Town of Oakville Urban Forest Health Monitoring Program



Warren Drive Park Woodland ID 2 (Zone 2)

Forest Health Rating (FHR)

1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
9931		/
9928		
9921	Drainage	Drainage



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Some ash tree mortality from emerald ash borer was recorded in the woodland. There were no biotic or abiotic disturbances recorded. Only one invasive plant was recorded in the woodlot, wild grape vine. Although this plant is native to this area, it can become invasive in its aggressive growth.

By Compartment:

Compartment # 9931: FHR =1
Dominant species: Willow
Comments:

<u>Compartment # 9928:</u> FHR = 1 Dominant species: Black walnut Comments:

Compartment #9921: Drainage

*FHR = Forest Health Rating



Wild grape vine



Cornwall Road Buffer

Woodland ID 9 (Zone 5)

Forest Health Rating (FHR)

1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Japanese beetle on willow
- Anthracnose
- Tar spot on maple
- · Discolouration of pine needles

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
8962		/
8961		
8966	✓	✓
8967		
8963	N/A	N/A



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in the woodland. Japanese beetle was recorded feeding on willow. Abiotic disturbances include anthracnose, tarspot, and discolouration of pine needles. A total of 3 invasive plants were present with buckthorn recorded in all compartments. Garlic mustard and wild grape vine were also present in pockets.

By Compartment:

Compartment 8962: FHR = 1
Dominant species: honey locust
Comments: Japanese beetle
affecting willow; anthracnose

Compartment 8961: FHR = 1
Dominant species: Scots pine
Comments: anthracnose on
horsechestnut; tar spot on maple,
discolouration of pine needles

Compartment 8964: FHR = 1
Dominant species: trembling aspen

<u>Compartment 8966:</u> FHR = 1 Dominant species: black walnut

<u>Compartment 8967</u>: FHR = 1 Dominant species: Austrian pine

Compartment 8963:
No access due to wet area

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn

Garlic mustard



Wild grape vine



Valleybrook Park Woodland ID 20 (Zone 19)

Forest Health Rating (FHR)

1 Healthy wi

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the

woodland. Gypsy moth and tar spot were both recorded as disturbances in the woodland. A total of 4 invasive plants were present; buckthorn,



garlic mustard, bindeed, purple loosestrife.

By Compartment:

Compartment 394: FHR = 1
Dominant species: sumac species
Comments: gypsy moth; tar spot

Compartment 393: Drainage

Biotic and Abiotic Disturbances

- Gypsy moth
- Tar spot

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
394	✓	✓
393	Drainage	Drainage



*Blank cells indicate that decline or mortality is not present in the compartment *FHR = Forest Health Rating



Buckthorn



Garlic mustard



Bindweed



Purple loosestrife



Woodland ID 26 (Zone 19)

East Joshua Creek Trail

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Dutch elm disease
- Gypsy moth affecting basswood and oak
- Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
381	Drainage	Drainage
382		✓
383	✓	✓
384		√



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was recorded in each compartment of the woodland. Biotic disturbances present in the woodlot included Dutch elm disease and gypsy moth. Storm damage was also recorded as an abiotic disturbance. A total of 5 invasive plants were present, with buckthorn, bindweed, and purple loosestrife being the most prevalent.

By Compartment:

Compartment 381: Drainage

Compartment 382: FHR = 1 Dominant species: accolade elm Comments: Dutch elm disease

Compartment 383: FHR = 1 Dominant species: white cedar Comments: gypsy moth on basswood and oak

Compartment 384: FHR = 1 Dominant species: willow species Comments: storm damage

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Buckthorn

Bindweed

Purple loosestrife







Sheridan Valley Park

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2 Moderately healthy, minor issues and <30% mortality

Health affected by obvious issues and >30% mortality 3

North

Woodland ID 36 (Zone 12)



Biotic and Abiotic Disturbances

- List biotic disturbances
- List abiotic disturbances
- Or, "No disturbances present"

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
219	Drainage	Drainage
220	✓	
221	✓	✓
222		✓
223		/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. No biotic disturbances were recorded. Abiotic disturbance in the woodland included storm damage. A total of 3 invasive plants were present, with buckthorn present in all forest compartments.

By Compartment:

Compartment 219: Drainage

Compartment 220: FHR = 1 Dominant species: willow Comments: storm damage

Compartment 221: FHR =3 Dominant species: pear Comments: buckthorn dominant understory

Compartment 222: FHR = 1 Dominant species: white pine Comments: storm damage

Compartment 223: FHR = 2 Dominant species: white ash Comments:

Compartment 224: FHR = 1 Dominant species: sugar maple

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn





Garlic mustard



Periwinkle



I ALLEMAND PLANT CARE

Sheridan Valley Park South

Woodland ID 37 (Zone 12)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality

214 **Sheridan Valley Park South** 4.19 ha

Biotic and Abiotic Disturbances

- Dutch elm disease
- Gypsy moth

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
218	Drainage	Drainage
225	√	
226		
227	✓	√
228		√



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. Biotic disturbance of Dutch elm disease and gypsy moth were present. No abiotic disturbance was recorded. A total of 2 invasive plants were present, with buckthorn present in all forest compartments.

By Compartment:

Compartment 218: Drainage

Compartment 225: FHR = 1 Dominant species: mixed oak

Compartment 226: FHR = 1 Dominant species: Ironwood Comments: Dutch elm disease

Compartment 227: FHR = 1 Dominant species: sugar maple Comments: gypsy moth; thick buckthorn in understory

Compartment 228: FHR = 3 Dominant species: mixed ash Comments: thick buckthorn in understory

*FHR = Forest Health Rating





Garlic mustard Buckthorn





1

Healthy with no obvious forest health issues

Iroquois Shoreline Wood

2

Moderately healthy, minor issues and <30% mortality

Forest Health Rating (FHR)

Woodland ID 39 (Zone 12)

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Anthracnose
- Gypsy moth
- Dutch elm disease
- Black knot on cherry

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
3		✓
199		
200		
202	✓	✓
205		/
211		/
214		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was recorded. Gypsy moth was the most prevalent biotic disturbance present. A total of 3 invasive plants were present, with buckthorn and garlic mustard present in all forest compartments.

By Compartment:

Compartment 3: FHR = 1
Dominant species: hawthorn
Comments: dominated by buckthorn

<u>Compartment 199:</u> FHR = 1 Dominant species: sugar maple Comments: anthracnose

Compartment 200: FHR = 1
Dominant species: mixed maple
Comments: gypsy moth; Dutch elm
disease; black knot on cherry

Compartment 202: FHR = 1
Dominant species: mixed maple
Comments: gypsy moth

<u>Compartment 205</u>: FHR = 1 Dominant species: shagbark hickory

Compartment 211: FHR = 1
Dominant species: sugar maple
Comments: gypsy moth egg masses

Compartment 214: FHR = 1
Dominant species: sugar maple
Comments: gypsy moth egg masses

Special Notes:

Forest health monitoring plots established in all compartments *FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Garlic mustard



Purple loosestrife



Forest Health Rating (FHR)

Healthy with no obvious forest health issues

Morrison Valley South

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality

U.M.R-Woodland ID 41 (Zone 7) 135 132 216 217 Morrison Valley South U.M.R. 740

Biotic and Abiotic Disturbances

- Tar spot on maples
- Gypsy moth
- Dutch elm disease

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
62	Drainage	Drainage
63		✓
64	✓	/
65		✓
66	/	✓
67		1
68		/
69		1
70	/	1
71		1

22.19 ha



Meter

*Blank cells indicate that decline or mortality is not present in the compartment

Invasive Plant Cover







Periwinkle

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. Both biotic and abiotic disturbances were recorded.

By Compartment:

Compartment 62: Drainage

Compartment 63: FHR = 1 Dominant species: red oak Comments: tar spot on maples

Compartment 64: FHR = 2 Dominant species: mixed ash Comments: gypsy moth; red oak in decline

Compartment 65: FHR = 1 Dominant species: sugar maple Comments: gypsy moth; Dutch elm disease; tar spot

Compartment 66: FHR = 1 Dominant species: sugar maple Comments: harvested

Compartment 67: FHR = 1 Dominant species: sugar maple Comments: Dutch elm disease

Compartment 68: FHR = 1 Dominant species: Ironwood Comments: gypsy moth; Dutch elm disease; tar spot

Compartment 69: FHR = 1 Dominant species: mixed maple Comments: tar spot

Compartment 70: FHR = 3 Dominant species: hawthorn

Compartment 71: FHR = 1 Dominant species: sugar maple

*FHR = Forest Health Rating





Buckthorn Garlic mustard

Oakville Woods

Woodland ID 42 (Zone 14)

Forest Health Rating (FHR)

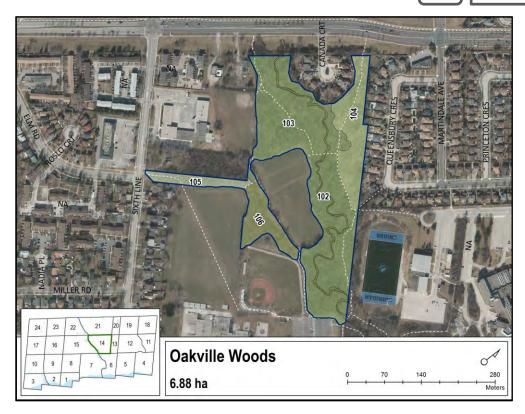
Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
102	Drainage	Drainage
103	✓	✓
104		✓
105	✓	/
106		✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. No biotic disturbance was recorded. Abiotic disturbance in the woodland included storm damage. A total of 2 invasive plants were present, with buckthorn present in all forest compartments.

