



Forest / Forêt

Association CNVC00305

***Populus tremuloides* / *Alnus viridis* (*Rosa acicularis*)**

Trembling Aspen / Green Alder (Prickly Rose)

Peuplier faux-tremble / Aulne vert (Rosier aciculaire)

**Subassociations:** 305a *Alnus viridis*, 305b *Acer spicatum*, 305c *Hylocomium splendens*  
**CNVC Alliance:** CA00024 *Populus tremuloides* / *Rosa acicularis* / *Aralia nudicaulis*  
**CNVC Group:** CG0011 Central Boreal Mesic-Moist Trembling Aspen – White Spruce Forest

**Type Description**

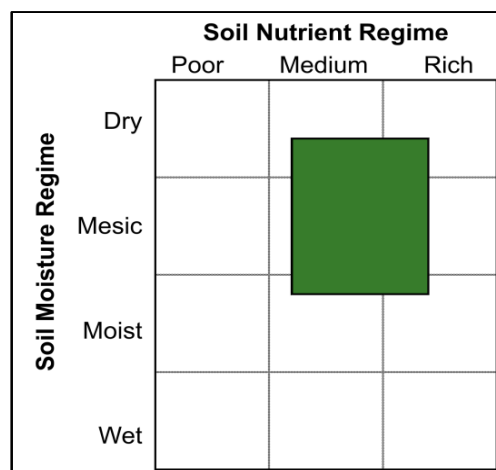
**Concept:** CNVC00305 is a boreal hardwood forest Association that occurs in Manitoba and Ontario. It has a closed canopy of trembling aspen (*Populus tremuloides*), sometimes with paper birch (*Betula papyrifera*) as a companion species. The shrub layer is usually dense, often with a tall shrub layer of green alder (*Alnus viridis*) or mountain maple (*Acer spicatum*) in addition to regenerating black spruce (*Picea mariana*) and lower abundance of paper birch or trembling aspen saplings and squashberry (*Viburnum edule*). Prickly rose (*Rosa acicularis*) and the heath species velvet-leaved blueberry (*Vaccinium myrtilloides*) and common Labrador tea (*Rhododendron groenlandicum*) are common in the low shrub layer, although northern bush-honeysuckle (*Diervilla lonicera*) can dominate this layer where present. The usually well-developed herb layer typically includes bunchberry (*Cornus canadensis*), twinflower (*Linnaea borealis*), wild lily-of-the-valley (*Maianthemum canadense*), wild sarsaparilla (*Aralia nudicaulis*), northern starflower (*Lysimachia borealis*), yellow clintonia (*Clintonia borealis*), dwarf raspberry (*Rubus pubescens*), stiff clubmoss (*Lycopodium annotinum*) and fireweed (*Chamerion angustifolium*). Where the forest floor cover is mainly broad-leaf litter, the moss layer is virtually nonexistent. In areas with less leaf litter, red-stemmed feathermoss (*Pleurozium schreberi*), staircase moss (*Hylocomium splendens*) and knight's plume moss (*Ptilium crista-castrensis*) can form a well-developed, often thick, moss layer. CNVC00305 is an early seral condition that typically establishes after fire or harvesting. It occurs in a region with a subhumid continental boreal climate, usually on mesic, nutrient-medium to rich sites. Three subassociations are distinguished: *Alnus viridis*, *Acer spicatum* and *Hylocomium splendens*.

**Vegetation:** CNVC00305 is a hardwood forest Association with a closed canopy of *Populus tremuloides*, sometimes with *Betula papyrifera* as a companion species. The shrub layer can be dense with a tall shrub layer comprising abundant *Alnus viridis* and/or *Acer spicatum*. Regenerating tree species, especially *Picea mariana*, but also *B. papyrifera*, *P. tremuloides* and sometimes *Abies balsamea*, are also consistent components of the tall shrub layer in addition to *Viburnum edule*. Low shrubs typically include *Rosa acicularis* and the heath species *Vaccinium myrtilloides* and *Rhododendron groenlandicum*. *Diervilla lonicera* can be abundant where present. The herb layer is usually well developed and commonly includes *Cornus canadensis*, *Linnaea borealis*, *Maianthemum canadense*, *Aralia nudicaulis*, *Lysimachia borealis*, *Clintonia borealis*, *Rubus pubescens*, *Lycopodium annotinum* and *Chamerion angustifolium*. Where the forest floor cover is predominantly broad-leaf litter, the moss layer is virtually nonexistent. In areas with less leaf litter, *Pleurozium schreberi*, *Hylocomium splendens* and *Ptilium crista-castrensis* can form a well-developed moss layer.

