





# Significant Wildlife Habitat Form

AECOM

Study Area: BLW JER GSH Map #: 261-GSH 20492050  
 Date: 2012-06-07 Time Started: 8:00 a.m.  
 Field Staff: Tom Shorrey Jess Pette Time Finished: 10:20 a.m.  
 Weather Conditions: Sunny, 21°C, Light breeze

**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: 454322 4794903 Area of standing water delineated on field map \_\_\_\_\_  
 Water depth (m): 0 % open water: 0 % emergent vegetation: 5%  
 Description of standing water (permanent pool, evidence of annual spring flooding, etc): No water, in wetter years water could be present.  
 Area and soil/substrate of shoreline habitat: Mineral Soil along pond edges, exposed soil.  
 Type and abundance of cover in open water habitat: Carex Sp., immature ash  
 Type and abundance of cover in surrounding habitat: SWD22 → 60% cover - Frax penn 60% Ulm amer 40%  
 Evidence of disturbance (e.g. cattle grazing): Forest management, recreational vehicles  
 Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: No water.

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

**Snake Hibernacula**

Fissured rock/foundation or rock/debris pile present:  No  Yes (if yes, photograph and complete the following)  
 UTMs: \_\_\_\_\_ Likelihood to extend below frost line: \_\_\_\_\_  
 % canopy cover: \_\_\_\_\_ % slope: \_\_\_\_\_ Distance to open canopy (m): \_\_\_\_\_  
 Description of fissure or stone pile (composition/material, dimensions, etc): \_\_\_\_\_  
 Description of surrounding habitat (type & abundance of cover, evidence of disturbance, etc): \_\_\_\_\_

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

Evidence of seep or spring:  No  Yes (if yes, photograph and complete the following)  
 UTMs: \_\_\_\_\_ Description (indicator species, etc): \_\_\_\_\_

# NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

**Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)**  
 (CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1)

Eroding bank, sandy hill, pits, steep slope or rock face present:  
 No  Yes (if yes, photograph and complete the following)

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

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

**Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas**  
 (BBO1, BBO2, BBS1, BBS2, BBT1, BBT2, SDO1, SDS2, SDT1, MAM1, MAM2, MAM3, MAM4, MAM5)

Shoreline of lake, large river or large wetland present:  
 No  Yes (if yes, photograph and complete the following)

UTMs: \_\_\_\_\_ Rocky island or peninsula present: \_\_\_\_\_  
 Mudflat present: \_\_\_\_\_ Evidence of disturbance (e.g. cattle grazing): \_\_\_\_\_

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

**Raptor Winter Feeding and Roosting, Open Country or Shrub/Early Successional Bird Breeding Habitat**  
 CUT1, CUS1, >30ha, CUM1 >30ha, FOC, FOD, FOM with a CUM, CUT, CUS, CUW > 20ha, or a CUM, CUS, CUT, CUW>15ha

Large meadow, old field or generally open habitat (e.g. CUM, CUS, CUT, CUS, CUW) present:  
 Large open habitat present:  No  Yes (if yes, photograph and complete the following)

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

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

**Old-growth or Mature Forests, Interior Forest Breeding Birds**  
 (FOD, FOC, FOM, SWC, SWM, SWD. Mature forest (>60 years) present)

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

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

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

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

Photo #	Location or Subject	Photo #	Location or Subject

# Species of Conservation Concern Habitat and Incidental Wildlife - Goshen



Map No: 261-GSH2049, 2050  
 Date (yyyy-mm-dd): 2012-06-07  
 Field Staff: Tom Shoney, Jess Pietz  
 Time Started: 8:00 a.m.  
 Time Finished: 10:20 a.m.

## Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
Blue Jay		VO					
House Wren		VO					
Chow		VO					
White-throated Sparrow		VO					
Great Crested Flycatcher		VO					
Bobwhite		VO					
Eastern Kingbird		VO					

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

N/O = not observed

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

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen

ELC	Species	Habitat Description	Habitat Present (Y/N: UTM: description of habitat if present)
CUM1, MAM, FOD6, FOD7, FOD9	June – August Green Dragon (Arisaema dracontium) - SC/IS3 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, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Hairy Bedstraw (Galium pilosum) - 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	Hairy Valerian (Valeriana edulis) - 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	Hairy Wood Mint (Blephilia hirsuta) - S1 Bloom Time – Summer	Woodlands, often rocky, especially rivers. Rich wood swamp forests, floodplains.	Y (N) UTM: N/O
FOD4, FOD7, FOD8, FOD9	Harbinger-of-spring (Erigenia bulbosa) - S3 Bloom Time – early to late April	Occurs in rich, moist deciduous woods, especially on floodplains.	Y (N) UTM: N/O
SAM1, SAM1, SAF1	Hill's Pond Weed (Potamogeton hillii) - SC/IS2 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 (Platanthera macrophylla) - 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, MAS, SWD, FOD6, FOD7, FOD9	Lizard's Tail (Saururus cernuus) - S3 Bloom Time – June – September	Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow wetlands at the borders of streams and ponds.	Y (N) UTM:
FOD6, FOD7, FOD9	Pawpaw (Asimina triloba) - S3 Bloom Time – March-May	Occurs in moist deciduous woods and stream banks.	Y (N) UTM: N/O
FOM6, FOD6, FOD7, FOD9, CUM1	Pilose Evening Primrose (Oenothera pilosella) - S2 Bloom Time – Late Spring – Early Summer	Moist edges of woods and open, disturbed ground	Y (N) UTM N/O
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostrate Tick-trefoil (Desmodium rotundifolium) - S2 Bloom Time – July-September	Dry, sandy or rocky woods	Y (N) UTM:
FOD7, SWD	Pumpkin Ash (Fraxinus profunda) - S2? Bloom Time – March – June	Swamps and floodplains	Y (N) UTM: N/O
CUM1, ALO, FET1, SWC	Ram's-head Lady's-slipper (Cypripedium arietinum) - 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, FOD5, FOC1, FOM4, FOM5	Rattlesnake Hawkweed (Hieracium venosum) - S2 Bloom Time – April – September	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands.	Y (N) UTM:
FOD6, FOD7, FOD9	Round-leaved Groundsel (Packera obovata) - S3 Bloom Time – May – June	Found in moist woods	Y (N) UTM: N/O
CUM1, CUT1, CUS1	Round-leaved hawthorn (Crataegus lumarina) - S3?	Species occurs in old fields, poorly managed pastures, fence-lines and roadsides	Y (N) UTM:
FOD8, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm (Monarda didyma) - S3 Bloom Time – May to October	Found in moist, rich woods thicket swamps, banks and floodplains	Y (N) UTM N/O
ALO ALS, ALT, TPO, TPS, TPW	Slender Blazing Star (Liatris cylindracea) - 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 (Polygonum tenue) - 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 Muly (Muhlenbergia tenuiflora) - S2	Found in rich deciduous woods, often on rocky or sandy soils, wooded hillsides, and riverbanks whether in oak or beech-maple woods	Y (N) UTM: N/O
BL01, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian (Gentiana quinquefolia) - 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 (Lupinus perennis) - 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 of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N) UTM: UTM: description of habitat if present
TP01, TPS1, TPW1, CUM1	Tail Blazing Star ( <i>Liatris aspera</i> )-S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM:
FEO, FES, FET, MAM2, MAM3	Tuberous Indian Plantain ( <i>Arnoglossum plantagineum</i> ) - S3 Bloom Time -mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and <del>carex</del> 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	Units insects over a wide variety of habitats, in particular open or semi-open areas. Nests on ground in a wide range of open, <del>open or semi-open</del> habitats	Y (N) UTM:
FOD, FOM	Louisiana Waterthrush ( <i>Seiurus motacilla</i> ) - SC	Inhabits <u>mature forests</u> along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting sites. <u>Riparian woodlands</u> are preferred stopover sites during migration	Y (N) UTM:
FOD, CUW, CUT	Red-headed Woodpecker ( <i>Meianerpes 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:
-	Short Eared Owl ( <i>Asio flammeus</i> ) - SC	Assessed as SWH. Record species if found	not required.
CUT1	Yellow-breasted Chat ( <i>Icteria virens</i> ) - SC	Inhabits thickets, tall tangles of shrubbery beside streams, ponds, overgrown bushy clearings with deciduous thickets, nests above ground in bush, vines	Y (N) UTM:
<b>REPTILES</b>			
-	Eastern Ribbonsnake ( <i>Thamnophis sauritus</i> ) - SC	Assessed as SWH. Record species if found.	not required.
-	Milksnake ( <i>Lampropeltis triangulum</i> ) -SC	Assessed as SWH. Record species if found.	not required.
-	Snapping Turtle ( <i>Chelydra serpentina</i> ) - SC	Assessed as SWH. Record species if found.	not required.
<b>INSECTS</b>			
OAO, SA, SWM, SWD	Azure Bluet ( <i>Enallagma aspersum</i> ) -S3	Species inhabits fishless ponds, lakes and boggy swamps	Y (N) UTM:
TPS, TPW	Sleepy Duskywing ( <i>Erynnis brizo</i> ) - S1	Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils. Species regularly seen at flowers in oak woods, on the ground, and at mud puddles	Y (N) UTM:
CUM1, CUT1, CUW1	Monarch Butterfly ( <i>Danaus plexippus</i> ) - SC	Their larvae only feed on milkweeds ( <i>Asclepius</i> spp.). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow	Y (N) UTM:
TPS, CUW	Mottled Duskywing ( <i>Erynnis martialis</i> ) -S2	Usually seen nectaring or on wet sandy roads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present	Y (N) UTM:
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 (foxtail) occurs	Y (N) UTM:

