



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

<http://cnvc-cnvc.ca>

**Wetland / Tourbière boisée**

**Association CNVC00300**

***Larix laricina* – *Picea mariana* / *Alnus incana* / *Gaultheria hispidula* / *Sphagnum* spp.  
Tamarack – Black Spruce / Speckled Alder / Creeping Snowberry / Peat Mosses  
Mélèze laricin – Épinette noire / Aulne rugueux / Petit thé / Sphaignes**

**Subassociations:** 300a *typic*, 300b *Rhododendron groenlandicum*, 300c *Larix laricina*  
**CNVC Alliance:** CA00045 *Picea mariana* / *Alnus incana* – *Rhododendron groenlandicum* / *Sphagnum* spp.  
**CNVC Group:** CG0019 Ontario-Quebec Boreal Black Spruce Poor – Intermediate Treed Wetland

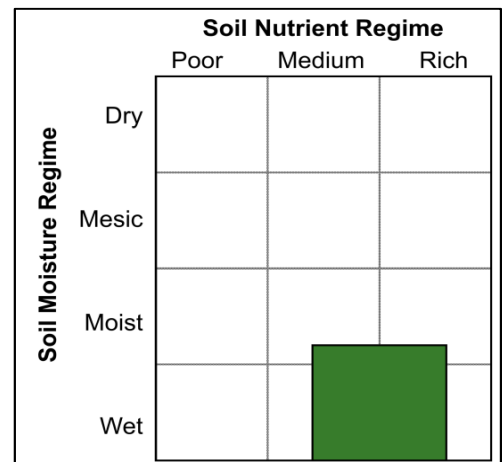


Source: Natural Resources Canada - Canadian Forest Service

## Type Description

**Concept:** CNVC00300 is a boreal wetland coniferous forest Association that occurs in Quebec. It has a moderately closed canopy of tamarack (*Larix laricina*) and black spruce (*Picea mariana*). Speckled alder (*Alnus incana*) dominates the dense shrub layer, which also typically contains black spruce, tamarack and balsam fir regeneration, common Labrador tea (*Rhododendron groenlandicum*), velvet-leaved blueberry (*Vaccinium myrtilloides*), sheep laurel (*Kalmia angustifolia*) and willows (*Salix* spp.). The herb layer is usually moderately developed, typically including sedges (*Carex* spp.), creeping snowberry (*Gaultheria hispidula*), bunchberry (*Cornus canadensis*), goldthread (*Coptis trifolia*), grasses (*Poaceae*) and three-leaved false Solomon's seal (*Maianthemum trifolium*). A well-developed moss layer dominated by peat mosses (*Sphagnum* spp.), helps to characterize this Association. CNVC00300 occurs on wet, nutrient-medium to rich sites mainly in a region with a humid continental boreal climate. Substrates are usually organic soils formed from slowly decomposing graminoid litter and *Sphagnum* mosses. CNVC00300 can be the first cohort after fire or succeed a pure tamarack condition. There are three subassociations: *typic*, *Rhododendron groenlandicum* and *Larix laricina*.

**Vegetation:** CNVC00300 is a coniferous forest Association with a moderately closed canopy of *Larix laricina* and *Picea mariana*. These two tree species are usually present in roughly equal proportions, except in the *Larix laricina* subassociation, where *L. laricina* is clearly dominant. The dense shrub layer is characterized by abundant *Alnus incana* (see Comments), *Rhododendron groenlandicum* and regenerating *P. mariana*. *Vaccinium myrtilloides*, *Kalmia angustifolia*, *Salix* spp. and regenerating *L. laricina* and *A. balsamea* also commonly occur in the shrub layer. The moderately developed herb layer typically includes *Carex* spp. and grasses (*Poaceae*), as well as *Gaultheria hispidula*, *Cornus canadensis*, *Coptis trifolia* and *Maianthemum trifolium*. Species indicative of greater nutrient status, such as *Rubus pubescens*, are occasionally present. Herb richness and abundance often increase in wet hollows and along drainage ways where proximity to the water table enhances nutrient supply. A well-developed moss layer dominated by *Sphagnum* spp., including *S. magellanicum*, *S. fuscum* and *S. girgensohnii*, further characterizes this Association. *Pleurozium schreberi* and *Dicranum* spp. are often present on drier microsites (e.g., peat hummocks). Compared to the *typic* subassociation, the *Rhododendron groenlandicum* subassociation has *R. groenlandicum* as the dominant shrub (although *A. incana* is also abundant) and greater abundance of *Chamaedaphne calyculata*, *Myrica gale* and, to a lesser extent, *V. angustifolium*. In addition to the purer overstory of the *L. laricina* subassociation, the shrub layer often includes *Ilex mucronata* and *Viburnum nudum* (see Comments), and *Betula pumila* can be abundant where present.





