

Appendix B1

Site Investigation



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April 2012

Project 60155032

AECOM**Figure 1**

Map Document (N:\\Projects\\aemcm601550320010\\GIS\\Projects\\GoshenGSH_Amphibians\\150032_GSH_AmphibianSurvey\\S72_GSH113.mxd)

Map Document (N:\\Projects\\aemcm601550320010\\GIS\\Projects\\GoshenGSH_Amphibians\\150032_GSH_AmphibianSurvey\\S72_GSH113.mxd)

Significant Wildlife Habitat Form

AECOM

Study Area:	BLW	JER	GSH	Map #:	O-GSH 1765
Date:	2012-04-17			Time Started:	1:30
Field Staff:	Tom Shorkey JESS Piette			Time Finished:	2:30
Weather Conditions:	Sunny 5°C 20km/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)

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: 1TT 448058 4793864 Area of standing water delineated on field map

Water depth (m): N/A (too large) % open water: 90% % emergent vegetation: 5%

Description of standing water (permanent pool, evidence of annual spring flooding, etc):
Permanent Pond → Possibly deep in centre

Area and soil/substrate of shoreline habitat: Mineral soil type Some exposed soil along edge.

Type and abundance of cover in open water habitat: Some grass sp. Trees and shrubs → red osier dogwood.

Type and abundance of cover in surrounding habitat: Willow sp / cottonwood surrounding veg cover

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

Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: mallards/geese flushed as we approached → Salamander/Frog up tadpoles observed

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
44	Salamanders		

Species Concern Habitat and Incidence

Map No: _____
Date (yyyy-mm-dd): _____

65H | 65

Field Staff:

Tom Shorey
Tress Pette

Time Started: 1:30
Time Finished: 2:30

Time Started: 1:30
Time Finished: 2:30

Observed Species List

Note: Evidence Codes (EV)

Breeding Bird (Possible) SH=Suitable Habitat SM=Singing Male

habitat, SM=Singing Male;

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Breeding Bird (Continued) 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) **Breeding Bird (Continued)** DD=Distraction, NU=Used nest, F=Fledged Young, NE=Eggs, NY=Young, FS=Food/faecal sack, AE=Nest Entry

LANTS		Species	Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)	
ELC				Y	NP
DD7	American Gromwell (<i>Lithospermum latifolium</i>) - S3 <u>Bloom Time - Spring</u>	Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods.	UTM:	Y	UTM:
LO, TPO	Muehlenberg's astomum moss (<i>Astomum muehlenbergianum</i>) - S2 <u>Bloom Time - Spring</u>	Thin soil over level outcrop ledges and on soil under grasses in open prairie	UTM:	Y	N
DM1, FOM2, CUP3	Autumn Coral-root (<i>Corallorrhiza odontorhiza</i>) - S2 <u>Bloom Time - summer to fall</u>	Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry, sandy woods.	UTM:	Y	N
OC, FOM, FOD	Burning Bush (<i>Euonymus atropurpureus</i>) - S3 <u>Bloom Time - April - June</u>	Species occurs in dry to moist deciduous thickets and woods	UTM:	Y	N
WC1, SWC3, SWC4, WM1, SWM2, SWM4, WM5, SWM6	Chinese Hemlock Parsley (<i>Conioselinum chinense</i>) - S2 <u>Bloom Time - summer to fall</u>	Swampy places with deciduous trees, white cedars, tamarack, springy river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes	UTM:	Y	N
WC, SWM, SWD, SWT, AM, MAS	Crowned Beggarticks (<i>Bidens trichosperma</i>) - S2 <u>Bloom Time - late summer</u>	Found in openings in swamps, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian bay. Bogs, fens, tamarack swamps.	UTM:	Y	N
LT1, FOD7	Eastern Green-violet (<i>Hybanthus concolor</i>) - S2 <u>Bloom Time - mid March to August</u>	Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone includes floodplains and river banks.	UTM:	Y	N
PS, TPW, FOM1, FOM2	Fogg's Goatfoot (<i>Chenopodium foggi</i>) - S2	Species occurs in sandy areas on limestone under oak or pine-oak forests	UTM:	Y	N
PO2, TPS2, TPW2	Giant Ironweed (<i>Vernonia gigantean</i>) - S1? <u>Bloom Time -</u>	Found in mesic prairies thickets, moist woods, roadsides and grassy meadows	UTM:	Y	N

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>) - SCS3 Bloom	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	Y (N) UTM
TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	June-August Hairy Bedstraw (<i>Galium pilosum</i>) -S3 Bloom Time –	Occurs in dry, sandy woods and thickets; occasionally in dry sandy fields	Y (N) UTM
FEO1, FES1, FET1, SWC, SWM, SWD, SWT, TPO, TPS, TPW	Hairy Valerian (<i>Valeriana edulis</i>) -S1 Bloom Time –	Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens.	Y (N) UTM:
FOD6, FOD7, SWM, SVWD	Hairy Wood Mint (<i>Blephilia hirsuta</i>) –S1 Bloom Time- Summer	Woodlands, often rocky, especially rivers. Rich woods, swamp forests, floodplains.	Y (N) UTM:
FOD6, FOD7, FOD8, FOD9	Harbinger-of-spring (<i>Eriogonum bulbosa</i>) - S3 Bloom Time - early to late April	Occurs in rich, moist deciduous woods, especially on floodplains	Y (N) UTM:
SAS1, SAM1, SAF1	Hill's Pond Weed (<i>Potamogeton hillii</i>) - SCS2 Bloom Time - summer	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters.	Y (N) UTM:
FOM6, FOM7, FOM8	Large Round-leaved Orchid (<i>Platanthera macrophylla</i>) - S2 Bloom Time - June to August	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech eastern hemlock woodlands.	Y (N) UTM:
MAM2, MAM3, MAS2, MAS3, SWD	Lizard's Tail (<i>Saururus cernuus</i>) - S3 Bloom Time – June – September	Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds.	Y (N) UTM:
FOD6, FOD7, FOD9	Pawpaw (<i>Asimina triloba</i>) –S3 Bloom Time – March-May	Occurs in moist deciduous woods and stream banks.	Y (N) UTM:
FOM8, FOD6, FOD7, FOD9, CUM1	Pileose Evening Primrose (<i>Oenothera pilosella</i>) –S2 Bloom Time – Late Spring – Early Summer	Moist edges of woods and open, disturbed ground.	Y (N) UTM:
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostate Tick-trefoil (<i>Desmodium rotundifolium</i>) –S2 Bloom Time – July-September	Dry, sandy or rocky woods	Y (N) UTM:
FOD7, SWD	Pumpkin Ash (<i>Fraxinus profunda</i>) –S2 Bloom Time – March - June	Swamps and floodplains	Y (N) UTM:
CUW1, ALO, FET1, SWC	Ram's-head Lady's-slipper (<i>Cypripedium arietinum</i>) - S3 Bloom Time –mid May to mid June	Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamps, dry sandy woods, and limestone barren	Y (N) UTM
FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5	Rattlesnake Hawkweed (<i>Hieracium venosum</i>) - S2 Bloom Time – April – September	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands	Y (N) UTM:
FOD6, FOD7, FOD9	Round-leaved Groundsel (<i>Packera obovata</i>) –S3 Bloom Time- May - June	Found in moist woods	Y (N) UTM:
CUM1, CUT1, CUS1	Round-leaved hawthorn (<i>Crataegus lamarckia</i>) –S3?	Species occurs in old fields, poorly managed pastures, fencelines and roadsides	Y (N) UTM:
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3	Scarlet Beebalm (<i>Monarda didyma</i>) - S3 Bloom Time – May to October	Found in moist, rich woods, thicket swamps, banks and floodplains.	Y (N) UTM
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 Muhiy (Muhiy <i>Muhlenbergia tenuifolia</i>) - S2	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods	Y (N) UTM:
BLO1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Stiff Gentian (<i>Gentianella quinquefolia</i>) - S2 Bloom Time - late summer to mid fall	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	Y (N) UTM
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine (<i>Lupinus perennis</i>) - S3 Bloom Time – mid-March to mid-June	Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen.	Y (N) UTM

Species Conservation Habitat and Incidental Wildlife – Goshen

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			Habitat Description	Habitat Present (Y/N; UTM; description of habitat if present)
ELC	Species			
TPO1, TPS1, TPW1, CUM1	Tall Blazing Star (<i>Liatris aspera</i>) - S3/SC		Occurs in open, sandy woods, dry roadsides and sandy prairies	Y (N) UTM:
FE0, FES, FET, MAM2, MAM3	Tuberous Indian Plantain (<i>Arnoglossum plantagineum</i>) - S3	Bloom Time - mid-March to mid-June	Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats.	Y (N) UTM:
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.
CUW1, 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>Seluruss motacilla</i>) - SC		Inhabits mature forests along steeply sided 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 thicketts; nests above ground in bush, vines	Y (N) UTM:
REPTILES				
-	Eastern Ribbon Snake (<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	Azur 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 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>Asclepias spp.</i>). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow	Y (N) UTM:
TPS, CUW	Mottled Duskywing (<i>Erynnis mormon</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 parts. Usually occurs near Hackberry, the larval foodplant	Y (N) UTM:
FOD5	West Virginia White (<i>Pieris virginiensis</i>) - SC		This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y (N) UTM:

177-GSH 1068



Geographic Coordinates

Site ID:	C-0207	Polygon:	Symmons 47
Surveyor(s):	J.W. + B.C.L.	Date:	July 2, 2011
Community Classification and Classification:		Time start:	1:32 AM
UTMZ:	17	Time finish:	11:59 PM

Polygon Description 22C, wetland - dry calcif.

