Penn Energy- Van Dorp
SOLAR ENERGY FACILITY

in the Geographic Township of Hope
Northumberland County
FIT Application No. FIT-FLTV77L
FIT Contract No. F-001573- SPV-130-505

Natural Heritage Assessment
Records Review

Prepared for: Penn Energy Renewables Ltd.
620 Righters Ferry Road, Bala Cynwyd, PA 19004

Submitted by: Niblett Environmental Associates Inc.
PN 10-066

October 2012

Niblett Environmental Associates Inc.
Biological Consultants

October 26, 2012 PN 10-066

Penn Energy Trust
620 Righters Ferry Road
Bala Cynwyd, PA 19004

Attention : Mr. Glen Tomkinson

RE: **Penn Energy- Van Dorp**
SOLAR ENERGY FACILITY
in the Geographic Township of Hope, Northumberland County
FIT Application No. FIT-FLTV77L
FIT Contract No. F-001573- SPV-130-505

Natural Heritage Assessment
Records Review

Dear Mr. Tomkinson:

We are pleased to submit the Records Review Report for the proposed Van Dorp solar energy facility as part of the Natural Heritage Assessment for this project.

The report follows the outline provided in the MNR Natural Heritage Assessment Manual.

If there are any comments or questions on the content please contact us.

Yours very truly,

Chris Ellingwood
President and Sr. Terrestrial and Wetland Biologist

55 Mary Street West, Suite 112, Lindsay, Ontario K9V 5Z6 Tel: (705) 878-9399 Fax: (705) 878-9390
Email: mail@niblett.ca Website: www.niblett.ca

Table of Contents

List of Figures

List of Tables

List of Appendices

1.0 Introduction

1.1 Project Overview

Penn Energy Renewables Ltd. has obtained a Feed-In-Tariff (FIT) contract from the Ontario Power Authority for the construction of a 10 MW (AC) solar PV renewable energy generation facility near the town of Port Hope (Figure 1). The project area is located on part of Lots 23 and 24, Concession 2 in the geographic township of Hope in Northumberland County, known municipally as 2300 Wesleyville Road. The facility consists of single photovoltaic (PV) modules that are approximately 1x2 meters in dimension. Modules are grouped in arrays which are aligned in rows; these rows are separated by access aisles approximately 5-6 meters in width. The project area will consist of approximately 55, 000 PV modules and 10 or more modular collection houses. The Environmental Protection Act (EPA) administered by the Ministry of the Environment (MOE) regulates the issuance of a Renewable Energy Approval (REA). The requirements applicants must meet to receive an REA are outlined in the REA Regulation (Ontario Regulation 359/09). The REA regulation requires that applicable renewable energy projects complete a Natural Heritage Assessment (NHA), which identifies natural features and provincial parks and conservation reserves near the proposed project location. NHAs determine feature significance and whether an environmental impact study (EIS) is required to outline impacts and mitigation measures. The facility class of the project falls under the Ground Mounted Solar Facility, Class 3, >10 kW and is therefore subject to NHA requirements. Niblett Environmental Associates Inc. (NEA) has been retained by Penn Energy Renewables Ltd. to conduct an NHA.

Natural features protected under the REA regulation include:

- Provincially significant southern wetlands
- Provincially significant coastal wetlands
- Provincially significant northern wetlands
- Significant woodlands
- Significant valleylands
- Significant wildlife habitat
- Provincially significant ANSI-life and earth science
- Provincial plan areas (Oak Ridges Moraine, Greenbelt)
- Provincial parks and conservation reserves

An NHA study begins with a records review to determine the presence of any natural features within 120 m of the project site (study area). A site investigation then verifies the

extent of the natural features, if any. An evaluation of significance (EOS) is performed if an unevaluated natural feature exists within 120 meters of the project area. The evaluation uses a set of criteria accepted or established by the MNR, which determines whether the natural feature is significant. If a project is located within 120 meters of a significant feature, an EIS is required to define the impacts on the natural feature and recommend any necessary mitigation measures.

Applicants submit NHA reports to the Ministry of Natural Resources (MNR) for review and written confirmation. These confirmations are then submitted to MOE as part of the application documentation for a REA.