***Larix laricina* – *Picea mariana* / *Alnus incana* / *Gaultheria hispidula* / *Sphagnum* spp.  
CNVC00300**

### Type Description (cont'd)

**Environment:** CNVC00300 occurs on peat-accumulating sites with permanently high water tables in a region with a humid continental boreal climate. Graminoid litter is a significant contributor of peat material, as well as *Sphagnum* mosses; the resulting organic matter thickness over mineral substrates ranges from approximately 20 cm to > 1 m. Sites are typically underlain by fine-textured mineral soils left from proglacial lakes or seas, or less commonly, coarser-textured soils developed from morainal parent materials. Groundwater flow or seepage inputs create minerotrophic conditions in the rooting layer; nutrient status is medium to rich. *Alnus incana* is a nitrogen-fixing species, further enriching the soil nutrient status. Surface microtopography is moderately hummocky; hollows are often in contact with groundwater for much of the growing season.

CNVC00300 can form contiguous stands in landscape basins or form isolated stands within larger wetland complexes, wherever the rooting layer remains in contact with mineral-rich water. It often occurs as a linear band along drainage features or in the narrow transition between poorer wetland *Picea mariana* forests near the centre of the peatland (e.g., CNVC00282 [*Picea mariana* / *Rhododendron groenlandicum* – *Kalmia angustifolia* / *Sphagnum* spp.]) and adjacent uplands from which seepage originates (e.g., CNVC00295 [*Picea mariana* / *Alnus incana* / *Pleurozium schreberi*]). The *Rhododendron groenlandicum* subassociation is less frequently on glaciolacustrine parent materials than are the *typic* and *Larix laricina* subassociations. It has a deeper peat/mor humus layer and likely has lower nutrient status.

Within the range of CNVC00300 regional fire cycles are intermediate (100-270 years), long (270-500 years) or even very long (>500 years). However, these stands occur where there are natural fire breaks (i.e., wetlands) and are less prone to fire because of their moisture status.

**Dynamics:** CNVC00300 can form the first cohort after fire, or succeed an earlier seral condition in which *Larix laricina* is dominant (e.g., the *Larix laricina* subassociation). Fires are infrequent and of limited extent because these sites are so wet. When a fire does occur, both *Larix laricina* and *Picea mariana* can regenerate from seed under favourable conditions (e.g., suitable seedbed), *L. laricina* typically by wind-dispersed seeds from trees in the surrounding area and *P. mariana* from semi-serotinous cones. *L. laricina* is a pioneer species that grows more rapidly than *P. mariana*, but *P. mariana* is more shade tolerant and better able to regenerate in the absence of fire (usually by vegetative layering), so it can become dominant on these sites over time, forming CNVC00298 [*Picea mariana* / *Alnus incana* / *Gaultheria hispidula* / *Sphagnum* spp.]. Stands of CNVC00300 tend to be long lived and multi-aged, with trees up to or exceeding 200 years. The *Larix laricina* subassociation, with much less *P. mariana*, may represent stands that burned more recently than stands of the *Rhododendron groenlandicum* subassociation.

Long-term change in the water table (either by anthropogenic activities or natural causes [e.g., beaver dams]) usually results in changes to the vegetation community. A rise in the water table can result in tree mortality and transition to shrubby wetland vegetation. A drop in the water table can sometimes result in the development of more productive feathermoss forests (e.g., CNVC00295 [*Picea mariana* / *Alnus incana* / *Pleurozium schreberi*]).