By Compartment:

Compartment 102: Drainage

Compartment 103: FHR = 1 Dominant species: white ash Comments: storm damage

Compartment 104: FHR = 1 Dominant species: beech

Compartment 105: FHR = 2 Dominant species: apple Comments: storm damage

Compartment 106: FHR = 3 Dominant species: white oak

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Oakdale Park

Woodland ID 44 (Zone 14)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
2897	Drainage	Drainage
2898	✓	
2901		/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. No biotic disturbances were recorded. Abiotic disturbance was present as storm damage in compartment 2898. A total of 3 invasive plants were present, with garlic mustard present in all forest compartments.

By Compartment:

Compartment 2897: Drainage

Compartment 2898: FHR = 1 Dominant species: Apple species Comments: storm damage

Compartment 2901: FHR = 1 Dominant species: willow

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Periwinkle



Oakdale Park

Woodland ID 45 (Zone 14)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality

By Compartment:

Compartment 2902:

Compartment 2913: FHR = 1

Dominant species: Willow Comments: tar spot on maples;

Drainage

storm damage

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in the woodland. Both biotic and abiotic disturbances were recorded as tar spot and storm damage. A total of 3 invasive plants were present, buckthorn, garlic mustard, and periwinkle.



Biotic and Abiotic Disturbances

- Tar spot on maples
- Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
2902	Drainage	Drainage
2913		/



*Blank cells indicate that decline or mortality is not present in the compartment

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Garlic mustard



Periwinkle



LALLEMAND PLANT CARE

Avonhead Ridge Trail South 2

Woodland ID 64 (Zone 11)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

Health affected by obvious issues and >30% mortality 3



Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
138		
140	✓	✓
141	✓	
142	√	✓
143	/	/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were recorded. A total of 2 invasive plants were present, with buckthorn and garlic mustard present in all forest compartments.

By Compartment:

Compartment 138: FHR = 1 Dominant species: white pine

Compartment 140: FHR = 1 Dominant species: basswood

Compartment 141: FHR = 1 Dominant species: silver maple

Compartment 142: FHR = 3 Dominant species: black cherry

Compartment 143: FHR = 1 Dominant species: black walnut

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating





Buckthorn Garlic mustard





Avonhead Ridge Trail South 2

Woodland ID 65 (Zone 11)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

Moderately healthy, minor issues and <30% mortality 2

3 Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Dutch elm disease

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
648		
649		
650		
651		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Biotic disturbance of Dutch elm disease was recorded in the woodland. No abiotic disturbances were reported. A total of 3 invasive plants were present, with buckthorn and garlic mustard present in all forest compartments.

By Compartment:

Compartment 648: FHR = 1 Dominant species: Norway spruce

Compartment 649: FHR = 1 Dominant species: Silver maple Comments: Dutch elm disease

Compartment 650: FHR = 1 Dominant species: white oak Comments: buckthorn is a major component of the compartment

Compartment 651: FHR = 1 Dominant species: white elm Comments:

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Wild grape vine





Annapolis ParkWoodland ID 74 (Zone 4)

Forest Health Rating (FHR)

1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Tar spot
- Blowdown
- Harvesting

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
7361		
7362	✓	✓
7363		✓
7364		
7366		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. Minor biotic disturbance of tar spot was present. Abiotic disturbance in the woodland included blow down and harvesting. A total of 4 invasive plants were present, with buckthorn and garlic mustard present in all forest compartments.

By Compartment:

Compartment 7361: FHR = 1
Dominant species: basswood
Comments: blowdown

<u>Compartment 7362:</u> FHR = 2 Dominant species: white ash Comments: harvested

<u>Compartment 7363</u>: FHR = 1 Dominant species: Beech

Compartment 7364: FHR = 2 Dominant species: Siberian elm Comments: tar spot

<u>Compartment 7366</u>: FHR = 1 Dominant species: red oak

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Periwinkle



Wild grape vine



Munn's Creek Trail 2 Woodland ID 104 (Zone 21)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

Health affected by obvious issues and >30% mortality 3



Biotic and Abiotic Disturbances

- Dutch elm disease
- Leaf miner
- **Aphids**
- Gypsy moth

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
1713	Drainage	Drainage
1729	✓	/
1730		/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were both observed in the woodland. Biotic disturbance of Dutch elm disease, leaf miner, aphids, and gypsy moth were recorded. No abiotic disturbances were present. A total of 3 invasive plants were present, with buckthorn present in all forest compartments.

By Compartment:

Compartment 1713: Drainage

Compartment 1729: FHR = 1 Dominant species: black walnut Comments: Dutch elm disease

Compartment 1730: FHR = 2 Dominant species: pear Comments: leaf miner and aphids on pear; gypsy moth; Dutch elm disease

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn

Garlic mustard





McCraney Creek Trail

Forest Health Rating (FHR)

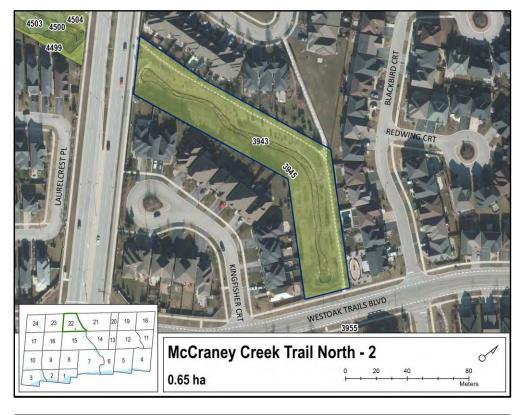
Healthy with no obvious forest health issues

2 Moderately healthy, minor issues and <30% mortality

Health affected by obvious issues and >30% mortality 3

North 2

Woodland ID 133 (Zone 22)



Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
3943	Drainage	Drainage
3945		/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were reported. Only one invasive plant was present in the woodland, purple loosestrife.

By Compartment:

Compartment 3943: Drainage

Compartment 3945: FHR = 1 Dominant species: sumac

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Purple loosestrife





McCraney Creek Trail North 2

Woodland ID 135 (Zone 22)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Hypoxylon canker
- Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
37	Drainage	Drainage
38		
39		✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of hypoxylon canker was recorded. Abiotic disturbance in the woodland included storm damage. A total of 4 invasive plants were present, with purple loosestrife recorded in both forest compartments.

By Compartment:

Compartment 37: Drainage

Compartment 38: FHR = 1
Dominant species: willow species
Comments: storm damage

Compartment 39: FHR = 1
Dominant species: silver maple
Comments: hypoxylon canker; some
spruce with dead tops

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Purple loosestrife



Garlic mustard



Buckthorn



Wild grape vine



Glen Oak Creek Trail North 1

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality

Woodland ID 139 (Zone 22)



Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
3940		
3941	Drainage	Drainage
3942	√	√



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. No biotic or abiotic disturbances were recorded. A total of 6 invasive plants were present in the woodland, with buckthorn and purple loosestrife present in all forest compartments. The 5 most prevalent invasive plants are displayed below.

By Compartment:

Compartment 3940: FHR = 1 Dominant species: black locust

Compartment 3941: Drainage

Compartment 3942: FHR = 1 Dominant species: silver maple

*FHR = Forest Health Rating



Buckthorn Purple loosestrife



Bindweed









Black alder

Glen Oak Creek Trail North 1

Forest Health Rating (FHR)

1 He

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality

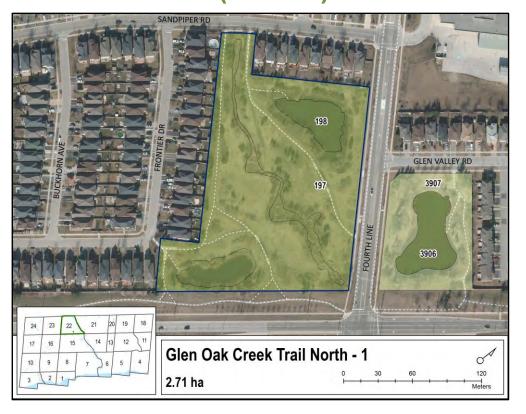
Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was

observed in the woodland. No biotic or abiotic disturbances were

recorded. A total of 5 invasive plants were present in the woodland. Each

Woodland ID 142 (Zone 22)



By Compartment:

is displayed below.

<u>Compartment 197:</u> FHR = 1 Dominant species: blue spruce

Compartment 198: Drainage

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
197		✓
198	Drainage	Drainage



*Blank cells indicate that decline or mortality is not present in the compartment

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Bindweed



Periwinkle



Purple loosestrife



Glen Oak Creek Trail North 1

Healthy with no obvious forest health issues

Forest Health Rating (FHR)

Moderately healthy, minor issues and <30% mortality 2

Health affected by obvious issues and >30% mortality 3

Woodland ID 143 (Zone 22)



Biotic and Abiotic Disturbances

Nipple gall on hackberry

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
3909	Drainage	Drainage
3910		/
3912	√	√



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. Minor biotic disturbance of nipple gall on hackberry was present in the woodland. No abiotic disturbances were recorded. A total of 6 invasive plants were present, with buckthorn and garlic mustard present in all forest compartments. The 5 most prevalent invasive plants are displayed below.

