

PRE-SURVEY COMMENT:

<b>ELC</b> Community Description and Classification	Site: 280_GSH1758	Polygon: A
Surveyor(s): <i>Komstra</i>	Date: <i>Sept 21 / 11</i>	Time start: <i>12:15</i>
UTM: <i>17 T</i>	UTM: <i>447750</i>	UTM: <i>4745870</i>

**Polygon Description**

System	Substrata	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <input type="checkbox"/> Site	<input type="checkbox"/> Organic <input type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk <input type="checkbox"/> Bedrock	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input type="checkbox"/> Upland <input type="checkbox"/> Rail Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD <input type="checkbox"/> Grasshold <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp)
1	4		<i>Acacia -&gt; Willow - Forster - Betula</i>
2	3		<i>Acacia -&gt; Carcno</i>
3	3		<i>Forster - Prunus</i>
4	3		<i>Willow - Prunus - Prunus - Soffia</i>

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-4m 2 > 4-6-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 50 - 75% 5 75 - 90% 6 > 90%

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Comm. Age:	<input type="checkbox"/> Pioneer	<input type="checkbox"/> Young	<input type="checkbox"/> Mid-Age	<input checked="" type="checkbox"/> Mature	<input type="checkbox"/> Old Growth
Ecoelite:					
Vegetation Type:	<i>DF Super Maple - Basswood</i>				
Inclusion:					
Code:	<i>F0D5-6</i>				

**Community Profile Diagram/Comments**

*Small stand forest with effects of*  
*at least some pine sycamores present*

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Prism Factor	Rel. Avg.
Total							
Basal Area (BA)							100
Dead							

**Soils Ontario and ELC Soils Description**

Soil Horizon Description	Site Metrics								Summary	
	Ptu/Auger #				UTM		Slope		Moisture Regime	
1	Depth from zero	% CF	% CF	% CF	UTM		Slope		Moisture Regime	
	Texture	Drainage		UTM		Slope		Moisture Regime		
2	Depth from zero	% CF	% CF	% CF	UTM		Slope		Moisture Regime	
	Texture	Drainage		UTM		Slope		Moisture Regime		
3	Depth from zero	% CF	% CF	% CF	UTM		Slope		Moisture Regime	
	Texture	Drainage		UTM		Slope		Moisture Regime		
4	Depth from zero	% CF	% CF	% CF	UTM		Slope		Moisture Regime	
	Texture	Drainage		UTM		Slope		Moisture Regime		



Ⓐ Cultural Thicket at UTM. 447775 / 4795905  
- disturbed vegetation along ditch that was dredged through forest  
prob ~ 20 years ago.

3-4 Rhizoph > Fra pen - Acesacu

4-4 Rubiace >> Rhotyp - Fra pen

5-4 Solcan. - Astlate Equearve

Veg Type: CUT1

Ⓒ Deciduous Forest - mixed canopy without Dipterocarp  
UTM 447810 / 4795915

2-4 Acesacu - Popgran - Betpapy - Fraamer

3-4 Hamving > Acesacu > Aluame -

4-~~2~~ Lin benz - Vibacer - Pru ving -

5/6-4 Pyrelli - Mitrepe - Parinse

Veg Type: Sugar Maple - Hardwood FOD6-5

PRE-SURVEY COMMENT: 280 1

**ELC** Community Description and Classification

Site: 999\_GSH280 Polygon: 1758 Polygon: P

Survey date: Sept 21/11 Date: Sept 21/11 Time start: 13:15

UTMZ: R54N58W UTMZ: 447900 UTMN: 4795965

**Polygon Description**

System	Substrate	Topographic Features	Plant Form	Community
<input type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <input type="checkbox"/> Shrub <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock	<input type="checkbox"/> Organic <input type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input type="checkbox"/> T. Upland <input type="checkbox"/> Rail Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD <input type="checkbox"/> Granuhoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

**Stand Description**

Species In Order of Decreasing Dominance (up to 4 sp)  
 (> Much Greater Than, > Greater Than, = About Equal To)

Layer	HT	CVR	Species
1	2-4	4	Aspen - Red Pine - Fraxinus - Picea - Populus
2	3	3	Carabid - Hamamelis - Fraxinus - Fagopyrum - Ischaemum
3	3	3	Lin. Bedr - Viburnum - Prunus
4	3	3	Mitella - Prunella - Viburnum

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-4m 2 > 4-6m 1 > 6m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 50 - 75% 5 75 - 100%

Stand Composition: Size Class Analysis: Standing Snags: Deadfall / Logs:  <10  10-24  25-50  >50

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecotype:  Moist dead Super maple - hardwood

Vegetation Type:  F046-5

Inclusion:  Codes:  Codes:  Codes:

Complex:  Codes:

**Community Profile Diagram/Comments**

Variable canopy forest, distinct clear openings

5-7 years

Notes:

\* Turn Over

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avt.
Total						100
Basal Area (BA)						
Dead						

**Soils Ontario and ELC Soils Description**

Site Metrics		Summary	
UTM	Zone	Moisture Regime	
UTM	Easting		
UTM	Northing		
Position	Aspect		
Percent	Slope		
Slope	Length		
Mottles			
Gley			
Water Table			
Carbonates			
Bedrock			
Depth from zero	% CF		
Texture	% CF		
Depth from zero	% CF		
Texture	% CF		
Depth from zero	% CF		
Texture	% CF		
Depth from zero	% CF		
Texture	% CF		
% Surface Stone/Rock			
Moisture Regime			
Drainage			

**Soil Horizon Description**

Horizon	Depth from zero	Texture	% CF
1	zero		
2	zero		
3	zero		
4	zero		

Ⓚ Upland Deciduous Forest at Property Line (much like D)

UTM 447975 / 4795985

- 2-4 Ace Saen - Fraamen > Popgem > Faggen - Tsucan  
3-3 Acesau - Hamving - Car caro  
4-3 Linherz > Ace saen  
6-3 Eucobov - Maican - Pyrelli

Veg Type: FOD 6-5

**ELC** Community Description and Classification

Site: 280\_GSH1801 Polygon: E

Surveyor(s): *Kawista* Date: *Sept 21/11* Time start: *4:00*

UTMz: *448070* UTMz: *448070* UTMN: *4796065*

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock <input type="checkbox"/> History <input type="checkbox"/> Natural <input type="checkbox"/> Cultural <input type="checkbox"/> Cover <input type="checkbox"/> Open <input type="checkbox"/> Shrub <input type="checkbox"/> Treed	<input type="checkbox"/> Organic <input type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Roll, Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

**Stand Description**

Species in Order of Decreasing Dominance (Up to 4 sp)  
 (> Much Greater Than, > Greater Than, = About Equal To)

Layer	HT	CVR	Notes
1	<i>3m</i>	<i>3m</i>	<i>Fraxinus &gt; Acer top</i>
2	<i>3m</i>	<i>3m</i>	<i>Fraxinus</i>
3	<i>3m</i>	<i>3m</i>	<i>L. BERK</i>
4	<i>3m</i>	<i>3m</i>	<i>Cystus - Gerrole Fraxinus - Corv</i>

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 6 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m

CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 50 - 75% 5 75 - 100%

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Stand Composition: Size Class Analysis: 

<10	A	10-24	O	25-50		>50
<10	R	10-24	R	25-50		>50
<10	A	10-24	O	25-50		>50

Standing Snags: 

<10	R	10-24	R	25-50		>50
<10	A	10-24	O	25-50		>50

Deadfall / Logs: 

<10	A	10-24	O	25-50		>50
<10	R	10-24	R	25-50		>50

Comm. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite: *Green Ash Mixed Swamp* Code: *SWD-2-2*

Vegetation Type: *Green Ash Mixed Swamp* Code: *SWD-2-2*

Inclusion: Code: *SWD-2-2*

Complex: Code: *SWD-2-2*

**Community Profile Diagram/Comments**

*Swamp of mixed forest. Hydrology prob affected by large dead standing tree trunk S.W.*

Notes: *Talk Over*

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel Avt.
Total						100
Basal Area (BA)						
Dead						

Prism Factor 2

**Soils Ontario and ELC Soils Description**

Soil Horizon Description	Depth to...	Site Metrics				Summary
		UTM	Slope	Moisture Regime	Drainage	
1	Depth from zero					
2	Depth from zero					
3	Depth from zero					
4	Depth from zero					

*Handwritten notes in table:*  
 Horizon 1: *15* Depth, *0* % CF  
 Horizon 2: *25* Depth, *0* % CF  
 Horizon 3: *40* Depth, *10* % CF  
 Horizon 4: *40* Depth, *10* % CF



⑥ White Pine Plantation UTM - 448010/4796120  
 - W Pine about 10-12m tall - about 25 years old  
 - Bare ground cover  
 - Some Red Pine, but mostly White  
 Veg Type - W. Pine Coniferous Plantation CUP3-2

⑦ Poplar forest small unit UTM - 448020/479195  
 2-4 Popgran → Betpamy  
 3-4 Almens → Ham viiq Ace Sach  
 5/6-3 Rharadi - Rubidae  
 Veg Type - df Poplar Decid. Forest FOD3-1

**ELC**  
 Community  
 Description and  
 Classification

Site: 280 GSH 1801 Polygon: H  
 Surveyor(s): Kowmista Date: Sept 21/11 Time start: 14:45  
 UTMZ: 448045 UTMZ: 448045 UTMN: 4706230

Polygon Description	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial	<input type="checkbox"/> Organic	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
<input type="checkbox"/> Wetland	<input type="checkbox"/> Mineral Soil	<input type="checkbox"/> Riverine	<input type="checkbox"/> Submerged	<input type="checkbox"/> Pond
<input type="checkbox"/> Aquatic	<input type="checkbox"/> Parent Min.	<input type="checkbox"/> Bottomland	<input type="checkbox"/> Floating-LVD	<input type="checkbox"/> River
<b>Site</b>	<input type="checkbox"/> Acidic Bedrk	<input type="checkbox"/> Terrace	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
<input type="checkbox"/> Open Water	<input type="checkbox"/> Basic Bedrk	<input type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Shallow Water	<input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input checked="" type="checkbox"/> Swamp
<input type="checkbox"/> Surficial Dep		<input type="checkbox"/> Roll, Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Cliff	<input type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
<b>History</b>		<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input type="checkbox"/> Natural		<input type="checkbox"/> Crevice/Cave	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input type="checkbox"/> Cultural		<input type="checkbox"/> Alvar		<input type="checkbox"/> Prairie
<b>Cover</b>		<input type="checkbox"/> Rockland		<input type="checkbox"/> Thicket
<input type="checkbox"/> Open		<input type="checkbox"/> Beach / Bar		<input type="checkbox"/> Savannah
<input type="checkbox"/> Shrub		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Woodland
<input type="checkbox"/> Treed		<input type="checkbox"/> Bluff		<input type="checkbox"/> Forest
				<input type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp)
1	<u>2</u>	<u>4</u>	<u>&gt;&gt; Much Greater Than &gt; Greater Than, = About Equal To</u>
2	<u>3</u>	<u>3</u>	<u>Aspen → Prairie →</u>
3	<u>3</u>	<u>3</u>	<u>Aspen → Oak / Elm →</u>
4	<u>5/6</u>	<u>3</u>	<u>Aspen → Prairie →</u>

HT Codes: <0.2m 6-0.2-0.5m 5-0.5-1m 4->1-2m 3->2.4m 2->6-25m 1->25m  
 CVR Codes: 0 none 10% - 10% 2 10-25% 3 25-60% 4 > 60%

Stand Composition:	Size Class Analysis:	Standing Snags:	Deadfall / Logs:
BA:	<10	<10	<10
	10-24	10-24	10-24
	25-50	25-50	25-50
	50	50	50

Abundance Codes: N = None R = Rare O = Occasional A = Abundant  
 Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

**Ecocote:** Forest Code: SUD3-3  
**Vegetation Type:** Swampy Maple Swamp  
**Inclusion:** mixed  
**Complex:** Swampy Maple Swamp

**Community Profile Diagram / Comments**

Notes: \* Turn Over

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Bal Avg
Total					100	
Basal Area (BA)						
Dead						

**Soils Ontario and ELC Soils Description**

Soils Ontario and ELC Soils Description	Pit/Auger #	Zone	Easting	Northing	Position	Aspect	Percent	Slope	Mottles	Water Table	Carbonates	Bedrock	Effective Texture (Indicate below)
	<u>#1</u>												

**Soil Horizon Description**

Soil Horizon Description	Depth from zero	Texture	% CF	% CF	% CF	% CF	% CF
1	zero	<u>loam</u>					
2	zero	<u>fine sandy silt</u>					
3	zero	<u>fine sandy silt with straw nodules</u>					
4	zero	<u>fine sandy silt with straw nodules</u>					

① Deciduous forest but broken canopy from edge effects and some selective cutting - Slightly elevated above adjacent Swamp Maple Swamp. UTM - 447985/4796260

2-4 AceSacu > Faggron > Betpapy - Fraxmes.

3-4 AceSacu >> Hamvieg - Carcavo.

4-3 Ruballe > Vibacer

6-3 Viocons - Mitrepe > Maicana

Veg Type: d-f Swamp Maple - Beech FOD5-2

② Old Field, - dense mesic meadow. UTM - 447960/4796245

4-1 Fraxem.

5/6-4 Solcana - Astpib - Poaprat - Poacomp.