The *Alnus viridis* and *Acer spicatum* subassociations have dense tall shrub layers with abundant *A. viridis* or *A. spicatum* respectively. The *Acer spicatum* subassociation sometimes has patches of *A. viridis* or *Alnus incana* and has abundant *D. lonicera* in the low shrub layer. The *Hylocomium splendens* subassociation lacks the abundance of tall broad-leaved shrubs found in the other subassociations and has a well-developed, often thick, moss layer with abundant *P. schreberi* and *H. splendens*, and minor cover of *P. crista-castrensis*, *Dicranum polysetum* and *Rhytidiadelphus triquetrus*.



Source: D. Downing





***Populus tremuloides* / *Alnus viridis* (*Rosa acicularis*) CNVC00305**

**Type Description (cont'd)**

**Environment:** CNVC00305 occurs in a subhumid continental boreal climate where regional fire cycles are intermediate (100-270 years). It is most frequently found on mesic, nutrient-medium to rich sites. Stands are usually on level sites or gentle slopes with soils of variable textures that have developed in deep morainal or lacustrine materials. Humus forms are typically mors, which can be very thick on moist or cool sites.

Site conditions vary among subassociations. The *Alnus viridis* subassociation is more common on sandy, lacustrine deposits. The *Acer spicatum* subassociation is more frequently found on warmer, south or west-facing aspects. The *Hylocomium splendens* subassociation occurs more frequently on cooler, north or east-facing aspects and on middle-slope topositions. Thick humus layers are common in this subassociation.

**Dynamics:** CNVC00305 is an early seral condition that typically establishes after stand-replacing fire or harvesting. *Populus tremuloides* is a pioneer species adapted to disturbance. Following any disturbance that does not kill its roots, it can reproduce vegetatively from root suckers. It also produces abundant, light, wind-dispersed seeds that can readily colonize mineral soil seedbeds exposed by disturbance. *P. tremuloides* grows rapidly in full-light conditions but is intolerant of shade so does not replace itself in a stand without further disturbance. If seed sources are available, shade tolerant conifers (e.g., *Abies balsamea*) can become established in these stands and may grow into the canopy as the *P. tremuloides* decline. After about 120 years, a mid-seral mixedwood Association could develop.

*Acer spicatum* and *Alnus viridis* can form dense thickets in canopy openings, sometimes significantly delaying conifer ingress. Their deep roots can survive even high-severity fires and they respond quickly after disturbance by suckering. Being semi-shade tolerant, these tall shrubs persist as the canopy closes, limiting the light available for plants beneath them.

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 *A. balsamea*.

**Range:** CNVC00305 is described from the boreal region of northwestern Ontario, with sample plots ranging from north of Lake Nipigon west to the Manitoba border. It likely extends into Manitoba.

**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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### Distribution

**Countries:** Canada

**Provinces / Territories / States:** Manitoba, Ontario

**Terrestrial Ecozones and Ecoregions of Canada:** Boreal Shield: Big Trout Lake, Lac Seul Upland

**Rowe's Forest Regions and Sections of Canada:** Boreal: Central Plateau, Lower English River, Northern Coniferous

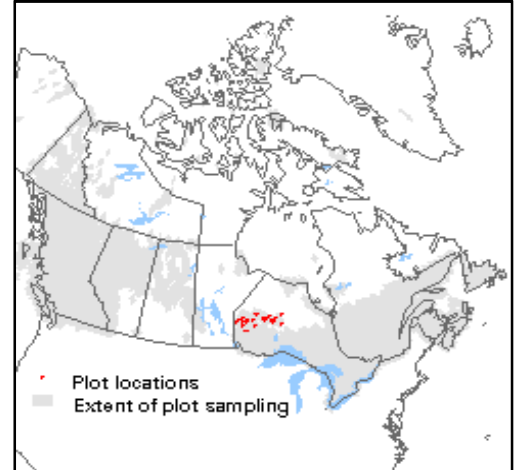
**NAAEC CEC Ecoregions of North America (Levels I & II):** Northern Forests: Softwood Shield