By Compartment:

Compartment 3909: Drainage

Compartment 3910: FHR = 1 Dominant species: blue spruce Comments: nipple gall on hackberry

Compartment 3912: FHR = 1 Dominant species: sumac

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Purple loosestrife



Wild grape vine



Phragmites





Oakhaven Pond Woodland ID 144 (Zone 22)

Forest Health Rating (FHR)

1 Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3 Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
100	Drainage	Drainage
101		



*Blank cells indicate that decline or mortality is not present in the compartment Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. No biotic or abiotic disturbances were present. A total of 3 invasive plants were present in the woodland; English ivy, garlic mustard, purple loosestrife.

Woodland Summary

By Compartment:

Compartment 100: Drainage

<u>Compartment 101:</u> FHR = 1 Dominant species: silver maple

*FHR = Forest Health Rating



English ivy



Garlic mustard



Purple loosestrife



Glen Valley Pond

Woodland ID 149 (Zone 22)

Forest Health Rating (FHR)

/ 1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Tar spot
- Anthracnose on Norway maple
- Apple rust

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
3906	Drainage	Drainage
3907		/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of tar spot, anthracnose, and apple rust were present. No abiotic disturbances were recorded. A total of 4 invasive plants were present in the woodland; buckthorn, bindweed, garlic mustard, purple loosestrife. These 4 are displayed below.

By Compartment:

Compartment 3906: Drainage

Compartment 3907: FHR = 1
Dominant species: mixed maple
Comments: tar spot; anthracnose on
Norway maple; apple rust

*FHR = Forest Health Rating



Buckthorn



Bindweed



Garlic mustard



Purple loosestrife



Kestell Pond

Woodland ID 150 (Zone 19)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Japanese beetle
- Discolouration and dieback on newly planted hackberry and maple trees

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
391	Drainage	Drainage
392		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Biotic disturbance of Japanese beetle, and discolouration and dieback on newly planted trees was recorded in the woodland. No abiotic disturbances were present. A total of 3 invasive plants were recorded; English ivy, garlic mustard, purple loosestrife. Each of these is displayed below.

By Compartment:

Compartment 391: Drainage

Compartment 392: FHR = 1
Dominant species: willow species
Comments: Japanese beetle;
discolouration and dieback in newly
planted hackberry and maple trees

*FHR = Forest Health Rating



English ivy



Garlic mustard



Purple loosestrife



Exception Zone 168

Woodland ID 168 (Zone 6)

Forest Health Rating (FHR)

/ 1 | |

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were recorded. A total of 2 invasive plants were present, garlic mustard and wild grape vine.

By Compartment:

<u>Compartment 10883:</u> FHR = 1 Dominant species: Austrian pine

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
10883	✓	



*Blank cells indicate that decline or mortality is not present in the compartment

*FHR = Forest Health Rating



Garlic mustard



Wild grape vine



Perkin's Passage Woodland ID 169 (Zone 6)

Forest Health Rating (FHR)

1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Forest harvesting

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
6402	Drainage	Drainage
6403		✓
6404		/
6406		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in the woodland. No biotic disturbances were recorded. Abiotic disturbance in the woodland included harvesting of ash trees in 2012. A total of 3 invasive plants were present, with garlic mustard present in all forest compartments.

By Compartment:

Compartment 6402: Drainage

<u>Compartment 6403:</u> FHR = 1 Dominant species: Manitoba maple

<u>Compartment 6404</u>: FHR = 1 Dominant species: black walnut

Compartment 6406: FHR = 1 Dominant species: green ash Comments: harvested in 2012

*FHR = Forest Health Rating



Garlic mustard



Buckthorn



Wild grape vine



Post Park

Woodland ID 172 (Zone 6)

Forest Health Rating (FHR)

/1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Hypoxylon canker on trembling aspen
- Dieback and crown thinning in Siberian elm and red pine
- Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
11841		
11842		
11844		✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Some ash mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of hypoxylon canker and dieback and crown thinning were recorded. Abiotic disturbance in the woodland included storm damage. A total of 3 invasive plants were present, with garlic mustard present in all forest compartments.

By Compartment:

<u>Compartment 11841:</u> FHR = 1 Dominant species: honey locust Comments:

<u>Compartment 11842:</u> FHR = 1 Dominant species: silver maple Comments: storm damage

Compartment 11844: FHR = 1
Dominant species: black walnut
Comments: hypoxylon canker on
trembling aspen; dieback and crown
thinning of Siberian elm and red pine

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Garlic mustard



Wild grape vine



English ivy



Glen Oak Park

Woodland ID 175 (Zone 7)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were recorded. A total of 2 invasive plants were present, buckthorn and garlic mustard.

By Compartment:

Compartment 13781: Drainage

Compartment 13784: FHR = 1 Dominant species: willow species

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
13781	Drainage	Drainage
13784		/



*Blank cells indicate that decline or mortality is not present in the compartment

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Oakville Transit

Woodland ID 178 (Zone 7)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Dutch elm disease

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
13174	Drainage	Drainage
13182		/
13443	N/A	N/A
13444	N/A	N/A
13445	N/A	N/A



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of Dutch elm disease was recorded. No abiotic disturbance was present. A total of 2 invasive plants were recorded in the woodland, buckthorn and garlic mustard. The majority of compartments in this woodland were inaccessible to survey.

By Compartment:

Compartment 13174: Drainage

Compartment 13182: FHR = #1 Dominant species: willow species Comments: Dutch elm disease

Compartment 13443: Not accessible (N/A)

Compartment 13444: Not accessible (N/A)

Compartment 13445: Not accessible (N/A)

*FHR = Forest Health Rating





Buckthorn Garlic mustard





Exception Zone 179

Woodland ID 179 (Zone 7)

Forest Health Rating (FHR)

1 Healthy with

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were recorded. A total of 3 invasive plants were present in the woodland, buckthorn, garlic mustard, and purple loosestrife.

By Compartment:

<u>Compartment 13169:</u> FHR = 1 Dominant species: willow species

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
13169		✓



*Blank cells indicate that decline or mortality is not present in the compartment *FHR = Forest Health Rating



Buckthorn



Garlic mustard



Purple loosestrife



Exception Zone 183

Woodland ID 183 (Zone 7)

Forest Health Rating (FHR)

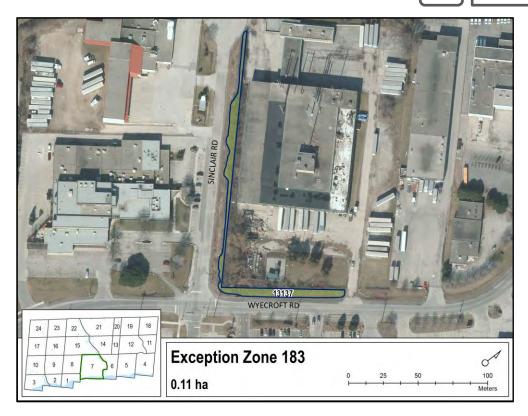
Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were recorded. A total of 2 invasive plants were present in the woodland, buckthorn and garlic mustard.

By Compartment:

Compartment 13137: FHR = 1 Dominant species: sumac

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
13137		✓



*Blank cells indicate that decline or mortality is not present in the compartment

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Bronte Beach ParkWoodland ID 197 (Zone 3)

Forest Health Rating (FHR)

1 Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3 Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Biotic disturbances of leaf minor, webworm, and anthracnose were recorded in the woodland. There were no abiotic disturbances present. No invasive plants were found in this woodland.

By Compartment:

Compartment 15054: FHR = 1
Dominant species: white birch
Comments: leaf miner; webworm
nest on birch; anthracnose

Biotic and Abiotic Disturbances

- Leaf miner
- Webworm nest on birch
- Anthracnose

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
15054		



*Blank cells indicate that decline or mortality is not present in the compartment

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating

Invasive Plant Cover

No invasive plants present



Bronte Beach/ Bronte Bluffs

Woodland ID 198 (Zone 3)

Forest Health Rating (FHR)

/[1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
16657		
16658	✓	✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were recorded. Garlic mustard was the only invasive plant present in the woodlot.

By Compartment:

<u>Compartment 16657:</u> FHR = 1 Dominant species: Manitoba maple

<u>Compartment 16658:</u> FHR = 1 Dominant species: silver poplar

*FHR = Forest Health Rating



Garlic mustard





Bronte Harbour

Woodland ID 199 (Zone 3)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

Health affected by obvious issues and >30% mortality 3



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were recorded. A total of 2 invasive plants were present in the woodland, buckthorn and garlic mustard.

