

CONIFERS						TREES and SHRUBS						GRAMINOIDS					
1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Abies balsamea						+ Rosa multiflora						Agrostis gigantea					
Juniperus communis						Rosa						Agrostis stolonifera					
Juniperus virginiana						Rubus allegheniensis						Agropyron repens					
Larix laricina						Rubus idaeus		X				Alopecurus					
Picea abies						Rubus occidentalis		X				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					
Tsuga occidentalis						Salix bebbiana						Carex blanda					
Tsuga canadensis						+ Salix discolor						Carex gracillima		X			
						Salix eriocephala						Carex granularis					
						Salix exigua						Carex hystericina					
						Salix lucida						Carex pennsylvanica					
						Salix petiolaris						Carex radiata					
						+ Salix purpurea						Carex retrorsa					
TREES and SHRUBS						Salix x rubens						Carex stipata					
Acer negundo		X				+ Salix						Carex stricta					
Acer rubrum						Sambucus canadensis						Carex vulpinoidea					
Acer saccharinum						Sambucus racemosa						Carex					
Acer saccharum		X				Sorbus aucuparia						Carex					
Acer spicatum						Spiraea alba						Carex					
Alnus rugosa						Syringa vulgaris						Carex					
Amelanchier						+ Tilia americana		X	X			Carex					
Berberis thunbergii						Ulmus americana		X	X			Carex					
Betula alleghaniensis						Ulmus						Carex					
Betula papyrifera						Vaccinium						Carex					
Carpinus caroliniana						Viburnum lentago		X	X			Carex					
Carya cordiformis						Viburnum opulus		X	X			Cyperus					
Celastrus scandens						Viburnum						Cyperus					
Cornus alternifolia						Vitis riparia		X				Dactylis glomerata					
Cornus amomum												Danthonia spicata					
Cornus rugosa <i>faem</i>		X										Echinochloa crus-galli					
Cornus stolonifera												Eleocharis crythropoda					
Corylus cornuta												Eleocharis					
Crataegus monogyna												Elymus virginicus		X			
Crataegus punctata		X										Elymus					
Crataegus sp.												Festuca arundinacea					
Crataegus												Glyceria striata					
Diervilla lonicera												Glyceria					
Fagus grandifolia												Juncus dudleyi					
Fracinus americana												Juncus effusus					
Fracinus nigra						FERNS						Juncus tenuis					
Fracinus pensylvanica		X				Adiantum pedatum						Juncus					
Ilex verticillata						Athyrium filix-femina						Juncus					
Juglans cinerea						Botrychium multifidum						Juncus					
Juglans nigra						Botrychium virginianum						Leersia oryzoides					
Lonicera morrowi						Cystopteris bulbifera						Muhlenbergia					
Lonicera tatarica		X				Dryopteris caroliniana						Oryzopsis asperifolia					
Lonicera						Dryopteris cristata						Panicum					
Malus pumila		X				Dryopteris marginalis						Panicum					
Ostrya virginiana		X				Ilyopteris						Pisalaris arundinacea		X			
Parthenocissus inserta						Equisetum arvense						Panicum pratense					
Populus balsamifera						Equisetum hyemale						Phragmites australis		X			
Populus grandidentata						Equisetum variegatum						Poa compressus					
Populus tremuloides						Equisetum						Poa pratensis					
Populus deltoides		X				Gymnocarpium dryopteris						Poa		X			
Prunus pensylvanica						Lycopodium digitatum						Scirpus atrovirens					
Prunus serotina						Lycopodium obscurum						Scirpus cyperinus					
Prunus virginiana		X				Lycopodium						Scirpus validus					
Prunus						Lycopodium						Scirpus					
Quercus macrocarpa		X				Mosses						Scirpus					
Quercus rubra						Monarda struthiopteris						Setaria					
Quercus						Oenothera scaberrima						Spartanum					
Rhamnus cathartica		X				Osmunda regalis						Typha angustifolia					
Rhus radicans		X				Polypodium acrostichoides						Typha latifolia					
Rhus typhina						Pteridium aquilinum						Typha Xglauca					
Ribes americana		X				Thelypteris palustris											
Ribes cynosbati																	
Ribes x rubrum		X															
Robinia pseudo-acacia																	
Sarya ovata		X															
Eubn obov		X															

ELC WILDLIFE	SITE: <u>267</u> <u>GSH 2236</u>	
	POLYGON:	
	DATE: <u>Oct 14 / 2011</u>	
	SURVEYORS: <u>JK</u>	
	START TIME: <u>12:00</u>	END TIME: <u>13:00</u>

TEMP (°C): <u>15</u>	CLOUD (10th): <u>10</u>	WIND: <u>2-3</u>	PRECIPITATION: <u>drizzle in part</u>
CONDITIONS:			

POTENTIAL WILDLIFE HABITAT:

<input type="checkbox"/>	VERNAL POOLS	<input checked="" type="checkbox"/>	SNAGS <u>low</u>
<input type="checkbox"/>	HIBERNACULA	<input checked="" type="checkbox"/>	FALLEN LOGS
<input checked="" type="checkbox"/>	<u>Creek but channelized</u>		

SPECIES LIST:

TY	SP. CODE	EV	NOTES	#	TY	SP. CODE	EV	NOTES	#
B	RTHA	OB							
	AMRO								
	BLJA								
M	Gr. Squirrel	OB							
H	Spring Peeper	VO							

FAUNAL TYPE CODES (TY):

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

EVIDENCE CODES (EV):

BREEDING BIRD - POSSIBLE:

SH = SUITABLE HABITAT SM = SINGING MALE

BREEDING BIRD - PROBABLE:

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

BREEDING BIRD - CONFIRMED:

DD = DISTRACTION NU = USED NEST FY = FLEDGED YOUNG
NE = EGGS NY = YOUNG FS = FOOD/FECAL SACK
AE = NEST ENTRY

OTHER WILDLIFE EVIDENCE:

OB = OBSERVED VO = VOCALIZATION CA = CARCASS
DP = DISTINCTIVE PARTS HO = HOUSE/DEN FY = EGGS/YOUNG
TK = TRACKS FE = FEEDING EVIDENCE SC = SCAT
SI = OTHER SIGNS (specify)

ELC
Community Description and Classification

Map #: 269 GSH 1493/1494
Surveyor(s): JSS & RCT
Date: April 18, 2012
Time start: 8:30 am
Time finish: 12:15 pm
UTMZ: UTMZ: UTMZ:

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic	<input type="checkbox"/> Organic <input type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <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 checked="" type="checkbox"/> Tableland <input type="checkbox"/> Roll Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Tatus <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) P > Much Greater Than; > Greater Than; = About Equal To
1	4		ACESAC = FAGGERAN > TILAMER > OSTVIG
2	3		ACESAC - FAGGERAN - OSTVIG
3	3		CHARCARO > PALVIG > FAGGERAN
4	3		ERYAMER > MANGROVE > FAGGERAN

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

Stand Composition: Size Class Analysis:

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

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

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

Ecosite: Sugar Maple-Beech Deciduous Forest Type
 Code: F0D5
 Code: F0D5-2
 Code:
 Code:

Community Profile Diagram/Comments

→ 1/18/12 in the NW corner
 → 100% of debris fit in 10m x 10m x 10m

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

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

Notes:

ELC
Community Description and Classification

Map #: 260GSH1493/1494 Polygon: P2
 Surveyor(s): JP + TS Date: April 19, 2012 Time start: 8:55 am finish: 12:15 pm
 UTMZ: UTMN:

Polygon Description

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

Stand Description

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1	1	4	FRAXINUS ACERIFRAXINUS
2	2	2	ALNUS ACERIFRAXINUS
3	3	3	CAREX SPICATA
4	4	1	CAREX SPICATA

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

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

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

Ecotope: ASH DECIDUOUS SWAMP
Vegetation Type: SWD2
Inclusion: SWD2-Z
Complex:

Community Profile Diagram/Comments

Notes:

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

Site Metrics	PI/Auger #	Soils Ontario and ELC Soils Description				Summary
UTM	Zone					
	Easting	177				
	Northing					
	Position					
	Aspect					
	Percent					
	Slope					
	Length					
	Mottles					
	Gley					
	Water Table	SURFACE				
	Carbonates					
	Bedrock					
Depth to ...	1	Depth from zero	% CF	% CF	% CF	% CF
		Texture				
Soil Horizon Description	2	Depth from zero	% CF	% CF	% CF	% CF
		Texture				
	3	Depth from zero	% CF	% CF	% CF	% CF
		Texture				
	4	Depth from zero	% CF	% CF	% CF	% CF
		Texture				
	% Surface Stone/Rock					
	Moisture Regime					
	Drainage					