Larch sawfly (*Pristiphora erichsonii*) can cause extensive mortality to *L. laricina* stands if heavy defoliation occurs successively for 6 to 9 years, potentially leaving *P. mariana* as the dominant overstory species. Pure *L. laricina* stands could become *Alnus incana* swamps.

**Range:** CNVC00300 occurs in the boreal region of Quebec. It is most common in the western portion of the range but is also described from the Lower North Shore of the Gulf of Saint Lawrence near the Little Mecatina River and also from the Gaspé region and the Magdalene Islands.

### 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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**Tamarack – Black Spruce / Speckled Alder / Creeping Snowberry / Peat Mosses**  
**Mélèze laricin – Épinette noire / Aulne rugueux / Petit thé / Sphaignes**

## Distribution

**Countries:** Canada

**Provinces / Territories / States:** Quebec

**Terrestrial Ecozones and Ecoregions of Canada:** Atlantic Highlands: Appalachians; Atlantic Maritime: Îles-de-la-Madeleine; Boreal Shield: Abitibi Plains, Central Laurentians, Lake Timiskaming Lowland, Mecatina Plateau, Rivière Rupert Plateau, Southern Laurentians; Hudson Plains: James Bay Lowland

**Rowe's Forest Regions and Sections of Canada:** Boreal: Chibougamau-Natashquan, Gouin, Hudson Bay Lowlands, Laurentide-Onatchiway, Missinaibi-Cabonga, Northeastern Transition, Northern Clay; Great Lakes-St. Lawrence: Saguenay, Temiscouata-Restigouche

**NAAEC CEC Ecoregions of North America (Levels I & II):** Hudson Plains; Northern Forests: Atlantic Highlands, Mixed Wood Shield, Softwood Shield

**Nature Conservancy of Canada Ecoregions:** Boreal Shield, Hudson Plains, Northern Appalachians-Acadia

**Bioclimatic Domains and Subdomains of Québec:** 4 Est, 4 Ouest, 5 Est, 5 Ouest, 6 Est, 6 Ouest



## Corresponding Types and Associations

<b>300a typic</b>	Quebec	QC051A	<i>Larix laricina</i> - <i>Picea mariana</i> / <i>Alnus incana</i> / <i>Sphagnum</i> spp. [Typique]
<b>300b <i>Rhododendron groenlandicum</i></b>	Quebec	QC051B	<i>Larix laricina</i> - <i>Picea mariana</i> / <i>Alnus incana</i> / <i>Sphagnum</i> spp. [ <i>Ledum groenlandicum</i> ]
<b>300c <i>Larix laricina</i></b>	Quebec	QC053	<i>Larix laricina</i> / <i>Alnus incana</i> / <i>Sphagnum</i> spp.