h

**Goshen Feature: 266 GSH1760/1761**

(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





**ELC** Community Description and Classification

Site Number: Polygon: 266-1760

Surveyor(s): Date: Time start: finish: UTMZ: UTMN:

JP - CB Spt. 7, 2011 6:05 pm 7:00 pm

**Polygon Description**

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

**Stand Description**

Layer	HIT	CVR	Species by Order of Dominant Canopies (up to 4 sp) (sp. Much Greater Than 5 Greater Than 10 About Equal To)
1			FRAX - BETPAPY - POPDET - THUCCI
2			CORACE
3			Solidago sp - Aster species - Dandelion grasses
4			

T Codes: 7 < 0.2m 8 > 0.2-0.5m 9 > 0.5-1m 4 > 1-2m 3 > 2-8m 2 > 6-25m 1 > 25m

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

**Abundance**

Abundance	<10	10-24	25-50	>50
1				
2				
3				
4				

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

**Community Profile Diagram/Comments**

Age:  Pioneer  Young  Mid-Age  Mature  Old Growth

Vegetation Type: Deciduous Forest Ecotone

Indicator: Pay - Fresh Deciduous Forest

Community: F50 F004

Community Profile Diagram/Comments

Low density forest

\* Fox seen along road

\* feature is ~30m from road

**Tree Tally by Species**

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Av.
TOTAL						100

**Soils Ontario and ELC Soils Description**

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

**ELC** Community Description and Classification

Site: 266-1761 Polygon: VI

Surveyor(s): JK-CB Date: Sept. 7 Time start: finish:

UTMZ: UTMZ: UTMZ: UTMZ:

**Polygon Description 15°C - overcast**

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"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk <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"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input type="checkbox"/> Deciduous <input checked="" type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input checked="" type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp)
1	1	4	PINUS strobus >> PICEA
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: N < 10 A 10-24 A 25-50 N > 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:** *cultural Plantation* Code: CUP  
**Vegetation Type:** Code: CUP3  
**Inclusion:** Code:  
**Complex:** Code:

**Community Profile Diagram/Comments**

*\* Landscape Investigation \**

*core location as on transect 1762*

Notes:

**Tree Tally by Species**

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

**Soils Ontario and ELC Soils Description**

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

**ELC**  
Community Description and Classification

Site: 2006-GSH 1761 Polygon: V2

Surveyor(s): JY-CB Date: Sept. 7, 2011 Time start: 6:05 pm finish: 6:50 pm

UTMZ: UTMZ: UTMN:

**Polygon Description** 15°C, overcast

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"/> Treed	<input type="checkbox"/> Organic <input type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input checked="" type="checkbox"/> Graminoid <input checked="" type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed <input checked="" type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp) (>> Much Greater Than; > Greater Than; = About Equal To)
1			
2			
3			
4	6	4	So. Caro. > Sol. Spruce > dau. Caro. > Phac. linn

HT Codes: 7 <0.2m 6 >0.2-0.5m 5 >0.5-1m 4 1-1.2m 3 >2-6m 2 >6-25m 1 >25m  
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

**Stand Composition: Size Class Analysis:**

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

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

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

**Ecosite:** Cultural Meadow Code: CUM  
**Vegetation Type:** Dry-fresh Cultural Meadow Code: CUM-1  
**Inclusion:**  
**Complex:**

**Community Profile Diagram/Comments**

\* Stand Investigation \*

Notes:

**Tree Tally by Species**

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

Prism Factor 2

**Soils Ontario and ELC Soils Description**

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

<b>ELC</b>  <b>WILDLIFE</b>	SITE: 266-GSH1762	
	POLYGON: <input checked="" type="checkbox"/>	
	DATE: Sept 7, 2011	
	SURVEYORS: JP-CB	
	START TIME:	END TIME:

TEMP (°C):	CLOUD (10th):	WIND:	PRECIPITATION:
CONDITIONS:			

**POTENTIAL WILDLIFE HABITAT:**

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

**SPECIES LIST:**

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
	Fox	OB							
	WILSON	OB	Flyover						
	leopard fox	OB							