Fish habitat and Endangered and Threatened species fall under separate regulations and require the submission of additional reports to the MOE and MNR respectively (Water Bodies Report and Species at Risk Report). However, these reports are prepared and reviewed through separate channels, and are not included within the scope of the Natural Heritage Assessment. The following report includes the records review of natural features found within the project area.

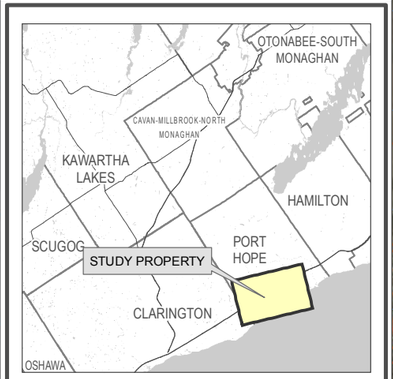
1.2 Project Location

The proposed Penn Energy-Van Dorp facility is located west of the Town of Port Hope. This property is bounded on the north by Highway 401, on the east by Wesleyville Road, on the south by Mail Road, and on the west side by private property (Figure 1). The subject property encompasses 124 acres (56.1 ha). The study area extends 120 m beyond the boundary of the project area to account for wildlife habitat components.

1:30,000

STUDY AREA

PROJECT LOCATION



NIBLETT ENVIRONMENTAL ASSOCIATES INC.

FIGURE 1: LOCATION OF PROJECT & STUDY AREA

17N 709253 4869455

Revision 1

10-066

HOPE TOWNSHIP

PETERBOROUGH DISTRICT

1 centimeter = 300 meters

Meters

0 412.5 825 1,650

LEGEND

Project Specific

- Project Location
- Study Area

Municipal

- Lot Parcel

Natural Features within 120m of Project Location

Wetland Wetland Area WE01- 82m

Woodlot Due to the amount of features, please refer to the report. Not all distances can be shown on map.

Corridor Potentially within project location and 120m project zone.

Email: mail.niblett.ca
Phone: 705.878.9399
GIS/Mapping Phone: 705.878.9399 x207
www.niblett.ca

NAD83 UTM ZONE 17N

2.0 Methodology

The Records Review is designed as a tool to gather information on natural features within the project location in order to make preliminary determinations on site feasibility and constraints. Preliminary mapping using satellite imagery and Ontario Ministry of Natural Resources (OMNR) data layers (2008-2011) helped to delineate areas of interest. Natural features that were examined included woodlands, wetlands, ANSIs and wildlife habitat. This includes the presence of significant vegetation communities and species at risk. Preliminary meetings with the Peterborough District of the Ontario Ministry of Natural Resources were held in July 2010 to discuss the project. Background information has also been requested from the Municipality of Port Hope and the Ganaraska Region Conservation Authority. Records relating to provincial parks and conservation reserves and natural features were analyzed to determine if the project location is within 120 m of a natural feature or 50 m from an ANSI. These records included Natural Heritage Information Center (NHIC), Land Information Ontario (LIO), OMNR Species at risk website, Ontario Breeding Bird Atlas, Species at Risk in Ontario List, Ontario Crown Land Use Atlas, Ontario Herpetofaunal Summary Atlas and the Municipality of Port Hope Official Plan.

The local planning board, municipal planning authority, local roads board, Niagara Escarpment Plan Area, Greenbelt Plan Area and the Oak Ridges Moraine were also consulted to verify if the property was within their jurisdiction. Table 1 lists natural features and information sources taken from Appendix B of the Natural Heritage Assessment Manual (2011).

Table 1: Information sources for natural features to be reviewed

Natural Feature	Records relating to natural feature	
Provincially significant wetlands and Coastal wetlands	MNR data layers, SOLRIS	Feature in or within 120 m of project location
Significant woodlands	MNR district office, municipal official plan, Conservation Authority, Oak Ridges Moraine Conservation Plan	
Significant valleylands	Conservation Authority, MNR district office	
Significant wildlife habitat	MNR district office, Conservation Authority, Significant wildlife habitat technical guide, Land Information Ontario	