Veg Type CUM1



**ELC** Community Description and Classification

Site: 280 GSH 1758 Polygon: L

Surveyors: RK Date: 2/1/11 Time start: 16:15

UTMZ: 447445 UTMN: 4795970

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial	<input type="checkbox"/> Organic	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
<input type="checkbox"/> Wetland	<input type="checkbox"/> Mineral Soil	<input type="checkbox"/> Riverine	<input type="checkbox"/> Submerged	<input type="checkbox"/> Pond
<input type="checkbox"/> Aquatic	<input type="checkbox"/> Parent Min.	<input type="checkbox"/> Bottomland	<input type="checkbox"/> Floating-LVD	<input type="checkbox"/> River
	<input type="checkbox"/> Acidic Bedrk	<input type="checkbox"/> Terrace	<input type="checkbox"/> Granitoid	<input type="checkbox"/> Stream
<input type="checkbox"/> Open Water	<input type="checkbox"/> Basic Bedrk	<input checked="" type="checkbox"/> Valley Slope	<input type="checkbox"/> Fort	<input type="checkbox"/> Marsh
<input type="checkbox"/> Shallow Water	<input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> abeland	<input type="checkbox"/> Lichen	<input checked="" type="checkbox"/> Swamp
<input type="checkbox"/> Surficial Dep		<input type="checkbox"/> Roll, Upland	<input checked="" type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Cliff	<input checked="" type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
<b>History</b>		<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input type="checkbox"/> Natural		<input type="checkbox"/> Crevices/Cave	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input type="checkbox"/> Cultural		<input type="checkbox"/> Alvar		<input type="checkbox"/> Prairie
<b>Cover</b>		<input type="checkbox"/> Rockland		<input type="checkbox"/> Thicket
<input type="checkbox"/> Open		<input type="checkbox"/> Beach / Bar		<input type="checkbox"/> Savannah
<input type="checkbox"/> Shrub		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Woodland
<input type="checkbox"/> Treed		<input type="checkbox"/> Bluff		<input type="checkbox"/> Forest
				<input type="checkbox"/> Plantation

**Stand Description**

Species in Order of Decreasing Dominance (up to 4 sp)  
 (> Much Greater Than; > Greater Than; = About Equal To)

Layer	HT	CVR
1	4	4
2	3	3
3	3	3
4	6	2

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 9 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

1: *Fraxinus - Populus*  
 2: *Calceolaria*  
 3: *Liriodendron*  
 4: *Onoclea*

Stand Composition: Size Class Analysis:

BA:	< 10	10-24	25-50	> 50
Standing Snags:	0	0	0	0
Deadfall / Logs:	0	0	0	0

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid Age  Mature  Old Growth

Ecoster: Code:   
 Vegetation Type: *Gr Ash - Poplar Swamp* Code: *SWD 2.2*  
 Inclusion: Code: *4-3*  
 Complex: Code:

**Community Profile Diagram/Comments**

Notes: *Secondary Forest, No water present*  
*\* Turn Over*

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Plot Factor
Total					100	2
Basal Area (BA)						
Dead						

**Soils Ontario and ELC Soils Description**

Soils Ontario and ELC Soils Description	Pit/Auger #		Summary	
	Zone	Easting	Moisture Regime	Drainage
UTM				
Position				
Aspect				
Percent				
Slope				
Slope Length				
Mottles				
Gley				
Water Table				
Carbonates				
Bedrock				

**Soil Horizon Description**

Soil Horizon Description	Depth to...	Depth from zero	Texture	% CF
1	Depth from zero	35	dark brown	0
2	Depth from zero	45	mid brown	0
3	Depth from zero	55	fine sand	10
4	Depth from zero		straw mottles	

(M) Rather extensive piece of woodlot that is intertwined complex of SWD and FOD, due to subtle changes in topography - and where seasonal flooding occurs. Overall Green Ash Mineral Swamp is the most predominant Vegetation type

- Contains inclusions of Sugar Maple - Birch - W. Ash  
Veg Type: FOD 6-5 / SWD 2-2

(N) Green Ash Swamp at Corner of Woodlot  
utm - 447655 / 4795795

2-4 Fraxin

3-3 Ulmamer > Fraxin

4-2 Fraxin.

6-2 Crx - Astlaur.

Veg Type: Green Ash Mineral Swamp SWD 2-2

- Very apparent extensive seasonal flooding, with muck up to 50cm on tree trunks

(O) Moist Ash - Birch - Poplar Forest utm - 447685  
4795720

2-4 Fraxin - Betpapy - Poptrou

3-4 Hamvirg > Ulmamer

4-3 Liubenz > Vibacer

6-4 Rhurali - Fraxin - Crxglac. > Pyrelli

Veg Type: f-m FOD 7/8?

**ELC** Community Description and Classification

Site: 280 GSH 1758 Polygon: P  
 Surveyors: Kowalski Date: Sept 21/11 Time start: 17:45  
 UTMZ: 17 UTMZ: 4477620 UTMN: 4795550

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial	<input type="checkbox"/> Organic	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
<input type="checkbox"/> Wetland	<input type="checkbox"/> Mineral Soil	<input type="checkbox"/> Rivine	<input type="checkbox"/> Submerged	<input type="checkbox"/> Pond
<input type="checkbox"/> Aquatic	<input type="checkbox"/> Parent Min.	<input type="checkbox"/> Bottomland	<input type="checkbox"/> Floating-LVD.	<input type="checkbox"/> River
<input type="checkbox"/> Site	<input type="checkbox"/> Acidic Bedrk	<input type="checkbox"/> Terrace	<input type="checkbox"/> Granitoid	<input type="checkbox"/> Stream
<input type="checkbox"/> Open Water	<input type="checkbox"/> Basic Bedrk	<input type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Shallow Water	<input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input type="checkbox"/> Swamp
<input type="checkbox"/> Surficial Dep		<input type="checkbox"/> Roll, Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Cliff	<input checked="" type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
<input type="checkbox"/> History		<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input type="checkbox"/> Natural		<input type="checkbox"/> Crevices/Cave	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input type="checkbox"/> Cultural		<input type="checkbox"/> Alvar		<input type="checkbox"/> Prairie
<input type="checkbox"/> Cover		<input type="checkbox"/> Beachland		<input type="checkbox"/> Thicket
<input type="checkbox"/> Open		<input type="checkbox"/> Rock / Bar		<input type="checkbox"/> Savannah
<input type="checkbox"/> Shrub		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Woodland
<input type="checkbox"/> Treed		<input type="checkbox"/> Bluff		<input checked="" type="checkbox"/> Forest
				<input type="checkbox"/> Plantation

**Stand Description**

Species In Order of Decreasing Dominance (up to 4 sp)  
 (> Much Greater Than; > Greater Than; = About Equal To)

Layer	HT	CVR	Notes
1	4	4	Aspen > Fir > Spruce > Fir > Spruce
2	3	3	Aspen > Fir > Spruce > Fir > Spruce
3	3	3	Aspen > Fir > Spruce > Fir > Spruce
4	3	3	Aspen > Fir > Spruce > Fir > Spruce

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 9 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m  
 CVR Codes: 0 none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition: Size Class Analysis:

Standing Snags:	< 10	10-24	25-50	> 50
Deadfall / Logs:	A	A	A	A
BA:	< 10	10-24	25-50	> 50

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite: Code: FOD5-8  
 Vegetation Type: d-f Sugar Maple - W. Ash  
 Inclusion: Code:  
 Complex: Code:

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Tally 5	Total
Basal Area (BA)						100
Dead						

**Soils Ontario and ELC Soils Description**

Site Metrics		Summary	
UTM		Moisture Regime	
Zone	Position		
Easting	Aspect		
Northing	Percent		
Slope	Slope		
Aspect	Slope Length		
Percent			
Slope			
Length			
Mottles			
Gley			
Water Table			
Carbonates			
Bedrock			
Depth from zero	% CF	% CF	% CF
Texture			
Depth from zero	% CF	% CF	% CF
Texture			
Depth from zero	% CF	% CF	% CF
Texture			
Depth from zero	% CF	% CF	% CF
Texture			
% Surface Stone/Rock			
Moisture Regime			
Drainage			

Soil Horizon Description		Effective Texture (Indicate below)	
1	Depth from zero	% CF	% CF
	Texture		
2	Depth from zero	% CF	% CF
	Texture		
3	Depth from zero	% CF	% CF
	Texture		
4	Depth from zero	% CF	% CF
	Texture		
	% Surface Stone/Rock		
	Moisture Regime		
	Drainage		

Q Moist Deciduous Forest UTM - 447420/4795550

2-4 Fraxinifera > Tilia > Acer sac

3-4 Acer sac > Ulmus - Carcaro

6-4 Astmacr - Eucobov > Crx - Rhuradi

Veg Type: df Sugar Maple - Basswood FOD 5-6

**ELC** Community Description and Classification

Site: 280 GST 1758 Polygon: R

Surveyor(s): SK Date: 02/11 Time start: 8:20

UTMZ: 17 UTMZ: 447050 UTMN: 4795170

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock <input type="checkbox"/> History <input type="checkbox"/> Natural <input type="checkbox"/> Cultural <input type="checkbox"/> Cover <input type="checkbox"/> Open <input type="checkbox"/> Shrub <input type="checkbox"/> Treed	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input checked="" type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Roll, Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LV. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

**Stand Description**

Species In Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)

Layer	HT	CVR	Notes
1	10	3	Parmeria -> Quercus -> Actin
2	10	3	Viola -> Carex
3	10	3	Viola -> Carex
4	10	3	Viola -> Carex

HT Codes: <0.2m 8-0.2-0.5m 8-0.5-1m 4-1-2m 3-2-6m 2-6-25m 1->25m

CVR Codes: 0 none 1 0%-10% 2 10-25% 3 25-60% 4 60%

**Stand Composition:**

Size Class Analysis:	<10	10-24	25-50	>50
Standing Snags:	R	R	R	R
Deadfall / Logs:	A	A	A	A

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecocite: \_\_\_\_\_ Code: \_\_\_\_\_

Vegetation Type: Most W Asl - Bur Oak Code: FDD9d

Inclusion: \_\_\_\_\_ Code: \_\_\_\_\_

Complex: \_\_\_\_\_ Code: \_\_\_\_\_

**Community Profile Diagram/Comments**

Forest Survey along Blackhills  
 Approx to be Ash Swamp Maple Swamp Forest E in woods  
 Notes: \* Turn Over

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Prism Factor	2
Total						100
Basal Area (BA)						
Dead						

**Soils Ontario and ELC Soils Description**

Soil Horizon Description	Site Metrics					Drainage	Effective Texture (Indicate below)
	UTM	Position	Aspect	Percent	Slope		
1	Depth from zero	% CF	% CF	% CF	% CF	% CF	% CF
2	Depth from zero	% CF	% CF	% CF	% CF	% CF	% CF
3	Depth from zero	% CF	% CF	% CF	% CF	% CF	% CF
4	Depth from zero	% CF	% CF	% CF	% CF	% CF	% CF

FOD 7-2  
⑤ Mount Ash Forest along Blackbush Road UTM 447080 / 4795250

2-4 Fraxinus - Fraxinus → Tilman - Populus - Acacia

3-3 Ulmus - Acer

4-3 Viburnum - Carum - Viburnum

6-4 Astilbe - Euonymus - Crataegus - Rhus  
inclusions of seasonal ponds

⑥ Mid Age W. Pine Plantation w saw understorey regen UTM 447050 / 4795385

2-4 Pinus → Fraxinus

3-2 Ulmus → Rhus

6-3 Rhus - Astilbe  
inclusions of seasonal ponds

CUP 3-2

⑦ Young disturbed forest w broken canopy + dense shrub layer UTM 447095 / 4795110

2-4 Fraxinus → Populus 60% canopy

3-4 Ulmus - Carum

4-4 Viburnum - Viburnum - Corchorus

6-4 Rhus → Solanum - Fraxinus - Astilbe

FOD 7-2

Note inclusions of shallow seasonal ponds



CONIFERS						TREES and SHRUBS						GRAMINOIDS					
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Abies balsamea						Rosa multiflora						Agrostis gigantea					
Juniperus communis						Rosa						Agrostis stolonifera					
Juniperus virginiana						Rubus alleghaniensis	X	X				Agropyron repens		X			
Larix laricina						Rubus idaeus	X	X				Alopecurus					
Picea abies						Rubus occidentalis	X					Bromus inermis					
Picea canadensis						Rubus odoratus						Calamagrostis canadensis					
Pinus resinosa						Rubus pubescens	X	X				Carex arcuata					
Pinus strobus						Salix alba						Carex aurea					
Pinus sylvestris						Salix amygdaloides						Carex bebbii		X			
Thuja occidentalis						Salix bebbiana	X	X				Carex blanda					
Tsuga canadensis	X	X				Salix discolor		X	X			Carex gracillima		X	X		
Taxus canadensis	X	X				Salix erioccephala	X					Carex granularis					
						Salix exigua						Carex hystericina					
						Salix lucida						Carex pennsylvanica		X			
						Salix petiolaris						Carex radiata		X			
						Salix purpurea						Carex retrorsa					
TREES and SHRUBS						Salix x rubens						Carex stipata					
Acer negundo						Salix						Carex stricta					
Acer rubrum						Sambucus canadensis		X				Carex vulpinoidea					
Acer saccharinum						Sambucus racemosa						Carex					
Acer saccharum	X					Sorbus aucuparia						Carex					
Acer spicatum						Spiraea alba		X				Carex					
Alnus rugosa						Syringa vulgaris						Carex					
Amelanchier		X				Tilia americana		X	X			Carex					
Berberis thunbergii						Ulmus americana		X	X			Carex					
Betula alleghaniensis	X	X				Ulmus						Carex					
Betula papyrifera	X	X				Vaccinium						Carex					
Caryinus caroliniana		X				Viburnum lentago		X	X			Carex					
Carya cordiformis						Viburnum opulus		X	X			Cyperus					
Celastrus scandens						Viburnum acerifol		X	X			Cyperus					
Cornus alternifolia	X					Vitis riparia		X	X			Dactylis glomerata					
Cornus amomum												Danthonia spicata					
Cornus rugosa	X	X										Echinochloa crus-galli					
Cornus stolonifera	X	X										Eleocharis cryttopoda					
Corylus cornuta												Eleocharis					
Crataegus monozyga												Elymus virginicus					
Crataegus punctata												Elymus					
Crataegus sp.												Festuca arundinacea					
Crataegus												Glyceria striata		X	X		
Diervilla lonicera												Glyceria					
Fagus grandifolia	X	X										Juncus dudleyi					
Fraxinus americana	X	X										Juncus effusus					
Fraxinus nigra	X	X				FERNS						Juncus tenuis			X		
Fraxinus pennsylvanica	X	X				Adiantum pedatum						Juncus					
Ilex verticillata						Athyrium filix-femina		X				Juncus					
Juglans cinerea						Botrychium multifidum						Leersia oryzoides			X		
Juglans nigra	X	X				Botrychium virginianum						Muhlenbergia					
Lonicera morrowi						Cystopteris bulbifera						Oryzopsis asperifolia					
Lonicera tatarica	X	X				Dryopteris carthusiana		X	X			Panicum					
Lonicera dioica	X	X				Dryopteris cristata						Panicum					
Malus pumila						Dryopteris marginalis		X				Phalaris arundinacea					
Ostrya virginiana	X	X				Dryopteris						Phleum pratense					
Parthenocissus inserta						Equisetum arvense		X	X			Phragmites australis					
Populus balsamifera						Equisetum hyemale						Poa compressa				X	X
Populus grandidentata	X	X				Equisetum variegatum						Poa pratensis				X	
Populus tremuloides	X	X				Equisetum						Poa					
Populus deltoides	X	X				Gymnocarpium dryoperis						Scirpus atrovirens					
Prunus pennsylvanica						Lycopodium digitatum						Scirpus cyperinus			X		
Prunus serotina	X					Lycopodium obscurum						Scirpus validus					
Prunus virginiana	X	X				Lycopodium						Scirpus					
Prunus avium	X					Lycopodium						Scirpus					
Quercus macrocarpa						Matteucia struthiopteris		X	X			Setaria glauca		X			
Quercus rubra						Onoclea sensibilis		X	X			Sporobolus					
Quercus						Osmunda cinnamonia						Typha angustifolia					
Rhamnus cathartica	X					Osmunda regalis						Typha latifolia					
Rhus radicans	X	X				Polystichum acrostichoides		X				Typha X glauca					
Rhus typhina	X					Pteridium aquilinum											
Ribes americana			X			Thelypteris palustris											
Ribes cynosbati																	
Ribes x rubrum	X	X															
Robinia pseudo-acacia																	
Euon ornatum	X	X															
Distichlis spicata	X	X															
Alnus alba	X	X															
Lindera benz	X	X															



<b>ELC</b>	<b>SITE:</b> Goslen 280 GSH 1758 + 1801
	<b>POLYGON:</b>
<b>WILDLIFE</b>	<b>DATE:</b> Sept 21 / 2011
	<b>SURVEYORS:</b> K. M. S. T. L.
	<b>START TIME:</b> 12:30 <b>END TIME:</b>

