

Page 2 of 2

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 if many individuals (most species will fall into this category)
R - Rare represented in the colony by less than about five individuals or small clumps

[illegible]

Significant Wildlife Habitat Form

AECOM

Study Area:	BLW	JER	(GSH)	Map #:	359-GSH1430
Date:	24/04/2012			Time Started:	8:30
Field Staff:	Tom Shorney Jess Piette			Time Finished:	10:10
Weather Conditions: cloudy, 3°C, 45km/h winds					

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, FE01)

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

UTMs: See Amphibian Form ☒ 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, dimenstions, 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

Field Staff:

379-65H1430

379-65H1430

Field Staff: Tor

Time Started:

83

2017-04-24

Test 04

Time Finished:

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areal/sock AE-Nest Ento:

4th Avenue, New York, NY 10013

10-10-10

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Present (Y/N; UTM; descrip

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10/10/2010

TM.

TMA:

1161.

10

TM:

100

TM:

TM.

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Species of Conservation Concern Habitat and Incidental Wildlife – Goshen

AECOM

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

Species Conservation Concern Habitat and Incidental Wildlife – Goshen

ATM

ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
TPO1, TPS1, TPW1, CUM1	Tall Blazing Star (<i>Liatris aspera</i>) - S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM:
FE0, FES, FET, MAM2, MAM3	Tuberous Indian Plantain (<i>Amorhossium 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:
BIRDS			
-	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:
REPTILES			
-	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.
INSECTS			
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 reads. 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 virginianensis</i>) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y (N) UTM:

Wetland Data Collection Sheet

AECOM

Study area: <u>Goshen</u>	Map No: <u>379- GSH 1430</u>
Date (yyyy-mm-dd): <u>2012-04-24</u>	Time Started: <u>8:30</u>
Field Staff: <u>TS J.P.</u>	Time Finished: <u>10:10</u>

Presence of Groundwater	No ☒	Yes ☐	<i>Jewell weed present, but no others were found</i>
☐ bank seepage	☐ iron staining	☐ groundwater indicator	

Site Type	Lacustrine ☐ (associated with lakes) Riverine ☐ (associated with rivers) Palustrine ☒ absent or intermittent inflow and either intermittent or permanent outflow	Isolated ☐ what are the water inputs and outputs? <u>Drainage feature - possibly from agricultural practices</u>
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Soils	refer to ELC card for soils information
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% open Water	
Type 1 - <5% ☐ Type 2 - 5-25% ☐ (water occurring in one central location) Type 3 - 5-25% ☒ (water occurring in ponds of various sizes) Type 4 - 26-75% ☐ (water occurring in a central location)	Type 5 - 26-75% ☐ (water occurring in a small pattern) Type 6 - 76-95% ☐ (occurring in a central location, vegetation is peripheral) Type 7 - 76-95% ☐ (vegetation occurs in patches or diffuse, open stands) Type 8 - >95% ☐ (water occupies over 95% of the area)

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

Map Code/ ELC Code	Community Description - list at least four dominant species for each form
<u>Man 2-2</u> <u>M2</u>	<u>NE - Phalaris Amm, carex sp</u> <u>gc - Imp cape, All Petio</u> <u>IS - Corrus seti</u>

Wetland Data Collection Sheet

Notes on Ecological Functions or features

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

Feature 392

65H1003

65H1000

3

65H1007

Leased

65H1000

Leased

Road

160 Meters

80

40



Date: Nov. 29, 2011

Job Number:

1: _____ 4: _____
2: _____ 5: _____
3: _____ 6: _____

SITE LOCATIONS

1 CONIFERS							1 2 3 4 5 6 1 TREES and SHRUBS							1 2 3 4 5 6 1 GRAMINOIDS							1 2 3 4 5 6								
Abies balsamea							+	Rosa multiflora									Agrostis gigantea												
Juniperus communis								Rosa									Agrostis stolonifera												
Juniperus virginiana								Rubus allegheniensis									Agropyron repens												
Larix laricina								Rubus idaeus									Alopecurus												
Picea abies								Rubus occidentalis									Bromus inermis												
Picea glauca								Rubus odoratus									Calamagrostis canadensis												
Pinus resinosa								Rubus pubescens									Carex arctata												
Pinus strobus								Salix alba									Carex aurea												
Pinus sylvestris								Salix amygdaloides									Carex bebbii												
Thuja occidentalis								Salix bebbiana									Carex blanda												
Tsuga canadensis							+	Salix discolor									Carex gracillima												
								Salix eriocephala									Carex granularis												
								Salix exigua									Carex hystericina												
								Salix lucida									Carex pensylvanica												
								Salix petiolaris									Carex radiata												
TREES and SHRUBS							+	Salix purpurea									Carex retrorsa												
Acer negundo								Salix x rubens									Carex stipata												
Acer rubrum							+	Salix									Carex stricta												
Acer saccharinum								Sambucus canadensis									Carex vulpinoidea												
Acer saccharum								Sambucus racemosa									Carex												
Acer spicatum								Sorbus aucuparia									Carex												
Alnus rugosa								Spiraea alba									Carex												
Amelanchier								Syringa vulgaris									Carex												
Berberis thunbergii																													



VASCULAR PLANT LIST

PROJECT / LOCATION: FEATURE 392

POLYGON: 4.

SURVEYOR(S): B. Miller, R. Aitken DATE(S): DEC. 12, 2011

VEGETATION TYPE:

NOTES:

Plant Species	ABUNDANCE / LAYER				Plant Species	Understory (U)	Ground Layer (GL)	Plant Species	Understory (U)	Ground Layer (GL)
	Canopy (C)	Sub-canopy (SC)	Understory (U)	Ground Layer (GL)						
TREES					HERBACEOUS FLORA			HERBACEOUS FLORA		
TIL AMER	O	O	R		SYM LATE		O			
ACESASA	D	D	D	D	GEUM SP.		O			
PRU SERO	R		R		ALL PETI		R			
FAG GRAN	A	A	A	R	ARC MINU		R			
FRA AMER	O	O	O	R	CAREX CF. ARCTATA		R			
ULM AMER	R		R		DRY MARG		R			
TSU CANA	R	O	R	R	LEO CARD		R			
OST VIRG		R	O	R	SOL FLEX		R			
BETALLE	R				ACT PACH		R			
CAR CARO			O	R	CAUTHAL		O			
CAR CORD			R		EPI VIRG		A			
					CIR LUTE		R			
					CAREX SP.		O			
					POL ACRO		R			
					ALL TRIC		O			
					POL PUBE		R			

VASCULAR PLANT LIST

PROJECT / LOCATION: FEATURE 392

SURVEYOR(S): B. Miller, R. Aitken DATE(S): DEC. 12, 2011

POLYGON: 5.

