APPENDIX A ENVIRONMENTAL PROTECTION PLAN SUGGESTED TABLE OF CONTENTS

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APPENDIX B WETLAND CHARACTERISTICS

WETLAND	WETLAND	LANDSCAPE	LANDEODM	WATER ELOW	COU TYPE	SURFACE/HYDROLOGIC	WETLAND	DOMINA	NT VEGETATION		WATERCOURSE/WATER BODY	
ID	TYPE	POSITION	LANDFORM	WATER FLOW	SOIL TYPE	CONDITIONS	BOUNDARY	Herbs	Shrubs	Trees	PRESENT	
1	Treed swamp	Terrene	Basin		` ' '		Moderate to steep	- New York fern (<i>Thelypteris</i> noveboracensis) - cinnamon fern (<i>Osmunda</i> cinnamomea)	- red maple (Acer rubrum)	None	None observed	
2	Treed swamp	Terrene	Basin	Outflow (assumed)	Organic (A1 - histosol)	1) Saturated at surface 2) Water stained leaves 3) Surface water - 30 cm 4) Pit and mound undulations	Moderate to steep	- cinnamon fern - New York fern - bunchberry (Cornus canadensis)	- speckled alder (Alnus incana rugosa) - false holly (Nemopanthus mucronata)	- black spruce (<i>Picea mariana)</i> - red maple	None observed	
3	Treed swamp	Terrene	Basin	Outflow (assumed)	,	Saturated at surface Water stained leaves Si and mound undulations	Moderate to steep	- cinnamon fern	- balsam fir (<i>Abies</i> balsamea) - black spruce	- black spruce - red maple	None observed	
4	Treed swamp	Terrene	Basin	Outflow	Organic (A1 - histosol)	1) Saturated at surface	Gentle to moderate	- tawny cotton-grass (<i>Eriophorum virginicum</i>) - bunchberry	speckled alder	- black spruce - red maple - yellow birch (<i>Betula</i> alleghaniensis)	None observed	
5	Treed swamp	Terrene	Basin	Outflow	Organic (A1 - histosol)	Saturated at surface Water stained leaves Surface water Sediment deposits	Moderate	- interupted fern (<i>Osmunda</i> claytoniana) - cinnamon fern - goldthread (Coptis trifolia)	- black spruce - red maple	- black spruce - red maple	A drainage channel drains the wetland to the southeast	
6	Treed swamp	Terrene	Basin	Isolated	Organic (A1 - histosol)	Saturated at surface Water stained leaves	Gentle to Moderate	- balsam fir (seedlings) - goldthread	- black spruce - red maple	- black spruce - red maple	None observed	
7	Treed swamp	Terrene	Slope/Seepage	Throughflow (perennial)	Organic (A1 - histosol)	Saturated at surface Drainage patterns	Gentle	- swamp dewberry (Rubus hispidus) - New York fern - sensitive fern (Onoclea sensibilis) - cinnamon fern	(Hamamelis virginiana) -	- red maple white ash (<i>Fraxinus</i> <i>americana</i>) balsam fir	Input provided at southwestern wetland boundary via a drainage channel. The wetland drains to the north away from the assessment area.	
8	Treed swamp	Lotic stream	Basin	Throughflow	· ,	Saturated at surface Groundwater witin 20 cm Drainage patterns	Gentle		- white ash - balsam fir - red maple	- red maple - white ash	An ephemeral stream enters the northwestern wetland boundary and exits to the southeast.	
9	Shrub swamp	Lotic stream	Floodplain/basin	Throughflow	,	Drainage patterns Water stained leaves Saturated at surface	Gentle	- cinnamon fern	- witch hazel - white ash - yellow birch	- red maple	Wetland exists as a riparian shrub swamp adjacent to Fall Brook located to the east.	
10	Shrub swamp	Lotic stream	Basin	Throughflow	Organic (A1 - histosol)	1) Groundwater within 15 cm 2) Drainage patterns 3) Saturated at surface 4) Water stained leaves	Gentle		- witch hazel - white ash - yellow birch - red maple	None	Watercourse 3 runs through the wetland habitat from south to north.	
11	Treed swamp	Terrene	Basin	Outflow		1) Groundwater within 20 cm 2) Drainage patterns 3) Water stained leaves	Moderate	- cinnamon fern - New York fern - bluejoint (Calamagrostis canadensis)	- balsam fir - red maple - Canada holly	- red maple - balsam fir - yellow birch	None observed	



APPENDIX C PLANT LISTS

Common Name	Scientific Name	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
Vascular Plants					
Chinese Hemlock-parsley	Conioselinum chinense	Yellow	Not Listed	Not Listed	Not Listed
F	1.72 and the section	N 11	Special	Special	
Eastern Lilaeopsis	Lilaeopsis chinensis	Yellow	Concern	Concern	Vulnerable
Blunt Sweet Cicely	Osmorhiza depauperata	Red	Not Listed	Not Listed	Not Listed
Smooth Sweet Cicely	Osmorhiza longistylis	Red	Not Listed	Not Listed	Not Listed
Clustered Sanicle	Sanicula odorata	Red	Not Listed	Not Listed	Not Listed
Golden Alexanders	Zizia aurea	Red	Not Listed	Not Listed	Not Listed
Rosy Pussytoes	Antennaria rosea	Red	Not Listed	Not Listed	Not Listed
Parlin's Pussytoes	Antennaria parlinii	Red	Not Listed	Not Listed	Not Listed
Estuary Beggarticks	Bidens hyperborea	Red	Not Listed	Not Listed	Not Listed
Hyssop-leaved Fleabane	Erigeron hyssopifolius	Yellow	Not Listed	Not Listed	Not Listed
Philadelphia Fleabane	Erigeron philadelphicus	Yellow	Not Listed	Not Listed	Not Listed
Coastal Plain Joe-pye-weed	Eutrochium dubium	Red	Not Listed	Not Listed	Not Listed
Robinson's Hawkweed	Hieracium robinsonii	Yellow	Not Listed	Not Listed	Not Listed
Big-leaved Marsh-elder	Iva frutescens	Yellow	Not Listed	Not Listed	Not Listed
Hairy Lettuce	Lactuca hirsuta	Yellow	Not Listed	Not Listed	Not Listed
Water Beggarticks	Bidens beckii	Yellow	Not Listed	Not Listed	Not Listed
Cut-Leaved Coneflower	Rudbeckia laciniata	Yellow	Not Listed	Not Listed	Not Listed
Seabeach Ragwort	Senecio pseudoarnica	Yellow	Not Listed	Not Listed	Not Listed
Hairy Goldenrod	Solidago hispida	Red	Not Listed	Not Listed	Not Listed
White Snakeroot	Ageratina altissima	Red	Not Listed	Not Listed	Not Listed
Boreal Aster	Symphyotrichum boreale	Yellow	Not Listed	Not Listed	Not Listed
Wavy-leaved Aster	Symphyotrichum undulatum	Yellow	Not Listed	Not Listed	Not Listed
Fringed Blue Aster	Symphyotrichum ciliolatum	Yellow	Not Listed	Not Listed	Not Listed
Pale Jewelweed	Impatiens pallida	Yellow	Not Listed	Not Listed	Not Listed
Blue Cohosh	Caulophyllum thalictroides	Red	Not Listed	Not Listed	Not Listed
Smooth Alder	Alnus serrulata	Yellow	Not Listed	Not Listed	Not Listed
Bog Birch	Betula pumila	Yellow	Not Listed	Not Listed	Not Listed
Newfoundland Dwarf Birch	Betula michauxii	Yellow	Not Listed	Not Listed	Not Listed
Wild Comfrey	Cynoglossum virginianum	Red	Not Listed	Not Listed	Not Listed
Drummond's Rockcress	Arabis drummondii	Yellow	Not Listed	Not Listed	Not Listed
Western Hairy Rockcress	Arabis hirsuta	Red	Not Listed	Not Listed	Not Listed
Small-flowered Bittercress	Cardamine parviflora	Yellow	Not Listed	Not Listed	Not Listed
Cuckoo Flower	Cardamine pratensis	Red	Not Listed	Not Listed	Not Listed
Large Toothwort	Cardamine maxima	Red	Not Listed	Not Listed	Not Listed
Rock Whitlow-Grass	Draba glabella	Red	Not Listed	Not Listed	Not Listed
Marsh Bellflower	Campanula aparinoides	Yellow	Not Listed	Not Listed	Not Listed
Pale-Spiked Lobelia	Lobelia spicata	Red	Not Listed	Not Listed	Not Listed
Greenland Stitchwort	Minuartia groenlandica	Yellow	Not Listed	Not Listed	Not Listed
Sleepy Catchfly	Silene antirrhina	Red	Not Listed	Not Listed	Not Listed
Saltmarsh Starwort	Stellaria humifusa	Yellow	Not Listed	Not Listed	Not Listed
Long-leaved Starwort	Stellaria longifolia	Yellow	Not Listed	Not Listed	Not Listed
Prickly Hornwort	Ceratophyllum echinatum	Red	Not Listed	Not Listed	Not Listed
Roland's Sea-Blite	Suaeda rolandii	Red	Not Listed	Not Listed	Not Listed
Rockrose	Helianthemum canadense	Red	Not Listed	Not Listed	Endangered
Pinebarren Golden Heather	Hudsonia ericoides	Yellow	Not Listed	Not Listed	Not Listed



Common Name	Scientific Name	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
Sweet Pepperbush	Clethra alnifolia	Yellow	Special Concern	Special Concern	Vulnerable
Disguised St John's-wort	Hypericum dissimulatum	Yellow	Not Listed	Not Listed	Not Listed
Large St John's-wort	Hypericum majus	Red	Not Listed	Not Listed	Not Listed
Orange-fruited Tinker's Weed	Triosteum aurantiacum	Yellow	Not Listed	Not Listed	Not Listed
Water Pygmyweed	Crassula aquatica	Yellow	Not Listed	Not Listed	Not Listed
Buttonbush Dodder	Cuscuta cephalanthi		Not Listed		Not Listed
	'	Red Yellow	Not Listed	Not Listed Not Listed	
Soapberry Binds Crossib arms	Shepherdia canadensis Empetrum eamesii				Not Listed Not Listed
Pink Crowberry	P	Yellow	Not Listed	Not Listed	
Northern Blueberry	Vaccinium boreale	Red	Not Listed	Not Listed	Not Listed
Dwarf Bilberry	Vaccinium caespitosum	Yellow	Not Listed	Not Listed	Not Listed
Alpine Bilberry	Vaccinium uliginosum	Yellow	Not Listed	Not Listed	Not Listed
Robbins' Milkvetch	Astragalus robbinsii	Red	Not Listed	Not Listed	Not Listed
Canada Tick-trefoil	Desmodium canadense	Red	Not Listed	Not Listed	Not Listed
Large Tick-Trefoil	Desmodium glutinosum	Red	Not Listed	Not Listed	Not Listed
Field Locoweed	Oxytropis campestris	Red	Not Listed	Not Listed	Not Listed
Farwell's Water Milfoil	Myriophyllum farwellii	Yellow	Not Listed	Not Listed	Not Listed
Whorled Water Milfoil	Myriophyllum verticillatum	Yellow	Not Listed	Not Listed	Not Listed
Comb-leaved Mermaidweed	Proserpinaca pectinata	Yellow	Not Listed	Not Listed	Not Listed
Intermediate Mermaidweed	Proserpinaca intermedia	Red	Not Listed	Not Listed	Not Listed
American False Pennyroyal	Hedeoma pulegioides	Yellow	Not Listed	Not Listed	Not Listed
Canada Germander	Teucrium canadense	Yellow	Not Listed	Not Listed	Not Listed
False Mermaidweed	Floerkea proserpinacoides	Yellow	Not at Risk	Not Listed	Not Listed
Inverted Bladderwort	Utricularia resupinata	Red	Not Listed	Not Listed	Not Listed
Swamp Loosestrife	Decodon verticillatus	Yellow	Not Listed	Not Listed	Not Listed
Black Ash	Fraxinus nigra	Yellow	Not Listed	Not Listed	Not Listed
Red Ash	Fraxinus pennsylvanica	Red	Not Listed	Not Listed	Not Listed
Purple-veined Willowherb	Epilobium coloratum	Yellow	Not Listed	Not Listed	Not Listed
Downy Willowherb	Epilobium strictum	Yellow	Not Listed	Not Listed	Not Listed
American Cancer-root	Conopholis americana	Red	Not Listed	Not Listed	Not Listed
Blood Milkwort	Polygala sanguinea	Yellow	Not Listed	Not Listed	Not Listed
Halberd-leaved Tearthumb	Persicaria arifolia	Yellow	Not Listed	Not Listed	Not Listed
Climbing False Buckwheat	Fallopia scandens	Yellow	Not Listed	Not Listed	Not Listed
Triangular-valve Dock	Rumex triangulivalvis	Yellow	Not Listed	Not Listed	Not Listed
Horn-leaved Riverweed	Podostemum ceratophyllum	Red	Not Listed	Not Listed	Not Listed
Water Blinks	Montia fontana	Red	Not Listed	Not Listed	Not Listed
Mistassini Primrose	Primula mistassinica	Yellow	Not Listed	Not Listed	Not Listed
Seaside Brookweed	Samolus valerandi	Yellow	Not Listed	Not Listed	Not Listed
Lesser Pyrola	Pyrola minor	Yellow	Not Listed	Not Listed	Not Listed
Canada Anemone	Anemone canadensis	Red	Not Listed	Not Listed	Not Listed
Wood Anemone	Anemone quinquefolia	Yellow	Not Listed	Not Listed	Not Listed
Virginia Anemone	Anemone virginiana	Yellow	Not Listed	Not Listed	Not Listed
Purple Clematis	Clematis occidentalis	Red	Not Listed	Not Listed	Not Listed
Round-lobed Hepatica	Anemone americana	Red	Not Listed	Not Listed	Not Listed
Pennsylvania Buttercup	Ranunculus pensylvanicus	Red	Not Listed	Not Listed	Not Listed
Cursed Buttercup	Ranunculus sceleratus	Red	Not Listed	Not Listed	Not Listed
Alder-leaved Buckthorn	Rhamnus alnifolia	Yellow	Not Listed	Not Listed	Not Listed



Common Name	Scientific Name	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
Nantucket Serviceberry	Amelanchier nantucketensis	Red	Not Listed	Not Listed	Not Listed
Common Buttonbush	Cephalanthus occidentalis	Yellow	Not Listed	Not Listed	Not Listed
Northern Bedstraw	Galium boreale	Red	Not Listed	Not Listed	Not Listed
Labrador Bedstraw	Galium labradoricum	Yellow	Not Listed	Not Listed	Not Listed
Blunt-leaved Bedstraw	Galium obtusum	Red	Not Listed	Not Listed	Not Listed
Bog Willow	Salix pedicellaris	Yellow	Not Listed	Not Listed	Not Listed
Silky Willow	Salix sericea	Red	Not Listed	Not Listed	Not Listed
Northern Comandra	Geocaulon lividum	Yellow	Not Listed	Not Listed	Not Listed
White Mountain Saxifrage	Saxifraga paniculata	Yellow	Not Listed	Not Listed	Not Listed
Heart-leaved Foamflower	Tiarella cordifolia	Yellow	Not Listed	Not Listed	Not Listed
Clammy Hedge-Hyssop	Gratiola neglecta	Yellow	Not Listed	Not Listed	Not Listed
Southern Mudwort	Limosella australis	Yellow	Not Listed	Not Listed	Not Listed
Eastern Leatherwood	Dirca palustris	Red	Not Listed	Not Listed	Not Listed
Small-spike False-nettle	Boehmeria cylindrica	Red	Not Listed	Not Listed	Not Listed
Canada Wood Nettle	Laportea canadensis	Yellow	Not Listed	Not Listed	Not Listed
Dwarf Clearweed	Pilea pumila	Red	Not Listed	Not Listed	Not Listed
Northern Bog Violet	Viola nephrophylla	Yellow	Not Listed	Not Listed	Not Listed
Eastern White Cedar	Thuja occidentalis	Red	Not Listed	Not Listed	Vulnerable
Lesser Brown Sedge	Carex adusta	Yellow	Not Listed	Not Listed	Not Listed
Scabrous Black Sedge	Carex atratiformis	Yellow	Not Listed	Not Listed	Not Listed
Bebb's Sedge	Carex bebbii	Red	Not Listed	Not Listed	Not Listed
Hairlike Sedge	Carex capillaris	Yellow	Not Listed	Not Listed	Not Listed
Chestnut Sedge	Carex castanea	Red	Not Listed	Not Listed	Not Listed
Creeping Sedge	Carex chordorrhiza	Red	Not Listed	Not Listed	Not Listed
Bearded Sedge	Carex comosa	Yellow	Not Listed	Not Listed	Not Listed
Slender Wood Sedge	Carex digitalis	Red	Not Listed	Not Listed	Not Listed
Bristle-leaved Sedge	Carex eburnea	Yellow	Not Listed	Not Listed	Not Listed
Garber's Sedge	Carex garberi	Red	Not Listed	Not Listed	Not Listed
Hayden's Sedge	Carex haydenii	Red	Not Listed	Not Listed	Not Listed
Pubescent Sedge	Carex hirtifolia	Yellow	Not Listed	Not Listed	Not Listed
Houghton's Sedge	Carex houghtoniana	Yellow	Not Listed	Not Listed	Not Listed
Porcupine Sedge	Carex hystericina	Red	Not Listed	Not Listed	Not Listed
Woolly Sedge	Carex pellita	Red	Not Listed	Not Listed	Not Listed
Loose-Flowered Sedge	Carex laxiflora	Red	Not Listed	Not Listed	Not Listed
Livid Sedge	Carex livida	Red	Not Listed	Not Listed	Not Listed
Necklace Spike Sedge	Carex ormostachya	Red	Not Listed	Not Listed	Not Listed
Peck's Sedge	Carex peckii	Red	Not Listed	Not Listed	Not Listed
Plantain-Leaved Sedge	Carex plantaginea	Red	Not Listed	Not Listed	Not Listed
Prairie Sedge	Carex prairea	Red	Not Listed	Not Listed	Not Listed
Swan's Sedge	Carex swanii	Yellow	Not Listed	Not Listed	Not Listed
Tender Sedge	Carex tenera	Yellow	Not Listed	Not Listed	Not Listed
Tuckerman's Sedge	Carex tuckermanii	Red	Not Listed	Not Listed	Not Listed
Wiegand's Sedge	Carex wiegandii	Red	Not Listed	Not Listed	Not Listed
Yellow Spikerush	Eleocharis flavescens	Yellow	Not Listed	Not Listed	Not Listed
Ovate Spikerush	Eleocharis ovata	Yellow	Not Listed	Not Listed	Not Listed
Slender Cottongrass	Eriophorum gracile	Yellow	Not Listed	Not Listed	Not Listed



Common Name	Scientific Name	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
Tall Beakrush	Rhynchospora macrostachya	Red	Not Listed	Not Listed	Not Listed
Long's Bulrush	Scirpus Iongii	Yellow	Special	Special Concern	Vulnerable
Long's Bulrush	, , , ,		Concern		
Torrey's Bulrush	Schoenoplectus torreyi	Red	Not Listed Special	Not Listed	Not Listed
Redroot	Lachnanthes caroliana	Red	Concern	Threatened	Threatened
Wild Celery	Apium graveolens	Exotic	Not Listed	Not Listed	Not Listed
Slender Blue Flag	Iris prismatica	Red	Not Listed	Not Listed	Not Listed
Coastal Plain Blue-eyed-grass	Sisyrinchium fuscatum	Red	Not Listed	Not Listed	Not Listed
Sharp-fruited Rush	Juncus acuminatus	Yellow	Not Listed	Not Listed	Not Listed
Greene's Rush	Juncus greenei	Red	Not Listed	Not Listed	Not Listed
Grass-leaved Rush	Juncus marginatus	Yellow	Not Listed	Not Listed	Not Listed
One-sided Rush	Juncus secundus	Red	Not Listed	Not Listed	Not Listed
Woodland Rush	Juncus subcaudatus	Yellow	Not Listed	Not Listed	Not Listed
Vasey's Rush	Juncus vaseyi	Red	Not Listed	Not Listed	Not Listed
Dudley's Rush	Juncus dudleyi	Yellow	Not Listed	Not Listed	Not Listed
Wild Chives	Allium schoenoprasum	Red	Not Listed	Not Listed	Not Listed
Wild Leek	Allium tricoccum	Red	Not Listed	Not Listed	Not Listed
Canada Lily	Lilium canadense	Yellow	Not Listed	Not Listed	Not Listed
Golden Crest	Lophiola aurea	Red	Special Concern	Threatened	Threatened
Thread-Like Naiad	Najas gracillima	Red	Not Listed	Not Listed	Not Listed
Long-bracted Frog Orchid	Coeloglossum viride	Red	Not Listed	Not Listed	Not Listed
Ram's-Head Lady's-Slipper	Cypripedium arietinum	Red	Not Listed	Not Listed	Endangered
Yellow Lady's-slipper	Cypripedium parviflorum	Yellow	Not Listed	Not Listed	Not Listed
Showy Lady's-Slipper	Cypripedium reginae	Red	Not Listed	Not Listed	Not Listed
Downy Rattlesnake-Plantain	Goodyera pubescens	Red	Not Listed	Not Listed	Not Listed
Lesser Rattlesnake-plantain	Goodyera repens	Yellow	Not Listed	Not Listed	Not Listed
Southern Twayblade	Listera australis	Red	Not Listed	Not Listed	Not Listed
White Adder's-Mouth	Malaxis monophyllos	Red	Not Listed	Not Listed	Not Listed
Tubercled Orchid	Platanthera flava	Yellow	Not Listed	Not Listed	Not Listed
Large Round-Leaved Orchid	Platanthera macrophylla	Yellow	Not Listed	Not Listed	Not Listed
Case's Ladies'-Tresses	Spiranthes casei	Yellow	Not Listed	Not Listed	Not Listed
Shining Ladies'-Tresses	Spiranthes lucida	Red	Not Listed	Not Listed	Not Listed
Yellow Ladies'-tresses	Spiranthes ochroleuca	Yellow	Not Listed	Not Listed	Not Listed
Short-awned Foxtail	Alopecurus aequalis	Yellow	Not Listed	Not Listed	Not Listed
Broad-Glumed Brome	Bromus latiglumis	Red	Not Listed	Not Listed	Not Listed
Slim-stemmed Reed Grass	Calamagrostis stricta	Yellow	Not Listed	Not Listed	Not Listed
Sweet Wood Reed Grass	Cinna arundinacea	Red	Not Listed	Not Listed	Not Listed
Narrow-leaved Panic Grass	Dichanthelium linearifolium	Yellow	Not Listed	Not Listed	Not Listed
Slender Panic Grass	Dichanthelium xanthophysum	Red	Not Listed	Not Listed	Not Listed
Wiegand's Wild Rye	Elymus wiegandii	Red	Not Listed	Not Listed	Not Listed
Spreading Wild Rye	Elymus hystrix	Red	Not Listed	Not Listed	Not Listed
Nodding Fescue	Festuca subverticillata	Red	Not Listed	Not Listed	Not Listed
Canada Rice Grass	Piptatherum canadense	Yellow	Not Listed	Not Listed	Not Listed
Tuckerman's Panic Grass	Panicum tuckermanii	Yellow	Not Listed	Not Listed	Not Listed
Redtop Panic Grass	Panicum rigidulum	Yellow	Not Listed	Not Listed	Not Listed
Glaucous Blue Grass	Poa glauca	Yellow	Not Listed	Not Listed Not Listed	Not Listed