<b>TEMP (°C):</b>	<b>CLOUD (10th):</b>	<b>WIND:</b>	<b>PRECIPITATION:</b>
<b>CONDITIONS:</b>			

**POTENTIAL WILDLIFE HABITAT:**

<input checked="" type="checkbox"/> <b>VERNAL POOLS</b>	<input checked="" type="checkbox"/> <b>SNAGS</b>
<input type="checkbox"/> <b>HIBERNACULA</b>	<input checked="" type="checkbox"/> <b>FALLEN LOGS</b>

**SPECIES LIST:**

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
M	E. Chipmunk	OB			H	Spring Peeper	VO	calling, several locations	
	Raccoon	SC	and TR			Wood Frog	OB		
	W.T. Deer	TK			H	Red backed Sal	OB	2 found under rotten log at 447620 4715550	
V	Gray Squirrel	VO							
B	CO GR	OB							
B	Wild Turkey	DP	feathers						
	AM CR	VO							
	BL TA				L	Common Sulfur	OB		
	RC CH	OB			L	Cabbage			
	NO FL	VO							
	HAWO	OB							
	AM RD								
	GB HE	OB	flyover						
	YR WA	VO							
	RE VI	VO							
V	WBNU	VO				stone pile	Potential Hibernaculum at Goshal edge		
	RNBL	OB							UTM 447613 4715581

**FAUNAL TYPE CODES (TY):**

B = BIRD M = MAMMAL H = HERPETOFAUNA L = LEPIDOPTERA F = FISH O = OTHER

**EVIDENCE CODES (EV):**

**BREEDING BIRD - POSSIBLE:**

SH = SUITABLE HABITAT SM = SINGING MALE

**BREEDING BIRD - PROBABLE:**

T = TERRITORY D = DISPLAY P = PAIR  
A = ANXIETY BEHAVIOUR N = NEST BUILDING V = VISITING NEST

**BREEDING BIRD - CONFIRMED:**

DD = DISTRACTION NU = USED NEST FY = FLEDGED YOUNG  
NE = EGGS NY = YOUNG FS = FOOD/FECAL SACK  
AE = NEST ENTRY

**OTHER WILDLIFE EVIDENCE:**

OB = OBSERVED VO = VOCALIZATION CA = CARCASS  
DP = DISTINCTIVE PARTS HO = HOUSE/DEN FY = EGGS/YOUNG  
TK = TRACKS FE = FEEDING EVIDENCE SC = SCAT  
SI = OTHER SIGNS (specify)

DATE	TIME	LOCATION	STATUS
10/21	12:00	...	...
10/21	13:00	...	...
10/21	14:00	...	...
10/21	15:00	...	...

...  
 ...  
 ...

DATE	TIME	LOCATION	STATUS
10/21	16:00	...	...
10/21	17:00	...	...
10/21	18:00	...	...
10/21	19:00	...	...
10/21	20:00	...	...
10/21	21:00	...	...
10/21	22:00	...	...
10/21	23:00	...	...
10/21	00:00	...	...
10/21	01:00	...	...
10/21	02:00	...	...
10/21	03:00	...	...
10/21	04:00	...	...
10/21	05:00	...	...
10/21	06:00	...	...
10/21	07:00	...	...
10/21	08:00	...	...
10/21	09:00	...	...
10/21	10:00	...	...
10/21	11:00	...	...
10/21	12:00	...	...

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**ELC**  
Community Description and Classification

Map #: 220-GSH1759 Polygon: 1  
 Surveyor(s): RA, SG Date: April 24, 2012 Time start: 8:00am finish: 11:00am  
 UTMZ: UTMZ: UTMN:

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic Site <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input checked="" type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input checked="" type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input checked="" type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1	2	4	POPTRM > FRAPENN > BETPAP1 > TSUCANA
2	2	2	FRAPENN > POPTRM
3	4	2	ULMAMER > VIBLEM
4	7	3	RIRAMER > FRAVIRG

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-5m 2 > 6-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition:	Size Class Analysis:																
Standing Snags: Deadfall / Logs:	<table border="1"> <tr> <td>&lt;10</td> <td>10-24</td> <td>25-50</td> <td>&gt;50</td> </tr> <tr> <td>A</td> <td>Q</td> <td>N</td> <td>N</td> </tr> <tr> <td>&lt;10</td> <td>R</td> <td>N</td> <td>N</td> </tr> <tr> <td>Q</td> <td>Q</td> <td>N</td> <td>N</td> </tr> </table>	<10	10-24	25-50	>50	A	Q	N	N	<10	R	N	N	Q	Q	N	N
<10	10-24	25-50	>50														
A	Q	N	N														
<10	R	N	N														
Q	Q	N	N														

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite: Fresh - Moist Poplar - White Birch Mixed For Code: FOD 4  
 Vegetation Type: Code: -  
 Inclusion: Code: -  
 Complex: Code: -

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Prism Factor
Total						2
Basal Area (BA)						
Dead						

**Soils Ontario and ELC Soils Description**

Pit/Auger #	Zone	Moisture Regime	Drainage	Summary
1	17T			
2	Not Recorded			
3	Not Recorded			
4	Table Land			
5	Q			
6	Q			
7	N/A			
8	19cm			
9	-			
10	-			
11	-			
12	-			
13	19cm			
14	Silty			
15	% CF			
16	% CF			
17	% CF			
18	% CF			
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96	% CF			
97	% CF			
98	% CF			
99	% CF			
100	% CF			

**ELC**  
Community Description and Classification

Map #: 280-GSH1759 Polygon: 2  
 Surveyor(s): RA, SG Date: Apr. 24, 2012 Time start: 8:00am finish: 11:00am  
 UTMZ: UTMZ: UTMN:

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic  <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock	<input type="checkbox"/> Organic <input type="checkbox"/> Mineral Soil <input checked="" type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input checked="" type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input checked="" type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input checked="" type="checkbox"/> Forest <input type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1	1	4	ACESAC - ERANR
2	2	3	AC SAGG > ERANR
3	4	2	PRVING - ULMA ER > VIBL - N - Z LINB - Z
4	7	3	ERYANER > ANEQUIN

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition:	Size Class Analysis:
Standing Snags: <input type="checkbox"/> < 10 <input type="checkbox"/> 10-24 <input type="checkbox"/> 25-50 <input type="checkbox"/> > 50	<input type="checkbox"/> < 10 <input type="checkbox"/> 10-24 <input type="checkbox"/> 25-50 <input type="checkbox"/> > 50
Deadfall / Logs: <input type="checkbox"/> < 10 <input type="checkbox"/> 10-24 <input type="checkbox"/> 25-50 <input type="checkbox"/> > 50	<input type="checkbox"/> < 10 <input type="checkbox"/> 10-24 <input type="checkbox"/> 25-50 <input type="checkbox"/> > 50

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite: Fresh-Moist Sugar Maple Deciduous For. Code: F006  
 Vegetation Type: Fresh-Moist Sugar Maple Lowland Code: F006-1  
 Inclusion: Ash Deciduous Forest Code: -  
 Complex: Code: -

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
Total						100
Basal Area (BA)						
Dead						

**Soils Ontario and ELC Soils Description**

Site Metrics	PIV/Auger #	Soils Description				Summary
Zone	17T					
Easting	0449471					
Northing	4216102					
Position	Tableland					
Aspect	0					
Percent	0%					
Slope	N/A					
Length	20cm					
Mottles						
Gley						
Water Table						
Carbonates						
Bedrock						
1	Depth from zero	2	% CF		% CF	% CF
	Texture					
2	Depth from zero	0	% CF		% CF	% CF
	Texture	y				
3	Depth from zero		% CF		% CF	% CF
	Texture					
4	Depth from zero		% CF		% CF	% CF
	Texture					
	% Surface Stone/Rock					
	Moisture Regime	(5) n t				
	Drainage	Imperfect/ Pr				

**ELC**  
Community Description and Classification

Map #: 280-GSH1759 Polygon: 3  
 Surveyor(s): RA, SG Date: Apr 12, 2011 Time start: 8:00am finish: 11:00am  
 UTMZ: UTMZ: UTMN:

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial	<input type="checkbox"/> Organic	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
<input type="checkbox"/> Wetland	<input checked="" type="checkbox"/> Mineral Soil	<input type="checkbox"/> Riverine	<input type="checkbox"/> Submerged	<input type="checkbox"/> Pond
<input type="checkbox"/> Aquatic	<input type="checkbox"/> Parent Min.	<input type="checkbox"/> Bottomland	<input type="checkbox"/> Floating-LVD	<input type="checkbox"/> River
	<input type="checkbox"/> Acidic Bedrk	<input type="checkbox"/> Terrace	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
	<input type="checkbox"/> Basic Bedrk	<input type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Open Water	<input type="checkbox"/> Carb. Bedrk	<input checked="" type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input type="checkbox"/> Swamp
<input checked="" type="checkbox"/> Shallow Water		<input type="checkbox"/> Roll. Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
<input checked="" type="checkbox"/> Surficial Dep.		<input type="checkbox"/> Cliff	<input checked="" type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<b>History</b>		<input type="checkbox"/> Crevice/Cave	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input checked="" type="checkbox"/> Natural		<input type="checkbox"/> Avar		<input type="checkbox"/> Prairie
<input type="checkbox"/> Cultural		<input type="checkbox"/> Rockland		<input type="checkbox"/> Thicket
<b>Cover</b>		<input type="checkbox"/> Beach / Bar		<input type="checkbox"/> Savannah
<input type="checkbox"/> Open		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Woodland
<input type="checkbox"/> Shrub		<input type="checkbox"/> Bluff		<input checked="" type="checkbox"/> Forest
<input checked="" type="checkbox"/> Treed				<input type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1	1	4	FRAPENN >> POPDELT > ACEEREE
2	2	3	FRAPENN >> ACEFRGE > ULMANER
3	4	3	NAMER > VIBLENITZ > LIN N
4			GEU ACU > HIBANER

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-5m 2 > 6-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition:	Size Class Analysis:	Standing Snags:	Deadfall / Logs:
	A < 10 10-24 A 10-24 A 25-50 N > 50	Q < 10 10-24 N 25-50 N > 50	Q < 10 10-24 R 25-50 N > 50

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite: Fresh-Moist lowland Deciduous For Code: F0D7  
 Vegetation Type: Fresh Forest Code: D72  
 Inclusion: - Code:  
 Complex: Code:

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Prism Factor	2
Total							100
Basal Area (BA)							
Dead							

**Soils Ontario and ELC Soils Description**

Site Metrics	PIV/Auger #	Soils Description		Summary
Zone	17T			
Easting	0447068			
Northing	4795348			
Position	Tableland			
Aspect	0			
Percent	0.1e			
Slope	N/A			
Length	12cm			
Mottles				
Gley				
Water Table				
Carbonates				
Bedrock				
Depth from zero	12cm	% CF	% CF	% CF
Texture	Silt loam	% CF	% CF	% CF
Depth from zero	12cm	% CF	% CF	% CF
Texture	ilty sand	% CF	% CF	% CF
Depth from zero		% CF	% CF	% CF
Texture		% CF	% CF	% CF
Depth from zero		% CF	% CF	% CF
Texture		% CF	% CF	% CF
% Surface Stone/Rock				
Moisture Regime	(6) Very Moist			
Drainage	Poor/Imperfect			

**ELC**  
Community Description and Classification

Map #: 280-G5H1759 Polygon: 4  
 Surveyor(s): RA, SG Date: April 24, 2012 Time start: 8:00am finish: 11:00am  
 UTMZ: UTMZ: UTMN:

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial	<input type="checkbox"/> Organic	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
<input type="checkbox"/> Wetland	<input checked="" type="checkbox"/> Mineral Soil	<input type="checkbox"/> Riverine	<input type="checkbox"/> Submerged	<input type="checkbox"/> Pond
<input type="checkbox"/> Aquatic	<input type="checkbox"/> Parent Min.	<input type="checkbox"/> Bottomland	<input type="checkbox"/> Floating-LVD.	<input type="checkbox"/> River
	<input type="checkbox"/> Acidic Bedrk	<input type="checkbox"/> Terrace	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
	<input type="checkbox"/> Basic Bedrk	<input type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Open Water	<input type="checkbox"/> Carb. Bedrk	<input checked="" type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input type="checkbox"/> Swamp
<input checked="" type="checkbox"/> Shallow Water	<input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Roll. Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
<input type="checkbox"/> Surficial Dep.	<input type="checkbox"/> Bedrock	<input type="checkbox"/> Cliff	<input type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
		<input type="checkbox"/> Talus	<input checked="" type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<b>History</b>		<input type="checkbox"/> Crevice/Cave	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input type="checkbox"/> Natural		<input type="checkbox"/> Alvar		<input type="checkbox"/> Prairie
<input checked="" type="checkbox"/> Cultural		<input type="checkbox"/> Rockland		<input type="checkbox"/> Thicket
		<input type="checkbox"/> Beach / Bar		<input type="checkbox"/> Savannah
<b>Cover</b>		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Woodland
<input type="checkbox"/> Open		<input type="checkbox"/> Bluff		<input type="checkbox"/> Forest
<input type="checkbox"/> Shrub				<input checked="" type="checkbox"/> Plantation
<input checked="" type="checkbox"/> Tree				

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1	2	4	PINSTRAB
2	2	1	ULMAMEA
3	5	1	RIBOCCI
4	7	1	ELAGOROV

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-5m 2 > 5-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

Stand Composition:	Size Class Analysis:																																										
Standing Snags: <table border="1"><tr><td>&lt;10</td><td>A</td><td>10-24</td><td>N</td><td>25-50</td><td>N</td><td>&gt;50</td></tr><tr><td>&lt;10</td><td>R</td><td>10-24</td><td>N</td><td>25-50</td><td>N</td><td>&gt;50</td></tr><tr><td>&lt;10</td><td>R</td><td>10-24</td><td>N</td><td>25-50</td><td>N</td><td>&gt;50</td></tr></table>	<10	A	10-24	N	25-50	N	>50	<10	R	10-24	N	25-50	N	>50	<10	R	10-24	N	25-50	N	>50	Deadfall / Logs: <table border="1"><tr><td>&lt;10</td><td>R</td><td>10-24</td><td>N</td><td>25-50</td><td>N</td><td>&gt;50</td></tr><tr><td>&lt;10</td><td>R</td><td>10-24</td><td>N</td><td>25-50</td><td>N</td><td>&gt;50</td></tr><tr><td>&lt;10</td><td>R</td><td>10-24</td><td>N</td><td>25-50</td><td>N</td><td>&gt;50</td></tr></table>	<10	R	10-24	N	25-50	N	>50	<10	R	10-24	N	25-50	N	>50	<10	R	10-24	N	25-50	N	>50
<10	A	10-24	N	25-50	N	>50																																					
<10	R	10-24	N	25-50	N	>50																																					
<10	R	10-24	N	25-50	N	>50																																					
<10	R	10-24	N	25-50	N	>50																																					
<10	R	10-24	N	25-50	N	>50																																					
<10	R	10-24	N	25-50	N	>50																																					

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite: Coniferous Plantation Code: CUP3  
 Vegetation Type: White Pine Coniferous Plantation Code: P3.2  
 Inclusion: Code:  
 Complex: Code:

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Prism Factor
Total					100	2
Basal Area (BA)						
Dead						

**Soils Ontario and ELC Soils Description**

Site Metrics		Soils Ontario and ELC Soils Description				Summary
Pit/Auger #	Zone					Moisture Regime
	Easting					
	Northing					
	Position					
Slope	Aspect					Drainage
	Percent					
	Slope Length					
Depth to ...	Mottles					Effective Texture (indicate below)
	Gley					
	Water Table					
	Carbonates					
Soil Horizon Description	Bedrock					% CF
	1	Depth from zero				
		Texture				
	2	Depth from zero				
		Texture				
	3	Depth from zero				
		Texture				
	4	Depth from zero				
		Texture				
		% Surface Slope/Rock				
		Moisture/Regime				
		Drainage				







# Significant Wildlife Habitat Form

AECOM

Study Area:	BLW	JER	<input checked="" type="checkbox"/> GSH	Map #:	280-GSH1759
Date:	April 24, 2012			Time Started:	8:00am
Field Staff:	BA, SG			Time Finished:	11:00am
Weather Conditions:	Overcast, Rain/Snow/Hail // Very Windy				

**Colonial Nesting Tree/Shrub Birds, Osprey Breeding/Feeding, Bald Eagle Breeding/Nesting Habitat**  
(FET1, FOC, FOM, FOD, SWC, SWM, SWD)

Nest bowls present:  No  Yes (if yes, photograph and complete the following)

UTMs: 17T 0447301, 4795499      Number of nests: 1

Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present):  
 Nest located in top of large poplar tree near edge of forest and agricultural field (Picture # 93, 94)

Description of habitat (note riparian areas if present, evidence of disturbance): In Poplar/Asch area adjacent Sugar Maple forest and agricultural field

**Waterfowls Stopover/Nesting, Amphibian Breeding, Turtle Nesting/Over-wintering, Marsh Breeding Birds**  
(CUM1, CUT1, MAM, MAS, SAS1, SAM1, SAF1, SWD, SWT1, SWT2) (FOC, FOM, FOD, SWC, SWM, SWD, BOO1, FEO1)

Standing water present:  No  Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_ Area of standing water delineated on field map \_\_\_\_\_

Water depth (m): \_\_\_\_\_ % open water: \_\_\_\_\_ % emergent vegetation: \_\_\_\_\_

Description of standing water (permanent pool, evidence of annual spring flooding, etc): \_\_\_\_\_

Area and soil/substrate of shoreline habitat: \_\_\_\_\_

Type and abundance of cover in open water habitat: \_\_\_\_\_

Type and abundance of cover in surrounding habitat: \_\_\_\_\_

Evidence of disturbance (e.g. cattle grazing): \_\_\_\_\_

Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds:  
 See Vernal Pool sheets for detailed data, not suitable for waterfowl stopover, turtle nesting or Marsh Breeding Birds  
 \*\*\*Complete Vernal Pool Habitat Description Form\*\*\*

**Snake Hibernacula**

Fissured rock/foundation or rock/debris pile present:  No  Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_ Likelihood to extend below frost line: \_\_\_\_\_

% canopy cover: \_\_\_\_\_ % slope: \_\_\_\_\_ Distance to open canopy (m): \_\_\_\_\_

Description of fissure or stone pile (composition/material, dimensions, etc): \_\_\_\_\_

Description of surrounding habitat (type & abundance of cover, evidence of disturbance, etc): \_\_\_\_\_

**Seeps and Springs** (FOC, FOM, FOD, SWC, SWM, SWD)

Evidence of seep or spring:  No  Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_ Description (indicator species, etc): \_\_\_\_\_

# NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

## Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)

(CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1)

Eroding bank, sandy hill, pits, steep slope or rock face present:

 No

 Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_

Location (e.g. aggregate pit, bridge): \_\_\_\_\_

Evidence of use by bank or cliff swallows (provide number of nests): \_\_\_\_\_

## Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas

(BBO1, BBO2, BBS1, BBS2, BBT1, BBT2, SDO1, SDS2, SDT1, MAM1, MAM2, MAM3, MAM4, MAM5)

Shoreline of lake, large river or large wetland present:

 No

 Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_

Rocky island or peninsula present: \_\_\_\_\_

Mudflat present: \_\_\_\_\_

Evidence of disturbance (e.g. cattle grazing): \_\_\_\_\_

Description of habitat (size of rocky outcrop/mudflat, substrate/soil type, type and abundance of cover):

## Raptor Winter Feeding and Roosting, Open Country or Shrub/Early Successional Bird Breeding Habitat

CUT1, CUS1, >30ha, CUM1 >30ha, FOC, FOD, FOM with a CUM, CUT, CUS, CUW > 20ha, or a CUM, CUS, CUT, CUW > 15ha

Large meadow, old field or generally open habitat (e.g. CUM, CUS, CUT, CUW) present:

Large open habitat present:  No

Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_

Evidence of disturbance (e.g. cattle grazing): \_\_\_\_\_

Description of habitat (abundance of food plants for rodents, abundance of perches, height of vegetation):

## Old-growth or Mature Forests, Interior Forest Breeding Birds

(FOD, FOC, FOM, SWC, SWM, SWD. Mature forest (>60 years) present)

Mature forest present:  No

Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_

Age of oldest trees: \_\_\_\_\_

Evidence of disturbance (e.g. selective cutting): \_\_\_\_\_

Description of habitat (structural complexity, abundance of snags and/or downed woody debris, etc):

Photo #	Location or Subject	Photo #	Location or Subject

# Species Conservation Concern Habitat and Incidental Wildlife - Goshen

Map No: 280-65411759  
 Date (yyyy-mm-dd): 2012-04-24

Field Staff: AA, SG

Time Started: 8:00 AM  
 Time Finished: 11:00 AM



## Observed Species List

M8.6.7 CAP3

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
American Crow		OB					
Downy Woodpecker		VO					
Northern Flicker		VO					
Turkey Vulture		OB	Very windy, not ideal for wildlife survey				

Note: Evidence Codes (EV) SH=Suitable Habitat, SM=Singing Male; T-Territory, D=Display, P=Pair, N=Nest Building, V=Visiting Nest, A=Anxiety Behavior; DD=Distraction, NU=Used Nest, FY=Fledged Young, NE=Eggs, NY=Young, FS=Foos/faecal sack, AE=Nest Entry

Other Wildlife Evidence: OB=observed, VO=Vocalization, CA=Carcass, DP=Distinctive Parts, HO=House/Den, FY=Eggs/young, TK=tracks, FE=Feeding evidence, SC=Scat, SI=Other signs (specify)

ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
PLANTS			
FOD7	American Gromwell (Lithospermum latifolium) - S3 Bloom Time - Spring	Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods.	Y N UTM: NO
ALO, TPO	Muehlenberg's astomum moss (Astomum muehlenbergianum) - S2 Bloom Time - Spring	Thin soil over level outcrop ledges and on soil under grasses in open prairie	Y (N) UTM: NO
FOM1, FOM2, CUP3	Autumn Coral-root (Corallorhiza odontorhiza) - S2 Bloom Time - summer to fall	Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry, sandy woods.	Y (N) UTM: NO
FOC, FOM, FOD	Burning Bush (Euonymus atropurpureus) - S3 Bloom Time - April - June	Species occurs in dry to moist deciduous thickets and woods	Y (N) UTM: NO
SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6	Chinese Hemlock Parsley (Conioselinum chinense) - S2 Bloom Time - summer to fall	Swampy places with deciduous trees, white cedars, tamarack; springy river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes	Y (N) UTM: NO
SWC, SWM, SWD, SWT, MAM, MAS	Crowned Beggarticks (Bidens trichosperma) - S2 Bloom Time - late summer	Found in openings in swamps, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian bay. Bogs, fens, tamarack swamps	Y (N) UTM: NO
ALT1, FOD7	Eastern Green-violet (Hybanthus concolor) - S2 Bloom Time - mid March to August	Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks.	Y (N) UTM: NO
TPS, TPW, FOM1, FOM2	Fogg's Goosefoot (Chenopodium foggii) - S2	Species occurs in sandy areas on limestone under oak or pine-oak forests	Y (N) UTM: NO
TPO2, TPS2, TPW2	Giant Ironweed (Vernonia gigantea) - S1? Bloom Time -	Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows	Y (N) UTM: NO

# Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
CUM1, MAM, FOD6, FOD7, FOD9	June–August Green Dragon ( <i>Arisaema dracontium</i> ) - S1/S3 <u>Bloom Time</u> – May and June	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y N UTM: NO
TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Hairy Bedstraw ( <i>Galium pilosum</i> ) - S3 <u>Bloom Time</u> – June–August	Occurs in dry, sandy woods and thickets; occasionally in dry sandy fields	Y (N) UTM: NO
FEOT1, FES1, FET1, SWC, SWM, SWD, SWT, TPO, TPS, TPW	Hairy Valerian ( <i>Valeriana edulis</i> ) - S1 <u>Bloom Time</u> – June to August	Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens.	Y (N) UTM: NO
FOD6, FOD7, SWM, SWD	Hairy Wood Mint ( <i>Blephilia hirsuta</i> ) - S1 <u>Bloom Time</u> – Summer	Woodlands often rocky, especially rivers. Rich woods, swamp forests, floodplains.	Y (N) UTM: NO
FOD6, FOD7, FOD8, FOD9	Harbinger-of-spring ( <i>Engenia bulbosa</i> ) - S3 <u>Bloom Time</u> – early to late April	Occurs in rich, moist deciduous woods especially on floodplains.	Y (N) UTM: NO
SAS1, SAM1, SAF1	Hill's Pond Weed ( <i>Potamogeton hillii</i> ) - S1/S2 <u>Bloom Time</u> – summer	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters.	Y (N) UTM: NO
FOM6, FOM7, FOM8	Large Round-leaved Orchid ( <i>Platanthera macrophylla</i> ) - S2 <u>Bloom Time</u> – June to August	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands.	Y (N) UTM: NO
MAM2, MAM3, MAS2, MAS3, SWD	Lizard's Tail ( <i>Saururus cernuus</i> ) - S3 <u>Bloom Time</u> – June – September	Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds.	Y (N) UTM: NO
FOD6, FOD7, FOD9	Pawpaw ( <i>Asimina triloba</i> ) - S3 <u>Bloom Time</u> – March–May	Occurs in moist deciduous woods and stream banks.	Y (N) UTM: NO
FOM8, FOD6, FOD7, FOD9, CUM1	Pilose Evening Primrose ( <i>Oenothera pilosella</i> ) - S2 <u>Bloom Time</u> – Late Spring – Early Summer	Moist edges of woods and open, disturbed ground.	Y (N) UTM: NO
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostate Tick-trefoil ( <i>Desmodium rotundifolium</i> ) - S2 <u>Bloom Time</u> – July–September	Dry, sandy or rocky woods	Y (N) UTM: NO
FOD7, SWD	Pumpkin Ash ( <i>Fraxinus profunda</i> ) - S2? <u>Bloom Time</u> – March - June	Swamps and floodplains	Y (N) UTM: NO
CUM1, ALO, FET1, SWC	Ram's-head Lady's-slipper ( <i>Cypripedium arietinum</i> ) - S3 <u>Bloom Time</u> – mid May to mid June	Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamps, dry-sandy woods, and limestone barren.	Y (N) UTM: NO
FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5	Rattlesnake Hawkweed ( <i>Hieracium venosum</i> ) - S2 <u>Bloom Time</u> – April – September	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands.	Y (N) UTM: NO
FOD6, FOD7, FOD9	Round-leaved Groundsel ( <i>Packera obovata</i> ) - S3 <u>Bloom Time</u> – May - June	Found in moist woods	Y (N) UTM: NO
CUM1, CUT1, CUS1	Round-leaved hawthorn ( <i>Crataegus lumarina</i> ) - S3?	Species occurs in old fields, poorly managed pastures, fencelines and roadsides	Y (N) UTM: NO
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm ( <i>Monarda didyma</i> ) - S3 <u>Bloom Time</u> – May to October	Found in moist, rich woods, thicket swamps, banks and floodplains	Y (N) UTM: NO
ALO, ALS, ALT, TPO, TPS, TPW	Slender Blazing Star ( <i>Liatris cylindracea</i> ) - S3	Species occurs in limestone and dolostone pavement, prairies, open woods, always and moist sandy meadows.	Y (N) UTM: NO
SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2	Slender Knotweed ( <i>Polygonum tenue</i> ) - S2	Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows, at edges of sand pits	Y (N) UTM: NO
SDT1, FOD5, FOD9	Slim-flowered Mully ( <i>Muhlenbergia tenuiflora</i> ) - S2	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods	Y (N) UTM: NO
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian ( <i>Gentiana quinquefolia</i> ) - S2 <u>Bloom Time</u> – late summer to mid fall	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	Y (N) UTM: NO
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine ( <i>Lupinus perennis</i> ) - S3 <u>Bloom Time</u> – mid-March to mid-June	Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen.	Y (N) UTM: NO

# Species Conservation Concern Habitat and Incidental Wildlife – Goshen

AOM

LC	Species	Habitat Description	Habitat Present (Y/N); UTM; description of habitat if present
TPO1, TPS1, TPW1, CUM1	Tall Blazing Star ( <i>Liatris aspera</i> )-S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM: NO
FE0, FES, FET, MAM2, MAM3	Tuberous Indian Plantain ( <i>Amoglossum plantagineum</i> ) - S3 Bloom Time - mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats.	Y (N) UTM: NO
FOC1, FOC2, FOC3, FOC4	Woodland Pinetrops ( <i>Pterospora andromedea</i> ) - S2 Bloom Time - summer	Found in conifer woods, under pines, but also hemlock, spruce, fir, and white cedar. In dry or rocky soil, often with common juniper and sometimes aspen or birch.	Y (N) UTM: NO
CUM1, CUT1, CUW1, RBO1, SBO1	Yellow Ladies'-tresses ( <i>Spiranthes ochroleuca</i> ) - S2 Bloom Time - August to November	Dry, open sites, usually on acidic sandy soil, dry to mesic open woodland, thickets, meadows, barrens, ledges, outcrops, banks and roadsides, old fields.	Y (N) UTM: NO
<b>BIRDS</b>			
-	Bald Eagle ( <i>Haliaeetus leucocephalus</i> ) - SC	Assessed as SWH. Record species if found.	not required.
CUW, SDO, RBO, TPS	Common Nighthawk ( <i>Chordeiles minor</i> ) - SC	Hunts insects over a wide variety of habitats, in particular open or semi-open areas. Nests on ground in a wide range of open, sparse or vegetation-free habitats.	Y (N) UTM: NO
FOD, FOM	Louisiana Waterthrush ( <i>Selurus motacilla</i> ) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration	Y (N) UTM: NO
FOD, CUW, CUT	Red-headed Woodpecker ( <i>Melanerpes erythrocephalus</i> ) - SC	Species inhabits open woodland/edges (oak savannahs and riparian forest), open, deciduous forest with little understory, fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; requires cavity trees with at least 40 cm dbh; requires about 4 ha for a territory.	N UTM: NO
-	Short Eared Owl ( <i>Asio flammeus</i> ) - SC	Assessed as SWH. Record species if found.	not required.
CUT1	Yellow-breasted Chat ( <i>Icteria virens</i> ) - SC	Inhabits thickets, tall tangles of shrubbery beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines	Y (N) UTM: NO
<b>REPTILES</b>			
-	Eastern Ribbonsnake ( <i>Thamnophis sauritus</i> ) - SC	Assessed as SWH. Record species if found.	not required.
-	Milksnake ( <i>Lampropeltis triangulum</i> ) -SC	Assessed as SWH. Record species if found.	not required.
-	Snapping Turtle ( <i>Chelydra serpentina</i> ) - SC	Assessed as SWH. Record species if found.	not required.
<b>INSECTS</b>			
OAO, SA, SWM, SWD	Azure Bluet ( <i>Enallagma aspersum</i> ) -S3	Species inhabits fishless ponds, lakes and boggy swamps	Y (N) UTM: NO
TPS, TPW	Sleepy Duskywing ( <i>Erynnis brize</i> ) - S1	Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils. Species regularly seen at flowers in oak woods, on the ground, and at mud puddles	Y (N) UTM: NO
CUM1, CUT1, CUW1	Monarch Butterfly ( <i>Danaus plexippus</i> ) - SC	Their larvae only feed on milkweeds ( <i>Asclepius</i> spp.). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow	Y (N) UTM: NO
TPS, CUW	Mottled Duskywing ( <i>Erynnis martialis</i> ) -S2	Usually seen nectaring or on wet sandy meads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present	Y (N) UTM: NO
SWT, SWD, SWM, FOM, FOD4-3, TPW, TPS, CUM1	Tawny Emperor ( <i>Asterocampa clytem</i> ) - S3	Species inhabits densely wooded riparian areas, elfy woods, open woods, fencerows and parks. Usually occurs near Hackberry, the larval foodplant	Y (N) UTM: NO
FOD5	West Virginia White ( <i>Pteris virginensis</i> ) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y (N) UTM: NO

