

VASCULAR PLANT CHECKSHEET

Location: 245\_GSH 2056  
 Observer: SAM

Date: Oct. 4/11

Job Number:

DICOT HERBS						MONOCOT HERBS					
1	2	3	4	5	6	1	2	3	4	5	6
Actaea millefolia						Plantago lanceolata					
Achillea millefolia						Plantago major					
Achillea millefolia						Plantago rugelii					
Achillea millefolia						Podophyllum peltatum					
Achillea millefolia						Polygonum					
Achillea millefolia						Polygonum					
Achillea millefolia						Polygonum					
Achillea millefolia						Polygonum lapathifolium					
Achillea millefolia						Polygonum pensilvanicum					
Achillea millefolia						Potentilla					
Achillea millefolia						Potentilla norvegica					
Achillea millefolia						Potentilla recta					
Achillea millefolia						Prenanthes alba					
Achillea millefolia						Prunella vulgaris					
Achillea millefolia						Pyrola elliptica					
Achillea millefolia						Ranunculus					
Achillea millefolia						Ranunculus abortivus					
Achillea millefolia						Ranunculus acris					
Achillea millefolia						Rudbeckia hirta					
Achillea millefolia						Rumex acetosella					
Achillea millefolia						Rumex crispus					
Achillea millefolia						Rumex					
Achillea millefolia						Sanguinaria canadensis					
Achillea millefolia						Sarcocolla marilandica					
Achillea millefolia						Saponaria officinalis					
Achillea millefolia						Satureja vulgaris					
Achillea millefolia						Scutellaria palmerioides					
Achillea millefolia						Silene vulgaris					
Achillea millefolia						Stem suave					
Achillea millefolia						Solanum dulcamara					
Achillea millefolia						Solidago					
Achillea millefolia						Solidago altissima					
Achillea millefolia						Solidago canadensis					
Achillea millefolia						Solidago flexicaulis					
Achillea millefolia						Solidago gigantea					
Achillea millefolia						Solidago nemoralis					
Achillea millefolia						Solidago rugosa					
Achillea millefolia						Sonchus oleraceus					
Achillea millefolia						Sonchus asper					
Achillea millefolia						Stellaria					
Achillea millefolia						Taraxacum vulgare					
Achillea millefolia						Taraxacum officinale					
Achillea millefolia						Thalictrum dictamnifolium					
Achillea millefolia						Thalictrum pubescens					
Achillea millefolia						Thymus cordifolia					
Achillea millefolia						Trigonotis pratensis					
Achillea millefolia						Trientalis borealis					
Achillea millefolia						Trifolium					
Achillea millefolia						Trifolium pratense					
Achillea millefolia						Trifolium repens					
Achillea millefolia						Tussilago farfara					
Achillea millefolia						Urtica dioica					
Achillea millefolia						Urtica vulgaris					
Achillea millefolia						Verbesina virginiana					
Achillea millefolia						Verbena hastata					
Achillea millefolia						Verbena urticifolia					
Achillea millefolia						Veronica					
Achillea millefolia						Veronica officinalis					
Achillea millefolia						Vicia cracca					
Achillea millefolia						Vicia tetrasperma					
Achillea millefolia						Vicia sp					
Achillea millefolia						Vicia					
Achillea millefolia						Vicia pubescens					
Achillea millefolia						Vicia serotina					

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

SITE LOCATIONS





<b>ELC</b>  <b>WILDLIFE</b>	SITE: 245-GSH 2056	
	POLYGON: ①	
	DATE: Oct-4/11	
	SURVEYORS: SAM	
	START TIME: 1548h	END TIME: 1632h

TEMP (°C): 18	CLOUD (10th): 1	WIND: 2-3	PRECIPITATION: nil
CONDITIONS:			

**POTENTIAL WILDLIFE HABITAT:**

VERNAL POOLS	SNAGS
HIBERNACULA	FALLEN LOGS

**SPECIES LIST:**

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
B	CCWA	VO		5					
B	AMRO	VO		2					
B	Dowo	VO		1					
B	BCCH								

**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)



- Legend**
- GE Trench
  - ▭ Trench Buffer (216 m)
  - ▭ Property Boundary
  - ▭ ELC Completed 2011
  - ▭ Natural Feature and ID
  - ▭ ELC Polygon Boundary
  - ▭ Disturbance Area
  - ▭ Area of Disturbance plus 10m
  - ▭ AHS
  - ▭ Evaluated Wetlands - PSW
  - ▭ ABCA Wetland



Information from the Ministry of Natural Resources  
 Cartography: 2012  
 2012 (2011), 2012 (2011)  
 This drawing has been prepared for the use of AECOM only and is not to be used for any other purpose. AECOM does not warrant the accuracy or completeness of the information, and makes no liability, acceptance to any other party.

Swedish Acquisition Survey  
 249\_GSH1745/GSH1746  
 April 2012  
 Project: 101010000000  
**AECOM**  
 Figure 1

ASA

**ELC**  
Community Description and Classification

Map #: 246 GST 1745 Polygon: 1

Surveyor(s): SG Date: July 4, 2012 Time start: 3:45 pm finish: 4:40 pm

UTMZ: UTMZ: UTMN:

**Polygon Description**

<b>System</b>	<b>Substrate</b>	<b>Topography</b>	<b>Plant Form</b>	<b>Community</b>
<input type="checkbox"/> Terrestrial <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <input checked="" type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock <input type="checkbox"/> Natural <input type="checkbox"/> Cultural <input type="checkbox"/> Open <input type="checkbox"/> Shrub <input checked="" type="checkbox"/> Tree	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil ? <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk <input type="checkbox"/> Lacustrine <input checked="" type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input 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"/> 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 type="checkbox"/> Forest <input type="checkbox"/> Plantation		

**Stand Description**

HT	OVR	Specialty	Planting	Community
2	4	Fe. penn > ulm & mix		
2	3	Fe. penn > ulm & mix		
3	3			
4	4	phragm		

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	Community	Age	Abundance
	<10	0	0
	<10	?	?
	<10	?	?
	>50	?	?
	>50	?	?
	>50	?	?

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

Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Vegetation: Ash mineral deciduous Swamp Code: SWDZ

Soil: Green Ash mineral soil Swamp Code: SWDZ

**Community Profile Diagram/Comments**

ASA: ...

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Total	% CF	Rel. Avg
						2
						100

**Soils Ontario and ELC Soils Description**

Site Metrics	Pit/Auger #				Summary
	Zone	Easting	Northing	Position	
Moisture Regime					
Drainage					
Soil Horizon Description	Depth to ...				Effective Texture (indicate below)
	1	2	3	4	







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Significant Wildlife Habitat Form

AECOM

Study Area:	BLW	JER	<u>GSH</u>	Map #:	249 GSH 1745
Date:	July 4, 2012			Time Started:	3:45 pm
Field Staff:	SG.			Time Finished:	4:40 pm
Weather Conditions:	33°C, 5/100, very light wind.				