Common Name	Scientific Name	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
Slender Rice Grass	Piptatherum pungens	Yellow	Not Listed	Not Listed	Not Listed
Fries' Pondweed	Potamogeton friesii	Red	Not Listed	Not Listed	Not Listed
Blunt-leaved Pondweed	Potamogeton obtusifolius	Yellow	Not Listed	Not Listed	Not Listed
White-stemmed Pondweed	Potamogeton praelongus	Yellow	Not Listed	Not Listed	Not Listed
Spotted Pondweed	Potamogeton pulcher	Red	Not Listed	Not Listed	Not Listed
Richardson's Pondweed	Potamogeton richardsonii	Red	Not Listed	Not Listed	Not Listed
Flat-stemmed Pondweed	Potamogeton zosteriformis	Yellow	Not Listed	Not Listed	Not Listed
Northern Maidenhair Fern	Adiantum pedatum	Red	Not Listed	Not Listed	Not Listed
Steller's Rockbrake	Cryptogramma stelleri	Red	Not Listed	Not Listed	Not Listed
Maidenhair Spleenwort	Asplenium trichomanes	Yellow	Not Listed	Not Listed	Not Listed
Green Spleenwort	Asplenium viride	Yellow	Not Listed	Not Listed	Not Listed
Netted Chain Fern	Woodwardia areolata	Yellow	Not Listed	Not Listed	Not Listed
Fragrant Wood Fern	Dryopteris fragrans	Yellow	Not Listed	Not Listed	Not Listed
Smooth Cliff Fern	Woodsia glabella	Yellow	Not Listed	Not Listed	Not Listed
Marsh Horsetail	Equisetum palustre	Red	Not Listed	Not Listed	Not Listed
Meadow Horsetail	Equisetum pratense	Yellow	Not Listed	Not Listed	Not Listed
Acadian Quillwort	Isoetes acadiensis	Yellow	Not Listed	Not Listed	Not Listed
Prototype Quillwort	Isoetes prototypus	Yellow Not	Special Concern	Special Concern	Vulnerable
Ground-Fir	Lycopodium sabinifolium	Listed	Not Listed	Not Listed	Not Listed
Triangle Moonwort	Botrychium lanceolatum	Yellow	Not Listed	Not Listed	Not Listed
Common Moonwort	Botrychium lunaria	Red	Not Listed	Not Listed	Not Listed
Least Moonwort	Botrychium simplex	Yellow	Not Listed	Not Listed	Not Listed
Northern Adder's-tongue	Ophioglossum pusillum	Yellow	Not Listed	Not Listed	Not Listed
Rock Spikemoss	Selaginella rupestris	Red	Not Listed	Not Listed	Not Listed
Low Spikemoss	Selaginella selaginoides	Red	Not Listed	Not Listed	Not Listed
Non-vascular Plants					
Lurking Leskea	Plagiothecium latebricola	Yellow	Not Listed	Not Listed	Not Listed
Tufted Fen Moss	Paludella squarrosa	Yellow	Not Listed	Not Listed	Not Listed
Wulf's Peat Moss	Sphagnum wulfianum	Yellow	Not Listed	Not Listed	Not Listed
Toothed-leaved Nitrogen Moss	Tetraplodon angustatus	Yellow	Not Listed	Not Listed	Not Listed
Metropolitan Timmia Moss	Timmia megapolitana	Yellow	Not Listed	Not Listed	Not Listed
Lichens		,	T.		
Common Chocolate-chip Lichen	Solorina saccata	Red	Not Listed	Not Listed	Not Listed
Blue Felt Lichen	Degelia plumbea	Green	Special Concern	No Status	Not Listed
Ghost Antler Lichen	Pseudevernia cladonia	Yellow	Not at Risk	No Status	Not Listed
Black-foam Lichen	Anzia colpodes	Yellow	Not Listed	Not Listed	Not Listed
Crumpled Bat's Wing Lichen	Collema leptaleum	Yellow	Not Listed	Not Listed	Not Listed
Blistered Tarpaper Lichen	Collema furfuraceum	Yellow	Not Listed	Not Listed	Not Listed
Peppered Moon Lichen	Sticta fuliginosa	Yellow	Not Listed	Not Listed	Not Listed
Beaded Jellyskin Lichen	Leptogium teretiusculum	Yellow	Not Listed	Not Listed	Not Listed
Appressed Jellyskin Lichen	Leptogium subtile	Yellow	Not Listed	Not Listed	Not Listed
Vole Ears Lichen	Erioderma mollissimum	Red	Endangered	No Status	Not Listed
Powder-tipped Antler Lichen	Everniastrum catawbiense	Red	Not Listed	Not Listed	Not Listed
Rimmed Shingles Lichen	Fuscopannaria leucosticta	Red	Not Listed	Not Listed	Not Listed
Scaly Fringe Lichen	Heterodermia squamulosa	Yellow	Not Listed	Not Listed	Not Listed



Common Name	Scientific Name	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
Blistered Jellyskin Lichen	Leptogium corticola	Yellow	Not Listed	Not Listed	Not Listed
Tattered Jellyskin Lichen	Leptogium lichenoides	Red	Not Listed	Not Listed	Not Listed
Stretched Jellyskin Lichen	Leptogium milligranum	Yellow	Not Listed	Not Listed	Not Listed
Naked Kidney Lichen	Nephroma bellum	Yellow	Not Listed	Not Listed	Not Listed
Pimpled Kidney Lichen	Nephroma resupinatum	Red	Not Listed	Not Listed	Not Listed
Eyed Mossthorns Woollybear Lichen	Polychidium muscicola	Red	Not Listed	Not Listed	Not Listed
Powdered Moon Lichen	Sticta limbata	Red	Not Listed	Not Listed	Not Listed
Tree Pelt Lichen	Peltigera collina	Yellow	Not Listed	Not Listed	Not Listed
Scaly Pelt Lichen	Peltigera lepidophora	Red	Not Listed	Not Listed	Not Listed
Poor-man's Shingles Lichen	Parmeliella parvula	Red	Not Listed	Not Listed	Not Listed
Boreal Felt Lichen - Atlantic pop.	Erioderma pedicellatum	Red	Endangered	Endangered	Endangered



APPENDIX D BIRD SURVEY RESULTS

				Conditions				1			
		Coordinates			John	10113		1		Number	Distance from
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)
2440		0412501E,	1100100	10 km/h		,		1		0.0001100.	o do o o o o o o o o o o o o o o o o o
March 20/2012	3MP1	4976533N	Mixedwoods	SE	3	Clear	None	Unknown	American Robin	1	0-50
-	-	-	-	-	-	-	-	-	Boreal Chickadee	4	0-50
-	_	-	-	-	_	-	-	_	Dark-eyed Junco	1	0-50
-	_	-	-	-	_	-	-	_	Pine Siskin	8	0-50
_	_	-	_	-	_	-	_	_	Purple Finch	1	0-50
		0412345E,		10 km/h						-	
-	3MP2	4976370N	Mixedwoods	SE	3	Clear	None	Unknown	American Crow	2	100 ⁺
-	-	-	-	-	-	-	-	-	American Robin	2	50-100
-	_	-	-	_	-	-	_	_	Black-capped Chickadee	2	50-100
_	-	_	_	_	_	_	_	_	Blue Jay	1	100 ⁺
	_	_		_	_		_	_	Brown Creeper	1	0-50
		_		_	_		_	_	Dark-eyed Junco	1	50-100
_	-	_		_	_		_	_	Golden-crowned Kinglet	2	50-100
		_	_	_	_	_	_	_	Pine Siskin	2	0-50
		0412161E,		10 km/h	_			_	I IIIe Olskiii		0-30
_	3MP3	4976275N	Unknown	SE	3	Clear	None	Unknown	American Crow	1	100 ⁺
-	-	- -	-	-	-	-	-	-	Black-capped Chickadee	2	50-100
		_		_	+	_				1	100 ⁺
-	-				-		-	-	Blue Jay Common Grackle	1	
-	-	-	-	-	-	-	-	-		1	0-50
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	3	50-100
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	50-100
-	-	-	-	-	-	-	-	-	Hairy Woodpecker Pine Siskin	1	50-100
-	-	-	-	-	-	-	-	-		2	0-50
-	-	-	-	-	-	-	-	-	Purple Finch	1	50-100
-	-	-	-	-	-	-	-	-	Ruffed Grouse	1	100 ⁺
		0412102E,		10 km/h							_
-	3MP4	4975988N	Mixedwoods	SE	3	Clear	None	Unknown	American Crow	1	100 ⁺
-	1	-	-	-	-	-	-	-	Black-capped Chickadee	2	50-100
-	-	-	-	-	-	-	-	-	Brown Creeper	2	50-100
-	1	-	-	-	-	-	-	-	Dark-eyed Junco	5	50-100
-	-	-	-	-	-	-	-	-	Evening Grosbeak	1	100 ⁺
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	4	50-100
-	-	-	-	-	-	-	-	-	Mourning Dove	1	0-50
-	-	-	-	-	-	-	-	-	Pine Siskin	2	50-100
-	-	-	-	-	-	-	-	-	Purple Finch	1	50-100
		0415503E,		10 km/h							
-	3MP5	4975739N	Mixedwoods	SE	3	Clear	None	9:29 AM	American Crow	1	100 ⁺
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	4	0-50
-	-	-	-	-	-	-	-	-	Common Raven	4	100 ⁺
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	50-100
-	-	-	-	-	-	-	-	-	Downy Woodpecker	1	0-50
-	-	-	-	-	-	-	-	-	Pine Siskin	8	50-100
-	-	-	-	-	-	-	-	-	Purple Finch	1	50-100
-	_	-	-	_	-	_	-	_	Red-breasted Nuthatch	2	100 ⁺



					Condit	ions					
		Coordinates			I	10113		1		Number	Distance from
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)
		0411883E,		10 km/h							
-	3MP6	4975794N	Mixedwoods	SE	3	Clear	None	10:06 AM	Black-capped Chickadee	2	0-50
-	-	-	-	-	-	-	-	-	Blue Jay	1	0-50
-	-	-	-	-	-	-	-	-	Common Raven	1	100 ⁺
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	50-100
-	-	-	-	-	-	-	-	-	Downy Woodpecker	2	0-50
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	0-50
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	1	0-50
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	4	50-100
-	-	-	-	-	-	-	-	-	Pine Siskin	4	50-100
-	-	-	-	-	-	-	-	-	Purple Finch	2	0-50
-	-	-	-	-	-	-	-	-	Purple Finch	4	50-100
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	2	100 ⁺
-	-	-	-	-	-	-	-	-	Red-winged Blackbird	1	FO
-	-	-	-	-	-	-	-	-	White-winged Crossbill	8	50-100
		0411776E,		10 km/h							
-	3MP7	4975499N	Mixedwoods	SE	6	Clear	None	10:26 AM	American Crow	4	100 ⁺
-	-	-	-	-	-	-	-	-	American Robin	1	0-50
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	2	0-50
-	-	-	-	-	-	-	-	-	Blue Jay	1	0-50
-	-	-	-	-	-	-	-	-	Brown Creeper	2	0-50
-	-	-	-	-	-	-	-	-	Common Raven	1	100 ⁺
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	1	0-50
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	100 ⁺
-	-	-	-	-	-	-	-	-	Downy Woodpecker	1	50-100
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	1	50-100
-	-	-	-	-	-	-	-	-	Northern Flicker	1	50-100
-	-	-	-	-	-	-	-	-	Pine Siskin	2	0-50
-	-	-	-	-	-	-	-	-	Purple Finch	1	0-50
-	-	-	-	-	-	-	-	-	Purple Finch	2	50-100
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	1	50-100
-	3MP8	0411591E, 4975301N	Mixedwoods	10 km/h SE	6	Clear	None	10:45 AM	American Crow	2	50-100
-	-	-	-	-	-	-	-	-	American Crow	2	100 ⁺
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	4	0-50
-	-	-	-	-	-	-	-	-	Blue Jay	1	100 ⁺
-	-	-	-	-	-	-	-	-	Common Raven	2	50-100
-	_	-	-	-	_	-	_	_	Common Raven	4	100 ⁺
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	1	50-100
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	1	100 ⁺
	-	-	-	_	-	_	-	_	Pine Siskin	2	50-100
_	-	-	-	-	-	-	_	_	Purple Finch	2	50-100
_	-	-	-	-	-	-	_	_	Red-breasted Nuthatch	1	0-50
-	_	_	-	_	_	_	_	_	Red-breasted Nuthatch	1	100 ⁺



					Condit	ions					
Date	Location	Coordinates (UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Number Observed	Distance from Observer (m)
		0411345E,		10 km/h							
-	3MP9	4975371N	Mixedwoods	SE	6	Clear	None	11:03 AM	American Crow	2	100 ⁺
-	-	-	-	-	-	-	-	-	Blue Jay	1	100 ⁺
-	-	-	-	-	-	-	-	-	Common Raven	2	100 ⁺
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	4	0-50
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	50-100
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	50-100
-	-	-	-	-	-	-	-	-	Pine Siskin	4	50-100
-	-	-	-	-	-	-	-	-	Purple Finch	2	50-100
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	1	50-100
-	-	-	-	-	-	-	-	-	Red-winged Blackbird	1	FO
-	3MP10	0411320E, 4975153N	Mixedwoods	10 km/h SE	6	Clear	None	11:21 AM	Brown Creeper	2	0-50
-	-	-	-	-	-	-	-	-	Downy Woodpecker	1	0-50
-	-	-	-	-	-	-	-	-	Pine Siskin	8	0-50
_	3MP11	0411385E, 4974883N	Mixedwoods	10 km/h SE	6	Clear	None	11:31 AM	American Black Duck	1	FO
-	-	-	-	-	-	-	-	-	Common Raven	1	0-50
-	-	-	-	-	-	-	-	-	Downy Woodpecker	1	0-50
-	-	-	-	-	-	-	-	-	Downy Woodpecker	2	50-100
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	1	50-100
-	-	-	-	-	-	-	-	-	Mourning Dove	2	0-50
-	-	-	-	-	-	-	-	-	Pine Siskin	4	0-50
-	-	-	-	-	-	-	-	-	Purple Finch	1	50-100



Common Name	Scientific Name	Number of Observations	Individuals Observed	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
American Black Duck	Anas rubripes	1	1	Green	Not Listed	Not Listed	Not Listed
American Crow	Corvus brachyrhynchos	8	15	Green	Not Listed	Not Listed	Not Listed
American Robin	Turdus migratorius	3	4	Green	Not Listed	Not Listed	Not Listed
Black-capped Chickadee	Poecile atricapillus	7	18	Green	Not Listed	Not Listed	Not Listed
Blue Jay	Cyanocitta cristata	6	6	Green	Not Listed	Not Listed	Not Listed
Boreal Chickadee	Poecile hudsonicus	1	4	Yellow	Not Listed	Not Listed	Not Listed
Brown Creeper	Certhia americana	4	7	Green	Not Listed	Not Listed	Not Listed
Common Grackle	Quiscalus quiscula	1	1	Green	Not Listed	Not Listed	Not Listed
Common Raven	Corvus corax	7	15	Green	Not Listed	Not Listed	Not Listed
Dark-eyed Junco	Junco hyemalis	12	25	Green	Not Listed	Not Listed	Not Listed
Downy Woodpecker	Picoides pubescens	6	8	Green	Not Listed	Not Listed	Not Listed
Evening Grosbeak	Coccothraustes vespertinus	1	1	Green	Not Listed	Not Listed	Not Listed
Golden-crowned Kinglet	Regulus satrapa	6	13	Yellow	Not Listed	Not Listed	Not Listed
Hairy Woodpecker	Picoides villosus	4	7	Green	Not Listed	Not Listed	Not Listed
Mourning Dove	Zenaida macroura	2	3	Green	Not Listed	Not Listed	Not Listed
Northern Flicker	Colaptes auratus	1	1	Green	Not Listed	Not Listed	Not Listed
Pine Siskin	Spinus pinus	11	46	Yellow	Not Listed	Not Listed	Not Listed
Purple Finch	Carpodacus purpureus	11	18	Green	Not Listed	Not Listed	Not Listed
Red-breasted Nuthatch	Sitta canadensis	6	8	Green	Not Listed	Not Listed	Not Listed
Red-winged Blackbird	Agelaius phoeniceus	2	2	Green	Not Listed	Not Listed	Not Listed
Ruffed Grouse	Bonasa umbellus	1	1	Green	Not Listed	Not Listed	Not Listed
White-winged Crossbill	Loxia leucoptera	1	8	Green	Not Listed	Not Listed	Not Listed



		Coordinates			Conditi					Number	Distance from	Pairs
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	lans
		0412501E,		15 km/h		Partly						
April 19/2012	3MP1	4976533N	Mixedwoods	NE	2	Cloudy	None	8:16 AM	American Crow	2	100+	-
-	ı	ı	-	-	•	-	-	-	American Robin	2	50-100	-
-	ı	•	-	-	•	-	-	-	American Robin	1	100+	-
-	ı	•	-	-	•	-	-	-	Black-capped Chickadee	2	0-50	1P
-	-	-	-	-	-	-	-	-	Blue Jay	1	0-50	-
-	ı	ı	-	-	1	-	-	-	Blue Jay	1	100+	-
-	ı	ı	-	-	•	-	-	-	Broad-winged Hawk	1	0-50	-
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	1	100+	-
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	2	0-50	1P
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	1	50-100	-
-	-	-	-	-	-	-	-	-	Northern Flicker	1	100+	-
-	-	-	-	-	-	-	-	-	Pine Siskin	1	0-50	-
-	-	-	-	-	-	-	-	-	Purple Finch	1	0-50	-
-	-	-	-	-	-	-	-	-	Purple Finch	2	50-100	-
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	1	100+	-
-	-	-	-	-	-	-	-	-	Yellow-bellied Sapsucker	1	50-100	-
		0412345E,		15 km/h		Partly						
-	3MP2	4976370N	Mixedwoods	NE	2	Cloudy	None	8:32 AM	American Crow	1	100+	-
-	-	-	-	-	-	-	-	-	American Robin	1	0-50	-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	1	0-50	-
-	-	-	-	-	-	-	-	-	Blue Jay	1	50-100	-
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	1	0-50	-
-	-	-	-	-	-	-	-	-	Downy Woodpecker	1	50-100	-
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	2	0-50	-
-	-	-	-	-	-	-	-	-	Pileated Woodpecker	1	0-50	-
-	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	1	0-50	-
		0412161E,		15 km/h		Partly			•			
-	3MP3	4976275N	Unknown	NE	2	Cloudy	None	8:50 AM	American Robin	1	0-50	_
-	-	-	-	-	-	-	-	-	American Robin	2	50-100	-
-	-	-	-	-	-	-	-	-	American Robin	3	100+	-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	6	0-50	3P
-	-	-	-	-	-	-	-	-	Blue Jay	4	50-100	-
-	-	-	-	-	-	-	-	-	Brown Creeper	2	0-50	1P
-	-	-	-	-	-	-	-	-	Downy Woodpecker	1	0-50	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	0-50	1P
-	-	-	-	-	-	-	-	-	Hermit Thrush	2	0-50	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	2	50-100	-
-	-	-	-	-	-	-	-	-	Northern Flicker	1	50-100	-
_	-	-	_	-	_	-	_	_	Pileated Woodpecker	1	100+	-
-	-	-	_	-	-	-	-	-	Pine Siskin	1	0-50	-
_	-	_	_	-	-	-	_	_	Winter Wren	1	0-50	-
_	_	_	_	_	-	_	_	_	Yellow-bellied Sapsucker	1 1	0-50	_



		Coordinates	<u> </u>		Conditi	ions				Number	Distance from	
Date	Location		Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	Pairs
Date	Location	0412102E,	Habitat	15 km/h	Temperature 0	Partly	Treoipitation	Tillic	Common Name	Obscived	Observer (III)	
_	3MP4	4975988N	Mixedwoods	NE	3	Cloudy	None	9:05 AM	American Crow	1	100+	_
	JIVII 4	497 3900IN	Wiixedwoods	INL	-	Cloudy	TNOTIC	9.03 AW	American Robin	1	0-50	
					-	_	_	-	American Robin	2	100+	
<u> </u>	-		_	_	-		_	-	Black-capped Chickadee	2	0-50	- 1P
	-	-	-	_			-	-	Blue Jay	2	50-100	- IF
	 		-	-	-	-		-	Broad-winged Hawk	4	50-100	
		-		-	-		-			1		-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	I	0-50	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	2	50-100	
_	-	-	-	-	-	-	-	-	Pileated Woodpecker	1 1	0-50	-
-	-	-	-	-	-	-	-	-	Pileated Woodpecker	1	100+	-
-	-	-	-	-	-	-	-	-	Purple Finch	1	0-50	-
-	-	-	-	-	-	-	-	-	Yellow-bellied Sapsucker	1	100+	-
		0411883E,		15 km/h		_						i
-	3MP6	4975794N	Mixedwoods	NE	3	Sunny	None	9:24 AM	American Crow	2	100+	
-	-	-	-	-	-	-	-	-	American Robin	4	100+	-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	2	0-50	1P
-	-	-	-	-	-	-	-	-	Blue Jay	1	50-100	
-	-	-	-	-	-	-	-	1	Common Raven	2	50-100	1P
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	50-100	1P
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	1	100+	-
-	-	-	-	-	-	-	-	-	Pileated Woodpecker	1	100+	-
-	-	-	-	-	-	-	-	-	Pine Siskin	1	0-50	-
_	-	-	-	-	-	-	-	-	Purple Finch	1	0-50	-
-	-	-	-	-	-	-	-	-	Purple Finch	1	100+	-
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	1	50-100	-
_	_	_	_	_	-	-	_	-	Yellow-rumped Warbler	1	0-50	-
		0411776E,		15 km/h					, , , , , , , , , , , , , , , , , , , ,			
_	3MP7	4975499N	Mixedwoods	NE	4	Sunny	None	9:40 AM	American Goldfinch	2	0-50	_
_	-	-	-	_	-	-	-	-	American Robin	2	50-100	_
_	_	_	_	_	-	_	_	-	American Robin	1	100+	_
_	_	_	_	_	_	_	_	-	Black-capped Chickadee	2	0-50	1P
	_	_	_	_	_	_	_	-	Blue Jay	2	50-100	
	_	_	_	_	_	_	_	_	Dark-eyed Junco	2	0-50	1P
		_	_	_	_	_	_	-	Dark-eyed Junco	2	100+	<u>' </u>
		_	_	_	-	_	_	-	Golden-crowned Kinglet	2	50-100	1P
	-	_	_	_	-	_	_	-	Hairy Woodpecker	1	0-50	
										1		
-	-	-	-	-	-	-	-	-	Pileated Woodpecker	1 1	50-100 50-100	
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	1 1	50-100	-
-	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	1	0-50	-
-	-	- 04115015	-	1 <i>E</i> km/b	-	-	-	-	Yellow-rumped Warbler	1	50-100	-
	ONADO	0411591E,	Missaulere	15 km/h	_	C	NI	0.50 454	Diver le		F0 400	l
-	3MP8	4975301N	Mixedwoods	NE	5	Sunny	None	9:58 AM	Blue Jay	2	50-100	-
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	1	50-100	-
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	100+	- 45
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	0-50	1P
-	-	-	-	-	-	-	-	-	Pileated Woodpecker	1	50-100	-
-	-	-	-	-	-	-	-	-	Purple Finch	1	0-50	-
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	1	50-100	-
-	-	-	-	-	-	-	-	-	Yellow-bellied Sapsucker	1	100+	-



