

APPENDIX B

GHG CALCULATIONS

Table 1: Baseline GHG Quantification - Aulds Cove Wind Project

Project # 24-10440

Power Generation via Coal			
Parameter/Variable	Value	Unit	Comments
Quantity of Power Generated via Coal	225,114,305	kWh/year	Based on 37% of electricity generated by NSPI in Q3 2025
Emission Factors			
Parameter/Variable	Value	Unit	Comments
Coal Generated Electricity	1.0502	kg CO ₂ e/kWh	[Source: EIA, 2023]
Conversion Factor	0.001	t CO ₂ e/kWh	1 kg = 0.001 Tonnes
Emissions	236,413.02	t CO ₂ e/year	B5*B8*B9
Power Generation via Oil			
Parameter/Variable	Value	Unit	Comments
Quantity of Power Generated via Oil	18,252,511	kWh/year	Based on 3% of electricity generated by NSPI in Q3 2025
Emission Factors			
Parameter/Variable	Value	Unit	Comments
Oil Generated Electricity	1.1089	kg CO ₂ e/kWh	[Source: EIA, 2023]
Conversion Factor	0.001	t CO ₂ e/kWh	1 kg = 0.001 Tonnes
Emissions	20,239.34	t CO ₂ e/year	B14*B17*B18
Power Generation via Natural Gas			
Parameter/Variable	Value	Unit	Comments
Quantity of Power Generated via Natural Gas	85,178,386	kWh/year	Based on 14% of electricity generated by NSPI in Q3 2025
Emission Factors			
Parameter/Variable	Value	Unit	Comments
Natural Gas Generated Electricity	0.4374	kg CO ₂ e/kWh	[Source: EIA, 2023]
Conversion Factor	0.001	t CO ₂ e/kWh	1 kg = 0.001 Tonnes
Emissions	37,258.35	t CO ₂ e/year	B23*B26*B27
Power Generation via Wind			
Parameter/Variable	Value	Unit	Comments
Quantity of Power Generated via Wind	279,871,838	kWh/year	Based on 46% of electricity generated by NSPI in Q3 2025
Emission Factors			
Parameter/Variable	Value	Unit	Comments
Wind Generated Electricity	0	t CO ₂ e/kWh	
Emissions	0.00	t CO ₂ e/year	B32*B35
Total Emissions	293,910.71	t CO ₂ e/year	B10+B19+B28

Table 2: Construction Phase GHG Quantification - Aulds Cove Wind Project

Project # 24-10440

Turbine Fabrication			
Parameter/Variable	Value	Unit	Comments
Turbine Steel	840,000 kg/Turbine 840 tonne/Turbine		Based on weights provided in NREL's 2015 Report [NREL, 2017] 1 kg = 0.001 Tonnes
Emission Factors			
Parameter/Variable	Value	Unit	Comments
General Steel	1.5 kg CO ₂ e/kg		Estimated from the UK's general steel type, excluding stainless steel (Inventory of Carbon & Energy (ICE), Version 2.0).
Conversion Factor	0.001 t CO ₂ e/kg		1 kg = 0.001 Tonnes
Emissions	27,720.00 t CO ₂ e		B5*B9*B10*22(WT)
Turbine Transportation			
Parameter/Variable	Value	Unit	Comments
Transportation Vehicle Heavy Duty Truck (Diesel)	1 ea		
Distance Travelled	15,532 km		From manufacturing facility to the Port in Chennai, India and the Strait of Canso Superport, Mulgrave, NS, to Wind Turbine Laydowns (includes all the wind turbine components for all wind turbines).
Freight Weight Marine Cargo and Containers (Diesel)	70.00 tonne 1 ea		Based on weights provided in NREL's 2015 Report [NREL, 2017]. Estimate of each component; 840 tonnes/12 components
Distance Travelled	470,800 km		From Port in Chennai, India, to Strait of Canso Superport, Mulgrave, NS, (includes 22 WT).
Freight Weight	840.00 tonne		Based on weights provided in NREL's 2015 Report [NREL, 2017].
Emission Factors			
Parameter/Variable	Value	Unit	Comments
Heavy Duty Truck Conversion Factor	135 g CO ₂ e/tonne-km 0.000001 t CO ₂ e/tonne-km		Freight emissions for calculating GHGs from freight (materials delivery, shipment of product to market, etc.) [Source: GHGenius v5.0d]. 1 g = 0.000001 Tonnes
Emissions	146.78 t CO ₂ e/year		B16*B17*B18*B24*B25
Marine Cargo and Containers (Diesel) Conversion Factor	15.1 g CO ₂ e/tonne-km 0.000001 t CO ₂ e/tonne-km		Freight emissions for calculating GHGs from freight (materials delivery, shipment of product to market, etc.) [Source: GHGenius v5.0d]. 1 g = 0.000001 Tonnes
Emissions	5,971.63 t CO ₂ e/year		B20*B21*B27*B28
Tower Foundation and Pedestal			
Parameter/Variable	Value	Unit	Comments
Concrete Production Quantity	2,250,000 kg 2,250 tonne		Based on a volume of 1,000 m ³ (per Wind Turbine Pad) - provided by the Proponent, and an estimated concrete density of 2,250 kg/m ³ 1 kg = 0.001 Tonnes
Concrete Truck	20.25 tonne/truck 112 ea		Source: Ready Mixed Concrete Association of Ontario, n.d and concrete density of 2,250 kg/m ³ (B34/B35) Required trucks per Turbine Pad
Turbine Pad Steel	146 tonnes/pad		Based on weights provided by the Proponent
Heavy Duty Truck	38 tonne/truck 4 ea		No more than 49,500 Gross Vehicle Weight (Assumed unladen weight of 11.5 tonnes) (B38/B39) Required trucks per Turbine Pad
Concrete Transportation Distances			
Distance Travelled (freight)	151 km		Based on one-way trip from Concrete Supplier to each Wind Turbine Pad
Distance Travelled (no freight)	151 km		Based on one-way trip from Concrete Supplier to each Wind Turbine Pad
Steel Transportation Distances			
Distance Travelled (freight)	1,171 km		Based on one-way trip from Steel Supplier to each Wind Turbine Pad
Distance Travelled (no freight)	1,171 km		Based on one-way trip from Steel Supplier to each Wind Turbine Pad
Emission Factors			
Parameter/Variable	Value	Unit	Comments
Concrete Production	300 g CO ₂ e/kg		0.3 kg CO ₂ e/kg [Source: GHGenius v5.0d].
Concrete Truck (freight)	135 g CO ₂ e/tonne-km		Freight emissions for calculating GHGs from freight (materials delivery, shipment of product to market, etc.) [Source: GHGenius v5.0d].
Concrete Truck (no freight)	1,106 g CO ₂ e/km		Emissions for calculating GHGs where the volume of fuel consumed is unknown but the distance travelled is known [Source: GHGenius v5.0d].
General Steel Production	1.5 t CO ₂ e/tonne		Estimated from the UK's general steel type, excluding stainless steel (Inventory of Carbon & Energy (ICE), Version 2.0).
Heavy Duty Truck (freight)	135 g CO ₂ e/tonne-km		Freight emissions for calculating GHGs from freight (materials delivery, shipment of product to market, etc.) [Source: GHGenius v5.0d].
Heavy Duty Truck (no freight)	1,106 g CO ₂ e/km		Emissions for calculating GHGs where the volume of fuel consumed is unknown but the distance travelled is known [Source: GHGenius v5.0d].
Conversion Factor	0.000001 t CO ₂ e/g		1 g = 0.000001 Tonnes
Concrete Production Emissions	14,850.00 t CO ₂ e/year		B33*B49*B56*22(WT)
Concrete Truck (freight) Emissions	46.21 t CO ₂ e/year		B35*B36*B42*B50*B56
Concrete Truck (no freight) Emissions	18.70 t CO ₂ e/year		B36*B43*B51*B56
Steel Production Emissions	4,818.00 t CO ₂ e/year		B38*B53*22(WT)
Heavy Duty Truck (freight) Emissions	24.02 t CO ₂ e/year		B39*B40*B45*B54*B56
Heavy Duty Truck (no freight) Emissions	5.18 t CO ₂ e/year		B40*B46*B55*B56
Total Tower Foundation and Pedestal	19,762.11 t CO ₂ e/year		SUM(B57,B58,B59,B61,B62,B63)
Total Emissions (Construction Phase)	53,600.52 t CO ₂ e		B11+B26+B29+B64

Table 3: Operational Phase GHG Quantification - Aulds Cove Wind Project

Project # 24-10440

Wind Energy			
Parameter/Variable	Value	Unit	Comments
Quantity of Power Generation via Wind	608,417,040 kWh/year		See Equation
$kWh = 22 \text{ Turbines} \times \frac{7.0 \text{ MW}}{\text{Turbine}} \times \frac{365 \text{ days}}{\text{year}} \times \frac{24 \text{ hours}}{\text{day}} \times 0.451 \times \frac{1000 \text{ kW}}{\text{MW}} = 608,417,040 \text{ kWh/year}$			
Emission Factors			
Parameter/Variable	Value	Unit	Comments
Wind Generated Electricity	0 t CO ₂ e/kWh		
Emissions	0 t CO ₂ e/year		B5*B8
Maintenance			
Parameter/Variable	Value	Unit	Comments
Nacelle Components Replacement	11,431 kg/Turbine		15% of Nacelle [Source: Source: Padey et al., 2012, (Number Three Wind LLC, 2018)]
Blade Replacement	18,688 kg/Turbine		One Blade [Source: Source: Padey et al., 2012, (Number Three Wind LLC, 2018)]
Emission Factors			
Parameter/Variable	Value	Unit	Comments
General Steel	1.5 kg CO ₂ e/kg		Estimated from the UK's general steel type, excluding stainless steel (Inventory of Carbon & Energy (ICE), Version 2.0).
Conversion Factor	0.001 t CO ₂ e/kg		1 kg = 0.001 Tonnes
Emissions	45.1785 t CO ₂ e/turbine		(B13+B14)*B17*B18
Total Emissions	993.93 t CO ₂ e		B9+B19*22 (WT)

APPENDIX C

NOISE IMPACT ASSESSMENT



Noise Impact Assessment

for the

Aulds Cove Wind Farm Project

Prepared For

Strum Consulting
Suite 210 – 211 Horseshoe Lake Drive
Halifax
Nova Scotia
B3S 0B9

December 5, 2025

Prepared By



Nortek Resource Solutions Inc.

RR # 1

Thorburn, Nova Scotia

B0K 1W0

Tel (902) 922-3607

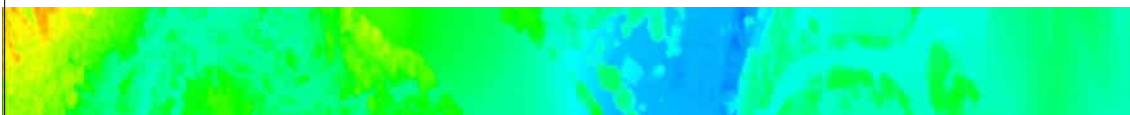


Table of Contents

1 .0 Introduction.....	3
2 .0 Sound Analysis.....	3
2.1 Background.....	3
2.2 Methodology.....	3
2.3 Sound Modeling Results.....	8
3 .0 Low Frequency Noise.....	8
4 .0 References.....	10
5 Appendix A – A-weighted Noise Modeling - WindPRO Results.....	11
6 Appendix B: Low Frequency Noise Modeling - WindPRO Results.....	13

1.0 Introduction

Green Current Renewable Energy Development Inc. is currently in the planning stages for developing the Aulds Cove Wind Farm Project. The project will consist of up to 21 wind turbines which that will be located in Guysborough County, Nova Scotia, west of the Town of Mulgrave. While the final turbine model has not yet been determined, Green Current has selected the Nordex N163 6.X 7000 turbine for this analysis as this model represents the general range of turbine options being considered.

The following report summarizes the results of sound modeling which will be incorporated into the Nova Scotia Environmental Assessment Registration Document for the project.

2.0 Sound Analysis

2.1 Background

Nortek Resource Solutions Inc. has completed a noise impact assessment for the proposed Aulds Cove Wind Farm Project. The objective of the analysis was to assess the impact of the the wind turbine sound emissions on surrounding dwellings. Noise modeling is based on sound levels that are adjusted to take into account how humans perceive sound with a lower sensitivity to very low and very high frequencies. The A-weight decibels (dBA) provides a measure of the loudness of sound in human terms.

The Nova Scotia Department of Environment and Climate Change (NSECC) requires that predicted noise levels are not to exceed 40 dBA for residential receptors which include homes, daycare facilities, hospitals and schools. The 40 dBA limit also includes a 35 dBA background noise consideration which is included in the modeling.

2.2 Methodology

The sound analysis was completed using WindPro 4.1.292 which provides a comprehensive suite of wind farm design and modeling software. The sound model is based on the *ISO 9613-2 – Attenuation of sound during propagation outdoors, Part 2*. This international standard provides a conservative estimate of sound propagation and subsequent environmental attenuation as a result of ground porosity, atmospheric attenuation and geometric spreading. A conservative modeling approach was utilized for this project by using the General Model with ground attenuation (porosity set at 0.7, where 0 is hard and 1 is a soft surface). The ISO 9613-2 standard assumes an ambient air temperature of 10° C and 70% relative humidity which are ideal for atmospheric sound transfer. A meteorological coefficient can be assigned to the model to simulate sound damping due to unique meteorological conditions and noise propagation in the upwind direction. To maintain a conservative approach, a meteorological coefficient was not applied for this analysis. Additionally, the modeling assumes that all receptors are downwind of each wind turbine, which contributes to the conservative

nature of the analysis. A wind speed of 10 m/s (at 10 m reference height) was modeled as this represents the highest noise emissions from the various wind turbines.

In addition to the proposed 21 turbines, there are 3 existing wind turbines located in close proximity to the eastern end of the proposed project which were included in the modeling. The Goose Harbour Lake (GHL) Wind Project is currently under construction and four turbines that are currently being built within 3.0 km of the proposed Aulds Cove wind turbines were included in the analysis. Table 1 summarizes the proposed turbine positions, Table 2 summarizes the location of the existing turbines and Table 3 shows the coordinates of the turbines that are currently under construction. Tables 4 to 7 summarize each of the turbine specifications. The total sound power output at various wind speeds for each turbine model were supplied by their respective manufacturers and shown in Table 8.

Table 1: Aulds Cove Proposed Turbine Positions

ID	Model	Easting* (m)	Northing* (m)
N01	N164/6.X STE**	620,200	5,054,099
N02	N164/6.X STE**	616,075	5,051,974
N03	N164/6.X STE**	621,675	5,053,499
N04	N164/6.X STE**	619,875	5,054,574
N05	N164/6.X STE**	618,025	5,053,124
N06	N164/6.X STE**	619,145	5,053,995
N07	N164/6.X STE**	619,075	5,052,399
N08	N164/6.X STE**	619,668	5,053,126
N09	N164/6.X STE**	616,400	5,051,423
N10	N164/6.X STE**	617,775	5,051,349
N11	N164/6.X STE**	617,800	5,052,474
N12	N164/6.X STE**	618,912	5,053,158
N13	N164/6.X STE**	618,419	5,053,740
N14	N164/6.X STE**	616,600	5,052,599
N15	N164/6.X STE**	618,475	5,052,324
N16	N164/6.X STE**	621,475	5,052,874
N17	N164/6.X STE**	620,750	5,053,299
N19	N164/6.X STE**	618,225	5,051,649
N20	N164/6.X STE**	616,700	5,051,999
N21	N164/6.X STE**	620,150	5,053,374
N22	N164/6.X STE**	617,475	5,053,199

* UTM, NAD83, Zone 20

** Serrated Trailing Edge Option

Table 2: Existing Turbine Positions

ID	Model	Easting* (m)	Northing* (m)
E1	E-92	622,009	5,053,084
E2	FD 21-50	622,177	5,053,064
E3	FD 21-50	622,333	5,052,993

* UTM, NAD83, Zone 20

Table 3: Turbines Under Construction

ID	Model	Easting* (m)	Northing* (m)
T5	N163/6.X	620,897	5,050,286
T21	N163/6.X	618,361	5,049,777
T27	N163/6.X	619,017	5,049,290
T30	N163/6.X	618,499	5,048,445

* UTM, NAD83, Zone 20

Table 4: Proposed Turbine Specifications

Item	Specification
Manufacturer	Nordex
Model	N163/6.X STE*
Hub Height	118 m
Rotor Diameter	163 m
Operation Mode	Level 0
Rated Power Output	7,000 kW

* Serrated Trailing Edge Option

Table 5: Existing Turbine Specifications - Enercon

Item	Specification
Manufacturer	Enercon
Model	E-92
Hub Height	98 m
Rotor Diameter	92 m
Operation Mode	Level 0
Rated Power Output	2,350 kW

Table 6: Existing Turbine Specifications - Ghrepower

Item	Specification
Manufacturer	Ghrepower
Model	FD 21-50
Hub Height	43 m
Rotor Diameter	21 m
Operation Mode	Level 0
Rated Power Output	50 kW

Table 7: Being Built Turbine Specifications - Nordex

Item	Specification
Manufacturer	Nordex
Model	N163/6.X
Hub Height	118 m
Rotor Diameter	163 m
Operation Mode	Level 0
Rated Power Output	7,000 kW

Table 8: Sound Power Levels for the Proposed, Existing and Being Built Turbines (dBA).

Status	Model	Wind Speed (m/s @ 10 m)										
		3	4	5	6	7	8	9	10	11	12	Up to cut-out
Proposed	N163/6.X STE	92.4	97.3	102.3	106.6	107.4	107.4	107.4	107.4	107.4	107.4	107.4
Being Built	N163/6.X	94.4	99.3	104.3	108.6	109.4	109.4	109.4	109.4	109.4	109.4	109.4
Existing	E-92	91.9	96.9	99.9	102.2	103.4	104.4	105.0	105.0	105.0	105.0	105.0
Existing	FD 21-50	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0

The proposed turbines were modeled using the Serrated Trailing Edge (STE) option which refers to modified rotor blades which reduce turbine noise. Alternatively, the GHL turbines were modeled with regular blades which are slightly louder. All turbines were modeled operating at full power or Level 0 which means the turbines are generating power at full capacity and therefore also operating at their highest noise level.

The spatial location of all the buildings located within 2.0 km of the proposed turbines were extracted from the Nova Scotia Topographic database. Recent satellite imagery was manually reviewed and additional potential receptors were identified. Field verification was completed and each of the potential receptors was classified as to whether it was habitable. Potential receptors including former buildings which had been demolished, burned or have fallen down as well as abandoned (non maintained, missing roof shingles, broken windows, animals using the structure for shelter, etc.) and active industrial buildings were classified as non habitable. All non habitable receptors as well as garages and sheds in close proximity to homes were not modeled. Receptors with which the owners have agreements with the project developer were considered participating receptors and were also excluded from the analysis.

A total of 19 receptors were included in the analysis and the location of the various receptors are shown in Figure 1. The individual coordinates, elevation and modeled A-weighted sound pressure levels for each receptor are shown in Table 9. The detailed WindPRO report for the Noise modeling is shown in Appendix A.

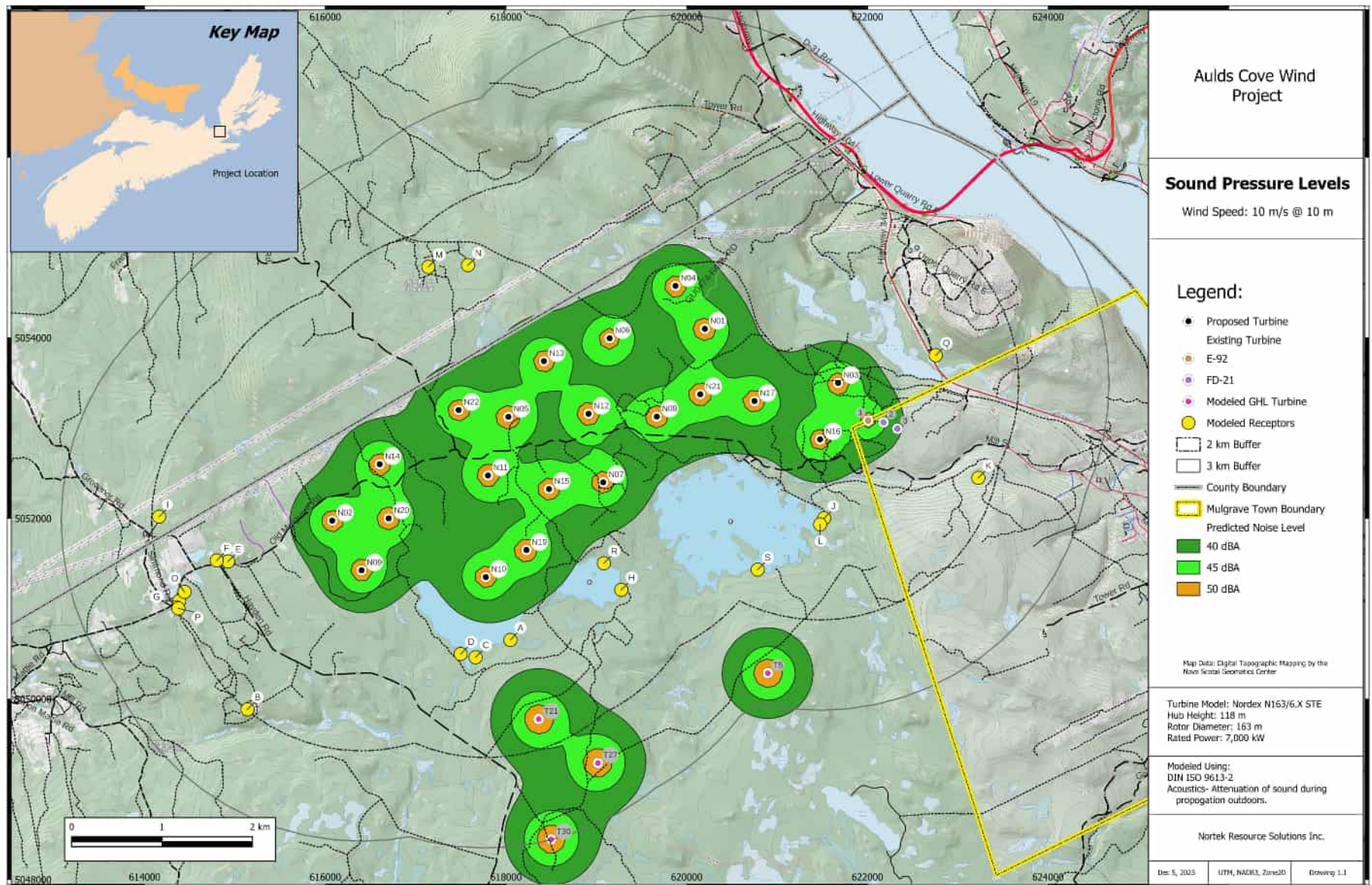


Figure 1: Modeled Sound Pressure Levels for the Proposed Aulds Cove Wind Farm (dBA)

Table 9: Modeled Receptor Coordinates and Resulting Sound Levels.

ID	Easting* (m)	Northing* (m)	Elevation (m)	dBA
A	618,047	5,050,654	138.8	39.9
B	615,137	5,049,885	124.2	35.9
C	617,662	5,050,462	139.1	39.1
D	617,497	5,050,498	137.8	38.8
E	614,922	5,051,523	129.2	36.7
F	614,796	5,051,535	126.9	36.5
G	614,381	5,051,084	121.6	35.9
H	619,275	5,051,208	136.2	38.5
I	614,159	5,052,019	127.9	35.8
J	621,520	5,052,002	125.2	38.2
K	623,228	5,052,449	109.7	36.2
L	621,476	5,051,934	123.0	38.0
M	617,139	5,054,786	122.6	36.7
N	617,578	5,054,805	120.4	37.1
O	614,440	5,051,186	128.3	36.0
P	614,371	5,051,003	122.8	35.9
Q	622,756	5,053,807	72.2	37.2
R	619,083	5,051,503	138.0	39.7
S	620,785	5,051,433	119.9	37.7

*UTM, NAD83, Zone 20

2.3 A-weighted Sound Modeling Results

The results of the analysis indicate that predicted sound pressure levels will not exceed 40 dBA for the modeled receptors based on the proposed turbine locations. Figure 1 and Table 9 show that all of the modeled receptors within 2.0 km of the proposed wind farm meet the 40 dBA threshold for sound power levels (including 35.0 dBA background noise). Therefore, no noise mitigation measures are recommended.

3.0 Low Frequency Noise

Low frequency noise is defined as sound that ranges from 20 to 200 Hz. In recent years, regulators have requested that a Low Frequency Noise analysis be completed to confirm that there are no expected issues from low frequency noise at receptors close proximity to the proposed wind turbines. The Finnish Low Frequency Noise model is a country specific algorithm that provides a consistent approach to quantifying low frequency noise expectations at receptors when developing a wind project.

The Finnish Low Frequency Noise model was used to determine if there are any concerns with low frequency noise at the 19 receptors located within 2.0 km of the proposed wind project. The model identifies the most critical predicted sound power level, which in this case is 50.0 Hz. All of the receptors have modeled results that are below the threshold level of 49.0 Hz which confirms that low frequency noise is not expected to be an issue (Appendix B).

4.0 References

International Organization for Standardization (1996). ISO 9613-2: Acoustics –Attenuation of sound during propagation outdoors – Part 2: General method of calculation.

Ontario Ministry of the Environment (2008). Noise guidelines for wind farms. Ontario.

Nova Scotia Policy Division, Environmental Assessment Branch, Guide to Preparing an EA Registration Document for Wind Power Projects in Nova Scotia, May 2007, revised October 2021.

Nova Scotia Topographic Database, <https://gis8.nsgc.gov.ns.ca/DataLocatorASP/main.html>.

5 Appendix A – A-weighted Noise Modeling - WindPRO Results

Project:
728 Mulgrave

Licensed user:
AL-PRO GmbH & Co.KG
Dorfstraße 100
DE-26532 Großheide
+49 (0) 4936 6986-0
Kirk / kirk.schmidt@al-pro.de
Calculated:
12/4/2025 1:43 PM/4.1.292

DECIBEL - Main Result

Calculation:APG N163 Mode 0 No N18 G0.7 Ht0.5

Noise calculation model:

ISO 9613-2:2024 General

Wind speed (at 10 m height):

10.0 m/s

Ground attenuation:

General, Ground factor: 0.7

Meteorological coefficient, C0:

Selected option: All receptors downwind of all wind turbines (Cmet = 0)

Type of demand in calculation:

2: WTG plus ambient noise is compared to ambient noise plus margin (FR etc.)

Noise values in calculation:

All noise values are mean values (Lwa) (Normal)

Pure tones:

Fixed penalty added to source noise of WTGs with pure tones

User: 0.0 dB(A)

Height above ground level, when no value in NSA object:

0.5 m; Allow override of model height with height from NSA object

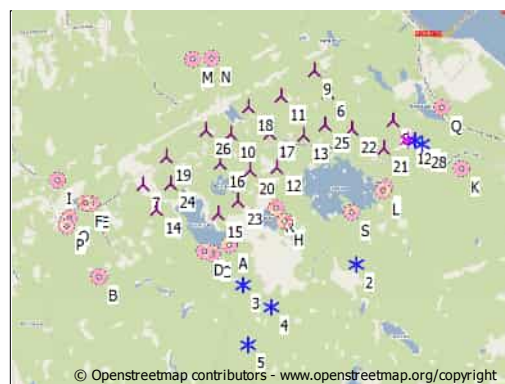
Uncertainty margin:

0.0 dB; Uncertainty margin in NSA has priority

Deviation from "official" noise demands. Negative is more restrictive, positive is less restrictive:

0.0 dB(A)

All coordinates are in
UTM (north)-NAD83 (US+CA) Zone: 20



WTGs

Easting	Northing	Z	Row data/Description	WTG type		Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Noise data		Wind speed [m/s]	Lwa,ref [dB(A)]
				Valid	Manufact.	Type-generator			Creator	Name		
1	622,009	5,053,084	119.8 E1	No	ENERCON	E-92 2,3 MW-2,350	2,350	92.0	EMD	Mode 00 - OM 0 s (2350 kW)	10.0	105.0
2	620,897	5,050,286	170.3 T5	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118 Mode 0	10.0	109.4 g
3	618,361	5,049,777	170.8 T21	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118 Mode 0	10.0	109.4 g
4	619,017	5,049,290	174.2 T27	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118 Mode 0	10.0	109.4 g
5	618,499	5,048,445	176.3 T30	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118 Mode 0	10.0	109.4 g
6	620,200	5,054,099	134.7 N01	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
7	616,075	5,051,974	138.1 N02	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
8	621,675	5,053,499	104.1 N03	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
9	619,875	5,054,574	125.7 N04	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
10	618,025	5,053,124	140.8 N05	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
11	619,145	5,053,995	118.8 N06	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
12	619,075	5,052,399	137.7 N07	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
13	619,668	5,053,126	125.3 N08	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
14	616,400	5,051,423	141.0 N09	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
15	617,775	5,051,349	147.7 N10	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
16	617,800	5,052,474	142.0 N11	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
17	618,912	5,053,158	137.4 N12	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
18	618,419	5,053,740	145.0 N13	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
19	616,600	5,052,599	129.9 N14	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
20	618,475	5,052,324	147.3 N15	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
21	621,475	5,052,874	123.0 N16	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
22	620,750	5,053,299	120.4 N17	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
23	618,225	5,051,649	143.7 N19	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
24	616,700	5,051,999	135.8 N20	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
25	620,150	5,053,374	129.2 N21	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
26	617,475	5,053,199	149.8 N22	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	USER	N163/6.X_R09 HH118_STE STE Mode 0	10.0	107.4 g
27	622,177	5,053,064	115.7 E2	No	Ghrepower	FD21-50-50	50	21.0	USER	Noise Level	10.0	60.0 h
28	622,333	5,052,993	115.9 E3	No	Ghrepower	FD21-50-50	50	21.0	USER	Noise Level	10.0	60.0 h

h) Generic octave distribution used

g) Data calculated from data for other wind speed (uncertain)

Calculation Results

Project:
728 Mulgrave

Licensed user:
AL-PRO GmbH & Co.KG
Dorffstraße 100
DE-26532 Großheide
+49 (0) 4936 6986-0
Kirk / kirk.schmidt@al-pro.de
Calculated:
12/4/2025 1:43 PM/4.1.292

DECIBEL - Main Result

Calculation:APG N163 Mode 0 No N18 G0.7 Ht0.5

Sound level

Noise sensitive area				Demands			Sound level				Demands fulfilled ?		
No.	Name	Easting	Northing	Z	Immission height	Ambient noise	Additional exposure	Ambient+WTGs	From WTGs	Ambient+WTGs	Additional exposure	Distance to noise demand	Noise
				[m]	[m]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[dB(A)]	[m]	
A	Receptor A	618,047	5,050,654	138.8	0.5	35.0	0.0	40.0	38.2	39.9	4.9	225	Yes
B	Receptor B	615,137	5,049,885	124.3	0.5	35.0	0.0	40.0	28.6	35.9	0.9	1,520	Yes
C	Receptor C	617,662	5,050,462	139.1	0.5	35.0	0.0	40.0	37.0	39.1	4.1	395	Yes
D	Receptor D	617,497	5,050,498	137.8	0.5	35.0	0.0	40.0	36.5	38.8	3.8	401	Yes
E	Receptor E	614,922	5,051,523	129.2	0.5	35.0	0.0	40.0	31.9	36.7	1.7	762	Yes
F	Receptor F	614,796	5,051,535	126.9	0.5	35.0	0.0	40.0	31.2	36.5	1.5	880	Yes
G	Receptor G	614,381	5,051,084	121.6	0.5	35.0	0.0	40.0	28.6	35.9	0.9	1,431	Yes
H	Receptor H	619,275	5,051,208	136.2	0.5	35.0	0.0	40.0	36.0	38.5	3.5	578	Yes
I	Receptor I	614,159	5,052,019	127.9	0.5	35.0	0.0	40.0	28.3	35.8	0.8	1,451	Yes
J	Receptor J	621,520	5,052,002	125.2	0.5	35.0	0.0	40.0	35.4	38.2	3.2	397	Yes
K	Receptor K	623,228	5,052,449	109.7	0.5	35.0	0.0	40.0	30.1	36.2	1.2	986	Yes
L	Receptor L	621,476	5,051,934	123.0	0.5	35.0	0.0	40.0	34.9	38.0	3.0	464	Yes
M	Receptor M	617,139	5,054,786	122.6	0.5	35.0	0.0	40.0	31.9	36.7	1.7	1,098	Yes
N	Receptor N	617,578	5,054,805	120.4	0.5	35.0	0.0	40.0	33.0	37.1	2.1	844	Yes
O	Receptor O	614,440	5,051,186	128.3	0.5	35.0	0.0	40.0	29.0	36.0	1.0	1,335	Yes
P	Receptor P	614,371	5,051,003	122.8	0.5	35.0	0.0	40.0	28.4	35.9	0.9	1,474	Yes
Q	Receptor Q	622,756	5,053,807	72.2	0.5	35.0	0.0	40.0	33.1	37.2	2.2	597	Yes
R	Receptor R	619,083	5,051,503	138.1	0.5	35.0	0.0	40.0	37.9	39.7	4.7	254	Yes
S	Receptor S	620,785	5,051,433	119.9	0.5	35.0	0.0	40.0	34.3	37.7	2.7	649	Yes

Distances (m)

WTG	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	4648	7580	5077	5200	7257	7378	7886	3316	7922	1188	1374	1268	5159	4754	7803	7916	1039	3326	2056
2	2874	5774	3240	3407	6102	6228	6566	1867	6958	1825	3180	1746	5863	5607	6520	6565	3981	2185	1152
3	931	3225	978	1124	3856	3974	4189	1698	4762	3864	5552	3789	5155	5088	4166	4173	5963	1870	2935
4	1673	3925	1791	1941	4664	4780	4971	1935	5572	3690	5264	3610	5808	5699	4954	4951	5864	2213	2778
5	2255	3657	2184	2285	4719	4823	4892	2870	5622	4666	6196	4586	6485	6426	4898	4856	6846	3113	3762
6	4063	6587	4435	4502	5873	5982	6554	3035	6389	2478	3448	2513	3137	2716	6455	6600	2572	2827	2730
7	2373	2290	2192	2050	1238	1353	1914	3290	1917	5445	7168	5401	3007	3205	1815	1961	6928	3044	4741
8	4611	7470	5033	5144	7036	7154	7684	3318	7660	1505	1874	1578	4715	4301	7596	7718	1124	3272	2250
9	4325	6666	4670	4719	5817	5919	6509	3419	6261	3053	3969	3088	2744	2309	6405	6561	2981	3172	3271
10	2470	4339	2687	2678	3491	3599	4177	2287	4021	3670	5246	3650	1883	1739	4075	4225	4780	1936	3237
11	3517	5740	3832	3866	4893	4997	5583	2790	5363	3100	4365	3111	2156	1764	5480	5634	3616	2493	3042
12	2025	4672	2398	2470	4244	4366	4875	1207	4931	2477	4153	2445	3073	2834	4791	4906	3941	896	1964
13	2956	5571	3335	3409	5009	5126	5668	1957	5619	2166	3623	2165	3025	2681	5576	5706	3162	1726	2029
14	1818	1990	1586	1435	1481	1608	2048	2883	2319	5152	6904	5101	3443	3581	1974	2072	6788	2684	4385
15	746	3017	894	895	2858	2985	3405	1506	3678	3801	5563	3746	3495	3462	3339	3421	5554	1317	3011
16	1837	3714	2017	1999	3031	3148	3691	1943	3669	3749	5428	3715	2405	2341	3598	3731	5132	1609	3161
17	2649	4996	2972	3013	4312	4425	4984	1983	4888	2852	4373	2841	2407	2120	4888	5026	3898	1664	2546
18	3108	5063	3364	3370	4140	4242	4834	2672	4594	3555	4979	3550	1653	1357	4728	4886	4337	2334	3305
19	2424	3083	2386	2284	1993	2095	2687	3014	2509	4956	6629	4921	2252	2413	2581	2741	6273	2714	4344
20	1724	4134	2032	2071	3642	3763	4278	1372	4327	3062	4754	3026	2801	2638	4192	4311	4530	1022	2476
21	4084	7007	4512	4633	6691	6812	7317	2760	7366	874	1803	940	4739	4350	7235	7346	1585	2757	1598
22	3782	6569	4194	4292	6092	6210	6744	2559	6714	1508	2619	1546	3905	3512	6654	6779	2069	2451	1867
23	1011	3556	1314	1362	3305	3431	3886	1138	4083	3313	5066	3263	3320	3222	3813	3907	5018	870	2569
24	1904	2629	1813	1700	1840	1960	2493	2693	2541	4820	6543	4776	2821	2940	2402	2533	6320	2434	4124
25	3438	6107	3830	3912	5546	5661	6207	2336	6142	1939	3214	1958	3326	2944	6115	6246	2642	2154	2043
26	2609	4055	2743	2701	3054	3154	3748	2683	3520	4218	5801	4196	1622	1609	3642	3802	5316	2337	3752
27	4782	7724	5211	5337	7417	7538	8044	3445	8086	1249	1217	1330	5324	4918	7962	8073	942	3466	2145
28	4883	7838	5313	5441	7555	7677	8178	3541	8232	1282	1047	1363	5495	5089	8097	8207	917	3576	2198

6 Appendix B: Low Frequency Noise Modeling - WindPRO Results

Project:
728 Mulgrave

Licensed user:
AL-PRO GmbH & Co.KG
Dorfstraße 100
DE-26532 Großheide
+49 (0) 4936 6986-0
Kirk / kirk.schmidt@al-pro.de
Calculated:
12/5/2025 10:59 AM/4.1.292

DECIBEL - Main Result

Calculation: APG N163 Mode 0 No N18 G0.8 Ht0.5 Low frequency

Noise calculation model:

Finland Low frequency

Wind speed (at 10 m height):

8.0 m/s

Spectral distribution:

From 20.0 Hz to 200.0 Hz

Meteorological coefficient, C0:

Selected option: Fixed value: 0.0 dB

Type of demand in calculation:

1: WTG noise is compared to demand (DK, DE, SE, NL etc.)