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

Stand Description

Species		Tally 1	Tally 2	Tally 3	Tally 4	Total	Rfl. Avg.
<input type="checkbox"/> Aceraceae	<input type="checkbox"/> 1						
<input type="checkbox"/> Elaeagnaceae	<input type="checkbox"/> 1A						
<input type="checkbox"/> Gramineae	<input type="checkbox"/> 1B						
<input type="checkbox"/> Acerubr	<input type="checkbox"/> 1C						

Soil Ontario and ELC Soils Description		Summary		Moisture Regime	
Pin/Auger #	12	Zone	W5	East	Wet
Total		Easting			Wet
Basal Area (BA)	10	Northing	4757420		Wet
Dead	1 elm	Position	W.M.		Wet
Site Metrics		Aspect			Wet
		edge			Wet
		Percent			Wet
		Slope			Wet
		Length			Wet
Mottles	20cm				
Gley					
Water Table					
Carbonates					
Bedrock					
Depth to					
Bedrock					
1 Depth from	10cm	% CF	% CF	% CF	% CF
2 Depth from	40cm	% CF	% CF	% CF	% CF
3 Depth from	70cm	% CF	% CF	% CF	% CF
4 Depth from	100cm	% CF	% CF	% CF	% CF
Texture	SiC				
Soil Horizon Description					

Species In Order of Decreasing Dominance (up to 4 sp)

>> Much Greater Than = Greater Than = About Equal To

HESACR > HCRBR > VIMVANE

RHICATH > RHICATH

YUWASH > YUWASH

VASCULAR PLANT CHECKSHEET

Date: July 12, 2011

Location: Foster GE70

Observer: Jessi Becker

Job Number:

BOT HERBS	1	2	3	4	5	6		1	2	3	4	5	6	MONOCOT HERBS	1	2	3	4	5	6	
Achillea millefolium							Erigeron annuum							Plantago lanceolata							Alliaria planifolia-aquatica
Aclisia pachypoda							Erigeron philadelphicus							Plantago major							Allium tricoccum
Actaea rubra							Erigeron strigosus							Plantago rugelii							Allium
Aegilops							Erysimum cheiranthoides							Polygonatum perfoliatum							Artemesia triphyllum
Agrimonia gryposepala	X						Eupatorium maculatum							Polygonum							Arenaria officinalis
Alliaria petiolata							Eupatorium perfoliatum							Polygonum							Calepitrimerus
Amaranthus retroflexus							Eupatorium rugosum							Polygonum							Cirsium boreale
Amelanchier alnifolia							Euphorbia							Polygonum lapathifolium							Convallaria majalis
Amelanchier fradatii							Euthamia graminifolia							Polygonum paniculatum							Cypripedium calceolus
Anemone nemorosa							Fragaria virginiana							Potentilla							Elaeagnus canadenensis
Anemone canadensis							Fragaria vesca							Potentilla nonverticillata							Epipactis helleborine
Anemone virginiana							Galeopsis tetrahit							Potentilla recta							Erythronium americanum
Anemone neglecta							Gallium							Pteridophyllum elatum							Hemerocallis fulva
Ascyrum androsaemifolium							Gallium palustre							Prunella vulgaris							Iris versicolor
Ascyrum canadense							Gallium triflorum							Pyrola elliptica							Lemna minor
Aquilegia canadensis							Geranium maculatum							Ranunculus							Lemna trisulca
Arnica nuda							Geranium robertianum							Ranunculus abortivus							Lilium
Archidium minus							Geum aleppicum							Ranunculus acris							Molinium canadense
Artemisia							Geum canadense							Rubus hispida							Molinium secundus
Asplenium canadense							Glechoma hederacea							Rumex acetosa							Polygonum pubescens
Asclepias incarnata							Hedysarum occidentale							Sanguinaria canadensis							Potamogeton crispus
Asclepias syriaca							Hieracium laevigatum							Sarcandra glauca							Potamogeton perfoliatus
Aster		X					Hieracium aurantiacum							Saponaria officinalis							Potamogeton
Aster cordifolius							Hieracium caespitosum							Satureja vulgaris							Poteridium cordatum
Aster ericoides							Hieracium							Scleranthus galericulata							Polygonum pubescens
Aster tenuifolius							Hydrophyllum virginianum							Silene vulgaris							Potamogeton
Aster macrophyllus							Hypericum perforatum							Sium sisyrinchium							Sagittaria latifolia
Aster novae-angliae							Impatiens capensis	X						Solanum dulcamara							Saururus montanus
Aster puniceus							Inula helianthoides							Solidago	X						Smilax herbacea
Barberis vulgaris							Lactuca							Solidago altissima							Spinanthus cernuus
Bidens cernua							Laportea canadensis							Solidago canadensis							Spiraea polyrhiza
Bidens frondosa							Lapsana communis							Solidago flexicaulis							Stellulopodus roseus
Bistorta cylindrica							Leonurus cardiaca							Solidago gigantea							Trillium erectum
Bixa orellana							Lepidium							Solidago nemoralis							Trillium grandiflorum
Blumea pallens							Lunaria vulgaris							Solidago rugosa							Uvularia grandiflora
Bryonia sepiaria							Lithospermum officinale							Sonchus arvensis							
Ceratomea sibirica							Lobelia							Sonchus asper							
Ceratopteris thalictroides							Lobelia inflata							Solanum dulcamara							
Cenchrus fontanum							Lotus corniculatus							Solidago							
Ceratophyllum demersum							Lycopus americanus							Tanacetum vulgare							
Chelidonium majus							Lycopus							Taraxacum officinale							
Chenopodium album							Lysimachia ciliata	X						Thlaspium dubium							
Chrysanthemum leucanthemum							Lythrum salicaria							Thlaspium pubescens							
Cichorium intybus							Medicago lupulina							Vitis cordifolia							
Cicutae							Medicago sativa							Tragopogon pratensis							
Circassia ledifolia	X						Molinia alba							Trientalis borealis							
Cirsium arvense							Mordwilkoja arvensis							Trifolium							
Cirsium vulgare							Mimulus ringens							Trifolium pratense							
Cornus virginiana							Mimulus ringens							Trifolium repens							
Cirsium heterophyllum							Mitchella diphylla							Tussilago farfara							
Corylus canadensis							Monilia fistulosa							Urtica dioica							
Corynandra varia							Mossostis							Utricularia vulgaris							
Cynanchum rossicum							Nasturtium officinale							Verbascum thapsus							
Cynoglossum officinale							Nepeta cataria							Verbena hastata							
Daucus carota	X						Nuphar variegatum							Verbena urticifolia							
Dennstaedtia canadensis							Nymphaea odorata							Veronica							
Dendrolycopodium obscurum							Oenothera biennis							Veronica officinalis							
Diodia amara							Osmunda cinnamomea							Viola crassula							
Dipsacus fullonum							Oxalis stricta							Viola latifolium							
Drimocarpus lobata							Phragmites australis							Viola	X						
Echinium vulgare							Physalis heterophylla							Viola							
Epilobium														Viola pubescens							
Epilobium ciliatum														Viola sororia							
Epilobium hirsutum																					
Epilobium parviflorum																					

1: SLID

2: _____

3: _____

4: _____

5: _____

6: _____

Location: Goshen SMN 47
Observer: Jess + Becky

VASCULAR PLANT CHECKSHEET

Date: July 12, 2011

Job Number:

1: SISD

4: _____

5: _____

ANSWER _____

177-GSH1068



Community Classification	Site:	Coshen	Polygon:	STIMENTS 46
	Surveyor(s):	Jess + Becky	Date:	July 12, 2011
	UTMZ:	UTMZ:	Time start:	11:23
		Time finish:	12:45	

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial	<input type="checkbox"/> Organic	<input type="checkbox"/> Lacustrine	<input type="checkbox"/> Plankton	<input type="checkbox"/> Lake
	<input checked="" type="checkbox"/> Mineral Soil	<input type="checkbox"/> Riverine	<input type="checkbox"/> Submerged	<input type="checkbox"/> Pond
		<input type="checkbox"/> Bottomland	<input type="checkbox"/> Floating-LVD.	<input type="checkbox"/> River
		<input type="checkbox"/> Terrace	<input type="checkbox"/> Graminoid	<input type="checkbox"/> Stream
<input type="checkbox"/> Wetland		<input type="checkbox"/> Valley Slope	<input type="checkbox"/> Forb	<input type="checkbox"/> Marsh
<input type="checkbox"/> Aquatic		<input type="checkbox"/> Tableland	<input type="checkbox"/> Lichen	<input type="checkbox"/> Swamp
Site		<input type="checkbox"/> Roll, Upland	<input type="checkbox"/> Bryophyte	<input type="checkbox"/> Fen
<input type="checkbox"/> Open Water		<input type="checkbox"/> Cliff	<input type="checkbox"/> Deciduous	<input type="checkbox"/> Bog
<input type="checkbox"/> Shallow Water		<input type="checkbox"/> Talus	<input type="checkbox"/> Coniferous	<input type="checkbox"/> Barren
<input type="checkbox"/> Surficial Dep.		<input type="checkbox"/> Crevice/Cave	<input type="checkbox"/> Mixed	<input type="checkbox"/> Meadow
<input type="checkbox"/> Bedrock		<input type="checkbox"/> Alvar		<input type="checkbox"/> Prairie
History		<input type="checkbox"/> Rockland		<input type="checkbox"/> Thicket
<input type="checkbox"/> Natural		<input type="checkbox"/> Beach		<input type="checkbox"/> Savannah
<input type="checkbox"/> Cultural Cover		<input type="checkbox"/> Bar		<input type="checkbox"/> Woodland
<input type="checkbox"/> Open		<input type="checkbox"/> Sand Dune		<input type="checkbox"/> Forest
		<input type="checkbox"/> Bluff		<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		
2				
3				
4				

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

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

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

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

Vegetation Type:	Code: FOZ-Z
Inclusion:	Code:
Complex:	Code:

Community Profile Diagram / Comments	Deciduous Wood	Code: FOZ-Z
Vegetation Type:		
Inclusion:		
Complex:		

Soil Horizon Description	3 Depth from zero Texture			

Notes:

Seimons 46 = sunny, 10% overcast

July 12, 2011

- entire length of woodlot
- agricultural land use adjacent / channelized, agricultural drain ; little water

VASCULAR PLANT CHECKSHEET

Date: July 12, 2011

Job Number:

Location: Goshen SMN 4b

Observer: JES + Ricky

MONOCOT HERBS													MONOCOT HERBS					
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Achillea millefolium							Eriogonum annuum						Polygonum lanceolatum					Alliaria pleniflora-aquatica
Achillea pachyphylla							Eriogonum philadelphicum						Polygonum major					Allium triquetrum
Achillea rubra							Eriogonum sibiricum						Polygonum rugosum					Allium
Aegopodium							Erysimum cheiranthoides						Polygonatum multiflorum					Artemesia triphyllum
Agrimonia gryposepala	X						Eupatorium maculatum						Polygonum					Asterus officinalis
Alieria pedicularia							Eupatorium perfoliatum						Polygonum					Celidion pratense
Amaranthus retroflexus							Eupatorium rugosum						Polygonum					Clintonia borealis
Amaranthus viridis							Euphorbia						Polygonum lapathifolium					Gennaria major
Amelanchier alnifolia							Euthamia graminifolia						Polygonum perfoliatum					Cypripedium acaule
Amelanchier canadensis							Fragaria virginiana						Potentilla					Uvularia grandiflora
Anemone							Fragaria vesca						Potentilla norvegica					Epipactis helleborine
Anemone canadensis							Glechoma hederacea						Potentilla recta					Erythronium americanum
Anemone virginiana							Gaultheria procumbens						Prunella vulgaris					Hemerocallis fulva
Antennaria neglecta							Gaultheria shallon						Pyrola elliptica					Iris versicolor
Apoium antrosoides							Gaultheria shallon						Ranunculus					Lemna minor
Apoium canescens							Gaultheria shallon						Ranunculus abortivus					Lemna trisulca
Asplenium cordatum							Gentianopsis macrorhiza						Ranunculus esculentus					Lilium
Asplenium cordatum							Gentianopsis macrorhiza						Ranunculus esculentus					Mitchella repens
Asplenium nidus							Gentianopsis macrorhiza						Ranunculus esculentus					Mitchella repens
Asplenium minum							Gentianopsis macrorhiza						Rubus hispida					Mitchella repens
Artemisia							Gentianopsis macrorhiza						Rumex acetosa					Polygonatum
Anemone canadensis							Gentianopsis macrorhiza						Rumex crispus					Polygonatum cordatum
Andropogon scoparius							Gentianopsis macrorhiza						Rumex					Polygonatum pubescens
Aster	X						Gentianopsis macrorhiza						Sanguisorba canadensis					Polygonatum crispus
Aster cordifolius							Gentianopsis macrorhiza						Sanguisorba canadensis					Polygonatum pubescens
Aster ericoides							Gentianopsis macrorhiza						Solidago					Polygonatum pubescens
Aster lanceolatus							Gentianopsis macrorhiza						Solidago altissima					Polygonatum pubescens
Aster lateriflorus							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Aster macrophyllus							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Aster novae-angliae							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Aster puniceus							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Barberis vulgaris							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Betula cerasifera							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Betula fontinalis							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Betula populifolia							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
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Betula populifolia							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Betula populifolia							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Betula populifolia							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Betula populifolia							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Betula populifolia							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Betula populifolia							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Betula populifolia							Gentianopsis macrorhiza						Solidago canadensis					Polygonatum pubescens
Betula populifolia							Gentianopsis macrorhiza			</td								

(SW) Bone Aug. 12/11 - SAM

Gosh 1068
Access Road / Collection Lines

0 25 50 75 100 125 140 Meters

Properties
EBC to Extreme
Access/Collection Line
Waterbody
Goshen Wind Energy Center
120m Buffer
Access

M-OSH 1068



ELC
Community
Classification

Site: 65H 1069 Polygon: D
Surveyors: SJM Date: Aug. 12/11 Time: start 12:36h
UTMN: UTMZ: 17 UTMZ: 11 End: 14:36h

Polygon Description w/ 20% readaphoto

System	Substrate	Topographic Feature	Plant Form	Community
Terrestrial	Organic	Lacustrine	Plankton	Lake
	Mineral Soil	Riverine	Submerged	Pond
	Parent Min.	Bottomland	Floating-LVD	River
	Acidic Bedrk	Terrace	Graminoid	Stream
	Basic Bedrk	Valley Slope	Fort	Marsh
	Carb. Bedrk	Tableland	Lichen	Swamp
Open Water	Shallow Water	Roll. Upland	Bryophyte	Fen
	Surficial Dep.	Cliff	Deciduous	Bog
	Bedrock	Talus	Camelopardus	Barren
History		Cave/Cave	Mixed	Meadow
Natural Cover		Alvar		Prairie
Cover		Rockland		Thicket
Open Shrub		Beach / Bar		Savannah
Treed		Sand Dune		Wetland
		Buff		Forest

Stand Description

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

1	4	4	AW =	AW > EW	> HS	H
2	2	2	EW =	EW >	EW	
3	10	10	Tree < 2m	Ground tree	-	Smooth Red
4	10	10	10 < 2m	10 < 1m	10 < 0.5m	10 < 0.5m

HT Codes: 7 < 2m 6 < 0.5m 5 > 2m 4 > 2m 3 > 0.5m 2 > 2m 1 > 0.5m

CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

A = Abundant N = None R = Rare O = Occasional

Stand Composition:	Size Class Analysis:	Standing Snags:	Deadfall / Logs:	Old Growth
AW-HS-EWS	O < 10 A < 10 R < 10 Q < 10	A 10-24 R 10-24 Q 10-24	A 25-55 R 25-55 Q 25-55	R > 50 N > 50 H > 50

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

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

Eco-site: Fresh-Mist Lowland Deciduous Forest Ecol. Code: FOPT

Vegetation Type: Fresh-Mist White Ash-Swamp Maple

Inclusion: Declining Forest Type

Complex: Deadfall / Logs

Community Profile Diagram/Comments

Prism Factor:	2	Total Rel. Avail.
Aw	4	40
Hs	3	36
Ews	5	25
Species	Tally 1	Tally 2
Aw	4	6
Hs	2	7
Ews	3	2
Tally 3	Tally 4	Total
10	10	10
15	15	15
20	20	20
25	25	25

VASCULAR PLANT CHECKSHEET

Location: 1776SH 1068
Observer: SM

Date: Aug. 12/11

Job Number:

DICOT HERB	1	2	3	4	5	6		1	2	3	4	5	6		MONOCOT HERBS	1	2	3	4	5	6
Achillea millefolia							Erigeron annuum								Polygonum lanceolata						
Actaea pachypoda							Erigeron philadelphicus								Plantago major						
Actaea rubra							Erigeron strigosus								Plantago rugelii						
Agalinis							Erysimum cheiranthoides								Podophyllum peltatum						
Agromyza gryposepalia							Eupatorium maculatum								Polygonum						
Alliaria petiolata	X						Eupatorium perfoliatum								Polygonum						
Amaranthus retroflexus							Eupatorium rugosum								Polygonum						
Ambrosia artemisiifolia							Euphorbia								Polygonum lapathifolium						
Amphicarpaea bracteata							Euthamia graminifolia								Polygonum persicaria						
Anaphalis margaritacea							Fragaria virginiana								Potentilla						
Anemone							Fragaria vesca	X							Potentilla norvegica						
Anemone canadensis							Galeopsis tetrahit								Potentilla recta						
Anemone virginiana							Gallium								Prenanthes alba						
Antennaria neglecta							Gallum								Prunella vulgaris						
Apocynum cannabinum							Gallum palustre								Pyrola elliptica						
Apocynum androsaemifolium							Gallum triflorum								Ranunculus						
Aquilegia canadensis							Geranium maculatum								Ranunculus abortivus						
Aralia nudicaulis							Geranium robertianum	X							Ranunculus esculentus						
Arctium minus							Geum aleppicum								Rubus hispida						
Artemisia							Geum canadense								Rumex acetosa						
Asplenium canadense							Geum								Rumex crispus						
Asclepias incarnata							Glycosa hederacea								Rumex						
Astilbe							Hedysarum occidentale								Sanguinaria canadensis						
Aster							Hepatica acutiloba								Saxifraga marilandica						
Aster cordifolius							Hesperelei matronalis								Saponaria officinalis						
Aster ericoides							Hieracium sursurifolium								Satureja vulgaris						
Aster lanceolatus							Hieracium caespitosum								Scutellaria galericulata						
Aster lateriflorus	X						Hieracium								Silene vulgaris						
Aster macrophyllus							Hydrophyllum virginianum								Sium suave						
Aster novae-angliae							Hypericum perforatum								Solanum dulcamara						
Aster puniceus							Impatiens capensis								Solidago						
Bartsia vulgaris							Inula helelenium								Solidago altissima						
Betula cermifolia							Lactuca								Solidago rugosa						
Betula frondosa							Laportea canadensis								Solidago caesia						
Boehmeria cylindrica							Lapsana communis								Solidago canadensis						
Caltha palustris							Leonturus cardiaca								Solidago flexicaulis						
Calyptigia septemloba							Lepidium								Solidago gigantea						
Centaurium erythraea							Linaria vulgaris								Solidago nemoralis						
Cardamine							Lithospermum officinale								Solidago rugosa						
Caulophyllum thalictroides							Lobelia inflata								Sonchus arvensis						
Ceratium fontanum							Lotus corniculatus								Sonchus asper						
Ceratophyllum demersum							Lycopus americanus								Stellaria						
Chelidonium majus							Lycopus								Tanacetum vulgare						
Chenopodium album							Lysimachia ciliata								Taraxacum officinale						
Chrysanthemum leucanthemum							Lythrum salicaria								Thalictrum dioicum						
Cichorium intybus							Medicago lupulina								Thalictrum pubescens						
Cicuta							Medicago sativa								Tiarella cordifolia						
Cirsium heterophyllum	X						Melilotus albus								Tussilago farfara						
Cirsium arvense							Mentha arvensis								Urtica dioica						
Cirsium vulgare							Mimulus ringens								Urtica dioica						
Clematis virginiana							Mimulus ringens								Veronica officinalis						
Clintonia borealis							Mitchella repens								Veronica officinalis						
Corynza canadensis							Mitchella repens								Veronica officinalis						
Coronilla varia							Myosotis								Veronica officinalis						
Cymarrum rossicum							Nasturtium officinale								Veronica officinalis						
Cymoglossum officinale							Neopeltis calcaria								Veronica officinalis						
Daucus carota							Nuphar variegatum								Veronica officinalis						
Desmodium canadense							Nymphoides odorata								Veronica officinalis						
Dianthus barbatus							Oenothera biennis								Veronica officinalis						
Dipsacus fullonum							Osmorhiza								Vicia cracca						
Echinocystis lobata							Oxalis stricta								Vicia sativa						
Echium vulgare							Phytomyza leptostachys								Viola						
Epilobium							Phragmites heterophylla								Viola						
Epilobium ciliatum															Viola pubescens						
Epilobium hirsutum															Viola sororia						
Epilobium parviflorum																					