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

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**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, 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

ASA

# Species of Conservation Concern Habitat and Incidental Wildlife - Goshen



Map No: 249 654 1745  
 Date (yyyy-mm-dd): July 4, 2012  
 Field Staff: SG  
 Time Started: 8:45 am  
 Time Finished: 4:45 pm

## Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
<i>B. winged blackbird</i>		19					
<i>green frog</i>		0					

**Note: Evidence Codes (EV)** SH=Suitable Habitat, SM=Singling Male, 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=Food/Faecal sack, AE=Nest Entry, Breeding Bird (Confirmed), DP=Distinctive Parts, HO=House/Den, FY=Eggs/young, TK=Tracks, FE=Feeding evidence, SC=Scat, S=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, S=Other signs (specify)

ELC	Species	Habitat Description	Habitat Present (Y/N) UTM	UTM	EV	Notes
<b>PLANTS</b>						
FO07	American Gromwell ( <i>Lithospermum latifolium</i> ) - 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 ( <i>Astomum muehlenbergianum</i> ) - S2 Bloom Time - Spring	Thin soil over level outcrop ledges and on soil under grasses in open prairie	Y (N) UTM			
FOM1, FOM2, GUP3	Autumn Corel-root ( <i>Coralichiza odoratissima</i> ) - 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, FOO	Burning Bush ( <i>Elaeagnus altipurpureus</i> ) - S3 Bloom Time - April - June	Species occurs in dry to moist deciduous thickets and woods	Y (N) UTM			
SWC1, SWC3, SWC4, SWM1, SWM2, SWM3, SWM4, SWM5, SWM6	Chinese Hemlock Parsley ( <i>Conioselinum chinense</i> ) - 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, SWO, SWT, MAM, MAS	Crowned Beggarticks ( <i>Bidens trichosperma</i> ) - S2 Bloom Time - late summer	Found in openings in tallgrass, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian bay. Bogs, fens, tamarack swamps.	Y (N) UTM: <i>n/a</i>			
ALT1, FOD7	Eastern Green-violet ( <i>Hybanthus concolor</i> ) - 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 ( <i>Chenopodium foggii</i> ) - S2	Species occurs in sandy areas on limestone under oak or pine-oak forests.	Y (N) UTM			
TPO2, TPQ2, TPW2	Giant Ironweed ( <i>Veronica gigantea</i> ) - S17 Bloom Time	Found in mesic prairies, thickets, moist woods, rusefudes 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, F006, F007, F009	June - August Green Dragon ( <i>Arisaema dracontium</i> ) - S2/S3 Bloom Time - 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
TP01, TP51, TPW1, FOM1, FOM2, FOO1, FOO2, FOO3	June - August Hairy Bedstraw ( <i>Galium pilosum</i> ) - S3 Bloom Time - June - August	Occurs in dry, sandy woods and thickets, occasionally in dry sandy fields	Y (N) UTM
FE01, FE51, FET1, SWC, SWM, SWD, SWT, TPO, TPS, TPW	June to August Hairy Valerian ( <i>Valeriana edulis</i> ) - S1 Bloom Time - June to August	Inhabits swampy river falls and meadows, wet prairies, and wooded, rocky riverbanks and trails.	Y (N) UTM n/o.
F006, F007, SWM (SWD)	Summer Hairy Wood Mint ( <i>Thymophylla nitida</i> ) - S1 Bloom Time - Summer	Woodlands, often rocky, especially rivets, swamp forests, floodplains.	Y (N) UTM n/o.
F006, F007, F008, F009	Herbinger-of-spring ( <i>Erigenia bulbosa</i> ) - S3 Bloom Time - 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> ) - S2/S3 Bloom Time - 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>Pleianthera macrophylla</i> ) - S2 Bloom Time - 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>Scirpus cernuus</i> ) - S3 Bloom Time - 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 n/o.
F006, F007, F009	Pawpaw ( <i>Asimina triloba</i> ) - S3 Bloom Time - March-May	Occurs in moist deciduous woods and stream banks.	Y (N) UTM
FOM6, F006, F007, F009, CUM1	Pileose Evening Primrose ( <i>Oenothera pilosella</i> ) - S2 Bloom Time - 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>Osmorhiza rotundifolia</i> ) - S2 Bloom Time - July-September	Dry, sandy or rocky woods	Y (N) UTM
F007; SWD	Pumpkin Ash ( <i>Fraxinus profunda</i> ) - S2? Bloom Time - March - June	Swamps and floodplains	Y (N) UTM n/o.
CUW1, ALO, FET1, SWC	Ram's-head Lady's-slipper ( <i>Cypripedium arietinum</i> ) - S3 Bloom Time - mid May to mid June	Found in cedar woodlands, limestone plains and wooded lens, 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 Bloom Time - April - September	Species inhabits open, dry sandy woods, Jack pine, oak, and aspen woodlands.	Y (N) UTM
FOD6, F007, F009	Round-leaved Groundsel ( <i>Packera obovata</i> ) - S3 Bloom Time - May - June	Found in moist woods	Y (N) UTM
CUM1, CUT1, CUS1	Round-leaved hawthorn ( <i>Crataegus lanata</i> ) - S3? Bloom Time - May to October	Species occurs in old fields, poorly managed pastures, fence-lines and roadsides	Y (N) UTM
FOD6, F007, F008, FOD9, SWT2, SWT3	Slender Blazing Star ( <i>Liatris cylindracea</i> ) - S3 Bloom Time - late summer to mid fall	Found in moist, rich woods, sicket swamps, banks and floodplains.	Y (N) UTM
SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2	Slender Knotweed ( <i>Polygonum tenue</i> ) - S2 Bloom Time - mid-March to mid-June	Species occurs in limestone and dolomite pavement, prairies, open woods, alvars and moist sandy meadows.	Y (N) UTM
SOT1, FOD5, FOD9	Slim-flowered Nettle ( <i>Muhlenbergia tenuiflora</i> ) - S2 Bloom Time - late summer to mid fall	Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows, at edges of sand pits	Y (N) UTM
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, F007	Stiff Gentian ( <i>Gentiana quinquefolia</i> ) - S2 Bloom Time - late summer to mid fall	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
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine ( <i>Lupinus perennis</i> ) - S3 Bloom Time - mid-March to mid-June	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	Y (N) UTM
		Inhabits dry, sandy oak savannas, 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, TP51, 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>Amoglossum plantagineum</i> ) - S3 Bloom Time - mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats.	Y (N) UTM
FOC1, FOC2, FOC3, FOC4	Woodland Pinedrops ( <i>Pinus strobus</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, CUM1, 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.
CUM, SOO, RIO, TPS	Common Nighthawk ( <i>Chordeiles minor</i> ) - SC	Hunts insects over a wide variety of habitats, in particular open or semi-open areas. Nests on ground in a wide range of open, sparse or vegetation-free habitats.	Y (N) UTM
FOD, FOM	Louisiana Waterthrush ( <i>Seiurus motacilla</i> ) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stop-over 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>Nyctaleus 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 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>			
OAO, SA, SWM (SND)	Azure Bluet ( <i>Eriolagisma aspersum</i> ) - S3	Species inhabits featureless ponds, lakes and boggy tramps	Y (N) UTM not boggy
TPS, TPW	Sleepy Duskywing ( <i>Erynnis brizo</i> ) - S1	Occurs in oak-bark-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, CUM1	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 reclining 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, FOD-3, TPW, TPS, CUM1	Tawny Emperor ( <i>Asterocampa clyton</i> ) - S3	Species inhabits densely wooded riparian areas, dry woods, open woods, fence rows and parks. Usually occurs near Hackberry, the larval foodplant	Y (N) UTM n/a
FODS	West Virginia White ( <i>Pieris virginianensis</i> ) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant (foolwort) occur	Y (N) UTM

