

CONIFERS							TREES and SHRUBS							GRAMINOIDS						
	1	2	3	4	5	6		1	2	3	4	5	6		1	2	3	4	5	6
Abies balsamea							Rosa multiflora							Agrostis gigantea						
Juniperus communis							Rosa							Agrostis stolonifera						
Juniperus virginiana							Rubus allegheniensis							Agropyron repens						
Larix laricina							Rubus idaeus							Alupectis						
Picea abies							Rubus occidentalis							Bromus inermis						
Picea glauca							Rubus odoratus							Calamagrostis canadensis						
Pinus resinosa							Rubus pubescens							Carex acrota						
Pinus strobus							Salix alba							Carex aurea						
Pinus sylvestris							Salix amygdaloides							Carex boottii						
Thuja occidentalis							Salix babingtoni							Carex blanda						
Tsuga canadensis	X						Salix discolor							Carex gracillima	X					
							Salix eriopetala							Carex granulata						
							Salix exigua							Carex hystericina						
							Salix lucida							Carex pennsylvanica						
							Salix petiolaris							Carex radiata						
TREES and SHRUBS							Salix purpurea							Carex retrorsa						
Acer negundo							Salix x rubens							Carex stipens						
Acer rubrum							Salix							Carex stricta						
Acer saccharinum							Sambucus canadensis							Carex vulpinoides						
Acer saccharum	X						Sambucus racemosa							Carex pedunculata	X					
Acer spicatum							Sorbus aucuparia							Carex						
Alnus rugosa							Sorbus sibirica							Carex inornata	X					
Amelanchier sp.	X						Syringa vulgaris							Carex						
Berberis thunbergii							Tilia americana	X						Carex						
Betula alleghaniensis	X						Ulmus americana	X						Carex						
Betula papyrifera							Ulmus							Carex						
Carpinus caroliniana							Vaccinium							Carex						
Carya cordiformis	X						Viburnum lentago							Carex						
Celastrus scandens							Viburnum opulus							Cyperus						
Cornus alternifolia							Viburnum							Cyperus						
Cornus amomum							Vitis riparia							Dactylis glomerata						
Cornus rugosa														Danthonia spicata						
Cornus stolonifera							CARYA OVATA	X						Dianthus arvensis						
Corylus cornuta							ACER X FREEMANII	X						Echinochloa crus-galli						
Cotoneaster monoxygna							NIL							Elychris erythropoda						
Cotoneaster punctata							EVOLVIMOUS	X						Elychris						
Cotoneaster sp.							CEPHALANTHUS	X						Elymus hystrix	X					
Cotoneaster							CORNUS	X						Festuca arundinacea						
Diervilla lonicera							RACEMOSEA							Glyceria stricta						
Fagus grandifolia	X						CEPHALANTHUS	X						Glyceria						
Fraxinus americana							OCIDENTALIS							Juncus dudleyi						
Fraxinus nigra							FERNS							Juncus effusus						
Fraxinus pennsylvanica	X						Adiantum pedatum							Juncus tenuis						
Ilex verticillata							Athyrium filix-femina							Juncus						
Juglans cinerea							Botrychium multifidum							Juncus						
Juglans nigra							Botrychium virginianum							Leersia oryzoides						
Lonicera marowii							Cystopteris bulbifera							Muhlenbergia						
Lonicera hians							Dryopteris caroliniana		X					Oryzopsis asperifolia						
Lonicera							Dryopteris cristata							Panicum						
Malus panicata							Dryopteris striatella		X					Panicum						
Ostrya virginiana	X						Elychris							Phalaris arundinacea						
Parthenocissus vitacea							Rhynchospora							Poa annua						
Populus balsamifera							Rhynchospora arvensis							Poa compressa						
Populus grandidentata							Rhynchospora hymenolepis							Poa pratensis						
Populus tremuloides							Rhynchospora variegata							Poa						
Populus							Rhynchospora							Setaria						
Prunus pennsylvanica							Rhynchospora							Sparganium						
Prunus serotina		X					Rhynchospora							Typha angustifolia						
Prunus virginiana		X					Rhynchospora							Typha latifolia						
Prunus							Rhynchospora							Typha X glauca						
Quercus macrocarpa		X					Rhynchospora													
Quercus rubra		X					Rhynchospora													
Quercus							Rhynchospora													
Rhamnus cathartica							Rhynchospora													
Rhus typhina							Rhynchospora													
Ribes americanum							Rhynchospora													
Ribes cynosbati							Rhynchospora													
Ribes x rubrum							Rhynchospora													
Rubus pseudo-acacia							Rhynchospora													

ELC WILDLIFE	SITE: 216	
	POLYGON: 12. and 13.	
	DATE: DEC. 13, 2011	
	SURVEYORS:	
START TIME:	END TIME:	

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

POTENTIAL WILDLIFE HABITAT:

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

SPECIES LIST:

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
M	Eastern Cottontail	TK		-					
M	White Tail Deer	SC		-					
B	White Breasted Nuthatch	VO		-					
B	Tundra or Trumpeter Swans	OB	~10 Flew over woodlot						

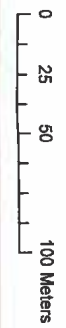
FAUNAL TYPE CODES (TY):
 B = BIRD M = MAMMAL H = HERPETOFAUNA L = LEPIDOPTERA F = FISH O = OTHER

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)

Goshen Feature: 196 GSH1532

(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
- Blower/Wind Energy Centre



ELC Site: 196_GSH1632 Polygon: P6-GSH 1532 VI
 Community Classification and Description: JP-C05 Surveyor(s): Date: Sept 7, 2011 Time start: 10:49am
 UTMZ: 17 UTMZ: 44570 UTMZ finish: 2:22 UTMN: 4790410

Polygon Description K⁵C, overcast, breezy

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

Stand Description Riparian tree zone

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

Layer	HT	CVR	Species
1	2	3	FRAAXW > FPAAXE >> SALRUG
2	3	2	FRAAXW > PAAXE = RANHLE
3	5	2	for PAAXE
4	5-4	4	AMBTRIF > SOLCFA = SOLAL+1

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 8 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m
 CVR Codes: 0 = None 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 50 - 75% 5 75 - 90% 6 90 - 100%

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

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

Excelsior: *Swat-Deedums* Code: *FDD7*
 Vegetation Type: *Tree-Miss first several decades* Code: *FDD7-2*
 Inclusion: Code: Code:
 Complex: Code: Code:

Community Profile Diagram/Comments

For Riparian tree zone
Riparian tree zone
Some riparian edge remaining within zone

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

Soil Horizon Description	Depth to...	Site Metrics				Effective Texture (Indicate below)
		PIVAuger #		UTM		
1	Depth from zero	25cm	% CF			% CF
2	Depth from zero		% CF			% CF
3	Depth from zero		% CF			% CF
4	Depth from zero		% CF			% CF

ELC
Community Description and Classification

Site: 196 GSF 1532 Polygon: V2

Surveyor(s): NP-CH Date: Sept. 7, 2011 Time start: 10:47 am
UTMZ: UTMZ: UTMZ: UTMZ: finish: 1:30 pm
UTMN: 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-L.VD.	<input type="checkbox"/> River
<input type="checkbox"/> Site	<input type="checkbox"/> Acidic Bedrk	<input type="checkbox"/> Terrace	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
<input type="checkbox"/> Open Water	<input type="checkbox"/> Basic Bedrk	<input type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Shallow Water	<input type="checkbox"/> Carb. Bedrk	<input checked="" type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input type="checkbox"/> Swamp
<input checked="" type="checkbox"/> Surficial Dep.		<input type="checkbox"/> Roll, Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Cliff	<input checked="" type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
<input type="checkbox"/> History		<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input checked="" type="checkbox"/> Natural		<input type="checkbox"/> Crevice/Cave	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input type="checkbox"/> Cultural		<input type="checkbox"/> Alvar	<input type="checkbox"/> Rockland	<input type="checkbox"/> Prairie
<input type="checkbox"/> Cover		<input type="checkbox"/> Beach / Bar	<input type="checkbox"/> Sand Dune	<input type="checkbox"/> Thicket
<input type="checkbox"/> Open		<input type="checkbox"/> Bluff		<input type="checkbox"/> Savannah
<input type="checkbox"/> Shrub				<input checked="" type="checkbox"/> Woodland
<input checked="" type="checkbox"/> Treed				<input type="checkbox"/> Forest
				<input type="checkbox"/> Plantation