1: polygon 3)

4:

2:

5:

3:

6:

ELC Plant Species List	SITE:	GSH 1068
	POLYGON:	① FM Aw Mx Cw F01
	DATE:	Aug. 12/11
	SURVEYOR(S):	SAM

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

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





ELC

Community
Description and
Classification
Surveyor(s): _____
UTMZ: _____

Map #: 1068 Polygon: _____
Date: _____ Time start: _____ finish: _____
CVR: _____

Polygon Description

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

Stand Description

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

1	1	4	TRAVERTINE > ULWAMER > FALFETE
2	2	3	ULWAMER > TRAVERTINE > CROTONIAN
3	3	2/3	ZANAMER > VIBIENS > RHT HELL
4	4	1	TRAVERTINE > VIBIENS > ZANAMER > CROTONIAN

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: BA:	Size Class Analysis:			Depth from zero Texture	% CF	Depth from zero Texture	% CF
	<10	10-24	25-50				
	N	R	N				
	<10	R	N	1	% CF	1	% CF
	A	O	O	2	% CF	2	% CF

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

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

Ecosite:
Vegetation Type:
Inclusion:
Complex:

Code:
Code:
Code:
Code:

Community Profile Diagram/Comments

Notes: _____

Tree Tally by Species

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

Soil Ontario and ELC Soils Description		Summary		Moisture Regime	
Site Metrics		Pit/Auger #	Zone	Northing	Position
Zone	Eastng				
UT					
Aspect	NE				
Percent Slope	Length				

Drainage		Effective Texture (indicate below)		Depth to	
Mottles		Gley	Water Table	Carbonates	Bedrock

**Plant Species List
2012**

Page 1 of 2

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 caprea</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 sterilis</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 pensylvanicum</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>					Fowl Manna Grass <i>Glyceria striata</i>				
Canada Yew <i>Taxus canadensis</i>					Ribes					Glyceria				
Eastern White Cedar <i>Thuja occidentalis</i>					Black Locust <i>Robinia pseudo-acacia</i>					Rice Cut Grass <i>Leersia oryzoides</i>				
Eastern Hemlock <i>Tsuga canadensis</i>					Prickly Rose <i>Rosa acicularis</i>					Tall Fescue <i>Lolium arundinaceum</i>				
Deciduous					Smooth Rose <i>Rosa blanda</i>					Muhlenbergia				
Manitoba Maple <i>Acer negundo</i>					Multiflora Rose <i>Rosa multiflora</i>					Witch-grass <i>Panicum capillare</i>				
Black Maple <i>Acer nigrum</i>					Rose					Panicum				
Norway Maple <i>Acer platanoides</i>					Com. Blackberry <i>Rubus strigosus</i>					Reed Canary Grass <i>Phalaris arundinacea</i>				
Red Maple <i>Acer rubrum</i>					Wild Red Raspberry <i>Rubus idaeus</i>					Timothy <i>Phleum pratense</i>				
Silver Maple <i>Acer saccharinum</i>					Black Raspberry <i>Rubus occidentalis</i>					Common Reed <i>Phragmites australis</i>				
Freeman's Maple <i>Acer X freemanii</i>					Purple-fl. Ras. ber. <i>Rubus odoratus</i>					Canada Blue Grass <i>Poa compressa</i>				
Sugar Maple <i>Acer saccharum</i>					Dwarf Ras. ber. <i>Rubus pubescens</i>					Fowl Meadow Grass <i>Poa trivialis</i>				
Mountain Maple <i>Acer spicatum</i>					Rubus					Kentucky Bluegrass <i>Poa pratensis</i>				
Speckled Alder <i>Alnus incana</i>					Peach-leaved Willow <i>Salix amygdaloides</i>					Yellow Foxtail <i>Setaria glauca</i>				
Downy Serviceberry <i>Amelanchier arborea</i>					Bebb's Willow <i>Salix bebbiana</i>					Green Foxtail <i>Setaria viridis</i>				
Serviceberry <i>Amelanchier canadensis</i>					Pussy Willow <i>Salix discolor</i>									
Yellow Birch <i>Betula alleghaniensis</i>					Missouri Willow <i>Salix eriocephala</i>									
White Birch <i>Betula papyrifera</i>					Sandbar Willow <i>Salix exigua</i>									
European Birch <i>Betula pendula</i>					Shining Willow <i>Salix lucida</i>									
Blue Beech <i>Carpinus caroliniana</i>					Black Willow <i>Salix nigra</i>									
Bitternut Hickory <i>Carya cordiformis</i>					Slender Willow <i>Salix triandra</i>									
Shagbark Hickory <i>Carya ovata</i>					Salix									
Climbing Bittersweet <i>Celastrus scandens</i>					Hybrid Crack Willow <i>Salix X rubens</i>									
Common Hackberry <i>Celtis occidentalis</i>					Black-berry Elder <i>Sambucus nigra</i>									
Buttonbush <i>Cephaelis occidentalis</i>					Red-berried Elder <i>Sambucus racemosa</i>									
Alt.-leaved Dogwood <i>Cornus alternifolia</i>					Buffaloberry <i>Shepherdia canadensis</i>									
Silky Dogwood <i>Cornus amomum</i>					Eur. Mountain Ash <i>Sorbus aucuparia</i>									
Bunchberry <i>Cornus canadensis</i>					Narrow Meadow-sweet <i>Spiraea alba</i>									
Gray dogwood <i>Cornus racemosa</i>					Common Lilac <i>Syringa vulgaris</i>									
Round-leaved Dogwood <i>Cornus rugosa</i>					Poison-ivy <i>Toxicodendron radicans</i>									
Red-osier Dogwood <i>Cornus sericea</i>					Climbing Poison-ivy <i>Toxicodendron radicans</i>									
American Hazel <i>Corylus americana</i>					White Elm <i>Ulmus americana</i>									
Beaked Hazel <i>Corylus cornuta</i>					Hobblebush <i>Viburnum alnifolium</i>									
Cockscomb Thorn <i>Crataegus crusgalli</i>					Nannyberry <i>Viburnum dentatum</i>									
English Hawthorn <i>Crataegus monogyna</i>					Guilder-Rose <i>Viburnum opulus</i>									
Large-fruited Thorn <i>Crataegus punctata</i>					Downy Arrow-wood <i>Viburnum alnifolium</i>									
Crataegus					Riverbank Grape <i>Vitis riparia</i>									
Bush Honeysuckle <i>Dierama lonicera</i>					Am. Pricklyash <i>Zanthoxylum americanum</i>									
Russian Olive <i>Eleagnus angustifolia</i>														
Autumn Olive <i>Eleagnus umbellata</i>														
Run Strawberry-bush <i>Euonymus obvovata</i>														
American Beach <i>Fagus grandifolia</i>														
Glossy Buckthorn <i>Fragaria ananassa</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>														
Sarsaparilla <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 domestica</i>														
White Mulberry <i>Morus alba</i>														
Sweet Gale <i>Mycetaria</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 Asp. <i>Populus grandidentata</i>														
Trembling Asp. <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														
Ferns & Allies					Ferns & Allies					Other Graminoids				
D - Dominant represented by large numbers, generally forming >10% ground cover or >25% vegetation cover in any one stratum					Rattlesnake Fern <i>Botrychium virginianum</i>					Broad Bur-reed <i>Schoenoplectus acutus</i>				
F - Fairly common (=Abundant in ELC) generally widespread represented by fairly large numbers of individual clumps, usually forming >10% ground cover					Bulbet Bladder Fern <i>Cystopteris bulbifera</i>					Narrow-leaved Cattail <i>Typha angustifolia</i>				
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)					Spin. Wood Fern <i>Dryopteris carthusiana</i>					Broad-leaved Cattail <i>Typha latifolia</i>				
R - Rare, represented by less than about five individuals or small clumps					Crested Wood Fern <i>Dryopteris cristata</i>					Articulated Rush <i>Juncus articulatus</i>				
Map Number: 117 LSHN02	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Date: April 16, 2012	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Surveyors: J.W. / T.J.S.	1	2	3	4	5	6	7	8	9	10	11	12	13	14