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- Legend**
- GE Turbine
  - ▭ Turbine Buffer (216 m)
  - ▭ Property Boundary
  - ▭ ELC Completed 2011
  - ▭ Natural Feature and ID
  - ▭ ELC Polygon Boundary
  - ▭ Disturbance Areas
  - ▭ Area of Disturbances, plus 10m
  - ▭ ANSI
  - ▭ Evaluated Wetlands - PSW
  - ▭ ABCA Watercourse



Base mappings from Ontario Ministry of Natural Resources  
 Orthophotography 2010



0 25 50 100  
 Metres  
 UTM Zone 17N NAD 83  
 12,500

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Goshen Amphibian Survey  
 249\_GSH1745/GSH1746

April 2012  
 Project 07155622



Figure 1

ASA

**ELC**  
Community Description and Classification

Map #: 249-6511745 Polygon: \_\_\_\_\_

Surveyor(s): RA, SG Date: \_\_\_\_\_ Time start: 8:00am finish: 10:30am

UTMZ: \_\_\_\_\_ UTMN: \_\_\_\_\_

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input checked="" 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 checked="" type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input 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"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input checked="" 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 checked="" 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) (> Much Greater Than; > Greater Than; = About Equal To)
1		0	
2		0	
3		0	
4		0	

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:  <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: Open Aquatic Code: 0AQ  
 Vegetation Type: ✓ Code: ✓  
 Inclusion: ✓ Code: ✓  
 Complex: ✓ Code: ✓

**Community Profile Diagram/Comments**

Open pond surrounded by small trees etc.

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
<i>(Table content is mostly blank with a diagonal line across it)</i>						
Total						100
Basal Area (BA)						
Dead						