Provincially Significant Areas of Natural and Scientific Interest (ANSI)	MNR district office, Land Information Ontario, Ontario's Renewable Energy Atlas, NHIC, Ontario Parks	Feature in or within 50 m (earth science) of project location
Conservation reserves	MNR district office, Land information Ontario, Ontario's Renewable Energy Atlas, NHIC	Feature in or within 120 m of project location.
Provincial parks	MNR district office, Land Information Ontario, Ontario's Renewable Energy Atlas, NHIC, Ontario Parks	
Significant vegetation communities	NHIC	
Wildlife concentration areas	NHIC	
Watercourses	Conservation Authority	
Sand barrens, savannahs, tallgrass prairies and alvars	Conservation Authority, Oak Ridges Moraine Conservation Plan	
Unevaluated or locally significant wetlands	SOLRIS, MNR district office	
Species at risk	Atlas of the Breeding Birds of Ontario, NHIC, Ontario Herp Atlas, MNR websites, MNR district office	
General information	All of the above, Niagara Escarpment Commission, Planning authorities and local boards (MMAH).	

3.0 Existing Conditions

The subject property is located outside of the Oak Ridges Moraine, the Greenbelt Protected Countryside and the Niagara Escarpment. The project location is not in (nor within 120 m of) a provincial park or conservation reserve. No valleylands or ANSIs are within120 m of the project location. The closest ANSI, Wesleyville Ravines is located roughly 700 m to the west of the project. No sand barrens, savannahs, tall grass prairies or alvars are located in or adjacent to the project. Residential properties and cropland are located to the east and west and Hwy 401 and lands owned by Ministry of Transportation are to the north. Woodlands and cropland are found to the south. Hydro One owns the parcel of land that abuts the eastern edge of the project property, which contains a small forest patch with an active red-tailed hawk nest. Habitat within the study area is primarily cropland, with a small area of woodland in the northwest corner which contains a stream running across that corner of the property. The site is not within a jurisdiction of

a local services board, local planning board, local roads board or municipal planning authority. No Crown or Federal lands are within the project location.

The subject property is zoned as "*Employment; General*" on Schedule C (Land Use) of the Municipality of Port Hope's Official Plan (2009). A very small portion of the northwest corner of the property is identified as "*Natural Environment*". This is associated with the small section of a creek that flows through this portion of the property and the lands on either side of it. Woodlands are identified on Schedule B (Development Constraints) adjacent to the property directly south and a 30 m floodplain runs along the creek.

3.1 Natural Features

A summary of the records review results pertaining to the presence of natural heritage features in the study area is provided in Table 2. Those natural heritage features that occur within the study area (typically within 120 meters of the project area) require an evaluation of significance.

Table 2. Summary of Natural Features Located within the Project Location or Adjacent Lands (based on the records review)

Natural Feature	Feature Within 120m of Project Location	Discussion (based on records review)
Greenbelt Protected Countryside and Niagara Escarpment	No	The study area was not found within the Greenbelt protected area or Niagara Escarpment on the OP
Oak Ridges Moraine	No	The study area is not within the Oak Ridges Moraine identified on the OP or within the Oak Ridges Moraine Conservation Plan
Provincially significant wetlands and coastal wetlands	No	No Provincially significant wetlands or coastal wetlands were identified within the study area as seen in the OP
Significant woodlands	Yes	Several woodlots are located within the study area. However, the site investigation report will confirm the potential for significance of these woodlots.
Significant valleylands	No	No significant valleylands were identified within the study area according to the OP.

Significant wildlife habitat	Yes	Agricultural fields and woodlands potentially provide wildlife habitat. More information, which will be gathered through the Site Investigation Report and other subsequent reports, is required for the assessment of any potential wildlife habitat.
Provincially Significant Areas of Natural and Scientific Interest (ANSI)	No	No ANSIs are recorded within the study area in the OP, The closest ANSI, Wesleyville Ravines is located roughly 700 m to the west of the project
Conservation reserves	No	No conservation reserves were recorded within the study area in the OP
Provincial Parks	No	No provincial parks were recorded within the study area in the OP
Significant vegetation communities	No	No such communities were identified as part of the records review process. However, this will be confirmed through the site investigation process.
Wildlife Concentration Areas	No	None were identified within the study area according to records from NHIC
Waterbodies	Yes	A stream was identified within the OP running through the northwest corner of the property.
Sand barrens, savannahs, tallgrass prairies and alvars	No	None were identified as occurring within the records review. The presence absence of these features needs to be confirmed during the site investigations.
Unevaluated or locally significant wetlands	No	None were identified in the study area in the OP

A summary of the records review for natural features identified within the study area are listed in Table 2. A site investigation and evaluation of significance are required to confirm and evaluate these natural features.

