

ELC Community Description and Classification

Map #: 3454/4378 Polygon: 4

Surveyor(s): RA/SS Date: 2013-04-02 Time start: 12:45 PM finish: 3:00 PM

UTMZ: UTMZ: UTMN:

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic Site <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock History <input type="checkbox"/> Natural <input type="checkbox"/> Cultural Cover <input type="checkbox"/> Open <input type="checkbox"/> Shrub <input type="checkbox"/> Treed	<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 checked="" type="checkbox"/> Deciduous <input type="checkbox"/> Coniferous <input type="checkbox"/> Mixed	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Marsh <input type="checkbox"/> Swamp <input type="checkbox"/> Fen <input type="checkbox"/> Bog <input type="checkbox"/> Barren <input type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

Stand Description

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp.) (= Much Greater Than > Greater Than = About Equal to)
1	2	4	JUGNIGR > FRAPENN
2	2	2	JUGNIGR > FRAPENN
3	4	1	GRATAEGUS SP > RHACATH
4	-	-	Unknown ASA

HT Codes: 7 <0.2m 6 >0.2-0.5m 5 >0.5-1m 4 >1-2m 3 >2-8m 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/Lugs
BAI	A <10 A 10-24 N 25-50 N >50	O <10 R 10-24 N 25-50 N >50	R <10 R 10-24 N 25-50 N >50

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

Gen/Age Pioneer Young Mid-Age Mature Old Growth

Ecoregion	Fresh Moist Lowland Deciduous Forest	Code	FOD7
Vegetation	s h Bl k Walnut Lowland	Code	FOD7-4
Subregion	Deciduous Forest	Code	-
Complex		Code	-

Community Profile Diagram/Comments

Dashed lines for profile diagram and comments.

Notes:

Tree Tally by Species

Photo # 2

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	% Avg
Total						100
Stand Area (BA)						
Dist						

Soils Ontario and ELC Soils Description

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

Plant Species List
2012

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

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

Map Number: 290 SER 10/14/3333/3454/43715 F007-2
 Date: April 2, 2013 F007-3
 Surveyors: BA, SS CAM-1

Plant Species List
2012

Dicot Herbs - Asteraceae					Dicot Herbs					Dicot Herbs				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Common Yarrow (<i>Achillea millefolium</i>)					Shepherd's Purse (<i>Capsella bursa-pastoris</i>)					Kidney-leaf Buttercup (<i>Ranunculus abortivus</i>)				
White Snakeroot (<i>Ageratina altissima</i>)					Cutleaf Toothwort (<i>Cardamine concatenata</i>)					Tall Buttercup (<i>Ranunculus acris</i>)				
Com. Ragweed (<i>Ambrosia artemisiifolia</i>)					Toothwort (<i>Cardamine diphylia</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>)	U				Mouse-ear Chickweed (<i>Cerastium fontanum</i>)					Bitter Dock (<i>Rumex obtusifolius</i>)				
Nodding Beggar-ticks (<i>Bidens cernua</i>)					Turtlehead (<i>Chelone glabra</i>)					Bloodroot (<i>Sanguinaria canadense</i>)				
Devil's Beggar-ticks (<i>Bidens frondosa</i>)					Spotted Water-hemlock (<i>Cicuta maculata</i>)					Black Snakeroot (<i>Sanicula marilandica</i>)				
Spotted Knapweed (<i>Centaurea biebersteinii</i>)					Water-hemlock (<i>Cicuta virosa</i>)					Bouncing Bet (<i>Saponaria officinalis</i>)				
Brown Knapweed (<i>Centaurea jacea</i>)					Enchanter's Nightshade (<i>Circaea lutetiana</i>)					Marsh Skullcap (<i>Scutellaria galericulata</i>)				
Chicory (<i>Cichorium intybus</i>)					Carolina Spring Beauty (<i>Claytonia caroliniana</i>)					Mad Dog Skullcap (<i>Scutellaria lateriflora</i>)				
Canada Thistle (<i>Cirsium arvensense</i>)					Virginia Spring Beauty (<i>Claytonia virginica</i>)					White Campion (<i>Silene latifolia</i>)				
Bull Thistle (<i>Cirsium vulgare</i>)					Virgin's-bower (<i>Clematis virginiana</i>)					Bladder Campion (<i>Silene vulgaris</i>)				
Horseweed (<i>Conyza canadensis</i>)					Field Bindweed (<i>Convolvulus arvensis</i>)					Hemlock Water-parsnip (<i>Sium suave</i>)				
Daisy Fleabane (<i>Erigeron annuus</i>)					Dog-strangling Vine (<i>Cynanchum rossicum</i>)					Bitter Nightshade (<i>Solanum dulcamara</i>)				
Philadelphia Fleabane (<i>Erig. philadelphicus</i>)					Wild Carrot (<i>Daucus carota</i>)					Black Nightshade (<i>Solanum ptychanthum</i>)				
<i>Erigeron</i>					Deftford Pink (<i>Dianthus armeria</i>)					Grassleaf Stitchwort (<i>Stellaria graminea</i>)				
Joe-pye-weed (<i>Eupatorium maculatum</i>)					Squirrel-com (<i>Dicentra canadensis</i>)					Common Chickweed (<i>Stellaria media</i>)				
Boneset (<i>Eupatorium perforatum</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 fulvonum</i>)		U	R		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 scariola</i>)					<i>Epilobium</i>					<i>Trifolium</i>				
<i>Lactuca</i>					Worm Mustard (<i>Erysimum cheiranthoides</i>)					Stinging Nettle (<i>Urtica dioica</i>)				
Ox-eye Daisy (<i>Leucanthemum vulgare</i>)					<i>Euphorbia</i>					Greater Bladderwort (<i>Utricularia vulgaris</i>)				
Pineapple-weed (<i>Matricaria discolor</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. anagaliss-aquatica</i>)				
Blue-stem Goldenrod (<i>Solidago caesia</i>)					<i>Galium</i>					Common Speedwell (<i>Veronica officinalis</i>)				
Canada Goldenrod (<i>Solidago canadensis</i>)					Spotted Geranium (<i>Geranium maculatum</i>)					<i>Veronica</i>				
Zig-zag Goldenrod (<i>Solidago flexicaulis</i>)					Herb-robert (<i>Geranium robertianum</i>)					Cow Vetch (<i>Vicia cracca</i>)				
Giant Goldenrod (<i>Solidago gigantea</i>)					Yellow Avens (<i>Geum aleppicum</i>)					<i>Vicia</i>				
Early Goldenrod (<i>Solidago juncea</i>)					White Avens (<i>Geum canadense</i>)					Periwinkle (<i>Vinca minor</i>)				
Gray Goldenrod (<i>Solidago nemoralis</i>)					Urban Avens (<i>Geum urbanum</i>)					Dog Violet (<i>Viola conspersa</i>)				
<i>Solidago (CANADA/ALT)</i>	F	U			Dame's Rocket (<i>Hesperis matronalis</i>)					Yellow Violet (<i>Viola pubescens</i>)				
Field Sow-thistle (<i>Sonchus arvensis</i>)					Virg. Water-leaf (<i>Hydrophyllum virginianum</i>)					Com. Blue Violet (<i>Viola sororia</i>)				
<i>Sonchus</i>					Com. St. John's-wort (<i>Hypericum perforatum</i>)					<i>Viola</i>				
Heart-leaf Aster (<i>Symph. cordifolium</i>)					Spotted Jewelweed (<i>Impatiens capensis</i>)					<i>Geum sp.</i>			U	
Heath Aster (<i>Symphyotrichum ericoides</i>)					Wood Nettle (<i>Laportea canadensis</i>)									
Tall White Aster (<i>Symph. lanceolatum</i>)	F				Motherwort (<i>Leonurus cardiaca</i>)									
Calico Aster (<i>Symphyotrichum lateriflorum</i>)	U				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>)					<i>Lobelia</i>									
Com. Goatsbeard (<i>Tragopogon pratensis</i>)					Cut-leaf Bugleweed (<i>Lycopus americanus</i>)									
Coltsfoot (<i>Tussilago farfara</i>)					Northern Bugleweed (<i>Lycopus uniflorus</i>)									
					Fringed Loosestrife (<i>Lysimachia ciliata</i>)									
					Moneywort (<i>Lysimachia nummularia</i>)		A							
					<i>Lysimachia</i>									
					Purple Loosestrife (<i>Lythrum salicaria</i>)									
					Black Medick (<i>Medicago lupulina</i>)									
					Alfalfa (<i>Medicago sativa</i>)									
					White Sweet-clover (<i>Mellilotus alba</i>)									
					Yellow Sweet-clover (<i>Mellilotus officinalis</i>)									
					Wild Mint (<i>Mentha arvensis</i>)									
					Wild Bergamot (<i>Monarda fistulosa</i>)									
					Small Forget-me-not (<i>Myosotis laxa</i>)									
					Forget-me-not (<i>Myosotis scorpioides</i>)									
					Water-cress (<i>Nasturtium officinale</i>)									
					Com. Evening-primrose (<i>Oenothera biennis</i>)									
					Sweet-cicely (<i>Osmorhiza berterii</i>)									
					Yellow Wood-sorrel (<i>Oxalis stricta</i>)									
					Wild Parsnip (<i>Pastinaca sativa</i>)									
					English Plantain (<i>Plantago lanceolata</i>)									
					Common Plantain (<i>Plantago major</i>)									
					Rugel's Plantain (<i>Plantago rugelii</i>)									
					May-apple (<i>Podophyllum peltatum</i>)									
					Pale Smartweed (<i>Polygonum lapathifolium</i>)									
					Lady's-thumb (<i>Polygonum persicaria</i>)									
					Virginia Knotweed (<i>Polygonum virginianum</i>)									
					<i>Polygonum</i>									
					Rough Cinquefoil (<i>Potentilla norvegica</i>)									
					Rough-fruited Cinquefoil (<i>Potentilla recta</i>)									
					Common Cinquefoil (<i>Potentilla simplex</i>)									
					<i>Potentilla</i>									
					Heal-all (<i>Prunella vulgaris</i>)									
					Shinleaf (<i>Pyrola elliptica</i>)									

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

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

Significant Wildlife Habitat Form

AECOM

Study Area:	BLW <u>(JER)</u> GSH	Map #:	290 JER 1014/3335/3484/ 4378
Date:	2013-04-02	Time Started:	12:45 PM
Field Staff:	RA, SS	Time Finished:	3:00 PM
Weather Conditions:	-		

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

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

UTMs: _____ Number of nests: _____

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

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

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

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

UTMs: See Map Area of standing water delineated on field map

Water depth (m): Unknown ASA % open water: 100% % emergent vegetation: 0%

Potential to hold water until at least July in most years: (Yes) / No

Description of standing water (permanent pool, evidence of annual spring flooding, etc): Dug pond, land owner said pond dries up each summer

Area and soil/substrate of shoreline habitat: Sandy soils in field adjacent CUM1-1

Type and abundance of cover in open water habitat: No cover

Type and abundance of cover in surrounding habitat: Meadow / Forest / Ag. Field

Evidence of disturbance (e.g. cattle grazing): None

Evidence of use by waterfowl, amphibians, turtles (e.g. broken eggs), marsh breeding birds: None, due to site drying up in summer and absence of structures for swanning site not suitable turtle habitat

Complete Vernal Pool Habitat Description Form

Snake Hibernacula

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

UTMs: _____ Likelihood to extend below frost line: _____

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

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

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

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

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

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

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)
 (CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1)
 Eroding bank, sandy hill, pits, steep slope or rock face present:
 No **Yes (if yes, photograph and complete the following)**
 UTM's: _____ 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's: _____ 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's: _____ 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's: _____ Age of oldest trees: _____
 Evidence of disturbance (e.g. selective cutting): _____
 Description of habitat (structural complexity, abundance of snags and/or downed woody debris, etc):

Photo #	Location or Subject	Photo #	Location or Subject

Species of Conservation Concern Habitat and Incidental Wildlife – Jericho



Study Area: 290 JER 1014/3333/3454/4378 Field Staff: Robert Aitken Steven Time Started: 12:45 PM
 Date (yyyy-mm-dd): 2013-04-02 Feature No.: 290 Time Finished: 3:00 PM

Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
RBLP		VO		SO SP		VO	
PIWR		VO		AMRO		OB	
				DEER		SC	
				AMCR		VO	
				DEJU		VO	
				RACCOON		TR	
				NCA		VO	
				DOWP		VO	
				BCH		VO	
				RWBB		VO	
				COMA		OB	
				TUVU		OB	
				SQUIRREL		OB	

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)

PLANTS

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
<u>American Gromwell (Lithospermum latifolium) - S3 Bloom Time - Spring</u>	Grows in rich deciduous woodlands, wooded floodplains, and shaded riverbanks as well as along the edges of woodlands	(FOD7)	Y N UTM: N/O
<u>A Moss (Astomum muehlenbergianum) - S2 Bloom Time - Spring</u>	Thin soil over level outcrop ledges and on soil under grasses in open prairie.	ALO, TPO	Y (N) UTM:
<u>Autumn Coral-root (Corallorhiza odorhiza) - S2 Bloom Time - Summer to Fall</u>	Found growing in openings of red pine or white pine plantations as well as dry sandy woods.	FOM1, FOM2, CUP3	Y (N) UTM:
<u>Broad Beech Fern (Phegopteris hexagonoptera) - SC Bloom Time-not a flowering plant</u>	Species grows in rich, mature deciduous woods in southern Ontario.		Y (N) UTM: Not mature
<u>Burning Bush (Euonymus atropurpureus) - S3</u>	Grows in dry to moist thickets, valleys, and forest edges. Similar Species: European Burning Bush (<i>Euonymus europaeus</i>). Distinctive Feature: Burning Bush has hairs on the underside of leaves while the European species does not.		Y (N) UTM:
<u>Carex's Sedge (Carex careyana) - S2 Bloom Time - May and June</u>	Occurs in rich deciduous woods, often on floodplains and slopes and mesic to dry-mesic hardwood forests.	(FOD6) (FOD7), FOD9, SWD	Y N UTM: N/O
<u>Caughuawaga Hawthorn (Crataegus suborbiculata) - S1</u>	Occurs in old fields, poorly managed pastures, <u>fencelines</u> and roadsides.	CUM1, CUS1, CUT1	Y N UTM: N/O
<u>Round-leaved Hawthorn (Crataegus lumaria) - S3?</u>	Occurs in old fields, poorly managed pastures, <u>fencelines</u> and roadsides.	CUM1, CUS1, CUT1	Y N UTM: N/O
<u>Chinese Hemlock Parsley (Conioselinum chinense) - S2 Bloom Time -summer to fall</u>	Swampy places with deciduous trees, white cedars, tamarack; springy river banks, creek borders, wet borders of streams & rivers. Also calcareous seepage slopes.	SWC1,SWC3,SWC4,SWM1, SWM2,SWM4,SWM5, SWM6	Y (N) UTM:
<u>Cream Violet (Viola striata) - S3 Bloom Time- March-June</u>	Inhabits rich floodplain forest and low, wet woods.	(FOD6) (FOD7) FOD9, SWM, SWD	Y N UTM: N/O
<u>Double-striped Bluet (Enallagma basidens)-S3</u>	Inhabits fishless <u>ponds</u> , lakes and boggy swamps.	OAO, SA, SWM, SWD	Y N UTM: N/O

Species of Conservation Concern Habitat and Incidental Wildlife – Jericho

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Eastern Green-violet (<i>Hybanthus concolor</i>) - S2 <i>Bloom Time – mid March to August</i>	Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks.	ALT1, FOD7	Y N UTM: N/O
Green Dragon (<i>Arisaema dracontium</i>) - SC/S3 <i>Bloom Time – May and June</i>	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	FOD6 , FOD7 , FOD9	Y N UTM: N/O
Harbinger-of-spring (<i>Eriogenia bulbosa</i>) - S3 <i>Bloom Time – early to late April</i>	Occurs in rich, moist deciduous woods, especially on floodplains.	FOD6 , FOD7 , FOD8, FOD9	Y N UTM: N/O
Hazel Dodder (<i>Cuscuta coryli</i>) –SH	Occurs in open, moist tall-grass prairie and meadows - parasitic on <i>Aster</i> , <i>Heliathus</i> , <i>Monarda</i> , <i>Rubus</i> , <i>Solidago</i> .	RBO, TPO2, CUM1	Y (N) UTM:
Leonard's Small Skullcap (<i>Scutellaria parvula</i>) –S3 <i>Bloom Time – late Spring to early Summer</i>	Occurs on open, rocky ground and prairies.	ALO, TPO	Y (N) UTM:
Mead's Sedge (<i>Carex meadii</i>) –S2 <i>Bloom Time –late spring to early summer</i>	Occurs in prairies and moist or dry open areas.	TPO, CUM1	Y (N) UTM:
Ovate Beak Grass –S1 <i>Bloom Time- mid Summer</i>	prefers riparian woodlands ¹⁴ ; floodplain swamps and river banks.	FOD6 , FOD7 , FOD9, SWD	Y N UTM: N/O
Pawpaw (<i>Asimina triloba</i>) –S3 <i>Bloom Time – March-May</i>	Occurs in moist deciduous woods and stream banks.	FOD6 , FOD7 , FOD9	Y N UTM: N/O
Perfoliate Tinker's-weed (<i>Triosteum perfoliatum</i>) – S1 <i>Bloom Time – May, June, July</i>	Grows in rich, deciduous woods.		Y N UTM: N/O
Pumpkin Ash (<i>Fraxinus profunda</i>) – S2?	This species is a wetland obligate and only grows in bottomland swamps and floodplains. Distinctive Feature: the base of the trunk swells outward, resembling a pumpkin in larger trees.		Y (N) UTM:
Riddell's Goldenrod (<i>Oligoneuron riddellii</i>)-SC	Riddell's Goldenrod grows in wet habitats such as wet marshes, moist prairies, fens, old fields and seepy banks.	ALO, TPO, CUM1	Y (N) UTM:
Shellbark Hickory (<i>Carya laciniosa</i>) – S3	Typically found in wet or wet -mesic deciduous forests and along stream banks. Similar Species: Shagbark Hickory. Distinctive Feature: Larger leaves and leaflets of 7.		Y N UTM: N/O
Shumard Oak (<i>Quercus shumardii</i>) –SC	Species inhabits mesic and mesic -hydric sites on clay and clay-loam soils with poor drainage.		Y N UTM: N/O
Slim-flowered Muhly (<i>Muhlenbergia tenuiflora</i>) – S2	Found in rich deciduous forest dominated by either oak or beech-maple. It can also occur on rocky or sandy soils, wooded dunes, hillsides, and riverbanks.	SDT1, FOD5, FOD9	Y N UTM: N/O
Southern Tickseed (<i>Bidens coronata</i>)-S2	Inhabits dry to moist sandy fields and sandy openings in prairies.	TPO, CUM1	Y (N) UTM:
Stiff Gentian (<i>Gentiana quinquefolia</i>) - S2 <i>Bloom Time – late summer to mid fall</i>	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Y N UTM: N/O
Stiff Goldenrod (<i>Solidago rigida</i>) –S3 <i>Bloom Time- early June to end of November</i>	Occurs on dry open ground, particularly in prairie remnants; along roadsides and railway, and waste places.	TPO1, CUM1	Y (N) UTM:
Tall Tickseed (<i>Coreopsis tripteris</i>)-S2 <i>Bloom Time-late summer to early fall.</i>	Occurs in prairies and open woods, and thickets.	TPO, TPS, TPW, FOD1, FOD2, FOD3, FOD4, FOD5, CUT1	Y (N) UTM:
Winged –Loosestrife (<i>Lythrum alatum</i>)-S3 <i>Bloom Time- mid to late summer</i>	found in prairies, meadows, open woods, thickets and wet disturbed areas.	TPO, CUM1, FOM, FOD, CUM1, CUT1, MAM2	Y (N) UTM:
Woodland Bulrush (<i>Scirpus expansus</i>) - S1	Grows in seepage areas, stream banks, and marshes. It is predominately found in the Asuable River.		Y (N) UTM:

MAMMALS

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Little Brown Bat (<i>Myotis lucifugus</i>)-SC	This species roosts in caves, quarries, tunnels, hollow trees or buildings but requires nearby wetlands and forest edges for hunting.	FOD, SWD	Y (N) UTM: Very few hollow trees
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)-SC	The Northern Long-eared Bat roosts and hibernates in mines, caves, and man-made structures but prefers hollow trees in wooded areas	FOD, SWD	Y (N) UTM: Very few hollow trees
Tri-colored Bat (<i>Perimyotis subflavus</i>)-SC	The Tricoloured Bat is one of the common bats in Ontario. It prefers to roost in trees, cliff crevices, and caves usually in open woodlands that are near water	FOD, SWD	Y (N) UTM: Very few hollow trees

Species of Conservation Concern Habitat and Incidental Wildlife – Jericho

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Woodland Vole (<i>Microtus pinetorum</i>)-SC	The Woodland Vole inhabits mature deciduous forests where it can burrow into loose sandy soils and deep humus. Other habitats also include grasslands, meadows, and orchards	FOD	Y (N) UTM:

REPTILES

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Eastern Ribbonsnake (<i>Thamnophis sauritus</i>) - SC	Assessed as SWH. Record species if found.	MAM, MAS	not required.
Milksnake (<i>Lampropeltis triangulum</i>) -SC	Assessed as SWH. Record species if found.	CUM, CUT	not required.
Northern Map Turtle (<i>Graptemys geographica</i>) -SC	Large water bodies with soft bottoms & aquatic veg; basks on logs, rocks, beaches, grassy edges; may nest at some distance from water; aquatic corridors (e.g. stream) required for movement.	OAO, SA	Y (N) UTM:

INSECTS

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Azure Bluet (<i>Enallagma aspersum</i>)-S3	Found in fishless ponds and other small water bodies. Distinctive Features: Male – Large Blue eyespot and mostly black dorsal surface on abdomen with a blue tip; Females: Green eyespots and almost all black dorsal surface and black tip. Similar Species: Common Blue Damselfly – has more blue than black on abdomen.	OAO	Y (N) UTM: N/A
Blue-ringed Dancer (<i>Argia sedula</i>) – S2	Found in streams and rivers of small to medium size and where there is dense herbaceous vegetation along the banks or shores.		Y (N) UTM:
Dusky Dancer (<i>Argia translate</i>) –S3	Inhabits small to medium, slow flowing sandy or rocky streams or large rivers in quite open areas or with wooded banks.	OAO, SA, SWM, SWD	Y (N) UTM:

BIRDS

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Bald Eagle (<i>Haliaeetus leucocephalus</i>)-SC	Assessed as SWH. Record species if found.	-	not required.
Hooded Warbler (<i>Wilsonia Citrina</i>) - SC	An area-sensitive species requiring large tracts of mature, closed canopy, deciduous forests. They generally nest above ground and prefer forests with tall trees that are along stream bottoms or at ravine edges	-	Y (N) UTM: Not large enough
Louisiana Waterthrush (<i>Seiurus motacilla</i>) -SC	<u>Mature forests</u> along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. <u>Riparian woodlands</u> are preferred stopover sites during migration.	FOD, FOM	Y (N) UTM: Not large enough

V1/V3 mosaic



* - Soil pit
⊗ - Soil pit w/
Prism Sweep

V1 = FOD 9-4
V2 = SWD 3-3
V3 = FOD 5-2
V4 = CUW1
V5 = OAO w/ wetland inclusion.

JER3445
ROE EYES

JER3332
ROEYES

Transit point count survey point locations and/or property access status may be subject to change and will be confirmed at the time of field surveys (e.g. depending on site conditions and/or landowner consultation)

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Metres
0 12.5 25 50 75 100

UTM Zone 17N, NAD 83 1:4,000

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Jericho Wind Energy Centre
Field Map
Significant Wildlife Habitat
AWO EOS Survey 173_JER1119
April 2013
Project 60155032
AECOM

ELC
Community Description and Classification

Map #: *Feature 293* Polygon: *V1*

Surveyor(s): *J. de Man, B. Waters* Date: *June 14, 2013* Time start: *12:30pm* finish: *1:30pm*

UTMZ: UTMZ: UTMN:

Polygon Description

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

Stand Description

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp) (>> Much Greater Than; > Greater Than; = About Equal To)
1	2	3	<i>Carya ovata > Acer sacch > Querc macr = Tili amer</i>
2	3	4	<i>Acer sacch = Carya ovata = Cornus fee = Ribes frut</i>
3	6	3	<i>Anem cana > Alli peti > Podo peti</i>
4	7	1	<i>Mosses</i>

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

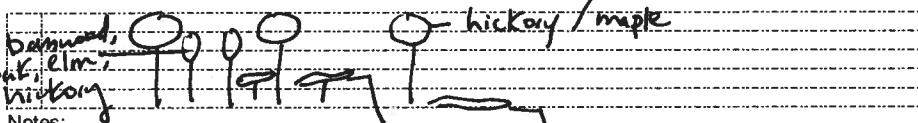
Stand Composition:	Size Class Analysis:	A <10	A 10-24	O 25-50	R >50
BA: <i>6</i>	Standing Snags:	N <10	R 10-24	N 25-50	N >50
	Deadfall / Logs:	N <10	O 10-24	N 25-50	N >50

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

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

Ecosite:	<i>Fresh-Moist Oak-Moist-Hickory</i>	Code:	<i>FOD9</i>
Vegetation Type:	<i>Fresh-Moist Shagbark Hickory Dec. Forest.</i>	Code:	<i>FOD9-4</i>
Inclusion:		Code:	
Complex:		Code:	

Community Profile Diagram/Comments



Notes: *imm. trees patches of moss.*

Tree Tally by Species

Prism Factor 2

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
<i>Carya ovata</i>	:					
<i>dead</i>	.					
Total	<i>3</i>					100
Basal Area (BA)	<i>6</i>					
Dead						

Soils Ontario and ELC Soils Description

Site Metrics	Pit/Auger #			Summary					
		1	2						
UTM	Zone			Moisture Regime					
	Easting								
	Northing								
	Slope	Position	<i>flat.</i>	<i>flat</i>	Drainage				
		Aspect	<i>0</i>	<i>east</i>					
		Percent	<i>2%</i>	<i>2%</i>					
Slope Length		<i>/</i>	<i>/</i>						
Depth to...	Mottles	<i>0</i>	<i>0</i>	Effective Texture (Indicate below)					
	Gley	<i>0</i>	<i>0</i>						
	Water Table	<i>n/a</i>	<i>n/a</i>						
	Carbonates	<i>n/a</i>	<i>n/a</i>						
	Bedrock	<i>n/a</i>	<i>n/a</i>						
Soil Horizon Description	1	Depth from zero (cm)	<i>15 cm</i>	% CF	<i>0</i>	% CF		% CF	
		Texture	<i>Sa L</i>		<i>Sa L</i>				
	2	Depth from zero (cm)	<i>S: f s</i>	% CF		% CF		% CF	
		Texture	<i>15 cm +</i>						
	3	Depth from zero		% CF		% CF		% CF	
		Texture							
	4	Depth from zero		% CF		% CF		% CF	
		Texture							
		% Surface Stone/Rock							
	Moisture Regime		<i>Fresh</i>		<i>Fresh</i>				
	Drainage		<i>Well drained</i>		<i>well drained</i>				

ELC
Community Description and Classification

Map #: Feature 293 Polygon: V2

Surveyor(s): J. de Man, B. Wouke Date: June 14, 2013 Time start: 10:00 am finish: 4:00 pm

UTMZ: UTMZ: UTMN:

Polygon Description

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

Stand Description

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp) (>> Much Greater Than; > Greater Than; = About Equal To)
1	2	3	Acer free >> Frax nigra = Frax penn
2	2	3	Frax penn > Carp coal = Ulmus amer
3	4	2	Lind benz >> Corn foem
4	6	4	Carex sp. > Onoc sensi = Hydro virgi

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%

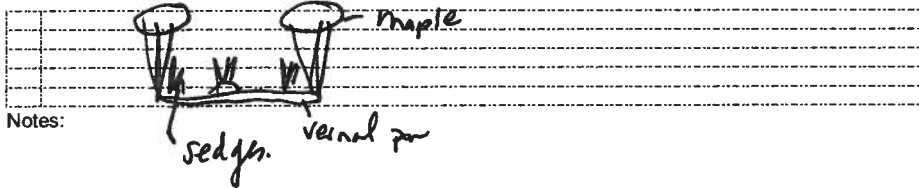
Stand Composition:	Size Class Analysis:	R < 10	O 10-24	A 25-50	O > 50
BA: 14	Standing Snags:	N < 10	O 10-24	N 25-50	N > 50
	Deadfall / Logs:	N < 10	O 10-24	N 25-50	N > 50

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

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

Ecosite: maple Mineral Deciduous Swamp	Code: SWD3
Vegetation Type: Swamp maple Mineral Deciduous Swamp	Code: SWD3-3
Inclusion:	Code:
Complex:	Code:

Community Profile Diagram/Comments



Tree Tally by Species

Prism Factor	2
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Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
Acer fremani	7	6				
Tilia americana	1					
Total	7					100
Basal Area (BA)	14					
Dead	0					

Soils Ontario and ELC Soils Description

Site Metrics	Pit/Auger #		Summary				
	UTM	Zone	Moisture Regime				
Slope	Easting		Drainage				
	Northing						
	Position	/					
	Aspect	0					
	Percent	0%					
	Slope Length	/					
Depth to...	Mottles	From 0 15 cm	Effective Texture (indicate below)				
	Gley	none					
	Water Table	surface					
	Carbonates						
	Bedrock						
Soil Horizon Description	1	Depth from zero	0-15 cm	% CF	% CF	% CF	% CF
		Texture	Oh				
	2	Depth from zero	15-50+ cm	% CF	% CF	% CF	% CF
		Texture	S&C				
	3	Depth from zero		% CF	% CF	% CF	% CF
		Texture					
	4	Depth from zero		% CF	% CF	% CF	% CF
		Texture					
			% Surface Stone/Rock				
			Moisture Regime	6-very moist			
			Drainage	Imperfect			

ELC
Community Description and Classification

Map #: Feature 293 Polygon: V3

Surveyor(s): J. deMan, B. Wank Date: June 14, 2013 Time start: 7:29 pm finish: 11:30 pm

UTMZ: _____ UTMZ: _____ UTMN: _____

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input 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	2	4	<u>Acer sacchar = Fagus grand >> Prun sero</u>
2	23	4	<u>Acer sacchar = Fagus grand</u>
3	6	1	<u>Eurob. obsv = Aris. High = Aster - M. Gledits sp.</u>
4	7	1	<u>monoc.</u>

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%

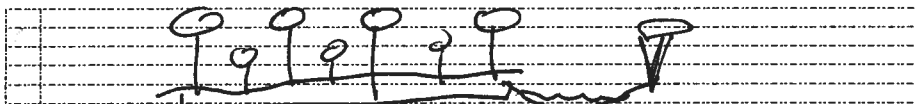
Stand Composition:	Size Class Analysis:	<input type="checkbox"/> <10	<input checked="" type="checkbox"/> A	10-24	<input checked="" type="checkbox"/> A	25-50	<input type="checkbox"/> >50
BA: <u>14</u>	Standing Snags:	<input checked="" type="checkbox"/> N	<input type="checkbox"/> <10	<input checked="" type="checkbox"/> N	10-24	<input checked="" type="checkbox"/> N	<input type="checkbox"/> >50
	Deadfall / Logs:	<input checked="" type="checkbox"/> N	<input type="checkbox"/> <10	<input checked="" type="checkbox"/> O	10-24	<input checked="" type="checkbox"/> O	<input type="checkbox"/> >50

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

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

Ecosite:	<u>Dry-Fresh Sugar Maple Dec. Forest</u>	Code:	<u>F0D5</u>
Vegetation Type:	<u>Dry-Fresh Sugar Maple-Beech Forest</u>	Code:	<u>F0D5-2</u>
Inclusion:	<u>Swamp Maple Mineral Dec. Swamp</u>	Code:	<u>SWD3-3</u>
Complex:		Code:	

Community Profile Diagram/Comments



Notes: made and Beech SWD3-3 w/ Upland pools.

Tree Tally by Species

Prism Factor 2

Species	Tally 1	Tally 2	Tally 3	Tally 4	Total	Rel. Avg.
<u>Acer saccharum</u>	<u>2</u>					
<u>Fagus grandifolia</u>	<u>5</u>					
Total	<u>7</u>					<u>100</u>
Basal Area (BA)	<u>14</u>					
Dead	<u>0</u>					

Soils Ontario and ELC Soils Description

Site Metrics	Pit/Auger #	Summary						
		Moisture Regime						
UTM	Zone							
	Easting							
	Northing							
Slope	Position							
	Aspect							
	Percent							
	Slope Length							
Depth to...	Mottles	<u>0</u>						
	Gley	<u>0</u>						
	Water Table	<u>0</u>						
	Carbonates	<u>0</u>						
	Bedrock	<u>0</u>						
Soil Horizon Description	1	Depth from zero	<u>25cm</u>	% CF		% CF		% CF
		Texture	<u>C1L</u>					
	2	Depth from zero	<u>25+</u>	% CF		% CF		% CF
		Texture	<u>C1Sa</u>					
	3	Depth from zero		% CF		% CF		% CF
		Texture						
	4	Depth from zero		% CF		% CF		% CF
		Texture						
		% Surface Stone/Rock						
		Moisture Regime	<u>Very Fresh</u>					
		Drainage	<u>Well</u>					

ELC
Community Description and Classification

Map #: Feature 293 Polygon: V4

Surveyor(s): J. deMan, B. Wente Date: June 14, 2013 Time start: 1 3:30pm finish: 4:00pm

UTMZ: UTMZ: UTMN:

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input checked="" 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 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 checked="" type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

↑ assumed to be from obs. of drsks.

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	3	Popu delt = Acer negun = Frax penn
2	3	4	Crataegus sp = Rhamnus cath
3	6	4	grasses = variety of herbs (see plant list)
4			

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

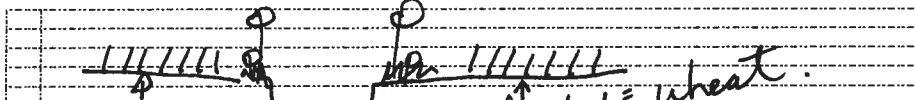
Stand Composition:	Size Class Analysis:
	R <10 A 10-24 R 25-50 R. >50
	Standing Snags: N <10 O 10-24 N 25-50 N >50
BA:	Deadfall / Logs: N <10 N 10-24 N 25-50 N >50

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

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

Ecosite: Cultural Woodland	Code: Cuw1
Vegetation Type:	Code:
Inclusion:	Code:
Complex:	Code:

Community Profile Diagram/Comments



Notes: Farmland - Community along banks of creek
↑ Farmland = wheat.