Plant Species List
2012

Page 2 of 2

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>)					Sher- erd'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 dentata</i>)					Hooked Buttercup (<i>Ranunculus recurvatus</i>)				
Giant Ragwort (<i>Ambrosia trifida</i>)					Penn. Bitter-cress (<i>Cardamine pensylvanica</i>)					<i>Ranunculus</i>				
Field Puss'-toes (<i>Antennaria neglecta</i>)					Cardamine					Sheep Sorrel (<i>Rumex acetosella</i>)				
Artemisia					Blue Cohosh (<i>Caulophyllum thalictroides</i>)					Curl-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 Banger-ticks (<i>Bidens cernua</i>)					Turtlehead (<i>Chelone glabra</i>)					Bloodroot (<i>Sanguinaria canadense</i>)				
Dev's Banger-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 Skunkcap (<i>Scutellaria galericulata</i>)				
Chicory (<i>Cichorium intybus</i>)					Caro-sperm Bean (<i>Claudia caroliniana</i>)					Mad Dog Skunkcap (<i>Scutellaria lateriflora</i>)				
Canada Thistle (<i>Cirsium arvense</i>)					Virginia Sperm Bean (<i>Claudia virginiana</i>)					White Camomile (<i>Silene latifolia</i>)				
Bull Thistle (<i>Cirsium vulgare</i>)					Virgin's-bower (<i>Clematis virginiana</i>)					Bladder Camomile (<i>Silene vulgaris</i>)				
Horseweed (<i>Conyza canadensis</i>)					Field Bindweed (<i>Convolvulus arvensis</i>)					Hemlock Water-fern (<i>Polypodium vulgare</i>)				
Das Fleabane (<i>Eriophorum annuum</i>)					Strangling Vine (<i>Cynanchum rossicum</i>)					Bitter Nightshade (<i>Solanum dulcamara</i>)				
Philadelphus Fleabane (<i>Eriophorum hickeyi</i>)					Wild Carrot (<i>Ducus carota</i>)					Black Nightshade (<i>Solanum nigrum</i>)				
Eriophorum					Devord Pink (<i>Dianthus barbatus</i>)					Grassleaf Stitchwort (<i>Stellaria graminea</i>)				
Joe-pye-weed (<i>Eupatorium maculatum</i>)					Squine-corn (<i>Dicentra canadensis</i>)					Common Chickweed (<i>Stellaria media</i>)				
Boneset (<i>Eupatorium perfoliatum</i>)					Dutchman's-breeches (<i>Dicentra cucullaria</i>)					Early Meadow-rue (<i>Thalictrum dioicum</i>)				
Large-leaved Aster (<i>Eurybia macrophylla</i>)					Wild Teasel (<i>Dipsacus fullonum</i>)					Tall Meadow-rue (<i>Thalictrum pubescens</i>)				
Flat-top Goldenrod (<i>Euthamia graminifolia</i>)					Wild Cucumber (<i>Echinocystis lobata</i>)					Field Pennycress (<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>Erythronium ciliatum</i>)					Star-flower (<i>Trentalonia borealis</i>)				
<i>Hieracium</i>					Har. Willow-herb (<i>Erythronium hispatum</i>)					Red Clover (<i>Trifolium pratense</i>)				
Elecampane (<i>Inula helenium</i>)					Small-fl. Willow-herb (<i>Erythronium revolutum</i>)					White Clover (<i>Trifolium repens</i>)				
Prickly Lettuce (<i>Lactuca serriola</i>)					Eu-lobium					Trifolium				
Lactuca					Worm Mustard (<i>Erysimum cheiranthoides</i>)					Stinging Nettle (<i>Urtica dioica</i>)				
Ox-eye Daisy (<i>Leucanthemum vulgare</i>)					Eu-horbie					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>Gaultheria mollis</i>)					Blue Vervain (<i>Verbena hastata</i>)				
Black-eyed Susan (<i>Rudbeckia hirta</i>)					Marsh Bedstraw (<i>Gaultheria mucronata</i>)					White Vervain (<i>Verbena urticifolia</i>)				
Tall Goldenrod (<i>Solidago altissima</i>)					Sweet-scented Bedstraw (<i>Gaultheria triflorum</i>)					Water Spurred-Veronica (<i>Veronica anagallis-aquatica</i>)				
Blue-stem Goldenrod (<i>Solidago caesia</i>)					Gaul.					Common Speedwell (<i>Veronica officinalis</i>)				
Canada Goldenrod (<i>Solidago canadensis</i>)					Spotted Geranium (<i>Geranium maculatum</i>)					Veronica				
Zig-zag 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 aleppicum</i>)					Vicia				
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>)					Dark 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>)					Vi. Water-leaf (<i>Hylotelephium vivianum</i>)					Com. Blue Violet (<i>Viola sororia</i>)				
<i>Sonchus</i>					Com. St. John's-wort (<i>Hypericum perforatum</i>)					Viola				
Heart-leaf Aster (<i>Symphytum cordifolium</i>)					Spotted Jewelweed (<i>Impatiens capensis</i>)					Monocot Herbs				
Heath Aster (<i>Symphytum ericoides</i>)					Wood Nettle (<i>Lamium galeobdolon</i>)					Water Plantain (<i>Alisma plantago-aquatica</i>)				
Tall White Aster (<i>Symphytum lanceolatum</i>)					Motherwort (<i>Leonurus cardiaca</i>)					Wild Leek (<i>Allium ursinum</i>)				
Calico Aster (<i>Symphytum lateritium</i>)					Field Pennycress (<i>Leavenworthia alpina</i>)					Jack-in-the-pulpit (<i>Arisaema triphyllum</i>)				
New England Aster (<i>Symphytum novae-angliae</i>)					Eur. Gromwell (<i>Lithospermum officinale</i>)					Asparagus (<i>Asparagus officinalis</i>)				
Purple-stem Aster (<i>Symphytum puniceum</i>)					Butter & Eggplant (<i>Linaria vulgaris</i>)					Wild Celery (<i>Cappastrum</i>)				
Common Tansy (<i>Tanacetum vulgare</i>)					Great Lobelia (<i>Lobelia siphilitica</i>)					Bluebead-lily (<i>Clintonia borealis</i>)				
Common Dandelion (<i>Taraxacum officinale</i>)					Lobelia					Garden Lily-of-the-valley (<i>Convallaria majalis</i>)				
Common Goatseard (<i>Taraxacum officinale</i>)					Cutleaf Butterweed (<i>Lysimachia americanus</i>)					Yellow Lady's Slipper (<i>Cypripedium parviflorum</i>)				
Coltsfoot (<i>Tussilago farfara</i>)					Northern Butterweed (<i>Lysimachia uniflora</i>)					Canada Waterweed (<i>Elodea canadensis</i>)				
Other Dicot Herbs					Fringed Loosestrife (<i>Lysimachia ciliata</i>)					Helleborine (<i>Epipactis helleborine</i>)				
White Baneberry (<i>Actaea pachypoda</i>)					Moneywort (<i>Lysimachia nummularia</i>)					Yellow Trout Lily (<i>Erigeron americanum</i>)				
Red Baneberry (<i>Actaea rubra</i>)					Purple Loosestrife (<i>Lysimachia salicaria</i>)					Blue-fl. Iris (<i>Iris versicolor</i>)				
Tall Agrimony (<i>Agrimony eupatoria</i>)					Black Medick (<i>Medicago lupulina</i>)					Orange Day Lily (<i>Hemerocallis fulva</i>)				
Garlic Mustard (<i>Alliaria officinalis</i>)					Alfalfa (<i>Medicago sativa</i>)					Lesser Duckweed (<i>Lemna minor</i>)				
Green Amaranth (<i>Amaranthus retroflexus</i>)					White Sweet-clover (<i>Melilotus albus</i>)					Star Duckweed (<i>Lemna trisulca</i>)				
Hemp-nettles (<i>Amorpha bracteata</i>)					Yellow Sweet-clover (<i>Melilotus officinalis</i>)					Wild Lily-of-the-valley (<i>Maianthemum canadense</i>)				
Pearly Everlasting (<i>Anaphalis mitchelianae</i>)					Wild Mint (<i>Mentha arvensis</i>)					False Solomon Seal (<i>Maianthemum canadense</i>)				
Canada Anemone (<i>Anemone canadensis</i>)					Wild Parsnip (<i>Pastinaca sativa</i>)					Star False Solomon Seal (<i>Maianthemum stellatum</i>)				
Ivy Heach (<i>Anemone acutiloba</i>)					English Plantain (<i>Plantago lanceolata</i>)					True Solomon Seal (<i>Polygonatum multiflorum</i>)				
Thimbleweed (<i>Anemone virginiana</i>)					Common Plantain (<i>Plantago major</i>)					Pickerel-weed (<i>Pontederia cordata</i>)				
Purple Angelica (<i>Angelica atropurpurea</i>)					Rue-leaved Plantain (<i>Plantago rugosa</i>)					Curly-leaved Pondweed (<i>Potamogeton crispus</i>)				
Indian Hemp (<i>Apocynum cannabinum</i>)					May-a-lee (<i>Polygonum perfoliatum</i>)					Sago Pondweed (<i>Potamogeton pectinatus</i>)				
Wild Sarsaparilla (<i>Aralia nudicaulis</i>)					Pale Smartweed (<i>Polygonum lapathifolium</i>)					Potamogeton				
Skunk-cabbage (<i>Aralia racemosa</i>)					Lady's-thumb (<i>Polygonum persicaria</i>)					Lady's-thumb				
Wild Ginger (<i>Asarum canadense</i>)					Virginia Knotweed (<i>Polygonum virginianum</i>)					(Broad-leaved Arrowhead) (<i>Sagittaria latifolia</i>)				
Swamp Milkweed (<i>Asclepias incarnata</i>)					Poly.					Blue-edged Grass (<i>Sisyrinchium montanum</i>)				
Common Milkweed (<i>Asclepias syriaca</i>)					Potentilla					Herb-Camomile Flower (<i>Smilax herbacea</i>)				
Yellow Rocket (<i>Barbera vulgaris</i>)					Potentilla					Bristly Greenbrier (<i>Smilax hispida</i>)				
False Nettle (<i>Boehmeria cylindrica</i>)					Rough Cinquefoil (<i>Potentilla norvegica</i>)					Nodding Ladies' Tresses (<i>Spiranthes nodosa</i>)				
Black Mustard (<i>Brassica nigra</i>)					Rough-fruited Cinquefoil (<i>Potentilla recta</i>)					Rose Twisted-stalk (<i>Streptanthus lanceolatus</i>)				
Marsh-mallow (<i>Caltha palustris</i>)					Common Cinquefoil (<i>Potentilla simplex</i>)					Skunk-cabbage (<i>Symplocarpus foetidus</i>)				
Creeper Bellflower (<i>Campanula rotundifolia</i>)					Potentilla					Purple Trillium (<i>Trillium erectum</i>)				
<i>D</i> - Dominant represented by large numbers, generally forming >10% ground cover or >25% vegetation cover in any one stratum					Heal-all (<i>Prunella vulgaris</i>)					White Trillium (<i>Trillium grandiflorum</i>)				
<i>F</i> - Fairly common (=Abundant in ELC) generally widespread represented by fairly large numbers of individual clumps, usually forming >10% ground cover					Shinleaf (<i>Prunella elliptica</i>)					Large-flowered Bellwort (<i>Uvularia grandiflora</i>)				
<i>U</i> - 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)														
<i>R</i> - Rare represented in the polygon by less than about five individuals or small clumps														
Map Number: 127-007-2	1	2	3	4	5	1	2	3	4	5	1	2	3	4
Date:	1	2	3	4	5	1	2	3	4	5	1	2	3	4
Surveyors:	1	2	3	4	5	1	2	3	4	5	1	2	3	4

Significant Wildlife Habitat Form

AECOM

Study Area:	BLW	JER	GSH	Map #:	177-65H/068
Date:	2012/04/16			Time Started:	9:30
Field Staff:	Tom Shockey / JESS P. off			Time Finished:	1:15
Weather Conditions:	Windy (45 km/h), cloudy, 20 °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)

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: 0438276 4788073 Likelihood to extend below frost line: _____

% canopy cover: 20% % slope: 10% Distance to open canopy (m): 1m

Description of fissure or stone pile (composition/material, dimensions, etc): Long, varies from small pebbles to large boulders - Abundant sun exposure

Description of surrounding habitat (type & abundance of cover, evidence of disturbance, etc): Cultural meadow.