Table 3: Natural features present within the Solar Energy Facility based on records review

ID	Natural Feature	Data/Information	Evaluation Status	Location of feature relative to project location
WE01	Wetland	MNR data layers (2008-2010), Land Information Ontario (LIO)	Unevaluated	A small watercourse exists in the northwest corner of the property which could be associated with a riparian wetland. A wetland is not identified in the OP or as an evaluated/unevaluated/interim wetland on the MNR layers or LIO. No PSWs found within 120 m of the study area.
WO01-WO03 and WO10	Woodland	OP, LIO, Renewable Energy Atlas	Unevaluated	The Municipality of Port Hope official plan (OP) does not show designation of significant woodland on property but does show development constraints pertaining to the woodland to the south of the study area (WO03). LIO also shows woodland in NW corner (WO02), hedgerows and a forest patch on the adjacent Hydro One property (near center of the project location) (WO01).) and the pocket to the north-east of the property (W)10).
None	Watercourse	Ganaraska Region Conservation Authority	identified	The Ganaraska Region Conservation Authortity identifies the watercourse traversing the property

An NHIC spatial boundary database query was done for element occurrences for species at risk within six 1 km squares (17QJ06_88/89/98/99 and 17QJ16_08/09). The project location is within squares 17QJ06_89/98/99,. The larger scope ensures all potential species are accounted for and habitat requirements of each species are examined to determine the likelihood of its presence in or within the project site. The records for

these species have been documented by MNR, though the locations provided are approximate. Many of the species at risk (SAR) records are historic, with sightings dating as far back as 1864. These are listed in Table 3.

Table 4: Element occurrences for squares 17QJ06/07/16/17

Common Name	Scientific Name	Date of Observation	S Rank	COSEWIC Status	SARO Status
Milksnake	*Lampropeltis triangulum*	1975	S3	SC	SC
Eastern Few Fruited Sedge	*Carex oligocarpa*	1864	S3		
Ribbed Sedge	*Carex virescens*	1998	S3		

A square summary of the Breeding Bird Atlas was also analyzed for the 10 km square (17QJ06) that includes the study area. A total of 4 species of conservation concern were recorded which included the black tern (*Chlidonias niger*), red-headed woodpecker (*Melanerpes erythrocephalus*), white-eyed vireo (*Vireo griseus*) and Canada warbler (*Wilsonia canadensis*). Four regionally rare species were also recorded and include the green heron (*Butorides virescens*), common loon (*Gavia immer*), bank swallow (*Riparia riparia*) and cliff swallow (*Petrochelidon pyrrhonota*). Appendix A lists all species recorded within the square. Species presence or absence will be assessed during the site investigation if habitat is thought to occur on the property.

A records review from the MNR include the occurrences of snapping turtle (*Chelydra serpentina*) and yellow rail (*Coturnicops noveboracensis*) within the general area. Potential habitat for the common nighthawk (*Chordeiles minor*) was also noted in the area of the proposed project.

4.0 Summary

Natural features identified through the records review will be mapped to display the data spatially for the site investigation. Table 4 provides a summary of agencies contacted and information reviewed. The subsequent site investigation, involving on the ground field visits will help to confirm the presence of these natural features and add to the validity of our records review. As stated previously, endangered and threatened species are regulated under the Endangered Species Act (2007), and if found will be addressed with the local MNR district office in a separate report. Similarly, the presence of fish habitat will involve the submission of a separate water report to the MOE.

Table 5: Summary of agencies contacted and information gathered

Source and Contact Information	Records Requested	Records Received
MNR, Peterborough District Office	• Wetlands mapping • Significant wildlife habitat information • Species at risk information	MNR data layers (2008-2011) have been shared with Niblett since 2008.
Land Information Ontario	• Provincial Parks and conservation reserves • Woodland mapping • Wetlands mapping • OHN waterbodies and watercourses	Map with layers provided
Natural Heritage Information Center	• ANSI mapping • Species of conservation concern occurrences • Significant vegetation communities, natural areas and wildlife concentration areas	Element occurrences for 17QJ06/07/17/17 from Biodiversity Explorer.
Ontario Breeding Bird Atlas	• Species of conservation concern	Square Summary for 17QJ06
Ganaraska Region Conservation Authority Greg Wells and Ken Towle (lttr sent September 2, 2011)	• Significant wildlife habitat information • Watercourses • Significant valleylands	Letter received October 20, 2011
Municipality of Port Hope Ron Warne (lttr sent September 2, 2011)	• Significant woodlands • Significant valleylands • Natural heritage features	Letter received May 29th, 2012