Stand Description

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

Layer	HT	CVR	Species
1		3	MUGLIFR >>> FRAXM R
2			
3			
4			

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 8 > 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 - 80% 5 80 - 100%

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

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

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

Ecotope: Cultural Woodland Code: CWL
Vegetation Type: Mixed Cultural Woodland Code: CWL
Inclusion: Code: Code:
Complex: Code: Code:

Community Profile Diagram/Comments

On this site of ~~intermediate~~ dominance by ~~Sideroxylon~~
Notes: * No access

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

Soils Ontario and ELC Soils Description	PI/Auger #	Site Metrics				Summary
		Zone	UTM	Position	Aspect	
Mottles		Easting				Moisture Regime
		Northing				
Slope		Percent				Drainage
		Slope Length				
Gley						Effective Texture (Indicate below)
		Water Table				
Carbonates						
		Bedrock				

Soil Horizon Description	Depth to...	Soil Metrics							
		Depth from zero	% CF	Texture	Depth from zero	% CF	Texture	Depth from zero	% CF
1									
2									
3									
4									
Moisture Regime									
Drainage									

VASCULAR PLANT CHECKSHEET

Location: 196-GSH/532

Date: Sept 7, 2011

Observer: JP-CRW

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 millefolia						Erigeron annuus						Plantago lanceolata					Alisma plantago-aquatica
Actaea pachypoda						Erigeron philadelphicus						Plantago major					Allium tricoccum
Actaea rubra						Erigeron strigosus						Plantago rugelii					Allium
Agalinus						Erysimum cheiranthoides						Podophyllum peltatum					Arisaema triphyllum
Agrimonia gryposepala						Eupatorium maculatum						Polygonum					Asparagus officinalis
Alliaria petiolata		XX				Eupatorium perfoliatum						Polygonum					Cela palustris
Amaranthus retroflexus		XX				Eupatorium rugosum						Polygonum					Cirtonia borealis
Ambrosia artemisiifolia		XX				Euphorbia						Polygonum lapathifolium					Coriaria majus
Amphicarpaea bracteata						Euthamia graminifolia		X				Polygonum persicaria					Cypripedium calceolus
Anaphalis margaritacea						Fragaria virginiana		XX				Potentilla					Ethoca canadensis
Anemone						Fragaria vesca						Potentilla norvegica					Epipactis helleborine
Anemone canadensis		X				Galeopsis tetrahit						Potentilla recta					Erythronium americanum
Anemone virginiana						Galium						Prenanthes alba					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
Aralia nudicaulis						Geranium robertianum						Ranunculus acris					Melantherum canadense
Arctium minus		X				Geum alappicum						Rubus hirta					Melantherum racemosa
Artemisia						Geum canadense						Rumex acetosella					Melantherum stellata
Asarum canadense						Geum nolinum		XX				Rumex crispus		XX			Platanthera
Asclepias incarnata						Glechoma hederacea						Rumex					Pontederia cordata
Asclepias syriaca		X				Hepatica acutiloba						Sanguinaria canadensis					Polygonatum pubescens
Aster						Hesperis matronalis						Sanicula marilandica					Potamogeton crispus
Aster cordifolius						Hieracium aurantiacum						Saponaria officinalis					Potamogeton pectinatus
Aster ericoides		X				Hieracium caespitosum						Satureja vulgaris					Potamogeton
Aster lanceolatus						Hieracium						Scutellaria galericulata					Potamogeton
Aster lateriflorus						Hydrophyllum virginianum						Silene vulgaris					Potamogeton
Aster macrophyllus						Hypericum perforatum						Slum suave					Segitaria latifolia
Aster novae-angliae		XX				Impatiens capensis		X				Solanum dulcamara					Styracchin montanum
Aster puniceus						Inula helenium						Solidago					Smilax herbacea
Barbarea vulgaris						Lactuca						Solidago altissima		X			Spiranthes cernua
Bidens cernua						Laportea canadensis						Solidago caesia					Spirodelia polyrrhiza
Bidens frondosa						Lapsana communis						Solidago canadensis		X			Streptopus roseus
Boehmeria cylindrica						Leonurus cardiaca						Solidago flexicaulis					Trillium erectum
Callitriche palustris						Lepidium						Solidago gigantea					Trillium grandiflorum
Calysstegia sepium						Lineria vulgaris						Solidago nemoralis					Urtica grandiflora
Cardamine diphylla						Lithospermum officinale						Solidago rugosa					
Cardamine						Lobelia						Sonchus arvensis					
Caulophyllum thalictroides						Lobelia inflata						Sonchus asper					
Cerastium fontanum						Lolium corniculatus						Stellaria					
Ceratophyllum demersum						Lycopus americanus						Tanacetum vulgare					
Chailidonium majus						Lycopus						Taraxacum officinale		XX			
Chenopodium album						Lysimachia ciliata						Thalictrum dioicum					
Chrysanth. leucanthemum						Lythrum salicaria						Thalictrum pubescens					
Cichorium intybus						Medicago lupulina						Tierella cordifolia					
Cicuta						Medicago sativum						Tragopogon pratensis					
Circaea leutetiana		XX				Melilotus alba						Trientalis borealis					
Cirsium arvense		XX				Mentha arvensis						Trifolium					
Cirsium vulgare						Mimulus ringens						Trifolium pratense					
Clematis virginiana						Mimulus ringens						Trifolium repens					
Cirtonia borealis						Mitella diphylla						Tussilago farfara					
Coryza canadensis						Morone fistulosa						Urtica dioica					
Coronilla varia						Mycostis						Utricularia vulgaris					
Cynanchum rossicum						Nasturtium officinale						Verbascum thapsus					
Cynoglossum officinale						Nepeta cataria						Verbena hastata					
Daucus carota		XX				Nuphar variegatum						Verbena urticifolia					
Desmodium canadense						Nymphaea odorata						Veronica					
Dianthus armeria						Oenothera biennis						Veronica officinalis					
Dipascus fulvum						Osmorhiza						Viola cracca					
Echinocystis lobata						Oxalis stricta		X				Viola lasperma					
Eclitum vulgare						Phytol leptostachya						Viola sp.		X			
Epilobium						Physalis heterophylla						Viola					
Epilobium ciliatum												Viola pubescens					
Epilobium hirsutum												Viola sororia					
Epilobium parviflorum																	
<i>Hymoxia triloba</i>		XX															

- 1: VI
 2: V2 - Black Walnut ~~WOM~~ C.W.
 3: _____
 4: _____
 5: _____
 6: _____

SITE LOCATIONS

CONIFERS						TREES and SHRUBS						GRAMINOIDS					
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Abies balsamea						+ Rosa multiflora						Agrostis gigantea					
Juniperus communis						Rosa						Agrostis stolonifera					
Juniperus virginiana						Rubus allegheniensis						Agropyron repens					
Larix laricina						Rubus idaeus		X	X			Alopecurus					
Picea abies						Rubus occidentalis		X	X			Bromus inermis					
Picea glauca						Rubus odoratus						Calamagrostis canadensis					
Pinus resinosa						Rubus pubescens						Carex arctata					
Pinus strobus		X				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 retrosa					
Acer negundo						Salix x rubens		X				Carex stipata					
Acer rubrum						+ Salix						Carex stricta					
Acer saccharinum						Sambucus canadensis						Carex vulpinoidea					
Acer saccharum						Sambucus racemosa						Carex <i>sp. 1840</i>		X			
Acer spicatum						Sorbus aucuparia						Carex					
Alnus rugosa						Spiraea alba						Carex					
Amelanchier						Syringa vulgaris						Carex					
Berberis thunbergii						+ Tilia americana						Carex					
Betula alleghaniensis						Ulmus americana						Carex					
Betula papyrifera						Ulmus						Carex					
Carpinus caroliniana						Vaccinium						Carex					
Carya cordiformis						Viburnum lentago						Carex					
Celastrus scandens						Viburnum opulus						Cyperus					
Cornus alternifolia						Viburnum						Cyperus					
Cornus amomum <i>RARE</i>		X				Vitis riparia		X	X			Dactylis glomerata			X	X	
Cornus rugosa												Danthonia spicata					
Cornus stolonifera												Echinochloa crus-galli					
Corylus cornuta												Eleocharis erythropoda					
Crataegus monogyna												Eleocharis					
Crataegus punctata												Elymus virginicus					
Crataegus sp.												Elymus					
Crataegus												Festuca arundinacea					
Diervilla lonicera												Glyceria striata					
Fagus grandifolia												Glyceria					
Fraxinus americana		X										Juncus dudleyi					
Fraxinus nigra						FERNS						Juncus effusus					
Fraxinus pennsylvanica		X				Adiantum pedatum						Juncus tenuis					
Ilex verticillata						Athyrium filix-femina						Juncus					
Juglans cinerea						Botrychium multifidum						Juncus					
Juglans nigra		X	X			Botrychium virginianum						Leersia oryzoides					
Lonicera morrowi						Cystopteris bulbifera						Muhlenbergia					
Lonicera tatarica						Dryopteris carthusiana						Oryzopsis asperifolia					
Lonicera						Dryopteris cristata						Panicum					
Malus pumila						Dryopteris marginalis						Panicum					
Ostrya virginiana						Dryopteris						Phalaris arundinacea					
Parthenocissus inserta						Equisetum arvense						Phleum pratense					
Populus balsamifera						Equisetum hyemale						Phragmites australis					
Populus grandidentata						Equisetum variegatum						Poa compressus					
Populus tremuloides		X				Equisetum						Poa pratensis					
Populus						Gymnocarpium dryoperis						Poa					
Prunus pennsylvanica		X				Lycopodium digitatum						Scirpus atrovirens					
Prunus serotina						Lycopodium obscurum						Scirpus cyperinus					
Prunus virginiana						Lycopodium						Scirpus validus					
Prunus						Lycopodium						Scirpus					
Quercus macrocarpa						Matteucia struthiopteris						Scirpus					
Quercus rubra						Onoclea sensibilis						Setaria					
Quercus						Osmunda cinnamonia						Sparganium					
Rhamnus cathartica						Osmunda regalis						Typha angustifolia					
Rhus radicans						Polystichum acrostichoides						Typha latifolia					
Rhus typhina		X	X			Pteridium aquilinum						Typha X glauca					
Ribes americana						Thelypteris palustris											
Ribes cynosbati																	
Ribes x rubrum																	
Robinia pseudo-acacia																	

