodyera repens	-	-	< 1	59
Rubus pubescens	10	14	4	52
Pyrola asarifolia	1	14	2	33
Fragaria virginiana	1	43	6	15
Diphasiastrum complanatum	4	29	6	37
Leymus innovatus	6	43	-	-
Geocaulon lividum	2	29	0	7
Galium boreale	-	-	-	-
Petasites frigidus	2	43	4	35
Poaceae	-	-	< 1	7
Equisetum sylvaticum	1	14	< 1	28
Clintonia borealis	-	-	3	54
Lathyrus ochroleucus	2	57	-	-
Pyrola chlorantha	1	14	< 1	26
Lycopodium clavatum	-	-	4	46
Lycopodium dendroideum	-	-	3	41
Viola renifolia	1	14	1	31
Calamagrostis canadensis	2	43	-	-
Mertensia paniculata	1	14	1	22
Campanula sp.	1	14	-	-
Mitella nuda	-	-	3	24
Achillea millefolium	2	29	-	-
Platanthera orbiculata	-	-	< 1	31
Piptatheropsis pungens	-	-	0	2
Gaultheria hispidula	-	-	2	28
Coptis trifolia	-	-	2	26
Anemone multifida	-	-	-	-
Herb Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})‡	**(13 25 43 59 75)**		**(8 25 47 68 100)**	
Bryophytes and Lichens				
Pleurozium schreberi	28	86	27	100
Hylocomium splendens	28	71	10	91
Cladonia sp.	2	43	0	44
Ptilium crista-castrensis	1	29	8	83
Dicranum polysetum	1	14	2	91
Cladina mitis	9	71	< 1	13
Dicranum sp.	2	14	-	-
Cladina rangiferina	-	-	< 1	31
Evernia mesomorpha	-	-	-	-
Parmelia sulcata	-	-	0	2
Sanionia uncinata	1	14	< 1	30

Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea
CNVC00125

Vegetation Summary (cont'd)*

	Subassociation 125c *Rhododendron groenlandicum*		Subassociation 125d *Picea mariana*	
Species Name†	% Cover±	% Presence^	% Cover±	% Presence^
Polytrichum juniperinum	-	-	< 1	17
Hypogymnia physodes	-	-	-	-
Peltigera aphthosa	1	43	< 1	15
Brachythecium salebrosum	-	-	2	22
Polytrichum sp.	-	-	-	-
Peltigera sp.	-	-	-	-
Vulpicida pinastri	-	-	-	-
Pylaisia polyantha	-	-	2	2
Peltigera canina	2	29	0	13
Usnea hirta	-	-	-	-
Usnea subfloridana	-	-	-	-
Dicranum ontariense	-	-	< 1	35
Rhytidiadelphus triquetrus	-	-	1	33
Dicranum fuscescens	-	-	< 1	24
Brachythecium acuminatum	-	-	< 1	20
Aulacomnium palustre	1	29	0	2
Bryo-Lichen Stratum Cover (P_{10} P_{25} Mean P_{75} P_{90})‡	**(32 46 54 64 77)**		**(5 24 45 64 88)**	

* 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)

Forest / Forêt **Association CNVC00125**

Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea

Trembling Aspen – Jack Pine / Velvet-leaved Blueberry / Lingonberry

Peuplier faux-tremble – Pin gris / Bleuet fausse-myrtille / Airelle rouge

Site / Soil Characteristics

	Association CNVC00125	Subassociation 125a *typic*	Subassociation 125b *Alnus viridis*
	194 plots	**94 plots**	**39 plots**
Elevation Range (min–mean–max meters)			
	200–458–1380	240–492–1380	200–473–800
	missing data (16)	missing data (6)	missing data (21)
Slope Gradient (% frequency)			
	steep (1)	steep (1)	steep (0)
	moderately steep (4)	moderately steep (6)	moderately steep (0)
	moderate (11)	moderate (12)	moderate (8)
	gentle (21)	gentle (12)	gentle (38)
	level (60)	**level (67)**	**level (41)**
	missing data (4)	missing data (2)	missing data (13)
Aspect (% frequency)			
	north (20)	north (14)	**north (38)**
	east (11)	east (11)	east (13)
	south (15)	south (16)	south (21)
	west (20)	west (22)	west (10)
	level (30)	**level (34)**	level (8)
	missing data (4)	missing data (3)	missing data (10)
Meso Topoposition (% frequency)			
	crest / upper (37)	crest / upper (32)	**crest / upper (56)**
	mid (18)	mid (20)	mid (15)
	lower / toe (11)	lower / toe (9)	lower / toe (8)
	depression (2)	depression (2)	depression (3)
	level (29)	level (32)	level (13)
	missing data (4)	missing data (5)	missing data (5)
Moisture Regime (% frequency)			
	very dry (1)	very dry (1)	very dry (0)
	dry (41)	**dry (51)**	dry (23)
	mesic (47)	mesic (34)	**mesic (74)**
	moist (11)	moist (14)	moist (0)
	missing data (1)	missing data (0)	missing data (3)
Nutrient Regime (% frequency)			
	poor (21)	poor (20)	**poor (51)**
	medium (16)	medium (11)	medium (44)
	rich (1)	rich (1)	rich (0)
	missing data (62)	missing data (68)	missing data (5)