Seeps and Springs

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

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

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



ELC	Species	Habitat Present (Y/N; UTM; description of habitat if present)	Habitat Description
CUM1, MAM, FOD8, FOD7, FOD9	June – August Green Dragon (<i>Arisaema dracontium</i>) - S2/S3 Bloom Time – May and June	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm. Y N UTM: n/a	
TPO1, TPS1, TPW1, FOM1 FOM2, FOD1, FOD2, FOD3	Hairy Bedstraw (<i>Galium pilosum</i>) - S3 Bloom Time – June-August	Occurs in dry, sandy woods and thickets; occasionally in dry sandy fields Y N UTM:	
FEO1, FES1, FET1, SWC, SWM, SWD, SWT, TPO, TPS, TPW	Hairy Valerian (<i>Valeriana edulis</i>) - S1 Bloom Time – June to August	Inhabits swampy river flats and meadows, wet prairies and wooded, rocky overbanks and fens Woodlands, often rocky, especially rivers. Rich woods, swamp forests, floodplains. Y N UTM:	
FOD6, FOD7, SWM, SWD	Hairy Wood Mint (<i>Blephilia hirsuta</i>) - S1 Bloom Time – Summer	Woodlands, often rocky, especially rivers. Rich woods, swamp forests, floodplains. Y N UTM: n/a	
FOD8, FOD7, FOD8, FOD9	Harbinger-of-spring (<i>Eriogonum bulbosa</i>) - S3 Bloom Time – early to late April	Occurs in rich, moist deciduous woods, especially on floodplains. Y N UTM:	
SAS1, SAM1, SAF1	Hill's Pond Weed (<i>Potamogeton hillii</i>) - SC/S2 Bloom Time – summer	Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters. Y N UTM:	
FOM6, FOM7, FOM8	Large Round-leaved Orchid (<i>Platanthera macrophylla</i>) - S2, Bloom Time – June to August	Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple- beech-eastern hemlock woodlands. Y N UTM:	
MAM2, MAM3, MAS2, MAS3, SAM2	Lizard's Tail (<i>Saururus cernuus</i>) - S3 Bloom Time – June – September	Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds. Y N UTM:	
FOD6, FOD7, FOD9	Pawpaw (<i>Asimina triloba</i>) - S3 Bloom Time – March-May	Occurs in moist deciduous woods and stream banks. Y N UTM: n/a	
FOM8 FOD6, FOD7, FOD9, CUM1	Pileose Evening Primrose (<i>Oenothera plesiosa</i>) - S2 Bloom Time – Late Spring – Early Summer	Moist edges of woods and open, disturbed ground. Y N UTM: n/a	
TPW1, FOM1, FOM2, FOD1, FOD2, FOD3	Prostate Tick-trefoil (<i>Desmodium rotundifolium</i>) - S2 Bloom Time – July-September	Dry, sandy or rocky woods Y N UTM:	
FOD7, SWD	Pumpkin Ash (<i>Fraxinus profunda</i>) - S2 Bloom Time – March - June	Swamps and floodplains Y N UTM: n/a	
CUW1, ALO, FET1, SWC FOD9, CUM1	Ram's-head Lady's-slipper (<i>Cypripedium arietinum</i>) - S3 Bloom Time – mid May to mid June	Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamp, dry sand woods, and limestone barren Y N UTM:	
FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1 O15	Rattlesnake Hawkweed (<i>Hieracium venosum</i>) - S2 Bloom Time – April – September	Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands Y N UTM:	
FOD6, FOD7, FOD9	Round-leaved Groundsel (<i>Packera obovata</i>) - S3 Bloom Time- May - June	Found in moist woods Y N UTM: n/a	
CUM1, CUT1, CUUS1	Round-leaved Hawthorn (<i>Crataegus lutea</i>) - S3?	Species occurs in old fields, poorly managed pastures, fencelines and roadsides Y N UTM:	
FOD6, FOD7, FOD8, FOD9, SWT2, SWT3 ALO, ALS, ALT, TPO, TPS, TPW	Scarlet Beebalm (<i>Monarda didyma</i>) - S3 Bloom Time – May to October	Found in moist, rich woods, thicket swamps, banks and floodplains. Species occurs in limestone and dolostone pavement, prairies, open woods, alvars and moist sandy meadows. Y N UTM: n/a	
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 Muhiy (<i>Muhlenbergia tenuiflora</i>) - S2	Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods Y N UTM:	
BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, SAM2, FOD7	Staff Gentian (<i>Gentianella quinquefolia</i>) - S2 Bloom Time – late summer to mid fall	Found in moist soil of streambanks, edges of woods, wet prairies, marshy meadows, dunes and wooded hillsides. Y N UTM: n/a	
TPS1, TPW1, CUW1, RBO, SBO	Sundial Lupine (<i>Lupinus perennis</i>) - S3 Bloom Time – mid-March to mid-June	Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen. Y N UTM:	

Species Conservation Habitat and Incidental Wildlife – Goshen

AOM

ELC	Status	Habitat Description	Habitat Present
			Y/N; UTM; description of habitat if present
TPO1, TPS1, TPW1, CUM1	Tall Blazing Star (<i>Liatris aspera</i>) - S3/SC	Occurs in open, sandy woods, dry roadsides and sandy prairies	Y N UTM:
FE0, FES, FET, MAM2, MAM3	Tuberous Indian Plantain (<i>Amomum plantagineum</i>) - S3	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	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	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.
CUW1, 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>Selunus 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 woods 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 Dustywing (<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>Asclepias spp.</i>). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow	Y N UTM:
TPS, CUW	Mottled Duskywing (<i>Erynnis mormon</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 virginiensis</i>) - SC	This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur	Y N UTM:

Goshen Feature:189 GSH1023/1559

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

0 25 50 100 Meters
Roads
Access/Collection Line
Survey to be Completed
Turbine Buffer (171.5m)
Turbine Buffer/Feature Intersect
Property Fabric
Goshen Wind Energy Centre

October 28, 2011



ELC Survey Completed
Survey to be Completed
Turbine Buffer (171.5m)



GSH1034

ELC
Community
Description and
Classification

Community
Description and
Classification

Site:	6189	Polygon:	
Surveyor(s):	Jd & TS	Date:	Nov. 29/11
UTMZ:		Time start:	9am
UTMZ:		Time finish:	9:30am
		UTMZ:	

Tree Tally by Species

Polygon Description

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

2nd notes

Stand Description

Species In Order of Decreasing Dominance (up to 4 sp)			
Layer	HT	CVR	(> Much Greater Than; = About Equal To)
1			<i>Baileya multiradiata</i> , <i>Bachmania umbellata</i> , <i>Mesa</i> , <i>Hemlock</i> , <i>Bn</i> ,
2			<i>Or</i> , <i>Fox</i> , <i>Eur</i> , <i>Wunderosa</i>
3			<i>Chrysothamnus</i> tree form, <i>Wedgeleaf</i> , <i>hairy</i> , <i>yellow</i>
4			

2 > 25m 1 > 25m or more
-Grand cruise, very

Abundance Codes:	N = None	R = Rare	O = Occasional	A = Abundant
Com. Age:	<input type="checkbox"/> Pioneer	<input type="checkbox"/> Young	<input type="checkbox"/> Mid-Age	<input type="checkbox"/> Mature

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

Common Diseases/Comments

Community Profile Diagram/Comments	
Notes:	

Soil Horizon Description

Soils Ontario and ELC Soils Description		Summary	
Pit/Auger #			
Zone			
Easting			
Nothing			
Position			
Aspect			
Percent			
Slope			
Length			
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 Stone/Rock		
Moisture Regime			
Drainage			

189 L GSH1023



Goshen ELC GSH1024

189 - GSH 1023

Community Classification	terrestrial	Polygon:	G-E64
Surveyor(s):	Date:	Time start:	12:32 PM
UTMZ:	[2, 23]	Time finish:	3:30 pm
	UTMN:		

Polygon Description 24C-Sunny, overcast

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

Stand Description

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp)			
1	1	4	<input checked="" type="checkbox"/> ACER ALN	<input type="checkbox"/> PLATANUS	<input type="checkbox"/> PRUNUS	<input type="checkbox"/> OSIER
2						
3	3	0	<input type="checkbox"/> COL	<input type="checkbox"/> RUB	<input type="checkbox"/> PRUNUS	<input type="checkbox"/> OSIER
4	6	3	<input type="checkbox"/> OSM	<input type="checkbox"/> COL	<input type="checkbox"/> RUB	<input type="checkbox"/> PRUNUS

HT Codes: 7 > 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-3m 2 > 3-5m 1 > 5m

CVR Codes: 0 = none 1 0% - 10% 2 10 - 20% 3 25 - 50% 4 > 50%

Stand Composition:	Size Class Analysis:		Standing Stage:		Deadfall / Logs:	
	<10	10-24	<10	10-24	<10	10-24
BM:						