VEGETATION TYPE:

NOTES:

Plant Species	ABUNDANCE / LAYER				Plant Species	Understory (U)	Ground Layer (GL)	Plant Species	Understory (U)	Ground Layer (GL)
	Canopy (C)	Sub-canopy (SC)	Understory (U)	Ground Layer (GL)						
TREES					HERBACEOUS FLORA			HERBACEOUS FLORA		
FRA NIGR			R		BIDENS SP.		A			
ACE FREE	D	D	O	R	BOE CYLI		O			
FRA PENN	O	O	O		EPILOBIUM SP.		O			
BET ALLE	R				SYM LANC		R			
SALIX SP.	R				GLY STRI		O			
CAR CARO			O		RUMEX SP.		R			
					ONO SENS		A			
					CAREX SP.		O			
					SYM PUNI		O			

Relative Abundance: D = Dominant; A = Abundant; O = Occasional; R = Rare
Vegetation Height: C = > 20m; SC = 10 - 20m; U = 2 - 10m; GL = < 2m

Page: ___ of ___

POLYGONS 4.3, 5.

VASCULAR PLANT CHECKSHEET

Location: FEATURE 392
Observer: B. Miller, R. Aitken

Date: Dec. 12, 2011

Job Number:[illegible]

SITE LOCATIONS

11

2.

3.

4

6

• **6**

FEATURE 392

POLYGONS 4. $\frac{3}{4}$ 5.

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
CONIFERS						TREES and SHRUBS						GRAMINOIDS					
Abies balsamea						Rosa multiflora						Agrostis gigantea					
Juniperus communis						Rosa						Agrostis stolonifera					
Juniperus virginiana						Rubus allegheniensis						Agropyron repens					
Larix laricina						Rubus idaeus						Alopecurus					
Picea abies						Rubus occidentalis						Bromus inermis					
Picea canadensis						Rubus odoratus						Cornus canadensis					
Picea mariana						Rubus parviflorus						Carex acutata					
Picea strobus						Salix alba						Carex aurea					
Pinus strobus						Salix amygdaloides						Carex bebbii					
Pinus resinosa						Salix bicolor						Carex blanda					
Pinus occidentalis						Salix discolor						Carex gracilis					
Pinus canadensis						Salix discolor						Carex graminifolia					
TAXUS						Salix edulis						Carex hypoleuca					
CANADENSIS						Salix nigra						Carex pennsylvanica					
						Salix purpurea						Carex radiata					
TREES and SHRUBS						Salix x rubens						Carex retrofracta					
Acer glabrum						Sambucus canadensis						Carex stricta					
Acer rubrum						Sambucus racemosa						Carex vulpina					
Acer saccharinum						Sorbus aucuparia						Carex sp.					
Acer saccharum						Spirea alba						Carex					
Acer spicatum						Spirea vulgaris						Carex					
Alnus incana						Tilia americana						Carex					
Amelanchier						Ulmus americana						Carex					
Berberis thunbergii						Ulmus						Carex					
Betula alleghaniensis						Vaccinium						Carex					
Betula papyrifera						Viburnum lentum						Carex					
Carpinus caroliniana						Viburnum opulus						Cyperus					
Carya cordifolia						Viburnum						Cyperus					
Celastrus scandens						Vitis riparia						Dactylis glomerata					
Cornus alternifolia												Deschampsia cespitosa					
Cornus amomum												Echinochloa crus-galli					
Cornus rugosa												Echinochloa typhopoda					
Cornus stolonifera												Eleocharis					
Corylus cornuta												Elymus virginicus					
Crataegus monogyna												Elymus					
Crataegus punctata												Festuca arundinacea					
Crataegus sp.												Glyceria striata					
Crataegus												Glyceria					
Diervilla lonicera												Juncus distachy					
Fagus grandifolia												Juncus effusus					
Fraxinus americana												Juncus tenuis					
Fraxinus nigra												Juncus					
Fraxinus pennsylvanica												Leersia oryzoides					
Ilex verticillata												Muhlenbergia					
Juglans cinerea												Oryzopsis asperifolia					
Juglans nigra												Panicum					
Lonicera morrowi												Panicum					
Lonicera tatarica												Panicum					
Lonicera												Paspalum					
Morus pavia												Paspalum					
Quercus virginiana												Paspalum					
Parthenocissus vitacea												Paspalum					
Populus balsamifera												Paspalum					
Populus grandidentata												Paspalum					
Populus tremuloides												Paspalum					
Populus												Paspalum					
Prunus pennsylvanica												Paspalum					
Prunus serotina												Paspalum					
Prunus virginiana												Paspalum					
Prunus												Paspalum					
Quercus macrocarpa												Paspalum					
Quercus rubra												Paspalum					
Quercus												Paspalum					
Rhamnus cathartica												Paspalum					
Rhus radicans												Paspalum					
Rhus typhina												Paspalum					
Ribes americana												Paspalum					
Ribes cynosbati												Paspalum					
Ribes x rubrum												Paspalum					
Rubus grandis												Paspalum					
ACER x FREE												Paspalum					
Berberis sp.												Paspalum					



(elc community description/forms/1-all-forms/042004)

Site Metrics		PI/Auger #						Summary	
Site Metrics	UTM	Zone						Moisture Regime	
		Easting							
	Slope	Nothing						Drainage	
		Position							
		Aspect							
		Percent							
		Slope							
		Length							
	Depth to ...	Mottles							Effective Texture (Indicate below)
		Gley							
Water Table									
Carbonates									
Bedrock									
1		Depth from zero		% CF		% CF		% CF	
		Texture							
2		Depth from zero		% CF		% CF		% CF	
		Texture							
3		Depth from zero		% CF		% CF		% CF	
	Texture								
4	Depth from zero		% CF		% CF		% CF		
	Texture								
Soil Horizon Description		% Surface Stone/Rock							
	Moisture Regime								
	Drainage								