Noise values in calculation:

All noise values are mean values (Lwa) (Normal)

Pure tones:

Pure tone penalty is subtracted from demand

Model: 5.0 dB(A)

Height above ground level, when no value in NSA object:

4.0 m; Don't allow override of model height with height from NSA object

Uncertainty margin:

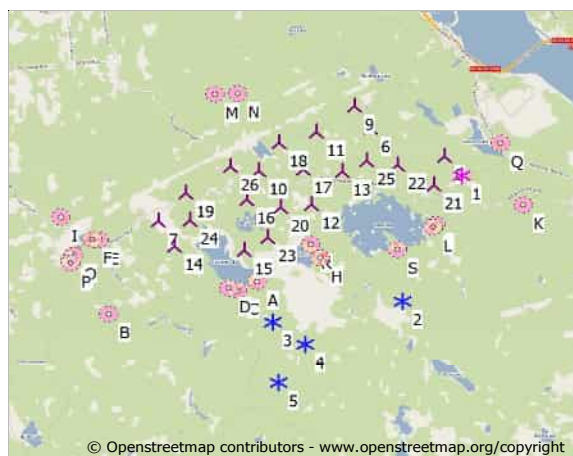
0.0 dB; Uncertainty margin in NSA has priority

Deviation from "official" noise demands. Negative is more restrictive, positive is less restrictive.:

0.0 dB(A)

All coordinates are in
UTM (north)-NAD83 (US+CA) Zone: 20

All coordinates are in
UTM (north)-NAD83 (US+CA) Zone: 20



Scale 1:125,000
New WTG
Existing WTG
Noise sensitive area

WTGs

Easting	Northing	Z	Row data/Description	WTG type		Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Noise data		Wind speed [m/s]	LwA,ref [dB(A)]
				Valid	Type-generator				Creator	Name		
1 622,009	5,053,084	119.8	E1	No	ENERCON	E-92 2.3 MW-2,350	2,350	92.0	98.4 EMD	Mode 00 - OM 0 s (2350 kW)	8.0	96.2
2 620,897	5,050,286	170.3	T5	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118 Mode 0	8.0	100.1 g
3 618,361	5,049,777	170.8	T21	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118 Mode 0	8.0	100.1 g
4 619,017	5,049,290	174.2	T27	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118 Mode 0	8.0	100.1 g
5 618,499	5,048,445	176.3	T30	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118 Mode 0	8.0	100.1 g
6 620,200	5,054,099	134.7	N01	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
7 616,075	5,051,974	138.1	N02	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
8 621,675	5,053,499	104.1	N03	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
9 619,875	5,054,574	125.7	N04	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
10 618,025	5,053,124	140.8	N05	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
11 619,145	5,053,995	118.8	N06	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
12 619,075	5,052,399	137.7	N07	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
13 619,668	5,053,126	125.3	N08	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
14 616,400	5,051,423	141.0	N09	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
15 617,775	5,051,349	147.7	N10	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
16 617,800	5,052,474	142.0	N11	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
17 618,912	5,053,158	137.4	N12	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
18 618,419	5,053,740	145.0	N13	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
19 616,600	5,052,599	129.9	N14	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
20 618,475	5,052,324	147.3	N15	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
21 621,475	5,052,874	123.0	N16	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
22 620,750	5,053,299	120.4	N17	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
23 618,225	5,051,649	143.7	N19	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
24 616,700	5,051,999	135.8	N20	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
25 620,150	5,053,374	129.2	N21	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g
26 617,475	5,053,199	149.8	N22	Yes	NORDEX	N163/6.X -7,000	7,000	163.0	118.0 USER	N163/6.X_R09 HH118_STE STE Mode 0	8.0	98.5 g

g) Data calculated from data for other wind speed (uncertain)

Calculation Results

Project:
728 Mulgrave

Licensed user:
AL-PRO GmbH & Co.KG
Dorfstraße 100
DE-26532 Großheide
+49 (0) 4936 6986-0
Kirk / kirk.schmidt@al-pro.de
Calculated:
12/5/2025 10:59 AM/4.1.292

DECIBEL - Main Result

Calculation: APG N163 Mode 0 No N18 G0.8 Ht0.5 Low frequency

Sound level

Noise sensitive area				Most critical demand				Predicted sound level	Demands fulfilled ?	
No.	Name	Easting	Northing	Z [m]	Immission height [m]	Frequency [Hz]	Noise [dB]	WTG noise [dB]	Noise	
A	Receptor A	618,047	5,050,654	138.8	4.0	50.0	49.0	41.2		Yes
B	Receptor B	615,137	5,049,885	124.3	4.0	50.0	49.0	34.7		Yes
C	Receptor C	617,662	5,050,462	139.1	4.0	50.0	49.0	40.4		Yes
D	Receptor D	617,497	5,050,498	137.8	4.0	50.0	49.0	40.2		Yes
E	Receptor E	614,922	5,051,523	129.2	4.0	50.0	49.0	36.9		Yes
F	Receptor F	614,796	5,051,535	126.9	4.0	50.0	49.0	36.4		Yes
G	Receptor G	614,381	5,051,084	121.6	4.0	50.0	49.0	34.7		Yes
H	Receptor H	619,275	5,051,208	136.2	4.0	50.0	49.0	40.3		Yes
I	Receptor I	614,159	5,052,019	127.9	4.0	50.0	49.0	34.5		Yes
J	Receptor J	621,520	5,052,002	125.2	4.0	50.0	49.0	39.4		Yes
K	Receptor K	623,228	5,052,449	109.7	4.0	50.0	49.0	35.6		Yes
L	Receptor L	621,476	5,051,934	123.0	4.0	50.0	49.0	39.2		Yes
M	Receptor M	617,139	5,054,786	122.6	4.0	50.0	49.0	37.5		Yes
N	Receptor N	617,578	5,054,805	120.4	4.0	50.0	49.0	38.2		Yes
O	Receptor O	614,440	5,051,186	128.3	4.0	50.0	49.0	34.9		Yes
P	Receptor P	614,371	5,051,003	122.8	4.0	50.0	49.0	34.6		Yes
Q	Receptor Q	622,756	5,053,807	72.2	4.0	50.0	49.0	37.5		Yes
R	Receptor R	619,083	5,051,503	138.1	4.0	50.0	49.0	41.6		Yes
S	Receptor S	620,785	5,051,433	119.9	4.0	50.0	49.0	38.8		Yes

*)Spectral distribution, please see details in report "Detailed results"

Distances (m)

WTG	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	4648	7580	5077	5200	7257	7378	7886	3316	7922	1188	1374	1268	5159	4754	7803	7916	1039	3326	2056
2	2874	5774	3240	3407	6102	6228	6566	1867	6958	1825	3180	1746	5863	5607	6520	6565	3981	2185	1152
3	931	3225	978	1124	3856	3974	4189	1698	4762	3864	5552	3789	5155	5088	4166	4173	5963	1870	2935
4	1673	3925	1791	1941	4664	4780	4971	1935	5572	3690	5264	3610	5808	5699	4954	4951	5864	2213	2778
5	2255	3657	2184	2285	4719	4823	4892	2870	5622	4666	6196	4586	6485	6426	4898	4856	6846	3113	3762
6	4063	6587	4435	4502	5873	5982	6554	3035	6389	2478	3448	2513	3137	2716	6455	6600	2572	2827	2730
7	2373	2290	2192	2050	1238	1353	1914	3290	1917	5445	7168	5401	3007	3205	1815	1961	6928	3044	4741
8	4611	7470	5033	5144	7036	7154	7684	3318	7660	1505	1874	1578	4715	4301	7596	7718	1124	3272	2250
9	4325	6666	4670	4719	5817	5919	6509	3419	6261	3053	3969	3088	2744	2309	6405	6561	2981	3172	3271
10	2470	4339	2687	2678	3491	3599	4177	2287	4021	3670	5246	3650	1883	1739	4075	4225	4780	1936	3237
11	3517	5740	3832	3866	4893	4997	5583	2790	5363	3100	4365	3111	2156	1764	5480	5634	3616	2493	3042
12	2025	4672	2398	2470	4244	4366	4875	1207	4931	2477	4153	2445	3073	2834	4791	4906	3941		
13	2956	5571	3335	3409	5009	5126	5668	1957	5619	2166	3623	2165	3025	2681	5576	5706	3162	1726	2029
14	1818	1990	1586	1435	1481	1608	2048	2883	2319	5152	6904	5101	3443	3581	1974	2072	6788	2684	4385
15	746	3017	894	895	2858	2985	3405	1506	3678	3801	5563	3746	3495	3462	3339	3421	5554	1317	3011
16	1837	3714	2017	1999	3031	3148	3691	1943	3669	3749	5428	3715	2405	2341	3598	3731	5132	1609	3161
17	2649	4996	2972	3013	4312	4425	4984	1983	4888	2852	4373	2841	2407	2120	4888	5026	3898	1664	2546
18	3108	5063	3364	3370	4140	4242	4834	2672	4594	3555	4979	3550	1653	1357	4728	4886	4337	2334	3305
19	2424	3083	2386	2284	1993	2095	2687	3014	2509	4956	6629	4921	2252	2413	2581	2741	6273	2714	4344
20	1724	4134	2032	2071	3642	3763	4278	1372	4327	3062	4754	3026	2801	2638	4192	4311	4530	1022	2476
21	4084	7007	4512	4633	6691	6812	7317	2760	7366		874	1803	940	4739	4350	7235	7346	1585	2757
22	3782	6569	4194	4292	6092	6210	6744	2559	6714	1508	2619	1546	3905	3512	6654	6779	2069	2451	1867
23	1011	3556	1314	1362	3305	3431	3886	1138	4083	3313	5066	3263	3320	3222	3813	3907	5018		
24	1904	2629	1813	1700	1840	1960	2493	2693	2541	4820	6543	4776	2821	2940	2402	2533	6320	2434	4124
25	3438	6107	3830	3912	5546	5661	6207	2336	6142	1939	3214	1958	3326	2944	6115	6246	2642	2154	2043
26	2609	4055	2743	2701	3054	3154	3748	2683	3520	4218	5801	4196	1622	1609	3642	3802	5316	2337	3752

OVERVIEW OF INFRASOUND

Infrasound is an inaudible range of low frequency sound between one and 10 Hz generated as a result of large masses/objects in motion. Infrasound is emitted from both natural sources (e.g., wind, oceans) and artificial sources such as road traffic, ventilation systems, and aircrafts (Keith, 2018). Levels of infrasound emitted from large-scale wind turbines attenuate over space as a function of site-specific characteristics (i.e., topography, structures, etc.) and climatic conditions (Rod & Heiger-Bernays, 2012; Schmidt & Klokke, 2014). Generally, frequencies below 100 Hz are attenuated by three dBA over a doubling of distance when downwind of turbines (between distances of 0.3 to 20 km) and six dBA over a doubling of distance when upwind of turbines (between distances of 0.4 to 3 km) (Shepherd & Hubbard, 1991). Health Canada reported that infrasound generated by wind turbines can be measured up to 10 km away, however, in many cases was below background levels (Health Canada, 2014; Keith, 2018).

When evaluating potential effects of infrasound, it is important that these frequencies be discussed in the context of the sound pressure levels, or in other words, the loudness of the sound. Studies show that the lower the frequency of the sound, the louder the sound needs to be in order to be audible/perceived. For instance, very loud sounds at very low frequencies (i.e., 165 dB at 2 Hz, reducing to 145 dB at 20 Hz) may result in pain (Leventhall, 2006) and infrasound has been shown to cause annoyance, when the sound level exceeds the threshold of hearing (i.e., the lowest sound levels that a listener can detect) (HGC, 2010). Further, research shows that to be physically felt, infrasound must exceed 100–110 dB (Ellenbogen et al., 2012). While there is some variation in the literature and between individual sensitivities, there is fairly good agreement on the level of the threshold of hearing among the various studies that have been completed (Figure 1).

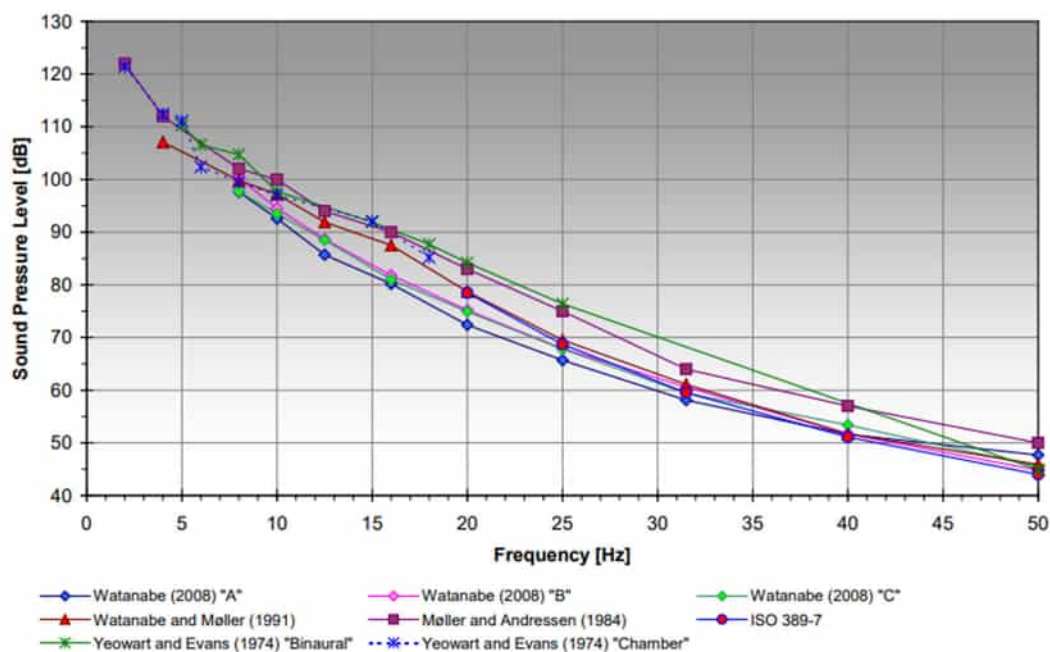


Figure 1: Threshold of Hearing Data from Various Papers (Source: HGC, 2010)

MEASURING INFRASOUND

In 2010, Sonus, an acoustic consulting firm based in South Australia, completed a study to measure infrasound produced by a range of natural and manmade sources using a methodology specifically designed to measure infrasound (Table 1). Sound levels measured using the G-weighting filters, expressed as dBG. The G-weighting network was applied to the measured infrasound pressure levels as it has been standardized to determine the human perception (i.e. threshold of hearing) and annoyance due to noise that lies within the infrasound frequency range. By comparison, when measuring audible sound levels, meters are usually equipped with weighting circuits to simulate the frequency response characteristics of the human ear.

Table 1: Measured Levels of Infrasound from Natural & Manmade Sources

Source	Infrasound Level (dBG)
Threshold of Hearing	85
Ambient Infrasound (As measured 100 m from nearest wind turbine with negligible wind and no turbine operation)	62
Natural Sources	
Adjacent to Beach – 25 m from high water	75
Cliff Face – 250 m from coastline	69
Inland Forest – 8 km from coastline	57
Anthropogenic Sources	
Business District (70 m from two major road corridors)	76
Gas Fired Power Station (350 m away)	74
Wind Farm – 100 m downwind	66
Wind Farm – 200 m downwind	63
Wind Farm – 360 m downwind	61
Outside Residence – 1.2 km from nearest wind turbine	58

Source: Sonus 2010

The results of the study indicate that while turbines do produce infrasound, levels are well below established levels that can be perceived by humans and are comparable to natural and urban sources that are common in the environment.

INFRASOUND AND POTENTIAL HEALTH CONCERNS

Concern about infrasound from wind turbines is thought to have originated from the experience of neighbours of early wind turbine designs with downwind rotors (rotors downwind of the tower). In contrast, all modern utility scale wind turbines have upwind rotors that produce significantly lower infrasound emissions (Bastasch et al., 2006). Several studies and panels have been assembled to evaluate the perceived health effects associated with wind turbines.

A study by Evans et al. (2013) concluded that measured infrasound levels at rural locations both near to and away from wind farms were no higher than infrasound levels measured at the

urban locations. Human activity and traffic were the main sources of infrasound within urban locations, while localized wind conditions were found to be the main source of infrasound in rural locations. All measurements were below the levels that can be perceived by humans, with most by a significant margin (Evans et al., 2013).

A scientific advisory panel with expertise in audiology, acoustics, occupational/environmental medicine, and public health was assembled by the wind industry in early 2009 to conduct a review of current literature available on the issue of perceived health effects of wind turbines (Colby et al., 2009). Following their review and analysis of the information, the panel reached consensus on the following conclusions:

- There is no evidence that the audible or sub-audible sounds emitted by wind turbines have any direct adverse physiological effects.
- The ground-borne vibrations from wind turbines are too weak to be detected by, or to affect, humans.
- Sounds emitted by wind turbines are not unique. There is no reason to believe, based on the levels and frequencies of the sounds and the panel's experience with sound exposures in occupational settings, that the sounds from wind turbines could plausibly have direct adverse health consequences.

The Chief Medical Officer of Health in Ontario also conducted a review of papers and reports (from 1970 to 2010) on wind turbines and health from scientific bibliographic databases, grey literature, and from a structured Internet search. The report concluded that “low frequency sound and infrasound from current generation upwind model turbines are well below the pressure sound levels at which known health effects occur. Further, there is no scientific evidence to date that vibration from low frequency wind turbine noise causes adverse health effects” (CMOH of Ontario, 2010).

The Massachusetts panel concluded that “measured levels of infrasound produced by modern upwind wind turbines at distances as close as 68 m are well below that required for non-auditory perception”. Further, the panel concluded that “the weight of the evidence suggests no association between noise from wind turbines and measures of psychological distress or mental health problems” (Ellenbogen et al., 2012).

A new study found that infrasound (generated acoustically as part of the study to correspond to real world wind farms) had no influence on reported annoyance or on the measured response on the autonomic nervous system (Majjala et al., 2021). The study concluded that participants did not detect infrasonic ranges of simulated wind turbine noise.

Overall, potential impacts on nearby residents as a result of Project generated infrasound are anticipated to be negligible based on the scientific findings discussed above and distances to nearby receptors.

APPENDIX D

SHADOW FLICKER

SHADOW - Main Result

Calculation: 251204 - Aulds Cove Wind Project - Shadow Flicker - EA
Assumptions for shadow calculations

Maximum distance for influence

Calculate only when more than 20 % of sun is covered by the blade

Please look in WTG table

Minimum sun height over horizon for influence

3 °

Day step for calculation

1 days

Time step for calculation

1 minutes

Sunshine probability S (Average daily sunshine hours) [CHARLOTTETOWN]

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
3.37	4.18	4.42	5.04	6.34	7.54	7.95	7.19	5.76	3.98	2.63	2.31

No operational time reduction. It is assumed the WTGs are always running with worst case wind direction.

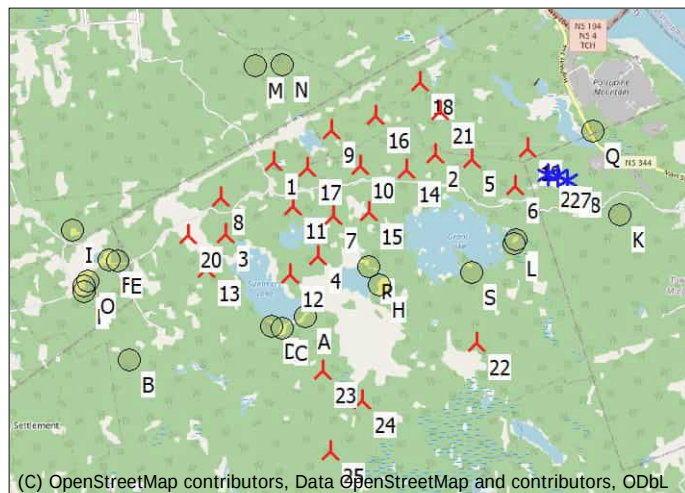
A ZVI (Zones of Visual Influence) calculation is performed before flicker calculation so non visible WTG do not contribute to calculated flicker values. A WTG will be visible if it is visible from any part of the receiver window. The ZVI calculation is based on the following assumptions:

Height contours used: Elevation Grid Data Object: 250711_GC_EMDGrid_1.wpg (2)

Receptor grid resolution: 1.0 m

All coordinates are in

UTM (north)-NAD83(CSRS)v6 (US+CA), geocentric, GRS80 Zone: 20



Scale 1:125,000

▲ New WTG
● Shadow receptor

★ Existing WTG

WTGs

	Easting	Northing	Z	Row data/Description	WTG type			Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Shadow data	
					Valid	Manufact.	Type-generator				Calculation distance [m]	RPM [RPM]
			[m]									
1	617,475.38	5,053,200.62	149.5	T22: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
2	620,150.38	5,053,375.63	129.2	T21: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
3	616,700.38	5,052,000.62	136.0	T20: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
4	618,225.39	5,051,650.62	143.5	T19: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
5	620,750.38	5,053,300.63	120.6	T17: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
6	621,475.38	5,052,875.63	122.7	T16: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
7	618,475.38	5,052,325.62	147.3	T15: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
8	616,600.38	5,052,600.62	129.7	T14: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
9	618,419.39	5,053,741.94	144.7	T13: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
10	618,912.64	5,053,159.19	137.3	T12: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
11	617,800.38	5,052,475.62	142.0	T11: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
12	617,775.39	5,051,350.62	147.6	T10: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
13	616,400.39	5,051,425.62	140.9	T9: NORDEX N163/6.X 7000 163.0 !O! h...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
14	619,668.46	5,053,127.88	124.9	T8: NORDEX N163/6.X 7000 163.0 !O! hu...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
15	619,075.38	5,052,400.62	138.0	T7: NORDEX N163/6.X 7000 163.0 !O! hu...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
16	619,145.96	5,053,996.26	118.4	T6: NORDEX N163/6.X 7000 163.0 !O! hu...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
17	618,025.38	5,053,125.62	140.7	T5: NORDEX N163/6.X 7000 163.0 !O! hu...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
18	619,875.38	5,054,575.62	125.4	T4: NORDEX N163/6.X 7000 163.0 !O! hu...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
19	621,675.38	5,053,500.63	103.5	T3: NORDEX N163/6.X 7000 163.0 !O! hu...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
20	616,075.39	5,051,975.62	138.0	T2: NORDEX N163/6.X 7000 163.0 !O! hu...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
21	620,200.38	5,054,100.63	134.4	T1: NORDEX N163/6.X 7000 163.0 !O! hu...	Yes	NORDEX	N163/6.X-7,000	7,000	163.0	118.0	1,788	10.7
22	620,897.04	5,050,284.80	170.3	NORDEX N163/6.X 7000 163.0 !O! hub: 1...	Yes	NORDEX	N163/7.X-7,000	7,000	163.0	118.0	1,788	10.7
23	618,361.04	5,049,775.80	170.9	NORDEX N163/6.X 7000 163.0 !O! hub: 1...	Yes	NORDEX	N163/7.X-7,000	7,000	163.0	118.0	1,788	10.7
24	619,016.04	5,049,288.80	174.2	NORDEX N163/6.X 7000 163.0 !O! hub: 1...	Yes	NORDEX	N163/7.X-7,000	7,000	163.0	118.0	1,788	10.7
25	618,499.04	5,048,443.80	176.3	NORDEX N163/6.X 7000 163.0 !O! hub: 1...	Yes	NORDEX	N163/7.X-7,000	7,000	163.0	118.0	1,788	10.7
26	622,014.06	5,053,080.37	119.7	ENERCON E-92 2,3 MW 2300 92.0 !-! hub:...	No	ENERCON	E-92 2,3 MW-2,300	2,300	92.0	98.4	1,516	16.0
27	622,177.00	5,053,064.00	115.7	Ghrepower FD21-50-50 50 21.0 !O! hub: 4...	No	Ghrepower	FD21-50-50-50	50	21.0	42.7	2,500	75.0
28	622,333.00	5,052,993.00	115.9	Ghrepower FD21-50-50 50 21.0 !O! hub: 4...	No	Ghrepower	FD21-50-50-50	50	21.0	42.7	2,500	75.0

Shadow receptor-Input

No.	Easting	Northing	Z	Width	Height	Elevation a.g.l.	Slope of window	Direction mode	Eye height (ZVI) a.g.l.
			[m]	[m]	[m]	[m]	[°]		[m]
A	618,047.23	5,050,653.75	138.7	1.0	1.0	1.0	90.0	"Green house mode"	2.0
B	615,137.53	5,049,885.05	124.3	1.0	1.0	1.0	90.0	"Green house mode"	2.0
C	617,662.03	5,050,461.75	139.1	1.0	1.0	1.0	90.0	"Green house mode"	2.0
D	617,497.53	5,050,497.95	137.8	1.0	1.0	1.0	90.0	"Green house mode"	2.0
E	614,922.33	5,051,523.05	129.2	1.0	1.0	1.0	90.0	"Green house mode"	2.0

To be continued on next page...

SHADOW - Main Result

Calculation: 251204 - Aulds Cove Wind Project - Shadow Flicker - EA

...continued from previous page

No.	Easting	Northing	Z	Width	Height	Elevation	Slope of	Direction mode	Eye height
			[m]	[m]	[m]	a.g.l.	window		(ZVI) a.g.l.
						[m]	[°]		[m]
F	614,796.03	5,051,534.55	126.9	1.0	1.0	1.0	90.0	"Green house mode"	2.0
G	614,380.73	5,051,083.82	121.6	1.0	1.0	1.0	90.0	"Green house mode"	2.0
H	619,274.83	5,051,208.35	136.2	1.0	1.0	1.0	90.0	"Green house mode"	2.0
I	614,159.20	5,052,018.98	127.9	1.0	1.0	1.0	90.0	"Green house mode"	2.0
J	621,519.83	5,052,001.45	125.2	1.0	1.0	1.0	90.0	"Green house mode"	2.0
K	623,227.83	5,052,449.15	109.7	1.0	1.0	1.0	90.0	"Green house mode"	2.0
L	621,475.83	5,051,933.45	123.0	1.0	1.0	1.0	90.0	"Green house mode"	2.0
M	617,139.13	5,054,785.85	122.5	1.0	1.0	1.0	90.0	"Green house mode"	2.0
N	617,577.73	5,054,804.75	120.4	1.0	1.0	1.0	90.0	"Green house mode"	2.0
O	614,440.18	5,051,185.80	128.4	1.0	1.0	1.0	90.0	"Green house mode"	2.0
P	614,371.63	5,051,002.93	122.8	1.0	1.0	1.0	90.0	"Green house mode"	2.0
Q	622,756.03	5,053,806.75	72.2	1.0	1.0	1.0	90.0	"Green house mode"	2.0
R	619,082.89	5,051,502.54	138.2	1.0	1.0	1.0	90.0	"Green house mode"	2.0
S	620,785.06	5,051,432.37	119.8	1.0	1.0	1.0	90.0	"Green house mode"	2.0

Calculation Results

Shadow receptor

No.	Shadow, worst case			Shadow, expected values	
	Shadow hours per year [h/year]	Shadow days per year [days/year]	Max shadow hours per day [h/day]	Shadow hours per year [h/year]	
A	0:00	0	0:00	0:00	
B	0:00	0	0:00	0:00	
C	46:07	76	0:42	13:57	
D	43:01	84	0:36	13:11	
E	34:22	98	0:32	15:40	
F	24:49	80	0:29	11:09	
G	0:00	0	0:00	0:00	
H	52:46	123	0:36	24:57	
I	0:00	0	0:00	0:00	
J	0:00	0	0:00	0:00	
K	12:33	54	0:17	6:08	
L	0:00	0	0:00	0:00	
M	21:04	58	0:25	6:16	
N	6:50	32	0:20	2:18	
O	0:00	0	0:00	0:00	
P	0:00	0	0:00	0:00	
Q	55:13	135	0:38	18:28	
R	50:15	105	0:44	22:13	
S	0:00	0	0:00	0:00	

Total amount of flickering on the shadow receptors caused by each WTG

No.	Name	Worst case [h/year]	Expected [h/year]
1	T22: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (1)	0:00	0:00
2	T21: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (2)	0:00	0:00
3	T20: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (3)	0:00	0:00
4	T19: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (4)	81:31	38:07
5	T17: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (6)	0:00	0:00
6	T16: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (7)	16:06	5:13
7	T15: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (8)	0:00	0:00
8	T14: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (9)	0:00	0:00
9	T13: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (10)	21:04	6:16
10	T12: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (11)	0:00	0:00
11	T11: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (12)	0:00	0:00
12	T10: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (13)	21:30	9:02
13	T9: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (14)	9:10	3:48
14	T8: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (15)	0:00	0:00
15	T7: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (16)	0:00	0:00
16	T6: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (17)	6:50	2:18
17	T5: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (18)	0:00	0:00
18	T4: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (19)	0:00	0:00
19	T3: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (20)	18:39	7:04

To be continued on next page...

SHADOW - Main Result

Calculation: 251204 - Aulds Cove Wind Project - Shadow Flicker - EA

...continued from previous page

No.	Name	Worst case [h/year]	Expected [h/year]
20	T2: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (21)	30:25	14:14
21	T1: NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (22)	0:00	0:00
22	NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (93)	0:00	0:00
23	NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (105)	69:06	21:03
24	NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (110)	0:00	0:00
25	NORDEX N163/6.X 7000 163.0 !O! hub: 118.0 m (TOT: 199.5 m) (113)	0:00	0:00
26	ENERCON E-92 2,3 MW 2300 92.0 !-! hub: 98.4 m (TOT: 144.4 m) (1)	33:01	12:19
27	Ghrepower FD21-50-50 50 21.0 !O! hub: 42.7 m (TOT: 53.2 m) (2)	0:00	0:00
28	Ghrepower FD21-50-50 50 21.0 !O! hub: 42.7 m (TOT: 53.2 m) (3)	0:00	0:00

Total times in Receptor wise and WTG wise tables can differ, as a WTG can lead to flicker at 2 or more receptors simultaneously and/or receptors may receive flicker from 2 or more WTGs simultaneously.

The calculation of the total expected values for a given receptor assumes a weighted average directional reduction for all WTGs contributing to shadow flicker within the same day. In the case where shadow flicker from different WTGs is not concurrent within the day, the total expected time at a given receptor may deviate marginally from the individual flicker time caused by each turbine separately.

APPENDIX E

GROUNDWATER WELLS

Well Number	Address	Community	County	Year Installed	Well Depth (m)	Casing Depth (m)	Bedrock Depth (m)	Static (m)	Yield (Lpm)	Elevation (m)	Well Type	Water Use	Easting	Northing
1923	AULDS COVE	EAST HAVRE BOUCHER	ANTIGONISH	2000-12-11	29.5	6.1	4.6	7.6	4.5	33.3	DRILLED	Domestic	620500	5057500
2866	PORT HASTINGS	CRANDALL ROAD	INVERNESS	2000-11-22	60.9	5.5	0.6	-	13.6	30.9	DRILLED	Domestic	623500	5056500
11111	91 HIGHWAY #19	TROY	INVERNESS	2001-06-12	44.8	12.2	8.5	5.2	45.4	31.4	DRILLED	Domestic	623921	5056350
11122	-	AULDS COVE	ANTIGONISH	2001-07-17	75.2	6.1	4.3	4.6	-	47.4	DRILLED	Commercial	621500	5055500
11134	-	AULDS COVE	ANTIGONISH	2001-08-30	14.3	12.2	-	2.7	68.1	76.7	DRILLED	Domestic	622500	5053500
13717	13239 HIGHWAY #104	AULDS COVE	ANTIGONISH	2001-11-08	62.4	12.2	7.6	13.7	45.4	3.6	DRILLED	Commercial	621693	5056261
13737	OFF HIGHWAY #104	AULDS COVE	ANTIGONISH	2001-07-18	32.0	12.2	-	7.6	31.8	0.2	DRILLED	Domestic	622500	5055500
20436	-	AULDS COVE	ANTIGONISH	2002-03-12	24.4	21.3	6.4	3.0	68.1	0.2	DRILLED	Domestic	621500	5056500
21246	-	MULGRAVE	GUYSBOROUGH	2002-08-22	37.5	6.1	4.0	3.0	13.6	69.6	DRILLED	Domestic	623500	5053500
21311	-	AULDS COVE	ANTIGONISH	2002-12-10	60.9	12.2	6.4	-	4.5	47.4	DRILLED	Domestic	621500	5055500
31880	-	AULDS COVE	ANTIGONISH	2003-06-26	29.8	12.2	7.9	4.6	54.5	0.2	DRILLED	Domestic	621500	5056500
31899	-	FRANKVILLE	ANTIGONISH	2003-11-04	22.8	12.2	8.2	3.0	181.6	130.0	DRILLED	Domestic	617500	5054500
32465	AULDS COVE BIG STOP	AULDS COVE	ANTIGONISH	2003-10-18	74.6	14.3	8.2	12.2	54.5	3.6	DRILLED	Domestic	621693	5056261
51803	Aulds Cove	AULDS COVE	ANTIGONISH	2005-09-07	83.4	6.1	3.7	3.7	4.5	23.6	DRILLED	Domestic	621516	5056060
71998	COVE ROAD (COVE MOTEL RIGHT OF WAY)	AULDS COVE	ANTIGONISH	2007-07-12	29.5	6.1	4.3	4.3	9.1	2.5	DRILLED	Domestic	621222	5057310
72001	HIGHWAY #104 (ACROSS FROM 13051)	AULDS COVE	ANTIGONISH	2007-07-19	37.2	-	4.9	6.1	22.7	18.6	DRILLED	Domestic	620919	5056830
81699	HIGHWAY #104	AULDS COVE	ANTIGONISH	2008-08-08	48.7	12.2	5.8	6.1	13.6	33.3	DRILLED	Domestic	620500	5057500
91757	HIGHWAY #344, AULDS COVE	MULGRAVE	GUYSBOROUGH	2009-05-15	85.3	11.0	5.5	9.1	90.8	76.6	DRILLED	Domestic	622599	5053887
600184	B.A. GARAGE, AULDS COVE	AULDS COVE	GUYSBOROUGH	1960-06-15	25.9	12.2	10.7	7.9	45.4	0.2	DRILLED	Domestic	621956	5056083
650092	RR#1 HAVRE BOUCHER	AULDS COVE	ANTIGONISH	1965-09-16	13.7	6.1	4.3	1.5	45.4	13.5	DRILLED	Domestic	620859	5057035
650138	-	AULDS COVE	ANTIGONISH	1965-10-09	24.4	6.1	3.7	7.6	22.7	19.3	DRILLED	Domestic	621659	5055958
660071	RR#1	HAVRE BOUCHER	ANTIGONISH	1966-05-18	27.4	9.4	7.9	1.8	45.4	13.5	DRILLED	Domestic	620818	5057026
660072	RR#1	HAVRE BOUCHER	ANTIGONISH	1966-05-14	24.4	7.9	6.7	6.1	45.4	13.0	DRILLED	-	620813	5057081
660073	RR#1	HAVRE BOUCHER	ANTIGONISH	1966-06-15	19.5	11.9	7.3	3.7	22.7	19.3	DRILLED	-	620738	5057159
660080	-	AULDS COVE	ANTIGONISH	1966-08-03	30.5	5.8	4.0	-	22.7	38.6	DRILLED	Domestic	620461	5057568
660087	-	AULDS COVE	ANTIGONISH	1966-08-16	21.3	6.7	5.5	-	36.3	7.9	DRILLED	Domestic	621340	5056406
660088	-	AULDS COVE	ANTIGONISH	1966-08-22	25.3	7.9	1.5	-	22.7	36.2	DRILLED	Domestic	620502	5057378
660096	-	AULDS COVE	ANTIGONISH	1966-09-05	21.3	5.8	4.3	1.8	22.7	6.9	DRILLED	Domestic	621653	5056114
660097	-	AULDS COVE	ANTIGONISH	1966-09-12	22.8	3.0	3.0	-	31.8	5.8	DRILLED	Domestic	621705	5056069
660101	-	AULDS COVE	ANTIGONISH	1966-09-16	22.8	6.7	2.4	-	31.8	32.4	DRILLED	Domestic	620666	5057078
660103	-	AULDS COVE	ANTIGONISH	1966-02-18	60.9	11.3	4.3	3.0	90.8	4.1	DRILLED	Industrial	621837	5056116
660110	RR#1	HAVRE BOUCHER	ANTIGONISH	1966-05-23	24.4	13.7	4.6	2.4	45.4	15.4	DRILLED	Domestic	620884	5056986
660116	-	AULDS COVE	ANTIGONISH	1966-08-30	30.5	7.0	4.6	4.6	22.7	37.5	DRILLED	Domestic	620530	5057291
670113	-	AULDS COVE	ANTIGONISH	1967-04-05	15.2	4.3	3.0	-	45.4	10.1	DRILLED	Domestic	621247	5056476
670134	-	AULDS COVE	ANTIGONISH	1967-04-11	16.4	6.1	4.3	0.9	31.8	14.3	DRILLED	Domestic	620792	5057136
670653	-	AULDS COVE	ANTIGONISH	1967-05-01	48.7	10.4	8.5	9.1	6.8	10.8	DRILLED	Industrial	620974	5057323
680167	-	AULDS COVE	ANTIGONISH	1968-05-11	32.0	6.9	3.0	3.0	13.6	21.5	DRILLED	Domestic	621553	5056051
680175	-	AULDS COVE	ANTIGONISH	1968-03-15	36.8	-	2.7	9.1	27.2	2.8	DRILLED	Domestic	621891	5056084
680188	-	AULDS COVE	ANTIGONISH	1968-06-06	25.6	5.5	4.3	2.4	31.8	22.3	DRILLED	Domestic	620852	5056847
680189	-	AULDS COVE	ANTIGONISH	1968-09-06	33.5	6.7	5.8	4.6	18.2	7.2	DRILLED	Domestic	621793	5056133
690137	CANSO CAUSEWAY TOLL BOOTH	MULGRAVE	GUYSBOROUGH	1969-04-26	36.8	6.4	4.6	4.3	22.7	5.1	DRILLED	-	622171	5055662
690169	-	AULDS COVE	ANTIGONISH	1969-07-15	44.5	14.0	8.5	1.2	27.2	6.9	DRILLED	Domestic	621672	5056237
700008	-	AULDS COVE	ANTIGONISH	1970-01-01	27.4	7.0	4.3	-	22.7	105.4	DRILLED	Domestic	620500	5056500
700641	-	AULDS COVE	ANTIGONISH	1970-03-03	24.4	12.2	10.7	6.1	18.2	1.9	DRILLED	Domestic	621638	5056844
710156	13239 Highway #104	AULDS COVE	ANTIGONISH	1971-09-06	60.3	13.4	6.1	2.1	45.4	7.9	DRILLED	Domestic	621630	5056250
710200	-	AULDS COVE	ANTIGONISH	1971-10-26	27.4	9.7	3.7	3.0	68.1	17.1	DRILLED	Domestic	620932	5056785
720077	-	AULDS COVE	ANTIGONISH	1972-01-21	53.3	8.2	6.7	7.3	68.1	4.8	DRILLED	-	621684	5056895
720114	-	AULDS COVE	ANTIGONISH	1972-05-09	21.3	9.1	7.6	1.5	272.4	4.8	DRILLED	Domestic	621084	5056829
720148	-	AULDS COVE	ANTIGONISH	1972-05-01	21.3	-	4.6	2.4	68.1	12.1	DRILLED	Domestic	621785	5056021
720163	GROSVENOR	MATTIE SETTLEMENT	ANTIGONISH	1972-06-24	28.9	15.8	14.0	4.6	18.2	127.0	DRILLED	Domestic	615500	5051500
720190	-	AULDS COVE	ANTIGONISH	1972-11-10	36.5	6.7	4.9	3.0	13.6	6.5	DRILLED	Domestic	621767	5056172
730186	-	AULDS COVE	ANTIGONISH	1973-12-04	32.0	6.7	3.0	2.1	9.1	7.5	DRILLED	Domestic	621594	5056162
730220	-	AULDS COVE	ANTIGONISH	1973-10-26	33.5	10.4	1.2	6.1	27.2	27.5	DRILLED	Domestic	620746	5056954
730355	-	AULDS COVE	ANTIGONISH	1973-09-17	60.0	7.9	4.6	3.0	68.1	9.7	DRILLED	Domestic	621190	5056550
740255	-	AULDS COVE	ANTIGONISH	1974-03-18	53.0	7.0	22.5	2.7	136.2	13.6	DRILLED	Domestic	621815	5055706
740256	-	AULDS COVE	ANTIGONISH	1974-03-18	53.0	7.0	4.3	2.7	136.2	105.4	DRILLED	Domestic	620500	5056500
750180	-	AULDS COVE	ANTIGONISH	1975-03-03	19.5	6.4	4.3	3.0	68.1	6.6	DRILLED	Domestic	621137	5056636
750259	-	AULDS COVE	ANTIGONISH	1975-10-23	44.8	6.7	5.2	4.6	136.2	105.4	DRILLED	Domestic	620500	5056500
760222	-	AULDS COVE	ANTIGONISH	1976-09-15	60.9	6.7	3.0	6.1	2.3	105.4	DRILLED	Domestic	620500	5056500
761052	-	AULDS COVE	ANTIGONISH	1976-10-15	25.9	9.1	1.2	2.4	45.4	105.4	DRILLED	Domestic	620500	5056500
790117	-	AULDS COVE	ANTIGONISH	1979-11-26	111.5	7.0	-	1.5	31.8	6.1	DRILLED	Domestic	621714	5056176