ELC WILDLIFE	SITE: <i>heathell 196-GSH 1532</i>	
	POLYGON: <i>V1 + V2</i>	
	DATE: <i>September 7, 2011</i>	
	SURVEYORS: <i>JP-CB</i>	
	START TIME: <i>10:49 am</i>	END TIME: <i>12:22 pm</i>

TEMP (°C): <i>15°C</i>	CLOUD (10th):	WIND:	PRECIPITATION:
CONDITIONS:			

POTENTIAL WILDLIFE HABITAT:

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

SPECIES LIST:

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
	<i>WOFR</i>	<i>OB</i>							
	<i>DEER</i>	<i>TK</i>							
	<i>GREEN DARNER</i>	<i>OB</i>							

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)

Goshen Feature: 216 GSH1527/1528/1532 / G552

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

h

September 1, 2011

0 25 50 100 Meters

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



ELC		Site: 216_GSH1528	Polygon: V-6252
Community Description and Classification	Surveyor(s): V.C.B.	Date: 29.7.2011	Time start: 12:44pm
	UTMZ: 17	UTMZ: 442217	finsh: 12:50pm
		UTMN: 4790829	

Polygon Description: 16-19 pics 15C, overcast

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

Stand Description

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than, > Greater Than, = About Equal To)
1	1	4	TILAMEE > CAROVAT > CARCARIU > AESACK
2	2	3	CARCARIU > CAROVAT = TILAMEE
3	3	3	EUAOBVIA > CILICIT > ZGERAKU
4	6	3	

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%

Stand Composition	<10	10-24	25-50	>50
Abundance Codes:	N	N	N	N
	O	A	A	R
	O	A	A	R

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

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

Ecosystem Type	Vegetation	Complex
Deciduous Forest	Frnk-Mist-Oak-Magde-Hickory deciduous	FDDN
Grasslands	Grasslands	FDDN 9

Community Profile Diagram/Comments

lots of mixed size trees
 lots of canopy layer edge
 notes within larger circle mainly of hardwood

Tree Tally by Species

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
TILAMEE	111					
CAROVAT	111					
QOEBICA	1					
TILAMEE	1					
Total	9					
Total Area (BA)	18					100

Soils Ontario and ELC Soils Description

Pit/Auger #	Site Metrics				Summary
	Zone	Easting	Northing	Position	
17		0442292	4790863	Flat	Moisture Regime
				Slope	Drainage
				Length	
				Mottles	Effective Texture (indicate below)
				Gley	
				Water Table	
				Carbonates	
				Bedrock	

Soil Horizon Description	Depth to...	Soil Metrics			
		Depth from zero	% CF	Texture	Effective Texture (indicate below)
1	Depth from zero	30cm	% CF		% CF
	Texture	1 Dam			
2	Depth from zero	30cm	% CF		% CF
	Texture	SC			
3	Depth from zero		% CF		% CF
	Texture				
4	Depth from zero		% CF		% CF
	Texture				

Moisture Regime: Moist

Drainage

Total
 mottles @ 30cm

ELC (Community and Description and Classification)

Site: 216 SH1528 Polygon: V2

Surveyor(s): SP-26 Date: _____ Time start: 12:44 pm

UTMZ: _____ UTMZ: _____ UTMN: _____ UTMN: 2:10 pm

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-L.V.D.	<input type="checkbox"/> River
Site	<input type="checkbox"/> Acidic Bedrk	<input type="checkbox"/> Terrace	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
<input type="checkbox"/> Open Water	<input type="checkbox"/> Basic Bedrk	<input type="checkbox"/> Valley Slope	<input checked="" type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Shallow Water	<input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input type="checkbox"/> Swamp
<input checked="" type="checkbox"/> Surficial Dep.	<input type="checkbox"/> Bedrock	<input type="checkbox"/> Roll, Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
History	<input type="checkbox"/> Natural	<input type="checkbox"/> Cliff	<input type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
<input type="checkbox"/> Cultural	<input type="checkbox"/> Cover	<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input checked="" type="checkbox"/> Open	<input type="checkbox"/> Natural	<input type="checkbox"/> Crevice/Cave	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input type="checkbox"/> Shrub	<input type="checkbox"/> Cultural	<input type="checkbox"/> Alvar	<input type="checkbox"/> Rockland	<input type="checkbox"/> Prairie
<input type="checkbox"/> Treed	<input type="checkbox"/> Cover	<input type="checkbox"/> Beach / Bar	<input type="checkbox"/> Sand Dune	<input type="checkbox"/> Thicket
		<input type="checkbox"/> Bluff	<input type="checkbox"/> Savannah	<input type="checkbox"/> Woodland
			<input type="checkbox"/> Forest	<input type="checkbox"/> Plantation

Stand Description

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

Layer	HT	CVR	Species
1	2	1	FRAXMOR
2	4	1	CORRAC > MALPYR1
3	4	4	SORANA = SOLAFI > ASTNUVA > ROUNER
4	6	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 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition:

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

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

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

Ecocite: _____ Code: _____

Vegetation Type: DM - Moist Cultural Meadow Code: Cum 1-1

Inclusion: _____ Code: _____

Complex: _____ Code: _____

Community Profile Diagram/Comments

Cultural meadow open area with scattered trees and shrubs

Notes:

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

Soils Ontario and ELC Soils Description	Summary	
	Moisture Regime	Drainage
Pfl/Auger # _____ Zone _____ Easting <u>442250</u> Northing <u>4790963</u> Position _____ Aspect _____ Percent _____ Slope _____ Slope Length _____ Mottles _____ Gley _____ Water Table _____ Carbonates _____ Bedrock _____		

Soil Horizon Description

Depth to...	Horizon	Depth from zero	Texture	% CF	Effective Texture (indicate below)
1	Bedrock	30cm	SIC		% CF
2	Bedrock				% CF
3	Bedrock				% CF
4	Bedrock				% CF

Soil Horizon Description

Horizon	Depth from zero	Texture	% CF	Effective Texture (indicate below)
1	30cm	SIC		% CF
2				% CF
3				% CF
4				% CF

ELC Community and Description and Classification	Site: 216_GSH1532	Polygon: 1/1 - Along edge of feature
	Surveyor(s):	Date: Time start: 12:23
	UTMZ:	UTMZ: finish: 12:44

Polygon Description pic 13-

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

Stand Description

HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than, > Greater Than, = About Equal To)
1	3	T/AMERIC'S FRAXINUS >>> Q/EA ALBA
2	2	Q/RPCE
3	5	
4	4	S/CAVANA >> A/STINOVA

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%

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

Pioneer Young Mid-Age Mature Old Growth

Code: FDD3
Code: FDD9
Code:
Code:

Community Profile Diagram/Comments

also along edge of W. station line
 only small patches in within range area

Notes:

Tree Tally by Species

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
Tall						100
Short Area (BA)						
Dwarf						

Soils Ontario and ELC Soils Description

Soil Horizon Description	Depth to...	Site Metrics				Summary
		PI/Auger #	UTM	Slope	Moisture Regime	
1	Depth from zero	% CF	% CF	% CF	% CF	Effective Texture (indicate below)
2	Depth from zero	% CF	% CF	% CF	% CF	
3	Depth from zero	% CF	% CF	% CF	% CF	
4	Depth from zero	% CF	% CF	% CF	% CF	



VASCULAR PLANT CHECKSHEET

Date: September 7, 2011

Location: 216-6541533

Observer: JP-CR

Job Number:

DICOT HERBS													MONOCOT HERBS						
	1	2	3	4	5	6	1	2	3	4	5	6		1	2	3	4	5	6
Chillea millefolida		X					Erigeron annuus						Plantago lanceolata						Arisma plantago-aquatica
Cicuta pachypoda							Erigeron philadelphicus						Plantago major						Allium tricoccum
Cicuta rubra							Erigeron strigosus						Plantago rugelii						Allium
Agalinus							Erysimum chieranthoides						Podophyllum peltatum						Arisaema triphyllum
Agrimonia gryposepala							Eupatorium maculatum						Polygonum						Asparagus officinalis
Allaria petiolaris							Eupatorium perforatum						Polygonum						Calla palustris
Amaranthus retroflexus							Eupatorium rugosum						Polygonum						Clinortia borealis
Ambrosia artemisiifolia							Euphorbia						Polygonum lapathifolium						Convallaria majus
Anaphalipsea bracteata							Euthamia graminifolia		X				Polygonum persicaria						Cypripedium calceolus
Anaphalis margaritacea							Fragaria virginiana		X				Potentilla						Elodea canadensis
Anemone							Fragaria vesca						Potentilla norvegica						Epipactis helleborine
Anemone canadensis							Galeopsis tetrahit						Potentilla recta						Erythronium americanum
Anemone virginiana							Galium						Prenanthes alba						Hemerocallis fulva
Antennaria neglecta							Galium						Prunella vulgaris						Iris versicolor
Apocynum androsaemifolium							Galium palustre						Pyrola elliptica						Lemma minor
Apocynum cannabinum							Galium triflorum						Ranunculus						Lemma trisulca
Aquilegia canadensis							Geranium maculatum			X			Ranunculus abortivus						Lilium
Aralia nudicaulis							Geranium robertianum			X			Ranunculus acris						Melianthum canadense
Achilleum minus		X					Geum alepicum						Rudbeckia hirta						Melianthum racemosa
Arenaria							Geum canadense						Rumex acetosella						Melianthum stellata
Asarum canadense							Geum <i>sp.</i>			X			Rumex crispus			X			Pistaria
Asclepias incarnata							Glecoma hederacea						Rumex						Portulaca cordata
Asclepias syriaca		X					Hepatica acutiloba						Sanguinaria canadensis						Polygonatum pubescens
Aster <i>sp.</i>		X					Hesperis matronalis						Sanicula marilandica						Potamogeton crispus
Aster cordifolius							Hieracium aurantiacum						Saponaria officinalis						Potamogeton pectinatus
Aster ericoides							Hieracium caespitosum						Satureja vulgaris						Potamogeton
Aster lanceolatus							Hieracium						Scutellaria galericulata						Potamogeton
Aster lateriflorus		X					Hydrophyllum virginianum						Silene vulgaris						Sagittaria latifolia
Aster macrophyllus							Hypericum perforatum			X			Sium suave						Sisyrinchium montanum
Aster novae-angliae		X					Impatiens capensis						Solanum dulcamara						Smilax herbacea
Aster puniceus							Inula helenium						Solidago <i>sp.</i>				X		Spiranthes cernua
Barbarea vulgaris							Lactuca						Solidago altissima				X		Spirodela polytriza
Bidens cernua							Laportea canadensis						Solidago caesia						Streptopus roseus
Bidens frondosa							Lapsana communis						Solidago canadensis				X		Trillium erectum
Boehmeria cylindrica							Leonurus cardiaca						Solidago flexicaulis						Trillium grandiflorum
Callitriche palustris							Lepidium						Solidago gigantea						Uvularia grandiflora
Calystegia sepium							Linaria vulgaris						Solidago nemoralis						
Cardamine diphylla							Lithospermum officinale						Solidago rugosa						
Cardamine							Lobelia						Sonchus oleraceus						
Caulophyllum thalictroides							Lobelia inflata						Sonchus asper						
Cerastium fontanum							Lotus corniculatus						Stellaria						
Ceratophyllum demersum							Lycopus americanus						Tanacetum vulgare						
Chelidonium majus							Lycopus						Taraxacum officinale				X		
Chenopodium album							Lysimachia ciliata						Thalictrum dioicum						
Chrysanth. leucanthemum							Lythrum salicaria						Thalictrum pubescens						
Cichorium intybus							Medicago lupulina			X			Tiarella cordifolia						
Cicuta							Medicago sativum						Tragopogon pratensis						
Circaea leucotiana		X					Melilotus alba						Trientalis borealis						
Cirsium arvense							Mentha arvensis						Trifolium						
Cirsium vulgare							Mimulus ringens						Trifolium pratense						
Clematis virginiana							Mimulus ringens						Trifolium repens						
Clinortia borealis							Mullethia diphylla						Tussilago farfara						
Coryza canadensis							Monsarda fistulosa						Urtica dioica						
Coronilla varia							Mycosiles						Urticularia vulgaris						
Cynanchum rossicum							Nasturtium officinale						Verbascum thapsus						
Cynoglossum officinale							Nepota cataria						Verbena hastata						
Daucus carota			X				Nuphar variegatum						Verbena urticifolia						
Desmodium canadense							Nymphaea odorata						Veronica						
Dianthus armeria							Oenothera biennis						Veronica officinalis						
Dipsacus fullonum			X				Osmorhiza						Vicia cracca						
Echinopsys lobata							Oxalis stricta			X			Vicia tetrasperma						
Echium vulgare							Phytolaba leptostachya						Viola <i>sp.</i>			X	X		
Epidobium							Phytolaba heterophylla						Viola						
Epidobium ciliatum													Viola pubescens						
Epidobium hirsutum													Viola sororia						
Epidobium parviflorum																			

- 1: VI - FOD
 2: V2 - Cum 1-1
 3: _____
 4: _____
 5: _____
 6: _____

SITE LOCATIONS

I CONIFERS						TREES and SHRUBS						GRAMINOIDS					
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Abies balsamea						+ Rosa multiflora						Agrostis gigantea					
Juniperus communis						Rosa						Agrostis stolonifera					
Juniperus virginiana						Rubus allegheniensis						Agropyron repens					
Larix laricina						Rubus idaeus						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 pennsylvanica					
						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 <i>sp. 100</i>					X
Acer spicatum						Sorbus aucuparia						Carex					
Alnus rugosa						Spiraea alba						Carex					
Amelanchier						Syringa vulgaris						Carex					
Berberis thunbergii						+ Tilia americana					X	Carex					
Betula alleghaniensis						Ulmus americana					X	Carex					
Betula papyrifera						Ulmus						Carex					
Carpinus caroliniana		X				Vaccinium						Carex					
Carya cordiformis		X				Viburnum lentago						Carex					
Celastrus scandens		X				Viburnum opulus						Cyperus					
Cornus alternifolia		X				Viburnum						Cyperus					
Cornus assumens <i>sp.</i>		X				Vitis riparia						Dactylis glomerata					
Cornus rugosa						<i>CAULYGMUS OVATA</i>					X	Danthonia spicata					
Cornus stolonifera												Echinochloa crus-galli					
Corylus cornuta												Eleocharis erythropoda					
Crataegus monogyna												Eleocharis					
Crataegus punctata												Elymus virginicus					
Crataegus sp.												Elymus					
Crataegus												Festuca arundinacea					
Diervilla lonicera												Glyceria striata					
Fagus grandifolia		X										Glyceria					
Fraxinus americana		X	X									Juncus dudleyi					
Fraxinus nigra						FERNS						Juncus effusus					
Fraxinus pennsylvanica						Adiantum pedatum						Juncus tenuis					
Ilex verticillata						Athyrium filix-femina						Juncus					
Juglans cinerea						Botrychium multifidum						Juncus					
Juglans nigra						Botrychium virginianum						Leersia oryzoides					
Lonicera macrocarpa						Cystopteris bulbifera						Muhlenbergia					
Lonicera tatarica						Dryopteris carthusiana						Oryzopsis asperifolia					
Lonicera						Dryopteris cristata						Panicum					
Males pumila						Dryopteris marginalis						Panicum					
Ostrya virginiana						Dryopteris						Phalaris arundinacea					X
Parthenocissus inserta		X				Equisetum arvense					X	Phleum pratense					X
Populus balsamifera						Equisetum hyemale						Phragmites australis					
Populus grandidentata						Equisetum variegatum						Poa compressus					
Populus tremuloides		X				Equisetum						Poa pratensis					
Populus						Gymnocarpium dryopteris						Poa					
Prunus pennsylvanica						Lycopodium digitatum						Scirpus atrovirens					
Prunus serotina						Lycopodium obscurum						Scirpus cyperinus					
Prunus virginiana						Lycopodium						Scirpus validus					
Prunus						Lycopodium						Scirpus					
Quercus macrocarpa						Matteucia struthiopteris						Scirpus					
Quercus rubra						Onoclea sensibilis					X	Setaria					
Quercus <i>alba</i>		X				Osmunda cinnamomina						Sparganium					
Rhamnus cathartica						Osmunda regalis						Typha angustifolia					
Rhus radicans						Polystichum acrostichoides						Typha latifolia					
Rhus typhina						Pteridium aquilinum						Typha Xglauca					
Ribes americana						Thelypteris palustris											
Ribes cynosbati																	
Ribes x rubrum																	
Robinia pseudo-acacia																	
<i>CAULYGMUS OVATA</i>		X															

