

IH6

White birch – Red maple / Sarsaparilla – Bracken

Betula papyrifera – *Acer rubrum* /
Aralia nudicaulis – *Pteridium aquilinum*

IH6a

Aspen variant

Populus grandidentata – *Populus tremuloides*

n=46



Black Lake,
Cumberland County

Concept: This early successional Vegetation Type (VT) has an overstory co-dominated by white birch and red maple, with minor associates. The IH6a variant describes stands where aspen (trembling and/or large-tooth) co-dominates with the birch and maple. Together with its variant, IH6 can grow in a wide range of ecological conditions —from dry to moist and poor to rich sites. White birch – Red maple / Sarsaparilla – Bracken usually follows stand-replacing disturbances events such as fire, windthrow or clearcutting.

Vegetation: White birch and red maple are the dominant overstory trees, while aspen species are co-dominant in variant IH6a. Balsam fir, red spruce, white pine, yellow birch and/or white spruce are common canopy associates. The shrub layer is often well developed and includes several regenerating tree species, wild raisin, lambkill, velvet-leaf blueberry, striped maple and serviceberry. A variety of plants can be found in the herb layer, reflecting the range of site conditions supporting this VT. However, the majority of plants are associated with relatively poor fertility and fresh to dry soils. Common herbaceous species include starflower, bunchberry, sarsaparilla, bracken and ground pine. The bryophyte layer is usually poorly

developed, but often contains patches of Schreber's moss, hypnum moss on decaying wood, and hair-cap moss on recently disturbed soil.

Environmental Setting: IH6 is associated with a range of site conditions ranging from relatively dry, poor, coarse textured soils to relatively moist, rich, fine textured soils (and combinations in between). This VT is common and widespread throughout the province. This is the most common white birch VT in the Acadian Forest, ranging widely across New Brunswick and Prince Edward Island.

Successional Dynamics: IH6 is an early successional VT that follows stand-level disturbances in both softwood and hardwood forests. Typical disturbance agents include fire, windthrow and harvesting. With time, short-lived white birch and aspen will deteriorate due to natural senescence, insects and disease and/or wind damage – leading to a range of possible successional VTs. The presence of other canopy and understory species, particularly residual trees from pre-disturbance conditions, should be used to assess likely successional trends.

Ecological Features

This early successional deciduous forest typically occurs as large patches following stand level disturbances such as fire or tree harvesting. Regeneration is by seed and coppice. White birch is shade-intolerant and is short-lived. The sudden exposure of white birch

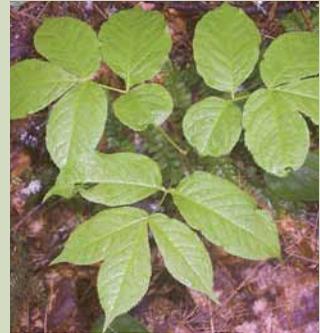
stems to increased sunlight and heat, which usually occurs after a partial stand disturbance, usually leads to birch mortality. Red maple has greater longevity and shade tolerance, both of which facilitate its persistence into later successional stages. It also

flowers before most other spring plants, providing one of the most important early and abundant pollen and nectar sources used by a wide range of insects. Both species, but red maple in particular, are favoured as browse for deer and moose.

Characteristic Plants	IH6		IH6a	
	Freq. (%)	Cover (%)	Freq. (%)	Cover (%)
White birch	97	35.1	89	18.6
Red maple	94	29.8	100	36.4
Balsam fir	33	17.3	33	11.7
Red spruce	28	6.0	44	8.8
White pine	28	4.8	11	15.0
Yellow birch	25	9.0	11	5.0
Large-tooth aspen	22	8.9	33	20.0
White spruce	14	6.6	22	6.5
Sugar maple	11	10.5	22	9.0
Red oak	11	8.8	22	7.5
Trembling aspen	11	5.5	67	27.3
Tree Layer (Mean % Cover)	80		94	
Balsam fir	78	5.9	67	7.1
Red maple	69	5.1	56	1.1
Wild raisin	67	1.8	56	1.9
Lambkill	61	16.5	56	2.3
Velvet-leaf blueberry	58	12.9	56	5.7
Striped maple	53	2.4	44	2.9
White pine	50	1.8	44	0.3
Black spruce	44	3.5	56	1.0
Serviceberry	44	0.6	89	0.3
Lowbush blueberry	42	4.8	44	2.3
Red spruce	42	2.7	44	1.6
False holly	36	0.9	11	0.1
Red oak	33	1.3	67	0.2
Witch-hazel	28	3.3	44	0.1
Beaked hazelnut	28	0.5	56	9.4
Shrub Layer (Mean % Cover)	43		22	
Wild lily-of-the-valley	89	1.7	100	2.0
Starflower	89	0.9	100	0.7
Bunchberry	81	7.2	78	3.5
Sarsaparilla	78	3.0	89	5.4
Bracken	72	12.1	89	12.6
Ground pine	61	0.7	67	0.1
Goldthread	50	2.9	78	0.8
Partridge-berry	50	0.5	89	3.0
Teaberry	44	17.8	56	6.6
Evergreen wood fern	39	2.2	22	1.5
Wood aster	39	0.7	33	0.5
Painted trillium	39	0.1	33	0.1
Twinflower	36	2.0	11	0.5
Mayflower	36	1.0	33	0.2
Indian cucumber root	36	0.3	56	0.1
Bluebead lily	33	2.0	44	0.2
Hay-scented fern	31	7.4		
Violets	11	6.3	44	1.3
Large-leaved aster	11	0.7	33	0.4
Short husk	11	0.1	56	0.1
Interrupted fern	8	0.7	44	8.3
New York fern	3	35.0	33	20.7
Herb Layer (Mean % Cover)	38		42	
Schreber's moss	86	3.1	89	1.2
Hypnum moss	75	1.7	44	1.1
Broom moss	72	0.7	78	1.0
Hair-cap moss	64	0.8	100	1.7
Stair-step moss	39	1.8	44	0.4
Shaggy moss			33	0.5
Bryo-Lichen Layer (Mean % Cover)	7		6	

Distinguishing Features

The canopy of this hardwood forest is dominated by early successional species (red maple, white birch, trembling and large-tooth aspen). Wild raisin, blueberry, lambkill, bracken and sarsaparilla are usually present. Aspen is diagnostic for the variant IH6a.



Sarsaparilla

Site Characteristics

Slope Position: Upper⁵ Middle³ Level¹ Lower¹
 Surface Stoniness: (Non - Slightly)⁶ (Moderately)³ (Very - Excessively)¹
 Bedrock Outcrop: (Non-rocky)⁹ (Slightly - Moderately)¹
 Elevation Range: 8 - 229m
 Slope Gradient: Gentle⁷ Moderate¹ Level¹ nd¹
 Aspect: North³ East¹ South² West³ None¹
 Exposure: Moderate⁸ Mod. exposed²
 Microtopography: Moderately⁶ Slightly³ Strongly¹
 Drainage: Well⁶ Moderately well² Imperfect²

Soil Characteristics

Soil Type: ST2⁴ ST2-L² ST6¹ ST15¹ Other²
 Parent Material: Glacial till⁹ Till/Bedrock¹
 Rooting Depth (cm): (<30)¹ (30-45)³ (>45)⁴ nd²
 Duff Thickness (cm): (0-5)³ (6-10)⁴ (11-20)¹ nd²