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Vegetation Summary\*

Species Name <sup>†</sup>	Association CNVC00300		Subassociation 300a <i>typic</i>		Subassociation 300b <i>Rhododendron groenlandicum</i>	
	61 plots		37 plots		16 plots	
	% Cover <sup>‡</sup>	% Presence <sup>^</sup>	% Cover <sup>‡</sup>	% Presence <sup>^</sup>	% Cover <sup>‡</sup>	% Presence <sup>^</sup>
<b>Overstory Trees</b>						
<i>Larix laricina</i>	22	100	22	100	19	100
<i>Picea mariana</i>	19	97	22	100	18	100
<i>Abies balsamea</i>	7	43	7	43	10	25
<i>Betula papyrifera</i>	6	28	7	35	3	6
Tree Stratum Cover (P <sub>10</sub> P <sub>25</sub> Mean P <sub>75</sub> P <sub>90</sub> ) <sup>‡</sup>	(32 32 49 66 66)		(32 32 53 66 66)		(32 32 43 49 49)	
<b>Understory Woody Shrubs and Regenerating Trees</b>						
<i>Alnus incana</i>	32	98	36	97	24	100
<i>Rhododendron groenlandicum</i>	16	93	7	89	34	100
<i>Picea mariana</i>	15	93	13	95	20	100
<i>Larix laricina</i>	5	74	4	68	7	94
<i>Vaccinium myrtilloides</i>	5	67	3	62	7	88
<i>Kalmia angustifolia</i>	8	66	6	57	13	81
<i>Salix</i> sp.	8	66	10	57	6	88
<i>Abies balsamea</i>	8	59	9	62	8	38
<i>Amelanchier</i> sp.	3	51	3	49	2	56
<i>Vaccinium angustifolium</i>	4	44	3	38	7	63
<i>Viburnum nudum</i>	4	43	4	41	3	38
<i>Chamaedaphne calyculata</i>	12	39	4	30	23	63
<i>Rubus idaeus</i>	4	36	4	35	3	31
<i>Betula papyrifera</i>	4	36	4	38	4	25
<i>Ribes glandulosum</i>	3	34	3	38	3	31
<i>Kalmia polifolia</i>	4	33	2	27	6	50
<i>Sorbus americana</i>	3	33	3	32	2	25
<i>Ilex mucronata</i>	4	28	3	22	8	19
<i>Cornus stolonifera</i>	6	21	4	22	4	6
<i>Sorbus decora</i>	3	15	3	8	3	25
<i>Myrica gale</i>	14	13	10	5	23	19
<i>Andromeda polifolia</i>	4	11	2	5	3	13
<i>Ribes lacustre</i>	2	11	3	11	3	6
<i>Betula pumila</i>	12	10	3	5	4	13
<i>Lonicera villosa</i>	3	8	3	5	3	6
Shrub Stratum Cover (P <sub>10</sub> P <sub>25</sub> Mean P <sub>75</sub> P <sub>90</sub> ) <sup>‡</sup>	(49 53 76 99 99)		(32 49 69 99 99)		(84 99 95 99 99)	
<b>Understory Herbs and Dwarf Shrubs</b>						
<i>Carex</i> sp.	13	92	16	95	6	88
<i>Gaultheria hispidula</i>	4	84	4	84	4	81
<i>Cornus canadensis</i>	3	67	3	70	4	63
<i>Coptis trifolia</i>	3	64	3	70	3	56