Tree Tally by Species

Prism Factor 2

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

Soils Ontario and ELC Soils Description

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

Plant Species List

2012-2013

Trees & Shrubs					Tree & Shrubs					Graminoids				
	1	2	3	4		1	2	3	4		1	2	3	4
Conifers					Deciduous					Grasses				
Balsam Fir (<i>Abies balsamea</i>)					White Oak (<i>Quercus alba</i>)		U			Giant Redtop (<i>Agrostis gigantea</i>)				
Common Juniper (<i>Juniperus communis</i>)					Bur Oak (<i>Quercus macrocarpa</i>)		F			Redtop (<i>Agrostis stolonifera</i>)				
Eastern Red Cedar (<i>Juniperus virginiana</i>)					Red Oak (<i>Quercus rubra</i>)		U			Awnless Brome (<i>Bromus inermis</i>)				
Tamarack (<i>Larix laricina</i>)					Alder Buckthorn (<i>Rhamnus alnifolia</i>)					Bromus	U			U
Norway Spruce (<i>Picea abies</i>)					Common Buckthorn (<i>Rhamnus cathartica</i>)					Blue-joint Grass (<i>Calamagrostis canadensis</i>)				
White Spruce (<i>Picea glauca</i>)					Smooth Sumac (<i>Rhus glabra</i>)					Orchard Grass (<i>Dactylis glomerata</i>)				
Black Spruce (<i>Picea mariana</i>)					Staghorn Sumac (<i>Rhus hirta</i>)					Poverty Oat Grass (<i>Danthonia spicata</i>)				
Jack Pine (<i>Pinus banksiana</i>)					Wild Black Currant (<i>Ribes americanum</i>)					Quack Grass (<i>Elymus repens</i>)				U
Red Pine (<i>Pinus resinosa</i>)					Prickly Gooseberry (<i>Ribes cynosbati</i>)		U			Virginia Wild Rye (<i>Elymus virginicus</i>)				
Eastern White Pine (<i>Pinus strobus</i>)					Swamp Black Currant (<i>Ribes lacustre</i>)					Elymus				
Scotch Pine (<i>Pinus sylvestris</i>)					Red Currant (<i>Ribes rubrum</i>)		U	U		Fowl Manna Grass (<i>Glyceria striata</i>)				
Canada Yew (<i>Taxus canadensis</i>)					Ribes					Glyceria				
Eastern White Cedar (<i>Thuja occidentalis</i>)					Black Locust (<i>Robinia pseudo-acacia</i>)					Rice Cut Grass (<i>Leersia oryzoides</i>)		U		U
Eastern Hemlock (<i>Tsuga canadensis</i>)					Prickly Rose (<i>Rosa acicularis</i>)					Tall Fescue (<i>Lolium arundinaceum</i>)				
Deciduous					Smooth Rose (<i>Rosa blanda</i>)					Muhlenbergia				
Manitoba Maple (<i>Acer negundo</i>)					Multiflora Rose (<i>Rosa multiflora</i>)			U		Witch-grass (<i>Panicum capillare</i>)				
Black Maple (<i>Acer nigrum</i>)		R			Rosa					Panicum				
Norway Maple (<i>Acer platanoides</i>)					Com. Blackberry (<i>Rubus allegheniensis</i>)					Reed Canary Grass (<i>Phalaris arundinacea</i>)				
Red Maple (<i>Acer rubrum</i>)					Wild Red Raspberry (<i>Rubus idaeus</i>)			U		Timothy (<i>Phleum pratense</i>)				U
Silver Maple (<i>Acer saccharinum</i>)					Black Raspberry (<i>Rubus occidentalis</i>)					Common Reed (<i>Phragmites australis</i>)				
Freeman's Maple (<i>Acer X freemanii</i>)			F	D	Purple-fl. Raspberry (<i>Rubus odoratus</i>)					Canada Blue Grass (<i>Poa compressa</i>)				
Sugar Maple (<i>Acer saccharum</i>)		F	D		Dwarf Raspberry (<i>Rubus pubescens</i>)				U	Fowl Meadow Grass (<i>Poa palustris</i>)				
Mountain Maple (<i>Acer spicatum</i>)					Rubus					Kentucky Bluegrass (<i>Poa pratensis</i>)				U
Speckled Alder (<i>Alnus incana</i>)					Peach-leaved Willow (<i>Salix amygdaloides</i>)					Yellow Foxtail (<i>Setaria pumila</i>)				
Downy Serviceberry (<i>Amelanchier arborea</i>)					Bebb's Willow (<i>Salix bebbiana</i>)					Green Foxtail (<i>Setaria viridis</i>)				
Serviceberry (<i>Amelanchier sanguinea</i>)					Pussy Willow (<i>Salix discolor</i>)					Sedges				
Yellow Birch (<i>Betula alleghaniensis</i>)			U		Missouri Willow (<i>Salix eriocephala</i>)					Drooping Wood Sedge (<i>Carex arctata</i>)				
White Birch (<i>Betula papyrifera</i>)		U			Sandbar Willow (<i>Salix exigua</i>)					Golden-fruited Sedge (<i>Carex aurea</i>)				
European Birch (<i>Betula pendula</i>)					Shining Willow (<i>Salix lucida</i>)					Graceful Sedge (<i>Carex gracillima</i>)				
Blue Beech (<i>Carpinus caroliniana</i>)		R	U		Black Willow (<i>Salix nigra</i>)					Inland Sedge (<i>Carex interior</i>)				
Bitternut hickory (<i>Carya cordiformis</i>)		F	U		Slender Willow (<i>Salix petiolaris</i>)					Bladder Sedge (<i>Carex intumescens</i>)				U
Shagbark Hickory (<i>Carya ovata</i>)		D			Salix					Lake-bank Sedge (<i>Carex lacustris</i>)				F
Climbing Bittersweet (<i>Celastrus scandens</i>)					Hybrid Crack Willow (<i>Salix X rubens</i>)			R		Hop Sedge (<i>Carex lupulina</i>)				
Common Hackberry (<i>Celtis occidentalis</i>)					Black-berried Elder (<i>Sambucus nigra</i>)					Pennsylvania Sedge (<i>Carex pensylvanica</i>)				
Buttonbush (<i>Cephalanthus occidentalis</i>)					Red-berried Elder (<i>Sambucus racemosa</i>)					Aw-fruited Sedge (<i>Carex stipata</i>)				
Alt.-leaved Dogwood (<i>Cornus alternifolia</i>)					Buffaloberry (<i>Shepherdia canadensis</i>)					Fox Sedge (<i>Carex vulpinoidea</i>)				U
Silky Dogwood (<i>Cornus amomum</i>)					Eur. Mountain Ash (<i>Sorbus aucuparia</i>)					Carex				
Bunchberry (<i>Cornus canadensis</i>)					Narrow Meadow-sweet (<i>Spiraea alba</i>)					Carex				
Gray dogwood (<i>Cornus racemosa</i>)					Common Lilac (<i>Syringa vulgaris</i>)					Carex				
Round-leaved Dogwood (<i>Cornus rugosa</i>)		U			Poison-ivy (<i>Toxicodendron rydbergii</i>)				D	Carex				
Red-osier Dogwood (<i>Cornus sericea</i>)					Climbing Poison-ivy (<i>Toxicodendron radicans</i>)					Carex				
American Hazel (<i>Corylus americana</i>)		U			White Elm (<i>Ulmus americana</i>)					Carex				
Beaked Hazel (<i>Corylus cornuta</i>)					Siberian Elm (<i>Ulmus pumila</i>)				U	Carex				
Cockspur Thorn (<i>Crataegus crus-galli</i>)					Slippery Elm (<i>Ulmus rubra</i>)					Carex				
English Hawthorn (<i>Crataegus monogyna</i>)					Low Blueberry (<i>Vaccinium angustifolium</i>)					Carex				
Large-fruited Thorn (<i>Crataegus punctata</i>)					Maple-leaf Viburnum (<i>Viburnum acerifolium</i>)					Carex				
Crataegus					Hobblebush (<i>Viburnum lantanoides</i>)					Carex				
Crataegus					Nannyberry (<i>Viburnum lentago</i>)					Carex				
Bush Honeysuckle (<i>Diervilla lonicera</i>)					Guelder-Rose (<i>Viburnum opulus</i>)					Carex				
Russian Olive (<i>Elaeagnus angustifolia</i>)					Downy Arrow-wood (<i>Vib. rafinesquianum</i>)					Carex				
Autumn Olive (<i>Elaeagnus umbellata</i>)					Riverbank Grape (<i>Vitis riparia</i>)				U	Carex				
Run. Strawberry-bush (<i>Euonymus obovata</i>)					Am. Prickly-ash (<i>Zanthoxylum americanum</i>)				U	Carex				
American Beech (<i>Fagus grandifolia</i>)					Ferns & Allies					Carex				
Glossy Buckthorn (<i>Frangula alnus</i>)					Lady Fern (<i>Athyrium filix-femina</i>)					Carex				
White Ash (<i>Fraxinus americana</i>)		U			Rattlesnake Fern (<i>Botrychium virginianum</i>)					Cyperus				
Black Ash (<i>Fraxinus nigra</i>)					Bulbet Bladder Fern (<i>Cystopteris bulbifera</i>)					Redroot Spike-rush (<i>Eleocharis erythropoda</i>)				
Green Ash (<i>Fraxinus pennsylvanica</i>)					Spin. Wood Fern (<i>Dryopteris carthusiana</i>)					Eleocharis				
Witch-hazel (<i>Hamamelis virginiana</i>)					Crested Wood Fern (<i>Dryopteris cristata</i>)					Hard-stem Bulrush (<i>Schoenoplectus acutus</i>)				
Winterberry (<i>Ilex verticillata</i>)					Marginal Wood Fern (<i>Dryopteris marginalis</i>)					Three-square Bulrush (<i>Sch. pungens</i>)				
Butternut (<i>Juglans cinerea</i>)					Dryopteris					Soft-stem Bulrush (<i>Sch. tabernaemontani</i>)				
Black Walnut (<i>Juglans nigra</i>)					Ostrich Fern (<i>Matteuccia struthiopteris</i>)					Dark-green Bulrush (<i>Scirpus atrovirens</i>)				
Common Privet (<i>Ligustrum vulgare</i>)					Sensitive Fern (<i>Onoclea sensibilis</i>)			R	F	Wool-grass (<i>Scirpus cyperinus</i>)				
Spicebush (<i>Lindera benzoin</i>)		U	D	U	Cinnamon Fern (<i>Osmunda cinnamomea</i>)									
Fly Honeysuckle (<i>Lonicera canadensis</i>)					Interrupted Fern (<i>Osmunda claytoniana</i>)									
Glaucous Honeysuckle (<i>Lonicera dioica</i>)					Royal Fern (<i>Osmunda regalis</i>)									
Morrow's Honeysuckle (<i>Lonicera morrowi</i>)					Christmas Fern (<i>Polystichum acrostichoides</i>)				U					
Tartarian Honeysuckle (<i>Lonicera tatarica</i>)					Eastern Bracken-fern (<i>Pteridium aquilinum</i>)									
Common Apple (<i>Malus pumila</i>)					Marsh Fern (<i>Thelypteris palustris</i>)									
White Mulberry (<i>Morus alba</i>)					Other Graminoids									
Sweet Gale (<i>Myrica gale</i>)					Broad Bur-reed (<i>Sparganium eurycarpum</i>)									
Ironwood (<i>Ostrya virginiana</i>)					Narrow-leaved Cattail (<i>Typha angustifolia</i>)									
Thicket-creeper (<i>Parthenocissus inserta</i>)					Broad-leaved Cattail (<i>Typha latifolia</i>)									U
Ninebark (<i>Physocarpus opulifolius</i>)					Broad-leaved Cattail (<i>Typha X glauca</i>)									
Balsam Poplar (<i>Populus balsamifera</i>)					Articulated Rush (<i>Juncus articulatus</i>)									
Eastern Cottonwood (<i>Populus deltoides</i>)					Soft Rush (<i>Juncus effusus</i>)									
Large-tooth Aspen (<i>Populus grandidentata</i>)		U			Path Rush (<i>Juncus tenuis</i>)									
Trembling Aspen (<i>Populus tremuloides</i>)					Juncus									
Sweet Cherry (<i>Prunus avium</i>)					Juncus									
Pin Cherry (<i>Prunus pennsylvanica</i>)					Juncus									
Black Cherry (<i>Prunus serotina</i>)		F												
Choke Cherry (<i>Prunus virginiana</i>)														
<i>Prunus</i>														

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

Map Number: <i>Plot 2A3</i>	1	<i>FOD 9.4</i>	4	<i>CUW1</i>
Date: <i>June 14, 2013</i>	2	<i>SND 3.3</i>	5	<i>QAO</i>
Surveyors: <i>J. deMan & J. Wark</i>	3	<i>FOD 5-2</i>		

2012 203

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>)																	
White Snakeroot (<i>Ageratina altissima</i>)																	
Com Ragweed (<i>Ambrosia artemisiifolia</i>)																	
Giant Ragweed (<i>Ambrosia trifida</i>)																	
Field Pussystoes (<i>Antennaria neglecta</i>)																	
<i>Artemisia</i>																	
Common Burdock (<i>Arctium minus</i>)			F	F													
Nodding Beggar-ticks (<i>Bidens cernua</i>)																	
Devil's Beggar-ticks (<i>Bidens frondosa</i>)																	
Spotted Knapweed (<i>Centaurea biebersteinii</i>)																	
Brown Knapweed (<i>Centaurea jacea</i>)																	
Chicory (<i>Cichorium intybus</i>)																	
Canada Thistle (<i>Cirsium arvense</i>)																	
Bull Thistle (<i>Cirsium vulgare</i>)																	
Horseweed (<i>Conyza canadensis</i>)																	
Daisy Fleabane (<i>Erigeron annuus</i>)																	
Philadelphia Fleabane (<i>Erig. philadelphicus</i>)																	
<i>Erigeron</i>																	
Joe-pye-weed (<i>Eupatorium maculatum</i>)																	
Boneset (<i>Eupatorium perfoliatum</i>)																	
Large-leaved Aster (<i>Eurybia macrophylla</i>)																	
Flat-top Goldenrod (<i>Euthamia graminifolia</i>)																	
Orange Hawkweed (<i>Hieracium aurantiacum</i>)																	
Field Hawkweed (<i>Hieracium caespitosum</i>)																	
<i>Hieracium</i>																	
Elecampans (<i>Inula helenium</i>)																	
Prickly Lettuce (<i>Lactuca scariola</i>)																	
<i>Lactuca</i>																	
Ox-eye Daisy (<i>Leucanthemum vulgare</i>)																	
Pineapple-weed (<i>Matricaria discoidea</i>)																	
Tall White Lettuce (<i>Prenanthes altissima</i>)																	
Black-eyed Susan (<i>Rudbeckia hirta</i>)																	
Tall Goldenrod (<i>Solidago altissima</i>)																	
Blue-stem Goldenrod (<i>Solidago caesia</i>)																	
Canada Goldenrod (<i>Solidago canadensis</i>)																	
Zig-zag Goldenrod (<i>Solidago flexicaulis</i>)																	
Giant Goldenrod (<i>Solidago gigantea</i>)																	
Early Goldenrod (<i>Solidago juncea</i>)																	
Gray Goldenrod (<i>Solidago nemoralis</i>)																	
<i>Solidago</i>																	
Field Sow-thistle (<i>Sonchus arvensis</i>)																	
<i>Sonchus</i>																	
Heart-leaf Aster (<i>Symph. cordifolium</i>)																	
Heath Aster (<i>Symphotrichum ericoides</i>)																	
Tall White Aster (<i>Symph. lanceolatum</i>)																	
Calico Aster (<i>Symphotrichum lateriflorum</i>)																	
New England Aster (<i>Symph. novae-angliae</i>)																	
Purple-stem Aster (<i>Symph. puniceus</i>)																	
Common Tansy (<i>Tanacetum vulgare</i>)																	
Common Dandelion (<i>Taraxacum officinale</i>)																	
Com. Goatbeard (<i>Tragopogon pratensis</i>)																	
Coltsfoot (<i>Tussilago farfara</i>)																	
Other Dicot Herbs																	
White Baneberry (<i>Actaea pachypoda</i>)																	
Red Baneberry (<i>Actaea rubra</i>)																	
Tall Agrimony (<i>Agrimonia gryposepala</i>)																	
Garlic Mustard (<i>Alliaria petiolata</i>)																	
Green Amaranth (<i>Amaranthus retroflexus</i>)																	
Hog-peanut (<i>Amphicarpa bracteata</i>)																	
Pearly Everlasting (<i>Anaphalis margaritacea</i>)																	
Canada Anemone (<i>Anemone canadensis</i>)																	
Ivy Hepatica (<i>Anemone acutiloba</i>)																	
Thimbleweed (<i>Anemone virginiana</i>)																	
Purple Angelica (<i>Angelica atropurpurea</i>)																	
Indian Hemp (<i>Apocynum cannabinum</i>)																	
Wild Sarsaparilla (<i>Aralia nudicaulis</i>)																	
Spikenard (<i>Aralia racemosa</i>)																	
Wild Ginger (<i>Asarum canadense</i>)																	
Swamp Milkweed (<i>Asclepias incarnata</i>)																	
Common Milkweed (<i>Asclepias syriaca</i>)																	
Yellow Rocket (<i>Barbarea vulgaris</i>)																	
False Nettle (<i>Boehmeria cylindrica</i>)																	
Black Mustard (<i>Brassica nigra</i>)																	
Marsh-mangold (<i>Caltha palustris</i>)																	
Creeping Bellflower (<i>Campanula rapunculoides</i>)																	
Shepherd's Purse (<i>Capsella bursa-pastoris</i>)																	
Cutleaf Toothwort (<i>Cardamine concatenata</i>)																	
Toothwort (<i>Cardamine diphylla</i>)																	
Penn. Bitter-cress (<i>Cardamine pensylvanica</i>)																	
<i>Cardamine</i>																	
Blue Cohosh (<i>Caulophyllum thalictroides</i>)																	
Mouse-ear Chickweed (<i>Cerastium fontanum</i>)																	
Turtlehead (<i>Chelone glabra</i>)																	
Spotted Water-hemlock (<i>Cicuta maculata</i>)																	
Water-hemlock (<i>Cicuta virosa</i>)																	
Enchanter's Nightshade (<i>Circaea lutetiana</i>)																	
Carolina Spring Beauty (<i>Claytonia caroliniana</i>)																	
Virginia Spring Beauty (<i>Claytonia virginica</i>)																	
Virgin's-bower (<i>Clematis virginiana</i>)																	
Field Bindweed (<i>Convolvulus arvensis</i>)																	
Dog-strangling Vine (<i>Cynanchum rossicum</i>)																	
Wild Carrot (<i>Daucus carota</i>)																	
Deptford Pink (<i>Dianthus armeria</i>)																	
Squirrel-com (<i>Dicentra canadensis</i>)																	
Dutchman's-breeches (<i>Dicentra cucullaria</i>)																	
Wild Teasel (<i>Dipsacus fullonum</i>)																	
Wild Cucumber (<i>Echinocystis lobata</i>)																	
Viper's Bugloss (<i>Echium vulgare</i>)																	
Northern Willow-herb (<i>Epilobium ciliatum</i>)																	
Hairy Willow-herb (<i>Epilobium hirsutum</i>)																	
Small-fl. Willow-herb (<i>Epilobium parviflorum</i>)																	
<i>Epilobium</i>																	
Worm Mustard (<i>Erysimum cheiranthoides</i>)																	
<i>Euphorbia</i>																	
Hemp Nettle (<i>Galeopsis tetrahit</i>)																	
Wild Madder (<i>Galium mollugo</i>)																	
Marsh Bedstraw (<i>Galium palustre</i>)																	
Sweet-scented Bedstraw (<i>Galium triflorum</i>)																	
<i>Galium</i>																	
Spotted Geranium (<i>Geranium maculatum</i>)																	
Herb-robert (<i>Geranium robertianum</i>)																	
Yellow Avens (<i>Geum aleppicum</i>)																	
White Avens (<i>Geum canadense</i>)																	
Urban Avens (<i>Geum urbanum</i>)																	
Dame's Rocket (<i>Hesperis matronalis</i>)																	
Virg. Water-leaf (<i>Hydrophyllum virginianum</i>)																	
Com. St. John's-wort (<i>Hypericum perforatum</i>)																	
Spotted Jewelweed (<i>Impatiens capensis</i>)																	
Wood Nettle (<i>Laportea canadensis</i>)																	
Motherwort (<i>Leonurus cardiaca</i>)																	
Field Peppergrass (<i>Lepidium campestre</i>)																	
Eur. Gromwell (<i>Lithospermum officinale</i>)																	
Butter & Eggs (<i>Linaris vulgaris</i>)																	
Great Lobelia (<i>Lobelia siphilitica</i>)																	

