

Species Conservation Concern Habitat and Incidental Wildlife - Goshen



Map No: 232-GSH1639
Date (yyyy-mm-dd): 2012-04-25

Field Staff: RA, SG

Time Started: 2:00 pm
Time Finished: 4:00 pm

Observed Species List

| Species Code | UTM | EV | Notes | Species Code | UTM | EV | Notes |
|-----------------------|-----|----|-------|--------------|-----|----|-------|
| white gullery | | OB | | | | | |
| red cardinal | | OB | | | | | |
| Swainson | | OB | | | | | |
| Northern Flicker | | VO | | | | | |
| Red Wing Blackbird | | VO | | | | | |
| Downy Woodpecker | | VO | | | | | |
| Golden Spoke | | OB | | | | | |
| Red bellied sapsucker | | VO | | | | | |
| Wood Thrush | | VO | | | | | |

Note: Evidence Codes (EV) Breeding Bird (Possible) SH=Suitable Habitat, SM=Singing Male;

Breeding Bird (Probable) T-Territory, D=Display, P=Pair, N=Nest Building, V=Visiting Nest, A=Anxiety Behavior;

Breeding Bird (Confirmed) DD=Distraction, NU=Used Nest, FY=Fledged Young, NE=Eggs, NY=Young, FS=Foos/Faecal sack, AE=Nest Entry

Other Wildlife Evidence: OB=observed, VO=Vocalization, CA=Carcass, DP=Distinctive Parts, HO=House/Den, FY=Eggs/Young, TK=tracks, FE=Feeding evidence, SC=Scat, SI=Other signs (specify)

| ELC | Species | Habitat Description | Habitat Present (Y/N); UTM | description of habitat if present |
|--|---|---|----------------------------|-----------------------------------|
| FOD7 | American Gromwell (Lithospermum latifolium) - S3 Bloom Time - Spring | Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods. | Y N UTM: | NO |
| ALO, TPO | Muehlenberg's astomum moss (Astomum muehlenbergianum)-S2 Bloom Time - Spring | Thin soil over level outcrop ledges and on soil under grasses in open prairie | Y (N) UTM: | NO |
| FOM1, FOM2, CUP3 | Autumn Coral-root (Corallorhiza odontorhiza) - S2 Bloom Time - summer to fall | Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry, sandy woods. | Y (N) UTM: | NO |
| FOC, FOM, FOD | Burning Bush (Euonymus atropurpureus) - S2 Bloom Time - April - June | Species occurs in dry to moist deciduous thickets and woods. | Y (N) UTM: | NO |
| SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6 | Chinese Hemlock Parsley (Conioselinum chinense) - S2 Bloom Time - summer to fall | Swampy places with deciduous trees, white cedars, tamarack; springy river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes. | Y (N) UTM: | NO |
| SWC, SWM, SWD, SWT, MAM, MAS | Crowned Beggarticks (Bidens trichosperma) -S2 Bloom Time - late summer | Found in openings in swamps, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian Bay. Bogs, fens, tamarack swamps. | Y (N) UTM: | NO |
| ALT1, FODZ | Eastern Green-violet (Hybanthus concolor) - S2 Bloom Time - mid March to August. | Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks. | Y (N) UTM: | NO |
| TPS, TPW, FOM1, FOM2 | Fogg's Goosefoot (Chenopodium foggii) -S2 | Species occurs in sandy areas on limestone under oak or pine-oak forests | Y (N) UTM: | NO |
| TPO2, TPS2, TPW2, | Giant Ironweed (Vernonia gigantea)-S1? Bloom Time- | Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows | Y (N) UTM: | NO |

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



| ELC | Species | Habitat Description | Habitat Present (Y/N; UTM; desc; pres; on of habitat if present) |
|---|--|---|--|
| CUM1, MAM, FOD6, FOD7, FOD8 | June - August Green Dragon (<i>Arisaema dracontium</i>) - SC/S3 <u>Bloom Time - May and June</u> | Species found in <u>open deciduous forest</u> and along river streams. Particularly <u>Maple forest</u> and forest dominated by <u>Red Ash</u> and <u>White Elm</u> . | Y N UTM: NO |
| TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3 | June - August Hairy Bedstraw (<i>Gallium pilosum</i>) - S3 <u>Bloom Time - June - August</u> | Occurs in dry, sandy woods and thickets; occasionally in dry sandy fields | Y N UTM: NO |
| FEO1, FES1, FET1, SWC, SWM, SWD, SWT, TPO, TPS, TPW | Hairy Valerian (<i>Valeriana edulis</i>) - S1 <u>Bloom Time - June to August</u> | Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens. | Y N UTM: NO |
| FOD6, FOD7, SWM, SWD | Hairy Wood Mint (<i>Blephilia hirsuta</i>) - S1 <u>Bloom Time - Summer</u> | <u>Woodlands</u> , often rocky, especially rivers. Rich woods, swamp forests, floodplains. | Y N UTM: NO |
| FOD6, FOD7, FOD8, FOD9 | Harbinger-of-spring (<i>Erigenia bulbosa</i>) - S3 <u>Bloom Time - early to late April</u> | Occurs in <u>rich, moist deciduous woods</u> , especially on floodplains. | Y N UTM: NO |
| SAS1, SAM1, SAF1 | Hill's Pond Weed (<i>Potamogeton hillii</i>) - SC/S2 <u>Bloom Time - summer</u> | Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters. | Y N UTM: NO |
| FOM6, FOM7, FOM8 | Large Round-leaved Orchid (<i>Platanthera macrophylla</i>) - S2 <u>Bloom Time - June to August</u> | Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands. | Y N UTM: NO |
| MAM2, MAM3, MAS2, MAS3, SWD | Lizard's Tail (<i>Saururus cernuus</i>) - S3 <u>Bloom Time - June - September</u> | Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds. | Y N UTM: NO |
| FOD6, FOD7, FOD8 | Pawpaw (<i>Asimina triloba</i>) - S3 <u>Bloom Time - March-May</u> | Occurs in <u>moist deciduous woods</u> and stream banks. | Y N UTM: NO |
| FOM8, FOD6, FOD7, FOD9, CUM1 | Pilose Evening Primrose (<i>Oenothera pilosella</i>) - S2 <u>Bloom Time - Late Spring - Early Summer</u> | <u>Moist edges of woods</u> and open, disturbed ground. | Y N UTM: NO |
| TPW1, FOM1, FOM2, FOD1, FOD2, FOD3 | Prostate Tick-trefoil (<i>Desmodium rotundifolium</i>) - S2 <u>Bloom Time - July-September</u> | Dry, sandy or rocky woods | Y N UTM: NO |
| FOD7, SWD | Pumpkin Ash (<i>Fraxinus profunda</i>) - S2? <u>Bloom Time - March - June</u> | Swamps and floodplains | Y N UTM: NO |
| CUW1, ALO, FET1, SWC | Ram's-head Lady's-slipper (<i>Cypripedium arietinum</i>) - S3 <u>Bloom Time - mid May to mid June</u> | Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamps, dry-sandy woods, and limestone barren. | Y N UTM: NO |
| FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5 | Rattlesnake Hawkweed (<i>Hieracium venosum</i>) - S2 <u>Bloom Time - April - September</u> | Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands. | Y N UTM: NO |
| FOD6, FOD7, FOD9 | Round-leaved Groundsel (<i>Packera obovata</i>) - S3 <u>Bloom Time - May - June</u> | Found in <u>moist woods</u> | Y N UTM: NO |
| CUM1, CUT1, CUS1 | Round-leaved hawthorn (<i>Crataegus lumaria</i>) - S3? | Species occurs in old fields, poorly managed pastures, fencelines and roadsides | Y N UTM: NO |
| FOD6, FOD7, FOD8, FOD9, SWT2, SWT3 | Scarlet Beebalm (<i>Monarda didyma</i>) - S3 <u>Bloom Time - May to October</u> | Found in <u>moist rich woods</u> , thicket swamps, banks and floodplains. | Y N UTM: NO |
| 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: NO |
| 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: NO |
| SDT1, FOD5, FOD9 | Slim-flowered Muhly (<i>Muhlenbergia tenuiflora</i>) - S2 | Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods | Y N UTM: NO |
| BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7 | Stiff Gentian (<i>Gentiana quinquefolia</i>) - S2 <u>Bloom Time - late summer to mid fall</u> | Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides. | Y N UTM: NO |
| TPS1, TPW1, CUW1, RBO, SBO | Sundial Lupine (<i>Lupinus perennis</i>) - S3 <u>Bloom Time - mid-March to mid-June</u> | Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen. | Y N UTM: NO |

Species Conservation Concern Habitat and Incidental Wildlife – Goshen



| ELC | Species | Habitat Description | Habitat Present (Y/N); UTM; description of habitat if present |
|--|---|---|---|
| TP01, TPS1, TPW1, CUM1 | Tall Blazing Star (<i>Liatris aspera</i>)-S3/SC | Occurs in open, sandy woods, dry roadsides and sandy prairies | Y (N) UTM: NO |
| FEO, FES, FET, MAM2, MAM3 | Tuberous Indian Plantain (<i>Amoglossum plantagineum</i>) - S3 Bloom Time -mid-March to mid-June | Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats. | Y (N) UTM: NO |
| 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: NO |
| CUM1, CUT1, CUW1, RBO1, SBO1 | Yellow Ladies'-tresses (<i>Spiranthes ochroleuca</i>) - S2 Bloom Time - August to November | Dry, open sites, usually on acidic sandy soil, dry to mesic open woodland, thickets, meadows, barrens, ledges, outcrops, banks and roadsides, old fields. | Y (N) UTM: NO |
| BIRDS | | | |
| - | Bald Eagle (<i>Haliaeetus leucocephalus</i>) - SC | Assessed as SWH. Record species if found. | not required. |
| CUW, SDO, RBO, TPS | Common Nighthawk (<i>Chordeiles minor</i>) - SC | 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: NO |
| FOD, FOM | Louisiana Waterthrush (<i>Seiurus motacilla</i>) - SC | Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration | Y (N) UTM: NO |
| 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: NO |
| - | Short Eared Owl (<i>Asio flammeus</i>) - SC | Assessed as SWH. Record species if found. | not required. |
| CUT1 | Yellow-breasted Chat (<i>Icteria virens</i>) - SC | Inhabits thickets, tall tangles of shrubbery beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines | Y (N) UTM: NO |
| 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: NO |
| TPS, TPW | Sleepy Duskywing (<i>Erynnis brize</i>) - S1 | Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils. Species regularly seen at flowers in oak woods, on the ground, and at mud puddles | Y (N) UTM: NO |
| CUM1, CUT1, CUW1 | Monarch Butterfly (<i>Danaus plexippus</i>) - SC | Their larvae only feed on milkweeds (<i>Asclepius</i> spp.). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow | Y (N) UTM: NO |
| TPS, CUW | Mottled Duskywing (<i>Erynnis martialis</i>) -S2 | Usually seen nectaring on or on wet sandy roads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present | Y (N) UTM: NO |
| SWT, SWD, SWM, FOM, FOD4-3, TPW, TPS, CUM1 | Tawny Emperor (<i>Asterocampa clyten</i>) - S3 | Species inhabits densely wooded riparian areas, dry woods, open woods, fencerows and parks. Usually occurs near Hackberry, the larval foodplant | Y (N) UTM: NO |
| FOD5 | West Virginia White (<i>Pteris virginensis</i>) - SC | This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur | Y (N) UTM: NO |

Goshen Feature: 235 GSH2061

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

October 28, 2011

0 25 50 100 Meters

↑

- Roads
- Access/Collection Line
- Survey to be Completed
- Turbine Buffer (171.5m)
- ELC Survey Completed
- Turbine Buffer/Feature Interest
- Property Fabric
- Goshen Wind Energy Centre



GSH056

GSH205

Accessible

GSH059

Accessible

49

Fence Line Survey

NO ACCESS

236

GSH2061

POC = NO

GSH2062

GSH1481

Accessible

GSH1480

249-5?