**Significant Wildlife Habitat Form**

Re-visit Nest Bowl

AECOM

Study Area:	BLW    JER <u>GSH</u>	Map #:	<u>280-GSH1759</u>
Date:	<u>18-May-2012</u>	Time Started:	<u>8:30</u>
Field Staff:	<u>A. Dait</u>	Time Finished:	<u>8:55</u>
Weather Conditions:	<u>Sunny, 18°C</u>		<u>9:15</u>

**Colonial Nesting Tree/Shrub Birds, Osprey Breeding/Feeding, Bald Eagle Breeding/Nesting Habitat**  
(FET1, FOC, FOM, FOD, SWC, SWM, SWD)

Nest bowls present:  No  Yes (if yes, photograph and complete the following)

UTMs: 447301, 4795499      Number of nests: 1

Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present):  
Nest actually in tall Green Ash ~ 20m high near edge of beulah + field

Description of habitat (note riparian areas if present, evidence of disturbance):  
Size of Crow nest + likely Crow, Crows heard calling nearby; No birds seen near nest  
Also second old nest in Ash about 10m away

**Waterfowls Stopover/Nesting, Amphibian Breeding, Turtle Nesting/Over-wintering, Marsh Breeding Birds**  
(CUM1, CUT1, MAM, MAS, SAS1, SAM1, SAF1, SWD, SWT1, SWT2)      (FOC, FOM, FOD, SWC, SWM, SWD, BOO1, FEO1)

Standing water present:  No  Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_       Area of standing water delineated on field map

Water depth (m): \_\_\_\_\_      % open water: \_\_\_\_\_      % emergent vegetation: \_\_\_\_\_

Description of standing water (permanent pool, evidence of annual spring flooding, etc): \_\_\_\_\_

Area and soil/substrate of shoreline habitat: \_\_\_\_\_

Type and abundance of cover in open water habitat: \_\_\_\_\_

Type and abundance of cover in surrounding habitat: \_\_\_\_\_

Evidence of disturbance (e.g. cattle grazing): \_\_\_\_\_

Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: \_\_\_\_\_

\*\*\*Complete Vernal Pool Habitat Description Form\*\*\*

**Snake Hibernacula**

Fissured rock/foundation or rock/debris pile present:  No  Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_      Likelihood to extend below frost line: \_\_\_\_\_

% canopy cover: \_\_\_\_\_      % slope: \_\_\_\_\_      Distance to open canopy (m): \_\_\_\_\_

Description of fissure or stone pile (composition/material, dimensions, etc): \_\_\_\_\_

Description of surrounding habitat (type & abundance of cover, evidence of disturbance, etc): \_\_\_\_\_

**Seeps and Springs** (FOC, FOM, FOD, SWC, SWM, SWD)

Evidence of seep or spring:  No  Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_      Description (indicator species, etc): \_\_\_\_\_

\* Additional - bird calls heard are on back of sheet

# NHA Site Investigation - Significant Wildlife Habitat Form

**AECOM**

## Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)

(CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1)

Eroding bank, sandy hill, pits, steep slope or rock face present:

 No

 Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_

Location (e.g. aggregate pit, bridge): \_\_\_\_\_

Evidence of use by bank or cliff swallows (provide number of nests): \_\_\_\_\_

## Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas

(BBO1, BBO2, BBS1, BBS2, BBT1, BBT2, SDO1, SDS2, SDT1, MAM1, MAM2, MAM3, MAM4, MAMS)

Shoreline of lake, large river or large wetland present:

 No

 Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_

Rocky island or peninsula present: \_\_\_\_\_

Mudflat present: \_\_\_\_\_

Evidence of disturbance (e.g. cattle grazing): \_\_\_\_\_

Description of habitat (size of rocky outcrop/mudflat, substrate/soil type, type and abundance of cover): \_\_\_\_\_

## Raptor Winter Feeding and Roosting, Open Country or Shrub/Early Successional Bird Breeding Habitat

CUT1, CUS1, >30ha, CUM1 >30ha, FOC, FOD, FOM with a CUM, CUT, CUS, CUW > 20ha, or a CUM, CUS, CUT, CUW >15ha

Large meadow, old field or generally open habitat (e.g. CUM, CUS, CUT, CUS, CUW) present:

Large open habitat present:

 No

 Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_

Evidence of disturbance (e.g. cattle grazing): \_\_\_\_\_

Description of habitat (abundance of food plants for rodents, abundance of perches, height of vegetation): \_\_\_\_\_

## Old-growth or Mature Forests, Interior Forest Breeding Birds

(FOD, FOC, FOM, SWC, SWM, SWD. Mature forest (>60 years) present)

Mature forest present:

 No

 Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_

Age of oldest trees: \_\_\_\_\_

Evidence of disturbance (e.g. selective cutting): \_\_\_\_\_

Description of habitat (structural complexity, abundance of snags and/or downed woody debris, etc): \_\_\_\_\_

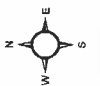
Photo #	Location or Subject	Photo #	Location or Subject



- Legend**
- Property Boundary
  - GE Turbine
  - ELC Completed 2011
  - Natural Feature and ID
  - ELC Polygon Boundary
  - Disturbance Areas
  - Area of Disturbance, plus 10m
  - ANSI
  - Evaluated Wetlands - PSW
  - ABCA Watercourse



Basemapping from Ontario Ministry of Natural Resources  
Orthophotography 2010



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Goshen Amphibian Survey  
280\_GSH1801  
April 2012  
Project 60155032

**AECOM**

Figure 1



**ELC**  
Community Description and Classification

Map #: 280-GSH1801 Polygon: 7  
 Surveyor(s): RA, SG Date: Apr 24, 2012 Time start: 12:00 on  
 UTMZ: UTMN: finish: 4:00 pm

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <input type="checkbox"/> Site <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock <input checked="" type="checkbox"/> History <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Cultural <input type="checkbox"/> Cover <input type="checkbox"/> Open <input type="checkbox"/> Shrub <input checked="" type="checkbox"/> Tree	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input checked="" type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input type="checkbox"/> Deciduous <input checked="" type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input checked="" type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (>> Much Greater Than; > Greater Than; = About Equal To)
1	2	4	PINRES127PINSTRO
2	2	1	WALNAMES
3	-	0	
4	-	0	

HT Codes: 7 <0.2m 6 >0.2-0.5m 5 >0.5-1m 4 >1-2m 3 >2-6m 2 >6-25m 1 >25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition:	Size Class Analysis:	Standing Snags:	Deadfall / Logs:
	R <10 A 10-24 N 25-50 N >50	R <10 R 10-24 N 25-50 N >50	R <10 R 10-24 N 25-50 N >50

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite:	Code:
Coniferous Plantation	CUP3
Vegetation Type:	Code:
Red Pine Coniferous Plantation	CUP3-1
Inclusion:	Code:
Complex:	Code:

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
Total						100
Basal Area (BA)						
Dead						

**Soils Ontario and ELC Soils Description**

Site Metrics	PI/Auger #	N/R	Summary
Zone			<b>Moisture Regime</b>
Easting			
Northing			<b>Drainage</b>
Position			
Aspect			<b>Effective Texture (indicate below)</b>
Percent			
Slope			% CF
Length			
Mottles			% CF
Gley			
Water Table			% CF
Carbonates			
Bedrock			% CF
Depth from zero			
Texture			% CF
Depth from zero			
Texture			% CF
Depth from zero			
Texture			% CF
Depth from zero			
Texture			% CF
Depth from zero			
Texture			% CF
Depth from zero			
% Surface Stone/Rock			% CF
Moisture Regime			
Drainage			% CF

**ELC**  
Community Description and Classification

Map #: 280-GSF11801 Polygon: 8

Surveyor(s): BA, SG Date: April 24, 2012 Time start: 2:00 pm finish: 4:00 pm

UTMZ: UTMZ: UTMN:

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <b>Site</b> <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock <b>History</b> <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Cultural <b>Cover</b> <input checked="" type="checkbox"/> Open <input type="checkbox"/> Shrub <input type="checkbox"/> Treed	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input checked="" type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input checked="" type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input checked="" type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (>> Much Greater Than; > Greater Than; = About Equal To)
1		0	
2	2	1	POPTREN
3	4	1	CORSEAL > SALLX SP.
4			GRASS SP. > SOLALTI > ALLPETI

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-5m 2 > 6-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition:	Size Class Analysis:	Standing Snags:	Deadfall / Logs:
	R < 10 N 10-24 N 25-50 N > 50	N < 10 N 10-24 N 25-50 N > 50	N < 10 N 10-24 N 25-50 N > 50

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite: Mineral Culture Meadow Code: C  
 Vegetation Type: y eastold Field Meadow Code:  
 Inclusion: Code:  
 Complex: Code:

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Prism Factor	2
Total							100
Basal Area (BA)							
Dead							

**Soils Ontario and ELC Soils Description**

Site Metrics	PIV/Auger #	Summary
UTM	Zone	Moisture Regime
	Easting	
	Northing	
	Position	
Slope	Aspect	Drainage
	Percent	
	Slope Length	
Depth to ...	Mottles	Effective Texture (Indicate below)
	Gley	
	Water Table	
	Carbonates	% CF
	Bedrock	
1	Depth from zero	% CF
	Texture	% CF
2	Depth from zero	% CF
	Texture	% CF
3	Depth from zero	% CF
	Texture	% CF
4	Depth from zero	% CF
	Texture	% CF
	% Surface Stone/Rock	% CF
	Moisture Regime	% CF
	Drainage	

**ELC** Community Description and Classification

Map #: 280-GSH1801 Polygon: 9

Surveyor(s): RA, SG Date: Apr 124, 2012 Time start: 2:00pm finish: 4:00pm

UTMZ: UTMZ: UTMN:

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input checked="" type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input checked="" type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input checked="" type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation
<b>Site</b> <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock				
<b>History</b> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Cultural				
<b>Cover</b> <input type="checkbox"/> Open <input type="checkbox"/> Shrub <input checked="" type="checkbox"/> Tree				

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1			ACESACC = FRAPENN = ULMANER
2			FRAPENN > ULMANER
3			PR RG > VLD AMERZ LINBEN
4			RYANERZ 1ST L

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-5m 2 > 6-25m 1 > 25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition:	Size Class Analysis:	Standing Snags:	Deadfall / Logs:
	<input type="checkbox"/> <10 <input type="checkbox"/> 10-24 <input type="checkbox"/> 25-50 <input type="checkbox"/> >50	<input type="checkbox"/> <10 <input type="checkbox"/> 10-24 <input type="checkbox"/> 25-50 <input type="checkbox"/> >50	<input type="checkbox"/> <10 <input type="checkbox"/> 10-24 <input type="checkbox"/> 25-50 <input type="checkbox"/> >50

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Ecosite: Fresh Moist Sugar Maple Deciduous Forest  
 Vegetation Type: Ash Deciduous Forest  
 Inclusion: Code: FOD  
 Complex: Code: FOD

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Prism Factor
Basal Area (BA)						2
Dead						
Total						100

**Soils Ontario and ELC Soils Description**

Site Metrics	Plt/Auger #	Soil Horizon Description				Summary
Zone Easting Northing Position Aspect Percent Slope Length						Moisture Regime
Mottles						Drainage
Gley						
Water Table						
Carbonates						
Bedrock						
1	Depth from zero	% CF	% CF	% CF	% CF	% CF
	Texture					
2	Depth from zero	% CF	% CF	% CF	% CF	% CF
	Texture					
3	Depth from zero	% CF	% CF	% CF	% CF	% CF
	Texture					
4	Depth from zero	% CF	% CF	% CF	% CF	% CF
	Texture					
	% Surface Stone/Rock					
	Moisture Regime					
	Drainage					

**ELC**  
Community Description and Classification

Map #: 280-GSH1801 Polygon: 10  
 Surveyor(s): BA, SG Date: April 24, 2012 Time start: 2:00pm finish: 4:00pm  
 UTMZ: UTMZ: UTMN:

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Aquatic	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk <input type="checkbox"/> Bedrock	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input checked="" type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Cliff, Upland <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input checked="" type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input checked="" type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation
Site	<input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock			
History	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Cultural			
Cover	<input type="checkbox"/> Open <input type="checkbox"/> Shrub <input checked="" type="checkbox"/> Treed			

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (>> Much Greater Than; > Greater Than; = About Equal To)
1	1	4	ACEFEEZFR P NN
2	2	2	ACE REZ FRA EN
3	4	2	LINBENZU A R
4	7	1	NIACANA

HT Codes: 7 <0.2m 6 >0.2-0.5m 5 >0.5-1m 4 >1-2m 3 >2-5m 2 >6-25m 1 >25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

**Stand Composition: Size Class Analysis:**  
 Standing Snags: 

<10	A	10-24	O	25-50	R	>50
<10	A	10-24	R	25-50	N	>50

  
 Deadfall / Logs: 

<10	A	10-24	R	25-50	N	>50
-----	---	-------	---	-------	---	-----

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

**Com. Age:**  Pioneer  Young  Mid-Age  Mature  Old Growth

**Ecosite:** Maple Mineral Deciduous Swamp Code: SWD3  
**Vegetation Type:** Swamp Maple Mineral Deciduous Code: SWD3-3  
**Inclusion:** Swamp Code: -  
**Complex:** Code: -