(follow-up letter sent May 23, 2012)		
Renewable Energy Atlas	• Provincial Parks and conservation reserves • ANSI mapping • Crown or federal lands • Wilderness areas • Watercourses • Bat Hibernacula	Map with layers provided
Local Services board	• Not applicable to the area where the project is located	
Planning Authority	• Not applicable to the area where the project is located	
Oak Ridges Moraine Conservation Plan	• Not applicable to the area where the project is located	
Local Roads Board	• Not applicable to the area where the project is located	

5.0 References

Cadman M.D., Sutherland D.A., Beck G.G., Lepage D. and Couturier A.R. 2001-2005. Atlas of the Breeding Birds of Ontario. Second Atlas. Available: http://www.birdsontario.org/atlas/index.jsp?lang=en. Accessed March 2011.

Land Information Ontario (LIO). 2011. Ontario Ministry of Natural Resources. Queen's Printer for Ontario. Available: http://www.mnr.gov.on.ca/en/Business/LIO/index.html. Accessed March 2011.

Natural Heritage Information Center (NHIC). 2010. Ontario Ministry of Natural Resources. Queen's Printer for Ontario. Available: http://nhic.mnr.gov.on.ca/. Accessed March 2011.

Ontario Ministry of Natural Resources. 2008-2011. Special features mapping. MNR GIS database.

Ontario Ministry of Natural Resources. 2010. Natural Heritage Assessment Guide for Renewable Energy Projects. Queen's Printer of Ontario.

Ontario's Renewable Energy Atlas. 2011. Ontario Ministry of Natural Resources. Queen's Printer for Ontario. Available: http://www.mnr.gov.on.ca/en/Business/Renewable/2ColumnSubPage/276957.html. Accessed March 2011.

The Municipality of Port Hope. 2009. Official Plan. Available: http://www.porthope.ca/en/doingbusiness/resources/OP_Text_Dec_4-08.pdf. Accessed March 2011.

Appendix A: Square Summary of Breeding Bird Atlas (2005)

Square Summary (17QJ06)

#species (1st atlas)				#species (2nd atlas)				#hours		#pc done	
poss	prob	conf	total	poss	prob	conf	total	1st	2nd	road	offrd
18	28	50	96	30	26	43	99	81	49	35	0

Region summary (#46: Durham)

#squares	#sq with data		#species		#pc done	target #pc
	1st	2nd	1st	2nd		
27	26	27	168	175	1103	675

Target number of point counts in this square: 21 road side, 4 off road (1 in deciduous forest, 1 in coniferous forest, 1 in mixed forest, 1 in pasture/grassland). Please try to ensure that each off-road station is located such that the entire 100m radius circle is within the prescribed habitat.

SPECIES	Code		%	
	1st	2nd	1st	2nd
Canada Goose	FY	FY	96	100
Mute Swan			15	37
Trumpeter Swan †			0	25
Wood Duck	H	FY	80	92
Gadwall		P	38	40
American Wigeon			23	18
American Black Duck			57	25
Mallard	FY	FY	100	100
Blue-winged Teal	FY		88	48
Northern Shoveler			11	22
Northern Pintail			15	18
Green-winged Teal			0	22
Redhead †			0	7
Hooded Merganser		H	7	37
Common Merganser	H		15	18
Red-breast Merganser ‡			3	0
Ruddy Duck †			7	14
Ring-necked Pheasant		H	61	40

SPECIES	Code		%	
	1st	2nd	1st	2nd
Black-crown N.-Heron † §			15	3
Turkey Vulture		H	57	88
Osprey			34	37
Bald Eagle †			0	0
Northern Harrier	P		96	92
Sharp-shinned Hawk	H	H	61	92
Cooper's Hawk		H	34	74
Northern Goshawk ‡			34	48
Red-should Hawk †	H		65	51
Broad-winged Hawk		H	65	81
Red-tailed Hawk	AE	P	100	100
American Kestrel	P	H	100	96
Merlin ‡			0	7
Yellow Rail †			3	0
Virginia Rail			73	74
Sora			69	51
Common Moorhen		H	46	40
American Coot			30	25

