

1 - Walker Park

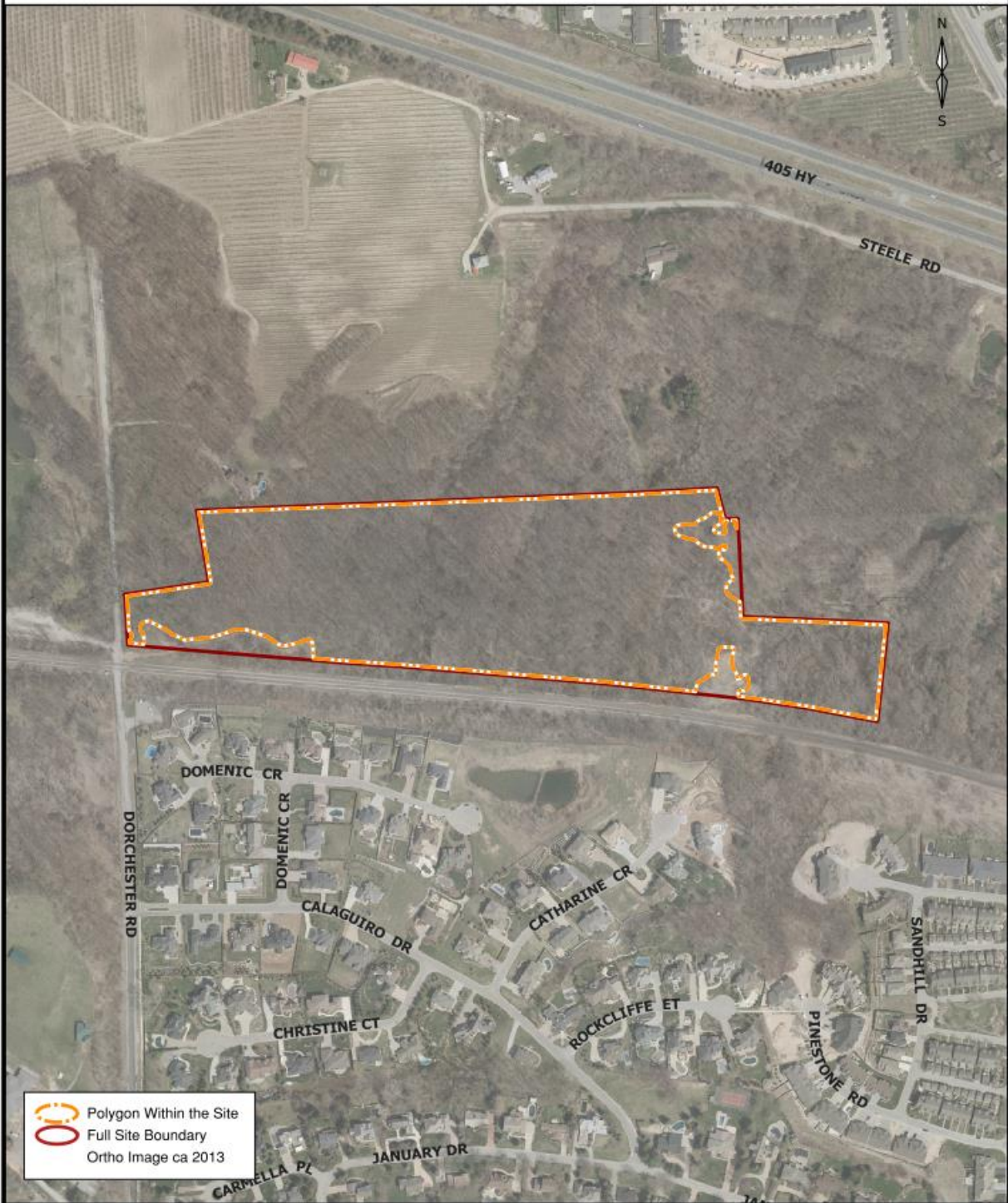


Table 1- Walker Park

Site 1 Walker Park

General Description

Walker Park is one of the jewels of the City of Niagara Falls Parks system. It contains species at risk such as the flowering dogwood. Wildflowers bloom during most of the growing season, some of which grow more robustly here than in the rest of the region.

Walker Park is mentioned in the old-growth forest survey conducted in 2003 by the Bert Miller Nature Club.