		Coordinates		ı	Conditi	one		ı		Number	Distance from	
Doto	Location		Uobitot	Wind			Drocinitation	Time	Common Nama			Pairs
Date	Location	(UTM NAD83)	Habitat	15 km/h	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	
	3MP9	0411345E, 4975371N	Mixedwoods	NE	E	Sunny	None	10:18 AM	American Robin	2	100+	l
-	311119	49/53/ IN	IVIIXEGWOOGS	INE	5	Sunny	None	10.16 AW		1	50-100	-
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	1 1	100+	-
-	-	-	-	-	-	-	-	-	Northern Flicker	1 1		-
-	-	- 0411320E,	-	- 15 km/h	-	-	-	-	Pine Siskin	1	0-50	-
	3MP10	4975153N	Mixedwoods	NE	6	Sunny	None	10:34 AM	American Crow	1	100+	l
-	SIVIP 10	49/313311	Mixeawoods	INC	6	Suring	None		American Robin	1	0-50	-
-	-	-	-	-	-	-	-	-	American Robin American Robin	2	100+	-
-	-			-	-		-	-				-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	4	0-50	2P
-	-	-	-	-	-	-	-	-	Blue Jay	•	100+	- 4D
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	0-50	1P
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	100+	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	1 1	50-100	-
-	-	-	-	-	-	-	-	-	Northern Flicker	1 1	100+	-
-	-	-	-	-	-	-	-	-	Pine Siskin	1 1	50-100	-
-	-	-	-	-	-	-	-	-	Purple Finch		100+	-
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	1	100+	-
-	-	-	-	-	-	-	-	-	Yellow-bellied Sapsucker	1	50-100	-
-	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	1	100+	-
						Sunny,						I
		0411385E,		15 km/h		partly						I
-	3MP11	4974883N	Mixedwoods	NE	7	cloudy	None	10:52 AM	American Crow	2	100+	-
-	-	-	-	-	-	-	-	-	American Robin	2	50-100	-
-	-	-	-	-	-	-	-	-	American Robin	2	100+	-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	4	0-50	2P
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	0-50	1P
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	1	50-100	-
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	100+	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	0-50	1P
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	1	100+	-
-	-	-	-	-	-	-	-	-	Mourning Dove	1	0-50	-
-	-	-	-	-	-	-	-	-	Pileated Woodpecker	1	100+	_
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	2	0-50	1P
-	-	-	-	-	-	-	-	-	Winter Wren	1	50-100	-
-	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	1	0-50	-
·	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	1	100+	-
		0412501E,				Mainly						
May 1/2012	3MP1	4976533N	Mixedwoods	Calm	3	clear	None	8:10 AM	American Crow	1	100+	
	-	-	-	-	-	-	-	-	American Robin	1	50-100	-
	-	-	-	-	-	-	-	-	American Robin	3	100+	-
	-	-	-	-	-	-	-	-	Black-capped Chickadee	2	0-50	1P
	-	-	-	-	-	-	-	-	Common Raven	1	50-100	-
	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	0-50	-
·	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	50-100	-
	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	100+	-
	-	-	-	-	-	-	-	-	Purple Finch	1	0-50	-
	-	-	-	-	-	-	-	-	White-breasted Nuthatch	1	0-50	-
	_	-	-	_	-	_	_	_	White-winged Crossbill	6	0-50	Family



		Coordinates			Conditi	one				Number	Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	Pairs
Duto	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	3	0-50	_
	_	-	-	-	_	_	-	_	Yellow-rumped Warbler	2	50-100	_
	<u> </u>	-		_	-	_	_	_	Yellow-rumped Warbler	3	100+	_
	1	0412345E,				Mainly			Tollow Turnpou Walbiol	 	1001	
	3MP2	4976370N	Mixedwoods	Calm	3	clear	None	8:27:00 AM	American Crow	1	100+	_
	-	-	-	-	-	-	-	-	Black-capped Chickadee	1 1	50-100	_
	_	-	-	-	_	-	-	_	Blue Jay	2	50-100	_
	_	-	-	-	_	-	-	_	Broad-winged Hawk	1	0-50	_
	_	-	-	_	_	-	-	_	Common Raven	2	100+	_
	-	_	_	_	_	-	_	-	Mourning Dove	1	100+	-
	-	-	-	_	_	-	-	-	Purple Finch	4	50-100	-
	-	_	-	_	_	-	_	-	Ruffed Grouse	1	100+	-
	_	-	-	-	_	_	-	_	Scarlet Tanager	1	50-100	_
	-	-	-	_	-	-	-	_	Winter Wren	1	50-100	_
	_	-	-	_	-	-	-	_	Yellow-rumped Warbler	1	0-50	_
	-	-	-	_	_	-	-	-	Yellow-rumped Warbler	2	50-100	-
	_	-	-	-	-	_	-	_	Yellow-rumped Warbler	1	100+	_
		0412161E,				Mainly			renew rumped transier	† 	1001	<u> </u>
	3MP3	4976275N	Mixedwoods	Calm	4	clear	None	8:42:00 AM	Black-capped Chickadee	1	50-100	_
	-	-	-	-	-	-	-		Blue Jay	1 1	100+	_
	_	_	_	_	_	_	_	_	Common Raven	1	100+	_
	_	-		_	_	_	_	-	Dark-eyed Junco	2	50-100	
	-	-		-	-	_	_	_	Dark cycd durico Dark-eyed Junco	2	100+	_
	-	-		-	-	_	-	_	Evening Grosbeak	1	50-100	_
	_	-	_	-	-	_	_	-	Golden-crowned Kinglet	2	0-50	1P
	-	-	-	_	-	_	-	-	Hermit Thrush	5	50-100	-
	_	-	_	_	-	_	-	-	Hermit Thrush	4	100+	_
	-	-	-	_	-	_	-	_	Mourning Dove	1	100+	_
	 -	-	_	_	-	_	-	_	Northern Flicker	1	50-100	_
	_	-	-		-	_	-	_	Purple Finch	2	100+	_
	_	-		_	_	_	-	_	Purple Finch	2	FO E	
	_	-		_	_	_	-	_	Ruby-crowned Kinglet	1	0-50	_
	-	-		_	_	_	-	_	Ruffed Grouse	1	100+	_
	_	_		_	_	_	_	_	Yellow-bellied Sapsucker	3	0-50	
	-	-	_	_	-	_	_	-	Yellow-rumped Warbler	3	50-100	_
	-	_	_	_	-	_	-	-	Yellow-rumped Warbler	4	100+	_
		0412102E,				Mainly			Tellow rumped warbier	-	1001	
	3MP4	4975988N	Mixedwoods	Calm	4	clear	None	8:57 AM	American Robin	5	100+	_
		-	-	-	-	-	-		Blue Jay	1	100+	_
	_	-	_	-	-	_	-	_	Hermit Thrush	3	100+	_
	-	-	-	_	-	_	-	-	Purple Finch	2	50-100	
	-	-		_	-	_	_	_	Purple Finch	2	100+	
	-	-	-	-	-	-	-	-	Ruby-crowned Kinglet	1	50-100	
	-	-	-	-	-	-	-	-	Ruffed Grouse	1 1	0-50	-
	-	-	-	-	-	-	-	-	Ruffed Grouse	1 1	50-100	-
	-	-	-		-	-	-	-	Yellow-rumped Warbler	1	50-100	-
	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	4	100+	-



		Coordinates			Condit	ions				Number	Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	Pairs
Date	Location	0411883E,	Habitat	Willia	Temperature C	Mainly	1 recipitation	Time	Common Name	Obscived	Observer (III)	
	3MP6	4975794N	Mixedwoods	Calm	4	clear	None	9:12 AM	American Crow	1	100+	_
	-	-	-	-	-	-	-	-	American Goldfinch	1 1	50-100	_
	 -	_	_	-	_	_	-	-	American Robin	1 1	50-100	_
	 -	_	_	_	_	_	_	-	American Robin	3	100+	_
	 -	_	_	_	_	_	_	-	Black-capped Chickadee	1	50-100	_
	_	_	_	_	_	_	-	-	Blue Jay	1	100+	_
	_	_	_	_	-	_	-	-	Common Raven	1	FO NW	_
	_	_	_	-	-	-	_	-	Dark-eyed Junco	1	50-100	_
	_	_	_	-	-	-	_	-	Dark-eyed Junco	1	100+	_
	_	_	_	-	-	-	_	-	Hairy Woodpecker	1	50-100	-
	_	_	_	_	-	_	_	-	Hermit Thrush	4	100+	_
	_	_	_	_	-	_	_	-	Purple Finch	1	100+	_
	_	_	_	-	-	-	_	-	Red-breasted Nuthatch	1	50-100	_
	_	_	_	-	-	-	-	-	Swainson's Thrush	2	50-100	_
	-	_	_	-	_	_	_	-	Swainson's Thrush	1	100+	_
	 -	_	_	_	-	_	_	-	Yellow-bellied Sapsucker	1	100+	_
	_	_	_	_	-	_	_	-	Yellow-rumped Warbler	4	0-50	_
	 -	_	_	-	_	_	_	-	Yellow-rumped Warbler	2	100+	_
		0411776E,				Mainly			Tollow fampou vvalsion		1001	
	3MP7	4975499N	Mixedwoods	Calm	5	clear	None	9:28 AM	American Crow	1	100+	_
	- OWN 7	-	-	- Jann	-	-	-	-	Black-capped Chickadee	1	100+	_
	-	_	_	_	_	_	_	-	Broad-winged Hawk	2	50-100	_
	-	-	_	_	_	_	_	-	Brown Creeper	1	0-50	_
	 -	-	-	_	_	_	_	-	Common Raven	1	100+	_
	_	_	-	_	_	_	_	-	Dark-eyed Junco	1 1	50-100	_
	<u> </u>	_	_	_	_	_	-	-	Dark-eyed Junco	3	100+	_
	 -	_	_	_	_	_	-	-	Northern Flicker	1	100+	_
	 -	_	-	_	_	_	_	-	Pileated Woodpecker	1	50-100	_
	_	_	_	_	_	_	_	-	Purple Finch	1	50-100	_
	_	_	_	_	-	_	-	-	Purple Finch	1	100+	_
	 -	_	_	_	_	_	_	-	Yellow-rumped Warbler	1	0-50	_
	 -	_	_	_	_	_	_	-	Yellow-rumped Warbler	2	50-100	_
	_	_	_	_	_	_	_	_	Yellow-rumped Warbler	4	100+	_
		0411591E,				Mainly			Tellow famped warbler	<u> </u>	1001	
	3MP8	4975301N	Mixedwoods	Calm	5	clear	None	9:45 AM	American Crow	2	100+	_
	-	-	-	-	-	-	-	-	American Robin	1	50-100	_
	_	_	_	_	-	_	-	-	American Robin	2	100+	_
	_	_	_	_	-	_	_	-	Black-capped Chickadee	1	0-50	_
	_	_	_	_	-	_	_	-	Blue Jay	1	100+	_
	_	_	_	_	-	_	_	-	Brown Creeper	1	0-50	_
		-	-	-	-	-	-	-	Hermit Thrush	3	100+	
		-		-	-	-	-	-	Pileated Woodpecker	1	100+	
	 	-	-	-	-	-	-	-	Purple Finch	1	100+	-
		-	-	-		-			White-winged Crossbill	1	50-100	
	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	1	0-50	-
	 	-	-	-	-	-	-	-	Yellow-rumped Warbler	2	50-100	
	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	1	100+	



Date Locati 3MP	0411345E 4975371N - - - - - - - - - - - - - - - - - - -		- - - - - - - - - - - - - - - -	Conditi Temperature °C 6	Sky Clear	Precipitation None	7ime 9:59 AM	American Robin Black-capped Chickadee Common Raven Common Raven Dark-eyed Junco Dark-eyed Junco Dark-eyed Junco Hermit Thrush Mourning Dove Pileated Woodpecker Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	Number Observed 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Distance from Observer (m) 100+ 0-50 100+ 100+ 0-50 50-100 100+ 100+ 100+ 100+ 100+ 100+ 100+	- 1P
3MP	0411345E 4975371N	Mixedwoods	Calm	6 	Clear	None	9:59 AM	American Robin Black-capped Chickadee Common Raven Common Raven Dark-eyed Junco Dark-eyed Junco Dark-eyed Junco Hermit Thrush Mourning Dove Pileated Woodpecker Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	3 2 1 1 1 1 1 2 1 1 1 1 1	100+ 0-50 100+ 100+ 0-50 50-100 100+ 100+ 50-100 100+ 100+ 100+ 100+ 100+	- - - - - - - - -
	29 4975371N		- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - -	- - - - - - - - - - - -	- - - - - - - - -	Black-capped Chickadee Common Raven Common Raven Dark-eyed Junco Dark-eyed Junco Dark-eyed Junco Hermit Thrush Mourning Dove Pileated Woodpecker Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	2 1 1 1 1 1 2 1 1 1 1 1	0-50 100+ 100+ 0-50 50-100 100+ 100+ 50-100 100+ 100+ 100+ 100+	- - - - - - - - -
	- - - - - - - - - - - - - - - - - - -		- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - -	- - - - - - - - - - - -	- - - - - - - - -	Black-capped Chickadee Common Raven Common Raven Dark-eyed Junco Dark-eyed Junco Dark-eyed Junco Hermit Thrush Mourning Dove Pileated Woodpecker Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	2 1 1 1 1 1 2 1 1 1 1 1	0-50 100+ 100+ 0-50 50-100 100+ 100+ 50-100 100+ 100+ 100+ 100+	- - - - - - - - -
- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -		- - - - - - - - - - - -	- - - - - - - - - - - -	- - - - - - - - - -	- - - - - - - - -	- - - - - - - -	Common Raven Common Raven Dark-eyed Junco Dark-eyed Junco Dark-eyed Junco Hermit Thrush Mourning Dove Pileated Woodpecker Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	1 1 1 1 1 2 1 1 1 1 1	100+ 100+ 0-50 50-100 100+ 100+ 50-100 100+ 100+ 100+ 100+	- - - - - - - - -
- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -		- - - - - - - - - - - -	- - - - - - - - - - -	- - - - - - - - - -	- - - - - - - - -	- - - - - - - -	Common Raven Dark-eyed Junco Dark-eyed Junco Dark-eyed Junco Hermit Thrush Mourning Dove Pileated Woodpecker Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	1 2 1 1 1 1 1 1	100+ 0-50 50-100 100+ 100+ 50-100 100+ 100+ 100+ 100+	- - - - - - -
- - - - - - - - - 3MP	- - - - - - - - - - - 0411320E 10 4975153N		- - - - - - - - - -	- - - - - - - - - -	- - - - - - - -	- - - - - - - - -	- - - - - - -	Dark-eyed Junco Dark-eyed Junco Dark-eyed Junco Hermit Thrush Mourning Dove Pileated Woodpecker Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	1 2 1 1 1 1 1 1	0-50 50-100 100+ 100+ 50-100 100+ 100+ 100+ 100+	- - - - - - -
- - - - - - - - - 3MP	- - - - - - - - - - - 0411320E 10 4975153N	- - - - - - - - - - - - - - - - - - -	- - - - - - - - -	- - - - - - - -	- - - - - - - -	- - - - - - -	- - - - - -	Dark-eyed Junco Dark-eyed Junco Hermit Thrush Mourning Dove Pileated Woodpecker Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	1 2 1 1 1 1 1 1	50-100 100+ 100+ 50-100 100+ 100+ 100+	- - - - - -
- - - - - - - - - 3MP	- - - - - - - - - 0411320E 10 4975153N	- - - - - - - - - - Mixedwoods	- - - - - - - -	- - - - - - -	- - - - - - -	- - - - - - -	- - - - - -	Dark-eyed Junco Hermit Thrush Mourning Dove Pileated Woodpecker Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	2 1 1 1 1 1 1	100+ 100+ 50-100 100+ 100+ 100+ 100+	- - - - -
- - - - - - - - 3MP	- - - - - - - - 0411320E 10 4975153N	- - - - - - - - - Mixedwoods	- - - - - - -	- - - - - -	- - - - - -	- - - - - -	- - - - -	Hermit Thrush Mourning Dove Pileated Woodpecker Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	2 1 1 1 1 1 1	100+ 50-100 100+ 100+ 100+ 100+	- - - -
- - - - - 3MP	- - - - - - - 0411320E 10 4975153N	- - - - - - - Mixedwoods	-	- - - - -	- - - -	- - - - -	- - - - -	Mourning Dove Pileated Woodpecker Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	1 1 1 1 1	50-100 100+ 100+ 100+ 100+	- - - -
- - - - - 3MP	- - - - - - - 0411320E 10 4975153N	- - - - - - - Mixedwoods	-	- - - - -	- - - -	- - - - -	- - - -	Pileated Woodpecker Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	1 1 1 1	100+ 100+ 100+ 100+	- - -
- - - - 3MP	- - - - - - 0411320E 10 4975153N	Mixedwoods	-	- - - -	- - - -	- - - -	- - -	Purple Finch Ruffed Grouse Winter Wren Yellow-rumped Warbler	1 1 1	100+ 100+ 100+	- - -
- - - - 3MP	- - - - - 0411320E 10 4975153N	- - - - - Mixedwoods	-	- - -	- - -	- - -	- - -	Ruffed Grouse Winter Wren Yellow-rumped Warbler	1 1	100+ 100+	-
- - - - 3MP	- - - 0411320E 10 4975153N	- - - - - Mixedwoods	-		-		-	Winter Wren Yellow-rumped Warbler	1	100+	
3MP	- - - 0411320E 10 4975153N	- - - Mixedwoods	-	-	-	-	-	Yellow-rumped Warbler	1		
3MP	- 0411320E 10 4975153N	- - Mixedwoods	-	-	-	-				0-30	-
3MP	- 0411320E 10 4975153N	- Mixedwoods	-					I CIOW I GILIDOG Waldion	2	50-100	_
3MP ⁻	0411320E 10 4975153N	Mixedwoods		-	_		_	Yellow-rumped Warbler	3	100+	_
-	10 4975153N -		Calm				_	Tellow-fulliped Walbiel	3	100+	
-	-		Califf	6	Clear	None	10:14 AM	American Black Duck	2	FO N	_
			_	-	- Clear	- INOTIC	10.14 AIVI	American Black Buck American Robin	2	0-50	
		_	-		_	-	-	American Robin	1	50-100	_
_	_	-		-		-	-	American Robin	4	100+	
		-	 	-	-	-	-	Blue Jay	2	50-100	-
		-	-	-	-			Common Raven	1	100+	-
	-	-	_			-	-	Dark-eyed Junco	2	0-50	_
	-	-	_	-	_	-	-	Dark-eyed Junco	2	50-100	_
	-	-		-	-	-	-	Dark-eyed Junco	3	100+	
		-	 		_	-	-	Hermit Thrush	1	100+	_
	-	-	-	-	<u> </u>	-	-	Northern Flicker	1 1	100+	
- -				-		-	-	Pine Siskin	2	50-100	
		-	_		-	-	-	Purple Finch	1	50-100	_
		-		-		-	-	Red-breasted Nuthatch	1	50-100	
		-		-	-	-	-	Yellow-rumped Warbler	1	0-50	
- -		-	-	_	<u> </u>	_	_	Yellow-rumped Warbler	2	50-100	-
		-	_	-	_	_	-	Yellow-rumped Warbler	2	100+	-
- -	0411385E		_	-	_	-	-	Tellow-fulliped Walblei		100+	-
3MP		Mixedwoods	Calm	7	Clear	None	10:29 AM	Black-backed Woodpecker	2	0-50	1P
- 31411	-	-	-	-	-	-		Black-capped Chickadee	2	50-100	1P
		-	-	-	_	_	-	Blue Jay	2	50-100	
		-	_		_	-	-	Common Raven	1	100+	-
		-	_	-	_	-	-	Dark-eyed Junco	3	50-100	_
-		-	-	-	-	-	-	Dark-eyed Junco	2	100+	-
-		-	_	-	-	-	-	Pine Siskin	2	50-100	-
		-	-	-	-	-	-	Purple Finch	1	50-100	-
	- -	-	-		-			Red-breasted Nuthatch	1	50-100	
-		-	+	-		-	-	Ruby-crowned Kinglet	1 1	50-100	-
		-	-	-	-	-	-	Yellow-bellied Sapsucker	1	50-100	-
	 	-	-	-	-	-	-	Yellow-rumped Warbler	1 1	0-50	-
	- -	-	-	-	-	-	-	Yellow-rumped Warbler	2	50-100	-
		-	-	-	-	-	-	Yellow-rumped Warbler	2	100+	-



Date		Coordinates			Condit	ions				Number	Distance from	Pairs
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	Falls
		0411268E,										
	3MP12	4974617N	Mixedwoods	Calm	9	Clear	None	10:46 AM	American Crow	1	100+	-
	-	-	-	-	-	-	-	-	American Robin	1	50-100	-
ı	-	-	-	-	-	-	-	-	American Robin	2	100+	-
	-	-	-	-	-	-	-	-	Black-capped Chickadee	2	0-50	1P
	-	-	-	-	-	-	-	-	Blue Jay	1	100+	-
	-	-	-	-	-	-	-	-	Common Raven	1	100+	-
	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	0-50	1P
	-	-	-	-	-	-	-	-	Dark-eyed Junco	1	100+	-
	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	0-50	1P
ı	-	-	-	-	-	-	-	-	Pine Siskin	1	50-100	-
1	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	2	0-50	-
	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	1	100+	-
	-	-	-	-	-	-	-		Yellow-rumped Warbler	3	0-50	-
	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	1	50-100	-
	-	-	-	-	-	-	-		Yellow-rumped Warbler	2	100+	-
		0412501E,							'			
May 31/2012	3MP1	4976533N	Mixedwoods	Calm	12	Overcast	None	8:51 AM	American Robin	5	50-100	-
	-	-	-	-	-	-	-	-	American Robin	6	100+	-
	_	-	-	-	-	-	-	_	Black-and-white Warbler	1	0-50	-
	-	-	-	_	-	_	-	-	Black-and-white Warbler	1	50-100	-
	_	-	-	_	-	_	-	_	Black-and-white Warbler	1	100+	-
	_	-	-	_	-	_	-	-	Black-capped Chickadee	2	0-50	1P
	_	-	-	_	-	_	-	-	Black-throated Blue Warbler	1	50-100	-
	_	-	-	_	_	_	-	_	Black-throated Green Warbler	1	100+	-
	_	-	_	_	-	_	-	_	Blue Jay	1	100+	-
	_	-	-	_	-	_	-	-	Blue-headed Vireo	1	0-50	-
	_	-	-	_	-	_	-	_	Blue-headed Vireo	1	100+	-
	_	-	_	_	_	_	-	_	Dark-eyed Junco	1	100+	_
	_	-	_	_	_	_	-	_	Eastern Wood-pewee	1	100+	_
1	-	-	_	_	-	_	-	-	Hairy Woodpecker	1 1	50-100	_
1	_	-	_	_	-	_	-	-	Least Flycatcher	1	0-50	_
	_	-	_	_	-	_	-	-	Magnolia Warbler	1	100+	
	_	-	_	_	-	_	-	-	Ovenbird	1	0-50	
,	_	-	_	_	-	_	_	-	Ovenbird	1	50-100	
,	_	_	_	_	-	_	-	_	Ovenbird	2	100+	_
,	_	-	-	_	-	_	-	-	Purple Finch	1	50-100	_
,	_	-	_	_	-	_	-	-	Red-breasted Nuthatch	2	50-100	
,	_	-	_	_	-	_	-		Red-eyed Vireo	2	0-50	
		_		_	-	_	-	<u>-</u>	Red-eyed Vireo	1	50-100	
,	-	_	_	_	-	_	-		Red-eyed Vireo	2	100+	
,		_	-	_	-	-	-	-	Swainson's Thrush	1	0-50	<u> </u>
		_	-		-	-	-	-	Swainson's Thrush	2	100+	<u> </u>
•	-	=	-	-	-	-	-	-	Winter Wren	1	100+	<u> </u>