NO ACCESS

S1023-3



245

NEW SITE
(1st Survey)

ELC Community Description and Classification

Site: 235_GSH2061 Polygon: **A**

Surveyor(s): **J Kamstina** Date: **Nov 7/11** Time start: **12:30** finish:

UTMZ: UTMN:

Polygon Description

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

Stand Description

| Layer | HT | CVR | Species in Order of Decreasing Dominance (up to 4 sp) (P > Much Greater Than; > Greater Than; = About Equal To) |
|-------|----|-----|--|
| 1 | 2 | 4 | Tilamer > Carcord > Plummer - European |
| 2 | 3 | 2 | Ummar - Ost vlg |
| 3 | 6 | 3 | Ruwadi - Ast lane > Solflex |
| 4 | | | |

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 5 > 0.5-1m 4 > 1-2m 3 > 2-6m 2 > 6-25m 1 > 25m
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 60% 4 > 60%

Stand Composition: Size Class Analysis:

| | | | | | | |
|------------------|-----|---|-------|---|-------|-----|
| Standing Age: | <10 | A | 10-24 | O | 25-50 | >50 |
| Deadfall / Logs: | <10 | | 10-24 | | 25-50 | >50 |

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

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

Ecosite: Basswood - Hickory
Vegetation Type: FOD 9-6
Inclusion: Fresh Moist Bitternut - Black Spruce
Complex:

Community Profile Diagram/Comments

Small woodlot in edge effect

Notes:

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

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

⑧ S Part of Woodlot

Freeman Maple - Green Ash Swamp
broken canopy, and some seasonal flooding though
likely brief

VASCULAR PLANT CHECKSHEET

Location: J. Kam stia
 Observer: 235 GSM 2061

Date: Nov 7 2011
 Job Number:

| DICOT HERBS | | | | | | | | | | | | MONOCOT HERBS | | | | | | | | | | | |
|------------------------------------|---|---|---|---|---|-----------------------------------|---|---|---|---|---|---------------------------------|---|---|---|---|---|---------------------------------|--|--|--|--|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | | | | | | |
| <i>Altea mollis</i> | | | | | | <i>Erigeron annuus</i> | | | | | | <i>Plantago lanceolata</i> | | | | | | <i>Alisma plantago-aquatica</i> | | | | | |
| <i>Azela pachypoda</i> | | | | | | <i>Erigeron philadelphicus</i> | | | | | | <i>Plantago major</i> | | | | | | <i>Allium tricoccum</i> | | | | | |
| <i>Cassia rubra</i> | | | | | | <i>Erigeron strigosus</i> | | | | | | <i>Plantago rugelii</i> | | | | | | <i>Allium</i> | | | | | |
| <i>Agalinus</i> | | | | | | <i>Erythronium chionanthoides</i> | | | | | | <i>Podophyllum peltatum</i> | | | | | | <i>Arisaema triphyllum</i> | | | | | |
| <i>Agrimonia gryposepala</i> | | | | | | <i>Eupatorium maculatum</i> | | | | | | <i>Polygonum</i> | | | | | | <i>Asparagus officinalis</i> | | | | | |
| <i>Allaria petiolaris</i> | X | | | | | <i>Eupatorium perfoliatum</i> | | | | | | <i>Polygonum</i> | | | | | | <i>Cela palustris</i> | | | | | |
| <i>Amaranthus retrofractus</i> | | | | | | <i>Eupatorium rugosum</i> | | | | | | <i>Polygonum</i> | | | | | | <i>Clinoclinis borealis</i> | | | | | |
| <i>Ambrosia artemisiifolia</i> | | | | | | <i>Euphorbia</i> | | | | | | <i>Polygonum lapathifolium</i> | | | | | | <i>Conoclinium majus</i> | | | | | |
| <i>Amphicarpaea bracteata</i> | | | | | | <i>Euthamia granifolia</i> | | | | | | <i>Polygonum persicaria</i> | | | | | | <i>Cypripedium calceolus</i> | | | | | |
| <i>Anaphalis margaritacea</i> | | | | | | <i>Fragaria virginiana</i> | | X | | | | <i>Polygonum</i> | | | | | | <i>Eloche canadensis</i> | | | | | |
| <i>Anemone</i> | | | | | | <i>Fragaria vesca</i> | | | | | | <i>Polygonum</i> | | | | | | <i>Equisetum hyemale</i> | | | | | |
| <i>Anemone canadensis</i> | | | | | | <i>Galeopsis tetrahit</i> | | | | | | <i>Polygonum</i> | | | | | | <i>Erythronium americanum</i> | | | | | |
| <i>Anemone virginiana</i> | | | | | | <i>Gallium</i> | | | | | | <i>Polygonum</i> | | | | | | <i>Hemerocallis fulva</i> | | | | | |
| <i>Anthriscus neglecta</i> | | | | | | <i>Gallium</i> | | | | | | <i>Polygonum</i> | | | | | | <i>Iris versicolor</i> | | | | | |
| <i>Apocynum androsaemifolium</i> | | | | | | <i>Gallium palustre</i> | | | | | | <i>Pyrola elliptica</i> | | | | | | <i>Lemna minor</i> | | | | | |
| <i>Apocynum cannabinum</i> | | | | | | <i>Gallium triflorum</i> | | | | | | <i>Ranunculus</i> | | | | | | <i>Lemna tritica</i> | | | | | |
| <i>Aquilegia canadensis</i> | | | | | | <i>Geonium maculatum</i> | | | | | | <i>Ranunculus abortivus</i> | | | | | | <i>Lilium</i> | | | | | |
| <i>Arnica montana</i> | | | | | | <i>Geonium robertianum</i> | | | | | | <i>Ranunculus acris</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Asarum canadense</i> | | | | | | <i>Geum aleppicum</i> | | | | | | <i>Ranunculus acris</i> | | | | | | <i>Milium racemosum</i> | | | | | |
| <i>Asclepias incarnata</i> | | | | | | <i>Geum canadense</i> | | | X | | | <i>Rumex</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Asclepias syriaca</i> | | | | | | <i>Geum</i> | | | | | | <i>Rumex crispus</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Aster</i> | | | | | | <i>Glechoma hederacea</i> | | | | | | <i>Rumex</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Aster cordifolius</i> | | | | | | <i>Hepatica acutiloba</i> | | | | | | <i>Sanguinaria canadensis</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Aster ericoides</i> | | | | | | <i>Hesperis matronalis</i> | | | | | | <i>Senecio maritima</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Aster lanceolatus</i> | X | | | | | <i>Hieracium aurantiacum</i> | | | | | | <i>Saponaria officinalis</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Aster lateralis</i> | X | | | | | <i>Hieracium cespitosum</i> | | | | | | <i>Satureja vulgaris</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Aster macrophyllus</i> | X | | | | | <i>Hieracium</i> | | | | | | <i>Scutellaria galericulata</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Aster novae-angliae</i> | X | | | | | <i>Hydrophyllum virginianum</i> | | X | | | | <i>Silene vulgaris</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Aster puniceus</i> | | | | | | <i>Hypericum perforatum</i> | | | | | | <i>Sium suave</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Barbarea vulgaris</i> | | | | | | <i>Impatiens capensis</i> | | | | | | <i>Solanum dulcamara</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Bidens cernua</i> | | | | | | <i>Inula helenium</i> | | | | | | <i>Solidago</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Bidens frondosa</i> | | | | | | <i>Lactuca</i> | | | | | | <i>Solidago altissima</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Boehmeria cylindrica</i> | | | | | | <i>Laportia canadensis</i> | | | | | | <i>Solidago canadensis</i> | | X | | | | <i>Milium canadense</i> | | | | | |
| <i>Calla palustris</i> | | | | | | <i>Lapsana communis</i> | | | | | | <i>Solidago canadensis</i> | | | X | | | <i>Milium canadense</i> | | | | | |
| <i>Calypso elatum</i> | | | | | | <i>Leonurus cardiaca</i> | | | | | | <i>Solidago flexilis</i> | | | X | | | <i>Milium canadense</i> | | | | | |
| <i>Cardamine hirsuta</i> | | | | | | <i>Lepidium</i> | | | | | | <i>Solidago rigida</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Cardamine</i> | | | | | | <i>Linaria vulgaris</i> | | | | | | <i>Solidago rigida</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Cardiophyllum thalictroides</i> | | | | | | <i>Lithospermum officinale</i> | | | | | | <i>Solidago rugosa</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Cerastium fontanum</i> | | | | | | <i>Lobelia</i> | | | | | | <i>Sonchus oleraceus</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Cerastium demersum</i> | | | | | | <i>Lobelia inflata</i> | | | | | | <i>Sonchus asper</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Chelidonium majus</i> | | | | | | <i>Lolium coarctatum</i> | | | | | | <i>Stellaria</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Chenopodium album</i> | | | | | | <i>Lycopus americanus</i> | | | | | | <i>Taraxacum vulgare</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Chrysanth. leucanthemum</i> | | | | | | <i>Lycopus</i> | | | | | | <i>Taraxacum officinale</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Cichorium intybus</i> | | | | | | <i>Lysimachia ciliata</i> | | | | | | <i>Thalictrum dioicum</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Cicuta</i> | | | | | | <i>Lythrum salicaria</i> | | | | | | <i>Thalictrum pubescens</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Circaea lutetiana</i> | | | | | | <i>Malva lupulina</i> | | | | | | <i>Thalictrum</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Cirsium arvense</i> | | | | | | <i>Malva sylvestris</i> | | | | | | <i>Trigonopogon pratensis</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Cirsium vulgare</i> | | | | | | <i>Mandragora officinalis</i> | | | | | | <i>Trifolium boreale</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Clematis virginiana</i> | | | | | | <i>Mandragora</i> | | | | | | <i>Trifolium</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Clinoclinis borealis</i> | | | | | | <i>Nasturtium officinale</i> | | | | | | <i>Trifolium pratense</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Coryza canadensis</i> | | | | | | <i>Nepeta cataractae</i> | | | | | | <i>Trifolium repens</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Coronilla varia</i> | | | | | | <i>Nepeta virginiana</i> | | | | | | <i>Tussilago farfara</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Cyananthus occidentalis</i> | | | | | | <i>Nepeta</i> | | | | | | <i>Urtica dioica</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Daucus carota</i> | | | | | | <i>Nicotiana glauca</i> | | | | | | <i>Urtica vulgaris</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Desmodium canadense</i> | | | | | | <i>Nicotiana glauca</i> | | | | | | <i>Verbascum thapsus</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Dianthus amurensis</i> | | | | | | <i>Nicotiana glauca</i> | | | | | | <i>Verbena hastata</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Dianthus barbatus</i> | | | | | | <i>Nicotiana glauca</i> | | | | | | <i>Verbena stricta</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Echinops latifolius</i> | | | | | | <i>Nicotiana glauca</i> | | | | | | <i>Veronica</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Echium vulgare</i> | | | | | | <i>Nicotiana glauca</i> | | | | | | <i>Veronica officinalis</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Epilobium</i> | | | | | | <i>Nicotiana glauca</i> | | | | | | <i>Vicia cracca</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Epilobium ciliatum</i> | | | | | | <i>Nicotiana glauca</i> | | | | | | <i>Vicia intropurpurea</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Epilobium maculatum</i> | | | | | | <i>Nicotiana glauca</i> | | | | | | <i>Vicia</i> | | | | | | <i>Milium canadense</i> | | | | | |
| <i>Epilobium parviflorum</i> | | | | | | <i>Nicotiana glauca</i> | | | | | | <i>Vicia pubescens</i> | | | | | | <i>Milium canadense</i> | | | | | |