**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)

Location: BLW 1762-F266  
 Observer: JP-CB

### VASCULAR PLANT CHECKSHEET

Date: Sept. 7, 2011

Job Number: \_\_\_\_\_

HERBS							MONOCOT HERBS										
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
<i>Asa millefolia</i>						<i>Plantago lanceolata</i>						<i>Allium plantago-aquatica</i>					
<i>Asa pachypoda</i>						<i>Plantago major</i>						<i>Allium tricoccum</i>					
<i>Asa rubra</i>						<i>Plantago rugelii</i>						<i>Allium</i>					
<i>Agalinus</i>						<i>Podophyllum peltatum</i>						<i>Arisaema triphyllum</i>					
<i>Agrimonia gryposepala</i>						<i>Polygonum</i>						<i>Asparagus officinalis</i>					
<i>Alliaria petricularis</i>						<i>Polygonum</i>						<i>Calla palustris</i>					
<i>Amaranthus retrofractus</i>						<i>Polygonum</i>						<i>Clintonia borealis</i>					
<i>Ambrosia artemisiifolia</i>						<i>Polygonum lapathifolium</i>						<i>Cimicifuga majus</i>					
<i>Ampelodesmos erosus</i>						<i>Polygonum persicaria</i>						<i>Cypripedium calceolus</i>					
<i>Anaphalis margaritacea</i>						<i>Potamogeton</i>						<i>Eriodroma canadensis</i>					
<i>Anemone</i>						<i>Potamogeton</i>						<i>Epipactis atrorubens</i>					
<i>Anemone canadensis</i>						<i>Potamogeton</i>						<i>Erythronium americanum</i>					
<i>Anemone virginiana</i>						<i>Potamogeton</i>						<i>Hamamelis virginica</i>					
<i>Antennaria neglecta</i>						<i>Prunella vulgaris</i>						<i>Iris versicolor</i>					
<i>Apocynum androsaemifolium</i>						<i>Pyrola elliptica</i>						<i>Linna minor</i>					
<i>Apocynum cannabinum</i>						<i>Ranunculus</i>						<i>Linna tulosa</i>					
<i>Arnica montana</i>						<i>Ranunculus abortivus</i>						<i>Lilium</i>					
<i>Arnica montana</i>						<i>Ranunculus acris</i>						<i>Melilotus canadensis</i>					
<i>Asarum canadense</i>						<i>Ranunculus sceleratus</i>						<i>Melilotus racemosus</i>					
<i>Asclepias incarnata</i>						<i>Rumex crispus</i>						<i>Melilotus strobilata</i>					
<i>Asclepias syriaca</i>						<i>Rumex</i>						<i>Platanus</i>					
<i>Aster</i>						<i>Rumex</i>						<i>Pentstemon cordata</i>					
<i>Aster cordifolius</i>						<i>Sanguinaria canadensis</i>						<i>Polygonatum pubescens</i>					
<i>Aster ericoides</i>						<i>Sanicula marilandica</i>						<i>Potamogeton crispus</i>					
<i>Aster lanceolatus</i>						<i>Saponaria officinalis</i>						<i>Potamogeton pectinatus</i>					
<i>Aster lateriflorus</i>						<i>Satureja vulgaris</i>						<i>Potamogeton</i>					
<i>Aster macrophyllus</i>						<i>Scutellaria palericulata</i>						<i>Potamogeton</i>					
<i>Aster novae-angliae</i>						<i>Silene vulgaris</i>						<i>Sagittaria latifolia</i>					
<i>Aster puniceus</i>						<i>Stium suave</i>						<i>Sium montanum</i>					
<i>Barbarea vulgaris</i>						<i>Solanum dulcamara</i>						<i>Smilax herbacea</i>					
<i>Bidens cernua</i>						<i>Solidago</i>						<i>Spiranthes cernua</i>					
<i>Bidens frondosa</i>						<i>Solidago altissima</i>						<i>Spiranthes polytricha</i>					
<i>Blechum spirale</i>						<i>Solidago caesia</i>						<i>Strophostyles triflorus</i>					
<i>Boehmeria cylindrica</i>						<i>Solidago canadensis</i>						<i>Trillium esculentum</i>					
<i>Caltha palustris</i>						<i>Solidago flexicaulis</i>						<i>Trillium grandiflorum</i>					
<i>Celastrus scandens</i>						<i>Solidago gigantea</i>						<i>Utricularia grandiflora</i>					
<i>Celastrus scandens</i>						<i>Solidago nemoralis</i>											
<i>Cardamine</i>						<i>Solidago rugosa</i>											
<i>Caulophyllum thalictroides</i>						<i>Sonchus arvensis</i>											
<i>Cerastium fontanum</i>						<i>Sonchus asper</i>											
<i>Cerastophyllum demersum</i>						<i>Stellaria</i>											
<i>Chelidonium majus</i>						<i>Tanacetum vulgare</i>											
<i>Chenopodium album</i>						<i>Tanacetum officinale</i>											
<i>Chrysanth. leucanthemum</i>						<i>Thalictrum dioicum</i>											
<i>Cichorium intybus</i>						<i>Thalictrum pubescens</i>											
<i>Cicuta</i>						<i>Tiarrellia borealis</i>											
<i>Circaea lutetiana</i>						<i>Trifolium</i>											
<i>Cirsium arvense</i>						<i>Trifolium pratense</i>											
<i>Cirsium vulgare</i>						<i>Trifolium repens</i>											
<i>Clematis virginiana</i>						<i>Tussilago farfara</i>											
<i>Clintonia borealis</i>						<i>Urtica dioica</i>											
<i>Coryza canadensis</i>						<i>Urticaria vulgaris</i>											
<i>Coronilla varia</i>						<i>Verbascum thapsus</i>											
<i>Cynanchum rossicum</i>						<i>Verbena hastata</i>											
<i>Cynoglossum officinale</i>						<i>Verbena uniflora</i>											
<i>Daucus carota</i>						<i>Veronica</i>											
<i>Desmodium canadense</i>						<i>Veronica officinalis</i>											
<i>Dianthus armeria</i>						<i>Viola cracca</i>											
<i>Dipsacus fulurium</i>						<i>Viola tetrasperma</i>											
<i>Echinocystis lobata</i>						<i>Viola</i>											
<i>Echium vulgare</i>						<i>Viola pubescens</i>											
<i>Epilobium</i>						<i>Viola sororia</i>											
<i>Epilobium ciliatum</i>																	
<i>Epilobium hirsutum</i>																	
<i>Epilobium parviflorum</i>																	

SITE LOCATIONS

- 1: CUM3
- 2: CUM1-1
- 3: FORD4

- 4: \_\_\_\_\_
- 5: \_\_\_\_\_
- 6: \_\_\_\_\_



ASA



ASA

**ELC** Community Description and Classification

Map #: 266-1760/1761(GSK) Polygon: 1

Surveyor(s): BA, SG Date: Apr 1 24, 2013 Time start: 4:00pm finish: 4:30pm

UTMZ: UTMN:

Polygon Description

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

Stand Description

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1	2	4	POPGAN FRAMER ACESAC
2	2	3	ACESACC FRAMER Z P PGRAN
3	4	3	VIBENT > LINBEN
4	7	2	TRIGRAN > ERYAM R

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

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

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

Ecosite:	Dry-Fresh Deciduous Forest	Code: F0N4
Vegetation Type:		Code: -
Inclusion:		Code: -
Complex:		Code: -

Community Profile Diagram/Comments

Notes:

Tree Tally by Species

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

Prism Factor 2

Soils Ontario and ELC Soils Description

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



ASA

**ELC** Community Description and Classification

Map #: 266-1760-1761 (6H) Polygon: 2

Surveyor(s): RA, SG Date: April 24, 2012 Time start: 4:00 pm finish: 4:30 pm

UTMZ: UTMZ: UTMZ:

**Polygon Description**

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

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (>> Much Greater Than; > Greater Than; = About Equal To)
1	2	4	Pin Strub
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:**

Standing Snags:	Deadfall / Logs:	Size Class	Abundance
		<10	10-24
		<10	25-50
		<10	>50

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

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

**Ecosite:** *coniferous plantation*

**Vegetation Type:** *Eastern White Pine Conif. plantation*

**Inclusion:** *Cultural Meadow*

**Complex:**

Code: *CUP3*  
 Code: *CUP 3-2*  
 Code: *CLP1-1*  
 Code:

**Community Profile Diagram/Comments**

Community Profile Diagram/Comments

Notes:

**Tree Tally by Species**

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

**Soils Ontario and ELC Soils Description**

Site Metrics		Pit/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						
	Mottles						
	Gley						<b>% CF</b>
	Water Table						
	Carbonates						
	Bedrock						<b>% CF</b>
	Depth from zero						
	Texture						
	Depth from zero						<b>% CF</b>
	Texture						
	Depth from zero						
	Texture						
	Depth from zero						<b>% CF</b>
	Texture						
	% Surface Stone/Rock						
	Moisture Regime						
	Drainage						





ASA

### Significant Wildlife Habitat Form

AECOM

Study Area:	BLW    JER <u>(GSF)</u>	Map #:	<u>266-GSH 1760/1761</u>
Date:	<u>April 24, 2012</u>	Time Started:	<u>4:00 pm</u>
Field Staff:	<u>SG, RA.</u>	Time Finished:	<u>4:30 pm</u>
Weather Conditions:	<u>overcast, strong wind.</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:    0447070, 479500                       Area of standing water delineated on field map

Water depth (m):    15cm                      % open water: —                      % emergent vegetation: —

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

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

Type and abundance of cover in open water habitat:    Viburnum lentago (5%)

Type and abundance of cover in surrounding habitat:    Ferns (15%)

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

Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds:  
not suitable for turtles/breeding birds/marsh, or waterfowl

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

**Snake Hibernacula**

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

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

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

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

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

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

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

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

# NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

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

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

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

No

Yes (if yes, photograph and complete the following)

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

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

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

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

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

Shoreline of lake, large river or large wetland present:

No

Yes (if yes, photograph and complete the following)

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

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

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

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

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

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

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

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

Large open habitat present:  No

Yes (if yes, photograph and complete the following)