Populus tremuloides – Pinus banksiana / *Vaccinium myrtilloides* / *V. vitis-idaea*
CNVC00125

Site / Soil Characteristics (cont'd)

	Association CNVC00125	Subassociation 125a *typic*	Subassociation 125b *Alnus viridis*
Soil Parent Material (% frequency)			
	colluvium (1)	colluvium (1)	colluvium (0)
	eolian (9)	eolian (7)	eolian (26)
	moraine / till (28)	moraine / till (30)	moraine / till (10)
	fluvial (18)	**fluvial (31)**	fluvial (10)
	glaciofluvial (23)	glaciofluvial (22)	**glaciofluvial (38)**
	lacustrine (16)	lacustrine (7)	lacustrine (8)
	glaciolacustrine (2)	glaciolacustrine (0)	glaciolacustrine (8)
	missing data (4)	missing data (1)	missing data (0)
Soil Rooting Zone Substrate (% frequency)			
	non-soil (1)	non-soil (1)	non-soil (0)
	sandy (27)	sandy (14)	**sandy (62)**
	coarse loamy (9)	coarse loamy (3)	coarse loamy (10)
	fine loamy (6)	fine loamy (3)	fine loamy (5)
	silty (4)	silty (0)	silty (8)
	clayey (6)	clayey (4)	clayey (5)
	missing data (47)	missing data (74)	missing data (10)
Root Restricting Depth (% frequency)			
	0 – 20 cm (1)	0 – 20 cm (1)	0 – 20 cm (0)
	21 – 99 cm (9)	21 – 99 cm (7)	21 – 99 cm (0)
	≥ 100 cm (41)	**≥ 100 cm (60)**	≥ 100 cm (0)
	missing data (49)	missing data (32)	missing data (100)
Humus Form (% frequency)			
	mor (61)	**mor (77)**	mor (13)
	moder (2)	moder (2)	moder (0)
	mull (2)	mull (3)	mull (0)
	peatymor (7)	peatymor (0)	peatymor (0)
	missing data (29)	missing data (18)	missing data (87)

Forest / Forêt **Association CNVC00125**

Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea
Trembling Aspen – Jack Pine / Velvet-leaved Blueberry / Lingonberry
Peuplier faux-tremble – Pin gris / Bleuet fausse-myrtille / Airelle rouge

Site / Soil Characteristics (cont'd)

	Subassociation 125c *Rhododendron groenlandicum*	Subassociation 125d *Picea mariana*
	7 plots	**54 plots**
Elevation Range (min–mean–max meters)		
	380–532–657	260–361–408
	missing data (43)	missing data (28)
Slope Gradient (% frequency)		
	steep (0)	steep (0)
	moderately steep (14)	moderately steep (2)
	moderate (0)	moderate (13)
	gentle (0)	gentle (28)
	level (86)	**level (57)**
	missing data (0)	missing data (0)
Aspect (% frequency)		
	north (29)	north (15)
	east (14)	east (9)
	south (14)	south (11)
	west (29)	west (20)
	level (0)	**level (44)**
	missing data (14)	missing data (0)
Meso Topoposition (% frequency)		
	crest / upper (29)	**crest / upper (33)**
	mid (0)	mid (17)
	lower / toe (14)	lower / toe (17)
	depression (0)	depression (2)
	level (57)	level (31)
	missing data (0)	missing data (0)
Moisture Regime (% frequency)		
	very dry (0)	very dry (0)
	dry (29)	dry (37)
	mesic (71)	**mesic (48)**
	moist (0)	moist (15)
	missing data (0)	missing data (0)
Nutrient Regime (% frequency)		
	poor (29)	poor (0)
	medium (71)	medium (0)
	rich (0)	rich (0)
	missing data (0)	missing data (100)

Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea
CNVC00125

Site / Soil Characteristics (cont'd)

	Subassociation 125c *Rhododendron groenlandicum*	Subassociation 125d *Picea mariana*
Soil Parent Material (% frequency)		
	colluvium (0)	colluvium (0)
	eolian (0)	eolian (2)
	moraine / till (43)	moraine / till (37)
	fluvial (14)	fluvial (2)
	glaciofluvial (43)	glaciofluvial (9)
	lacustrine (0)	**lacustrine (39)**
	glaciolacustrine (0)	glaciolacustrine (0)
	missing data (0)	missing data (11)
Soil Rooting Zone Substrate (% frequency)		
	non-soil (0)	non-soil (0)
	sandy (14)	**sandy (28)**
	coarse loamy (0)	coarse loamy (20)
	fine loamy (57)	fine loamy (6)
	silty (0)	silty (9)
	clayey (14)	clayey (7)
	missing data (14)	missing data (30)
Root Restricting Depth (% frequency)		
	0 – 20 cm (0)	0 – 20 cm (0)
	21 – 99 cm (0)	21 – 99 cm (19)
	≥ 100 cm (0)	**≥ 100 cm (44)**
	missing data (100)	missing data (37)
Humus Form (% frequency)		
	mor (29)	**mor (72)**
	moder (0)	moder (4)
	mull (0)	mull (0)
	peatymor (0)	peatymor (24)
	missing data (71)	missing data (0)