1: 235 4: _____
 2: _____ 5: _____
 3: _____ 6: _____

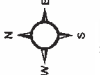
SITE LOCATIONS



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



Basemapping from Ontario Ministry of Natural Resources
 Orthophotography: 2010



UTM Zone 17N, NAD 83
 12,500
 1:2,500
 Meters
 0 25 50 100

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, without the express written consent of AECOM. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent.

ELC
 Geohen Amphibian Survey
235_GSH2061
 April 2012
 Project 60155032

AECOM

Figure 1

Significant Wildlife Habitat Form

AECOM

Study Area: BLW JER (GSH) Map #: 235-65H2081
 Date: 2012-04-19 Time Started: 2:39
 Field Staff: Tom Sharney Jess Pette Time Finished: 4:20
 Weather Conditions: Sunny 12°C, 10 km/h

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

Nest bowls present: No Yes (if yes, photograph and complete the following)
 UTM: _____ 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)
 UTM: See Amphibian Form Area of standing water delineated on field map
 Water depth (m): _____ % open water: _____ % emergent vegetation: _____
 Description of standing water (permanent pool, evidence of annual spring flooding, etc): _____
 Area and soil/substrate of shoreline habitat: _____
 Type and abundance of cover in open water habitat: _____
 Type and abundance of cover in surrounding habitat: _____
 Evidence of disturbance (e.g. cattle grazing): _____
 Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: _____

 Complete Vernal Pool Habitat Description Form

Snake Hibernacula

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

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

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

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)

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

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

No

Yes (if yes, photograph and complete the following)

UTMs: _____

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

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

Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas

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

Shoreline of lake, large river or large wetland present:

No

Yes (if yes, photograph and complete the following)

UTMs: _____

Rocky island or peninsula present: _____

Mudflat present: _____

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

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

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

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

Large meadow, old field or generally open habitat (e.g. CUM, CUS, CUT, 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 |
|---------|---------------------|---------|---------------------|
| 30,31 | Hibiscus | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Species Conservation Concern Habitat and Incidental Wildlife - Goshen



Map No: 235 GSH 2061
 Date (yyyy-mm-dd): 2012-04-19

Field Staff: Tom Shorey
 Jess Pierce

Time Started: 2:39
 Time Finished: 4:10pm

Observed Species List

| Species Code | UTM | EV | Notes | Species Code | UTM | EV | Notes |
|-------------------------|-----|----|-----------------------|--------------|-----|----|-------|
| Red-winged Blackbird | | VO | | CAJON | | Ob | |
| cowbird | | VO | | | | | |
| white breasted nuthatch | | VO | | | | | |
| Downy Woodpecker | | VO | | | | | |
| Flicker | | Ob | within feathers | | | | |
| warbler | | Ob | from wet area | | | | |
| red-winged blackbird | | Ob | fling within feathers | | | | |
| Song Sparrow | | VO | calling within swamp | | | | |
| Red-shouldered | | Ob | | | | | |
| cabage white | | Ob | | | | | |
| Eastern crow | | Ob | | | | | |
| 5 deer | | Ob | running towards us | | | | |

Note: Evidence Codes (EV) Breeding Bird (Possible) SH=Suitable Habitat, SM=Singing Male;

Breeding Bird (Probable) T-Territory, D=Display, P=Pair, N=Nest Building, V= Visiting Nest, A=Anxiety Behavior;

Breeding Bird (Confirmed) DD=Distraction, NU=Used Nest, FY=Fledged Young, NE=Eggs, NY=Young, FS=Feeds/Faecal sack, AE=Nest Entry

Other Wildlife Evidence: OB=observed, VO=Vocalization, CA=Carcass, DP=Distinctive Parts, HO=House/Den, FY=Eggs/Young, TK=tracks, FE=Feeding evidence, SC= Scat, SI=Other signs (specify)

| ELC | Species | Habitat Description | Habitat Present (Y/N); UTM; description of habitat if present |
|--|---|---|---|
| PLANTS | | | |
| FOD7 | American Gromwell (Lithospermum latifolium) - S3 Bloom Time - Spring | Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods. | Y (N) UTM: |
| ALO, TPO | Muehlenberg's astomum moss (Astomum muehlenbergianum)- S2 Bloom Time - Spring | Thin soil over level outcrop ledges and on soil under grasses in open prairie | Y (N) UTM: |
| FOM1, FOM2, CUP3 | Autumn Coral-root (Coralorhiza odontorhiza) - S2 Bloom Time - summer to fall | Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry, sandy woods. | Y (N) UTM: |
| FOC, FOM, FOD | Burning Bush (Euonymus atropurpureus) - S3 Bloom Time - April - June | Species occurs in dry to moist deciduous thickets and woods | Y (N) UTM: not observed |
| SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6 | Chinese Hemlock Parsley (Conioselinum chinense) - S2 Bloom Time - summer to fall | Swampy places with deciduous trees, white cedars, tamarack; springy river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes. | Y (N) UTM: |
| SWC, SWM, SWD, SWT, MAM, MAS | Crowned Beggarticks (Bidens trichosperma) -S2 Bloom Time - late summer | Found in openings in swamps, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian bay. Bogs, fens, tamarack swamps. | Y (N) UTM: not observed |
| ALT1, FOD7 | Eastern Green-violet (Hybanthus concolor) - S2 Bloom Time - mid March to August | Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks. | Y (N) UTM: |
| TPS, TPW, FOM1, FOM2 | Fogg's Goosefoot (Chenopodium foggii) -S2 | Species occurs in sandy areas on limestone under oak or pine-oak forests | Y (N) UTM: |
| TPO2, TPS2, TPW2 | Giant Ironweed (Vernonia gigantea)-S1? Bloom Time- | Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows | Y (N) UTM: |

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen

| ELC | Species | Habitat Description | Habitat Present (Y/N; UTM); description of habitat if present |
|---|---|--|---|
| CUM1, MAM, FOD6, FOD7, FOD9 | June – August Green Dragon (<i>Arisaema dracontium</i>) - SC/S3 <u>Bloom Time</u> - May and June | Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm. | Y (N) UTM: |
| TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3 | June-August Hairy Bedstraw (<i>Gallium pilosum</i>) -S3 <u>Bloom Time</u> - June-August | Occurs in dry, sandy woods and thickets; occasionally in dry sandy fields | Y (N) UTM: |
| FEO1, FES1, FET1, SWC, SWM, SWD, SWT, TPO, TPS, TPW | Hairy Valerian (<i>Valeriana edulis</i>) -S1 <u>Bloom Time</u> - June to August | Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens. | N UTM: <i>not observed</i> |
| FOD6, FOD7, SWM, SWD | Hairy Wood Mint (<i>Blephilia hirsuta</i>) -S1 <u>Bloom Time</u> - Summer | Woodlands, often rocky, especially rivers. Rich woods, swamp forests, floodplains. | Y (N) UTM: <i>not observed</i> |
| FOD6, FOD7, FOD8, FOD9 | Harbinger-of-spring (<i>Erigenia bulbosa</i>) - S3 <u>Bloom Time</u> - early to late April | Occurs in rich, moist deciduous woods, especially on floodplains. | Y (N) UTM: |
| SAS1, SAM1, SAF1 | Hill's Pond Weed (<i>Potamogeton hillii</i>) - SC/S2 <u>Bloom Time</u> - summer | Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters. | Y (N) UTM: |
| FOM6, FOM7, FOM8 | Large Round-leaved Orchid (<i>Platanthera macrophylla</i>) - S2 <u>Bloom Time</u> - June to August | Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands. | Y (N) UTM: |
| MAM2, MAM3, MAS2, MAS3, SWD | Lizard's Tail (<i>Saururus cernuus</i>) - S3 <u>Bloom Time</u> - June - September | Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds. | Y (N) UTM: <i>not observed</i> |
| FOD6, FOD7, FOD9 | Pawpaw (<i>Asimina triloba</i>) -S3 <u>Bloom Time</u> - March-May | Occurs in moist deciduous woods and stream banks. | Y (N) UTM: <i>not observed</i> |
| FOM8, FOD6, FOD7, FOD9, CUM1 | Ploose Evening Primrose (<i>Oenothera pilosella</i>) -S2 <u>Bloom Time</u> - Late Spring - Early Summer | Moist edges of woods and open, disturbed ground. | Y (N) UTM: <i>not observed</i> |
| TPW1, FOM1, FOM2, FOD1, FOD2, FOD3 | Prostate Tick-trefoil (<i>Desmodium rotundifolium</i>) -S2 <u>Bloom Time</u> - July-September | Dry, sandy or rocky woods | Y (N) UTM: |
| FOD7, SWD | Pumpkin Ash (<i>Fraxinus profunda</i>)-S2? <u>Bloom Time</u> - March - June | Swamps and floodplains | Y (N) UTM: <i>not observed</i> |
| CUW1, ALO, FET1, SWC | Ram's-head Lady's-slipper (<i>Cypripedium arietinum</i>) - S3 <u>Bloom Time</u> - mid May to mid June | Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamps, dry-sandy woods, and limestone barren. | Y (N) UTM: |
| FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5 | Rattlesnake Hawkweed (<i>Hieracium venosum</i>) - S2 <u>Bloom Time</u> - April - September | Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands. | Y (N) UTM: |
| FOD6, FOD7, FOD9 | Round-leaved Groundsel (<i>Packera obovata</i>) -S3 <u>Bloom Time</u> - May - June | Found in moist woods | Y (N) UTM: <i>not observed</i> |
| CUM1, CUT1, CUS1 | Round-leaved hawthorn (<i>Crataegus lumaria</i>) -S3? | Species occurs in old fields, poorly managed pastures, fencelines and roadsides | Y (N) UTM: |
| FOD6, FOD7, FOD8, FOD9, SWT2, SWT3 | Scarlet Beebalm (<i>Monarda didyma</i>) - S3 <u>Bloom Time</u> - May to October | Found in moist, rich woods, thicket swamps, banks and floodplains. | Y (N) UTM: <i>not observed</i> |
| ALO, ALS, ALT, TPO, TPS, TPW | Slender Blazing Star (<i>Liatris cylindracea</i>) -S3 | Species occurs in limestone and dolomite pavement, prairies, open woods, alvars and moist sandy meadows. | Y (N) UTM: |
| SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2 | Slender Knotweed (<i>Polygonum tenue</i>)-S2 | Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows; at edges of sand pits | Y (N) UTM: |
| SDT1, FOD5, FOD9 | Slim-flowered Muhly (<i>Muhlenbergia tenuiflora</i>) - S2 | Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods | Y (N) UTM: <i>not observed</i> |
| BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7 | Stiff Gentian (<i>Gentiana quinquefolia</i>) - S2 <u>Bloom Time</u> - late summer to mid fall | Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides. | Y (N) UTM: |
| TPS1, TPW1, CUW1, RBO, SBO | Sundial Lupine (<i>Lupinus perennis</i>) - S3 <u>Bloom Time</u> - mid-March to mid-June | Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen. | Y (N) UTM: |