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Prism Factor
<b>Total</b>						2
<b>Basal Area (BA)</b>						
<b>Dead</b>						

**Soils Ontario and ELC Soils Description**

Site Metrics		PIV/Auger #	Soils Description				Summary
Zone	Easting	17T					<b>Moisture Regime</b>
UTM	Nothing	0448 4					
Position	Aspect	4796 51					
Slope	Percent	Bottomland					
	Slope Length	N					<b>Drainage</b>
	Mottles						
Depth to ...	Gley	20cn					<b>Effective Texture (indicate below)</b>
	Water Table	20c					
	Carbonates						
	Bedrock						
	1	Depth from zero	2	% CF		% CF	% CF
	2	Texture					
	3	Depth from zero	2	% CF		% CF	% CF
	4	Texture					
		Depth from zero					% CF
		Texture					
		% Surface Stone/Rock					% CF
		Moisture Regime					
		Drainage					



Plant Species List  
2012

Dicot Herbs - Asteraceae						Dicot Herbs						Dicot Herbs					
1	2	3	4	5		1	2	3	4	5	1	2	3	4	5		
Common Yarrow ( <i>Achillea millefolium</i> )					Shepherd's Purse ( <i>Capsella bursa-pastoris</i> )						Kidney-leaf Buttercup ( <i>Ranunculus abortivus</i> )						
White Snakeroot ( <i>A. serotina altissima</i> )					Cutleaf Toothwort ( <i>Cardamine concatenata</i> )						Tall Buttercup ( <i>Ranunculus acris</i> )						
Com. Ragwort ( <i>Ambrosia artemisiifolia</i> )					Toothwort ( <i>Cardamine diaphylla</i> )						Hooked Buttercup ( <i>Ranunculus recurvatus</i> )						
Giant Ragwort ( <i>Ambrosia trifida</i> )					Penn Bitter-cress ( <i>Cardamine pensylvanica</i> )						Ranunculus						
Field Puss-toes ( <i>Antennaria neglecta</i> )					Cardamine						Sheep Sorrel ( <i>Rumex acetosella</i> )						
Artemisia					Blue Cohosh ( <i>Caulophyllum thalictroides</i> )						Curly-leaf Dock ( <i>Rumex crispus</i> )						
Common Burdock ( <i>Arctium minus</i> )					Mouse-ear Chickweed ( <i>Cerastium fontanum</i> )						Bitter Dock ( <i>Rumex obtusifolius</i> )						
Nodding Beggar-ticks ( <i>Bidens cernua</i> )					Turtlehead ( <i>Chelone glabra</i> )						Bloodroot ( <i>Sanguinaria canadense</i> )						
Devil's Beggar-ticks ( <i>Bidens frondosa</i> )					Spotted Water-hemlock ( <i>Cicuta maculata</i> )						Black Snakeroot ( <i>Sanicula marilandica</i> )						
Spotted Knapweed ( <i>Centaurea biebersteinii</i> )					Water-hemlock ( <i>Cicuta virosa</i> )						Bouncing Bet ( <i>Sisymbrium officinalis</i> )						
Brown Knapweed ( <i>Centaurea jacea</i> )					Enchanter's Nightshade ( <i>Circaea lutetiana</i> )						Marsh Skullcap ( <i>Scutellaria palerucata</i> )						
Chicory ( <i>Cichorium intybus</i> )					Carolina Spring Beauty ( <i>Claytonia caroliniana</i> )						Mad Dog Skullcap ( <i>Scutellaria lateriflora</i> )						
Canada Thistle ( <i>Cirsium arvense</i> )					Virginia Spring Beauty ( <i>Claytonia virginica</i> )						White Camphion ( <i>Silene latifolia</i> )						
Bull Thistle ( <i>Cirsium vulgare</i> )					Virgin's-bower ( <i>Clematis virginiana</i> )						Bladder Campion ( <i>Silene vulgaris</i> )						
Horseweed ( <i>Conyza canadensis</i> )					Field Bindweed ( <i>Convolvulus arvensis</i> )						Hemlock Waterparsni ( <i>Sium suave</i> )						
Daisy Fleabane ( <i>Eryngon annuus</i> )					Doan's-translating Vine ( <i>Cyananthus rossicum</i> )						Bitter Nightshade ( <i>Solanum dulcamara</i> )						
Philadelphia Fleabane ( <i>Eryngium philadelphicum</i> )					Wild Carrot ( <i>Daucus carota</i> )						Black Nightshade ( <i>Solanum nigrum</i> )						
Eryngon					Dorset Pink ( <i>Dianthus armeria</i> )						Grassleaf Stitchwort ( <i>Stellaria graminea</i> )						
Joe-Pye-weed ( <i>Eupatorium maculatum</i> )					Squirrel-corn ( <i>Dicentra canadensis</i> )						Common Chickweed ( <i>Stellaria media</i> )						
Boneset ( <i>Eupatorium purfoliatum</i> )					Dutchman's-breaches ( <i>Dicentra cucullaria</i> )						Early Meadow-rue ( <i>Thalictrum dioicum</i> )						
Large-leaved Aster ( <i>Eurybia macrophylla</i> )					Wild Teasel ( <i>Dipsacus fullonum</i> )						Tall Meadow-rue ( <i>Thalictrum pubescens</i> )						
Flat-top Goldenrod ( <i>Euthamia graminifolia</i> )					Wild Cucumber ( <i>Echinocystis lobata</i> )						Field Pennycress ( <i>Thlaspi arvense</i> )						
Orange Hawkweed ( <i>Hieracium aurantiacum</i> )					Virgin's Burloss ( <i>Echium vulgare</i> )						Foamflower ( <i>Tiarella cordifolia</i> )						
Field Hawkweed ( <i>Hieracium caespitosum</i> )					Northern Willow-herb ( <i>Epilobium ciliatum</i> )						Star-flower ( <i>Trenitalia borealis</i> )						
Hieracium					Hairy Willow-herb ( <i>Epilobium hirsutum</i> )						Red Clover ( <i>Trifolium pratense</i> )						
Elecampane ( <i>Inula helenium</i> )					Small-fl Willow-herb ( <i>Epilobium parviflorum</i> )						White Clover ( <i>Trifolium repens</i> )						
Prickly Lettuce ( <i>Lactuca scariola</i> )					Epilobium						Trifolium						
Lactuca					Worm Mustard ( <i>Erysimum cheiranthoides</i> )						Stinging Nettle ( <i>Urtica dioica</i> )						
Ox-eye Daisy ( <i>Leucanthemum vulgare</i> )					Euroborbia						Greater Bladderwort ( <i>Utricularia vulgaris</i> )						
Pineapple-weed ( <i>Matricaria discordea</i> )					Worm Nettle ( <i>Lepidosiphon tetrahit</i> )						Common Mullein ( <i>Verbascum thapsus</i> )						
Tall White Lettuce ( <i>Prenanthes altissima</i> )					Wild Madder ( <i>Galium mollugo</i> )						Blue Vervain ( <i>Verbena hastata</i> )						
Black-eyed Susan ( <i>Rudbeckia hirta</i> )					Marsh Bedstraw ( <i>Galium palustre</i> )						White Vervain ( <i>Verbena urticifolia</i> )						
Tall Goldenrod ( <i>Solidago altissima</i> )					Sweet-scented Bedstraw ( <i>Galium triflorum</i> )						Water Speedwell ( <i>Veronica anagallis-aquatica</i> )						
Blue-stem Goldenrod ( <i>Solidago caesia</i> )					Galium						Common Speedwell ( <i>Veronica officinalis</i> )						
Canada Goldenrod ( <i>Solidago canadensis</i> )					Spotted Geranium ( <i>Geranium maculatum</i> )						Veronica						
Zinnia Goldenrod ( <i>Solidago flexicaulis</i> )					Herb-robert ( <i>Geranium robertianum</i> )						Cow Vetch ( <i>Vicia cracca</i> )						
Giant Goldenrod ( <i>Solidago gigantea</i> )					Yellow Avens ( <i>Geum aleaicum</i> )						Vicia						
Early Goldenrod ( <i>Solidago uncea</i> )					White Avens ( <i>Geum canadense</i> )						Periwinkle ( <i>Viola minor</i> )						
Gray Goldenrod ( <i>Solidago nemoralis</i> )					Urban Avens ( <i>Geum urbanum</i> )						Common Violet ( <i>Viola conspersa</i> )						
Solidago					Dame's Rocket ( <i>Hesperis matronalis</i> )						Yellow Violet ( <i>Viola pubescens</i> )						
Field Sow-thistle ( <i>Sonchus arvensis</i> )					Virginia Water-leaf ( <i>Hydrophyllum virginianum</i> )						Com. Blue Violet ( <i>Viola sororia</i> )						
Sonchus					Com. St. John's-wort ( <i>Hypericum perforatum</i> )						Viola						
Heart-leaf Aster ( <i>Symphoricarpos cordifolium</i> )					Spotted Jewelweed ( <i>Impatiens capensis</i> )						<i>Viola setacea</i>						
Heath Aster ( <i>Symphoricarpos ericoides</i> )					Wood Nettle ( <i>Laportea canadensis</i> )						<i>Eryngium virginicum</i>						
Tall White Aster ( <i>Symphoricarpos lanceolatum</i> )					Motherwort ( <i>Leonurus cardiaca</i> )												
Calico Aster ( <i>Symphoricarpos lateriflorum</i> )					Field Peppergrass ( <i>Leptium campestre</i> )												
New England Aster ( <i>Symphoricarpos novae-angliae</i> )					Eur. Gromwell ( <i>Lithospermum officinale</i> )												
Purple-stem Aster ( <i>Symphoricarpos uniceus</i> )					Butter & Eggs ( <i>Linaria vulgaris</i> )												
Common Tansy ( <i>Tanacetum vulgare</i> )					Great Lobelia ( <i>Lobelia siphilitica</i> )												
Common Dandelion ( <i>Taraxacum officinale</i> )					Lobelia												
Com. Goatsbeard ( <i>Thalassipogon pratensis</i> )					Cut-leaf Bugleweed ( <i>Lythrum americanum</i> )						Water Plantain ( <i>Alisma plantago-aquatica</i> )						
Cotsgfoot ( <i>Tussilago farfara</i> )					Northern Bugleweed ( <i>Lythrum uniflorum</i> )						Wild Leek ( <i>Allium tricoccum</i> )						
					Fringed Loosestrife ( <i>Lythrum ciliata</i> )						Jack-in-the-box ( <i>Ansaema triphelyum</i> )						
					Monardella ( <i>Lythrum nummularia</i> )						Asarum ( <i>Asarum officinale</i> )						
					Lythrum						Wild Calla ( <i>Calla palustris</i> )						
					Purple Loosestrife ( <i>Lythrum salicaria</i> )						Bluebead-lily ( <i>Cliantonia borealis</i> )						
					Black Medick ( <i>Medicago lupulina</i> )						Garden Lily-of-the-valley ( <i>Convallaria majalis</i> )						
					Alfalfa ( <i>Medicago sativa</i> )						Yel. Lily's Slipper ( <i>Cypripedium parviflorum</i> )						
					White Sweet-clover ( <i>Melilotus alba</i> )						Canada Waterweed ( <i>Elodea canadensis</i> )						
					Yellow Sweet-clover ( <i>Melilotus officinalis</i> )						Helleborine ( <i>Eppacis helleborine</i> )						
					Wild Mint ( <i>Mentha arvensis</i> )						Yellow Trout Lily ( <i>Erythronium americanum</i> )						
					Wild Bergamot ( <i>Monarda fistulosa</i> )						Blue-fl. Iris ( <i>Iris versicolor</i> )						
					Small Forget-me-not ( <i>Myosotis laxa</i> )						Orange Day Lily ( <i>Heimerocallis fulva</i> )						
					Forget-me-not ( <i>Myosotis scorpioides</i> )						Lesser Duckweed ( <i>Lemna minor</i> )						
					Water-cress ( <i>Nasturtium officinale</i> )						Sour Duckweed ( <i>Lemna sicular</i> )						
					Com Evening primrose ( <i>Oenothera biennis</i> )						Wild Lily-of-the-valley ( <i>Maianthemum canadense</i> )						
					Sweet-cicely ( <i>Osmorhiza berterii</i> )						False Solom Seal ( <i>Maianthemum racemosum</i> )						
					Yellow Wood-sorrel ( <i>Oxalis stricta</i> )						Star False Solomon ( <i>Maianthemum stellatum</i> )						
					Wild Parsnip ( <i>Pastinaca sativa</i> )						True Solomon Seal ( <i>Polygonatum pubescens</i> )						
					English Plantain ( <i>Plantago lanceolata</i> )						Pickereel-weed ( <i>Pontederia cordata</i> )						
					Common Plantain ( <i>Plantago major</i> )						Curly-leaf Pondweed ( <i>Potamogeton crispus</i> )						
					Rugel's Plantain ( <i>Plantago rugelii</i> )						Sago Pondweed ( <i>Potamogeton pectinatus</i> )						
					Man-of-war ( <i>Podophyllum peltatum</i> )						Potamogeton						
					Pale Smartweed ( <i>Polygonum lapathifolium</i> )						Potamogeton						
					Lady's-thumb ( <i>Polygonum persicaria</i> )						Broad-leaved Arrowhead ( <i>Sagittaria latifolia</i> )						
					Virginia Knotweed ( <i>Polygonum virginianum</i> )						Blue-eyed grass ( <i>Scyrrhium montanum</i> )						
					Polygonum						Herb Canton Flower ( <i>Smilax herbacea</i> )						
					Polygonum						Bristly Greenbrier ( <i>Smilax hispida</i> )						
					Rough Cin-uefoil ( <i>Potentilla norvegica</i> )						Nodding Ladies Tresses ( <i>Spiranthes cernua</i> )						
					Rough-fruited Cin-uefoil ( <i>Potentilla recta</i> )						Rose Twisted-stalk ( <i>Streptopus lanceolatus</i> )						
					Common Cin-uefoil ( <i>Potentilla simplex</i> )						Skunk-cabbage ( <i>Symplocarpus foetidus</i> )						
					Potentilla						Purple Trillium ( <i>Trillium erectum</i> )						
					Heal-all ( <i>Prunella vulgaris</i> )						White Trillium ( <i>Trillium grandiflorum</i> )						
					Shinleaf ( <i>Pyrola elliptica</i> )						Large-flowered Bellwort ( <i>Uvularia grandiflora</i> )						

D - Dominant represented by large numbers generally forming >10% ground cover or >25% vegetation cover in any one stratum  
 F - Fairly common (=Abundant in ELC) generally widespread represented by fairly large numbers of individual clumps, usually forming >10% ground cover  
 U - Uncommon (=Occasional in ELC) present as widespread scattered individuals or represented by one or more clumps of many individuals (most species will fall into this category)  
 R - Rare represented by the polygon by less than about five individuals or small clumps

Map Number:	1	4
Date:	2	5
Surveyors:	3	

# Significant Wildlife Habitat Form

AECOM

Study Area:	BLW    JER <b>GSH</b>	Map #:	280-GSH-1801
Date:	April 24, 2012	Time Started:	2:00 pm
Field Staff:	SG, PA.	Time Finished:	4:00 pm
Weather Conditions:	Sunny, Windy		