**Nature Conservancy of Canada Ecoregions:** Boreal Shield

**Ecozones and Ecoregions of Manitoba:** Boreal Shield

**Manitoba Protected Areas Initiative Natural Regions:** Precambrian Boreal Forest: Lac Seul 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

<b>305a <i>Alnus viridis</i></b>	Ontario	BTr5-6	<i>Populus tremuloides</i> / <i>Alnus viridis</i> ( <i>Rosa acicularis</i> )
<b>305b <i>Acer spicatum</i></b>	Ontario	BTr5-5	<i>Populus tremuloides</i> / <i>Acer spicatum</i> ( <i>Rosa acicularis</i> ) / <i>Rubus pubescens</i>
<b>305c <i>Hylocomium splendens</i></b>	Ontario	BTr5-2	<i>Populus tremuloides</i> ( <i>Betula papyrifera</i> ) / <i>Picea mariana</i> - <i>Vaccinium myrtilloides</i> / <i>Hylocomium splendens</i>



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Classification nationale de la végétation du Canada (CNVC)

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Peuplier faux-tremble / Aulne vert (Rosier aciculaire)

Vegetation Summary\*

Species Name <sup>T</sup>	Association CNVC00305		Subassociation 305a <i>Alnus viridis</i>		Subassociation 305b <i>Acer spicatum</i>	
	42 plots		24 plots		8 plots	
	% Cover <sup>±</sup>	% Presence <sup>^</sup>	% Cover <sup>±</sup>	% Presence <sup>^</sup>	% Cover <sup>±</sup>	% Presence <sup>^</sup>
<b>Overstory Trees</b>						
<i>Populus tremuloides</i>	65	100	71	100	70	100
<i>Betula papyrifera</i>	35	29	25	25	28	13
<i>Picea mariana</i>	6	17	2	8	-	-
<i>Pinus banksiana</i>	3	12	5	8	-	-
<b>Tree Stratum Cover (P<sub>10</sub> P<sub>25</sub> Mean P<sub>75</sub> P<sub>90</sub>)<sup>‡</sup></b>	<b>(57 66 76 87 94)</b>		<b>(63 69 77 85 93)</b>		<b>(54 66 74 82 97)</b>	
<b>Understory Woody Shrubs and Regenerating Trees</b>						
<i>Vaccinium myrtilloides</i>	8	76	9	79	7	63
<i>Rosa acicularis</i>	6	74	6	75	7	88
<i>Picea mariana</i>	18	64	16	58	17	50
<i>Rhododendron groenlandicum</i>	9	62	9	79	6	38
<i>Alnus viridis</i>	39	60	42	92	22	25
<i>Betula papyrifera</i>	7	60	8	54	2	38
<i>Viburnum edule</i>	5	60	7	63	4	75
<i>Populus tremuloides</i>	10	57	10	50	15	63
<i>Diervilla lonicera</i>	25	45	19	38	37	100
<i>Sorbus decora</i>	3	45	4	38	1	75
<i>Abies balsamea</i>	12	43	11	33	20	38
<i>Ribes triste</i>	3	43	4	42	1	63
<i>Amelanchier alnifolia</i>	3	40	4	42	1	63
<i>Cornus stolonifera</i>	3	36	5	38	1	63
<i>Ribes glandulosum</i>	2	26	3	25	1	38
<i>Acer spicatum</i>	42	24	9	8	57	88
<i>Rubus idaeus</i>	6	24	6	25	5	50
<i>Salix bebbiana</i>	2	19	3	25	-	-
<i>Prunus pensylvanica</i>	2	17	2	21	0	13
<i>Salix humilis</i>	2	14	1	21	3	13
<i>Alnus incana</i>	10	7	2	4	15	25
<b>Shrub Stratum Cover (P<sub>10</sub> P<sub>25</sub> Mean P<sub>75</sub> P<sub>90</sub>)<sup>‡</sup></b>	<b>(40 58 76 100 100)</b>		<b>(59 72 83 100 100)</b>		<b>(78 98 92 100 100)</b>	
<b>Understory Herbs and Dwarf Shrubs</b>						
<i>Cornus canadensis</i>	13	95	17	96	6	88
<i>Linnaea borealis</i>	5	90	5	88	8	88
<i>Maianthemum canadense</i>	3	83	4	79	2	100
<i>Aralia nudicaulis</i>	16	81	21	75	17	100
<i>Lysimachia borealis</i>	1	81	1	83	2	88
<i>Clintonia borealis</i>	9	71	5	71	22	100
<i>Rubus pubescens</i>	5	69	5	71	7	100
<i>Lycopodium annotinum</i>	13	64	17	67	7	63
<i>Chamerion angustifolium</i>	2	60	2	67	4	38