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Trees & Shrubs	1	2	3	4	5	Trees & Shrubs	1	2	3	4	5	Graminoids	1	2	3	4
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>)						Common Buckthorn (<i>Rhamnus cathartica</i>)						Blue-joint Grass (<i>Calamagrostis canadensis</i>)				
White Spruce (<i>Picea glauca</i>)						Smooth Sumac (<i>Rhus glabra</i>)						Orchard Grass (<i>Dactylis glomerata</i>)				
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>)						Quack Grass (<i>Elymus repens</i>)				
Red Pine (<i>Pinus resinosa</i>)						Prickly Gooseberry (<i>Ribes cynosbati</i>)						Virginia Wild Rye (<i>Elymus virginicus</i>)				
Eastern White Pine (<i>Pinus strobus</i>)						Swamp Black Currant (<i>Ribes lacustre</i>)						<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>				
						<i>Rosa</i>						Witch-grass (<i>Panicum capillare</i>)				
						Com. Blackberry (<i>Rubus allegheniensis</i>)						<i>Panicum</i>				
						Wild Red Raspberry (<i>Rubus idaeus</i>)						Reed Canary Grass (<i>Phalaris arundinacea</i>)				
						Black Raspberry (<i>Rubus occidentalis</i>)						Timothy (<i>Phleum pratense</i>)				
						Purple-fl. Raspberry (<i>Rubus odoratus</i>)						Common Reed (<i>Phragmites australis</i>)				
						Dwarf Raspberry (<i>Rubus pubescens</i>)						Canada Blue Grass (<i>Poa compressa</i>)				
						<i>Rubus</i>						Fowl Meadow Grass (<i>Poa palustris</i>)				
						Peach-leaved Willow (<i>Salix amygdaloides</i>)						Kentucky Bluegrass (<i>Poa pratensis</i>)				
						Bebb's Willow (<i>Salix bebbiana</i>)						Yellow Foxtail (<i>Setaria pumila</i>)				
						Pussy Willow (<i>Salix discolor</i>)						Green Foxtail (<i>Setaria viridis</i>)				
						Missouri Willow (<i>Salix elaeagnifolia</i>)										
						Sandbar Willow (<i>Salix exigua</i>)										
						Shining Willow (<i>Salix lucida</i>)										
						Black Willow (<i>Salix nigra</i>)										
						Slender Willow (<i>Salix petiolaris</i>)										
						<i>Salix</i> sp.										
						Hybrid Crack Willow (<i>Salix X rubens</i>)										
						Black-berried Elder (<i>Sambucus nigra</i>)										
						Red-berried Elder (<i>Sambucus racemosa</i>)										
						Buffaloberry (<i>Shepherdia canadensis</i>)										
						Eur. Mountain Ash (<i>Sorbus aucuparia</i>)										
						Narrow Meadow-sweet (<i>Spiraea alba</i>)										
						Common Lilac (<i>Syringa vulgaris</i>)										
						Poison-ivy (<i>Toxicodendron rydbergii</i>)										
						Climbing Poison-ivy (<i>Toxicodendron radicans</i>)										
						White Elm (<i>Ulmus americana</i>)										
						Siberian Elm (<i>Ulmus pumila</i>)										
						Slippery Elm (<i>Ulmus rubra</i>)										
						Low Blueberry (<i>Vaccinium angustifolium</i>)										
						Maple-leaf Viburnum (<i>Viburnum acerifolium</i>)										
						Hobblebush (<i>Viburnum lantanoides</i>)										
						Nannyberry (<i>Viburnum lentago</i>)										
						Guelder-Rose (<i>Viburnum opulus</i>)										
						Downy Arrow-wood (<i>Vib. rafinesquianum</i>)										
						Riverbank Grape (<i>Vitis riparia</i>)										
						Am. Prickly-ash (<i>Zanthoxylum americanum</i>)										
						<i>Tilia cordata</i>										

Page 2 of 2

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: 392 GSH 1043/1060/1008	1	F005-2	4	
Date: Jan 23, 2012	2	SWP 3-3 (Comp)	8	
Surveyors: 10 - TS	3			

Significant Wildlife Habitat Form

AECOM

Study Area:	BLW JER <u>GSH</u>	Map #:	<u>392 GSH 1043/1060/1008</u>
Date:	<u>April 23, 2012</u>	Time Started:	<u>4:07 PM</u>
Field Staff:	<u>Jess Pette + Tom Shinn</u>	Time Finished:	<u>6:00 PM</u>
Weather Conditions:	<u>50°C, Cloudy - 45 km/h</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: There are 2 pools ☒ 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): see amphibian data form

Area and soil/substrate of shoreline habitat: _____

Type and abundance of cover in open water habitat: _____

Type and abundance of cover in surrounding habitat: _____

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

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

Complete Vernal Pool Habitat Description Form

Snake Hibernacula

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

UTMs: _____ Likelihood to extend below frost line: _____

% canopy cover: _____ % slope: _____ Distance to open canopy (m): _____

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

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

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

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

UTMs: _____ Description (indicator species, etc): _____

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)

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

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

☒ No

☐ Yes (if yes, photograph and complete the following)

UTMs: _____

Location (e.g. aggregate pit, bridge): _____

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

Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas

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

Shoreline of lake, large river or large wetland present:

☒ No

☐ Yes (if yes, photograph and complete the following)

UTMs: _____

Rocky island or peninsula present: _____

Mudflat present: _____

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

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

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

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

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

Large open habitat present: ☒ No

☐ Yes (if yes, photograph and complete the following)

UTMs: _____

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

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

Old-growth or Mature Forests, Interior Forest Breeding Birds

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

Mature forest present: ☒ No

☐ Yes (if yes, photograph and complete the following)