		Coordinates			Condit	ione				Number	Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	Pairs
Date	Location	0412345E,	Парна	willa	Temperature C	<u> </u>	Frecipitation	Tille	Common Name	Observed	Observer (III)	
	3MP2	4976370N	Mixedwoods	Calm	12	Overcast	None	9:13	American Robin	1	0-50	_
	JIVII Z	-	-	- Callii	-		- INOTIC		American Robin	3	50-100	
	_	-	-	-	-	_	-		American Robin	4	100+	
	_	_	-	_	-	_	-	<u> </u>	Black-and-white Warbler	1	0-50	
		-	-	_	-	_	-		Black-and-white Warbler	2	50-100	_
		_	-		-	_	-		Blackburnian Warbler	1	50-100	
	 -	_	-		-	_	-		Blackburnian Warbler	1	100+	_
	_	_		_	-	 	-		Black-throated Blue Warbler	1	50-100	_
	_	_	-	_	-	_	_		Black-throated Blue Warbler	1	100+	_
	_	_		_	_	_	-		Least Flycatcher	1	0-50	_
	 -	_	_	_	-	_	-		Least Flycatcher	4	50-100	_
	_	_	_	_	-		_		Least Flycatcher	2	100+	
	-	_	-	_	-	_	-		Magnolia Warbler	2	50-100	_
	_	_	-	_	-	_	-		Magnolia Warbler	2	100+	_
	-	-	-	_	-	_	-		Mourning Dove	1	0-50	
	-	_	_	_	-	_	-		Ovenbird	1	50-100	_
	_	_	_	_	_	_	_		Ovenbird	2	100+	_
		-	-		-	_	_		Red-eyed Vireo	1	0-50	
	_	-	_	_	_		_		Red-eyed Vireo	3	50-100	
		-	_	_	-	_	-		Red-eyed Vireo	2	100+	_
		0412161E,							Red cycu viico		1001	
	3MP3	4976275N	Mixedwoods	Calm	12	Overcast	None	9:30	Black-capped Chickadee	2	0-50	1P
	-	-	-	-	-	-	-	9.50	Black-throated Green Warbler		100+	-
	_	-	-	_	-	_	-	<u> </u>	Blue Jay	1	50-100	
	-	_	-	_	-	_	-		Blue-headed Vireo	1	100+	_
	-	_	-	-	-	_	-		Common Raven	1	100+	
		_	-		-	_	-	<u> </u>	Dark-eyed Junco	1	100+	
	-	-	-		-	_	-		Hermit Thrush	2	100+	
	_	-	_	_	-		-		Least Flycatcher	4	50-100	
	-	-	-	_	-	_	-		Least Flycatcher	2	100+	_
	 -	_	_	_	-	_	-		Mourning Dove	1	50-100	_
	_	_	_		-	_	-		Ovenbird	1	0-50	_
	_	-	_		_	 	_		Ovenbird	2	50-100	-
	_	-	-	_	-	_	_	<u> </u>	Red-breasted Nuthatch	1	100+	-
	-	-	-	-	-	_	_	-	Red-eyed Vireo	2	50-100	
	-	_	-		-	-	-	<u> </u>	Red-eyed Vireo	2	100+	_
	-	_	-		-	-	-	<u> </u>	Swainson's Thrush	1	50-100	
	-	_	-	-	-	-	-	<u> </u>	Swainson's Thrush	4	100+	
	-	_	-		-	-	-	<u> </u>	Winter Wren	1	100+	
	-	_	-	-	-	-	-	<u> </u>	Yellow-bellied Sapsucker	1	0-50	
	-	0412102E,	-	-	_	-	-		Tollow beliled dapadekel	 	0 00	
	3MP4	4975988N	Mixedwoods	Calm	12	Overcast	None	9:49	American Crow	1	100+	l _
	-	-	-	-	-	-	-	9.49 -	American Robin	1	50-100	
	-	_	-	-	-	-	-	<u>-</u>	American Robin	2	100+	
	-	_	-	-	-	-	-	<u> </u>	Blackburnian Warbler	1	50-100	
	-	_	<u> </u>	-	-	-	-	<u> </u>	Black-throated Blue Warbler	1	0-50	
	-	_	<u> </u>		-	_	-	<u> </u>	Black-throated Blue Warbler	2	50-100	
	· -		-	_		<u> </u>	_	-	Black-throated Blue Warbler		100+	



		Coordinates			Condit	ione			1	Number	Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	Pairs
Date	Location	-	-	-	-	-	-	-	Black-throated Green Warbler	2	100+	_
	_	-	_	_	-	_	_	-	Blue Jay	1	100+	_
	_	_	_	_	_		_		Blue-headed Vireo	1	50-100	
	_	_	_	_	-	_	-	-	Brown Creeper	1	0-50	_
	 	_	_		-	_	-	<u> </u>	Eastern Wood-pewee	1	100+	
	-		_		-	_	-	<u> </u>	Hermit Thrush	2	100+	
			_		-	_	_		Least Flycatcher	2	50-100	
	-		-		-		-	<u> </u>	Least Flycatcher	2	100+	
			_		-		-	<u> </u>	Mourning Dove	1	50-100	
			_	_	-	_	_	<u> </u>	Northern Parula	1	0-50	
	-			-	-	<u> </u>	-		Northern Parula	1	50-100	-
	-		-	-		-	-	<u> </u>	Ovenbird	1	0-50	
	-	-		-	-	-	-		Ovenbird	1		-
	-	-	-	-	-	-	-	-	Winter Wren	2	50-100	-
	-	-	-	-	-	-	-	-		1	100+	-
	-	0444000	-	-	-	-	-	-	Yellow-bellied Sapsucker	1	100+	-
	3MP6	0411883E, 4975794N	Mixedwoods	Calm	12	Overcast	None	10:13	Black-and-white Warbler	1	50-100	-
	-	1	-	-	-	-	-	-	Black-and-white Warbler	1	100+	ı
	-	-	-	-	-	-	-	-	Black-capped Chickadee	2	0-50	1P
	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	2	0-50	-
	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	2	50-100	-
	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	100+	-
	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	50-100	-
	-	-	-	-	-	-	-	-	Red-eyed Vireo	1	0-50	-
	-	-	-	-	-	-	-	-	Red-eyed Vireo	2	50-100	-
	-	-	-	-	-	-	-	-	Red-eyed Vireo	1	100+	-
	3MP7	0411776E, 4975499N	Mixedwoods	Calm	12	Overcast	None	10:34	Blackburnian Warbler	1	0-50	-
	-	-	-	-	-	-	-	-	Blackburnian Warbler	1	50-100	_
	_	-	_	_	-	_	-		Black-capped Chickadee	1	50-100	_
	_	_	_		-	_	-	-	Black-throated Blue Warbler	2	50-100	_
	_		_	_	-	_	-		Black-throated Blue Warbler	2	100+	_
	_	_	_		_	_	_		Blue Jay	1	50-100	_
		_			_	<u> </u>	_		Hermit Thrush	3	100+	
		_	_	_	-	_	_	-	Least Flycatcher	1	100+	
	-	_	-	_	-	_	_	-	Magnolia Warbler	1	100+	
	-	_	_	_	-	_	-		Ovenbird	1	0-50	-
	-		-	_	 		-	<u> </u>	Ovenbird	1	50-100	
		<u>-</u>			-	-	-		Ovenbird	2	100+	-
	-	<u>-</u>	-	-	-	-	-	-	Pine Siskin	1		-
	-	' <u>-</u>		-	-	-	-	-		1	0-50	-
	-	<u>-</u>	-	-	-	-	-	-	Swainson's Thrush Yellow-bellied Sapsucker	1	100+ 0-50	-
	-	- 0411591E,	-	-	-	-	-	-	<u> </u>	1	0-50	-
	3MP8	4975301N	Mixedwoods	Calm	12	Overcast	None	10:55	American Crow	2	100+	-
	-	-	-	-	-	-	-	-	Black-and-white Warbler	1	50-100	-
	-	-	-	-	-	-	-	-	Black-and-white Warbler	1	100+	-
	-	-	-	-	-	-	-	-	Black-capped Chickadee	2	50-100	1P
	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	2	50-100	-
	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	2	100+	_



	1		ı	1					T			
	l	Coordinates		147	Conditi					Number	Distance from	Pairs
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	
	-	-	-	-	-	-	-	-	Black-throated Green Warbler	2	50-100	-
	-	-	-	-	-	-	-	-	Blue Jay	3	0-50	-
	-	-	-	-	-	-	-	-	Blue Jay	1	100+	-
	-	-	-	-	-	-	-	-	Blue-headed Vireo	2	0-50	-
	-	-	-	-	-	-	-	-	Brown Creeper	1	0-50	-
	-	-	-	-	-	-	-	-	Dark-eyed Junco	1	0-50	-
	-	-	-	-	-	-	-	-	Dark-eyed Junco	4	100+	
	-	-	-	-	-	-	-	-	Downy Woodpecker	1	100+	-
	-	-	-	-	-	-	-	-	Hermit Thrush	1	0-50	-
	-	-	-	-	-	-	-	-	Hermit Thrush	2	50-100	-
	-	-	-	-	-	-	-	-	Hermit Thrush	4	100+	-
	-	-	-	-	-	-	-	-	Mourning Dove	1	100+	-
	-	-	-	-	-	-	-	-	Purple Finch	1	50-100	-
	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	2	50-100	-
	-	-	-	-	-	-	-	-	Red-eyed Vireo	2	50-100	-
	-	-	-	-	-	-	-	-	Red-eyed Vireo	2	100+	-
	-	-	-	-	-	-	-	-	Swainson's Thrush	2	50-100	-
	-	-	-	-	-	-	-	-	Swainson's Thrush	2	100+	-
	-	-	-	-	-	-	-	-	Winter Wren	1	100+	-
	3MP9	0411345E, 4975371N	Mixedwoods	Calm	12	Overcast	None	11:20	American Crow	2	100+	•
	-	-	-	-	-	-	-	-	Black-and-white Warbler	1	0-50	-
	-	-	-	-	-	-	-	-	Blackburnian Warbler	1	50-100	-
	-	-	-	-	-	-	-	-	Black-capped Chickadee	1	100+	-
	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	2	50-100	-
	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	2	100+	-
	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	50-100	-
	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	100+	-
	-	-	-	-	-	-	-	-	Blue Jay	1	50-100	-
	-	-	-	-	-	-	-	-	Common Raven	1	100+	-
	-	-	-	-	-	-	-	-	Ovenbird	1	0-50	-
	-	-	-	-	-	-	-	-	Ovenbird	1	50-100	-
	-	-	-	-	-	-	-	-	Ovenbird	2	100+	-
	-	-	-	-	-	-	-	-	Pine Siskin	1	50-100	-
	-	-	-	-	-	-	-	-	Red-eyed Vireo	1	50-100	-
	-	-	-	-	-	-	-	-	Red-eyed Vireo	3	100+	-
	3MP10	0411320E, 4975153N	Mixedwoods	Calm	12	Overcast	None	11:37	American Crow	2	100+	-
	-	-	-	-	-	-	-	-	Blackburnian Warbler	1	50-100	-
	-	-	-	-	-	-	-	-	Blackburnian Warbler	1	100+	-
	-	-	-	-	-	-	-	-	Black-capped Chickadee	2	0-50	1P
	-	-	-	-	-	-	-	-	Black-capped Chickadee	1	50-100	-
	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	2	0-50	-
	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	2	50-100	-
	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	50-100	-
	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	100+	-
	-	-	-	-	-	-	-	-	Blue-headed Vireo	1	50-100	-
	_	-	_	-	-	_	-	_	Dark-eyed Junco	1	50-100	-



		Coordinates	1		Condit	ions	T		T	Number	Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	Pairs
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	1	100+	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	2	100+	-
-	-	-	-	-	-	-	-	-	Purple Finch	1	0-50	-
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	2	50-100	-
-	-	-	-	-	-	-	-	-	Ruffed Grouse	1	100+	-
-	3MP11	0411385E, 4974883N	Mixedwoods	Calm	12	Overcast	None	11:53	Black-and-white Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Blackburnian Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	2	0-50	1P
-	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	3	0-50	-
-	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	2	50-100	-
-	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	2	100+	-
-	-	-	-	-	-	-	-	-	Black-throated Green Warbler	2	0-50	-
-	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	50-100	-
-	-	•	-	-	-	-	-	-	Black-throated Green Warbler	2	100+	-
-	-	-	-	-	-	-	-	-	Blue Jay	1	100+	-
-	-	-	-	-	-	-	-	-	Blue-headed Vireo	2	0-50	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	1	100+	-
-	-	•	-	-	-	-	-	-	Least Flycatcher	4	50-100	-
-	-	•	-	-	-	-	-	-	Magnolia Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Ovenbird	2	0-50	-
-	-	-	-	-	-	-	-	-	Ovenbird	1	100+	-
-	-	-	-	-	-	-	-	-	Pine Siskin	1	50-100	-
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	1	100+	-
-	-	-	-	-	-	-	-	-	Winter Wren	1	100+	-



Common Name	Scientific Name	Number of Observations	Individuals Observed	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
American Black Duck	Anas rubripes	1	2	Green	Not Listed	Not Listed	Not Listed
American Crow	Corvus brachyrhynchos	16	23	Green	Not Listed	Not Listed	Not Listed
American Goldfinch	Spinus tristis	2	3	Green	Not Listed	Not Listed	Not Listed
American Robin	Turdus migratorius	36	80	Green	Not Listed	Not Listed	Not Listed
Black-and-white Warbler	Mniotilta varia	11	12	Green	Not Listed	Not Listed	Not Listed
Black-backed Woodpecker	Picoides arcticus	1	2	Yellow	Not Listed	Not Listed	Not Listed
Blackburnian Warbler	Dendroica fusca	9	9	Green	Not Listed	Not Listed	Not Listed
Black-capped Chickadee	Poecile atricapillus	26	51	Green	Not Listed	Not Listed	Not Listed
Black-throated Blue Warbler	Dendroica caerulescens	19	34	Green	Not Listed	Not Listed	Not Listed
Black-throated Green Warbler	Dendroica virens	12	17	Green	Not Listed	Not Listed	Not Listed
Blue Jay	Cyanocitta cristata	25	36	Green	Not Listed	Not Listed	Not Listed
Blue-headed Vireo	Vireo solitarius	7	9	Green	Not Listed	Not Listed	Not Listed
Broad-winged Hawk	Buteo platypterus	4	5	Green	Not Listed	Not Listed	Not Listed
Brown Creeper	Certhia americana	5	6	Green	Not Listed	Not Listed	Not Listed
Common Raven	Corvus corax	13	15	Green	Not Listed	Not Listed	Not Listed
Dark-eyed Junco	Junco hyemalis	40	67	Green	Not Listed	Not Listed	Not Listed
Downy Woodpecker	Picoides pubescens	3	3	Green	Not Listed	Not Listed	Not Listed
Eastern Wood-pewee	Contopus virens	2	2	Yellow	Not Listed	Not Listed	Not Listed
Evening Grosbeak	Coccothraustes vespertinus	1	1	Green	Not Listed	Not Listed	Not Listed
Golden-crowned Kinglet	Regulus satrapa	7	13	Yellow	Not Listed	Not Listed	Not Listed
Hairy Woodpecker	Picoides villosus	7	9	Green	Not Listed	Not Listed	Not Listed
Hermit Thrush	Catharus guttatus	19	46	Green	Not Listed	Not Listed	Not Listed
Least Flycatcher	Empidonax minimus	10	23	Green	Not Listed	Not Listed	Not Listed
Magnolia Warbler	Dendroica magnolia	5	7	Green	Not Listed	Not Listed	Not Listed
Mourning Dove	Zenaida macroura	8	8	Green	Not Listed	Not Listed	Not Listed
Northern Flicker	Colaptes auratus	7	7	Green	Not Listed	Not Listed	Not Listed
Northern Parula	Parula americana	2	2	Green	Not Listed	Not Listed	Not Listed
Ovenbird	Seiurus aurocapilla	17	24	Green	Not Listed	Not Listed	Not Listed
Pileated Woodpecker	Dryocopus pileatus	11	11	Green	Not Listed	Not Listed	Not Listed
Pine Siskin	Spinus pinus	11	13	Yellow	Not Listed	Not Listed	Not Listed
Purple Finch	Carpodacus purpureus	23	31	Green	Not Listed	Not Listed	Not Listed
Red-breasted Nuthatch	Sitta canadensis	16	21	Green	Not Listed	Not Listed	Not Listed
Red-eyed Vireo	Vireo olivaceus	15	27	Green	Not Listed	Not Listed	Not Listed
Ruby-crowned Kinglet	Regulus calendula	3	3	Yellow	Not Listed	Not Listed	Not Listed
Ruffed Grouse	Bonasa umbellus	6	6	Green	Not Listed	Not Listed	Not Listed
Scarlet Tanager	Piranga olivacea	1	1	Undetermined	Not Listed	Not Listed	Not Listed
Swainson's Thrush	Catharus ustulatus	9	16	Green	Not Listed	Not Listed	Not Listed
White-breasted Nuthatch	Sitta carolinensis	1	1	Green	Not Listed	Not Listed	Not Listed
White-winged Crossbill	Loxia leucoptera	2	7	Green	Not Listed	Not Listed	Not Listed
Winter Wren	Troglodytes troglodytes	9	9	Green	Not Listed	Not Listed	Not Listed
Yellow-bellied Sapsucker	Sphyrapicus varius	11	13	Green	Not Listed	Not Listed	Not Listed
Yellow-rumped Warbler	Dendroica coronata	38	71	Green	Not Listed	Not Listed	Not Listed



		Coordinates			Condition	ons		I			Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Number Observed	Observer (m)	Pairs
	200411011	0412501E,	1100100	11110	Tomporatare C	City	· rooipitation		Johnnen Hame	Trainibor Obcorrou	Caserror ()	
June 16/2012	3MP1	4976533N	Mixedwoods	10 km/hr NE	12	Overcast	None	4:42 AM	American Crow	1	100+	_
-	-	-	-	-	-	-	-	-	American Robin	2	0-50	-
-	-	-	-	-	-	-	-	-	American Robin	4	50-100	-
-	-	-	-	-	-	-	-	-	American Robin	4	100+	-
-	-	-	-	-	-	-	-	-	Barred Owl	1	100+	-
-	-	-	-	-	-	-	-	-	Black-and-white Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Blackburnian Warbler	1	50-100	-
-	_	-	-	-	-	-	_	-	Black-throated Green Warbler	1	50-100	_
-	_	-	_	-	-	_	_	-	Black-throated Green Warbler	1	100+	_
_	_	-	_	-	-	_	_	-	Blue Jay	1	50-100	_
_	_	_	-	_	_	_	-	_	Blue-headed Vireo	<u>·</u> 1	0-50	_
_	_	-	-	_	-	_	_	_	Common Nighthawk	<u>.</u> 1	FO	_
_		-	-	_	_	_	-	_	Eastern Wood-pewee	2	0-50	_
-		-	-	-		_	-	_	Eastern Wood-pewee	2	50-100	
-	<u> </u>	-	<u>-</u>	_	<u> </u>	_	<u>-</u>	-	Hermit Thrush	4	100+	
		-	-	+	<u> </u>					<u>4</u> 1	50-100	
-	-			-		-	-	-	Least Flycatcher	1 1		
-	-	-	-	-	-	-	-	-	Least Flycatcher	<u> </u>	100+	-
-	-	-	-	-	-	-	-	-	Northern Parula	ı	0-50	-
-	-	-	-	-	-	-	-	-	Ovenbird	1	0-50	-
-	-	-	-	-	-	-	-	-	Ovenbird	<u> </u>	100+	-
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	1	0-50	-
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	2	50-100	-
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	1	100+	-
-	-	-	-	-	-	-	-	-	Swainson's Thrush	4	100+	-
-	-	-	-	-	-	-	-	-	Yellow-bellied Sapsucker	1	100+	-
		0412345E,										
-	3MP2	4976370N	Mixedwoods	10 km/hr NE	12	Overcast	None	5:04 AM	American Robin	2	0-50	-
-	-	-	-	-	-	-	-	-	American Robin	5	50-100	-
-	-	-	-	-	-	-	•	-	American Robin	4	100+	•
-	-	-	•	-	-	-	-	-	Barred Owl	2	100+	-
-	-	-	-	-	-	-	-	-	Black-and-white Warbler	1	50-100	-
-	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	1	100+	-
-	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	50-100	-
-	-	-	-	-	-	-	-	-	Brown Creeper	1	0-50	-
-	_	-	-	-	-	-	_	-	Eastern Wood-pewee	1	50-100	-
-	-	-	-	-	-	-	_	-	Eastern Wood-pewee	<u> </u>	100+	-
-	_	-	-	_	-	-	_	-	Hermit Thrush	4	100+	-
_	_	-	_	_	-	-	-	_	Least Flycatcher	2	0-50	_
_	_	_	-	_	-	_	_	_	Least Flycatcher	1	100+	_
-		-	-	-	-	_	-	-	Mourning Dove	<u>'</u> 1	50-100	_
_	-	-	-	_	-	_	-	_	Northern Parula	<u>'</u>	0-50	
	<u> </u>	-	<u> </u>	_	<u>-</u>	_		-	Ovenbird	<u>'</u> 1	0-50	
	-	-	<u>-</u>	-	<u>-</u>	_	<u>-</u>	-	Ovenbird	<u> </u>	100+	
-	_			+	<u>-</u>				Red-breasted Nuthatch	<u> </u> 1	50-100	
-	-				-	-	-	-		!		-
-	-	-	-	-					Pod oved Viros	2	50 100	
- - -	-	-	-	-	-	-	-	-	Red-eyed Vireo	2	50-100	-
- - -		-	-	-	-	-	-	-	Red-eyed Vireo	2	100+	-
- - -	-	-	-	-	-							



