

**ELC**  
Community  
Description and  
Classification

Site: 392 65H1060/1043 Polygon: ③  
Surveyor(s): SAM Date: Aug 15/11 Time start: 15:31H finish: 16:11H  
UTMZ: 17 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 Bedk <input type="checkbox"/> Basic Bedk <input type="checkbox"/> Carb. Bedk	<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"/> Upland <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"/> Savanna <input type="checkbox"/> Wetland <input checked="" type="checkbox"/> Open <input type="checkbox"/> Pasture

**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	MH >>> BE >>> Av = CB
2	3	3	MH >>> BE >>> Av >>> EW
3	4-5	3	Av >>> BE >>> EW
4	6	2-3	Wetland grand. > Vign. complex > Pison. Ivy > Yellow dwns

HT Codes: 7 < 0.2m 8 = 0.2-0.5m 9 = 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:  < 10  10-24  25-50  > 50  
Standing Snags:  < 10  10-24  25-50  > 50  
Deadfall / Logs:  < 10  10-24  25-50  > 50  
BA: 17

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

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

Ecosite: Dry-Fresh Sugar Maple Deciduous Forest  
Vegetation Type: Dry-Fresh Sugar Maple-Beech Deciduous Forest Type  
Inclusion: /  
Complex: /

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
MH	1				1	1
BE	1				1	1
CB	1				1	1
EW	1				1	1
Av	17				17	100
Total	34				34	
Basal Area (BA)						
Dead	2				2	2

**Soils Ontario and ELC Soils Description**

Site Metrics	PIU/Auger #	Soils Description	Summary
UTM	Zone		
Easting	Easting		
Northing	Northing		
Position	Position		
Aspect	Aspect		
Slope	Slope		
Length	Length		
Mottles			
Gley			
Water Table			
Carbonates			
Bedrock			

Soil Horizon Description	Depth from zero	Texture	% CF	Depth from zero	Texture	% CF	Depth from zero	Texture	% CF	Depth from zero	Texture	% CF	% CF
1	0	LC		0	LC		0	LC		0	LC		
2	17	C		17	C		17	C		17	C		
3													
4													
Moisture Regime		Stone/Rock		Moisture Regime		Stone/Rock		Moisture Regime		Stone/Rock		Moisture Regime	
Drainage		Drainage		Drainage		Drainage		Drainage		Drainage		Drainage	



<b>ELC WILDLIFE</b>	SITE: <u>592 GSH1060 / 1043</u>		
	POLYGON: <u>3</u>		
	DATE: <u>Aug 8 / 5 / 11</u>		
	SURVEYORS: <u>SAH</u>		
	START TIME: <u>1531h</u>	END TIME: <u>1611h</u>	
TEMP (°C): <u>26</u>	CLOUD (10th): <u>2</u>	WIND: <u>2-3</u>	PRECIPITATION: <u>NI</u>
CONDITIONS: <u>Warm Sunny, breezy</u>			

**POTENTIAL WILDLIFE HABITAT:**

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

**SPECIES LIST:**

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
B	BLJA	VO		3					
B	AMCR	VO		2					

**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:**

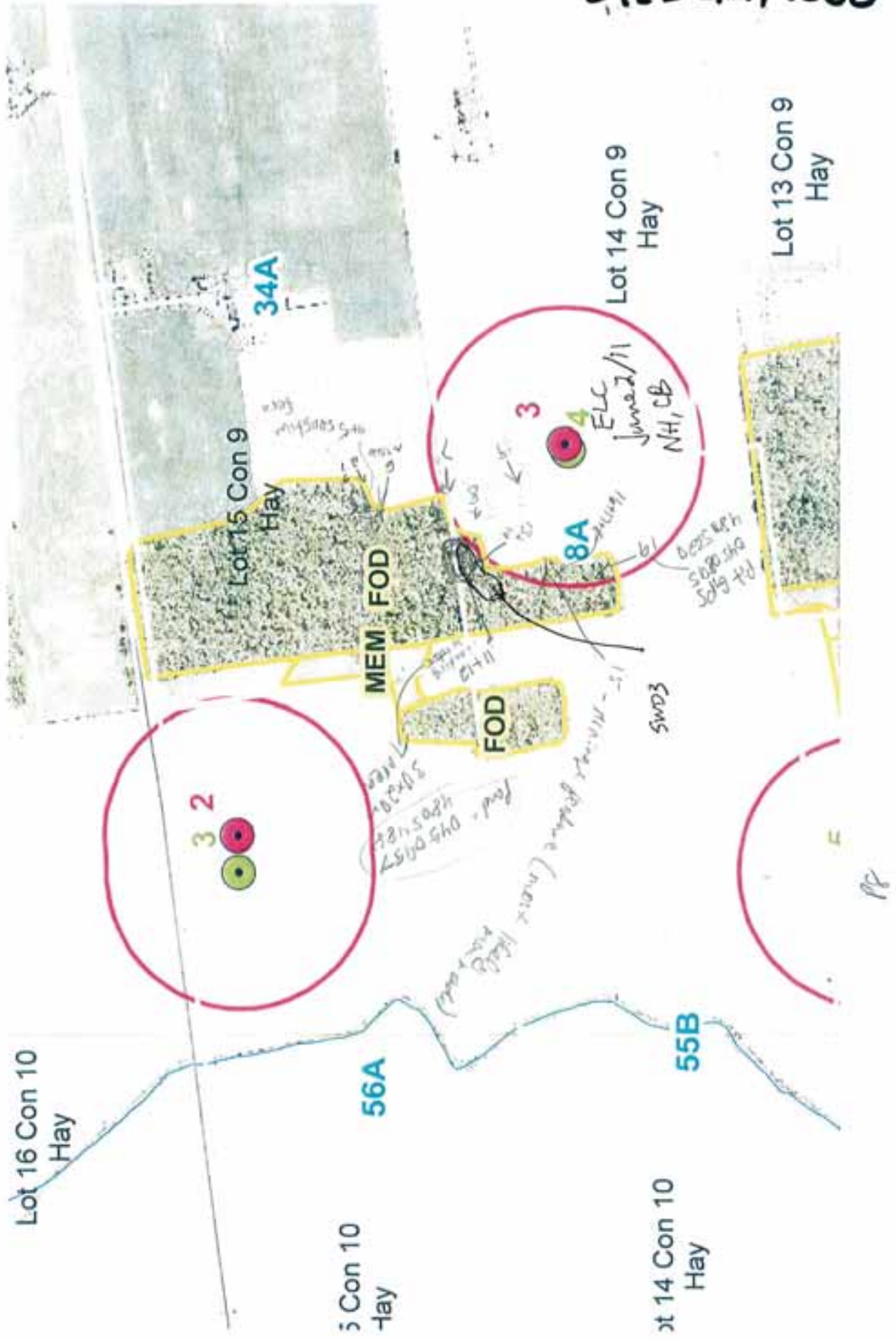
T = TERRITORY D = DISPLAY P = PAIR  
A = ANXIETY BEHAVIOUR N = NEST BUILDING V = VISITING NEST

**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)



Plants - upland (Photo 7)

- Acer sacch (sugar) D
- Hemlock 0
- Ironwood 0
- Witch hazel 0
- Tilia americana (Bass) 0
- Smil racemosa (FSS)
- Uval perf - bellwort
- Toxi radi - PJ
- Arisaema atr-rubens - JIP
- Pronanthes sp.
- Tril. gran
- Maranth. comm.
- Soli. flexicaulis - zigzag g.
- Garl. must.