By Compartment:

Compartment 15053: FHR = 1 Dominant species: mixed maples

Biotic and Abiotic Disturbances

- List biotic disturbances
- List abiotic disturbances
- Or, "No disturbances present"

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
15053	✓	



*Blank cells indicate that decline or mortality is not present in the compartment

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Riverview Park

Woodland ID 207 (Zone 3)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Gypsy moth defoliation and egg masses
- Hypoxolon canker on trembling aspen
- Harvesting of ash trees

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
111	Drainage	Drainage
112	✓	
113	N/A	N/A
114	✓	
115	√	✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. Biotic disturbance of gypsy moth and hypoxylon canker were present. Abiotic disturbance in the woodland included recent harvesting of ash trees. A total of 3 invasive plants were present, with buckthorn and garlic mustard present in all forest compartments.

By Compartment:

Compartment 111: Drainage

Compartment 112: FHR = 1 Dominant species: white birch Comments: gypsy moth defoliation and egg masses; hypoxylon canker on trembling aspen;

Compartment 113:

Dominant species: willow species Not accessible

Compartment 114: FHR = 1 Dominant species: green ash

Compartment 115: FHR = 1 Dominant species: mixed oak Comments: gypsy moth; harvesting of ash

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Garlic mustard







Bronte Creek

Woodland ID 232 (Zone 10)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
15681		
15683		
15686		/
15689		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Some ash mortality due to emerald ash borer was observed in the woodland. No biotic disturbances were recorded. Storm damage was the only abiotic disturbance present. Buckthorn was the only invasive plant recorded in the woodland.

By Compartment:

<u>Compartment 15681:</u> FHR = 1 Dominant species: Norway maple

<u>Compartment 15683:</u> FHR = 1 Dominant species: sugar maple Comments: storm damage

<u>Compartment 15686:</u> FHR = # Dominant species: Scots pine

Compartment 15689: FHR = 1
Dominant species: apple

*FHR = Forest Health Rating



Buckthorn



Red Oak Trail

Woodland ID 238 (Zone 10)

Forest Health Rating (FHR)

/ 1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
244	Drainage	Drainage
245	_	_
246	✓	✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. No biotic disturbance was recorded. Abiotic disturbance in the woodland included storm damage. A total of 3 invasive plants were present, with bindweed present in all forest compartments.

By Compartment:

Compartment 244: Drainage

<u>Compartment 245:</u> FHR = 1 Dominant species: willow species

<u>Compartment 246:</u> FHR = 2 Dominant species: willow Comments: storm damage on willow

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Bindweed



Garlic mustard



Buckthorn



Arbourview PondWoodland ID 253 (Zone 23)

Forest Health Rating (FHR)

1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Gypsy moth on bur oak and hickory

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
4539	Drainage	Drainage
4818	√	
4819		
4821		✓
4841		✓
4844	✓	/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. Biotic disturbance of gypsy moth on bur oak and hickory was recorded. A total of 5 invasive plants were present, with buckthorn present in all forest compartments.

By Compartment:

Compartment 4539: Drainage

Compartment 4818: FHR = 1
Dominant species: bur oak
Comments: gypsy moth on bur oak

<u>Compartment 4819:</u> FHR = 1 Dominant species: willow species

<u>Compartment 4821:</u> FHR = 1 Dominant species: American beech

<u>Compartment 4841</u>: FHR = 1 Dominant species: spruce species

Compartment 4844: FHR = 1
Dominant species: mixed oak
Comments: gypsy moth on hickory

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Garlic mustard



Purple loosestrife



Bindweed



Periwinkle



Town of Oakville Urban Forest Health Monitoring Program – Detection Survey Results 2014

Fourteen Mile Creek Trail 1

Woodland ID 256 (Zone 23)

Forest Health Rating (FHR)

1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Storm damage on willow

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
29	Drainage	Drainage
31	√	/
33	✓	
35		✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. No biotic disturbance was recorded. Abiotic disturbance of storm damage on willow was present. A total of 2 invasive plants were present, buckthorn and garlic mustard.

By Compartment:

Compartment 29: Drainage

Compartment 31: FHR = 1 Dominant species: white cedar

Compartment 33: FHR = 1 Dominant species: hawthorn Comments: storm damage on willow

Compartment 35: FHR = 1 Dominant species: mixed maple

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating





Garlic mustard



East Fourteen Mile Creek Trail 1

Woodland ID 258 (Zone 23)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. No biotic disturbances were present. Abiotic disturbance in the woodland included leaf scorch on planted maple trees. A total of 3 invasive plants were present, garlic mustard, purple loosestrife, phragmites.

By Compartment:

Compartment 18897: Drainage

Compartment 18902: FHR = 1
Dominant species: willow
Comments: leaf scorch on planted
maple

Biotic and Abiotic Disturbances

Leaf scorch on planted maple

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
18897	Drainage	Drainage
18902		



*Blank cells indicate that decline or mortality is not present in the compartment

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating

Invasive Plant Cover



Garlic mustard



Purple loosestrife



Phragmites



Arbourview Trail 1 Woodland ID 260 (Zone 23)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Dutch elm disease
- Gypsy moth defoliation on mature oak
- Storm damage
- Mechanical damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
4523		
4525		
4527		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Biotic disturbance of Dutch elm disease and gypsy moth were present. Abiotic disturbance in the woodland included storm damage and mechanical damage. A total of 3 invasive plants were present, with buckthorn and garlic mustard present in all forest compartments.

By Compartment:

Compartment 4523: FHR = 1 Dominant species: silver maple

Compartment 4525: FHR = 1 Dominant species: white pine Comments: Dutch elm disease; storm damage; mechanical damage

Compartment 4527: FHR = 1 Dominant species: white oak Comments: gypsy moth defoliation on mature oak; Dutch elm disease

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Wild grape vine



McCraney Creek Trail

Forest Health Rating (FHR)

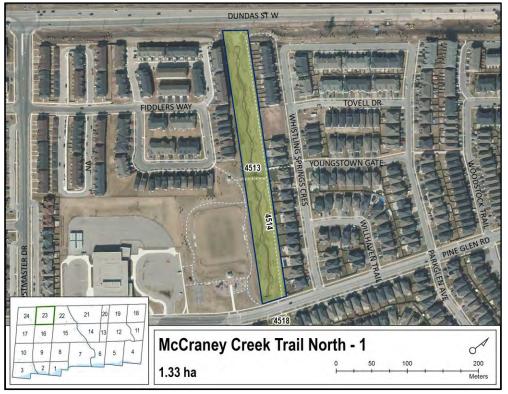
Healthy with no obvious forest health issues

Moderately healthy, minor issues and <30% mortality 2

Health affected by obvious issues and >30% mortality 3

North 2

Woodland ID 264 (Zone 23)



Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
4513	Drainage	Drainage
4514		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. No biotic or abiotic disturbances were recorded. There were no invasive plants found in the woodland.

By Compartment:

Compartment 4513: Drainage

Compartment 4514: FHR = 1 Dominant species: basswood

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating

Invasive Plant Cover

No Invasive Plants Present





McCraney Creek Trail North 1

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

Moderately healthy, minor issues and <30% mortality 2

Health affected by obvious issues and >30% mortality 3

Woodland ID 265 (Zone 23)



Biotic and Abiotic Disturbances

Dieback in young planted maple trees

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
4516	Drainage	Drainage
4518	√	✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. No biotic disturbances were present in the woodland. Abiotic disturbance was present as dieback in young planted maple trees. A total of 2 invasive plants were present, purple loosestrife and black alder.

By Compartment:

Compartment 4516: Drainage

Compartment 4518: FHR = 1 Dominant species: willow species Comments: dieback in young planted maple trees

*FHR = Forest Health Rating



Purple loosestrife



Black alder





McCraney Creek Trail North 1

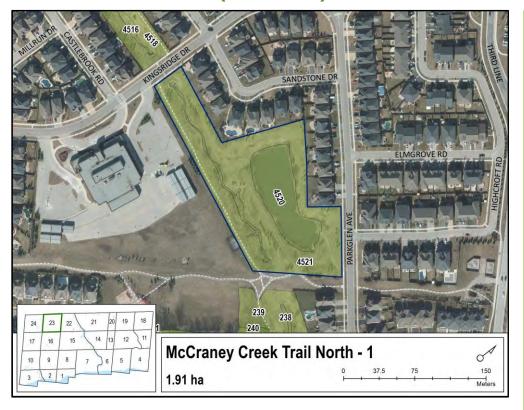
Forest Health Rating (FHR)

Healthy with no obvious forest health issues

Moderately healthy, minor issues and <30% mortality 2

Health affected by obvious issues and >30% mortality 3

Woodland ID 266 (Zone 23)



Biotic and Abiotic Disturbances

Leaf scorch

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
4520	Drainage	Drainage
4521	✓	✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed in the woodland. No biotic disturbances were recorded. Abiotic disturbance in the woodland included leaf scorch. Black alder was the only invasive plant recorded in the woodland.

By Compartment:

Compartment 4520: Drainage

Compartment 4521: FHR = 1 Dominant species: willow species Comments: young planted trees in decline; leaf scorch

*FHR = Forest Health Rating



Black alder





Woodgate Woods

Woodland ID 267 (Zone 23)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Dutch elm disease
- Gypsy moth
- Anthracnose

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
238	Drainage	Drainage
239		
240	✓	✓
241		/
242		/
243	✓	/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer were observed. Biotic disturbance of Dutch elm disease. gypsy moth, and anthracnose were present. No abiotic disturbances were recorded in the woodland. A total of 2 invasive plants were present, with buckthorn and garlic mustard.

