



### Site 7 NS&T Trail

# General Description

The N S & T is an old railway right-of-way that provided passenger service between Niagara Falls and Thorold in the first half of the 20<sup>th</sup> Century. Since that time, the railway was abandoned and the rails were removed. The right-of-way (east of Thorold Townline Rd.) is now the property of the City of Niagara Falls. The section of the trail surveyed runs east to west approximately 300 metres south of Thorold Rd from Garner Rd to Thorold Townline Rd. The trail will be described in three sections, from Garner Rd. to Kalar Rd., from Kalar Rd. to Beechwood Rd., and from Beechwood Rd. to Thorold Townline Rd.

#### Polygon 1

From Garner Rd to Kalar Rd. This section of the trail consists of a well-maintained road bed, with mature trees and shrubs along its edges. It provides a pleasant and easy walking corridor, but locked fences at both ends discourages pedestrian traffic. Shriner's Creek runs along portions of this section of trail, and adjacent land appears to belong to the Niagara Peninsula Conservation Authority.

#### Polygon 2

From Kalar Rd to Beechwood Rd. West of Kalar Rd, it was not clear exactly where the trail right-of-way was located. It appeared that the neighbouring house to the north may have encroached onto the trail property. From Beechwood Rd east, someone has maintained a rough track that provides access eastwards. Where a drainage ditch cuts across the right-of-way, a wooden bridge has been constructed. Hunting platforms exist along the edge of the right-of-way. About halfway to Kalar Rd, dense undergrowth of shrubs (primarily buckthorn) and fallen trees make access almost impossible.

### Polygon 3

From Beechwood Rd to Thorold Townline Rd. West of Beechwood R, the trail is accessible for a few hundred metres until a drainage ditch cuts across it. A large amount of illegal dumping has occurred in this section of the trail. From Thorold Townline Rd east, the trail is completely overgrown with trees and bushes. The old rail bed can be distinguished by the change in the contour of the land but it is inaccessible due to the thick vegetation.

#### Recommendations

- Neighbour encroachments shall be removed from the woodland. In addition to being illegal under the City parks bylaw, these encroachments degrade the quality of the natural habitat and may negatively impact the public use of the lands
- 2. To enhance and ensure the longterm sustainability of the woodland, additional planting of native species is needed. The planting shall be of both trees and shrubs. If possible, turf grasses should be removed in the planting area to minimize competition for the new plantings. The location within the woodland will dictate whether the planting will be pioneer or climax species.
- 3. Litter and debris should be removed from the woodland. Consideration should be made for the installation of waste receptacles at the entrance to the woodland in a convenient location for both the public and maintenance staff. Natural debris from dead trees shall be left on-site but moved off trails.
- 4. Establish barriers to deter dumping.
- 5. Trail improvements to encourage positive use.
- 6. Removal of invasive species should be done. Priority for removal shall be in areas where there is greater impact on the existing native vegetation. After removal of invasive species has occurred, monitoring is necessary to ensure that these plants do not re-establish themselves. The techniques used for the removals shall be tailored to the invasive species being removed and be in accordance with industry standards.
- 7. To raise awareness of the woodland features and functions, informative signage should be put on site. The signage should be installed near a main trail or access point to the woodland.



Figure 1-Kalar Rd. looking West. Credit: M. Vogt



Figure 2-Garner Rd. looking East. Credit: M. Vogt

## NS & T Trail - Route 1 Plant Species Inventory

<u>Legend:</u>
Layer: 1=Canopy(>10M), 2=Sub-Canopy, 3=Understory, 4=Ground Layer

Abundance: r=Rare, o=Occasional, a=Abundant, d=Dominant

Invasive Species: ai=Aggressive Invasive Species, i=Invasive Species

Old Growth: og=Old Growth Plantation: p=Plantation Species

Federal Status: t=Threatened, v=Vulnerable, sp=Special Concern Provincial Status: e=Endangered, t=Threatened, v=Vulnerable