Plants - vernal pool / SWD (Photos 11-14)

- Redwing swamp inclusion ~~3x20m~~
- Sens. fern
- Impa capen.
- Lycopos uniflorus (Bygle)?
- ~ maybe W. horsehind
- C. sericea
- Toxi. radi
- Rubus idaeus

Plants - upland (Photos 19)

- Acer sacch (sugar) D
- Tili amer. 0
- Pan serv. R
- Toxi radi (shrub)
- Smil racem
- Tril grand
- Pronanthes sp.
- Civaca quadrisulcata (EN)
- Fraz. amer (w. ash)
- Aris. atr-rubens (jip)
- Soli. flexicaulis - zigzag
- Actaea puchypoda - dull eyes
- Garl. must. R
- Parthenocissus quinquefolia
- L. linear benzoin - Spicebush
- Rubus idaeus
- Gedunium robertianum
- Castroplyllum thalictroides (B. Loh)
- Rhamnus cathartica - buckthorn
- Fran pensylvanica - pin cherry
- Ironwood

↑  
outside 120m  
see map  
SWD3 approx. 50x80m

↑  
outside 120m  
see map

↑  
use this plant list  
inside 120m  
GE4/53

392-GSH1060

\*Plant list on reverse of this page

**ELC** Community Description and Classification

Site: *Grashen - GEY, S3* Polygon: *88*

Surveyor(s): *N.L. P.B.* Date: *June 2/11* Time start: *10:00am* finish: *2:11pm*

UTMZ: *17* UTMZ: *0450899* UTMN: *4805330*

**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 checked="" type="checkbox"/> Natural <input type="checkbox"/> Cultural <b>Cover</b> <input type="checkbox"/> Open <input type="checkbox"/> Shrub <input checked="" 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 type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input checked="" 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	2	4	<i>ALCER SACH &gt;&gt; TILI. AMER &gt;&gt; LIRIODENDR. PEENY.</i>
2	3	3	<i>ALCER SACH &gt;&gt; PRUN. PENN &gt;&gt; FRAX. AMER</i>
3	6	3	<i>FRAX. AMER &gt;&gt; SMILIX. ACER &gt;&gt; C. BIR. SAC &gt;&gt; FRAX. AMER</i>
4			

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: *A < 10 A 10-24 A 25-50 N > 50*  
 Standing Snags: *R < 10 R 10-24 R 25-50 N > 50*  
 Deadfall / Logs: *A < 10 A 10-24 O 25-50 N > 50*

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

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

Ecosite: *Deciduous forest* Code: *FOD*  
 Vegetation Type: *Dry-fresh Sugar Maple Deciduous Forest* Code: *FODS-1*  
 Inclusion: *Multiple Mineral Acid. Swamp Ecosite* Code: *SWD3 (F-5M)*  
 Complex: Code:

**Community Profile Diagram/Comments**

*900000*  
*111111*

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Prism Factor	2
Sugar Maple							
Basswood	1						
White Ash							
Total							100
Basal Area (BA)							
Dead							

**Soils Ontario and ELC Soils Description**

Pit/Auger #	Soils Description										Summary
Zone	<i>W2M17</i>										Moisture Regime <i>1 Mod. Fresh</i>
Easting	<i>0450899</i>										
Northing	<i>4805330</i>										Drainage <i>rapid/well</i>
Position	<i>mid humidity</i>										
Aspect	<i>1/1</i>										Effective Texture (indicate below)
Percent											
Slope	<i>W2</i>										% CF
Length	<i>none</i>										
Mottles	<i>none</i>										% CF
Gley	<i>none</i>										
Water Table	<i>W2</i>										% CF
Carbonates	<i>—</i>										
Bedrock	<i>—</i>										% CF
Depth from zero	<i>16cm</i>										
Texture	<i>loamy sand</i>										% CF
Depth from zero	<i>32cm</i>										
Texture	<i>sand</i>										% CF
Depth from zero											
Texture											% CF
Depth from zero											
Texture											% CF
Depth from zero											
Texture											% CF
Depth from zero											
% Surface Stone/Rock	<i>0%</i>										% CF
Moisture Regime	<i>1 mod. fresh</i>										
Drainage	<i>Rapid, well</i>										% CF

Total depth: *48cm*

VASCULAR PLANT CHECKSHEET

88

Location: GC4/S3  
 Observer: Nick + Caroline

Date: June 2, 2011  
 Job Number:

DICOT HERBS												MONOCOT HERBS					
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Achillea millefolida						Erigeron annuus						Plantago lanceolata					Alisma plantago-aquatica
Actaea pachypoda	X					Erigeron philadelphicus						Plantago major					Allium tricoccum
Actaea rubra						Erigeron strigosus						Plantago rugelii					Allium
Agalinis						Erysimum cheiranthoides						Podophyllum peltatum					Arisaema triphyllum
Agrimonia gryposepala						Eupatorium maculatum						Polygonum					Asperagus officinale
Alliaria petiolaris	X					Eupatorium perfoliatum						Polygonum					Cela palustris
Amaranthus retroflexus						Eupatorium rugosum						Polygonum					Clintonia borealis
Ambrosia artemisiifolia						Euphorbia						Polygonum lapathifolium					Convallaria majus
Amphicarpaea baccata						Euthamia graminifolia						Polygonum persicaria					Cypripedium calceolus
Anaphalis margaritacea						Fragaria virginiana						Potentilla					Eleocharis acicularis
Anemone						Fragaria vesca						Potentilla norvegica					Eupacris helleborinis
Anemone canadensis						Galeopsis tetrahit						Potentilla recta					Erythronium americanum
Anemone virginiana						Galium						Preranthus alba	X				Hemerocallis fulva
Antennaria neglecta						Galium						Prunella vulgaris					Iris versicolor
Apocynum androsaemifolium						Galium palustre						Pyrola elliptica					Lemna minor
Apocynum cannabinum						Galium triflorum						Ranunculus					Lemna trisulca
Aquilegia canadensis						Geranium maculatum						Ranunculus abortivus					Lilium
Arnica montana						Geranium robertianum	X					Ranunculus acris					Mianthemum canadense
Asarum canadense						Geum aleppicum						Rudbeckia hirta					Mianthemum racemosum
Asclepias incarnata						Geum canadense						Rumex acetosella					Mianthemum stellatum
Asclepias syriaca						Geum						Rumex crispus					Palatifer
Aster						Glecoma hederacea						Rumex					Parideris cordata
Aster cordifolius						Hepatica acutiloba						Sanguinaria canadensis					Polygonatum pubescens
Aster ericoides						Hesperis matronalis						Saricula marilandica					Potamogeton crispus
Aster lanceolatus						Hieracium aurantiacum						Saponaria officinalis					Potamogeton pectinatus
Aster lateriflorus						Hieracium caespitosum						Satureja vulgaris					Potamogeton
Aster macrophyllus						Hieracium						Scutellaria galericulata					Potamogeton
Aster novae-angliae						Hydrophyllum virginianum						Silene vulgaris					Potamogeton
Aster purpureus						Hypericum perforatum						Sium suave					Sagittaria latifolia
Barbarea vulgaris						Impatiens capensis	X					Solanum dulcamara					Sisyrinchium montanum
Bidens cernua						Inula helenium						Solidago					Smilax herbacea
Bidens frondosa						Lactuca						Solidago altissima					Spiranthes cernua
Bolmaria cylindrica						Laportea canadensis						Solidago caesia					Spirodela polyrhiza
Caltha palustris						Lapsana communis						Solidago canadensis					Streptopus roseus
Calystegia sepium						Leonurus cardiaca						Solidago flexicaulis	X				Trillium erectum
Cardamine diphylla						Lepidium						Solidago gigantea					Trillium grandiflorum
Cardamine						Linaria vulgaris						Solidago nemoralis					Uvularia grandiflora
Caulophyllum thalictroides						Lithospermum officinale						Solidago rugosa					
Cerastium fontanum						Lobelia						Sonchus oleraceus					
Cerastophyllum demersum						Lobelia inflata						Sonchus asper					
Chelidonium majus						Lotus corniculatus						Stellaria					
Chenopodium album						Lycopus americanus	X					Tanacetum vulgare					
Chrysanth. leucanthemum						Lycopus						Taraxacum officinale					
Cichorium intybus						Lysimachia ciliata						Thalictrum dioicum					
Cicuta						Lythrum salicaria						Thalictrum pubescens					
Circaea leutelliana	X					Medicago lupulina						Thapsia cordifolia					
Cirsium arvense						Medicago sativum						Tragopogon pratensis					
Cirsium vulgare						Melilotus alba						Triantala borealis					
Clematis virginiana						Mertha arvensis						Tribolium					
Clintonia borealis						Mimulus ringens						Tritolium pratense					
Coryza canadensis						Mimulus ringens						Tritolium repens					
Cornilla varia						Mitella diphylla						Tussilago farfara					
Cynanchum roseolum						Monarda fistulosa						Urtica dioica					
Cynoglossum officinale						Myosotis						Urticaria vulgaris					
Daucus carota						Nasturtium officinale						Verbascum thapsus					
Desmodium canadense						Nepeta cataria						Verbena hastata					
Dianthus armeria						Nuphar variegatum						Verbena urticifolia					
Dipsacus fulonum						Nymphaea odorata						Veronica					
Echinopyxis lobata						Oenothera biennis						Veronica officinalis					
Echium vulgare						Osmorhiza						Vicia cracca					
Epilobium						Oxalis stricta						Vicia tetrasperma					
Epilobium ciliatum						Phytolacca dioica						Viola					
Epilobium hirtum						Physalis heterophylla						Viola pubescens					
Epilobium parviflorum												Viola sororia					

SITE LOCATIONS

- 1: \_\_\_\_\_
- 2: \_\_\_\_\_
- 3: \_\_\_\_\_
- 4: \_\_\_\_\_
- 5: \_\_\_\_\_
- 6: \_\_\_\_\_