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***Populus tremuloides* / *Alnus viridis* (*Rosa acicularis*) CNVC00305**

**Vegetation Summary (cont'd)\***

Species Name <sup>†</sup>	Association CNVC00305		Subassociation 305a <i>Alnus viridis</i>		Subassociation 305b <i>Acer spicatum</i>	
	% Cover <sup>‡</sup>	% Presence <sup>^</sup>	% Cover <sup>‡</sup>	% Presence <sup>^</sup>	% Cover <sup>‡</sup>	% Presence <sup>^</sup>
<i>Pyrola asarifolia</i>	2	50	3	42	2	88
<i>Lycopodium dendroideum</i>	4	45	3	42	7	63
<i>Petasites frigidus</i>	2	45	2	58	1	50
<i>Streptopus lanceolatus</i>	3	43	2	46	6	63
<i>Mitella nuda</i>	4	40	4	50	4	38
<i>Viola renifolia</i>	< 1	40	< 1	38	< 1	50
<i>Mertensia paniculata</i>	3	36	4	33	4	63
<i>Coptis trifolia</i>	1	36	2	29	1	63
<i>Orthilia secunda</i>	1	31	1	33	0	13
<i>Fragaria virginiana</i>	1	29	2	33	0	38
<i>Galium trifidum</i>	1	26	1	38	1	25
<i>Equisetum sylvaticum</i>	1	26	1	33	0	25
<i>Goodyera repens</i>	< 1	26	< 1	13	0	13
<i>Dryopteris carthusiana</i>	< 1	17	< 1	21	1	25
<i>Platanthera orbiculata</i>	0	17	0	13	-	-
<i>Actaea</i> sp.	2	14	2	17	2	25
<i>Lycopodium clavatum</i>	3	12	2	13	5	25
<i>Viola</i> sp.	3	10	5	8	1	25
<i>Platanthera obtusata</i>	0	10	-	-	-	-
<b>Herb Stratum Cover (P<sub>10</sub> P<sub>25</sub> Mean P<sub>75</sub> P<sub>90</sub>)<sup>‡</sup></b>	<b>(10 20 53 95 100)</b>		<b>(17 38 64 100 100)</b>		<b>(18 23 58 100 100)</b>	
<b>Bryophytes and Lichens</b>						
<i>Pleurozium schreberi</i>	9	88	4	92	4	63
<i>Ptilium crista-castrensis</i>	2	67	< 1	63	2	63
<b><i>Hylocomium splendens</i></b>	10	57	2	54	2	25
<i>Dicranum polysetum</i>	1	48	1	42	0	25
<i>Rhytidiadelphus triquetrus</i>	2	36	1	33	2	13
<i>Sanionia uncinata</i>	0	33	0	33	0	50
<i>Peltigera canina</i>	< 1	29	0	21	< 1	38
<i>Polytrichum juniperinum</i>	0	26	0	13	0	38
<i>Cladonia</i> sp.	< 1	21	< 1	17	-	-
<i>Brachythecium acuminatum</i>	< 1	19	< 1	25	0	25
<i>Brachythecium salebrosum</i>	6	17	8	21	3	13
<i>Sciuro-hypnum oedipodium</i>	2	17	2	21	2	25
<i>Plagiomnium cuspidatum</i>	< 1	17	0	13	1	38
<i>Peltigera aphthosa</i>	< 1	17	0	17	-	-
<i>Campyladelphus chrysophyllus</i>	0	17	0	17	0	38
<i>Dicranum undulatum</i>	0	17	0	8	0	13
<i>Cladina rangiferina</i>	< 1	14	0	13	-	-
<i>Jamesoniella autumnalis</i>	0	14	0	13	0	25
<i>Cladina mitis</i>	1	10	0	4	-	-
<b>Bryo-Lichen Stratum Cover (P<sub>10</sub> P<sub>25</sub> Mean P<sub>75</sub> P<sub>90</sub>)<sup>‡</sup></b>	<b>(1 4 18 24 56)</b>		<b>(1 1 9 10 22)</b>		<b>(1 3 6 7 11)</b>	