Species Conservation Concern Habitat and Incidental Wildlife – Goshen



| ELC | Species | Description | Habitat Present (Y/N); UTM; description or habitat if present |
|--|---|---|---|
| TP01, TPS1, TPW1, CUM1 | Tall Blazing Star (<i>Liatis aspera</i>)-S2/SC | Occurs in open, sandy woods, dry roadsides and sandy prairies | Y (N) UTM: |
| FEO, FES, FET, MAM2, MAM3 | Tuberous Indian Plantain (<i>Amoglossum plantagineum</i>) - S3 Bloom Time –mid-March to mid-June | Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats. | Y (N) UTM: |
| FOC1, FOC2, FOC3, FOC4 | Woodland Pinedrops (<i>Pterospora andromedea</i>) - S2 Bloom Time – summer | Found in conifer woods, under pines, but also hemlock, spruce, fir, and white cedar. In dry or rocky soil, often with common juniper and sometimes aspen or birch. | Y (N) UTM: |
| CUM1, CUT1, CUW1, RBO1, SBO1 | Yellow Ladies'-tresses (<i>Spiranthes ochroleuca</i>) - S2 Bloom Time-- August to November | Dry, open sites, usually on acidic sandy soil, dry to mesic open woodland, thickets, meadows, barrens, ledges, outcrops, banks and roadsides, old fields. | Y (N) UTM: |
| BIRDS | | | |
| - | Bald Eagle (<i>Haliaeetus leucocephalus</i>) - SC | Assessed as SWH. Record species if found. | not required. |
| CUW, SDO, RBO, TPS | Common Nighthawk (<i>Chordeiles minor</i>) - SC | Hunts insects over a wide variety of habitats, in particular open or semi-open areas. Nests on ground in a wide range of open, sparse or vegetation-free habitats. | Y (N) UTM: |
| FOD, FOM | Louisiana Waterthrush (<i>Seiurus motacilla</i>) - SC | Inhabits mature forests along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration | Y (N) UTM: |
| FOD, CUW, CUT | Red-headed Woodpecker (<i>Melanerpes erythrocephalus</i>) - SC | Species inhabits open woodland/ edges (oak savannas and riparian forest), open, deciduous forest with little understorey; fields or pasture lands with scattered large trees; wooded swamps; orchards, small woodlots or forest edges; groves of dead or dying trees; requires cavity trees with at least 40 cm dbh; requires about 4 ha for a territory. | Y (N) UTM: |
| - | Short Eared Owl (<i>Asio flammeus</i>) - SC | Assessed as SWH. Record species if found. | not required. |
| CUT1 | Yellow-breasted Chat (<i>Icteria virens</i>) - SC | Inhabits thickets, tall tangles of 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: not observed |
| TPS, TPW | Sleepy Duskywing (<i>Erynnis brizeo</i>) - S1 | Occurs in oak/oak-pine scrub, chaparral, barrens, well-drained sandy or shaly soils. Species regularly seen at flowers in oak woods, on the ground, and at mud puddles | Y (N) UTM: |
| CUM1, CUT1, CUW1 | Monarch Butterfly (<i>Danaus plexippus</i>) - SC | Their larvae only feed on milkweeds (<i>Asclepius</i> spp.). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow | Y (N) UTM: |
| TPS, CUW | Mottled Duskywing (<i>Erynnis martialis</i>) -S2 | Usually seen nectaring on wet sandy reeds. 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: not observed |
| FOD5 | West Virginia White (<i>Pteris virginensis</i>) - SC | This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur | Y (N) UTM: |

Plant Species List
2012

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

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

Map Number: 23631-1079/1509
 Date: Aug 18, 2012
 Surveyors: JPI, J

Significant Wildlife Habitat Form *Re-visit Nest Bowls* **AECOM**

Study Area: BLW JER GSH Map #: 236-GSH1079-1509
 Date: 18-May-2012 Time Started: 7:50 a.m
 Field Staff: J. Kamstra + A. Da + Time Finished: 8:20 a.m
 Weather Conditions: 70% cloudcover 15°C 8:40 a.m

Colonial Nesting Tree/Shrub Birds, Osprey Breeding/Feeding, Bald Eagle Breeding/Nesting Habitat
 (FET1, FOC, FOM, FOD, SWC, SWM, SWD)
 Nest bowls present: No Yes (if yes, photograph and complete the following)
 UTM's: 446497, 4791529 Number of nests: 1
 Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present):
Large sticks w/ 15m in crch of beech, prob RTHA, no recent material on nest +
prob not active this year.
 Description of habitat (note riparian areas if present, evidence of disturbance):
semi-open (logged) Maple-Hickory-Ash,

Waterfowls Stopover/Nesting, Amphibian Breeding, Turtle Nesting/Over-wintering, Marsh Breeding Birds
 (CUM1, CUT1, MAM, MAS, SAS1, SAM1, SAF1, SWD, SWT1, SWT2) (FOC, FOM, FOD, SWC, SWM, SWD, BOO1, FEO1)
 Standing water present: No Yes (if yes, photograph and complete the following)
 UTM's: _____ Area of standing water delineated on field map _____
 Water depth (m): _____ % open water: _____ % emergent vegetation: _____
 Description of standing water (permanent pool, evidence of annual spring flooding, etc): _____
 Area and soil/substrate of shoreline habitat: _____
 Type and abundance of cover in open water habitat: _____
 Type and abundance of cover in surrounding habitat: _____
 Evidence of disturbance (e.g. cattle grazing): _____
 Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: _____
 Complete Vernal Pool Habitat Description Form

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

Seeps and Springs (FOC, FOM, FOD, SWC, SWM, SWD)
 Evidence of seep or spring: No Yes (if yes, photograph and complete the following)
 UTM's: _____ Description (indicator species, etc): _____

Ⓢ Additional - Bird calls heard are noted on back

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

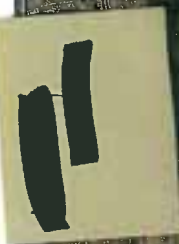
Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)
 (CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1)
 Eroding bank, sandy hill, pits, steep slope or rock face present:
 No Yes (if yes, photograph and complete the following)
 UTM: _____ Location (e.g. aggregate pit, bridge): _____
 Evidence of use by bank or cliff swallows (provide number of nests): _____

Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas
 (BBO1, BBO2, BBS1, BBS2, BBT1, BBT2, SDO1, SDS2, SDT1, MAM1, MAM2, MAM3, MAM4, MAM5)
 Shoreline of lake, large river or large wetland present:
 No Yes (if yes, photograph and complete the following)
 UTM: _____ Rocky island or peninsula present: _____
 Mudflat present: _____ Evidence of disturbance (e.g. cattle grazing): _____
 Description of habitat (size of rocky outcrop/mudflat, substrate/soil type, type and abundance of cover): _____

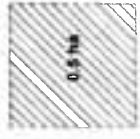
Raptor Winter Feeding and Roosting, Open Country or Shrub/Early Successional Bird Breeding Habitat
 CUT1, CUS1, >30ha, CUM1 >30ha, FOC, FOD, FOM with a CUM, CUT, CUS, CUW > 20ha, or a CUM, CUS, CUT, CUW >15ha
 Large meadow, old field or generally open habitat (e.g. CUM, CUS, CUT, CUS, CUW) present:
 Large open habitat present: No Yes (if yes, photograph and complete the following)
 UTM: _____ Evidence of disturbance (e.g. cattle grazing): _____
 Description of habitat (abundance of food plants for rodents, abundance of perches, height of vegetation): _____

Old-growth or Mature Forests, Interior Forest Breeding Birds
 (FOD, FOC, FOM, SWC, SWM, SWD. Mature forest (>60 years) present)
 Mature forest present: No Yes (if yes, photograph and complete the following)
 UTM: _____ Age of oldest trees: _____
 Evidence of disturbance (e.g. selective cutting): _____
 Description of habitat (structural complexity, abundance of snags and/or downed woody debris, etc): _____

| Photo # | Location or Subject | Photo # | Location or Subject |
|---------|---------------------|---------|---------------------|
| REVI | calling | NOFL | |
| INBA | " | RCKI | |
| SOSP | " | RBGR | |
| YEWA | " | | |
| COYE | " | | |
| YBSA | 4 | | |
| SCTA | 4 | | |
| EWPE | " | | |
| HOWR | " | | |



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



Revised for the Ontario Ministry of Natural Resources
Ordnance Survey 2010



UTM Zone 17N, NAD 83
12,500
0 25 50 100
Metres

This drawing has been prepared for the use of AECOM's client and any use of this drawing for any other purpose without the written consent of AECOM is prohibited. AECOM and its staff, as required by law or for use by governmental reviewing agencies, AECOM accepts no liability for the accuracy or completeness of the information provided in this drawing without AECOM's express written consent.