		Coordinates			Condition	ons					Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Number Observed	Observer (m)	Pairs
		0412161E,					-					
-	3MP3	4976275N	Unknown	Calm	12	Overcast	None	5:21 AM	American Robin	4	50-100	-
-	-	-	-	-	-	-	-	-	American Robin	6	100+	-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	2	0-50	-
-	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	050	-
-	-	-	-	-	-	-	•	-	Black-throated Green Warbler	2	50-100	-
-	-	-	-	-	-	-	•	-	Black-throated Green Warbler	2	100+	-
-	-	-	-	-	-	-	Ī	-	Common Raven	1	F/o W	-
-	-	-	-	-	-	-	Ī	-	Common Raven	1	100+	-
-	-	-	-	-	-	-	Ī	-	Dark-eyed Junco	2	0-50	-
-	-	-	-	-	-	-	Ī	-	Hermit Thrush	2	0-50	-
-	-	-	-	-	-	-	Ī	-	Hermit Thrush	4	50-100	-
-	-	-	-	-	-	-	·	-	Hermit Thrush	4	100+	-
-	-	-	-	-	-	-	-	-	Northern Waterthrush	1	0-50	-
-	-	-	-	-	-	-	-	-	Ovenbird	1	0-50	-
-	-	-	-	-	-	-	-	-	Ovenbird	1	50-100	-
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	1	50-100	-
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	2	100+	-
-	-	-	-	-	-	-	-	-	Swainson's Thrush	2	50-100	-
-	-	-	-	-	-	-	-	-	Swainson's Thrush	4	100+	-
-	-	-	-	-	-	-	-	-	Winter Wren	1	100+	-
-	-	-	-	-	-	-	-	-	Yellow-bellied Sapsucker	1	0-50	-
		0412102E,										
-	3MP4	4975988N	Mixedwoods	Calm	12	Overcast	None	5:38 AM	American Goldfinch	2	0-50	1P
-	-	-	-	-	-	-	-	-	American Robin	2	0-50	-
-	-	-	-	-	-	-	-	-	American Robin	3	50-100	-
-	-	-	-	-	-	-	-	-	American Robin	6	100+	-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	2	0-50	-
-	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	1	100+	-
-	-	-	-	-	-	-	-	-	Blue Jay	1	100+	-
-	-	-	-	-	-	-	-	-	Eastern Wood-pewee	1	0-50	-
_	-	-	-	-	-	-	-	-	Eastern Wood-pewee	1	100+	-
-	-	-	-	-	-	-	•	-	Magnolia Warbler	1	0-50	
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	100+	-
_	-	-	-	-	-	-	-	-	Ovenbird	2	0-50	-
-	-	-	-	-	-	-	-	-	Ovenbird	1	50-100	-
_	-	-	-	-	-	-	-	-	Ovenbird	2	100+	-
-	-	-	-	-	-	-	•	-	Red-eyed Vireo	2	0-50	-
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	2	50-100	-
_	-	-	-	-	-	-	-	-	Red-eyed Vireo	4	100+	-
-	-	-	-	-	-	-	•	-	Swainson's Thrush	2	0-50	-
-	-	-	-	-	-	-	-	-	Swainson's Thrush	2	100+	-
_	-	-	-	-	-	-	-	-	Winter Wren	1	100+	-
_	-	-	-	-	-	-	-	-	Yellow-bellied Sapsucker	2	50-100	-



		Casudinatas		1	0 110				1		Distance from	
D-1-		Coordinates	11-1-1-1	\A/!1	Conditi		Donalul(atlan	T !	O a manual and Nilamana	Name kan Okasama d	Distance from	D-:
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Number Observed	Observer (m)	Pairs
	01450	0411883E,		401 " 115	40					_	5 0.400	
-	3MP6	4975794N	Mixedwoods	10 km/hr NE	12	Overcast	None	5:57 AM	American Goldfinch	1	50-100	-
-	-	-	-	-	-	-	-	-	American Robin	4	0-50	-
-	-	-	-	-	-	-	-	-	American Robin	1	50-100	-
-	-	-	-	-	-	-	-	-	American Robin	3	100+	-
-	-	-	-	-	-	-	-	-	Blue Jay	2	50-100	
-	-	-	-	-	-	-	•	-	Common Raven	1	100+	-
-	-	-	-	-	-	-	-	-	Eastern Wood-pewee	1	100+	-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	100+	-
-	-	-	•	-	-	-	·	-	Northern Parula	1	50-100	-
-	-	-	•	-	-	-	Ī	-	Purple Finch	1	50-100	-
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	2	100+	-
-	-	-	-	-	-	-	-	-	Yellow-bellied Sapsucker	1	100+	-
		0411776E,										
-	3MP7	4975499N	Mixedwoods	10 km/hr NE	12	Overcast	None	6:15 AM	American Robin	2	0-50	1P
-	-	-	-	-	-	-	•	-	American Robin	1	50-100	-
-	-	-	-	-	-	_	-	-	American Robin	3	100+	_
-	-	-	-	-	-	_	-	-	Blackburnian Warbler	1	0-50	_
-	_	-	-	_	-	_	-	_	Black-capped Chickadee	2	0-50	1P
-	_	-	-	_	-	_	-	_	Black-throated Blue Warbler	1	0-50	
_	_	-	-	_	-	_	-	_	Black-throated Blue Warbler	1	100+	_
	_	-	-	_	-	_	-	_	Blue-headed Vireo	1	0-50	
-	_	-	-	-	-	_	-	-	Hermit Thrush	1	0-50	
		-	-	-	<u> </u>	_	<u>-</u>	_	Hermit Thrush	2	100+	
<u> </u>	_	-	-	-	<u>-</u>	-			Magnolia Warbler	1	0-50	
	-							-	Magnolia Warbler	1	100+	-
-	-	-	-	-	-	-	-	-	Ovenbird	3		 1P
-	-	-	-	-	-	-	-	-	Ovenbird	3	0-50	
-	-	-	-	-	-	-	-	-		1	100+	-
-	-	-	-	-	-	-	-	-	Pileated Woodpecker	1	0-50	
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	2	50-100	
-	-	-	-	-	-	-	-	-	Swainson's Thrush	1	0-50	-
-	-	-	-	-	-	-	-	-	Swainson's Thrush	1	50-100	-
		0411591E,										
-	3MP8	4975301N	Mixedwoods	10 km/hr NE	12	Overcast	None	6:32 AM	American Robin	1	0-50	-
-	-	-	-	-	-	-	-	-	American Robin	2	50-100	-
-	-	-	-	-	-	-	-	-	American Robin	1	100+	-
-	-	-	-	-	-	-	-	-	Black-and-white Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Blackburnian Warbler	1	0-50	-
-	-	-	-	-	-	-	i	-	Blackburnian Warbler	1	50-100	-
-	-	-	•	-	-	-	ī	-	Black-throated Blue Warbler	1	0-50	-
-	-	-	-	-	-	-	•	-	Black-throated Green Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	1	0-50	
-	-	-	-	-	-	-	-	-	Hermit Thrush	2	100+	-
-	-	-	-	-	-	-	ī	-	Ovenbird	1	0-50	-
-	-	-	-	-	-	-	-	-	Ruby-throated Hummingbird	1	0-50	-
-	-	-	-	-	-	-	-	-	Swainson's Thrush	1	0-50	-
_	_	-	_	-	-	-	_	_	Swainson's Thrush	2	50-100	_
_	_	-	-	-	-	_	-	-	Swainson's Thrush	2	100+	_
-	_	_	-	-	-	_	-	-	Winter Wren	1	100+	-



		Coordinates			Conditi	ons					Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Number Observed	Observer (m)	Pairs
		0411345E,		1		1					0.0001101 (111)	
-	3MP9	4975371N	Mixedwoods	10 km/hr NE	13	Overcast	None	6:50 AM	American Crow	1	100+	-
-	-	-	-	-	-	-	-	-	American Goldfinch	2	0-50	1P
-	-	-	-	_	-	-	-	-	American Robin	2	0-50	_
-	-	-	-	-	-	-	-	-	American Robin	1	50-100	_
-	-	-	-	_	-	-	-	-	American Robin	2	100+	_
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	8	0-50	Family
-	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	1	50-100	-
-	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	1	100+	-
-	-	-	-	-	-	-	-	-	Blue Jay	1	0-50	-
-	-	-	-	-	-	-	-	-	Blue-headed Vireo	1	50-100	-
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	11	0-50	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	2	50-100	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	2	100+	-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	11	0-50	
-	-	-	-	-	-	-	-	-	Magnolia Warbler	11	50-100	
-	-	-	-	-	-	-	-	-	Ovenbird	1	0-50	
-	-	-	-	-	-	-	-	-	Ovenbird	11	100+	-
-	-	-	-	-	-	-	-	-	Yellow-bellied Sapsucker	1	100+	-
		0411320E,										
-	3MP10	4975153N	Mixedwoods	10 km/hr NE	13	Clearing	None	7:06 AM	American Robin	2	0-50	-
-	-	-	-	-	-	-	-	-	American Robin	2	100+	-
-	-	-	-	-	-	-	-	-	Black-and-white Warbler	1	50-100	-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	1	50-100	-
-	-	-	-	-	-	-	-	-	Cedar Waxwing	1	0-50	
-	-	-	-	-	-	-	-	-	Common Raven	1	50-100	-
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	0-50	
-	-	-	-	-	-	-	-	-	Eastern Wood-pewee	2	100+	
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	50-100	
-	-	-	-	-	-	-	-	-	Ovenbird	1	0-50	-
-	-	-	-	-	-	-	-	-	Ovenbird	1	50-100	-
-	-	-	-	-	-	-	-	-	Ovenbird	1	100+	-
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	2	0-50	1P
_	3MP11	0411385E, 4974883N	Mixedwoods	10 km/hr NE	13	Sunny	None	7:23 AM	American Robin	1	0-50	_
-	-	-	-	-	-	-	-	-	American Robin	1	50-100	-
-	-	-	-	-	-	-	-	-	American Robin	3	100+	-
-	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	1	50-100	-
-	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	50-100	-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	50-100	
-	-	-	-	-	-	-	-	-	Ovenbird	1	0-50	-
-	-	-	-	-	-	-	-	-	Ovenbird	1	50-100	-
-	-	-	-	-	-	-	-	-	Pine Siskin	2	0-50	-
-	-	-	-	-	-	-	-	-	Purple Finch		0-50	-
-	-	-	-	-	-	-	-	-	Swainson's Thrush	<u>.</u> 1	0-50	-
_	-	-	-	_	_	-	_	_	Swainson's Thrush	1	100+	_



		Coordinates			Condition	one					Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Number Observed	Observer (m)	Pairs
Date	Location	(OTHITEADOO)	Habitat	Willia	remperature o	ORY	Tredipitation	Time	Common Name	Mulliper Observed	Observer (III)	1 4113
		0411268E,	Mid-old aged coniferous									
_	3MP12	4974617N	dominated and mixed.	Calm	13	Sunny	None	7:41 AM	Common Raven	1	100+	_
	-	-	-	-	-	-	-	-	Dark-eyed Junco	2	0-50	
_	_	-	_	-	-	_	-	_	Magnolia Warbler	1	0-50	_
_	_	-	-	-	-	_	-	_	Magnolia Warbler	<u> </u>	50-100	_
_	_	-	_	-	-	_	-	_	Ovenbird	1	50-100	_
_	_	_	-	-	-	_	-	_	Ovenbird	<u> </u>	100+	_
_	_	-	-	_	-	_	-	_	Red-breasted Nuthatch	2	0-50	1P
-	_	-	-	_	-	_	_	_	Yellow-bellied Flycatcher	<u>-</u> 1	50-100	-
		0412501E,							, , , , , , , , , , , , , , , , , , , ,	•		-
July 16/2012	3MP1	4976533N	Mixedwoods	20 km/h S	14	Overcast	None	5:27 AM	American Robin	3	0-50	-
-	-	-	-	-	-	-	-	-	American Robin	4	50-100	-
-	-	-	-	-	-	-	-	-	American Robin	6	100+	-
-	-	-	-	-	-	-	-	-	Black-and-white Warbler	1	50-100	-
-	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	100+	
-	-	-	-	-	-	-	-	-	Blue-headed Vireo	1	50-100	-
-	-	-	-	-	-	-	-	-	Common Raven	1	100+	
-	-	-	-	-	-	-	-	-	Magnolia Warbler	2	0-50	-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	50-100	
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	100+	-
-	-	-	-	-	-	-	-	-	Ovenbird	1	50-100	-
-	-	-	-	-	-	-	-	-	Pine Siskin	1	0-50	
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	2	0-50	-
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	2	5-100	
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	3	100+	-
-	-	-	-	-	-	-	-	-	Ruby-crowned Kinglet	1	100+	-
-	-	-	-	-	-	-	-	-	Swainson's Thrush	2	0-50	
-	-	-	-	-	-	-	-	-	Swainson's Thrush	2	50-100	
-	-	-	-	-	-	-	-	-	Yellow-bellied Flycatcher	1	100+	
-	-	-	-	-	-	-	-	-	Yellow-bellied Sapsucker	1	100+	-
-	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	1	50-100	-
	3MP2	0412345E, 4976370N	Mixedwoods	20 km/h S	1.4	Overcast	None	5:44 AM	American Goldfinch	4	0.50	
-	1				14	Overcasi		5.44 AIVI		<u> </u>	0-50	
<u>-</u>	-	-	-	-	<u>-</u>	-	-	-	American Robin American Robin	2	50-100 100+	<u>-</u>
<u>-</u>	-	-	-	-	-	-	<u>-</u>	-	Black-and-white Warbler	1 1	0-50	-
<u>-</u>	-				<u>-</u>	†	-	-	Black-throated Blue Warbler	1	0-50	<u>-</u>
<u>-</u>	-	-	-	-	<u>-</u>	-	-	-	Black-throated Blue Warbler Black-throated Green Warbler	1	100+	<u>-</u>
-	-	-	-	-	-	-	-	-	Blue Jay	1 1		-
	-	-	-	-	-	-	-	-	Common Grackle	1	100+	-
-	-	-	-	-	-	-	-	-		1	100+ 100+	-
-	-	-	-	-	-	-	-	-	Common Nighthawk	•		-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	100+	-
-	-	-	-	-	-	-	-	-	Northern Parula	1	50-100	-
-	-	-	-	-	-	-	-	-	Ovenbird	<u> </u>	100+	-
-	-	-	-	-	-	-	-	-	Swainson's Thrush	1	100+	-



		Coordinates			Condition	ons					Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Number Observed	Observer (m)	Pairs
		0412161E,		111114	Tomporature C						o accerto: ()	
_	3MP3	4976275N	Unknown	20km/h S	14	Overcast	None	5:59 AM	American Crow	1	100+	_
_	-	-	-	-	-		-	- 0.0071111	American Robin	2	0-50	1P
	_	_		_	-	_		_	American Robin	3	100+	
<u> </u>	-	-	<u> </u>	-	<u>-</u>	_	<u>-</u>	<u> </u>	Black-throated green Warbler	<u></u>	50-100	<u>-</u>
<u> </u>	-	-	<u> </u>	-	-	-	<u> </u>	<u> </u>	Blue-headed Vireo	1 1	50-100	<u>-</u>
<u>-</u>	-	-	<u> </u>		-		<u>-</u>	-	Cedar Waxwing	2	0-50	 1P
			<u> </u>		-		<u>-</u>		Dark-eyed Junco		0-50	
-	-	-				-		-		1 1		-
-	-	-	-	-	-	-	-	-	Eastern Wood-pewee	•	100+	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	2	0-50	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	2	100+	-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	<u> </u>	50-100	-
-	-	-	-	-	-	-	-	-	Ovenbird	1	50-100	-
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	2	0-50	1P
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	1	100+	
				20 km/h								
		0412102E,		gusting to								
-	3MP4	4975988N	Mixedwoods	30km/h S	14	Overcast	None	6:16 AM	American Crow	1	100+	-
-	-	-	-	-	-	-	-	-	American Robin	2	0-50	1P
-	-	-	-	-	-	-	-	-	American Robin	1	100+	-
-	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	50-100	-
-	-	-	-	-	-	-	-	-	Eastern Wood-pewee	1	100+	-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Ovenbird	2	0-50	1P
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	1	0-50	-
				20 km/h					,			
		0415503E,		gusting to								
_	3MP5	4975739N	Mixedwoods	30km/h S	14	overcast	none	6:32 AM	American Robin	1	50-100	_
-	-	-	-	-	-	-	-	-	American Robin	2	100+	-
-	_	_	_	-	_	_	-	_	Black-throated Green Warbler	2	0-50	1P
-	_	-	_	-	_	_	-	_	Black-throated Green Warbler	1	100+	- ''
-	_	_	<u> </u>	-	-	_	<u> </u>	_	Ovenbird	1	0-50	-
-	_	-	<u> </u>	_	-	-	<u> </u>	_	Red-eyed Vireo	1	0-50	-
<u> </u>	-	-	<u>-</u>	-	-	_	<u> </u>	-	Red-eyed Vireo	1 1	50-100	<u> </u>
	1 -	-	-	20 km/h	-	-	-	-	iteu-eyeu viieu	l I	30-100	
		0411776E,		gusting to								
	3MP7		Mixedwoods	30km/h S	4.4	Oversest	None	7:08 AM	Dark-eyed Junco	G	0-50	Eamily.
-	1	4975499N			14	Overcast	None			<u>6</u> 1		Family
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	<u>'</u>	0-50	-
-	-	-	-	-	-	-	-	-	Northern Parula	1	0-50	-
		04446455		20 km/h								
	0.455	0411345E,		gusting to				7.00			F0.405	
-	3MP9	4975371N	Mixedwoods	30km/h S	15	Overcast	None	7:28 AM	American Robin	<u> </u>	50-100	-
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	1	0-50	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	1	50-100	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	1	100+	-
-	-	-	-	-	-	-	-	-	Ovenbird	1	0-50	-
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	1	0-50	-



		Coordinates			Conditi	ons					Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Number Observed	Observer (m)	Pairs
				20 km/h			-					
		0411385E,		gusting to								
-	3MP11	4974883N	Mixedwoods	30km/h S	15	Overcast	None	7:47 AM	Black-capped Chickadee	8	50-100	Family
-	-	-	-	-	-	-	-	-	Black-throated Blue Warbler	1	50-100	-
-	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	100+	-
-	-	-	-	-	-	-	-	-	Blue-headed Vireo	2	0-50	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	2	50-100	Adult w/young
-	-	-	-	-	-	-	-	-	Hermit Thrush	2	100+	-
				20 km/h								
		0411268E,	Mid-old aged coniferous	gusting to								
-	3MP12	4974617N	dominated and mixed.	30km/h S	15	Overcast	None	8:12 AM	American Robin	2	100+	-
-	-	-	-	-	-	-	-	-	Blue Jay	1	50-100	-
-	-	-	-	-	-	-	-	-	Brown Creeper	1	50-100	-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	1	100+	-
-	-	-	-	-	-	-	-	-	Mourning Dove	1	100+	-
-	-	-	-	-	-	-	-	-	Ovenbird	1	0-50	-
				20 km/h								
		0411320E,		gusting to								
-	3MP10	4975153N	Mixedwoods	30km/h S	15	Overcast	None	8:33 AM	Golden-crowned Kinglet	4	0-50	Family
-	-	-	-	-	-	-	-	-	Blue Jay	1	100+	-
-	-	-	-	-	-	-	-	-	Hermit Thrush	2	50-100	-
-	-	-	-	-	-	-	-	-	Red-eyed Vireo	1	100+	-
-	-	-	-	-	-	-	-	-	Swainson's Thrush	1	100+	-
				20 km/h								
		0411591E,		gusting to								
-	3MP8	4975301N	Mixedwoods	30km/h S	15	Overcast	Drizzle	8:52 AM	American Crow	2	100+	-
-	-	-	-	-	-	-	-	-	American Robin	1	100+	-
-	-	-	-	-	-	-	-	-	Black-and-white Warbler	1	100+	-
-	-	-	-	-	-	-	-	-	Blackburnian Warbler	1	0-50	-
-	-	-	-	-	-	-	-	-	Black-throated Green Warbler	1	100+	-
-	-	-	-	-	-	-	-	-	Blue-headed Vireo	1	0-50	-



		Number of Times	Individuals				
Common Name	Scientific Name	Observed	Observed	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
American Crow	Corvus brachyrhynchos	5	6	Green	Not Listed	Not Listed	Not Listed
American Goldfinch	Spinus tristis	4	6	Green	Not Listed	Not Listed	Not Listed
American Robin	Turdus migratorius	42	105	Green	Not Listed	Not Listed	Not Listed
Barred Owl	Strix varia	2	3	Green	Not Listed	Not Listed	Not Listed
Black-and-white Warbler	Mniotilta varia	7	7	Green	Not Listed	Not Listed	Not Listed
Blackburnian Warbler	Dendroica fusca	5	5	Green	Not Listed	Not Listed	Not Listed
Black-capped Chickadee	Poecile atricapillus	6	23	Green	Not Listed	Not Listed	Not Listed
Black-throated Blue Warbler	Dendroica caerulescens	13	13	Green	Not Listed	Not Listed	Not Listed
Black-throated Green Warbler	Dendroica virens	16	19	Green	Not Listed	Not Listed	Not Listed
Blue Jay	Cyanocitta cristata	7	8	Green	Not Listed	Not Listed	Not Listed
Blue-headed Vireo	Vireo solitarius	7	8	Green	Not Listed	Not Listed	Not Listed
Brown Creeper	Certhia americana	2	2	Green	Not Listed	Not Listed	Not Listed
Cedar Waxwing	Bombycilla cedrorum	2	3	Green	Not Listed	Not Listed	Not Listed
Common Grackle	Quiscalus quiscula	1	1	Green	Not Listed	Not Listed	Not Listed
Common Nighthawk	Chordeiles minor	2	2	Red	Threatened	Threatened	Threatened
Common Raven	Corvus corax	6	6	Green	Not Listed	Not Listed	Not Listed
Dark-eyed Junco	Junco hyemalis	7	15	Green	Not Listed	Not Listed	Not Listed
Eastern Wood-pewee	Contopus virens	10	13	Yellow	Not Listed	Not Listed	Not Listed
Golden-crowned Kinglet	Regulus satrapa	1	4	Yellow	Not Listed	Not Listed	Not Listed
Hairy Woodpecker	Picoides villosus	1	1	Green	Not Listed	Not Listed	Not Listed
Hermit Thrush	Catharus guttatus	18	40	Green	Not Listed	Not Listed	Not Listed
Least Flycatcher	Empidonax minimus	4	5	Green	Not Listed	Not Listed	Not Listed
Magnolia Warbler	Dendroica magnolia	22	23	Green	Not Listed	Not Listed	Not Listed
Mourning Dove	Zenaida macroura	2	2	Green	Not Listed	Not Listed	Not Listed
Northern Parula	Parula americana	5	5	Green	Not Listed	Not Listed	Not Listed
Northern Waterthrush	Seiurus noveboracensis	1	1	Green	Not Listed	Not Listed	Not Listed
Ovenbird	Seiurus aurocapilla	28	33	Green	Not Listed	Not Listed	Not Listed
Pileated Woodpecker	Dryocopus pileatus	1	1	Green	Not Listed	Not Listed	Not Listed
Pine Siskin	Spinus pinus	2	3	Yellow	Not Listed	Not Listed	Not Listed
Purple Finch	Carpodacus purpureus	2	2	Green	Not Listed	Not Listed	Not Listed
Red-breasted Nuthatch	Sitta canadensis	3	5	Green	Not Listed	Not Listed	Not Listed
Red-eyed Vireo	Vireo olivaceus	22	38	Green	Not Listed	Not Listed	Not Listed
Ruby-crowned Kinglet	Regulus calendula	1	1	Yellow	Not Listed	Not Listed	Not Listed
Ruby-throated Hummingbird	Archilochus colubris	1	1	Green	Not Listed	Not Listed	Not Listed
Swainson's Thrush	Catharus ustulatus	19	34	Green	Not Listed	Not Listed	Not Listed
Winter Wren	Troglodytes troglodytes	3	3	Green	Not Listed	Not Listed	Not Listed
Yellow-bellied Flycatcher	Empidonax flaviventris	2	2	Yellow	Not Listed	Not Listed	Not Listed
Yellow-bellied Sapsucker	Sphyrapicus varius	6	7	Green	Not Listed	Not Listed	Not Listed
Yellow-rumped Warbler	Dendroica coronata	1	1	Green	Not Listed	Not Listed	Not Listed