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

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

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

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

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

Mature forest present:  No

Yes (if yes, photograph and complete the following)

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

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

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

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

Photo #	Location or Subject	Photo #	Location or Subject

# Species Conservation Concern Habitat and Incident Wildlife - Goshen

Map No: ASA  
 Date (yyyy-mm-dd): 2012-04-24  
 Field Staff: SA, RA  
 Time Started: 4:00 pm  
 Time Finished: 4:30 pm

## Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes

**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)
FOD7	American Gromwell (Lithospermum latifolium) - S3 Bloom Time - Spring	Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods.	Y N UTM:
ALO, TPO	Muehlenberg's astomum moss (Astomum muehlenbergianum) - S2 Bloom Time - Spring	Thin soil over level outcrop ledges and on soil under grasses in open prairie	Y N UTM:
FOM1, FOM2, CUP3	Autumn Coral-root (Corallorhiza odontorhiza) - S2 Bloom Time - Summer to fall	Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry, sandy woods.	Y N UTM:
FOC, FOM, FOD	Burning Bush (Euonymus atropurpureus) - S3 Bloom Time - April - June	Species occurs in dry to moist deciduous thickets and woods.	Y N UTM: n/a
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 foggi) - S2	Species occurs in sandy areas on limestone under oak or pine-oak forests	Y N UTM:
TPO2, TPS2, TPW2	Giant Ironweed (Vernonia gigantea) - S1? Bloom Time -	Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows	Y N UTM:

# Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N); UTM; description of habitat if present
CUM1, MAM, FOD6, FOD7, FOD9	June – August Green Dragon ( <i>Arisaema dracontium</i> ) - SC/S3 <u>Bloom Time</u> – May and June	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y (N) UTM:
TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	June-August Hairy Bedstraw ( <i>Galium pilosum</i> ) -S3 <u>Bloom Time</u> - June-August	Occurs in dry, sandy woods and thickets; occasionally in dry sandy fields	Y (N) UTM:
FEO1, 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>Eigenia bulbosa</i> ) - S3 <u>Bloom Time</u> - early to late April	Occurs in rich, moist deciduous woods, especially on floodplains.	Y (N) UTM:
SAS1, SAM1, SAF1	Hill's Pond Weed ( <i>Potamogeton hillii</i> ) - SC/S2 <u>Bloom Time</u> - summer	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters.	Y (N) UTM:
FOM6, FOM7, FOM8	Large Round-leaved Orchid ( <i>Platanthera macrophylla</i> ) - S2 <u>Bloom Time</u> - June to August	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands.	Y (N) UTM:
MAM2, MAM3, MAS2, MAS3, SWD	Lizard's Tail ( <i>Saururus cernuus</i> ) - S3 <u>Bloom Time</u> - June - September	Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds.	Y (N) UTM:
FOD6, FOD7, FOD9	Pawpaw ( <i>Asimina triloba</i> ) -S3 <u>Bloom Time</u> - March-May	Occurs in moist deciduous woods and stream banks.	Y (N) UTM:
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: n/o.
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: n/o.
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 lumaris</i> ) -S3?	Species occurs in old fields, poorly managed pastures, fencelines and roadsides	Y (N) UTM: n/o.
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm ( <i>Monarda didyma</i> ) - S3 <u>Bloom Time</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 dolomite 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 Mulyh ( <i>Muhlenbergia tenuiflora</i> ) - S2	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods	Y (N) UTM:
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian ( <i>Gentiana quinquefolia</i> ) - S2 <u>Bloom Time</u> - late summer to mid fall	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	Y (N) UTM:
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine ( <i>Lupinus perennis</i> ) - S3 <u>Bloom Time</u> - mid-March to mid-June	Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen.	Y (N) UTM:

# Species Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Description	Habitat Present (Y/N; UTM; description on ornabitat if present)
TP01, TPS1, TPW1, CUM1	Tall Blazing Star ( <i>Liathris aspera</i> )-S2/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y N UTM: n/a.
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: n/a.
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: n/a.
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: n/a.
<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: n/a.
FOD, FOM	Louisiana Waterthrush ( <i>Seiurus motacilla</i> ) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration.	Y N UTM: n/a.
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: n/a.
-	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: n/a.
<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: n/a.
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. 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: n/a.
CUM1, CUT1, CUW1	Monarch Butterfly ( <i>Danaus plexippus</i> ) - SC	Usually seen nectaring on wet sandy roads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present	Y N UTM: n/a.
TPS, CUW	Mottled Duskywing ( <i>Erynnis martialis</i> ) -S2		Y N UTM: n/a.
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, fence-rows and parks. Usually occurs near Hackberry, the larval foodplant	Y N UTM: n/a.
FOD5	West Virginia White ( <i>Pteris virginiensis</i> ) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y N UTM: n/a.



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



Basemapping from Ontario Ministry of Natural Resources  
Cartography 2010



0 25 50 100  
Meters

UTM Zone 17N, MAD 83

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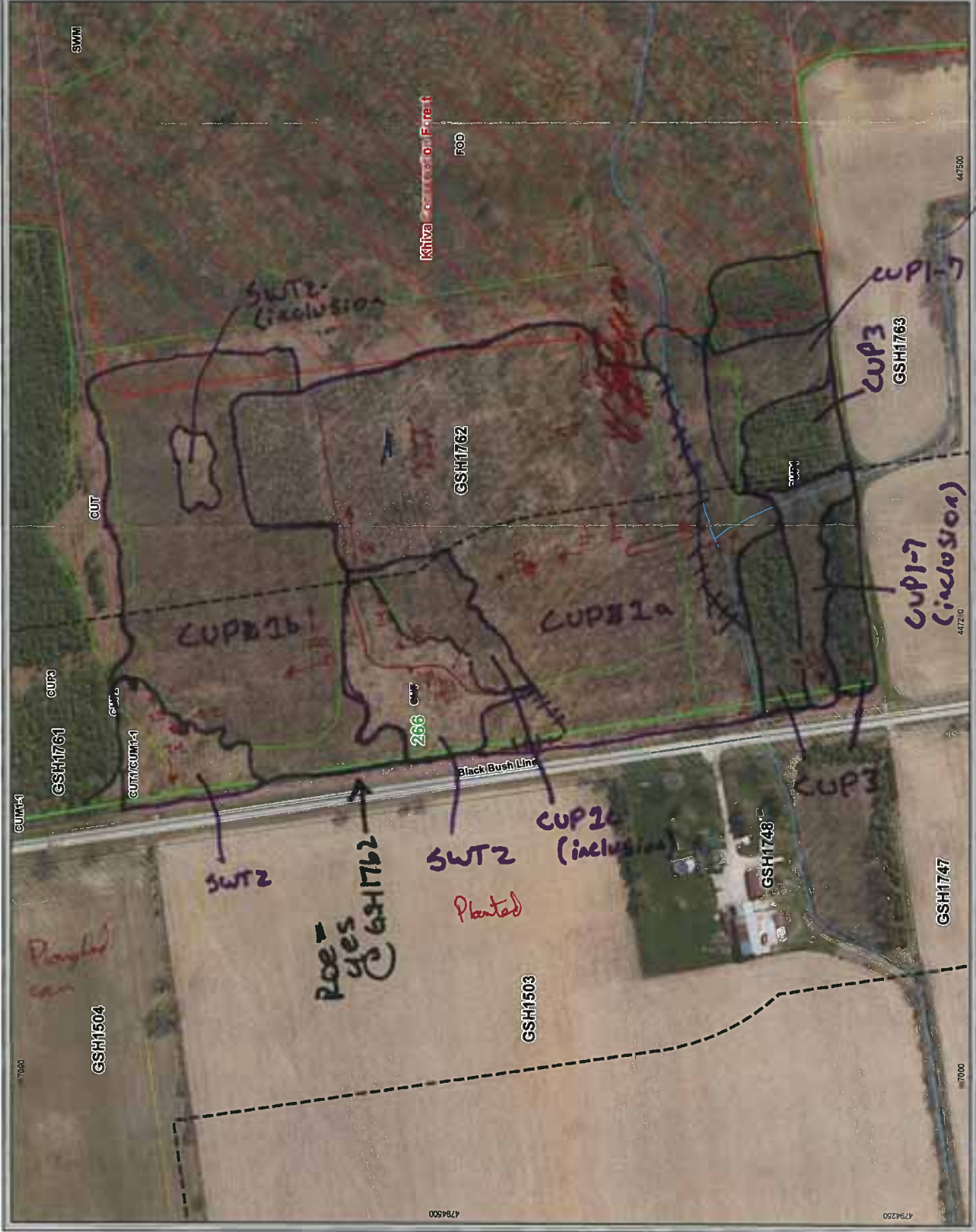
Geshen ELC Survey