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. Ragwort (<i>Ambrosia artemisiifolia</i>)					Toothwort (<i>Cardamine diophylla</i>)					Hooked Buttercup (<i>Ranunculus recurvatus</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Giant Ragwort (<i>Ambrosia trifida</i>)					Penn. Bitter-cress (<i>Cardamine pensylvanica</i>)					<i>Ranunculus</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Field Pussy-toes (<i>Antennaria neglecta</i>)					<i>Cardamine</i>					Sheep Sorrel (<i>Rumex acetosella</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
<i>Artemisia</i>					Blue Cohosh (<i>Caulophyllum thalictroides</i>)					Curly-leaf Dock (<i>Rumex crispus</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Common Burdock (<i>Arctium minus</i>)					Water-hemlock (<i>Cicuta virosa</i>)					Bitter Dock (<i>Rumex obtusifolius</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Noddin Bigger-ticks (<i>Bidens cernua</i>)					Turtlehead (<i>Chelone glabra</i>)					Bloodroot (<i>Sanguinaria canadense</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Devil's Bigger-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>Sisymbrium 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 Camphor (<i>Silene latifolia</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Bull Thistle (<i>Cirsium vulgare</i>)					Virgin's-bower (<i>Clematis virginiana</i>)					Bladder Camphor (<i>Silene vulgaris</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Horseweed (<i>Conyza canadensis</i>)					Field Bindweed (<i>Convolvulus arvensis</i>)					Hemlock Water-hemlock (<i>Sium suave</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Daisy Fleabane (<i>Eryngon annuus</i>)					Dog-strain Vine (<i>Cynanchum rossicum</i>)					Bitter Nightshade (<i>Solanum dulcamara</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Philadelphia Fleabane (<i>Eryngium philadelphicum</i>)					Wild Carrot (<i>Daucus carota</i>)					Black Nightshade (<i>Solanum elaeagnifolium</i>)					<i>Eryngon</i>					Deerard 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 perforatum</i>)					Dutchman's-breeches (<i>Dicentra cucullaria</i>)					Earl Meadow-rue (<i>Thalictrum dioicum</i>)					Large-leaved Aster (<i>Eurybia macrophylla</i>)					Wild Teasel (<i>Dipsacus fulorum</i>)					Tall Meadow-rue (<i>Thalictrum pubescens</i>)					Flat-top Goldenrod (<i>Euthamia graminifolia</i>)					Wild Cucumber (<i>Echinocystis lobata</i>)					Field Penny-cress (<i>Thlaspi arvense</i>)					Orange Hawkweed (<i>Hieracium aurantiacum</i>)					Virgins Bulbloss (<i>Echium vulgare</i>)					Foamflower (<i>Tiarella cordifolia</i>)					Field Hawkweed (<i>Hieracium caespitosum</i>)					Northern Willow-herb (<i>Eriobium ciliatum</i>)					Star-flower (<i>Trientalis borealis</i>)					<i>Hieracium</i>					Hairy Willow-herb (<i>Eriobium hirsutum</i>)					Red Clover (<i>Trifolium pratense</i>)					Elecampane (<i>Inula helenium</i>)					Small-fl. Willow-herb (<i>Eriobium parviflorum</i>)					White Clover (<i>Trifolium repens</i>)					Prickly Lettuce (<i>Lactuca scariola</i>)					<i>Eriobium</i>					<i>Trifolium</i>					<i>Lactuca</i>					Worm Mustard (<i>Eruca cheiranthoides</i>)					Stinging Nettle (<i>Urtica dioica</i>)					Ox-eye Daisy (<i>Leucanthemum vulgare</i>)					<i>Euthorbia</i>					Greater Bladderwort (<i>Utricularia vulgaris</i>)					Pineapple-weed (<i>Metricaria discoidea</i>)					Hem. 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. angustifolia</i>)					Blue-stem Goldenrod (<i>Solidago caesia</i>)					<i>Galium</i>					Common Speedwell (<i>Veronica officinalis</i>)					Canada Goldenrod (<i>Solidago canadensis</i>)					Spotted Geranium (<i>Geranium maculatum</i>)					<i>Veronica</i>					Zizyphoid Goldenrod (<i>Solidago flexicaulis</i>)					Herb-robert (<i>Geranium robertianum</i>)					Cow Vetch (<i>Vicia cracca</i>)					Giant Goldenrod (<i>Solidago gigantea</i>)					Yellow Avens (<i>Geum aleaicum</i>)					<i>Vicia</i>					Early Goldenrod (<i>Solidago juncea</i>)					White Avens (<i>Geum canadense</i>)					Periwinkle (<i>Vinca minor</i>)					Gray Goldenrod (<i>Solidago nemoralis</i>)					Urban Avens (<i>Geum urbanum</i>)					Dog Violet (<i>Viola conspersa</i>)					<i>Solidago</i>					Dame's Rocket (<i>Hesperis matronalis</i>)					Yellow Violet (<i>Viola pubescens</i>)					Field Sow-thistle (<i>Sonchus arvensis</i>)					Virg. Water-leaf (<i>Hydrophyllum virginianum</i>)					Com. Blue Violet (<i>Viola sororia</i>)					<i>Sonchus</i>					Com. St. John's-wort (<i>Hypericum perforatum</i>)					<i>Viola</i>					Heart-leaf Aster (<i>Symphoricarpos cordifolium</i>)					Spotted Jewelweed (<i>Impatiens capensis</i>)										Heath Aster (<i>Symphoricarpos encoides</i>)					Wood Nettle (<i>Laportea canadensis</i>)										Tall White Aster (<i>Symphoricarpos lanceolatum</i>)					Motherwort (<i>Leonurus cardiaca</i>)										Calico Aster (<i>Symphoricarpos lateriflorum</i>)					Field Peppergrass (<i>Leptochloa canadensis</i>)										New England Aster (<i>Symphoricarpos novae-angliae</i>)					Eur. Gromwell (<i>Lithospermum officinale</i>)										Purple-stem Aster (<i>Symphoricarpos purpureus</i>)					Butter & Eggs (<i>Linnaea vulgaris</i>)										Common Tansy (<i>Tanacetum vulgare</i>)					Great Lobelia (<i>Lobelia siphilitica</i>)										Common Dandelion (<i>Taraxacum officinale</i>)					<i>Lobelia</i>										Com. Goatsbeard (<i>Trigonon pratensis</i>)					Cut-leaf Bugleweed (<i>Lythrum americanum</i>)										Coltsfoot (<i>Tussilago farfara</i>)					Northern Bugleweed (<i>Lythrum uniflorum</i>)															Fringed Loosestrife (<i>Lysimachia ciliata</i>)															Moneypert (<i>Lysimachia nummularia</i>)															<i>Lysimachia</i>															Purple Loosestrife (<i>Lithrum salicaria</i>)															Black Medick (<i>Medicago lupulina</i>)															Alfalfa (<i>Medicago sativa</i>)															White Sweet-clover (<i>Melilotus alba</i>)															Yellow Sweet-clover (<i>Melilotus officinalis</i>)															Wild Mint (<i>Mentha arvensis</i>)															Wild Bergamot (<i>Monarda fistulosa</i>)															Small Forget-me-not (<i>Myosotis laxa</i>)															Forget-me-not (<i>Myosotis scorpioides</i>)															Water-cress (<i>Nasturtium officinale</i>)															Com. Evening-primrose (<i>Oenothera biennis</i>)															Sweet-cicely (<i>Osmorhiza berterii</i>)															Yellow Wood-sorrel (<i>Oxalis stricta</i>)															Wild Parsnip (<i>Pastinaca sativa</i>)															English Plantain (<i>Plantago lanceolata</i>)															Common Plantain (<i>Plantago major</i>)															Rugel's Plantain (<i>Plantago rugelii</i>)															May-apple (<i>Podophyllum peltatum</i>)															Pale Smartweed (<i>Polypogon lanthifolium</i>)															Lady's-thumb (<i>Polypogon persicaria</i>)															Virginia Knotweed (<i>Polypogon virginianum</i>)															<i>Polypogon</i>															Rough Cinquefoil (<i>Potentilla canadensis</i>)															Rough-fruited Cinquefoil (<i>Potentilla recta</i>)															Common Cinquefoil (<i>Potentilla simplex</i>)															<i>Potentilla</i>															Heal-all (<i>Prunella vulgaris</i>)															Shinleaf (<i>Psoralea elliptica</i>)									
<i>Eryngon</i>					Deerard 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 perforatum</i>)					Dutchman's-breeches (<i>Dicentra cucullaria</i>)					Earl Meadow-rue (<i>Thalictrum dioicum</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Large-leaved Aster (<i>Eurybia macrophylla</i>)					Wild Teasel (<i>Dipsacus fulorum</i>)					Tall Meadow-rue (<i>Thalictrum pubescens</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Flat-top Goldenrod (<i>Euthamia graminifolia</i>)					Wild Cucumber (<i>Echinocystis lobata</i>)					Field Penny-cress (<i>Thlaspi arvense</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Orange Hawkweed (<i>Hieracium aurantiacum</i>)					Virgins Bulbloss (<i>Echium vulgare</i>)					Foamflower (<i>Tiarella cordifolia</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Field Hawkweed (<i>Hieracium caespitosum</i>)					Northern Willow-herb (<i>Eriobium ciliatum</i>)					Star-flower (<i>Trientalis borealis</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
<i>Hieracium</i>					Hairy Willow-herb (<i>Eriobium hirsutum</i>)					Red Clover (<i>Trifolium pratense</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Elecampane (<i>Inula helenium</i>)					Small-fl. Willow-herb (<i>Eriobium parviflorum</i>)					White Clover (<i>Trifolium repens</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Prickly Lettuce (<i>Lactuca scariola</i>)					<i>Eriobium</i>					<i>Trifolium</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
<i>Lactuca</i>					Worm Mustard (<i>Eruca cheiranthoides</i>)					Stinging Nettle (<i>Urtica dioica</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Ox-eye Daisy (<i>Leucanthemum vulgare</i>)					<i>Euthorbia</i>					Greater Bladderwort (<i>Utricularia vulgaris</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Pineapple-weed (<i>Metricaria discoidea</i>)					Hem. 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. angustifolia</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Blue-stem Goldenrod (<i>Solidago caesia</i>)					<i>Galium</i>					Common Speedwell (<i>Veronica officinalis</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Canada Goldenrod (<i>Solidago canadensis</i>)					Spotted Geranium (<i>Geranium maculatum</i>)					<i>Veronica</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Zizyphoid Goldenrod (<i>Solidago flexicaulis</i>)					Herb-robert (<i>Geranium robertianum</i>)					Cow Vetch (<i>Vicia cracca</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Giant Goldenrod (<i>Solidago gigantea</i>)					Yellow Avens (<i>Geum aleaicum</i>)					<i>Vicia</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Early Goldenrod (<i>Solidago juncea</i>)					White Avens (<i>Geum canadense</i>)					Periwinkle (<i>Vinca minor</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Gray Goldenrod (<i>Solidago nemoralis</i>)					Urban Avens (<i>Geum urbanum</i>)					Dog Violet (<i>Viola conspersa</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
<i>Solidago</i>					Dame's Rocket (<i>Hesperis matronalis</i>)					Yellow Violet (<i>Viola pubescens</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Field Sow-thistle (<i>Sonchus arvensis</i>)					Virg. Water-leaf (<i>Hydrophyllum virginianum</i>)					Com. Blue Violet (<i>Viola sororia</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
<i>Sonchus</i>					Com. St. John's-wort (<i>Hypericum perforatum</i>)					<i>Viola</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Heart-leaf Aster (<i>Symphoricarpos cordifolium</i>)					Spotted Jewelweed (<i>Impatiens capensis</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Heath Aster (<i>Symphoricarpos encoides</i>)					Wood Nettle (<i>Laportea canadensis</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Tall White Aster (<i>Symphoricarpos lanceolatum</i>)					Motherwort (<i>Leonurus cardiaca</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Calico Aster (<i>Symphoricarpos lateriflorum</i>)					Field Peppergrass (<i>Leptochloa canadensis</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
New England Aster (<i>Symphoricarpos novae-angliae</i>)					Eur. Gromwell (<i>Lithospermum officinale</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Purple-stem Aster (<i>Symphoricarpos purpureus</i>)					Butter & Eggs (<i>Linnaea vulgaris</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Common Tansy (<i>Tanacetum vulgare</i>)					Great Lobelia (<i>Lobelia siphilitica</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Common Dandelion (<i>Taraxacum officinale</i>)					<i>Lobelia</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Com. Goatsbeard (<i>Trigonon pratensis</i>)					Cut-leaf Bugleweed (<i>Lythrum americanum</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
Coltsfoot (<i>Tussilago farfara</i>)					Northern Bugleweed (<i>Lythrum uniflorum</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Fringed Loosestrife (<i>Lysimachia ciliata</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Moneypert (<i>Lysimachia nummularia</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					<i>Lysimachia</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Purple Loosestrife (<i>Lithrum salicaria</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Black Medick (<i>Medicago lupulina</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Alfalfa (<i>Medicago sativa</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					White Sweet-clover (<i>Melilotus alba</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Yellow Sweet-clover (<i>Melilotus officinalis</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Wild Mint (<i>Mentha arvensis</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Wild Bergamot (<i>Monarda fistulosa</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Small Forget-me-not (<i>Myosotis laxa</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Forget-me-not (<i>Myosotis scorpioides</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Water-cress (<i>Nasturtium officinale</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Com. Evening-primrose (<i>Oenothera biennis</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Sweet-cicely (<i>Osmorhiza berterii</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Yellow Wood-sorrel (<i>Oxalis stricta</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Wild Parsnip (<i>Pastinaca sativa</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					English Plantain (<i>Plantago lanceolata</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Common Plantain (<i>Plantago major</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Rugel's Plantain (<i>Plantago rugelii</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					May-apple (<i>Podophyllum peltatum</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Pale Smartweed (<i>Polypogon lanthifolium</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Lady's-thumb (<i>Polypogon persicaria</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Virginia Knotweed (<i>Polypogon virginianum</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					<i>Polypogon</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Rough Cinquefoil (<i>Potentilla canadensis</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Rough-fruited Cinquefoil (<i>Potentilla recta</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Common Cinquefoil (<i>Potentilla simplex</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					<i>Potentilla</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Heal-all (<i>Prunella vulgaris</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Shinleaf (<i>Psoralea elliptica</i>)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