ELC
Goshen Amphibian Survey
236_GSH1079/GSH1509
April 2012
Project 6015632

AECOM

Figure 1

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

| | |
|---|--|
| Study Area (e.g. Bluewater): <u>Goshen</u> | Natural Area No.: <u>236-GSH 1079/1509</u> |
| Date (yyyy-mm-dd): <u>2012-04-18/19</u> | ELC Polygon: <u>F004-4/F009</u> |
| Field Staff (full name): <u>Tom Skotney JessP</u> | Time Started: <u>5:20</u> |
| Weather Conditions: <u>Sunny, 90°, 15km/h</u> | Time Finished: <u>5:50</u> |

Colonial Nesting Tree/Shrub Birds, Osprey Breeding/Feeding, Bald Eagle Breeding/Nesting Habitat

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

UTMs: 446497 4991529 Number of nests: 1

Description of nests (location, e.g. in tree/on built structure; material; evidence of recent use; birds present):
No bird observed in watch of Beech tree → medium sized approx 10m high

Description of habitat (note riparian areas if present, evidence of disturbance):
SWD 3-3 → in wet habitat

*****Complete Feature Identification Map (1 sheet)*****

Waterfowls Stopover/Nesting, Amphibian Breeding, Turtle Nesting/Over-wintering, Marsh Breeding Birds

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

UTMs: See Amphibian Form Area of standing water delineated on field map

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

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

Area and soil/substrate of shoreline habitat: _____

Type and abundance of cover in open water habitat: _____

Type and abundance of cover in surrounding habitat: _____

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

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

*****Complete Vernal Pool Habitat Description Form and Feature Identification Map (2 sheets)*****

Snake Hibernacula

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

UTMs: See Hibernacula Form 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): _____

*****Complete Feature Identification Map (1 sheet)*****

NHA Site Investigation - Significant Wildlife Habitat Form



Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)
 Eroding sand bank, sandy hill, pits, steep slope or rock face present:
 No Yes (if yes, photograph and complete the following)
 UTM: _____ Location (e.g. aggregate pit, bridge): _____
 Evidence of use by bank or cliff swallows (provide number of nests): _____

Colonial Nesting Ground Breeding Birds, Shorebird Migratory Stopover Areas
 Shoreline of lake, large river or large wetland present:
 No Yes (if yes, photograph and complete the following)
 UTM: _____ Rocky island or peninsula present: _____
 Mudflat present: _____ Evidence of disturbance (e.g. cattle grazing): _____
 Description of habitat (size of rocky outcrop/mudflat, substrate/soil type, type and abundance of cover): _____
*****Complete Feature Identification Map (1 sheet)*****

Raptor Winter Feeding and Roosting, Open Country or Shrub/Early Successional Bird Breeding Habitat
 Large meadow, old field or generally open habitat (e.g. CUM, CUS, CUT, CUS, CUW) present:
 Large open habitat present: No Yes (if yes, photograph and complete the following)
 UTM: _____ Evidence of disturbance (e.g. cattle grazing): _____
 Description of habitat (abundance of food plants for rodents, abundance of perches, height of vegetation): _____
*****Complete Feature Identification Map (1 sheet)*****

Seeps and Springs
 Evidence of seep or spring: No Yes (if yes, photograph and complete the following)
 UTM: _____ Description (indicator species, etc): _____

Old-growth or Mature Forests, Interior Forest Breeding Birds
 Mature forest present: No Yes (if yes, photograph and complete the following)
 UTM: _____ Age of oldest trees: _____
 Evidence of disturbance (e.g. selective cutting): _____
 Description of habitat (structural complexity, abundance of snags and/or downed woody debris, etc): _____

| Photo # | Location or Subject | Photo # | Location or Subject |
|---------|---------------------|---------|---------------------|
| 19 | stick nest | | |
| | | | |
| | | | |
| | | | |

Species Conservation Concern Habitat and Incidental Wildlife - Goshen

Map No: 236-6541079 / GSA1507
 Date (yyyy-mm-dd): 2012-04-19
 Field Staff: Tom Steyer
 Jess McFar

Time Started: 10:30
 Time Finished: 1:45



Observed Species List

| Species Code | UTM | EV | Notes | Species Code | UTM | EV | Notes |
|-------------------------|-----|-----|-----------------------|--------------|-----|----|-------|
| Red Admiral | | 06 | among hibernowla | | | | |
| White breasted nuthatch | | 06 | catching flies | | | | |
| Thruway Vireo | | 06 | Soaring | | | | |
| Downy Wood | | VO | calling | | | | |
| Cabbog wh. H | | 06 | | | | | |
| Black-capped chickadee | | VO | calling | | | | |
| Spurred | | 06 | FOD9b | | | | |
| Kingfisher | | 06 | Near VP4 | | | | |
| Flicker | | 06 | Flying through SWD3-3 | | | | |
| Deer | | TKS | along FOD7-2 | | | | |
| Blue Jays | | 06 | in FOD7-2 | | | | |
| Gray-Canna | | 06 | in SWD2-2 | | | | |

Note: Evidence Codes (EV) SH=Suitable Habitat, SM=Singing Male; T-Territory, D=Display, P=Pair, N=Nest Building, V=Visiting Nest; A=Anxiety Behavior; DD=Distraction, NU=Used Nest, FY=Fledged Young, NE=Eggs, NY=Young, FS=Feces/Faecal sack, AE=Nest Entry

Other Wildlife Evidence: OB=observed, VO=Vocalization, CA=Carcass, DP=Distinctive Parts, HO=House/Den, FY=Eggs/Young, TK=tracks, FE=Feeding evidence, SC=Scat, SI=Other signs (Specify)

| ELC | Species | Habitat Description | Habitat Present (Y/N; UTM; description of habitat if present) |
|--|---|--|--|
| PLANTS | | | |
| FOD7 | American Gromwell (Lithospermum latifolium) - S3 Bloom Time - Spring | Shaded river banks, wooded floodplains. River floodplains, woods and edges of woods. | <input checked="" type="radio"/> Y <input checked="" type="radio"/> N UTM: N/A |
| ALO, TPO | Muehlenberg's astomum moss (Astomum muehlenbergianum) - S2 Bloom Time - Spring | Thin soil over level outcrop ledges and on soil under grasses in open prairie | <input checked="" type="radio"/> Y <input checked="" type="radio"/> N UTM: |
| FOM1, FOM2, CUP3 | Autumn Coral-root (Corallorhiza odontorhiza) - S2 Bloom Time - summer to fall | Oak-pine woods or occasionally in open, red pine or white pine plantations. Dry, sandy woods. | <input checked="" type="radio"/> Y <input checked="" type="radio"/> N UTM: |
| FOC, FOM, FOD | Burning Bush (Euonymus atropurpureus) - S3 Bloom Time - April - June | Species occurs in dry to moist deciduous thickets and woods | <input checked="" type="radio"/> Y <input checked="" type="radio"/> N UTM: U/A |
| SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6 | Chinese Hemlock Parsley (Conioselinum chinense) - S2 Bloom Time - summer to fall | Swampy places with deciduous trees, white cedars, tamarack; spring river banks, wet borders of streams and rivers. Also found among calcareous seepage slopes. | <input checked="" type="radio"/> Y <input checked="" type="radio"/> N UTM: |
| SWC, SWM, SWD, SWT, MAM, MAS | Crowned Beggarticks (Bidens trichosperma) - S2 Bloom Time - late summer | Found in openings in swamps, marshes, along shores & wet fields within the Carolinian zone and southeastern Georgian bay. Bogs, fens, tamarack swamps. | <input checked="" type="radio"/> Y <input checked="" type="radio"/> N UTM: U/A |
| ALT1, FOD7 | Eastern Green-violet (Hybanthus concolor) - S2 Bloom Time - mid March to August | Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks. | <input checked="" type="radio"/> Y <input checked="" type="radio"/> N UTM: U/A |
| TPS, TPW, FOM1, FOM2 | Fogg's Goosefoot (Chenopodium foggii) - S2 | Species occurs in sandy areas on limestone under oak or pine-oak forests | <input checked="" type="radio"/> Y <input checked="" type="radio"/> N UTM: |
| TPO2, TPS2, TPW2, | Giant Ironweed (Vermonia gigantea) - S1? Bloom Time - | Found in mesic prairies, thickets, moist woods, roadsides and grassy meadows | <input checked="" type="radio"/> Y <input checked="" type="radio"/> N UTM: |

Species of Conservation Concern Habitat and Incidental Wildlife – Goshen



| ELC | Species | Habitat Description | Habitat Present (Y/N); UTM; description of habitat if present |
|---|---|---|---|
| CUM1, MAM | June – August | | |
| FOD6, FOD7, FOD9 | Green Dragon (<i>Arisaema dracontium</i>) - S3 SCS3 <u>Bloom Time – May and June</u> | Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm. | Y N UTM: N/A |
| TPO1, TPS1, TPW1, FOM1, FOM2, FOD1, FOD2, FOD3 | Hairy Bedstraw (<i>Galium pilosum</i>) - S3 <u>Bloom Time – June-August</u> | Occurs in dry, sandy woods and thickets; occasionally in dry sandy fields | Y N UTM: |
| FEO1, FES1, FET1, SWC, SWM, SWD, SWT, TPO, TPS, TPW | Hairy Valerian (<i>Valeriana edulis</i>) - S1 <u>Bloom Time – June to August</u> | Inhabits swampy river flats and meadows, wet prairies, and wooded, rocky riverbanks and fens. | Y N UTM: N/A |
| FOD6, FOD7, SWM, SWD | Hairy Wood Mint (<i>Blephilia hirsuta</i>) - S1 <u>Bloom Time – Summer</u> | Woodlands, often rocky, especially rivers. Rich woods, swamp forests, floodplains. | Y N UTM: N/A |
| FOD6, FOD7, FOD8, FOD9 | Harbinger-of-spring (<i>Erigenia bulbosa</i>) - S3 <u>Bloom Time – early to late April</u> | Occurs in rich, moist deciduous woods, especially on floodplains. | Y N UTM: N/A |
| SAS1, SAM1, SAF1 | Hill's Pond Weed (<i>Potamogeton hillii</i>) - SCS2 <u>Bloom Time – summer</u> | Aquatic plant found in highly alkaline waters of ditches, ponds, beaver ponds, and slow-moving cold waters. | Y N UTM: |
| FOM6, FOM7, FOM8 | Large Round-leaved Orchid (<i>Platanthera macrophylla</i>) - S2 <u>Bloom Time – June to August</u> | Species inhabits moist mixed woods. Found in fairly mature, upland sugar maple-beech-eastern hemlock woodlands. | Y N UTM: |
| MAM2, MAM3, MAS2, MAS3, SWD | Lizard's Tail (<i>Saururus cernuus</i>) - S3 <u>Bloom Time – June – September</u> | Species inhabits shores and streambanks along shallow water. As well as swamps, floodplains, shallow water and mudflats at the borders of streams and ponds | Y N UTM: N/A |
| FOD6, FOD7, FOD9 | Pawpaw (<i>Asimina trioba</i>) - S3 <u>Bloom Time – March-May</u> | Occurs in moist deciduous woods and stream banks. | Y N UTM: N/A |
| FOM8, FOD6, FOD7, FOD9, CUM1 | Pileose Evening Primrose (<i>Oenothera pilosella</i>) - S2 <u>Bloom Time – Late Spring – Early Summer</u> | Moist edges of woods and open, disturbed ground | Y N UTM: N/A |
| TPW1, FOM1, FOM2, FOD1, FOD2, FOD3 | Prostate Tick-trefoil (<i>Desmodium rotundifolium</i>) - S2 <u>Bloom Time – July-September</u> | Dry, sandy or rocky woods | Y N UTM: |
| FOD7, SWD | Pumpkin Ash (<i>Fraxinus profunda</i>) - S2? <u>Bloom Time – March - June</u> | Swamps and floodplains | Y N UTM: N/A |
| CUW1, ALO, FET1, SWC | Ram's-head Lady's-slipper (<i>Cypripedium arietinum</i>) - S3 <u>Bloom Time – mid May to mid June</u> | Found in cedar woodlands, limestone plains and wooded fens, moist coniferous swamps, dry-sandy woods and limestone barren. | Y N UTM: |
| FOD1, FOD2, FOD3, FOD4, FOD5, FOC1, FOM1, FOM5 | Rattlesnake Hawkweed (<i>Hieracium venosum</i>) - S2 <u>Bloom Time – April – September</u> | Species inhabits open, dry sandy woods. Jack pine, oak, and aspen woodlands. | Y N UTM: |
| FOD6, FOD7, FOD9 | Round-leaved Groundsel (<i>Packera obovata</i>) - S3 <u>Bloom Time – May - June</u> | Found in moist woods | Y N UTM: N/A |
| CUM1, CUT1, CUS1 | Round-leaved hawthorn (<i>Crataegus lumana</i>) - S3? | Species occurs in old fields, poorly managed pastures, fencelines and roadsides | Y N UTM: |
| FOD6, FOD7, FOD8, FOD9, SWT2, SWT3 | Scarlet Beebalm (<i>Monarda didyma</i>) - S3 <u>Bloom Time – May to October</u> | Found in moist, rich woods, thicket swamps, banks and floodplains | Y N UTM: N/A |
| ALO, ALS, ALT, TPO, TPS, TPW | Slender Blazing Star (<i>Liatris cyindracea</i>) - S3 | Species occurs in limestone and dolostone pavement, prairies, open woods, alvars and moist sandy meadows. | Y N UTM: |
| SBO, SBS, SBT, TPO1, TPS1, TPW1, FOD1, FOD2 | Slender Knotweed (<i>Polygonum tenue</i>) - S2 | Found in dry, sandy, open areas in deciduous (often oak woods), prairie meadows; at edges of sand pits | Y N UTM: |
| SDT1, FOD5, FOD9 | Slim-flowered Muhly (<i>Muhlenbergia tenuiflora</i>) - S2 | Found in rich deciduous forest, often on rocky or sandy soils, wooded dunes, hillsides, and riverbanks whether in oak or beech-maple woods | Y N UTM: N/A |
| BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7 | Stiff Gentian (<i>Gentiana quinquefolia</i>) - S2 <u>Bloom Time – late summer to mid fall</u> | Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides. | Y N UTM: N/A |
| TPS1, TPW1, CUW1, RBO, SBO | Sundial Lupine (<i>Lupinus perennis</i>) - S3 <u>Bloom Time – mid-March to mid-June</u> | Inhabits dry, sandy oak savannahs, prairies, open barrens or clearings in woodlands of oak, jack pine, and/or aspen. | Y N UTM: |