Forest / Forêt **Association CNVC00125**

Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea

Trembling Aspen – Jack Pine / Velvet-leaved Blueberry / Lingonberry

Peuplier faux-tremble – Pin gris / Bleuet fausse-myrtille / Airelle rouge

Additional Characteristics

Species of High Conservation Concern:

Non-native Species:

Management Issues:

Type Statistics

Internal Similarity: **Confidence:**

Strength:

Related Concepts

Similar CNVC Associations:

CNVC00088 [*Populus tremuloides / Vaccinium myrtilloides / V. vitis-idaea*] is a similar hardwood Association that occurs on comparable sites in the same range.

CNVC00092 [*Populus tremuloides – Pinus contorta / Rhododendron groenlandicum / Leymus innovatus – Vaccinium vitis-idaea / Hylocomium splendens*] occurs on comparable boreal and foothills sites in western Alberta and northern British Columbia and has codominance of *Pinus contorta* var. *latifolia*, rather than *P. banksiana* (see Comments).

CNVC00213 [*Populus tremuloides – Betula papyrifera – Picea mariana – Pinus banksiana / Diervilla lonicera / Pleurozium schreberi*] occurs on comparable sites from southeastern Manitoba to Quebec. It has *Acer spicatum*, *Sorbus* spp., *Vaccinium angustifolium, Diervilla lonicera, Clintonia borealis* and *Eurybia macrophylla*.

CNVC00252 [*Picea mariana – Betula papyrifera – Pinus banksiana / Vaccinium myrtilloides / Pleurozium schreberi*] occurs on similar or drier sites in northwestern Ontario but has less *Populus tremuloides*.

CNVC00253 [*Betula papyrifera – Picea mariana – Populus tremuloides / Alnus viridis / Vaccinium vitis-idaea*] occurs in northern Saskatchewan on comparable subarctic sites. It has more *Picea mariana* and a very depauperate understory.

Related United States National Vegetation Classification Associations:

Relationships with Other Classifications:

In southwestern Manitoba, CNVC00125 best matches the concepts of ES12 [Trembling Aspen - Jack Pine - Spruce Mixedwood on Dry to Fresh Sandy Soil] and ES35 [Black Spruce - Trembling Aspen - Jack Pine Mixedwood on Fresh Fine Loamy Soil] in Arnup et al. 2006.

Comments

Where CNVC00125 occurs at higher elevations (i.e., above 650 mASL) in northern Alberta, *Pinus banksiana* may form fertile hybrids with *P. contorta* var. *latifolia* that are recognized by intermediate cone characters; ecologically, the hybrid pine (*P. murraybanksiana*) occupies similar sites. Stands containing hybrid pine with similar understories on comparable sites are classified as CNVC00125 in northeastern Alberta (e.g., Birch Mountains). Such stands at higher elevations in the Caribou Mountains and west are classified as CNVC00092 [*Populus tremuloides – Pinus contorta / Rhododendron groenlandicum / Leymus innovatus – Vaccinium vitis-idaea / Hylocomium splendens*].

Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea
CNVC00125

Source Information

Number of source plots for CNVC00125: 194
Number of source plots for 125a typic: 94
Number of source plots for 125b Alnus viridis: 39
Number of source plots for 125c Rhododendron groenlandicum: 7
Number of source plots for 125d Picea mariana: 54
Information Sources:

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Concept Authors: L. Allen, K. Baldwin, K. Chapman, M. McLaughlan, P. Uhlig, M. Wester
Description Authors: K. Chapman, D. Downing and K. Baldwin
Date of Concept: November, 2011
Date of Description: March, 2016

Classification References:

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Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea
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Characterization References (cont'd):

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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.

Suggested Citation: K. Chapman, D. Downing and K. Baldwin. *Populus tremuloides – Pinus banksiana / Vaccinium myrtilloides / V. vitis-idaea* [online]. Sault Ste. Marie, Ontario, Canada: Canadian National Vegetation Classification. March, 2016; generated Jun/13/2016; cited ENTER DATE ACCESSED. 16 p. Canadian National Vegetation Classification Association: CNVC00125. Available from http://cnvc-cnvc/ca. System Requirements: Adobe Acrobat Reader v. 7.0 or higher. ISSN 1916-3266.