By Compartment:

Compartment 238: Drainage

Compartment 239: FHR = 1 Dominant species: trembling aspen Comments:

Compartment 240: FHR = 2 Dominant species: white ash Comments: Dutch elm disease

Compartment 241: FHR = 1 Dominant species: shagbark hickory

Compartment 242: FHR = 1 Dominant species: shagbark hickory

Compartment 243: FHR = 1 Dominant species: sugar maple Comments: gypsy moth; anthracnose on oak species

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating





Buckthorn Garlic mustard



Colonel Williams Trail

Woodland ID 269 (Zone 24)

Forest Health Rating (FHR)

/1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
5448	Drainage	Drainage
5449		
5451		
5453		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. No biotic or abiotic disturbances were present in the woodland. Garlic mustard was the only invasive plant recorded in the woodland and it was present in all compartments.

By Compartment:

Compartment 5448: Drainage

<u>Compartment 5449:</u> FHR = 1 Dominant species: white spruce

<u>Compartment 5451</u>: FHR = 1 Dominant species: black locust

<u>Compartment 5453</u>: FHR = 1 Dominant species: trembling aspen

*FHR = Forest Health Rating



Garlic mustard



Fourteen Mile Creek Trail 1

Woodland ID 271 (Zone 24)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Gypsy moth
- Tar spot
- Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
6182	Drainage	Drainage
6186		
6187		
6188		
6196		✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Some ash mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of gypsy moth and tar spot were present. Abiotic disturbance in the woodland included storm damage. A total of 2 invasive plants were present, buckthorn and garlic mustard.

By Compartment:

Compartment 6182: Drainage

<u>Compartment 6186:</u> FHR = 1 Dominant species: Norway spruce

Compartment 6187: FHR = 1 Dominant species:

Compartment 6188: FHR = 2
Dominant species: sugar maple
Comments: gypsy moth; tar spot;
storm damage; crown decline in
mature maples

<u>Compartment 6196</u>: FHR = 1 Dominant species: white pine

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Garlic mustard



Colonel Williams Trail

Woodland ID 272 (Zone 24)

Forest Health Rating (FHR)

/1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Gypsy moth
- Hypoxylon canker

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
5454	Drainage	Drainage
5456		
5762		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Biotic disturbance of gypsy moth and hypoxylon canker were present in the woodland. No abiotic disturbance was recorded. Garlic mustard was the only invasive plant recorded and it was present in both forest compartments.

By Compartment:

Compartment 5454:
Drainage

Compartment 5456: FHR = 1
Dominant species: trembling aspen
Comments: gypsy moth; hypoxylon
canker

Compartment 5762: FHR = 1
Dominant species: trembling aspen
Comments: hypoxylon canker

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Garlic mustard



Exception Zone 278

Woodland ID 278 (Zone 7)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. No biotic or abiotic disturbances were recorded in the woodland. Garlic mustard was the only invasive plant present.

By Compartment:

<u>Compartment 13154:</u> FHR = 1 Dominant species: black locust

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
13154		



*Blank cells indicate that decline or mortality is not present in the compartment *FHR = Forest Health Rating



Garlic mustard



St. Jude's Cemetery Woodland ID 279 (Zone 7)

Forest Health Rating (FHR)

/1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Some ash decline due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were present. A total of 3 invasive plants were present, buckthorn, garlic mustard, and purple loosestrife.

By Compartment:

Compartment 13155: FHR = 1 Dominant species: red oak

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
13155	✓	



*Blank cells indicate that decline or mortality is not present in the compartment *FHR = Forest Health Rating



Buckthorn



Garlic mustard



Purple loosestrife



Exception Zone 280

Woodland ID 280 (Zone 8)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. No biotic or abiotic disturbances were recorded in the woodland. A total of 3 invasive plants were present, garlic mustard, purple loosestrife, and wild grape

By Compartment:

Compartment 13156: FHR = 1 Dominant species: willow

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
13156		



*Blank cells indicate that decline or mortality is not present in the compartment

*FHR = Forest Health Rating



Garlic mustard



Purple loosestrife



Wild grape vine



Sunningdale Public School

Woodland ID 284 (Zone 14)

Forest Health Rating (FHR)

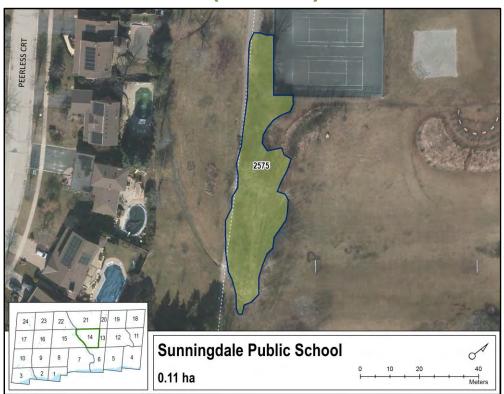
Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were recorded. A total of 2 invasive plants were present, buckthorn and garlic mustard.

By Compartment:

Compartment 2575: FHR = 1 Dominant species: buckthorn Comments:

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
2575	/	



*Blank cells indicate that decline or mortality is not present in the compartment

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Buckthorn Garlic mustard



Exception Zone 285

Woodland ID 285 (Zone 7)

Forest Health Rating (FHR)

1 Healthy with

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Some ash mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of tar spot on predominantly understory maples was present. No abiotic disturbances were recorded. Garlic mustard was the only invasive plant present in the woodland.

By Compartment:

<u>Compartment 1377:</u> FHR = 1 Dominant species: white ash Comments: tar spot on maple

Biotic and Abiotic Disturbances

Tar spot on maple

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
1377		✓



*Blank cells indicate that decline or mortality is not present in the compartment

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Garlic mustard



Brook Valley ParkWoodland ID 286 (Zone 8)

Forest Health Rating (FHR)

1 Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3 Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
14116	Drainage	Drainage
14120		/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Some ash mortality due to emerald ash borer was observed in the woodland. No biotic disturbances were recorded. Abiotic disturbance in the woodland included storm damage. General decline in willow and discolouration of pine foliage was also recorded. A total of 2 invasive plants were present, garlic mustard and bindweed.

By Compartment:

Compartment 14116: Drainage

Compartment 14120: FHR = 1 Dominant species: willow Comments: discolouration in pine foliage; general decline in willow; storm damage

*FHR = Forest Health Rating



Garlic mustard



Bindweed



Sunningdale Public School

Woodland ID 288 (Zone 14)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. Ash decline due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were recorded. A total of 2 invasive plants were present, buckthorn and garlic mustard.

By Compartment:

Compartment 2574: FHR = 1 Dominant species: buckthorn

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
2574	√	



*Blank cells indicate that decline or mortality is not present in the compartment

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Buckthorn Garlic mustard



Queens Parkette Woodland ID 289 (Zone 14)

Forest Health Rating (FHR)

1 Healthy w

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. No biotic or abiotic disturbances were recorded in the woodland. Buckthorn was the only invasive plant species found in the woodland.

By Compartment:

<u>Compartment 1603:</u> FHR = 1 Dominant species: serviceberry

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
1603		



*Blank cells indicate that decline or mortality is not present in the compartment *FHR = Forest Health Rating



Buckthorn



Exception Zone 290

Woodland ID 290 (Zone 7)

Forest Health Rating (FHR)

/ 1

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is healthy with no obvious issues affecting the dominant tree canopy. No biotic or abiotic disturbances were recorded in the woodland. A total of 2 invasive plants were present, buckthorn and periwinkle.

By Compartment:

<u>Compartment 12491:</u> FHR = 1 Dominant species: Norway maple

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
12491		



*Blank cells indicate that decline or mortality is not present in the compartment

*FHR = Forest Health Rating



Buckthorn



Periwinkle



Pinewood Park

Woodland ID 4 (Zone 5)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Tar spot
- Anthracnose
- Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
10569	✓	/
10573		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of tar spot and anthracnose were present. Abiotic disturbance in the woodland included storm damage. A total of 6 invasive plants were present, with buckthorn, garlic mustard, and wild grape vine recorded in all forest compartments.

By Compartment:

Compartment 10569: FHR = 2 Dominant species: white ash Comments: tar spot; anthracnose; dead branches on white birch

Compartment 10573: FHR = 2 Dominant species: Siberian elm Comments: anthracnose on elm; tar spot on Manitoba maple; storm damage on elm

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Garlic mustard



Wild grape vine



Purple loosestrife



Periwinkle



Cornwall Woods

Woodland ID 8 (Zone 5)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Tar spot on maple
- Anthracnose
- Discolouration of foliage
- Harvested

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
9282	Drainage	Drainage
9301	N/A	N/A
9290		
9291		✓
9292	/	√



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. Biotic disturbance recorded included tar spot on maple, anthracnose, and foliage discolouration. Abiotic disturbance in the woodland included harvesting. A total of 4 invasive plants were present, with buckthorn and garlic mustard present in all forest compartments.