D - Dominant represented by large numbers, generally forming >10% ground cover or >25% vegetation cover in any one stratum
 F - Fairly common (Abundant in ELC) generally widespread represented by fairly large numbers of individual clumps, usually forming >10% ground cover
 U - Uncommon (Occasional in ELC) present as widely 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: 29611193/1994 1 F005-2 4
 Date: Apr 18, 2012 2 SW02-2 6
 Surveyors: JLB 3

Significant Wildlife Habitat Form

AECOM

Study Area: BLW JER GSH Map #: 269-GSH/493/GSH/494
 Date: 2012-04-18 Time Started: 8:55
 Field Staff: Tom Shorney, Jess P. He Time Finished: 12:15
 Weather Conditions: Sunny, 8°C, 15 km/h

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)
 UTM: 454479 4795174 Number of nests: 1
 Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present):
in notch of beach tree 15-20m high
small sticks construction
 Description of habitat (note riparian areas if present, evidence of disturbance): FOD 5-2 habitat
Pic #13

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: 454440 4795111 Area of standing water delineated on field map
 Water depth (m): _____ % open water: _____ % emergent vegetation: _____
 Description of standing water (permanent pool, evidence of annual spring flooding, etc):
See Amphibian Form
 Area and soil/substrate of shoreline habitat: _____
 Type and abundance of cover in open water habitat: _____
 Type and abundance of cover in surrounding habitat: _____
 Evidence of disturbance (e.g. cattle grazing): _____
 Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: _____

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

Snake Hibernacula

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

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N); UTM; description of habitat if present
CUM1, MAM, FOD6, FOD7, FOD9	June – August Green Dragon (<i>Arisaema dracontium</i>) - S3/S3 <u>Bloom</u> Time – May and June	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y (N) UTM:
TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	June-August Hairy Bedstraw (<i>Galium pilosum</i>) -S3 <u>Bloom</u> Time –	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	June to August Hairy Valerian (<i>Valeriana edulis</i>) -S1 <u>Bloom</u> Time –	Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens.	Y (N) UTM: N/A
FOD6, FOD7, SWM, SWD	Summer Hairy Wood Mint (<i>Blephilia hirsuta</i>) -S1 <u>Bloom</u> Time-	Woodlands, often rocky, especially rivers. Rich woods, swamp forests, floodplains.	Y (N) UTM: N/A
FOD6, FOD7, FOD8, FOD9	Time – Early to late April Harbinger-of-spring (<i>Erigenia bulbosa</i>) - S3 <u>Bloom</u>	Occurs in rich, moist deciduous woods, especially on floodplains.	Y (N) UTM:
SAS1, SAM1, SAF1	Hill's Pond Weed (<i>Potamogeton hillii</i>) - SC/S2 <u>Bloom</u> 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 <u>Bloom</u> 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 <u>Bloom</u> 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/A
FOD6, FOD7, FOD9	Pawpaw (<i>Asimina triloba</i>) -S3 <u>Bloom</u> Time – March-May	Occurs in moist deciduous woods and stream banks.	Y (N) UTM:
FOM8, FOD6, FOD7, FOD9, CUM1	Pilose Evening Primrose (<i>Oenothera pilosella</i>) -S2 <u>Bloom</u> Time – Late Spring – Early Summer	Moist edges of woods and open, disturbed ground.	Y (N) UTM:
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostate Tick-trefoil (<i>Desmodium rotundifolium</i>) -S2 <u>Bloom</u> Time – July-September	Dry, sandy or rocky woods	Y (N) UTM:
FOD7, SWD	Pumpkin Ash (<i>Fraxinus profunda</i>)-S2? <u>Bloom</u> Time – March - June	Swamps and floodplains	Y (N) UTM: N/A
CUW1, ALO, FET1, SWC	Ram's-head Lady's-slipper (<i>Cypripedium arietinum</i>) - S3 <u>Bloom</u> 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 <u>Bloom</u> Time – April – September	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands.	Y (N) UTM: N/A
FOD6, FOD7, FOD9	Round-leaved Groundsel (<i>Packera obovata</i>) -S3 <u>Bloom</u> Time- May - June	Found in moist woods	Y (N) UTM:
CUM1, CUT1, CUS1	Round-leaved hawthorn (<i>Crataegus lumarina</i>) -S3?	Species occurs in old fields, poorly managed pastures, fencelines and roadsides	Y (N) UTM:
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm (<i>Monarda didyma</i>) - S3 <u>Bloom</u> Time – May to October	Found in moist, rich woods, thicket swamps, banks and floodplains.	Y (N) UTM:
ALO, ALS, ALT, TPO, TPS, TPW	Slender Blazing Star (<i>Liatris cylindracea</i>) -S3	Species occurs in limestone and dolostone pavement, prairies, open woods; always and moist sandy meadows.	Y (N) UTM:
SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2	Slender Knotweed (<i>Polygonum tenue</i>)-S2	Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows; at edges of sand pits	Y (N) UTM:
SOT1, FOD5, FOD9	Slim-flowered Mulyhy (<i>Muhlenbergia tenuiflora</i>) - S2	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillslides, and riverbanks whether in oak or beech-maple woods	Y (N) UTM: N/A
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian (<i>Gentiana quinquefolia</i>) - S2 <u>Bloom</u> Time – late summer to mid fall	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillslides.	Y (N) UTM:
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine (<i>Lupinus perennis</i>) - S3 <u>Bloom</u> Time – mid-March to mid-June	Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen.	Y (N) UTM:

Species Conservation Concern Habitat and Incidental Wildlife - Goshen

ADOM

ELC	Species	Habitat Description	Habitat Present (Y/N); UTM; description of habitat if present
TP01, TPS1, TPW1, CUM1	Tail Blazing Star (<i>Liathris aspera</i>) - S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM:
FE0, FES, FET, MAM2, MAM3	Tuberous Indian Plantain (<i>Arnoglossum plantagineum</i>) - S3 Bloom Time - mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats.	Y (N) UTM:
FOC1, FOC2, FOC3, FOC4	Woodland Pinedrops (<i>Pterospora andromedea</i>) - S2 Bloom Time - summer	Found in conifer woods, under pines, but also hemlock, spruce, fir, and white cedar. In dry or rocky soil, often with common juniper and sometimes aspen or birch.	Y (N) UTM:
CUM1, CUT1, CUW1, RBO1, SBO1	Yellow Ladies'-tresses (<i>Spiranthes ochroleuca</i>) - S2 Bloom Time - August to November	Dry, open sites, usually on acidic sandy soil, dry to mesic open woodland, thickets, meadows, barrens, ledges, outcrops, banks and roadsides, old fields.	Y (N) UTM:
BIRDS			
-	Bald Eagle (<i>Haliaeetus leucocephalus</i>) - SC	Assessed as SWH. Record species if found.	not required.
CUW, SDO, RBO, TPS	Common Nighthawk (<i>Chordeiles minor</i>) - SC	Hunts insects over a wide variety of habitats, in particular open or semi-open areas. Nests on ground in a wide range of open, sparse or vegetation-free habitats.	Y (N) UTM:
FOD, FOM	Louisiana Waterthrush (<i>Seiurus motacilla</i>) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration	Y (N) UTM: N/A
FOD, CUW, CUT	Red-headed Woodpecker (<i>Melanerpes erythrocephalus</i>) - SC	Species inhabits open woodland/ edges (oak savannahs and riparian forest), open, deciduous forest with little understory; fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; requires cavity trees with at least 40 cm dbh; requires about 4 ha for a territory.	Y (N) UTM: N/A
-	Short Eared Owl (<i>Asio flammeus</i>) - SC	Assessed as SWH. Record species if found.	not required.
CUT1	Yellow-breasted Chat (<i>Icteria virens</i>) - SC	Inhabits thickets, tall tangles of shrubbery beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines	Y (N) UTM: N/A
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: N/A
TPS, TPW	Sleepy Duskywing (<i>Erynnis brize</i>) - S1	Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils.	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: N/A
SWT, SWD, SWM, FOM, FOD4-3, TPW, TPS, CUM1	Tawny Emperor (<i>Asterocampa clyten</i>) - S3	Species inhabits densely wooded riparian areas, dry woods, open woods, fencerows and parks. Usually occurs near Hackberry, the larval foodplant	Y (N) UTM: N/A
FOD5	West Virginia White (<i>Pieris virginianensis</i>) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y (N) UTM: N/A

Wetland Data Collection Sheet



Study area: <u>GOSHEN</u>	Map No: <u>April 18 2012</u>
Date (yyyy-mm-dd): <u>269-G-11493/404</u>	Time Started: <u>8:55am</u>
Field Staff: <u>Jess Pette + Tom Shorey</u>	Time Finished: <u>12:15pm</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? surface water drainage

Soils refer to ELC card for soils information

% open Water

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

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

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

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

Community Descriptions

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

Map Code/ ELC Code	Community Description - list at least four dominant species for each form
<u>SWDZ-2</u> <u>SI</u>	<u>h⁺ Fraxin, ACEFEE, PPOELT</u> <u>TS Fraxin</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

Ducks were observed within ponds

Significant Wildlife Habitat Form

Re-visit Nest Bowl

AECOM

Study Area: BLW JER **GSH** Map #: 269-GSH1493/1494
 Date: 17-May-2012 Time Started: 2:05 pm
 Field Staff: J. Kamstra, A. Dorf Time Finished: 2:20 pm
 Weather Conditions: Sunny, 18°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)
 UTM: 454479, 4795174 Number of nests: 1
 Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present):
 Suspected Crow nest, crows heard edge of woodlot, no birds seen at nest
 Description of habitat (note riparian areas if present, evidence of disturbance): medium-age Beech → Sugar Maple - Basswood

Waterfowls Stopover/Nesting, Amphibian Breeding, Turtle Nesting/Over-wintering, Marsh Breeding Birds
 (CUM1, CUT1, MAM, MAS, SAS1, SAM1, SAF1, SWD, SWT1, SWT2) (FOC, FOM, FOD, SWC, SWM, SWD, BOO1, FE01)
 Standing water present: No Yes (if yes, photograph and complete the following)
 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): _____

Additional - Bird calls heard are noted on back

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)

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

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

 No

 Yes (if yes, photograph and complete the following)

UTMs: _____

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

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

Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas

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

Shoreline of lake, large river or large wetland present:

 No

 Yes (if yes, photograph and complete the following)

UTMs: _____

Rocky island or peninsula present: _____

Mudflat present: _____

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

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

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

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

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

Large open habitat present: No

Yes (if yes, photograph and complete the following)

UTMs: _____

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

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

Old-growth or Mature Forests, Interior Forest Breeding Birds

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

Mature forest present: No

Yes (if yes, photograph and complete the following)

UTMs: _____

Age of oldest trees: _____

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

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

Photo #	Location or Subject	Photo #	Location or Subject
AMRO			
AMCR			
HOWR			
BAOR			

ELC
Community Description and Classification

Map #: 241-GSH 2252 Polygon: 1
 Surveyor(s): SG, RA Date: April 26, 2012 Time start: 2:00 PM finish: 3:30 PM
 UTMZ: UTMN:

Polygon Description

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

Stand Description

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1	2	4	Aspen > V. maculata
2	2	4	Aspen > V. maculata
3	4	3	Aspen > V. maculata
4	7	3	Aspen > V. maculata

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

Stand Composition: Size Class Analysis:

A	<10	A	10-24	0	25-50	>50
	<10	0	10-24	0	25-50	>50
	<10	0	10-24	0	25-50	>50

Standing Snags: Deadfall / Logs:

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

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

Ecosite: Fresh-moist sugar maple dec. Code: F006

Vegetation Type: Fresh-moist sugar maple-w. elm Code: F006-4

Inclusion: Cultural meadow - mineral Code: CUM1-1

Complex:

Community Profile Diagram/Comments

Notes:

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

Site Metrics		Pit/Auger #	Soil Horizon Description				Summary
UTM	Zone	177					Moisture Regime
Slope	Easting	4					
	Northing	475					
	Position	table					
	Aspect						Drainage
	Percent						
	Slope Length						
Depth to...		Mottles					Effective Texture (Indicate below)
	Gley	7					
	Water Table	m					
	Carbonates						
		Bedrock					% CF
1	Depth from zero						
	Texture	Silty m					
2	Depth from zero						
	Texture	Sandy lo					% CF
3	Depth from zero						
	Texture						
4	Depth from zero						
	Texture						% CF
	% Surface Stone/Rock						
	Moisture Regime	Vary					
	Drainage	PIT					