Well Number	Address	Community	County	Year Installed	Well Depth (m)	Casing Depth (m)	Bedrock Depth (m)	Static (m)	Yield (Lpm)	Elevation (m)	Well Type	Water Use	Easting	Northing
790227	-	AULDS COVE	ANTIGONISH	1979-05-18	29.5	9.1	6.7	7.0	9.1	8.2	DRILLED	Domestic	621349	5057174
790921	-	AULDS COVE	ANTIGONISH	1979-05-31	38.1	6.1	3.0	-	36.3	47.4	DRILLED	Domestic	621500	5055500
850591	GROSVENOR	MATTIE SETTLEMENT	ANTIGONISH	1985-09-05	91.4	38.1	9.1	-	-	104.8	DRILLED	Domestic	615500	5052500
860008	-	AULDS COVE	ANTIGONISH	1986-04-26	29.8	6.4	3.0	2.4	22.7	123.1	DRILLED	Domestic	619500	5055500
860012	-	AULDS COVE	ANTIGONISH	1986-04-30	37.2	6.7	2.1	1.5	27.2	30.9	DRILLED	Domestic	620518	5057480
862326	-	AULDS COVE	ANTIGONISH	1986-06-18	29.5	10.1	8.5	1.8	27.2	47.4	DRILLED	Domestic	621500	5055500
872125	-	AULDS COVE	ANTIGONISH	1987-05-14	44.8	13.4	7.6	4.3	27.2	105.4	DRILLED	Domestic	620500	5056500
882159	-	PORT HASTINGS	INVERNESS	1988-10-03	37.2	6.1	3.0	28.9	18.2	30.9	DRILLED	Domestic	623500	5056500
882337	-	AULDS COVE	ANTIGONISH	1988-06-13	60.9	12.2	10.1	6.1	22.7	7.7	DRILLED	Domestic	621651	5056272
891321	HAVRE BOUCHER	AULDS COVE	ANTIGONISH	1989-08-01	42.6	18.3	12.2	9.1	54.5	132.6	DRILLED	-	618500	5056500
901330	-	AULDS COVE	ANTIGONISH	1990-07-25	79.2	8.8	5.5	-	1.4	47.4	DRILLED	-	621500	5055500
901376	-	MULGRAVE	GUYSBOROUGH	1990-10-16	85.3	12.2	6.1	9.1	18.2	47.4	DRILLED	-	621500	5055500
902162	-	AULDS COVE	ANTIGONISH	1990-01-05	60.0	12.2	7.6	25.6	18.2	47.4	DRILLED	-	621500	5055500
902225	-	AULDS COVE	ANTIGONISH	1990-12-07	52.4	7.9	3.7	6.1	9.1	96.7	DRILLED	-	622500	5054500
902228	-	AULDS COVE	ANTIGONISH	1990-09-21	29.5	6.1	-	2.4	9.1	13.3	DRILLED	-	620894	5056897
920869	40 TOWER ROAD	AULDS COVE	ANTIGONISH	1992-02-28	60.9	13.4	9.1	7.9	9.1	47.4	DRILLED	Domestic	621500	5055500
921622	-	AULDS COVE	ANTIGONISH	1992-12-15	60.0	18.3	6.7	5.2	-	7.3	DRILLED	Domestic	621878	5055987
921642	GROSVENOR	MATTIE SETTLEMENT	ANTIGONISH	1992-06-12	29.5	7.6	4.6	4.6	22.7	93.7	DRILLED	Domestic	613500	5052500
942485	MULGRAVE	AULDS COVE	ANTIGONISH	1994-04-08	37.2	12.2	10.7	3.0	54.5	96.7	DRILLED	Domestic	622500	5054500
942499	PORT HAWKESBURY	PORT HASTINGS	INVERNESS	1994-10-03	75.2	8.5	3.0	3.0	4.5	30.9	DRILLED	Domestic	623500	5056500
942562	-	AULDS COVE	ANTIGONISH	1994-06-28	60.9	11.0	8.2	12.2	45.4	7.8	DRILLED	Commercial	621598	5056267
942577	-	PORT HASTINGS	INVERNESS	1994-08-03	60.9	6.1	-	3.0	2.3	30.9	DRILLED	Domestic	623500	5056500
951747	DAVIS DRIVE	PORT HASTINGS	INVERNESS	1995-10-06	50.2	13.4	3.0	9.1	18.2	30.9	DRILLED	Domestic	623500	5056500
952475	PETROCAN, HIGHWAY #105	AULDS COVE	ANTIGONISH	1995-06-20	49.9	12.2	9.1	9.1	90.8	5.2	DRILLED	Commercial	621152	5056661
962232	TROY	PORT HASTINGS	INVERNESS	1996-09-06	37.2	6.1	4.0	4.6	18.2	30.9	DRILLED	Domestic	623500	5056500
972690	CANADIAN PIONEER ESTATES LTD, MALCOLM ROAD	AULDS COVE	ANTIGONISH	1997-07-29	29.5	12.2	7.6	2.4	45.4	5.5	DRILLED	Domestic	621281	5056572
972691	RR#2 HAVRE BOUCHER, GROSVENOR	MATTIE SETTLEMENT	ANTIGONISH	1997-09-23	44.8	6.1	0.9	1.5	13.6	127.0	DRILLED	Domestic	614500	5051500
982239	-	PORT HASTINGS	INVERNESS	1998-10-07	44.8	12.2	9.7	8.5	27.2	30.9	DRILLED	Domestic	623500	5056500
991164	-	AULDS COVE	ANTIGONISH	1999-10-29	60.0	6.1	4.0	4.6	4.5	123.1	DRILLED	Domestic	619500	5055500
991176	-	AULDS COVE	ANTIGONISH	1999-05-14	21.9	7.6	9.1	5.5	31.8	47.4	DRILLED	Domestic	621500	5055500
991245	-	MULGRAVE	GUYSBOROUGH	1999-08-25	42.6	6.1	1.5	4.6	31.8	76.7	DRILLED	Domestic	622500	5053500

Notes

Shading indicates wells located within 800 m of the Project Footprint

APPENDIX F

ACCDC REPORT

Data Report 8927: Green Current, NS

Prepared 8 October 2025
by P. Greyson, Conservation Data
Analyst

CONTENTS OF REPORT

1.0 Preface

- 1.1 Data List
- 1.2 Data Use Restrictions
- 1.3 Additional Information
- Map 1: Buffered Study Area

2.0 Rare and Endangered Species

- 2.1 Flora
- 2.2 Fauna
- Map 2: Flora and Fauna

3.0 Special Areas

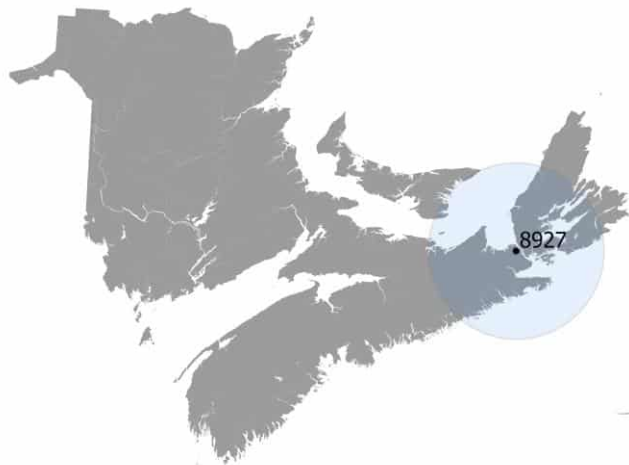
- 3.1 Managed Areas
- 3.2 Significant Areas
- Map 3: Special Areas

4.0 Rare Species Lists

- 4.1 Fauna
- 4.2 Flora
- 4.3 Location Sensitive Species
- 4.4 Source Bibliography

5.0 Rare Species within 100 km

- 5.1 Source Bibliography



Map 1. A 100 km buffer around the study area

1.0 PREFACE

The Atlantic Canada Conservation Data Centre (AC CDC; www.accdc.com) is a member of the NatureServe network, a collaborative alliance of natural heritage programs and conservation data centres operating across all 50 U.S. states, nine Canadian provinces, three territories, and several countries in Central and South America. Established over five decades ago, the NatureServe network employs a standardized and scientifically rigorous methodology for the collection, analysis, and dissemination of biodiversity data. Since its founding in 1997, the AC CDC has served as the authoritative source of information on species at risk and ecological communities within the jurisdictions of New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador. Although AC CDC operates as a non-governmental organization, it receives core funding and support from six federal agencies and four provincial governments and is supplemented by external grants and data processing fees.

In response to formal requests and for a service fee, the AC CDC queries its database and provides customized data reports detailing the known occurrences of rare and endangered flora and fauna within a defined area of interest. These reports are further supplemented by spatial information on protected and conserved areas and sites identified as ecologically significant or sensitive. This service supports evidence-based decision-making in environmental assessments, land-use planning, and natural resource management and are vital to the conservation of biodiversity in Atlantic Canada.

1.1 DATA LIST

Included datasets:

Filename

GreenCurrentNS_8927ob.xls
GreenCurrentNS_8927ob100km.xls
GreenCurrentNS_8927msa.xls
GreenCurrentNS_8927bp.xls
GreenCurrentNS_8927mm.xls

Contents

Rare or legally-protected Flora and Fauna in your study area
A list of Rare and legally protected Flora and Fauna within 100 km of your study area
Managed and Biologically Significant Areas in your study area
Rare and common Pelagic Birds in your study area (CWS database)
Rare and common Marine Mammals in your study area

1.2 DATA USE RESTRICTIONS

The Atlantic Canada Conservation Data Centre (AC CDC) makes every effort to ensure the accuracy of the data it manages; however, it assumes no responsibility for any errors or omissions in the data provided. By accepting data from the AC CDC, recipients agree to the following terms of use:

- a) Data must be used only by qualified personnel who are aware of landowner sensitivities and the potential risks that disclosure of rare and/or endangered species locations may pose to those species.
- b) Data may be used only by the designated Data User. Any third-party requiring access must submit a separate request to the AC CDC.
- c) Data must be deleted and no longer used 12 months after receipt. Continued use requires submission of a new request for updated data.
- d) All data provided reflects the contents of the AC CDC's database at the time of the request.
- e) Each record includes an estimate of locational uncertainty, which must be considered when assessing the record's relevance to a specific location. Please refer to the accompanying Data Dictionary for further details.
- f) AC CDC data responses are not to be construed as exhaustive inventories of taxa in an area of interest.
- g) The absence of a taxon does not imply that the species is absent from the area of interest.

1.3 ADDITIONAL INFORMATION

The accompanying Data Dictionary provides metadata for the data provided.

Please direct any additional questions about AC CDC data to the following individuals:

Plants, Lichens, Ranking Methods, All other Inquiries

Sean Blaney
Senior Scientist / Executive Director
(506) 364-2658
sean.blaney@accdc.ca

Animals (Fauna)

John Klymko
Zoologist
(506) 364-2660
john.klymko@accdc.ca

Data Management, GIS

Charity Robicheau
Senior Conservation Data Analyst
charity.robicheau@accdc.ca

Billing

Jean Breau
Financial Manager / Executive Assistant
(506) 364-2657
jean.breau@accdc.ca

Questions on the biology of Federal Species at Risk can be directed to AC CDC: (506) 364-2658, with questions on Species at Risk regulations to: Samara Eaton, Canadian Wildlife Service (NB and PE): (506) 364-5060 or Julie McKnight, Canadian Wildlife Service (NS): (902) 426-4196.

For provincial information about rare taxa and protected areas, or information about game animals, deer yards, old growth forests, archeological sites, fish habitat etc., in New Brunswick, please contact Hubert Askanas, Energy and Resource Development: (506) 453-5873.

For provincial information about rare taxa and protected areas, or information about game animals, deer yards, old growth forests, archeological sites, fish habitat etc., in Nova Scotia, please contact Donna Hurlburt, NS DLF: (902) 679-6886. To determine if location-sensitive species (section 4.3) occur near your study site please contact a NS DLF Regional Biologist:

Western: Emma Vost
(902) 670-8187
Emma.Vost@novascotia.ca

Western: Sarah Spencer
(902) 541-0081
Sarah.Spencer@novascotia.ca

Central: Shavonne Meyer
(902) 893-0816
Shavonne.Meyer@novascotia.ca

Central: Kimberly George
(902) 890-1046
Kimberly.George@novascotia.ca

Eastern: Harrison Moore
(902) 497-4119
Harrison.Moore@novascotia.ca

Eastern: Maureen Cameron-MacMillan
(902) 295-2554
Maureen.Cameron-MacMillan@novascotia.ca

For provincial information about rare taxa and protected areas, or information about game animals, fish habitat etc., in Prince Edward Island, please contact Garry Gregory, PEI Dept. of Communities, Land and Environment: (902) 569-7595.

-  Vertebrate fauna
 Invertebrate fauna
 Vascular flora
 Nonvascular flora

3.0 SPECIAL AREAS

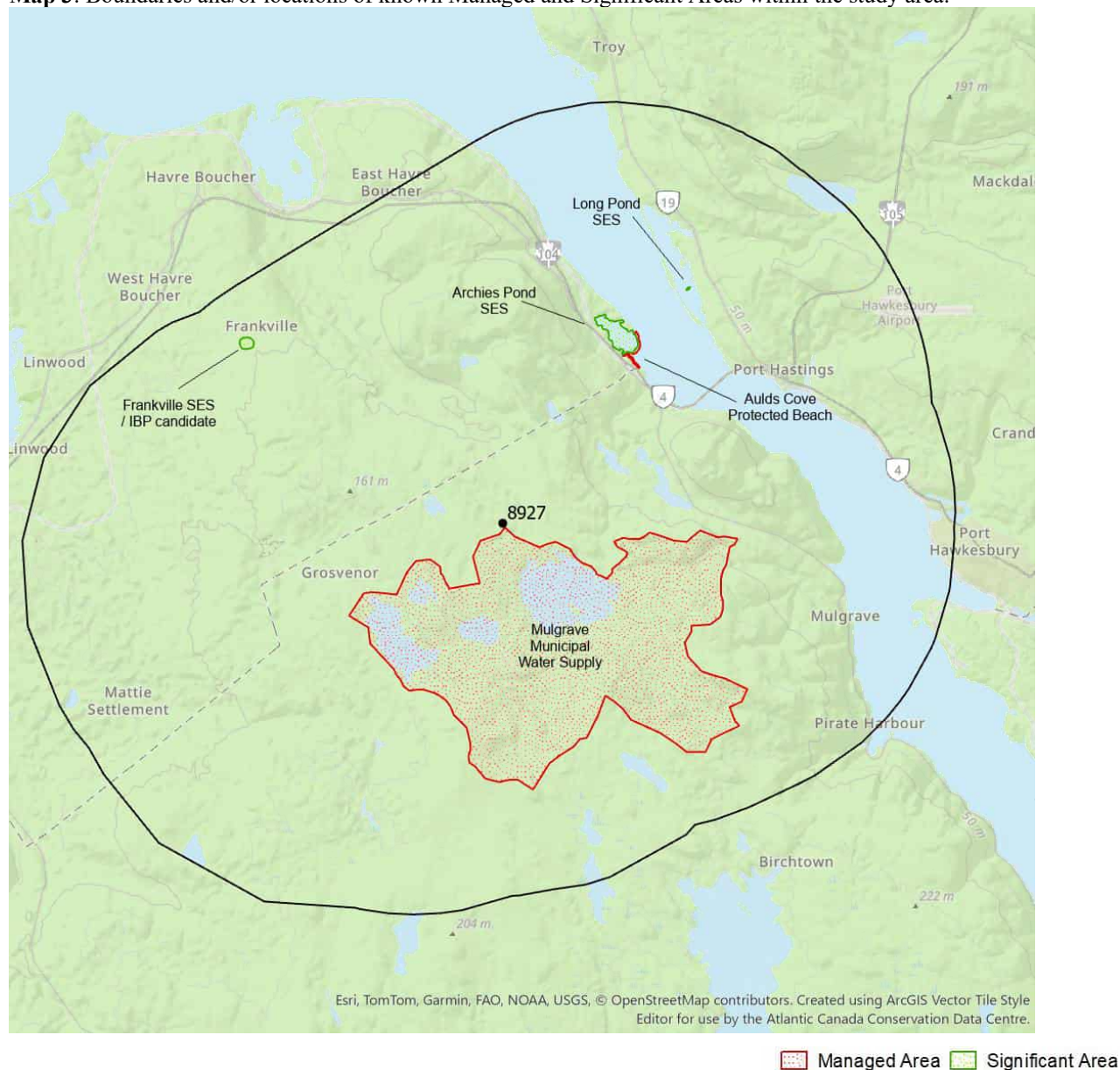
3.1 MANAGED AREAS

The GIS scan identified 2 managed areas in the vicinity of the study area (Map 3 and attached file: *msa.xls).

3.2 SIGNIFICANT AREAS

Significant Areas are sites with a conservation designation and management that qualifies them for listing in the Canadian Protected and Conserved Areas Database (CPCAD; <https://www.canada.ca/en/environment-climate-change/services/national-wildlife-areas/protected-conserved-areas-database.html>). The absence of a “Significant Area” within a site or region does not indicate an absence of ecologically significant properties. The GIS scan identified 3 biologically significant sites in the vicinity of the study area (Map 3 and attached file: *msa.xls).

Map 3: Boundaries and/or locations of known Managed and Significant Areas within the study area.



4.0 RARE SPECIES LISTS

Rare and/or endangered taxa (excluding “location-sensitive” species, section 4.3) within the study area listed in order of concern, beginning with legally listed taxa, with the number of observations per taxon and the distance in kilometers from study area centroid to the closest observation ($\pm$ the precision, in km, of the record). [P] = vascular plant, [N] = nonvascular plant, [A] = vertebrate animal, [I] = invertebrate animal, [C] = community. Note: records are from attached files *ob.xls/*ob.shp only.

4.1 FLORA

	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)
N	<i>Pectenaria plumbea</i>	Blue Felt Lichen	Special Concern	Special Concern	Vulnerable	S3	7	2.9 $\pm$ 0.01
N	<i>Sclerophora peronella</i> (Atlantic pop.)	Frosted Glass-whiskers (Atlantic population)	Special Concern	Special Concern		S3S4	2	5.5 $\pm$ 0.01
N	<i>Anacamptodon splachnoides</i>	a Moss				S2	1	4.3 $\pm$ 0.2
N	<i>Solorina saccata</i>	Woodland Owl Lichen				S3	1	6.5 $\pm$ 0.05
N	<i>Scytinium lichenoides</i>	Tattered Jellyskin Lichen				S3	1	6.3 $\pm$ 0.2
N	<i>Anaptychia palmulata</i>	Shaggy Fringed Lichen				S3S4	1	2.8 $\pm$ 0.01
P	<i>Cypripedium parviflorum</i> var. <i>pubescens</i>	Yellow Lady's-slipper				S2	2	4.1 $\pm$ 0.2
P	<i>Myriophyllum farwellii</i>	Farwell's Water Milfoil				S2S3	1	4.7 $\pm$ 7.07
P	<i>Carex cryptolepis</i>	Hidden-scaled Sedge				S3	1	8.5 $\pm$ 0.7
P	<i>Platanthera grandiflora</i>	Large Purple Fringed Orchid				S3	1	6.5 $\pm$ 0.01
P	<i>Platanthera hookeri</i>	Hooker's Orchid				S3	1	7.4 $\pm$ 0.1
P	<i>Spiranthes ochroleuca</i>	Yellow Ladies'-tresses				S3?	1	5.8 $\pm$ 0.2
P	<i>Packera paupercula</i>	Balsam Groundsel				S3S4	2	5.8 $\pm$ 5.0
P	<i>Fagus grandifolia</i>	American Beech				S3S4	2	3.6 $\pm$ 0.2
P	<i>Geocaulon lividum</i>	Northern Comandra				S3S4	1	4.6 $\pm$ 2.5
P	<i>Viola selkirkii</i>	Great-Spurred Violet				S3S4	1	5.3 $\pm$ 1.0
P	<i>Asplenium trichomanes</i>	Maidenhair Spleenwort				S3S4	1	7.4 $\pm$ 0.2

4.2 FAUNA

	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)
A	<i>Dermochelys coriacea</i> pop. 2	Leatherback Sea Turtle - Atlantic population	Endangered	Endangered		S1S2N	2	4.1 $\pm$ 0.2
A	<i>Pagophila eburnea</i>	Ivory Gull	Endangered	Endangered		SNA	1	5.2 $\pm$ 0.2
A	<i>Hydrobates leucorhous</i> pop. 1	Leach's Storm-Petrel - Atlantic Population	Threatened			S3B	1	3.9 $\pm$ 0.2
A	<i>Bubo scandiacus</i>	Snowy Owl	Threatened			SNA	2	6.1 $\pm$ 0.02
A	<i>Bucephala islandica</i> pop. 1	Barrow's Goldeneye - Eastern Population	Special Concern	Special Concern		S1N,SUM	1	8.3 $\pm$ 0.2
A	<i>Euphagus carolinus</i>	Rusty Blackbird	Special Concern	Special Concern	Endangered	S2B	3	0.6 $\pm$ 0.15
A	<i>Histrionicus histrionicus</i> pop. 1	Harlequin Duck - Eastern population	Special Concern	Special Concern	Endangered	S2N	1	4.0 $\pm$ 1.8
A	<i>Chelydra serpentina</i>	Snapping Turtle	Special Concern	Special Concern	Vulnerable	S3	1	6.1 $\pm$ 1.8
A	<i>Hirundo rustica</i>	Barn Swallow	Special Concern	Threatened	Endangered	S3B	3	4.7 $\pm$ 7.07
A	<i>Cardellina canadensis</i>	Canada Warbler	Special Concern	Threatened	Endangered	S3B	9	1.8 $\pm$ 0.01
A	<i>Chordeiles minor</i>	Common Nighthawk	Special Concern	Special Concern	Threatened	S3B	5	3.5 $\pm$ 0.1
A	<i>Contopus cooperi</i>	Olive-sided Flycatcher	Special Concern	Special Concern	Threatened	S3B	15	0.7 $\pm$ 0.15
A	<i>Dolichonyx oryzivorus</i>	Bobolink	Special Concern	Threatened	Vulnerable	S3B	2	4.7 $\pm$ 7.07
A	<i>Coccythraustes vespertinus</i>	Evening Grosbeak	Special Concern	Special Concern	Vulnerable	S3B,S3N,S3M	6	4.7 $\pm$ 7.07
A	<i>Contopus virens</i>	Eastern Wood-Pewee	Special Concern	Special Concern	Vulnerable	S3S4B	3	3.6 $\pm$ 0.01
A	<i>Phocoena phocoena</i> pop. 1	Harbour Porpoise - Northwest Atlantic Population	Special Concern			S4	14	3.9 $\pm$ 0.2
A	<i>Lynx canadensis</i>	Canada Lynx	Not At Risk		Endangered	S2S3	5	6.7 $\pm$ 1.8
A	<i>Hemidactylium scutatum</i>	Four-toed Salamander	Not At Risk			S3	3	1.9 $\pm$ 0.5
A	<i>Megaptera novaeangliae</i> pop. 2	Humpback Whale - Western North Atlantic Population	Not At Risk			S3	12	3.8 $\pm$ 0.2
A	<i>Sterna hirundo</i>	Common Tern	Not At Risk			S3B	16	4.7 $\pm$ 7.07
A	<i>Lagenorhynchus acutus</i>	Atlantic White-sided Dolphin	Not At Risk			S3S4	2	5.1 $\pm$ 0.2
A	<i>Ammodramus nelsoni</i>	Nelson's Sparrow	Not At Risk			S3S4B	2	4.7 $\pm$ 7.07

	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)
A	<i>Mimus polyglottos</i>	Northern Mockingbird				S1B	3	4.7 ± 7.07
A	<i>Calidris minutilla</i>	Least Sandpiper				S1B,S4M	1	6.5 ± 0.05
A	<i>Alca torda</i>	Razorbill				S2B	1	3.8 ± 0.2
A	<i>Somateria mollissima</i>	Common Eider				S2B,S2N,S4M	5	3.9 ± 0.2
A	<i>Melanitta perspicillata</i>	Surf Scoter				S2N,S4M	7	5.6 ± 0.2
A	<i>Martes americana</i>	American Marten			Endangered	S2S3	2	5.9 ± 1.8
A	<i>Asio otus</i>	Long-eared Owl				S2S3	1	5.9 ± 7.07
A	<i>Rissa tridactyla</i>	Black-legged Kittiwake				S2S3B	6	3.9 ± 0.2
A	<i>Petrochelidon pyrrhonota</i>	Cliff Swallow				S2S3B	1	4.7 ± 7.07
A	<i>Phalacrocorax carbo</i>	Great Cormorant				S2S3B,S2S3N	3	5.3 ± 0.2
A	<i>Setophaga pinus</i>	Pine Warbler				S2S3B,S4S5M	1	8.2 ± 0.2
A	<i>Icterus galbula</i>	Baltimore Oriole				S2S3B,SUM	1	5.9 ± 7.07
A	<i>Perisoreus canadensis</i>	Canada Jay				S3	3	4.7 ± 7.07
A	<i>Poecile hudsonicus</i>	Boreal Chickadee				S3	5	4.7 ± 7.07
A	<i>Spinus pinus</i>	Pine Siskin				S3	7	4.3 ± 0.2
A	<i>Charadrius vociferus</i>	Killdeer				S3B	7	4.7 ± 7.07
A	<i>Tringa semipalmata</i>	Willet				S3B	8	3.9 ± 0.2
A	<i>Tyrannus tyrannus</i>	Eastern Kingbird				S3B	4	3.4 ± 0.15
A	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak				S3B	1	4.7 ± 7.07
A	<i>Tringa melanoleuca</i>	Greater Yellowlegs				S3B,S4M	2	3.6 ± 0.2
A	<i>Falco sparverius</i>	American Kestrel				S3B,S4S5M	3	4.7 ± 7.07
A	<i>Mergus serrator</i>	Red-breasted Merganser				S3B,S4S5N,S5M	10	4.0 ± 0.2
A	<i>Gallinago delicata</i>	Wilson's Snipe				S3B,S5M	1	5.9 ± 7.07
A	<i>Setophaga striata</i>	Blackpoll Warbler				S3B,S5M	3	4.7 ± 7.07
A	<i>Cardellina pusilla</i>	Wilson's Warbler				S3B,S5M	1	5.9 ± 7.07
A	<i>Pinicola enucleator</i>	Pine Grosbeak				S3B,S5N,S5M	2	5.9 ± 7.07
A	<i>Setophaga tigrina</i>	Cape May Warbler				S3B,SUM	1	4.7 ± 7.07
A	<i>Arenaria interpres</i>	Ruddy Turnstone				S3M	2	3.8 ± 0.2
A	<i>Chroicocephalus ridibundus</i>	Black-headed Gull				S3N	2	8.1 ± 0.2
A	<i>Podiceps auritus pop. 2</i>	Horned Grebe - Western population		Special Concern		S3N,SUM	1	8.3 ± 0.2
A	<i>Accipiter atricapillus</i>	American Goshawk				S3S4	2	4.2 ± 0.2
A	<i>Picoides arcticus</i>	Black-backed Woodpecker				S3S4	2	0.6 ± 0.15
A	<i>Botaurus lentiginosus</i>	American Bittern				S3S4B,S4S5M	4	4.7 ± 7.07
A	<i>Setophaga castanea</i>	Bay-breasted Warbler				S3S4B,S4S5M	7	3.3 ± 0.01
A	<i>Actitis macularius</i>	Spotted Sandpiper				S3S4B,S5M	10	3.9 ± 0.2
A	<i>Leiothlypis peregrina</i>	Tennessee Warbler				S3S4B,S5M	4	3.4 ± 0.15
A	<i>Passerella iliaca</i>	Fox Sparrow				S3S4B,S5M	1	5.9 ± 7.07
A	<i>Morus bassanus</i>	Northern Gannet				SHB	52	3.9 ± 0.2
I	<i>Bombus terricola</i>	Yellow-banded Bumble Bee	Special Concern	Special Concern	Vulnerable	S3	1	7.7 ± 0.2

4.3 LOCATION SENSITIVE SPECIES

The Department of Natural Resources in each Maritimes province considers a number of species “location sensitive”. Concern about exploitation of location-sensitive species precludes inclusion of precise coordinates in this report. Those intersecting your study area are indicated below with “**YES**”.

Nova Scotia

Scientific Name	Common Name	SARA	Prov Legal Prot	Known within the Study Site?
<i>Alces alces americana</i>	Moose – Mainland population		Endangered	No
<i>Fraxinus nigra</i>	Black Ash		Threatened	No
<i>Emydoidea blandingii</i>	Blanding's Turtle - Nova Scotia pop.	Endangered	Endangered	No
<i>Glyptemys insculpta</i>	Wood Turtle	Threatened	Threatened	YES
<i>Falco peregrinus</i> pop. 1	Peregrine Falcon - anatum/tundrius pop.		Vulnerable	YES
<i>Bat Hibernaculum</i> or bat species occurrence		[Endangered] ¹	[Endangered] ¹	YES
<i>Snake hibernaculum</i>		[Threatened] ²	[Threatened] ²	No

1 *Myotis lucifugus* (Little Brown Myotis), *Myotis septentrionalis* (Long-eared Myotis), and *Perimyotis subflavus* (Tri-colored Bat or Eastern Pipistrelle) are all Endangered under the Federal Species at Risk Act and the NS Endangered Species Act.

2 *Thamnophis sauritus* (Eastern Ribbonsnake) is Threatened under the Federal Species at Risk Act (SARA) and the Nova Scotia Endangered Species Act. Occurrences between October 15 – April 15 are considered location sensitive.

4.4 SOURCE BIBLIOGRAPHY

The recipient of these data shall acknowledge the AC CDC and the data sources listed below in any documents, reports, publications or presentations, in which this dataset makes a significant contribution.

# recs	CITATION
96	Lepage, D. 2014. Maritime Breeding Bird Atlas Database. Bird Studies Canada, Sackville NB, 407,838 recs.
93	iNaturalist.ca. 2023. iNaturalist Data Export December 2022. iNaturalist.org; iNaturalist.ca, Web site: 128634 recs.
36	iNaturalist. 2020. iNaturalist Data Export 2020. iNaturalist.org and iNaturalist.ca, Web site: 128728 recs.
21	Erskine, A.J. 1992. Maritime Breeding Bird Atlas Database. NS Museum & Nimbus Publ., Halifax, 82,125 recs.
15	iNaturalist.ca. 2024. iNaturalist Data Export December 2023. iNaturalist.org; iNaturalist.ca.
11	NS DNR Wildlife Division. Biodiversity Investigation Reporting (BIR) SAR Record Export. Nova Scotia Department of Natural Resources and Renewables, 3071 recs.
9	Canadian Wildlife Service. 2011. Eastern Canada Seabirds at Sea (ECSAS), 3.27 Ed. Environment Canada, 305,783 recs.
6	Neily, T.H. & Pepper, C.; Toms, B. 2018. Nova Scotia lichen database [as of 2018-03]. Mersey Tobeatic Research Institute.
5	Staicer, C. & Bliss, S.; Achenbach, L. 2017. Occurrences of tracked breeding birds in forested wetlands. , 303 records.
4	Benjamin, L.K. (compiler). 2012. Significant Habitat & Species Database. Nova Scotia Dept Natural Resources, 4965 recs.
3	Envirosphere Consultants Ltd., Strum. 2023. SAR records from three Environmental Assessments in Nova Scotia. Envirosphere Consultants Ltd., Strum, 48 records.
3	Haughian, Sean. 2021. Update to lichen data from 2017-2021. Nova Scotia Museum.
3	Toms, Brad. 2024. PHP survey results 2024. Mersey Tobeatic Research Institute, 9 recs.
2	Benjamin, L.K. (compiler). 2001. Significant Habitat & Species Database. Nova Scotia Dept of Natural Resources, 15 spp, 224 recs.
2	Newell, R.E. 2005. E.C. Smith Digital Herbarium. E.C. Smith Herbarium, Irving Biodiversity Collection, Acadia University, Web site: http://luxor.acadiau.ca/library/Herbarium/project/ . 582 recs.
2	Nova Scotia Dept Natural Resources, Forestry Branch. 2007. Restricted & Limited Use Land Database (RLUL). , http://www.gov.ns.ca/natr/FORESTRY/rlul/downloadrlul.htm .
2	Pronych, G. & Wilson, A. 1993. Atlas of Rare Vascular Plants in Nova Scotia. Nova Scotia Museum, Halifax NS, I:1-168, II:169-331. 1446 recs.
2	Wilhelm, S.I. et al. 2011. Colonial Waterbird Database. Canadian Wildlife Service, Sackville, 2698 sites, 9718 recs (8192 obs).
1	Benjamin, L.K. 2009. Boreal Felt Lichen, Mountain Avens, Orchid and other recent records. Nova Scotia Dept Natural Resources, 105 recs.
1	Chapman-Lam, C.J. 2021. Atlantic Canada Conservation Data Centre 2020 botanical fieldwork. Atlantic Canada Conservation Data Centre, 17309 recs.
1	Chris Pepper. 2021-2022. Mersey Wind Farm Lichen Observations. Chris Pepper, 20 recs.
1	iNaturalist.ca. 2024. iNaturalist Data Export December 2023 botany records. iNaturalist.org; iNaturalist.ca.
1	Munro, Marian K. Nova Scotia Provincial Museum of Natural History Herbarium Database. Nova Scotia Provincial Museum of Natural History, Halifax, Nova Scotia. 2013.
1	Munro, Marian K. Tracked lichen specimens, Nova Scotia Provincial Museum of Natural History Herbarium. Atlantic Canada Conservation Data Centre. 2019.
1	Newell, R.E. 2000. E.C. Smith Herbarium Database. Acadia University, Wolfville NS, 7139 recs.

# recs	CITATION
1	NS DOE. 1991-1992. Nova Scotia Protected Areas database. Nova Scotia Department of Environment.
1	Rousseau, J. 1938. Notes Floristiques sur l'est de la Nouvelle-Ecosse in Contributions de l'Institut Botanique de l'Universite de Montreal. Universite de Montreal, 32, 13-62. 11 recs.
1	Scott, F.W. 2002. Nova Scotia Herpetofauna Atlas Database. Acadia University, Wolfville NS, 8856 recs.
1	Toms, Brad. 2022. Non-Lichen Observations from Lichen SMP and NCC Property Searches. Mersey Tobeatic Research Institute.
1	Wilhelm, S.I. et al. 2019. Colonial Waterbird Database. Canadian Wildlife Service.
1	Zinck, M. & Roland, A.E. 1998. Roland's Flora of Nova Scotia. Nova Scotia Museum, 3rd ed., rev. M. Zinck; 2 Vol., 1297 pp.

5.0 RARE SPECIES WITHIN 100 KM

A 100 km buffer around the study area contains 32621 records of 153 vertebrate and 1129 records of 62 invertebrate fauna; 6259 records of 244 vascular and 4966 records of 143 nonvascular flora (attached: *ob100km.xls).

Taxa within 100 km of the study site that are rare and/or endangered in the province in which the study site occurs (including “location-sensitive” species). All ranks correspond to the province in which the study site falls, even for out-of-province records. Taxa are listed in order of concern, beginning with legally listed taxa, with the number of observations per taxon and the distance in kilometers from study area centroid to the closest observation ($\pm$ the precision, in km, of the record).