<http://www.bertmillernatureclub.org/documents>

Below is the description from page 50 of the report:

Bruce Trail Grove at Firemen's Park

This is the second old growth forest grove which the Bruce Trail passes through in the town of Niagara-on-the-Lake. The other is the Brock's Monument Scarlet Oak Grove. A short section of the Bruce Trail runs through this grove on the east side of Dorchester Road opposite Firemen's Park. There are 6 acres of secondary old growth trees (150 - 185 years old) mixed with a mature second growth forest. The woods are dominated by young to mature black cherry.

The grove contains unusual tree species, including the following large or old specimens:

- 9 inch diameter flowering dogwood, possibly 150 years old
This is highly unusual for its size because most have died due to blight
- Butternuts up to 40 inch diameter; there are also numerous 70-80 year old butternuts
- Mature Shumard oak (needs confirmation)

The following are the most common old growth trees:

- Black cherry, up to 27 inch diameter, 150-180 years old, some with striking shaggy bark
- Black oak, several 150 years old; one 40 inch diameter and 180 years old
- Two balding white oaks, 175 years old
- Tulip tree, 180 years old, 42 inch diameter; also a number of 70-100 year old tulip trees
- Beech, mature, 125 years old
- Basswood

Polygon 1

ATVs and dirt bikes have created deep ruts on the trail and done extensive damage to the vegetation that previously grew beside the trail. Because the ATVs have damaged the path to the tree line, in some areas the plant life is less diverse than it was 10 years ago. In addition, deer browsing has caused damage to trees.

Invasive species such as European buckthorn, Multiflora rose and

Autumn olive are present and spreading.

Recommendations

1. Flowering dogwood is threatened by a fungus called dogwood anthracnose which spreads when there is no airflow. The flowering dogwood trees need to be better protected from this threat by thinning the canopy around them. Multiflora rose and grape vines need to be removed from close proximity to the flowering dogwoods.
2. A section of the park is owned by Niagara-on-the-Lake. The City of Niagara Falls should coordinate management of the woodland with the town of Niagara-on-the-Lake.
3. 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.
4. 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.
5. 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.
6. The existing trails shall be examined for drainage issues. The cause of these drainage issues should be determined so that the repairs fully address the issues. Drainage culverts and boardwalks are commonly used. Importing new topsoil into the woodlands should be done sparingly to minimize the risk of introducing invasive species from a foreign seed bank.
7. All-terrain vehicle (ATV) barriers should be installed strategically to deter this illegal activity. Careful considerations should be made to the location of the barriers to insure that ATVs aren't simply moved to a different part of the woodland. Special signage should be part of these barriers that inform ATVers of the negative impact they are doing to the natural environment and the potential harm they could cause to park users.



Figure 1- Flowering Dogwood, a species at risk. Credit: NF Nature Club



Figure 2- Autumn Olive Shrubs, which are invasive. Credit: NF Nature Club

Walker Park Plant Species Inventory

Legend:

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
1	Walker Park	1	1	Acer negundo	o					
1	Walker Park	1	1	Acer saccharum	o					
1	Walker Park	1	1	Aesculus hippocastanum	r					
1	Walker Park	1	1	Betula papyrifera	r					
1	Walker Park	1	1	Carpinus caroliniana	r					
1	Walker Park	1	1	Carya ovata	o					
1	Walker Park	1	1	Cornus florida	r					e
1	Walker Park	1	1	Fraxinus pennsylvanica	a					
1	Walker Park	1	1	Fraxinus sp.	a					
1	Walker Park	1	1	Juglan nigra	d					
1	Walker Park	1	1	Liriodendron tulipifera	r		og			
1	Walker Park	1	1	Populus deltoides	a					
1	Walker Park	1	1	Populus tremuloides	a					
1	Walker Park	1	1	Prunus serotina	a		og			
1	Walker Park	1	1	Quercus alba	r		og			
1	Walker Park	1	1	Quercus palustris	r					
1	Walker Park	1	1	Quercus rubra	a					
1	Walker Park	1	1	Salix sp.	o					
1	Walker Park	1	1	Sassafras albidum	a					
1	Walker Park	1	1	Tilia americana	a					
1	Walker Park	1	2	Cornus alternifolia	a					
1	Walker Park	1	2	Crataegus crus-galli	o					
1	Walker Park	1	2	Crataegus mollis	a					
1	Walker Park	1	2	Elaeagnus umbellata	a	i				
1	Walker Park	1	2	Hamamelis virginiana	o					