\* 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<sub>x</sub> = X<sup>th</sup> percentile (e.g., P<sub>10</sub> = 10<sup>th</sup> percentile)



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**Vegetation Summary (cont'd)\***

Species Name <sup>T</sup>	Subassociation	
	305c <i>Hylocomium splendens</i>	
	10 plots	
	% Cover <sup>±</sup>	% Presence <sup>^</sup>
<b>Overstory Trees</b>		
<b><i>Populus tremuloides</i></b>	<b>46</b>	<b>100</b>
<i>Betula papyrifera</i>	48	50
<i>Picea mariana</i>	7	50
<i>Pinus banksiana</i>	1	30
<b>Tree Stratum Cover (P<sub>10</sub> P<sub>25</sub> Mean P<sub>75</sub> P<sub>90</sub>)<sup>‡</sup></b>	<b>(49 60 74 90 92)</b>	
<b>Understory Woody Shrubs and Regenerating Trees</b>		
<i>Vaccinium myrtilloides</i>	7	80
<b><i>Rosa acicularis</i></b>	<b>4</b>	<b>60</b>
<i>Picea mariana</i>	21	90
<i>Rhododendron groenlandicum</i>	10	40
<b><i>Alnus viridis</i></b>	<b>15</b>	<b>10</b>
<i>Betula papyrifera</i>	6	90
<i>Viburnum edule</i>	0	40
<i>Populus tremuloides</i>	4	70
<i>Diervilla lonicera</i>	4	20
<i>Sorbus decora</i>	1	40
<i>Abies balsamea</i>	9	70
<i>Ribes triste</i>	1	30
<i>Amelanchier alnifolia</i>	0	20
<i>Cornus stolonifera</i>	0	10
<i>Ribes glandulosum</i>	0	20
<b><i>Acer spicatum</i></b>	<b>0</b>	<b>10</b>
<i>Rubus idaeus</i>	-	-
<i>Salix bebbiana</i>	1	20
<i>Prunus pensylvanica</i>	0	10
<i>Salix humilis</i>	-	-
<i>Alnus incana</i>	-	-
<b>Shrub Stratum Cover (P<sub>10</sub> P<sub>25</sub> Mean P<sub>75</sub> P<sub>90</sub>)<sup>‡</sup></b>	<b>(34 38 46 56 62)</b>	
<b>Understory Herbs and Dwarf Shrubs</b>		
<i>Cornus canadensis</i>	8	100
<i>Linnaea borealis</i>	3	100
<i>Maianthemum canadense</i>	1	80
<i>Aralia nudicaulis</i>	2	80
<i>Lysimachia borealis</i>	< 1	70
<i>Clintonia borealis</i>	5	50
<i>Rubus pubescens</i>	1	40
<i>Lycopodium annotinum</i>	9	60
<i>Chamerion angustifolium</i>	1	60



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**Vegetation Summary (cont'd)\***