**Soils Ontario and ELC Soils Description**

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

Trees & Shrubs					Tree & Shrubs					Graminoids				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
<b>Conifers</b>					<b>Deciduous</b>					<b>Grasses</b>				
Balsam Fir ( <i>Abies balsamea</i> )					White Oak ( <i>Quercus alba</i> )					Giant Redtop ( <i>Agrostis gigantea</i> )				
Common Juniper ( <i>Juniperus communis</i> )					Bur Oak ( <i>Quercus macrocarpa</i> )					Redtop ( <i>Agrostis stolonifera</i> )				
Eastern Red Cedar ( <i>Juniperus virginiana</i> )					Red Oak ( <i>Quercus rubra</i> )					Awnless Brome ( <i>Bromus inermis</i> )				
Tamarack ( <i>Larix laricina</i> )					Alder Buckthorn ( <i>Rhamnus alnifolia</i> )					Bromus				
Norway Spruce ( <i>Picea abies</i> )					Common Buckthorn ( <i>Rhamnus cathartica</i> )					Blue-joint Grass ( <i>Calamagrostis canadensis</i> )				
White Spruce ( <i>Picea glauca</i> )					Smooth Sumac ( <i>Rhus glabra</i> )					Orchard Grass ( <i>Dactylis glomerata</i> )				
Picea Spruce ( <i>Picea mariana</i> )					Staghorn Sumac ( <i>Rhus hirta</i> )					Poverty Oat Grass ( <i>Danthonia spicata</i> )				
Jack Pine ( <i>Pinus banksiana</i> )					Wild Black Currant ( <i>Ribes americanum</i> )					Quack Grass ( <i>Elymus repens</i> )				
Red Pine ( <i>Pinus resinosa</i> )					Prickly Gooseberry ( <i>Ribes cynosbati</i> )					Virginia Wild Rye ( <i>Elymus virginicus</i> )				
Eastern White Pine ( <i>Pinus strobus</i> )					Swamp Black Currant ( <i>Ribes lacustre</i> )					Elymus				
Scotch Pine ( <i>Pinus sylvestris</i> )					Red Currant ( <i>Ribes rubrum</i> )									
Canada Yew ( <i>Taxus canadensis</i> )					<i>Ribes</i>					Fowl Manna Grass ( <i>Glyceria striata</i> )				
Eastern White Cedar ( <i>Thuja occidentalis</i> )					Black Locust ( <i>Robinia pseudo-acacia</i> )					Glyceria				
Eastern Hemlock ( <i>Tsuga canadensis</i> )					Prickly Rose ( <i>Rosa acicularis</i> )					Rice Cut Grass ( <i>Leersia oryzoides</i> )				
					Smooth Rose ( <i>Rosa blanda</i> )					Tall Fescue ( <i>Loium arundinaceum</i> )				
					Multiflora Rose ( <i>Rosa multiflora</i> )					Muhlenbergia				
					<i>Rosa</i>					Witch-grass ( <i>Panicum capillare</i> )				
<b>Deciduous</b>														
Manitoba Maple ( <i>Acer negundo</i> )					Com. Blackberry ( <i>Rubus allegheniensis</i> )					Panicum				
Black Maple ( <i>Acer nigrum</i> )					Wild Red Raspberry ( <i>Rubus idaeus</i> )					Reed Canary Grass ( <i>Phalaris arundinacea</i> )				
Norway Maple ( <i>Acer platanoides</i> )					Black Raspberry ( <i>Rubus occidentalis</i> )					Timothy ( <i>Phleum pratense</i> )				
Red Maple ( <i>Acer rubrum</i> )					Purple-fl. Raspberry ( <i>Rubus odoratus</i> )					Common Reed ( <i>Phragmites australis</i> )				
Silver Maple ( <i>Acer saccharinum</i> )					Dwarf Raspberry ( <i>Rubus pubescens</i> )					Canada Blue Grass ( <i>Poa compressa</i> )				
Freeman's Maple ( <i>Acer X freemanii</i> )					<i>Rubus</i>					Fowl Meadow Grass ( <i>Poa palustris</i> )				
Sugar Maple ( <i>Acer saccharum</i> )					Peach-leaved Willow ( <i>Salix amygdaloides</i> )					Kentucky Bluegrass ( <i>Poa pratensis</i> )				
Mountain Maple ( <i>Acer spicatum</i> )					Bebb's Willow ( <i>Salix bebbiana</i> )					Yellow Foxtail ( <i>Setaria pumila</i> )				
Spotted Alder ( <i>Alnus incana</i> )					Pussy Willow ( <i>Salix discolor</i> )					Green Foxtail ( <i>Setaria viridis</i> )				
Downy Serviceberry ( <i>Amelanchier arborea</i> )					Missouri Willow ( <i>Salix eriocephala</i> )									
Serviceberry ( <i>Amelanchier sanguinea</i> )					Sandbar Willow ( <i>Salix exigua</i> )									
Yellow Birch ( <i>Betula alleghaniensis</i> )					Shining Willow ( <i>Salix lucida</i> )									
White Birch ( <i>Betula papyrifera</i> )					Black Willow ( <i>Salix nigra</i> )									
European Birch ( <i>Betula pendula</i> )					Slender Willow ( <i>Salix petiolaris</i> )									
Blue Beech ( <i>Carpinus caroliniana</i> )					<i>Salix</i>									
Bitternut hickory ( <i>Carya cordiformis</i> )					Hybrid Crack Willow ( <i>Salix X rubens</i> )									
Shagbark Hickory ( <i>Carya ovata</i> )					Black-berried Elder ( <i>Sambucus nigra</i> )									
Climbing Bittersweet ( <i>Celastrus scandens</i> )					Red-berried Elder ( <i>Sambucus racemosa</i> )									
Common Hackberry ( <i>Celtis occidentalis</i> )					Buffaloberry ( <i>Shepherdia canadensis</i> )					<b>Sedges</b>				
Buttonbush ( <i>Cephalanthus occidentalis</i> )					Eur. Mountain Ash ( <i>Sorbus aucuparia</i> )					Drooping Wood Sedge ( <i>Carex arcata</i> )				
Alt.-leaved Dogwood ( <i>Comus alternifolia</i> )					Narrow Meadow-sweet ( <i>Spiraea alba</i> )					Golden-fruited Sedge ( <i>Carex aurea</i> )				
Silky Dogwood ( <i>Comus amomum</i> )					Common Lilac ( <i>Syringa vulgaris</i> )					Graceful Sedge ( <i>Carex gracillima</i> )				
Bunchberry ( <i>Cornus canadensis</i> )					Poison-ivy ( <i>Toxicodendron rydbergii</i> )					Inland Sedge ( <i>Carex interior</i> )				
Gray dogwood ( <i>Cornus racemosa</i> )					Climbing Poison-ivy ( <i>Toxicodendron radicans</i> )					Bladder Sedge ( <i>Carex intumescens</i> )				
Round-leaved Dogwood ( <i>Cornus rugosa</i> )					White Elm ( <i>Ulmus americana</i> )					Lake-bank Sedge ( <i>Carex lacustris</i> )				
Red-osier Dogwood ( <i>Cornus sericea</i> )					Siberian Elm ( <i>Ulmus pumila</i> )					Hop Sedge ( <i>Carex lupulina</i> )				
American Hazel ( <i>Corylus americana</i> )					Slippery Elm ( <i>Ulmus rubra</i> )					Pennsylvania Sedge ( <i>Carex pensylvanica</i> )				
Beaked Hazel ( <i>Corylus cornuta</i> )					Low Blueberry ( <i>Vaccinium angustifolium</i> )					Awi-fruited Sedge ( <i>Carex stipata</i> )				
Cockspur Thorn ( <i>Crataegus crus-galli</i> )					Maple-leaf Viburnum ( <i>Viburnum acerifolium</i> )					Fox Sedge ( <i>Carex vulpinoidea</i> )				
English Hawthorn ( <i>Crataegus monogyne</i> )					Hobblebush ( <i>Viburnum lantanoides</i> )					Carex				
Large-fruited Thorn ( <i>Crataegus punctata</i> )					Nannyberry ( <i>Viburnum lentago</i> )					Carex				
<i>Crataegus</i>					Guelder-Rose ( <i>Viburnum opulus</i> )					Carex				
<i>Crataegus</i>					Downy Arrow-wood ( <i>Vib. rafinesquianum</i> )					Carex				
Bush Honeysuckle ( <i>Diervilla lonicera</i> )					Riverbank Grape ( <i>Vitis riparia</i> )					Carex				
Russian Olive ( <i>Eleagnus angustifolia</i> )					Am. Prickly-ash ( <i>Zanthoxylum americanum</i> )					Carex				
Autumn Olive ( <i>Eleagnus umbellata</i> )										Carex				
Run. Strawberry-bush ( <i>Euonymus obovata</i> )										Carex				
American Beech ( <i>Fagus grandifolia</i> )										Carex				
Glossy Buckthorn ( <i>Frangula alnus</i> )										Carex				
White Ash ( <i>Fraxinus americana</i> )										Carex				
Black Ash ( <i>Fraxinus nigra</i> )					<b>Ferns &amp; Allies</b>					Carex				
Green Ash ( <i>Fraxinus pennsylvanica</i> )					Lady Fern ( <i>Athyrium filix-femina</i> )					Carex				
Witch-hazel ( <i>Hamamelis virginiana</i> )					Rattlesnake Fern ( <i>Botrychium virginianum</i> )					Cyperus				
Winterberry ( <i>Ilex verticillata</i> )					Bulb-Bladder Fern ( <i>Cystopteris bulbifera</i> )					Redroot Spike-rush ( <i>Eleocharis erythropoda</i> )				
Butternut ( <i>Juglans cinerea</i> )					Spin. Wood Fern ( <i>Dryopteris carthusiana</i> )					Eleocharis				
Black Walnut ( <i>Juglans nigra</i> )					Crested Wood Fern ( <i>Dryopteris cristata</i> )					Hard-stem Bulrush ( <i>Schoenoplectus acutus</i> )				
Common Privet ( <i>Ligustrum vulgare</i> )					Marginal Wood Fern ( <i>Dryopteris marginalis</i> )					Three-square Bulrush ( <i>Sch. pungens</i> )				
Spicebush ( <i>Lindera benzoin</i> )					<i>Dryopteris</i>					Soft-stem Bulrush ( <i>Sch. tabernaemontani</i> )				
Fly Honeysuckle ( <i>Lonicera canadensis</i> )					Ostrich Fern ( <i>Matteuccia struthiopteris</i> )					Dark-green Bulrush ( <i>Scirpus atrovirens</i> )				
Glaucous Honeysuckle ( <i>Lonicera dioica</i> )					Sensitive Fern ( <i>Onoclea sensibilis</i> )					Wool-grass ( <i>Scirpus cyprenus</i> )				
Morrow's Honeysuckle ( <i>Lonicera morrowii</i> )					Cinnamon Fern ( <i>Osmunda cinnamomea</i> )									
Tartarian Honeysuckle ( <i>Lonicera tatarica</i> )					Interrupted Fern ( <i>Osmunda claytoniana</i> )									
Common Apple ( <i>Malus pumila</i> )					Royal Fern ( <i>Osmunda regalis</i> )									
White Mulberry ( <i>Morus alba</i> )					Christmas Fern ( <i>Polystichum acrostichoides</i> )									
Sweet Gale ( <i>Myrica gale</i> )					Eastern Bracken-fern ( <i>Pteridium aquilinum</i> )									
Ironwood ( <i>Ostrya virginiana</i> )					Marsh Fern ( <i>Thelypteris palustris</i> )									
Thicket-creeper ( <i>Parthenocissus inserta</i> )										<b>Other Graminoids</b>				
Ninebark ( <i>Physocarpus opulifolius</i> )										Broad Bur-reed ( <i>Sperganium eurycarpum</i> )				
Balsam Poplar ( <i>Populus balsamifera</i> )					Field Horsetail ( <i>Equisetum arvense</i> )					Narrow-leaved Cattail ( <i>Typha angustifolia</i> )				
Eastern Cottonwood ( <i>Populus deltoides</i> )					Scouring-rush ( <i>Equisetum hyemale</i> )					Broad-leaved Cattail ( <i>Typha latifolia</i> )				
Large-tooth Aspen ( <i>Populus grandidentata</i> )					Variegated Horsetail ( <i>Equisetum variegatum</i> )					Broad-leaved Cattail ( <i>Typha X glauca</i> )				
Trembling Aspen ( <i>Populus tremuloides</i> )					<i>Equisetum</i>					Articulated Rush ( <i>Juncus articulatus</i> )				
Sweet Cherry ( <i>Prunus avium</i> )					Ground-cedar ( <i>Lycopodium digitatum</i> )					Soft Rush ( <i>Juncus effusus</i> )				
Pin Cherry ( <i>Prunus pensylvanica</i> )					Shining Clubmoss ( <i>Lycopodium lucidulum</i> )					Path Rush ( <i>Juncus tenuis</i> )				
Black Cherry ( <i>Prunus serotina</i> )					Ground-pine ( <i>Lycopodium obscurum</i> )					Juncus				
Choke Cherry ( <i>Prunus virginiana</i> )										Juncus				
<i>Prunus</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: 249-65H1745 1 OAO 4  
 Date: Apr 27, 2012 2 6  
 Surveyors: R.A.S.G. 3