By Compartment:

Compartment 9282: Drainage

Compartment 9301: No access due to fence

Compartment 9290: FHR = 1 Dominant species: white pine Comments: tar spot on Norway maple; browning of pine needles

Compartment 9291: FHR = 1 Dominant species: Manitoba maple

Compartment 9292: FHR = 2 Dominant species: basswood Comments: anthracnose; tar spot on maple; discolouration of basswood foliage; harvested

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn

Garlic mustard





Wild grape vine



Cornwall Road Buffer

Woodland ID 30 (Zone 5)

Forest Health Rating (FHR)

1 Healthy with no obvious forest health issues

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
9601	✓	✓
9602	✓	✓
9603		✓
9604	✓	/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in each compartment of the woodland. No biotic disturbances were present. Abiotic disturbance in the woodland included recent storm damage. A total of 6 invasive plants were present, with buckthorn present in all forest compartments. The five most prevalent species are displayed below.

By Compartment:

Compartment 9601: FHR = 1
Dominant species: mixed maple
Comments: storm damage

<u>Compartment 9602:</u> FHR = 1 Dominant species: black walnut

<u>Compartment 9603</u>: FHR = 1 Dominant species: Austrian pine

Compartment 9604: FHR = 3 Dominant species: white ash

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Garlic mustard



Purple loosestrife



Goutweed



Wild grape vine



Town of Oakville Urban Forest Health Monitoring Program – Detection Survey Results 2014

Forest Health Rating (FHR)

Chamberlain Walk Park

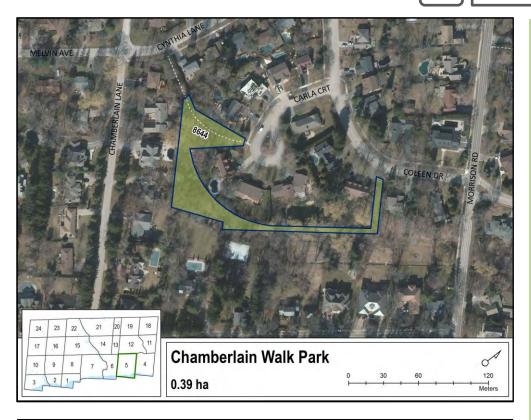
Healthy with no obvious forest health issues

Moderately healthy, minor issues and <30% mortality

Woodland ID 32 (Zone 5)

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. No biotic disturbance was present. Abiotic disturbance in the woodland included storm damage on willow. A total of 4 invasive plants were recorded in the woodland.

By Compartment:

Compartment 8644: FHR = 2 Dominant species: white ash Comments: storm damage on willow

Biotic and Abiotic Disturbances

Storm damage on willow

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
8644	✓	✓



*Blank cells indicate that decline or mortality is not present in the compartment

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Garlic mustard



Periwinkle



Wild grape vine



Town of Oakville Urban Forest Health Monitoring Program – Detection Survey Results 2014

Ford Woods

Woodland ID 34 (Zone 12)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
642	√	/
644		
645		✓
646		✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were present. A total of 2 invasive plants were present, buckthorn and garlic mustard. Both species were recorded in all forest compartments.

By Compartment:

Compartment 642: FHR = 3 Dominant species: white ash

Compartment 644: FHR = 1 Dominant species: mixed pine

Compartment 645: FHR = 1 Dominant species: Manitoba maple

Compartment 646: FHR = 2 Dominant species: willow

*FHR = Forest Health Rating





Buckthorn



Garlic mustard



Ontario Hydro / **College Park 1**

Woodland ID 43 (Zone 14)

Forest Health Rating (FHR)

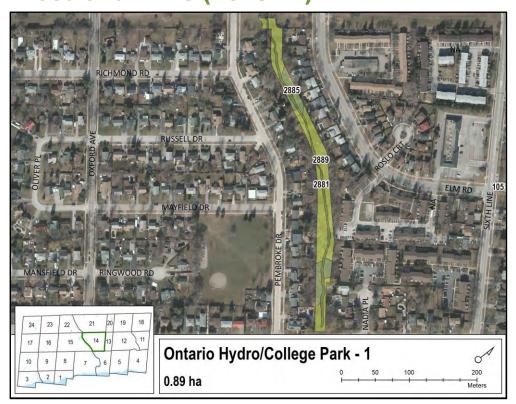
Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Blowdown
- Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
2881	Drainage	Drainage
2885	-	_
2889		/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Some ash mortality due to emerald ash borer was observed in the woodland. No biotic disturbances were present. Abiotic disturbance in the woodland included blowdown and storm damage. A total of 4 invasive plants were present, each recorded in all forest compartments.

By Compartment:

Compartment 2881: Drainage

Compartment 2885: FHR = 2 Dominant species: Manitoba maple Comments: blowdown; storm damage

Compartment 2889: FHR = 2 Dominant species: willow Comments: storm damage

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



English ivy



Periwinkle



Winston Woods

Woodland ID 60 (Zone 18)

Forest Health Rating (FHR)

1 Healthy with no obvious forest health issues

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Gypsy moth
- Leaf rollers
- Leaf miners
- · Harvesting of ash trees

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
335		/
336		✓
337		/
338		/
339		√
340		/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in each compartment of the woodland. Gypsy moth and harvesting of ash trees were the most prevalent disturbances recorded. A total of 2 invasive plants were present.

By Compartment:

Compartment 335: FHR = 2
Dominant species: mixed oak species
Comments: gypsy moth; harvesting of ash trees

Compartment 336: FHR = 2
Dominant species: mixed ash species
Comments: gypsy moth; leaf rollers on
basswood; leaf miners on elm;
harvesting of ash trees

Compartment 337: FHR = 2
Dominant species: white ash
Comments: gypsy moth on oak and
hickory; harvesting of ash trees

<u>Compartment 338</u>: FHR = 2 Dominant species: red oak Comments: gypsy moth egg masses

Compartment 339: FHR = 2
Dominant species: mixed oak species
Comments: gypsy moth on hickory and
oak; tar spot on maple

Compartment 340: FHR = 2
Dominant species: shagbark hickory
Comments: gypsy moth; rust on
hawthorn

*FHR = Forest Health Rating





Buckthorn

Garlic mustard





Ardleigh Park Woodland ID 72 (Zone 4)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of tar spot on Norway maple was present, but no abiotic disturbances were recorded. A total of 4 invasive plants were present in the woodland.

By Compartment:

Compartment 8329: FHR = 2 Dominant species: white ash Comments: tar spot on Norway maple

Biotic and Abiotic Disturbances

Tar spot on Norway maple

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
8329	✓	✓



*Blank cells indicate that decline or mortality is not present in the compartment

*FHR = Forest Health Rating



Buckthorn



Garlic mustard





Wild grape vine



Interprovincial Pipeline 2

Woodland ID 95 (Zone 21)

Forest Health Rating (FHR)

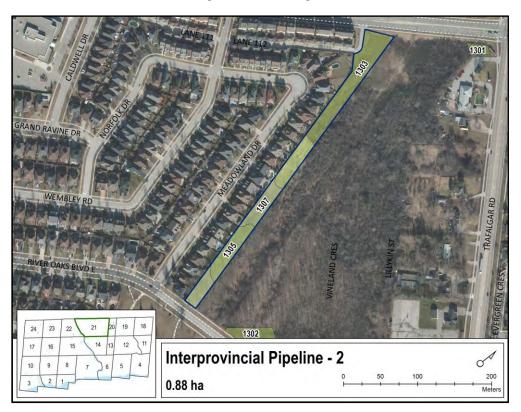
1 Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Gypsy moth
- Dutch elm disease

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
1303		
1305		✓
1307		✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of gypsy moth and Dutch elm disease were present. No abiotic disturbances were recorded in the woodland. A total of 4 invasive plants were present.

By Compartment:

<u>Compartment 1303:</u> FHR = 1 Dominant species: no trees

Compartment 1305: FHR = 2
Dominant species: white elm
Comments: gypsy moth on oak;
Dutch elm disease

Compartment 1307: FHR = 2
Dominant species: mixed oak species
Comments: gypsy moth on oak and hickory; Dutch elm disease

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Purple loosestrife



Wild grape vine



Phragmites





Munn's Creek Trail 1

Woodland ID 103 (Zone 21)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

_2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Gypsy moth
- Dutch elm disease
- Powdery mildew
- Foliar rust on hawthorn
- Tar spot
- Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
72	Drainage	Drainage
74	✓	√



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. Numerous biotic disturbances were present. Abiotic disturbance was recorded as storm damage in the woodland. A total of 5 invasive plants were observed.

By Compartment:

Compartment 72: Drainage

Compartment 74: FHR = 2 Dominant species: mixed maple species

Comments: gypsy moth on oak; Dutch elm disease; powdery mildew; foliar rust on hawthorn; tar spot; storm damage

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Purple loosestrife



Phragmites



Wild grape vine





River Oaks Park

Woodland ID 108 (Zone 21)

Forest Health Rating (FHR)

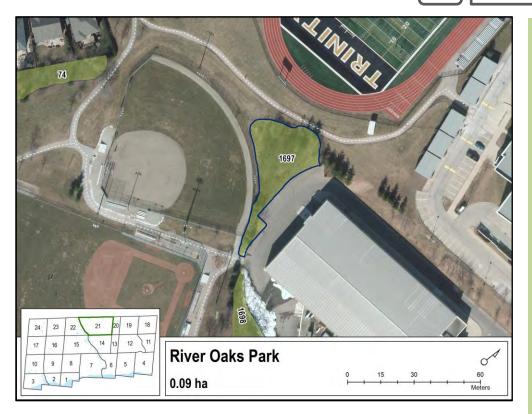
Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Biotic disturbance of leaf miner, defoliation, and foliar rusts were present in the woodland. No abiotic disturbance was recorded. A total of 2 invasive plants were present, buckthorn and garlic mustard.