Species Name <sup>†</sup>	Subassociation	
	305c % Cover <sup>‡</sup>	<i>Hylocomium splendens</i> % Presence <sup>^</sup>
<i>Pyrola asarifolia</i>	0	40
<i>Lycopodium dendroideum</i>	1	40
<i>Petasites frigidus</i>	0	10
<i>Streptopus lanceolatus</i>	0	20
<i>Mitella nuda</i>	0	20
<i>Viola renifolia</i>	< 1	40
<i>Mertensia paniculata</i>	0	20
<i>Coptis trifolia</i>	1	30
<i>Orthilia secunda</i>	0	40
<i>Fragaria virginiana</i>	0	10
<i>Galium trifidum</i>	-	-
<i>Equisetum sylvaticum</i>	2	10
<i>Goodyera repens</i>	0	70
<i>Dryopteris carthusiana</i>	-	-
<i>Platanthera orbiculata</i>	0	40
<i>Actaea</i> sp.	-	-
<i>Lycopodium clavatum</i>	-	-
<i>Viola</i> sp.	-	-
<i>Platanthera obtusata</i>	0	40
<b>Herb Stratum Cover (P<sub>10</sub> P<sub>25</sub> Mean P<sub>75</sub> P<sub>90</sub>)<sup>‡</sup></b>	<b>(8 10 24 36 42)</b>	
<b>Bryophytes and Lichens</b>		
<i>Pleurozium schreberi</i>	21	100
<i>Ptilium crista-castrensis</i>	5	80
<b><i>Hylocomium splendens</i></b>	<b>23</b>	<b>90</b>
<i>Dicranum polysetum</i>	1	80
<i>Rhytidiadelphus triquetrus</i>	5	60
<i>Sanionia uncinata</i>	0	20
<i>Peltigera canina</i>	0	40
<i>Polytrichum juniperinum</i>	0	50
<i>Cladonia</i> sp.	0	50
<i>Brachythecium acuminatum</i>	-	-
<i>Brachythecium salebrosum</i>	0	10
<i>Sciuro-hypnum oedipodium</i>	-	-
<i>Plagiomnium cuspidatum</i>	0	10
<i>Peltigera aphthosa</i>	< 1	30
<i>Campyliadelphus chrysophyllus</i>	-	-
<i>Dicranum undulatum</i>	0	40
<i>Cladina rangiferina</i>	1	30
<i>Jamesoniella autumnalis</i>	0	10
<i>Cladina mitis</i>	1	30
<b>Bryo-Lichen Stratum Cover</b>	<b>(21 28 51 67 88)</b>	
<b>(P<sub>10</sub> P<sub>25</sub> Mean P<sub>75</sub> P<sub>90</sub>)<sup>‡</sup></b>		

\* 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<sub>x</sub> = X<sup>th</sup> percentile (e.g., P<sub>10</sub> = 10<sup>th</sup> percentile)



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Site / Soil Characteristics

	Association CNVC00305 42 plots	Subassociation 305a <i>Alnus viridis</i> 24 plots	Subassociation 305b <i>Acer spicatum</i> 8 plots
<b>Elevation Range (min–mean–max meters)</b>	288–368–421 missing data (43)	288–369–421 missing data (29)	373–387–406 missing data (38)
<b>Slope Gradient (% frequency)</b>	moderately steep (2) moderate (2) gentle (36) <b>level (60)</b>	moderately steep (4) moderate (0) gentle (33) <b>level (63)</b>	moderately steep (0) moderate (0) gentle (50) level (50)
<b>Aspect (% frequency)</b>	north (24) east (10) south (24) west (7) <b>level (36)</b>	north (25) east (8) south (25) west (8) <b>level (33)</b>	north (13) east (0) south (38) west (13) level (38)
<b>Meso Toposition (% frequency)</b>	<b>crest / upper (33)</b> mid (31) lower / toe (5) level (31)	<b>crest / upper (38)</b> mid (25) lower / toe (8) level (29)	crest / upper (38) mid (25) lower / toe (0) level (38)
<b>Moisture Regime (% frequency)</b>	very dry (2) dry (14) <b>mesic (76)</b> moist (7)	very dry (4) dry (17) <b>mesic (67)</b> moist (13)	very dry (0) dry (0) <b>mesic (100)</b> moist (0)
<b>Nutrient Regime (% frequency)</b>	missing data (100)	missing data (100)	missing data (100)