266\_GSH1762

April 2012  
Project 80155032

**AECOM**

Figure 1



**ELC**  
Community Description and Classification

Map #: 266 GSH 1742 Polygon: SW12 Prism Factor: 2

Surveyor(s): Jess Pfeiffer + Tom Shortley Date: March 3, 2012 Time start: 8:30am finish: 11:15am

UTMZ: 477232 UTMZ: 4794520 UTMN:

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Aquatic Site <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input checked="" type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input 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 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**

Layer	HT	CVR	Species in Order of Increasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1	3	1	FRAPPEN - ACEFREE
2	-	-	
3	4	3	ELAMBER - SALEXIO - SURFACE
4	6	4	PHAGLION >> TALOFFI - SALEXIO - TRIFOLIUM AP

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 5 > 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
Deadfall / Logs:	<10	10-24	25-50	>50

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

**Community Profile Diagram/Comments**

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

Ecosite: Mineral Swamp Ecotype  
 Vegetation Type: Deciduous Plantation  
 Inclusion: CUPIC  
 Complex: CUPIC

Notes: Community was adjacent to buried swamp

**Tree Tally by Species**

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

**Soils Ontario and ELC Soils Description**

PI/Auger #	1	2	3	4	Summary
Zone	17				
Easting	447232				
Northing	4794520				
Position	Flat				
Aspect	-				
Percent	-				
Slope	-				
Length	22cm				
Mottles	-				
Gley	-				
Water Table	19cm				
Carbonates	-				
Bedrock	-				
Depth from zero	22cm	% CF	% CF	% CF	% CF
Texture	SCL				
Depth from zero	44cm	% CF	% CF	% CF	% CF
Texture	SC				
Depth from zero		% CF	% CF	% CF	% CF
Texture					
Depth from zero		% CF	% CF	% CF	% CF
Texture					
% Surface Stone/Rock					
Moisture Regime	6				
Drainage	P/1				

**ELC**  
Community  
Description and  
Classification

Map #: 2666 (SH762) Polygon: CAP/a  
 Surveyor(s): Date: 8/3/2012 Time start: 8:35am  
 finish: 11:15am  
 UTMZ: 447232 UTMN: 4494520

**Tree Tally by Species**

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

Prism Factor 2

**Polygon Description**

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

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (=> Much Greater Than; > Greater Than; = About Equal To)
1	4		Populus > Thuja >> Liriodendron - CARVNY
2	3		Fraxinus > Prunus > Iontata
3	4		Fraxinus > Prunus > Iontata
4	6		Taxus - alberti - Fraxinus - Caragana

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 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 - 50% 4 > 50%

**Stand Composition: Size Class Analysis:**

Size Class	<10	10-24	25-50	>50
Abundant	N	A	A	R
Occasional	N	R	R	N
Rare	N	R	R	N

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

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

**Ecotope:** Deciduous Plantation  
**Vegetation Type:** Code: Cup/O  
**Inclusion:** Code:  
**Complex:** Code:

**Community Profile Diagram/Comments**

plantations populus be done for purposes. Various species found throughout part dominant. American elm

Notes:

**Soils Ontario and ELC Soils Description**

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

**ELC**  
Community Description and Classification

Map #: 266634762 Polygon: CUP3

Surveyor(s): Jess Ketter + Tom Shroy Date: May 3, 2012 Time start: 8:35am finish: 11:50am

UTMZ: 47232 UTMZ: 474520 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 type="checkbox"/> Deciduous <input checked="" type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input checked="" type="checkbox"/> Plantation
<b>History</b>				
<input type="checkbox"/> Natural				
<input checked="" type="checkbox"/> Cultural				
<b>Cover</b>				
<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	4		Pin stro - P. RESI - P. ABLE - P. GMA
2	3		FRAPENN
3	4		FRAPENN > P. CHRIS > L. L. L.
4	6		T. ROCHI - A. L. P. - J. G. R. - F. V. G.

HT Codes: 7 > 0.2m 6 > 0.2-0.5m 5 > 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:	Deadfall / Logs:	<10	10-24	25-50	>50
R	R	A	A	A	N
N	R	N	N	N	N
R	R	N	N	N	N

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

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

Ecosite:	Vegetation Type:	Inclusion:	Complex:
Coniferous Plantation		Green Oak Plantation	
Code: CUP3		Code: CUP1-7	

**Community Profile Diagram/Comments**

Mixture of coniferous species throughout  
 as shown in photo above  
 at 1 supports

Notes:

**Tree Tally by Species**

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

Prism Factor 2

**Soils Ontario and ELC Soils Description**

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

**ELC**  
Community Description and Classification

Map #: 266 FSH 762 Polygon: CUP16  
 Surveyor(s): Jess Kelle + Tom Sherry Date: May 3, 2012 Time start: 8:30 am finish: 11:15 am  
 UTMZ: 447232 UTMN: 4294520

**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"/> Slope <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 checked="" 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 type="checkbox"/> Forest <input checked="" type="checkbox"/> Plantation

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1	1	4	Que Mac >> Fragran
2	3	2	Fragran >> AEsac
3	4	3	Fragran > lonta > Eloumbr.
4	6	1	Taroff

HT Codes: 7 < 0.2m 8 > 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 - 50% 4 > 50%

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

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

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

<b>Ecotope:</b>	Deciduous Plantation	<b>Code:</b>	CUP 16
<b>Vegetation Type:</b>		<b>Code:</b>	
<b>Inclusion:</b>		<b>Code:</b>	
<b>Complex:</b>		<b>Code:</b>	

**Community Profile Diagram/Comments**

Plantation removed from previous plantation as it was dominated by birch oak with grasses and some maple scattered  
 → shrub layer was a little thicker dominated by grass oak

Notes:

**Tree Tally by Species**

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

Prism Factor 2

**Soils Ontario and ELC Soils Description**

Site Metrics	PIVAuger #		Soils Ontario and ELC Soils Description				Summary
	Zone	Easting	Northing	Position	Aspect	Percent	
Moisture Regime							
Drainage							
Effective Texture (indicate below)							

**Soil Horizon Description**

Depth to ...	1	2	3	4
Depth from zero	% CF	% CF	% CF	% CF
Texture				
Depth from zero	% CF	% CF	% CF	% CF
Texture				
Depth from zero	% CF	% CF	% CF	% CF
Texture				
% Surface Stone/Rock				
Moisture Regime				
Drainage				

