

## WD6

### Red maple – Balsam fir / Wood aster / Sphagnum

*Acer rubrum* – *Abies balsamea* /  
*Aster acuminatus* / *Sphagnum* spp.

n=7



MacElmons Pond,  
Belmont, Colchester County

**Concept:** Red maple - Balsam fir / Wood aster / Sphagnum is one of three wet mixedwood forests (WD6, WD7 and WD8) recognized in Nova Scotia, each largely distinguished by important differences in canopy composition and more minor differences in soil fertility and understory composition. This relatively common Vegetation Type (VT) is characterized by red maple and balsam fir co-dominance, moderate to high herbaceous cover and a well-developed bryophyte layer of sphagnum moss. It is usually found on poorly drained mineral soil, with low to medium nutrient availability.

**Vegetation:** Crown closure is moderate to high, although some stands support more widely spaced trees. The canopy is co-dominated by red maple and balsam fir; other tree species are infrequent and seldom abundant. The understory supports low to moderate levels of woody species but higher herbaceous cover. Characteristic vascular plants include false holly, cinnamon fern, creeping snowberry, wood aster and three seeded sedge. Bryophyte development is moderate, composed of sphagnum moss and lesser amounts of common upland species. Small patches of pale fat-leaved sphagnum, common green and/or flat topped sphagnum are sometimes present.

#### Ecological Features

Mixedwood forests may support vertebrate and invertebrate species associated with both coniferous and deciduous wetlands. Wildlife which utilize either hardwood or softwood structures will often seek small clumps of target canopy trees within broader matrices of dissimilar species. The Red maple – Balsam fir / Wood aster /

Sphagnum VT is a moderately productive mixedwood forest, with a well-developed canopy and often dense understory strata. Small pools or narrow channels of standing or very slowly moving water are typical, and may provide important habitat for amphibians and other wildlife. This small patch ecosystem supports

similar biodiversity values as WD2, but occurs in more sheltered areas with lower peat accumulations. These characteristics may influence the VT's ecology and contributions to local landscape structure and function. Observations of alder-leaved buckthorn and black ash were found in available plot data.

## Characteristic Plants

WD6

	Freq. (%)	Cover (%)
Red maple	100	37.3
Balsam fir	100	27.3
Yellow birch	57	3.3
Red spruce	43	11.7
White birch	43	3.0
White spruce	29	5.0
Tamarack	14	23.0
Black spruce	14	18.0
White ash	14	3.0
White pine	14	2.0
<b>Tree Layer (Mean % Cover)</b>		<b>75</b>
Balsam fir	86	2.9
Red maple	71	1.7
False holly	71	0.2
Speckled alder	43	2.5
Winterberry	43	1.7
Lambkill	43	0.5
Mountain maple	29	11.5
Black spruce	29	6.5
Red spruce	29	2.3
Bristly black currant	29	0.3
Lowbush blueberry	29	0.1
Velvet-leaf blueberry	29	0.1
Wild raisin	29	0.1
<b>Shrub Layer (Mean % Cover)</b>		<b>14</b>
Cinnamon fern	100	17.1
Goldthread	100	2.3
Wild lily-of-the-valley	100	0.4
Starflower	86	1.1
Bunchberry	71	2.3
Creeping snowberry	71	0.6
Wood aster	71	0.3
Dwarf raspberry	57	3.3
Sarsaparilla	57	2.8
Twinflower	57	2.6
Violets	57	0.6
Bluebead lily	57	0.5
Three seeded sedge	57	0.1
New York fern	43	25.0
Mitrewort	43	0.8
Crested wood fern	43	0.2
Strawberry	43	0.1
Interrupted fern	29	6.5
Oak fern	29	5.0
Woodland horsetail	29	1.0
Lady fern	29	0.5
Manna-grass	29	0.2
<b>Herb Layer (Mean % Cover)</b>		<b>53</b>
Stair-step moss	86	14.0
Bazzania	86	2.3
Broom moss	57	1.0
Common green sphagnum	43	20.0
Pale fat-leaved sphagnum	43	15.0
Schreber's moss	43	13.7
Shaggy moss	43	6.7
Hypnum moss	43	5.8
Flat topped sphagnum	29	12.0
Ladies' tresses	29	6.5
<b>Bryo-Lichen Layer (Mean % Cover)</b>		<b>55</b>

## Distinguishing Features

Red maple and balsam fir in the overstory layer define this wet mixedwood forest. Characteristic plants include false holly, cinnamon fern, creeping snowberry, wood aster and three seeded sedge. Common green sphagnum and pale fat-leaved sphagnum are common.



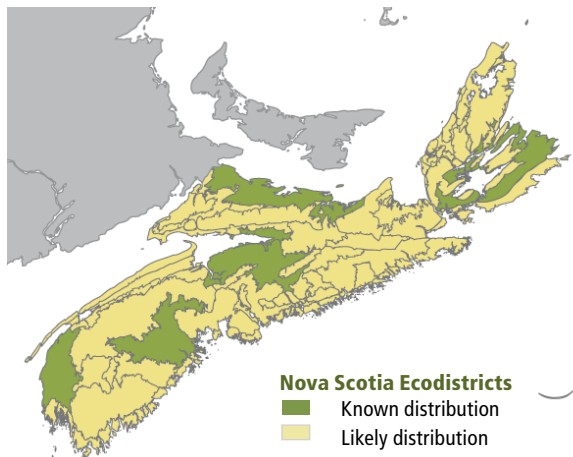
Creeping snowberry

## Site Characteristics

Slope Position:	Level <sup>8</sup> Lower <sup>1</sup> Toe <sup>1</sup>
Surface Stoniness:	(Non - Slightly) <sup>10</sup>
Bedrock Outcrop:	(Non-rocky) <sup>10</sup>
Elevation Range:	5 - 124m
Slope Gradient:	Level <sup>9</sup> Gentle <sup>1</sup>
Aspect:	North <sup>1</sup> West <sup>1</sup> None <sup>8</sup>
Exposure:	Moderate <sup>9</sup> Mod. Sheltered <sup>1</sup>
Microtopography:	Level <sup>7</sup> Slightly <sup>3</sup>
Drainage:	Poor <sup>4</sup> Very poor <sup>4</sup> Imperfect <sup>2</sup>

## Soil Characteristics

Soil Type:	ST7 <sup>6</sup> ST4 <sup>1</sup> ST9 <sup>1</sup> ST10 <sup>1</sup> ST14 <sup>1</sup>
Parent Material:	Glacial till <sup>7</sup> Organic <sup>1</sup> Glaciofluvial <sup>1</sup> nd <sup>1</sup>
Rooting Depth (cm):	(<30) <sup>9</sup> (30-45) <sup>1</sup>
Duff Thickness (cm):	(0-5) <sup>1</sup> (6-10) <sup>1</sup> (11-20) <sup>6</sup> (21-40) <sup>1</sup> (>40) <sup>1</sup>



### Nova Scotia Ecodistricts

- Known distribution
- Likely distribution