Probable Breeder Confirmed Breeder

		Coordinates			Conditions					Number	Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	Flyover Height (m)
Date	Location	0412501E,	Habitat	20 km/h W gusts	Tomporatare C	- City	1 rooipitation	111110	- Common Hame	CDCC: YCC	Cocci vei (iii)	
October 2/2012	3MP1	4976533N	Mixedwoods	of 40 km/h	12	Overcast	None	7:07 AM	American Crow	6	100+	_
-	-	-	-	-	-	-	-	-	American Robin	2	0-50	_
_	_	_	-	-	-	_	_	_	American Robin	5	50-100	_
<u> </u>	-	-	-	-	-	_	-	-	American Robin	5	100+	<u>-</u>
<u>-</u>	-	-	-	-	-	_	-		American Woodcock	1	0-50	<u>-</u>
<u>-</u>	-	-	-	-	-	-	-	-	Bald Eagle	1	FO SE to SW	>100
	-	-	-	-	-	-			Blue Jay	2	FO S to N	100
-		-	-	-		-	-		Canada Goose	8	FO S to N	> 100
-	-				-		-		Canada Goose Common Raven	1	FO S to N	>100
-	-	-	-	-	-	-	-	-			50-100	
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	6		-
-	-	-	-	-	-	-	-	-	Evening Grosbeak	2	FO NE to SW	100
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	4	0-50	-
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	1	0-50	-
-	-	-	-	-	-	-	-	-	Magnolia Warbler	2	0-50	-
-	-	-	-	-	-	-	-	-	White-throated Sparrow	8	0-50	-
		0412345E,		20 km/h W gusts								
-	3MP2	4976370N	Mixedwoods	of 40 km/h	12	Overcast	None	7:24 AM	American Crow	4	100+	-
-	-	-	-	-	-	-	-	-	American Robin	2	50-100	•
-	-	-	-	-	-	-	-	-	White-throated Sparrow	6	50-100	-
		0412161E,		20 km/h W gusts								
-	3MP3	4976275N	Mixedwoods	of 40 km/h	12	Overcast	None	7:42 AM	American Crow	4	100+	-
-	-	-	-	-	-	-	-	-	American Robin	2	0-50	-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	6	50-100	•
-	-	-	-	-	-	-	-	-	Blue Jay	4	50-100	•
-	-	-	-	-	-	-	-	-	Brown Creeper	3	50-100	•
-	-	-	-	-	-	-	-	-	Common Raven	1	100+	•
-	-	-	-	-	-	-	-	1	Dark-eyed Junco	14	0-50	1
-	-	-	-	-	-	-	-	-	Downy Woodpecker	1	50-100	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	4	0-50	-
-	-	-	-	-	-	-	-	-	Pileated Woodpecker	2	0-50	-
-	-	-	-	-	-	-	-	-	Ruffed Grouse	1	0-50	-
-	-	-	-	-	-	-	-	-	Swainson's Thrush	2	0-50	•
		0412102E,		20 km/h W gusts								
-	3MP4	4975988N	Mixedwoods	of 40 km/h	12	Overcast	None	8:03 AM	American Crow	8	100+	-
-	_	-	-	-	-	-	-	-	Black-capped Chickadee	12	0-50	_
-	_	-	-	-	-	-	_	-	Blue Jay	2	50-100	-
_	-	-	-	-	-	_	-	-	Blue Jay	4	100+	_
-	-	-	-	-	-	-	_	-	Common Raven	2	100+	-
-	-	-	-	-	-	-	-	-	Dark-eyed Junco	4	0-50	_
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	4	0-50	-
<u> </u>	-	-	-	-	-	_	-	-	Mourning Dove	2	100+	-
<u> </u>	-	-	-	-	-	-	-		Northern Flicker	2	50-100	-
<u> </u>	-	-	<u>-</u>	-	-	-	-	<u>-</u>	Ruby-crowned Kinglet	1	0-50	-
				-		+	-	-	Ruffed Grouse	1 1	0-50	
-	-	-	-	-	-	-	-	-	Yellow-bellied Sapsucker	1 1	0-50	-
-	-	-	-		-	-	-	-	r ellow-bellieu Sapsucker	<u> </u>	0-50	-



		Coordinates			Conditions					Number	Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed		Flyover Height (m)
		0415503E,	110001000	20 km/h W gusts	i omportation o	J.1.5				0.000.100.	Caster var (,	
_	3MP5	4975739N	Mixedwoods	of 40 km/h	12	Overcast	none	8:21 AM	Blue Jay	2	50-100	_
_	-	-	-	-	-	-	-	-	Blue Jay	4	100+	-
_	_	-	_	_	-	_	_	-	Common Raven	2	100+	-
_	_	-	-	_	-	_	-	_	Downy Woodpecker	1	50-100	_
_	_	-	-	_	-	_	-	-	Yellow-rumped Warbler	3	0-50	_
		0411883E,		20 km/h W gusts					Tellett Tallipea Transier		0 00	
_	3MP6	4975794N	Mixedwoods	of 40 km/h	12	Sunny	None	8:44 AM	American Crow	2	50-100	_
-	-	-	-	-	-	-	-	-	American Crow	4	100+	-
-	_	-	-	_	-	_	-	-	Blue Jay	2	50-100	-
-	_	-	-	_	-	_	-	-	Blue Jay	2	100+	-
_	_	-	-	_	-	_	_	-	Common Raven	2	100+	-
-	_	-	-	_	-	_	-	-	Downy Woodpecker	1	0-50	-
-	_	-	_	-	-	_	_	-	Hermit Thrush	2	50-100	-
_	_	-	-	-	-	_	_	_	Yellow-rumped Warbler	2	0-50	-
		0411776E,		20 km/h W gusts					. Show ramped warbler		0 00	
_	3MP7	4975499N	Mixedwoods	of 40 km/h	16	Sunny	None	9:04 AM	Black-capped Chickadee	4	0-50	-
_	-	-	-	-	-	-	-	-	Brown Creeper	2	0-50	-
_	_	-	-	_	-	_	-	-	Common Raven	1	100+	-
_	_	-	-	-	-	_	-	-	Dark-eyed Junco	6	0-50	-
-	_	-	-	-	-	_	_	-	Golden-crowned Kinglet	2	0-50	-
	_	_	-	_	_	_	_	_	Yellow-rumped Warbler	4	0-50	-
		0411591E,		20 km/h W gusts			_	_	Tellow-rumped Warbier	7	0-30	
_	3MP8	4975301N	Mixedwoods	of 40 km/h	16	Sunny	None	9:21 AM	American Crow	4	0-50	_
	-	-	-	-	-	-	-		Black-capped Chickadee	7	0-50	-
		-	-	-	-	-	_	-	Brown Creeper	3	0-50	-
-	-	-	-	-	-	-	-	-	Canada Goose	30	100+	-
		-	-	_	-	_	-	-	Golden-crowned Kinglet	6	0-50	-
		0411345E,	_	20 km/h W gusts		_	_	_	Colden-crowned Kinglet	0	0-30	-
_	3MP9	4975371N	Mixedwoods	of 40 km/h	16	Sunny	None	9:37 AM	American Crow	4	50-100	-
	- SIVIF9	497337 TN	- IVIIXEUWOOUS		-	- Suring	- INOTIE	9.37 AIVI	American Crow	4	100+	<u> </u>
-		-	<u>-</u>	-	-	-	-	-	Black-capped Chickadee	2	50-100	<u>-</u>
		-	<u> </u>	-	-	_	_	_	Blue Jay	2	100+	<u> </u>
	-	0411320E,	-	20 km/h W gusts	-	 	-	-	Blue Jay		100+	-
	3MP10	4975153N	Mixedwoods	of 40 km/h	16	Sunny	None	9:51 AM	Blue Jay	2	50-100	
					-	Suring		9.51 AW	Golden-crowned Kinglet	4	0-50	-
-	-	-	-	-		-	-	-	Hermit Thrush	4	0-50	-
-	-			-	-		-	-	Pileated Woodpecker	1 1	0-50	-
-	-	- 0411385E,	-	20 km/h W gusts	-	-	-	-	rileated vvoodpecker	<u> </u>	0-50	-
	3MP11	4974883N	Mixedwoods	of 40 km/h	16	Sunny	None	10:06 AM	American Craw	6	100.	
-					16	†	None		American Crow Black-capped Chickadee	9	100+	-
-	-	-	-	-	-	-	-	-		4	0-50 100+	-
-	-	-	-		-	-	-	-	Blue Jay	4		-
-	-	-	-		-	-	-		Common Raven	1	50-100	-
-	-	-	-	-	-	-	-	-	Colden arouned Kinglet	4	100+	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	4	0-50	-
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	1	0-50	-
-	-	-	-	-	-	-	-	-	Philadelphia Vireo	1	0-50	-



		Coordinates			Conditions					Number	Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed		Flyover Height (m)
		(01111111111111111111111111111111111111										
		0411268E,	Mid-old aged coniferous	20 km/h W gusts								
-	3MP12	4974617N	dominated and mixed.	of 40 km/h	18	Sunny	None	10:27 AM	American Robin	4	50-100	-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	4	50-100	-
-	-	-	-	-	-	-	-	-	Cedar Waxwing	2	0-50	-
-	-	-	-	-	-	-	-	-	Common Raven	2	0-50	-
-	-	-	-	-	-	-	-	-	Common Raven	4	100+	-
-	-	-	-	-	-	-	-	-	Yellow-rumped Warbler	2	0-50	-
		0412501E,				Mainly						
October 26/2012	3MP1	4976533N	Mixedwoods	Calm	3	sunny	None	7:52 AM	American Goldfinch	1	100+	-
-	-	-	-	-	-	-	-	-	Blue Jay	1	100+	-
-	-	-	-	-	-	-	-	-	Downy Woodpecker	1	100+	-
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	1	100+	-
		0412345E,				Mainly						
-	3MP2	4976370N	Mixedwoods	Calm	3	sunny	None	8:11 AM	American Goldfinch	1	100+	-
-	-	-	-	-	-	-	-	-	Brown Creeper	1	0-50	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	0-50	-
		0412161E,				Mainly						
-	3MP3	4976275N	Mixedwoods	10 km/h N	3	sunny	None	8:28 AM	American Robin	1	FO S to N	<50
-	-	-	-	-	-	-	-	-	Common Raven	1	100+	-
		0412102E,				Mainly						
-	3MP4	4975988N	Mixedwoods	15 km/h N	3	sunny	None	8:45 AM	Black-capped Chickadee	4	0-50	-
-	-	-	-	-	-	-	-	-	Common Raven	1	100+	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	1	100+	-
-	-	-	-	-	-	-	-	-	Pine Grosbeak	1	100+	-
-	-	-	-	-	-	-	-	-	Ruffed Grouse	2	0-50	-
		0411883E,				Mainly						
-	3MP6	4975794N	Mixedwoods	15 km/h N	3	sunny	None	9:05 AM	American Crow	1	100+	-
-	-	-	-	-	-	- 1	-	-	Black-capped Chickadee	1	50-100	-
-	-	-	-	-	-	-	-	-	Common Raven	2	100+	-
-	-	-	-	-	-	-	-	-	Downy Woodpecker	1	50-100	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	0-50	-
-	-	-	-	-	-	-	_	-	White-breasted Nuthatch	1	0-50	_
		0411776E,				Mainly				-		
_	3MP7	4975499N	Mixedwoods	15 km/h N	5	sunny	None	9:27 AM	Black-capped Chickadee	3	50-100	_
-	-	-	-	-	-	-	-	-	Brown Creeper	1	0-50	-
-	-	-	-	-	-	-	-	-	Canada Goose	5	100+	-
-	-	-	-	-	-	-	-	-	Common Raven	1	100+	-
-	-	-	-	-	-	-	-	-	Evening Grosbeak	3	100+	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	50-100	-
-	-	-	-	-	-	-	-	-	Pine Siskin	1	100+	-
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	1	50-100	-
		0411591E,				Mainly						
-	3MP8	4975301N	Mixedwoods	15 km/h N	5	sunny	None	10:07 AM	Black-capped Chickadee	2	0-50	_
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	1	100+	-
-	-	-	-	-	-	-	-	-	Common Raven	2	100+	-
-	_	-	-	-	-	-	_	_	White-winged Crossbill	3	FO S to N	<100



		Coordinates			Conditions					Number	Distance from	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed		Flyover Height (m)
		0411345E,			'	Mainly					\ /	
-	3MP9	4975371N	Mixedwoods	15 km/h N	8	sunny	None	10:27 AM	Black-capped Chickadee	3	0-50	-
-	-	-	-	-	-	-	-	-	Brown Creeper	1	0-50	-
=	-	-	-	-	-	-	-	-	Common Raven	2	100+	-
-	-	-	-	-	-	-	-	-	Downy Woodpecker	1	0-50	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	0-50	-
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	1	50-100	-
-	-	-	-	-	-	-	-	-	White-winged Crossbill	4	100+	-
		0411320E,										
-	3MP10	4975153N	Mixedwoods	20 km/h N	8	Clear	None	10:44 AM	Downy Woodpecker	1	100+	-
		0411385E,										
-	3MP11	4974883N	Mixedwoods	20 km/h N	8	Clear	None	11:01 AM	Black-capped Chickadee	2	0-50	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	0-50	-
-	-	-	-	-	-	-	-	-	Red-tailed Hawk	1	0-50	-
		0411268E,	Mid-old aged coniferous									
-	3MP12	4974617N	dominated and mixed.	20 km/h N	10	Clear	None	11:20 AM	Blue Jay	1	0-50	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	1	50-100	-
		0412501E,										
November 6/2012	3MP1	4976533N	Mixedwoods	Calm	-1	Cloudy	None	7:04 AM	American Crow	1	0-50	-
-	-	-	-	-	-	-	-	-	American Goldfinch	2	100+	-
-	-	-	-	-	-	-	-	-	American Robin	1	50-100	-
-	-	-	-	-	-	-	-	-	Common Raven	3	100+	-
		0412345E,										
-	3MP2	4976370N	Mixedwoods	Calm	-1	Cloudy	None	7:26 AM	Black-capped Chickadee	2	100+	-
-	-	-	-	-	-	-	-	-	Common Raven	1	100+	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	100+	-
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	1	50-100	-
		0412161E,										
-	3MP3	4976275N	Mixedwoods	Calm	0	Cloudy	None	7:45 AM	Black-capped Chickadee	2	100+	-
-	-	-	-	-	-	-	-	-	Brown Creeper	1	100+	-
-	-	-	-	-	-	-	-	-	Common Raven	1	100+	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	4	100+	-
-	-	-	-	-	-	-	-	-	Pine Grosbeak	2	100+	-
-	-	-	-	-	-	-	-	-	White-winged Crossbill	2	F/O E	<50
-	-	-	-	-	-	-	-	-	White-winged Crossbill	2	F/O NE	100
		0412102E,										
-	3MP4	4975988N	Mixedwoods	Calm	0	Cloudy	None	8:05 AM	Black-capped Chickadee	4	0-50	-
-	-	-	-	-	-	-	-	-	Brown Creeper	1	0-50	-
-	-	-	-	-	-	-	-	-	Common Raven	1	100+	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	1	50-100	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	3	0-50	-
-	-	-	-	-	-	-	-	-	Pileated Woodpecker	2	F/O N	>100



		Coordinates			Conditions					Number	Distance from	Flyover Height (m)
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	i iyover rieigiit (iii)
		0411883E,										
-	3MP6	4975794N	Mixedwoods	Calm	1	Cloudy	None	8:23 AM	Black-capped Chickadee	2	0-50	-
-	-	-	1	-	-	-	-	ı	Blue Jay	1	F/O SE	-
-	-	-	-	-	-	-	-	-	Brown Creeper	1	0-50	-
-	-	-	-	-	-	-	-	-	Common Raven	1	100+	-
-	-	-	-	-	-	-	-	-	Downy Woodpecker	1	0-50	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	0-50	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	3	100+	-
-	-	-	-	-	-	-	-	-	Gray Jay	2	0-50	_
-	-	-	-	-	-	-	-	-	Red Crossbill	3	F/O S	>50
		0411776E,										
-	3MP7	4975499N	Mixedwoods	Calm	1	Cloudy	None	8:41AM	American Crow	1	100+	-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	3	100+	-
-	-	-	-	-	-	-	-	-	Red-breasted Nuthatch	1	100+	-
-	-	-	-	-	-	-	-	-	White-winged Crossbill	1	F/O N	100
		0411591E,										
-	3MP8	4975301N	Mixedwoods	Calm	1	Cloudy	None	8:59 AM	American Crow	1	100+	-
-	-	-	-	-	-	-	-	-	Black-capped Chickadee	5	50-100	-
-	_	-	-	-	-	-	_	-	Blue Jay	1	100+	_
-	_	-	-	-	-	-	_	-	Downy Woodpecker	2	0-50	-
_	_	-	-	_	_	_	_	_	Golden-crowned Kinglet	1	0-50	_
_	_	-	-	_	_	_	_	-	Pine Grosbeak	1	F/O W	>100
_	_	-	-	_	_	_	_	-	Red-breasted Nuthatch	2	50-100	-
-	_	-	-	-	_	_	_	-	Red-breasted Nuthatch	2	100+	-
	_	-	-	_	_	_	_	_	Ruffed Grouse	1	50-100	-
		0411345E,							Trailed Grease	'	00 100	
_	3MP9	4975371N	Mixedwoods	Calm	2	Cloudy	None	9:16 AM	American Crow	1	100+	_
	31/11 9	-	-	-	-	-	-	9.10 AW	Black-capped Chickadee	1	100+	<u> </u>
		-	<u>-</u>	-	-	-	_		Black-capped Chickadee	3	50-100	
-	-	-	-	-	-	-	_	-	Canada Goose	10	100+	-
	-	-	<u>-</u>	-	-	_			Downy Woodpecker	10	50-100	-
	-	-	-	-	-	-			Golden-crowned Kinglet	2	50-100	<u> </u>
		-	<u>-</u>	<u>-</u>	-	-			Pine Grosbeak	2	F/O E	100
	-	-	-	<u>-</u>			-	-	White-winged Crossbill	1	F/O W	<100
-	-				-	-	-	-		1		
-	-	- 04442205	-	-	-	-	-	-	White-winged Crossbill	1	F/O S	<100
	214040	0411320E,	Miyodyyoodo	Colm		Claudy	None	0.20 ^ 1/4	Plack copped Chickedes		F0 400	
-	3MP10	4975153N	Mixedwoods	Calm	2	Cloudy	None	9:38AM	Black-capped Chickadee	3	50-100	-
-	-	-	-	-	-	-	-	-	Blue Jay	3	0-50	-
-	-	-	-	-	-	-	-	-	Golden-crowned Kinglet	2	0-50	-
-	-	-	-	-	-	-	-	-	Pine Grosbeak	1	100+	-
	01.15.1.1	0411385E,						0.50.44.			400	
-	3MP11	4974883N	Mixedwoods	Calm	2	Cloudy	None	9:53 AM	Black-capped Chickadee	2	100+	-
-	-	-	-	-	-	-	-	-	Brown Creeper	1	100+	-
-	-	-	-	-	-	-	-	-	Downy Woodpecker	1 1	100+	-
-	-	-	-	-	-	-	-	-	Hairy Woodpecker	1	0-50	-
-	-	-	-	-	-	-	-	-	Pine Grosbeak	2	100+	-
-	-	-	-	-	-	-	-	-	Pine Grosbeak	11	50-100	-



		Coordinates		Conditions					Number	Distance from	Flyover Height (m)	
Date	Location	(UTM NAD83)	Habitat	Wind	Temperature °C	Sky	Precipitation	Time	Common Name	Observed	Observer (m)	riyovei neigiii (iii)
		0411268E,	Mid-old aged coniferous									
-	3MP12	4974617N	dominated and mixed.	12 km/h NE	2	Cloudy	None	10:15AM	Evening Grosbeak	2	F/O SE	<100
-	-	-	-	-	=	-	-	-	Golden-crowned Kinglet	1	50-100	-
-	-	-	-	-	-	-	-	-	Pine Grosbeak	1	100+	-



Common Name	Scientific Name	Number of Observations	Total Individuals Observed	NSDNR Status	COSEWIC Status	SARA Status	NSESA Status
American Crow	Corvus brachyrhynchos	15	51	Green	Not Listed	Not Listed	Not Listed
American Goldfinch	Spinus tristis	3	4	Green	Not Listed	Not Listed	Not Listed
American Robin	Turdus migratorius	8	22	Green	Not Listed	Not Listed	Not Listed
American Woodcock	Scolopax minor	1	1	Green	Not Listed	Not Listed	Not Listed
Bald Eagle	Haliaeetus leucocephalus	1	1	Green	Not at Risk	Not Listed	Not Listed
Black-capped Chickadee	Poecile atricapillus	24	87	Green	Not Listed	Not Listed	Not Listed
Blue Jay	Cyanocitta cristata	16	37	Green	Not Listed	Not Listed	Not Listed
Brown Creeper	Certhia americana	10	15	Green	Not Listed	Not Listed	Not Listed
Canada Goose	Branta canadensis	4	53	Green	Not Listed	Not Listed	Not Listed
Cedar Waxwing	Bombycilla cedrorum	1	2	Green	Not Listed	Not Listed	Not Listed
Common Raven	Corvus corax	21	36	Green	Not Listed	Not Listed	Not Listed
Dark-eyed Junco	Junco hyemalis	4	30	Green	Not Listed	Not Listed	Not Listed
Downy Woodpecker	Picoides pubescens	11	12	Green	Not Listed	Not Listed	Not Listed
Evening Grosbeak	Coccothraustes vespertinus	3	7	Green	Not Listed	Not Listed	Not Listed
Golden-crowned Kinglet	Regulus satrapa	24	61	Yellow	Not Listed	Not Listed	Not Listed
Gray Jay	Perisoreus canadensis	1	2	Yellow	Not Listed	Not Listed	Not Listed
Hairy Woodpecker	Picoides villosus	5	5	Green	Not Listed	Not Listed	Not Listed
Hermit Thrush	Catharus guttatus	2	3	Green	Not Listed	Not Listed	Not Listed
Magnolia Warbler	Dendroica magnolia	1	2	Green	Not Listed	Not Listed	Not Listed
Mourning Dove	Zenaida macroura	1	2	Green	Not Listed	Not Listed	Not Listed
Northern Flicker	Colaptes auratus	1	2	Green	Not Listed	Not Listed	Not Listed
Philadelphia Vireo	Vireo philadelphicus	1	1	Undetermined	Not Listed	Not Listed	Not Listed
Pileated Woodpecker	Dryocopus pileatus	3	5	Green	Not Listed	Not Listed	Not Listed
Pine Grosbeak	Pinicola enucleator	8	11	Red	Not Listed	Not Listed	Not Listed
Pine Siskin	Spinus pinus	1	1	Yellow	Not Listed	Not Listed	Not Listed
Red Crossbill	Loxia curvirostra	1	3	Green	Not Listed	Not Listed	Not Listed
Red-breasted Nuthatch	Sitta canadensis	5	7	Green	Not Listed	Not Listed	Not Listed
Red-tailed Hawk	Buteo jamaicensis	1	1	Green	Not at Risk	Not Listed	Not Listed
Ruby-crowned Kinglet	Regulus calendula	1	1	Yellow	Not Listed	Not Listed	Not Listed
Ruffed Grouse	Bonasa umbellus	4	5	Green	Not Listed	Not Listed	Not Listed
Swainson's Thrush	Catharus ustulatus	1	2	Green	Not Listed	Not Listed	Not Listed
White-breasted Nuthatch	Sitta carolinensis	1	1	Green	Not Listed	Not Listed	Not Listed
White-throated Sparrow	Zonotrichia albicollis	2	14	Green	Not Listed	Not Listed	Not Listed
White-winged Crossbill	Loxia leucoptera	7	14	Green	Not Listed	Not Listed	Not Listed
Yellow-bellied Sapsucker	Sphyrapicus varius	1	1	Green	Not Listed	Not Listed	Not Listed
Yellow-rumped Warbler	Dendroica coronata	4	11	Green	Not Listed	Not Listed	Not Listed



APPENDIX E ELECTROMAGNETIC INTERFERENCE STUDY CORRESPONDENCE

RCMP Response

Good day,

The Martock proposed wind turbine area should not create a problem to the RCMP as our closest site is 14 km away and Provincial IWAN TMR closest site is approx 4km away.