Plant Species List  
2012

Trees & Shrubs					Tree & Shrubs					Graminoids				
Conifers					Deciduous					Grasses				
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> )					<i>Bromus</i>				
Norway Spruce ( <i>Picea abies</i> )	F				Common Buckthorn ( <i>Rhamnus cathartica</i> )		R			Blue-joint Grass ( <i>Calamagrostis canadensis</i> )				
White Spruce ( <i>Picea glauca</i> )	F				Smooth Sumac ( <i>Rhus glabra</i> )					Orchard Grass ( <i>Dactylis glomerata</i> )				
Black 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> )		U	U	U	Quack Grass ( <i>Elymus repens</i> )				
Red Pine ( <i>Pinus resinosa</i> )	F				Prickly Gooseberry ( <i>Ribes cynosbati</i> )					Virginia Wild Rye ( <i>Elymus virginicus</i> )				
Eastern White Pine ( <i>Pinus strobus</i> )	F				Swamp Black Currant ( <i>Ribes lacustre</i> )					<i>Elymus</i>				
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> )					<i>Glyceria</i>				
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>Lolium arundinaceum</i> )				
					Multiflora Rose ( <i>Rosa multiflora</i> )					<i>Muhlenbergia</i>				
					Rosa					Witch-grass ( <i>Panicum capillare</i> )				
										<i>Panicum</i>				
Manitoba Maple ( <i>Acer negundo</i> )					Com. Blackberry ( <i>Rubus allegheniensis</i> )					Reed Canary Grass ( <i>Phalaris arundinacea</i> )			D	
Black Maple ( <i>Acer nigrum</i> )					Wild Red Raspberry ( <i>Rubus idaeus</i> )					Timothy ( <i>Phleum pratense</i> )				
Norway Maple ( <i>Acer platanoides</i> )					Black Raspberry ( <i>Rubus occidentalis</i> )					Common Reed ( <i>Phragmites australis</i> )				
Red Maple ( <i>Acer rubrum</i> )					Purple-fl. Raspberry ( <i>Rubus odoratus</i> )					Canada Blue Grass ( <i>Poa compressa</i> )				
Silver Maple ( <i>Acer saccharinum</i> )					Dwarf Raspberry ( <i>Rubus pubescens</i> )					Fowl Meadow Grass ( <i>Poa palustris</i> )				
Freeman's Maple ( <i>Acer X freemanii</i> )			U		<i>Rubus</i>					Kentucky Bluegrass ( <i>Poa pratensis</i> )				
Sugar Maple ( <i>Acer saccharum</i> )			U		Peach-leaved Willow ( <i>Salix amygdaloides</i> )					Yellow Foxtail ( <i>Setaria pumila</i> )				
Mountain Maple ( <i>Acer spicatum</i> )					Bebb's Willow ( <i>Salix bebbiana</i> )					Green Foxtail ( <i>Setaria viridis</i> )				
Speckled Alder ( <i>Alnus incana</i> )					Pussy Willow ( <i>Salix discolor</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> )			F						
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> )			U		Black-berried Elder ( <i>Sambucus nigra</i> )			R						
Climbing Bittersweet ( <i>Celastrus scandens</i> )					Red-berried Elder ( <i>Sambucus racemosa</i> )									
Common Hackberry ( <i>Celtis occidentalis</i> )					Buffalobery ( <i>Shepherdia canadensis</i> )									
Buttonbush ( <i>Cephalanthus occidentalis</i> )					Eur. Mountain Ash ( <i>Sorbus aucuparia</i> )					Sedges				
Alt.-leaved Dogwood ( <i>Cornus alternifolia</i> )					Narrow Meadow-sweet ( <i>Spiraea alba</i> )					Drooping Wood Sedge ( <i>Carex arcata</i> )				
Silky Dogwood ( <i>Cornus amomum</i> )					Common Lilac ( <i>Syringa vulgaris</i> )					Golden-fruited Sedge ( <i>Carex aurea</i> )				
Bunchberry ( <i>Cornus canadensis</i> )					Poison-ivy ( <i>Toxicodendron rydbergii</i> )					Graceful Sedge ( <i>Carex gracillima</i> )		U	U	
Gray dogwood ( <i>Cornus racemosa</i> )		R			Climbing Poison-ivy ( <i>Toxicodendron radicans</i> )		U	U	U	Inland Sedge ( <i>Carex interior</i> )				
Round-leaved Dogwood ( <i>Cornus rugosa</i> )					White Elm ( <i>Ulmus americana</i> )					Bladder Sedge ( <i>Carex intumescens</i> )				
Red-osier Dogwood ( <i>Cornus sericea</i> )			R		Siberian Elm ( <i>Ulmus pumila</i> )					Lake-bank Sedge ( <i>Carex lacustris</i> )				
American Hazel ( <i>Corylus americana</i> )					Slippery Elm ( <i>Ulmus rubra</i> )					Hop Sedge ( <i>Carex lupulina</i> )				
Beaked Hazel ( <i>Corylus cornuta</i> )					Low Blueberry ( <i>Vaccinium angustifolium</i> )					Pennsylvania Sedge ( <i>Carex pensylvanica</i> )		U	U	
Cockspur Thorn ( <i>Crataegus crus-galli</i> )					Maple-leaf Viburnum ( <i>Viburnum acerifolium</i> )					Awl-fruited Sedge ( <i>Carex stipata</i> )				
English Hawthorn ( <i>Crataegus monogyna</i> )					Hobblebush ( <i>Viburnum lantanoideis</i> )					Fox Sedge ( <i>Carex vulpinoidea</i> )				
Large-fruited Thorn ( <i>Crataegus punctata</i> )					Nannyberry ( <i>Viburnum lentago</i> )					<i>Carex</i>				
<i>Crataegus</i>					Guelder-Rose ( <i>Viburnum opulus</i> )					<i>Carex</i>				
<i>Crataegus</i>					Downy Arrow-wood ( <i>Vib. rafinesquianum</i> )					<i>Carex</i>				
Bush Honeysuckle ( <i>Diervilla lonicera</i> )					Riverbank Grape ( <i>Vitis riparia</i> )					<i>Carex</i>				
Russian Olive ( <i>Elaeagnus angustifolia</i> )					Am. Prickly-ash ( <i>Zanthoxylum americanum</i> )					<i>Carex</i>				
Autumn Olive ( <i>Elaeagnus umbellata</i> )										<i>Carex</i>				
Run. Strawberry-bush ( <i>Euonymus obovata</i> )				F	White Birch (written)					<i>Carex</i>				
American Beech ( <i>Fagus grandifolia</i> )					Strawberry-bush (written)					<i>Carex</i>				
Glossy Buckthorn ( <i>Frangula alnus</i> )										<i>Carex</i>				
White Ash ( <i>Fraxinus americana</i> )					Ferns & Allies					<i>Carex</i>				
Black Ash ( <i>Fraxinus nigra</i> )					Lady Fern ( <i>Athyrium filix-femina</i> )					<i>Carex</i>				
Green Ash ( <i>Fraxinus pennsylvanica</i> )		F	F		Rattlesnake Fern ( <i>Botrychium virginianum</i> )					<i>Cyperus</i>				
Witch-hazel ( <i>Hamamelis virginiana</i> )					Bulbet Bladder Fern ( <i>Cystopteris bulbifera</i> )					Redroot Spike-rush ( <i>Eleocharis erythropoda</i> )				
Winterberry ( <i>Ilex verticillata</i> )					Spin. Wood Fern ( <i>Dryopteris carthusiana</i> )					<i>Eleocharis</i>				
Butternut ( <i>Juglans cinerea</i> )					Crested Wood Fern ( <i>Dryopteris cristata</i> )					Hard-stem Bulrush ( <i>Schoenoplectus acutus</i> )				
Black Walnut ( <i>Juglans nigra</i> )					Marginal Wood Fern ( <i>Dryopteris marginalis</i> )					Three-square Bulrush ( <i>Sch. pungens</i> )				
Common Privet ( <i>Ligustrum vulgare</i> )					<i>Dryopteris</i>					Soft-stem Bulrush ( <i>Sch. tabernaemontani</i> )				
Spicebush ( <i>Lindera benzoin</i> )				R	Ostrich Fern ( <i>Matteuccia struthiopteris</i> )					Dark-green Bulrush ( <i>Scirpus atrovirens</i> )				
Fly Honeysuckle ( <i>Lonicera canadensis</i> )					Sensitive Fern ( <i>Onoclea sensibilis</i> )					Wool-grass ( <i>Scirpus cyperinus</i> )				
Glaucous Honeysuckle ( <i>Lonicera dioica</i> )					Cinnamon Fern ( <i>Osmunda cinnamomea</i> )									
Morrow's Honeysuckle ( <i>Lonicera morrowii</i> )					Interrupted Fern ( <i>Osmunda claytoniana</i> )									
Tartarian Honeysuckle ( <i>Lonicera tatarica</i> )		U	U		Royal Fern ( <i>Osmunda regalis</i> )									
Common Apple ( <i>Malus pumila</i> )					Christmas Fern ( <i>Polystichum acrostichoides</i> )									
White Mulberry ( <i>Morus alba</i> )					Eastern Bracken-fern ( <i>Pteridium aquilinum</i> )									
Sweet Gale ( <i>Myrica gale</i> )					Marsh Fern ( <i>Thelypteris palustris</i> )					Other Graminoids				
Ironwood ( <i>Ostrya virginiana</i> )										Broad Bur-reed ( <i>Sparganium eurycarpum</i> )				
Thicket-creeper ( <i>Parthenocissus inserta</i> )										Narrow-leaved Cattail ( <i>Typha angustifolia</i> )				
Ninebark ( <i>Physocarpus opulifolius</i> )		R			Field Horsetail ( <i>Equisetum hyemale</i> )					Broad-leaved Cattail ( <i>Typha latifolia</i> )				
Balsam Poplar ( <i>Populus balsamifera</i> )					Scouring-rush ( <i>Equisetum hyemale</i> )					Broad-leaved Cattail ( <i>Typha X glauca</i> )				
Eastern Cottonwood ( <i>Populus deltoides</i> )					Variegated Horsetail ( <i>Equisetum variegatum</i> )					Articulated Rush ( <i>Juncus articulatus</i> )				
Large-tooth Aspen ( <i>Populus grandidentata</i> )			D		<i>Equisetum</i>					Soft Rush ( <i>Juncus effusus</i> )				
Trembling Aspen ( <i>Populus tremuloides</i> )					Ground-cedar ( <i>Lycopodium digitatum</i> )					Path Rush ( <i>Juncus tenuis</i> )				
Sweet Cherry ( <i>Prunus avium</i> )					Shining Clubmoss ( <i>Lycopodium lucidulum</i> )					<i>Juncus</i>				
Pin Cherry ( <i>Prunus pennsylvanica</i> )					Ground-pine ( <i>Lycopodium obscurum</i> )					<i>Juncus</i>				
Black Cherry ( <i>Prunus serotina</i> )														
Choke Cherry ( <i>Prunus virginiana</i> )			U	U										
<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: 266ESH17C2	1	CUP3	4	CUP16
Date: May 3, 2012	2	CUP1A	6	
Surveyors: JP+JS	3	SWT2		