***Populus tremuloides* / *Alnus viridis* (*Rosa acicularis*) CNVC00305**

**Site / Soil Characteristics (cont'd)**

	Association CNVC00305	Subassociation 305a <i>Alnus viridis</i>	Subassociation 305b <i>Acer spicatum</i>
<b>Soil Parent Material (% frequency)</b>	eolian (5) moraine / till (29) glaciofluvial (5) <b>lacustrine (40)</b> missing data (21)	eolian (4) moraine / till (21) glaciofluvial (8) <b>lacustrine (50)</b> missing data (17)	eolian (13) moraine / till (38) glaciofluvial (0) lacustrine (38) missing data (13)
<b>Soil Rooting Zone Substrate (% frequency)</b>	sandy (21) <b>coarse loamy (29)</b> fine loamy (12) silty (12) clayey (7) missing data (19)	<b>sandy (25)</b> coarse loamy (17) fine loamy (17) silty (13) clayey (8) missing data (21)	sandy (13) <b>coarse loamy (38)</b> fine loamy (13) silty (13) clayey (13) missing data (13)
<b>Root Restricting Depth (% frequency)</b>	0 – 20 cm (2) 21 – 99 cm (7) ≥ 100 cm (45) missing data (45)	0 – 20 cm (4) 21 – 99 cm (8) <b>≥ 100 cm (54)</b> missing data (33)	0 – 20 cm (0) 21 – 99 cm (13) <b>≥ 100 cm (63)</b> missing data (25)
<b>Humus Form (% frequency)</b>	<b>mor (57)</b> mull (2) peatymor (38) missing data (2)	<b>mor (71)</b> mull (4) peatymor (21) missing data (4)	<b>mor (63)</b> mull (0) peatymor (38) missing data (0)



Forest / Forêt

Association CNVC00305

*Populus tremuloides* / *Alnus viridis* (*Rosa acicularis*)

Trembling Aspen / Green Alder (Prickly Rose)

Peuplier faux-tremble / Aulne vert (Rosier aciculaire)

**Site / Soil Characteristics (cont'd)**

Subassociation  
 305c *Hylocomium splendens*  
 10 plots

**Elevation Range (min–mean–max meters)**

307–309–311  
 missing data (80)

**Slope Gradient (% frequency)**

moderately steep (0)  
 moderate (10)  
 gentle (30)  
**level (60)**

**Aspect (% frequency)**

north (30)  
 east (20)  
 south (10)  
 west (0)  
**level (40)**

**Meso Toposition (% frequency)**

crest / upper (20)  
**mid (50)**  
 lower / toe (0)  
 level (30)

**Moisture Regime (% frequency)**

very dry (0)  
 dry (20)  
**mesic (80)**  
 moist (0)

**Nutrient Regime (% frequency)**

missing data (100)



***Populus tremuloides* / *Alnus viridis* (*Rosa acicularis*) CNVC00305**

**Site / Soil Characteristics (cont'd)**

Subassociation  
305c *Hylocomium splendens*

**Soil Parent Material (% frequency)**

eolian (0)  
moraine / till (40)  
glaciofluvial (0)  
lacustrine (20)  
missing data (40)

**Soil Rooting Zone Substrate (% frequency)**

sandy (20)  
**coarse loamy (50)**  
fine loamy (0)  
silty (10)  
clayey (0)  
missing data (20)

**Root Restricting Depth (% frequency)**

0 – 20 cm (0)  
21 – 99 cm (0)  
≥ 100 cm (10)  
missing data (90)

**Humus Form (% frequency)**

mor (20)  
mull (0)  
**peatymor (80)**  
missing data (0)



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

<http://cnvc-cnvc.ca>

Forest / Forêt

Association CNVC00305

***Populus tremuloides* / *Alnus viridis* (*Rosa acicularis*)**

Trembling Aspen / Green Alder (Prickly Rose)

Peuplier faux-tremble / Aulne vert (Rosier aciculaire)

## 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*] ranges from western Manitoba to Alberta, and occurs on drier, poorer sites. It has less regenerating *Picea mariana*, lower cover of tall shrubs and more *Vaccinium vitis-idaea*.

CNVC00238 [*Populus tremuloides* (*Betula papyrifera*) / *Diervilla lonicera*] ranges from southeastern Manitoba to Quebec and occurs on boreal sites that are not as rich. It has more *Abies balsamea* but lower cover of tall shrub species and more *Vaccinium angustifolium* and *Eurybia macrophylla*.