ELC WILDLIFE	SITE:	
	POLYGON: <i>216 GSH-1532</i>	
	DATE: <i>September 7, 2011</i>	
	SURVEYORS: <i>JP-CB</i>	
	START TIME: <i>12:44</i>	END TIME: <i>2:10</i>

TEMP (°C): <i>15°C</i>	CLOUD (10th):	WIND:	PRECIPITATION:
CONDITIONS:			

POTENTIAL WILDLIFE HABITAT:

<input checked="" type="checkbox"/> VERNAL POOLS	<i>0</i>	<input checked="" type="checkbox"/> SNAGS	
<input checked="" type="checkbox"/> HIBERNACULA (potential within forest)	<i>many piles of stones</i>	<input checked="" type="checkbox"/> FALLEN LOGS	

SPECIES LIST:

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
	<i>morwich</i>	<i>OB</i>							
	<i>WID TURKEY</i>	<i>OB</i>							
	<i>Deer</i>	<i>TK</i>							
	MISSISSIPPI								
	<i>Caribou</i>	<i>VO</i>							

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)

ELC Community Description and Classification

Map #: 2176SH2023 Polygon: F007-2

Surveyor(s): Jess Reke - Jim Sherry Date: April 30, 2012 Time start: 1:30pm finish: 2:55pm

UTMZ: 45243 UTMN:

Polygon Description

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

Stand Description

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp)
1	4	FRAPPEN >> WIMAMER - OSTVICK - TLAMER	
2	3	GRATAEUS SP > BLEBURSE > WIMAMER	
3	2	PENICIA > AGERUS	
4	2	Eucander - Teregan - Alpeti - qsmach	

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

Stand Composition:

Size Class Analysis:	<10	A	10-24	A	25-50	R	>50
Standing Snags:	<10	N	10-24	R	25-50	N	>50
Deadfall / Logs:	<10	A	10-24	O	25-50	N	>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: Fresh - Moist lowland deciduous forest

Vegetation Type: Fresh-Moist Ash lowland deciduous forest

Inclusion: Red Maple Mixed Deciduous Swamp type

Complex:

Notes:

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

Site Metrics	Pit/Auger #	(Foot)	Z (Yrd)	Summary
Zone	17		17	
Easting	452543		452953	
Northing	4791192		4791212	
Position	Flat		Flat	
Aspect				
Percent				
Slope				
Length				
Mottles	32cm		5cm	
Gley				
Water Table				
Carbonates				
Bedrock				

Soil Horizon Description	Depth from zero	Texture	% CF	% CF	% CF
1	28cm	SIL		12cm	
2	43cm	SIL		34cm	
3		Si		SIC	
4					
Moisture Regime	5			6	
Drainage	1/1			1/1	