UTMs: _____

Age of oldest trees: _____

Evidence of disturbance (e.g. selective cutting): _____

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

Photo #	Location or Subject	Photo #	Location or Subject

Time Started: 4:07 am

IM SHOWS

Time Finished: 6:00 PM

Observed Species List

[illegible]

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)

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

ELC	Species	Habitat Description	Habitat Present (Y/N); UTM; description of habitat if present)
PLANTS			
FOD7	American Gromwell (<i>Lithospermum latifolium</i>) - S3 <u>Bloom Time</u> - Spring	Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods.	Y (N) UTM:
ALO, TPO	Muehlenberg's astomum moss (<i>Astomum muehlenbergianum</i>) - S2 <u>Bloom Time</u> - Spring	Thin soil over level outcrop ledges and on soil under grasses in open prairie	Y (N) UTM:
FOM1, FOM2, CUP3	Autumn Coral-root (<i>Corallorhiza odontorhiza</i>) - S2 <u>Bloom Time</u> - 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 (<i>Euonymus atropurpureus</i>) - S3 <u>Bloom Time</u> - April - June	Species occurs in dry to <u>moist deciduous thickets and woods</u>	(Y) N UTM <i>not observed</i>
SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6	Chinese Hemlock Parsley (<i>Conioselinum chinense</i>) - S2 <u>Bloom Time</u> - 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 (<i>Bidens trichosperma</i>) - S2 <u>Bloom Time</u> - late summer	Found in <u>openings in swamps, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian bay</u> . Bogs, fens, tamarack swamps	(Y) N UTM <i>not observed</i>
ALT1, FOD7	Eastern Green-violet (<i>Hybanthus concolor</i>) - S2 <u>Bloom Time</u> - mid March to August	Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks.	Y (N) UTM
TPS, TPW, FOM1, FOM2	Fogg's Goosefoot (<i>Chenopodium foggii</i>) - S2	Species occurs in sandy areas on limestone under oak or pine-oak forests	Y (N) UTM
TPO2, TPS2, TPW2,	Giant Ironweed (<i>Vernonia gigantea</i>) - S1? <u>Bloom Time</u> -	Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows	Y (N) UTM

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen

ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
CUM1, MAM, FOD6, FOD7, FOD9	June–August Green Dragon (<i>Arisaema dracontium</i>) - S3/S3 <u>Bloom Time</u> – May and June	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y (N) UTM
TP01, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	June–August Hairy Bedstraw (<i>Gallium pilosum</i>) –S3 <u>Bloom Time</u> – June–August	Occurs in dry, sandy woods and thickets; occasionally in dry sandy fields	Y (N) UTM
FE01, FES1, FET1, SWC, SWM, SWD, SWT, TPO, TPS, TPW	June to August 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	Summer 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	Time – early to late April Harbinger-of-spring (<i>Erigenia bulbosa</i>) - S3 <u>Bloom Time</u> – early to late April	Occurs in rich, moist deciduous woods, especially on floodplains.	Y (N) UTM
SAS1, SAM1, SAF1	Time – summer 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	S2 <u>Bloom Time</u> – June to August 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	June – September 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	March–May 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	Early Summer Pillose Evening Primrose (<i>Oenothera pilosella</i>) –S2 <u>Bloom Time</u> – Late Spring – Early Summer	Moist edges of woods and open, disturbed ground.	Y (N) UTM
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	July–September Prostrate Tick-trefoil (<i>Desmodium rotundifolium</i>) –S2 <u>Bloom Time</u> – July–September	Dry, sandy or rocky woods	Y (N) UTM
FOD7, SWD	March – June Pumpkin Ash (<i>Fraxinus profunda</i>)–S2? <u>Bloom Time</u> – March – June	Swamps and floodplains	Y (N) UTM:
CUW1, ALO, FET1, SWC	Mid June 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	September Rattlesnake Hawkweed (<i>Hieracium venosum</i>) - S2 <u>Bloom Time</u> – April – September	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands.	Y (N) UTM:
FOD6, FOD7, FOD9	June Round-leaved Groundsel (<i>Packera obovata</i>) –S3 <u>Bloom Time</u> – June	Found in moist woods	Y (N) UTM:
CUM1, CUT1, CUS1	June Round-leaved hawthorn (<i>Crataegus lumaria</i>) –S3?	Species occurs in old fields, poorly managed pastures, fencelines and roadsides	Y (N) UTM:
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	May to October Scarlet Beebalm (<i>Monarda didyma</i>) - S3 <u>Bloom Time</u> – May to October	Found in moist, rich woods, thicket swamps, banks and floodplains.	Y (N) UTM:
ALO, ALS, ALT, TPO, TPS, TPW	Slender Blazing Star (<i>Liatris cylindracea</i>) –S3	Species occurs in limestone and dolostone pavement, prairies, open woods, alvars and moist sandy meadows.	Y (N) UTM:
SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2	S2 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)	S2 Slim-flowered Muhly (<i>Muhlenbergia tenuiflora</i>) - S2	Found in rich-deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods	Y (N) UTM: not observed
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	mid fall Stiff Gentian (<i>Gentianella 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	mid-March to mid-June 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

ADOM

ELC	Species	Habitat Description	Habitat Present (Y/N); UTM; description or habitat if present
TP01, TPS1, TPW1, CUM1	Tall Blazing Star (<i>Liatris aspera</i>) - S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM:
FE0, FES, FET, MAM2, MAM3	Tuberous Indian Plantain (<i>Amorhossium 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:
BIRDS			
-	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:
REPTILES			
-	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.
INSECTS			
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>Pieris virginienis</i>) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y (N) UTM: not observed - same toothwort observed

Done Aug 15/11 - 5AM.