# Significant Wildlife Habitat Form

AECOM

Study Area: BLW JER (GSH) Map #: 266-GSH1762  
 Date: 2012-05-03 Time Started: 8:35 AM  
 Field Staff: Tom Sloney, Jess Piette Time Finished: 11:15 AM  
 Weather Conditions: cloudy, 20°C, Light breeze

**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, MAMS)  
 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: 266-6SH1762  
 Date (yyyy-mm-dd): 2012-05-03

Field Staff: Tom Stoney  
 Jess Petre

Time Started: 8:35 AM  
 Time Finished: 11:50 AM

## Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
Red Admiral		06		Eastern Common		06	
Meadow		06	Flying over feature	Ring-necked Pheasant		06	Perched
Woodcock		06	5 on forest floor of COP	Carolinian		06	
Chipping Sparrow		06		Blue Jay		06	Flying over feature
Mourning Dove		06		Goldfinch		06	
Blue Jay		06					
Wood Frog		06	Plantation				
Carriage White		06					
Penaeus		06					
Grasshopper Sparrow		06	drumming in plantation				
American Crow		06					
Downy Woodpecker		06					
Deer		TKS	Throughout Plantation				
Blue Jay		06					

**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=Carass, DP=Distinctive Parts, HO=House/Den, FY=Eggs/young, TK=tracks, FE=Feeding evidence, SC= Scat, SI=Other signs (specify)  
 \* Not observed → N/O

ELC	Species	Habitat Description	Habitat Present (Y/N)	UTM	UTM
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 odontorhiza) - S2 Bloom Time - summer to fall	Oak (pine woods) or occasionally in open, red pine or white pine plantations. Dry, sandy woods.	Y	(N)	UTM: N/O
FOC, FOM, FOD	Burning Bush (Euonymus atropurpureus) - S3 Bloom Time - April - June	Species occurs in dry to moist deciduous thickets and woods	Y	(N)	UTM:
SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, 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, TPS2, TPW2	Giant Ironweed (Vernonia gigantea) - S1? Bloom Time	Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows	Y	(N)	UTM:

# Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N; UTM); description of habitat if present
CUM1, MAM, FOD6, FOD7, FOD9	June - August <b>Green Dragon (Arisaema dracontium) - S1/S3 Bloom Time - May and June</b>	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 <b>Hairy Bedstraw (Galium pilosum) - S3 Bloom Time - June - August</b>	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 <b>Hairy Valerian (Valeriana edulis) - S1 Bloom Time - June to August</b>	Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens.	Y (N) UTM:
FOD6, FOD7, SWM, SWD	Summer <b>Hairy Wood Mint (Blephilia hirsuta) - S1 Bloom Time - Summer</b>	Woodlands, often rocky, especially rivers. Rich woods, swamp forests, floodplains.	Y (N) UTM:
FOD6, FOD7, FOD8, FOD9	<b>Harbinger-of-spring (Erigenia bulbosa) - S3 Bloom Time - early to late April</b>	Occurs in rich, moist deciduous woods, especially on floodplains.	Y (N) UTM:
SAS1, SAM1, SAF1	<b>Hill's Pond Weed (Potamogeton hillii) - SC/S2 Bloom Time - summer</b>	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters.	Y (N) UTM:
FOM6, FOM7, FOM8	<b>Large Round-leaved Orchid (Platanthera macrophylla) - S2 Bloom Time - June to August</b>	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands.	Y (N) UTM:
MAM2, MAM3, MAS2, MAS3, SWD	<b>Lizard's Tail (Saururus cernuus) - S3 Bloom Time - June - September</b>	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	<b>Pawpaw (Asimina triloba) - S3 Bloom Time - March-May</b>	Occurs in moist deciduous woods and stream banks.	Y (N) UTM:
FOM8, FOD6, FOD7, FOD9, CUM1	<b>Pileose Evening Primrose (Oenothera pilosella) - S2 Bloom Time - Late Spring - Early Summer</b>	Moist edges of woods and open, disturbed ground.	Y (N) UTM:
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	<b>Prostrate Tick-trefoil (Desmodium rotundifolium) - S2 Bloom Time - July-September</b>	Dry, sandy or rocky woods	Y (N) UTM:
FOD7, SWD	<b>Pumpkin Ash (Fraxinus profunda) - S2? Bloom Time - March - June</b>	Swamps and floodplains	Y (N) UTM:
CUW1, ALO, FET1, SWC	<b>Ram's-head Lady's-slipper (Cypripedium arietinum) - S3 Bloom Time - mid May to mid June</b>	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	<b>Rattlesnake Hawkweed (Hieracium venosum) - S2 Bloom Time - April - September</b>	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands.	Y (N) UTM:
FOD6, FOD7, FOD9	<b>Round-leaved Groundsel (Packera obovata) - S3 Bloom Time - May - June</b>	Found in moist woods	Y (N) UTM:
CUM1, CUT1, CUS1	<b>Round-leaved hawthorn (Crataegus lumaria) - S3?</b>	Species occurs in old fields, poorly managed pastures, fence lines and roadsides	Y (N) UTM:
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	<b>Scarlet Beebalm (Monarda didyma) - S3 Bloom Time - May to October</b>	Found in moist, rich woods, thicket swamps, banks and floodplains.	Y (N) UTM:
ALO, ALS, ALT, TPO, TPS, TPW	<b>Slender Blazing Star (Liatris cylindracea) - S3</b>	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	<b>Slender Knotweed (Polygonum tenue) - S2</b>	Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows; at edges of sand pits	Y (N) UTM:
SDT1, FOD5, FOD9	<b>Slim-flowered Muihy (Muhlenbergia tenuiflora) - S2</b>	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	<b>Stiff Gentian (Gentiana quinquefolia) - S2 Bloom Time - late summer to mid fall</b>	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	<b>Sundial Lupine (Lupinus perennis) - S3 Bloom Time - mid-March to mid-June</b>	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