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Myotis lucifugus</i>	Little Brown Myotis	Endangered	Endangered	Endangered	S1	238	8.5 $\pm$ 0.1	NS
A	<i>Myotis septentrionalis</i>	Northern Myotis	Endangered	Endangered	Endangered	S1	31	8.9 $\pm$ 1.8	NS
A	<i>Perimyotis subflavus</i>	Tricolored Bat	Endangered	Endangered	Endangered	S1	2	51.0 $\pm$ 0.01	NS
A	<i>Salmo salar</i> pop. 4	Atlantic Salmon - Eastern Cape Breton population	Endangered			S1	35	18.0 $\pm$ 0.5	NS
A	<i>Salmo salar</i> pop. 6	Atlantic Salmon - Nova Scotia Southern Upland population	Endangered			S1	25	20.4 $\pm$ 1.0	NS
A	<i>Eubalaena glacialis</i>	North Atlantic Right Whale	Endangered	Endangered		S1	1	70.0 $\pm$ 1.62	NS
A	<i>Charadrius melodus melodus</i>	Piping Plover melodus subspecies	Endangered	Endangered	Endangered	S1B	966	12.8 $\pm$ 0.5	NS
A	<i>Sterna dougallii</i>	Roseate Tern	Endangered	Endangered	Endangered	S1B	93	41.3 $\pm$ 7.07	NS
A	<i>Dermochelys coriacea</i> pop. 2	Leatherback Sea Turtle - Atlantic population	Endangered	Endangered		S1S2N	2	4.1 $\pm$ 0.2	NS
A	<i>Lasionycteris noctivagans</i>	Silver-haired Bat	Endangered			SUB,S1M	3	54.5 $\pm$ 0.01	NS
A	<i>Lasiurus borealis</i>	Eastern Red Bat	Endangered			SUB,S1M	3	83.2 $\pm$ 0.1	NS
A	<i>Lasiurus cinereus</i>	Hoary Bat	Endangered			SUB,S1M	2	51.0 $\pm$ 0.01	NS
A	<i>Catharus minimus minimus</i>	Gray-cheeked Thrush minimus subspecies	Threatened			S1?B	5	53.5 $\pm$ 0.15	NS
A	<i>Catharus bicknelli</i>	Bicknell's Thrush	Threatened	Threatened	Endangered	S1B	17	45.7 $\pm$ 7.07	NS
A	<i>Asio flammeus</i>	Short-eared Owl	Threatened	Special Concern		S1B	10	50.3 $\pm$ 0.15	NS
A	<i>Glyptemys insculpta</i>	Wood Turtle	Threatened	Threatened	Threatened	S2	8035	6.0 $\pm$ 0.01	NS
A	<i>Riparia riparia</i>	Bank Swallow	Threatened	Threatened	Endangered	S2B	856	12.4 $\pm$ 0.15	NS
A	<i>Chaetura pelagica</i>	Chimney Swift	Threatened	Threatened	Endangered	S2S3B,S1M	635	15.1 $\pm$ 0.02	NS
A	<i>Limosa haemastica</i>	Hudsonian Godwit	Threatened			S2S3M	13	34.4 $\pm$ 0.5	NS
A	<i>Acipenser oxyrinchus</i> pop. 2	Atlantic Sturgeon - Maritimes populations	Threatened			S2S3N	2	71.4 $\pm$ 3.5	NS
A	<i>Hydrobates leucorhous</i> pop. 1	Leach's Storm-Petrel - Atlantic Population	Threatened			S3B	57	22.4 $\pm$ 0.31	NS
A	<i>Tringa flavipes</i>	Lesser Yellowlegs	Threatened			S3M	314	12.3 $\pm$ 0.5	NS
A	<i>Limnodromus griseus</i> ssp. 1	Short-billed Dowitcher hendersoni/griseus	Threatened			S3M	163	34.4 $\pm$ 0.5	NS
A	<i>Anguilla rostrata</i>	American Eel	Threatened			S3N	18	14.6 $\pm$ 0.01	NS
A	<i>Sturnella magna</i>	Eastern Meadowlark	Threatened	Threatened		SHB	2	41.3 $\pm$ 7.07	NS
A	<i>Bubo scandiacus</i>	Snowy Owl	Threatened			SNA	39	10.9 $\pm$ 0.02	NS
A	<i>Hylocichla mustelina</i>	Wood Thrush	Threatened	Threatened		SUB	10	23.2 $\pm$ 7.07	NS
A	<i>Salmo salar</i> pop. 12	Atlantic Salmon - Gaspe - Southern Gulf of St. Lawrence population	Special Concern			S1	23	10.7 $\pm$ 1.0	NS
A	<i>Antrostomus vociferus</i>	Eastern Whip-Poor-Will	Special Concern	Threatened	Threatened	S1?B	3	36.3 $\pm$ 7.07	NS
A	<i>Passerculus sandwichensis princeps</i>	Ipswich Sparrow	Special Concern	Special Concern		S1B	13	49.8 $\pm$ 0.2	NS
A	<i>Bucephala islandica</i> pop. 1	Barrow's Goldeneye -	Special Concern	Special Concern		S1N,SUM	32	19.6 $\pm$ 0.2	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Euphagus carolinus</i>	Eastern Population Rusty Blackbird	Special Concern	Special Concern	Endangered	S2B	248	0.6 ± 0.15	NS
A	<i>Histrionicus histrionicus</i> pop. 1	Harlequin Duck - Eastern population	Special Concern	Special Concern	Endangered	S2N	47	100.0 ± 0.15	NS
A	<i>Balaenoptera physalus</i> pop. 1	Fin Whale - Atlantic population	Special Concern	Special Concern		S2S3	2	74.5 ± 0.2	NS
A	<i>Phalaropus lobatus</i>	Red-necked Phalarope	Special Concern	Special Concern		S2S3M	1	61.2 ± 0.2	NS
A	<i>Morone saxatilis</i> pop. 1	Striped Bass - Southern Gulf of St. Lawrence population	Special Concern			S2S3N	1	35.2 ± 1.0	NS
A	<i>Chelydra serpentina</i>	Snapping Turtle	Special Concern	Special Concern	Vulnerable	S3	314	6.1 ± 1.8	NS
A	<i>Hirundo rustica</i>	Barn Swallow	Special Concern	Threatened	Endangered	S3B	881	12.3 ± 0.15	NS
A	<i>Cardellina canadensis</i>	Canada Warbler	Special Concern	Threatened	Endangered	S3B	762	1.8 ± 0.01	NS
A	<i>Chordeiles minor</i>	Common Nighthawk	Special Concern	Special Concern	Threatened	S3B	307	10.0 ± 7.07	NS
A	<i>Contopus cooperi</i>	Olive-sided Flycatcher	Special Concern	Special Concern	Threatened	S3B	1148	0.7 ± 0.15	NS
A	<i>Dolichonyx oryzivorus</i>	Bobolink	Special Concern	Threatened	Vulnerable	S3B	521	100.0 ± 0.1	PE
A	<i>Coccothraustes vespertinus</i>	Evening Grosbeak	Special Concern	Special Concern	Vulnerable	S3B,S3N,S3M	900	13.0 ± 7.07	NS
A	<i>Contopus virens</i>	Eastern Wood-Pewee	Special Concern	Special Concern	Vulnerable	S3S4B	544	13.0 ± 7.07	NS
A	<i>Phocoena phocoena</i> pop. 1	Harbour Porpoise - Northwest Atlantic Population	Special Concern			S4	20	3.9 ± 0.2	NS
A	<i>Chrysemys picta picta</i>	Eastern Painted Turtle	Special Concern	Special Concern		S4	10	48.2 ± 1.0	NS
A	<i>Accipiter cooperii</i>	Cooper's Hawk	Not At Risk			S1?B,SUN,SUM	12	40.1 ± 0.46	NS
A	<i>Fulica americana</i>	American Coot	Not At Risk			S1B	8	48.7 ± 0.2	NS
A	<i>Chlidonias niger</i>	Black Tern	Not At Risk			S1B	4	22.4 ± 0.05	NS
A	<i>Falco peregrinus</i> pop. 1	Peregrine Falcon - anatum/tundrius	Not At Risk		Vulnerable	S1B,SUM	12	3.8 ± 0.15	NS
A	<i>Sorex dispar gaspensis</i>	Gaspé Shrew	Not At Risk	Special Concern		S2	6	54.5 ± 0.5	NS
A	<i>Aegolius funereus</i>	Boreal Owl	Not At Risk			S2?B,SUM	8	26.2 ± 0.15	NS
A	<i>Lynx canadensis</i>	Canada Lynx	Not At Risk		Endangered	S2S3	300	6.6 ± 0.02	NS
A	<i>Globicephala melas</i>	Long-finned Pilot Whale	Not At Risk			S2S3	4	65.4 ± 0.43	NS
A	<i>Hemidactylium scutatum</i>	Four-toed Salamander	Not At Risk			S3	21	1.9 ± 0.5	NS
A	<i>Megaptera novaeangliae</i> pop. 2	Humpback Whale - Western North Atlantic Population	Not At Risk			S3	12	3.8 ± 0.2	NS
A	<i>Sterna hirundo</i>	Common Tern	Not At Risk			S3B	694	10.0 ± 0.1	NS
A	<i>Sialia sialis</i>	Eastern Bluebird	Not At Risk			S3B	25	47.3 ± 0.2	NS
A	<i>Buteo lagopus</i>	Rough-legged Hawk	Not At Risk			S3N	9	19.1 ± 0.5	NS
A	<i>Lagenorhynchus acutus</i>	Atlantic White-sided Dolphin	Not At Risk			S3S4	2	5.1 ± 0.2	NS
A	<i>Ammospiza nelsoni</i>	Nelson's Sparrow	Not At Risk			S3S4B	134	13.0 ± 7.07	NS
A	<i>Calidris canutus rufa</i>	Red Knot rufa subspecies	E,SC	Endangered	Endangered	S2M	41	21.9 ± 0.5	NS
A	<i>Alces alces americana</i>	Moose			Endangered	S1	116	11.4 ± 0.01	NS
A	<i>Picoides dorsalis</i>	American Three-toed Woodpecker				S1?	7	34.5 ± 0.15	NS
A	<i>Uria aalge</i>	Common Murre				S1?B	1	46.9 ± 0.2	NS
A	<i>Passerina cyanea</i>	Indigo Bunting				S1?B,SUM	25	24.0 ± 0.15	NS
A	<i>Nycticorax nycticorax</i>	Black-crowned Night Heron				S1B	2	36.3 ± 7.07	NS
A	<i>Oxyura jamaicensis</i>	Ruddy Duck				S1B	11	39.7 ± 0.2	NS
A	<i>Bartramia longicauda</i>	Upland Sandpiper				S1B	1	61.6 ± 0.2	NS
A	<i>Myiarchus crinitus</i>	Great Crested Flycatcher				S1B	1	72.0 ± 3.42	NS
A	<i>Mimus polyglottos</i>	Northern Mockingbird				S1B	25	28.2 ± 7.07	NS
A	<i>Toxostoma rufum</i>	Brown Thrasher				S1B	8	21.2 ± 0.15	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Salmo salar</i>	Atlantic Salmon				S1B,S1N	15	59.7 ± 0.2	NS
A	<i>Charadrius semipalmatus</i>	Semipalmated Plover				S1B,S4M	450	12.3 ± 0.5	NS
A	<i>Calidris minutilla</i>	Least Sandpiper				S1B,S4M	238	12.3 ± 0.5	NS
A	<i>Anas acuta</i>	Northern Pintail				S1B,SUM	17	29.8 ± 1.0	NS
A	<i>Vireo gilvus</i>	Warbling Vireo				S1B,SUM	8	19.6 ± 7.07	NS
A	<i>Vespertilionidae sp.</i>	bat species				S1S2	94	7.6 ± 0.1	NS
A	<i>Vespertilionidae sp. not</i>	Bat species not Big Brown				S1S2	14	26.5 ± 15.0	NS
A	<i>Eptesicus</i>	Bat				S1S2	14	26.5 ± 15.0	NS
A	<i>Poocetes gramineus</i>	Vesper Sparrow				S1S2B,SUM	7	19.6 ± 7.07	NS
A	<i>Microtus chrotorrhinus</i>	Rock Vole				S2	12	54.5 ± 0.5	NS
A	<i>Vireo philadelphicus</i>	Philadelphia Vireo				S2?B,SUM	16	30.4 ± 0.5	NS
A	<i>Alca torda</i>	Razorbill				S2B	27	3.8 ± 0.2	NS
A	<i>Fratercula arctica</i>	Atlantic Puffin				S2B	7	58.1 ± 0.34	NS
A	<i>Empidonax traillii</i>	Willow Flycatcher				S2B	8	34.4 ± 7.07	NS
A	<i>Molothrus ater</i>	Brown-headed Cowbird				S2B	71	15.8 ± 7.07	NS
A	<i>Somateria mollissima</i>	Common Eider				S2B,S2N,S4M	563	100.0 ± 0.2	PE
A	<i>Spatula clypeata</i>	Northern Shoveler				S2B,SUM	9	38.1 ± 0.01	NS
A	<i>Mareca strepera</i>	Gadwall				S2B,SUM	17	24.4 ± 7.07	NS
A	<i>Piranga olivacea</i>	Scarlet Tanager				S2B,SUM	12	47.7 ± 7.07	NS
A	<i>Calidris alba</i>	Sanderling				S2N,S3M	216	26.1 ± 1.23	NS
A	<i>Melanitta perspicillata</i>	Surf Scoter				S2N,S4M	106	22.0 ± 0.2	NS
A	<i>Melanitta deglandi</i>	White-winged Scoter				S2N,S4M	38	32.2 ± 16.6	NS
A	<i>Martes americana</i>	American Marten			Endangered	S2S3	87	5.9 ± 1.8	NS
A	<i>Asio otus</i>	Long-eared Owl				S2S3	27	10.4 ± 0.15	NS
A	<i>Rallus limicola</i>	Virginia Rail				S2S3B	10	16.1 ± 0.15	NS
A	<i>Rissa tridactyla</i>	Black-legged Kittiwake				S2S3B	33	3.9 ± 0.2	NS
A	<i>Petrochelidon pyrrhonota</i>	Cliff Swallow				S2S3B	212	15.2 ± 0.2	NS
A	<i>Phalacrocorax carbo</i>	Great Cormorant				S2S3B,S2S3N	350	35.1 ± 0.5	NS
A	<i>Morone saxatilis</i>	Striped Bass				S2S3B,S2S3N	13	24.9 ± 0.2	NS
A	<i>Cathartes aura</i>	Turkey Vulture				S2S3B,S4S5M	17	42.7 ± 0.4	NS
A	<i>Setophaga pinus</i>	Pine Warbler				S2S3B,S4S5M	31	40.9 ± 0.2	NS
A	<i>Icterus galbula</i>	Baltimore Oriole				S2S3B,SUM	64	26.0 ± 0.25	NS
A	<i>Pluvialis dominica</i>	American Golden-Plover				S2S3M	35	34.4 ± 0.5	NS
A	<i>Numenius phaeopus hudsonicus</i>	Whimbrel				S2S3M	96	34.4 ± 0.5	NS
A	<i>Phalaropus fulicarius</i>	Red Phalarope				S2S3M	2	61.4 ± 0.36	NS
A	<i>Perisoreus canadensis</i>	Canada Jay				S3	674	10.0 ± 7.07	NS
A	<i>Poecile hudsonicus</i>	Boreal Chickadee				S3	1333	10.0 ± 7.07	NS
A	<i>Spinus pinus</i>	Pine Siskin				S3	644	10.0 ± 7.07	NS
A	<i>Salvelinus fontinalis</i>	Brook Trout				S3	86	13.6 ± 0.01	NS
A	<i>Synaptomys cooperi</i>	Southern Bog Lemming				S3	4	54.5 ± 0.5	NS
A	<i>Pekania pennanti</i>	Fisher				S3	9	9.6 ± 0.01	NS
A	<i>Calcarius lapponicus</i>	Lapland Longspur				S3?N,SUM	11	34.7 ± 0.2	NS
A	<i>Spatula discors</i>	Blue-winged Teal				S3B	116	17.7 ± 7.07	NS
A	<i>Charadrius vociferus</i>	Killdeer				S3B	243	12.3 ± 0.5	NS
A	<i>Tringa semipalmata</i>	Willet				S3B	714	10.0 ± 0.1	NS
A	<i>Sterna paradisaea</i>	Arctic Tern				S3B	113	11.4 ± 7.07	NS
A	<i>Coccyzus erythrophthalmus</i>	Black-billed Cuckoo				S3B	56	23.2 ± 7.07	NS
A	<i>Tyrannus tyrannus</i>	Eastern Kingbird				S3B	108	19.1 ± 7.07	NS
A	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak				S3B	384	14.4 ± 7.07	NS
A	<i>Alosa pseudoharengus</i>	Alewife				S3B	40	11.8 ± 0.2	NS
A	<i>Tringa melanoleuca</i>	Greater Yellowlegs				S3B,S4M	496	12.3 ± 0.5	NS
A	<i>Falco sparverius</i>	American Kestrel				S3B,S4S5M	335	10.0 ± 7.07	NS
A	<i>Mergus serrator</i>	Red-breasted Merganser				S3B,S4S5N,S5M	278	10.0 ± 7.07	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Gallinago delicata</i>	Wilson's Snipe				S3B,S5M	650	10.0 ± 7.07	NS
A	<i>Setophaga striata</i>	Blackpoll Warbler				S3B,S5M	177	17.7 ± 7.07	NS
A	<i>Cardellina pusilla</i>	Wilson's Warbler				S3B,S5M	155	12.2 ± 0.15	NS
A	<i>Pinicola enucleator</i>	Pine Grosbeak				S3B,S5N,S5M	188	15.8 ± 7.07	NS
A	<i>Setophaga tigrina</i>	Cape May Warbler				S3B,SUM	183	14.4 ± 7.07	NS
A	<i>Branta bernicla</i>	Brant				S3M	3	32.2 ± 16.6	NS
A	<i>Pluvialis squatarola</i>	Black-bellied Plover				S3M	288	12.3 ± 0.5	NS
A	<i>Arenaria interpres</i>	Ruddy Turnstone				S3M	170	12.3 ± 0.5	NS
A	<i>Calidris pusilla</i>	Semipalmated Sandpiper				S3M	324	12.3 ± 0.5	NS
A	<i>Calidris melanotos</i>	Pectoral Sandpiper				S3M	44	34.4 ± 0.5	NS
A	<i>Chroicocephalus ridibundus</i>	Black-headed Gull				S3N	74	34.8 ± 0.2	NS
A	<i>Podiceps auritus pop. 2</i>	Horned Grebe - Western population		Special Concern		S3N,SUM	31	25.1 ± 0.2	NS
A	<i>Accipiter atricapillus</i>	American Goshawk				S3S4	163	15.8 ± 7.07	NS
A	<i>Picoides arcticus</i>	Black-backed Woodpecker				S3S4	114	0.6 ± 0.15	NS
A	<i>Loxia curvirostra</i>	Red Crossbill				S3S4	124	11.0 ± 0.01	NS
A	<i>Sorex albibarbis</i>	Eastern Water Shrew				S3S4	1	99.7 ± 0.1	PE
A	<i>Botaurus lentiginosus</i>	American Bittern				S3S4B,S4S5M	219	14.4 ± 7.07	NS
A	<i>Setophaga castanea</i>	Bay-breasted Warbler				S3S4B,S4S5M	447	10.0 ± 7.07	NS
A	<i>Actitis macularius</i>	Spotted Sandpiper				S3S4B,S5M	888	10.0 ± 7.07	NS
A	<i>Leiothlypis peregrina</i>	Tennessee Warbler				S3S4B,S5M	434	17.7 ± 7.07	NS
A	<i>Passerella iliaca</i>	Fox Sparrow				S3S4B,S5M	190	12.5 ± 7.07	NS
A	<i>Bucephala albeola</i>	Bufflehead				S3S4N	78	22.3 ± 0.2	NS
A	<i>Calidris maritima</i>	Purple Sandpiper				S3S4N	36	12.2 ± 10.0	NS
A	<i>Lanius borealis</i>	Northern Shrike				S3S4N	18	36.5 ± 0.2	NS
A	<i>Morus bassanus</i>	Northern Gannet				SHB	177	100.0 ± 0.2	PE
A	<i>Aythya americana</i>	Redhead				SHB	17	39.7 ± 0.2	NS
A	<i>Leucophaeus atricilla</i>	Laughing Gull				SHB	4	49.2 ± 0.25	NS
A	<i>Progne subis</i>	Purple Martin				SHB	5	58.1 ± 0.34	NS
A	<i>Eremophila alpestris</i>	Horned Lark				SHB,S4S5N,S5M	10	48.3 ± 0.53	NS
I	<i>Bombus bohemicus</i>	Ashton Cuckoo Bumble Bee	Endangered	Endangered	Endangered	S1	10	34.4 ± 5.0	NS
I	<i>Danaus plexippus</i>	Monarch	Endangered	Endangered	Endangered	S2?B,S3M	205	10.1 ± 0.01	NS
I	<i>Alasmodonta varicosa</i>	Brook Floater	Special Concern	Special Concern	Threatened	S3	9	27.8 ± 0.1	NS
I	<i>Bombus terricola</i>	Yellow-banded Bumble Bee	Special Concern	Special Concern	Vulnerable	S3	384	7.7 ± 0.2	NS
I	<i>Coccinella transversoguttata richardsoni</i>	Transverse Lady Beetle	Special Concern	Special Concern	Endangered	SH	1	50.7 ± 2.5	NS
I	<i>Papilio breviceauda bretonensis</i>	Short-tailed Swallowtail				S1	4	75.8 ± 2.5	NS
I	<i>Coenagrion interrogatum</i>	Subarctic Bluet				S1	1	96.1 ± 0.05	NS
I	<i>Atlanticoncha ochracea</i>	Tidewater Mucket				S1	12	99.5 ± 0.5	NS
I	<i>Polygonia satyrus</i>	Satyr Comma				S1?	1	73.0 ± 2.5	NS
I	<i>Euphyes bimacula</i>	Two-spotted Skipper				S1S2	2	48.4 ± 0.1	NS
I	<i>Boloria chariclea grandis</i>	Purple Lesser Fritillary				S1S2	2	79.9 ± 2.5	NS
I	<i>Haematopota rara</i>	Shy Cleg				S1S3	1	60.2 ± 0.05	NS
I	<i>Tharsalea dorcas</i>	Dorcas Copper				S2	36	37.2 ± 0.01	NS
I	<i>Tharsalea dospassosi</i>	Maritime Copper				S2	1	48.9 ± 0.05	NS
I	<i>Satyrrium acadica</i>	Acadian Hairstreak				S2	4	97.7 ± 2.5	NS
I	<i>Neurocordulia michaeli</i>	Broad-tailed Shadowdragon				S2	26	61.7 ± 0.05	NS
I	<i>Somatochlora septentrionalis</i>	Muskeg Emerald				S2	8	76.3 ± 0.05	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
I	<i>Coenagrion resolutum</i>	Taiga Bluet				S2	2	98.3 ± 0.5	PE
I	<i>Margaritifera margaritifera</i>	Eastern Pearlshell				S2	126	10.7 ± 0.1	NS
I	<i>Pantala hymenaea</i>	Spot-Winged Glider				S2?B	3	38.6 ± 0.01	NS
I	<i>Nymphalis l-album j-album</i>	Compton Tortoiseshell				S2S3	4	79.9 ± 2.5	NS
I	<i>Aglais milberti</i>	Milbert's Tortoiseshell				S2S3	3	77.0 ± 2.5	NS
I	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail				S2S3	8	40.8 ± 0.2	NS
I	<i>Somatochlora williamsoni</i>	Williamson's Emerald				S2S3	8	81.3 ± 0.05	NS
I	<i>Alasmodonta undulata</i>	Triangle Floater				S2S3	5	37.4 ± 0.25	NS
I	<i>Sphaeroderus nitidicollis</i>	Polished Snail-eating Beetle				S3	1	34.3 ± 0.2	NS
I	<i>Astyleiopus variegatus</i>	Variegated Long-horned Beetle				S3	1	86.0 ± 0.2	NS
I	<i>Psephenus herricki</i>	Herrick's Water Penny Beetle				S3	1	44.4 ± 0.2	NS
I	<i>Platydacus fossator</i>	Digging Rove Beetle				S3	2	63.4 ± 0.2	NS
I	<i>Oxyporus lateralis</i>	Lateral Cross-toothed Rove Beetle				S3	1	98.3 ± 0.2	NS
I	<i>Chrysochus auratus</i>	Dogbane Leaf Beetle				S3	1	63.5 ± 0.2	NS
I	<i>Naemia seriata</i>	Seaside Lady Beetle				S3	3	41.2 ± 0.54	NS
I	<i>Tachyerges ephippiatus</i>	Caparison Weevil				S3	1	63.5 ± 0.2	NS
I	<i>Chilocorus stigma</i>	Twice-stabbed Lady Beetle				S3	2	23.8 ± 0.2	NS
I	<i>Myzia pullata</i>	Streaked Lady Beetle				S3	1	89.7 ± 0.2	NS
I	<i>Iphthiminus opacus</i>	Cloudy Darkling Beetle				S3	2	38.4 ± 0.01	NS
I	<i>Monochamus marmorator</i>	Balsam Fir Sawyer				S3	3	64.3 ± 0.2	NS
I	<i>Satyrus calanus falacer</i>	Falacer Hairstreak				S3	1	91.8 ± 2.5	NS
I	<i>Callophrys lanoraieensis</i>	Bog Elfin				S3	2	82.6 ± 0.2	NS
I	<i>Strymon melinus</i>	Gray Hairstreak				S3	2	39.6 ± 0.1	NS
I	<i>Phanogomphus descriptus</i>	Harpoon Clubtail				S3	16	20.9 ± 0.05	NS
I	<i>Ophiogomphus aspersus</i>	Brook Snaketail				S3	5	20.9 ± 0.05	NS
I	<i>Ophiogomphus mainensis</i>	Maine Snaketail				S3	14	53.1 ± 0.1	NS
I	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail				S3	36	61.7 ± 0.05	NS
I	<i>Somatochlora forcipata</i>	Forcinate Emerald				S3	7	69.7 ± 1.0	NS
I	<i>Enallagma vemale</i>	Vernal Bluet				S3	8	15.3 ± 0.05	NS
I	<i>Polygonia interrogationis</i>	Question Mark				S3B	26	35.7 ± 0.01	NS
I	<i>Cecropterus pylades</i>	Northern Cloudywing				S3S4	22	29.3 ± 0.01	NS
I	<i>Amblyscirtes hegon</i>	Pepper and Salt Skipper				S3S4	9	31.8 ± 1.0	NS
I	<i>Argynnis aphrodite winni</i>	Aphrodite Fritillary				S3S4	7	34.6 ± 2.5	NS
I	<i>Polygonia faunus</i>	Green Comma				S3S4	16	33.1 ± 0.05	NS
I	<i>Oeneis jutta ascerta</i>	Jutta Arctic				S3S4	7	32.7 ± 0.01	NS
I	<i>Aeshna clepsydra</i>	Mottled Darner				S3S4	3	8.9 ± 0.05	NS
I	<i>Aeshna constricta</i>	Lance-Tipped Darner				S3S4	5	89.8 ± 0.2	NS
I	<i>Boyeria grafiana</i>	Ocellated Darner				S3S4	9	40.8 ± 0.2	NS
I	<i>Gomphaeschna furcillata</i>	Harlequin Darner				S3S4	4	9.9 ± 0.05	NS
I	<i>Erythrodiplosis berenice</i>	Seaside Dragonlet				S3S4	11	27.4 ± 0.01	NS
I	<i>Nannothemis bella</i>	Elfin Skimmer				S3S4	6	9.9 ± 0.05	NS
I	<i>Sympetrum danae</i>	Black Meadowhawk				S3S4	8	16.5 ± 0.05	NS
I	<i>Amphiagrion saucium</i>	Eastern Red Damsel				S3S4	17	38.2 ± 0.05	NS
I	<i>Icaricia saepiolus amica</i>	Greenish Blue				SH	1	92.1 ± 2.5	NS
I	<i>Polygonia gracilis</i>	Hoary Comma				SH	2	77.0 ± 2.5	NS
N	<i>Erioderma mollissimum</i>	Graceful Felt Lichen	Endangered	Endangered	Endangered	S1	17	82.1 ± 0.5	NS
N	<i>Erioderma pedicellatum</i> (Atlantic pop.)	Boreal Felt Lichen - Atlantic pop.	Endangered	Endangered	Endangered	S1	561	31.4 ± 0.5	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	<i>Peltigera hydrothyria</i>	Eastern Waterfan	Threatened	Threatened	Threatened	S1	120	9.1 ± 0.01	NS
N	<i>Pannaria lurida</i>	Wrinkled Shingle Lichen	Threatened	Threatened	Threatened	S2S3	290	29.5 ± 0.01	NS
N	<i>Anzia colpodes</i>	Black-foam Lichen	Threatened	Threatened	Threatened	S3	8	70.7 ± 1.0	NS
N	<i>Fuscopannaria leucosticta</i>	White-rimmed Shingle Lichen	Threatened			S3	3	45.7 ± 0.01	NS
N	<i>Heterodermia squamulosa</i>	Scaly Fringe Lichen	Threatened			S3	7	57.9 ± 0.01	NS
N	<i>Pectenia plumbea</i>	Blue Felt Lichen	Special Concern	Special Concern	Vulnerable	S3	1023	2.9 ± 0.01	NS
N	<i>Sclerophora peronella</i> (Atlantic pop.)	Frosted Glass-whiskers (Atlantic population)	Special Concern	Special Concern		S3S4	30	5.5 ± 0.01	NS
N	<i>Pseudevernia cladonia</i>	Ghost Antler Lichen	Not At Risk			S2S3	7	38.4 ± 0.01	NS
N	<i>Fissidens exilis</i>	Pygmy Pocket Moss	Not At Risk			S3	9	30.0 ± 0.01	NS
N	<i>Cinclidium stygium</i>	Sooty Cupola Moss				S1	2	41.2 ± 0.01	NS
N	<i>Seligeria diversifolia</i>	a Moss				S1	1	99.7 ± 0.3	NS
N	<i>Usnea perplexans</i>	Powdered Beard Lichen				S1	1	78.9 ± 1.0	NS
N	<i>Cladonia brevis</i>	Short Peg Lichen				S1	3	61.0 ± 0.0	NS
N	<i>Lathagrium cristatum</i>	Fingered Jelly Lichen				S1	3	58.9 ± 4.0	NS
N	<i>Scytinium schraderi</i>	Wrinkled Jellyskin Lichen				S1	1	56.3 ± 1.0	NS
N	<i>Polychidium muscicola</i>	Eyed Mossthorns				S1	4	16.3 ± 0.05	NS
N	<i>Sticta limbata</i>	Woollybear Lichen				S1	5	39.6 ± 0.01	NS
N	<i>Dermatocarpon miniatum</i>	Powdered Moon Lichen				S1	1	86.5 ± 0.01	NS
N	<i>Peltigera lepidophora</i>	Common Stippleback Lichen				S1	3	59.0 ± 0.01	NS
N	<i>Hypogymnia hultenii</i>	Scaly Pelt Lichen				S1	20	40.9 ± 0.5	NS
N	<i>Jubula pennsylvanica</i>	Powdered Honeycomb Lichen				S1	3	59.0 ± 0.01	NS
N	<i>Eocalypogeia schusteriana</i>	Schuster's Pouchwort				S1?	2	82.8 ± 0.01	NS
N	<i>Brachythecium erythrorrhizon</i>	a liverwort				S1?	4	82.9 ± 0.01	NS
N	<i>Conardia compacta</i>	Taiga Ragged Moss				S1?	2	51.1 ± 2.0	NS
N	<i>Oligotrichum hercynicum</i>	Coast Creeping Moss				S1?	3	69.0 ± 0.01	NS
N	<i>Paludella squarrosa</i>	Hercynian Hair Moss				S1?	1	77.8 ± 5.0	NS
N	<i>Lathagrium undulatum</i> var. <i>granulosum</i>	Tufted Fen Moss				S1?	1	60.0 ± 1.0	NS
N	<i>Scytinium intermedium</i>	Granular Jelly Flakes Lichen				S1?	3	36.1 ± 4.0	NS
N	<i>Peltigera malacea</i>	Forty-five Jellyskin Lichen				S1?	1	28.3 ± 0.01	NS
N	<i>Buxbaumia minakatae</i>	Veinless Pelt Lichen				S1S2	1	82.3 ± 100.0	NS
N	<i>Hamatocaulis vernicosus</i>	Hump-Backed Elves				S1S2	1	43.2 ± 0.01	NS
N	<i>Enchylum bachmanianum</i>	a Moss				S1S2	2	61.6 ± 1.0	NS
N	<i>Placidium squamulosum</i>	Bachman's Jelly Lichen				S1S2	1	58.9 ± 4.0	NS
N	<i>Cladonia labradorica</i>	Limy Soil Stipplescale Lichen				S1S2	1	41.7 ± 0.05	NS
N	<i>Parmotrema reticulatum</i>	Labrador Lichen				S1S2	1	31.7 ± 0.5	NS
N	<i>Solorina spongiosa</i>	Netted Ruffle Lichen				S1S2	11	45.5 ± 0.2	NS
N	<i>Parmeliella parvula</i>	Fringed Chocolate Chip Lichen				S1S2	31	31.7 ± 0.5	NS
N	<i>Barbilophozia lycopodioides</i>	Poor-man's Shingles Lichen				S1S3	1	67.7 ± 0.01	NS
N	<i>Odontoschisma sphagni</i>	Greater Pawwort				S1S3	1	83.3 ± 0.01	NS
N	<i>Xylopsora friesii</i>	Bog-Moss Flapwort				S1S3	1	88.8 ± 0.01	NS
N	<i>Peltigera neckeri</i>	a Lichen				S1S3	5	35.4 ± 0.66	NS
N	<i>Anacamptodon splachnoides</i>	Black-saddle Pelt Lichen				S2	2	4.3 ± 0.2	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	<i>Scorpidium scorpioides</i>	Hooked Scorpion Moss				S2	13	36.1 ± 0.01	NS
N	<i>Sphagnum platyphyllum</i>	Flat-leaved Peat Moss				S2	4	38.2 ± 0.01	NS
N	<i>Sphagnum subnitens</i>	Lustrous Peat Moss				S2	2	62.3 ± 0.01	NS
N	<i>Scorpidium cossonii</i>	Cosson's Hook Moss				S2	6	38.5 ± 0.01	NS
N	<i>Scytinium imbricatum</i>	Scaly Jellyskin Lichen				S2	1	61.9 ± 0.05	NS
N	<i>Nephroma arcticum</i>	Arctic Kidney Lichen				S2	3	65.7 ± 0.5	NS
N	<i>Nephroma resupinatum</i>	a lichen				S2	2	30.0 ± 0.5	NS
N	<i>Anaptychia crinalis</i>	Hanging Fringed Lichen				S2	1	99.8 ± 0.5	NS
N	<i>Moerckia flotoviana</i>	Flotow's Ruffwort				S2?	2	82.8 ± 0.01	NS
N	<i>Riccardia multifida</i>	Delicate Germanderwort				S2?	2	38.4 ± 0.2	NS
N	<i>Anomodon viticulosus</i>	a Moss				S2?	2	50.8 ± 1.0	NS
N	<i>Atrichum angustatum</i>	Lesser Smoothcap Moss				S2?	2	41.3 ± 3.0	NS
N	<i>Drepanocladus polygamus</i>	Polygamous Hook Moss				S2?	3	59.6 ± 0.01	NS
N	<i>Pseudocampyllum radicale</i>	Long-stalked Fine Wet Moss				S2?	1	36.1 ± 0.01	NS
N	<i>Dicranum condensatum</i>	Condensed Broom Moss				S2?	2	97.5 ± 0.01	PE
N	<i>Fontinalis sullivantii</i>	Sullivant's Water Moss				S2?	1	82.3 ± 100.0	NS
N	<i>Grimmia anomala</i>	Mountain Forest Grimmi				S2?	1	98.9 ± 0.01	NS
N	<i>Philonotis marchica</i>	a Moss				S2?	1	86.4 ± 0.01	NS
N	<i>Platydictya jungermannioides</i>	False Willow Moss				S2?	5	36.1 ± 4.0	NS
N	<i>Tortella fragilis</i>	Fragile Twisted Moss				S2?	8	54.0 ± 0.01	NS
N	<i>Cyrtomnium hymenophylloides</i>	Short-pointed Lantern Moss				S2?	1	84.0 ± 0.01	NS
N	<i>Platylomella lescurii</i>	a Moss				S2?	1	72.8 ± 0.2	NS
N	<i>Scorpidium revolvens</i>	Limprichtia Moss				S2S3	8	37.9 ± 0.01	NS
N	<i>Moelleropsis nebulosa</i>	Blue-gray Moss Shingle Lichen				S2S3	34	13.8 ± 0.01	NS
N	<i>Moelleropsis nebulosa ssp. frullaniae</i>	Blue-gray Moss Shingle Lichen				S2S3	1	85.4 ± 0.5	NS
N	<i>Ramalina thrausta</i>	Angelhair Ramalina Lichen				S2S3	13	9.7 ± 0.5	NS
N	<i>Collema leptaleum</i>	Crumpled Bat's Wing Lichen				S2S3	265	29.7 ± 0.01	NS
N	<i>Usnea hirta</i>	Bristly Beard Lichen				S2S3	1	66.4 ± 0.2	NS
N	<i>Usnea scabrata</i>	Straw Beard Lichen				S2S3	1	99.2 ± 1.0	PE
N	<i>Usnea rubicunda</i>	Red Beard Lichen				S2S3	3	49.9 ± 0.01	NS
N	<i>Ahtiana aurescens</i>	Eastern Candlewax Lichen				S2S3	3	77.2 ± 6.33	NS
N	<i>Usnocetraria oakesiana</i>	Yellow Band Lichen				S2S3	1	99.2 ± 0.2	NS
N	<i>Cetraria muricata</i>	Spiny Heath Lichen				S2S3	3	46.8 ± 1.7	NS
N	<i>Cladonia incrassata</i>	Powder-foot British Soldiers Lichen				S2S3	1	83.6 ± 0.05	NS
N	<i>Scytinium tenuissimum</i>	Birdnest Jellyskin Lichen				S2S3	18	35.9 ± 0.01	NS
N	<i>Parmelia fertilis</i>	Fertile Shield Lichen				S2S3	28	29.7 ± 0.01	NS
N	<i>Parmeliopsis ambigua</i>	Green Starburst Lichen				S2S3	5	45.8 ± 0.5	NS
N	<i>Usnea mutabilis</i>	Bloody Beard Lichen				S2S3	1	34.7 ± 0.5	NS
N	<i>Fuscopannaria sorediata</i>	a Lichen				S2S3	21	17.9 ± 0.03	NS
N	<i>Stereocaulon condensatum</i>	Granular Soil Foam Lichen				S2S3	26	18.9 ± 0.01	NS
N	<i>Hypotrachyna revoluta</i>	Granulating Loop Lichen				S2S3	1	55.7 ± 0.01	NS
N	<i>Cladonia coccifera</i>	Eastern Boreal Pixie-cup Lichen				S2S3	3	49.4 ± 0.01	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	<i>Cladonia deformis</i>	Lesser Sulphur-cup Lichen				S2S3	1	99.0 ± 0.2	PE
N	<i>Usnea flammea</i>	Coastal Bushy Beard Lichen				S2S3	3	39.2 ± 0.01	NS
N	<i>Fissidens taxifolius</i>	Yew-leaved Pocket Moss				S3	3	50.8 ± 0.01	NS
N	<i>Anomodon tristis</i>	a Moss				S3	1	92.3 ± 0.01	NS
N	<i>Sphagnum contortum</i>	Twisted Peat Moss				S3	7	35.4 ± 0.01	NS
N	<i>Tetraplodon angustatus</i>	Toothed-leaved Nitrogen Moss				S3	3	11.4 ± 0.01	NS
N	<i>Tetraplodon mnioides</i>	Entire-leaved Nitrogen Moss				S3	1	49.7 ± 0.01	NS
N	<i>Rostania occulta</i>	Crusted Tarpaper Lichen				S3	4	48.5 ± 5.0	NS
N	<i>Collema nigrescens</i>	Blistered Tarpaper Lichen				S3	2	96.5 ± 0.01	NS
N	<i>Solorina saccata</i>	Woodland Owl Lichen				S3	13	6.5 ± 0.05	NS
N	<i>Fuscopannaria ahlneri</i>	Roughened Shingle Lichen				S3	151	16.6 ± 0.01	NS
N	<i>Scytinium lichenooides</i>	Tattered Jellyskin Lichen				S3	19	6.3 ± 0.2	NS
N	<i>Leptogium milligranum</i>	Stretched Jellyskin Lichen				S3	1	27.6 ± 0.01	NS
N	<i>Nephroma bellum</i>	Naked Kidney Lichen				S3	17	18.8 ± 0.01	NS
N	<i>Placynthium nigrum</i>	Common Ink Lichen				S3	1	90.3 ± 10.0	NS
N	<i>Platismatia norvegica</i>	Oldgrowth Rag Lichen				S3	192	34.6 ± 0.01	NS
N	<i>Punctelia appalachensis</i>	Appalachian Speckleback Lichen				S3	1	34.0 ± 0.01	NS
N	<i>Viridothelium virens</i>	a lichen				S3	1	73.1 ± 5.0	NS
N	<i>Ephebe lanata</i>	Waterside Rockshag Lichen				S3	3	14.2 ± 0.01	NS
N	<i>Phaeophyscia adiastrata</i>	Powder-tipped Shadow Lichen				S3	1	99.9 ± 0.01	PE
N	<i>Phaeophyscia pusilloides</i>	Pompom-tipped Shadow Lichen				S3	5	44.4 ± 0.01	NS
N	<i>Peltigera collina</i>	Tree Pelt Lichen				S3	257	8.6 ± 0.01	NS
N	<i>Cladonia pocillum</i>	Rosette Pixie-cup Lichen				S3	1	82.8 ± 0.01	NS
N	<i>Calliergon giganteum</i>	Giant Spear Moss				S3?	4	56.4 ± 0.01	NS
N	<i>Mnium stellare</i>	Star Leafy Moss				S3?	2	82.9 ± 0.01	NS
N	<i>Sphagnum lindbergii</i>	Lindberg's Peat Moss				S3?	4	46.1 ± 0.01	NS
N	<i>Sphagnum riparium</i>	Streamside Peat Moss				S3?	4	34.0 ± 0.01	NS
N	<i>Cladonia stygia</i>	Black-footed Reindeer Lichen				S3?	37	34.8 ± 0.2	NS
N	<i>Dicranum leioneuron</i>	a Dicranum Moss				S3S4	1	34.9 ± 0.01	NS
N	<i>Encalypta ciliata</i>	Fringed Extinguisher Moss				S3S4	1	21.1 ± 2.5	NS
N	<i>Encalypta procera</i>	Slender Extinguisher Moss				S3S4	14	35.6 ± 0.2	NS
N	<i>Splachnum ampullaceum</i>	Cruet Dung Moss				S3S4	2	59.4 ± 0.01	NS
N	<i>Thamnobryum alleghaniense</i>	a Moss				S3S4	26	76.7 ± 0.01	NS
N	<i>Schistidium agassizii</i>	Elf Bloom Moss				S3S4	1	66.0 ± 3.0	NS
N	<i>Hylocomiastrum pyrenaicum</i>	a Feather Moss				S3S4	1	66.7 ± 3.0	NS
N	<i>Bryoria pseudofuscescens</i>	Mountain Horsehair Lichen				S3S4	9	94.4 ± 0.2	PE
N	<i>Enchylum tenax</i>	Soil Tarpaper Lichen				S3S4	14	36.1 ± 4.0	NS
N	<i>Sticta fuliginosa</i>	Peppered Moon Lichen				S3S4	29	28.9 ± 0.5	NS
N	<i>Arctoparmelia incurva</i>	Finger Ring Lichen				S3S4	56	39.5 ± 0.01	NS
N	<i>Scytinium teretiusculum</i>	Curly Jellyskin Lichen				S3S4	4	36.3 ± 0.01	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	<i>Leptogium acadiense</i>	Acadian Jellyskin Lichen				S3S4	75	27.6 ± 0.01	NS
N	<i>Scytinium subtile</i>	Appressed Jellyskin Lichen				S3S4	22	19.1 ± 0.01	NS
N	<i>Chaenotheca brachypoda</i>	a stubble lichen				S3S4	2	73.1 ± 1.17	NS
N	<i>Cladonia floerkeana</i>	Gritty British Soldiers Lichen				S3S4	7	40.2 ± 0.01	NS
N	<i>Vahliella leucophaea</i>	Shelter Shingle Lichen				S3S4	33	26.5 ± 0.01	NS
N	<i>Heterodermia speciosa</i>	Powdered Fringe Lichen				S3S4	53	17.2 ± 0.01	NS
N	<i>Leptogium corticola</i>	Blistered Jellyskin Lichen				S3S4	29	37.9 ± 0.01	NS
N	<i>Melanohalea olivacea</i>	Spotted Camouflage Lichen				S3S4	4	74.9 ± 0.2	NS
N	<i>Parmeliopsis hyperopta</i>	Gray Starburst Lichen				S3S4	3	45.8 ± 0.5	NS
N	<i>Parmotrema perlatum</i>	Powdered Ruffle Lichen				S3S4	1	85.7 ± 0.01	NS
N	<i>Peltigera hymenina</i>	Cloudy Pelt Lichen				S3S4	2	21.7 ± 0.5	NS
N	<i>Sphaerophorus fragilis</i>	Fragile Coral Lichen				S3S4	10	40.3 ± 0.01	NS
N	<i>Coccocarpia palmicola</i>	Salted Shell Lichen				S3S4	776	31.7 ± 0.5	NS
N	<i>Physcia tenella</i>	Fringed Rosette Lichen				S3S4	2	88.5 ± 3.5	NS
N	<i>Anaptychia palmulata</i>	Shaggy Fringed Lichen				S3S4	245	2.8 ± 0.01	NS
N	<i>Evermia prunastri</i>	Valley Oakmoss Lichen				S3S4	9	35.3 ± 0.7	NS
N	<i>Heterodermia neglecta</i>	Fringe Lichen				S3S4	97	12.7 ± 0.01	NS
P	<i>Fraxinus nigra</i>	Black Ash	Threatened		Threatened	S1S2	451	12.6 ± 0.01	NS
P	<i>Clethra alnifolia</i>	Coast Pepper-Bush	Threatened	Threatened	Vulnerable	S2	2	83.3 ± 0.2	NS
P	<i>Juncus caesariensis</i>	New Jersey Rush	Special Concern	Special Concern	Vulnerable	S3	256	58.4 ± 0.1	NS
P	<i>Floerkea proserpinacoides</i>	False Mermaidweed	Not At Risk			S2S3	26	14.2 ± 0.1	NS
P	<i>Salix candida</i>	Sage Willow			Endangered	S1	56	58.9 ± 0.01	NS
P	<i>Arnica lonchophylla</i>	Northern Arnica				S1	1	35.7 ± 7.07	NS
P	<i>Betula minor</i>	Dwarf White Birch				S1	1	63.2 ± 0.01	NS
P	<i>Cardamine dentata</i>	Toothed Bittercress				S1	4	34.9 ± 0.5	NS
P	<i>Cochlearia tridactylites</i>	Limestone Scurvy-grass				S1	12	47.3 ± 0.1	NS
P	<i>Draba norvegica</i>	Norwegian Whitlow-Grass				S1	1	98.5 ± 2.5	NS
P	<i>Stellaria crassifolia</i>	Fleshy Stitchwort				S1	2	42.5 ± 2.0	NS
P	<i>Hudsonia tomentosa</i>	Woolly Beach-heath				S1	19	26.6 ± 1.7	NS
P	<i>Bistorta vivipara</i>	Alpine Bistort				S1	1	45.5 ± 1.0	NS
P	<i>Montia fontana</i>	Water Blinks				S1	2	8.7 ± 1.0	NS
P	<i>Agalinis tenuifolia</i>	Slender Agalinis				S1	1	48.3 ± 0.01	NS
P	<i>Scrophularia lanceolata</i>	Lance-leaved Figwort				S1	2	21.5 ± 1.5	NS
P	<i>Carex alopecoidea</i>	Foxtail Sedge				S1	4	24.7 ± 0.2	NS
P	<i>Carex granularis</i>	Limestone Meadow Sedge				S1	21	36.9 ± 0.01	NS
P	<i>Carex tenuiflora</i>	Sparse-Flowered Sedge				S1	2	58.2 ± 0.5	NS
P	<i>Carex tinctoria</i>	Tinged Sedge				S1	2	24.7 ± 0.2	NS
P	<i>Carex viridula ssp. brachyrrhyncha</i>	Greenish Sedge				S1	1	53.4 ± 0.01	NS
P	<i>Carex viridula var. elatior</i>	Greenish Sedge				S1	59	34.7 ± 0.01	NS
P	<i>Carex grisea</i>	Inflated Narrow-leaved Sedge				S1	6	34.7 ± 0.01	NS
P	<i>Cyperus lupulinus ssp. macilentus</i>	Hop Flatsedge				S1	18	25.6 ± 0.01	NS
P	<i>Eleocharis erythropoda</i>	Red-stemmed Spikerush				S1	7	46.8 ± 0.01	NS
P	<i>Rhynchospora capillacea</i>	Slender Beakrush				S1	8	54.2 ± 1.0	NS
P	<i>Scirpus atrovirens</i>	Dark-green Bulrush				S1	3	53.4 ± 0.01	NS
P	<i>Iris prismatica</i>	Slender Blue Flag				S1	3	56.8 ± 1.5	NS
P	<i>Triantha glutinosa</i>	Sticky False-Asphodel				S1	18	58.9 ± 0.01	NS
P	<i>Malaxis monophyllos var.</i>	North American White				S1	1	9.3 ± 7.07	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
	<i>brachypoda</i>	Adder's-mouth							
P	<i>Calamagrostis stricta</i> ssp. <i>inexpansa</i>	Slim-stemmed Reed Grass				S1	3	28.5 ± 0.01	NS
P	<i>Elymus hystrix</i>	Spreading Wild Rye				S1	1	90.1 ± 1.6	NS
P	<i>Torreyochloa pallida</i> var. <i>pallida</i>	Pale False Manna Grass				S1	2	97.3 ± 1.5	NS
P	<i>Graphephorum melicoides</i>	Purple False Oats				S1	2	92.2 ± 0.01	NS
P	<i>Potamogeton nodosus</i>	Long-leaved Pondweed				S1	1	80.7 ± 5.0	NS
P	<i>Sparganium angustifolium</i>	Branching Bur-Reed				S1	3	48.5 ± 1.0	NS
P	<i>Dryopteris goldieana</i>	Goldie's Woodfern				S1	4	77.2 ± 0.2	NS
P	<i>Equisetum palustre</i>	Marsh Horsetail				S1	8	46.6 ± 0.01	NS
P	<i>Botrychium ascendens</i>	Upswept Moonwort				S1	1	51.2 ± 0.2	NS
P	<i>Solidago hispida</i>	Hairy Goldenrod				S1?	1	97.2 ± 7.07	NS
P	<i>Bolboschoenus robustus</i>	Sturdy Bulrush				S1?	2	76.6 ± 5.0	NS
P	<i>Allium schoenoprasum</i>	Wild Chives				S1?	2	80.2 ± 0.2	NS
P	<i>Allium schoenoprasum</i> var. <i>sibiricum</i>	Wild Chives				S1?	1	36.6 ± 7.07	NS
P	<i>Huperzia selago</i>	Northern Firmoss				S1?	4	86.5 ± 0.01	NS
P	<i>Sanicula odorata</i>	Clustered Sanicle				S1S2	8	30.4 ± 0.5	NS
P	<i>Ageratina altissima</i>	White Snakeroot				S1S2	2	34.4 ± 7.07	NS
P	<i>Cornus suecica</i>	Swedish Bunchberry				S1S2	3	51.1 ± 6.0	NS
P	<i>Anemone virginiana</i> var. <i>alba</i>	Virginia Anemone				S1S2	6	46.9 ± 0.1	NS
P	<i>Parnassia parviflora</i>	Small-flowered Grass-of-Parnassus				S1S2	17	50.5 ± 1.2	NS
P	<i>Carex haydenii</i>	Hayden's Sedge				S1S2	4	37.6 ± 0.05	NS
P	<i>Platanthera huronensis</i>	Fragrant Green Orchid				S1S2	10	13.9 ± 0.2	NS
P	<i>Calamagrostis stricta</i> ssp. <i>stricta</i>	Slim-stemmed Reed Grass				S1S2	1	77.9 ± 1.0	NS
P	<i>Selaginella selaginoides</i>	Low Spikemoss				S1S2	5	53.8 ± 0.8	NS
P	<i>Carex vacillans</i>	Estuarine Sedge				S1S3	3	24.7 ± 0.5	NS
P	<i>Zizia aurea</i>	Golden Alexanders				S2	8	28.5 ± 5.0	NS
P	<i>Rudbeckia laciniata</i>	Cut-Leaved Coneflower				S2	2	34.4 ± 7.07	NS
P	<i>Hudsonia ericoides</i>	Pinebarren Golden Heather				S2	15	97.5 ± 0.01	PE
P	<i>Desmodium canadense</i>	Canada Tick-trefoil				S2	10	93.6 ± 0.01	NS
P	<i>Anemone canadense</i>	Canada Anemone				S2	3	7.6 ± 3.0	NS
P	<i>Ranunculus sceleratus</i>	Cursed Buttercup				S2	1	76.2 ± 7.07	NS
P	<i>Comandra umbellata</i>	Bastard's Toadflax				S2	45	25.2 ± 0.01	NS
P	<i>Carex gynocrates</i>	Northern Bog Sedge				S2	15	37.4 ± 0.01	NS
P	<i>Carex pellita</i>	Woolly Sedge				S2	7	93.6 ± 0.01	NS
P	<i>Carex livida</i>	Livid Sedge				S2	24	31.9 ± 0.01	NS
P	<i>Juncus greenii</i>	Greene's Rush				S2	1	26.7 ± 1.5	NS
P	<i>Juncus alpinoarticulatus</i> ssp. <i>americanus</i>	Northern Green Rush				S2	11	32.4 ± 1.0	NS
P	<i>Luzula spicata</i>	Spiked Woodrush				S2	1	34.9 ± 0.01	NS
P	<i>Lilium canadense</i>	Canada Lily				S2	60	17.9 ± 0.01	NS
P	<i>Cypripedium parviflorum</i> var. <i>pubescens</i>	Yellow Lady's-slipper				S2	39	4.1 ± 0.2	NS
P	<i>Cypripedium parviflorum</i> var. <i>makasin</i>	Small Yellow Lady's-Slipper				S2	17	11.0 ± 0.01	NS
P	<i>Cypripedium reginae</i>	Showy Lady's-Slipper				S2	409	7.1 ± 0.2	NS
P	<i>Platanthera flava</i> var. <i>herbiola</i>	Pale Green Orchid				S2	2	19.2 ± 0.01	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Platanthera macrophylla</i>	Large Round-Leaved Orchid				S2	6	10.9 ± 1.67	NS
P	<i>Bromus latiglumis</i>	Broad-Glumed Brome				S2	11	17.1 ± 0.01	NS
P	<i>Cinna arundinacea</i>	Sweet Wood Reed Grass				S2	24	17.1 ± 0.01	NS
P	<i>Elymus wiegandii</i>	Wiegand's Wild Rye				S2	12	18.2 ± 0.01	NS
P	<i>Sparganium hyperboreum</i>	Northern Burreed				S2	4	50.6 ± 0.1	NS
P	<i>Cryptogramma stelleri</i>	Steller's Rockbrake				S2	17	48.7 ± 0.3	NS
P	<i>Cuscuta cephalanthi</i>	Buttonbush Dodder				S2?	9	24.4 ± 7.07	NS
P	<i>Rumex persicarioides</i>	Peach-leaved Dock				S2?	1	66.2 ± 0.01	NS
P	<i>Crataegus submollis</i>	Quebec Hawthorn				S2?	2	54.4 ± 7.07	NS
P	<i>Thuja occidentalis</i>	Eastern White Cedar			Vulnerable	S2S3	21	41.1 ± 0.2	NS
P	<i>Osmorhiza longistylis</i>	Smooth Sweet Cicely				S2S3	29	32.3 ± 1.0	NS
P	<i>Bidens hyperborea</i>	Estuary Beggarticks				S2S3	3	34.9 ± 1.0	NS
P	<i>Erigeron philadelphicus</i>	Philadelphia Fleabane				S2S3	15	44.4 ± 7.07	NS
P	<i>Impatiens pallida</i>	Pale Jewelweed				S2S3	29	18.2 ± 1.0	NS
P	<i>Caulophyllum thalictroides</i>	Blue Cohosh				S2S3	41	18.2 ± 0.01	NS
P	<i>Draba arabisans</i>	Rock Whitlow-Grass				S2S3	3	49.4 ± 1.6	NS
P	<i>Stellaria humifusa</i>	Saltmarsh Starwort				S2S3	6	79.3 ± 0.1	NS
P	<i>Oxybasis rubra</i>	Red Goosefoot				S2S3	8	36.3 ± 7.07	NS
P	<i>Hypericum majus</i>	Large St John's-wort				S2S3	6	59.6 ± 0.01	NS
P	<i>Hypericum x dissimulatum</i>	Disguised St. John's-wort				S2S3	2	29.5 ± 1.0	NS
P	<i>Empetrum atropurpureum</i>	Purple Crowberry				S2S3	2	48.9 ± 3.0	NS
P	<i>Euphorbia polygonifolia</i>	Seaside Spurge				S2S3	17	10.6 ± 0.01	NS
P	<i>Myriophyllum farwellii</i>	Farwell's Water Milfoil				S2S3	4	4.7 ± 7.07	NS
P	<i>Hedeoma pulegioides</i>	American False Pennyroyal				S2S3	2	50.8 ± 5.0	NS
P	<i>Oenothera fruticosa</i> ssp. <i>tetragona</i>	Narrow-leaved Evening Primrose				S2S3	2	69.7 ± 1.5	NS
P	<i>Polygonum aviculare</i> ssp. <i>buxiforme</i>	Box Knotweed				S2S3	2	91.3 ± 0.2	NS
P	<i>Polygonum oxyspermum</i> ssp. <i>raii</i>	Ray's Knotweed				S2S3	10	28.4 ± 1.0	NS
P	<i>Rumex triangulivalvis</i>	Triangular-valve Dock				S2S3	8	19.1 ± 6.0	NS
P	<i>Anemone quinquefolia</i>	Wood Anemone				S2S3	16	61.9 ± 0.01	NS
P	<i>Caltha palustris</i>	Yellow Marsh Marigold				S2S3	37	44.3 ± 0.01	NS
P	<i>Amelanchier fernaldii</i>	Fernald's Serviceberry				S2S3	4	44.4 ± 1.0	NS
P	<i>Potentilla canadensis</i>	Canada Cinquefoil				S2S3	1	25.3 ± 2.6	NS
P	<i>Salix pellita</i>	Satiny Willow				S2S3	5	8.8 ± 1.6	NS
P	<i>Tiarella stolonifera</i>	Stoloniferous Foamflower				S2S3	2	18.2 ± 3.81	NS
P	<i>Agalinis purpurea</i> var. <i>parviflora</i>	Small-flowered Purple False Foxglove				S2S3	9	36.3 ± 0.01	NS
P	<i>Carex adusta</i>	Lesser Brown Sedge				S2S3	3	47.9 ± 0.01	NS
P	<i>Carex comosa</i>	Bearded Sedge				S2S3	1	73.3 ± 1.5	NS
P	<i>Carex hystericina</i>	Porcupine Sedge				S2S3	39	24.8 ± 0.5	NS
P	<i>Eleocharis ovata</i>	Ovate Spikerush				S2S3	1	33.8 ± 0.01	NS
P	<i>Scirpus pedicellatus</i>	Stalked Bulrush				S2S3	9	18.0 ± 0.01	NS
P	<i>Vallisneria americana</i>	Wild Celery				S2S3	1	45.0 ± 0.01	NS
P	<i>Goodyera pubescens</i>	Downy Rattlesnake-Plantain				S2S3	1	18.1 ± 0.01	NS
P	<i>Spiranthes casei</i> var. <i>novaescotiae</i>	Case's Ladies'-Tresses				S2S3	3	45.6 ± 0.2	NS
P	<i>Spiranthes lucida</i>	Shining Ladies'-Tresses				S2S3	33	38.8 ± 0.01	NS
P	<i>Calamagrostis stricta</i>	Slim-stemmed Reed Grass				S2S3	1	38.6 ± 0.01	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Potamogeton friesii</i>	Fries' Pondweed				S2S3	8	18.8 ± 0.01	NS
P	<i>Cystopteris laurentiana</i>	Laurentian Bladder Fern				S2S3	6	49.0 ± 10.0	NS
P	<i>Woodsia glabella</i>	Smooth Cliff Fern				S2S3	6	49.0 ± 7.07	NS
P	<i>Botrychium lanceolatum</i> <i>ssp. angustisegmentum</i>	Narrow Triangle Moonwort				S2S3	7	32.9 ± 3.0	NS
P	<i>Botrychium simplex</i>	Least Moonwort				S2S3	3	36.1 ± 5.0	NS
P	<i>Angelica atropurpurea</i>	Purple-stemmed Angelica				S3	29	16.5 ± 0.01	NS
P	<i>Hieracium robinsonii</i>	Robinson's Hawkweed				S3	2	99.4 ± 1.6	NS
P	<i>Senecio pseudoarnica</i>	Seabeach Ragwort				S3	25	9.1 ± 1.0	NS
P	<i>Symphotrichum boreale</i>	Boreal Aster				S3	72	34.7 ± 0.01	NS
P	<i>Symphotrichum ciliolatum</i>	Fringed Blue Aster				S3	4	26.4 ± 0.01	NS
P	<i>Betula michauxii</i>	Michaux's Dwarf Birch				S3	15	50.6 ± 0.01	NS
P	<i>Betula pumila</i>	Bog Birch				S3	10	35.5 ± 0.01	NS
P	<i>Palustricodon aparinoides</i>	Marsh Bellflower				S3	10	47.5 ± 5.0	NS
P	<i>Lobelia kalmii</i>	Brook Lobelia				S3	100	32.8 ± 0.01	NS
P	<i>Sagina nodosa</i>	Knotted Pearlwort				S3	3	48.6 ± 5.0	NS
P	<i>Sagina nodosa ssp. borealis</i>	Knotted Pearlwort				S3	1	98.8 ± 5.0	PE
P	<i>Stellaria longifolia</i>	Long-leaved Starwort				S3	1	18.2 ± 0.01	NS
P	<i>Triosteum aurantiacum</i>	Orange-fruited Tinker's Weed				S3	224	25.6 ± 0.2	NS
P	<i>Viburnum edule</i>	Squashberry				S3	1	98.4 ± 7.07	NS
P	<i>Crassula aquatica</i>	Water Pygmyweed				S3	4	45.7 ± 7.07	NS
P	<i>Empetrum eamesii</i>	Pink Crowberry				S3	9	83.1 ± 0.01	NS
P	<i>Vaccinium uliginosum</i>	Alpine Bilberry				S3	3	88.5 ± 0.5	NS
P	<i>Halenia deflexa</i>	Spurred Gentian				S3	24	13.6 ± 0.01	NS
P	<i>Geranium bicknellii</i>	Bicknell's Crane's-bill				S3	1	53.5 ± 0.2	NS
P	<i>Myriophyllum verticillatum</i>	Whorled Water Milfoil				S3	5	34.8 ± 0.01	NS
P	<i>Utricularia resupinata</i>	Inverted Bladderwort				S3	1	69.2 ± 0.8	NS
P	<i>Epilobium densum</i>	Downy Willowherb				S3	22	18.8 ± 0.5	NS
P	<i>Senega sanguinea</i>	Blood Milkwort				S3	14	42.5 ± 0.01	NS
P	<i>Persicaria arifolia</i>	Halberd-leaved Tearthumb				S3	11	24.0 ± 0.01	NS
P	<i>Plantago rugelii</i>	Rugel's Plantain				S3	2	48.3 ± 0.01	NS
P	<i>Primula laurentiana</i>	Laurentian Primrose				S3	1	93.6 ± 7.07	NS
P	<i>Samolus parviflorus</i>	Seaside Brookweed				S3	23	34.9 ± 0.01	NS
P	<i>Pyrola minor</i>	Lesser Pyrola				S3	9	49.5 ± 2.0	NS
P	<i>Anemone virginiana</i>	Virginia Anemone				S3	31	34.0 ± 0.01	NS
P	<i>Galium kamtschaticum</i>	Northern Wild Licorice				S3	12	44.5 ± 0.2	NS
P	<i>Galium labradoricum</i>	Labrador Bedstraw				S3	93	33.8 ± 0.01	NS
P	<i>Salix pedicellaris</i>	Bog Willow				S3	13	34.7 ± 0.01	NS
P	<i>Salix sericea</i>	Silky Willow				S3	1	76.0 ± 0.01	NS
P	<i>Saxifraga paniculata ssp. laestadii</i>	Laestadius' Saxifrage				S3	5	44.6 ± 7.07	NS
P	<i>Lindernia dubia</i>	Yellow-seeded False Pimpernel				S3	9	18.0 ± 0.01	NS
P	<i>Laportea canadensis</i>	Canada Wood Nettle				S3	22	17.1 ± 0.01	NS
P	<i>Pilea pumila</i>	Dwarf Clearweed				S3	1	75.7 ± 6.0	NS
P	<i>Viola nephrophylla</i>	Northern Bog Violet				S3	11	19.3 ± 0.01	NS
P	<i>Carex bebbii</i>	Bebb's Sedge				S3	36	35.3 ± 7.07	NS
P	<i>Carex castanea</i>	Chestnut Sedge				S3	17	36.9 ± 0.01	NS
P	<i>Carex cryptolepis</i>	Hidden-scaled Sedge				S3	13	8.5 ± 0.7	NS
P	<i>Carex eburnea</i>	Bristle-leaved Sedge				S3	176	34.6 ± 5.0	NS
P	<i>Carex hirtifolia</i>	Pubescent Sedge				S3	18	18.1 ± 0.01	NS
P	<i>Carex lupulina</i>	Hop Sedge				S3	12	36.2 ± 0.01	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Carex rosea</i>	Rosy Sedge				S3	8	21.6 ± 0.01	NS
P	<i>Carex tenera</i>	Tender Sedge				S3	3	8.7 ± 1.0	NS
P	<i>Carex tribuloides</i>	Blunt Broom Sedge				S3	14	15.7 ± 1.0	NS
P	<i>Carex tuckermanii</i>	Tuckerman's Sedge				S3	2	81.4 ± 0.01	NS
P	<i>Carex atratiformis</i>	Scabrous Black Sedge				S3	2	49.0 ± 7.07	NS
P	<i>Eleocharis flavescens</i> var. <i>olivacea</i>	Bright-green Spikerush				S3	3	40.3 ± 5.0	NS
P	<i>Eleocharis quinqueflora</i>	Few-flowered Spikerush				S3	33	37.7 ± 0.05	NS
P	<i>Eriophorum gracile</i>	Slender Cottongrass				S3	8	35.2 ± 0.01	NS
P	<i>Schoenoplectus americanus</i>	Olney's Bulrush				S3	1	34.9 ± 0.01	NS
P	<i>Juncus stygius</i> ssp. <i>americanus</i>	Moor Rush				S3	31	53.6 ± 1.0	NS
P	<i>Oreojuncus trifidus</i>	Highland Rush				S3	2	56.1 ± 0.75	NS
P	<i>Cypripedium parviflorum</i>	Yellow Lady's-slipper				S3	168	11.1 ± 0.01	NS
P	<i>Goodyera oblongifolia</i>	Menzies' Rattlesnake-plantain				S3	12	73.4 ± 10.0	NS
P	<i>Neottia bifolia</i>	Southern Twayblade				S3	55	9.9 ± 0.01	NS
P	<i>Platanthera grandiflora</i>	Large Purple Fringed Orchid				S3	59	6.5 ± 0.01	NS
P	<i>Platanthera hookeri</i>	Hooker's Orchid				S3	3	7.4 ± 0.1	NS
P	<i>Dichantherium linearifolium</i>	Narrow-leaved Panic Grass				S3	1	94.7 ± 7.07	NS
P	<i>Poa glauca</i>	Glaucous Blue Grass				S3	9	49.3 ± 0.01	NS
P	<i>Stuckenia filiformis</i>	Thread-leaved Pondweed				S3	43	18.6 ± 0.01	NS
P	<i>Potamogeton praelongus</i>	White-stemmed Pondweed				S3	14	37.7 ± 0.1	NS
P	<i>Potamogeton richardsonii</i>	Richardson's Pondweed				S3	10	18.8 ± 0.01	NS
P	<i>Potamogeton zosteriformis</i>	Flat-stemmed Pondweed				S3	10	57.8 ± 7.07	NS
P	<i>Asplenium viride</i>	Green Spleenwort				S3	27	13.4 ± 0.2	NS
P	<i>Dryopteris fragrans</i>	Fragrant Wood Fern				S3	2	10.0 ± 7.07	NS
P	<i>Polystichum lonchitis</i>	Northern Holly Fern				S3	5	32.5 ± 5.0	NS
P	<i>Sceptridium dissectum</i>	Dissected Moonwort				S3	3	58.4 ± 1.0	NS
P	<i>Polypodium appalachianum</i>	Appalachian Polypody				S3	8	28.4 ± 0.01	NS
P	<i>Persicaria amphibia</i> var. <i>emersa</i>	Long-root Smartweed				S3?	1	48.6 ± 0.01	NS
P	<i>Spiranthes ochroleuca</i>	Yellow Ladies'-tresses				S3?	51	5.8 ± 0.2	NS
P	<i>Diphysastrum x sabinifolium</i>	Savin-leaved Ground-cedar				S3?	13	49.8 ± 1.0	NS
P	<i>Bidens vulgata</i>	Tall Beggarticks				S3S4	1	91.1 ± 0.01	NS
P	<i>Erigeron hyssopifolius</i>	Hyssop-leaved Fleabane				S3S4	88	35.2 ± 0.01	NS
P	<i>Hieracium paniculatum</i>	Panicled Hawkweed				S3S4	1	64.9 ± 0.2	NS
P	<i>Bidens beckii</i>	Water Beggarticks				S3S4	10	41.6 ± 0.5	NS
P	<i>Packera paupercula</i>	Balsam Groundsel				S3S4	185	5.8 ± 5.0	NS
P	<i>Atriplex glabriuscula</i> var. <i>franktonii</i>	Frankton's Saltbush				S3S4	4	11.6 ± 0.01	NS
P	<i>Shepherdia canadensis</i>	Soapberry				S3S4	170	46.2 ± 0.01	NS
P	<i>Vaccinium boreale</i>	Northern Blueberry				S3S4	17	44.4 ± 1.0	NS
P	<i>Vaccinium cespitosum</i>	Dwarf Bilberry				S3S4	43	61.3 ± 0.01	NS
P	<i>Vaccinium corymbosum</i>	Highbush Blueberry				S3S4	1	82.4 ± 0.2	NS
P	<i>Fagus grandifolia</i>	American Beech				S3S4	562	3.6 ± 0.2	NS
P	<i>Bartonia virginica</i>	Yellow Bartonia				S3S4	1	46.5 ± 0.1	NS
P	<i>Decodon verticillatus</i>	Swamp Loosestrife				S3S4	5	39.1 ± 7.07	NS
P	<i>Persicaria pennsylvanica</i>	Pennsylvania Smartweed				S3S4	19	13.1 ± 5.0	NS
P	<i>Fallopia scandens</i>	Climbing False Buckwheat				S3S4	28	17.9 ± 0.01	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Rumex pallidus</i>	Seabeach Dock				S3S4	1	35.9 ± 0.01	NS
P	<i>Pyrola asarifolia</i>	Pink Pyrola				S3S4	10	35.5 ± 0.01	NS
P	<i>Endotropis alnifolia</i>	Alder-leaved Buckthorn				S3S4	532	17.3 ± 0.01	NS
P	<i>Amelanchier spicata</i>	Running Serviceberry				S3S4	8	11.3 ± 0.01	NS
P	<i>Fragaria vesca</i> ssp. <i>americana</i>	Woodland Strawberry				S3S4	73	13.9 ± 0.04	NS
P	<i>Fragaria vesca</i>	Woodland Strawberry				S3S4	1	60.7 ± 0.2	NS
P	<i>Galium aparine</i>	Common Bedstraw				S3S4	3	35.1 ± 0.01	NS
P	<i>Geocaulon lividum</i>	Northern Comandra				S3S4	81	4.6 ± 2.5	NS
P	<i>Limosella australis</i>	Southern Mudwort				S3S4	6	54.8 ± 5.0	NS
P	<i>Ulmus americana</i>	White Elm				S3S4	114	13.5 ± 0.01	NS
P	<i>Verbena hastata</i>	Blue Vervain				S3S4	56	26.5 ± 0.2	NS
P	<i>Viola selkirkii</i>	Great-Spurred Violet				S3S4	1	5.3 ± 1.0	NS
P	<i>Carex argyrantha</i>	Silvery-flowered Sedge				S3S4	1	68.8 ± 0.5	NS
P	<i>Triglochin gaspensis</i>	Gaspé Arrowgrass				S3S4	8	19.2 ± 0.01	NS
P	<i>Juncus acuminatus</i>	Sharp-Fruit Rush				S3S4	4	46.8 ± 0.01	NS
P	<i>Juncus subcaudatus</i>	Woods-Rush				S3S4	10	36.9 ± 0.01	NS
P	<i>Luzula parviflora</i> ssp. <i>melanocarpa</i>	Black-fruited Woodrush				S3S4	13	70.9 ± 0.01	NS
P	<i>Goodyera repens</i>	Lesser Rattlesnake-plantain				S3S4	20	19.6 ± 0.01	NS
P	<i>Liparis loeselii</i>	Loesel's Twayblade				S3S4	18	12.5 ± 0.01	NS
P	<i>Platanthera obtusata</i>	Blunt-leaved Orchid				S3S4	10	10.0 ± 10.0	NS
P	<i>Platanthera orbiculata</i>	Small Round-leaved Orchid				S3S4	10	14.1 ± 0.01	NS
P	<i>Alopecurus aequalis</i>	Short-awned Foxtail				S3S4	16	18.9 ± 0.01	NS
P	<i>Dichanthelium clandestinum</i>	Deer-tongue Panic Grass				S3S4	97	61.4 ± 0.01	NS
P	<i>Panicum philadelphicum</i>	Philadelphia Panicgrass				S3S4	1	33.5 ± 0.01	NS
P	<i>Koeleria spicata</i>	Narrow False Oats				S3S4	6	56.5 ± 0.01	NS
P	<i>Asplenium trichomanes</i>	Maidenhair Spleenwort				S3S4	8	7.4 ± 0.2	NS
P	<i>Equisetum pratense</i>	Meadow Horsetail				S3S4	22	30.7 ± 0.01	NS
P	<i>Diphasiastrum complanatum</i>	Northern Ground-cedar				S3S4	6	39.1 ± 5.0	NS
P	<i>Diphasiastrum sitchense</i>	Sitka Ground-cedar				S3S4	32	11.3 ± 0.01	NS
P	<i>Huperzia appressa</i>	Mountain Firmoss				S3S4	1	44.3 ± 1.0	NS
P	<i>Sceptridium multifidum</i>	Leathery Moonwort				S3S4	6	47.2 ± 10.0	NS
P	<i>Botrychium matricariifolium</i>	Daisy-leaved Moonwort				S3S4	5	19.6 ± 10.0	NS
P	<i>Viola canadensis</i>	Canada Violet				SH	1	48.9 ± 0.25	NS

