

## FP3

### Red maple / Sensitive fern – Rough goldenrod

*Acer rubrum* / *Onoclea sensibilis* –  
*Solidago rugosa*

n=9



Crowsnest,  
Guysborough County

**Concept:** This early to mid-successional ecosystem is the most nutrient-limited floodplain forest classified in Nova Scotia. The low elevation deciduous forest is characterized by red maple canopy dominance and by a moderately broad group of herbaceous species. Typical understory plants include a mix of floodplain and wetland species.

**Vegetation:** Canopy layers are usually closed but some stands feature more widely-spaced trees. Red maple is the only dominant canopy species, but trace amounts of yellow birch, ironwood, white ash and several conifers may be scattered throughout. The woody understory is usually open with scattered individuals or pockets of wild raisin, beaked hazelnut and regenerating trees. Herbaceous cover is moderate to high depending on available moisture. Dwarf raspberry, sensitive fern, rough goldenrod and bladder sedge are common species. Some occurrences of FP3 support high levels of short husk. Ground bryophyte and lichen cover is absent or reduced.

#### Ecological Features

The Red maple / Sensitive fern – Rough goldenrod is usually on more nutrient-limited floodplains, with lower species richness and reduced productivity, but some stands occur on better sites with increased biodiversity potential. This small patch ecosystem typically supports fewer rare plants than other floodplain forests, with some notable exceptions

(e.g. hooked agrimony, Canada wood-nettle and black ash). It is the only forest ecosystem from which the extremely rare false nettle has been documented. The VT supports habitat for numerous riparian vertebrates, while red maple (that flowers before spring leaf out) provides one of the most important early and reliable pollen sources.

**Environmental Setting:** FP3 is mainly associated with fresh to moist, nutrient rich alluvium soils. This Vegetation Type (VT) can be found on active floodplains, low riparian slopes and on inactive terraces. Active sites typically flood annually. Most FP3 sites occur in the middle reaches of rivers found across the province. Rooting zone texture is variable, but sandy loams are most common. FP3 (Red maple / Sensitive fern – Rough goldenrod) occurs across southeastern New Brunswick, but only small, disturbed fragments remain on Prince Edward Island.

**Successional Dynamics:** FP3 is an early to mid-successional VT. Moister occurrences are expected to persist as an edaphic climax, while stands on better drained sites may succeed to FP1 (Sugar maple – White ash / Ostrich fern – Wood goldenrod). Stands on inactive floodplains or glaciofluvial soils may succeed to an upland forest type. Successional development will depend on available seed sources, site conditions, disturbance regime and geographic location. Disturbance agents include flood events, ice scour, insects and disease, farming and harvesting.

Similar to other riparian forests, it promotes landscape connectivity, water quality, stream bank stability and channel integrity. Old growth potential is low, except where FP3 forms an edaphic climax on moist sites; in which case a unique form of old growth may develop.

## Characteristic Plants

FP3

	Freq. (%)	Cover (%)
Red maple	100	60.4
Red oak	33	7.3
Sugar maple	33	4.0
Ironwood	33	2.7
White pine	33	2.3
Hemlock	22	7.5
Black cherry	22	6.5
White birch	22	5.5
Balsam fir	22	5.0
Yellow birch	22	4.5
Red spruce	22	3.0
White spruce	22	2.5
<b>Tree Layer (Mean % Cover)</b>		<b>75</b>
Red maple	56	5.4
Balsam fir	56	4.0
Serviceberry	56	1.1
Wild raisin	44	10.3
Beaked hazelnut	44	8.5
Sugar maple	44	7.6
Poison ivy	44	1.5
Meadow-sweet	44	0.9
White pine	44	0.6
Red raspberry	44	0.3
Choke cherry	33	19.5
White ash	33	6.2
Red oak	33	3.3
Speckled alder	33	3.3
White spruce	33	1.2
Black cherry	33	0.5
Virgins bower	33	0.1
<b>Shrub Layer (Mean % Cover)</b>		<b>36</b>
Meadow-rue	100	1.2
Sensitive fern	78	4.1
Dwarf raspberry	67	3.0
Rough goldenrod	67	0.6
Bladder sedge	67	0.4
Short husk	56	36.4
New York fern	56	7.4
Wild lily-of-the-valley	56	1.1
Partridge-berry	56	0.6
Starflower	56	0.6
Sarsaparilla	44	3.8
Violets	44	1.3
Evergreen wood fern	44	0.8
Lady fern	44	0.3
Bunchberry	33	20.0
Graceful sedge	33	3.3
Calico aster	33	1.0
Rough bedstraw	33	0.7
White panicle aster	33	0.7
Goldthread	33	0.5
Cinnamon fern	33	0.3
Blue flag	33	0.1
Fringed sedge	33	0.1
Nodding trillium	33	0.1
Sweet-scented bedstraw	33	0.1
Stiff sedge	22	13.5
Jewelweed	22	4.0
<b>Herb Layer (Mean % Cover)</b>		<b>64</b>

## Distinguishing Features

This floodplain vegetation type can be a complex of well to poorly drained sites usually with well-defined seasonally active channels and depressions.

Red maple is the dominant overstory species. Sensitive fern, bladder sedge, meadow rue and dwarf raspberry are typically present. Cinnamon fern is scattered but a good indicator.



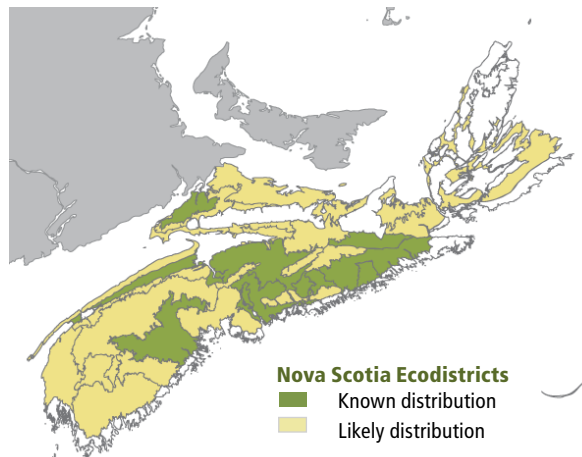
*Sensitive fern*

## Site Characteristics

Slope Position:	Level <sup>10</sup>
Surface Stoniness:	(Non - Slightly) <sup>9</sup> (Moderately) <sup>1</sup>
Bedrock Outcrop:	(Non-rocky) <sup>10</sup>
Elevation Range:	12 - 93m
Slope Gradient:	Level <sup>10</sup>
Aspect:	None <sup>10</sup>
Exposure:	Moderate <sup>5</sup> Mod. sheltered <sup>2</sup> nd <sup>3</sup>
Microtopography:	Level <sup>7</sup> Moderate <sup>1</sup> Slightly <sup>1</sup> nd <sup>1</sup>
Drainage:	Well <sup>6</sup> Moderately well <sup>3</sup> Imperfect <sup>1</sup>

## Soil Characteristics

Soil Type:	ST8 <sup>6</sup> ST8-C <sup>1</sup> ST9 <sup>1</sup> nd <sup>2</sup>
Parent Material:	Alluvium <sup>8</sup> nd <sup>2</sup>
Rooting Depth (cm):	(>45) <sup>9</sup> nd <sup>1</sup>
Duff Thickness (cm):	(0-5) <sup>7</sup> (11-20) <sup>1</sup> nd <sup>2</sup>



**Nova Scotia Ecodistricts**  
■ Known distribution  
■ Likely distribution