By Compartment:

Compartment 1697: FHR = 2 Dominant species: white pine Comments: leaf miner on basswood; defoliation of oak: foliar rust on cherry and hawthorn

Biotic and Abiotic Disturbances

- Leaf miner on basswood
- Defoliation on oak
- Foliar rusts on cherry and hawthorn

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

	Compartment	Decline	Mortality
Г	1697		



*Blank cells indicate that decline or mortality is not present in the compartment

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



McCraney Creek Trail North 2

1 Healthy with no obvious forest health issues

2 Moderately healthy, minor issues and <30% mortality

Forest Health Rating (FHR)

3 Health affected by obvious issues and >30% mortality

Woodland ID 134 (Zone 22)



Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
3953	Drainage	Drainage
3954		✓
3955		/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash mortality due to emerald ash borer was observed in the woodland. No biotic or abiotic disturbances were present. A total of 3 invasive plants were recorded in the woodland.

By Compartment:

Compartment 3953: Drainage

<u>Compartment 3954:</u> FHR = 1 Dominant species: white pine

Compartment 3955: FHR = 2
Dominant species: silver maple
Comments: significant ash mortality

*FHR = Forest Health Rating



Garlic mustard



Purple loosestrife



Wild grape vine



Cornwall Road Sports

Park

Woodland ID 165 (Zone 6)

Forest Health Rating (FHR)

1 Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Gypsy moth defoliation

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
7687	✓	✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of gypsy moth defoliation was present. No abiotic disturbance in the woodland was recorded. A total of 4 invasive plants were observed in the forest compartment.

By Compartment:

Compartment 7687: FHR = 2
Dominant species: white ash
Comments: gypsy moth defoliation;
decline in intermediate ash

*FHR = Forest Health Rating



Buckthorn



Purple loosestrife



Wild grape vine



Phragmites



Westgate Park Woodland ID 174 (Zone 7)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2 Moderately healthy, minor issues and <30% mortality

3 Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Blowdown

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
13785	Drainage	Drainage
13789		✓
14087		./



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. No biotic disturbance was present. Abiotic disturbance in the woodland included blowdown of trees. A total of 2 invasive plants were present, with buckthorn and garlic mustard present in all forest compartments.

By Compartment:

Compartment 13785: Drainage

Compartment 13789: FHR = 1
Dominant species: Norway spruce
Comments: blowdown

<u>Compartment 14087:</u> FHR = 2 Dominant species: white ash

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Sixteen Mile Creek South QEW 2

Woodland ID 185 (Zone 7)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Tar spot

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Γ	Compartment	Decline	Mortality
Г	12490		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Biotic disturbance of tar spot on maple was present. No abiotic disturbance was recorded in the woodland. General decline in maples was noted due to thinning crowns and dead branches. A total of 2 invasive plants were present in the forest compartment, buckthorn and garlic mustard.

By Compartment:

Compartment 12490: FHR = 2 Dominant species: sugar maple Comments: tar spot; crown thinning in maple trees

*FHR = Forest Health Rating



Buckthorn



Garlic mustard





Birch Hill Promenade

Woodland ID 192 (Zone 7)

Forest Health Rating (FHR)

1 Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Tar spot

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
13766		
13767		
13768		
13769		
13771	✓	✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Some ash decline and mortality due to emerald ash borer was observed in the woodland. Tar spot was the only biotic disturbance present. No abiotic disturbance was recorded in the woodland. Garlic mustard was the only invasive plant present.

By Compartment:

<u>Compartment 13766:</u> FHR = 1 Dominant species: Scots pine

Compartment 13767: FHR = 1
Dominant species: Austrian pine
Comments: browning on pine foliage

Compartment 13768: FHR = 1 Dominant species: willow

<u>Compartment 13769:</u> FHR = 1 Dominant species: balsam poplar

Compartment 13771: FHR = 2
Dominant species: white ash
Comments: tar spot; white ash and
white pine thin foliage and
discolouration

*FHR = Forest Health Rating



Garlic mustard



Thornlea Park

Woodland ID 196 (Zone 2)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

/ 2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. No biotic disturbances were present in the woodland. Abiotic disturbance included recent harvesting of ash trees. A total of 4 invasive plants



By Compartment:

compartment.

were present in the forest

Compartment 14401: Drainage

<u>Compartment 14404:</u> FHR = 2 Dominant species: green ash Comments: harvesting of ash trees

Biotic and Abiotic Disturbances

Harvesting of ash trees

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
14401	Drainage	Drainage
14404		



*Blank cells indicate that decline or mortality is not present in the compartment

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Wild grape vine



Purple loosestrife



Bindweed



LALLEMAND PLANT CARE

Village Wood Park Woodland ID 209 (Zone 3)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

Moderately healthy, minor issues and <30% mortality 2

> Health affected by obvious issues and >30% mortality 3



Biotic and Abiotic Disturbances

- Dutch elm disease
- Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
229	Drainage	Drainage
230	✓	✓
231	√	
232	√	✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of Dutch elm disease was present. Abiotic disturbance in the woodland included storm damage on white pine. A total of 3 invasive plants were present, with buckthorn and garlic mustard present in all forest compartments.

By Compartment:

Compartment 229: Drainage

Compartment 230: FHR = 1 Dominant species: white pine Comments: Dutch elm disease; storm damage on white pine

Compartment 231: FHR = 1 Dominant species: green ash

Compartment 232: FHR = 2 Dominant species: white ash

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Garlic mustard

Wild grape vine



LALLEMAND PLANT CARE

Nautical Woods Woodland ID 211 (Zone 3)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

Moderately healthy, minor issues and <30% mortality 2

> Health affected by obvious issues and >30% mortality 3



Biotic and Abiotic Disturbances

Anthracnose

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
17301	Drainage	Drainage
17302	✓	
17303	✓	✓
17307	√	/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of anthracnose on red oak was present. No abiotic disturbance was recorded in the woodland. A total of 3 invasive plants were present, with buckthorn present in all forest compartments.

By Compartment:

Compartment 17301: Drainage

Compartment 17302: FHR = 1 Dominant species: red oak

Compartment 17303: FHR = 1 Dominant species: red oak Comments: anthracnose on red oak

Compartment 17307: FHR = 3 Dominant species: green ash

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Purple loosestrife



Sheldon Creek Park

Woodland ID 213 (Zone 3)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Tar spot on understory sugar maple

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
16641	Drainage	Drainage
16643	√	/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. Minor biotic disturbance of tar spot on understory sugar maple was present. No abiotic disturbance was recorded in the woodland. A total of 2 invasive plants were present in the forest compartment, buckthorn and garlic mustard.

By Compartment:

Compartment 16641: Drainage

Compartment 16643: FHR = 2 Dominant species: willow Comments: tar spot on understory sugar maple

*FHR = Forest Health Rating





Buckthorn



Garlic mustard



Creek Path WoodsWoodland ID 218 (Zone 3)

Forest Health Rating (FHR)

1 Healthy with no obvious forest health issues

2 Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Gypsy moth

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
16337	Drainage	Drainage
16339		✓
16345	✓	/
16347	✓	



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of gypsy moth was present in all three forest compartments. No abiotic disturbance was recorded in the woodland. A total of 3 invasive plants were present, with buckthorn present in all forest compartments.

By Compartment:

Compartment 16337: Drainage

Compartment 16339: FHR = 2
Dominant species: white spruce
Comments: gypsy moth defoliation
on small oaks

Compartment 16345: FHR = 1
Dominant species: pear
Comments: gypsy moth defoliation
on young oaks and basswood

Compartment 16347: FHR = 2
Dominant species: hawthorn
Comments: gypsy moth defoliation
on young oaks and basswood;
poplar in compartment is dead and
dying

*FHR = Forest Health Rating



Buckthorn



Wild grape vine



Purple loosestrife





Exception Zone 240

Woodland ID 240 (Zone 10)

Forest Health Rating (FHR)

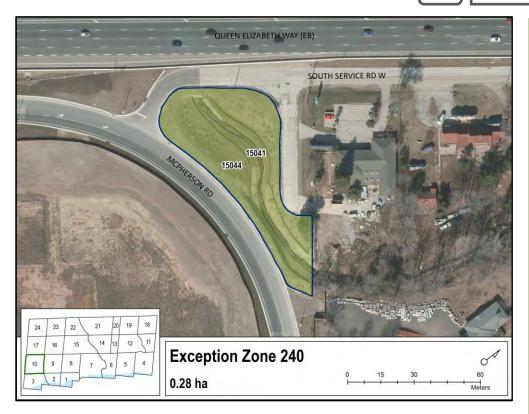
1 Healthy with no obvious forest health issues

1 2

Moderately healthy, minor issues and <30% mortality

3

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Drought

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
15041	Drainage	Drainage
15044		



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. No biotic disturbances were present in the woodland. Abiotic disturbance included drought. The woodland itself was assessed as a poor site for growing condition of trees. No invasive plants were observed.