***Larix laricina* – *Picea mariana* / *Alnus incana* / *Gaultheria hispidula* / *Sphagnum* spp.  
 CNVC00300**

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

Species Name <sup>†</sup>	Association CNVC00300		Subassociation 300a <i>typic</i>		Subassociation 300b <i>Rhododendron groenlandicum</i>	
	% Cover <sup>‡</sup>	% Presence <sup>^</sup>	% Cover <sup>‡</sup>	% Presence <sup>^</sup>	% Cover <sup>‡</sup>	% Presence <sup>^</sup>
<i>Poaceae</i>	5	62	5	65	5	56
<i>Maianthemum trifolium</i>	3	62	3	65	4	63
<i>Linnaea borealis</i>	3	54	3	59	2	44
<i>Lysimachia borealis</i>	2	54	3	57	2	44
<i>Viola</i> sp.	3	48	3	49	3	38
<i>Clintonia borealis</i>	3	46	3	49	2	31
<i>Rubus pubescens</i>	5	43	6	49	3	38
<i>Equisetum</i> sp.	3	39	3	38	5	44
<i>Maianthemum canadense</i>	3	39	3	46	3	19
<i>Lycopodium annotinum</i>	4	38	5	30	4	69
<i>Dryopteris spinulosa</i> complex	3	36	3	46	3	19
<i>Vaccinium oxycoccos</i>	3	25	3	11	3	50
<i>Equisetum sylvaticum</i>	6	21	6	24	6	25
<i>Mitella nuda</i>	3	21	3	27	3	13
<i>Petasites frigidus</i>	3	20	4	27	2	13
<i>Rubus chamaemorus</i>	4	15	6	11	3	31
<i>Oxalis montana</i>	3	15	3	22	2	6
<i>Oclemena acuminata</i>	3	11	3	14	-	-
<i>Galium triflorum</i>	3	5	2	3	-	-
<i>Moneses uniflora</i>	2	5	2	3	-	-
<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>(3 16 26 33 50)</b>		<b>(3 16 29 33 50)</b>		<b>(16 16 18 16 33)</b>	
<b>Bryophytes and Lichens</b>						
<b><i>Sphagnum</i> sp.</b>	<b>48</b>	<b>87</b>	<b>47</b>	<b>86</b>	<b>50</b>	<b>94</b>
<i>Pleurozium schreberi</i>	7	80	8	84	8	81
<i>Dicranum</i> sp.	3	67	3	81	3	44
<b><i>Sphagnum magellanicum</i></b>	<b>14</b>	<b>56</b>	<b>12</b>	<b>51</b>	<b>15</b>	<b>69</b>
<i>Cladina rangiferina</i>	3	54	2	54	6	63
<i>Polytrichum</i> sp.	3	49	3	46	3	56
<i>Cladonia</i> sp.	2	46	2	41	3	56
<b><i>Sphagnum fuscum</i></b>	<b>12</b>	<b>38</b>	<b>7</b>	<b>30</b>	<b>15</b>	<b>56</b>
<i>Ptilium crista-castrensis</i>	3	31	2	35	5	31
<b><i>Sphagnum girgensohnii</i></b>	<b>27</b>	<b>26</b>	<b>27</b>	<b>27</b>	<b>21</b>	<b>31</b>
<i>Hylocomium splendens</i>	6	21	8	19	3	19
<i>Ptilidium ciliare</i>	2	20	2	16	3	25
<i>Cladina stellaris</i>	5	10	2	5	6	25
<i>Rhytidiadelphus triquetrus</i>	2	8	3	5	2	6
<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>(33 50 69 90 90)</b>		<b>(11 50 65 90 90)</b>		<b>(52 85 79 90 90)</b>	

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

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

<sup>‡</sup> average percent cover of a species within the plots in which it occurs (i.e., characteristic cover)

<sup>^</sup> percent frequency occurrence for a species within the total plots

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



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Mélèze laricin – Épinette noire / Aulne rugueux / Petit thé / Sphaignes

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

Subassociation  
 300c *Larix laricina*

8 plots

Species Name <sup>†</sup>	% Cover <sup>‡</sup>	% Presence <sup>^</sup>
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#### Overstory Trees

<i>Larix laricina</i>	32	100
<i>Picea mariana</i>	7	75
<i>Abies balsamea</i>	3	75
<i>Betula papyrifera</i>	3	38
<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>(32 35 46 53 66)</b>	

#### Understory Woody Shrubs and Regenerating Trees

<i>Alnus incana</i>	29	100
<i>Rhododendron groenlandicum</i>	16	100
<i>Picea mariana</i>	11	75
<i>Larix laricina</i>	5	63
<i>Vaccinium myrtilloides</i>	10	50
<i>Kalmia angustifolia</i>	5	75
<i>Salix</i> sp.	4	63
<i>Abies balsamea</i>	5	88
<i>Amelanchier</i> sp.	3	50
<i>Vaccinium angustifolium</i>	2	38
<i>Viburnum nudum</i>	3	63
<i>Chamaedaphne calyculata</i>	7	38
<i>Rubus idaeus</i>	6	50
<i>Betula papyrifera</i>	4	50
<i>Ribes glandulosum</i>	3	25
<i>Kalmia polifolia</i>	3	25
<i>Sorbus americana</i>	3	50
<i>Ilex mucronata</i>	4	75
<i>Cornus stolonifera</i>	10	50
<i>Sorbus decora</i>	4	25
<i>Myrica gale</i>	9	38
<i>Andromeda polifolia</i>	7	38
<i>Ribes lacustre</i>	2	25
<i>Betula pumila</i>	29	25
<i>Lonicera villosa</i>	3	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>(49 49 72 87 99)</b>	

#### Understory Herbs and Dwarf Shrubs

<i>Carex</i> sp.	16	88
<i>Gaultheria hispidula</i>	3	88
<i>Cornus canadensis</i>	5	63
<i>Coptis trifolia</i>	3	50