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

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

Ecclesie: Production Forest Code: F- SND

Vegetation: Sugar Maple - Hickory Forest - #0:54 Code: F- SND

Type: Primary Forest Code:

Inclusion: Secondary Forest Code:

Complex: Old Growth Forest Code:

Community Profile Diagram/Comments

* Dominant forest, no tree transplant

Notes:

Tree Tally by Species

	Prism	Dot	2"
Species	Tally 1	Tally 2	Tally 3
Tallies	1/1	1/1	1/1
Total	1	1	1
Basal Area (BA)	1.2	1.2	1.2
Dead	0	0	0

Soil Ontario and ELC Soils Description		Summary	
		Site Metrics	Moisture Regime
Pin/Auger #		Zone	
Total	12	Easting	424906
Basal Area (BA)	2.4	Northing	4784653
Dead		Position	
		Aspect	
		Soil Type	
		Slope Length	
		Mottles	
		Gley	
		Water Table	
		Carbonates	
Depth to:		Bedrock	
		1 Depth from zero	% CF
		Texture	% CF
		2 Depth from zero	% CF
		Texture	% CF
		Clay	% CF
Soil Horizon Description		3 Depth from zero	% CF
		Texture	% CF
		4 Depth from zero	% CF
		Texture	% CF
		% Surface Stone/Rock	
		Moisture Regime	
		Drainage	

VASCULAR PLANT CHECKSHEET

Location: G-64

Date: July 12, 2011

Job Number:

SPECIES	JULY 1970						JULY 1971						MONOCOT HERBS					
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Achillea millefolium							<i>Eriogonum annuum</i>						<i>Polygonum lanceolata</i>					<i>Allium plantago-aquaticum</i>
Achillea pachyphylla							<i>Eriogonum philadelphicum</i>						<i>Polygonum major</i>					<i>Allium triococcum</i>
Achillea rubra							<i>Eriogonum strigosus</i>						<i>Polygonum rugosum</i>					<i>Allium</i>
Aegopodium							<i>Erysimum cheiranthoides</i>						<i>Polygonum perfoliatum</i>					<i>Artemisia triphyllum</i>
Agrimonia gryposepala							<i>Eupatorium maculatum</i>						<i>Polygonum</i>					<i>Anemone officinalis</i>
Altaria polysticha							<i>Eupatorium perfoliatum</i>						<i>Polygonum</i>					<i>Celastrina luciliae</i>
Amelanchier alnifolia							<i>Eupatorium rugosum</i>						<i>Polygonum</i>					<i>Clytia borealis</i>
Amelanchier canadensis							<i>Euphorbia</i>						<i>Polygonum lapathifolium</i>					<i>Convallaria majalis</i>
Amelanchier laevigata							<i>Eutrema graminifolium</i>						<i>Polygonum pensylvanicum</i>					<i>Cypripedium calceolus</i>
Amphicarpaea bracteata							<i>Fragaria virginiana</i>	X					<i>Potentilla</i>					<i>Elodes canadensis</i>
Anaphalis margaritacea							<i>Fragaria vesca</i>						<i>Potentilla norvegica</i>					<i>Epipactis helleborine</i>
Anemone							<i>Galeopsis tetrahit</i>						<i>Potentilla recta</i>					<i>Erythronium americanum</i>
Anemone canadensis							<i>Gaultheria</i>						<i>Prunella vulgaris</i>					<i>Hemerocallis fulva</i>
Anemone virginiana							<i>Gaultheria procumbens</i>						<i>Pyrola elliptica</i>					<i>Iris versicolor</i>
Antennaria neglecta							<i>Gaultheria shallon</i>						<i>Ranunculus</i>					<i>Lemna minor</i>
Apocynum cannabinum							<i>Gentianella maculatum</i>	X					<i>Ranunculus abortivus</i>					<i>Lemna trisulca</i>
Apocynum cannabinum							<i>Gentianella robustum</i>						<i>Ranunculus acris</i>					<i>Lilium</i>
Apulegia canadensis							<i>Gentianella villosa</i>						<i>Rubus hispida</i>					<i>Molinia canadensis</i>
Asclepias radicans							<i>Gentianella villosa</i>						<i>Rumex acetosa</i>					<i>Molinia canadensis</i>
Asclepias minus							<i>Gentianella villosa</i>						<i>Rumex crispus</i>					<i>Molinia glaberrima</i>
Artemisia							<i>Gentianella villosa</i>						<i>Rumex obtusifolius</i>					<i>Polygonatum pubescens</i>
Asplenium cordatum							<i>Gentianella villosa</i>						<i>Rumex acetosa</i>					<i>Polygonatum crinitum</i>
Asplenium incisum							<i>Glechoma hederacea</i>						<i>Sanguinaria canadensis</i>					<i>Polygonatum perfoliatum</i>
Asplenium lyngbyoides							<i>Heuchera scutellarioides</i>						<i>Saxifraga mertensii</i>					<i>Polygonatum</i>
Aster							<i>Hypericum perforatum</i>						<i>Saponaria officinalis</i>					<i>Saxifraga bronchialis</i>
Aster cordifolius							<i>Impatiens capensis</i>	X					<i>Saxifraga officinalis</i>					<i>Saxifraga montana</i>
Aster ericoides							<i>Irula heterophylla</i>						<i>Saxifraga</i>					<i>Saxifraga herbacea</i>
Aster laevis							<i>Leucanthemum vulgare</i>						<i>Solidago</i>					<i>Spiraea cornuta</i>
Aster lateriflorus							<i>Leucanthemum vulgare</i>						<i>Solidago altissima</i>					<i>Spiraea polyrhiza</i>
Aster macrocephalus							<i>Lychnis viscaria</i>						<i>Solidago canadensis</i>					<i>Spiraea moschata</i>
Aster novae-angliae							<i>Lychnis viscaria</i>						<i>Solidago gigantea</i>					<i>Trollius europaeus</i>
Aster puniceus							<i>Lychnis viscaria</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Bartsia vulgaris							<i>Lychnis viscaria</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Bartsia cernua							<i>Lychnis viscaria</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Bartsia frondosa							<i>Lychnis viscaria</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Bartsia cylindrica							<i>Lychnis viscaria</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Bartsia peduncularis							<i>Lychnis viscaria</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Bartsia septemloba							<i>Lychnis viscaria</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Cardamine diphylla							<i>Lychnis viscaria</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Cardamine							<i>Lobelia inflata</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Calochortus thalassinoides	X						<i>Lobelia inflata</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Carex stans							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Carex stipularis							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Carex tenera							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Carex vulpinoidea							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Cassiope mertensiana							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Chelidonium majus							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Chenopodium album							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Chrysanthemum leucanthemum							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Cichorium intybus							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Cirsium							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Cirsium heterophyllum							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
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Cirsium heterophyllum							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					<i>Trollius europaeus</i>
Cirsium heterophyllum							<i>Lolium perenne</i>						<i>Solidago speciosa</i>					

1: Fad 5-5

2 SWD 3-1

3

4: _____

6: _____

6: _____



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ELC

file: 55-H-65 Date: July 13, 2011 Polygon: U1
 surveyor(s): J. R. Time start: 2pm
 UTMZ: UTMN:

Tree Talk by S. D. Cole

Tree Tally by Species		Tally 1	Tally 2	Total	Rel. Avg.
Species	Prism	For 1	For 2	Total	
Bitter Nut		1111			
Solid Back		11			
Iron Wood		11			
Deadwood		1			
White Ash		11			
					100
Total					
Basal Area (BA)					
Prism					

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
Terrestrial	<input type="checkbox"/> Organic <input type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Mnr.	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace	<input type="checkbox"/> Plankton <input type="checkbox"/> Submerged <input type="checkbox"/> Floating-LVD. <input type="checkbox"/> Graminoid <input type="checkbox"/> Fern <input type="checkbox"/> Lichen <input type="checkbox"/> Bryophyte	<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
Wetland	<input type="checkbox"/> Aquatic Site	<input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock	<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"/> Ayar	
Aquatic	<input type="checkbox"/> Natural <input type="checkbox"/> Cultural		<input type="checkbox"/> Rockland <input type="checkbox"/> Beach / Bar <input type="checkbox"/> Sand Dune <input type="checkbox"/> Bluff	
	<input type="checkbox"/> Cover			
	<input type="checkbox"/> Open <input type="checkbox"/> Shrub <input checked="" type="checkbox"/> Tree			

Stand Description

Species in Order of Decreasing Dominance (up to 4 sp)						
Layer	HT	CVR				
1	7	4	S. heterolepis	> S. heterolepis	> Much Greater Than	> Much Greater Than
2	3	7	N. tenuis	N. tenuis	> N. tenuis	> N. tenuis
3	6	3	N. tenuis	N. tenuis	> N. tenuis	> N. tenuis
4						