ASA

# Significant Wildlife Habitat Form

AECOM

Study Area:	BLW JER <u>(GSH)</u>	Map #:	<u>249-GSH1745</u>
Date:	<u>April 27, 2012</u>	Time Started:	<u>8:00am</u>
Field Staff:	<u>RA, SG</u>	Time Finished:	<u>11:30am</u>
Weather Conditions:	<u>3°C, Windy (4), ~50% Cloud Cover</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: see map Area of standing water delineated on field map

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

Description of standing water (permanent pool, evidence of annual spring flooding, etc):  
Site appears to be a dug pond, could not see into water to collect detailed info

Area and soil/substrate of shoreline habitat: unknown

Type and abundance of cover in open water habitat: Unknown

Type and abundance of cover in surrounding habitat: Hybrid willow, Green Ash, Freeman's Maple

Evidence of disturbance (e.g. cattle grazing): surrounded by agricultural land

Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds:  
Unknown could be potential habitat for waterfowl stopover, amphibian breeding & turtle nesting/habitat

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

**Snake Hibernacula**

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

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

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

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

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

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

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

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

# NHA Site Investigation - Significant Wildlife Habitat Form

**AECOM**

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

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

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

No

Yes (if yes, photograph and complete the following)

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

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

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

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

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

Shoreline of lake, large river or large wetland present:

No

Yes (if yes, photograph and complete the following)

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

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

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

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

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

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

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

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

Large open habitat present:

No

Yes (if yes, photograph and complete the following)

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

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

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

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

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

Mature forest present:

No

Yes (if yes, photograph and complete the following)

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

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

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

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

Photo #	Location or Subject	Photo #	Location or Subject

**Conservation Concern Habitat and Incidence Wildlife – Goshen**

Map No: 249-GSH745  
 Date (yyyy-mm-dd): 2012-04-27

Field Staff: RA, SG

Time Started: 8:00 am  
 Time Finished: 11:30 am

**Observed Species List**

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
<i>Flared Lark</i>		VO					
<i>killdeer</i>		VO					
<i>Song Sparrow</i>		VO					

**Note:** Evidence Codes (EV) *Breeding Bird (Possible)* SH=Suitable Habitat, SM=Singing 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; description of habitat if present)
PLANTS			
FOD7	American Gromwell ( <i>Lithospermum latifolium</i> ) - S3 <i>Bloom Time - Spring</i>	Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods.	Y (N) UTM:
ALO, TPO	Muehlenberg's astomum moss ( <i>Astomum muehlenbergianum</i> ) - 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 ( <i>Corallorhiza odontorhiza</i> ) - S2 <i>Bloom Time - summer to fall</i>	Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry, sandy woods.	Y (N) UTM:
FOC, FOM, FOD	Burning Bush ( <i>Euonymus atropurpureus</i> ) - S3 Bloom Time - April - June	Species occurs in dry to moist deciduous thickets and woods	Y (N) UTM:
SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6	Chinese Hemlock Parsley ( <i>Conioseilinum chinense</i> ) - S2 <i>Bloom Time - summer to fall</i>	Swampy places with deciduous trees, white cedars, tamarack; springy river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes	Y (N) UTM:
SWC, SWM, SWD, SWT, MAM, MAS	Crowned Beggarticks ( <i>Bidens trichosperme</i> ) - S2 <i>Bloom Time - late summer</i>	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 ( <i>Hybanthus concolor</i> ) - 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 ( <i>Chenopodium foggii</i> ) - S2	Species occurs in sandy areas on limestone under oak or pine-oak forests	Y (N) UTM:
TPO2, TPS2, TPW2	Giant Ironweed ( <i>Vernonia gigantean</i> ) - S1? Bloom Time	Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows	Y (N) UTM:

# Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
CUM1, MAM, FOD6, FOD7, FOD9	June – August Green Dragon ( <i>Arisaema dracontium</i> ) - S1/S3 <u>Bloom Time</u> – May and June	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y (N) UTM:
TP01, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	June-August Hairy Bedstraw ( <i>Galium pilosum</i> ) -S3 <u>Bloom Time</u> – June to 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> ) - S1/S2 <u>Bloom Time</u> – summer	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters.	Y (N) UTM:
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:
FOM8, FOD6, FOD7, FOD9, CUM1	Pilose Evening Primrose ( <i>Oenothera pilosella</i> ) –S2 <u>Bloom Time</u> – Late Spring – Early Summer	Moist edges of woods and open, disturbed ground.	Y (N) UTM:
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostate Tick-trefoil ( <i>Desmodium rotundifolium</i> ) –S2 <u>Bloom Time</u> – July-September	Dry, sandy or rocky woods	Y (N) UTM:
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> ) –S3 <u>Bloom Time</u> – May - June	Found in moist woods	Y (N) UTM:
CUM1, CUT1, CUS1	Round-leaved hawthorn ( <i>Crataegus lumaria</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</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; always and moist sandy meadows.	Y (N) UTM:
SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2	Slender Knotweed ( <i>Polygonum tenue</i> )-S2	Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows, at edges of sand pits	Y (N) UTM:
SDT1, FOD5, FOD9	Slim-flowered Muhly ( <i>Muhlenbergia tenuiflora</i> ) - S2	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods	Y (N) UTM:
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian ( <i>Gentiana quinquefolia</i> ) - S2 <u>Bloom Time</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 savannas, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen.	Y (N) UTM:

# Species Conservation Concern Habitat and Incidental Wildlife – Goshen

ATCOM

ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description or 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>Amoglossum plantagineum</i> ) - S3 Bloom Time –mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats.	Y (N) UTM:
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>Selurus motacilla</i> ) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration	Y (N) UTM:
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 shrubby 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>			
OAO, SA, SWM, SWD	Azure Bluet ( <i>Enallagma aspersum</i> ) -S3	Species inhabits fishless ponds, lakes and boggy swamps	Y (N) UTM: NO
TPS, TPW	Sleepy Duskywing ( <i>Erynnis brize</i> ) - S1	Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils. Species regularly seen at flowers in oak woods, on the ground, and at mud puddles	Y (N) UTM:
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 on or 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 clyton</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>Pteris virginianensis</i> ) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y (N) UTM:

ASA

# Wetland Data Collection Sheet



Study area: <i>GSH</i>	Map No: <i>249-GSH1745</i>
Date (yyyy-mm-dd): <i>2012-04-27</i>	Time Started: <i>8:00am</i>
Field Staff: <i>RA, SG</i>	Time Finished: <i>10:30am</i>

**Presence of Groundwater**      No       Yes

bank seepage       iron staining       groundwater indicator

*- ASA could not see*

**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? \_\_\_\_\_

**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
<i>QAO</i>	<i>- ASA could not see into water of pond</i>

# Wetland Data Collection Sheet

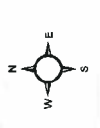

### Notes on Ecological Functions or features

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

*Pond appears to have been dug, surrounded by a narrow band of trees & grass, surrounded by agricultural land with a small watercourse ~ 30m away.*



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



Meters  
0 25 50 100

1:3 000  
UTM Zone 17N, NAD 83

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Base Mapping from Ontario Ministry of Natural Resources  
Orthophotography, 2010

Goshen ELC Survey  
**250\_GSH1077**

May 2012  
Project 60155032



Figure 1



4793750 4793500 4793250

4482

44 50

0 OAG

GSH1765

39

250

Polys  
BOF →

GSH1077

BOF Yes

GSH1787

BOF Yes  
Polys  
BOF →

GSH1789

BOF No  
Access

GSH1081

GSH1768

C + ditton Road

D:\Projects\2012\60155032\Goshen ELC Survey\Map\250\_GSH1077\250\_GSH1077.dwg (PLT) 4/20/12 - 8:17 PM

**ELC**  
Community Description and Classification

Map #: 250-GSH1077 Polygon: |  
 Surveyor(s): RA, SG Date: May 18, 2014 Time start: 11:00 am finish: 12:30 pm  
 UTMZ: 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"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input checked="" type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input checked="" 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 type="checkbox"/> Forest <input type="checkbox"/> Plantation
History	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Cultural			
Cover	<input type="checkbox"/> Open <input type="checkbox"/> Shrub <input checked="" type="checkbox"/> Treed			

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1	2	2	ACESACC 7 V W A M R K = SPRAWLER = <i>Fraxinus</i>
2	2	4	ACESACC
3	4	1	ACESACC >> PRUVIRG
4	7	2	VIOLASP. = ERYANER

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%

BA:	Size Class Analysis:		Standing Snags:		Deadfall / Logs:	
	<10	10-24	<10	10-24	<10	10-24
	A	A	R	R	R	R

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

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

Ecotope:	Dry-Fresh Sugar Maple Deciduous	Code:	F0D
Vegetation Type:	Dry-Fresh Sugar Maple Deciduous	Code:	F0D5-1
Inclusion:	Dry moist old field meadow	Code:	Cum1-1
Complex:		Code:	-

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

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

**Soils Ontario and ELC Soils Description**

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





# Significant Wildlife Habitat Form

AECOM

Study Area:	BLW	JER	<u>GSH</u>	Map #:	<u>250-GSH/1077</u>
Date:	<u>May 18, 2012</u>			Time Started:	<u>11:00am</u>
Field Staff:	<u>RA, SG</u>			Time Finished:	<u>12:30pm</u>
Weather Conditions:	<u>~20°C, 0% Cloud Cover, Light Breeze (1)</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): \_\_\_\_\_ % open water: \_\_\_\_\_ % emergent vegetation: \_\_\_\_\_

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

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

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

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

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

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

\_\_\_\_\_

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

**Snake Hibernacula**

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

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

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

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

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

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

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

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

# NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

**Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)**  
 (CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1)  
 Eroding bank, sandy hill, pits, steep slope or rock face present:  
 No  Yes (if yes, photograph and complete the following)  
 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, CUS, 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 Conservation Concern Habitat and Incidental Wildlife - Goshen