5.1 SOURCE BIBLIOGRAPHY (100 km)

The recipient of these data shall acknowledge the AC CDC and the data sources listed below in any documents, reports, publications or presentations, in which this dataset makes a significant contribution.

# recs	CITATION
6189	Lepage, D. 2014. Maritime Breeding Bird Atlas Database. Bird Studies Canada, Sackville NB, 407,838 recs.
3950	East Coast Aquatics Inc. 2023. Year 3 (2022) Wood Turtle Monitoring Hwy 104 Sutherlands River To Antigonish.
3736	Eaton, S. 2014. Nova Scotia Wood Turtle Database. Environment and Climate Change Canada, 4843 recs.
3130	Pardieck, K.L., Ziolkowski Jr., D.J., Lutmerding, M., Aponte, V.I., and Hudson, M-A.R. 2020. North American Breeding Bird Survey Dataset 1966 - 2019: U.S. Geological Survey data release, https://doi.org/10.5066/P9J6QUF6
2909	iNaturalist.ca. 2023. iNaturalist Data Export December 2022. iNaturalist.org; iNaturalist.ca, Web site: 128634 recs.
1591	eBird. 2020. eBird Basic Dataset. Version: EBD_relFeb-2020. Ithaca, New York. Feb 2020, Cape Breton Bras d'Or Lakes Watershed subset. Cornell Lab of Ornithology, 5063 recs.
1535	Erskine, A.J. 1992. Maritime Breeding Bird Atlas Database. NS Museum & Nimbus Publ., Halifax, 82,125 recs.
1366	Paquet, Julie. 2018. Atlantic Canada Shorebird Survey (ACSS) database 2012-2018. Environment Canada, Canadian Wildlife Service.

# recs	CITATION
1162	Morrison, Guy. 2011. Maritime Shorebird Survey (MSS) database. Canadian Wildlife Service, Ottawa, 15939 surveys. 86171 recs.
937	iNaturalist.ca. 2024. iNaturalist Data Export December 2023. iNaturalist.org; iNaturalist.ca.
831	NS DNR Wildlife Division. Biodiversity Investigation Reporting (BIR) SAR Record Export. Nova Scotia Department of Natural Resources and Renewables, 3071 recs.
740	Blaney, C.S.; Mazerolle, D.M.; Belliveau, A.B. 2015. Atlantic Canada Conservation Data Centre Fieldwork 2015. Atlantic Canada Conservation Data Centre, # recs.
728	iNaturalist. 2020. iNaturalist Data Export 2020. iNaturalist.org and iNaturalist.ca, Web site: 128728 recs.
596	Blaney, C.S.; Mazerolle, D.M.; Belliveau, A.B. 2014. Atlantic Canada Conservation Data Centre Fieldwork 2014. Atlantic Canada Conservation Data Centre, # recs.
560	Chapman-Lam, C.J. 2022. Atlantic Canada Conservation Data Centre 2021 botanical fieldwork. Atlantic Canada Conservation Data Centre, 15099 recs.
496	eBird. 2020. eBird Basic Dataset. Version: EBD_relNov-2019. Ithaca, New York. Nov 2019, Cape Breton Bras d'Or Lakes Watershed subset. Cornell Lab of Ornithology.
452	Churchill, J.L. 2023. Atlantic Canada Conservation Data Centre Fieldwork 2023. Atlantic Canada Conservation Data Centre.
443	Neily, T.H. & Pepper, C.; Toms, B. 2018. Nova Scotia lichen database [as of 2018-03]. Mersey Tobeatic Research Institute.
403	Benjamin, L.K. (compiler). 2012. Significant Habitat & Species Database. Nova Scotia Dept Natural Resources, 4965 recs.
382	SwiftWatch. 2022. Total Chimney Swift counts from roost watches for the duration of the SwiftWatch program (2011-2021). Birds Canada.
342	Benjamin, L.K. (compiler). 2007. Significant Habitat & Species Database. Nova Scotia Dept Natural Resources, 8439 recs.
320	Belliveau, A.G. 2016. Atlantic Canada Conservation Data Centre Fieldwork 2016. Atlantic Canada Conservation Data Centre, 10695 recs.
320	Churchill, J.L. 2022. Atlantic Canada Conservation Data Centre Fieldwork 2022. Atlantic Canada Conservation Data Centre.
320	Neily, T.H. & Pepper, C.; Toms, B. 2013. Nova Scotia lichen location database. Mersey Tobeatic Research Institute, 1301 records.
319	Belliveau, A.G. 2020. E.C. Smith Herbarium and Atlantic Canada Conservation Data Centre Fieldwork 2019, 2020. E.C. Smith Herbarium.
319	Wilhelm, S.I. et al. 2011. Colonial Waterbird Database. Canadian Wildlife Service, Sackville, 2698 sites, 9718 recs (8192 obs).
312	iNaturalist.ca. 2024. iNaturalist Data Export December 2023 botany records. iNaturalist.org; iNaturalist.ca.
309	Churchill, James. 2024. CPAWS records from the 2024 field season. Lobaria Consulting, 4451 records.
307	Neily, T.H. 2017. Nova Scotia lichen records. Mersey Tobeatic Research Institute.
299	Blaney, C.S.; Mazerolle, D.M. 2012. Fieldwork 2012. Atlantic Canada Conservation Data Centre, 13,278 recs.
270	Hicks, Andrew. 2009. Coastal Waterfowl Surveys Database, 2000-08. Canadian Wildlife Service, Sackville, 46488 recs (11149 non-zero).
266	Blaney, C.S.; Mazerolle, D.M. 2009. Fieldwork 2009. Atlantic Canada Conservation Data Centre. Sackville NB, 13395 recs.
265	Churchill, J.L. 2020. Atlantic Canada Conservation Data Centre Fieldwork 2020. Atlantic Canada Conservation Data Centre, 1083 recs.
264	Wildlife Division. 2021. Fraxinus nigra records assembled to define and model habitat. Nova Scotia Department of Natural Resources and Renewables.
258	Blaney, C.S.; Mazerolle, D.M. 2010. Fieldwork 2010. Atlantic Canada Conservation Data Centre. Sackville NB, 15508 recs.
247	Bryson, Ian. 2024. Nova Scotia vascular and non-vascular flora observations Sept 2023-Oct 2024. Fraxinus Environmental & Geomatics, 10882 records.
238	Clayden, S. Digitization of Wolfgang Maass Nova Scotia forest lichen collections, 1964-2004. New Brunswick Museum. 2018.
238	Newell, R.E. 2000. E.C. Smith Herbarium Database. Acadia University, Wolfville NS, 7139 recs.
227	Chapman-Lam, C.J. 2021. Atlantic Canada Conservation Data Centre 2020 botanical fieldwork. Atlantic Canada Conservation Data Centre, 17309 recs.
217	Brooks, Fiona. 2023. Field data - 2023. Atlantic Canada Conservation Data Centre.
215	Pepper, C. 2021. Rare bird, plant and mammal observations in Nova Scotia, 2017-2021.
202	Staicer, Cindy. 2023. 2022 SAR Bird field occurrences from the Landbirds at Risk Project, NS. Dalhousie University, 446 records.
170	Newell, R.E. 2005. E.C. Smith Digital Herbarium. E.C. Smith Herbarium, Irving Biodiversity Collection, Acadia University, Web site: http://luxor.acadiau.ca/library/Herbarium/project/ . 582 recs.
166	Blaney, C.S.; Mazerolle, D.M.; Hill, N.M. 2011. Nova Scotia Crown Share Land Legacy Trust Fieldwork. Atlantic Canada Conservation Data Centre, 5022 recs.
163	Neily, T.H. & Pepper, C. 2020. Nova Scotia SMP lichen surveys 2020. Mersey Tobeatic Research Institute.
157	Amirault, D.L. & Stewart, J. 2007. Piping Plover Database 1894-2006. Canadian Wildlife Service, Sackville, 3344 recs, 1228 new.
152	Klymko, J.J.D.; Robinson, S.L. 2012. 2012 field data. Atlantic Canada Conservation Data Centre, 447 recs.
151	Unama'ki Institute of Natural Resources (UINR). 2025. SAR data for the Maliamu'kik Msit Ko'kqmanaq program from 2024. Unama'ki Institute of Natural Resources (UINR), 168 records.
146	Pronych, G. & Wilson, A. 1993. Atlas of Rare Vascular Plants in Nova Scotia. Nova Scotia Museum, Halifax NS, I:1-168, II:169-331. 1446 recs.
140	Quigley, E.J. & Neily, P.D. 2012. Botanical Discoveries in Inverness County, NS. Nova Scotia Dept Natural Resources. Pers. comm. to C.S. Blaney, Nov. 29, 141 rec.
136	English, M. 2024. Colonial Waterbird Database. Canadian Wildlife Service.
134	Cameron, R.P. 2011. Lichen observations, 2011. Nova Scotia Environment & Labour, 731 recs.
128	Toms, Brad & Pepper, Chris; Neily, Tom. 2022. Nova Scotia lichen database [as of 2022-04]. Mersey Tobeatic Research Institute.
125	Toms, B. 2018. Bat Species data from www.batconservation.ca for Nova Scotia. Mersey Tobeatic Research Institute, 547 Records.
118	LaPaix, R.W.; Crowell, M.J.; MacDonald, M.; Neily, T.D.; Quinn, G. 2017. Stantec Nova Scotia rare plant records, 2012-2016. Stantec Consulting.
106	Blaney, C.S. & Spicer, C.D.; Popma, T.M.; Basquill, S.P. 2003. Vascular Plant Surveys of Northumberland Strait Rivers & Amherst Area Peatlands. Nova Scotia Museum Research Grant, 501 recs.
103	MacDonald, E.C. 2018. Piping Plover nest records from 2010-2017. Canadian Wildlife Service.
99	Blaney, C.S. 2016. Atlantic Canada Conservation Data Centre Fieldwork 2016. Atlantic Canada Conservation Data Centre, 6719 recs.
96	Klymko, J.J.D. 2012. Insect fieldwork & submissions, 2011. Atlantic Canada Conservation Data Centre. Sackville NB, 760 recs.
93	MacDonald, E.C. 2018. CWS Piping Plover Census, 2010-2017. Canadian Wildlife Service, 672 recs.
93	Mazerolle, D.M. 2016. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre.
91	Klymko, J. 2018. Maritimes Butterfly Atlas database. Atlantic Canada Conservation Data Centre.
90	Blaney, C.S.; Korol, J.B.; Crowell, I. 2023. 2022 AC CDC Botany program field data. Atlantic Canada Conservation Data Centre, 5293 records.