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 allegheniensis						Agropyron repens					
Larix laricina						Rubus idaeus		X				Alopecurus					
Picea abies						Rubus occidentalis						Bromus inermis					
Picea glauca						Rubus odoratus						Calamagrostis canadensis					
Pinus resinosa						Rubus pubescens						Carex arctata					
Pinus strobus						Salix alba						Carex aurea					
Pinus sylvestris						Salix amygdaloides						Carex bebbii					
Thuja occidentalis						Salix bebbiana						Carex blanda					
Tsuga canadensis	X					+ Salix discolor						Carex gracillima					
						Salix eriocephala						Carex granularis					
						Salix exigua						Carex hystericina					
						Salix lucida						Carex pennsylvanica					
						Salix petiolaris						Carex radiata					
TREES and SHRUBS						+ Salix purpurea						Carex retrosa					
Acer negundo						Salix x rubens						Carex stipata					
Acer rubrum	X					+ Salix						Carex stricta					
Acer saccharinum						Sambucus canadensis						Carex vulpinoidea					
Acer saccharum	X					Sambucus racemosa						Carex					
Acer spicatum						Sorbus aucuparia						Carex					
Alnus rugosa						Spiraea alba						Carex					
Amelanchier						Syringa vulgaris						Carex					
Berberis thunbergii						+ Tilia americana	X					Carex					
Betula alleghaniensis						Ulmus americana						Carex					
Betula papyrifera						Ulmus						Carex					
Carpinus caroliniana						Vaccinium						Carex					
Carya cordiformis						Viburnum lentago						Carex					
Celastrus scandens						Viburnum opulus						Cyperus					
Cornus alternifolia						Viburnum						Cyperus					
Cornus amomum						Vitis riparia						Dactylis glomerata					
Cornus rugosa												Danthonia spicata					
Cornus stolonifera												Echinochloa crus-galli					
Corylus cornuta												Eleocharis erythropoda					
Crataegus monogyna												Eleocharis					
Crataegus punctata												Elymus virginicus					
Crataegus sp.												Elymus					
Crataegus												Festuca arundinacea					
Diervilla lonicera												Glyceria striata					
Fagus grandifolia												Glyceria					
Fraxinus americana	X					FERNS						Juncus dudleyi					
Fraxinus nigra						Adiantum pedatum						Juncus effusus					
Fraxinus pennsylvanica						Athyrium filix-femina						Juncus tenuis					
Ilex verticillata						Botrychium multifidum						Juncus					
Juglans cinerea						Botrychium virginianum						Juncus					
Juglans nigra						Cystopteris bulbifera						Leersia oryzoides					
Lonicera morrowi						Dryopteris carthusiana						Muhlenbergia					
Lonicera tatarica						Dryopteris cristata						Oryzopsis asperifolia					
Lonicera						Dryopteris marginalis						Panicum					
Malus pumila						Dryopteris						Panicum					
Ostrya virginiana	X					Equisetum arvense						Phalaris arundinacea					
Parthenocissus inserta	X					Equisetum hyemale						Phleum pratense					
Populus balsamifera						Equisetum variegatum						Phragmites australis					
Populus grandidentata						Equisetum						Poa compressus					
Populus tremuloides						Gymnocarpium dryopteris						Poa pratensis					
Populus						Lycopodium digitatum						Poa					
Prunus pennsylvanica						Lycopodium obscurum						Scirpus atrovirens					
Prunus serotina	X					Lycopodium						Scirpus cyperinus					
Prunus virginiana						Lycopodium						Scirpus validus					
Prunus (X pennsylvanica)	X					Lycopodium						Scirpus					
Quercus macrocarpa						Matteucia strathiopteris						Scirpus					
Quercus rubra						Onoclea sensibilis		X				Setaria					
Quercus						Osmunda cinnamomea						Sparanium					
Rhamnus cathartica	X					Osmunda regalis						Typha angustifolia					
Rhus radicans	X					Polystichum acrostichoides						Typha latifolia					
Rhus typhina						Pteridium aquilinum						Typha X glauca					
Ribes americana						Thelypteris palustris											
Ribes cynosbati																	
Ribes x rubrum																	
Robinia pseudo-acacia																	
Rudera floridana	X																



18

<b>ELC WILDLIFE</b>	<b>SITE:</b> Gosken
	<b>POLYGON:</b> GE4, 53
	<b>DATE:</b> June 2/11
	<b>SURVEYORS:</b> NH, CB
	<b>START TIME:</b> 12:00

<b>TEMP (°C):</b> 16°C	<b>CLOUD (10th):</b>	<b>WIND:</b> very	<b>PRECIPITATION:</b> None
<b>CONDITIONS:</b> Sunny			

**POTENTIAL WILDLIFE HABITAT:**

<input type="checkbox"/> VERNAL POOLS - wet + dry	<input type="checkbox"/> SNAGS
<input checked="" type="checkbox"/> HIBERNACULA	<input type="checkbox"/> FALLEN LOGS

O = Occasional

**SPECIES LIST:**

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
M	—	CA		2					

**FAUNAL TYPE CODES (TY):**

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

**EVIDENCE CODES (EV):**

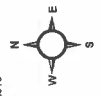
- BREEDING BIRD - POSSIBLE:**
  - SH = SUITABLE HABITAT
  - SM = SINGING MALE
- BREEDING BIRD - PROBABLE:**
  - T = TERRITORY
  - A = ANXIETY BEHAVIOUR
  - D = DISPLAY
  - N = NEST BUILDING
  - P = PAIR
  - V = VISITING NEST
- BREEDING BIRD - CONFIRMED:**
  - DD = DISTRACTION
  - NE = EGGS
  - AE = NEST ENTRY
  - NU = USED NEST
  - NY = YOUNG
  - FY = FLEDGED YOUNG
  - FS = FOOD/FECAL SACK
- OTHER WILDLIFE EVIDENCE:**
  - OB = OBSERVED
  - DP = DISTINCTIVE PARTS
  - TK = TRACKS
  - SI = OTHER SIGNS (specify)
  - VO = VOCALIZATION
  - HO = HOUSE/DEN
  - FE = FEEDING EVIDENCE
  - CA = CARCASS
  - FY = EGGS/YOUNG
  - SC = SCAT



- Legend**
- Property Boundary
  - Prime Transmission Line
  - ▭ Prime Transmission Line Buffer (180 m)
  - ▭ ELC Completed 2011
  - ▭ Natural Feature and ID
  - ▭ ELC Polygon Boundary
  - ▭ ANSI
  - ▭ Evaluated Wetlands - PSW
  - ▭ ABCA Watercourse

0.5 ha

Basemapping from Ontario Ministry of Natural Resources  
Orthophotography 2010



Metres  
0 25 50 100  
1:3 000  
UTM Zone 17N, NAD 83

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Goshen ELC Survey  
09\_GSH2394/GSH2717  
May 2012  
Project 00165032

**AECOM**

**ELC**  
Community Description and Classification

Map #: 609 DS H2 394 / 2717 Polygon: SWDZ-2

Surveyor(s): Date: 3/2012 Time start: 8:00AM finish: 11:40AM

UTMZ: UTMZ: UTMZ:

**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"/> Site <input checked="" type="checkbox"/> Open Water <input checked="" 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 checked="" 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 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**

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp)
1	1	4	FINDANA > DAF > FPC
2	3	2	AC > FEE > S > E > L > A > M > N
3	5	2	Whidde > R > C > F > E > F > R > D > E > N
4	6	2	W > P > A > S > D > P > F > R > A > D > D > S > S

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

**Stand Composition: Size Class Analysis:**

Standing Snags:	R	<10	A	10-24	A	25-50	R	>50
Deadfall / Logs:	R	<10	N	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:** ASH mixed deciduous swamp  
**Vegetation Type:** Green ASH mixed deciduous swamp type  
**Inclusion:** Coniferous plantation  
**Complex:**

Code: SWDZ  
 Code: SWDZ-2  
 Code: Cul3

**Community Profile Diagram/Comments**

Notes:  
 - The stand consists of various species including white pine, yellow pine, and other species.  
 - The stand is located in a swampy area with a high water table.