Map No: 250-6541072  
 Date (yyyy-mm-dd): 2012-05-18

Field Staff: RA, SG

Time Started: 11:00 AM  
 Time Finished: 12:30 PM

**AL 3M**

## Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
Turkey Vulture		OB					
Spring Peeper		VO					
Red-winged Blackbird		VO					
Song Sparrow		VO					
Garter Snake		OB					
Blue Jay		VO					
Rose-breasted Grosbeak		VO					
Chipping Sparrow		VO					
Deer		SC					
American Crow		VO					
American Goldfinch		VO					
Yellow Warbler		VO					

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

Other Wildlife Evidence: OB=observed, VO=observed, 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	UTM	UTM	Notes
PLANTS							
FOD7	American Gromwell (Lithospermum latifolium) - S3 Bloom Time - Spring	Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods.	Y (N)	UTM:			
ALO, TPO	Muehlenberg's astomum moss (Astomum muehlenbergianum) - S2 Bloom Time - Spring	Thin soil over level outcrop ledges and on soil under grasses in open prairie	Y (N)	UTM:			
FOM1, FOM2, CUP3	Autumn Coral-root (Corallorhiza odorifera) - 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 (Elyonimus atropurpureus) - S3 Bloom Time - April - June	Species occurs in <u>dry</u> to moist <u>deciduous</u> thickets and <u>woods</u>	Y (N)	UTM:			
SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6	Chinese Hemlock Parsley (Conioselinum chinense) - S2 Bloom Time - summer to fall	Swampy places with deciduous trees, white cedars, tamarack; springy river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes.	Y (N)	UTM:			
SWC, SWM, SWD, SWT, MAM, MAS	Crowned Beggarticks (Bidens trichosperma) - S2 Bloom Time - late summer	Found in openings in swamps, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian bay. Bogs, fens, tamarack swamps	Y (N)	UTM:			
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, TFS2, TPW2,	Giant Ironweed (Vernonia gigantea) - S17 Bloom Time -	Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows	Y (N)	UTM:			

# Species of Conservation Concern Habitat and Incidental Wildlife – Goshen

ELC	Species	Habitat Description	Habitat Present (Y/N) UTM	description of habitat if present
CUM1, MAM, FOD6, FOD7, FOD9	June – August Green Dragon ( <i>Arisaema dracontium</i> ) - S3/S3 Bloom Time – 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	June-August Hairy Bedstraw ( <i>Galium pilosum</i> ) - S3 Bloom Time – 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	June to August Hairy Valerian ( <i>Valeriana edulis</i> ) - S1 Bloom Time – June to August	Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens.	Y (N) UTM	
FOD6, FOD7, SWM, SWD	Summer Hairy Wood Mint ( <i>Blephilia hirsuta</i> ) - S1 Bloom Time – 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 Bloom Time – 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> ) - S3/S2 Bloom Time – 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 Bloom Time – 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 Bloom Time – 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 Bloom Time – March-May	Occurs in moist deciduous woods and stream banks.	Y (N) UTM	
FOM8, FOD6, FOD7, FOD9, CUM1	Pilose Evening Primrose ( <i>Oenothera pilosella</i> ) - S2 Bloom Time – Late Spring – Early Summer	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 Bloom Time – July-September	Dry, sandy or rocky woods	Y (N) UTM	
FOD7, SWD	Pumpkin Ash ( <i>Fraxinus profunda</i> ) - S2? Bloom Time – March - June	Swamps and floodplains	Y (N) UTM	
CUM1, ALO, FET1, SWC	Ram's-head Lady's-slipper ( <i>Cypripedium arietinum</i> ) - S3 Bloom Time – 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, FOD6, FOC1, FOM1, FOM5	Rattlesnake Hawkweed ( <i>Hieracium venosum</i> ) - S2 Bloom Time – April – September	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands.	Y (N) UTM	Not sandy or open
FOD6, FOD7, FOD9	Round-leaved Groundsel ( <i>Packera obovata</i> ) - S3 Bloom Time – May - June	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	NO
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm ( <i>Monarda didyma</i> ) - S3 Bloom Time – 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	
SDT1, FOD5, FOD9	Slim-flowered Muehly ( <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	Not rich site
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian ( <i>Gentiana quinquefolia</i> ) - S2 Bloom Time – 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 Bloom Time – 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 Conservation Concern Habitat and Incidental Wildlife - Goshen

A. OM

ELC	Species	Habitat Description	Habitat Present (Y/N) UTM	description of habitat if present
TPO1, TPS1, TPW1, CUM1	Tall Blazing Star ( <i>Liatris aspera</i> ) - S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM:	
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:	Not sandy
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:	Not sandy
BIRDS				
CUW, SDO, RBO, TPS	Bald Eagle ( <i>Haliaeetus leucocephalus</i> ) - SC Common Nighthawk ( <i>Chordeiles minor</i> ) - SC	Assessed as SWH. Record species if found 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.	not required	
FOD, FOM	Louisiana Waterthrush ( <i>Selurus motacilla</i> ) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration	Y (N) UTM:	Not Mature
FOD, CUW, CUT	Red-headed Woodpecker ( <i>Melanerpes erythrocephalus</i> ) - SC	Species inhabits open woodland/ edges (oak savannahs and riparian forest), open, deciduous forest with little understory; fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees, requires cavity trees with at least 40 cm dbh; requires about 4 ha for a territory.	Y (N) UTM:	Not Open
CUT1	Short Eared Owl ( <i>Asio flammeus</i> ) - SC Yellow-breasted Chat ( <i>Icteria virens</i> ) - SC	Assessed as SWH. Record species if found. Inhabits thickets, tall tangles of shrubbery beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines	not required	
REPTILES				
	Eastern Ribbonsnake ( <i>Thamnophis sauritus</i> ) - SC Milksnake ( <i>Lampropeltis triangulum</i> ) - SC Snapping Turtle ( <i>Chelydra serpentina</i> ) - SC	Assessed as SWH. Record species if found. Assessed as SWH. Record species if found Assessed as SWH. Record species if found	not required. not required. not required.	
INSECTS				
OAO, SA, SWM, SWD	Azure Bluet ( <i>Ecnalgma aspersum</i> ) - S3	Species inhabits fishless ponds, lakes and boggy swamps	Y (N) UTM:	
TPS, TPW	Sleepy Duskywing ( <i>Erynnis brizo</i> ) - S1	Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils	Y (N) UTM:	
CUM1, CUT1, CUW1	Monarch Butterfly ( <i>Danaus plexippus</i> ) - SC	Species regularly seen at flowers in oak woods, on the ground, and at mud puddles. 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:	Not a lot of Milkweed
TPS, CUW	Mottled Duskywing ( <i>Erynnis martialis</i> ) - S2	Usually seen nectaring or on wet sandy roads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present	Y (N) UTM:	
SWT, SWD, SWM, FOM, FOD-3, TPW, TPS, CUM1	Tawny Emperor ( <i>Asterocampa clyton</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 virginianensis</i> ) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y (N) UTM:	No Toothwort