Plant Species List
2012

Trees & Shrubs					Tree & Shrubs					Graminoids				
Conifers					Deciduous					Grasses				
Balsam Fir (<i>Abies balsamea</i>)					White Oak (<i>Quercus alba</i>)					Giant Redtop (<i>Agrostis gigantea</i>)				
Common Juniper (<i>Juniperus communis</i>)					Bur Oak (<i>Quercus macrocarpa</i>)					Redtop (<i>Agrostis stolonifera</i>)				
Eastern Red Cedar (<i>Juniperus virginiana</i>)					Red Oak (<i>Quercus rubra</i>)					Awnless Brome (<i>Bromus inermis</i>)	U			
Tamarack (<i>Larix laricina</i>)					Alder Buckthorn (<i>Rhamnus alnifolia</i>)					Bromus				
Norway Spruce (<i>Picea abies</i>)					Common Buckthorn (<i>Rhamnus cathartica</i>)			U		Blue-joint Grass (<i>Calamagrostis canadensis</i>)				
White Spruce (<i>Picea glauca</i>)					Smooth Sumac (<i>Rhus glabra</i>)				U	Orchard Grass (<i>Dactylis glomerata</i>)			U	
Black Spruce (<i>Picea mariana</i>)					Staghorn Sumac (<i>Rhus hirta</i>)			U		Poverty Oat Grass (<i>Danthonia spicata</i>)				
Jack Pine (<i>Pinus banksiana</i>)					Wild Black Currant (<i>Ribes americanum</i>)			R		Quack Grass (<i>Elymus repens</i>)			U	
Red Pine (<i>Pinus resinosa</i>)					Prickly Gooseberry (<i>Ribes cynosbati</i>)					Virginia Wild Rye (<i>Elymus virginicus</i>)				
Eastern White Pine (<i>Pinus strobus</i>)					Swamp Black Currant (<i>Ribes lacustre</i>)					<i>Elymus</i>				
Scotch Pine (<i>Pinus sylvestris</i>)					Red Currant (<i>Ribes rubrum</i>)					Fowl Manna Grass (<i>Glyceria striata</i>)				
Canada Yew (<i>Taxus canadensis</i>)					<i>Ribes</i>					<i>Glyceria</i>				
Eastern White Cedar (<i>Thuja occidentalis</i>)					Black Locust (<i>Robinia pseudo-acacia</i>)			R		Rice Cut Grass (<i>Leersia oryzoides</i>)				
Eastern Hemlock (<i>Tsuga canadensis</i>)					Prickly Rose (<i>Rosa acicularis</i>)					Tall Fescue (<i>Lolium arundinaceum</i>)				
					Smooth Rose (<i>Rosa blanda</i>)					<i>Muhlenbergia</i>				
					Multiflora Rose (<i>Rosa multiflora</i>)					Witch-grass (<i>Panicum capillare</i>)				
					<i>Rosa</i>					<i>Panicum</i>				
					Manitoba Maple (<i>Acer negundo</i>)	U				Reed Canary Grass (<i>Phalaris arundinacea</i>)				
					Black Maple (<i>Acer nigrum</i>)				F	Timothy (<i>Phleum pratense</i>)				
					Norway Maple (<i>Acer platanoides</i>)					Common Reed (<i>Phragmites australis</i>)				
					Red Maple (<i>Acer rubrum</i>)					Canada Blue Grass (<i>Poa compressa</i>)				
					Silver Maple (<i>Acer saccharinum</i>)					Fowl Meadow Grass (<i>Poa palustris</i>)				
					Freeman's Maple (<i>Acer X freemanii</i>)					Kentucky Bluegrass (<i>Poa pratensis</i>)				
					Sugar Maple (<i>Acer saccharum</i>)				R	Yellow Foxtail (<i>Setaria pumila</i>)	R			
					Mountain Maple (<i>Acer spicatum</i>)					Green Foxtail (<i>Setaria viridis</i>)				
					Speckled Alder (<i>Alnus incana</i>)									
					Downy Serviceberry (<i>Amelanchier arborea</i>)									
					Serviceberry (<i>Amelanchier sanguinea</i>)									
					Yellow Birch (<i>Betula alleghaniensis</i>)									
					White Birch (<i>Betula papyrifera</i>)									
					European Birch (<i>Betula pendula</i>)									
					Blue Beech (<i>Carpinus caroliniana</i>)									
					Bitternut hickory (<i>Carya cordiformis</i>)				U					
					Shagbark Hickory (<i>Carya ovata</i>)									
					Climbing Bittersweet (<i>Celastrus scandens</i>)									
					Common Hackberry (<i>Celtis occidentalis</i>)									
					Buttonbush (<i>Cephalanthus occidentalis</i>)									
					Ait.-leaved Dogwood (<i>Cornus alternifolia</i>)									
					Silky Dogwood (<i>Cornus amomum</i>)	R								
					Bunchberry (<i>Cornus canadensis</i>)									
					Gray dogwood (<i>Cornus racemosa</i>)	U								
					Round-leaved Dogwood (<i>Cornus rugosa</i>)									
					Red-osier Dogwood (<i>Cornus sericea</i>)	U								
					American Hazel (<i>Corylus americana</i>)				R					
					Beaked Hazel (<i>Corylus comuta</i>)									
					Cockspur Thorn (<i>Crataegus crus-galli</i>)									
					English Hawthorn (<i>Crataegus monogyna</i>)	U								
					Large-fruited Thorn (<i>Crataegus punctata</i>)									
					<i>Crataegus</i> sp.	R								
					<i>Crataegus</i>									
					Bush Honeysuckle (<i>Dierilla lonicera</i>)									
					Russian Olive (<i>Elaeagnus angustifolia</i>)									
					Autumn Olive (<i>Elaeagnus umbellata</i>)									
					Run. Strawberry-bush (<i>Euonymus obovata</i>)									
					American Beech (<i>Fagus grandifolia</i>)									
					Glossy Buckthorn (<i>Frangula alnus</i>)	U								
					White Ash (<i>Fraxinus americana</i>)									
					Black Ash (<i>Fraxinus nigra</i>)									
					Green Ash (<i>Fraxinus pennsylvanica</i>)	F								
					Witch-hazel (<i>Hamamelis virginiana</i>)									
					Winterberry (<i>Ilex verticillata</i>)									
					Butternut (<i>Juglans cinerea</i>)									
					Black Walnut (<i>Juglans nigra</i>)									
					Common Privet (<i>Ligustrum vulgare</i>)									
					Spicebush (<i>Lindera benzoin</i>)									
					Fly Honeysuckle (<i>Lonicera canadensis</i>)									
					Glaucous Honeysuckle (<i>Lonicera dioica</i>)									
					Morrow's Honeysuckle (<i>Lonicera morrowii</i>)									
					Tartarian Honeysuckle (<i>Lonicera tatarica</i>)									
					Common Apple (<i>Malus pumila</i>)	F								
					White Mulberry (<i>Morus alba</i>)									
					Sweet Gale (<i>Myrica gale</i>)									
					Ironwood (<i>Ostrya virginiana</i>)									
					Thicket-creeper (<i>Parthenocissus inserta</i>)	F								
					Ninebark (<i>Physocarpus opulifolius</i>)				R					
					Balsam Poplar (<i>Populus balsamifera</i>)									
					Eastern Cottonwood (<i>Populus deltoides</i>)	F								
					Large-tooth Aspen (<i>Populus grandidentata</i>)									
					Trembling Aspen (<i>Populus tremuloides</i>)									
					Sweet Cherry (<i>Prunus avium</i>)									
					Pin Cherry (<i>Prunus pensylvanica</i>)									
					Black Cherry (<i>Prunus serotina</i>)									
					Choke Cherry (<i>Prunus virginiana</i>)									
					<i>Prunus</i>									
					D - Dominant: represented by large numbers; generally forming >10% ground cover or >25% vegetation cover in any one stratum									
					F - Fairly common (=Abundant In ELC): generally widespread represented by fairly large numbers of individual clumps; usually forming >10% ground cover									
					U - Uncommon (=Occasional In ELC): present as widespread scattered individuals or represented by one or more clumps of many individuals (most species will fall into this category)									
					R - Rare: represented in the polygon by less than about five individuals or small clumps									
					Map Number: JER AH 2	1								
					Date: July 9, 2013	2								
					Surveyors: R/A, IS	3								

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Significant Wildlife Habitat Form

AECOM

Study Area:	BLW JER <u>GSH</u>	Map #:	<u>A17 2</u>
Date:	<u>July 9, 2013</u>	Time Started:	<u>10:00am</u>
Field Staff:	<u>BA, TS</u>	Time Finished:	<u>12:00pm</u>
Weather Conditions:	<u>~30°C, 90%CC BS:1</u>		

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

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

UTMs: _____ Number of nests: _____

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

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

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

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

UTMs: _____ Area of standing water delineated on field map

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

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

Area and soil/substrate of shoreline habitat: _____

Type and abundance of cover in open water habitat: _____

Type and abundance of cover in surrounding habitat: _____

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

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

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

Snake Hibernacula

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

UTMs: _____ Likelihood to extend below frost line: _____

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

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

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

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

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

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

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

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

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

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

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

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

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

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

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

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

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

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

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

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

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

UTMs: _____ Age of oldest trees: _____

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

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

Photo #	Location or Subject	Photo #	Location or Subject

Species of Conservation Concern Habitat and Incidental Wildlife – Jericho



Study Area: SER-AH2

Field Staff: RA, JS

Time Started: 10:00 am

Date (yyyy-mm-dd): 2013-07-09

Feature No.: 295

Time Finished: 12:00 pm

Observed Species List

Species Code	UTM	EV	Notes	Species Code	UTM	EV	Notes
BAOR		SM					
BHCO		SM					
AMGO		SM					
AMRO		SM					
SOSP		SM					

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)

PLANTS

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
American Gromwell (<i>Lithospermum latifolium</i>) - S3 Bloom Time - Spring	Grows in rich deciduous woodlands, wooded floodplains, and shaded riverbanks as well as along the edges of woodlands	FOD7	Y (N) UTM:
A Moss (<i>Astorum muehlenbergianum</i>) - S2 Bloom Time - Spring	Thin soil over level outcrop ledges and on soil under grasses in open prairie.	ALO, TPO	Y (N) UTM:
Autumn Coral –root (<i>Corallorhiza odorathiza</i>) – S2 Bloom Time – Summer to Fall	Found growing in openings of red pine or white pine plantations as well as dry sandy woods.	FOM1, FOM2, CUP3	Y (N) UTM:
Broad Beech Fern (<i>Phegopteris hexagonoptera</i>) – SC Bloom Time- not a flowering plant	Species grows in rich, mature deciduous woods in southern Ontario.		Y (N) UTM:
Burning Bush (<i>Euonymus atropurpureus</i>) – S3	Grows in dry to moist thickets, valleys, and forest edges. Similar Species: European Burning Bush (<i>Euonymus europaeus</i>). Distinctive Feature: Burning Bush has hairs on the underside of leaves while the European species does not.		Y (N) UTM:
Carey's Sedge (<i>Carex careyana</i>) –S2 Bloom Time – May and June	Occurs in rich deciduous woods, often on floodplains and slopes and mesic to dry-mesic hardwood forests.	FOD6, FOD7, FOD9, SWD	Y (N) UTM:
Caughuawaga Hawthron (<i>Crataegus suborbiculata</i>) – S1	Occurs in old fields, poorly managed pastures (<u>fencelines</u>) and roadsides.	CUM1, CUS1, CUT1	Y (N) UTM: Not Observed
Round-leaved Hawthorn (<i>Crataegus lumaria</i>) - S3?	Occurs in old fields, poorly managed pastures (<u>fencelines</u>) and roadsides.	CUM1, CUS1, CUT1	Y (N) UTM: Not Observed
Chinese Hemlock Parsley (<i>Conioselinum chinense</i>) - S2 Bloom Time –summer to fall	Swampy places with deciduous trees, white cedars, tamarack; springy river banks, creek borders, wet borders of streams & rivers. Also calcareous seepage slopes.	SWC1,SWC3,SWC4,SWM1, SWM2,SWM4,SWM5, SWM6	Y (N) UTM:
Cream Violet (<i>Viola striata</i>) – S3 Bloom Time- March- June).	Inhabits rich floodplain forest and low, wet woods.	FOD6, FOD7, FOD9, SWM, SWD	Y (N) UTM:
Double –striped Bluet (<i>Enallagma basidens</i>)-S3	Inhabits fishless ponds, lakes and boggy swamps.	OAO, SA, SWM, SWD	Y (N) UTM:

Species of Conservation Concern Habitat and Incidental Wildlife – Jericho

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Eastern Green-violet (<i>Hybanthus concolor</i>) - S2 <i>Bloom Time –mid March to August</i>	Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks.	ALT1, FOD7	Y (N) UTM:
Green Dragon (<i>Arisaema dracontium</i>) - SC/S3 <i>Bloom Time – May and June</i>	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	FOD6, FOD7, FOD9	Y (N) UTM:
Harbinger-of-spring (<i>Erigenia bulbosa</i>) - S3 <i>Bloom Time – early to late April</i>	Occurs in rich, moist deciduous woods, especially on floodplains.	FOD6, FOD7, FOD8, FOD9	Y (N) UTM:
Hazel Dodder (<i>Cuscuta coryli</i>) –SH	Occurs in open, moist tall-grass prairie and meadows - parasitic on <i>Aster</i> , <i>Heliathus</i> , <i>Monarda</i> , <i>Rubus</i> , <i>Solidago</i> .	RBO, TPO2, CUM1	Y (N) UTM:
Leonard's Small Skullcap (<i>Scutellaria parvula</i>) –S3 <i>Bloom Time – late Spring to early Summer</i>	Occurs on open, rocky ground and prairies.	ALO, TPO	Y (N) UTM:
Mead's Sedge (<i>Carex meadii</i>) –S2 <i>Bloom Time –late spring to early summer</i>	Occurs in prairies and moist or dry open areas.	TPO, CUM1	Y (N) UTM:
Ovate Beak Grass –S1 <i>Bloom Time- mid Summer</i>	prefers riparian woodlands ¹⁴ ; floodplain swamps and river banks.	FOD6, FOD7, FOD9, SWD	Y (N) UTM:
Pawpaw (<i>Asimina triloba</i>) –S3 <i>Bloom Time – March-May</i>	Occurs in moist deciduous woods and stream banks.	FOD6, FOD7, FOD9	Y (N) UTM:
Perfoliate Tinker's-weed (<i>Triosteum perfoliatum</i>) – S1 <i>Bloom Time – May, June, July</i>	Grows in rich, deciduous woods.		Y (N) UTM:
Pumpkin Ash (<i>Fraxinus profunda</i>) – S2?	This species is a wetland obligate and only grows in bottomland swamps and floodplains. Distinctive Feature: the base of the trunk swells outward, resembling a pumpkin in larger trees.		Y (N) UTM:
Riddell's Goldenrod (<i>Oligoneuron riddellii</i>)-SC	Riddell's Goldenrod grows in wet habitats such as wet marshes, moist prairies, fens, old fields and seepy banks.	ALO, TPO, CUM1	Y (N) UTM:
Shellbark Hickory (<i>Carya laciniosa</i>) – S3	Typically found in wet or wet -mesic deciduous forests and along stream banks. Similar Species: Shagbark Hickory. Distinctive Feature: Larger leaves and leaflets of 7.		Y (N) UTM:
Shumard Oak (<i>Quercus shumardii</i>) –SC	Species inhabits mesic and mesic -hydric sites on clay and clay-loam soils with poor drainage.		Y (N) UTM:
Slim-flowered Muhly (<i>Muhlenbergia tenuiflora</i>) – S2	Found in rich deciduous forest dominated by either oak or beech-maple. It can also occur on rocky or sandy soils, wooded dunes, hillsides, and riverbanks.	SDT1, FOD5, FOD9	Y (N) UTM:
Southern Tickseed (<i>Bidens coronata</i>)-S2	Inhabits dry to moist sandy fields and sandy openings in prairies.	TPO, CUM1	Y (N) UTM:
Stiff Gentian (<i>Gentianella quinquefolia</i>) - S2 <i>Bloom Time – late summer to mid fall</i>	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Y (N) UTM:
Stiff Goldenrod (<i>Solidago rigida</i>) –S3 <i>Bloom Time-early June to end of November</i>	Occurs on dry open ground, particularly in prairie remnants; along roadsides and railway, and waste places.	TPO1, CUM1	Y (N) UTM:
Tall Tickseed (<i>Coreopsis tripteris</i>)-S2 <i>Bloom Time-late summer to early fall.</i>	Occurs in prairies and open woods, and thickets.	TPO, TPS, TPW, FOD1, FOD2, FOD3, FOD4, FOD5, CUT1	Y (N) UTM:
Winged –Loosestrife (<i>Lythrum alatum</i>)-S3 <i>Bloom Time- mid to late summer</i>	found in prairies, meadows, open woods, thickets and wet disturbed areas.	TPO, CUM1, FOM, FOD, CUM1, CUT1, MAM2	Y (N) UTM:
Woodland Bulrush (<i>Scirpus expansus</i>) - S1	Grows in seepage areas, stream banks, and marshes. It is predominately found in the Asuable River.		Y (N) UTM:

MAMMALS

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Little Brown Bat (<i>Myotis lucifugus</i>)-SC	This species roosts in caves, quarries, tunnels, hollow trees or buildings but requires nearby wetlands and forest edges for hunting.	FOD, SWD	Y (N) UTM:
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)-SC	The Northern Long-eared Bat roosts and hibernates in mines, caves, and man-made structures but prefers hollow trees in wooded areas	FOD, SWD	Y (N) UTM:
Tri-colored Bat (<i>Perimyotis subflavus</i>)-SC	The Tricoloured Bat is one of the common bats in Ontario. It prefers to roost in trees, cliff crevices, and caves usually in open woodlands that are near water	FOD, SWD	Y (N) UTM:

Species of Conservation Concern Habitat and Incidental Wildlife – Jericho



Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Woodland Vole (<i>Microtus pinetorum</i>)-SC	The Woodland Vole inhabits mature deciduous forests where it can burrow into loose sandy soils and deep humus. Other habitats also include grasslands, meadows, and orchards	FOD	Y (N) UTM:

REPTILES

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Eastern Ribbonsnake (<i>Thamnophis sauritus</i>) - SC	Assessed as SWH. Record species if found.	MAM, MAS	not required.
Milksnake (<i>Lampropeltis triangulum</i>) -SC	Assessed as SWH. Record species if found.	CUM, CUT	not required.
Northern Map Turtle (<i>Graptemys geographica</i>) -SC	Large water bodies with soft bottoms & aquatic veg; basks on logs, rocks, beaches, grassy edges; may nest at some distance from water; aquatic corridors (e.g. stream) required for movement.	OAO, SA	Y (N) UTM:

INSECTS

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Azure Bluet (<i>Enallagma aspersum</i>)- S3	Found in fishless ponds and other small water bodies. Distinctive Features: Male – Large Blue eyespot and mostly black dorsal surface on abdomen with a blue tip; Females: Green eyespots and almost all black dorsal surface and black tip. Similar Species: Common Blue Damselfly – has more blue than black on abdomen.	OAO	Y (N) UTM:
Blue-ringed Dancer (<i>Argia sedula</i>) – S2	Found in streams and rivers of small to medium size and where there is dense herbaceous vegetation along the banks or shores.		Y (N) UTM:
Dusky Dancer (<i>Argia translate</i>) –S3	Inhabits small to medium, slow flowing sandy or rocky streams or large rivers in quite open areas or with wooded banks.	OAO, SA, SWM, SWD	Y (N) UTM: Not Observed

BIRDS

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Bald Eagle (<i>Haliaeetus leucocephalus</i>)-SC	Assessed as SWH. Record species if found.	-	not required.
Hooded Warbler (<i>Wilsonia Citrina</i>) - SC	An area-sensitive species requiring large tracts of mature, closed canopy, deciduous forests. They generally nest above ground and prefer forests with tall trees that are along stream bottoms or at ravine edges	-	Y (N) UTM:
Louisiana Waterthrush (<i>Seiurus motacilla</i>) -SC	<u>Mature forests</u> along steeply sloped ravines adjacent to running water. Trees, bushes, exposed roots, cliffs, banks and mossy logs are favoured nesting spots. <u>Riparian woodlands</u> are preferred stopover sites during migration.	FOD, FOM	Y (N) UTM:

Species at Risk Threatened and Endangered Habitat Assessment – Jericho



Study Area: JER-A14 2 Field Staff: RA, JS Time Started: 10:00am
 Date (yyyy-mm-dd): 2013-07-09 Natural Area: 293 Time Finished: 12:00pm

PLANTS

Species	Habitat Description	Potential Habitat /Species Present (Y/N; UTM; description if present)
American Ginseng (<i>Panax quinquefolius</i>)	In relatively mature deciduous forests, often near the bottom of south-facing slopes, where the microhabitat is warm and well-drained. Deep leaf litter in undisturbed areas of neutral soil (such as over limestone or marble bedrock). Flowers May to August; fruits late summer. FOD5, FOD6, FOD7, FOD9 Soil: Moist (4,5,6) to fresh (2,3).	Habitat: Yes / (No) Species: Yes / No UTM (if required):
Butternut (<i>Juglans cinerea</i>)	Deciduous forests in rich, moist, & well-drained soils often found along streams; may also be found on well-drained gravel sites, especially in limestone areas. Grows alone or in small groups. Shade intolerant, usually occurs along or near edge of deciduous woodlots and hedgerows. Flowers in May; fruits mature late summer. FOD2, FOD5, FOD6, FOD7; mature hedgerows; Soil: dry rocky or moist (4,5,6) to fresh (2,3).	Habitat: Yes / (No) Species: Yes / No UTM (if required):
Drooping Trillium (<i>Trillium flexipes</i>)	Found in rich, mature, deciduous forests usually crossed by streams; grows on dry, circum-neutral, well-drained, sandy clay soils associated with limestone; prefers higher elevations of microsites on floodplains. FOD	Habitat: Yes / (No) Species: Yes / No UTM (if required):
Eastern Flowering Dogwood (<i>Cornus florida</i>)	Woodland borders & sunny openings; hedgerows; understory species in semi-open dry oak-hickory to mesic maple-beech deciduous or mixed forests; sandy soil, more or less clayey. If present, likely planted. Flowers May; fruits mature fall. FOM1, FOM2, FOM3, FOD1, FOD2, FOD5, FOD6; Soil: dry (0) to fresh (1,2,3).	Habitat: Yes / (No) Species: Yes / No UTM (if required):
False Rue-anemone (<i>Enemion biternatum</i>)	Grows in large colonies on open, wooded slopes, on river floodplains with rich soils, and in rich woods and thickets; found in shady areas in mature maple-beech forest; Ontario populations are found near streams in deciduous forests dominated by sugar maple. FOD2, FOD4, FOD5, FOD6, FOD7, FOD9.	Habitat: Yes / (No) Species: Yes / No UTM (if required):
Goldenseal (<i>Hydrastis Canadensis</i>)	Rich moist areas of mature deciduous forests dominated by sugar maple, or in moist floodplain forests dominated by red maples and white oaks. Individuals of this species have been planted but planted individuals are not protected from kill and harm by the ESA. Blooming & fruiting: April to May. FOD5, FOD6, FOD7, FOD9; Soil: Moist (4,5,6)-Fresh (2,3).	Habitat: Yes / (No) Species: Yes / No UTM (if required):
Heart-leaved Plantain (<i>Plantago cordata</i>)	Prefers swampy or seasonally flooded areas with dense overstory; moist deciduous woods, shallow streams, swamps, and wet ditches; commonly grows in cracks of bedrock or in gravel; has an association with limestone quarries and gravel pits. In Ontario, species grows along intermittent streams in mature silver maple swamps. FOD6, FOD7, FOD9, SWD, MAM2.	Habitat: Yes / (No) Species: Yes / No UTM (if required):

REPTILES

Species	Habitat Description	Potential Habitat /Species Present (Y/N; UTM; description if present)
Blanding's Turtle (<i>Emydonidea blandingii</i>)	Freshwater lakes, permanent or temporary pools, slow-flowing streams, marshes, swamps; prefers shallow water, organic soil & dense vegetation; nest in loose substrates, including sand, organic soil, gravel, cobblestone; overwinter in permanent pools ~ 1 m deep, or in slow-flowing streams or in bogs; basks on logs, stumps, or banks. SWT2, SWT3, SWD, SWM, MAS2, SAS1, SAM1 , where open water present.	Habitat: Yes / (No) Species: Yes / No UTM (if required):
Eastern Hognose Snake (<i>Heterodon platirhinos</i>)	Prefers habitats with sandy, well-drained soil and open vegetative cover, such as open woods, thickets, upland fields, pastures, forest edges, savannahs, sandy beaches; dry open mixed or deciduous forest prefer forest areas > 5ha ; often found near water.. BB, SD, SB, TP, FOD1 ; potentially in any suitable habitat with sandy soils.	Habitat: Yes / (No) Species: Yes / No UTM (if required):
Eastern Musk Turtle (<i>Sternotherus odoratus</i>)	Require water > 1 m deep; slow moving water of lakes, streams, marshes and ponds and soft earth to bury into for hibernation; eggs laid in debris or under stumps at water's edge and exposed to direct sunlight. MAM3, MAS2, MAS3, OAO, SA.	Habitat: Yes / (No) Species: Yes / No UTM (if required):
Five-lined Skink (<i>Plestiodon fasciatus</i>)	Found under woody debris such as logs, leaf litter, and sawdust in open areas or edges associated with stabilized dune habitat, open deciduous or mixed woodlands or savanna with sandy substrate; prefers habitat with sandy soil and ground cover. Also can be found on open talus slopes and barren rock. SD, TPS, FOM, FOD ; soil: sandy sites.	Habitat: Yes / (No) Species: Yes / No UTM (if required):
Queensnake (<i>Regina septemvittata</i>)	Highly specialized habitat requirements: aquatic species, seldom found > 3 m from water. (1) Permanent water , flowing or still, with temp ≥18°C throughout most of the active season; (2) abundant cover , e.g. flat rock, (3) abundant crayfish . Rocky, gravelly, or stone stream-bed substrates, swift to moderate current, and woodland surroundings. OAO ; adjacent terrestrial habitat. SA, MAM2, MAM3, SWT2-2, SWT3-2.	Habitat: Yes / (No) Species: Yes / No UTM (if required):
Spotted Turtle (<i>Clemmys guttata</i>)	Occurs in shallow bodies of water such as streams, ponds, wet meadows, marshes or swamps with aquatic vegetation, logs or clumps of vegetation for basking; nest is dug near water; habitat contains soft, muddy soil, sphagnum moss, sedge tussocks, cattails, water lilies and water-loving shrubs; nests in groups near	Habitat: Yes / (No) Species: Yes / No UTM (if required):

Species at Risk Threatened and Endangered Habitat Assessment – Jericho

Species	Habitat Description	Potential Habitat /Species Present (Y/N; UTM; description if present)
	man-made dykes, muskrat nests, base of grass tussocks. SWD, SWM, MAM3, MAS2, MAS3, OAO, SA.	
Spiny Softshell (<i>Apalone spinifera</i>)	Occurs in marshy creeks, fast-flowing rivers, lakes, impoundments, bays, marshy lagoons, ditches and ponds near rivers. Requires: sand or gravel nesting areas close to water in absence of vegetation; shallow, muddy or sandy areas to bury in; deep pools for hibernation; basking areas such as sand bars, mud flats, grassy beaches, logs or rocks exposed to sunlight; and suitable habitat for crayfish as a food source.	Habitat: Yes / <input checked="" type="radio"/> No Species: Yes / No UTM (if required):

BIRDS

Species	Habitat Description	Potential Habitat /Species Present (Y/N; UTM; description if present)
Acadian Flycatcher (<i>Empidonax virescens</i>)	Occurs in the understory of large, closed-canopy, mature, undisturbed forests (<40 ha) and well-wooded swamps and ravines; Species hang nests over water but do not occupy dry woods; has associations with maple-beech, oak-maple, and beech-hemlock forests. FOD5-2, FOD2-4, FOM3, SWD.	Habitat: Yes / <input checked="" type="radio"/> No Species: Yes / No UTM (if required):
Barn Swallow (<i>Hirundo rustica</i>)	Nearly all nests are made on man-made structures such as barns, garages, sheds, boat houses, bridges, road culverts, eaves and wharfs. Farmlands or rural areas; forages over open country especially near bodies of water. Where Barn Swallows observed foraging only, is not Significant habitat. Forages in TPO, CUM1, MAM, MAS, OAO, SAS1, SAM1, SAF1 ; nest on suitable structures.	Habitat: Yes / <input checked="" type="radio"/> No Species: Yes / No UTM (if required):
Bobolink (<i>Dolichonyx oryzivorus</i>)	Nests primarily in forage crops, particularly hayfields and pastures , dominated by a variety of species such as clover, tall grasses and broadleaved plants; also occurs in wet prairie, graminoid peatlands and abandoned fields; generally requires tracts of grassland >5 ha . Also nests in lightly grazed pastures, fallow and abandoned fields and shallow grassy marshes. TPO, TPS, CUM1, MAM2	Habitat: Yes / <input checked="" type="radio"/> No Species: Yes / No UTM (if required):
Cerulean Warbler (<i>Dendroica cerulea</i>)	Large tracts of mature deciduous forests with tall trees and an open understory; forests may be in wet bottomland areas or upland locations; also nests in older, second-growth deciduous forests and mature deciduous swamps. FOD2, FOD5, FOD6, FOD7	Habitat: Yes / <input checked="" type="radio"/> No Species: Yes / No UTM (if required):
Chimney Swift (<i>Chaetura pelagica</i>)	Formerly nested in the trunks of large, hollow trees. Today, mainly use chimneys or abandoned buildings as nesting sites. May forage over wide variety of habitats. It requires dead trees >30 cm for roosting and possibly nesting. Where swifts observed foraging only, is not Significant habitat. Forages in TPO, CUM1, MAM, MAS, OAO, SAS1, SAM1, SAF1 ; nest in any communities where buildings with chimneys present.	Habitat: Yes / <input checked="" type="radio"/> No Species: Yes / No UTM (if required):
Eastern Meadowlark (<i>Sturnella magna</i>)	Most common in native grasslands, savannah, old fields, hayfields, lightly grazed pastures, weedy meadows, fields with occasional shrubs. Minimum area of grassland required is about 5 ha. TPO, TPS, CUM1, MAM2, MAS2	Habitat: Yes / <input checked="" type="radio"/> No Species: Yes / No UTM (if required):
Least Bittern (<i>Ixobrychus exilis</i>)	Occurs in large marshes (especially cattail) with good interspersions of emergents and open water. Nests sit on platforms of stiff stems; nests within 10m of open water. Prefers large marshes that have relatively stable water levels throughout the nesting period. MAS2-1, MAS3-1, SA, OAO.	Habitat: Yes / <input checked="" type="radio"/> No Species: Yes / No UTM (if required):
Whip-poor-will (<i>Caprimulgus vociferus</i>)	Generally prefer semi-open deciduous or mixed forests or patchy forests with clearings; areas with little ground cover also preferred; .Generally associated with >100 ha forests. CUW, FOD, FOM, FOD1.	Habitat: Yes / <input checked="" type="radio"/> No Species: Yes / No UTM (if required):

Additional Species at Risk Presence Observed:

Species Code	UTM	EV	Notes

Evidence Codes (EV)

Breeding Bird (Possible)

Breeding Bird (Probable)

Breeding Bird (Confirmed)

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=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)

Map Document: (N:\projects\0-aecom\60155032\2010\Final\GIS\spatial\MXDs\FinalMap\MXD\Project_ELC_Visual\JER_ELC_Only\60155032_JER_ELC_Survey_Site_34_JER3115.mxd) 5/4/2012 -- 10:07:18 AM



Legend

- Property Boundary
- Natural Feature and ID
- ELC Polygon Boundary
- ANSI
- Evaluated Wetlands - PSW
- Watercourse
- 171.5m Turbine Buffer
- 120m Area of Investigation

Project Location

- GE Turbine
- Met Tower
- Collection Line
- Access Road
- Crane Path
- Transmission Line
- Substation
- Disturbance Area

0.5 ha

Basemapping from Ontario Ministry of Natural Resources
 Orthophotography: 2010
 Turbine Layout: April 9, 2012

N
W E
S

Metres
 0 25 50 100
 1:3,000
 UTM Zone 17N, NAD 83

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Jericho ELC Survey
T1_JER1001/1077
 March 2013
 Project 60155032

AECOM

ELC
Community Description and Classification

Map #: VER/018? 1001 Polygon: CUM1
 Surveyor(s): Jess Pate + Shelly Johns Date: July 4, 2013 Time start: 3:00 PM
 finish: 4:00 PM
 UTMZ: _____ UTMZ: _____ UTMN: _____

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input 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 checked="" type="checkbox"/> Graminoid <input checked="" 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 checked="" type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

Stand Description

Layer	HT	CVR	Species In Order of Decreasing Dominance (up to 4 sp) (>> Much Greater Than; > Greater Than; = About Equal To)
1	3	1	FRAPPEN > FRAMER
2	-	-	
3	5/4	1	MALPUMI > CRATAEGUS SA > Rhoicath
4	5/6	6	Solidago sp - Symphytrichium - VICCRAC - DACQUOM

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:	<input type="checkbox"/> 0 < 10	<input type="checkbox"/> 10-24	<input type="checkbox"/> N 25-50	<input type="checkbox"/> N > 50
BA:	Standing Snags:	<input type="checkbox"/> N < 10	<input type="checkbox"/> N 10-24	<input type="checkbox"/> N 25-50	<input type="checkbox"/> N > 50
	Deadfall / Logs:	<input type="checkbox"/> N < 10	<input type="checkbox"/> N 10-24	<input type="checkbox"/> N 25-50	<input type="checkbox"/> N > 50

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

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

Ecosite:	<u>Cultural Meadow</u>	Code:	<u>CUM1</u>
Vegetation Type:	<u>Dry-Moist Old Field Meadow</u>	Code:	<u>CUM1-1</u>
Inclusion:	<u>Cultural Mineral Spilled Marsh</u>	Code:	<u>MAS2-1</u>
Complex:		Code:	

Community Profile Diagram/Comments

Community had scattered trees & shrubs throughout but not enough to call it a cultural thicket community

Notes:

Tree Tally by Species

Prism Factor 2

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

Soils Ontario and ELC Soils Description

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

Plant Species List
2012

Trees & Shrubs					Tree & Shrubs					Graminoids				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Conifers					Deciduous					Grasses				
Balsam Fir (<i>Abies balsamea</i>)					White Oak (<i>Quercus alba</i>)					Giant Redtop (<i>Agrostis gigantea</i>)				
Common Juniper (<i>Juniperus communis</i>)					Bur Oak (<i>Quercus macrocarpa</i>)					Redtop (<i>Agrostis stolonifera</i>)				
Eastern Red Cedar (<i>Juniperus virginiana</i>)					Red Oak (<i>Quercus rubra</i>)					Awless Brome (<i>Bromus inermis</i>)	F			
Tamarack (<i>Larix laricina</i>)					Alder Buckthorn (<i>Rhamnus alnifolia</i>)					<i>Bromus</i>				
Norway Spruce (<i>Picea abies</i>)					Common Buckthorn (<i>Rhamnus cathartica</i>)	U				Blue-joint Grass (<i>Calamagrostis canadensis</i>)				
White Spruce (<i>Picea glauca</i>)					Smooth Sumac (<i>Rhus glabra</i>)					Orchard Grass (<i>Dactylis glomerata</i>)	D			
Black Spruce (<i>Picea mariana</i>)					Staghorn Sumac (<i>Rhus hirta</i>)					Poverty Oat Grass (<i>Danthonia spicata</i>)				
Jack Pine (<i>Pinus banksiana</i>)					Wild Black Currant (<i>Ribes americanum</i>)					Quack Grass (<i>Elymus repens</i>)	F			
Red Pine (<i>Pinus resinosa</i>)					Prickly Gooseberry (<i>Ribes cynosbati</i>)					Virginia Wild Rye (<i>Elymus virginicus</i>)				
Eastern White Pine (<i>Pinus strobus</i>)					Swamp Black Currant (<i>Ribes lacustre</i>)					<i>Elymus</i>				
Scotch Pine (<i>Pinus sylvestris</i>)					Red Currant (<i>Ribes rubrum</i>)					Fowl Manna Grass (<i>Glyceria striata</i>)				
Canada Yew (<i>Taxus canadensis</i>)					<i>Ribes</i>					<i>Glyceria</i>				
Eastern White Cedar (<i>Thuja occidentalis</i>)					Black Locust (<i>Robinia pseudo-acacia</i>)					Rice Cut Grass (<i>Leersia oryzoides</i>)				
Eastern Hemlock (<i>Tsuga canadensis</i>)					Prickly Rose (<i>Rosa acicularis</i>)					Tall Fescue (<i>Lolium arundinaceum</i>)				
					Smooth Rose (<i>Rosa blanda</i>)					Muhlenbergia				
					Multiflora Rose (<i>Rosa multiflora</i>)					Witch-grass (<i>Panicum capillare</i>)				
					<i>Rosa</i>					<i>Panicum</i>				
Deciduous					Com. Blackberry (<i>Rubus allegheniensis</i>)					Reed Canary Grass (<i>Phalaris arundinacea</i>)				
Manitoba Maple (<i>Acer negundo</i>)					Wild Red Raspberry (<i>Rubus idaeus</i>)	K				Timothy (<i>Phleum pratense</i>)				
Black Maple (<i>Acer nigrum</i>)					Black Raspberry (<i>Rubus occidentalis</i>)					Common Reed (<i>Phragmites australis</i>)				
Norway Maple (<i>Acer platanoides</i>)					Purple-fl. Raspberry (<i>Rubus odoratus</i>)					Canada Blue Grass (<i>Poa compressa</i>)				
Red Maple (<i>Acer rubrum</i>)					Dwarf Raspberry (<i>Rubus pubescens</i>)					Fowl Meadow Grass (<i>Poa palustris</i>)				
Silver Maple (<i>Acer saccharinum</i>)					<i>Rubus</i>					Kentucky Bluegrass (<i>Poa pratensis</i>)				
Freeman's Maple (<i>Acer X freemanii</i>)					Peach-leaved Willow (<i>Salix amygdaloides</i>)					Yellow Foxtail (<i>Setaria pumila</i>)				
Sugar Maple (<i>Acer saccharum</i>)					Bebb's Willow (<i>Salix bebbiana</i>)					Green Foxtail (<i>Setaria viridis</i>)				
Mountain Maple (<i>Acer spicatum</i>)					Pussy Willow (<i>Salix discolor</i>)									
Speckled Alder (<i>Alnus incana</i>)					Missouri Willow (<i>Salix eriocephala</i>)									
Downy Serviceberry (<i>Amelanchier arborea</i>)					Sandbar Willow (<i>Salix exigua</i>)									
Serviceberry (<i>Amelanchier sanguinea</i>)					Shining Willow (<i>Salix lucida</i>)									
Yellow Birch (<i>Betula alleghaniensis</i>)					Black Willow (<i>Salix nigra</i>)									
White Birch (<i>Betula papyrifera</i>)					Slender Willow (<i>Salix petiolaris</i>)									
European Birch (<i>Betula pendula</i>)					<i>Salix</i>									
Blue Beech (<i>Carpinus caroliniana</i>)					Hybrid Crack Willow (<i>Salix X rubens</i>)									
Bitternut hickory (<i>Carya cordiformis</i>)					Black-berried Elder (<i>Sambucus nigra</i>)									
Shagbark Hickory (<i>Carya ovata</i>)					Red-berried Elder (<i>Sambucus racemosa</i>)									
Climbing Bittersweet (<i>Celastrus scandens</i>)					Buffalobery (<i>Shepherdia canadensis</i>)									
Common Hackberry (<i>Celtis occidentalis</i>)					Eur. Mountain Ash (<i>Sorbus aucuparia</i>)									
Buttonbush (<i>Cephalanthus occidentalis</i>)					Narrow Meadow-sweet (<i>Spiraea alba</i>)									
Alt-leaved Dogwood (<i>Cornus alternifolia</i>)					Common Lilac (<i>Syringa vulgaris</i>)									
Silky Dogwood (<i>Cornus amomum</i>)					Poison-ivy (<i>Toxicodendron rydbergii</i>)									
Bunchberry (<i>Cornus canadensis</i>)					Climbing Poison-ivy (<i>Toxicodendron radicans</i>)									
Gray dogwood (<i>Cornus racemosa</i>)					White Elm (<i>Ulmus americana</i>)									
Round-leaved Dogwood (<i>Cornus rugosa</i>)					Siberian Elm (<i>Ulmus pumila</i>)									
Red-osier Dogwood (<i>Cornus sericea</i>)					Slippery Elm (<i>Ulmus rubra</i>)									
American Hazel (<i>Corylus americana</i>)					Low Blueberry (<i>Vaccinium angustifolium</i>)									
Beaked Hazel (<i>Corylus cornuta</i>)					Maple-leaf Viburnum (<i>Viburnum acerifolium</i>)									
Cockspur Thorn (<i>Crataegus crus-galli</i>)					Hobblebush (<i>Viburnum lantanoides</i>)									
English Hawthorn (<i>Crataegus monogyna</i>)					Nannyberry (<i>Viburnum lentago</i>)									
Large-fruited Thorn (<i>Crataegus punctata</i>)					Guelder-Rose (<i>Viburnum opulus</i>)									
<i>Crataegus mollis</i> ?				R	Downy Arrow-wood (<i>Vib. rafinesquianum</i>)									
<i>Crataegus</i>					Riverbank Grape (<i>Vitis riparia</i>)				F					
Bush Honeysuckle (<i>Lonicera konicera</i>)					Am. Prickly-ash (<i>Zanthoxylum americanum</i>)									
Russian Olive (<i>Elaeagnus angustifolia</i>)														
Autumn Olive (<i>Elaeagnus umbellata</i>)														
Run. Strawberry-bush (<i>Euonymus obovata</i>)														
American Beech (<i>Fagus grandifolia</i>)														
Glossy Buckthorn (<i>Frangula alnus</i>)														
White Ash (<i>Fraxinus americana</i>)				R										
Black Ash (<i>Fraxinus nigra</i>)														
Green Ash (<i>Fraxinus pennsylvanica</i>)				R										
Witch-hazel (<i>Hamamelis virginiana</i>)														
Winterberry (<i>Ilex verticillata</i>)														
Butternut (<i>Juglans cinerea</i>)														
Black Walnut (<i>Juglans nigra</i>)														
Common Privet (<i>Ligustrum vulgare</i>)														
Spicebush (<i>Lindera benzoin</i>)														
Fly Honeysuckle (<i>Lonicera canadensis</i>)														
Glaucous Honeysuckle (<i>Lonicera dioica</i>)														
Morrow's Honeysuckle (<i>Lonicera morrowii</i>)														
Tartarian Honeysuckle (<i>Lonicera tatarica</i>)														
Common Apple (<i>Malus pumila</i>)				R										
White Mulberry (<i>Morus alba</i>)														
Sweet Gale (<i>Myrica gale</i>)														
Ironwood (<i>Ostrya virginiana</i>)														
Thicket-creeper (<i>Parthenocissus inserta</i>)														
Ninebark (<i>Physocarpus opulifolius</i>)														
Balsam Poplar (<i>Populus balsamifera</i>)														
Eastern Cottonwood (<i>Populus deltoides</i>)														
Large-tooth Aspen (<i>Populus grandidentata</i>)														
Trembling Aspen (<i>Populus tremuloides</i>)														
Sweet Cherry (<i>Prunus avium</i>)														
Pin Cherry (<i>Prunus pensylvanica</i>)				R										
Black Cherry (<i>Prunus serotina</i>)														
Choke Cherry (<i>Prunus virginiana</i>)														
<i>Prunus</i>														
D - Dominant: represented by large numbers, generally forming >10% ground cover or >25% vegetation cover in any one stratum														
F - Fairly common (Abundant in ELC): generally widespread represented by fairly large numbers of individual clumps; usually forming >10% ground cover														
U - Uncertain (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: JER 1018+1001														
Date: July 4, 2013														
Surveyors: JP + SL														

Plant Species List
2012

Dicot Herbs - Asteraceae						Dicot Herbs						Dicot Herbs					
1	2	3	4	5		1	2	3	4	5		1	2	3	4	5	
Common Yarrow (<i>Achillea millefolium</i>)						Shepherd's Purse (<i>Capsella bursa-pastoris</i>)						Kidney-leaf Buttercup (<i>Ranunculus abortivus</i>)					
White Snakeroot (<i>Ageratina altissima</i>)	U					Cutleaf Toothwort (<i>Cardamine concatenata</i>)						Tall Buttercup (<i>Ranunculus acris</i>)					
Com. Ragweed (<i>Ambrosia artemisiifolia</i>)	U					Toothwort (<i>Cardamine diphylla</i>)						Hooked Buttercup (<i>Ranunculus recurvatus</i>)					
Giant Ragweed (<i>Ambrosia trifida</i>)	U					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>)	U					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 blebersteinii</i>)						Water-hemlock (<i>Cicuta virosa</i>)						Bouncing Bet (<i>Saponaria officinalis</i>)					
Brown Knapweed (<i>Centaurea jacea</i>)						Enchanter's Nightshade (<i>Circaea lutetiana</i>)						Marsh Skullcap (<i>Scutellaria galericulata</i>)					
Chicory (<i>Cichorium intybus</i>)						Carolina Spring Beauty (<i>Claytonia caroliniana</i>)						Mad Dog Skullcap (<i>Scutellaria lateriflora</i>)					
Canada Thistle (<i>Cirsium arvense</i>)						Virginia Spring Beauty (<i>Claytonia virginica</i>)						White Campion (<i>Silene latifolia</i>)					
Bull Thistle (<i>Cirsium vulgare</i>)						Virgin's-bower (<i>Clematis virginiana</i>)						Bladder Campion (<i>Silene vulgaris</i>)					
Horseweed (<i>Coryza canadensis</i>)						Field Bindweed (<i>Convolvulus arvensis</i>)	U					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>)					
Philadelphica Fleabane (<i>Eng. philadelphicus</i>)	U					Wild Carrot (<i>Daucus carota</i>)				U		Black Nightshade (<i>Solanum ptychanthum</i>)					
<i>Erigeron</i>						Deptford Pink (<i>Dianthus ameria</i>)						Grassleaf Stitchwort (<i>Stellaria graminea</i>)					
Joe-pye-weed (<i>Eupatorium maculatum</i>)						Squirrel-com (<i>Dicentra canadensis</i>)						Common Chickweed (<i>Stellaria media</i>)					
Boneset (<i>Eupatorium perfoliatum</i>)						Dutchman's-breeches (<i>Dicentra cucullaria</i>)						Early Meadow-rue (<i>Thalictrum dioicum</i>)					
Large-leaved Aster (<i>Eurybia macrophylla</i>)						Wild Teasel (<i>Dipsacus fullonum</i>)				U		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>)					U
Elecampane (<i>Inula helenium</i>)						Small-fl. Willow-herb (<i>Epilobium parviflorum</i>)						White Clover (<i>Trifolium repens</i>)					U
Prickly Lettuce (<i>Lactuca scariola</i>)						<i>Epilobium</i>						<i>Trifolium</i>					
<i>Lactuca</i>						Worm Mustard (<i>Erysimum cheiranthoides</i>)						Stinging Nettle (<i>Urtica dioica</i>)					
Ox-eye Daisy (<i>Leucanthemum vulgare</i>)	U					<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>)						Veronica					
Zig-zag Goldenrod (<i>Solidago flexicaulis</i>)						Herb-robert (<i>Geranium robertianum</i>)						Cow Vetch (<i>Vicia cracca</i>)					U
Giant Goldenrod (<i>Solidago gigantea</i>)						Yellow Avens (<i>Geum alepnicum</i>)						Vicia					
Early Goldenrod (<i>Solidago juncea</i>)						White Avens (<i>Geum canadense</i>)						Pariwinkle (<i>Vinca minor</i>)					
Gray Goldenrod (<i>Solidago nemoralis</i>)						Urban Avens (<i>Geum urbanum</i>)						Dog Violet (<i>Viola conspersa</i>)					
<i>Solidago</i>						Dame's Rocket (<i>Hesperis matronalis</i>)						Yellow Violet (<i>Viola pubescens</i>)					
Field Sow-thistle (<i>Sonchus arvensis</i>)	R					Virg. Water-leaf (<i>Hydrophyllum virginianum</i>)						Com. Blue Violet (<i>Viola sororia</i>)					
<i>Sonchus</i>						Com. St. John's-wort (<i>Hypericum perforatum</i>)	U					Viola					
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>)	F					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>)	U					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>)						<i>Lobelia</i>						Monocot Herbs					
Com. Goatsbeard (<i>Tragopogon pratensis</i>)	U					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>)					
						Fringed Loosestrife (<i>Lysimachia ciliata</i>)						Jack-in-the-pulpit (<i>Arisaema triphyllum</i>)					
<i>Cirsium</i> sp.	U					Moneywort (<i>Lysimachia nummularia</i>)						Asparagus (<i>Asparagus officinalis</i>)					
						<i>Lysimachia</i>						Wild Calla (<i>Calla palustris</i>)					
<i>Solidago</i> sp.	F					Purple Loosestrife (<i>Lythrum salicaria</i>)						Bluebead-lily (<i>Clintonia borealis</i>)					
						Black Medick (<i>Medicago lupulina</i>)					U	Garden Lily-of-valley (<i>Convallaria majalis</i>)					
						Alfalfa (<i>Medicago sativa</i>)					U	Yel. Lady's Slipper (<i>Cypripedium parviflorum</i>)					
						White Sweet-clover (<i>Melilotus alba</i>)					U	Canada Waterweed (<i>Elodea canadensis</i>)					
						Yellow Sweet-clover (<i>Melilotus officinalis</i>)						Helleborine (<i>Epipactis helleborine</i>)					
						Wild Mint (<i>Mentha arvensis</i>)						Yellow Trout Lily (<i>Erythronium americanum</i>)					
						Wild Bergamot (<i>Monarda fistulosa</i>)						Blue-flag Iris (<i>Iris versicolor</i>)					
Other Dicot Herbs						Small Forget-me-not (<i>Myosotis laxa</i>)						Orange Day Lily (<i>Hemerocallis fulva</i>)					
White Baneberry (<i>Actaea pachypoda</i>)						Forget-me-not (<i>Myosotis scorpioides</i>)						Lesser Duckweed (<i>Lemna minor</i>)					
Red Baneberry (<i>Actaea rubra</i>)						Water-cress (<i>Nasturtium officinale</i>)						Starry Duckweed (<i>Lemna trisulca</i>)					
Tall Agrimony (<i>Agrimonia gryposepala</i>)						Com. Evening-primrose (<i>Oenothera biennis</i>)					R	Wild Lily-of-valley (<i>Maianthemum canadense</i>)					
Garlic Mustard (<i>Alliaria petiolata</i>)					R	Sweet-cicely (<i>Osmorhiza berterii</i>)						False Solom Seal (<i>Maianthemum racemosum</i>)					
Green Amaranth (<i>Amaranthus retroflexus</i>)						Yellow Wood-sorrel (<i>Oxalis stricta</i>)					U	Star False Solomon (<i>Maianthemum stellatum</i>)					
Hog-peanut (<i>Amphicarpa bracteata</i>)						Wild Parsnip (<i>Pastinaca sativa</i>)						True Solomon Seal (<i>Polygonatum pubescens</i>)					
Pearly Everlasting (<i>Anaphalis margaritacea</i>)						English Plantain (<i>Plantago lanceolata</i>)						Pickering-weed (<i>Portulaca cordata</i>)					
Canada Anemone (<i>Anemone canadensis</i>)						Common Plantain (<i>Plantago major</i>)						Curly-leaf Pondweed (<i>Potamogeton crispus</i>)					
Ivy Hepatica (<i>Anemone acutiloba</i>)						Rugel's Plantain (<i>Plantago rugelii</i>)						Sago Pondweed (<i>Potamogeton perfoliatus</i>)					
Thimbleweed (<i>Anemone virginiana</i>)						May-apple (<i>Podophyllum peltatum</i>)						<i>Potamogeton</i>					
Purple Angelica (<i>Angelica atropurpurea</i>)						Pale Smartweed (<i>Polygonum lapathifolium</i>)						<i>Potamogeton</i>					
Indian Hemp (<i>Apocynum cannabinum</i>)						Lady's-thumb (<i>Polygonum persicaria</i>)						Broad-leaved Arrowhead (<i>Sagittaria latifolia</i>)					
Wild Sarsaparilla (<i>Aralia nudicaulis</i>)						Virginia Knotweed (<i>Polygonum virginianum</i>)						Blue-eyed-grass (<i>Sisyrinchium montanum</i>)					
Spikenard (<i>Aralia racemosa</i>)						<i>Polygonum</i>						Herb. Carrion Flower (<i>Smilax herbacea</i>)					
Wild Ginger (<i>Asarum canadense</i>)						<i>Polygonum</i>						Bristly Greenbrier (<i>Smilax hispida</i>)					
Swamp Milkweed (<i>Asclepias incarnata</i>)						Rough Cinquefoil (<i>Potentilla norvegica</i>)						Nodding Ladies' Tresses (<i>Spiranthes cernua</i>)					
Common Milkweed (<i>Asclepias syriaca</i>)	U					Rough-fruited Cinquefoil (<i>Potentilla recta</i>)						Rose Twisted-stalk (<i>Streptopus lancoletus</i>)					
Yellow Rocket (<i>Barbarea vulgaris</i>)						Common Cinquefoil (<i>Potentilla simplex</i>)						Skunk-cabbage (<i>Symplocarpus foetidus</i>)					
False Nettle (<i>Boehmeria cylindrica</i>)						<i>Potentilla</i>						Purple Trillium (<i>Trillium erectum</i>)					
Black Mustard (<i>Brassica nigra</i>)						Heal-all (<i>Prunella vulgaris</i>)						White Trillium (<i>Trillium grandiflorum</i>)					
Marsh-marigold (<i>Caltha palustris</i>)						Shinleaf (<i>Pyrola elliptica</i>)						Large-flowered Bellwort (<i>Uvularia grandiflora</i>)					
Creeping Bellflower (<i>Campanula rapunculoides</i>)						<i>CHENOPADIUM album</i>	U										