# recs	CITATION
85	Belliveau, A.G., King, K., Vail, C. 2020. Bras d'Or Lakes Watershed Pectenaria plumbea records, 2020. Acadia University E.C. Smith Herbarium.
84	LaPaix, Rich. 2022. Rare species observations, 2018-2022. Nova Scotia Nature Trust.
81	Churchill, J.L. 2018. Atlantic Canada Conservation Data Centre Fieldwork 2018. Atlantic Canada Conservation Data Centre, 907 recs.
80	Belliveau, A.G. 2018. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre.
77	Island Nature Trust. 2023. Bobolink observations from Farmland Bird Program, 2017-2022. Island Nature Trust. Pers. comm., 1346 records.
77	Richardson, Leif. 2018. Maritimes Bombus records from various sources. Richardson, Leif.
76	Arsenault, M. 2019. Cormorant colony nest counts. PE Department of Communities, Land, and Environment.
76	Blaney, C.S. 2020. Sean Blaney 2020 field data. Atlantic Canada Conservation Data Centre, 4407 records.
71	Amirault, D.L. & McKnight, J. 2003. Piping Plover Database 1991-2003. Canadian Wildlife Service, Sackville, unpublished data. 7 recs.
71	Neily, T.H. & Pepper, C.; Toms, B. 2020. Nova Scotia lichen database [as of 2020-03-18]. Mersey Tobeatic Research Institute.
70	Cameron-MacMillan, Maureen. 2020. Northern Goshawk Nests in Eastern Nova Scotia, as of November, 2020. Nova Scotia Department of Lands and Forestry.
69	Benjamin, L.K. 2012. NSDNR fieldwork & consultant reports 2008-2012. Nova Scotia Dept Natural Resources, 196 recs.
68	Bryson, I.C. 2020. Nova Scotia flora and lichen observations 2020. Nova Scotia Environment, 139 recs.
67	Manthorne, A. 2014. MaritimesSwiftwatch Project database 2013-2014. Bird Studies Canada, Sackville NB, 326 recs.
67	Power, T.; Gilhen, J. 2018. Status, distribution, and nesting ecology of Snapping Turtle (Chelydra serpentina) on Cape Breton Island, Nova Scotia, Canada. The Canadian Field Naturalist, 132(1): 8-17.
65	Staicer, C. 2021. Additional compiled Nova Scotia Species at Risk bird records, 2005-2020. Dalhousie University.
60	AMEC Earth & Environmental. 2024. Black Point Quarry EA Observation Data. Nova Scotia Department of Natural Resources & Renewables, 60 recs.
59	Scott, F.W. 2002. Nova Scotia Herpetofauna Atlas Database. Acadia University, Wolfville NS, 8856 recs.
58	Benjamin, L.K. 2009. D. Anderson Odonata Records for Cape Breton, 1997-2004. Nova Scotia Dept Natural Resources, 1316 recs.
55	Staicer, Cindy. 2022. 2021 Landbird Species at Risk observations. Dalhousie University.
54	Benjamin, L.K. (compiler). 2001. Significant Habitat & Species Database. Nova Scotia Dept of Natural Resources, 15 spp, 224 recs.
51	Munro, Marian K. Nova Scotia Provincial Museum of Natural History Herbarium Database. Nova Scotia Provincial Museum of Natural History, Halifax, Nova Scotia. 2013.
45	Belliveau, A.G. 2018. E.C. Smith Herbarium and Atlantic Canada Conservation Data Centre Fieldwork 2018. E.C. Smith Herbarium, 6226 recs.
44	Churchill, J.L. 2021. Atlantic Canada Conservation Data Centre Fieldwork 2021. Atlantic Canada Conservation Data Centre.
44	Staicer, Cindy. 2023. 2022 SAR Bird ARU occurrences. Dalhousie University, 379 records.
42	Neily, T.H. 2010. Erioderma Pedicellatum records 2005-09. Mersey Tobatic Research Institute, 67 recs.
42	Pulsifer, M.D. 2002. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 369 recs.
42	Zinck, M. & Roland, A.E. 1998. Roland's Flora of Nova Scotia. Nova Scotia Museum, 3rd ed., rev. M. Zinck; 2 Vol., 1297 pp.
40	Sollows, M.C.. 2008. NBM Science Collections databases: mammals. New Brunswick Museum, Saint John NB, download Jan. 2008, 4983 recs.
40	Staicer, C. & Bliss, S.; Achenbach, L. 2017. Occurrences of tracked breeding birds in forested wetlands. , 303 records.
39	Patrick, A.; Horne, D.; Noseworthy, J. et. al. 2017. Field data for Nova Scotia and New Brunswick, 2015 and 2017. Nature Conservancy of Canada.
38	Munro, Marian K. Tracked lichen specimens, Nova Scotia Provincial Museum of Natural History Herbarium. Atlantic Canada Conservation Data Centre. 2019.
38	Pepper, C. 2013. 2013 rare bird and plant observations in Nova Scotia. , 181 records.
38	Siemens-Worsley, Allison. 2024. iNaturalist Wood Turtle observations for New Brunswick and Nova Scotia. NatureServe Canada.
38	Williams, M. Cape Breton University Digital Herbarium. Cape Breton University Digital Herbarium. 2013.
37	Canadian Wildlife Service, Dartmouth. 2010. Piping Plover censuses 2007-09, 304 recs.
37	Neily, T.H. 2017. Maritimes Lichen and Bryophyte records. Atlantic Canada Conservation Data Centre, 1015 recs.
36	Unama'ki Institute of Natural Resources. 2023. Species at Risk records from the Maliamu'kik Msit to Ko'kmanaq project. Unama'ki Institute of Natural Resources, 49 records.
35	Mazerolle, D.M. 2018. Atlantic Canada Conservation Data Centre botanical fieldwork 2018. Atlantic Canada Conservation Data Centre, 13515 recs.
35	Roland, A.E. & Smith, E.C. 1969. The Flora of Nova Scotia, 1st Ed. Nova Scotia Museum, Halifax, 743pp.
35	Wilhelm, S.I. et al. 2019. Colonial Waterbird Database. Canadian Wildlife Service.
33	Nickerson, Shayla. 2020. UINR Field Observations 2020-2021. Unama'ki Institute of Natural Resources.
32	Brunelle, P.-M. (compiler). 2009. ADIP/MDDS Odonata Database: data to 2006 inclusive. Atlantic Dragonfly Inventory Program (ADIP), 24200 recs.
31	Mazerolle, D.M. 2017. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre.
29	Crowell, Iain. 2023. Field data - 2023. Atlantic Canada Conservation Data Centre.
29	Neily, T.H. 2019. Tom Neily NS Bryophyte records (2009-2013). T.H. Neily, Atlantic Canada Conservation Data Centre, 1029 specimen records.
28	Birds Canada. 2023. Maritimes Swiftwatch project data for 2023. Pers. comm., 270 recs.
28	Neily, T.H. 2012. 2012 Erioderma pedicellatum records in Nova Scotia.
28	Patrick, Allison. 2021. Animal and plant records from NCC properties from 2019 and 2020. Nature Conservancy Canada.
27	Cameron, R.P. 2009. Erioderma pedicellatum database, 1979-2008. Dept Environment & Labour, 103 recs.
27	iNaturalist. 2018. iNaturalist Data Export 2018. iNaturalist.org and iNaturalist.ca, Web site: 11700 recs.
26	Belliveau, A.G. 2021. E.C. Smith Herbarium and Atlantic Canada Conservation Data Centre Fieldwork 2021. E.C. Smith Herbarium.
26	Blaney, C.S.; Spicer, C.D. 2001. Fieldwork 2001. Atlantic Canada Conservation Data Centre. Sackville NB, 981 recs.
25	Anderson, Frances; Neily, Tom. 2014. A Reconnaissance Level Survey of Cryptogams in Selected Karst Topography in Cape Breton. Mersey Tobeatic Research Institute.
25	Rock, J. 2020. Atlantic Canada Piping Plover field surveys: Nesting pairs by beach, 2018-2020. Environment and Climate Change Canada - Canadian Wildlife Service, 216 records.

# recs	CITATION
25	Toms, Brad. 2022. Non-Lichen Observations from Lichen SMP and NCC Property Searches. Mersey Tobeatic Research Institute.
24	Basquill, S.P., Porter, C. 2019. Bryophyte and lichen specimens submitted to the E.C. Smith Herbarium. NS Department of Lands and Forestry.
24	Neily, T.H. & Pepper, C.; Toms, B. 2015. Nova Scotia lichen location database [as of 2015-02-15]. Mersey Tobeatic Research Institute, 1691 records.
24	Neily, T.H. 2013. Email communication to Sean Blaney regarding <i>Listera australis</i> observations made from 2007 to 2011 in Nova Scotia. , 50.
23	Adams, J. & Herman, T.B. 1998. Thesis, Unpublished map of <i>C. insculpta</i> sightings. Acadia University, Wolfville NS, 88 recs.
23	Benjamin, L.K. 2009. Boreal Felt Lichen, Mountain Avens, Orchid and other recent records. Nova Scotia Dept Natural Resources, 105 recs.
22	Benjamin, L.K. (compiler). 2002. Significant Habitat & Species Database. Nova Scotia Dept of Natural Resources, 32 spp, 683 recs.
22	Chapman, C.J. 2018. Atlantic Canada Conservation Data Centre botanical fieldwork 2018. Atlantic Canada Conservation Data Centre, 11171 recs.
21	Anderson, Frances; Neily, Tom. 2010. A Reconnaissance Level Survey of Calciphilous Lichens in Selected Karst Topography in Nova Scotia with Notes on Incidental Bryophytes. Mersey Tobeatic Research Institute.
21	iNaturalist. 2020. iNaturalist butterfly records selected for the Maritimes Butterfly Atlas. iNaturalist.
21	Korol, Burke. 2023. Field data - 2023. Atlantic Canada Conservation Data Centre.
20	Kennedy, Bob; White, Jeff. 2024. New Jersey Rush observations near Forchu, NS. Personal Collection, 20 recs.
20	Paquet, Julie. 2019. Atlantic Canada Shorebird Survey ACSS database for 2019. Environment Canada, Canadian Wildlife Service.
19	Gillis, J. 2015. Rare plant records from Cape Breton gypsum sites. Pers. comm., 25 rare plant records.
19	Porter, C.J.M. 2014. Field work data 2007-2014. Nova Scotia Nature Trust, 96 recs.
19	St. Mary's River Association. 2025. Sturgeon and Wood Turtle Records. , 19 recs.
18	Bell, G. 2018. Moose, bat and bird records from Goldboro LNG Project, NS, Environmental Assessment. Amec Foster Wheeler.
18	Benjamin, L.K. 2011. NSDNR fieldwork & consultant reports 1997, 2009-10. Nova Scotia Dept Natural Resources, 85 recs.
18	Birds Canada. 2024. Chimney swift observations 2024. Birds Canada, 220 records.
18	Misc. rare species records gathered by NSDNR staff or communicated to NSDNR and forwarded to ACCDC
17	Catling, P.M., Erskine, D.S. & MacLaren, R.B. 1985. The Plants of Prince Edward Island with new records, nomenclatural changes & corrections & deletions, 1st Ed. Research Branch, Agriculture Canada, Ottawa, Publication 1798. 22pp.
17	Environment and Climate Change Canada. 2025. Piping Plover Census records from 2023-2024. Canadian Wildlife Service, 134 records.
17	Lundholm, Jeremy. 2021. Bras d'Or Watershed Field Survey. Saint Mary's University.
16	anon. 2001. S.. H.. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 76 recs.
16	Island Nature Trust. 2023. INT 2023 Bobolink Observations. Island Nature Trust, 177 recs.
16	Liv Monck-Whipp. 2024. Incidental observations from Nova Scotia Nature Trust 2024 field season. Nova Scotia Nature Trust.
16	Paquet, Julie. 2024. Atlantic Canada Piping Plover census data from 2021 and 2022. Environment and Climate Change Canada - Canadian Wildlife Service, 140 records.
15	Birds Canada. 2023. NatureCounts Bank Swallow Data. Birds Canada, 464 recs.
15	Cameron, R.P. 2012. Rob Cameron 2012 vascular plant data. NS Department of Environment, 30 recs.
15	Knapton, R. & Power, T.; Williams, M. 2001. SAR Inventory: Fortress Louisbourg NP. Parks Canada, Atlantic, SARINV01-13. 157 recs.
15	Newell, R.E. 2004. Assessment and update status report on the New Jersey Rush (<i>Juncus caesariensis</i>) in Canada. Committee on the Status of Endangered Wildlife in Canada, 15 recs.
14	Basquill, S.P. 2012. 2012 Bryophyte specimen data. Nova Scotia Department of Natural Resources, 37 recs.
14	Birds Canada. 2022. Maritimes Swiftwatch project data for 2022. Pers. comm., 155 records.
14	Chapman, C.N. (Cody). 2020. Nova Scotia Black Ash (<i>Fraxinus nigra</i>) field observations by Confederacy of Mainland Mi'kmaq. Forestry Program, Confederacy of Mainland Mi'kmaq.
14	Churchill, J.L. 2019. Atlantic Canada Conservation Data Centre Fieldwork 2019. Atlantic Canada Conservation Data Centre.
14	Haughian, Sean. 2021. Update to lichen data from 2017-2021. Nova Scotia Museum.
14	Island Nature Trust. 2016. Farmland birds project. Mader, Shannon (ed.) .
14	Taylor, B.R., and Tam, J.C. 2012. Local distribution of the rare plant <i>Triosteum aurantiacum</i> in northeastern Nova Scotia, Canada. <i>Rhodora</i> , 114(960): 366-382.
13	Island Nature Trust. 2023. PEI Bank Swallow Survey Data. Island Nature Trust, 164 recs.
13	Island Nature Trust. 2024. INT 2024 Bobolink Observations. Island Nature Trust, 355 records.
13	Klymko, J.J.D. 2016. 2015 field data. Atlantic Canada Conservation Data Centre.
13	Layberry, R.A. & Hall, P.W., LaFontaine, J.D. 1998. The Butterflies of Canada. University of Toronto Press. 280 pp+plates.
13	Parker, G.R., Maxwell, J.W., Morton, L.D. & Smith, G.E.J. 1983. The ecology of <i>Lynx</i> , <i>Lynx canadensis</i> , on Cape Breton Island. <i>Canadian Journal of Zoology</i> , 61:770-786. 51 recs.
12	Basquill, S.P. 2012. 2012 rare vascular plant field data. Nova Scotia Department of Natural Resources, 37 recs.
12	Belland, R.J. Maritimes moss records from various herbarium databases. 2014.
12	Cameron, R.P. 2017. 2017 rare species field data. Nova Scotia Environment, 64 recs.
12	Driscoll, Kendra Lichen specimens from Atlantic Canada. New Brunswick Museum. 2023.
12	Skomorowski, Joanna. 2024. 2022 Nova Scotia Nature Trust SAR occurrences. Nova Scotia Nature Trust, 58 records.
11	Blaney, C.S.; Spicer, C.D.; Mazerolle, D.M. 2005. Fieldwork 2005. Atlantic Canada Conservation Data Centre. Sackville NB, 2333 recs.
11	Cameron, R.P. 2013. 2013 rare species field data. Nova Scotia Department of Environment, 71 recs.
11	Downes, C. 1998-2000. Breeding Bird Survey Data. Canadian Wildlife Service, Ottawa, 111 recs.
11	Frances MacKinnon. 2023. SAR records from Bear Head Energy EA. NS Department of Natural Resources and Renewables.

recs CITATION

11	Moore, Lance. 2023. Island Nature Trust 2023 Field Observations. Island Nature Trust.
10	Blaney, C.S. 2000. Fieldwork 2000. Atlantic Canada Conservation Data Centre. Sackville NB, 1265 recs.
10	Canadian Wildlife Health Cooperative. 2024. Atlantic Canada Bat Hotline data from NS and PE. Atlantic Bat Conservation Project.
10	e-Butterfly. 2016. Export of Maritimes records and photos. Maxim Larrivee, Sambo Zhang (ed.) e-butterfly.org.
10	Hirtle, Sarah. 2023. 2022 Bank Swallow occurrence data. Island Nature Trust.
10	Island Nature Trust. 2025. Bank swallow colony data from 2024 for Prince Edward Island. Cahill, Jenna (ed.) Island Nature Trust, 111 records.
10	McNeil, J.A. 2020. Snapping Turtle and Eastern Painted Turtle records, 2020. Mersey Tobeatic Research Institute.
10	McRae, Daniel. 2023. 2023 species occurrences for Prince Edward Island. MacPhail Woods Ecological Forestry Project, 4921 records.
10	Murphy, S. 2006. Juncus caesariensis data from Yava Technologies In Situ Leach Mining Environmental Assessment. Jacques Whitford Inc., 10 recs.
10	Ogden, K. Nova Scotia Museum butterfly specimen database. Nova Scotia Museum. 2017.
10	White, S. 2018. Notable species sightings, 2016-2017. East Coast Aquatics.
9	ACAP Cape Breton. 2025. Bombus terricola and Danaus plexippus observations in Cape Breton in summer 2024. ACAP Cape Breton, 20 records.
9	Bryson, I. 2020. Nova Scotia and Newfoundland rare species observations, 2018-2020. Nova Scotia Environment.
9	Chaput, G. 2002. Atlantic Salmon: Maritime Provinces Overview for 2001. Dept of Fisheries & Oceans, Atlantic Region, Science Stock Status Report D3-14. 39 recs.
9	McMullin, R.T. 2022. Maritimes lichen records. Canadian Museum of Nature.
9	Mersey Tobeatic Research Institute. 2022. Bat data from Bat Hotline from 2020-2022. Toms, Brad (ed.) Mersey Tobeatic Research Institute, 85 records.
9	Neily, T.H. Tom Neily NS Sphagnum records (2009-2014). T.H. Neily, Atlantic Canada Conservation Data Centre. 2019.
9	Unama'ki Institute of Natural Resources. 2022. Wisqoq (Black Ash) records in Port Hood, NS. pers. comm., 9 records.
8	Archibald, D.R. 2003. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 213 recs.
8	Envirosphere Consultants Ltd., Strum. 2023. SAR records from three Environmental Assessments in Nova Scotia. Envirosphere Consultants Ltd., Strum, 48 records.
8	Gilhen, J. 1984. Amphibians & Reptiles of Nova Scotia, 1st Ed. Nova Scotia Museum, 164pp.
8	Henger, Benjamin. 2023. Barn Swallow observations since 2017. Island Nature Trust.
8	McRae, Daniel. 2023. Black Ash records on PEI for 2023. MacPhail Woods Ecological Forestry Project, 269 records.
8	Oldham, M.J. 2000. Oldham database records from Maritime provinces. Oldham, M.J.; ONHIC, 487 recs.
8	Toms, Brad. 2024. PHP survey results 2024. Mersey Tobeatic Research Institute, 9 recs.
8	Whittam, R.M. 1999. Status Report on the Roseate Tern (update) in Canada. Committee on the Status of Endangered Wildlife in Canada, 36 recs.
7	Ferguson, D.C. 1954. The Lepidoptera of Nova Scotia. Part I, macrolepidoptera. Proceedings of the Nova Scotian Institute of Science, 23(3), 161-375.
7	Francis MacKinnon. 2023. Multiple Environmental Assessment studies in NS - 2023. Nova Scotia Department of Natural Resources.
7	Nova Scotia Nature Trust. 2013. Nova Scotia Nature Trust 2013 Species records. Nova Scotia Nature Trust, 95 recs.
7	Nussey, Pat & NCC staff. 2019. AEI tracked species records, 2016-2019. Chapman, C.J. (ed.) Atlantic Canada Conservation Data Centre, 333.
7	Phinney, Lori; Toms, Brad; et. al. 2016. Bank Swallows (Riparia riparia) in Nova Scotia: inventory and assessment of colonies. Merser Tobeatic Research Institute, 25 recs.
7	Robinson, S.L. 2011. 2011 ND dune survey field data. Atlantic Canada Conservation Data Centre, 2715 recs.
6	Blaney, C.S.; Mazerolle, D.M.; Oberndorfer, E. 2007. Fieldwork 2007. Atlantic Canada Conservation Data Centre. Sackville NB, 13770 recs.
6	Holder, M.L.; Kingsley, A.L. 2000. Kinglsey and Holder observations from 2000 field work.
6	Klymko, J. 2021. Atlantic Canada Conservation Data Centre zoological fieldwork 2020. Atlantic Canada Conservation Data Centre.
6	Neily, T.H. & Pepper, C.; Toms, B. 2018. Nova Scotia lichen database Update. Mersey Tobeatic Research Institute, 14 recs.
6	NS DNR. 2017. Black Ash records from NS DNR Permanent Sample Plots (PSPs), 1965-2016. NS Dept of Natural Resources.
6	Pepper, Chris. 2020. Species of conservation concern, Powderhorn Lake, NS. pers.comm. to J. Churchill.
6	Popma, T.M. 2003. Fieldwork 2003. Atlantic Canada Conservation Data Centre. Sackville NB, 113 recs.
5	Blaney, C.S. 2003. Fieldwork 2003. Atlantic Canada Conservation Data Centre. Sackville NB, 1042 recs.
5	Blaney, C.S.; Spicer, C.D.; Rothfels, C. 2004. Fieldwork 2004. Atlantic Canada Conservation Data Centre. Sackville NB, 1343 recs.
5	Cameron, R.P. 2009. Cyanolichen database. Nova Scotia Environment & Labour, 1724 recs.
5	Cameron, R.P. 2018. Degelia plumbea records. Nova Scotia Environment.
5	Lawrence Benjamin. 2009. Wood Anemone records from Victoria Co., from personal communication with S. Ferguson. Nova Scotia Department of Natural Resources, 5 records.
5	McNeil, Jeffie. 2023. 2022 Turtle Records. Mersey Tobeatic Research Institute.
5	Munro, Marian K. Nova Scotia Provincial Museum of Natural History Herbarium Database. Nova Scotia Provincial Museum of Natural History, Halifax, Nova Scotia. 2014.
5	Plissner, J.H. & Haig, S.M. 1997. 1996 International piping plover census. US Geological Survey, Corvallis OR, 231 pp.
5	Powell, B.C. 1967. Female sexual cycles of Chrysemy spicta & Clemmys insculpta in Nova Scotia. Can. Field-Nat., 81:134-139. 26 recs.
5	Power, T. 2019. Cape Breton Wood Turtle records. NS Lands and Forestry.
5	Whittam, R.M. 1997. Status Report on the Roseate Tern (Sterna dougallii) in Canada. Committee on the Status of Endangered Wildlife in Canada, 5 recs.
4	Blaney, C.S.; Mazerolle, D.M. 2008. Fieldwork 2008. Atlantic Canada Conservation Data Centre. Sackville NB, 13343 recs.
4	Blaney, C.S.; Mazerolle, D.M.; Belliveau, A.B. 2013. Atlantic Canada Conservation Data Centre Fieldwork 2013. Atlantic Canada Conservation Data Centre, 9000+ recs.
4	Campbell, G. 2017. Maritimes Bicknell's Thrush database 2002-2015. Bird Studies Canada, Sackville NB, 609 recs.
4	e-Butterfly. 2019. Export of Maritimes records and photos. McFarland, K. (ed.) e-butterfly.org.
4	Erskine, D. 1960. The plants of Prince Edward Island, 1st Ed. Research Branch, Agriculture Canada, Ottawa., Publication 1088. 1238 recs.

recs CITATION

- 4 Hagerman, Christianne. 2022. Wissoq and Eastern White Cedar field work. E.C. Smith Herbarium, Acadia University.
- 4 Mersey Tobeatic Research Institute. 2024. Port Hawkesbury Paper (PHP) block survey results. Mersey Tobeatic Research Institute, 6 records.
- 4 NatureServe Canada. 2019. iNaturalist Maritimes Butterfly Records. iNaturalist.org and iNaturalist.ca.
- 4 Neily, T.H. & Pepper, C.; Toms, B. 2020. Nova Scotia lichen database [as of 2020-05-25]. Mersey Tobeatic Research Institute, 668 recs.
- 4 Newell, R.E. 2001. Fortress Louisbourg Species at Risk Survey 2001. Parks Canada, 4 recs.
- 4 O'Neil, S. 1998. Atlantic Salmon: Northumberland Strait Nova Scotia part of SFA 18. Dept of Fisheries & Oceans, Atlantic Region, Science. Stock Status Report D3-08. 9 recs.
- 4 Ogden, J. NS DNR Butterfly Collection Dataset. Nova Scotia Department of Natural Resources. 2014.
- 4 Robicheau, Charity. 2023. Field data from 2023. Atlantic Canada Conservation Data Centre, 14 records.
- 4 Robinson, S.L. 2014. 2013 Field Data. Atlantic Canada Conservation Data Centre.
- 4 Rousseau, J. 1938. Notes Floristiques sur l'est de la Nouvelle-Ecosse in Contributions de l'Institut Botanique de l'Universite de Montreal. Universite de Montreal, 32, 13-62. 11 recs.
- 4 Westwood, A., Staicer, C. 2016. Nova Scotia landbird Species at Risk observations. Dalhousie University.
- 3 Amirault, D.L. 1997-2000. Unpublished files. Canadian Wildlife Service, Sackville, 470 recs.
- 3 Anonymous. 2023. Peltigera Hydrotheria records. Anonymous, 3 recs.
- 3 Baechler, Lynn. 2012. Plant observations & photos, 2012. Pers. comm. to S. Blaney, July 2012, 4 recs.
- 3 Basquill, S.P. 2003. Fieldwork 2003. Atlantic Canada Conservation Data Centre, Sackville NB, 69 recs.
- 3 Blaney, C.S.; Mazerolle, D.M. 2011. Fieldwork 2011. Atlantic Canada Conservation Data Centre. Sackville NB.
- 3 Busby, D.G. 1999. 1997-1999 Bicknell's Thrush data, unpublished files. Canadian Wildlife Service, Sackville, 17 recs.
- 3 Cahill, Jenna. 2024. PEI Coastal SAR Data. Island Nature Trust, 281 recs.
- 3 Cameron, R.P. 2014. 2013-14 rare species field data. Nova Scotia Department of Environment, 35 recs.
- 3 Clayden, S.R. 2007. NBM Science Collections databases: vascular plants. New Brunswick Museum, Saint John NB, download Mar. 2007, 6914 recs.
- 3 Dibblee, R.L. 1999. PEI Cormorant Survey. Prince Edward Island Fisheries, Aquaculture & Environment, 1p. 21 recs.
- 3 Klymko, J. 2019. Atlantic Canada Conservation Data Centre zoological fieldwork 2018. Atlantic Canada Conservation Data Centre.
- 3 Klymko, J. 2025. John Klymko 2024 field data. Atlantic Canada Conservation Data Centre.
- 3 Klymko, J. Henry Hensel's Butterfly Collection Database. Atlantic Canada Conservation Data Centre. 2016.
- 3 LaPaix, R.W.; Crowell, M.J.; MacDonald, M. 2011. Stantec rare plant records, 2010-11. Stantec Consulting, 334 recs.
- 3 MacFarlane, R. 2015. Freshwater fish records from electrofishing surveys. PEI Department of Environment, Energy and Climate Action.
- 3 Marshall, L. 1998. Atlantic Salmon: Cape Breton SFA 18 (part) & SFA 19. Dept of Fisheries & Oceans, Atlantic Region, Science. Stock Status Report D3-09. 5 recs.
- 3 Neily, T.H. 2016. Email communication (May 6, 2016) to Sean Blaney regarding Fissidens exilis observations made in 2016 in Nova Scotia. Pers. Comm., 3 recs.
- 3 Richardson, D., Anderson, F., Cameron, R., McMullin, T., Clayden, S. 2014. Field Work Report on Black Foam Lichen (Anzia colpodes). COSEWIC.
- 2 Blaney, C.S. Miscellaneous specimens received by ACCDC (botany). Various persons. 2001-08.
- 2 COSEWIC (Committee on the Status of Wildlife in Canada). 2013. COSEWIC Assessment and Status Report on the Eastern Waterfern Peltigera hydrothryia in Canada. COSEWIC, 46 pp.
- 2 Curley, F.R. 2005. PEF&W Collection 2003-04. PEI Fish & Wildlife Div., 716 recs.
- 2 Daur, R.W. & Bateman, M.C. 1996. The Barrow's Goldeneye (Bucephala islandica) in the Atlantic Provinces and Maine. Canadian Wildlife Service, Sackville, 47pp.
- 2 Gillis, J. 2007. Botanical observations from bog on Skye Mountain, NS. Pers. comm., 8 recs.
- 2 Hill, N. 2003. Floerkea proserpinacoides at Heatherdale, Antigonish Co. 2002. , Pers. comm. to C.S. Blaney. 2 recs.
- 2 Hill, Nick. 2021. Fraxinus nigra observations at Marshy Hope. Fern Hill Institute of Plant Conservation.
- 2 Hirtle, Sarah. 2023. Piping Plover nest occurrence data - 2023. Island Nature Trust.
- 2 Malcolm, Adam. 2023. Wood turtle observations - Cape Breton - 2023. Pers. Comm.
- 2 McAlpine, D.F. New Brunswick Museum bee specimens. New Brunswick Museum. 2013.
- 2 McRae, Daniel. 2025. Macphail Woods Ecological Forestry Project 2024 species data. Macphail Woods Ecological Forestry Project, 6478 records.
- 2 Mersey Tobeatic Research Institute. 2023. Monarch (Danaus plexippus) and Milkweed MTRI records from the 2023 Field Season. Mersey Tobeatic Research Institute.
- 2 Mersey Tobeatic Research Institute. 2024. 2024 Monarch and Blanding's Turtle Data. Mersey Tobeatic Research Institute, 20 recs.
- 2 Nature Conservancy of Canada. 2022. NCC Field data for Nova Scotia. Nature Conservancy of Canada.
- 2 O'Neil, S. 1998. Atlantic Salmon: Eastern Shore Nova Scotia SFA 20. Dept of Fisheries & Oceans, Atlantic Region, Science. Stock Status Report D3-10. 4 recs.
- 2 Olsen, R. Herbarium Specimens. Nova Scotia Agricultural College, Truro. 2003.
- 2 Quigley, E.J. 2006. Plant records, Mabou & Port Hood. Pers. comm. to S.P. Basquill, Jun. 12. 4 recs, 4 recs.
- 2 Scott, F.W. 1988. Status Report on the Gaspé Shrew (Sorex gaspensis) in Canada. Committee on the Status of Endangered Wildlife in Canada, 12 recs.
- 2 Spicer, C.D. 2003. Mount Allison Herbarium Database. Mount Allison University, 5939 recs.
- 2 Toms, Brad; Pepper, Chris. 2024. Boreal Felt Lichen - New Host Tree. Mersey Tobeatic Research Institute, 2 recs.
- 2 Whittam, R.M. et al. 1998. Country Island Tern Restoration Project. Canadian Wildlife Service, Sackville, 2 recs.
- 1 Anderson, D. 2019. Black Ash observation, Baddeck, Nova Scotia. pers. comm. to J.L. Churchill.
- 1 Anderson, D.G. 2011. New site for showy lady'slipper on Cape Breton. Nova Scotia Department of Natural Resources, pers.comm. to R. Lautenschlager, Jul 5, 2011.
- 1 Atlantic Canada Bank Swallow Working Group. 2022. 2021 Bank Swallow colony records. Birds Canada.
- 1 Baechler, Lynn. 2016. Plant observations & photos, 2016. Pers. comm. to S. Blaney, May 2016, 2 recs.
- 1 Bagnell, B.A. 2001. New Brunswick Bryophyte Occurrences. B&B Botanical, Sussex, 478 recs.

# recs	CITATION
1	Benedict, B. Connell Herbarium Specimens (Data) . University New Brunswick, Fredericton. 2003.
1	Benjamin, L.K. 2009. NSDNR Fieldwork & Consultants Reports. Nova Scotia Dept Natural Resources, 143 recs.
1	Blaney, C.S. 2025. Atlantic Canada Conservation Data Centre fieldwork from 2024 NB, NS, PE, including Sable Island. Atlantic Canada Conservation Data Centre, 6569 records.
1	Blaney, C.S.; Mazerolle, D.M.; Klymko, J.; Spicer, C.D. 2006. Fieldwork 2006. Atlantic Canada Conservation Data Centre. Sackville NB, 8399 recs.
1	Boyne, A.W. & Grecian, V.D. 1999. Tern Surveys. Canadian Wildlife Service, Sackville, unpublished data. 23 recs.
1	Bridgland, J. 2006. Cape Breton Highlands National Park Digital Database. Parks Canada, 190 recs.
1	Calhoun, J.C. Butterfly records databased at the McGuire Center for Lepidoptera and Biodiversity. Calhoun, J.C. 2020.
1	Cameron, R.P. 2005. Erioderma pedicellatum unpublished data. NS Dept of Environment, 9 recs.
1	Cameron, R.P. 2009. Nova Scotia nonvascular plant observations, 1995-2007. Nova Scotia Dept Natural Resources, 27 recs.
1	Chris Pepper. 2021-2022. Mersey Wind Farm Lichen Observations. Chris Pepper, 20 recs.
1	Christie, D.S. 2000. Christmas Bird Count Data, 1997-2000. Nature NB, 54 recs.
1	Clayden, S.R. 1998. NBM Science Collections databases: vascular plants. New Brunswick Museum, Saint John NB, 19759 recs.
1	Crowell, Iain. 2021. Fraxinus nigra observation near Port Hood. iNaturalist.
1	Crowell, M. 2013. email to Sean Blaney regarding <i>Listera australis</i> at Bear Head and Mill Cove Canadian Forces Station. Jacques Whitford Environmental Ltd., 2.
1	Doucet, D.A. 2007. Lepidopteran Records, 1988-2006. Doucet, 700 recs.
1	Doucet, D.A. 2009. Census of Globally Rare, Endemic Butterflies of Nova Scotia Gulf of St Lawrence Salt Marshes. Nova Scotia Dept of Natural Resources, Species at Risk, 155 recs.
1	Frittaion, C. 2012. NSNT 2012 Field Observations. Nova Scotia Nature Trust, Pers comm. to S. Blaney Feb. 7, 34 recs.
1	Hill, N.M. 2021. Observation of <i>Carex haydenii</i> and black ash near Marshy Hope and Ponhook Lake. pers. comm.
1	Hughes, Cory. 2020. Atlantic Forestry Centre <i>Coccinella transversoguttata</i> collections. Canadian Forest Service, Atlantic Forestry Centre.
1	Jessica Ferguson. 2023. SAR observations for Clean Annapolis River Project - 2020-2023. Clean Annapolis River Project (CARP).
1	Klymko, J.J.D. 2012. Insect field work & submissions. Atlantic Canada Conservation Data Centre, 852 recs.
1	Klymko, J.J.D. 2012. Maritimes Butterfly Atlas, 2010 and 2011 records. Atlantic Canada Conservation Data Centre, 6318 recs.
1	Klymko, J.J.D. 2018. 2017 field data. Atlantic Canada Conservation Data Centre.
1	Manthorne, A. 2019. Incidental aerial insectivore observations. Birds Canada.
1	McKendry, Karen. 2016. Rare species observations, 2016. Nova Scotia Nature Trust, 19 recs.
1	McNeil, J.A. 2016. Blandings Turtle (<i>Emydoidea blandingii</i>), Eastern Ribbonsnake (<i>Thamnophis sauritus</i>), Wood Turtle (<i>Glyptemys insculpta</i>), and Snapping Turtle (<i>Chelydra serpentina</i>) sightings, 2016. Mersey Tobeatic Research Institute, 774 records.
1	McNeil, J.A. 2019. Snapping Turtle records, 2019. Mersey Tobeatic Research Institute.
1	Mersey Tobeatic Research Institute. 2021. 2020 Monarch records from the MTRI monitoring program. Mersey Tobeatic Research Institute, 72 records.
1	Nature Conservancy of Canada. 2023. NCC Nova Scotia Data.
1	Nature Conservancy of Canada. 2023. PEI Fieldwork. , 283 recs.
1	Neily, T.H. & Pepper, C.; Toms, B. 2019. Boreal Felt Lichen Observation, January 2019. Mersey Tobeatic Research Institute, 1 rec.
1	Neily, T.H. 2013. Email communication to Sean Blaney regarding <i>Agalinis pauperula</i> observations made in 2013 in Nova Scotia. , 1 rec.
1	New York Botanical Garden. 2006. Virtual Plant Herbarium - Vascular Plant Types Catalog. Sylva, S.; Kallunki, J. (ed.) International Plant Science Centre, Web site: http://sciweb.nybg.org/science2/vii2.asp . 4 recs.
1	Porter, K. 2013. 2013 rare and non-rare vascular plant field data. St. Mary's University, 57 recs.
1	Riley, Jonathan. 2021. Fraxinus nigra observation near Gillisdale. iNaturalist.
1	Robinson, C.B. 1907. Early intervale flora of eastern Nova Scotia. Transactions of the Nova Scotia Institute of Science, 10:502-506. 1 rec.
1	Schmidt, B.C. 2017. Details about a <i>Speyeria aphrodite</i> specimen at the Canadian National Collection from Baddeck, NS, sent via email on 15 February 2017.
1	Selva, S.B. 2002. Status Report on frosted glass-whiskers, <i>Sclerophora peronella</i> . Committee on the Status of Endangered Wildlife in Canada, Draft Revision, May 2002. 2 recs.
1	Spicer, C.D. 2004. Specimens from CWS Herbarium, Mount Allison Herbarium Database. Mount Allison University, 5939 recs.
1	Standley, L.A. 2002. <i>Carex haydenii</i> in Nova Scotia. , Pers. comm. to C.S. Blaney. 4 recs.
1	Stephen Freeman. 2022. New location for Black Ash in Queens County, NS. Personal communication, 2.
1	Thomas, H.H., Jones, G.S. & Diblee, R.L. 1980. <i>Sorex palustris</i> on Prince Edward Island. Can. Field Nat., vol 94:329-331. 2 recs.
1	Webster, R.P. Atlantic Forestry Centre Insect Collection, Maritimes butterfly records. Natural Resources Canada. 2014.
1	White, S. 2019. Notable species sightings, 2018. East Coast Aquatics.
1	Whittam, R.M. 2000. <i>Senecio pseudoarnica</i> on Country Island. , Pers. comm. to S. Gerriets. 1 rec.

APPENDIX G
SURFACE WATER AND FISH & FISH HABITAT
PHOTOGRAPH LOG



Photo 1: Representative photo of WC1.



Photo 2: Representative photo of WC2.



Photo 3: Representative photo of WC3.



Photo 4: Representative photo of WC4.



Photo 5: Representative photo of WC5.



Photo 6: Representative photo of WC6.



Photo 7: Representative photo of WC7.



Photo 8: Representative photo of WC8.



Photo 9: Representative photo of WC9.



Photo 10: Representative photo of WC10.



Photo 11: Representative photo of WC11.



Photo 12: Representative photo of WC12.



Photo 13: Representative photo of WC13.



Photo 14: Representative photo of W14.



Photo 15: Representative photo of W15.



Photo 16: Representative photo of WC16.



Photo 17: Representative photo of Atlantic salmon.



Photo 18: Representative photo of brook trout.



Photo 19: Representative photo of Northern redbelly dace.



Photo 20: Representative photo of white sucker.



Photo 21: Representative photo of Electrofishing Site 1 (Little Tracadie River).



Photo 22: Representative photo of Electrofishing Site 2.



Photo 23: Representative photo of Electrofishing Site 3 (Wrights River).



Photo 24: Representative photo of Trapping Site 4 (Grant Lake).



Photo 25: Representative photo of Electrofishing Site 5.



Photo 26: Representative photo of Electrofishing Site 6 (Murray Brook).