**Plant Species List
2012**

Dicot Herbs - Asteraceae					Dicot Herbs					Dicot Herbs				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Common Yarrow (<i>Achillea millefolium</i>)					Shepherd's Purse (<i>Capsella bursa-pastoris</i>)					Kidney-leaf Buttercup (<i>Ranunculus abortivus</i>)				
White Snakeroot (<i>Ageratina altissima</i>)					Cutleaf Toothwort (<i>Cardamine concatenata</i>)					Tall Buttercup (<i>Ranunculus acris</i>)				
Com. Ragweed (<i>Ambrosia artemisiifolia</i>)					Toothwort (<i>Cardamine diphylla</i>)					Hooked Buttercup (<i>Ranunculus recurvatus</i>)	U			
Giant Ragweed (<i>Ambrosia trifida</i>)					Penn. Bitter-cress (<i>Cardamine pennsylvanica</i>)					<i>Ranunculus</i>				
Field Pussytoes (<i>Antennaria neglecta</i>)					<i>Cardamine</i>					Sheep Sorrel (<i>Rumex acetosella</i>)				
<i>Artemisia</i>					Blue Cohosh (<i>Caulophyllum thalictroides</i>)	R				Curly-leaf Dock (<i>Rumex crispus</i>)				
Common Burdock (<i>Arctium minus</i>)					Mouse-ear Chickweed (<i>Cerastium fontanum</i>)					Bitter Dock (<i>Rumex obtusifolius</i>)				
Nodding Beggar-ticks (<i>Bidens cernua</i>)					Turtlehead (<i>Chelone glabra</i>)					Bloodroot (<i>Sanguinaria canadense</i>)				
Devil's Beggar-ticks (<i>Bidens frondosa</i>)					Spotted Water-hemlock (<i>Cicuta maculata</i>)					Black Snakeroot (<i>Sanicula marilandica</i>)				
Spotted Knapweed (<i>Centaurea biebersteinii</i>)					Water-hemlock (<i>Cicuta virosa</i>)					Bouncing Bet (<i>Saponaria officinalis</i>)				
Brown Knapweed (<i>Centaurea jacea</i>)					Enchanter's Nightshade (<i>Circaea lutetiana</i>)					Marsh Skullcap (<i>Scutellaria galericulata</i>)				
Chicory (<i>Cichorium intybus</i>)					Carolina Spring Beauty (<i>Claytonia caroliniana</i>)					Mad Dog Skullcap (<i>Scutellaria lateriflora</i>)				
Canada Thistle (<i>Cirsium arvense</i>)					Virginia Spring Beauty (<i>Claytonia virginica</i>)					White Campion (<i>Silene latifolia</i>)				
Bull Thistle (<i>Cirsium vulgare</i>)					Virgin's-bower (<i>Clematis virginiana</i>)					Bladder Campion (<i>Silene vulgaris</i>)				
Horseweed (<i>Conyza canadensis</i>)					Field Bindweed (<i>Convolvulus arvensis</i>)					Hemlock Water-parnsnip (<i>Sium suave</i>)				
Daisy Fleabane (<i>Erigeron annuus</i>)					Dog-strangling Vine (<i>Cynanchum rossicum</i>)					Bitter Nightshade (<i>Solanum dulcamara</i>)				
Philadelphia Fleabane (<i>Erig. philadelphicus</i>)					Wild Carrot (<i>Daucus carota</i>)					Black Nightshade (<i>Solanum ptychanthum</i>)				
<i>Erigeron</i>					Deptford Pink (<i>Dianthus armeria</i>)					Grassleaf Stitchwort (<i>Stellaria graminea</i>)				
Joe-pye-weed (<i>Eupatorium maculatum</i>)					Squirrel-corn (<i>Dicentra canadensis</i>)					Common Chickweed (<i>Stellaria media</i>)				
Boneset (<i>Eupatorium perfoliatum</i>)					Dutchman's-breeches (<i>Dicentra cucullaria</i>)					Early Meadow-rue (<i>Thalictrum dioicum</i>)				
Large-leaved Aster (<i>Eurybia macrophylla</i>)					Wild Teasel (<i>Dipsacus fullonum</i>)					Tall Meadow-rue (<i>Thalictrum pubescens</i>)				
Fiat-top Goldenrod (<i>Euthamia graminifolia</i>)					Wild Cucumber (<i>Echinocystis lobata</i>)					Field Penny-cress (<i>Thlaspi arvense</i>)				
Orange Hawkweed (<i>Hieracium aurantiacum</i>)					Viper's Bugloss (<i>Echium vulgare</i>)					Foamflower (<i>Tiarella cordifolia</i>)				
Field Hawkweed (<i>Hieracium caespitosum</i>)					Northern Willow-herb (<i>Epilobium ciliatum</i>)					Star-flower (<i>Trientalis borealis</i>)				
<i>Hieracium</i>					Hairy Willow-herb (<i>Epilobium hirsutum</i>)					Red Clover (<i>Trifolium pratense</i>)				
Elecampane (<i>Inula helenium</i>)					Small-fl. Willow-herb (<i>Epilobium parviflorum</i>)					White Clover (<i>Trifolium repens</i>)				
Prickly Lettuce (<i>Lactuca scariola</i>)					<i>Epilobium</i>					<i>Trifolium</i>				
<i>Lactuca</i>					Worm Mustard (<i>Erysimum cheiranthoides</i>)					Stinging Nettle (<i>Urtica dioica</i>)				
Ox-eye Daisy (<i>Leucanthemum vulgare</i>)					<i>Euphorbia</i>					Greater Bladderwort (<i>Utricularia vulgaris</i>)				
Pineapple-weed (<i>Matricaria discoidea</i>)					Hemp Nettle (<i>Galeopsis tetrahit</i>)					Common Mullein (<i>Verbascum thapsus</i>)				
Tall White Lettuce (<i>Prenanthes altissima</i>)					Wild Madder (<i>Galium mollugo</i>)					Blue Vervain (<i>Verbena hastata</i>)				
Black-eyed Susan (<i>Rudbeckia hirta</i>)					Marsh Bedstraw (<i>Galium palustre</i>)					White Vervain (<i>Verbena urticifolia</i>)				
Tall Goldenrod (<i>Solidago altissima</i>)					Sweet-scented Bedstraw (<i>Galium triflorum</i>)					Water Speedwell (<i>Veron. anagallis-aquatica</i>)				
Blue-stem Goldenrod (<i>Solidago caesia</i>)					<i>Galium</i>					Common Speedwell (<i>Veronica officinalis</i>)				
Canada Goldenrod (<i>Solidago canadensis</i>)					Spotted Geranium (<i>Geranium maculatum</i>)	F				<i>Veronica</i>				
Zig-zag Goldenrod (<i>Solidago flexicaulis</i>)					Herb-robert (<i>Geranium robertianum</i>)	U				Cow Vetch (<i>Vicia cracca</i>)				
Giant Goldenrod (<i>Solidago gigantea</i>)					Yellow Avens (<i>Geum alepicum</i>)					<i>Vicia</i>				
Early Goldenrod (<i>Solidago juncea</i>)					White Avens (<i>Geum canadense</i>)	U				Periwinkle (<i>Vinca minor</i>)				
Gray Goldenrod (<i>Solidago nemoralis</i>)					Urban Avens (<i>Geum urbanum</i>)					Dog Violet (<i>Viola conspersa</i>)				
<i>Solidago sp.</i>	U				Dame's Rocket (<i>Hesperis matronalis</i>)					Yellow Violet (<i>Viola pubescens</i>)				
Field Sow-thistle (<i>Sonchus arvensis</i>)					Virg. Water-leaf (<i>Hydrophyllum virginianum</i>)					Com. Blue Violet (<i>Viola sororia</i>)				
<i>Sonchus</i>					Com. St. John's-wort (<i>Hypericum perforatum</i>)					<i>Viola</i>				
Heart-leaf Aster (<i>Symph. cordifolium</i>)					Spotted Jewelweed (<i>Impatiens capensis</i>)									
Heath Aster (<i>Symphyotrichum ericoides</i>)					Wood Nettle (<i>Laportea canadensis</i>)									
Tall White Aster (<i>Symph. lanceolatum</i>)					Motherwort (<i>Leonurus cardiaca</i>)									
Calico Aster (<i>Symphyotrichum lateriflorum</i>)					Field Peppergrass (<i>Lepidium campestre</i>)									
New England Aster (<i>Symph. novae-angliae</i>)					Eur. Gromwell (<i>Lithospermum officinale</i>)									
Purple-stem Aster (<i>Symph. puniceus</i>)					Butter & Eggs (<i>Linaria vulgaris</i>)									
Common Tansy (<i>Tanacetum vulgare</i>)					Great Lobelia (<i>Lobelia siphilitica</i>)									
Common Dandelion (<i>Taraxacum officinale</i>)	R				<i>Lobelia</i>					Monocot Herbs				
Com. Goatsbeard (<i>Tragopogon pratensis</i>)					Cut-leaf Bugleweed (<i>Lycopus americanus</i>)					Water-plantain (<i>Alisma plantago-aquatica</i>)				
Colt'sfoot (<i>Tussilago farfara</i>)					Northern Bugleweed (<i>Lycopus uniflorus</i>)					Wild Leek (<i>Allium tricoccum</i>)	U			
					Fringed Loosestrife (<i>Lysimachia ciliata</i>)					Jack-in-the-pulpit (<i>Arisaema triphyllum</i>)	R			
					Moneywort (<i>Lysimachia nummularia</i>)					Asparagus (<i>Asparagus officinalis</i>)				
					<i>Lysimachia</i>					Wild Calla (<i>Calla palustris</i>)				
					Purple Loosestrife (<i>Lythrum salicaria</i>)					Bluebead-lily (<i>Clintonia borealis</i>)				
					Black Medick (<i>Medicago lupulina</i>)					Garden Lily-of-valley (<i>Convallaria majalis</i>)				
					Alfalfa (<i>Medicago sativa</i>)					Yel. Lady's Slipper (<i>Cypripedium parviflorum</i>)				
					White Sweet-clover (<i>Melilotus alba</i>)					Canada Waterweed (<i>Elodea canadensis</i>)				
					Yellow Sweet-clover (<i>Melilotus officinalis</i>)					Helleborine (<i>Epipactis helleborine</i>)	K			
					Wild Mint (<i>Mentha arvensis</i>)					Yellow Trout Lily (<i>Erythronium americanum</i>)	D			
Other Dicot Herbs					Wild Bergamot (<i>Monarda fistulosa</i>)					Blue-flag Iris (<i>Iris versicolor</i>)				
White Baneberry (<i>Actaea pachypoda</i>)					Small Forget-me-not (<i>Myosotis laxa</i>)					Orange Day Lily (<i>Hemerocallis fulva</i>)				
Red Baneberry (<i>Actaea rubra</i>)					Forget-me-not (<i>Myosotis scorpioides</i>)					Lesser Duckweed (<i>Lemna minor</i>)				
Tall Agrimony (<i>Agrimonia gryposepala</i>)	U				Water-cress (<i>Nasturtium officinale</i>)					Starry Duckweed (<i>Lemna trisulca</i>)				
Garlic Mustard (<i>Alliaria petiolata</i>)	F				Com. Evening-primrose (<i>Oenothera biennis</i>)					Wild Lily-of-valley (<i>Maianthemum canadense</i>)				
Green Amaranth (<i>Amaranthus retroflexus</i>)					Sweet-cicely (<i>Osmorhiza berterii</i>)					False Solom Seal (<i>Maianthemum racemosum</i>)				
Hog-peanut (<i>Amphicarpa bracteata</i>)					Yellow Wood-sorrel (<i>Oxalis stricta</i>)					Star False Solomon (<i>Maianthemum stellatum</i>)				
Pearly Everlasting (<i>Anaphalis margaritacea</i>)					Wild Parsnip (<i>Pastinaca sativa</i>)					True Solomon Seal (<i>Polygonatum pubescens</i>)				
Canada Anemone (<i>Anemone canadensis</i>)					English Plantain (<i>Plantago lanceolata</i>)					Pickeral-weed (<i>Pontederia cordata</i>)				
Ivy Hepatica (<i>Anemone acutiloba</i>)					Common Plantain (<i>Plantago major</i>)					Curly-leaf Pondweed (<i>Potamogeton crispus</i>)				
Thimbleweed (<i>Anemone virginiana</i>)					Rugel's Plantain (<i>Plantago rugelii</i>)					Sago Pondweed (<i>Potamogeton pectinatus</i>)				
Purple Angelica (<i>Angelica atropurpurea</i>)					May-apple (<i>Podophyllum peltatum</i>)	U				<i>Potamogeton</i>				
Indian Hemp (<i>Apocynum cannabinum</i>)					Pale Smartweed (<i>Polygonum lapathifolium</i>)					<i>Potamogeton</i>				
Wild Sarsaparilla (<i>Aralia nudicaulis</i>)					Lady's-thumb (<i>Polygonum persicaria</i>)					Broad-leaved Arrowhead (<i>Sagittaria latifolia</i>)				
Spikenard (<i>Aralia racemosa</i>)					Virginia Knotweed (<i>Polygonum virginianum</i>)					Blue-eyed-grass (<i>Sisyrinchium montanum</i>)				
Wild Ginger (<i>Asarum canadense</i>)					<i>Polygonum</i>					Herb. Carrion Flower (<i>Smilax herbacea</i>)				
Swamp Milkweed (<i>Asclepias incarnata</i>)					<i>Polygonum</i>					Bristly Greenbrier (<i>Smilax hispida</i>)				
Common Milkweed (<i>Asclepias syriaca</i>)					Rough Cinquefoil (<i>Potentilla norvegica</i>)					Nodding Ladies' Tresses (<i>Spiranthes cernua</i>)				
Yellow Rocket (<i>Barbarea vulgaris</i>)					Rough-fruited Cinquefoil (<i>Potentilla recta</i>)					Rose Twisted-stalk (<i>Streptopus lanceolatus</i>)				
False Nettle (<i>Boehmeria cylindrica</i>)					Common Cinquefoil (<i>Potentilla simplex</i>)					Skunk-cabbage (<i>Symplocarpus foetidus</i>)				
Black Mustard (<i>Brassica nigra</i>)					<i>Potentilla</i>					Purple Trillium (<i>Trillium erectum</i>)	U, F			
Marsh-marigold (<i>Caltha palustris</i>)					Heal-all (<i>Prunella vulgaris</i>)					White Trillium (<i>Trillium grandiflorum</i>)	F			
Creeping Bellflower (<i>Campanula rapunculoides</i>)					Shinleaf (<i>Pyrola elliptica</i>)					Large-flowered Bellwort (<i>Uvularia grandiflora</i>)				