250 GSH1078



Goshen ELC SMN29

GSH1078

0 30 60 120  
Meters

**ELC**  
Community  
Description and  
Classification

site: Goshen SNV29 Polygon: ①  
Surveyor(s): SAM Time start: 13:02  
Date: Aug. 10/11 finish: 14:01  
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 <b>Site</b> <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input checked="" type="checkbox"/> Tableland <input type="checkbox"/> Roll, Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input checked="" type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input 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	3	MA >> AW >> BE >> BW
2	3	4	MA >> AW >> BE >> BW
3	4	4	MA >> AW >> BE >> BW
4	5	3	MA >> AW >> BE >> BW

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

Standing Snags: Deadfall / Logs:

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

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

Ecosite:	Code:
Vegetation Type:	Code: F005-1
Inclusion:	Code:
Complex:	Code:

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
BE	2				2	
BW	2				2	
MA	3				3	
AW	7				7	
BE	1				1	
<b>Total</b>						100
<b>Basal Area (BA)</b>						
<b>Dead</b>						

**Soils Ontario and ELC Soils Description**

Pit/Auger #	Site Metrics				Soil Horizon Description				Summary																	
UTM	Zone	Easting	Northing	Position	Aspect	Percent	Slope	Length	Mottles	Gley	Water Table	Carbonates	Bedrock	Depth from zero	Texture	Depth from zero	Texture	Depth from zero	Texture	Depth from zero	Texture	% Surface Stone/Rock	Moisture Regime	Drainage	Effective Texture (Indicate below)	% CF
1						2	5	3 m																		
2																										
3																										
4																										



**ELC**  
Community  
Description and  
Classification

Site: Gosken SMP29 Polygon: (2)  
 Surveyors: SM Date: 1413  
Aug-10/11 finish: 1448  
 UTMZ: 17 UTMN:

**Polygon Description**

<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 checked="" type="checkbox"/> Pond
<input type="checkbox"/> Aquatic	<input type="checkbox"/> Parent Min.	<input type="checkbox"/> Bottomland	<input type="checkbox"/> Floating-LVD.	<input type="checkbox"/> River
<b>Site</b>	<input type="checkbox"/> Acidic Bedrk	<input type="checkbox"/> Terrace	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
<input type="checkbox"/> Open Water	<input type="checkbox"/> Basic Bedrk	<input type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Shallow Water	<input type="checkbox"/> Carb. Bedrk	<input checked="" type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input type="checkbox"/> Swamp
<input checked="" type="checkbox"/> Surficial Dep.	<input type="checkbox"/> Bedrock	<input type="checkbox"/> Roll. Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Cliff	<input checked="" type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
<b>History</b>		<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input checked="" type="checkbox"/> Natural		<input type="checkbox"/> Crevice/Cave	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input type="checkbox"/> Cultural		<input type="checkbox"/> 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 checked="" type="checkbox"/> Woodland
<input checked="" type="checkbox"/> Tree		<input type="checkbox"/> Bluff		<input type="checkbox"/> Forest
				<input type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1			
2			
3			
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:  <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-Mage  Mature  Old Growth

Ecosite:	Code:
Vegetation Type:	Code:
Inclusion:	Code:
Complex:	Code:

**Community Profile Diagram/Comments**

Notes:

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**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Plism Factor	2
<u>Cottonwood</u>	<u>4</u>				<u>4</u>		
<u>PT</u>	<u>2</u>				<u>2</u>		
<b>Total</b>							<b>100</b>
<b>Basal Area (BA)</b>							
<b>Dead</b>							

**Soils Ontario and ELC Soils Description**

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



<b>ELC</b>  <b>WILDLIFE</b>	SITE: Goshen SMN 29	
	POLYGON: D	
	DATE: Aug. 10/11	
	SURVEYORS: SAM	
START TIME: 1:02	END TIME:	

TEMP (°C): 20	CLOUD (10th): 9	WIND: B.3-4	PRECIPITATION: nil
CONDITIONS: Cool, Windy, Overcast			

**POTENTIAL WILDLIFE HABITAT:**

<input type="checkbox"/>	VERNAL POOLS	<input 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	#
M	WTDeer	VO							

**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)

# h

## Goshen Feature: 251 GSH1733

(Properties that contain Features within 125m from Collection lines and 171.5m from Turbines)

September 1, 2011



- Roads
- Access/Collection Line
- Collection Buffer (125m)
- Turbine Buffer (171.5m)
- Collection/Feature Intersect
- Turbine Buffer/Feature Intersect
- Property Fabric
- Goshen Wind Energy Centre



GSH1732

rock pile

GSH1971

GSH1733

no = yes

GSH4066

GSH1734

GSH1092748



PRE-SURVEY COMMENT:

**ELC** Site: 261\_GSH1733 Polygon:   
 Community Description and Classification Surveyor(s): *JK* Date: *Oct 14* Time start: *14:00* finish:   
 UTMZ: *450375* UTMN: *479420*

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input 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 type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock <b>History</b> <input type="checkbox"/> Natural <input type="checkbox"/> Cultural <b>Cover</b> <input type="checkbox"/> Open <input type="checkbox"/> Shrub <input type="checkbox"/> Tree	<input type="checkbox"/> Organic <input type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Aquatic <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 checked="" type="checkbox"/> Cliff <i>gully</i> <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	OVR	Species in Order of Decreasing Dominance (up to 4 sp)
1	1/3	4	<i>Tilia</i>
2	3	3	<i>Acer</i>
3	4	2	<i>Fraxinus</i>
4	6	2	<i>Rhus</i>

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 9 > 0.5-1m 4 > 1-2m 3 > 2-8m 2 > 8-25m 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
A	A	A	A

 Deadfall / Log: 

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

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

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

Ecosite:		Code:	
Vegetation Type:	<i>dF Beech Forest</i>	Code:	<i>FOD 4-1</i>
Inclusion:		Code:	
Complex:		Code:	

**Community Profile Diagram/Comments**

Notes:

**Tree Tally by Species**

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

**Soils Ontario and ELC Soils Description**

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