Species Conservation Concern Habitat and Incidental Wildlife - Goshen



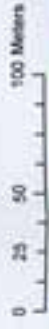
| Species | Habitat Description | Habitat Present (Y/N) | UTM | Description or Habitat if present |
|--|---|--|-----|---|
| BIRDS | | | | |
| TPO1, TPS1, TPW1, CUM1 | Tail Blazing Star (<i>Liatris aspera</i>) - S3/SC | Y | N | Occurs in open, sandy woods, dry roadsides and sandy prairies |
| FE0, FES, FET, MAM2, MAM3 | Tuberous Indian Plantain (<i>Armoglossum plantagineum</i>) - S3 Bloom Time - mid-March to mid-June | Y | N | Occurs mainly in flat, sandy areas of the Bruce Peninsula. Fens, wet meadows, and calcareous river flats. |
| FOC1, FOC2, FOC3, FOC4 | Woodland Pinedrops (<i>Pterospora andromedea</i>) - S2 Bloom Time - summer | Y | N | 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. |
| CUM1, CUT1, CUW1, RBO1, SBO1 | Yellow Ladies'-tresses (<i>Spiranthes ochroleuca</i>) - S2 Bloom Time - August to November | Y | N | Dry, open sites, usually on acidic sandy soil, dry to mesic open woodland, thickets, meadows, barrens, ledges, outcrops, banks and roadsides, old fields |
| BIRDS | | | | |
| CUW, SDO, RBO, TPS | Bald Eagle (<i>Haliaeetus leucocephalus</i>) - SC Common Nighthawk (<i>Chordeiles minor</i>) - SC | not required. | | Assessed as SWH. Record species if found 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. |
| FOD, FOM | Louisiana Waterthrush (<i>Seiurus motacilla</i>) - SC | Y | N | UTM: Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. Riparian woodlands are preferred stopover sites during migration |
| FOD, CUW, CUT | Red-headed Woodpecker (<i>Melanerpes erythrocephalus</i>) - SC | Y | N | UTM: 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 |
| CUT1 | Short Eared Owl (<i>Asio flammeus</i>) - SC Yellow-breasted Chat (<i>Icteria virens</i>) - SC | not required. Y | N | UTM: Assessed as SWH. Record species if found. Inhabits thickets, tall tangles of shrubby beside streams, ponds; overgrown bushy clearings with deciduous thickets; nests above ground in bush, vines |
| REPTILES | | | | |
| | Eastern Ribbonsnake (<i>Thamnophis sauritus</i>) - SC Milksnake (<i>Lampropeltis triangulum</i>) - SC Snapping Turtle (<i>Chelydra serpentina</i>) - SC | not required. not required not required. | | Assessed as SWH. Record species if found Assessed as SWH. Record species if found. Assessed as SWH. Record species if found. |
| INSECTS | | | | |
| OAO, SA, SWM, SWD | Azure Bluet (<i>Enallagma aspersum</i>) - S3 | Y | N | UTM: Species inhabits fishless ponds, lakes and boggy swamps |
| TPS, TPW | Sleepy Duskywing (<i>Erynnis brizo</i>) - S1 | Y | N | UTM: 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 |
| CUM1, CUT1, CUW1 | Monarch Butterfly (<i>Danaus plexippus</i>) - SC | Y | N | UTM: Their larvae only feed on milkweeds (<i>Asclepius</i> spp.). Habitat includes abandoned farmland, along roadsides, open spaces where these plants grow |
| TPS, CUW | Mottled Duskywing (<i>Erynnis martialis</i>) - S2 | Y | N | UTM: Usually seen nectaring or on wet sandy roads. Larvae feeds on New Jersey Tea and adults only likely near where this plant is present |
| SWT, SWD, SWM, FOM, FOD4-3, TPW, TPS, CUM1 | Tawny Emperor (<i>Asterocampa clyton</i>) - S3 | Y | N | UTM: Species inhabits densely wooded riparian areas, dry woods, open woods, fencerows and parks. Usually occurs near Hackberry, the larval foodplant |
| FOD5 | West Virginia White (<i>Pieris virginianensis</i>) - SC | Y | N | UTM: This species is restricted to rich, moist, deciduous woods, where its foodplant Toothwort occur |

236-GSH1079/bss/1507

- Access/Collection Line
- Collection Buffer (125m)
- Turbine Buffer (171.5m)
- Collector/Spur Interest
- Turbine Buffer Feature Impact
- Property Fabric
- Blowdown Wood Energy Centre

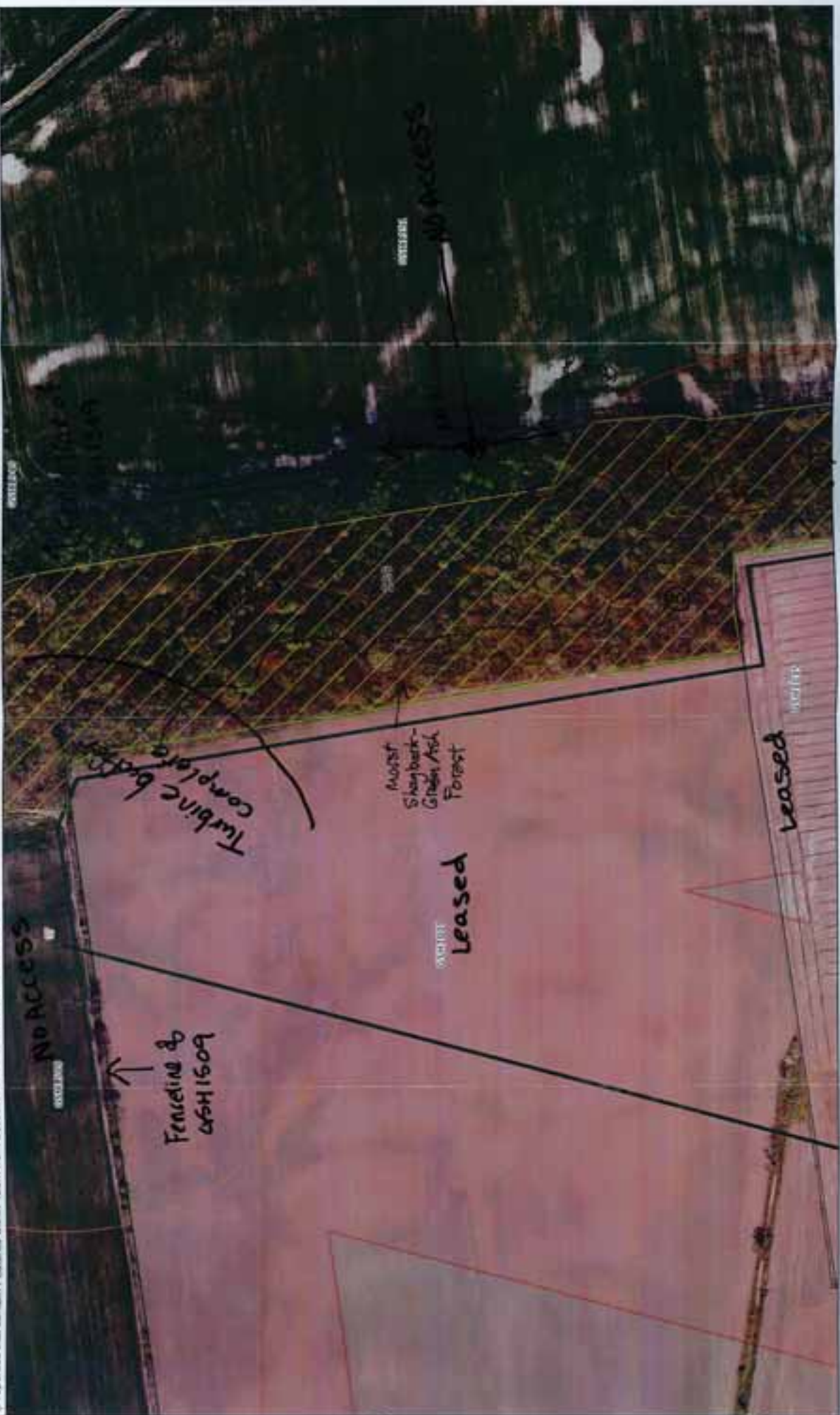
h

September 1, 2011



Goshen Feature: 236 GSH1079

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



Turbine Buffer Complete

Leased
August Shady Brook Green Ash Forest

No Access

Fencing of GSH1509

Leased

No Access

Leased

No Access

No Access

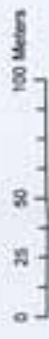
Leased

- Collection/Feature Interest
- Turbine Buffer/Infrastructure Interest
- Property Feature
- Stream/Water Body Energy Corridor

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

h

September 1, 2011



Goshen Feature: 236 GSH1035

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



ELC
Community Description and Classification

Site: 236_GSH1500 1079 Polygon: C
 Surveyor(s): Date: Sept 21/11 Time start: 10:10 finish: 10:16
 UTMZ: Kawista UTMZ: 446515 UTMN: 4791370

Polygon Description

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

Stand Description

| Layer | HT | CVR | Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To) |
|-------|-----|-----|--|
| 1 | 1/2 | 3 | Aspen - 77 Carrot |
| 2 | 3 | | Ulmus - Acer - Fraxin |
| 3 | | | |
| 4 | 5/6 | 3 | Cx lupn - Glystr - Georxz - Ribrub |

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

Stand Composition: Size Class Analysis:

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

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

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

Ecotope: **Swamp Maple Swamp (Mineral)** Code: **SWD 3-3**

Inclusion: Code:
 Complex: Code:

Community Profile Diagram/Comments

Extensive Swamp forest. Distal area of wooded seasonal pond. Forest but no water at present. Evidence of selective logging ~ 5 years ago, open canopy + logging tracks.