***Larix laricina* – *Picea mariana* / *Alnus incana* / *Gaultheria hispidula* / *Sphagnum* spp.  
 CNVC00300**

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

Species Name <sup>†</sup>	Subassociation 300c <i>Larix laricina</i>	
	% Cover <sup>‡</sup>	% Presence <sup>^</sup>
<i>Poaceae</i>	5	63
<i>Maianthemum trifolium</i>	3	50
<i>Linnaea borealis</i>	3	50
<i>Lysimachia borealis</i>	2	63
<i>Viola</i> sp.	5	63
<i>Clintonia borealis</i>	2	63
<i>Rubus pubescens</i>	9	25
<i>Equisetum</i> sp.	3	38
<i>Maianthemum canadense</i>	3	50
<i>Lycopodium annotinum</i>	2	13
<i>Dryopteris spinulosa</i> complex	2	25
<i>Vaccinium oxycoccos</i>	3	38
<i>Equisetum sylvaticum</i>	-	-
<i>Mitella nuda</i>	3	13
<i>Petasites frigidus</i>	-	-
<i>Rubus chamaemorus</i>	-	-
<i>Oxalis montana</i>	-	-
<i>Oclemena acuminata</i>	3	25
<i>Galium triflorum</i>	3	25
<i>Moneses uniflora</i>	3	25
<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>(12 16 28 33 44)</b>	
<b>Bryophytes and Lichens</b>		
<b><i>Sphagnum</i> sp.</b>	<b>45</b>	<b>75</b>
<i>Pleurozium schreberi</i>	3	63
<i>Dicranum</i> sp.	3	50
<b><i>Sphagnum magellanicum</i></b>	<b>24</b>	<b>50</b>
<i>Cladina rangiferina</i>	2	38
<i>Polytrichum</i> sp.	3	50
<i>Cladonia</i> sp.	2	50
<b><i>Sphagnum fuscum</i></b>	<b>19</b>	<b>38</b>
<i>Ptilium crista-castrensis</i>	2	13
<b><i>Sphagnum girgensohnii</i></b>	<b>50</b>	<b>13</b>
<i>Hylocomium splendens</i>	2	38
<i>Ptilidium ciliare</i>	2	25
<i>Cladina stellaris</i>	-	-
<i>Rhytidiadelphus triquetrus</i>	2	25
<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>(33 46 66 90 90)</b>	

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

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

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<sup>^</sup> percent frequency occurrence for a species within the total plots

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Wetland / Tourbière boisée

Association CNVC00300

***Larix laricina* – *Picea mariana* / *Alnus incana* / *Gaultheria hispidula* / *Sphagnum* spp.**  
**Tamarack – Black Spruce / Speckled Alder / Creeping Snowberry / Peat Mosses**  
**Mélèze laricin – Épinette noire / Aulne rugueux / Petit thé / Sphaignes**

Site / Soil Characteristics

	Association CNVC00300	Subassociation 300a <i>typic</i>	Subassociation 300b <i>Rhododendron groenlandicum</i>
	<b>61 plots</b>	<b>37 plots</b>	<b>16 plots</b>
<b>Elevation Range (min–mean–max meters)</b>	5–291–625	5–293–625	125–286–440
<b>Slope Gradient (% frequency)</b>	gentle (2) <b>level (98)</b>	gentle (3) <b>level (97)</b>	gentle (0) <b>level (100)</b>
<b>Aspect (% frequency)</b>	north (2) south (7) west (7) <b>level (85)</b>	north (3) south (8) west (8) <b>level (81)</b>	north (0) south (6) west (6) <b>level (88)</b>
<b>Meso Topoposition (% frequency)</b>	mid (7) lower / toe (5) depression (5) <b>level (84)</b>	mid (8) lower / toe (5) depression (5) <b>level (81)</b>	mid (6) lower / toe (6) depression (6) <b>level (81)</b>
<b>Moisture Regime (% frequency)</b>	moist (18) <b>wet (82)</b>	moist (19) <b>wet (81)</b>	moist (19) <b>wet (81)</b>
<b>Nutrient Regime (% frequency)</b>	missing data (100)	missing data (100)	missing data (100)