APPENDIX H
WETLANDS CHARACTERISTICS & PHOTOGRAPH LOG

Wetland ID	Date (dd-mm-yy)	Wetland Type	Area (m ²)	Delineation Type	Alterations Present? (Y/N)	Landform	Water Flow	Soil Type	Surface/ Hydrological Conditions	Dominant Vegetation			Associated Watercourse
WL1	24-06-25	Treed Swamp	4441.1	Full	N	slope	Isolated	Histosol (A1)	High Water Table	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Sensitive Fern (<i>Onoclea sensibilis</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>), Bunchberry (<i>Cornus canadensis</i>)	Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>), Speckled Alder (<i>Alnus incana</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL2	23-06-25	Treed Swamp	4085.1	Partial	N	Slope	Isolated	Histosol (A1), Hydrogen Sulfide (A4)	High Water Table	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Sensitive Fern (<i>Onoclea sensibilis</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>)	Pussy Willow (<i>Salix discolor</i>), Balsam Fir (<i>Abies balsamea</i>)	Balsam Fir (<i>Abies balsamea</i>), Pussy Willow (<i>Salix discolor</i>), Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL3	24-06-25	Treed Swamp	4595.6	Partial	N	Slope	Isolated	Histosol (A1)	High Water Table, Saturation	Whorled Wood Aster (<i>Oclemena acuminata</i>), Sensitive Fern (<i>Onoclea sensibilis</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>), Bunchberry (<i>Cornus canadensis</i>)	Balsam Fir (<i>Abies balsamea</i>)	Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>), White Ash (<i>Fraxinus americana</i>)	N
WL4	25-06-25	Complex (Treed Swamp, Bog)	11264.4	Partial	N	Slope	Isolated	Histosol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Fowl Manna Grass (<i>Glyceria striata</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>)	Black Spruce (<i>Picea mariana</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>)	Black Spruce (<i>Picea mariana</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>)	N
WL5	25-06-25	Treed Swamp	12534.2	Partial	N	Slope	Isolated	Histosol (A1)	High Water Table	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Sensitive Fern (<i>Onoclea sensibilis</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>), Bunchberry (<i>Cornus canadensis</i>), Northern Starflower (<i>Lysimachia borealis</i>)	Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>), Speckled Alder (<i>Alnus incana</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL6	25-06-26	Treed Swamp	8,069.50	Partial	N	Slope	Isolated	Histosol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Sensitive Fern (<i>Onoclea sensibilis</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>), Bunchberry (<i>Cornus canadensis</i>)	Red Maple (<i>Acer rubrum</i>), Balsam Fir (<i>Abies balsamea</i>)	Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL7	26-06-25	Treed Swamp	4,245.90	Partial	N	Slope	Isolated	Histosol (A1)	High Water Table	Broad-leaved Cattail (<i>Typha latifolia</i>), Hairy Flat-top White Aster (<i>Doellingeria umbellata</i>)	Red Maple (<i>Acer rubrum</i>), Balsam Fir (<i>Abies balsamea</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	Red Maple (<i>Acer rubrum</i>), Balsam Fir (<i>Abies balsamea</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL8	26-06-25	Treed Swamp	2,180.70	Partial	N	Slope	Isolated	Histosol (A1)	High Water Table, Saturation	Bunchberry (<i>Cornus canadensis</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>)	Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Mountain Holly (<i>Ilex mucronata</i>)	Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL9	26-06-25	Treed Swamp	1,227.40	Partial	N	Slope	Isolated	Histosol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Sensitive Fern (<i>Onoclea sensibilis</i>), Bunchberry (<i>Cornus canadensis</i>)	Black Spruce (<i>Picea mariana</i>), Black Spruce (<i>Betula alleghaniensis</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>), Pussy Willow (<i>Salix discolor</i>)	Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>)	N
WL10	09-07-25	Treed Swamp	2,505.60	Partial	Y	Flat	Isolated	Histosol (A1)	High Water Table, Saturation, Hydrogen Sulfide Odour	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Wild Sarsaparilla (<i>Aralia nudicaulis</i>), Sensitive fern (<i>Onoclea sensibilis</i>), Creeping Buttercup (<i>Ranunculus repens</i>), Creeping Snowberry (<i>Gaultheria hispida</i>)	Red Maple (<i>Acer rubrum</i>), White Spruce (<i>Picea glauca</i>)	Red Spruce (<i>Picea rubens</i>), Yellow birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>), Balsam fir (<i>Abies balsamea</i>)	N
WL11	24-07-25	Treed Swamp	559.80	Partial	N	Basin	Isolated	Histisol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Red Maple (<i>Acer rubrum</i>), Bunchberry (<i>Conrus canadensis</i>), Goldthread (<i>Coptis trifolia</i>), Twin Flower (<i>Linnaea borealis</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>)	Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Black Spruce (<i>Picea mariana</i>), Balsam Fir (<i>Abies balsamea</i>)	N
WL12	26-06-25	Shrub Swamp	5,568.30	Partial	N	Slope	Isolated	Histosol (A1)	High Water Table	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Bunchberry (<i>Cornus canadensis</i>), New York Fern (<i>Amauropelta noveboracensis</i>)	Speckled Alder (<i>Alnus incana</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>), Mountain Holly (<i>Ilex mucronata</i>)	Black Spruce (<i>Picea mariana</i>), Red maple (<i>Acer rubrum</i>), American Mountain Ash (<i>Sorbus americana</i>)	N
WL13	09-07-25	Treed Swamp	359.80	Partial	N	Basin	Isolated	Histosol (A1)	Saturation, Water-stained Leaves, High Water Table, Hydrogen Sulfide Odour, Moss Trimmed Lines, Geomorphic Position	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Creeping Buttercup (<i>Ranunculus repens</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>), Canada Goldenrod (<i>Solidago canadensis</i>), Rough Sedge (<i>Carex scabrata</i>)	Red Spruce (<i>Picea rubens</i>)	Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>), Balsam Fir (<i>Abies balsamea</i>)	N
WL14	10-07-25	Treed Swamp	2,949.40	Partial	N	Basin	Isolated	Histic Epipedion (A2)	Saturation, Water-stained Leaves, High Water Table, Hydrogen Sulfide Odour	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Sensitive Fern (<i>Onoclea sensibilis</i>), Northern Starflower (<i>Lysimachia borealis</i>), Goldthread (<i>Coptis trifolia</i>), Small Enchanter's Nightshade (<i>Circaea alpina</i>)	Speckled Alder (<i>Alnus incana</i>), Balsam Fir (<i>Abies balsamea</i>), Red Spruce (<i>Picea rubens</i>), Mountain Holly (<i>Ilex mucronata</i>)	Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>)	N
WL15	09-07-25	Treed Swamp	1,390.50	Full	N	Basin	Isolated	Histosol (A1)	Saturation, Water-stained Leaves, High Water Table, Hydrogen Sulfide Odour, Moss Trimmed Lines, Geomorphic Position	Sensitive Fern (<i>Onoclea sensibilis</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>), Creeping Buttercup (<i>Ranunculus repens</i>), Common Marsh Bedstraw (<i>Galium palustre</i>), Wild Lily-of-The-Valley (<i>Maianthemum canadense</i>)	Balsam Fir (<i>Abies balsamea</i>), White Spruce (<i>Picea glauca</i>)	Red Maple (<i>Acer rubrum</i>), Balsam Fir (<i>Abies balsamea</i>), White Spruce (<i>Picea glauca</i>)	N
WL16	10-07-25	Shrub Swamp	9,995.60	Partial	N	Basin	Isolated	Histic Epipedion (A2)	Saturation, High Water Table, Presence of Reduced Iron	Interrupted Fern (<i>Claytosomeunda claytoniana</i>), Broad-leaved Cattail (<i>Typha latifolia</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>), Black-girdled Bulrush (<i>Scirpus atrocinctus</i>), Goldthread (<i>Coptis trifolia</i>), Wild Lily-of-The-Valley (<i>Maianthemum canadense</i>), Field Horsetail (<i>Equisetum arvense</i>)	Red Spruce (<i>Picea mariana</i>), Balsam fir (<i>Abies balsamea</i>), Yellow birch (<i>Betula alleghaniensis</i>)	Yellow Birch (<i>Betula alleghaniensis</i>), Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>)	N
WL17	24-07-25	Treed Swamp	7,209.00	Partial	N	Basin	Isolated	Histisol (A1)	High Water Table, Saturation, Water Marks, Water-stained Leaves	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Twinflower (<i>Linnaea borealis</i>), Balsam Fir (<i>Abies balsamea</i>), Northern Starflower (<i>Lysimachia borealis</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Goldthread (<i>Coptis trifolia</i>)	Balsam Fir (<i>Abies balsamea</i>), Speckled Alder (<i>Alnus incana</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Speckled Alder (<i>Alnus incana</i>), Black Spruce (<i>Picea mariana</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL18	24-07-25	Treed Swamp	1,969.00	Partial	N	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Bunchberry (<i>Cornus canadensis</i>), Red maple (<i>Acer rubrum</i>), Three-seeded Sedge (<i>Carex trisperma</i>), Balsam Fir (<i>Abies balsamea</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Balsam Fir (<i>Abies balsamea</i>), Speckled Alder (<i>Alnus incana</i>), Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>)	Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>), Red Spruce (<i>Picea rubens</i>), Balsam Fir (<i>Abies Balsamea</i>)	N
WL19	24-07-25	Treed Swamp	996.00	Partial	N	Sloped	Isolated	Histisol (A1), Hyrdogen Sulfide (A4)	High Water Table, Saturation, Water Marks, Water-stained Leaves	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Red Maple (<i>Acer rubrum</i>), Wild Lily-of-The-Valley (<i>Maianthemum canadense</i>), Northern Starflower (<i>Lysimachia borealis</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Balsam Fir (<i>Abies Balsamea</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Goldthread (<i>Coptis trifolia</i>)	Balsam Fir (<i>Abies balsamea</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>)	Speckled Alder (<i>Alnus incana</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>), Red Spruce (<i>Picea rubens</i>), Balsam Fir (<i>Abies Balsamea</i>)	N
WL20	24/07/25	Treed Swamp	2,228.70	Partial	N	Basin	Isolated	Histisol (A1)	High Water Table, Saturation, Water-stained Leaves	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Northern Starflower (<i>Lysimachia borealis</i>), Goldthread (<i>Coptis trifolia</i>), Red Maple (<i>Acer rubrum</i>), Bunchberry (<i>Cornus canadensis</i>), Sensitive Fern (<i>Onoclea sensibilis</i>)	Balsam Fir (<i>Abies balsamea</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>)	Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Balsam Fir (<i>Abies balsamea</i>), Red Spruce (<i>Picea rubens</i>)	N
WL21	24-07-25	Treed Swamp	5,497.70	Partial	N	Basin	Isolated	Histic Epipedon (A2)	High Water Table, Saturation, Water-stained Leaves	Three-seeded Sedge (<i>Carex trisperma</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Bunchberry (<i>Cornus canadensis</i>), Red Maple (<i>Acer rubrum</i>), Sensitive Fern (<i>Onoclea sensibilis</i>), New York Fern (<i>Amauropelta noveboracensis</i>)	Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>), Speckled Alder (<i>Alnus incana</i>), Red Maple (<i>Acer rubrum</i>)	Yellow Birch (Betula alleghaniensis), Red Maple (Acer rubrum), Speckled Alder (Alnus incana)	N

Wetland ID	Date (dd-mm-yy)	Wetland Type	Area (m ²)	Delineation Type	Alterations Present? (Y/N)	Landform	Water Flow	Soil Type	Surface/ Hydrological Conditions	Dominant Vegetation			Associated Watercourse
WL22	10-07-25	Treed Swamp	1735.60	Partial	N	Basin	Inflow	Histic Epipedon (A2)	High Water Table, Surface Water, Saturation, Hydrogen Sulfide Odour	Broad-leaved Cattail (<i>Typha latifolia</i>), Sensitive Fern (<i>Onoclea sensibilis</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>), Bunchberry (<i>Cornus canadensis</i>)	Black Spruce (<i>Picea mariana</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Mountain Holly (<i>Ilex mucronata</i>)	Black Spruce (<i>Picea mariana</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>)	WC12
WL23	25-09-25	Bog	3762.3	Partial	N	Basin	Isolated	Histisol (A1)	Saturation, Sparsley Vegetated Concave Surface	Leatherleaf (<i>Chamaedaphne calyculata</i>), Northern Pitcher Plant (<i>Sarracenia purpurea</i>), Sheep Laurel (<i>Kalmia angustifolia</i>), Eastern Teaberry (<i>Gaultheria procumbens</i>), Small Cranberry (<i>Vaccinium oxycoccos</i>), Common Labrador Tea (<i>Rhododendron groenlandicum</i>), Tamarack (<i>Larix laricina</i>), Black Spruce (<i>Picea mariana</i>), Three-seeded Sedge (<i>Carex trisperma</i>)	Northern Wild Raisin (<i>Viburnum cassinoides</i>), Black Spruce (<i>Picea mariana</i>), Tamarack (<i>Larix laricina</i>)	Black Spruce (<i>Picea mariana</i>)	N
WL24	25-09-25	Treed Swamp	466.4	Partial	Y	Basin	Isolated	Histisol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Bunchberry (<i>Cornus canadensis</i>), Three-seeded Sedge (<i>Carex trisperma</i>), Small Cranberry (<i>Vaccinium oxycoccos</i>), Narrow-leaved Cottongrass (<i>Eriophorum angustifolium</i>)	Northern Wild Raisin (<i>Viburnum cassinoides</i>), Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Red Spruce (<i>Picea rubens</i>)	Red Spruce (<i>Picea rubens</i>), Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL25	07-09-25	Shrub Swamp	3085.8	Full	Y	Basin	Isolated	Histisol (A1)	High Water Table, Saturation	Three-leaved False Soloman's Seal (<i>Maianthemum trifolium</i>), Sheep Laurel (<i>Kalmia angustifolia</i>), Three-seeded Sedge (<i>Carex trisperma</i>), Creeping Snowberry (<i>Gaultheria hispida</i>)	Black Spruce (<i>Picea mariana</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>), Mountain Holly (<i>Ilex mucronata</i>)	Tamarack (<i>Larix laricina</i>), Black Spruce (<i>Picea mariana</i>)	N
WL26	23-07-25	Shrub Swamp	2114.3	Partial	N	Flat	Isolated	Histic Epipedon (A2)	High Water Table, Saturation	Narrow-Leaved Cattail (<i>Typha angustifolia</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Bunchberry (<i>Cornus canadensis</i>), Twinflower (<i>Linnaea borealis</i>), New York Fern (<i>Amauropelta noveboracensis</i>)	Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Red Spruce (<i>Picea rubens</i>), Black Spruce (<i>Picea mariana</i>)	Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Red Spruce (<i>Picea rubens</i>)	N
WL27	09-07-25	Bog	526.5	Full	N	Basin	Isolated	Histisol (A1)	High Water Table, Saturation	Small Cranberry (<i>Vaccinium oxycoccos</i>), Sheep laurel (<i>Kalmia angustifolia</i>), Boreal Bog Sedge (<i>Carex magellanica</i>)	Red Maple (<i>Acer rubrum</i>)	NA	N
WL28	10-07-25	Treed Swamp	571.60	Partial	N	Flat	Isolated	Histic Epipedon (A2)	High Water Table, Saturation	Sensitive Fern (<i>Onoclea sensibilis</i>), Wild Sarsaparilla (<i>Aralia nudicaulis</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>), Common Marsh Bedstraw (<i>Galium palustre</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>)	Balsam Fir (<i>Abies balsamea</i>)	Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Balsam Fir (<i>Abies balsamea</i>)	N
WL29	08-07-25	Treed Swamp	1,418.70	Partial	N	Basin	Isolated	Histosol (A1)	High Water Table, Saturation, Water Stained Leaves, Moss Trimmed Lines, Microtopographic Relief	Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>), Paper Birch (<i>Betula papyrifera</i>), Eastern White Pine (<i>Pinus strobus</i>)	Balsam Fir (<i>Abies balsamea</i>)	Goldthread (<i>Coptis trifolia</i>), Sheep Laurel (<i>Kalmia angustifolia</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	N
WL30	23-07-25	Treed Swamp	4,129.70	Full	N	Flat	Isolated	Histosol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Royal Fern (<i>Osmunda regalis</i>), Bunchberry (<i>Cornus canadensis</i>), Twinflower (<i>Linnaea borealis</i>), Red Spruce (<i>Picea rubens</i>), Balsam Fir (<i>Abies balsamea</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Spruce (<i>Picea rubens</i>), Black Spruce (<i>Picea mariana</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Spruce (<i>Picea rubens</i>), Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>)	N
WL31	08-07-25	Treed Swamp	9,570.80	Partial	N	Basin	Isolated	Histosol (A1)	High Water Table, Saturation, Water Stained Leaves, Hydrogen Sulfide	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Northern Starflower (<i>Lysimachia borealis</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Three-leaved False Soloman's Seal (<i>Maianthemum trifolium</i>), Bunchberry (<i>Cornus canadensis</i>)	Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL32	25-09-25	Shrub Swamp	315.80	Full	N	Basin	Isolated	Histic Epipedon (A2)	High Water Table, Saturation	Pink Lady's-Slipper (<i>Cypripedium acaule</i>), Three-seeded Sedge (<i>Carex trisperma</i>), Red Maple (<i>Acer rubrum</i>)	Northern Wild Raisin (<i>Viburnum cassinoides</i>), Mountain Holly (<i>Ilex mucronata</i>), Common Winterberry (<i>Ilex verticillata</i>), Balsam Fir (<i>Abies balsamea</i>)	Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>)	N
WL33	09-07-25	Bog	31,282.90	Partial	Y	Basin	Isolated	Histisol (A1)	Surface Water, High Water Table, Saturation	Three-leaved False Soloman's Seal (<i>Maianthemum trifolium</i>), Small Cranberry (<i>Vaccinium oxycoccos</i>), Northern Pitcher Plant (<i>Sarracenia purpurea</i>), Round-leaved Sundew (<i>Drosera rotundifolia</i>), Sheep Laurel (<i>Kalmia angustifolia</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), White Bog Orchid (<i>Platanthera dilatata</i>), Common Labrador Tea (<i>Rhododendron groenlandicum</i>)	Tamarack (<i>Larix laricina</i>), Black Spruce (<i>Picea mariana</i>), Mountain Holly (<i>Ilex mucronata</i>), Speckled Alder (<i>Alnus incana</i>), Red Maple (<i>Acer rubrum</i>)	Black Spruce (<i>Picea mariana</i>), Tamarack (<i>Larix laricina</i>)	N
WL34	09-07-25	Shrub Swamp	2,823.30	Partial	N	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Royal Fern (<i>Osmunda regalis</i>), Sheep Laurel (<i>Kalmia angustifolia</i>), Late Lowbush Blueberry (<i>Vaccinium angustifolium</i>), Wild Lily-of-The-Valley (<i>Maianthemum canadense</i>)	Northern Wild Raisin (<i>Viburnum cassinoides</i>), Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>)	Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>)	N
WL35	26-06-25	Treed Swamp	14,886.00	Partial	N	Slope	Isolated	Histisol (A1)	High Water Table	Sensitive Fern (<i>Onoclea sensibilis</i>), Goldthread (<i>Coptis trifolia</i>), Twinflower (<i>Linnaea borealis</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>)	Gray Birch (<i>Betula populifolia</i>), Balsam Fir (<i>Abies balsamea</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Spruce (<i>Picea rubens</i>), Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL36	23-07-25	Treed Swamp	844.50	Partial	N	Flat	Isolated	Histosol (A1)	Saturation	Northern Wild Raisin (<i>Viburnum cassinoides</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Common Labrador Tea (<i>Rhododendron groenlandicum</i>), Bunchberry (<i>Cornus canadensis</i>), Twinflower (<i>Linnaea borealis</i>)	Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>), Red Spruce (<i>Picea rubens</i>), Mountain Holly (<i>Ilex mucronata</i>)	Balsam fir (<i>Abies balsamea</i>) Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>), Red Spruce (<i>Picea rubens</i>)	N
WL37	27-06-25	Complex (Bog, Treed Swamp)	3,965.90	Partial	N	Slope	Isolated	Histic Epipedon (A2)	High Water Table	Sheep Laurel (<i>Kalmia angustifolia</i>), Large False Solomon's Seal (<i>Mainantheum racemosum</i>), Northern Pitcher Plant (<i>Sarracenia purpurea</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>)	Speckled Alder (<i>Alnus incana</i>), Mountain Holly (<i>Ilex mucronata</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Tamarack (<i>Larix laricina</i>), Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>)	N
WL38	23-07-25	Treed Swamp	7,759.80	Partial	N	Flat	Isolated	Histosol (A1)	High Water Table, Saturation	Common Labrador Tea (<i>Rhododendron groenlandicum</i>), Bunchberry (<i>Cornus canadensis</i>), Three-seeded Sedge (<i>Carex trisperma</i>), Red Maple (<i>Acer rubrum</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Creeping Snowberry (<i>Gaultheria hispida</i>)	Balsam Fir (<i>Abies balsamea</i>) Yellow Birch (<i>Betula alleghaniensis</i>) Red Spruce (<i>Picea rubens</i>), Black Spruce (<i>Picea mariana</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Balsam Fir (<i>Abies balsamea</i>) Red Maple (<i>Acer rubrum</i>) Red Spruce (<i>Picea rubens</i>), Black Spruce (<i>Picea mariana</i>), Mountain Holly (<i>Ilex mucronata</i>)	N
WL39	09-07-25	Vernal Pool	348.70	Partial	N	Basin	Isolated	Histosol (A1)	Saturation, Water Stained Leaves	Sensitive Fern (<i>Onoclea sensibilis</i>), Cinnamon fern (<i>Osmundastrum cinnamomeum</i>)	Balsam Fir (<i>Abies balsamea</i>)	Yellow Birch (<i>Betula alleghaniensis</i>), Balsam Fir (<i>Abies balsamea</i>) Red Maple (<i>Acer rubrum</i>)	N
WL40	23-07-25	Treed Swamp	934.20	Partial	N	Flat	Isolated	Histosol (A1)	High Water Table, Saturation	Royal Fern (<i>Osmunda regalis</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Bunchberry (<i>Cornus canadensis</i>), Three-seeded Sedge (<i>Carex trisperma</i>), Northern Starflower (<i>Lysimachia borealis</i>), Goldthread (<i>Coptis trifolia</i>)	Balsam fir (<i>Abies balsamea</i>), Red Spruce (<i>Picea rubens</i>), Mountain Holly (<i>Ilex mucronata</i>)	Mountain Holly (<i>Ilex mucronata</i>), Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Tamarack (<i>Larix laricina</i>), Red Spruce (<i>Picea rubens</i>)	N

Wetland ID	Date (dd-mm-yy)	Wetland Type	Area (m ²)	Delineation Type	Alterations Present? (Y/N)	Landform	Water Flow	Soil Type	Surface/ Hydrological Conditions	Dominant Vegetation			Associated Watercourse
WL41	23-07-25	Treed Swamp	432.20	Partial	N	Flat	Isolated	Histosol (A1)	Saturation, High Water Table, Water Stained Leaves	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Wild Lily-of-The-Valley (<i>Maianthemum canadense</i>), Goldthread (<i>Coptis trifolia</i>), Three-seeded Sedge (<i>Carex trisperma</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Creeping Snowberry (<i>Gaultheria hispida</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Red Spruce (<i>Picea rubens</i>)	N
WL42	09-07-25	Shrub Swamp	580.20	Partial	Y	Slope	Isolated	Histosol (A1)	Surface Water, High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Interrupted Fern (<i>Claytosmunda calytoniana</i>), Narrow-Leaved Cattail (<i>Typha angustifolia</i>), Sallow Sedge (<i>Carex lurida</i>), Narrowleaf Fragrant Goldenrod (<i>Euthamia galetorum</i>), Bunchberry (<i>Cornus canadensis</i>), Swamp Yellow Loosestrife (<i>Lysimachia terrestris</i>)	Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Red Maple (<i>Acer rubrum</i>), Balsam Fir (<i>Abies balsamea</i>)	N
WL43	11-07-25	Treed Swamp	5381	Partial	N	Basin	Isolated	Histosol (A1), Hydrogen Sulfied (A4)	Saturation, High Water Table, Water Stained Leaves, Hydrogen Sulfide Odour	Royal Fern (<i>Osmunda regalis</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Spotted Jewelweed (<i>Impatiens capensis</i>), Sensitive Fern (<i>Onoclea sensibilis</i>), Common Marsh Bedstraw (<i>Galium palustre</i>), Eastern Marsh Fern (<i>Thelypteris palustris</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>)	Red Osier Dogwood (<i>Cornus sericea</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL44	23-07-25	Treed Swamp	7974	Partial	N	Flat	Throughflow	Histosol (A1)	Surface Water, Saturation, Water Stained Leaves	Bunchberry (<i>Cornus canadensis</i>), Red Maple (<i>Acer rubrum</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Northern Starflower (<i>Lysimachia borealis</i>), Twinflower (<i>Linnaea borealis</i>)	Red Spruce (<i>Picea rubens</i>), Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Black spruce (<i>Picea mariana</i>)	Eastern White Pine (<i>Pinus strobus</i>), Red Spruce (<i>Picea rubens</i>), Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Black spruce (<i>Picea mariana</i>)	WC6
WL45	11-07-25	Treed Swamp	1372.9	Full	N	Slope	Isolated	Histosol (A1), Hydrogen Sulfied (A4)	High Water Table, Saturation, Hydrogen Sulfide Odour	Common Marsh Bedstraw (<i>Galium palustre</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Sensitive Fern (<i>Onoclea sensibilis</i>), Broad-leaved Cattail (<i>Typha latifolia</i>), Mad-dog Skullcap (<i>Scutellaria lateriflora</i>)	Black Spruce (<i>Picea mariana</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL46	11-07-25	Treed Swamp	811.10	Partial	N	Flat	Isolated	Histic Epipedon (A2)	Saturation, High Water Table, Water Stained Leaves, Aquatic Fauna, Hydrogen Sulfide Odour	Sensitive Fern (<i>Onoclea sensibilis</i>), Common Marsh Bedstraw (<i>Galium palustre</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>), Wild Lily-of-The-Valley (<i>Maianthemum canadense</i>)	Balsam fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL47	09-07-25	Treed Swamp	6,741.70	Full	N	Basin	Isolated	Histosol (A1)	Saturation, High Water Table	Shining Rose (<i>Rosa nitida</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Broad-leaved Cattail (<i>Typha latifolia</i>), Star Sedge (<i>Carex echinata</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Bunchberry (<i>Cornus canadensis</i>), Eastern Marsh Fern (<i>Thelypteris palustris</i>)	Common Winterberry (<i>Ilex verticillata</i>), Speckled Alder (<i>Alnus incana</i>), Balsam Fir (<i>Abies balsamea</i>)	Black Spruce (<i>Picea mariana</i>), Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Paper Birch (<i>Betula papyrifera</i>)	N
WL48	09-07-25	Treed Swamp	1,245.70	Partial	Y	Flat	Isolated	Histic Epipedon (A2)	High Water Table	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Bunchberry (<i>Cornus canadensis</i>), Northern Starflower (<i>Lysimachia borealis</i>), Three-leaved Flase Solomon's Seal (<i>Maianthemum trifolium</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Pink Lady's Slipper (<i>Cypripedium acaule</i>)	Yellow Birch (<i>Betula alleghaniensis</i>), Mountain Holly (<i>Ilex mucronata</i>), Speckled Alder (<i>Alnus incana</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>)	N
WL49	25-06-25	Shrub Swamp	129.80	Partial	Y	Flat	Isolated	Histosol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Bunchberry (<i>Cornus canadensis</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Speckled Alder (<i>Alnus incana</i>), Gray birch (<i>Betula populifolia</i>)	NA	N
WL50	24-09-25	Bog	1,071.80	Partial	N	Basin	Isolated	Histosol (A1)	High Water Table, Saturation, Sparsley Vegetated Concave Surface	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Soft Rush (<i>Juncus effusus</i>), Common Bedstraw (<i>Galium aparine</i>), Three-seeded Sedge (<i>Carex trisperma</i>), Fringed Sedge (<i>Carex crinita</i>)	Speckled Alder (<i>Alnus incana</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>), Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>)	Black Spruce (<i>Picea mariana</i>)	N
WL51	24-09-25	Treed Swamp	742.00	Partial	N	Flat	Isolated	Histic Epipedon (A2)	High Water Table, Saturation, Sparsly Vegetated Concave Surface	Bunchberry (<i>Cornus canadensis</i>), Late Lowbush Blueberry (<i>Vaccinium angustifolium</i>), Pale Bog Laurel (<i>Kalmia polifolia</i>), Black Spruce (<i>Picea mariana</i>)	Gray Birch (<i>Betula populifolia</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>), Balsam Fir (<i>Abies balsamea</i>), Steeplebush (<i>Spiraea tomentosa</i>), Black Spruce (<i>Picea mariana</i>)	Red Maple (<i>Acer rubrum</i>), Trembling Aspen (<i>Populus tremuloides</i>), Black Spruce (<i>Picea mariana</i>)	N
WL52	25-09-25	Treed Swamp	1,394.60	Partial	Y	Flat	Isolated	Depleted Below Dark Surface (A11)	High Water Table, Saturation	Bunchberry (<i>Cornus canadensis</i>), Yellow Bluebead Lily (<i>Clintonia borealis</i>), Velvet-leaved Blueberry (<i>Vaccinium myrtilloides</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Northern Starflower (<i>Lysimachia borealis</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>)	Balsam Fir (<i>Abies balsamea</i>), Speckled Alder (<i>Alnus incana</i>), Mountain Holly (<i>Ilex mucronata</i>), Red Maple (<i>Acer rubrum</i>)	Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>), Balsam Fir (<i>Abies balsamea</i>)	N
WL53	10-07-25	Treed Swamp	796.60	Full	N	Flat	Isolated	Histosol (A1)	High Water Table	Pink Lady's-Slipper (<i>Cypripedium acaule</i>), Bunchberry (<i>Cornus canadensis</i>), Sheep Laurel (<i>Kalmia angustifolia</i>), Creeping snowberry (<i>Gaultheria hispida</i>), Three-seeded Sedge (<i>Carex trisperma</i>)	Balsam Fir (<i>Abies balsamea</i>), Mountain Holly (<i>Ilex mucronata</i>), Sheep Laurel (<i>Kalmia angustifolia</i>), Black Spruce (<i>Picea mariana</i>)	Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>)	N
WL54	24-06-25	Shrub Swamp	11,189.10	Partial	N	Flat	Throughflow	Histosol (A1)	Surface Water, High Water Table, Saturation	Yellow Bluebead Lily (<i>Clintonia borealis</i>), Hairy Flat-top White Aster (<i>Doellingeria umbellata</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Bunchberry (<i>Cornus canadensis</i>)	Mountain Holly (<i>Ilex mucronata</i>), Speckled Alder (<i>Alnus incana</i>), Red Maple (<i>Acer rubrum</i>), Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>)	Balsam Fir (<i>Abies balsamea</i>)	WC2
WL55	24-09-25	Shrub Swamp	482.80	Partial	N	Basin	Isolated	Histosol (A1)	Water-stained Leaves, High Water Table, Saturation	Wild Sarsaparilla (<i>Aralia nudicaulis</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Red Maple (<i>Acer rubrum</i>), One-sided Wintergreen (<i>Orthilia secunda</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>), Goldthread (<i>Coptis trifolia</i>), Creeping Buttercup (<i>Ranunculus repens</i>), Sensitive Fern (<i>Onoclea sensibilis</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>)	Yellow Birch (<i>Betula alleghaniensis</i>)	Red Spruce (<i>Picea rubens</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>), Balsam Fir (<i>Abies balsamea</i>)	N
WL56	10-07-25	Shrub Swamp	387.70	Partial	N	Flat	Isolated	Histosol (A1)	High Water Table, Saturation	Sheep Laurel (<i>Kalmia angustifolia</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Northern Starflower (<i>Lysimachia borealis</i>), Pink Lady's-Slipper (<i>Cypripedium acaule</i>), Three-leaved False Solomon's Seal (<i>Maianthemum trifolium</i>)	Northern Wild Raisin (<i>Viburnum cassinoides</i>), Black Spruce (<i>Picea mariana</i>), Tamarack (<i>Larix laricina</i>), Mountain Holly (<i>Ilex mucronata</i>)	Black Spruce (<i>Picea mariana</i>), Tamarack (<i>Larix laricina</i>)	N
WL57	10-07-25	Shrub Swamp	219.90	Partial	N	Basin	Isolated	Histosol (A1)	High Water Table, Saturation	Three-leaved False Solomon's Seal (<i>Maianthemum trifolium</i>), Northern Pitcher Plant (<i>Sarracenia purpurea</i>), Three-seeded Sedge (<i>Carex trisperma</i>), Sheep Laurel (<i>Kalmia angustifolia</i>)	Mountain Holly (<i>Ilex mucronata</i>), Black Spruce (<i>Picea Mariana</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Tamarack (<i>Larix laricina</i>), Black Spruce (<i>Picea mariana</i>)	N
WL58	25-07-25	Treed Swamp	4,700.00	Partial	N	Basin	Isolated	Histosol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Three-seeded Sedge (<i>Carex trisperma</i>), Bunchberry (<i>Cornus canadensis</i>), Goldthread (<i>Coptis trifolia</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Red Maple (<i>Acer rubrum</i>)	Balsam Fir (<i>Abies balsamea</i>), Speckled Alder (<i>Alnus incana</i>), Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>)	Balsam Fir (<i>Balsam Fir</i>), Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>), Red Spruce (<i>Picea rubens</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N

Wetland ID	Date (dd-mm-yy)	Wetland Type	Area (m ²)	Delineation Type	Alterations Present? (Y/N)	Landform	Water Flow	Soil Type	Surface/ Hydrological Conditions	Dominant Vegetation			Associated Watercourse
WL59	10-07-25	Treed Swamp	755.20	Partial	N	Slope	Throughflow	Histisol (A1)	High Water Table,Saturation, Stunted or Stressed Plants	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Bunchberry (<i>Cornus canadensis</i>)	Northern Wild Rasisin (<i>Viburnum cassinoides</i>), Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>), Sheep Laurel (<i>Kalmia angustifolia</i>)	Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>)	WC5
WL60	10-07-25	Shrub Swamp	626.60	Partial	N	Slope	Isolated	Histisol (A1)	High Water Table, Saturation	Sheep Laurel (<i>Kalmia angustifolia</i>), Common Labrador Tea (<i>Rhododendron groenlandicum</i>), Pink Lady's-Slipper (<i>Cypripedium acaule</i>), Northern Pitcher Plant (<i>Sarracenia purpurea</i>), Three-seeded Sedge (<i>Carex trisperma</i>)	Mountain Holly (<i>Ilex mucronata</i>), Red Maple (<i>Acer rubrum</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Black Spruce (<i>Picea mariana</i>) , Red Maple (<i>Acer rubrum</i>), Tamarack (<i>Larix laricina</i>)	N
WL61	08-07-25	Treed Swamp	2043.4	Partial	N	Flat	Isolated	Histisol (A1)	High Water Table, Saturation, Stunted or Stressed Plants	Bunchberry (<i>Cornus canadensis</i>), Common Labrador Tea (<i>Rhododendron groenlandicum</i>), Sheep Laurel (<i>Kalmia angustifolia</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Yellow Bluebead Lily (<i>Clintonia borealis</i>)	Black Spruce (<i>Picea mariana</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>), Mountain Holly (<i>Ilex mucronata</i>)	Black Spruce (<i>Picea mariana</i>), Tamarack (<i>Larix laricina</i>)	N
WL62	11-07-25	Treed Swamp	25832.1	Partial	N	Flat	Isolated	Depleted Below Dark Surface (A11)	High Water Table, Saturation	New York Fern (<i>Amauropelta noveboracensis</i>), Northern Starflower (<i>Lysimachia borealis</i>), Goldthread (<i>Coptis trifolia</i>), Wild Sarsaparilla (<i>Aralia nudicaulis</i>)	Yellow Birch (<i>Betula alleghaniensis</i>), Balsam Fir (<i>Abies balsamea</i>)	Yellow Birch (<i>Betula alleghaniensis</i>), Balsam Fir (<i>Abies Balsamea</i>), Red Maple (<i>Acer rubrum</i>)	N
WL63	25-07-25	Treed Swamp	1733.8	Partial	N	Flat	Isolated	Histisol (A1)	Saturation	Bunchberry (<i>Cornus canadensis</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Goldthread (<i>Coptis trifolia</i>), Wild Lily-of-The-Valley (<i>Maianthemum canadense</i>), Red Maple (<i>Acer rubrum</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>)	Black Spruce (<i>Picea mariana</i>), Balsam Fir (<i>Abies balsamea</i>), Red Spruce (<i>Picea rubens</i>), Speckled Alder (<i>Alnus incana</i>)	Black Spruce (<i>Picea mariana</i>), Balsam Fir (<i>Abies balsamea</i>), Red Spruce (<i>Picea rubens</i>), Red Maple (<i>Acer rubrum</i>)	N
WL64	25-07-25	Treed Swamp	4096	Partial	N	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Bunchberry (<i>Cornus canadensis</i>), Three-seeded Sedge (<i>Carex trisperma</i>), Twinflower (<i>Linnaea borealis</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Black Spruce (<i>Picea mariana</i>)	Black Spruce (<i>Picea mariana</i>), Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>)	Black Spruce (<i>Picea mariana</i>), Balsam Fir (<i>Abies balsamea</i>), Red Spruce (<i>Picea rubens</i>), Red Maple (<i>Acer rubrum</i>)	N
WL65	27-06-25	Shrub Swamp	2,240.60	Partial	Y	Flat	Throughflow	Histisol (A1)	Surface Water, High Water Table,Saturation	Hairy Flat-top White Aster (<i>Doellingeria umbellata</i>), Wild Sarsaparilla (<i>Aralia nudicaulis</i>), Dwarf Red Raspberry (<i>Rubus pubescens</i>)	Red Maple (<i>Acer rubrum</i>), Speckled Alder (<i>Alnus incana</i>), Balsam Fir (<i>Abies balsamea</i>)	Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	WC3
WL66	08-07-25	Treed Swamp	14,663.80	Partial	N	Flat	Isolated	Histisol (A1), Hydrogen Sulfide (A4)	High Surface Water, Saturation, Stunted or Stressed Plants	Creeping Snowberry (<i>Gaultheria hispida</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Bunchberry (<i>Cornus canadensis</i>), Yellow Bluebead Lily (<i>Clintonia borealis</i>)	Gray Birch (<i>Betula populifolia</i>), Balsam Fir (<i>Abies balsamea</i>), Mountain Holly (<i>Ilex mucronata</i>), Rhodora (<i>Rhododendron canadense</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>)	N
WL67	25-07-25	Treed Swamp	152.60	Partial	N	Flat	Isolated	Histisol (A1)	Saturation, Water Stained Leaves	Red Maple (<i>Acer rubrum</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Bunchberry (<i>Cornus canadensis</i>), Three-seeded Sedge (<i>Carex trisperma</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Northern Starflower (<i>Lysimachia borealis</i>), Twinflower (<i>Linnaea borealis</i>)	Northern Wild Raisin (<i>Viburnum cassinoides</i>), Red Spruce (<i>Picea rubens</i>), Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>)	Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>), Eastern White Pine (<i>Pinus strobus</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL68	25-06-25	Treed Swamp	4,006.80	Partial	N	Flat	Isolated	Histisol (A1)	Surface Water, High Water Table, Saturation	New York Fern (<i>Amauropelta noveboracensis</i>), Wild Lily-of-The-Valley (<i>Maianthemum canadense</i>), Hairy Flat-top White Aster (<i>Doellingeria umbellata</i>), Yellow Bluebead Lily (<i>Clintonia borealis</i>), Mountain Wood Fern (<i>Dryopteris campylopetra</i>)	Balsam Fir (<i>Abies balsamea</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>)	Yellow Birch (<i>Betula alleghaniensis</i>), Red Maple (<i>Acer rurbum</i>), Balsam Fir (<i>Abies balsamea</i>)	N
WL69	25-07-25	Shrub Swamp	4,145.00	Partial	Y	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Bunchberry (<i>Cornus canadensis</i>), Twinflower (<i>Linnaea borealis</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Creeping Snowberry (<i>Gaultheria hispida</i>), Narrow-Leaved Cattail (<i>Typha angustifolia</i>)	Speckled Alder (<i>Alnus incana</i>), Black Spruce (<i>Picea mariana</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>)	Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>), Balsam Fir (<i>Abies balsamea</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL70	25-06-25	Shrub Swamp	238.30	Partial	N	Flat	Isolated	Histic Epipedon (A2)	Surface Water, High Water Table, Saturation	Goldthread (<i>Coptis trifolia</i>), Bunchberry (<i>Cornus canadensis</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Common Wood Sorrel (<i>Oxalis montana</i>)	Balsam Fir (<i>Abies balsamea</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Black Spruce (<i>Picea mariana</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Red Maple (<i>Acer rubrum</i>)	N
WL71	23-06-25	Shrub Swamp	1,364.40	Partial	Y	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Bunchberry (<i>Cornus canadensis</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Twinflower (<i>Linnaea borealis</i>), New York Fern (<i>Amauropelta noveboracensis</i>)	Red Maple (<i>Acer rubrum</i>), Gray Birch (<i>Betula populifolia</i>), Balsam Fir (<i>Abies balsamea</i>), Tamarack (<i>Larix laricina</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Red Maple (<i>Acer rubrum</i>), Gray Birch (<i>Betula populifolia</i>)	N
WL72	25-06-25	Shrub Swamp	9,582.60	Partial	N	Flat	Isolated	Histic Epipedon (A2), Hydrogen Sulfide (A4)	Surface Water, High Water Table, Saturation	Harlequin Blue Flag (<i>Iris versicolor</i>), Hairy Flat-top White Aster (<i>Doellingeria umbellata</i>)	Speckled Alder (<i>Alnus incana</i>), Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>)	NA	N
WL73	24-06-25	Treed Swamp	2,715.30	Partial	N	Flat	Isolated	Histic Epipedon (A2), Depleted Below Dark Surface (A11)	Surface Water, High Water Table, Saturation	Wild Lily-of-The-Valley (<i>Maianthemum canadense</i>), Yellow Bluebead Lily (<i>Clintonia borealis</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), New York Fern (<i>Amauropelta noveboracensis</i>)	Red Maple (<i>Acer rubrum</i>), Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>), Mountain Holly (<i>Ilex mucronata</i>)	Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>)	N
WL74	23-06-25	Shrub Swamp	2,359.50	Partial	Y	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Crested Wood Fern (<i>Dryopteris cristata</i>), Swamp Yellow Loosestrife (<i>Lysimachia terrestris</i>)	Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Gray Birch (<i>Betula populifolia</i>)	Balsam Fir (<i>Abies balsamea</i>)	N
WL75	24-06-25	Treed Swamp	18,536.80	Partial	N	Flat	Throughflow	Histisol (A1)	Surface Water, High Water Table, Saturation	Hairy Flat-top White Aster (<i>Doellingeria umbellata</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Goldthread (<i>Coptis trifolia</i>), Canada Goldenrod (<i>Solidago canadensis</i>)	Red Maple (<i>Acer rubrum</i>), Balsam Fir (<i>Abies balsamea</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL76	23-06-25	Shrub Swamp	1,251.90	Full	Y	Flat	Isolated	Histic Epipedon (A2), Depleted Below Dark Surface (A11)	High Water Table, Saturation	Northern Starflower (<i>Lysimachia borealis</i>), Goldthread (<i>Coptis trifolia</i>), Creeping snowberry (<i>Gaultheria hispida</i>), Twinflower (<i>Linnaea borealis</i>)	Red Maple (<i>Acer rubrum</i>), Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Gray Birch (<i>Betula populifolia</i>)	Black Spruce (<i>Picea mariana</i>)	N
WL77	24-09-25	Complex (Bog, Treed Swamp)	3,085.10	Partial	N	Basin	Isolated	Histosol (A1)	Saturation, High water table	Bunchberry (<i>Cornus canadensis</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>)	Mountain Holly (<i>Ilex mucronata</i>), Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>)	N
WL78	25-06-25	Treed Swamp	12307	Partial	N	Flat	Isolated	Histisol (A1)	Surface Water, High Water Table, Saturation	New York Fern (<i>Amauropelta noveboracensis</i>), Wild Lily-of-The-Valley (<i>Maianthemum canadense</i>), Hairy Flat-top White Aster (<i>Doellingeria umbellata</i>), Yellow Bluebead Lily (<i>Clintonia borealis</i>), Mountain Wood Fern (<i>Dryopteris campyloptera</i>)	Balsam Fir (<i>Abies balsamea</i>), Yellow Birch (<i>Betula Alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>)	Yellow Birch (<i>Betula Alleghaniensis</i>), Red Maple (<i>Acer rubrum</i>), Balsam Fir (<i>Abies balsamea</i>)	N
WL79	07-07-25	Treed Swamp	452.7	Partial	N	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), New York Fern (<i>Amauropelta noveboracensis</i>), Common Wood Sorrel (<i>Oxalis montana</i>), Goldthread (<i>Coptis trifolia</i>)	Mountain Holly (<i>Ilex mucronata</i>), Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>)	Red Maple (<i>Acer rubrum</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Balsam Fir (<i>Abies balsamea</i>)	WC1