**Colonial Nesting Tree/Shrub Birds, Osprey Breeding/Feeding, Bald Eagle Breeding/Nesting Habitat**  
(FET1, FOC, FOM, FOD, SWC, SWM, SWD)

Nest bowls present:     **No**                       **Yes (if yes, photograph and complete the following)**

UTMs: \_\_\_\_\_                      Number of nests: \_\_\_\_\_

Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present): \_\_\_\_\_

\_\_\_\_\_

Description of habitat (note riparian areas if present, evidence of disturbance): \_\_\_\_\_

**Waterfowls Stopover/Nesting, Amphibian Breeding, Turtle Nesting/Over-wintering, Marsh Breeding Birds**  
(CUM1, CUT1, MAM, MAS, SAS1, SAM1, SAF1, SWD, SWT1, SWT2)                      ( FOC, FOM, FOD, SWC, SWM, SWD, BOO1, FEO1)

Standing water present:     **No**                       **Yes (if yes, photograph and complete the following)**

UTMs: \_\_\_\_\_                       Area of standing water delineated on field map

Water depth (m): \_\_\_\_\_                      % open water: \_\_\_\_\_                      % emergent vegetation: \_\_\_\_\_

Description of standing water (permanent pool, evidence of annual spring flooding, etc): \_\_\_\_\_

Area and soil/substrate of shoreline habitat: \_\_\_\_\_

Type and abundance of cover in open water habitat: \_\_\_\_\_

Type and abundance of cover in surrounding habitat: \_\_\_\_\_

Evidence of disturbance (e.g. cattle grazing ): \_\_\_\_\_

Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: \_\_\_\_\_

\_\_\_\_\_

**\*\*\*Complete Vernal Pool Habitat Description Form\*\*\***

**Snake Hibernacula**

Fissured rock/foundation or rock/debris pile present:     **No**                       **Yes (if yes, photograph and complete the following)**

UTMs: \_\_\_\_\_                      Likelihood to extend below frost line: \_\_\_\_\_

% canopy cover: \_\_\_\_\_                      % slope: \_\_\_\_\_                      Distance to open canopy (m): \_\_\_\_\_

Description of fissure or stone pile (composition/material, dimensions, etc): \_\_\_\_\_

Description of surrounding habitat (type & abundance of cover, evidence of disturbance, etc): \_\_\_\_\_

**Seeps and Springs**                      (FOC, FOM, FOD, SWC, SWM, SWD)

Evidence of seep or spring:     **No**                       **Yes (if yes, photograph and complete the following)**

UTMs: \_\_\_\_\_                      Description (indicator species, etc): \_\_\_\_\_



# NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

## Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)

(CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1)

Eroding bank, sandy hill, pits, steep slope or rock face present:

No

Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_

Location (e.g. aggregate pit, bridge): \_\_\_\_\_

Evidence of use by bank or cliff swallows (provide number of nests): \_\_\_\_\_

## Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas

(BBO1, BBO2, BBS1, BBS2, BBT1, BBT2, SDO1, SDS2, SDT1, MAM1, MAM2, MAM3, MAM4, MAM5)

Shoreline of lake, large river or large wetland present:

No

Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_

Rocky island or peninsula present: \_\_\_\_\_

Mudflat present: \_\_\_\_\_

Evidence of disturbance (e.g. cattle grazing): \_\_\_\_\_

Description of habitat (size of rocky outcrop/mudflat, substrate/soil type, type and abundance of cover):

## Raptor Winter Feeding and Roosting, Open Country or Shrub/Early Successional Bird Breeding Habitat

CUT1, CUS1, >30ha, CUM1 >30ha, FOC, FOD, FOM with a CUM, CUT, CUS, CUW > 20ha, or a CUM, CUS, CUT, CUW > 15ha

Large meadow, old field or generally open habitat (e.g. CUM, CUS, CUT, CUS, CUW) present:

Large open habitat present:  No

Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_

Evidence of disturbance (e.g. cattle grazing): \_\_\_\_\_

Description of habitat (abundance of food plants for rodents, abundance of perches, height of vegetation):

## Old-growth or Mature Forests, Interior Forest Breeding Birds

(FOD, FOC, FOM, SWC, SWM, SWD. Mature forest (>60 years) present)

Mature forest present:  No

Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_

Age of oldest trees: \_\_\_\_\_

Evidence of disturbance (e.g. selective cutting): \_\_\_\_\_

Description of habitat (structural complexity, abundance of snags and/or downed woody debris, etc):

Photo #	Location or Subject	Photo #	Location or Subject

# Species Conservation Concern Habitat and Incidental Wildlife - Goshen



Map No: 280-GH-180  
Date (yyyy-mm-dd): 10/27/2011

Field Staff: S. RA

Time Started: 2:00 PM  
Time Finished: 4:00 PM

## Observed Species List

A- 7-CUP3-1, 8-CUP3-1, 9-FOD6-1, 10-SWD3-3

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
Turkey Vulture		OB	VERY WINDY				
Bush-crowned chickadee		VO					

Note: Evidence Codes (EV) SH= Suitable Habitat, SM= Singing Male; T= Territory, D= Display, P= Pair, N= Nest Building, V= Visiting Nest, A= Anxiety Behavior; DD= Distraction, NU= Used Nest, FY= Fledged Young, NE= Eggs, NY= Young, FS= Feces/Faecal sack, AE= Nest Entry

Other Wildlife Evidence: OB= Observed, VO= Vocalization, CA= Carcass, DP= Distinctive Parts, HO= House/Den, FY= Eggs/Young, TK= Tracks, FE= Feeding Evidence, SC= Scat, SI= Other signs (specify)

ELC	Species	Habitat Description	Habitat Present (Y/N)	UTM	Description of habitat if present
FOD7	American Gromwell (Lithospermum latifolium) - S3 Bloom Time - Spring	Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods.	Y	N	UTM:
ALO, TPO	Muehlenberg's astomum moss (Astomum muehlenbergianum) - S2 Bloom Time - Spring	Thin soil over level outcrop ledges and on soil under grasses in open prairie	Y	N	UTM:
FOM1, FOM2, CUP3	Autumn Coral-root (Corallorhiza odontorhiza) - S2 Bloom Time - summer to fall	Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry, sandy woods.	Y	N	UTM: n/o
FOC, FOM, FOD	Burning Bush (Eryonimus atropurpureus) - S3 Bloom Time - April - June	Species occurs in dry to moist deciduous thickets and woods.	Y	N	UTM: n/o
SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6	Chinese Hemlock Parsley (Conioselinum chinense) - S2 Bloom Time - summer to fall	Swampy places with deciduous trees, white cedars, tamarack, springy river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes.	Y	N	UTM:
SWC, SWM, SWD, SWT, MAM, MAS	Crowned Beggarticks (Bidens trichosperma) - S2 Bloom Time - late summer	Found in openings in swamps, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian bay. Bogs, fens, tamarack swamps.	Y	N	UTM: n/o
ALT1, FOD7	Eastern Green-violet (Hybanthus concolor) - S2 Bloom Time - mid March to August	Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks.	Y	N	UTM:
TPS, TPW, FOM1, FOM2	Fogg's Goosefoot (Chenopodium foggii) - S2	Species occurs in sandy areas on limestone under oak or pine-oak forests	Y	N	UTM:
TPO2, TPS2, TPW2	Giant Ironweed (Vernonia gigantea) - S1? Bloom Time	Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows	Y	N	UTM:

# Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N); UTM; description of habitat if present
CUM1, MAM, FOD6, FOD7, FOD9	June–August Green Dragon ( <i>Arisaema dracontium</i> ) - SC/S3 <u>Bloom Time – May and June</u>	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y N UTM: n/o
TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	June–August Hairy Bedstraw ( <i>Gallium pilosum</i> ) - S3 <u>Bloom Time – June–August</u>	Occurs in dry, sandy woods and thickets; occasionally in dry sandy fields	Y N UTM: n/a
FEO1, FES1, FET1, SWC, SWM, SWD, SWT, TPO, TPS, TPW	June to August Hairy Valerian ( <i>Valeriana edulis</i> ) - S1 <u>Bloom Time – June to August</u>	Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens.	Y N UTM: n/o
FOD6, FOD7, SWM, SWD	Summer Hairy Wood Mint ( <i>Blephilia hirsuta</i> ) - S1 <u>Bloom Time – Summer</u>	Woodlands, often rocky, especially rivers. Rich woods, swamp forests, floodplains.	Y N UTM: n/o
FOD6, FOD7, FOD8, FOD9	Harbinger-of-spring ( <i>Erigenia bulbosa</i> ) - S3 <u>Bloom Time – early to late April</u>	Occurs in rich, moist deciduous woods, especially on floodplains.	Y N UTM:
SAS1, SAM1, SAF1	Hill's Pond Weed ( <i>Potamogeton hillii</i> ) - SC/S2 <u>Bloom Time – summer</u>	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters.	Y N UTM:
FOM6, FOM7, FOM8	Large Round-leaved Orchid ( <i>Platanthera macrophylla</i> ) - S2 <u>Bloom Time – June to August</u>	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands.	Y N UTM: n/o
MAM2, MAM3, MAS2, MAS3, SWD	Lizard's Tail ( <i>Saururus cernuus</i> ) - S3 <u>Bloom Time – June – September</u>	Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds.	Y N UTM: n/o
FOD6, FOD7, FOD9	Pawpaw ( <i>Asimina triloba</i> ) - S3 <u>Bloom Time – March–May</u>	Occurs in moist deciduous woods and stream banks.	Y N UTM: n/o
FOM8, EOD6, FOD7, FOD9, CUM1	Pilose Evening Primrose ( <i>Oenothera pilosella</i> ) - S2 <u>Bloom Time – Late Spring – Early Summer</u>	Moist edges of woods and open, disturbed ground.	Y N UTM:
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostate Tick-trefoil ( <i>Desmodium rotundifolium</i> ) - S2 <u>Bloom Time – July–September</u>	Dry, sandy or rocky woods	Y N UTM: n/o
FOD7, SWD	Pumpkin Ash ( <i>Fraxinus profunda</i> ) - S2? <u>Bloom Time – March – June</u>	Swamps and floodplains	Y N UTM: n/o
CUW1, ALO, FET1, SWC	Ram's-head Lady's-slipper ( <i>Cypripedium arietinum</i> ) - S3 <u>Bloom Time – mid May to mid June</u>	Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamps, dry-sandy woods, and limestone barren.	Y N UTM:
FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5	Rattlesnake Hawkweed ( <i>Hieracium venosum</i> ) - S2 <u>Bloom Time – April – September</u>	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands.	Y N UTM:
FOD6, FOD7, FOD9	Round-leaved Groundsel ( <i>Packera obovata</i> ) - S3 <u>Bloom Time – May – June</u>	Found in moist woods	Y N UTM: n/o
CUM1, CUT1, CUS1	Round-leaved hawthorn ( <i>Crataegus lumarina</i> ) - S3?	Species occurs in old fields, poorly managed pastures, fencelines and roadsides	Y N UTM: n/o
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm ( <i>Monarda didyma</i> ) - S3 <u>Bloom Time – May to October</u>	Found in moist rich woods, thicket swamps, banks and floodplains.	Y N UTM: n/o
ALO, ALS, ALT, TPO, TPS, TPW	Slender Blazing Star ( <i>Liatris cylindracea</i> ) - S3	Species occurs in limestone and dolomite pavement, prairies, open woods; always and moist sandy meadows.	Y N UTM:
SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2	Slender Knotweed ( <i>Polygonum tenue</i> ) - S2	Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows; at edges of sand pits	Y N UTM:
SDT1, FOD5, FOD9	Slim-flowered Muhly ( <i>Muhlenbergia tenuiflora</i> ) - S2	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods	Y N UTM:
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian ( <i>Gentiana quinquefolia</i> ) - S2 <u>Bloom Time – late summer to mid fall</u>	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	Y N UTM:
TPS1, TPW1, CUW1, RBO SBO	Sundial Lupine ( <i>Lupinus perennis</i> ) - S3 <u>Bloom Time – mid-March to mid-June</u>	Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen.	Y N UTM:

# Species Conservation Concern Habitat and Incidental Wildlife - Goshen



ELC		Species	Habitat Description	Habitat Present (Y/N); UTM; description of habitat if present
TPW1, TPS1, TPW1, CUM1		Tail Blazing Star ( <i>Liatris aspera</i> )-S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y N UTM: <i>n/o</i>
FE0, FES, FET, MAM2, MAM3		Tuberous Indian Plantain ( <i>Arnoglossum plantagineum</i> ) - S3 Bloom Time -mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats.	Y N UTM:
FOC1, FOC2, FOC3, FOC4		Woodland Pinedrops ( <i>Pterospora andromedea</i> ) - S2 Bloom Time - summer	Found in conifer woods, under pines, but also hemlock, spruce, fir, and white cedar. In dry or rocky soil, often with common juniper and sometimes aspen or birch.	Y N UTM:
CUM1, CUT1, CUW1, RBO1, SBO1		Yellow Ladies'-tresses ( <i>Spiranthes ochroleuca</i> ) - S2 Bloom Time - August to November	Dry, open sites, usually on acidic sandy soil, dry to mesic open woodland, thickets, meadows, barrens, ledges, outcrops, banks and roadsides, old fields.	Y N UTM: <i>n/o</i>
<b>BIRDS</b>				
-		Bald Eagle ( <i>Haliaeetus leucocephalus</i> ) - SC	Assessed as SWH. Record species if found.	not required. <i>n/o</i>
CUW, SDO, RBO, TPS		Common Nighthawk ( <i>Chordeiles minor</i> ) - SC	Hunts insects over a wide variety of habitats, in particular open or semi-open areas. Nests on ground in a wide range of open, sparse or vegetation-free habitats.	Y N UTM:
FOD, FOM		Louisiana Waterthrush ( <i>Seiurus motacilla</i> ) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration	Y N UTM: <i>n/o</i>
FOD, CUW, CUT		Red-headed Woodpecker ( <i>Melanerpes erythrocephalus</i> ) - SC	Species inhabits open woodland/ edges (oak savannahs and riparian forest), open, deciduous forest with little understory, fields or pasture lands with scattered large trees, wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; requires cavity trees with at least 40 cm dbh; requires about 4 ha for a territory.	Y N UTM: <i>n/o</i>
-		Short Eared Owl ( <i>Asio flammeus</i> ) - SC	Assessed as SWH. Record species if found.	not required. <i>n/o</i>
CUT1		Yellow-breasted Chat ( <i>Icteria virens</i> ) - SC	Inhabits thickets, tall tangles of shrubbery beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines	Y N UTM:
<b>REPTILES</b>				
-		Eastern Ribbonsnake ( <i>Thamnophis sauritus</i> ) - SC	Assessed as SWH. Record species if found.	not required. <i>n/o</i>
-		Milksnake ( <i>Lampropeltis triangulum</i> ) -SC	Assessed as SWH. Record species if found.	not required. <i>n/o</i>
-		Snapping Turtle ( <i>Chelydra serpentina</i> ) - SC	Assessed as SWH. Record species if found.	not required. <i>n/o</i>
<b>INSECTS</b>				
OAO, SA, SWM, SWD		Azure Bluet ( <i>Enallagma aspersum</i> ) -S3	Species inhabits fishless ponds, lakes and boggy swamps	Y N UTM: <i>n/o</i>
TPS, TPW		Sleepy Duskywing ( <i>Erynnis brize</i> ) - S1	Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils. Species regularly seen at flowers in oak woods, on the ground, and at mud puddles	Y N UTM:
CUM1, CUT1, CUW1		Monarch Butterfly ( <i>Danaus plexippus</i> ) - SC	Their larvae only feed on milkweeds ( <i>Asclepius</i> spp.) Habitat includes abandoned <del>farm</del> out, along roadsides, open spaces where these plants grow	Y N UTM: <i>n/o</i>
TPS, CUW		Mottled Duskywing ( <i>Erynnis martialis</i> ) -S2	Usually seen nectaring or on wet sandy roads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present	Y N UTM:
SWT, SWD, SWM, FOM, FOD4-3, TPW, TPS, CUM1		Tawny Emperor ( <i>Asterocampa clyten</i> ) - S3	Species inhabits densely wooded riparian areas, dry woods, open woods, fencerows and parks. Usually occurs near Hackberry, the larval foodplant	Y N UTM: <i>n/o</i>
FOD5		West Virginia White ( <i>Pieris virginianensis</i> ) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y N UTM:

# Wetland Data Collection Sheet

Study area: <u>Goshon</u>	Map No: <del>280</del> <u>280-GSH 1801</u>
Date (yyyy-mm-dd): <u>April 24, 2012</u>	Time Started: <u>2:00 pm</u>
Field Staff: <u>SG, RA</u>	Time Finished: <u>4:00 pm</u>

**Presence of Groundwater**      No       Yes

bank seepage       iron staining       groundwater indicator

**Site Type**

Lacustrine  (associated with lakes)      Isolated

Riverine  (associated with rivers)

Palustrine  absent or intermittent inflow and either intermittent or permanent outflow

what are the water inputs and outputs?      precipitation, seepage, evapo transpiration

**Soils**      refer to ELC card for soils information

Silty loam: 0-20cm; Silty clay loam w/ gley = 20cm; water table: 20cm

**% open Water**

Type 1 - <5%       Type 5 - 26-75%  (water occurring in a small pattern)

Type 2 - 5-25%  (water occurring in one central location)      Type 6 - 76-95%  (occurring in a central location, vegetation is peripheral)

Type 3 - 5-25%  (water occurring in ponds of various sizes)      Type 7 - 76-95%  (vegetation occurs in patches or diffuse, open stands)

Type 4 - 26-75%  (water occurring in a central location)      Type 8 - >95%  (water occupies over 95% of the area)

**Community Descriptions**

Vegetation forms			
td (deciduous trees)	ne (narrow leaved emergents)	ts (tall shrubs 1-6m)	f (aquatic with floating leaf)
tc (coniferous trees)	be (broad leaved emergents)	ls (low shrubs up to 1m)	ff (free floating)
dh (dead deciduous trees)	gc (ground cover)	ds (dead shrubs)	su (all under water)
dc (dead coniferous trees)	m (mosses)	re (robust emergents)	u (unvegetated)

Map Code/ ELC Code	Community Description - list at least four dominant species for each form
<u>SWD3-3</u>	<u>Acer freemanii - D</u> <u>Fraxinus pennsylvanica - F</u>
<u>SWD3-3</u>	<u>Lindera benzoin - F</u> <u>Ulmus americana - F</u>
<u>SWD3-3</u>	<u>Onoclea sensibilis</u>

same community  
different  
layers

# Wetland Data Collection Sheet




**Notes on Ecological Functions or features**

should include notes on: furbearer, cranberries, wild rice, baitfish, bullfrogs, winter cover for wildlife, suitability for waterfowl breeding staging, moulting, evidence of recreational activities, disturbance, surrounding topography (flat, rolling, hilly, steep), and surrounding habitat diversity

Swamp

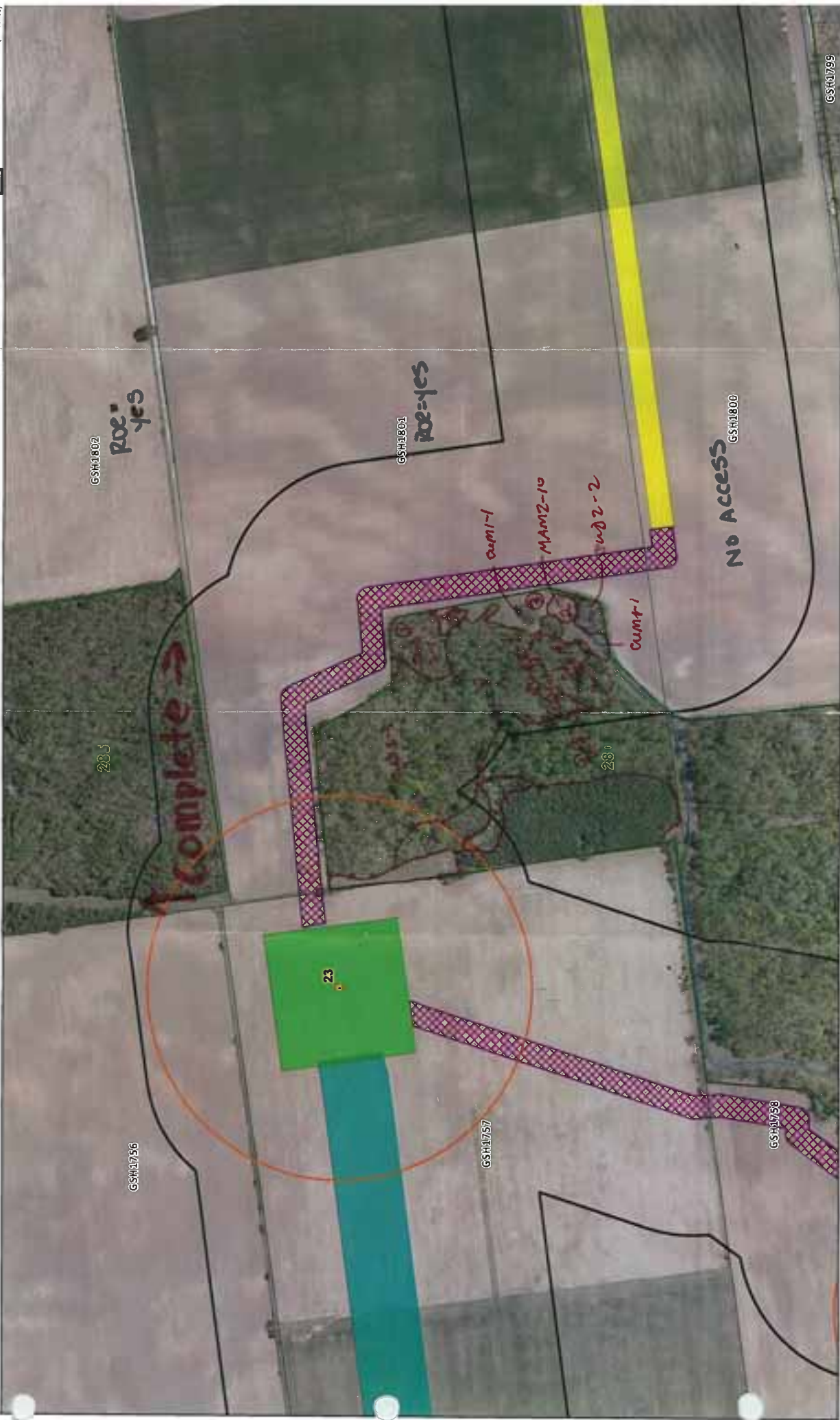
# Goshen Properties: 280 GSH1801 / 285 - GSH1802

(Properties that contain Features within 120m from Collection lines)

November 21 2011



- Roads
  - Watercourse Crossing
  - Property Fabric
  - Road & Collection
- Collections
  - Roads
  - Proposed Changes
  - Area of Disturbance 120m Buffer (11.07.11)



GSH1759

Site: 280 GSH 1802 Polygon: 1  
 Surveyor(s): Date: 07/29/2011 Time start: finish:  
 UTMZ: UTMZ: UTMZ:

Site: 280 GSH 1802 Polygon: 2  
 Surveyor(s): Date: 07/29/2011 Time start: finish:  
 UTMZ: UTMZ: UTMZ:

Tree Tally by Species

Species	Tally 1	Tally 2	Tally 3	Total	% CF
Total					100
Basal Area (BA)					
Dead					

Soils Ontario and ELC Soils Description

Site Metrics	Zone	Easting	Northing	Position	Aspect	Percent	Slope	Length	Mottles	Gley	Water Table	Carbonates	Bedrock	Depth from zero	% CF	% CF	% CF	% CF	Effective Texture (Indicate below)
UTM														1					
Slope														2					
Moisture Regime														3					
Drainage														4					

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial	<input type="checkbox"/> Organic	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
<input checked="" type="checkbox"/> Wetland	<input checked="" type="checkbox"/> Mineral Soil	<input type="checkbox"/> Riverine	<input type="checkbox"/> Submerged	<input type="checkbox"/> Pond
<input type="checkbox"/> Aquatic	<input type="checkbox"/> Parent Min.	<input type="checkbox"/> Bottomland	<input type="checkbox"/> Floating-LVD.	<input type="checkbox"/> River
<b>Site</b>	<input type="checkbox"/> Acidic Bedrk	<input type="checkbox"/> Terrace	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
<input type="checkbox"/> Open Water	<input type="checkbox"/> Basic Bedrk	<input checked="" type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Shallow Water	<input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input checked="" type="checkbox"/> Swamp
<input checked="" type="checkbox"/> Surficial Dep.		<input type="checkbox"/> Roll. Upland	<input checked="" type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Cliff	<input checked="" type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
<b>History</b>		<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input checked="" type="checkbox"/> Natural		<input type="checkbox"/> Crevice/Cave	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input type="checkbox"/> Cultural		<input type="checkbox"/> Aiver		<input type="checkbox"/> Prairie
<b>Cover</b>		<input type="checkbox"/> Rockland		<input type="checkbox"/> Thicket
<input type="checkbox"/> Open		<input type="checkbox"/> Beach / Bar		<input type="checkbox"/> Savannah
<input type="checkbox"/> Shrub		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Woodland
<input checked="" type="checkbox"/> Tree		<input type="checkbox"/> Bluff		<input type="checkbox"/> Forest
				<input type="checkbox"/> Plantation

Stand Description

Layer HT CVR  
 1 2 4  
 2  
 3 2  
 4 6 1

T Codes: 7 < 0.2m 8 > 0.2-0.5m 9 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m  
 VR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

Stand Composition: Size Class Analysis:  < 10  10-24  25-50  > 50  
 Standing Snags:  < 10  10-24  25-50  > 50  
 Deadfall / Logs:  < 10  10-24  25-50  > 50

BA:   
 bundance Codes: N = None R = Rare O = Occasional A = Abundant

Dom. Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Soil Horizon Description

Soil Horizon Description	Depth from zero	% CF	% CF	% CF	% CF
1					
2					
3					
4					

Ecosite: Ash Mineral Deciduous Swamp Ecosite Code: SWDZ  
 Vegetation Type: Black Ash mineral deciduous swamp Code: SWDZ-1  
 Inclusion: Type  
 Complex: Code: Code:

Community Profile Diagram/Comments

Stack - Ash Swamp - speckled with white Elm  
 50% maple

otes:



**ELC**  
Community  
Description and  
Classification

Site: 280-65H1802 Polygon: 2  
Surveyor(s): JDm, TS Date: Nov. 28, 2011 Time start: \_\_\_\_\_ finish: \_\_\_\_\_  
UTMZ: \_\_\_\_\_ UTMZ: \_\_\_\_\_

**Polygon Description**

<b>System</b>	<b>Substrate</b>	<b>Topographic Feature</b>	<b>Plant Form</b>	<b>Community</b>
<input type="checkbox"/> Terrestrial <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Aquatic	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input checked="" type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation
<b>Site</b>				
<input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock				
<b>History</b>				
<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Cultural				
<b>Cover</b>				
<input checked="" type="checkbox"/> Open <input type="checkbox"/> Shrub <input checked="" type="checkbox"/> Tree				

**Stand Description**

<b>Layer</b>	<b>HT</b>	<b>CVR</b>	<b>Species in Order of Decreasing Dominance (up to 4 sp)</b> (> Much Greater Than; > Greater Than; = About Equal To)
1			
2			
3	<u>6</u>	<u>4</u>	<u>Rhynchospora &gt; Solidago = Aster sp &gt; Carex sp.</u>
4	<u>17</u>	<u>2</u>	<u>Nas Off</u>

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m  
CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

<b>Stand Composition:</b>	<b>Size Class Analysis:</b>	<b>Standing Snags:</b>	<b>Deadfall / Logs:</b>
	<10	<10	<10

BA: \_\_\_\_\_

Abundance Codes: N = None R = Rare O = Occasional A = Abundant

<b>Com. Age:</b>	<input checked="" type="checkbox"/> Pioneer <input type="checkbox"/> Young <input type="checkbox"/> Mid-Age <input type="checkbox"/> Mature <input type="checkbox"/> Old Growth		
<b>Ecosite:</b>	<u>Mineral Meadow marsh Ecosite</u>	<b>Code:</b>	<u>MAM 2</u>
<b>Vegetation Type:</b>	<u>Forb Mineral Meadow marsh</u>	<b>Code:</b>	<u>MAM 2-10</u>
<b>Inclusion:</b>		<b>Code:</b>	
<b>Complex:</b>		<b>Code:</b>	

**Community Profile Diagram/Comments**

Notes: \_\_\_\_\_

**Tree Tally by Species**

<b>Species</b>	<b>Tally 1</b>	<b>Tally 2</b>	<b>Tally 3</b>	<b>Tally 4</b>	<b>Total</b>	<b>Rel. Avg.</b>
<b>Total</b>						100
<b>Basal Area (BA)</b>						
<b>Dead</b>						

**Soils Ontario and ELC Soils Description**

<b>Pit/Auger #</b>									<b>Summary</b>	
<b>Site Metrics</b>	<b>Zone</b>									
	<b>Easting</b>									
	<b>Northing</b>									
	<b>Position</b>									
	<b>Aspect</b>									
<b>Slope</b>	<b>Percent</b>									
	<b>Slope</b>									
	<b>Length</b>									
	<b>Mottles</b>									
<b>Depth to...</b>	<b>Gley</b>									
	<b>Water Table</b>									
	<b>Carbonates</b>									
	<b>Bedrock</b>									
<b>Soil Horizon Description</b>	<b>1</b>	<b>Depth from zero</b>				<b>% CF</b>		<b>% CF</b>		
		<b>Texture</b>								
	<b>2</b>	<b>Depth from zero</b>				<b>% CF</b>		<b>% CF</b>		
		<b>Texture</b>								
	<b>3</b>	<b>Depth from zero</b>				<b>% CF</b>		<b>% CF</b>		
		<b>Texture</b>								
	<b>4</b>	<b>Depth from zero</b>				<b>% CF</b>		<b>% CF</b>		
		<b>Texture</b>								
	<b>Moisture Regime</b>	<b>% Surface Stone/Rock</b>							<b>% CF</b>	
		<b>Moisture Regime</b>								
	<b>Drainage</b>									