***Larix laricina* – *Picea mariana* / *Alnus incana* / *Gaultheria hispidula* / *Sphagnum* spp.  
 CNVC00300**

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

	Association CNVC00300	Subassociation 300a <i>typic</i>	Subassociation 300b <i>Rhododendron groenlandicum</i>
<b>Soil Parent Material (% frequency)</b>	moraine / till (8) fluvial (5) glaciofluvial (2) lacustrine (2) glaciolacustrine (25) marine (5) <b>organic (54)</b>	moraine / till (8) fluvial (8) glaciofluvial (3) lacustrine (3) glaciolacustrine (30) marine (5) <b>organic (43)</b>	moraine / till (6) fluvial (0) glaciofluvial (0) lacustrine (0) glaciolacustrine (13) marine (6) <b>organic (75)</b>
<b>Soil Rooting Zone Substrate (% frequency)</b>	coarse loamy (2) fine loamy (2) silty (2) clayey (2) organic (54) missing data (39)	coarse loamy (3) fine loamy (0) silty (0) clayey (3) organic (43) missing data (51)	coarse loamy (0) fine loamy (0) silty (6) clayey (0) <b>organic (75)</b> missing data (19)
<b>Root Restricting Depth (% frequency)</b>	0 – 20 cm (2) 21 – 99 cm (39) missing data (59)	0 – 20 cm (3) 21 – 99 cm (49) missing data (49)	0 – 20 cm (0) 21 – 99 cm (19) missing data (81)
<b>Humus Form (% frequency)</b>	mor (13) moder (2) <b>peatymor (85)</b>	mor (19) moder (0) <b>peatymor (81)</b>	mor (0) moder (6) <b>peatymor (94)</b>



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

Subassociation  
 300c *Larix laricina*

8 plots

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

185–289–325

**Slope Gradient (% frequency)**

gentle (0)  
**level (100)**

**Aspect (% frequency)**

north (0)  
 south (0)  
 west (0)  
**level (100)**

**Meso Toposition (% frequency)**

mid (0)  
 lower / toe (0)  
 depression (0)  
**level (100)**

**Moisture Regime (% frequency)**

moist (13)  
**wet (88)**

**Nutrient Regime (% frequency)**

missing data (100)



***Larix laricina* – *Picea mariana* / *Alnus incana* / *Gaultheria hispidula* / *Sphagnum* spp.  
CNVC00300**

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

Subassociation  
300c *Larix laricina*

**Soil Parent Material (% frequency)**

moraine / till (13)  
fluvial (0)  
glaciofluvial (0)  
lacustrine (0)  
glaciolacustrine (25)  
marine (0)  
**organic (63)**

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

coarse loamy (0)  
fine loamy (13)  
silty (0)  
clayey (0)  
**organic (63)**  
missing data (25)

**Root Restricting Depth (% frequency)**

0 – 20 cm (0)  
21 – 99 cm (38)  
missing data (63)

**Humus Form (% frequency)**

mor (13)  
moder (0)  
**peatymor (88)**



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### Additional Characteristics

Species of High Conservation Concern:

Non-native Species:

Management Issues:

### Type Statistics

Internal Similarity:

Confidence:

Strength:

### Related Concepts

Similar CNVC Associations:

CNVC00288 [*Picea mariana* – *Larix laricina* / *Rhododendron groenlandicum* / *Gaultheria hispidula* / *Sphagnum* spp.] occurs on sites with poorer nutrient status in the same range. It lacks abundant *Alnus incana* in the shrub layer and has much less cover of *Carex* spp.

CNVC00289 [*Larix laricina* – *Picea mariana* / *Ilex mucronata* / *Sphagnum* spp.] occurs on similarly wet but nutrient-poor sites in the temperate region of Ontario, Quebec, New Brunswick, Nova Scotia and Prince Edward Island. It lacks abundant *Alnus incana* in the shrub layer and has greater constancy and cover of temperate indicator species such as *Acer rubrum*, *Ilex mucronata* and *Viburnum nudum*.