Plant Species List
2012

Trees & Shrubs						Tree & Shrubs						Graminoids					
1	2	3	4	5		1	2	3	4	5		1	2	3	4	5	
Conifers						Deciduous						Grasses					
Balsam Fir (<i>Abies balsamea</i>)						White Oak (<i>Quercus alba</i>)						Giant Redtop (<i>Agrostis gigantea</i>)					
Common Juniper (<i>Juniperus communis</i>)						Bur Oak (<i>Quercus macrocarpa</i>)						Redtop (<i>Agrostis stolonifera</i>)					
Eastern Red Cedar (<i>Juniperus virginiana</i>)						Red Oak (<i>Quercus rubra</i>)						Awnless Brome (<i>Bromus inermis</i>)					
Tamarack (<i>Larix laricina</i>)						Alder Buckthorn (<i>Rhamnus alnifolia</i>)						Bromus					
Norway Spruce (<i>Picea abies</i>)						Common Buckthorn (<i>Rhamnus cathartica</i>)						Blue-joint Grass (<i>Calamagrostis canadensis</i>)					
White Spruce (<i>Picea glauca</i>)						Smooth Sumac (<i>Rhus glabra</i>)						Orchard Grass (<i>Dactylis glomerata</i>)					
Black Spruce (<i>Picea mariana</i>)						Staghorn Sumac (<i>Rhus hirta</i>)						Poverty Oat Grass (<i>Danthonia spicata</i>)					
Jack Pine (<i>Pinus banksiana</i>)						Wild Black Currant (<i>Ribes americanum</i>)						Quack Grass (<i>Elymus repens</i>)					
Red Pine (<i>Pinus resinosa</i>)						Prickly Gooseberry (<i>Ribes cynosbati</i>)						Virginia Wild Rye (<i>Elymus virginicus</i>)					
Eastern White Pine (<i>Pinus strobus</i>)						Swamp Black Currant (<i>Ribes lacustre</i>)						Elymus					
Scotch Pine (<i>Pinus sylvestris</i>)						Red Currant (<i>Ribes rubrum</i>)											
Canada Yew (<i>Taxus canadensis</i>)						Ribes						Fowl Manna Grass (<i>Glyceria striata</i>)					
Eastern White Cedar (<i>Thuja occidentalis</i>)						Black Locust (<i>Robinia pseudo-acacia</i>)						Glyceria					
Eastern Hemlock (<i>Tsuga canadensis</i>)						Prickly Rose (<i>Rosa acicularis</i>)						Rice Cut Grass (<i>Leersia oryzoides</i>)					
						Smooth Rose (<i>Rosa blanda</i>)						Tall Fescue (<i>Lolium arundinaceum</i>)					
						Multiflora Rose (<i>Rosa multiflora</i>)						Muhlenbergia					
						Rosa						Witch-grass (<i>Panicum capillare</i>)					
						Manitoba Maple (<i>Acer negundo</i>)						Panicum					
						Black Maple (<i>Acer nigrum</i>)						Reed Canary Grass (<i>Phalaris arundinacea</i>)					
						Norway Maple (<i>Acer platanoides</i>)						Timothy (<i>Phleum pratense</i>)					
						Red Maple (<i>Acer rubrum</i>)						Common Reed (<i>Phragmites australis</i>)					
						Silver Maple (<i>Acer saccharinum</i>)						Canada Blue Grass (<i>Poa compressa</i>)					
						Freeman's Maple (<i>Acer X freemanii</i>)						Fowl Meadow Grass (<i>Poa palustris</i>)					
						Sugar Maple (<i>Acer saccharum</i>)						Kentucky Bluegrass (<i>Poa pratensis</i>)					
						Mountain Maple (<i>Acer spicatum</i>)						Yellow Foxtail (<i>Setaria pumila</i>)					
						Speckled Alder (<i>Alnus incana</i>)						Green Foxtail (<i>Setaria viridis</i>)					
						Downy Serviceberry (<i>Amelanchier arborea</i>)											
						Serviceberry (<i>Amelanchier sanguinea</i>)											
						Yellow Birch (<i>Betula alleghaniensis</i>)											
						White Birch (<i>Betula papyrifera</i>)											
						European Birch (<i>Betula pendula</i>)											
						Blue Beech (<i>Carpinus caroliniana</i>)											
						Bitternut hickory (<i>Carya cordiformis</i>)											
						Shagbark Hickory (<i>Carya ovata</i>)											
						Climbing Bittersweet (<i>Celastrus scandens</i>)											
						Common Hackberry (<i>Celtis occidentalis</i>)											
						Buttonbush (<i>Cephalanthus occidentalis</i>)											
						Alt.-leaved Dogwood (<i>Cornus alternifolia</i>)											
						Silky Dogwood (<i>Cornus amomum</i>)											
						Bunchberry (<i>Cornus canadensis</i>)											
						Gray dogwood (<i>Cornus racemosa</i>)											
						Round-leaved Dogwood (<i>Cornus rugosa</i>)											
						Red-osier Dogwood (<i>Cornus sericea</i>)											
						American Hazel (<i>Corylus americana</i>)											
						Beaked Hazel (<i>Corylus cornuta</i>)											
						Cockspur Thorn (<i>Crataegus crus-galli</i>)											
						English Hawthorn (<i>Crataegus monogyna</i>)											
						Large-fruited Thorn (<i>Crataegus punctata</i>)											
						Crataegus											
						Crataegus											
						Bush Honeysuckle (<i>Diervilla lonicera</i>)											
						Russian Olive (<i>Elaeagnus angustifolia</i>)											
						Autumn Olive (<i>Elaeagnus umbellata</i>)											
						Run. Strawberry-bush (<i>Euonymus obovata</i>)											
						American Beech (<i>Fagus grandifolia</i>)											
						Glossy Buckthorn (<i>Fregula alnus</i>)											
						White Ash (<i>Fraxinus americana</i>)											
						Black Ash (<i>Fraxinus nigra</i>)											
						Green Ash (<i>Fraxinus pennsylvanica</i>)											
						Witch-hazel (<i>Hamamelis virginiana</i>)											
						Winterberry (<i>Ilex verticillata</i>)											
						Butternut (<i>Juglans cinerea</i>)											
						Black Walnut (<i>Juglans nigra</i>)											
						Common Privet (<i>Ligustrum vulgare</i>)											
						Spicebush (<i>Lindera benzoin</i>)											
						Fly Honeysuckle (<i>Lonicera canadensis</i>)											
						Glaucous Honeysuckle (<i>Lonicera dioica</i>)											
						Morrow's Honeysuckle (<i>Lonicera morrowii</i>)											
						Tartarian Honeysuckle (<i>Lonicera tatarica</i>)											
						Common Apple (<i>Malus pumila</i>)											
						White Mulberry (<i>Morus alba</i>)											
						Sweet Gale (<i>Myrica gale</i>)											
						Ironwood (<i>Ostrya virginiana</i>)											
						Thicket-creeper (<i>Parthenocissus inserta</i>)											
						Ninebark (<i>Physocarpus opulifolius</i>)											
						Balsam Poplar (<i>Populus balsamifera</i>)											
						Eastern Cottonwood (<i>Populus deltoides</i>)											
						Large-tooth Aspen (<i>Populus grandidentata</i>)											
						Trembling Aspen (<i>Populus tremuloides</i>)											
						Sweet Cherry (<i>Prunus avium</i>)											
						Pin Cherry (<i>Prunus pensylvanica</i>)											
						Black Cherry (<i>Prunus serotina</i>)											
						Choke Cherry (<i>Prunus virginiana</i>)											
						Prunus											
						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: 271-65H2252											
						Date: April 26, 2012											
						Surveyors: RA, SG											

Puffball (R)
Painted Trillium - R

Plant Species List
2012

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

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

Map Number:	1	4
Date:	2	6
Surveyors:	3	

Significant Wildlife Habitat Form

AECOM

Study Area:	BLW JER (GSH)	Map #:	271-GSH-2252
Date:	April 26, 2012	Time Started:	2:00pm
Field Staff:	SG, RA	Time Finished:	3:00pm
Weather Conditions:	overcast, moderate wind, occasional rain		

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

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

UTMs: _____ Number of nests: _____

Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present): _____

Description of habitat (note riparian areas if present, evidence of disturbance): _____

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

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

UTMs: _____ Area of standing water delineated on field map

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

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

Area and soil/substrate of shoreline habitat: _____

Type and abundance of cover in open water habitat: _____

Type and abundance of cover in surrounding habitat: _____

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

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

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

Snake Hibernacula

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

UTMs: _____ Likelihood to extend below frost line: _____

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

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

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

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

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

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

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)

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

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

No

Yes (if yes, photograph and complete the following)

UTMs: _____

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

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

Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas

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

Shoreline of lake, large river or large wetland present:

No

Yes (if yes, photograph and complete the following)

UTMs: _____

Rocky island or peninsula present: _____

Mudflat present: _____

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

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

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

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

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

Large open habitat present: No

Yes (if yes, photograph and complete the following)

UTMs: _____

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

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

Old-growth or Mature Forests, Interior Forest Breeding Birds

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

Mature forest present: No

Yes (if yes, photograph and complete the following)

UTMs: _____

Age of oldest trees: _____

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

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

Photo #	Location or Subject	Photo #	Location or Subject

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
CUM1, MAM, FOD6, FOD7, FOD9	June-August Green Dragon (<i>Arisaema dracontium</i>) - SC/S3 <u>Bloom Time - May and June</u>	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y N UTM: NO
TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	June-August Hairy Bedstraw (<i>Gallium pilosum</i>) - S3 <u>Bloom Time - June to August</u>	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	June to August Hairy Valerian (<i>Valeriana edulis</i>) - S1 <u>Bloom Time - June to August</u>	Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens.	Y N UTM:
FOD6, FOD7, SWM, SWD	Summer Hairy Wood Mint (<i>Blephilia hirsuta</i>) - S1 <u>Bloom Time - Summer</u>	Woodlands, often rocky, especially rivers. Rich woods, swamp forests, floodplains	Y N UTM: NO
FOD6, FOD7, FOD8, FOD9	Harbinger-of-spring (<i>Erigenia bulbosa</i>) - S3 <u>Bloom Time - early to late April</u>	Occurs in rich, moist deciduous woods, especially on floodplains	Y N UTM: NO
SAS1, SAM1, SAF1	Hill's Pond Weed (<i>Potamogeton hillii</i>) - SC/S2 <u>Bloom Time - summer</u>	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters.	Y N UTM:
FOM6, FOM7, FOM8	Large Round-leaved Orchid (<i>Platanthera macrophylla</i>) - S2 <u>Bloom Time - June to August</u>	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands.	Y N UTM:
MAM2, MAM3, MAS2, MAS3, SWD	Lizard's Tail (<i>Saururus cernuus</i>) - S3 <u>Bloom Time - June - September</u>	Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds.	Y N UTM:
FOD6, FOD7, FOD9	Pawpaw (<i>Asimina triloba</i>) - S3 <u>Bloom Time - March-May</u>	Occurs in moist deciduous woods and stream banks	Y N UTM: NO
FOM8, FOD6, FOD7, FOD9, CUM1	Pliose Evening Primrose (<i>Oenothera pilosella</i>) - S2 <u>Bloom Time - Late Spring - Early Summer</u>	Moist edges of woods and open, disturbed ground.	Y N UTM: NO
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostate Tick-trefoil (<i>Desmodium rotundifolium</i>) - S2 <u>Bloom Time - July-September</u>	Dry, sandy or rocky woods	Y N UTM:
FOD7, SWD	Pumpkin Ash (<i>Fraxinus profunda</i>) - S2? <u>Bloom Time - March - June</u>	Swamps and floodplains	Y N UTM:
CUW1, ALO, FET1, SWC	Ram's-head Lady's-slipper (<i>Cypripedium arietinum</i>) - S3 <u>Bloom Time - mid May to mid June</u>	Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamps, dry-sandy woods, and limestone barren	Y N UTM:
FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5	Rattlesnake Hawkweed (<i>Hieracium venosum</i>) - S2 <u>Bloom Time - April - September</u>	Species inhabits open, dry sandy woods, Jack pine, oak, and aspen woodlands.	Y N UTM:
FOD6, FOD7, FOD9	Round-leaved Groundsel (<i>Packera obovata</i>) - S3 <u>Bloom Time - May - June</u>	Found in moist woods	Y N UTM: NO
CUM1, CUT1, CUS1	Round-leaved hawthorn (<i>Crataegus lumarina</i>) - S3? <u>Bloom Time - May - June</u>	Species occurs in old fields, poorly managed pastures, fencelines and roadsides	Y N UTM: NO
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm (<i>Monarda didyma</i>) - S3 <u>Bloom Time - May to October</u>	Old farm <u>oath</u> Found in moist, rich woods, thicket swamps, banks and floodplains.	Y N UTM: NO
ALO, ALS, ALT, TPO, TPS, TPW	Slender Blazing Star (<i>Liatris cylindracea</i>) - S3 <u>Bloom Time - late summer to mid fall</u>	Species occurs in limestone and dolostone pavement, prairies, open woods, always and moist sandy meadows.	Y N UTM:
SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2	Slender Knotweed (<i>Polygonum tenue</i>) - S2 <u>Bloom Time - late summer to mid fall</u>	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 Mulihi (<i>Muhlenbergia tenuiflora</i>) - S2 <u>Bloom Time - late summer to mid fall</u>	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods	Y N UTM:
BL01, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian (<i>Gentiana quinquefolia</i>) - S2 <u>Bloom Time - late summer to mid fall</u>	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	Y N UTM:
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine (<i>Lupinus perennis</i>) - S3 <u>Bloom Time - mid-March to mid-June</u>	Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, Jack pine, and/or aspen.	Y N UTM:

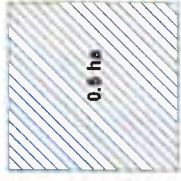
Species Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N); UTM; description of habitat if present
TP01, TPS1, TPW1, CUM1	Tail Blazing Star (<i>Liatris aspera</i>)-S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM:
FE0, FES, FET, MAM2, MAM3	Tuberous Indian Plantain (<i>Arnoglossum plantagineum</i>) - S3 Bloom Time –mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats.	Y (N) UTM:
FOC1, FOC2, FOC3, FOC4	Woodland Pinedrops (<i>Pterospora andromedea</i>) - S2 Bloom Time – summer	Found in conifer woods, under pines, but also hemlock, spruce, fir, and white cedar. In dry or rocky soil, often with common juniper and sometimes aspen or birch.	Y (N) UTM:
CUM1, CUT1, CUW1, RBO1, SBO1	Yellow Ladies'-tresses (<i>Spiranthes ochroleuca</i>) - S2 Bloom Time – August to November	Dry, open sites, usually on acidic sandy soil, dry to mesic open woodland, thickets, meadows, barrens, ledges, outcrops, banks and roadsides, old fields.	Y (N) UTM: NO
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	Nests on ground over a wide variety of habitats, in particular open or semi-open areas. Nests on ground in a wide range of open, sparse or vegetation-free habitats.	Y (N) UTM:
FOD, FOM	Louisiana Waterthrush (<i>Seiurus motacilla</i>) - SC	Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration	Y (N) UTM:
FOD, CUW, CUT	Red-headed Woodpecker (<i>Melanerpes erythrocephalus</i>) - SC	Species inhabits open woodland/ edges (oak savannahs and riparian forest), open, deciduous forest with little understory; fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; requires cavity trees with at least 40 cm dbh; requires about 4 ha for a territory.	Y (N) UTM:
-	Short Eared Owl (<i>Asio flammeus</i>) - SC	Assessed as SWH. Record species if found.	not required.
CUT1	Yellow-breasted Chat (<i>Icteria virens</i>) - SC	Inhabits thickets, tall tangles of shrubbery beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines	Y (N) UTM:
REPTILES			
-	Eastern Ribbonsnake (<i>Thamnophis sauritus</i>) - SC	Assessed as SWH. Record species if found.	not required.
-	Milksnake (<i>Lampropeltis triangulum</i>) -SC	Assessed as SWH. Record species if found.	not required.
-	Snapping Turtle (<i>Chelydra serpentina</i>) - SC	Assessed as SWH. Record species if found.	not required.
INSECTS			
OAO, SA, SWM, SWD	Azure Bluet (<i>Enallagma aspersum</i>) –S3	Species inhabits fishless ponds, lakes and boggy swamps	Y (N) UTM:
TPS, TPW	Sleepy Duskywing (<i>Erynnis brize</i>) - S1	Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils. Species regularly seen at flowers in oak woods, on the ground, and at mud puddles	Y (N) UTM:
CUM1, CUT1, CUW1	Monarch Butterfly (<i>Danaus plexippus</i>) - SC	Their larvae only feed on milkweeds (<i>Asclepius</i> spp.). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow	Y (N) UTM: NO
TPS, CUW	Mottled Duskywing (<i>Erynnis martialis</i>) –S2	Usually seen nectaring on or wet sandy roads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present	Y (N) UTM:
SWT, SWD, SWM, FOM, FOD4-3, TPW, TPS, CUM1	Tawny Emperor (<i>Asterocampa clyten</i>) – S3	Species inhabits densely wooded riparian areas, dry woods, open woods, fencerows and parks. Usually occurs near Hackberry, the larval foodplant	Y (N) UTM: NO
FOD5	West Virginia White (<i>Pieris virginianensis</i>) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y (N) UTM:



- 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



0.5 ha

Basemapping from Ontario Ministry of Natural Resources
Orthophotography 2010



UTM Zone 17N, NAD 83

The drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties except as agreed by AECOM and its client, as required by law. AECOM shall not be liable for any errors or omissions in this drawing, no responsibility and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent.

Geshen ELC Survey
273_GSH2133

April 2012
Project 80150602

AECOM

Figure 1

ELC
Community
Description and
Classification

Site: 2736SH2133 Polygon: F08-1
 Surveyor(s): Jenaib + Tom Shroyer Date: 8/23/08
 Time start: 8:23 am finish: 9:55 am
 UTMZ: 452138 UTMX: 4795644 UTMN:

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic Site <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input checked="" type="checkbox"/> Tableland <input type="checkbox"/> Roll. Upland <input type="checkbox"/> Cliff <input type="checkbox"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Forb <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte <input checked="" type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> 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	4		POTTEM > LILAMER - LYAMMER - FLAPENN
2	3		LILAMER > CARCARO > ALCEFREE > LILAMER
3	3		PLUWIG - CARCARO - RIBAMER
4	3		MIFACE - allpet - Tarshi - Suldaya sp.

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 - 50% 4 > 50%

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

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

Com. Age:	<input type="checkbox"/> Pioneer	<input checked="" type="checkbox"/> Young	<input type="checkbox"/> Mid-Age	<input type="checkbox"/> Mature	<input type="checkbox"/> Old Growth
-----------	----------------------------------	---	----------------------------------	---------------------------------	-------------------------------------

Ecosite:	Fresh-Moist Poplar-Saxatras Deciduous Forest Ecotone	Code:	F08-8
Vegetation Type:	Fresh-Moist Poplar Deciduous Forest Type	Code:	F08-1
Inclusion:	SWAMPY AREA, mixed deciduous SWAMP	Code:	SWD3-3
Complex:		Code:	

Community Profile Diagram/Comments

Notes:
 VERY OPEN SWAMPY
 - DECIDUOUS
 - SMALL SWAMP DECIDUOUS along edge following
 - 10-15m tall trees

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

Site Metrics	PIWAuger #	1 (F08-1)	2 (SWD-1)	Summary
Zone	17		17	
Easting	452138		452164	
Northing	4795644		4795630	
Position	flat (conductivity)		Bottom	
Aspect			E	
Percent			2%	
Slope			20m	
Length				
Mottles	26cm		25cm	
Gley	26cm		25cm	
Water Table			13cm	
Carbonates				
Bedrock				
Depth from zero	26cm	% CF	25cm	% CF
Texture	SIL		SIL	
Depth from zero	36cm	% CF	41cm	% CF
Texture	SIC		SIC	
Depth from zero		% CF		% CF
Texture				
Depth from zero		% CF		% CF
Texture				
Depth from zero		% CF		% CF
Texture	SIC		SIC	
% Surface Stone/Rock				
Moisture Regime	6		6	
Drainage	P/1		P/1	

Significant Wildlife Habitat Form

Study Area: BLW JER GSH
 Date: 2012-05-02
 Field Staff: Tom Storey Jess Pielke
 Time Started: 8:23 am
 Time Finished: 9:55 am
 Map #: 273-GSH2133
 Weather Conditions: Overcast, 15°C, 20 km/h

Colonial Nesting Tree/Shrub Birds, Osprey Breeding/Feeding, Bald Eagle Breeding/Nesting Habitat
 (FET1, FOC, FOM, FOD, SWC, SMM, SWD)
 Nest bowls present: No Yes (if yes, photograph and complete the following)
 UTM's: _____
 Number of nests: _____
 Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present): _____
 Description of habitat (note riparian areas if present, evidence of disturbance): _____

Waterfowl's Stopover/Nesting, Amphibian Breeding, Turtle Nesting/Over-wintering, Marsh Breeding Birds
 (CUM1, CUT1, MAM, MAS, SAS1, SAM1, SAF1, SWD, SWT1, SWT2)
 Standing water present: No Yes (if yes, photograph and complete the following)
 UTM's: _____
 Area of standing water delineated on field map
 % 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: _____

Snake Hibernacula
 Fissured rock/foundation or rock/debris pile present: No Yes (if yes, photograph and complete the following)
 UTM's: _____
 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, SMM, SWD)
 Evidence of seep or spring: No Yes (if yes, photograph and complete the following)
 UTM's: _____
 Description (indicator species, etc): _____

Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)
(CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CST1, CLT1)

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

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)

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

Rocky island or peninsula present: _____
 Evidence of disturbance (e.g. cattle grazing): _____
 Mudflat present: _____
 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, FOD, FOM with a CUM, CUT, CUS, CUW >20ha, or a CUM, CUS, CUT, CUW >15ha

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

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

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

Age of oldest trees: _____
 Evidence of disturbance (e.g. selective cutting): _____
 Description of habitat (structural complexity, abundance of snags and/or downed woody debris, etc): _____

Photo #	Location or Subject	Photo #	Location or Subject

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
CUM1, MAM,	June - August		
FOD6, FOD7, FOD9	Green Dragon (<i>Arisaema dracontium</i>) - SC/S3 <u>Bloom Time - May and June</u>	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y (N) UTM:
TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Hairy Bedstraw (<i>Galium pilosum</i>) - S3 <u>Bloom Time - June-August</u>	Occurs in dry, sandy woods and thickets; occasionally in dry sandy fields	Y (N) UTM:
FEO1, FES1, FET1, SWC, SWM, SWD, SWT, TPO, TPW	Hairy Valerian (<i>Valeriana edulis</i>) - S1 <u>Bloom Time - June to August</u>	Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens.	Y (N) UTM:
FOD6, FOD7, SWM (SWD)	Hairy Wood Mint (<i>Blephilia hirsuta</i>) - S1 <u>Bloom Time - Summer</u>	Woodlands, often rocky, especially rivers. Rich woods, <u>swamp forests</u> , floodplains	Y (N) UTM: <u>N/O</u>
FOD6, FOD7, FOD9	Harbinger-of-spring (<i>Erigenia bulbosa</i>) - S3 <u>Bloom Time - early to late April</u>	Occurs in rich, moist deciduous woods, especially on floodplains	Y (N) UTM: <u>N/O</u>
SAS1, SAM1, SAF1	Hill's Pond Weed (<i>Potamogeton hillii</i>) - SC/S2 <u>Bloom Time - summer</u>	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters.	Y (N) UTM:
FOM6, FOM7, FOM8	Large Round-leaved Orchid (<i>Platanthera macrophylla</i>) - S2 <u>Bloom Time - June to August</u>	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands.	Y (N) UTM:
MAM2, MAM3, MAS2, MAS3, SWD	Lizard's Tail (<i>Saururus cernuus</i>) - S3 <u>Bloom Time - June - September</u>	Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds.	Y (N) UTM:
FOD5, FOD7, FOD9	Pawpaw (<i>Asimina triloba</i>) - S3 <u>Bloom Time - March-May</u>	Occurs in moist deciduous woods and stream banks.	Y (N) UTM:
FOM8, FOD6, FOD7, FOD9, CUM1	Pilose Evening Primrose (<i>Oenothera pilosella</i>) - S2 <u>Bloom Time - Late Spring - Early Summer</u>	Moist edges of woods and open, disturbed ground	Y (N) UTM:
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostrate Tick-trefoil (<i>Desmodium rotundifolium</i>) - S2 <u>Bloom Time - July-September</u>	Dry, sandy or rocky woods	Y (N) UTM:
FOD7, SWD	Pumpkin Ash (<i>Fraxinus profunda</i>) - S2? <u>Bloom Time - March - June</u>	Swamps and floodplains	Y (N) UTM: <u>N/O</u>
CUM1, ALO, FET1, SWC	Ram's-head Lady's-slipper (<i>Cypripedium arietinum</i>) - S3 <u>Bloom Time - mid May to mid June</u>	Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamps, dry-sandy woods, and limestone barren.	Y (N) UTM:
FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5	Rattlesnake Hawkweed (<i>Hieracium venosum</i>) - S2 <u>Bloom Time - April - September</u>	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands.	Y (N) UTM:
FOD6, FOD7, FOD9	Round-leaved Groundsel (<i>Packera obovata</i>) - S3 <u>Bloom Time - May - June</u>	Found in moist woods	Y (N) UTM:
CUM1, CUT1, CUS1	Round-leaved hawthorn (<i>Crataegus lumaria</i>) - S3?	Species occurs in old fields, poorly managed pastures, fencelines and roadsides	Y (N) UTM:
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm (<i>Monarda didyma</i>) - S3 <u>Bloom Time - May to October</u>	Found in moist, rich woods, thicket swamps, banks and floodplains.	Y (N) UTM: <u>N/O</u>
ALO, ALS, ALT, TPO, TPS, TPW	Slender Blazing Star (<i>Liatris cylindracea</i>) - S3	Species occurs in limestone and dolostone pavement, prairies, open woods, alvars and moist sandy meadows.	Y (N) UTM:
SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2	Slender Knotweed (<i>Polygonum tenue</i>) - S2	Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows, at edges of sand pits	Y (N) UTM:
SDT1, FOD5, FOD9	Slim-flowered Muehly (<i>Muhlenbergia tenuiflora</i>) - S2	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods	Y (N) UTM:
BL01, BLS1, BLT1, TPO2, TP-S2, TPW2, MAM2, FOD7	Stiff Gentian (<i>Gentiana quinquefolia</i>) - S2 <u>Bloom Time - late summer to mid fall</u>	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	Y (N) UTM:
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine (<i>Lupinus perennis</i>) - S3 <u>Bloom Time - mid-March to mid-June</u>	Inhabits dry, sandy oak 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	Tail Blazing Star (<i>Liatris aspera</i>) - S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM:
FE0, FES, FET, MAM2, MAM3	Tuberous Indian Plantain (<i>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 areas 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 understory, fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; requires cavity trees with at least 40 cm dbh; requires about 4 ha for a territory.	Y (N) UTM:
-	Short Eared Owl (<i>Asio flammeus</i>) - SC	Assessed as SWH. Record species if found.	not required
CUT1	Yellow-breasted Chat (<i>Icteria virens</i>) - SC	Inhabits thickets, tall tangles of shrubby beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines	Y (N) UTM:
REPTILES			
-	Eastern Ribbonsnake (<i>Thamnophis sauritus</i>) - SC	Assessed as SWH. Record species if found.	not required
-	Milksnake (<i>Lampropeltis triangulum</i>) - SC	Assessed as SWH. Record species if found.	not required
-	Snapping Turtle (<i>Chelydra serpentina</i>) - SC	Assessed as SWH. Record species if found.	not required
INSECTS			
OAO, SA, SWM, SWD	Azure Bluet (<i>Enallagma aspersum</i>) - S3	Species inhabits fishless ponds, lakes and boggy swamps	Y (N) UTM:
TPS, TPW	Sleepy Duskywing (<i>Erynnis brizo</i>) - S1	Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils. Species regularly seen at flowers in oak woods, on the ground, and at mud puddles	Y (N) UTM:
CUM1, CUT1, CUW1	Monarch Butterfly (<i>Danaus plexippus</i>) - SC	Their larvae only feed on milkweeds (<i>Asclepius</i> spp.). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow	Y (N) UTM:
TPS, CUW	Mottled Duskywing (<i>Erynnis martialis</i>) - S2	Usually seen nectaring or on wet sandy roads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present	Y (N) UTM:
SWT, SWD, SWM, FOM, FOD4-3, TPW, TPS, CUM1	Tawny Emperor (<i>Asterocampa clyton</i>) - S3	Species inhabits densely wooded riparian areas, dry woods, open woods, fencerows and parks. Usually occurs near Hackberry, the larval foodplant	Y (N) UTM:
FOD5	West Virginia White (<i>Pieris virginensis</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>273GSH2133</u>
Date (yyyy-mm-dd): <u>May 2, 2012</u>	Time Started: <u>8:23am</u>
Field Staff: <u>Jess Piotti + Tom Sharkey</u>	Time Finished: <u>9:55am</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? surface water

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>SWD3-3</u> <u>51</u>	<u>h*: Acer, Ulm, Pop, Elm</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

Very small wetland pocket following
small drainage feature within feature

*ASA * Roadside

ELC Community Description and Classification

Map #: 2746SH2224 Polygon: MAM3-2

Surveyor(s): JCS, Jette + Tim Spronzy, May 1, 2012 Time start: 2:15 pm finish: 2:55 pm

UTMZ: /UTMZ: /UTMN:

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock <input type="checkbox"/> History <input type="checkbox"/> Natural <input type="checkbox"/> Cultural <input type="checkbox"/> Cover <input checked="" type="checkbox"/> Open <input type="checkbox"/> Shrub <input type="checkbox"/> Treed	<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"/> Talus <input type="checkbox"/> Crevice/Cave <input type="checkbox"/> Alvar <input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input checked="" type="checkbox"/> Valley Slope <input type="checkbox"/> Tableland <input type="checkbox"/> Rofl. 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"/> Bare <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	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input checked="" type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input checked="" type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

Stand Description

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp)
1			
2			
3	4	2	Saxifrage >> Corseti
4	6	4	Phacelia >> Solidago > Symphyotrichum sp

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

Stand Composition: Size Class Analysis:

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

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

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

Ecotis: Organic Meadow Marsh Code: MAM3

Vegetation Type: Reed Canary Grass Organic Meadow Marsh Type Code: MAM3-2

Inclusion: Code:

Complex: Code:

Community Profile Diagram/Comments

Soils should be confirmed but given proximity to swamp and marsh, assume they had occurred to be same soils

Notes:

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

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

Plant Species List
2012

Trees & Shrubs					Tree & Shrubs					Graminoids				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Conifers					Deciduous					Grasses				
Balsam Fir (<i>Abies balsamea</i>)					White Oak (<i>Quercus alba</i>)					Giant Redtop (<i>Agrostis gigantea</i>)				
Common Juniper (<i>Juniperus communis</i>)					Bur Oak (<i>Quercus macrocarpa</i>)					Redtop (<i>Agrostis stolonifera</i>)				
Eastern Red Cedar (<i>Juniperus virginiana</i>)					Red Oak (<i>Quercus rubra</i>)					Awnless Brome (<i>Bromus inermis</i>)				
Tamarack (<i>Larix laricina</i>)					Alder Buckthorn (<i>Rhamnus alnifolia</i>)					Bromus				
Norway Spruce (<i>Picea abies</i>)					Common Buckthorn (<i>Rhamnus cathartica</i>)					Blue-joint Grass (<i>Calamagrostis canadensis</i>)				
White Spruce (<i>Picea glauca</i>)					Smooth Sumac (<i>Rhus glabra</i>)					Orchard Grass (<i>Dactylis glomerata</i>)				
Black Spruce (<i>Picea mariana</i>)					Staghorn Sumac (<i>Rhus hirta</i>)					Poverty Oat Grass (<i>Danthonia spicata</i>)				
Jack Pine (<i>Pinus banksiana</i>)					Wild Black Currant (<i>Ribes americanum</i>)					Quack Grass (<i>Elymus repens</i>)				
Red Pine (<i>Pinus resinosa</i>)					Prickly Gooseberry (<i>Ribes cynosbati</i>)					Virginia Wild Rye (<i>Elymus virginicus</i>)				
Eastern White Pine (<i>Pinus strobus</i>)					Swamp Black Currant (<i>Ribes lacustre</i>)					<i>Elymus</i>				
Scotch Pine (<i>Pinus sylvestris</i>)					Red Currant (<i>Ribes rubrum</i>)									
Canada Yew (<i>Taxus canadensis</i>)					<i>Ribes</i>					Fowl Manna Grass (<i>Glyceria striata</i>)				
Eastern White Cedar (<i>Thuja occidentalis</i>)					Black Locust (<i>Robinia pseudo-acacia</i>)					<i>Glyceria</i>				
Eastern Hemlock (<i>Tsuga canadensis</i>)					Prickly Rose (<i>Rosa acicularis</i>)					Rice Cut Grass (<i>Leersia oryzoides</i>)				
					Smooth Rose (<i>Rosa blanda</i>)					Tall Fescue (<i>Lolium arundinaceum</i>)				
					Multiflora Rose (<i>Rosa multiflora</i>)					<i>Muhlenbergia</i>				
					<i>Rosa</i>					Witch-grass (<i>Panicum capillare</i>)				
					Com. Blackberry (<i>Rubus allegheniensis</i>)					<i>Panicum</i>				
Deciduous					Wild Red Raspberry (<i>Rubus idaeus</i>)					Reed Canary Grass (<i>Phalaris arundinacea</i>)				
Manitoba Maple (<i>Acer negundo</i>)					Black Raspberry (<i>Rubus occidentalis</i>)					Timothy (<i>Phleum pratense</i>)				
Black Maple (<i>Acer nigrum</i>)					Purple-fl. Raspberry (<i>Rubus odoratus</i>)					Common Reed (<i>Phragmites australis</i>)				
Norway Maple (<i>Acer platanoides</i>)					Dwarf Raspberry (<i>Rubus pubescens</i>)					Canada Blue Grass (<i>Poa compressa</i>)				
Red Maple (<i>Acer rubrum</i>)					<i>Rubus</i>					Fowl Meadow Grass (<i>Poa palustris</i>)				
Silver Maple (<i>Acer saccharinum</i>)					Peach-leaved Willow (<i>Salix amygdaloides</i>)					Kentucky Bluegrass (<i>Poa pratensis</i>)				
Freeman's Maple (<i>Acer X freemanii</i>)					Bebb's Willow (<i>Salix bebbiana</i>)					Yellow Foxtail (<i>Setaria pumila</i>)				
Sugar Maple (<i>Acer saccharum</i>)					Pussy Willow (<i>Salix discolor</i>)					Green Foxtail (<i>Setaria viridis</i>)				
Mountain Maple (<i>Acer spicatum</i>)					Missouri Willow (<i>Salix eriocephala</i>)									
Speckled Alder (<i>Alnus incana</i>)					Sandbar Willow (<i>Salix exigua</i>)									
Downy Serviceberry (<i>Amelanchier arborea</i>)					Shining Willow (<i>Salix lucida</i>)									
Serviceberry (<i>Amelanchier sanguinea</i>)					Black Willow (<i>Salix nigra</i>)									
Yellow Birch (<i>Betula alleghaniensis</i>)					Slender Willow (<i>Salix petiolaris</i>)									
White Birch (<i>Betula papyrifera</i>)					<i>Salix</i>									
European Birch (<i>Betula pendula</i>)					Hybrid Crack Willow (<i>Salix X rubens</i>)									
Blue Beech (<i>Carpinus caroliniana</i>)					Black-berried Elder (<i>Sambucus nigra</i>)									
Bitternut hickory (<i>Carya cordiformis</i>)					Red-berried Elder (<i>Sambucus racemosa</i>)									
Shagbark Hickory (<i>Carya ovata</i>)					Buffaloberry (<i>Shepherdia canadensis</i>)									
Climbing Bittersweet (<i>Celastrus scandens</i>)					Eur. Mountain Ash (<i>Sorbus aucuparia</i>)									
Common Hackberry (<i>Celtis occidentalis</i>)					Narrow Meadow-sweet (<i>Spiraea alba</i>)									
Buttonbush (<i>Cephalanthus occidentalis</i>)					Common Lilac (<i>Syringa vulgaris</i>)									
Alt.-leaved Dogwood (<i>Cornus alternifolia</i>)					Poison-ivy (<i>Toxicodendron rydbergii</i>)									
Silky Dogwood (<i>Cornus amomum</i>)					Climbing Poison-ivy (<i>Toxicodendron radicans</i>)									
Bunchberry (<i>Cornus canadensis</i>)					White Elm (<i>Ulmus americana</i>)									
Gray dogwood (<i>Cornus racemosa</i>)					Siberian Elm (<i>Ulmus pumila</i>)									
Round-leaved Dogwood (<i>Cornus rugosa</i>)					Slippery Elm (<i>Ulmus rubra</i>)									
Red-osier Dogwood (<i>Cornus sericea</i>)					Low Blueberry (<i>Vaccinium angustifolium</i>)									
American Hazel (<i>Corylus americana</i>)					Maple-leaf Viburnum (<i>Viburnum acerifolium</i>)									
Beaked Hazel (<i>Corylus cornuta</i>)					Hobblebush (<i>Viburnum lentanoides</i>)									
Cockspur Thorn (<i>Crataegus crus-galli</i>)					Nannyberry (<i>Viburnum lentago</i>)									
English Hawthorn (<i>Crataegus monogyna</i>)					Guelder-Rose (<i>Viburnum opulus</i>)									
Large-fruited Thorn (<i>Crataegus punctata</i>)					Downy Arrow-wood (<i>Vib. rafinesquianum</i>)									
<i>Crataegus</i>					Riverbank Grape (<i>Vitis riparia</i>)									
<i>Crataegus</i>					Am. Prickly-ash (<i>Zanthoxylum americanum</i>)									
Bush Honeysuckle (<i>Diervilla lonicera</i>)														
Russian Olive (<i>Elaeagnus angustifolia</i>)														
Autumn Olive (<i>Elaeagnus umbellata</i>)														
Run. Strawberry-bush (<i>Euonymus obovata</i>)														
American Beech (<i>Fagus grandifolia</i>)														
Glossy Buckthorn (<i>Frangula alnus</i>)														
White Ash (<i>Fraxinus americana</i>)														
Black Ash (<i>Fraxinus nigra</i>)														
Green Ash (<i>Fraxinus pennsylvanica</i>)														
Witch-hazel (<i>Hamamelis virginiana</i>)														
Winterberry (<i>Ilex verticillata</i>)														
Butternut (<i>Juglans cinerea</i>)														
Black Walnut (<i>Juglans nigra</i>)														
Common Privet (<i>Ligustrum vulgare</i>)														
Spicebush (<i>Lindera benzoin</i>)														
Fly Honeysuckle (<i>Lonicera canadensis</i>)														
Glaucous Honeysuckle (<i>Lonicera dioica</i>)														
Morrow's Honeysuckle (<i>Lonicera morrowii</i>)														
Tartarian Honeysuckle (<i>Lonicera tatarica</i>)														
Common Apple (<i>Malus pumila</i>)														
White Mulberry (<i>Morus alba</i>)														
Sweet Gale (<i>Myrica gale</i>)														
Ironwood (<i>Ostrya virginiana</i>)														
Thicket-creeper (<i>Parthenocissus inserta</i>)														
Ninebark (<i>Physocarpus opulifolius</i>)														
Balsam Poplar (<i>Populus balsamifera</i>)														
Eastern Cottonwood (<i>Populus deltoides</i>)														
Large-tooth Aspen (<i>Populus grandidentata</i>)														
Trembling Aspen (<i>Populus tremuloides</i>)														
Sweet Cherry (<i>Prunus avium</i>)														
Pin Cherry (<i>Prunus pensylvanica</i>)														
Black Cherry (<i>Prunus serotina</i>)														
Choke Cherry (<i>Prunus virginiana</i>)														
<i>Prunus</i>														

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

Map Number: 274GSH 2124
 Date: May 2, 2012
 Surveyors: JP + TS