

SH5

Red spruce – Balsam fir / Schreber's moss

Picea rubens – *Abies balsamea* /
Pleurozium schreberi

n=83



Big Indian Lake,
Hants County

Concept: This mid-successional Vegetation Type (VT) has abundant red spruce with varying amounts of balsam fir. Typically minor amounts of red maple and white birch indicate recent disturbance events, whereas yellow birch, white pine and hemlock indicate development toward a later successional stage. Red spruce – Balsam fir / Schreber's moss is a typical Acadian softwood VT found on zonal sites in Nova Scotia.

Vegetation: Red spruce is usually the dominant overstory tree, although balsam fir may be abundant in some stands. Both species are often well represented as regeneration in the shrub layer. Hybrid (red/black) spruce can also be found on more marginal sites. Low light availability often reduces the abundance of common woodland flora such as wild lily-of-the-valley, goldthread and bunchberry. A needle carpet is common under many stands, but coverage by Schreber's moss, stair-step moss and bazzania can be extensive in some.

Environmental Setting: SH5 is mainly associated with dry to fresh, nutrient poor to medium soils of glacial origin.

Ecological Features

This closed canopy coniferous forest typically occurs over hundreds of hectares, forming matrix in many ecoregions. Balsam fir and red spruce are very shade-tolerant in the understory. Good seed crops in red

spruce start at age 35-45, and the species does not regenerate well before age 50. Forests may provide habitat for marten, spruce grouse, black-backed woodpecker, red and flying squirrels. South facing slopes may provide winter

These soils are generally medium to coarse textured and often stony. This VT is found throughout mainland Nova Scotia and parts of Cape Breton. It is relatively common in New Brunswick but absent from Prince Edward Island.

Successional Dynamics: SH5 is a predominantly even-aged, mid-successional VT dominated by red spruce. Usually SH5 develops from advanced regeneration present at the time of stand-level disturbance. If advanced regeneration is not present (or has been destroyed), SH5 can also develop from other VTs including IH3 (Large-tooth aspen / Christmas fern – New York fern), IH4 (Trembling aspen / Wild raisin / Bunchberry), IH5 (Trembling aspen – White ash / Beaked hazelnut / Christmas fern), IH6 (White birch – Red maple / Sarsaparilla – Bracken) and MW4 (Balsam fir – Red maple / Wood sorrel – Goldthread). This VT may succeed to later successional types such as SH1 (Hemlock / Pin cushion moss / Needle carpet), SH2 (Hemlock – White pine / Sarsaparilla), SH3 (Red spruce – Hemlock / Wild lily-of-the-valley) and SH4 (Red spruce – White pine / Lambkill / Bracken).

cover for deer. Sapling stage forests are preferred habitat for snowshoe hare. Creeping rattlesnake plantain is the only plant species of conservation concern known from this VT.

Characteristic Plants

SH5

	Freq. (%)	Cover (%)
Red spruce	98	63.1
Red maple	67	5.7
Balsam fir	53	12.9
White birch	33	4.7
Yellow birch	32	4.1
White pine	21	6.4
Hemlock	13	4.2
Tree Layer (Mean % Cover)		80
Balsam fir	92	4.7
Red spruce	82	6.7
Red maple	82	0.5
Velvet-leaf blueberry	41	0.8
Yellow birch	31	0.5
Wild raisin	28	0.1
White pine	27	0.7
False holly	27	0.1
Lambkill	25	1.0
Lowbush blueberry	20	0.3
Shrub Layer (Mean % Cover)		12
Wild lily-of-the-valley	62	0.4
Goldthread	61	1.7
Painted trillium	53	0.1
Starflower	52	0.3
Bunchberry	41	2.4
Bluebead lily	41	0.4
Bracken	33	1.8
Sarsaparilla	32	1.0
Evergreen wood fern	29	0.3
Hay-scented fern	26	0.2
Wood-sorrel	24	0.4
Indian cucumber root	22	0.1
Indian pipe	20	0.1
Herb Layer (Mean % Cover)		5
Schreber's moss	93	32.6
Stair-step moss	93	9.9
Bazzania	88	15.7
Broom moss	75	2.0
Hypnum moss	73	1.9
Wavy dicranum	47	2.7
Grey reindeer lichen	36	0.5
Hair-cap moss	34	0.9
Ladies' tresses	22	0.1
Pin cushion moss	22	0.1
Bryo-Lichen Layer (Mean % Cover)		59

Distinguishing Features

A softwood forest of abundant red spruce with varying amounts of balsam fir occurring on well drained sites.

The absence of sphagnum moss (minor amounts in depressions) is diagnostic for identification of this unit.



Schreber's moss

Site Characteristics

Slope Position:	Upper ³ Level ² Lower ² Middle ² Other ¹
Surface Stoniness:	(Non - Slightly) ⁶ (Moderately) ³ (Very - Excessively) ¹
Bedrock Outcrop:	(Non-rocky) ⁹ (Slightly - Moderately) ¹
Elevation Range:	9 - 268m
Slope Gradient:	Gentle ⁶ Level ² Moderate ¹ Other ¹
Aspect:	North ² East ² South ² West ³ None ¹
Exposure:	Moderate ⁶ Mod. exposed ² Mod. sheltered ²
Microtopography:	Moderately ⁵ Slightly ² Strongly ² Other ¹
Drainage:	Well ⁵ Moderately well ³ Imperfect ¹ Other ¹

Soil Characteristics

Soil Type:	ST2 ⁵ ST2-L ² ST6 ¹ Other ²
Parent Material:	Glacial till ⁸ Till/Bedrock ¹ Other ¹
Rooting Depth (cm):	(<30) ² (30-45) ⁴ (>45) ³ nd ¹
Duff Thickness (cm):	(6-10) ³ (11-20) ⁶ nd ¹