Wetland ID	Date (dd-mm-yy)	Wetland Type	Area (m ²)	Delineation Type	Alterations Present? (Y/N)	Landform	Water Flow	Soil Type	Surface/ Hydrological Conditions	Dominant Vegetation			Associated Watercourse
WL80	26-06-25	Complex (Treed Swamp, Shrub Swamp)	7761.39	Partial	N	Flat	Isolated	Histisol (A1)	Surface Water, High Water Table, Saturation	Bunchberry (<i>Cornus canadensis</i>), Sheep Laurel (<i>Kalmia angustifolia</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Creeping Snowberry (<i>Gaultheria hispidula</i>), Yellow Bluebead Lily (<i>Clintonia borealis</i>)	Mountain Holly (<i>Ilex mucronata</i>), Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>), Nothern Wild Raisin (<i>Viburnum cassinoides</i>), Red Maple (<i>Acer rubrum</i>)	Black Spruce (<i>Picea mariana</i>)	N
WL81	26-06-25	Shrub Swamp	109.2	Full	N	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Bunchberry (<i>Cornus canadensis</i>), Creeping Snowberry (<i>Gaultheria hispidula</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Mountain Wood Fern (<i>Dryopteris campylopetra</i>), Goldthread (<i>Coptis trifolia</i>)	Mountain Holly (<i>Ilex mucronata</i>), Eastern White Pine (<i>Pinus strobus</i>), Yellow Birch (<i>Betula alleghaniensis</i>), Black Spruce (<i>Picea mariana</i>), Balsam Fir (<i>Abies balsamea</i>)	NA	N
WL82	26-06-25	Complex (Treed Swamp, Shrub Swamp)	6700.8	Full	N	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Yellow Bluebead Lily (<i>Clintonia borealis</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Bunchberry (<i>Cornus canadensis</i>), Goldthread (<i>Coptis trifolia</i>)	Northern Wild Raisin (<i>Viburnum cassinoides</i>), Black Spruce (<i>Picea mariana</i>), Mountain Holly (<i>Ilex mucronata</i>), Balsam Fir (<i>Abies balsamea</i>), Red Maple (<i>Acer rubrum</i>)	Black Spruce (<i>Picea mariana</i>)	N
WL83	26-06-25	Treed Swamp	478.5	Full	N	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Bunchberry (<i>Cornus canadensis</i>), Pink Lady's Slipper (<i>Cypripedium acaule</i>), Goldthread (<i>Coptis trifolia</i>), Creeping Snowberry (<i>Gaultheria hispidula</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>)	Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>), Red Maple (<i>Acer rubrum</i>), Eastern White Pine (<i>Pinus strobus</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>)	N
WL84	08-07-25	Shrub Swamp	1696.7	Partial	Y	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Narrow-Leaved Cattail (<i>Typha angustifolia</i>), Hairy Flat-top White Aster (<i>Doellingeria umbellata</i>)	Yellow Birch (<i>Betula alleghaniensis</i>), Mountain Holly (<i>Ilex mucronata</i>), Red Maple (<i>Acer rubrum</i>)	Yellow Birch (<i>Betula alleghaniensis</i>)	N
WL85	26-06-25	Treed Swamp	1583.8	Partial	N	Flat	Isolated	Histisol (A1), Depleted Below Dark Surface (A11)	High Water Table, Saturation	Bunchberry (<i>Cornus canadensis</i>), Sheep Laurel (<i>Kalmia angustifolia</i>), Goldthread (<i>Coptis trifolia</i>), Creeping Snowberry (<i>Gaultheria hispidula</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>)	Black Spruce (<i>Picea mariana</i>), Balsam Fir (<i>Abies balsamea</i>), Mountain Holly (<i>Ilex mucronata</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Black Spruce (<i>Picea mariana</i>)	N
WL86	27-06-25	Shrub Swamp	1142.7	Partial	N	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Bunchberry (<i>Cornus canadensis</i>), Yellow Bluebead Lily (<i>Clintonia borealis</i>), Common Labrador Tea (<i>Rhododendron groenlandicum</i>), Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Creeping Snowberry (<i>Gaultheria hispidula</i>)	Black Spruce (<i>Picea mariana</i>), Balsam Fir (<i>Abies balsamea</i>), Mountain Holly (<i>Ilex mucronata</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	NA	N
WL87	26-06-25	Complex (Shrub Swamp, Treed Swamp)	2306.5	Partial	N	Flat	Isolated	Histisol (A1)	High Water Table, Saturation	Cinnamon Fern (<i>Osmundastrum cinnamomeum</i>), Bunchberry (<i>Cornus canadensis</i>), Goldthread (<i>Coptis trifolia</i>), Yellow Bluebead Lily (<i>Clintonia borealis</i>)	Red Maple (<i>Acer rubrum</i>), Black Spruce (<i>Picea mariana</i>), Tamarack (<i>Larix laricina</i>), Mountain Holly (<i>Ilex mucronata</i>), Northern Wild Raisin (<i>Viburnum cassinoides</i>)	Tamarack (<i>Larix laricina</i>), Balsam Fir (<i>Abies balsamea</i>), Black Spruce (<i>Picea mariana</i>)	N



Photo 1: Representative photo of WL1.



Photo 2: Representative photo of WL2.



Photo 3: Representative photo of WL3.



Photo 4: Representative photo of WL4.



Photo 5: Representative photo of WL5.



Photo 6: Representative photo of WL6.



Photo 7: Representative photo of WL7.



Photo 8: Representative photo of WL8.



Photo 9: Representative photo of WL9.



Photo 10: Representative photo of WL10.



Photo 11: Representative photo of WL11.



Photo 12: Representative photo of WL12.



Photo 13: Representative photo of WL13.



Photo 14: Representative photo of WL14.



Photo 15: Representative photo of WL15.



Photo 16: Representative photo of WL16.



Photo 17: Representative photo of WL17.



Photo 18: Representative photo of WL18.



Photo 19: Representative photo of WL19.



Photo 20: Representative photo of WL20.



Photo 21: Representative photo of WL21.



Photo 22: Representative photo of WL22.



Photo 23: Representative photo of WL23.



Photo 24: Representative photo of WL24.



Photo 25: Representative photo of WL25.



Photo 26: Representative photo of WL26.



Photo 27: Representative photo of WL27.



Photo 28: Representative photo of WL28.



Photo 29: Representative photo of WL29.



Photo 30: Representative photo of WL30.



Photo 31: Representative photo of WL31.



Photo 32: Representative photo of WL32.



Photo 33: Representative photo of WL33.



Photo 34: Representative photo of WL34.



Photo 35: Representative photo of WL35.



Photo 36: Representative photo of WL36.



Photo 37: Representative photo of WL37.



Photo 38: Representative photo of WL38.



Photo 39: Representative photo of WL39.



Photo 40: Representative photo of WL40.



Photo 41: Representative photo of WL41.



Photo 42: Representative photo of WL42.



Photo 43: Representative photo of WL43.



Photo 44: Representative photo of WL44.



Photo 45: Representative photo of WL45.



Photo 46: Representative photo of WL46.



Photo 47: Representative photo of WL47.

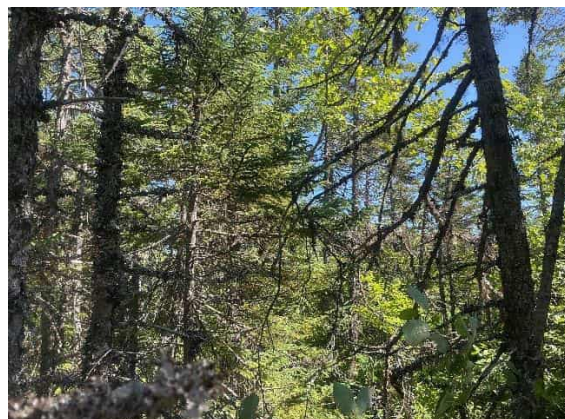


Photo 48: Representative photo of WL48.



Photo 49: Representative photo of WL49.



Photo 50: Representative photo of WL50.



Photo 51: Representative photo of WL51.



Photo 52: Representative photo of WL52.

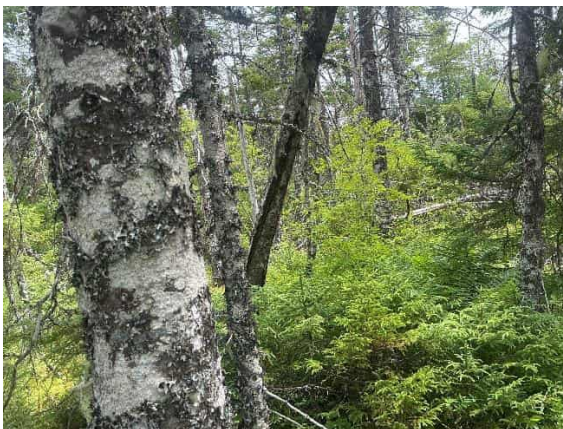


Photo 53: Representative photo of WL53.



Photo 54: Representative photo of WL54.



Photo 55: Representative photo of WL55.



Photo 56: Representative photo of WL56.



Photo 57: Representative photo of WL57.



Photo 58: Representative photo of WL58.



Photo 59: Representative photo of WL59.



Photo 60: Representative photo of WL60.



Photo 61: Representative photo of WL61.



Photo 62: Representative photo of WL62.



Photo 63: Representative photo of WL63.



Photo 64: Representative photo of WL64.



Photo 65: Representative photo of WL65.



Photo 66: Representative photo of WL66.



Photo 67: Representative photo of WL67.



Photo 68: Representative photo of WL68.



Photo 69: Representative photo of WL69.



Photo 70: Representative photo of WL70



Photo 71: Representative photo of WL71.



Photo 72: Representative photo of WL72.



Photo 73: Representative photo of WL73.



Photo 74: Representative photo of WL74.



Photo 75: Representative photo of WL75.



Photo 76: Representative photo of WL76.



Photo 77: Representative photo of WL77.



Photo 78: Representative photo of WL78.



Photo 79: Representative photo of WL79.



Photo 80: Representative photo of WL80.

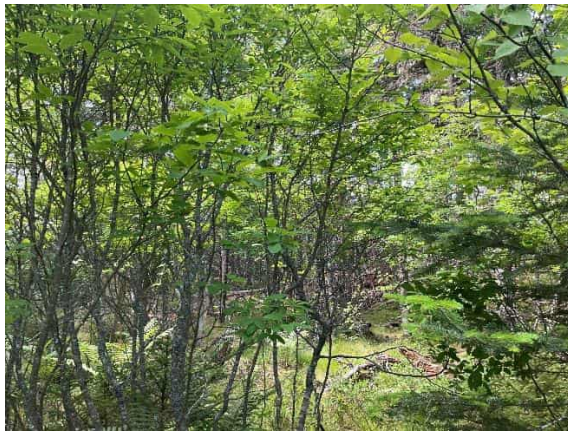


Photo 81: Representative photo of WL81.



Photo 82: Representative photo of WL82.



Photo 83: Representative photo of WL83.



Photo 84: Representative photo of WL84.



Photo 85: Representative photo of WL85.



Photo 86: Representative photo of WL86.



Photo 87: Representative photo of WL87.

APPENDIX I
OLD GROWTH ASSESSMENT PHOTOGRAPH LOG



Photo 1: Representative photo of plot 1,
stand C021-01103.



Photo 2: Representative photo of plot 2,
stand C021-01103.



Photo 3: Representative photo of plot 3,
stand C021-01103.



Photo 4: Representative photo of plot 4, stand C021-
01103.



Photo 5: Representative photo of plot 5,
stand C021-01103.



Photo 6: Representative photo of plot 6,
stand C021-01103.



Photo 7: Representative photo of plot 7,
stand C021-01103.



Photo 8: Representative photo of plot 8,
stand C021-01103.



Photo 9: Representative photo of plot 9,
stand C021-01103.



Photo 10: Representative photo of plot 1,
stand C021-01522.

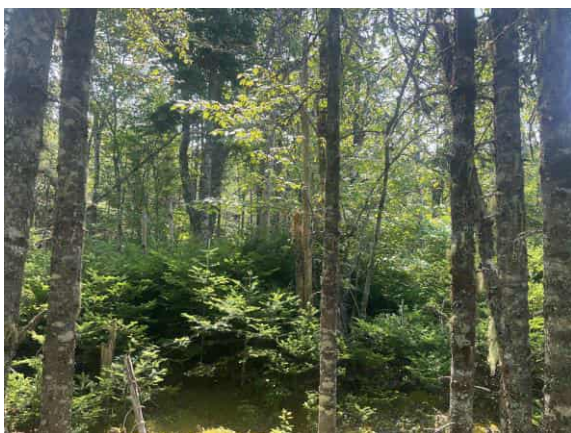


Photo 11: Representative photo of plot 2,
stand C021-01522.



Photo 12: Representative photo of plot 3,
stand C021-01522.



Photo 13: Representative photo of plot 1,
stand C021-01524.



Photo 14: Representative photo of plot 2,
stand C021-01524.



Photo 15: Representative photo of plot 3,
stand C021-01524.



Photo 16: Representative photo of plot 4,
stand C021-01524.



Photo 17: Representative photo of plot 1,
stand C021-01562.



Photo 18: Representative photo of plot 2,
stand C021-01562.



Photo 19: Representative photo of plot 3,
stand C021-01562.



Photo 20: Representative photo of plot 4,
stand C021-01562.



Photo 21: Representative photo of plot 5,
stand C021-01562.

APPENDIX J

FLORA INVENTORY

Common Name	Scientific Name	COSEWIC	SARA	ESA	S-Rank
Plants (Vascular)					
<i>Abies balsamea</i>	Balsam Fir	-	-	-	S5
<i>Acer pensylvanicum</i>	Striped Maple	-	-	-	S5
<i>Acer rubrum</i>	Red Maple	-	-	-	S5
<i>Acer saccharum</i>	Sugar Maple	-	-	-	S4S5
<i>Actaea rubra</i>	Red Baneberry	-	-	-	S5
<i>Agalinis neoscotica</i>	Nova Scotia Agalinis	-	-	-	S4S5
<i>Agrostis scabra</i>	Rough Bent Grass	-	-	-	S5
<i>Alnus alnobetula</i>	Green Alder	-	-	-	S5
<i>Alnus incana</i>	Speckled Alder	-	-	-	S5
<i>Amauropelta noveboracensis</i>	New York Fern	-	-	-	S5
<i>Ambrosia artemisiifolia</i>	Common Ragweed	-	-	-	S5
<i>Amelanchier arborea</i>	Downy Serviceberry	-	-	-	S4S5
<i>Anaphalis margaritacea</i>	Pearly Everlasting	-	-	-	S5
<i>Anthoxanthum odoratum</i>	Large Sweet Vernal Grass	-	-	-	SNA
<i>Apocynum androsaemifolium</i>	Spreading Dogbane	-	-	-	S5
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	-	-	-	S5
<i>Aronia melanocarpa</i>	Black Chokeberry	-	-	-	S5
<i>Bellis perennis</i>	English Daisy	-	-	-	SNA
<i>Betula alleghaniensis</i>	Yellow Birch	-	-	-	S5
<i>Betula cordifolia</i>	Heart-Leaved Birch	-	-	-	S5
<i>Betula papyrifera</i>	Paper Birch	-	-	-	S5
<i>Betula populifolia</i>	Gray Birch	-	-	-	S5
<i>Bidens cernua</i>	Nodding Beggarticks	-	-	-	S5
<i>Calamagrostis canadensis</i>	Bluejoint Reed Grass	-	-	-	S5
<i>Calla palustris</i>	Wild Calla	-	-	-	S4
<i>Callitriche palustris</i>	Marsh Water-Starwort	-	-	-	S5
<i>Calopogon tuberosus</i>	Tuberous Grass Pink	-	-	-	S4S5
<i>Cardamine pensylvanica</i>	Pennsylvania Bittercress	-	-	-	S5
<i>Carex atlantica</i>	Atlantic Sedge	-	-	-	S4
<i>Carex brunnescens</i>	Brownish Sedge	-	-	-	S5
<i>Carex debilis</i>	White-edged Sedge	-	-	-	S5
<i>Carex disperma</i>	Two-seeded Sedge	-	-	-	S5
<i>Carex echinata</i>	Star Sedge	-	-	-	S5
<i>Carex flava</i>	Yellow Sedge	-	-	-	S5
<i>Carex folliculata</i>	Northern Long Sedge	-	-	-	S5
<i>Carex gynandra</i>	Nodding Sedge	-	-	-	S5
<i>Carex interior</i>	Inland Sedge	-	-	-	S4S5
<i>Carex intumescens</i>	Bladder Sedge	-	-	-	S5

Common Name	Scientific Name	COSEWIC	SARA	ESA	S-Rank
<i>Carex lasiocarpa</i>	Slender Sedge	-	-	-	S5
<i>Carex leptalea</i>	Bristly-stalked Sedge	-	-	-	S5
<i>Carex lurida</i>	Sallow Sedge	-	-	-	S5
<i>Carex magellanica</i>	Boreal Bog Sedge	-	-	-	S5
<i>Carex nigra</i>	Smooth Black Sedge	-	-	-	S5
<i>Carex novae-angliae</i>	New England Sedge	-	-	-	S5
<i>Carex projecta</i>	Necklace Sedge	-	-	-	S5
<i>Carex stricta</i>	Tussock Sedge	-	-	-	S5
<i>Carex trisperma</i>	Three-Seeded Sedge	-	-	-	S5
<i>Cerastium fontanum</i>	Common Chickweed	-	-	-	SNA
<i>Chamaedaphne calyculata</i>	Leatherleaf	-	-	-	S5
<i>Chamaenerion angustifolium</i>	Fireweed	-	-	-	SNA
<i>Chelone glabra</i>	White Turtlehead	-	-	-	S5
<i>Chrysosplenium americanum</i>	American Golden Saxifrage	-	-	-	S5
<i>Circaea alpina</i> ssp. <i>alpina</i>	Small Enchanter's Nightshade	-	-	-	S5
<i>Claytonia virginiana</i>	Interrupted Fern	-	-	-	S5
<i>Clematis virginiana</i>	Virginia Clematis	-	-	-	S5
<i>Climacium dendroides</i>	Northern Tree Moss	-	-	-	S5
<i>Clintonia borealis</i>	Yellow Bluebead Lily	-	-	-	S5
<i>Corallorhiza maculata</i>	Spotted Coralroot	-	-	-	S4
<i>Coreopsis grandiflora</i>	Large-Flowered Tickseed	-	-	-	SNA
<i>Cornus alternifolia</i>	Alternate-Leaved Dogwood	-	-	-	S5
<i>Cornus sericea</i>	Red Osier Dogwood	-	-	-	S5
<i>Cypripedium acaule</i>	Pink Lady's-Slipper	-	-	-	S5
<i>Cypripedium parviflorum</i>	Yellow Lady's-Slipper var. <i>pubescens</i>	-	-	-	S2
<i>Dendrolycopodium dendroideum</i>	Round-branched Tree-clubmoss	-	-	-	S5
<i>Dendrolycopodium hickeyi</i>	Hickey's Tree-Clubmoss	-	-	-	S4
<i>Dennstaedtia punctilobula</i>	Eastern Hay-Scented Fern	-	-	-	S5
<i>Drosera intermedia</i>	Spoon-Leaved Sundew	-	-	-	S5
<i>Drosera rotundifolia</i>	Round-Leaved Sundew	-	-	-	S5
<i>Dryopteris campyloptera</i>	Mountain Wood Fern	-	-	-	S5
<i>Dryopteris carthusiana</i>	Spinulose Wood Fern	-	-	-	S5
<i>Dryopteris cristata</i>	Crested Wood Fern	-	-	-	S5
<i>Dryopteris intermedia</i>	Evergreen Wood Fern	-	-	-	S5
<i>Epifagus virginiana</i>	Beechdrops	-	-	-	S4
<i>Epigaea repens</i>	Trailing Arbutus	-	-	-	S5

Common Name	Scientific Name	COSEWIC	SARA	ESA	S-Rank
<i>Epilobium ciliatum</i>	Northern Willowherb	-	-	-	S4S5
<i>Epipactis helleborine</i>	Helleborine	-	-	-	SNA
<i>Equisetum arvense</i>	Field Horsetail	-	-	-	S5
<i>Equisetum fluviatile</i>	Water Horsetail	-	-	-	S5
<i>Eupatorium perfoliatum</i>	Common Boneset	-	-	-	S5
<i>Eutrochium maculatum</i>	Spotted Joe Pye Weed	-	-	-	S5
<i>Fagus grandifolia</i>	American Beech	-	-	-	S3S4
<i>Fallopia cilinodis</i>	Fringed Black Bindweed	-	-	-	S5
<i>Fragaria virginiana</i>	Wild Strawberry	-	-	-	S5
<i>Fraxinus americana</i>	White Ash	-	-	-	S4
<i>Fraxinus nigra</i>	Black Ash	Threatened	Threatened	Threatened	S1S2
<i>Galium asprellum</i>	Rough Bedstraw	-	-	-	S5
<i>Gaultheria hispidula</i>	Creeping Snowberry	-	-	-	S5
<i>Gaultheria procumbens</i>	Eastern Teaberry	-	-	-	S5
<i>Gaylussacia baccata</i>	Black Huckleberry	-	-	-	S5
<i>Geranium robertianum</i>	Herb Robert	-	-	-	S4
<i>Geum aleppicum</i>	Yellow Avens	-	-	-	S5
<i>Geum rivale</i>	Water Avens	-	-	-	S5
<i>Glyceria borealis</i>	Northern Manna Grass	-	-	-	S5
<i>Gratiola lutea</i>	Golden Hedge-hyssop	-	-	-	S5
<i>Gymnocarpium dryopteris</i>	Common Oak Fern	-	-	-	S5
<i>Hieracium sabaudum</i>	New England Hawkweed	-	-	-	SNA
<i>Huperzia lucidula</i>	Shining Firmoss	-	-	-	S5
<i>Ilex mucronata</i>	Mountain Holly	-	-	-	S5
<i>Ilex verticillata</i>	Common Winterberry	-	-	-	S5
<i>Impatiens capensis</i>	Spotted Jewelweed	-	-	-	S5
<i>Iris versicolor</i>	Harlequin Blue Flag	-	-	-	S5
<i>Juncus articulatus</i> ssp. <i>articulatus</i>	Jointed Rush	-	-	-	S5
<i>Juncus canadensis</i>	Canada Rush	-	-	-	S5
<i>Juncus filiformis</i>	Thread Rush	-	-	-	S5
<i>Kalmia angustifolia</i>	Sheep Laurel	-	-	-	S5
<i>Kalmia polifolia</i>	Pale Bog Laurel	-	-	-	S5
<i>Lactuca biennis</i>	Tall Blue Lettuce	-	-	-	S5
<i>Larix laricina</i>	Tamarack	-	-	-	S5
<i>Linnaea borealis</i>	Twinflower	-	-	-	S5
<i>Liparis loeselii</i>	Loesel's Twayblade	-	-	-	S3S4
<i>Lobelia inflata</i>	Inflated Lobelia	-	-	-	S5

Common Name	Scientific Name	COSEWIC	SARA	ESA	S-Rank
<i>Lonicera canadensis</i>	Canada Fly Honeysuckle	-	-	-	S5
<i>Lonicera villosa</i>	Mountain Fly Honeysuckle	-	-	-	S4S5
<i>Lycopodium clavatum</i>	Running Clubmoss	-	-	-	S5
<i>Lycopus virginicus</i>	Virginia Bugleweed	-	-	-	SNA
<i>Lysimachia terrestris</i>	Swamp Yellow Loosestrife	-	-	-	S5
<i>Maianthemum canadense</i>	Wild Lily-Of-The-Valley	-	-	-	S5
<i>Maianthemum racemosum</i>	Large False Solomon's Seal	-	-	-	S4S5
<i>Mentha canadensis</i>	Canadian Mint	-	-	-	S5
<i>Mitella nuda</i>	Naked Bishop's-Cap	-	-	-	S4S5
<i>Moneses uniflora</i>	One-Flowered Wintergreen	-	-	-	S4S5
<i>Myrica gale</i>	Sweet Gale	-	-	-	S5
<i>Nabalus altissimus</i>	Tall Rattlesnakeroot	-	-	-	S5
<i>Nabalus trifoliolatus</i>	Three-Leaved Rattlesnakeroot	Threatened	Threatened	Threatened	S5
<i>Oclemena acuminata</i>	Whorled Wood Aster	-	-	-	S5
<i>Oclemena nemoralis</i>	Bog Aster	-	-	-	S5
<i>Onoclea sensibilis</i>	Sensitive Fern	-	-	-	S5
<i>Osmunda regalis</i>	Royal Fern	-	-	-	S5
<i>Osmundastrum cinnamomeum</i>	Cinnamon Fern	-	-	-	S5
<i>Oxalis montana</i>	Common Wood Sorrel	-	-	-	S5
<i>Packera schweinitziana</i>	Schweinitz's Groundsel	-	-	-	S4
<i>Panax trifolius</i>	Dwarf Ginseng	-	-	-	S4
<i>Pellia epiphylla</i>	Common Pellia	-	-	-	S5
<i>Phegopteris connectilis</i>	Northern Beech Fern	-	-	-	S5
<i>Phleum pratense</i>	Common Timothy	-	-	-	SNA
<i>Picea mariana</i>	Black Spruce	-	-	-	S5
<i>Picea rubens</i>	Red Spruce	-	-	-	S5
<i>Pilosella aurantiaca</i>	Orange Hawkweed	-	-	-	SNA
<i>Pilosella piloselloides</i>	Tall Hawkweed	-	-	-	SNA
<i>Pinus strobus</i>	Eastern White Pine	-	-	-	S5
<i>Plantago lanceolata</i>	English Plantain	-	-	-	SNA
<i>Plantago major</i>	Common Plantain	-	-	-	SNA
<i>Platanthera aquilonis</i>	Tall Northern Green Orchid	-	-	-	S4
<i>Platanthera blephariglottis</i>	White Fringed Orchid	-	-	-	S4S5
<i>Platanthera clavellata</i>	Club Spur Orchid	-	-	-	S5
<i>Platanthera dilatata</i>	White Bog Orchid	-	-	-	S4S5
<i>Platanthera lacera</i>	Ragged Fringed Orchid	-	-	-	S4S5

Common Name	Scientific Name	COSEWIC	SARA	ESA	S-Rank
<i>Pogonia ophioglossoides</i>	Rose Pogonia	-	-	-	S4S5
<i>Polystichum acrostichoides</i>	Christmas Fern	-	-	-	S5
<i>Pontederia cordata</i>	Pickerselweed	-	-	-	S5
<i>Populus grandidentata</i>	Large-Toothed Aspen	-	-	-	S5
<i>Populus tremuloides</i>	Trembling Aspen	-	-	-	S5
<i>Potentilla norvegica</i>	Rough Cinquefoil	-	-	-	S5
<i>Potentilla simplex</i>	Old Field Cinquefoil	-	-	-	S5
<i>Prunella vulgaris</i> ssp. <i>lanceolata</i>	Common Self-Heal	-	-	-	S5
<i>Prunus pensylvanica</i>	Pin Cherry	-	-	-	S5
<i>Pteridium aquilinum</i>	Bracken Fern	-	-	-	S5
<i>Pyrola elliptica</i>	Shinleaf	-	-	-	S5
<i>Ranunculus acris</i>	Common Buttercup	-	-	-	SNA
<i>Rhododendron canadense</i>	Rhodora	-	-	-	S5
<i>Rhododendron groenlandicum</i>	Common Labrador Tea	-	-	-	S5
<i>Ribes lacustre</i>	Bristly Black Currant	-	-	-	S5
<i>Rosa nitida</i>	Shining Rose	-	-	-	S4S5
<i>Rosa palustris</i>	Swamp Rose	-	-	-	S4
<i>Rubus allegheniensis</i>	Alleghaney Blackberry	-	-	-	S5
<i>Rubus hispidus</i>	Bristly Dewberry	-	-	-	S5
<i>Rumex obtusifolius</i>	Bitter Dock	-	-	-	SNA
<i>Salix bebbiana</i>	Bebb's Willow	-	-	-	S5
<i>Sarracenia purpurea</i>	Northern Purple Pitcher-Plant	-	-	-	S5
<i>Scutellaria lateriflora</i>	Mad-Dog Skullcap	-	-	-	S5
<i>Securigera varia</i>	Purple Crown-Vetch	-	-	-	SNA
<i>Setaria pumila</i>	Yellow Foxtail	-	-	-	SNA
<i>Sibbaldia tridentata</i>	Three-toothed Cinquefoil	-	-	-	S5
<i>Sium suave</i>	Common Water Parsnip	-	-	-	S5
<i>Solidago canadensis</i>	Canada Goldenrod	-	-	-	S4S5
<i>Solidago flexicaulis</i>	Zigzag Goldenrod	-	-	-	S5
<i>Solidago juncea</i>	Early Goldenrod	-	-	-	S5
<i>Solidago nemoralis</i>	Gray-stemmed Goldenrod	-	-	-	S4S5
<i>Sorbus aucuparia</i>	European Mountain Ash	-	-	-	SNA
<i>Spinulum annotinum</i>	Stiff Clubmoss	-	-	-	S5
<i>Spiraea alba</i>	White Meadowsweet	-	-	-	S5
<i>Spiraea tomentosa</i>	Steeplebush	-	-	-	S5
<i>Streptopus lanceolatus</i>	Rose Twisted-Stalk	-	-	-	S5
<i>Symphotrichum lateriflorum</i>	Calico Aster	-	-	-	S5

Common Name	Scientific Name	COSEWIC	SARA	ESA	S-Rank
<i>Symphyotrichum novi-belgii</i>	New York Aster	-	-	-	SNR
<i>Thalictrum pubescens</i>	Tall Meadow-Rue	-	-	-	S5
<i>Thelypteris palustris</i>	Eastern Marsh Fern	-	-	-	S5
<i>Trifolium arvense</i>	Rabbit's-Foot Clover	-	-	-	SNA
<i>Trifolium pratense</i>	Red Clover	-	-	-	SNA
<i>Trillium cernuum</i>	Nodding Trillium	-	-	-	S4
<i>Vaccinium oxycoccos</i>	Small Cranberry	-	-	-	S5
<i>Verbascum thapsus</i>	Common Mullein	-	-	-	SNA
<i>Veronica officinalis</i>	Common Speedwell	-	-	-	SNA
<i>Viburnum cassinoides</i>	Northern Wild Raisin	-	-	-	S5
<i>Viburnum opulus</i>	Highbush Cranberry	-	-	-	S4
<i>Vicia cracca</i>	Tufted Vetch	-	-	-	SNA
<i>Viola cucullata</i>	Marsh Blue Violet	-	-	-	S5
Lichens					
<i>Cetrelia chicitae</i>	Frothing Seastorm Lichen	-	-	-	S5
<i>Cladonia boryi</i>	Fishnet Lichen	-	-	-	S5
<i>Cladonia macilenta</i>	Lipstick Powderhorn Lichen	-	-	-	S4S5
<i>Cladonia maxima</i>	Giant Cladonia Lichen	-	-	-	S5
<i>Cladonia ochrochlora</i>	Smooth-footed Powderhorn Lichen	-	-	-	S5
<i>Cladonia rangiferina</i>	Gray Reindeer Lichen	-	-	-	S5
<i>Cladonia squamosa</i>	Dragon Lichen	-	-	-	S5
<i>Dibaeis baeomyces</i>	Pink Earth Lichen	-	-	-	S5
<i>Dolichousnea longissima</i>	Methuselah's Beard Lichen	-	-	-	S4
<i>Hypogymnia krogiae</i>	Freckled Tube Lichen	-	-	-	S5
<i>Hypogymnia tubulosa</i>	Powder-headed Tube Lichen	-	-	-	S5
<i>Imshaugia aleurites</i>	Salted Starburst Lichen	-	-	-	S4S5
<i>Lobaria pulmonaria</i>	Lungwort Lichen	-	-	-	S5
<i>Lobaria scrobiculata</i>	Textured Lungwort Lichen	-	-	-	S5
<i>Menegazzia subsimilis</i>	Tree Flute Lichen	-	-	-	S4S5
<i>Menegazzia terebrata</i>	Magic Flute Lichen	-	-	-	S4S5
<i>Parmelia squarrosa</i>	Bottlebrush Shield Lichen	-	-	-	S5
<i>Parmelia sulcata</i>	Hammered Shield Lichen	-	-	-	S5
<i>Parmeliella triptophylla</i>	Black-bordered Shingles Lichen	-	-	-	S5
<i>Pectenota plumbea</i>	Blue Felt Lichen	Special Concern	Special Concern	Vulnerable	S3
<i>Platismatia glauca</i>	Varied Rag Lichen	-	-	-	S5

Common Name	Scientific Name	COSEWIC	SARA	ESA	S-Rank
<i>Protopannaria pezizoides</i>	Brown-gray Moss-shingle Lichen	-	-	-	S5
<i>Ramalina dilacerata</i>	Punctured Ramalina Lichen	-	-	-	S5
<i>Ramalina roesleri</i>	Frayed Ramalina Lichen	-	-	-	S5
<i>Sclerophora peronella</i> (Atlantic pop.)	Frosted glass-whiskers lichen (Atlantic population)	Special Concern	Special Concern	-	S3S4
<i>Sphaerophorus globosus</i>	Northern Coral Lichen	-	-	-	S4
<i>Usnea strigosa</i>	Bushy Beard Lichen	-	-	-	S5
Bryophytes					
<i>Bazzania trilobata</i>	Three-lobed Whipwort	-	-	-	S5
<i>Dicranum polysetum</i>	Wavy-leaved Broom Moss	-	-	-	S5
<i>Dicranum scoparium</i>	Common Broom Moss	-	-	-	S5
<i>Dicranum viride</i>	Green Broom Moss	-	-	-	S5
<i>Hylocomium splendens</i>	Stairstep Moss	-	-	-	S5
<i>Leucobryum glaucum</i>	White Pincushion Moss	-	-	-	S5
<i>Pellia epiphylla</i>	Common Pellia	-	-	-	S5
<i>Pleurozium schreberi</i>	Red-stemmed Feather Moss	-	-	-	S5
<i>Polytrichum commune</i>	Common Haircap Moss	-	-	-	S5
<i>Rhytidiadelphus triquetrus</i>	Electrified Cat's-tail Moss	-	-	-	S5
<i>Sphagnum capillifolium</i>	Northern Peatmoss	-	-	-	S5
<i>Sphagnum fallax</i>	Flat-top Peat Moss	-	-	-	S5
<i>Sphagnum fuscum</i>	Brown Peat Moss	-	-	-	S5
<i>Sphagnum girgensohnii</i>	Green Peat Moss	-	-	-	S5
<i>Ulota crispa</i>	Crisped Pincushion Moss	-	-	-	S5
Exotics					
<i>Centaurea nigra</i>	Black Knapweed	-	-	-	SNA
<i>Cirsium arvense</i>	Canada Thistle	-	-	-	SNA
<i>Euphrasia nemorosa</i>	Common Eyebright	-	-	-	SNA
<i>Frangula alnus</i>	Glossy Buckthorn	-	-	-	SNA
<i>Galium mollugo</i>	Smooth bedstraw	-	-	-	SNA
<i>Hieracium lachenalii</i>	Common Hawkweed	-	-	-	SNA
<i>Jacobaea vulgaris</i>	Tansy Ragwort	-	-	-	SNA
<i>Hypericum perforatum</i>	Common St. John's-wort	-	-	-	SNA
<i>Leucanthemum vulgare</i>	Oxeye Daisy	-	-	-	SNA
<i>Melilotus albus</i>	White Sweet-Clover	-	-	-	SNA
<i>Ranunculus repens</i>	Creeping Buttercup	-	-	-	SNA

Common Name	Scientific Name	COSEWIC	SARA	ESA	S-Rank
<i>Rosa multiflora</i>	Multiflora Rose	-	-	-	SNA
<i>Senecio vulgaris</i>	Common Ragwort	-	-	-	SNA
<i>Tussilago farfara</i>	Colt's foot	-	-	-	SNA
SOCI and SAR					
<i>Fagus grandifolia</i>	American Beech	-	-	-	S3S4
<i>Fraxinus nigra</i>	Black Ash	Threatened	Threatened	Threatened	S1S2
<i>Liparis loeselii</i>	Loesel's Twayblade	-	-	-	S3S4
<i>Pectenia plumbea</i>	Blue Felt Lichen	Special Concern	Special Concern	Vulnerable	S3
<i>Sclerophora peronella</i> (Atlantic pop.)	Frosted glass-whiskers lichen (Atlantic population)	Special Concern	Special Concern	-	S3S4

APPENDIX K
TERRESTRIAL FAUNA PHOTOGRAPH LOG



Photo 1: White-tailed deer (*Odocoileus virginianus*) photographed at 8:42 am April 12, 2025, by trail camera A located within the Study Area.



Photo 2: Eastern coyote (*Canis latrans*) photographed at 1:04 pm April 12, 2025, by trail camera B located within the Study Area.



Photo 3: Bobcat (*Lynx rufus*) photographed at 19:09pm April 15, 2025, by trail camera D located within the Study Area.



Photo 4: Snowshoe hare (*Lepus americanus*) photographed at 13:04pm June 9, 2025, by trail camera B located within the Study Area.



Photo 5: Bobcat (*Lynx rufus*) tracks photographed on February 7, 2025, during winter tracking surveys.



Photo 6: Red squirrel (*Tamiasciurus hudsonicus*) tracks photographed on February 7, 2025, during winter tracking surveys.



Photo 7: Snowshoe hare (*Lepus americanus*) tracks and scat photographed on February 11, 2025, during winter tracking surveys.