Notes: Spring paper calls - two no water at present. Prob good site for camp breeding.

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

| Site Metrics | PII/Auger # | | Soils Ontario and ELC Soils Description | | | | Summary | | | | | |
|--------------------------|--|---|--|---|---|--|---|------------------------------------|------|------|------|------|
| | UTM | Zone | Easting | Northing | Position | Aspect | | Moisture Regime | | | | |
| Depth to... | Slope <td rowspan="2">Mottles <td rowspan="2">Water Table <td rowspan="2">Carbonates <td rowspan="2">Bedrock <td rowspan="2">Slope Percent <td rowspan="2">Slope Length <td rowspan="2">Drainage </td></td></td></td></td></td></td> | Mottles <td rowspan="2">Water Table <td rowspan="2">Carbonates <td rowspan="2">Bedrock <td rowspan="2">Slope Percent <td rowspan="2">Slope Length <td rowspan="2">Drainage </td></td></td></td></td></td> | Water Table <td rowspan="2">Carbonates <td rowspan="2">Bedrock <td rowspan="2">Slope Percent <td rowspan="2">Slope Length <td rowspan="2">Drainage </td></td></td></td></td> | Carbonates <td rowspan="2">Bedrock <td rowspan="2">Slope Percent <td rowspan="2">Slope Length <td rowspan="2">Drainage </td></td></td></td> | Bedrock <td rowspan="2">Slope Percent <td rowspan="2">Slope Length <td rowspan="2">Drainage </td></td></td> | Slope Percent <td rowspan="2">Slope Length <td rowspan="2">Drainage </td></td> | Slope Length <td rowspan="2">Drainage </td> | Drainage | | | | |
| | | | | | | | | | 1 | 2 | 3 | 4 |
| Soil Horizon Description | Texture | Depth from zero | Texture | Depth from zero | Texture | Depth from zero | Texture | Effective Texture (indicate below) | % CF | % CF | % CF | % CF |
| | | | | | | | | | | | | |
| Moisture Regime | Drainage | % Surface Stones/Rock | Moisture Regime | Drainage | % CF | % CF | % CF | % CF | % CF | % CF | % CF | % CF |
| | | | | | | | | | | | | |

| | | |
|-----------------------------------|---|-----------|
| ELC WILDLIFE | SITE: <i>Gosken 236 @SH 1035 + 1079</i> | |
| | POLYGON: | |
| | DATE: <i>Sept</i> | |
| | SURVEYORS: <i>Kamstra</i> | |
| | START TIME: <i>9:00</i> | END TIME: |

| | | | |
|----------------------|-------------------------|----------------|----------------|
| TEMP (°C): <i>18</i> | CLOUD (10th): <i>10</i> | WIND: <i>2</i> | PRECIPITATION: |
| CONDITIONS: | | | |

POTENTIAL WILDLIFE HABITAT:

| | |
|--|--|
| <input checked="" type="checkbox"/> VERNAL POOLS | <input checked="" type="checkbox"/> SNAGS <i>few</i> |
| <input type="checkbox"/> HIBERNACULA | <input checked="" type="checkbox"/> FALLEN LOGS |

SPECIES LIST:

| TY | SP. CODE | EV | NOTES | # | TY | SP. CODE | EV | NOTES | # |
|----|-----------------|----|-------------------------|---|----|---------------|----|-------|---|
| B | AMCR | VO | | | L | Monarch | OB | | |
| | BLJA | VO | | | | | | | |
| | WBNU | | | | | | | | |
| | COYE | | | | | | | | |
| | BCCH | | | | | | | | |
| | EWPE | ↓ | | | O | Gosken Downy | | | |
| | HAWO | OB | | | O | Annual Cicada | | | |
| | Pomarine Falcon | OB | adult migratory | 1 | | | | | |
| | | | | | | | | | |
| H | Spry Peeper | VO | | | | | | | |
| | | | | | | | | | |
| M | WT DRL | OB | cradling through forest | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

FAUNAL TYPE CODES (TY):

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

EVIDENCE CODES (EV):

BREEDING BIRD - POSSIBLE:

SH = SUITABLE HABITAT

SM = SINGING MALE

BREEDING BIRD - PROBABLE:

T = TERRITORY

D = DISPLAY

P = PAIR

A = ANXIETY BEHAVIOUR

N = NEST BUILDING

V = VISITING NEST

BREEDING BIRD - CONFIRMED:

DD = DISTRACTION

NU = USED NEST

FY = FLEDGED YOUNG

NE = EGGS

NY = YOUNG

FS = FOOD/FECAL SACK

AE = NEST ENTRY

OTHER WILDLIFE EVIDENCE:

OB = OBSERVED

VO = VOCALIZATION

CA = CARCASS

DP = DISTINCTIVE PARTS

HO = HOUSE/DEN

FY = EGGS/YOUNG

TK = TRACKS

FE = FEEDING EVIDENCE

SC = SCAT

SI = OTHER SIGNS (specify)

Soil Collection / E-of Shipika (SW)

Goshen Feature: 236 GSH1509

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



September 1, 2011

h

- Roads
- Access/Collection Line
- Collection Buffer (125m)
- Turbine Buffer (171.5m)
- Collection/Feature Intersect
- Turbine Buffer/Feature Intersect
- Property Values
- Sumner Wind Energy Centre



ELC
Community
Description and
Classification

Site: 236 GSH1509 Polygon: A
 Surveyor(s): JK Date: Oct 13/11 Time start: 15:45
 UTMZ: 17 UTMZ: 446370 UTMN: 4791750

Polygon Description

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

Stand Description

| Layer | HT | CVR | Species In Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To) |
|-------|----|-----|--|
| 1 | 3 | 2 | Prospira > Crataegus |
| 2 | 4 | 3 | |
| 3 | | | |
| 4 | 6 | 4 | Solati - Astsp - Popsp |

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

| | | | | | |
|---------------------------|-----------------------------|------------------------------|--------------------------------|--------------------------------|------------------------------|
| Stand Composition: | Size Class Analysis: | <input type="checkbox"/> <10 | <input type="checkbox"/> 10-24 | <input type="checkbox"/> 25-50 | <input type="checkbox"/> >50 |
| | Standing Snags: | <input type="checkbox"/> <10 | <input type="checkbox"/> 10-24 | <input type="checkbox"/> 25-50 | <input type="checkbox"/> >50 |
| BA: | Deadfall / Logs: | <input type="checkbox"/> <10 | <input type="checkbox"/> 10-24 | <input type="checkbox"/> 25-50 | <input type="checkbox"/> >50 |

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

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

| | |
|---|------------------|
| Exceller: | Code: |
| Vegetation Type: Riponady Ash Cultural Thicket | Code: CUT |
| Inclusion: Meadow Marsh ASIA - JUVENIS | Code: MAM |
| Complex: | Code: |

Community Profile Diagram/Comments

Notes:

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

| Site Metrics | | PIU/Auger # | Soils Description | | | | Summary |
|-----------------|--|----------------------|-------------------|--|--|--|------------------------------------|
| UTM | | Zone | | | | | Moisture Regime |
| Slope | | Easting | | | | | |
| Mottles | | Nothing | | | | | |
| Depth to... | | Position | | | | | Drainage |
| Gley | | Aspect | | | | | |
| Water Table | | Percent | | | | | |
| Carbonates | | Slope | | | | | Effective Texture (indicate below) |
| Bedrock | | Length | | | | | |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| Moisture Regime | | % Surface Stone/Rock | | | | | |
| Drainage | | | | | | | |

Site: **GSH 1509** Polygon: **B**
 Surveyor(s): **JK** Date: **Oct B/11** Time start: **16:00**
 UTMZ: **446450** UTMN: **4791710**

Polygon Description

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

Stand Description

| Layer | HT | CVR | Species In Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To) |
|-------|----|-----|--|
| 1 | 2 | 4 | Carovet -> Furama - 11 layers - Quercus |
| 2 | 3 | 3 | Alnus - 2 struts |
| 3 | 4 | 2 | Flowers - Viburnum |
| 4 | 6 | 2 | Cx spp. (leaf litter) |

HT Codes: 7 < 0.2m 8 > 0.2-0.5m 9 > 0.5-1m 4 > 1-2m 3 > 2-5m 2 > 5-25m
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

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

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

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

| EcoSite: | Code: |
|------------------|---------------------|
| Vegetation Type: | Code: FOD9-4 |
| Inclusion: | Code: |
| Complex: | Code: |

Community Profile Diagram/Comments
 Ground cover not detectable beans late season

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

| Soils Ontario and ELC Soils Description | Summary |
|--|---|
| Site Metrics Pit/Auger # Zone Easting Northing Position Aspect Percent Slope Length | Moisture Regime Drainage |
| Moisture Gley Water Table Carbonates Bedrock | |
| Depth B 1 Depth from zero Texture 2 Depth from zero Texture 3 Depth from zero Texture 4 Depth from zero Texture | % CF % CF % CF % CF % CF % CF |
| Soil Horizon Description % Surface Stone/Rock Moisture Regime Drainage | % CF % CF % CF |

ELC
Community Description and Classification

Site: 236_GSH1507 Polygon: D

Surveyor(s): JK Date: Oct 13/11 Time start: 17:15 finish:

UTMZ: 17 UTMZ: 446240 UTMN: 4792505

Polygon Description

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

Stand Description

| Layer | HT | CVR | Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To) |
|-------|----|-----|--|
| 1 | 2 | H | Caracant - Procerus - Pogon - Quercus |
| 2 | 3 | H | Aegusa - > Ostrya |
| 3 | 3 | H | Pogon - Alnus - Caracant |
| 4 | 6 | H | Asp. lat |