Please do not hesitate to send me any further questions that you might have.

Thank you, Francine

From: Francine Boucher [mailto:FRANCINE.BOUCHER@rcmp-grc.gc.ca]

Sent: October-03-12 11:56 AM

To: Chris Gallivan

Subject: Re: [12-4402] Review of Proposed Wind Turbine Farm Installation - Martock Nova Scotia

Environment Canada Response

Dear Mr. Chris Gallivan,

Thank you for contacting the Meteorological Service of Canada, a branch of Environment Canada, regarding your wind energy intentions.

Our preliminary assessment of the information provided to us via e-mail on September 14, 2012 indicates that any potential interference that may be created by the Martock Ridge wind farm near Three Mile Plains, Nova Scotia will not be severe. Although we would prefer our radar view to be interference free, this is not always reasonable. As a consequence, we do not have strong objections to the current proposal.

If your plans are modified in any manner (e.g. number of turbines, height, placement or materials) this analysis would no longer be valid. An updated analysis must be conducted.

Please contact us at: weatherradars@ec.gc.ca.

Thank you for your ongoing cooperation and we wish you success.

Best Regards,

Carolyn Rennie

National Radar Program
Meteorological Service of Canada
Environment Canada
4905 Dufferin Street
Toronto, Ontario M3H 5T4
Office: 3N-WS12
Carolyn.Rennie@ec.gc.ca

Phone: 416-739-4931

Department of National Defense Response

I have reviewed your proposal in respect to DND's radio communication systems, and I have no objections or concerns.

Thank you for coordinating with DND.

Have a good Day.

Mr. Mario Lavoie
Spectrum Engineering Technician
National Defence | Défense nationale
Ottawa, Canada K1A 0K2
mario.lavoie2@forces.gc.ca
Telephone | Téléphone 613-992-3479
Facsimile | Télécopieur 613-991-3961
Government of Canada | Gouvernement du Canada



Neil Lovitt <lovitt.neil@gmail.com>

Potential Windfarm Radar Impacts

XNCR, Windfarm Coordinator < Windfarm.Coordinator@dfo-mpo.gc.ca> To: Neil Lovitt < nlovitt@scotianwindfields.ca>

Fri, Jun 8, 2012 at 11:12 AM

Good morning Mr Lovitt,

Sorry for the delay in responding to you, I had to do some research.

The proposed wind farm (Three Mile Plains) is 50 km away from a CCG radar site. However, no interference issues are anticipated because it is not in the area covered by the radar.

Regards,

Martin Grégoire, P. Eng Canadian Coast Guard

From: lovitt.neil@gmail.com [mailto:lovitt.neil@gmail.com] On Behalf Of Neil Lovitt

Sent: May 15, 2012 12:21 PM **To:** XNCR, Windfarm Coordinator

Subject: Potential Windfarm Radar Impacts

[Quoted text hidden]



Neil Lovitt <lovitt.neil@gmail.com>

Detailed Analysis - No Interference - Three Mile Plains Wind Project - Three Mile Plains, NS - WTA-2072

ADIN.SWITZER@forces.gc.ca < ADIN.SWITZER@forces.gc.ca>

Wed, May 23, 2012 at 10:47 AM

To: nlovitt@scotianwindfields.ca, lovitt.neil@gmail.com

Cc: JOCELYN BELAND@forces.gc.ca

Neil,

We have completed the detailed analysis of your proposed site, Three Mile Plains Wind Project, located near Three Mile Plains, NS (WTA-2072). The results of our detailed analysis have shown that there is likely to be no interference with DND radar and flight operations.

Therefore, as a result of these findings we have no objections with your project as submitted (attached). If however, the layout were to change/move, please re-submit that proposal for another assessment using the assigned WTA number listed above. The concurrence for this site is valid for 24 months from date of this email. If the project should be cancelled or delayed during this timeframe please advise this office accordingly. It should be noted that our office looks at each submission on a case by case basis and as such, concurrence on this submission in no way constitutes a concurrence for similar projects in the same area, nor does it indicate that similar concurrence might be offered in another region.

Finally, the concurrence offered in this email extends only to the subject projects and current proponent. Should the project or any part of it be altered, or be sold to another developer, this office must be notified and we reserve the right to reassess the project.

Thank you for your patience on this matter and for considering DND radar and airport facilities in your project development process.

If you have any questions feel free to contact me.

Thank you.

<<SWFI-2001-DND.pdf>>
Adin Switzer
Capt
AEC Liaison Officer
CCISF/ESICC
ATESS/ESTTMA
Défense nationale | National Defence

8 Wing Trenton, Astra, ON K0K 3W0

TEL: 613 392-2811 Ext4834 (CSN: 827-4834)

FAX: 613 965-3200

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December 12, 2012

Your file 12-4402 Martock Nova Scotia Our file 12-3736

Mr. Chris Gallivan Strum Environmental Railside, 1355 Bedford Highway Bedford, NS B4A 1C5

RE: Wind Farm: 3 Wind Turbines - Three Miles Plains, NS (See attached spreadsheet)

Mr. Gallivan,

We have evaluated the captioned proposal and NAV CANADA has no objection to the project as submitted. Please note that any changes to this proposal would need to be re-assessed for possible impact.

The nature and magnitude of electronic interference to NAV CANADA ground-based navigation aids, including RADAR, due to wind turbines depends on the location, configuration, number, and size of turbines; all turbines must be considered together for analysis. The interference of wind turbines to certain navigation aids is cumulative and while initial turbines may be approved, continued development may not always be possible.

In the interest of aviation safety, it is incumbent on NAV CANADA to maintain up-to-date aeronautical publications and issue NOTAM as required. To assist us in that end, we ask that you notify us at least 10 business days prior to the start of construction. This notification requirement can be satisfactorily met by returning a completed, signed copy of the attached form by e-mail at landuse@navcanada.ca or fax at 613-248-4094. In the event that you should decide not to proceed with this project or if the structure is dismantled, please advise us accordingly so that we may formally close the file.

If you have any questions, contact the Land Use Department by telephone at 1-866-577-0247 or e-mail at landuse@navcanada.ca.

NAV CANADA's land use evaluation is valid for a period of 12 months. Our assessment is limited to the impact of the proposed physical structure on the air navigation system and installations; it neither constitutes nor replaces any approvals or permits required by Transport Canada, Industry Canada, other Federal Government departments, Provincial or Municipal land use authorities or any other agency from which approval is required. Industry Canada addresses any spectrum management issues that may arise from your proposal and consults with NAV CANADA engineering as deemed necessary.

Yours truly,

Aleksandar Trandafilovski

for

David Legault

Manager, Data Collection

Aeronautical Information Services

cc ATLR - Atlantic Region, Transport Canada

Mpangapuloon Hierenger

APPENDIX F SOUND MODELLING RESULTS

Receptor			Predicted Sound	Within Town of
ID	Easting (m)	Northing (m)	Level (dBA)	Windsor Lands?
R1	412387	4977566	28.4	No
R2	412396	4977511	28.8	No
R3	412383	4977495	28.9	No
R4	414042	4976443	26.7	No
RV1	412877	4975694	36.6	Yes
RV2	412743	4975957	39.9	Yes
RV3	412678	4976085	41.3	Yes
RV4	412640	4976182	41.5	No
RV5	412558	4976051	44.3	No
RV6	412606	4976289	41	Yes
RV7	412511	4976468	39.4	Yes
RV8	412850	4974922	33.1	Yes
RV9	412508	4976700	36	Yes
RV10	414140	4976160	26.5	No
RV11	413578	4976268	30	No
RV12	413919	4977156	25.5	No
RV13	412983	4975974	36.2	Yes
RV14	413997	4977704	23.4	No
RV15	413596	4977337	26.2	No
RV16	413086	4977021	30.2	Yes
RV17	413006	4977178	29.5	Yes
RV18	413033	4977397	28.1	Yes
RV19	413012	4977500	27.6	No
RV20	412951	4977554	27.4	No
RV21	412904	4977580	27.4	No
RV22	412855	4977616	27.3	No
RV23	412807	4977658	27.2	No
RV24	412020	4977883	26.6	No
RV25	412550	4976903	33.6	Yes
RV26	412553	4977017	32.5	Yes
RV27	412535	4977098	31.8	Yes
RV28	412510	4977162	31.3	Yes
RV29	412466	4977248	30.7	Yes
RV30	412481	4976931	33.5	No
RV31	412497	4977048	32.3	No
RV32	412469	4977105	31.9	No
RV33	412444	4977162	31.4	No
RV34	412419	4977216	31	Yes
RV35	412398	4977249	30.8	No
RV36	411884	4976881	33.9	No
RV37	411855	4976851	34	No
RV38	411623	4976680	34.7	No
RV39	411673	4977198	30.7	No
RV40	411920	4977452	29.2	No
RV41	411554	4977059	31.4	No
RV42	409959	4975862	28.4	No
RV43	410149	4975893	29.5	No
RV44	410840	4975586	35.7	No
RV45	409994	4976480	27.2	No
RV46	410800	4976007	33.9	No
RV47	410244	4976848	27.2	No
RV48	411,011	4,976,677	31.6	No



Receptor ID	Easting (m)	Northing (m)	Predicted Sound Level (dBA)	Within Town of Windsor Lands?
RV49	411,205	4,974,105	34.7	Yes
RV50	412,806	4,977,915	25.8	No
RV51	412,250	4,973,066	26.3	No
RV52	410,851	4,973,139	26.4	No
RV53	410,371	4,973,295	25.8	No
RV54	409,677	4,975,256	27.2	No
RV55	409,645	4,974,456	26.3	No
RV56	409,645	4,974,366	26.1	No
RV57	409,767	4,975,466	27.7	No
RV58	409,830	4,975,918	27.5	No
RV59	410,436	4,975,069	32.4	No
RV60	412,184	4,973,346	28	No
RV61	412,913	4,973,781	28	No
RV62	412,173	4,974,157	34	Yes
RV63	413,414	4,974,207	27.5	No
RV64	412,086	4,974,491	37.6	Yes
RV65	412,598	4,975,974	43.1	Yes
RV66	412,675	4,975,849	40.5	No
RV67	412,795	4,975,376	35.6	Yes
CAMP1	410,268	4,976,163	29.6	No
CAMP2	410,316	4,974,063	29	No
CAMP3	410,511	4,974,690	32.6	No
CAMP4	410,908	4,974,551	36.1	No
CAMP5	411,042	4,975,053	38.9	No
CAMP6	411,115	4,974,857	40.4	Yes
CAMP7	410,944	4,973,470	28.5	No
CAMP8	411,603	4,974,053	35.1	No
CAMP9	412,128	4,976,447	40.5	No
CAMP10	412,650	4,974,344	32	No
CAMP11	412,765	4,976,317	38.2	No
CAMP12	412,173	4,975,499	41.5	Yes



APPENDIX G COMMUNITY ENGAGEMENT

Martock Ridge Wind Turbine Project



Proposed location of turbine, with prevailing winds shown

Community Electricity

The provincial government has established clear targets for clean energy: 25% of our electricity is to be renewable by 2015, with a goal of 40% by 2020. The Community Feed-In Tariff (ComFIT) program is designed to help our province meet that goal. The program recognizes that small community-owned projects are an effective way to reach our goals in a way that maximizes benefits for all Nova Scotians while strengthening the electricity grid. This vision will shift ownership from the virtual monopoly currently held by Nova Scotia Power to a decentralized structure that would see many small groups owning our electricity sources.

In order for Martock Ridge to be eligible for the ComFIT program, at least 25 citizens from the county in which the turbine will be installed must invest in it.

The ComFIT program is beneficial because all of the electricity produced by the turbine will be consumed at a truly local level; only the people who are connected to the same electrical substation as the turbine can use its power.

You're not alone

Wind energy is cited by the International Energy Agency as the world's fastest growing energy resource. Worldwide, the combined capacity of all wind turbines is over 195 GW; the equivalent of 100,000 of the turbines Scotian WindFields proposes installing in your community.

In Nova Scotia, there are already over 100 of these turbines installed throughout the province. Communities across Nova Scotia are taking responsibility for the generation of their energy and enjoying the benefits that come with local electricity production.



Community Owned. Naturally.

About the Project

Scotian Wind is working towards installing three wind turbines in Martock. The proposed project would be located just off Mountain Road, near Mill Lakes. Scotian Wind is in the early stages of this multiyear project and is currently planning to collect data about the nature of the wind regime using a meteorological tower on the site. This study will help us learn about the characteristics.

The proposed capacity of the turbines we expect to put on site is just under 6 Megawatts, producing enough energy to power 2000 households. The tower for these turbines is projected to be approximately 80 meters high, with each blade measuring about 45 meters in length.

Why we've contacted you

We understand some people have concerns about wind energy. We are here to listen to your concerns and help you understand the facts. Wind turbines are not a new technology, but they may be new to your area. We are distributing this newsletter to inform you about the proposed project and to dispel some of the myths surrounding wind turbines. But this is just the beginning. This is the first in a series of informational letters and public meetings that will keep you in the loop. This project represents an important opportunity for Wedgeport to transition to renewable energy sources, and we are here to help foster a sense of community pride surrounding it.

Turbines near Martock

The nearest large wind turbines to Martock are located at the Dalhousie Mountain Wind Farm, near Mount Thom. These turbines are about the same height and size as the turbines that Scotian WindFields intends to install in Martock, and have been in operation since 2010.

Visiting a turbine is a great way to get a sense of the sound and scale of today's industrial wind turbines.

www.scotianwindfields.ca

Wind Power In Nova Scotia

140

120

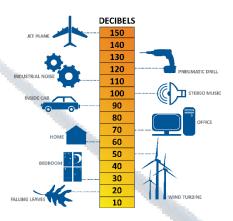
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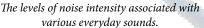
80

60

40

20





More than 800 Nova Scotian families

share in ownership of Scotian WindFields.

As your neighbours we want to share the

dividends with the communities where our

projects are located. That is why Scotian

WindFields has committed to donate 1% of

the revenue from this project to your com-

munity for its chosen community activity

or cause. This dividend could be as much

as \$10,000, annually and could be used for

school programs, local scholarships, com-

munity recreation programs or facilities.

The use of proceeds will be up to the com-

Wind is a safe, locally produced source of

energy that will lessen our dependence on

foreign sources of fuel. Once a wind tur-

bine is installed, it produces electricity at

a fixed price for 20 years, as shown in the

figure below. With the price of oil and coal

expected to keep rising with each passing

year, wind power offer Nova Scotians as-

surance electricity bills won't do the same.

munity to decide.

Energy Security

Community Dividend

Nova Scotia Total Energy Use

Coal/Coke

Petroleum

Renewables

Nat. Gas

Import and Domestic 2005 (petajoules)

Climate change is happening at a rapid next century. The province has 13, 300 kilometers

By using wind power to lower our greenhouse gas emissions, Nova Scotia is helping in the fight to curb global climate change.

Climate Change

pace. During the twentieth century Nova Scotia's sea level rose approximately 30 centimeters. Researchers expect an additional increase from 70 to 140 cm over the

of coastline, which makes it particularly sensitive to coastal impacts. The relative rise in sea level and more intense storms, cause larger storm surges. This means more damage to people, property, infrastructure, wildlife, and ecosystems across the province.

Sound

Over the past 30 years, more than 60,000 wind turbines have been installed around the world. Each turbine must meet strict environmental requirements, including: abiding by minimum setbacks from nearby homes that limit the possibility of noise pol-

New technologies have allowed the sound produced by industrial turbines to decrease substantially over the years.

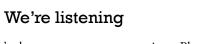
Thousands of people have been living near large wind turbines for decades, a relatively small number of those people experiencing negative effects.

Better health with wind

Several peer-reviewed studies have focused on the impacts of wind turbines on human health. In 2009, Ontario's Chief Medical Examiner concluded that though some people find the sound of wind turbines "annoying". She could find "no conclusive evidence that turbines have an effect on health."Scotian WindFields is committed to ensuring that none of our projects have a negative impact on the health of those who live nearby.

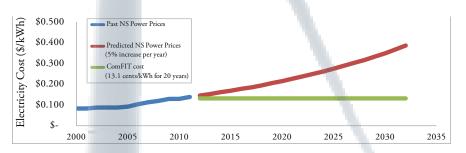
According to Statistics Canada, Nova Scotia consistently leads the nation with the highest asthma rates in Canada and is the leader in most forms of cancer. These detrimental and deadly health effects are related to our dependence on coal-fired generation as our chief electricity source and the associated toxic emissions.

Nova Scotia's per capita emissions of carbon monoxide, particulate matter, sulphur oxides, and volatile organic compounds are higher than the averages of any industrialized country worldwide.



We're here to answer your questions. Please do not hesitate to contact us.

> Gay Harley 902-482-4308 gay.harley@scotianwindfields.ca



The power from the turbine would be sold at the same price for 20 years while coal and oil costs continue to rise

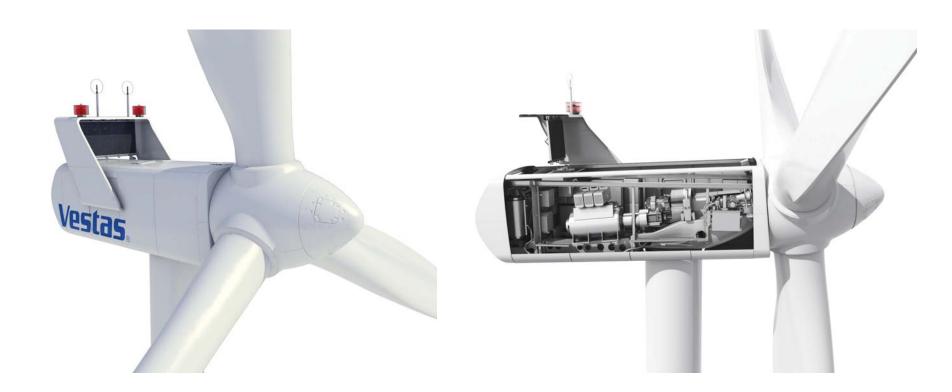
The Turbine Vestas V100

This wind energy project uses the Vestas V100 wind turbine. Vestas, a Danish company, is a long time pioneer in wind energy. Its new V100 model represents cutting edge design and technology, built on extensive testing and experience gained from the 9700+2MW class turbines installed worldwide





The Nacelle



The housing that contains all of the generating components of the turbine. Inside you will find the generator, gearbox, drive train and brake assembly.

The Blades

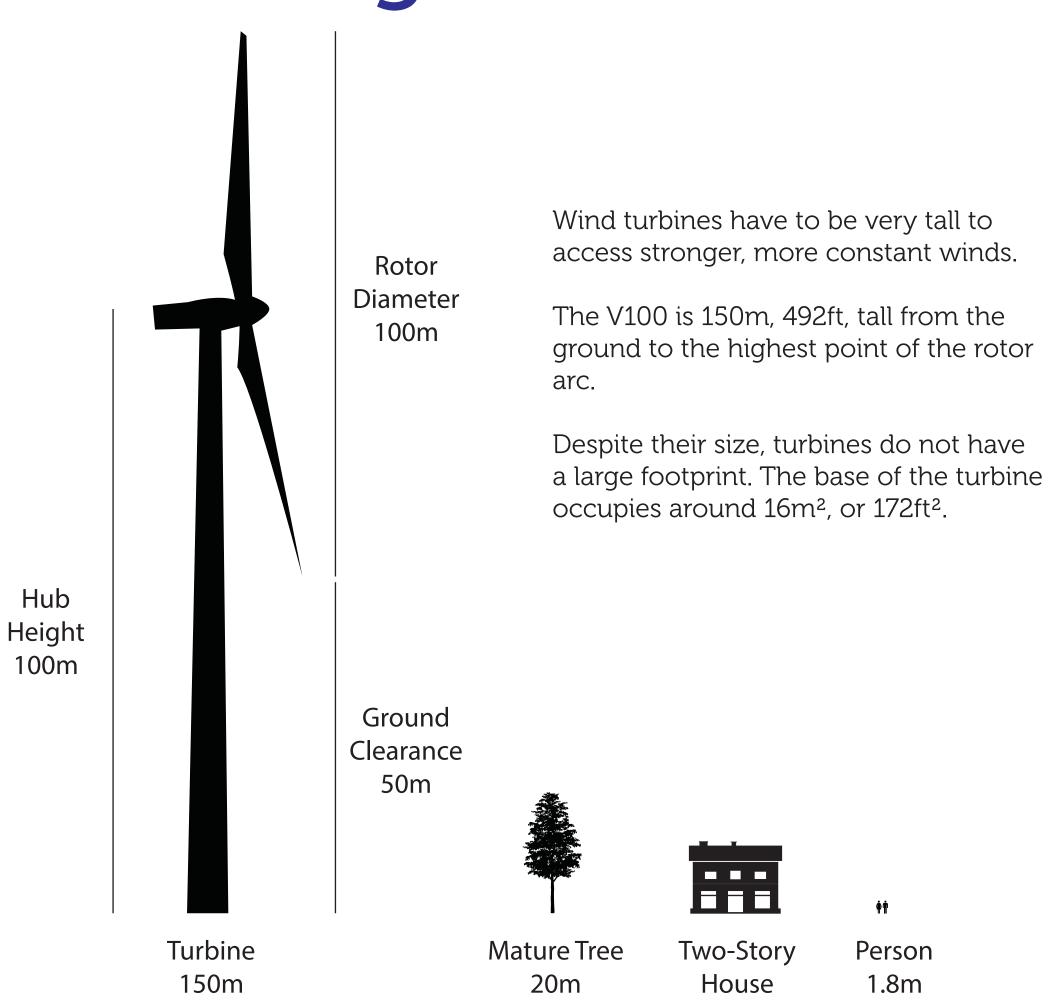


The V100 blades are about 50 metres, 164 feet, long. Each of the three are made using lightweight composite marerials to improve energy efficiency.

The longer the blade, the more wind it is able to capture energy from. The total swept area of the rotor is almost 2 acres.

Because they are so long, the tips of the blades can travel at very high speeds. However, the entire rotor spins at a maximum of 15rpm, which appears quite relaxed to the observer.