Site Number	Site Name	Polygon	Layer	Species	Abundance	Invasive	Old Growth	Plantation	Federal	Provincial
1	Walker Park	1	2	Malus spp.	r					
1	Walker Park	1	2	Pinus strobus	r					
1	Walker Park	1	2	Prunus Americana	r					
1	Walker Park	1	2	Prunus avium	r					
1	Walker Park	1	3	Cornus obliqua	r					
1	Walker Park	1	3	Cornus racemosa	a					
1	Walker Park	1	3	Ligustrum vulgare	o	i				
1	Walker Park	1	3	Lindera benzoin	a					
1	Walker Park	1	3	Lonicera tatarica	a	i				
1	Walker Park	1	3	Prunus virginiana	r					
1	Walker Park	1	3	Rhamnus cathartica	a	ai				
1	Walker Park	1	3	Rhus typhina	o					
1	Walker Park	1	3	Ribes sp.	o					
1	Walker Park	1	3	Rosa blanda	o					
1	Walker Park	1	3	Rosa multiflora	a	i				
1	Walker Park	1	3	Rubus occidentalis	a					
1	Walker Park	1	3	Rubus odoratus	o					
1	Walker Park	1	3	Viburnum acerifolium	o					
1	Walker Park	1	4	Acalypha rhomboidea	r					
1	Walker Park	1	4	Achillea millefolium	a					
1	Walker Park	1	4	Actaea pachypoda	a					
1	Walker Park	1	4	Agrimonia gryposepala	a					
1	Walker Park	1	4	Alliaria petiolata	o	ai				
1	Walker Park	1	4	Allium vineale	o					
1	Walker Park	1	4	Ambrosia artemisiifolia	a					
1	Walker Park	1	4	Amphicarpa bracteata	o					
1	Walker Park	1	4	Andropogon gerardi	a					
1	Walker Park	1	4	Anemone canadensis	o					
1	Walker Park	1	4	Anemone virginiana	o					
1	Walker Park	1	4	Apios americana	a					
1	Walker Park	1	4	Arctium minus	o					
1	Walker Park	1	4	Arisaema atrorubens	a					
1	Walker Park	1	4	Asarum canadense	r					

Site Number	Site Name	Polygon	Layer	Species	Abundance	Invasive	Old Growth	Plantation	Federal	Provincial
1	Walker Park	1	4	Asparagus officinalis	r					
1	Walker Park	1	4	Aster laevis	a					
1	Walker Park	1	4	Aster lateriflorus	a					
1	Walker Park	1	4	Aster novae-angliae	a					
1	Walker Park	1	4	Aster pilosus	o					
1	Walker Park	1	4	Athyrium Filix-femina	o					
1	Walker Park	1	4	Caulophyllum thalictroides	r					
1	Walker Park	1	4	Celastrus orbiculatus	r	ai				
1	Walker Park	1	4	Centaurea maculosa	a					
1	Walker Park	1	4	Cerastium vulgatum	r					
1	Walker Park	1	4	Chelidonium majus	a	i				
1	Walker Park	1	4	Chenopodium album	o					
1	Walker Park	1	4	Chrysanthemum leucanthemum	o					
1	Walker Park	1	4	Cicuta maculata	o					
1	Walker Park	1	4	Circaea quadrisulcata	a					
1	Walker Park	1	4	Collinsonia canadensis	o					
1	Walker Park	1	4	Dactylis glomerata	a					
1	Walker Park	1	4	Daucus carota	o					
1	Walker Park	1	4	Desmodium canadense	a					
1	Walker Park	1	4	Dianthus armeria	o					
1	Walker Park	1	4	Dryopteris spinulosa	o					
1	Walker Park	1	4	Echinocystis lobata	o					
1	Walker Park	1	4	Eleocharis	r					
1	Walker Park	1	4	Equisetum sp.	a					
1	Walker Park	1	4	Erigeron annuus	o					
1	Walker Park	1	4	Erigeron philadelphicus	a					
1	Walker Park	1	4	Erythronium americanum	a					
1	Walker Park	1	4	Eupatorium maculatum	o					
1	Walker Park	1	4	Eupatorium perfoliatum	a					
1	Walker Park	1	4	Eupatorium rugosum	a					
1	Walker Park	1	4	Galium triflorum	o					
1	Walker Park	1	4	Geranium maculatum	o					
1	Walker Park	1	4	Geranium robertianum	o					