By Compartment:

Compartment 15041: Drainage

Compartment 15044: FHR = 2
Dominant species: silver maple
Comments: drought; poor growing
conditions

*FHR = Forest Health Rating

Invasive Plant Cover

No Invasive Plants Present



Falling Green Pond Woodland ID 261 (Zone 23)

Forest Health Rating (FHR)

1 Healthy with no obvious forest health issues

2 Moderately healthy, minor issues and <30% mortality

3 Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Foliar discolouration in maple

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
17	Drainage	Drainage
19	√	√



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the woodland is moderately healthy with minor issues affecting the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. No specific biotic or abiotic disturbances were present. Discolouration in maple crowns and general decline in ash trees was recorded. No invasive plants were observed in the woodland.

By Compartment:

Compartment 17: Drainage

Compartment 19: FHR = 2
Dominant species: ash species
Comments: foliar discolouration in
maple; general decline in ash trees

*FHR = Forest Health Rating

Invasive Plant Cover

No Invasive Plants Present



Aspen Forest ParkWoodland ID 79 (Zone 4)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2 Moderately healthy, minor issues and <30% mortality

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the health of the woodland is affected by obvious issues in the dominant tree canopy. Significant ash decline and mortality due to emerald ash borer was observed in the woodland. No other biotic or abiotic disturbances were present. A total of 5 invasive plants were recorded in the forest compartment.

By Compartment:

<u>Compartment 6216:</u> FHR = 3 Dominant species: white ash

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
6216	✓	✓



*Blank cells indicate that decline or mortality is not present in the compartment *FHR = Forest Health Rating



Buckthorn



Garlic mustard



Purple loosestrife



Phragmites



Wild grape vine



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Cornwall Road Sports

Park

Woodland ID 169 (Zone 6)

Forest Health Rating (FHR)

1 Healthy with no obvious forest health issues

2 Moderately healthy, minor issues and <30% mortality

3 Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Harvested

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
7681	Drainage	Drainage
7682		✓
7685	/	/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the health of the woodland is affected by obvious issues in the dominant tree canopy. Ash decline and mortality due to emerald ash borer was observed in the woodland. No biotic disturbances were present. Abiotic disturbance in the woodland included recent harvesting of ash trees. A total of 4 invasive plants were present, with buckthorn and wild grape vine present in all forest compartments.

By Compartment:

Compartment 7681: Drainage

<u>Compartment 7682:</u> FHR = 2 Dominant species: black walnut

Compartment 7685: FHR = 3
Dominant species: white ash
Comments: harvesting of ash trees

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Garlic mustard



Purple loosestrife



Wild grape vine



LALLEMAND PLANT CARE

Chalmers Park Woodland ID 210 (Zone 3)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

Moderately healthy, minor issues and <30% mortality 2

Health affected by obvious issues and >30% mortality 3



Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

	Compartment	Decline	Mortality
Г	6721		✓
Г	6722	√	✓



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the health of the woodland is affected by obvious issues in the dominant tree canopy. Significant ash decline and mortality due to emerald ash borer was observed in the woodland. No other biotic or abiotic disturbances were present. A total of 2 invasive plants were present, buckthorn and garlic mustard. Each was present in both forest compartments.

By Compartment:

Compartment 6721: FHR = 2 Dominant species: silver maple

Compartment6722: FHR = 3 Dominant species: white ash

*FHR = Forest Health Rating





Buckthorn



Garlic mustard



Brook Valley ParkWoodland ID 221 (Zone 8)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2 Moderately healthy, minor issues and <30% mortality

3 Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Storm damage

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
167	Drainage	Drainage
168	Not surveyed	Not surveyed
169	✓	/
170	✓	/
172	/	/



*Blank cells indicate that decline or mortality is not present in the compartment

Woodland Summary

Overall, the health of the woodland is affected by obvious issues in the dominant tree canopy. Significant ash decline and mortality due to emerald ash borer was observed in the woodland. No other biotic disturbances were present. Abiotic disturbance in the woodland included storm damage. A total of 4 invasive plants were present, with buckthorn and garlic mustard present in all forest compartments.

By Compartment:

Compartment 167:
Only grass, no trees to survey

Compartment 168: Drainage

<u>Compartment 169:</u> FHR = 3 Dominant species: black walnut Comments: storm damage

<u>Compartment 170:</u> FHR = 3 Dominant species: mixed ash

Compartment 172: FHR = 3
Dominant species: white ash

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Periwinkle



Wild grape vine



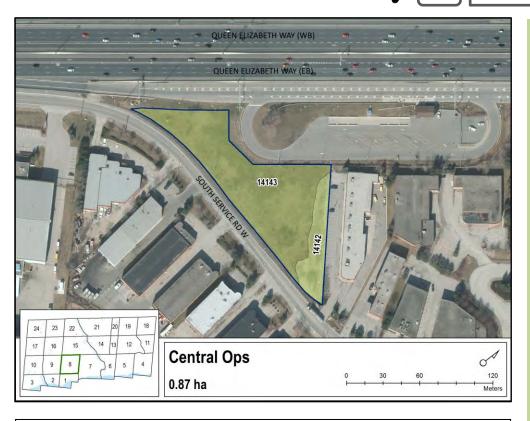
Central OpsWoodland ID 223 (Zone 8)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2 Moderately healthy, minor issues and <30% mortality

3 Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

Dutch elm disease

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
14142		
14143		



*Blank cells indicate that decline or mortality is not present in the compartment *FHR = Forest Health Rating

Invasive Plant Cover







Purple loosestrife



Town of Oakville Urban Forest Health Monitoring Program – Detection Survey Results 2014

Woodland Summary

Overall, the health of the woodland is affected by obvious issues in the dominant tree canopy. Biotic disturbance of Dutch elm disease was present and noted to have caused significant mortality and decline in elm trees in both forest compartments. No abiotic disturbance was recorded. A total of 2 invasive plants were observed, buckthorn and purple loosestrife.

By Compartment:

<u>Compartment 14142:</u> FHR = 3 Dominant species: white elm Comments: Dutch elm disease

Compartment 14143: FHR = 3 Dominant species: elm species Comments: Dutch elm disease

Brook Valley ParkWoodland ID 281 (Zone 8)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

Moderately healthy, minor issues and <30% mortality

2

Health affected by obvious issues and >30% mortality



Woodland Summary

Overall, the health of the woodland is affected by obvious issues in the dominant tree canopy. Significant ash decline and mortality due to emerald ash borer was observed in the woodland. No other biotic or abiotic disturbances were present. A total of 3 invasive plants were recorded, buckthorn, garlic mustard, and wild grape vine.

By Compartment:

Compartment 14123: FHR = 3
Dominant species: willow
Comments: decline due to emerald ash borer

Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartm	ent	Decline	Mortality
14123		✓	✓



*Blank cells indicate that decline or mortality is not present in the compartment

Special Notes:

Forest health monitoring plots established in all compartments of the woodland.

*FHR = Forest Health Rating



Buckthorn



Garlic mustard



Wild grape vine



Dunvegan Park Woodland ID 69 (Zone 4)

Forest Health Rating (FHR)

Woodland Summary

ash decline and mortality due to emerald ash borer was observed in both forest compartments of the woodland. No additional biotic or abiotic disturbances were present. A

total of 3 invasive plants were recorded, each present in all forest

Compartment 6205: FHR = 3

Dominant species: Scots pine

Compartment 6207: FHR = 3 Dominant species: white ash

compartments.

By Compartment:

Overall, the health of the woodland is affected by obvious issues in the dominant tree canopy. Significant

Healthy with no obvious forest health issues

Moderately healthy, minor issues and <30% mortality 2

Health affected by obvious issues and >30% mortality 3



Biotic and Abiotic Disturbances

No disturbances present

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
6205	✓	✓
6207	✓	/



*Blank cells indicate that decline or mortality is not present in the compartment

*FHR = Forest Health Rating



Buckthorn





Wild grape vine



Exception Zone 961 Woodland ID 961 (Zone 5)

Forest Health Rating (FHR)

Healthy with no obvious forest health issues

2 Moderately healthy, minor issues and <30% mortality

Health affected by obvious issues and >30% mortality



Biotic and Abiotic Disturbances

- Tar spot
- Anthracnose

Ash Status

Presence of ash decline and mortality due to emerald ash borer was recorded in each compartment.

Compartment	Decline	Mortality
8643	✓	/



*Blank cells indicate that decline or mortality is not present in the compartment

*FHR = Forest Health Rating

Invasive Plant Cover



Buckthorn



Garlic mustard



Wild grape vine

affected by obvious issues in the dominant tree canopy. Significant ash decline and mortality due to

Woodland Summary

Overall, the health of the woodland is

ash decline and mortality due to emerald ash borer was observed in the woodland. Biotic disturbance of tar spot and anthracnose on Norway maple was present. No abiotic disturbances were recorded in the woodland. A total of 3 invasive plants were observed, buckthorn, garlic mustard, and wild grape vine.

By Compartment:

Compartment 8643: FHR = 3 Dominant species: ash species Comments: tar spot on Norway maple; anthracnose on Norway maple



Town of Oakville Urban Forest Health Monitoring Program – Detection Survey Results 2014