**Tree Tally by Species**

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

Prism Factor 2

**Soils Ontario and ELC Soils Description**

Site Metrics	PI/Auger #	Soils Ontario and ELC Soils Description	Summary
Zone	17		
Easting	457213		
Northing	4795195		
Position	Bottom		
Aspect	NW		
Percent	60%		
Slope	40M		
Length	30M		
Mottles			
Gley			
Water Table	45cm		
Carbonates			
Bedrock			
Depth from zero	26cm	% CF	% CF
Texture			
Depth from zero	35cm	% CF	% CF
Texture	MFS		
Depth from zero	56cm	% CF	% CF
Texture	SC		
Depth from zero		% CF	% CF
Texture			
Depth from zero		% CF	% CF
Texture			
% Surface Stone/Rock			
Moisture Regime	6		
Drainage	1/1		

**ELC** Community Description and Classification

Map #: 60965H2394/2317 Polygon: SW2-2

Surveyor(s): *RSS + Tim Stovell* Date: *8:10 AM* Time start: *May 31, 2012* finish: *11:40g PM*

UTMZ: UTMZ: UTMZ:

**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"/> 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 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 checked="" 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	1	1	<i>Saltwig + Flopern</i>
2	-	-	
3	3	4	<i>Salix + Corallite - Corall</i>
4	6/5	4	<i>Phacelia + Rapanea + Rapanea + Solidago sp</i>

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: A < 10 N 10-24 R 25-50 N > 50  
 Standing Snags: N < 10 N 10-24 N 25-50 N > 50  
 Deadfall / Logs: 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:** *Mineral Thicket Swamp Ecosite* Code: *SW2*

**Vegetation Type:** *Willow Mineral Thicket Swamp Type* Code: *SW2-2*

**Inclusion:** *Open Aquatic* Code: *OAC*

**Complex:** Code:

**Community Profile Diagram/Comments**

*Mineral Thicket Swamp Ecosite*

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		PI/Auger #	Soil Horizon Description				Summary
Zone		17					Moisture Regime
Easting		457195					
Northing		4795193					
Position		A-1					
Aspect							Drainage
Percent							
Slope							
Mottles							Effective Texture (indicate below)
Gley							
Water Table							
Carbonates							
Bedrock	1						% CF
	Depth from zero						
Texture	2						% CF
	Depth from zero						
Texture	3						% CF
	Depth from zero						
Texture	4						% CF
	Depth from zero						
% Surface Stone/Rock							
Moisture Regime							
Drainage							



Plant Species List 2012

Table with 16 columns: Dicots (1-5) and Monocots (1-5). It lists plant species with their scientific names and occurrence codes (e.g., R, F, U, D). A section titled 'Monocot Herbs' is also present. The table includes species like Shepherd's Purse, Cutleaf Toothwort, and many others.

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 in the polygon by less than about five individuals or small clumps

Map Number: 6016 2
Date: 8/11/12
Surveyors: JSC, S. Owen

# Significant Wildlife Habitat Form

A-COM

Study Area: <u>BLW JER (GSH)</u>	Map #: <u>609-GSH 2394/2917</u>
Date: <u>2012-05-31</u>	Time Started: <u>8:10 AM</u>
Field Staff: <u>Tom Shorney, Jess Piette</u>	Time Finished: <u>11:40 AM</u>
Weather Conditions: <u>Sunny, 16°C, Light breeze</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: \_\_\_\_\_ 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): +3m % open water: 100 % emergent vegetation: 0

Potential to hold water until at least July in most years: Yes / No

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

Area and soil/substrate of shoreline habitat: mineral soil → very little exposure

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

Type and abundance of cover in surrounding habitat: Salix sp, Cornus Ser, Frax Penn, grass Sp.

Evidence of disturbance (e.g. cattle grazing): Agriculture

Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: Spotted amphibians along pond

**\*\*\*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: 457158 4795112 Likelihood to extend below frost line: Yes

% canopy cover: 10 % slope: 50% Distance to open canopy (m): 0.5m

Description of fissure or stone pile (composition/material, dimensions, etc): old brick foundation exposed, as well as small pile of cement slabs along watercourse

Description of surrounding habitat (type & abundance of cover, evidence of disturbance, etc): Surrounding habitat is Swamp thicket bordering onto stream community

**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 )  
 UTM: \_\_\_\_\_ 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 )  
 UTM: \_\_\_\_\_ 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 )  
 UTM: \_\_\_\_\_ 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 )  
 UTM: \_\_\_\_\_ 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 of Conservation Concern Habitat and Incidental Wildlife - Goshen



Map No: 609-65H2394/2717  
Date (yyyy-mm-dd): 2012-05-31

Field Staff: Tom Storey Jess Rette

Time Started: 8:10 AM  
Time Finished: 11:40 AM

## Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
Belted Kingfisher		OB		Red-breasted Nuthatch		OB	
Gray Kingfisher		VO		Scrub Wren		OB	
Red-shouldered Hawk		VO		Monarch Butterfly		OB	
Robin		VO		Peewee		VO	
Chimney Swift		DO		Great Crested Flycatcher		VO	
Woodpecker sp.		VO		Chipping Sparrow		VO	
Swallow sp.		VO		White-throated Sparrow		VO	
Turkey Vulture		OB					
Lesser Green Frog		OB					
Green Frog		OB					
American Goldfinch		OB					
White-throated Sparrow		OB					
Woodpecker sp.		OB					
		VO					

Note: Evidence Codes (EV) SH=Suitable Habitat, SM=Singing Male; Breeding Bird (Possible) T=Territory, D=Display, P=Pair, N=Nest Building, V=Visiting Nest, A=Anxiety Behavior; Breeding Bird (Probable) DD=Distraction, NU=Used Nest, FY=Fledged Young, NE=Eggs, NY=Young, FS=Foos/Faecal sack, AE=Nest Entry; Breeding Bird (Confirmed) CA=Carcass, DP=Distinctive Parts, HO=House/Den, FY=Eggs/young, TK=Tracks, FE=Feeding evidence, SC=Scat, SI=Other signs (specify)

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) \$ Not observed → N/O

ELC	Species	Habitat Description	Habitat Present (Y/N)	UTM	Description of habitat if present
PLANTS	American Gromwell (Lithospermum latifolium) - S3 Bloom Time - Spring	Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods.	Y	N	UTM:
FOD7	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:
ALO, TPO	Autumn Coral-root (Corallorhiza odororhiza) - 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:
FOM1, FOM2, CUP3	Burning Bush (Euonymus atropurpureus) - S3 Bloom Time - April - June	Species occurs in dry to moist deciduous thickets and woods	Y	N	UTM:
FOC, FOM, FOD	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:
SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6	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. Boys, fens, tamarack swamps.	Y	N	UTM: N/O (not observed)
SWC, SWM, SWD, SWT, MAM, MAS	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:
ALT1, FOD7	Fogg's Goosefoot (Chenopodium foggii) - S2	Species occurs in sandy areas on limestone under oak or pine-oak forests	Y	N	UTM:
TPS, TPW, FOM1, FOM2	Giant Ironweed (Veronica gigantea) - S1? Bloom Time -	Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows	Y	N	UTM:
TPO2, TPS2, TPW2,			Y	N	UTM:

# Species of Conservation Concern Habitat and Incidental Wildlife – Goshen

AECOM

ELC	Species	Habitat Description	Habitat Present (Y/N; UTM); description of habitat if present
CUM1, MAM,	June – August		
FOD6, FOD7, FOD9	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:
TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	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:
FE01, FES1, FET1, SWC, SWM, (SWD) (SWT), TPO, TPS, TPW	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)	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 woodland.	Y (N) UTM:
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 border of streams and ponds.	(Y) N UTM: N/O
FOD6, FOD7, FOD9	Pawpaw ( <i>Asimina trifoba</i> ) -S3 <u>Bloom Time – March-May</u>	Occurs in moist, deciduous woods and stream banks.	Y (N) UTM:
FOM8, FOD6, 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:
FOD7, (SWD)	Pumpkin Ash ( <i>Fraxinus profunda</i> )-S2? <u>Bloom Time – March – June</u>	Swamps and floodplains	(Y) N UTM: N/O
CUM1, 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:
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:
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 dolostone 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:
SOT1, 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:
BL01, 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 of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N): UTM: ; description of habitat if present
TP01, 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:
FEO, 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:
<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:
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 messy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration)	Y (N) UTM:
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 understorey; 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:
-	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:
<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>			
OAD, SA, SWM, SWD	Azure Bluet ( <i>Enallagma aspersum</i> ) - S3	Species inhabits fishless ponds, lakes and boggy swamps	Y (N) UTM: N/O
TPS, TPW	Sleepy Duskywing ( <i>Erynnis brizeo</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 farmland, along roadsides, open spaces where these plants grow	Y (N) UTM:
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:
SW1 (SWD), SWM, FOM, FOD4-3, TPW, TPS, CUM1	Tawny Emperor ( <i>Asterocampa clyton</i> ) - S3	Species inhabits densely wooded riparian area, dry woods, open woods, fencerows and parks. Usually occurs near Hackberry, the larval foodplant	Y (N) UTM: N/O
FOD5	West Virginia White ( <i>Pteris virginiensis</i> ) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y (N) UTM:

# Valleylands Data Collection Sheet

Study area:	<u>Goshun</u>	Feature No.:	<u>609 GSH 2394/277</u>
Date (yyyy-mm-dd):	<u>2012-05-31</u>	Time Started:	<u>8:10 am</u>
Field Staff:	<u>Ben Platt + Tom Sharkey</u>	Time Finished:	<u>11:40 AM</u>
UTM Coordinates	<u>Easting</u>	Northing	

**Landform prominence**

is area well defined?  no  yes - if yes see below

Does area have an average width of 25m or more?  no  yes

width (from top of slope to top of slope) ~ 100-200 m  
 depth (from top of slope to valley bottom) ~ 20m m

**Surfacewater functions**

*Watercourse*

Is there surface water drainage?  no  yes - if yes, flowing/direction W-E / watercourse

Is there standing water?  no  yes - if yes, width ~ 10-15 m depth unknown m

Is there exposed soil?  no  yes very vegetated banks with areas of exposed soil

What is the degree of slope? 45-50°

Are there wetland communities present?  no  yes - if yes what type  marsh  swamp  bog  fen SWT2-2 / SWD2-2  
 (refer to ELC and wetland data cards for data entry)

**Groundwater/Distinctive geomorphic landforms**

Is there evidence of groundwater?  no  yes - (if yes please check all that apply)

bank seepage  iron staining  groundwater indicator species observed

**Distinctive geomorphic landforms**

Is one of the following landforms present? (check all that apply)

None  terraces  exposed soil strata

Oxbow  deltas  bottomlands

eroding slopes along riverbanks or valley walls

Brief Description of area: banks are very solid, well vegetated  
are mostly well used

**Degree of naturalness**

What is the vegetation cover around feature (refer to ELC and wetland data cards for data entry)

open agriculture 90%

woodland (CUW, CUP, FOD, FOC, FOM) %cover \_\_\_\_\_

wetland (MAM, MAS, SWT, SWD, SWM) %cover \_\_\_\_\_

meadow (CUM) %cover 10%

thicket (CUT) %cover \_\_\_\_\_

What is the estimated width of natural cover on either side of feature

2 m } of valley  
2 m } land  
 but is entirely vegetated within

Is there evidence of disturbance?  no  yes

description: slight disturbance on west & east sides by agriculture  
agricultural road through feature

**Unique Communities and Species**

Evidence of Seasonally Important Habitat (deer winter yards, stopover areas, hibernacula) (refer to significant wildlife data card for data entry)  no  yes

deer yards, hibernacula + stopover

Is there evidence of an existing linkage area or potential for restoration  no  yes

description: doesn't need restoration very good area

**Notes**

pictures 30-39 west side  
41-46 east side

# Wetland Data Collection Sheet

Study area: <u>GOSHEN</u>	Map No: <u>609GSH2394/2717</u>
Date (yyyy-mm-dd): <u>2012-05-31</u>	Time Started: <u>8:10am</u>
Field Staff: <u>Jojo Patti + Tim Skurney</u>	Time Finished: <u>11:40am</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?      river influenced + surface water inputs

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

**% 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			
h (deciduous trees)	ne (narrow leaved emergents)	ts (tall shrubs 1-6m)	f (aquatic with floating leaf)
c (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>SWDZ-2</u>	<u>h* - Fraxinus, Acer</u> <u>gc - Juncus, Isolepis, goldenrod sp.</u>
<u>SWTZ-2</u>	<u>ts* - Salix, Corchorus, Corallorhiza</u> <u>ne - Phragmites</u> <u>gc - Juncus, Isolepis, Anemone</u>

# 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

- winter cover within 2 inclusions
- waterfowl breeding, staging, moulting
- area is within valleyland
- farm field surrounds



\* ASA fence line from distant property with box scope

**ELC**  
Community Description and Classification

Map #: 611-65H2411-0610-05H2871/411 Polygon: ①

Surveyor(s): S.A.P. Date: June 13/12 Time start: 11:17h finish: 11:45h

UTMZ: 17T UTMZ: 456469 UTMN: 495074

location of ASA Survey, not feature

**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"/> 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 checked="" type="checkbox"/> T. Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Swamp
<input checked="" type="checkbox"/> Surficial Dep.		<input type="checkbox"/> Roll. Upland	<input type="checkbox"/> Deciduous	<input type="checkbox"/> Fen
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Cliff	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Bog
<b>History</b>		<input type="checkbox"/> Talus	<input type="checkbox"/> Mixed	<input type="checkbox"/> Barren
<input checked="" type="checkbox"/> Natural		<input type="checkbox"/> Crevice/Cave		<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 checked="" type="checkbox"/> Treed		<input type="checkbox"/> Bluff		<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	2	4	TILAMER > ULMAMER > CARCORD = QUEMACK
2	3	3	TILAMER > QUEMACK
3	4-3	?	TILAMER
4			

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:	<10	10-24	25-50	>50
Deadfall / Logs:	<10	10-24	25-50	>50

BA: N/A

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

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

**Ecosite:** Fresh-wooded Oak-Mack-Hickory Decid. Forest Code: FOD9

**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	Rel. Avg.
ASA						
n/a						
Total						100
Basal Area (BA)						
Dead						

**Soils Ontario and ELC Soils Description**

Site Metrics		Soils Ontario and ELC Soils Description				Summary	
UTM	Zone						
	Easting						
	Northing						
	Position						
	Aspect						
	Percent						
	Slope						
	Length						
Mottles							
Gley							
Water Table							
Carbonates							
Bedrock							
1	Depth from zero		% CF		% CF		% CF
	Texture						
2	Depth from zero		% CF		% CF		% CF
	Texture						
3	Depth from zero		% CF		% CF		% CF
	Texture						
4	Depth from zero		% CF		% CF		% CF
	Texture						
% Surface Stone/Rock							
Moisture Regime							
Drainage							