Site Number	Site Name	Polygon	Layer	Species	Abundance	Invasive	Old Growth	Plantation	Federal	Provincial
1	Walker Park	1	4	Geum canadense	a					
1	Walker Park	1	4	Gnaphalium obtusifolium	r					
1	Walker Park	1	4	Helianthus divaricatus	r					
1	Walker Park	1	4	Hypericum perforatum	o	i				
1	Walker Park	1	4	Impatiens capensis	a					
1	Walker Park	1	4	Juncus effusus	o					
1	Walker Park	1	4	Juncus tenuis	a					
1	Walker Park	1	4	Juniperus virginiana	r					
1	Walker Park	1	4	Lapsana communis	o					
1	Walker Park	1	4	Lobelia siphilitica	o					
1	Walker Park	1	4	Lythrum salicaria	o	ai				
1	Walker Park	1	4	Melilotus alba	a					
1	Walker Park	1	4	Oenothera biennis	a					
1	Walker Park	1	4	Onoclea sensibilis	a					
1	Walker Park	1	4	Osmunda claytoniana	a					
1	Walker Park	1	4	Oxalis europaea	o					
1	Walker Park	1	4	Parthenocissus spp.	a					
1	Walker Park	1	4	Phytolacca americana	r					
1	Walker Park	1	4	Pilea pumila	o					
1	Walker Park	1	4	Plantago major	o					
1	Walker Park	1	4	Podophyllum peltatum	a					
1	Walker Park	1	4	Polygonum persicaria	o					
1	Walker Park	1	4	Potentilla recta	o					
1	Walker Park	1	4	Rhus radicans	a					
1	Walker Park	1	4	Rudbeckia serotina	o					
1	Walker Park	1	4	Rumex crispus	o					
1	Walker Park	1	4	Sanguinaria canadensis	r					
1	Walker Park	1	4	Setaria viridis	o					
1	Walker Park	1	4	Silene cucubalus	r					
1	Walker Park	1	4	Sisyrinchium montanum	r					
1	Walker Park	1	4	Smilacina racemosa	a					
1	Walker Park	1	4	Smilax herbacea	o					
1	Walker Park	1	4	Solidago canadensis	a					

Site Number	Site Name	Polygon	Layer	Species	Abundance	Invasive	Old Growth	Plantation	Federal	Provincial
1	Walker Park	1	4	Solidago juncea	o					
1	Walker Park	1	4	Tovara virginiana	a					
1	Walker Park	1	4	Trifolium pratense	o					
1	Walker Park	1	4	Trillium grandiflorum	a					
1	Walker Park	1	4	Tussilago farfara	o					
1	Walker Park	1	4	Urtica sp.	o					
1	Walker Park	1	4	Verbena urticifolia	o					
1	Walker Park	1	4	Veronica chamaedrys	o	i				
1	Walker Park	1	4	Vicia sp.	a					
1	Walker Park	1	4	Viola pubescens	o					
1	Walker Park	1	4	Vitis riparia	a					

Walker Park Disturbance Report

Site	Polygon	Disturbance / Extent	Total Score
01 Walker Park	1	Alien Species / Extent Of Alien Species	4
01 Walker Park	1	Beaver Activity / Extent Of Beaver Activity	0
01 Walker Park	1	Browse (e.g. Deer) / Extent Of Browse	1
01 Walker Park	1	Disease/Death Of Trees / Extent Of Disease/Death	1
01 Walker Park	1	Dumping (rubbish) / Extent Of Dumping	1
01 Walker Park	1	Earth Displacement / Extent Of Displacement	4
01 Walker Park	1	Fire / Extent Of Fire	0
01 Walker Park	1	Flooding (Pools & Puddling) / Extent Of Flooding	2
01 Walker Park	1	Gaps In Forest Canopy / Extent Of Gaps	2
01 Walker Park	1	Ice Damage / Extent Of Ice Damage	0
01 Walker Park	1	Intensity / Extent Of Logging	0
01 Walker Park	1	Livestock (Grazing) / Extent Of Livestock	0
01 Walker Park	1	Motorcycles & ATVs	6
01 Walker Park	1	Noise / Extent Of Noise	1
01 Walker Park	1	Planting (plantation) / Extent Of Planting	0
01 Walker Park	1	Recreational Use / Extent Of Recr. Use	9
01 Walker Park	1	Sugar Bush Operations / Extent Of Operations	0
01 Walker Park	1	Time Since Logging	1
01 Walker Park	1	Tracks And Trails / Extent Of Tracks/Trails	6
01 Walker Park	1	Wind Throw (blow Down) / Extent Of Wind Throw	1