The Height



12m

Manufacturer Specs

Generator Max Capacity: 2MW
Cut-in Wind Speed: 3m/s (11km/h, 6knots)
Cut-out Wind Speed: 20m/s (72km/h, 39knots)
Maximum Output at: 12.5m/s (45km/h, 24knots)
Operating Temperature Range: -20C to 40C

(-30C with cold weather package)

Sound Power max: 105 dB(A)

Rotor Diameter: 100m Swept Area: 7850m²

Revolution Speed: 8.8-14.9rpm

Brake System: Blade Pitch Control + Hydraulic Disk Brake

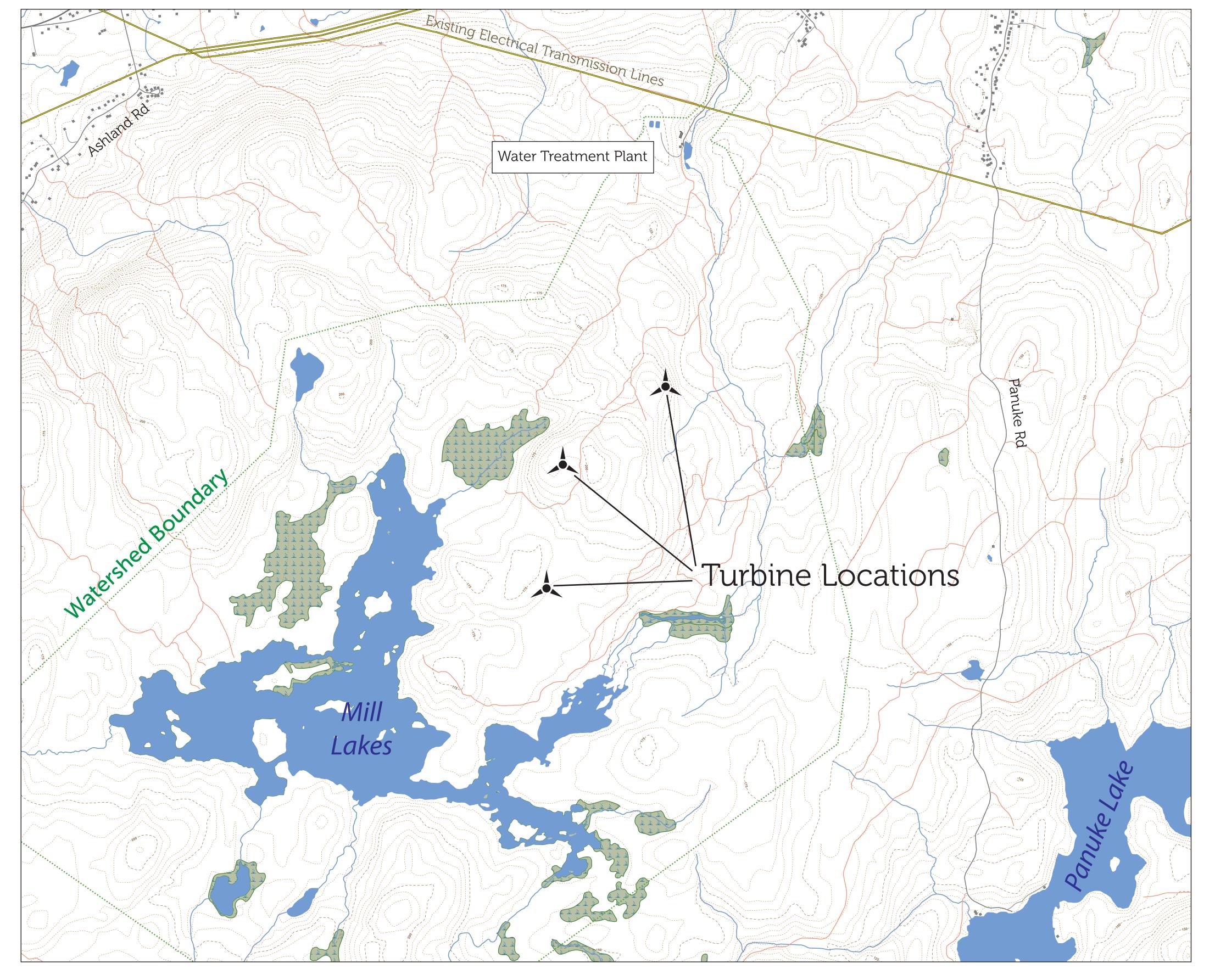
Tower Height: 100m, Tubular Steel

In addition to manufacturer standard systems, the turbine will will be equipped with an advanced real-time monitoring system. Sensors throughout the nacelle feed operational data to a manned control centre. Any irregularities can be identified 24/7/365 to ensure early preventative action is taken.

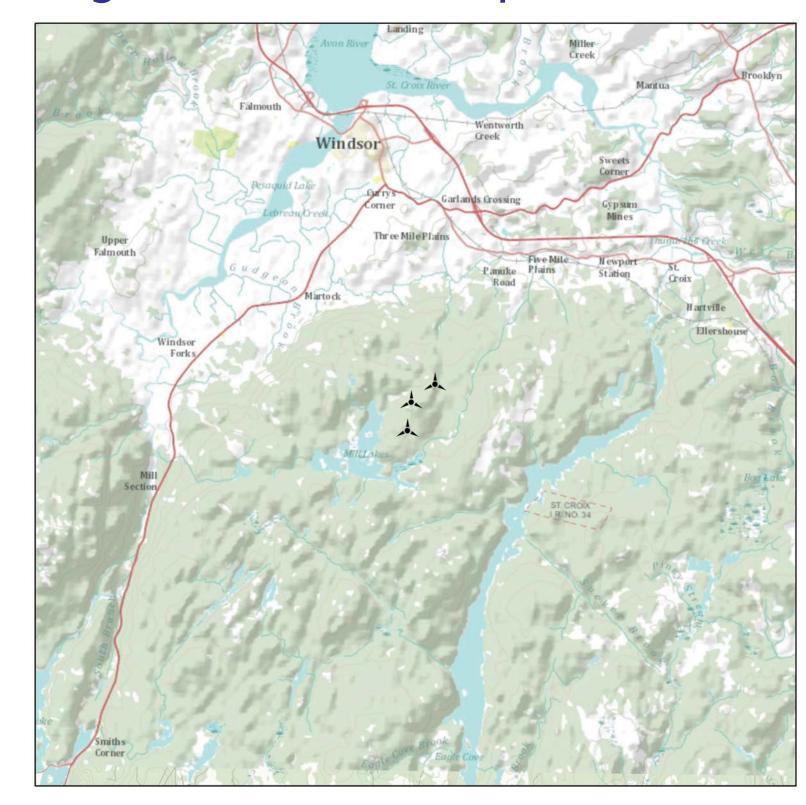
Scotian WindFields
Community Owned. Naturally.



Site Map



Regional Context Map



Project Summary -Martock Ridge Community Wind Farm

3 x 2MW Vestas V100 Wind Turbine Generators

Production equivalent to consumption of 2000 homes

100% of power generated is consumed in local area

Awarded conditional approval from NS Dept of Energy

Environmental Assessment is underway

Wind data collection is ongoing

Municipal Development Agreement required (not initiated)

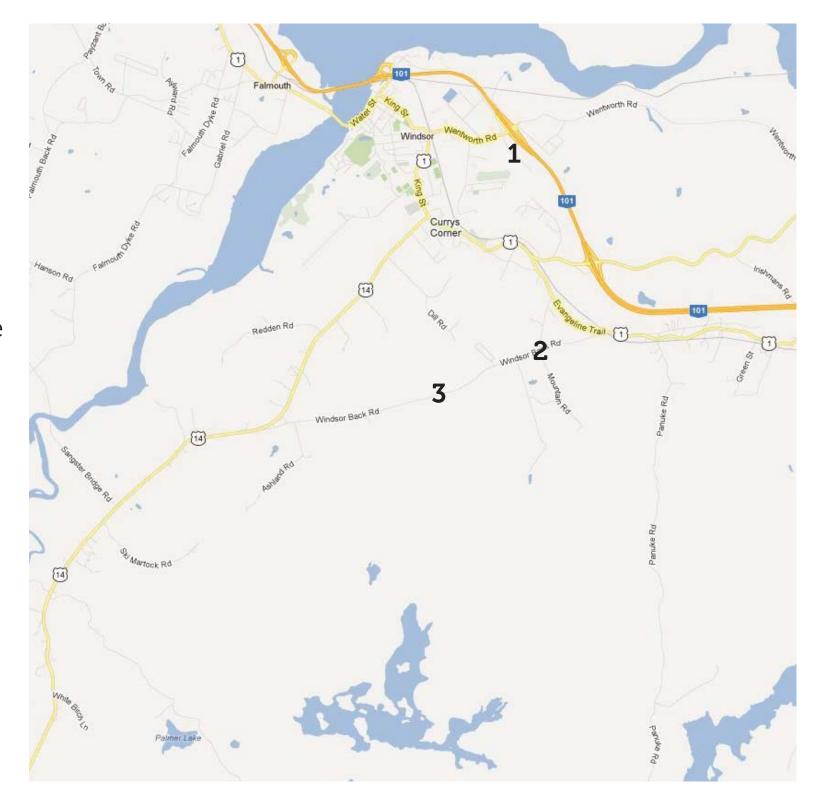
Target Installation - Late Summer 2013



Visual Estimates

It can be difficult to guess what a wind power project is going to look like in your community. The following images can help you get an idea of how much of the turbine will be visible, and from where.

Since turbines are best sited on high elevations where wind speeds are faster, they can usually be seen from a great distance away. While these turbines will be visible in many areas of the surrounding community, the large separation distances will prevent them from dominating the view.





View 1







View 2

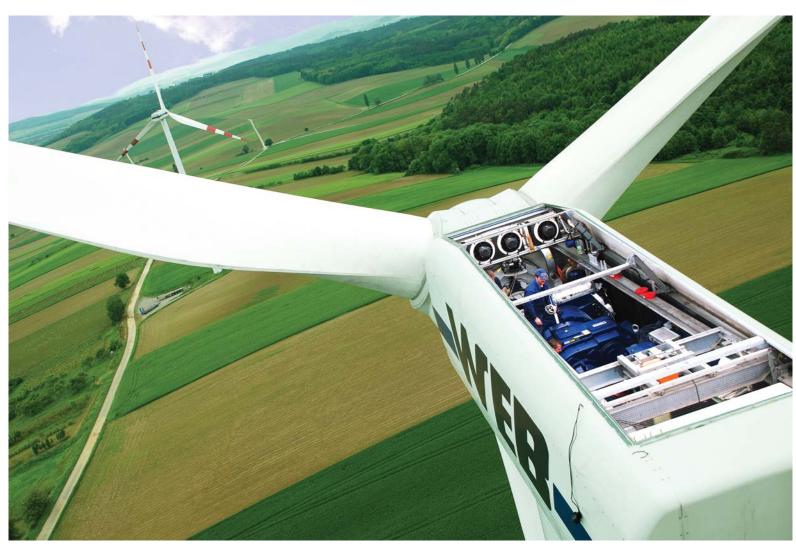


Global

Wind turbine generators have been producing renewable electricity for decades. Countries such as the Netherlands, Denmark, Germany and Spain have shown that wind energy is a safe, effective means to produce electricity without the negative impacts on the climate, air and water quality associated with conventional fossil-fuel based generation.

As fuel costs and concerns over carbon emissions rise, many countries are now encouraging the deployment of wind power at a massive scale. With the UK, US, India, Australia, and China all investing heavily, wind power is the fastest growing method of electrical generation in the world.

Scotian WindFields has partnered with WEB Wind Energie, a pioneering Austrian wind energy company, to develop projects in Nova Scotia. With over 250MW of wind energy generators in operation, some for as long as 18 years, WEB gives our local development process access to the global wealth of experience.

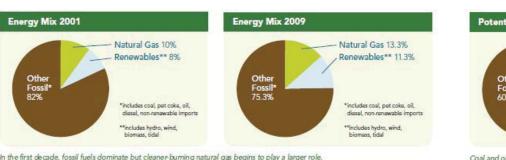


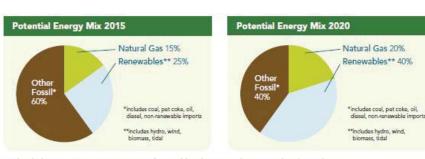
A WEB facility operating in Europe. (C) Alexander Zechmeister

Provincial

While there have been several wind power projects constructed in Nova Scotia in recent years, it is still relatively unfamiliar to many. That is quickly changing; wind energy is set to become a substantial component our province's electricity generation mix.

In recognition of the potential impacts of climate change in a province of coastal communities, and the susceptibility of power rates to forecasted fuel price escalation, the NS Government legislated goals for renewable energy generation.





Coal and oil give way to increasing amounts of renewables (dolliestic amount injudence).

Source: NS Dept. of Energy Renewable Electricity Plan (2010)

To help reach those goals, a Community Feed-In Tariff (COMFIT) program was established to encourage local production and distribution of renewable electricity by independent community-based project developers. The structure of COMFIT ensures that 100% of the power generated by these projects is used by the homes, businesses, and industries in the communities they are located.

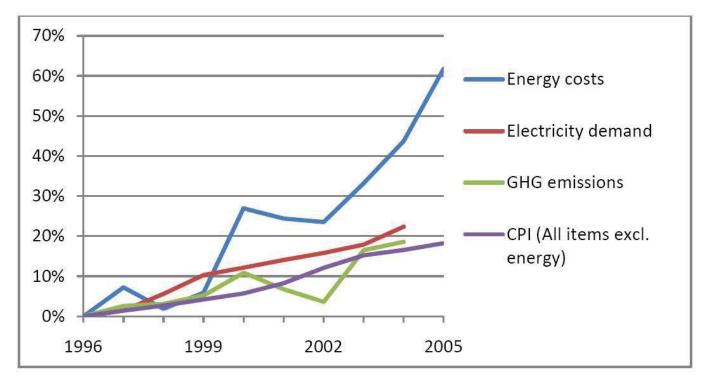


Figure 1: Growth in energy cost, electricity demand, greenhouse gases, and the CPI for Nova Scotia

(Stats Can 2007a; Env Can 2006) Source: Hughes, Energy Security in Nova Scotia,

Though projects are paid a premium for the power they produce in todays terms, that rate is locked for 20 years. Over that period, prices for fossil fuel-based energy will continue to climb as they always have. Introducing more renewable power now will help stabilize long term rates.

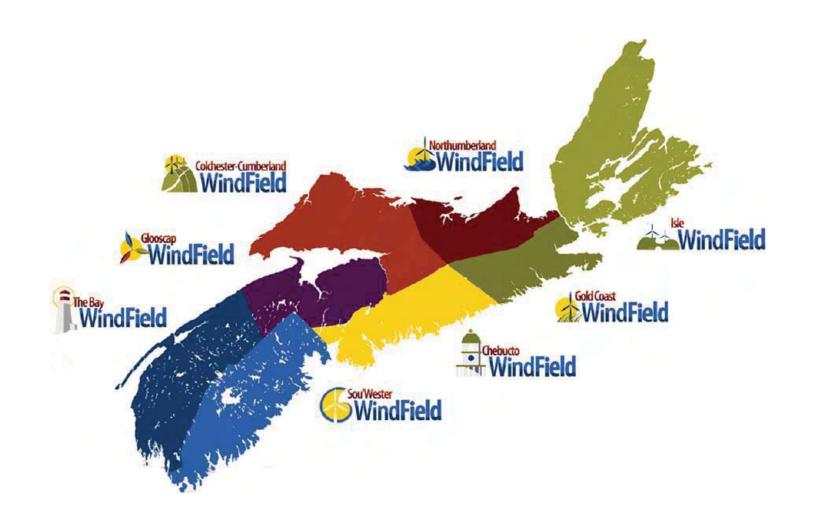
Community

1%

Scotian WindFields allocates 1% of gross project revenue for investment back into the local area. How this dividend is spent is decided by the community.

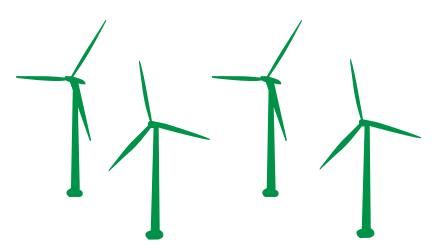
Community Ownership

The corporate structure of Scotian WindFields enables Nova Scotians to participate directly in renewable energy development by investing in their local WindField CEDIF.



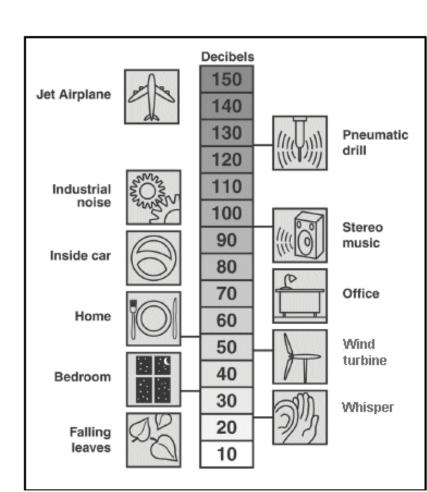




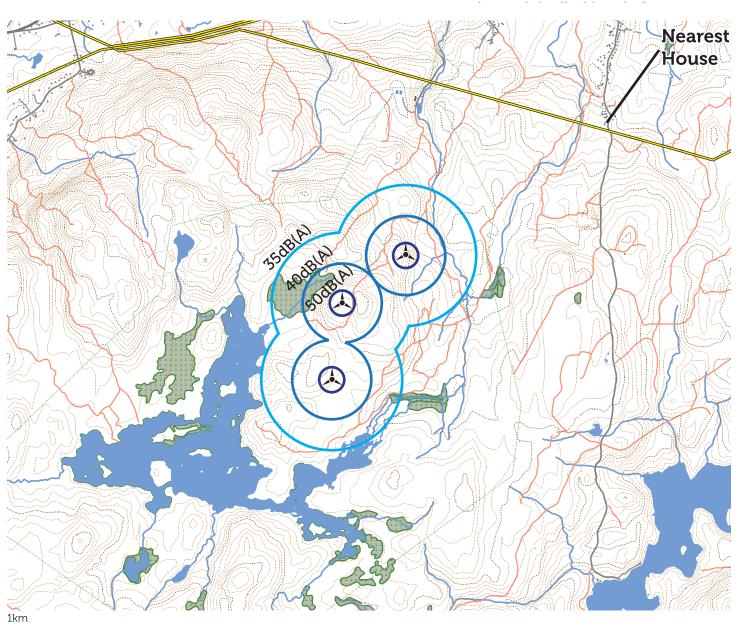




Right: Typical sound levels; wind turbines are usually regulated to be between 40 and 45 decibels at the nearest dwelling.



Below:
Predicted sound levels. This is a rough preliminary estimate.



Sound

One of the most common concerns community members have when learning of a proposed wind energy project is the question of how the turbine will sound, and how noticeable it will be.

All turbines produce sound if they're producing electricity. Operating turbines are often described as producing an audible "woosh" sound as the blade passes in front of the tower. While the preference for the sound varies by personal taste, the power of the sound is measurable. Due to their size, a turbine's sound cannot be mitigated easily through engineered solutions, such as sound walls that are sometimes built along highways.

The most common method of ensuring wind turbine sound does not adversely affect quality of life is simply by locating them away from sensitive land uses, such as residences. Some debate exists over what distance is appropriate to achieve this, partially due to the fact that the distance sound travels can be affected by site specific factors, such as topography, amount of forest cover, and local weather conditions. Sound levels are investigated using detailed computer modeling software as part of the Environmental Assessment process and the predicted worst-case scenario must fall within acceptable standards.

In Nova Scotia, set-back distances from houses vary by municipality, from around 200m up to 1000m. Our proposed location exceeds even the strictest standards. The closest building is the water treatment plant at around 1.5km. The nearest house is around 2.3km away. At these distances we do not expect turbine noise to create any issues.

2.3km separation distance to scale



Shadow

Another common concern with large scale wind energy projects is the potential for flickering shadows to be cast on neighbouring houses if the sun is shining directly through the rotating blades.

This issue will also be investigated in detail as part of the EA process, however, given that the proposed turbine location is far to the west and south of houses in the area, the potential for negative impact is low.

The graphic to the left shows a rough estimate of the maximum shadow zone; modeled for the winter solstice (approx Dec. 21) which is the day when the sun is lowest, and shadows are longest.

Environmental

In conformance with the Environment Act, a full Environmental Assessment is being undertaken as part of this project. Many of the field studies for this are already being conducted, and the public participation component has yet to come. A preliminary investigation has identified significant bird and bat areas within 10km of the project site, and those will certainly be studied further in the EA process.

This project will be located in the Mill Lakes Surface Water Supply Area.

In addition to typical environmental studies and precautions, this project will be subject to expanded regulation by the Province. It is our objective to not only meet the current rules guiding land use in the watershed area, but accommodate any potential protective measures the Watershed Committee is considering. Working with the Province, the Watershed Committee, municipal staff, and third-party environmental engineering consultants we can ensure the water supply remains protected.

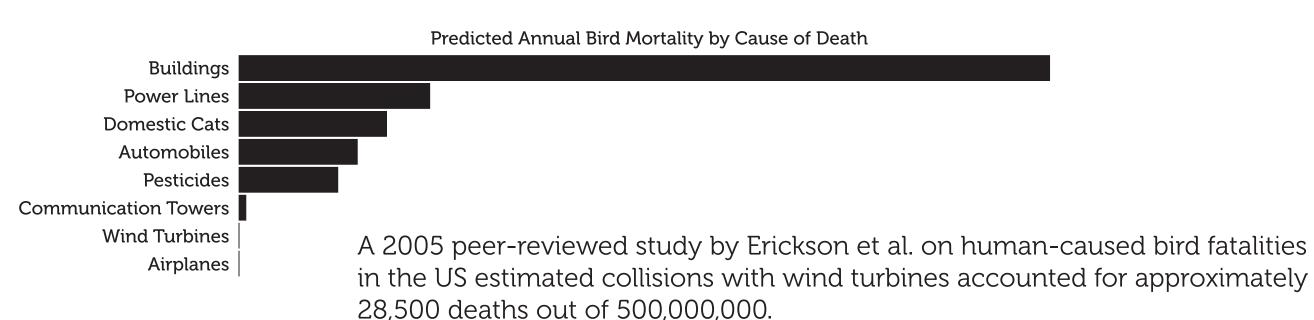
The greatest risks to water quality are during the construction phase when the potential for erosion and sediment runoff is highest. Well established precautionary steps can be taken to contain these problems, and all road construction and water crossings are regulated at the provincial level.

Once in operation, wind turbines present very little potential hazard. With construction complete, access infrastructure can be reduced if necessary, and no emissions are released by the turbines themselves. Oil, grease and coolant will be present in the nacelle. The systems that rely on these chemicals are subject to 24h live monitoring. Any leaks can be detected quickly and responded to by local service crews. The release of these chemicals into the environment is highly unlikely due to the self-contained design of the turbine.

We are committed to developing this project in a safe, responsible manner. With employees and family members counted amoung those who rely on this source, your water is also our water.

Impacts in Context

No development is without its adverse impacts. While we are trying our best to ensure this project is carried out in an environmentally sensitive way, any time people alter the natural world, there are going to be negative impacts. It is important to consider the context of those impacts. For example, wind turbines are known to be a cause of bird and bat kills, but the degree to which they affect bird populations is comparatively small to many other human activities. All things considered, wind energy is still among the most environmentally friendly forms of power generation.



Scotian WindFields
Community Owned. Naturally.