SPECIES	Code		%	
	1st	2nd	1st	2nd
Herring Gull ‡§	H		23	11
Lesser Black-backed Gull †			0	0
Great Black-backed Gull †			0	0
Caspian Tern †			0	3
Black Tern † §	P		57	25
Common Tern §			19	18
Forster's Tern † §			0	0
Mourning Dove	NE	NE	100	100
Yellow-billed Cuckoo			38	37
Black/Yell-billed Cuckoo			0	33
Black-billed Cuckoo	S	S	96	81
Barn Owl †			0	0
Eastern Screech-Owl	H		53	85
Great Horned Owl	P	S	100	92
Barred Owl			26	29
Long-eared Owl ‡			34	11
Short-eared Owl †			0	3
North Saw-whet Owl			7	11

Ruffed Grouse	FY	FY	96	96
Wild Turkey		FY	0	77
Northern Bobwhite †			0	3
Common Loon ‡	P		19	14
Pied-billed Grebe			46	33
Double-crest Cormorant ‡§	H		3	0
American Bittern			46	44
Least Bittern †		S	38	33
Great Blue Heron §	H		100	55
Great Egret †			0	0
Green Heron ‡§	H	H	92	96

Coot/Moorhen			0	3
Sandhill Crane ‡			0	3
Killdeer	NE	FY	100	96
Rock Dove	AE	H	100	100
Spotted Sandpiper	DD	H	100	88
Upland Sandpiper	FY		73	33
Common Snipe			65	70
American Woodcock	S	NE	80	88
Wilson's Phalarope †			0	3
Little Gull †			3	0
Ring-billed Gull ‡§			3	7

Common Nighthawk			61	33
Whip-poor-will			46	25
Chimney Swift			76	62
Ruby-thr Hummingbird	H	D	96	96
Belted Kingfisher	P	P	100	100
Red-headed Woodpecker †	H	H	80	51
Red-bell Woodpecker			11	18
Yellow-bellied Sapsucker		FY	61	51
Downy Woodpecker	AE	FY	100	96
Hairy Woodpecker	FY	H	96	96
Northern Flicker	AE	S	100	100

next page >>

Ontario Breeding Bird Atlas - Summary Sheet for Square 17QJ06 (page 2 of 3)

SPECIES	Code		%	
	1st	2nd	1st	2nd
Pileated Woodpecker	H	T	88	92
Olive-sided Flycatcher ‡			7	0
Eastern Wood-Pewee	NE	AE	100	96
Alder Flycatcher			84	92
Willow Flycatcher	P	T	80	81
Least Flycatcher	T	S	96	92
Eastern Phoebe	NY	AE	96	96
Gr Crested Flycatcher	AE	FY	100	100
Eastern Kingbird	AE	CF	100	100
Loggerhead Shrike †			11	0
White-eyed Vireo †	T		3	0
Yellow-throated Vireo			11	7
Blue-headed Vireo			15	37
Warbling Vireo	T	S	100	96
Red-eyed Vireo	T	NY	100	96

SPECIES	Code		%	
	1st	2nd	1st	2nd
Carolina Wren		S	3	25
House Wren	CF	NY	100	100
Winter Wren	S	FY	84	85
Sedge Wren ‡			15	22
Marsh Wren	S	S	34	40
Golden-crown Kinglet		T	23	62
Ruby-crown Kinglet			11	0
Blue-gr Gnatcatcher	AE	H	26	48
Eastern Bluebird		NY	57	81
Veery	CF	T	100	96
Swainson's Thrush ‡			3	0
Hermit Thrush			23	55
Wood Thrush	NE	T	96	96
American Robin	NY	NY	100	100
Gray Catbird	DD	A	100	100