North-Central

392-65H 1043/1060

Goshen Access Road / Collection Lines



VASCULAR PLANT CHECKSHEET

Location: 392-GSH 1043/1060
Observer: SAM (GE 2 & GE 4)

Date: Aug. 15/11
Job Number:

DICOT HERBS	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	MONOCOT HERBS	1	2	3	4	5	6
Achillea millefolium																			Alisma plantago-aquatica						
Achillea ptarmica																			Allium triocculum						
Achillea rubra																			Allium						
Agalinis																			Arisaema triphyllum						
Agrimonia eupatoria																			Asparagus officinalis						
Alliaria petiolata																			Calla palustris						
Amaranthus retrofractus																			Clintonia borealis						
Ambrosia artemisiifolia																			Coriaria majus						
Amphicarpaea bracteata																			Cypripedium calceolus						
Anaphalis margaritacea																			Elodea canadensis						
Anemone																			Epipactis helleborina						
Anemone canadensis																			Erythronium americanum						
Anemone virginiana																			Hemerocallis fulva						
Antennaria neglecta																			Iris versicolor						
Apocynum androsaemifolium																			Lemna minor						
Apocynum cannabinum																			Lemna trisulca						
Aquilegia canadensis																			Lilium						
Arnica montana																			Malthodorum canadense						
Asclepias incarnata																			Malthodorum racemosa						
Asclepias syriaca																			Malthodorum stellata						
Aster																			Plantago						
Aster cordifolius																			Portulaca oleraceae						
Aster ericoides																			Polygonatum pubescens						
Aster lanceolatus																			Potamogeton crispus						
Aster lateralis																			Potamogeton pectinatus						
Aster macrophyllus																			Potamogeton						
Aster novae-angliae																			Potamogeton						
Aster purpureus																			Potamogeton						
Barbarea vulgaris																			Sagittaria latifolia						
Bidens cernua																			Sisyrinchium montanum						
Bidens frondosa																			Smilax herbacea						
Boehmeria cylindrica																			Spiranthes cernua						
Calla palustris																			Spirodela polyrrhiza						
Calystegia sepium																			Streptopus roseus						
Cardamine hirsuta																			Trillium erectum						
Cardamine																			Trillium grandiflorum						
Caulophyllum thalictroides																			Urtica dioica						
Cerastium fontanum																			Urtica dioica						
Cerastium minus																			Urtica dioica						
Chelidonium majus																			Urtica dioica						
Chenopodium album																			Urtica dioica						
Chrysanthemum leucanthemum																			Urtica dioica						
Cichorium intybus																			Urtica dioica						
Cicuta																			Urtica dioica						
Cirsium leucanthemum																			Urtica dioica						
Cirsium arvense																			Urtica dioica						
Cirsium vulgare																			Urtica dioica						
Clematis virginiana																			Urtica dioica						
Clintonia borealis																			Urtica dioica						
Coryza canadensis																			Urtica dioica						
Coronilla varia																			Urtica dioica						
Cynanchum rossicum																			Urtica dioica						
Cynoglossum officinale																			Urtica dioica						
Daucus carota																			Urtica dioica						
Desmodium canadense																			Urtica dioica						
Dianthus armeria																			Urtica dioica						
Dipsacus fullorum																			Urtica dioica						
Echinocystis lobata																			Urtica dioica						
Echium vulgare																			Urtica dioica						
Epilobium																			Urtica dioica						
Epilobium ciliatum																			Urtica dioica						
Epilobium hirsutum																			Urtica dioica						
Epilobium parviflorum																			Urtica dioica						

SITE LOCATIONS

- 1: Polygon 1 (GSH 1043)
2: 2 (GSH 1043/1060)
3: 3 (GSH 1060)
4: Swamp Inclusion in Poly 2
5:
6:

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

ELC

Community Description and Classification

Site: G5H 1043/1060 Polygon: 0
 Surveyor(s): AM Date: Aug 15/11 Time start: 1350
 UTMZ: 17 UTMZ: WP202 UTMN: 1446

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
☒ Terrestrial ☐ Wetland ☐ Aquatic	☐ Organic ☐ Mineral Soil ☐ Parent Min. ☐ Acidic Bedk. ☐ Basic Bedk. ☐ Carb. Bedk.	☐ Lacustrine ☐ Riverine ☐ Bottomland ☐ Terrace ☐ Valley Slope ☐ Plateau ☐ Roll, Upland ☐ Cliff ☐ Talus ☐ Crevice/Cave ☐ Avar ☐ Rockland ☐ Beach / Bar ☐ Sand Dune ☐ Bluff	☐ Plankton ☐ Submerged ☐ Floating-LVD ☐ Graminoid ☐ Forb ☐ Lichen ☐ Bryophyte ☒ Deciduous ☐ Coniferous ☐ Mixed	☐ Lake ☐ Pond ☐ River ☐ Stream ☐ Marsh ☐ Swamp ☐ Fen ☐ Bog ☐ Barren ☐ Meadow ☐ Prairie ☐ Thicket ☐ Savanna ☐ Woodland ☒ Forest ☐ Plantation

Stand Description

Layer	HT	CVR	Species	Order of Decreasing Dominance (up to 4 sp)
1	3	4	MH	>> Much Greater Than; > Greater Than; = About Equal To
2	3	3	MH	>> Much Greater Than; > Greater Than; = About Equal To
3	5	3	BD	>> Much Greater Than; > Greater Than; = About Equal To
4	6	3	BD	>> Much Greater Than; > Greater Than; = About Equal To

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 - 60% 4 = 60%
 MH = A-14-BpD
 BD = A-14-BpD
 BA: 31
 Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Stand Composition: Size Class Analysis: A < 10 10-24 25-50 > 50
 Standing Snags: A < 10 10-24 25-50 > 50
 Deadfall / Log: A < 10 10-24 25-50 > 50
 BA: 31
 Abundance Codes: N = None R = Rare O = Occasional A = Abundant

Com. Age:	☐ Pioneer	☐ Young	☐ Mid-Age	☒ Mature	☐ Old Growth
Ecotype:	Fresh-Forest Sugar Maple - Hardwood				
Vegetation Type:	Deciduous Forest Type (Hgt-BD-Aw)				
Inclusion:	/				
Complex:	/				

Community Profile Diagram/Comments

Notes:

Tree Tally by Species

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
MH	9	7			16	53
BD	1	2			3	10
BD	1	2			3	10
BD	2	1			3	10
BD	3	3			6	19
Total	16	15			31	100
Basal Area (BA)	32	30			62	31
Dead						