CNVC00239 [*Betula papyrifera* (*Populus tremuloides*) / *Acer spicatum* / *Clintonia borealis*] ranges from southeastern Manitoba to Quebec and occurs on comparable boreal sites. It has higher constancy of *Betula papyrifera* and *Abies balsamea* in the tree and shrub layers, less *Viburnum edule*, *Rosa acicularis* and *Rhododendron groenlandicum* in the shrub layer and more *Dryopteris* spp. in the herb layer.

CNVC00306 [*Populus tremuloides* – *Betula papyrifera* / *Acer spicatum* (*Rosa acicularis*)] occurs in eastern Saskatchewan and western Manitoba on comparable boreal sites. It has a more open canopy and lacks *Picea mariana*, *Diervilla lonicera*, *Rhododendron groenlandicum*, *Clintonia borealis* and *Lycopodium annotinum* in the understory.

CNVC00333 [*Populus tremuloides* – *P. balsamifera* / *Alnus incana* – *Cornus stolonifera*] occurs on moister, richer sites in the same range but has abundant *Alnus incana* and/or *Cornus stolonifera* in the shrub layer.

CNVC00347 [*Populus tremuloides* – *Picea mariana* – *Pinus banksiana* / *Acer spicatum* (*Rosa acicularis*)] is a similar mixedwood Association that occurs in the same range on comparable sites.

Related United States National Vegetation Classification Associations:

Relationships with Other Classifications:

## Comments

## Source Information

Number of source plots for CNVC00305: 42

Number of source plots for 305a *Alnus viridis*: 24

Number of source plots for 305b *Acer spicatum*: 8

Number of source plots for 305c *Hylocomium splendens*: 10

Information Sources:

McMurray, S.C., Johnson, J.A., Zhou, K., Uhlig, P.W.C. 2015. Ontario ecological land classification program - Ecological Data Repository (EDR). Ont. Min. Nat. Resour. & For., Sci. & Info. Branch, Sault Ste. Marie, ON.



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

<http://cnvc-cnvc.ca>

## *Populus tremuloides* / *Alnus viridis* (*Rosa acicularis*) CNVC00305

### Source Information (cont'd)

**Concept Authors:** K. Baldwin, K. Chapman, P. Uhlig, M. Wester

**Description Authors:** K. Chapman and K. Baldwin

**Date of Concept:** November, 2011

**Date of Description:** February, 2016

### Classification References:

Uhlig, P.W.C., Chapman, K., Baldwin, K., Wester, M., Yanni, S. 2016. Draft boreal treed vegetation type factsheets. Ecol. Land Class. Prog., Ont. Min. Nat. Resour. & For., Sci. & Info Branch, Sault Ste. Marie, ON.

### Characterization References:

Bell, F.W. 1991. Critical silvics of conifer crop species and selected competitive vegetation in northwestern Ontario. For. Can., Ontario Region, Sault Ste. Marie, Ont. and NW Ont. Tech. Dev. Unit, Min. Nat. Resour., Thunder Bay, ON. COFRDA Rep. 3310.

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.

Brandt, J.P.; Cerezke, H.F.; Mallett, K.I.; Volney, W.J.; Weber, J.D. 2003. Factors affecting trembling aspen (*Populus tremuloides* Michx.) health in the boreal forest of Alberta, Saskatchewan, and Manitoba, Canada. For. Ecol. Manage. 178:287-300.

Bridge, S.R.J. 2001. Spatial and temporal variations in the fire cycle across Ontario. OMNR, Northeast Sci. Tech., South Porcupine, ON. NEST TR-043.

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).

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.

Man, R.; Rice, J.A. 2010. Response of aspen stands to forest tent caterpillar defoliation and subsequent overstory mortality in northeastern Ontario, Canada. For. Ecol. Manage. 260:1853-1860.

Ontario Ministry of Natural Resources. 2009. Ecological land classification ecosites field manual – operational draft, April 20th, 2009 – boreal. Ecol. Land Class. Working Grp, Ont. Min. Nat. Resour., Sci. & Info Branch, Inven. Monit. Assess. Sect., Sault Ste. Marie, ON.

Van Sleenwen, M. 2006. Natural fire regimes in Ontario. Ont. Min. Nat. Resour., Queen's Printer for Ont., Toronto, ON.

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>.

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