CNVC00298 [*Picea mariana* / *Alnus incana* / *Gaultheria hispidula* / *Sphagnum* spp.] occurs on comparable sites in the same range but lacks *Larix laricina* in the overstory (see Dynamics).

CNVC00326 [*Larix laricina* / *Alnus incana* / *Rubus pubescens*] occurs on comparable sites in Ontario. It has *Larix laricina* dominant in the tree layer and has lower cover of ericaceous species in the shrub layer (e.g., *Kalmia angustifolia*, *Rhododendron groenlandicum*, *Vaccinium myrtilloides* and *V. angustifolium*).

Related United States National Vegetation Classification Associations:

Relationships with Other Classifications:

### Comments

*Alnus incana* here refers to ssp. *rugosa* (speckled alder).

*Viburnum nudum* here refers to var. *cassinoides* (wild raisin).

CNVC00298 is consistent with the concept of a coniferous treed swamp in the Canadian Wetland Classification System.



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

<http://cnvc-cnvc.ca>

## ***Larix laricina* – *Picea mariana* / *Alnus incana* / *Gaultheria hispidula* / *Sphagnum* spp. CNVC00300**

### Source Information

Number of source plots for CNVC00300: 61

Number of source plots for 300a *typic*: 37

Number of source plots for 300b *Rhododendron groenlandicum*: 16

Number of source plots for 300c *Larix laricina*: 8

#### Information Sources:

Ministère des Ressources naturelles. 2003. Base de données des points d'observation écologique (version 2003). Gouv. du Qué., Min. des Resour. nat., Dir. des inv. for., QC.

**Concept Authors:** K. Baldwin, K. Chapman, C. Morneau

**Description Authors:** K. Chapman, K. Baldwin and J.-P. Saucier

**Date of Concept:** January, 2011

**Date of Description:** December, 2016

### Classification References:

Bergeron, J.-F.; Grondin, P.; Blouin, J. 1999. Rapport de classification écologique du sous-domaine bioclimatique de la pessière à mousses de l'ouest. Min. des Res. nat. du Qué., Dir. des inv. for., Sainte-Foy, QC.

Grondin, P.; Blouin, J.; Racine, P. 1998. Rapport de classification écologique du sous-domaine bioclimatique de la sapinière à bouleau blanc de l'ouest. Min. des Res. nat. du Qué., Dir. des inv. for., QC.

Grondin, P.; Blouin, J.; Racine, P. 1999. Rapport de classification écologique du sous-domaine bioclimatique de la sapinière à bouleau jaune de l'est. Min. des Res. nat. du Qué., Dir. des inv. for., QC.

### Characterization References:

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.

Crum, H.A.; Planisek, S. 1988. A focus on peatlands and peat mosses. Univ. of Michigan Press, MI, US.

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Gauthier, S.; Bergeron, Y.; Leduc, A. 1996. Forest dynamics modelling under natural fire cycles: a tool to define natural mosaic diversity for forest management. *Environ. Monit. Assess.* 39:417-434.

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Ministère des Ressources naturelles. 2013. Le guide sylvicole du Québec, Tome 1, Les fondements biologiques de la sylviculture. Ouvrage collectif sous la supervision de B. Boulet et M. Huot. Les Publications du Québec, QC. 1044.

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National Wetlands Working Group. 1988. Wetlands of Canada. Sustain. Dev. Branch, Environ. Can., Ottawa, ON and Polyscience Publications Inc., Montreal, QC. ELC Series No. 24.

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CNVC00300**

**Characterization References (cont'd):**

Rydin, H.; Jeglum, J.K. 2006. The biology of peatlands. Oxford Univ. Press, Oxford, UK.

Uchytel, R.J. 1991. *Larix laricina*. In: Fire Effects Information System. U.S. Dept. Agric., For. Serv., Rocky Mt. Res. Stn., Fire Sci. Lab., Missoula, MT, US. <http://www.fs.fed.us/database/feis/plants/tree/larlar/all.html> (accessed: October 6, 2008).

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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