Soils Ontario and ELC Soils Description

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

* Small Swamp Inclusion @ E 450887
N 4805527

ELC
Community
Description and
Classification

Site: GSH 1043/1060
Surveyor(s): SAM
UTMZ: 17

Polygon:
Date: Aug. 15/11
UTMZ: 17

Time
start: 1452h
finish: 1524h
UTMN:

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
☒ Terrestrial	☐ Organic	☐ Lacustrine	☐ Plankton	☐ Lake
☐ Wetland	☒ Mineral Soil	☐ Riverine	☐ Submerged	☐ Pond
☐ Aquatic	☐ Parent Min.	☐ Bottomland	☐ Floating-LVD	☐ River
	☐ Acidic Bedrk	☐ Terrace	☐ Graminoid	☐ Stream
	☐ Basic Bedrk	☐ Valley Slope	☐ J Forb	☐ Marsh
	☐ Carb. Bedrk	☒ Graveland	☐ Lichen	☐ Swamp
		☐ Roll. Upland	☐ Bryophyte	☐ Fen
		☐ Cliff	☒ Deciduous	☐ Bog
		☐ Talus	☐ Coniferous	☐ Barren
		☐ Crevice/Cave	☐ Mixed	☐ Meadow
		☐ Alvar		☐ Prairie
		☐ Rockland		☐ Thicket
		☐ Beach / Bar		☐ Sav. Innah
		☐ Sand Dune		☐ Woodland
		☐ Bluff		☒ Open st
				☐ 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	HA >> BA = Be > He
2	3-4	3	HA7 Au > CB > HA7 Au Alt. Dogwood
3			Pickly Ash > Blk. Elder > Blue Birch
4	0-7	3	Herb Robert > Corn. May Flower > Banded Shorthusk > False Nettie

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

Stand Composition:	Size Class Analysis:	Standing Snags:	Deadfall / Logs:
HA 35-4015-Be 18	Q < 10	R < 10	O < 10
BA: 34	A 10-24	O 10-24	A 10-24
	R > 50	R > 50	R > 50

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

Com. Age:	☐ Pioneer	☐ Young	☒ Mid-Age	☐ Mature	☐ Old Growth
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Ecosite:	Fresh-Hoist Sugar Maple Deciduous Forest	Code:	FOD6
Vegetation Type:	Fresh-Hoist Sugar Maple-Hardwood	Code:	FOD6-5
Inclusion:	Black Ash, Red Maple, Oak, Swamp Type	Code:	SWD 2-1
Complex:		Code:	

Community Profile Diagram/Comments

Notes:

Tree Tally by Species

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Prism Factor	2
BP	1				1		
EW	1				1		
Bz	1				1		
HA	1				1		
AW	1				1		
Be	1				1		
Total	17				17		100
Basal Area (BA)	34				34		34
Dead	2				2		2

Soils Ontario and ELC Soils Description Inclusion

Plt/Auger #	WP 203	WP 204	Summary
Zone		17T	
Easting		450987	Moisture Regime
Northing		4805527	
Position		5	
Aspect	5	W	
Percent	5	-	
Slope	2m	-	Drainage
Length	20	0	
Mottles	04	12	
Gley	73	0	Effective Texture (Indicate below)
Water Table	38	27	
Carbonates		7/20	
Bedrock			
1	Depth from zero	% CF	% CF
Texture	VP5SCL	0h-m	
2	Depth from zero	% CF	% CF
Texture	VP5C	C	
3	Depth from zero	% CF	% CF
Texture	C		
4	Depth from zero	% CF	% CF
Texture			
% Surface Stone/Rock			
Moisture Regime			
Drainage			

ELC Plant Species List	SITE:	GSH 1043/1060
	POLYGON:	^{Bd} (2) FM Mn ^{ABc} He Fod
	DATE:	Aug. 15 / 11
	SURVEYOR(S):	SAM

LAYERS: 1 = CANOPY 2 = SUB-CANOPY 3 = UNDERSTORY 4 = GROUND (GRD.) LAYER

ABUNDANCE CODES: R = RARE O = OCCASSIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER				COLL.
	1	2	3	4	
WB					
CB					
Cpm					
SA Sumac					
MH					
Bj					
Rasp.					
Rub. allg					
Cadwip					
wd. Bane.					
Aw					
Be					
Sensfern					
False Nettle					
Blk Elder					
He					
Zig Zag					
Prickly Ash					
Alt Dog.					
False Sol Seal					
Com. Mayflower					
Sack					
Rattlesnake Root					
fow / panna					
Bn					
Inf Wd. Fern					
Bear's Broom					
Each Ntshd					

[illegible]

MS-Eu 5001
inclusion

6 photos 151-532 to 537
w pm 204

ELC

Community
Description and
Classification

Site: 392 65H1060/1043 Polygon: ③
Surveyor(s): SAM Date: Aug 15/11 Time start: 1531H finish: 1611H
UTMZ: 17 UTMZ: UTMN:

Polygon Description

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

Stand Description

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than, > Greater Than, = About Equal To)
1	2	4	HA >> BE >> AW = CB
2	3	3	HA >> BE >> BE > BE
3	4-5	3	AW > BE > BE
4	6	2-3	Wetland grand. > Vign. crup. > Pers. lvy > Yellow dwn. 3

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 9 > 0.5-1m 4 > 1-2m 3 > 2-5m 2 > 5-25m 1 > 25m
CVR Codes: 0 = none 1 0% - 10% 2 10% - 25% 3 25% - 60% 4 > 60%

Stand Composition:	Size Class Analysis:	Standing Snags:	Deadfall / Logs:
HA 71-BE 17	☐ < 10 ☐ 10-24 ☐ 25-50 ☐ > 50	☐ < 10 ☐ 10-24 ☐ 25-50 ☐ > 50	☐ < 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
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Ecosite:	Dry-Fresh Sugar Maple Deciduous Forest	Code:	F05-2
Vegetation Type:	Dry-Fresh Sugar Maple-Beech Deciduous Forest Type	Code:	F05-2
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.
HA	17				17	1
BE	34				34	2
CB	2				2	0.1
AW						
Wetland						
Open Water						
Shallow Water						
Surficial Dep.						
Bedrock						
Natural						
Cultural						
Open						
Shrub						
Tree						
Total	17				17	1
Basal Area (BA)	34				34	2
Dead	2				2	0.1