HT Codes: T < 0.2m E > 0.2-0.5m S > 0.5-1m 4 > 1-2m 3 > 2-5m 2 > 5-25m 1 > 25m
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 > 50%

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

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

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

Ecosite:
 Vegetation Type: FOD
 Inclusion:
 Complex:

Community Profile Diagram/Comments

Reduced Forest w/ No clear canopy

Notes:

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

| Site Metrics | PI/Auger # | Soils Ontario and ELC Soils Description | | | | Summary |
|--------------|-----------------|---|--|--|--|------------------------------------|
| Zone | | | | | | Moisture Regime |
| Easting | | | | | | |
| Northing | | | | | | Drainage |
| Position | | | | | | |
| Aspect | | | | | | Effective Texture (indicate below) |
| Percent | | | | | | |
| Slope | | | | | | % CF |
| Length | | | | | | |
| Mottles | | | | | | % CF |
| Clay | | | | | | |
| Water Table | | | | | | % CF |
| Carbonates | | | | | | |
| Bedrock | | | | | | % CF |
| 1 | Depth from zero | | | | | |
| Texture | | | | | | % CF |
| 2 | Depth from zero | | | | | |
| Texture | | | | | | % CF |
| 1 | Depth from zero | | | | | |
| Texture | | | | | | % CF |
| 1 | Depth from zero | | | | | |
| Texture | | | | | | % CF |
| 1 | Depth from zero | | | | | |
| Texture | | | | | | % CF |
| 1 | Depth from zero | | | | | |
| Drainage | | | | | | |

Handwritten note: Jessica P. to Code

(E) Swamp Maple Swamp - UTM 446265/4792500
edge SWD3-3

(F) Small Dry Pond at Edge of Woodlot - UTM - 446245/4792465
may be permanent but recent rains, currently about 1m deep in middle
Mostly Chara, some Pot. pusillus., 1 clump of Scirpalis
Abundant Green Frog tadpoles.

Vegetation Type - Stonewort Submerged Shallow Aquatic SAS1-3

ELC
Community Description and Classification

Site: 236_GSH1508 Polygon: 6
 Surveyor(s): JK Date: Oct 13/11 Time start: 17:30
 UTMZ: 17 UTMZ: 446980 UTMN: 4792390

Polygon Description

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

Stand Description

| Layer | HT | CVR | Species In Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To) |
|-------|----|-----|--|
| 1 | 4 | 4 | Fraxinus > Fagopyrum > Acer saccharum |
| 2 | 3 | 3 | Acer saccharum - Dist. Vig. |
| 3 | 2 | 2 | Fraxinus > Dist. Vig. |
| 4 | 1 | 1 | Saxifraga - C. rad. (-) Saxifraga - baccata |

HT Codes: 1 < 0.2m 2 > 0.2-0.5m 3 > 0.5-1m 4 > 1-2m 5 > 2-5m 6 > 5-10m 7 > 10-25m 8 > 25-50m 9 > 50m
 CVR Codes: 0 = none 1 0% - 10% 2 10 - 25% 3 25 - 50% 4 50 - 60% 5 60 - 75% 6 75 - 90% 7 90 - 100%

Stand Composition: Size Class Analysis:

| | | | | |
|------------------|-----|-------|-------|-----|
| Standing Snags: | <10 | 10-24 | 25-50 | >50 |
| Deadfall / Logs: | 0 | 10-24 | 25-50 | >50 |
| | A | D | D | D |

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

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

Ecotope: W. Ash Deciduous
Vegetation Type: FOD4-2
Inclusion:
Complex:

Community Profile Diagram/Comments

Notes:

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

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

(H) Swamp Maple Swamp UTM - 446280 / 4792431

2-4 Aefree >>> Carovat - Franigr

3-2 Aefre - Ulmanen

6-1 Glystrin' seasonally flooded'

Size 0 < 10 A < 25 A < 50

Shrub B

Deadfall A 0

Matune
Veg Type SWD3-3

(I) Shagbark Hickory Forest UTM - 446300 / 4792180

2-4 Carovat

3-3 Carovat Ulmanen

4-2 Carovat

6-3 Gerrobe - Enoobar - Astlauc - Fraume - Allpetr

Size A < 10 A < 25 R < 50

Shrub R R

Deadfall 0 0

Mid Age
Veg Type FOD9-4

ELC
Community Description and Classification

Map #: 236 CH 150 / SD 7/1947 Polygon: T009

Surveyor(s): WTB Date: July 4, 202 Time start: 4:32 PM finish: 6:00 PM

UTMZ: UTMN: UTMZ:

Polygon Description

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

Stand Description

| Layer | HT | CVR | Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To) |
|-------|----|-----|--|
| 1 | 1 | 4 | TILGVE - FRAXMEX - COVAT - OUE TUB |
| 2 | 2 | 3 | OSTVIA - ALESAC - GRCORD |
| 3 | 3 | 3 | COVARD - CALCOA - COVAT - ALESAC |
| 4 | 4 | 4 | QERMACO - PAVISON - FAVIA - TAX COA |

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

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

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

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

Ecosite: Forest - Plus Oak - Maple - Hickory - Deciduous Forest Code: T009

Vegetation Type: Forest Code: F016

Inclusion: Forest - Plus Oak - Maple - Hickory - Deciduous Forest Code: F016

Complex: Forest - Plus Oak - Maple - Hickory - Deciduous Forest Code: F016

Community Profile Diagram/Comments

Notes:

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

| Site Metrics | PWAuger # | Soils Description | | | | Summary |
|--------------|-----------------|-------------------|------|--|--|------------------------------------|
| Zone | 1 | | | | | Moisture Regime |
| Easting | 17 | | | | | |
| Northing | | | | | | Drainage |
| Position | Flat | | | | | |
| Aspect | | | | | | Effective Texture (indicate below) |
| Percent | | | | | | |
| Slope | | | | | | % CF |
| Length | | | | | | |
| Mottles | | | | | | % CF |
| Gley | 100M | | | | | |
| Water Table | | | | | | % CF |
| Carbonates | | | | | | |
| Bedrock | | | | | | % CF |
| 1 | Depth from zero | 10 | % CF | | | |
| 2 | Texture | SIC | | | | % CF |
| 3 | Depth from zero | 3Z | % CF | | | |
| 4 | Texture | SIC | | | | % CF |
| 5 | Depth from zero | | % CF | | | |
| 6 | Texture | | | | | % CF |
| 7 | Depth from zero | | % CF | | | |
| 8 | Texture | | | | | % CF |
| 9 | Depth from zero | | % CF | | | |
| 10 | Texture | | | | | % CF |
| 11 | Depth from zero | | % CF | | | |
| 12 | Texture | | | | | % CF |
| 13 | Depth from zero | | % CF | | | |
| 14 | Texture | | | | | % CF |
| 15 | Depth from zero | | % CF | | | |
| 16 | Texture | | | | | % CF |
| 17 | Depth from zero | | % CF | | | |
| 18 | Texture | | | | | % CF |
| 19 | Depth from zero | | % CF | | | |
| 20 | Texture | | | | | % CF |
| 21 | Depth from zero | | % CF | | | |
| 22 | Texture | | | | | % CF |
| 23 | Depth from zero | | % CF | | | |
| 24 | Texture | | | | | % CF |
| 25 | Depth from zero | | % CF | | | |
| 26 | Texture | | | | | % CF |
| 27 | Depth from zero | | % CF | | | |
| 28 | Texture | | | | | % CF |
| 29 | Depth from zero | | % CF | | | |
| 30 | Texture | | | | | % CF |
| 31 | Depth from zero | | % CF | | | |
| 32 | Texture | | | | | % CF |
| 33 | Depth from zero | | % CF | | | |
| 34 | Texture | | | | | % CF |
| 35 | Depth from zero | | % CF | | | |
| 36 | Texture | | | | | % CF |
| 37 | Depth from zero | | % CF | | | |
| 38 | Texture | | | | | % CF |
| 39 | Depth from zero | | % CF | | | |
| 40 | Texture | | | | | % CF |
| 41 | Depth from zero | | % CF | | | |
| 42 | Texture | | | | | % CF |
| 43 | Depth from zero | | % CF | | | |
| 44 | Texture | | | | | % CF |
| 45 | Depth from zero | | % CF | | | |
| 46 | Texture | | | | | % CF |
| 47 | Depth from zero | | % CF | | | |
| 48 | Texture | | | | | % CF |
| 49 | Depth from zero | | % CF | | | |
| 50 | Texture | | | | | % CF |
| 51 | Depth from zero | | % CF | | | |
| 52 | Texture | | | | | % CF |
| 53 | Depth from zero | | % CF | | | |
| 54 | Texture | | | | | % CF |
| 55 | Depth from zero | | % CF | | | |
| 56 | Texture | | | | | % CF |
| 57 | Depth from zero | | % CF | | | |
| 58 | Texture | | | | | % CF |
| 59 | Depth from zero | | % CF | | | |
| 60 | Texture | | | | | % CF |
| 61 | Depth from zero | | % CF | | | |
| 62 | Texture | | | | | % CF |
| 63 | Depth from zero | | % CF | | | |
| 64 | Texture | | | | | % CF |
| 65 | Depth from zero | | % CF | | | |
| 66 | Texture | | | | | % CF |
| 67 | Depth from zero | | % CF | | | |
| 68 | Texture | | | | | % CF |
| 69 | Depth from zero | | % CF | | | |
| 70 | Texture | | | | | % CF |
| 71 | Depth from zero | | % CF | | | |
| 72 | Texture | | | | | % CF |
| 73 | Depth from zero | | % CF | | | |
| 74 | Texture | | | | | % CF |
| 75 | Depth from zero | | % CF | | | |
| 76 | Texture | | | | | % CF |
| 77 | Depth from zero | | % CF | | | |
| 78 | Texture | | | | | % CF |
| 79 | Depth from zero | | % CF | | | |
| 80 | Texture | | | | | % CF |
| 81 | Depth from zero | | % CF | | | |
| 82 | Texture | | | | | % CF |
| 83 | Depth from zero | | % CF | | | |
| 84 | Texture | | | | | % CF |
| 85 | Depth from zero | | % CF | | | |
| 86 | Texture | | | | | % CF |
| 87 | Depth from zero | | % CF | | | |
| 88 | Texture | | | | | % CF |
| 89 | Depth from zero | | % CF | | | |
| 90 | Texture | | | | | % CF |
| 91 | Depth from zero | | % CF | | | |
| 92 | Texture | | | | | % CF |
| 93 | Depth from zero | | % CF | | | |
| 94 | Texture | | | | | % CF |
| 95 | Depth from zero | | % CF | | | |
| 96 | Texture | | | | | % CF |
| 97 | Depth from zero | | % CF | | | |
| 98 | Texture | | | | | % CF |
| 99 | Depth from zero | | % CF | | | |
| 100 | Texture | | | | | % CF |
| 101 | Depth from zero | | % CF | | | |

Property line gpr