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 - Uncertain (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: JER1018+1061 1 CUM-1 4
 Date: July 4, 2013 2 5
 Surveyors: JP+SL 3

Significant Wildlife Habitat Form

AECOM

Study Area:	BLW <u>JER</u> GSH	Map #:	TJER 1001/1077
Date:	July 4, 2013	Time Started:	3:00 pm
Field Staff:	Jan Kettle + Shelby Johns	Time Finished:	4:00 pm
Weather Conditions:	28°C, overcast		

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

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

UTMs: _____ Number of nests: _____

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

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

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

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

UTMs: _____ Area of standing water delineated on field map

Water depth (m): ~ 0.2m % open water: 5% % emergent vegetation: 95%

Potential to hold water until at least July in most years: Yes / No

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

Standing in watercourse - pair of sandhill cranes with 1 young

Area and soil/substrate of shoreline habitat: marsh/mud with some water

Type and abundance of cover in open water habitat: cattail/groves in areas outside of open water

Type and abundance of cover in surrounding habitat: surrounding areas dominated by agriculture

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

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

Observed 2 breeding sandhill cranes with 1 young

Complete Vernal Pool Habitat Description Form

Snake Hibernacula

Fissured rock/foundation or rock/debris pile present:

No Yes (if yes, photograph and complete the following)

UTMs: _____ Likelihood to extend below frost line: _____

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

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

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

Seeps and Springs

(FOC, FOM, FOD, SWC, SWM, SWD)

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

UTMs: _____ Description (indicator species, etc):

NHA Site Investigation - Significant Wildlife Habitat Form

AECOM

Colonial Nesting Bird Breeding Habitat (Bank and Cliff Swallows)
 (CUM1, CUT1, CUS, BLO1, BLS1, BLT1, CLO1, CLS1, CLT1)
 Eroding bank, sandy hill, pits, steep slope or rock face present:
 No Yes (if yes, photograph and complete the following)
 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, MAMS)
 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 > 1Sha
 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
	Silver spotted Skipper - Lepidoptera		
	Widow Skimmer - Odonata		
	Red-spotted purple - Lepidoptera		
	RTHA - Ob		
	JoSP - VO		
	SACR - Ob (Breeding pair to young)		
	AMCR - Ob		
	GRSP - VO		
	COYE - VO		

Cabbage white - Lepid.
 Skipper sp. - Lepid.

Species of Conservation Concern Habitat and Incidental Wildlife – Jericho



Study Area: Jericho

Field Staff: Jessalita Snoddy, Lohas

Time Started: 3:00 PM

Date (yyyy-mm-dd): 2013-07-04

Feature No.: JER101841001

Time Finished: 4:00 PM

Observed Species List

Species Code	UTM	Evidence Codes (EV)	Notes	Species Code	UTM	Evidence Codes (EV)	Notes
Silver spotted skipper		Ob					
Widow skimmer		Ob					
Red-spotted purple		Ob					
RTHA		Ob					
SOSP		VO					
SANDHILL CRANE		Ob	breeding pair with young				
AMCR		Ob					
GRSP		VO					
COYE		VO					
Cabbage white		Ob					
Skipper sp.		Ob					

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)

PLANTS

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
American Gromwell (<i>Lithospermum latifolium</i>) - S3 Bloom Time - Spring	Grows in rich deciduous woodlands, wooded floodplains, and shaded riverbanks as well as along the edges of woodlands	FOD7	Y (N) UTM:
A Moss (<i>Astomum muehlenbergianum</i>) - S2 Bloom Time - Spring	Thin soil over level outcrop ledges and on soil under grasses in open prairie.	ALO, TPO	Y (N) UTM:
Autumn Coral -root (<i>Corallorhiza odororhiza</i>) - S2 Bloom Time - Summer to Fall	Found growing in openings of red pine or white pine plantations as well as dry sandy woods.	FOM1, FOM2, CUP3	Y (N) UTM:
Broad Beech Fern (<i>Phegopteris hexagonoptera</i>) - SC Bloom Time- not a flowering plant	Species grows in rich, mature deciduous woods in southern Ontario.		Y (N) UTM:
Burning Bush (<i>Euonymus atropurpureus</i>) - S3	Grows in dry to moist thickets, valleys, and forest edges. Similar Species: European Burning Bush (<i>Euonymus europaeus</i>). Distinctive Feature: Burning Bush has hairs on the underside of leaves while the European species does not.		Y (N) UTM:
Carey's Sedge (<i>Carex careyana</i>) - S2 Bloom Time - May and June	Occurs in rich deciduous woods, often on floodplains and slopes and mesic to dry-mesic hardwood forests.	FOD6, FOD7, FOD9, SWD	Y (N) UTM:
Caughuawaga Hawthorn (<i>Crataegus suborbiculata</i>) - S1	Occurs in <u>old fields</u> , poorly managed pastures, fencelines and roadsides.	(CUM1), CUS1, CUT1	(Y) N UTM: not observed
Round-leaved Hawthorn (<i>Crataegus lumaria</i>) - S3?	Occurs in <u>old fields</u> , poorly managed pastures, fencelines and roadsides.	(CUM1), CUS1, CUT1	(Y) N UTM: not observed
Chinese Hemlock Parsley (<i>Conioselinum chinense</i>) - S2 Bloom Time - summer to fall	Swampy places with deciduous trees, white cedars, tamarack; springy river banks, creek borders, wet borders of streams & rivers. Also calcareous seepage slopes.	SWC1, SWC3, SWC4, SWM1, SWM2, SWM4, SWM5, SWM6	Y (N) UTM:
Cream Violet (<i>Viola striata</i>) - S3 Bloom Time- March-June).	Inhabits rich floodplain forest and low, wet woods.	FOD6, FOD7, FOD9, SWM, SWD	Y (N) UTM:
Double -striped Bluet (<i>Enallagma basidens</i>) - S3	Inhabits fishless ponds, lakes and boggy swamps. <u>Small Stream</u>	(OAO), SA, SWM, SWD	(Y) N UTM: not observed

Species of Conservation Concern Habitat and Incidental Wildlife – Jericho

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Eastern Green-violet (<i>Hybanthus concolor</i>) - S2 <i>Bloom Time – mid March to August</i>	Occurs in rich, wet-mesic floodplain forests as well as mesic forests over limestone. Includes floodplains and river banks.	ALT1, FOD7	Y (N) UTM:
Green Dragon (<i>Arisaema dracontium</i>) - SC/S3 <i>Bloom Time – May and June</i>	Species found in damp deciduous forest and along river streams. Particularly Maple forest and forest dominated by Red Ash and White Elm.	FOD6, FOD7, FOD9	Y (N) UTM:
Harbinger-of-spring (<i>Eriogonum bulbosum</i>) - S3 <i>Bloom Time – early to late April</i>	Occurs in rich, moist deciduous woods, especially on floodplains.	FOD6, FOD7, FOD8, FOD9	Y (N) UTM:
Hazel Dodder (<i>Cuscuta coryli</i>) –SH	Occurs in open, moist tall-grass prairie and meadows - parasitic on <i>Aster</i> , <i>Heliopsis</i> , <i>Monarda</i> , <i>Rubus</i> , <i>Solidago</i> .	RBO, TPO2, CUM1	Y (N) UTM: not observed
Leonard's Small Skullcap (<i>Scutellaria parvula</i>) –S3 <i>Bloom Time – late Spring to early Summer</i>	Occurs on open, rocky ground and prairies.	ALO, TPO	Y (N) UTM:
Mead's Sedge (<i>Carex meadii</i>) –S2 <i>Bloom Time –late spring to early summer</i>	Occurs in prairies and moist or dry open areas.	TPO, CUM1	Y (N) UTM: not observed
Ovate Beak Grass –S1 <i>Bloom Time- mid Summer</i>	prefers riparian woodlands ¹⁴ ; floodplain swamps and river banks.	FOD6, FOD7, FOD9, SWD	Y (N) UTM:
Pawpaw (<i>Asimina triloba</i>) –S3 <i>Bloom Time – March-May</i>	Occurs in moist deciduous woods and stream banks.	FOD6, FOD7, FOD9	Y (N) UTM:
Perfoliate Tinker's-weed (<i>Triosteum perfoliatum</i>) – S1 <i>Bloom Time – May, June, July</i>	Grows in rich, deciduous woods.		Y (N) UTM:
Pumpkin Ash (<i>Fraxinus profunda</i>) – S2?	This species is a wetland obligate and only grows in bottomland swamps and floodplains. Distinctive Feature: the base of the trunk swells outward, resembling a pumpkin in larger trees.		Y (N) UTM:
Riddell's Goldenrod (<i>Oligoneuron riddellii</i>)-SC	Riddell's Goldenrod grows in wet habitats such as wet marshes, moist prairies, fens, old fields and seepy banks.	ALO, TPO, CUM1	Y (N) UTM: not observed
Shellbark Hickory (<i>Carya laciniosa</i>) – S3	Typically found in wet or wet -mesic deciduous forests and along stream banks. Similar Species: Shagbark Hickory. Distinctive Feature: Larger leaves and leaflets of 7.		Y (N) UTM:
Shumard Oak (<i>Quercus shumardii</i>) –SC	Species inhabits mesic and mesic -hydric sites on clay and clay-loam soils with poor drainage.		Y (N) UTM:
Slim-flowered Muhly (<i>Muhlenbergia tenuiflora</i>) – S2	Found in rich deciduous forest dominated by either oak or beech-maple. It can also occur on rocky or sandy soils, wooded dunes, hillsides, and riverbanks.	SDT1, FOD5, FOD9	Y (N) UTM:
Southern Tickseed (<i>Bidens coronata</i>)-S2	Inhabits dry to moist sandy fields and sandy openings in prairies.	TPO, CUM1	Y (N) UTM: not observed
Stiff Gentian (<i>Gentianella quinquefolia</i>) - S2 <i>Bloom Time – late summer to mid fall</i>	Found in moist soils of streambanks, edges of woods, wet prairies, marshy meadows, bluffs and wooded hillsides.	BLO1, BLS1, BLT1, TPO2, TPS2, TPW2, MAM2, FOD7	Y (N) UTM:
Stiff Goldenrod (<i>Solidago rigida</i>) –S3 <i>Bloom Time- early June to end of November</i>	Occurs on dry open ground, particularly in prairie remnants; along roadsides and railway, and waste places.	TPO1, CUM1	Y (N) UTM: not observed
Tall Tickseed (<i>Coreopsis tripteris</i>)-S2 <i>Bloom Time-late summer to early fall.</i>	Occurs in prairies and open woods, and thickets.	TPO, TPS, TPW, FOD1, FOD2, FOD3, FOD4, FOD5, CUT1	Y (N) UTM:
Winged –Loosestrife (<i>Lythrum alatum</i>)-S3 <i>Bloom Time- mid to late summer</i>	found in prairies, meadows, open woods, thickets and wet disturbed areas.	TPO, CUM1, FOM, FOD, CUM1, CUT1, MAM2	Y (N) UTM: not observed
Woodland Bulrush (<i>Scirpus expansus</i>) - S1	Grows in seepage areas, stream banks, and marshes. It is predominately found in the Asuable River.		Y (N) UTM:

MAMMALS

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Little Brown Bat (<i>Myotis lucifugus</i>)-SC	This species roosts in caves, quarries, tunnels, hollow trees or buildings but requires nearby wetlands and forest edges for hunting.	FOD, SWD	Y (N) UTM:
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)-SC	The Northern Long-eared Bat roosts and hibernates in mines, caves, and man-made structures but prefers hollow trees in wooded areas	FOD, SWD	Y (N) UTM:
Tri-colored Bat (<i>Perimyotis subflavus</i>)-SC	The Tricoloured Bat is one of the common bats in Ontario. It prefers to roost in trees, cliff crevices, and caves usually in open woodlands that are near water	FOD, SWD	Y (N) UTM:

Species of Conservation Concern Habitat and Incidental Wildlife – Jericho



Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Woodland Vole (<i>Microtus pinetorum</i>)-SC	The Woodland Vole inhabits mature deciduous forests where it can burrow into loose sandy soils and deep humus. Other habitats also include grasslands, meadows, and orchards	FOD	Y (N) UTM:

REPTILES

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Eastern Ribbonsnake (<i>Thamnophis sauritus</i>) - SC	Assessed as SWH. Record species if found.	MAM, MAS	not required.
Milksnake (<i>Lampropeltis triangulum</i>) -SC	Assessed as SWH. Record species if found.	CUM, CUT	not required.
Northern Map Turtle (<i>Graptemys geographica</i>) -SC	Large water bodies with soft bottoms & aquatic veg; basks on logs, rocks, beaches, grassy edges; may nest at some distance from water; aquatic corridors (e.g. stream) required for movement.	OAO, SA	Y (N) UTM:

INSECTS

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Azure Bluet (<i>Enallagma aspersum</i>)-S3	Found in fishless ponds and other small water bodies. Distinctive Features: Male – Large Blue eyespot and mostly black dorsal surface on abdomen with a blue tip; Females: Green eyespots and almost all black dorsal surface and black tip. Similar Species: Common Blue Damselfly – has more blue than black on abdomen.	OAO	Y (N) UTM: not observed
Blue-ringed Dancer (<i>Argia sedula</i>) – S2	Found in streams and rivers of small to medium size and where there is dense herbaceous vegetation along the banks or shores.		Y (N) UTM: not observed
Dusky Dancer (<i>Argia translate</i>) –S3	Inhabits small to medium, slow flowing sandy or rocky streams or large rivers in quite open areas or with wooded banks.	OAO SA, SWM, SWD	Y (N) UTM: not observed

BIRDS

Species	Habitat Description	ELC	Habitat Present (Y/N; UTM; description of habitat if present)
Bald Eagle (<i>Haliaeetus leucocephalus</i>)-SC	Assessed as SWH. Record species if found.	-	not required.
Hooded Warbler (<i>Wilsonia Citrina</i>) - SC	An area-sensitive species requiring large tracts of mature, closed canopy, deciduous forests. They generally nest above ground and prefer forests with tall trees that are along stream bottoms or at ravine edges	-	Y (N) UTM: not observed
Louisiana Waterthrush (<i>Seiurus motacilla</i>) -SC	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.	FOD, FOM	Y (N) UTM: not observed



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 UTM Zone 17N, NAD83
 1:1,000
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Jenicho Wind Energy Centre
 NHA Amendment
T-Line Field Map
 July 2013
 Project 60155032

AECOM Figure 1

ELC Community Description and Classification

Map #: NA 340 - T Line Polygon: CUMI-1
 Surveyor(s): RA/AV Date: Aug 1, 2013 Time start: 10:40am finish: 11:25am
 UTMZ: UTMN:

Polygon Description

System	Substrate	Topographic Feature	Plant Form	Community
<input checked="" type="checkbox"/> Terrestrial <input type="checkbox"/> Wetland <input type="checkbox"/> Aquatic <hr/> <input type="checkbox"/> Open Water <input type="checkbox"/> Shallow Water <input checked="" type="checkbox"/> Surficial Dep. <input type="checkbox"/> Bedrock <hr/> <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Cultural <hr/> <input checked="" type="checkbox"/> Open <input type="checkbox"/> Shrub <input type="checkbox"/> Tree	<input type="checkbox"/> Organic <input checked="" type="checkbox"/> Mineral Soil <input type="checkbox"/> Parent Min. <input type="checkbox"/> Acidic Bedrk <input type="checkbox"/> Basic Bedrk <input type="checkbox"/> Carb. Bedrk	<input type="checkbox"/> Lacustrine <input type="checkbox"/> Riverine <input type="checkbox"/> Bottomland <input type="checkbox"/> Terrace <input type="checkbox"/> Valley Slope <input checked="" type="checkbox"/> Tableland <input checked="" 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 checked="" 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 checked="" type="checkbox"/> Meadow <input type="checkbox"/> Prairie <input type="checkbox"/> Thicket <input type="checkbox"/> Savannah <input type="checkbox"/> Woodland <input type="checkbox"/> Forest <input type="checkbox"/> Plantation

Stand Description

Layer	HT	CVR	Species in Order of Decreasing Dominance (up to 4 sp) (> Much Greater Than; > Greater Than; = About Equal To)
1		Q	
2		Q	
3			
4	6	4	B GNIGR > POAPRA > SO A TI

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

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

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

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

Ecosite:	Mineral Cultural Meadow	Code:	CUMI
Vegetation Type:	Dry Moist Old Field Meadow	Code:	CUMI-1
Inclusion:		Code:	-
Complex:		Code:	-

Community Profile Diagram/Comments

Notes:

Tree Tally by Species

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

Soils Ontario and ELC Soils Description

Pit/Auger #	Site Metrics		Soil Horizon Description		Summary
	UTM	Slope	Moisture Regime	Drainage	
1					
2					
3					
4					