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

Stand Composition:	Size Class Analysis:	Standing Stock:	Deadfall / Logs:																																																																													
BA:	<table border="1"> <tr><td>A</td><td><10</td><td>10-24</td></tr> <tr><td>B</td><td><10</td><td>10-24</td></tr> <tr><td>C</td><td><10</td><td>10-24</td></tr> <tr><td>D</td><td><10</td><td>10-24</td></tr> <tr><td>E</td><td><10</td><td>10-24</td></tr> <tr><td>F</td><td><10</td><td>10-24</td></tr> <tr><td>G</td><td><10</td><td>10-24</td></tr> <tr><td>H</td><td><10</td><td>10-24</td></tr> <tr><td>I</td><td><10</td><td>10-24</td></tr> <tr><td>J</td><td><10</td><td>10-24</td></tr> <tr><td>K</td><td><10</td><td>10-24</td></tr> <tr><td>L</td><td><10</td><td>10-24</td></tr> <tr><td>M</td><td><10</td><td>10-24</td></tr> <tr><td>N</td><td><10</td><td>10-24</td></tr> <tr><td>O</td><td><10</td><td>10-24</td></tr> <tr><td>P</td><td><10</td><td>10-24</td></tr> <tr><td>Q</td><td><10</td><td>10-24</td></tr> <tr><td>R</td><td><10</td><td>10-24</td></tr> <tr><td>S</td><td><10</td><td>10-24</td></tr> <tr><td>T</td><td><10</td><td>10-24</td></tr> <tr><td>U</td><td><10</td><td>10-24</td></tr> <tr><td>V</td><td><10</td><td>10-24</td></tr> <tr><td>W</td><td><10</td><td>10-24</td></tr> <tr><td>X</td><td><10</td><td>10-24</td></tr> <tr><td>Y</td><td><10</td><td>10-24</td></tr> <tr><td>Z</td><td><10</td><td>10-24</td></tr> </table>	A	<10	10-24	B	<10	10-24	C	<10	10-24	D	<10	10-24	E	<10	10-24	F	<10	10-24	G	<10	10-24	H	<10	10-24	I	<10	10-24	J	<10	10-24	K	<10	10-24	L	<10	10-24	M	<10	10-24	N	<10	10-24	O	<10	10-24	P	<10	10-24	Q	<10	10-24	R	<10	10-24	S	<10	10-24	T	<10	10-24	U	<10	10-24	V	<10	10-24	W	<10	10-24	X	<10	10-24	Y	<10	10-24	Z	<10	10-24	A = Abundant
A	<10	10-24																																																																														
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Z	<10	10-24																																																																														

Abundance Codes: N = None R = Rare Q = Occasional A = Abundant
 Com. Age: Pioneer Young Mid-Age Mature Old Growth

EcoSite:		Code:
Vegetation Type:		Code:
Inclusion:		Code:
Complex:		Code:

Community Profile Diagram/Comments

and $\text{log}_2 E$ are plotted against ρ .

Ontario and ELC Soil Description

Site Metrics		Summary	
Pit/Auger #		Moisture Regime	
Zone		Position	
LTW	Eastling		
	Northing		
	Position		
	Aspect	0	
	Slope		0

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		Length		Effective Texture (Indicate below)			
Mottles	Gray	0	0	0	0	0	0
Water Table		0					
Carbonates		0					
Bedrock		0					
1	Depth from zero	5-6-	% CF 0	% CF 0	% CF 0	% CF 0	% CF 0
	Texture	5-5-					
2	Depth from zero	15-50-	% CF 0	% CF 0	% CF 0	% CF 0	% CF 0

Texture
W...
on

Soil Horizon Description					
3	Depth from zero	% CF	% CF	% CF	% CF
	Texture				
4	Depth from zero	% CF	% CF	% CF	% CF
	Texture				
	% Surface Stone/Rock	O.			
	Moisture Regime				
	Drainage				

GE64 Turbine E&C Completed July 12/11 -JP

181-G5H1023

Goshen Access Road / Collection Lines

189-GSH1023



ELC

Community
Description and
Classification

Site: GSA 1023 Polygon: ①

Surveyors: SAM Date: Aug 13/11 Time: start 09:37
UTM: 17 UTMZ: Finish 11:32

Polygon Description

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

Stand Description

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

1	4	MS	> BD	> Av	> FH
2	3	BD	> BD	= FH	
3	4	BD	> BD	> R	> HS
4	3	BD	= HS		

HT Codes: 7 < 0.2m 6 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-3m 2 > 3-5m 1 > 5m

CVR Codes: 0 = none 1.0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

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

Stand Composition:	Size Class Analysis:	O < 10	O 10-24	A 25-50	R > 50
HS-BS-A-LS-HA	Standing Snags:	Y < 10	B 10-24	O 25-50	N > 50
BA: 26	Deadfall / Logs:	Y < 10	B 10-24	O 25-50	N > 50

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

Ecozone: Freshwater/Swamp Maple-Birch-Pinewood & Balsam

Vegetation Type: Fresh-Wet Spruce Maple-Pinewood & Balsam

Inclusion: Forest Type

Complex:

Code: FDN-6	Code: FDN-5	Code: /	Code: /
Texture	C	C	C

Community Profile Diagram/Comments

% Surface Stone/Rock	Very Hard (6)	Very Hard (6)
Moisture Regime	Poor (6)	Impeded (5)

Notes:

Tree Tally by Species		Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Ave.
Species		15	2	2	2	15	15
BD		15	2	1	1	15	15
Hs		15	2	1	1	15	15
Av		15	2	1	1	15	15
Be		15	2	1	1	15	15
Total		45	10	6	6	45	45
Basal Area (BA)		2.14	0.47	0.53	0.53	2.00	2.00
Dead		-	-	-	-	-	-

Soils Ontario and ELC Soils Description		WP/196	WP/197	Summary
PIU/Auger #		WP/196	WP/197	②
Zone				
Easting				
Northing				
Position		5	5	
Aspect		N	N	
Elevation		-	-	
Slope		-	-	
Length		21	21	
Mottles		38	38	53
Gley		73	73	-
Water Table		32	32	-
Carbonates		-	-	
Bedrock		-	-	
Depth to				
Mottles		21	21	
Gley		38	38	53
Water Table		73	73	-
Carbonates		32	32	-
Bedrock		-	-	
Depth from		0-8	0-8	
zero		0	0	
Texture		LC	LC	
Effective Texture		WSLC	WSLC	
Indicate below				

Soil Horizon Description		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868
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VASCULAR PLANT CHECKSHEET

Location: 189_GSA 1023
Observer: SAM

Date: 9 Aug. 12/11

Job Number:

DICOT HERBS	1	2	3	4	5	6	1	2	3	4	5	6	MONOCOT HERBS	1	2	3	4	5	6
Achillea millefolium							Erigeron annuum						Plantago lanceolata						
Actaea pachypoda							Erigeron philadelphicus						Plantago major						
Aclisia rubra							Erigeron strigosus						Plantago rugelii						
Agalinis							Erysimum cheiranthoides						Polygonum perfoliatum						
Agrimonia gryposepala							Eupatorium maculatum						Polygonum						
Alliaria petiolata							Eupatorium perfoliatum						Polygonum						
Amaranthus retroflexus							Eupatorium rugosum						Polygonum						
Ambrosia artemisiifolia							Euphorbia						Polygonum lapathifolium						
Amphicarpaea bracteata							Euthamia graminifolia						Polygonum persicaria						
Anaphalis margaritacea							Fragaria virginiana						Potentilla						
Anemone							Fragaria vesca						Potentilla norvegica						
Anemone canadensis							Galeopsis tetrahit						Potentilla recta						
Anemone virginiana							Gallium						Prenanthes alba						
Antennaria neglecta							Gallium						Prunella vulgaris						
Apocynum androsaemifolium							Gallium palustre						Pyrola elliptica						
Apocynum cannabinum							Gallium triflorum						Ranunculus						
Aquilegia canadensis							Geranium maculatum						Ranunculus abortivus						
Aralia nudicaulis							Geranium robertianum						Ranunculus esculentus						
Arctium minus							Geum aleppicum						Rudbeckia hirta						
Artemesia							Geum canadense						Rumex acetosa						
Asearum canadense							Geum						Rumex crispus						
Aesculus incana							Glechoma hederacea						Rumex						
Aesculus sylvatica							Hepatica acutiloba						Sanguinaria canadensis						
Aster							Hesperis matronalis						Sanicula marilandica						
Aster cordifolius							Heracleum aurantiacum						Saponaria officinalis						
Aster ericoides							Heracleum caespitosum						Satureja vulgaris						
Aster lanceolatus							Heracleum						Scutellaria galericulata						
Aster lateriflorus							Hydrophyllum virginianum						Silene vulgaris						
Aster macrophyllus							Hypericum perforatum						Silium suave						
Aster novae-angliae							Impatiens capensis						Solanum dulcamara						
Aster puniceus							Inula helianthemum						Solidago						
Barberis vulgaris							Lactuca						Solidago altissima						
Bidens cernua							Laportea canadensis						Solidago caesia						
Bidens frondosa							Lapsana communis						Solidago canadensis						
Boehmeria cylindrica							Leonurus cardiaca						Solidago flexicaulis						
Cacalia palustris							Lepidium						Solidago gigantea						
Calyptegia septem							Lunaria vulgaris						Solidago nemoralis						
Cardamine diphylla							Lithospermum officinale						Solidago rugosa						
Cardamine							Lobelia						Sonchus arvensis						
Caulophyllum thalictroides							Lobelia inflata						Sonchus asper						
Ceratostium fontanum							Lotus corniculatus						Stellaria						
Ceratopodium demersum							Lycopus americanus						Tanacetum vulgare						
Chelidonium majus							Lycopus						Tanacetum officinale						
Chenopodium album							Lysimachia ciliata						Thalictrum diococcum						
Chrysanth. leucanthemum							Lythrum salicaria						Thalictrum pubescens						
Cichorium intybus							Medicago lupulina						Tiarella cordifolia						
Cicuta							Medicago sativa						Tragopogon pratense						
Circassia leufliana							Melilotus alba						Trientalis borealis						
Cirsium arvense							Mentha arvensis						Trifolium						
Cirsium vulgare							Mimulus ringens						Trifolium pratense						
Clematis virginiana							Mimulus ringens						Trifolium repens						
Clinoptilus borealis							Mitchella repens						Tussilago farfara						
Corynza canadensis							Muscardine fatuella						Urtica dioica						
Coronilla varia							Myosotis						Urticularia vulgaris						
Cyranchum rossicum							Nasturtium officinale						Verbascum thapsus						
Cynoglossum officinale							Nepeta cataria						Verbena hastata						
Daucus carota							Nuphar variegatum						Verbena urticifolia						
Desmodium canadense							Nymphaea odorata						Veronica						
Dianthus armeria							Oenothera biennis						Veronica officinalis						
Dipsacus fullonum							Oenothera						Vicia cracca						
Echinocystis lobata							Oenothera stricta						Vicia tetrasperma						
Echium vulgare							Phytomyza leptostachya						Viola						
Epilobium							Physalis heterophylla						Viola						
Epilobium ciliatum													Viola pubescens						
Epilobium hirsutum													Viola sororia						
Epilobium parviflorum																			

1: Polygonum

4:

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