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

Map Number: 217GSH2024
 Date: April 30, 2012
 Surveyors: JP, JS

1 F007-2
 2 SNO3-1 (incluvin)
 3

Significant Wildlife Habitat Form

AECOM

Study Area: <u>BLW</u> <u>JER</u> <u>GSH</u>	Map #: <u>217 GSH 2028</u>
Date: <u>2012-04-30</u>	Time Started: <u>1:30 P.m</u>
Field Staff: <u>Tom Stoney</u> <u>Jess Piette</u>	Time Finished: <u>2:55 P.m</u>
Weather Conditions: <u>overcast, Rain, 6°C</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) *nest # 1*

UTMs: 452953 499173 Number of nests: 1

Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present):
Stick nest in patch of green Ash - roughly 10-12m high
unoccupied

Description of habitat (note riparian areas if present, evidence of disturbance): FOD7-2-Agriculture
Pic # 20 *disturbance ie -> Rock Piles etc*

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

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

UTMs: _____ Area of standing water delineated on field map

Water depth (m): _____ % open water: _____ % emergent vegetation: _____

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

Area and soil/substrate of shoreline habitat: _____

Type and abundance of cover in open water habitat: _____

Type and abundance of cover in surrounding habitat: _____

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

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

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

Snake Hibernacula

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

UTMs: _____ Likelihood to extend below frost line: _____

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

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

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

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

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

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

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)

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

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

No

Yes (if yes, photograph and complete the following)

UTMs: _____

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

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

Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas

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

Shoreline of lake, large river or large wetland present:

No

Yes (if yes, photograph and complete the following)

UTMs: _____

Rocky island or peninsula present: _____

Mudflat present: _____

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

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

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

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

Large meadow, old field or generally open habitat (e.g. CUM, CUS, CUT, 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
Pic #20	Stick nest		

Significant Wildlife Habitat Form

AECOM

Study Area: BLW JER (GSH) Map #: 217 GSH 2028
 Date: 2012-04-30 Time Started: 1:30 P.M.
 Field Staff: Tom Stoney Jess Kette Time Finished: 2:55 P.M.
 Weather Conditions: overcast, rain, 6°C

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

Nest bowls present: No Yes (if yes, photograph and complete the following) Nest #2
 UTM: 452942 4791206 Number of nests: 1
 Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present):
Medium sized stick nest, Approx 15m high in crotch of
areon ASL.
 Description of habitat (note riparian areas if present, evidence of disturbance): FOD-2 bordering
Pic # 21 SWD3-1

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)
 UTM: _____ 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)
 UTM: _____ 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)
 UTM: _____ 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 > 1.5ha

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

Large open habitat present: No Yes (if yes, photograph and complete the following)

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

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

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

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

UTMs: _____ Age of oldest trees: _____

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

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

Photo #	Location or Subject	Photo #	Location or Subject
21	Sticknest #2		

Significant Wildlife Habitat Form

AECOM

Study Area: BLW JER GSH Map #: 217 GSH 2028
 Date: 2012-04-30 Time Started: 1:30 P.m
 Field Staff: Tom Sharkey Jess Pette Time Finished: 2:55 P.m
 Weather Conditions: overcast, 6°C Rain

Colonial Nesting Tree/Shrub Birds, Osprey Breeding/Feeding, Bald Eagle Breeding/Nesting Habitat
 (FET1, FOC, FOM, FOD, SWC, SWM, SWD) Nest #3

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

UTMs: 452945 491243 Number of nests: 1

Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present):
Medium sized stick nest in crotch of green Ash, Approx 15-20m high, near edge of woods

Description of habitat (note riparian areas if present, evidence of disturbance): FOD1-2-Near Pic #22 & agricultural fields

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

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

UTMs: _____ Area of standing water delineated on field map

Water depth (m): _____ % open water: _____ % emergent vegetation: _____

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

Area and soil/substrate of shoreline habitat: _____

Type and abundance of cover in open water habitat: _____

Type and abundance of cover in surrounding habitat: _____

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

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

Complete Vernal Pool Habitat Description Form

Snake Hibernacula

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

UTMs: _____ Likelihood to extend below frost line: _____

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

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

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

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

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

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

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

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

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

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

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

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

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

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

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

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

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

Large open habitat present: No Yes (if yes, photograph and complete the following)

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

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

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

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

UTMs: _____ Age of oldest trees: _____

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

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

Photo #	Location or Subject	Photo #	Location or Subject
Pic # 22	Stick nest # 3		

Species Conservation Concern Habitat and Incident Wildlife - Goshen



Map No: 217 GSH 2028

Field Staff: Tom Skofrey
Jess Perle

Time Started: 1:30 P.M.

Time Finished: 2:55 P.M.

Date (yyyy-mm-dd): 2012-04-30

Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
Red winged Blackbird		VO	Along edges				
Downy woodpecker		VO	Within feature				
Coyote/Fox		HO	Along edge				

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= Foss/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)

* Not observed - NO

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 odorhiza) - S2 Bloom Time - summer to fall	Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry, sandy woods.	Y (N) UTM:
FOC, FOM, FOD	Burning Bush (Euonymus atropurpureus) - S3 Bloom Time: April - June	Species occurs in dry to moist deciduous thickets and woods	Y (N) UTM:
SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6	Chinese Hemlock Parsley (Conioselinum chinense) - S2 Bloom Time - summer to fall	Swampy places with deciduous trees, white cedars, tamarack, springy river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes.	Y (N) UTM:
SWC, SWM, SWD, SWT, MAM, MAS	Crowned Beggarticks (Bidens trichosperma) - S2 Bloom Time - late summer	Found in openings in swamps, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian Bay. Bogs, fens, tamarack swamps	Y (N) UTM: N/O
ALT1, FOD7	Eastern Green-violet (Hybanthus concolor) - S2 Bloom Time - mid March to August	Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks.	Y (N) UTM:
TPS, TPW, FOM1, FOM2	Fogg's Goosefoot (Chenopodium foggii) - S2	Species occurs in sandy areas on limestone under oak or pine-oak forests	Y (N) UTM:
TPO2, TPS2, TPW2,	Giant Ironweed (Vermonia gigantea) - S1? Bloom Time	Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows	Y (N) UTM:

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N; UTM); description of habitat if present
CUM1, MAM	June - August		
FOD6, FOD7, FOD9	Green Dragon (<i>Arisaema dracontium</i>) - S3/S3 Bloom Time - May and June	Species found in damp-deciduous forest along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y N UTM: N/O
TP01, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Hairy Bedstraw (<i>Gallium pilosum</i>) - S3 Bloom Time - 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 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 (<i>Blephilia hirsuta</i>) - S1 Bloom Time - Summer	Woodlands, often rocky, especially rivers, swamp forests, floodplains.	Y N UTM: N/O
FOD6, FOD7, FOD8, FOD9	Harbinger-of-spring (<i>Eriogonum bulbosum</i>) - S3 Bloom Time - early to late April	Occurs in rich, moist deciduous woods, especially on floodplains.	Y N UTM: N/O
SAS1, SAM1, SAF1	Hill's Pond Weed (<i>Potamogeton hillii</i>) - SC/S2 Bloom Time - summer	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters.	Y N UTM:
FOM6, FOM7, FOM8	Large Round-leaved Orchid (<i>Platanthera macrophylla</i>) - S2 Bloom Time - June to August	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands.	Y N UTM:
MAM2, MAM3, MAS2, MAS3, SWD	Lizard's Tail (<i>Saururus cernuus</i>) - S3 Bloom Time - June - September	Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds.	Y N UTM: N/O
FOD6, FOD7, FOD9	Pawpaw (<i>Asimina triloba</i>) - S3 Bloom Time - March-May	Occurs in moist deciduous woods and stream banks.	Y N UTM: N/O
FOM8, FOD6, FOD7, FOD9, CUM1	Pilose Evening Primrose (<i>Oenothera pilosella</i>) - S2 Bloom Time - Late Spring - Early Summer	Moist edges of woods and open, disturbed ground.	Y N UTM: N/O
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostate Tick-trefoil (<i>Desmodium rotundifolium</i>) - S2 Bloom Time - July-September	Dry, sandy or rocky woods	Y N UTM:
FOD7, SWD	Pumpkin Ash (<i>Fraxinus profunda</i>) - S2? Bloom Time - March - June	Swamps and floodplains	Y N UTM: N/O
CUM1, ALO, FET1, SWC	Ram's-head Lady's-slipper (<i>Cypripedium arietinum</i>) - S3 Bloom Time - mid May to mid June	Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamps, dry-sandy woods, and limestone barren.	Y N UTM:
FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5	Rattlesnake Hawkweed (<i>Hieracium venosum</i>) - S2 Bloom Time - April - September	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands.	Y N UTM:
FOD6, FOD7, FOD9	Round-leaved Groundsel (<i>Packera obovata</i>) - S3 Bloom Time - May - June	Found in moist woods	Y N UTM: N/O
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 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 (<i>Liatris cylindracea</i>) - S3	Species occurs in limestone and dolomite pavement, prairies, open woods; always and moist sandy meadows.	Y N UTM:
SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2	Slender Knotweed (<i>Polygonum tenue</i>) - S2	Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows; at edges of sand pits	Y N UTM:
SDT1, FOD5, FOD9	Slim-flowered Muhly (<i>Muhlenbergia tenuiflora</i>) - S2	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods	Y N UTM:
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian (<i>Gentiana quinquefolia</i>) - S2 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: N/O
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine (<i>Lupinus perennis</i>) - S3 Bloom Time - mid-March to mid-June	Inhabits dry, sandy oak savannas, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen.	Y N UTM:

Species Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N); UTM; description of habitat if present
TP01, TPS1, TPW1, CUM1	Tall Blazing Star (<i>Liatris aspera</i>)-S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM:
FEO, FES, FET, MAM2, MAM3	Tuberous Indian Plantain (<i>Amoglossum plantagineum</i>) - S3 Bloom Time -mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats.	Y (N) UTM:
FOC1, FOC2, FOC3, FOC4	Woodland Pinedrops (<i>Pterospora andromedea</i>) - S2 Bloom Time - summer	Found in conifer woods, under pines, but also hemlock, spruce, fir, and white cedar. In dry or rocky soil, often with common juniper and sometimes aspen or birch.	Y (N) UTM:
CUM1, CUT1, CUW1, RBO1, SBO1	Yellow Ladies'-tresses (<i>Spiranthes ochroleuca</i>) - S2 Bloom Time - August to November	Dry, open sites, usually on acidic sandy soil, dry to mesic open woodland, thickets, meadows, barrens, ledges, outcrops, banks and roadsides, old fields.	Y (N) UTM:
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>Selurus motacilla</i>) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration	Y (N) UTM:
FOD, CUW, CUT	Red-headed Woodpecker (<i>Melanerpes erythrocephalus</i>) - SC	Species inhabits open woodland/ edges (oak savannahs and riparian forest), open, deciduous forest with little understorey, fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; requires cavity trees with at least 40 cm dbh; requires about 4 ha for a territory.	Y (N) UTM:
-	Short Eared Owl (<i>Asio flammeus</i>) - SC	Assessed as SWH. Record species if found.	not required.
CUT1	Yellow-breasted Chat (<i>Icteria virens</i>) - SC	Inhabits thickets, tall tangles of 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 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 clytem</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 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: <u>Goshen</u>	Map No: <u>217 GSH 2028</u>
Date (yyyy-mm-dd): <u>2012-04-30</u>	Time Started: <u>1:30 P.M.</u>
Field Staff: <u>Tom Shoney, Jess P. et al</u>	Time Finished: <u>2:55 P.M.</u>

Presence of Groundwater No Yes

bank seepage iron staining groundwater indicator

Site Type

Lacustrine (associated with lakes) Isolated

Riverine (associated with rivers)

Palustrine absent or intermittent inflow and either intermittent or permanent outflow

what are the water inputs and outputs? _____

Soils refer to ELC card for soils information

% open Water

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

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

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

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

Community Descriptions

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

Map Code/ ELC Code	Community Description - list at least four dominant species for each form
<u>FOD7-2</u>	<u>h → Frax penn >> Ulm amer = ost Virg = T. amer</u> <u>+S → Acer rubr > Ulm amer</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

Small SWD 3-1 inclusion included in FOD 7-2 Wetland Form



- 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

COPY



Besmoothing from Ontario Ministry of Natural Resources
Orthophotography, 2010



0 25 50 100
Metres
1:2,500
UTM Zone 17N, NAD 83

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ELC
Goshen Amphibian Survey
220_GSH1539

April 2012
Project 0015602

AECOM

Figure 1

ASA

ASA

ELC Community Description and Classification

Map #: 220GS 139

Surveyor(s): SG KA Date: Aug 6, 2012 Time start: 8:00 AM finish: 3:30 PM

UTMZ: UTMN

Polygon Description

<input checked="" type="checkbox"/> Terrestrial	<input type="checkbox"/> Organic	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
<input type="checkbox"/> Wetland	<input checked="" type="checkbox"/> Mineral Soil	<input type="checkbox"/> Riverine	<input type="checkbox"/> Submerged	<input 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 checked="" type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
<input type="checkbox"/> Open Water	<input type="checkbox"/> Basic Bedrk	<input checked="" type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Shallow Water	<input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input type="checkbox"/> Swamp
<input checked="" type="checkbox"/> Surficial Dep.		<input type="checkbox"/> ROLL. Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Cliff	<input type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
History		<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input type="checkbox"/> Natural		<input type="checkbox"/> Crevice/Cave	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input checked="" type="checkbox"/> Cultural		<input type="checkbox"/> Alvar		<input type="checkbox"/> Prairie
Cover		<input type="checkbox"/> Rockland		<input type="checkbox"/> Thicket
<input type="checkbox"/> Open		<input type="checkbox"/> Beach / Bar		<input type="checkbox"/> Savannah
<input type="checkbox"/> Shrub		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Woodland
<input type="checkbox"/> Tree		<input type="checkbox"/> Bluff		<input type="checkbox"/> Forest
				<input type="checkbox"/> Plantation

Stand Description

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4:sp)
1	2	1	<i>Cicobol = fir Resi</i>
2	1	1	
3	1	1	
4	6	4	<i>BOMUS sp = Phoroid</i>

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

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

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

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

Ecotic: Cultural meadow Code: CUM

Vegetation Type: mineral cultural meadow Code: CUM-1

Inclination: Code:

Comp loc: Code:

Community Profile Diagram/Comments

ASA - (cultural meadow) - cultural meadow, riparian to stream and forest.

Notes:

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

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

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