SPECIES	Code		%	
	1st	2nd	1st	2nd
Black-thr Blue Warbler			0	44
Yellow-rumped Warbler			57	70
Black-thr Green Warbler		T	38	88
Blackburnian Warbler			34	29
Pine Warbler		T	26	85
Cerulean Warbler †			7	3
Black-white Warbler	A	S	84	92
American Redstart	T	T	96	92
Ovenbird	T	T	100	96
North Waterthrush	CF	S	92	92
Louis Waterthrush †			0	7
Mourning Warbler	P	T	80	96
Common Yellowthroat	A	T	100	100
Canada Warbler	CF		46	44
Eastern Towhee	T	T	69	70

Blue Jay	NE	FY	100	96	Northern Mockingbird			7	51	Chipping Sparrow	FY	NY	100	96
American Crow	FY	NY	100	100	Brown Thrasher	CF	CF	100	100	Clay-colored Sparrow	T		46	55
Horned Lark	T	S	100	92	European Starling	NY	NY	100	100	Field Sparrow	FY	FY	92	92
Purple Martin	CF		80	37	Cedar Waxwing	T	NY	100	100	Vesper Sparrow	T	S	100	85
Tree Swallow	AE	NY	100	100	Blue-winged Warbler		S	15	40	Savannah Sparrow	CF	NE	100	100
North Rgh-wing Swallow	AE	FY	92	88	Golden-winged Warbler			38	25	Grasshopper Sparrow	FY	S	76	66
Bank Swallow ‡§	AE	NU	100	96	Blue/Gold-wing Warbler			0	11	Henslow's Sparrow †			0	0
Cliff Swallow ‡§	NY	NY	80	77	Lawrence's Warbler †			0	0	Song Sparrow	FY	NY	100	100
Barn Swallow	NY	NY	100	100	Brewster's Warbler †		S	3	11	Swamp Sparrow	CF	T	84	100
Black-capped Chickadee	T	FY	100	100	Nashville Warbler	T		84	74	White-throat Sparrow	FY	FY	100	85
Tufted Titmouse †			0	0	Northern Parula			3	3	Dark-eyed Junco			15	3
Red-breast Nuthatch			65	85	Yellow Warbler	A	CF	100	100	Summer Tanager ‡			0	0
White-breast Nuthatch		H	88	96	Chestn-sided Warbler	S	CF	76	88	Scarlet Tanager	T	T	69	74
Brown Creeper	S		73	66	Magnolia Warbler			19	66	Northern Cardinal	FY	NU	96	96

<< previous page next page >>

Ontario Breeding Bird Atlas - Summary Sheet for Square 17QJ06 (page 3 of 3)

SPECIES	Code		%	
	1st	2nd	1st	2nd
Rose-breast Grosbeak	FY	FY	100	96
Indigo Bunting	A	A	96	100
Dickcissel †			0	0
Bobolink	T	T	100	100
Red-wing Blackbird	AE	T	100	100
Eastern Meadowlark	FY	T	100	100
Western Meadowlark ‡			3	0
Brewer's Blackbird ‡			0	0
Common Grackle	FY	NY	100	100
Brown-head Cowbird	FY	NY	100	96
Orchard Oriole		A	15	37
Baltimore Oriole	AE	NU	100	100

Purple Finch			57	66
House Finch		P	26	96
Red Crossbill ‡			11	3
White-winged Crossbill ‡			3	3
Pine Siskin			26	11
American Goldfinch	A	NB	100	100
Evening Grosbeak			11	7
House Sparrow	AE	T	100	96

This list includes all species found during the Ontario Breeding Bird Atlas (1st atlas: 1981-1985, 2nd atlas: 2001-2005) in the region #46 (Durham). Underlined species are those that you should try to add to this square. They have not yet been reported during the 2nd atlas, but were found during the 1st atlas in this square or have been reported in more than 50% of the squares in this region during the 2nd atlas so far. In the species table, "BE 2nd" and "BE 1st" are the codes for the highest breeding evidence for that species in square 17QJ06 during the 2nd and 1st atlas respectively. The % columns give the percentage of squares in that region where that species was reported during the 2nd and 1st atlas (this gives an idea of the expected chance of finding that species in region #46). Rare/Colonial Species Report Forms should be completed for species marked: § (Colonial), ‡ (regionally rare), or † (provincially rare). Current as of 30/03/2011. An up-to-date version of this sheet is available from http://www.birdsontario.org/atlas/summaryform.jsp?squareID=17QJ06

<< previous page