

OW5

Red oak / Huckleberry / Cow-wheat – Rice grass / Reindeer lichen

Quercus rubra / *Gaylussacia baccata* /
Melampyrum lineare – *Oryzopsis asperifolia* /
Cladina spp.

n=3



Moses Mountain,
Hants County

Concept: This relatively uncommon ecosystem develops on acidic glacial soil and or exposed bedrock. It is characterized by an open canopy of red oak and by dense huckleberry cover. The ecosystem has been called a wooded barren or savanna, and is often found in areas where there is an abrupt change in relief. Many occurrences are adjacent to lakes or on steep ridges or sharply rounded crests.

Vegetation: Red oak and lesser red maple dominate the open deciduous canopy. In southwestern Nova Scotia, black cherry may be a frequent but minor component of stand structure. The well-developed understory usually includes abundant huckleberry, although lambkill cover may be relatively abundant in some occurrences. Other important shrubs include witch-hazel, lowbush blueberry and wild raisin. Herbaceous species abundance and richness is reduced, but species characteristic of open dry forest (e.g. bracken, mayflower, cow-wheat, rice grass) are well represented. Reindeer lichens are abundant in some occurrences.

Ecological Features

Red oak / Huckleberry / Cow-wheat – Rice grass / Reindeer lichen woodlands are under sampled and poorly understood in Nova Scotia. This small patch ecosystem is one of our most temperate woodlands. It is somewhat uncommon in Nova Scotia, and much

rarer in New Brunswick. Analyses of eastern Canadian forests and woodlands have not yet addressed this VT, but early comparisons indicate the ecosystem may be restricted to the Maritimes, presenting important conservation challenges. This ecosystem supports unique habitat

Environmental Setting: The OW5 ecosystem may occur on rock ridges but most occurrences are on upper slopes and crests of thin glacial deposits. Sites have high exposure and moderate to high surface stoniness; microtopography is low. This Vegetation Type (VT) is found across the Western ecoregion and in parts of the Annapolis Valley ecodistrict. OW5 is often found interspersed with IH2 (Red oak – Red maple / Witch-hazel). The VT is also scattered across southern and eastern New Brunswick.

Successional Dynamics: The woodland occurs as an early to mid-successional phase. General successional relationships are poorly understood, but the ecosystem is expected to persist as an edaphic climax, because dry, nutrient very poor soils generally prevent succession to other VTs. The woodland is maintained by tree senescence and windthrow, but many occurrences, particularly those on glacial soils, originate with fire.

conditions, but associated animal, plant and lichen species are undocumented. It typically features a very open canopy and high shrub and lichen cover. Productivity, tree age, canopy height and old growth potential are all low.

Characteristic Plants

OW5

	Freq. (%)	Cover (%)
Red oak	100	30.7
Red maple	67	15.0
White pine	33	5.0
White spruce	33	2.0
Large-tooth aspen	33	0.1
Tree Layer (Mean % Cover)		43
Red maple	100	9.0
Red oak	100	8.2
Witch-hazel	100	5.8
Velvet-leaf blueberry	100	4.3
Huckleberry	67	63.5
Lambkill	67	8.5
Lowbush blueberry	67	7.0
Black spruce	67	4.5
White pine	67	4.5
White spruce	67	4.0
Wild raisin	67	1.3
Striped maple	33	9.0
White birch	33	7.0
Balsam fir	33	2.1
Red spruce	33	2.0
Serviceberry	33	1.0
Sweetfern	33	0.3
Staghorn sumac	33	0.3
Grey birch	33	0.1
Bush-honeysuckle	33	0.1
White ash	33	0.1
Ground juniper	33	0.1
Hemlock	33	0.1
Shrub Layer (Mean % Cover)		79
Bracken	100	9.0
Sarsaparilla	100	1.8
Starflower	100	0.2
Teaberry	67	8.3
Bunchberry	67	4.0
Cow-wheat	67	1.0
Wood aster	67	0.3
Poverty grass	67	0.3
Wild lily-of-the-valley	67	0.2
Pink lady's slipper	67	0.1
Rice grass	67	0.1
Mayflower	33	1.0
Evergreen wood fern	33	0.2
Marginal wood fern	33	0.1
Herb Layer (Mean % Cover)		22
Grey reindeer lichen	100	10.3
Schreber's moss	100	4.8
Hypnum moss	67	9.0
Star-tipped reindeer lichen	67	3.5
Green reindeer lichen	67	1.5
Wavy dicranum	67	1.0
Broom moss	33	10.0
Hair-cap moss	33	1.0
Cup lichens	33	0.5
Bazzania	33	0.5
Bryo-Lichen Layer (Mean % Cover)		29

Distinguishing Features

Red oak is diagnostic of this hardwood woodland, often with red maple, exposed bedrock and prominent reindeer lichen and huckleberry cover. Witch-hazel is common.



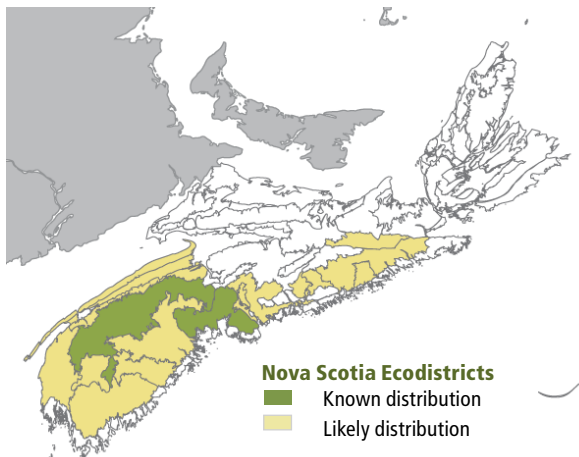
Star-tipped reindeer lichen

Site Characteristics

Slope Position:	Upper ⁷ Crest ³
Surface Stoniness:	(Very - Excessively) ⁷ (Moderately) ³
Bedrock Outcrop:	(Slightly - Moderately) ⁷ (Very - Excessively) ³
Elevation Range:	107 - 175m
Slope Gradient:	Gentle ⁷ Moderate ³
Aspect:	North ³ South ⁷
Exposure:	Exposed ⁷ Moderate ³
Microtopography:	Level ⁷ Slightly ³
Drainage:	Rapid ⁷ Well ³

Soil Characteristics

Soil Type:	ST15 ⁷ ST2 ³
Parent Material:	Glacial till ⁷ Till/Bedrock ³
Rooting Depth (cm):	(<30) ⁷ nd ³
Duff Thickness (cm):	(0-5) ⁷ (11-20) ³



Nova Scotia Ecodistricts
■ Known distribution
■ Likely distribution