Soils Ontario and ELC Soils Description

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

Plant Species List

SURVEYOR(S): SAM

ABUNDANCE CODES: R = RARE O = OCCASSIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER				COLL.
	1	2	3	4	
wt Boneberry					
Blue Cohosh					
Jack.					
Aw	O		D		
P. l.				A	
MA	D	D			
Rattlesnake Root					
MH					
Be	O	A	D		
Carex Inflata					
wood at little					
Paul Manna					
Barbed Storkbill Grass					
Sm Currant					
Gr. ch. Ntshid					
Cursed Cowfoot thorough					
Leek					
False S. Seal					
Ms					
Arb Robt					
BS Ntshd					
Wood Fern					
Garlic Must.					
Lg Flwr Bellwort				D	
Zig Zag G'rod					
Vine Creeper				D	
Gray Rgn'd					
Chokeberry					

[illegible]

Plants - upland (Photo 7)

Acer saccharum (sugar) 0
 Hemlock 0
 Liriodendron 0
 Witch hazel 0
 Tilia americana (Bass) 0
 Smil. racemosa (FSS)
 Urtica perfoliata - hollow
 Toxic. rad. - F2
 Arisaema, str. rubens - JIP
 Premna sp.
 Trill. grand.
 Maranth. commun.
 Soli. flexicaulis - zigzag g.
 Gaul. must.

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

Red maple swamp inclusion ~~3x20m~~
 Sars. fern
 Impatiens
 Lygostis uniflorus (Buple)?
 ~ maybe W. marshmallow
 C. sarcocolla
 Toxic. rad.
 Rubus idaeus

Plants - upland (Photos 19)

Acer saccharum (sugar) 0
 Tilia americana 0
 Prun. serot. L
 Toxic. rad. (shrub)
 Smil. racemosa
 Trill. grand.
 Premna sp.
 C. sarcocolla (E.N.)
 Frax. americana (w. ash)
 Aris. str. rubens (JIP)
 Soli. flexicaulis - zigzag
 Aethra pachypoda - dilligay
 Gaul. must. 0
 Perennissus quinquefolia
 Lonicera benzoin - Spicebush
 Rubus coccineus
 Geranium robertianum
 Carduus marianthus (B. Loh)
 Rhamnus coccinea - buckthorn
 Prun. pennsylvanica - pin cherry
 Ironwood

↑
 outside 120m
 see map

SWD3 approx. 50x80m

↑
 outside 120m
 see map

↑
 use this plant list
 inside 120m
 GE4/S3

392-GSH1060

ELC Community Description and Classification	Site: Gashen - GEY.S3		Polygon: 18	
	Surveyor(s): NW CBS		Date: June 2/11	Time
	UTMZ: 17	UTMZ: 0450899	UTMN: 4805330	UTMN: 4805330
	start: 08:00 am		finish: 2:00 pm	

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
☒ Terrestrial	☐ Organic	☐ Lacustrine	☐ Plankton	☐ Lake
☐ Wetland	☒ Mineral Soil	☐ Riverine	☐ Submerged	☐ Pond
☐ Aquatic	☐ Parent Min.	☐ Bottomland	☐ Floating-LVD	☐ River
Site	☐ Acidic Bedrk	☐ Terrace	☐ Graminoid	☐ Stream
☐ Open Water	☐ Basic Bedrk	☐ Valley Slope	☐ Forb	☐ Marsh
☐ Shallow Water	☐ Carb. Bedrk	☐ Tableland	☐ Lichen	☐ Swamp
☒ Surficial Dep.		☒ Roll Upland	☐ Bryophyte	☐ Fen
☐ Bedrock		☐ Cliff	☒ Deciduous	☐ Bog
History		☐ Talus	☐ Coniferous	☐ Barren
☒ Natural		☐ Crevice/Cave	☐ Mixed	☐ Meadow
☐ Cultural		☐ Ahar		☐ Prairie
Cover		☐ Rockland		☐ Thicket
☐ Open		☐ Beach / Bar		☐ Savannah
☐ Shrub		☐ Sand Dune		☐ Woodland
☒ Treed		☐ Bluff		☒ Forest
				☐ 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	Near beach > T. l. c. > 10' m. = P. u. - p. - s. - l.
2	3	3	At beach > P. u. - p. - s. - l. > T. l. c.
3	6	3	At 10' m. > 5 m. l. c. > near beach = P. u. - p. - s. - l.
4			

HT Codes:		7 = 0.2m	8 = 0.2-0.5m	9 = 0.5-1m	4 = 1-2m	3 = 2-6m	2 = 6-25m	1 = >25m
CVR Codes:		0 = none	10% - 10%	20% - 25%	35% - 60%	4 = 60%		
Stand Composition:	Size Class Analysis:	A	<10	A	10-24	O	25-50	N >50
	Standing Snags:	R	<10	O	10-24	R	25-50	N >50
BA:	Deadfall / Logs:	A	<10	O	10-24	O	25-50	N >50

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

Com. Age:	☐ Pioneer	☐ Young	☐ Mid-Age	☒ Mature	☐ Old Growth
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Ecosite:	Deciduous forest	Code:	F0D
Vegetation Type:	Dry-fresh Sugar Maple Deciduous Forest	Code:	F0D5-1
Inclusion:	Maple, Mineral Decid. Swamp Ecosite	Code:	SWD3 (p. 56)
Complex:		Code:	

Community Profile Diagram/Comments

[illegible]

Notes:

Tree Tally by Species

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
Sugar Maple	+++ III					
Basswood	I					
White Ash	I					
Total						100
Basal Area (BA)						
Dead	II					

Soils Ontario and ELC Soils Description

Pit/Auger #						Summary
UTM	Zone	N7M17				
	Easting	0480839				Moisture Regime I med-fresh
	Northing	4803330				
	Position	road				
	Aspect	hummocky				
	Percent Slope	1%				
	Slope Length	N/a				Drainage rapid/well
Mottles		n.c.m.				
Gley		m.m.				
Water Table		N/a				Effective Texture (indicate below)
Carbonates		-				% CF
Bedrock		-				% CF
1	Depth from zero	16 cm	% CF			
	Texture	fairy sand				% CF
2	Depth from zero	32 cm	% CF			
	Texture	sand				% CF
3	Depth from zero		% CF			
	Texture					
4	Depth from zero		% CF			% CF
	Texture					
	% Surface Stone/Rock	0%				
	Moisture Regime	I med-fresh				
	Drainage	Rapid, well				