Site Number	Site Name	Polygon	Layer	Species	Abundance	Invasive	Old Growth	Plantation	Federal	Provincial
7	NS&T Trail	1	1	Betula alleghaniensis	0					
7	NS&T Trail	3	1	Carya ovata	r					
7	NS&T Trail	1	1	Carya ovata	0					
7	NS&T Trail	2	1	Fraxinus americana	0					
7	NS&T Trail	2	1	Fraxinus pennsylvanica	а					
7	NS&T Trail	3	1	Fraxinus pennsylvanica	а					
7	NS&T Trail	1	1	Fraxinus pennsylvanica	а					
7	NS&T Trail	2	1	Juglan nigra	0					
7	NS&T Trail	3	1	Juglan nigra	0					
7	NS&T Trail	1	1	Juglan nigra	0					
7	NS&T Trail	3	1	Malus sp.	0					
7	NS&T Trail	3	1	Populus deltoides	r					
7	NS&T Trail	1	1	Prunus serotina	а					
7	NS&T Trail	2	1	Prunus sp.	0					
7	NS&T Trail	1	1	Prunus sp.	а					
7	NS&T Trail	2	1	Quercus bicolor	0					
7	NS&T Trail	2	1	Quercus rubra	0					
7	NS&T Trail	3	1	Quercus rubra	r					
7	NS&T Trail	1	1	Quercus rubra	0					
7	NS&T Trail	2	1	Tilia americana	а					
7	NS&T Trail	1	1	Tilia americana	а					
7	NS&T Trail	2	1	Ulmus sp.	0					
7	NS&T Trail	1	1	Ulmus sp.	0					
7	NS&T Trail	1	2	Acer negundo	0					
7	NS&T Trail	1	2	Acer platanoides	r	i				

Site Number	Site Name	Polygon	Layer	Species	Abundance	Invasive	Old Growth	Plantation	Federal	Provincial
7	NS&T Trail	1	2	Acer saccharum	r					
7	NS&T Trail	2	2	Acer saccharum	r					
7	NS&T Trail	1	2	Carpinus caroliniana	r					
7	NS&T Trail	2	2	Carpinus caroliniana	r					
7	NS&T Trail	1	2	Crataegus sp.	0					
7	NS&T Trail	1	2	Malus sp.	0					
7	NS&T Trail	1	2	Populus deltoides	r					
7	NS&T Trail	1	2	Populus tremuloides	0					
7	NS&T Trail	3	2	Prunus sp.	0					
7	NS&T Trail	1	2	Rhamnus cathartica	а	ai				
7	NS&T Trail	2	2	Rhamnus cathartica	d	ai				
7	NS&T Trail	3	2	Rhamnus cathartica	а	ai				
7	NS&T Trail	1	2	Sorbus Americana	r					
7	NS&T Trail	1	3	Cornus racemosa	а					
7	NS&T Trail	3	3	Cornus racemosa	а					
7	NS&T Trail	1	3	Cornus stolonifera	0					
7	NS&T Trail	1	3	Ligustrum vulgare	а	i				
7	NS&T Trail	2	3	Ligustrum vulgare	а	i				
7	NS&T Trail	2	3	Rhamnus cathartica	а	ai				
7	NS&T Trail	1	3	Rhus typhina	0					
7	NS&T Trail	3	3	Rhus typhina	0					
7	NS&T Trail	1	3	Rosa sp.	а					
7	NS&T Trail	2	3	Rosa sp.	0					
7	NS&T Trail	1	3	Rubus idaeus	0					
7	NS&T Trail	2	3	Rubus sp.	0					
7	NS&T Trail	3	3	Rubus sp.	а					
7	NS&T Trail	2	4	Arctium minus	0					
7	NS&T Trail	3	4	Aster novae-angliae	0					
7	NS&T Trail	3	4	Daucus carota	0					
7	NS&T Trail	1	4	Parthenocissus sp.	0					
7	NS&T Trail	2	4	Parthenocissus sp.	0					
7	NS&T Trail	1	4	Rhus radicans	0					
7	NS&T Trail	2	4	Rhus radicans	0					

Site Number	Site Name	Polygon	Layer	Species	Abundance	Invasive	Old Growth	Plantation	Federal	Provincial
7	NS&T Trail	1	4	Solidago sp.	а					
7	NS&T Trail	3	4	Solidago sp.	а					
7	NS&T Trail	1	4	Vitis sp.	0					
7	NS&T Trail	3	4	Vitis sp.	0					