Plant Species List
2012

Tree & Shrubs	1	2	3	4	5	Tree & Shrubs	1	2	3	4	5	Graminoids	1	2	3	4	5	
Conifers																		
Balsam Fir (<i>Abies balsamea</i>)						White Oak (<i>Quercus alba</i>)												
Common Juniper (<i>Juniperus communis</i>)						Bur Oak (<i>Quercus macrocarpa</i>)												
Eastern Red Cedar (<i>Juniperus virginiana</i>)						Red Oak (<i>Quercus rubra</i>)												
Tamarack (<i>Larix laricina</i>)						Alder Buckthorn (<i>Rhamnus alnifolia</i>)												
Norway Spruce (<i>Picea abies</i>)						Common Buckthorn (<i>Rhamnus cathartica</i>)												
White Spruce (<i>Picea glauca</i>)						Smooth Sumac (<i>Rhus glabra</i>)												
Black Spruce (<i>Picea mariana</i>)						Staghorn Sumac (<i>Rhus hirta</i>)												
Jack Pine (<i>Pinus banksiana</i>)						Wild Black Currant (<i>Ribes americanum</i>)												
Red Pine (<i>Pinus resinosa</i>)						Prickly Gooseberry (<i>Ribes cynosbati</i>)												
Eastern White Pine (<i>Pinus strobus</i>)						Swamp Black Currant (<i>Ribes lacustre</i>)												
Scotch Pine (<i>Pinus sylvestris</i>)						Red Currant (<i>Ribes rubrum</i>)												
Canada Yew (<i>Taxus canadensis</i>)						<i>Ribes</i>												
Eastern White Cedar (<i>Thuja occidentalis</i>)						Black Locust (<i>Robinia pseudo-acacia</i>)												
Eastern Hemlock (<i>Tsuga canadensis</i>)						Prickly Rose (<i>Rosa acicularis</i>)												
						Smooth Rose (<i>Rosa blanda</i>)												
						Multiflora Rose (<i>Rosa multiflora</i>)												
						<i>Rosa</i>												
Deciduous																		
Manitoba Maple (<i>Acer negundo</i>)						Com. Blackberry (<i>Rubus allegheniensis</i>)												
Black Maple (<i>Acer nigrum</i>)						Wild Red Raspberry (<i>Rubus idaeus</i>)												
Norway Maple (<i>Acer platanoides</i>)						Black Raspberry (<i>Rubus occidentalis</i>)												
Red Maple (<i>Acer rubrum</i>)						Purple-4. Raspberry (<i>Rubus odoratus</i>)												
Silver Maple (<i>Acer saccharinum</i>)						Dwarf Raspberry (<i>Rubus pubescens</i>)												
Freeman's Maple (<i>Acer X. freemanii</i>)						<i>Rubus</i>												
Mountain Maple (<i>Acer spicatum</i>)						Peach-leaved Willow (<i>Salix amygdaloides</i>)												
Spotted Alder (<i>Alnus incana</i>)						Bebb's Willow (<i>Salix bebbiana</i>)												
Downy Serviceberry (<i>Amelanchier arborea</i>)						Pussy Willow (<i>Salix discolor</i>)												
Serviceberry (<i>Amelanchier sanguinea</i>)						Miscout Willow (<i>Salix enoccephala</i>)												
Yellow Birch (<i>Betula alleghaniensis</i>)						Sandbar Willow (<i>Salix exigua</i>)												
White Birch (<i>Betula papyrifera</i>)						Shining Willow (<i>Salix lucida</i>)												
European Birch (<i>Betula pendula</i>)						Black Willow (<i>Salix nigra</i>)												
Blue Beech (<i>Carpinus caroliniana</i>)						<i>Salix</i>												
Bitternut Hickory (<i>Carya cordiformis</i>)						Hybrid Crack Willow (<i>Salix X. rubens</i>)												
Shagbark Hickory (<i>Carya ovata</i>)						Black-berried Elder (<i>Sambucus nigra</i>)												
Climbing Bittersweet (<i>Celastrus scandens</i>)						Red-berried Elder (<i>Sambucus racemosa</i>)												
Common Hackberry (<i>Celtis occidentalis</i>)						Burflaborry (<i>Shepherdia canadensis</i>)												
Buttonbush (<i>Cephalanthus occidentalis</i>)						Eur. Mountain Ash (<i>Sorbus aucuparia</i>)												
All-leaved Dogwood (<i>Cornus alternifolia</i>)						Narrow Meadow-sweet (<i>Spiraea alba</i>)												
Silky Dogwood (<i>Cornus amomum</i>)						Common Lilac (<i>Syringa vulgaris</i>)												
Bunchberry (<i>Cornus canadensis</i>)						Poison-ivy (<i>Toxicodendron rydbergii</i>)												
Gray dogwood (<i>Cornus racemosa</i>)						Climbing Poison-ivy (<i>Toxicodendron radicans</i>)												
Red-osier Dogwood (<i>Cornus sericea</i>)						White Elm (<i>Ulmus americana</i>)												
Beaked Hazel (<i>Corylus cornuta</i>)						Siberian Elm (<i>Ulmus pumila</i>)												
Cockspur Thorn (<i>Crataegus crus-galli</i>)						Slippery Elm (<i>Ulmus rubra</i>)												
English Hawthorn (<i>Crataegus monogyna</i>)						Low Blueberry (<i>Vaccinium angustifolium</i>)												
<i>Crataegus</i>						Maple-leaf Viburnum (<i>Viburnum acerifolium</i>)												
<i>Crataegus</i>						Hobblebush (<i>Viburnum lentago</i>)												
Bush Honeysuckle (<i>Diervilla lonicera</i>)						Nannyberry (<i>Viburnum lentago</i>)												
Russian Olive (<i>Elaeagnus angustifolia</i>)						Gualder-Rose (<i>Viburnum opulus</i>)												
Autumn Olive (<i>Elaeagnus umbellata</i>)						Downy Arrow-wood (<i>Vib. raimdesquianum</i>)												
Run. Strawberry-bush (<i>Euconymus obovata</i>)						Riverbank Grape (<i>Vitis riparia</i>)												
American Beech (<i>Fagus grandifolia</i>)						Am. Prickly-ash (<i>Zanthoxylum americanum</i>)												
Glossy Buckthorn (<i>Fraxinus alnus</i>)																		
White Ash (<i>Fraxinus americana</i>)																		
Black Ash (<i>Fraxinus nigra</i>)																		
Green Ash (<i>Fraxinus pennsylvanica</i>)						Ferns & Allies												
Witch-hazel (<i>Hamamelis virginiana</i>)						Lady Fern (<i>Athyrium filix-femina</i>)												
Winterberry (<i>Ilex verticillata</i>)						Rattlesnake Fern (<i>Botrychium virginianum</i>)												
Butternut (<i>Juglans cinerea</i>)						Bulbet. Wood Fern (<i>Cystopteris bulbifera</i>)												
Black Walnut (<i>Juglans nigra</i>)						Spin. Wood Fern (<i>Dryopteris carthusiana</i>)												
Common Privet (<i>Ligustrum vulgare</i>)						Crested Wood Fern (<i>Dryopteris cristata</i>)												
Spicebush (<i>Lindera benzoin</i>)						Marginal Wood Fern (<i>Dryopteris marginalis</i>)												
Fly Honeysuckle (<i>Lonicera canadensis</i>)						<i>Dryopteris</i>												
Glaucous Honeysuckle (<i>Lonicera dioica</i>)						Ostrich Fern (<i>Matteuccia struthiopteris</i>)												
Morrow's Honeysuckle (<i>Lonicera morrowii</i>)						Sensitive Fern (<i>Onoclea sensibilis</i>)												
Tartarian Honeysuckle (<i>Lonicera tatarica</i>)						Cinnamon Fern (<i>Osmunda cinnamomea</i>)												
White Mulberry (<i>Morus alba</i>)						Interrupted Fern (<i>Osmunda claytoniana</i>)												
Sweet Gale (<i>Myrica gale</i>)						Royal Fern (<i>Osmunda regalis</i>)												
Ironwood (<i>Ostrya virginiana</i>)						Christmas Fern (<i>Polystichum acrostichoides</i>)												
Tricket-creeper (<i>Parthenocissus inserta</i>)						Eastern Bracken-fern (<i>Pteridium aquilinum</i>)												
Ninebark (<i>Physocarpus opulifolius</i>)						Marsh Fern (<i>Thelypteris palustris</i>)												
Balsam Poplar (<i>Populus balsamifera</i>)																		
Eastern Cottonwood (<i>Populus deltoides</i>)						Field Horsetail (<i>Equisetum arvense</i>)												
Large-tooth Aspen (<i>Populus grandidentata</i>)						Scouring-rush (<i>Equisetum hyemale</i>)												
Trembling Aspen (<i>Populus tremuloides</i>)						Variiegated Horsetail (<i>Equisetum variegatum</i>)												
Sweet Cherry (<i>Prunus avium</i>)						<i>Equisetum</i>												
Pin Cherry (<i>Prunus pensylvanica</i>)						Shining Clubmoss (<i>Lycopodium lucidulum</i>)												
Black Cherry (<i>Prunus serotina</i>)						Ground-pine (<i>Lycopodium obscurum</i>)												
<i>Prunus</i>																		

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

Map Number: NA 340-T-L-10
 Date: Aug 1, 2013
 Surveyors: RA, AW

Plant Species List
2012

	Dicot Herbs - Asteraceae					Dicot Herbs					Dicot Herbs					
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
Common Yarrow (<i>Achillea millefolium</i>)						Shepherd's Purse (<i>Capsella bursa-pastoris</i>)									Kidney-leaf Buttercup (<i>Ranunculus abortivus</i>)	
White Snakeroot (<i>Ageratina altissima</i>)						Cutleaf Toothwort (<i>Cardamine concatenata</i>)									Tall Buttercup (<i>Ranunculus acris</i>)	
Com. Ragweed (<i>Ambrosia artemisiifolia</i>)						Toothwort (<i>Cardamine diphylla</i>)									Hooked Buttercup (<i>Ranunculus recurvatus</i>)	
Giant Ragweed (<i>Ambrosia trifida</i>)						Penn. Blitter-creas (<i>Cardamine pensylvanica</i>)									<i>Ranunculus</i>	
Field Pusytops (<i>Anthemina 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>)									Blitter Dock (<i>Rumex obtusifolius</i>)	
Nodding Beggar-ticks (<i>Bidens cernua</i>)						Turtleneck (<i>Chelone glabra</i>)									Bloodroot (<i>Sanguinaria canadense</i>)	
Devil's Beggar-ticks (<i>Bidens frondosa</i>)						Spotted Water-henlock (<i>Cicuta maculata</i>)									Black Snakeroot (<i>Sanicula marilandica</i>)	
Spotted Knapweed (<i>Centaura eiebersteinii</i>)						Water-henlock (<i>Cicuta virosa</i>)									Bouncing Bet (<i>Saponaria officinalis</i>)	
Brown Knapweed (<i>Centaura jacea</i>)						Enchanter's Nighthade (<i>Circaea lutetiana</i>)									Marsh Skullcap (<i>Scutellaria galericulata</i>)	
Chicory (<i>Cichorium intybus</i>)						Carolina Spring Beauty (<i>Claytonia caroliniana</i>)									Mad Dog Skullcap (<i>Scutellaria lateriflora</i>)	
Canada Thistle (<i>Cirsium arvense</i>)						Virginia Spring Beauty (<i>Claytonia virginica</i>)									White Campion (<i>Silene latifolia</i>)	
Bull Thistle (<i>Cirsium vulgare</i>)						Virgin's-bower (<i>Clematis virginiana</i>)									Bladder Campion (<i>Silene vulgaris</i>)	
Horseweed (<i>Conyza canadensis</i>)						Field Bindweed (<i>Convolvulus arvensis</i>)									Hemlock Water-panship (<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>Erng. philadelphicus</i>)						Wild Carrot (<i>Daucus carota</i>)									Black Nightshade (<i>Solanum elaeagnifolium</i>)	
Joe-pye-weed (<i>Eupatorium maculatum</i>)						Deftford Pink (<i>Dianthus armeria</i>)									Grassleaf Stitchwort (<i>Stellaria graminea</i>)	
Boneset (<i>Eupatorium perfoliatum</i>)						Squirrel-ear (<i>Dianthus canadensis</i>)									Common Chickweed (<i>Stellaria media</i>)	
Joe-pye-weed (<i>Eupatorium maculatum</i>)						Dutchman's-breaches (<i>Diarrhiza cucullata</i>)									Early Meadow-rue (<i>Thalictrum dioicum</i>)	
Large-leaved Aster (<i>Eurybia macrophylla</i>)						Wild Teasel (<i>Dipsacus filiformis</i>)									Tail Meadow-rue (<i>Thalictrum pubescens</i>)	
Flat-top Goldenrod (<i>Euthamia graminifolia</i>)						Wild Cucumber (<i>Echinocystis lobata</i>)									Field Penny-creas (<i>Thlaspi arvense</i>)	
Orange Hawkweed (<i>Heracleum aurantiacum</i>)						Viper's Bugloss (<i>Echium vulgare</i>)									Foamflower (<i>Tiarella cordifolia</i>)	
Field Hawkweed (<i>Heracleum caespitosum</i>)						Northern Willow-herb (<i>Epilobium ciliatum</i>)									Star-flower (<i>Theridialis borealis</i>)	
<i>Heracleum</i>						Hairy Willow-herb (<i>Epilobium hirsutum</i>)									Red Clover (<i>Trifolium pratense</i>)	
Elecampane (<i>Inula helenium</i>)						Small-ft. Willow-herb (<i>Epilobium parviflorum</i>)									White Clover (<i>Trifolium repens</i>)	
Prickly Lettuce (<i>Lactuca serriola</i>)						<i>Epilobium</i>									<i>Trifolium</i>	
Lactuca						Worm Mustard (<i>Erysimum cheiranthoides</i>)									Stinging Nettle (<i>Urtica dioica</i>)	
Ok-eye Daisy (<i>Leucanthemum vulgare</i>)						<i>Euphorbia</i>									Greater Bladderwort (<i>Utricularia vulgaris</i>)	
Pineapple-weed (<i>Matricaria discolora</i>)						Hemp Nettle (<i>Galeopsis tetrahit</i>)									Common Mullen (<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>)	
Blue-stem Goldenrod (<i>Solidago canadensis</i>)						Spotted Geranium (<i>Geranium maculatum</i>)									<i>Veronica</i>	
Zig-zag Goldenrod (<i>Solidago flexicaulis</i>)						Hero-robert (<i>Geranium robertianum</i>)									Cow Vetch (<i>Vicia cracca</i>)	
Early Goldenrod (<i>Solidago gigantea</i>)						Yellow Avens (<i>Geum alepcticum</i>)									<i>Vicia</i>	
Early Goldenrod (<i>Solidago juncea</i>)						White Avens (<i>Geum canadense</i>)									Penwinkle (<i>Vinca minor</i>)	
Gray Goldenrod (<i>Solidago nemoralis</i>)						Urban Avens (<i>Geum urbanum</i>)									Dog Violet (<i>Viola conspersa</i>)	
<i>Solidago</i>						Dame's Rocket (<i>Hesperis matronalis</i>)									Yellow Violet (<i>Viola pubescens</i>)	
Field Sow-thistle (<i>Sonchus olerensis</i>)						Virg. Water-leaf (<i>Hydrophyllum virginianum</i>)									Com. Blue Violet (<i>Viola sororia</i>)	
<i>Sonchus</i>						Com. St. John's-wort (<i>Hypericum perforatum</i>)									<i>Viola</i>	
Heart-leaf Aster (<i>Symph. cordifolium</i>)						Spotted Jewelweed (<i>Impatiens capensis</i>)										
Heath Aster (<i>Symphotrichum ericoides</i>)						Wood Nettle (<i>Laportea canadensis</i>)										
Tail 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. Gronwell (<i>Lithospermum officinale</i>)										
Purple-stem Aster (<i>Symph. puniccus</i>)						Butter & Eggs (<i>Liliana vulgare</i>)										
Common Tansy (<i>Tanacetum vulgare</i>)						Great Lobelia (<i>Lobelia siphilitica</i>)										
Common Dandelion (<i>Taraxacum officinale</i>)						<i>Lobelia</i>										
Com. Goatsbeard (<i>Tragopogon pratensis</i>)						Cul-leaf Bugleweed (<i>Lycopus americanus</i>)										
Coltsfoot (<i>Tussilago farfara</i>)						Northern Bugleweed (<i>Lycopus uniflorus</i>)										
						Fringed Loosestrife (<i>Lysimachia ciliata</i>)										
						Moneywort (<i>Lysimachia nummularia</i>)										
						<i>Lysimachia</i>										
						Purple Loosestrife (<i>Lythrum salicaria</i>)										
						Black Medick (<i>Medicago lupulina</i>)										
						Alfalfa (<i>Medicago sativa</i>)										
						White Sweet-clover (<i>Melilotus alba</i>)										
						Yellow Sweet-clover (<i>Melilotus officinalis</i>)										
						Wild Mint (<i>Mentha arvensis</i>)										
						Wild Bergamot (<i>Monarda fistulosa</i>)										
						Small Forget-me-not (<i>Myosotis laxa</i>)										
						Forget-me-not (<i>Myosotis scorpioides</i>)										
						Water-creas (<i>Masturtium officinale</i>)										
						Com. Evening-primrose (<i>Oenothera biennis</i>)										
						Sweet-csaly (<i>Osmorhiza berterii</i>)										
						Yellow Wood-sorrel (<i>Oxalis stricta</i>)										
						Wild Parsnip (<i>Pastinaca sativa</i>)										
						English Plantain (<i>Plantago lanceolata</i>)										
						Common Plantain (<i>Plantago major</i>)										
						Rugel's Plantain (<i>Plantago rugelii</i>)										
						May-apple (<i>Podophyllum peltatum</i>)										
						Pale Smartweed (<i>Polygonum lapathifolium</i>)										
						Lady's-thumb (<i>Polygonum persicaria</i>)										
						Virginia Knotweed (<i>Polygonum virginianum</i>)										
						<i>Polygonum</i>										
						Rough Cinquefoil (<i>Potentilla norvegica</i>)										
						Rough-fruited Cinquefoil (<i>Potentilla recta</i>)										
						Common Cinquefoil (<i>Potentilla simplex</i>)										
						<i>Potentilla</i>										
						Heal-all (<i>Prunella vulgaris</i>)										
						Shin-leaf (<i>Pyrola elliptica</i>)										

D - Dominant: represented by large numbers, generally forming >10% ground cover or >25% vegetation cover in any one stream
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Map Number: NA340-T-Line Date: Aug 1, 2013 Surveyors: PA AV

CUM-1 community

Significant Wildlife Habitat Form

AECOM

Study Area: BLW (JER) GSH Map #: 340 (T-LINE)
 Date: Aug 1 2013 Time Started: 10:40am
 Field Staff: RAYAL Time Finished: 11:25am
 Weather Conditions: Sunny/overcast

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

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

Waterfowl 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):

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)

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

UTMs: _____

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)

Rocky island or peninsula present: _____

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

UTMs: _____

Mudflat present: _____

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

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

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

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

No

Yes (if yes, photograph and complete the following)

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

UTMs: _____

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)

Age of oldest trees: _____

UTMs: _____

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