Total depth: 48 cm

VASCULAR PLANT CHECKSHEET

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Location: GC4/S3
 Observer: Nick + Caroline

Date: June 2, 2011
 Job Number: _____

DICOT HERBS												MONOCOT HERBS					
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Achillea millefolium						Erigeron annuus						Plantago lanceolata					Allium plantago-aquatica
Actaea pachypoda	X					Erigeron philadelphicus						Plantago major					Allium tricoccum
Actaea rubra						Erigeron strigosus						Plantago rugelii					Allium
Agalinis						Erysimum cheiranthoides						Podophyllum peltatum					Arisaema triphyllum
Agrostis hyemalis						Eupatorium maculatum						Polygonum					Asparagus officinalis
Alliaria petiolata	X					Eupatorium perfoliatum						Polygonum					Cela palustris
Amaranthus retrofractus						Eupatorium rugosum						Polygonum					Clinostema boreale
Ambrosia artemisiifolia						Euphorbia						Polygonum lapathifolium					Conoclinium majus
Amphicarpaea bracteata						Euthamia graminifolia						Polygonum persicaria					Cypripedium calceolus
Anaphalis margaritacea						Fragaria virginiana						Potentilla					Diodea canadensis
Anemone						Fragaria vesca						Potentilla norvegica					Eupactis heliophora
Anemone canadensis						Galeopsis tetrahit						Potentilla recta					Erythronium americanum
Anemone virginiana						Galium						Pteranthus alba	X				Hemerocallis fulva
Antennaria neglecta						Galium						Prunella vulgaris					Iris versicolor
Apocynum androsaemifolium						Galium palustre						Pyrola elliptica					Lemna minor
Apocynum cannabinum						Galium triflorum						Ranunculus					Lemna trisulca
Aquilegia canadensis						Geranium maculatum						Ranunculus abortivus					Lilium
Arnica montana						Geranium robertianum	X					Ranunculus acris					Melanthium canadense
Artemisia						Geum aleppicum						Rudbeckia hirta					Melanthium racemosum
Asarum canadense						Geum canadense						Rumex acetosella					Melanthium stellata
Asclepias incarnata						Geum						Rumex crispus					Parthenocissus
Asclepias syriaca						Glechoma hederacea						Rumex					Parthenocissus cordata
Aster						Hepatica acutiloba						Sanguinaria canadensis					Polygonatum pubescens
Aster cordifolius						Hesperis matronalis						Saricula maritima					Potamogeton crispus
Aster ericoides						Hieracium aurantiacum						Saponaria officinalis					Potamogeton pectinatus
Aster lanceolatus						Hieracium caespitosum						Satureja vulgaris					Potamogeton
Aster laevis						Hieracium						Scutellaria galericulata					Potamogeton
Aster multiflorus						Hydrophyllum virginianum						Silene vulgaris					Potamogeton
Aster macrophyllus						Hypericum perforatum						Sium suave					Sagittaria latifolia
Aster novae-angliae						Impatiens capensis	X					Solanum dulcamara					Sisyrinchium montanum
Aster puniceus						Inula helenium						Solidago					Smilax herbacea
Barbarea vulgaris						Lactuca						Solidago altissima					Spiranthes cernua
Bidens cernua						Laportea canadensis						Solidago canadensis					Spirodela polyrrhiza
Bidens frondosa						Lapsana communis						Solidago canadensis					Streptopus roseus
Bolmaria cylindrica						Leonurus cardiaca						Solidago flexicaulis	X				Trillium erectum
Caltha palustris						Lepidium						Solidago gigantea					Trillium grandiflorum
Calystegia sepium						Linaria vulgaris						Solidago nemoralis					Urtica dioica
Cardamine diphylla						Lithospermum officinale						Solidago rugosa					
Cardamine						Lobelia						Sonchus asper					
Caulophyllum thalictroides						Lobelia inflata						Sonchus oleraceus					
Cerastium fontanum						Lotus corniculatus						Stellaria					
Cerastophyllum demersum						Lycopus americanus	X					Tanacetum vulgare					
Chelidonium majus						Lycopus						Taraxacum officinale					
Chenopodium album						Lysimachia ciliata						Thalictrum dioicum					
Chrysanth. leucanthemum						Lythrum salicaria						Thalictrum pubescens					
Cichorium intybus						Medicago lupulina						Tiarella cordifolia					
Cicuta						Medicago sativum						Tragopogon pratensis					
Circaea leutelliana	X					Melilotus alba						Trifolium boreale					
Cirsium arvense						Mercurialis perennis						Trifolium					
Cirsium vulgare						Mimulus ringens						Trifolium pratense					
Clematis virginiana						Mimulus ringens						Trifolium repens					
Clinostema boreale						Mitella diphylla						Tussilago farfara					
Coryza canadensis						Monarda fistulosa						Urtica dioica					
Cornus varia						Myosotis						Urticularia vulgaris					
Cynanchum roseolum						Nasturtium officinale						Verbascum thapsus					
Cynoglossum officinale						Nepeta cataria						Verbena hastata					
Daucus carota						Nuphar variagatum						Verbena urticifolia					
Desmodium canadense						Nymphaea odorata						Veronica					
Diarrhiza americana						Oenothera biennis						Veronica officinalis					
Dipsacus fulorum						Osmorhiza						Viola cracca					
Echinocystis lobata						Oxalis stricta						Viola tetrasperma					
Echium vulgare						Phytolacca americana						Viola					
Epilobium						Physalis heterophylla						Viola					
Epilobium ciliatum												Viola pubescens					
Epilobium hirsutum												Viola sororia					
Epilobium parviflorum																	

SITE LOCATIONS

1: _____ 4: _____
 2: _____ 5: _____
 3: _____ 6: _____