# NS & T Trail – Route 1 Disturbance Report

Site	Polygon	Disturbance / Extent	Total Score
07 NS and T Trail	1	Alien Species / Extent Of Alien Species	1
07 NS and T Trail	1	Beaver Activity / Extent Of Beaver Activity	0
07 NS and T Trail	1	Browse (e.g. Deer) / Extent Of Browse	1
07 NS and T Trail	1	Disease/Death Of Trees / Extent Of Disease/Death	0
07 NS and T Trail	1	Dumping (rubbish) / Extent Of Dumping	0
07 NS and T Trail	1	Earth Displacement / Extent Of Displacement	1
07 NS and T Trail	1	Fire / Extent Of Fire	0
07 NS and T Trail	1	Flooding (Pools & Puddling) / Extent Of Flooding	0
07 NS and T Trail	1	Gaps In Forest Canopy / Extent Of Gaps	4
07 NS and T Trail	1	Ice Damage / Extent Of Ice Damage	0
07 NS and T Trail	1	Intensity / Extent Of Logging	0
07 NS and T Trail	1	Livestock (Grazing) / Extent Of Livestock	0
07 NS and T Trail	1	Noise / Extent Of Noise	0
07 NS and T Trail	1	Planting (plantation) / Extent Of Planting	0
07 NS and T Trail	1	Recreational Use / Extent Of Recr. Use	1
07 NS and T Trail	1	Sugar Bush Operations / Extent Of Operations	0
07 NS and T Trail	1	Time Since Logging	0
07 NS and T Trail	1	Tracks And Trails / Extent Of Tracks/Trails	3
07 NS and T Trail	1	Wind Throw (blow Down) / Extent Of Wind Throw	0
07 NS and T Trail	2	Alien Species / Extent Of Alien Species	4
07 NS and T Trail	2	Beaver Activity / Extent Of Beaver Activity	0
07 NS and T Trail	2	Browse (e.g. Deer) / Extent Of Browse	1
07 NS and T Trail	2	Disease/Death Of Trees / Extent Of Disease/Death	1
07 NS and T Trail	2	Dumping (rubbish) / Extent Of Dumping	1
07 NS and T Trail	2	Earth Displacement / Extent Of Displacement	1
07 NS and T Trail	2	Fire / Extent Of Fire	0
07 NS and T Trail	2	Flooding (Pools & Puddling) / Extent Of Flooding	0
07 NS and T Trail	2	Gaps In Forest Canopy / Extent Of Gaps	1
07 NS and T Trail	2	Ice Damage / Extent Of Ice Damage	0
07 NS and T Trail	2	Intensity / Extent Of Logging	0
07 NS and T Trail	2	Livestock (Grazing) / Extent Of Livestock	0
07 NS and T Trail	2	Noise / Extent Of Noise	0
07 NS and T Trail	2	Planting (plantation) / Extent Of Planting	0
07 NS and T Trail	2	Recreational Use / Extent Of Recr. Use	1
07 NS and T Trail	2	Sugar Bush Operations / Extent Of Operations	0
07 NS and T Trail	2	Time Since Logging	0
07 NS and T Trail	2	Tracks And Trails / Extent Of Tracks/Trails	1
07 NS and T Trail	2	Wind Throw (blow Down) / Extent Of Wind Throw	2
07 NS and T Trail	3	Alien Species / Extent Of Alien Species	4
07 NS and T Trail	3	Beaver Activity / Extent Of Beaver Activity	0
07 NS and T Trail	3	Browse (e.g. Deer) / Extent Of Browse	1

Site	Polygon	Disturbance / Extent	Total Score
07 NS and T Trail 3 Disease		Disease/Death Of Trees / Extent Of Disease/Death	1
07 NS and T Trail	3	Dumping (rubbish) / Extent Of Dumping	3
07 NS and T Trail	3	Earth Displacement / Extent Of Displacement	2
07 NS and T Trail	3	Fire / Extent Of Fire	0
07 NS and T Trail	3	Flooding (Pools & Puddling) / Extent Of Flooding	0
07 NS and T Trail	3	Gaps In Forest Canopy / Extent Of Gaps	2
07 NS and T Trail	3	Ice Damage / Extent Of Ice Damage	0
07 NS and T Trail	3	Intensity / Extent Of Logging	0
07 NS and T Trail	3	Livestock (Grazing) / Extent Of Livestock	0
07 NS and T Trail	3	Noise / Extent Of Noise	0
07 NS and T Trail	3	Planting (plantation) / Extent Of Planting	0
07 NS and T Trail	3	Recreational Use / Extent Of Recr. Use	0
07 NS and T Trail	3	Sugar Bush Operations / Extent Of Operations	0
07 NS and T Trail	3	Time Since Logging	0
07 NS and T Trail	3	Tracks And Trails / Extent Of Tracks/Trails	1
07 NS and T Trail	3	Wind Throw (blow Down) / Extent Of Wind Throw	1