**Plant Species List**  
2012

<b>Dicot Herbs - Asteraceae</b>						<b>Dicot Herbs</b>						<b>Dicot Herbs</b>					
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>Ageratina altissima</i> )						Cutleaf Toothwort ( <i>Cardamine concatenata</i> )						Tall Buttercup ( <i>Ranunculus acris</i> )
					Com. Ragweed ( <i>Ambrosia artemisiifolia</i> )						Toothwort ( <i>Cardamine diphylia</i> )						Hooked Buttercup ( <i>Ranunculus recurvatus</i> )
					Giant Ragweed ( <i>Ambrosia trifida</i> )						Penn. Bitter-cress ( <i>Cardamine pennsylvanica</i> )						<i>Ranunculus</i>
					Field Pussytoes ( <i>Antennaria neglecta</i> )						<i>Cardamine</i>						Sheep Sorrel ( <i>Rumex acetosella</i> )
					<i>Artemisia</i>						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>Saponaria officinalis</i> )
					Brown Knapweed ( <i>Centaurea jacea</i> )						Enchanter's Nightshade ( <i>Circaea lutetiana</i> )						Marsh Skullcap ( <i>Scutellaria galericulata</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 Campion ( <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 Water-parsnip ( <i>Sium suave</i> )
					Daisy Fleabane ( <i>Erigeron annuus</i> )						Dog-strangling Vine ( <i>Cynanchum rossicum</i> )						Bitter Nightshade ( <i>Solanum dulcamara</i> )
					Philadelphia Fleabane ( <i>Erig. philadelphicus</i> )						Wild Carrot ( <i>Daucus carota</i> )						Black Nightshade ( <i>Solanum ptychanthum</i> )
					<i>Erigeron</i>						Deptford 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 perfoliatum</i> )						Dutchman's-breeches ( <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> )
					Fiat-top Goldenrod ( <i>Euthamia graminifolia</i> )						Wild Cucumber ( <i>Echinocystis lobata</i> )						Field Penny-cress ( <i>Thlaspi arvense</i> )
					Orange Hawkweed ( <i>Hieracium aurantiacum</i> )						Viper's Bugloss ( <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>Trientalis borealis</i> )
					<i>Hieracium</i>						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 serriola</i> )						<i>Epilobium</i>						<i>Trifolium</i>
					<i>Lactuca</i>						Worm Mustard ( <i>Erysimum cheiranthoides</i> )						Stinging Nettle ( <i>Urtica dioica</i> )
					Ox-eye Daisy ( <i>Leucanthemum vulgare</i> )						<i>Euphorbia</i>						Greater Bladderwort ( <i>Utricularia vulgaris</i> )
					Pineapple-weed ( <i>Matricaria discoides</i> )						Hemp Nettle ( <i>Galeopsis 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>Veron. anagallis-aquatica</i> )
					Blue-stem Goldenrod ( <i>Solidago caesia</i> )						<i>Galium</i>						Common Speedwell ( <i>Veronica officinalis</i> )
					Canada Goldenrod ( <i>Solidago canadensis</i> )						Spotted Geranium ( <i>Geranium maculatum</i> )						<i>Veronica</i>
					Zig-zag 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 aleppicum</i> )						<i>Vicia</i>
					Early Goldenrod ( <i>Solidago juncea</i> )						White Avens ( <i>Geum canadense</i> )						Periwinkle ( <i>Vinca minor</i> )
					Gray Goldenrod ( <i>Solidago nemoralis</i> )						Urban Avens ( <i>Geum urbanum</i> )						Dog Violet ( <i>Viola conspersa</i> )
					<i>Solidago</i>						Dame's Rocket ( <i>Hesperis matronalis</i> )						Yellow Violet ( <i>Viola pubescens</i> )
					Field Sow-thistle ( <i>Sonchus arvensis</i> )						Virg. Water-leaf ( <i>Hydrophyllum virginianum</i> )						Com. Blue Violet ( <i>Viola sororia</i> )
					<i>Sonchus</i>						Com. St. John's-wort ( <i>Hypericum perforatum</i> )						<i>Viola</i>
					Heart-leaf Aster ( <i>Symph. cordifolium</i> )						Spotted Jewelweed ( <i>Impatiens capensis</i> )						
					Heath Aster ( <i>Symphyotrichum ericoides</i> )						Wood Nettle ( <i>Laportea canadensis</i> )						
					Tall White Aster ( <i>Symph. lanceolatum</i> )						Motherwort ( <i>Leonurus cardiaca</i> )						
					Calico Aster ( <i>Symphyotrichum lateriflorum</i> )						Field Peppergrass ( <i>Lepidium campestre</i> )						
					New England Aster ( <i>Symph. novae-angliae</i> )						Eur. Gromwell ( <i>Lithospermum officinale</i> )						
					Purple-stem Aster ( <i>Symph. purpureus</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> )						<i>Lobelia</i>						<b>Monocot Herbs</b>
					Com. Goatsbeard ( <i>Tragopogon pratensis</i> )						Cut-leaf Bugleweed ( <i>Lycopus americanus</i> )						Water-plantain ( <i>Alisma plantago-aquatica</i> )
					Coltsfoot ( <i>Tussilago farfara</i> )						Northern Bugleweed ( <i>Lycopus uniflorus</i> )						Wild Leek ( <i>Allium tricoccum</i> )
											Fringed Loosestrife ( <i>Lysimachia ciliata</i> )						Jack-in-the-pulpit ( <i>Arisaema triphyllum</i> )
											Moneywort ( <i>Lysimachia nummularia</i> )						Asparagus ( <i>Asparagus officinalis</i> )
											<i>Lysimachia</i>						Wild Calla ( <i>Calla palustris</i> )
											Purple Loosestrife ( <i>Lythrum salicaria</i> )						Bluebead-lily ( <i>Clintonia borealis</i> )
											Black Medick ( <i>Medicago lupulina</i> )						Garden Lily-of-valley ( <i>Convallaria majalis</i> )
											Alfalfa ( <i>Medicago sativa</i> )						Yel. Lady'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> )						Hellebore ( <i>Epipactis helleborine</i> )
											Wild Mint ( <i>Mentha arvensis</i> )						Yellow Trout Lily ( <i>Erythronium americanum</i> )
					<b>Other Dicot Herbs</b>						Wild Bergamot ( <i>Monarda fistulosa</i> )						Blue-flag Iris ( <i>Iris versicolor</i> )
					White Baneberry ( <i>Actaea pachypoda</i> )						Small Forget-me-not ( <i>Myosotis laxa</i> )						Orange Day Lily ( <i>Hemerocallis fulva</i> )
					Red Baneberry ( <i>Actaea rubra</i> )						Forget-me-not ( <i>Myosotis scorpioides</i> )						Lesser Duckweed ( <i>Lemna minor</i> )
					Tall Agrimony ( <i>Agrimonia gryposepala</i> )						Water-cress ( <i>Nasturtium officinale</i> )						Starry Duckweed ( <i>Lemna trisulca</i> )
					Garlic Mustard ( <i>Alliaria petiolata</i> )						Com. Evening-primrose ( <i>Oenothera biennis</i> )						Wild Lily-of-valley ( <i>Maianthemum canadense</i> )
					Green Amaranth ( <i>Amaranthus retroflexus</i> )						Sweet-cicely ( <i>Osmorhiza berterii</i> )						False Solom Seal ( <i>Maianthemum racemosum</i> )
					Hog-peanut ( <i>Amphicarpa bracteata</i> )						Yellow Wood-sorrel ( <i>Oxalis stricta</i> )						Star False Solomon ( <i>Maianthemum stellatum</i> )
					Pearly Everlasting ( <i>Anaphalis margaritacea</i> )						Wild Parsnip ( <i>Pastinaca sativa</i> )						True Solomon Seal ( <i>Polygonatum pubescens</i> )
					Canada Anemone ( <i>Anemone canadensis</i> )						English Plantain ( <i>Plantago lanceolata</i> )						Pickereel-weed ( <i>Pontederia cordata</i> )
					Ivy Hepatica ( <i>Anemone acutioba</i> )						Common Plantain ( <i>Plantago major</i> )						Curly-leaf Pondweed ( <i>Potamogeton crispus</i> )
					Thimbleweed ( <i>Anemone virginiana</i> )						Rugel's Plantain ( <i>Plantago rugelii</i> )						Sago Pondweed ( <i>Potamogeton pectinatus</i> )
					Purple Angelica ( <i>Angelica atropurpurea</i> )						May-apple ( <i>Podophyllum peltatum</i> )						<i>Potamogeton</i>
					Indian Hemp ( <i>Apocynum cannabinum</i> )						Pale Smartweed ( <i>Polygonum lapathifolium</i> )						<i>Potamogeton</i>
					Wild Sarsaparilla ( <i>Aralia nudicaulis</i> )						Lady's-thumb ( <i>Polygonum persicaria</i> )						Broad-leaved Arrowhead ( <i>Sagittaria latifolia</i> )
					Spikenard ( <i>Aralia racemosa</i> )						Virginia Knotweed ( <i>Polygonum virginianum</i> )						Blue-eyed-grass ( <i>Sisyrinchium montanum</i> )
					Wild Ginger ( <i>Asarum canadense</i> )						<i>Polygonum</i>						Herb. Carrion Flower ( <i>Smilax herbacea</i> )
					Swamp Milkweed ( <i>Asclepias incarnata</i> )						<i>Polygonum</i>						Bristly Greenbrier ( <i>Smilax hispida</i> )
					Common Milkweed ( <i>Asclepias syriaca</i> )						Rough Cinquefoil ( <i>Potentilla norvegica</i> )						Nodding Ladies' Tresses ( <i>Spiranthes cernua</i> )
					Yellow Rocket ( <i>Barbarea vulgaris</i> )						Rough-fruited Cinquefoil ( <i>Potentilla recta</i> )						Rose Twisted-stalk ( <i>Streptopus lanceolatus</i> )
					False Nettle ( <i>Boehmeria cylindrica</i> )						Common Cinquefoil ( <i>Potentilla simplex</i> )						Skunk-cabbage ( <i>Symplocarpus foetidus</i> )
					Black Mustard ( <i>Brassica nigra</i> )						<i>Potentilla</i>						Purple Trillium ( <i>Trillium erectum</i> )
					Marsh-marigold ( <i>Caltha palustris</i> )						Heal-all ( <i>Prunella vulgaris</i> )						White Trillium ( <i>Trillium grandiflorum</i> )
					Creeping Bellflower ( <i>Campanula rapunculoides</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 in the polygon by less than about five individuals or small clumps

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

\*ASA from distant property

# Species of Conservation Concern Habitat and Incidental Wildlife - Goshen



Date (yyyy-mm-dd): 2013-06-13 Field Staff: S.A.M. Time Started: 017 h Time Finished: 1045h

Map No: 017-GSH 241 + 610-GSH 241/287

## Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes

**Note: Evidence Codes (EV)** **Breeding Bird (Possible)** SH=Suitable Habitat, SM=Singling Male;  
**Breeding Bird (Probable)** T=Territory, D=Display, P=Pair, N=Nest Building, V=Visiting Nest, A=Anxiety Behavior;  
**Breeding Bird (Confirmed)** 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; or description of habitat if present
<b>PLANT</b>	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 (Astorum 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:
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:
SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM6, SWM8	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 Saggarticks (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:
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