ELC	Species	Habitat Description	Habitat Present (Y/N) UTM, description of habitat if present
TP01, TPS1, TPW1, CUM1	Tall Blazing Star ( <i>Liatris aspera</i> )-S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM:
FE0, FES, FET, MAM2, MAM3	Tuberous Indian Plantain ( <i>Arnoglossum plantagineum</i> ) - S3 Bloom Time –mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats.	Y (N) UTM:
FOC1, FOC2, FOC3, FOC4	Woodland Pinedrops ( <i>Pterospora andromedea</i> ) - S2 Bloom Time – summer	Found in conifer woods, under pines, but also hemlock, spruce, fir, and white cedar. In dry or rocky soil, often with common juniper and sometimes aspen or birch.	Y (N) UTM:
CUM1, CUT1, CUW1, RBO1, SBO1	Yellow Ladies'-tresses ( <i>Spiranthes ochroleuca</i> ) - S2 Bloom Time – August to November	Dry, open sites, usually on acidic sandy soil, dry to mesic open woodland, thickets, meadows, barrens, ledges, outcrops, banks and roadsides, old fields.	Y (N) UTM:
<b>BIRDS</b>			
-	Bald Eagle ( <i>Haliaeetus leucocephalus</i> ) - SC	Assessed as SWH. Record species if found.	not required.
CUW, SDO, RBO, TPS	Common Nighthawk ( <i>Chordeiles minor</i> ) - SC	Hunts insects over a wide variety of habitats, in particular open or semi-open areas. Nests on ground in a wide range of open, sparse or vegetation-free habitats.	Y (N) UTM:
FOD, FOM	Louisiana Waterthrush ( <i>Seiurus motacilla</i> ) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and 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 understory; fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; requires cavity trees with at least 40 cm dbh; requires about 4 ha for a territory.	Y (N) UTM
-	Short Eared Owl ( <i>Asio flammeus</i> ) - SC	Assessed as SWH. Record species if found.	not required.
CUT1	Yellow-breasted Chat ( <i>Icteria virens</i> ) - SC	Inhabits thickets, tall tangles of shrubbery beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines	Y (N) UTM:
<b>REPTILES</b>			
-	Eastern Ribbonsnake ( <i>Thamnophis sauritus</i> ) - SC	Assessed as SWH. Record species if found.	not required.
-	Milksnake ( <i>Lampropeltis triangulum</i> ) -SC	Assessed as SWH. Record species if found.	not required.
-	Snapping Turtle ( <i>Chelydra serpentina</i> ) - SC	Assessed as SWH. Record species if found.	not required.
<b>INSECTS</b>			
OAO, SA, SWM, SWD	Azure Bluet ( <i>Enallagma aspersum</i> ) -S3	Species inhabits fishless ponds, lakes and boggy swamps	Y (N) UTM:
TPS, TPW	Sleepy Duskywing ( <i>Erynnis brize</i> ) - S1	Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils. Species regularly seen at flowers in oak woods, on the ground, and at mud puddles	Y (N) UTM:
CUM1, CUT1, CUW1	Monarch Butterfly ( <i>Danaus plexippus</i> ) - SC	Their larvae only feed on milkweeds ( <i>Asclepius</i> spp.). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow	Y (N) UTM:
TPS, CUW	Mottled Duskywing ( <i>Erynnis martialis</i> ) -S2	Usually seen nectaring or on wet sandy roads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present	Y (N) UTM:
SWT, SWD, SWM, FOM, FOD4-3, TPW, TPS, CUM1	Tawny Emperor ( <i>Asterocampa clyten</i> ) - S3	Species inhabits densely wooded riparian areas, dry woods, open woods, fencerows and parks. Usually occurs near Hackberry, the larval foodplant	Y (N) UTM:
FOD5	West Virginia White ( <i>Pieris virginiensis</i> ) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y (N) UTM:

# Wetland Data Collection Sheet



Study area: <i>Gashen</i>	Map No: <i>266 GSH 1762</i>
Date (yyyy-mm-dd): <i>2012-05-03</i>	Time Started: <i>8:35 a.m</i>
Field Staff: <i>Tom Shorney Jess Piette</i>	Time Finished: <i>11:15 a.m</i>

**Presence of Groundwater**      No  Yes

bank seepage       iron staining       groundwater indicator

**Site Type**

Lacustrine  (associated with lakes)      Isolated

Riverine  (associated with rivers)

Palustrine  absent or intermittent inflow and either intermittent or permanent outflow

what are the water inputs and outputs? \_\_\_\_\_

**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>SWT2</i>	<i>h → Frapenn = Acer FR</i> <i>+S → Flaumbe = Salixia = Coffae e</i> <i>re → Phaarun → Carex sp.</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

Micro topography → Tableland.

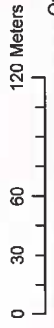
- Potential for Furbearing mammals, winter cover in adjacent Plantations
- Roadway observed from recreational vehicles

267

Goshen Feature: ~~267~~ GSH2236

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

James Kamstra  
KAMSTRA



October 28, 2011



- Roads
- Access/Collection Line
- Survey to be Completed
- Turbine Buffer (171.5m)

- ELC Survey Completed
- Turbine Buffer/Feature Intersect
- Property Fabric
- Goshen Wind Energy Centre

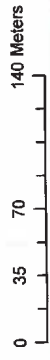


**h**

- Collection/Feature Intersect
- Turbine Buffer/Feature Intersect
- Property Fabric
- Goshen Wind Energy Centre

- Roads
- Access/Collection Line
- Collection Buffer (125m)
- Turbine Buffer (171.5m)

September 1, 2011



**Goshen Feature: 267 GSH2237/2230**

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



GSH2252

GSH2271

GSH2237

20

GSH2236

ROAD



PRE-SURVEY COMMENT:

**ELC**  
Community Description and Classification

Site: 267\_GSH2237 Polygon:   
 Surveyors: *JR* Date: *Oct 14/11* Time start: *12:00* finish:   
 UTMZ: *17* UTMZ: *445725* UTMN: *4795670*

**Polygon Description**

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic	<input type="checkbox"/> Organic <input type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input checked="" type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Roll Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input 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"/> 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
History	Cultural	Geology	Soil	Other
<input 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"/> Treeed		

**Stand Description**

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1	2	4	<i>Fragaria</i> → <i>Ulmus</i> → <i>Quercus</i> - <i>Corylus</i>
2	3	3	<i>Ulmus</i> - <i>Acer saccharinum</i> - <i>Rubus</i>
3	4	4	<i>Alnus</i> → <i>Geum</i> - <i>Solidago</i> - <i>Cerastium</i>
4	6	4	

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

**Stand Composition:** N = None R = Rare O = Occasional A = Abundant

Species Class Analysis:	Standing Snags:	Deadfall / Logs:
A < 10	A 10-24	O 25-50
A < 10	O 10-24	O 25-50
A < 10	A 10-24	O 25-50

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

**Ecotope:** *moist Green Ash* **Code:** *FOD 7-2*

**Inclusion:** **Code:**

**Complex:** **Code:**

**Community Profile Diagram/Comments**

*Narrow Band of Dec Forest along creek*

Notes:

**Tree Tally by Species**

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

**Soils Ontario and ELC Soils Description**

Site Metrics	PIVAuger #		Summary
	Zone	Easting	
UTM			
Northing			
Position			
Aspect			
Percent			
Slope			
Length			
Mottles			
Gley			
Water Table			
Carbonates			
Bedrock			
Depth to ...	1	% CF	% CF
	2	% CF	% CF
Soil Horizon Description	3	% CF	% CF
	4	% CF	% CF
Moisture Regime	% Surface Stone/Rock		
	Moisture Regime		
Drainage			