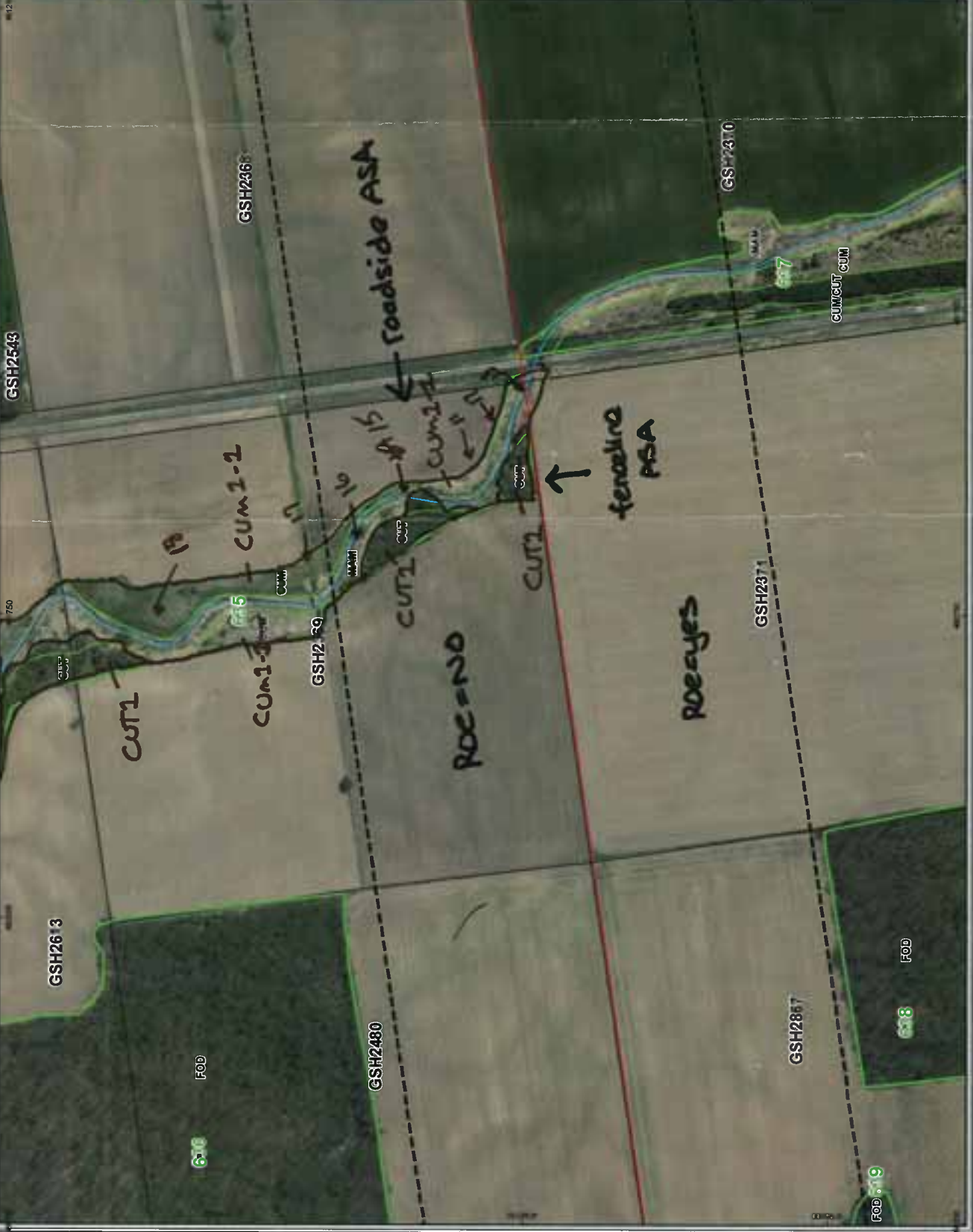


ELC	Species	Habitat Description	Habitat Present (Y/N)	UTM	description of habitat if present
CUM1, MAM,	June - August				
FOD6, FOD7, FOD9	Green Dragon ( <i>Arisaema dracontium</i> ) - S3 <u>Bloom Time</u> - May and June	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y	N	UTM:
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:
FE01, 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:
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:
FOD6, FOD7, FOD8, FOD9	Harbinger-of-spring ( <i>Erigenia bulbosa</i> ) - S3 <u>Bloom Time</u> - early to late April	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</u> - summer	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</u> - June to August	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands.	Y	N	UTM:
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:
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:
FOM6, FOD6, FOD7, FOD9, CUM1	Ploose 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:
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostrate Tick-trefoil ( <i>Desmodium rotundifolium</i> ) - S2 <u>Bloom Time</u> - July-September	Dry, sandy or rocky woods	Y	N	UTM:
FOD7, SWD	Pumpkin Ash ( <i>Fraxinus profunda</i> ) - S2? <u>Bloom Time</u> - March - June	Swamps and floodplains	Y	N	UTM:
CUW1, 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:
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:
FOD6, FOD7, FOD9	Round-leaved Groundsel ( <i>Packera obovata</i> ) - S1 <u>Bloom Time</u> - May - June	Found in moist woods	Y	N	UTM:
CUM1, CUT1, CUS1	Round-leaved hawthorn ( <i>Crataegus lumenia</i> ) - S3?	Species occurs in old fields, poorly managed pastures, fence lines and roadsides	Y	N	UTM:
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:
ALO, ALS, ALT, TPO, TPS, TPW	Slender Blazing Star ( <i>Liatris cylindracea</i> ) - S3	Species occurs in limestone and dolostone pavement, prairies, open woods, alvars 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:
SOT1, 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</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:
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:

# Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N) UTM: if description of habitat is present
TPO1, TPS1, TPW1, CUM1	Tail Blazing Star ( <i>Liatris aspera</i> ) - S3/S3C	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y N UTM:
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>Pinetropsa 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:
	<b>BIRD</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	Units insects over a wide variety of habitats, in particular open or semi-open areas. Feeds on ground in a wide range of open areas or wooded areas 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 sites. Riparian woodlands are preferred stopover sites during migration	Y N UTM:
FOD, CUW, CUT	Red-headed Woodpecker ( <i>Melanerpes erythrocephalus</i> ) - SC	Species inhabits open woodland/ edges (oak savannah 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:
	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 shrubby beside streams, ponds; overgrown bushy areas 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.
	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:
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 for 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>Asclepias</i> spp.). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow	Y N UTM:
TPS, CUW	Mottled Duskywing ( <i>Erynnis martialis</i> ) - S2	Usually seen nectaring on 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:
FOD5	West Virginia White ( <i>Pieris virginiana</i> ) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y N UTM:



- Legend**
- Property Boundary
  - Prime Transmission Line
  - Prime Transmission Line Buffer (180 m)
  - ELC Completed 2011
  - Natural Feature and ID
  - ELC Polygon Boundary
  - ANSI
  - Evaluated Wetlands - PSW
  - ABCA Watercourse

0.5 ha

Basemapping from Ontario Ministry of Natural Resources  
Ordnography 2010



Metres  
0 25 50 100  
UTM Zone 17N NAD 83  
13 000

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Geshen ELC Survey

**635\_GSH2369/GSH2371**

May 2012  
Project 00156032

AECOM

Figure 1

\* ASA \* from adjacent property

Map #: C5654236/234 Polygon: CWT  
 Surveyor(s): Date: June 5 2012 Time start: 8:00 AM finish: 12:40 PM  
 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"/> 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 ASA	<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"/> Roli. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Aivar <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 checked="" 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 checked="" 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			
2			
3			<i>Croton sp. - Nodulosum - Rhacath - Resbian</i>
4			<i>Sida sp. - polyphylla sp. - pharaca</i>

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 Smags:  < 10  10-24  25-50  > 50  
 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

Ecosite:	Mineral Cultural Thicket Forest	Code:	CWT1
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						
Basal Area (BA)						100
Dead						

### Soils Ontario and ELC Soils Description

Site Metrics	Pit/Auger #		Summary
	UTM	Zone	
Moisture Regime			
Drainage			
Effective Texture (Indicate below)	Depth to ...		% CF
	1	2	
Soil Horizon Description	Depth to ...		% CF
	3	4	

ASA

**Map #:** 6356SH2369/2371  
**Polygon:** CUM-1  
**Surveyor(s):** Jess Bell, Tom Shroy, June 5, 2012  
**Date:** start: 12:30 pm, finish: 12:48 pm  
**UTMZ:** UTMZ:

**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"/> History <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Cultural <input type="checkbox"/> Cover <input checked="" type="checkbox"/> Open <input type="checkbox"/> Shrub <input 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 ASA	<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 checked="" 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"/> Valley Slope <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	—	—	
2	—	—	
3	—	—	
4	6	4	Phacelia sp. - <i>Phacelia trichomanis</i> - <i>Heptameria</i>

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:  <10  10-24  25-50  >50  
 Standing Snags:  <10  10-24  25-50  >50  
 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

**Ecosite:** Code: CUM-1  
**Vegetation Type:** Dry-must Old field meadow type  
**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						

Prism Factor 2

**Soils Ontario and ELC Soils Description**

Pit/Auger #	UTM	Zone	Easting	Northing	Position	Aspect	Percent	Slope	Length	Summary
<b>Site Metrics</b>										
<b>Depth to...</b>										
<b>Soil Horizon Description</b>										
1										% CF
Mottles										
Gley										
Water Table										
Carbonates										
Bedrock										
Depth from zero										
Texture										
Depth from zero										
Texture										
Depth from zero										
Texture										
Depth from zero										
Texture										
Depth from zero										
Texture										
% Surface Stone/Rock										
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>Ageratina altissima</i> )						Cutleaf Toothwort ( <i>Cardamine concatenata</i> )						Tall Buttercup ( <i>Ranunculus acris</i> )					
Com. Ragweed ( <i>Ambrosia artemisiifolia</i> )						Toothwort ( <i>Cardamine diphylla</i> )						Hooked Buttercup ( <i>Ranunculus recurvatus</i> )					
Giant Ragweed ( <i>Ambrosia trifida</i> )						Penn. Bitter-cress ( <i>Cardamine pennsylvanica</i> )						<i>Ranunculus</i>					
Field Pussytoes ( <i>Antennaria neglecta</i> )						<i>Cardamine</i>						Sheep Sorrel ( <i>Rumex acetosella</i> )					
<i>Artemisia</i>						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>Saponaria officinalis</i> )					
Brown Knapweed ( <i>Centaurea jacea</i> )						Enchanter's Nightshade ( <i>Circaea lutetiana</i> )						Marsh Skullcap ( <i>Scutellaria galericulata</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 Campion ( <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 Water-parsnip ( <i>Sium suave</i> )					
Daisy Fleabane ( <i>Erigeron annuus</i> )						Dog-strangling Vine ( <i>Cynanchum rossicum</i> )						Bitter Nightshade ( <i>Solanum dulcamara</i> )					
Philadelphia Fleabane ( <i>Erig. philadelphicus</i> )						Wild Carrot ( <i>Daucus carota</i> )						Black Nightshade ( <i>Solanum ptychanthum</i> )					
<i>Erigeron</i>						Deptford 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 perfoliatum</i> )						Dutchman's-breeches ( <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 Penny-cress ( <i>Thlaspi arvense</i> )					
Orange Hawkweed ( <i>Hieracium aurantiacum</i> )						Viper's Bugloss ( <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>Trientalis borealis</i> )					
<i>Hieracium</i>						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> )						<i>Epilobium</i>						<i>Trifolium</i>					
<i>Lactuca</i>						Worm Mustard ( <i>Erysimum cheiranthoides</i> )						Stinging Nettle ( <i>Urtica dioica</i> )					
Ox-eye Daisy ( <i>Leucanthemum vulgare</i> )						<i>Euphorbia</i>						Greater Bladderwort ( <i>Utricularia vulgaris</i> )					
Pineapple-weed ( <i>Matricaria discoidea</i> )						Hemp Nettle ( <i>Galeopsis 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>Veron. anagallis-aquatica</i> )					
Blue-stem Goldenrod ( <i>Solidago caesia</i> )						<i>Galium</i>						Common Speedwell ( <i>Veronica officinalis</i> )					
Canada Goldenrod ( <i>Solidago canadensis</i> )						Spotted Geranium ( <i>Geranium maculatum</i> )						<i>Veronica</i>					
Zig-zag 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 aleppicum</i> )						<i>Vicia</i>					
Early Goldenrod ( <i>Solidago juncea</i> )						White Avens ( <i>Geum canadense</i> )						Periwinkle ( <i>Vinca minor</i> )					
Gray Goldenrod ( <i>Solidago nemoralis</i> )						Urban Avens ( <i>Geum urbanum</i> )						Dog Violet ( <i>Viola conspersa</i> )					
<i>Solidago m?</i>	F	F				Dame's Rocket ( <i>Hesperis matronalis</i> )						Yellow Violet ( <i>Viola pubescens</i> )					
Field Sow-thistle ( <i>Sonchus arvensis</i> )						Virg. Water-leaf ( <i>Hydrophyllum virginianum</i> )						Com. Blue Violet ( <i>Viola sororia</i> )					
<i>Sonchus</i>						Com. St. John's-wort ( <i>Hypericum perforatum</i> )						<i>Viola</i>					
Heart-leaf Aster ( <i>Symph. cordifolium</i> )						Spotted Jewelweed ( <i>Impatiens capensis</i> )											
Heath Aster ( <i>Symphytichum aricoideis</i> )						Wood Nettle ( <i>Laportea canadensis</i> )											
Tall White Aster ( <i>Symph. lanceolatum</i> )						Motherwort ( <i>Leonurus cardiaca</i> )											
Calico Aster ( <i>Symphytichum lateriflorum</i> )						Field Peppergrass ( <i>Lepidium campestre</i> )											
New England Aster ( <i>Symph. novae-angliae</i> )						Eur. Gromwell ( <i>Lithospermum officinale</i> )											
Purple-stem Aster ( <i>Symph. punicus</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> )	U	U				<i>Lobelia</i>											
Com. Goatsbeard ( <i>Tragopogon pratensis</i> )						Cut-leaf Bugleweed ( <i>Lycopus americanus</i> )											
Cotsfoot ( <i>Tussilago farfara</i> )						Northern Bugleweed ( <i>Lycopus uniflorus</i> )											
						Fringed Loosestrife ( <i>Lysimachia ciliata</i> )											
						Moneywort ( <i>Lysimachia nummularia</i> )											
						<i>Lysimachia</i>											
						Purple Loosestrife ( <i>Lythrum salicaria</i> )											
						Black Medick ( <i>Medicago lupulina</i> )											
						Alfalfa ( <i>Medicago sativa</i> )											
						White Sweet-clover ( <i>Melilotus alba</i> )											
						Yellow Sweet-clover ( <i>Melilotus officinalis</i> )											
						Wild Mint ( <i>Mentha arvensis</i> )											
						Wild Bergamot ( <i>Monarda fistulosa</i> )											
						Small Forget-me-not ( <i>Myosotis laxa</i> )											
						Forget-me-not ( <i>Myosotis scorpioides</i> )											
						Water-cress ( <i>Nasturtium officinale</i> )											
						Com. Evening-primrose ( <i>Oenothera biennis</i> )											
						Sweet-cicely ( <i>Osmorhiza berterii</i> )											
						Yellow Wood-sorrel ( <i>Oxalis stricta</i> )											
						Wild Parsnip ( <i>Pastinaca sativa</i> )											
						English Plantain ( <i>Plantago lanceolata</i> )											
						Common Plantain ( <i>Plantago major</i> )											
						Rugel's Plantain ( <i>Plantago rugelii</i> )											
						May-apple ( <i>Podophyllum peltatum</i> )											
						Pale Smartweed ( <i>Polygonum lapathifolium</i> )											
						Lady's-thumb ( <i>Polygonum persicaria</i> )											
						Virginia Knotweed ( <i>Polygonum virginianum</i> )											
						<i>Polygonum</i>											
						<i>Polygonum</i>											
						Rough Cinquefoil ( <i>Potentilla norvegica</i> )											
						Rough-fruited Cinquefoil ( <i>Potentilla recta</i> )											
						Common Cinquefoil ( <i>Potentilla simplex</i> )											
						<i>Potentilla</i>											
						Heal-all ( <i>Prunella vulgaris</i> )											
						Shinleaf ( <i>Pyrola elliptica</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 in the polygon by less than about five individuals or small clumps

Map Number: 6356542369/	1	ACTI	4
Date: June 5, 2012	2	cum -	5
Surveyors: JP/BS	3		

ASA

### Significant Wildlife Habitat Form

A-COM

Study Area: BLW JER GSH Map #: 635-GSH2369/2371  
 Date: 2012-06-05 Time Started: 12:00 P.M.  
 Field Staff: Tom Shorney JSP Time Finished: 12:48 P.M.  
 Weather Conditions: Partly Sunny, Light breeze 16°C

**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: \_\_\_\_\_

Potential to hold water until at least July in most years: Yes / No \_\_\_\_\_

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

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