



Figures 3A – N. Representative habitat conditions and animal sign found at the New Annan quarry site during the 22 May 2024 general wildlife survey. Photo points correspond with labels found in Figure 4. **A:** Small beaver impoundment (0.07 ha; photo point - Pond 1) surrounded by mature balsam fir. **B:** Watercourse approximately 1 m wide (photo point - watercourse and watercourse2). **C:** Regenerating harvest area dominated by raspberry. Red and sugar maple regen scattered throughout harvest area (photo point – Cutover Regen, Cutover Regen2, Cutover Regen 3). **D:** Example of one of several sugar maple and yellow birch with broken crowns, cavities and split trunks that could potentially provide habitats for small mammals (photo point – cavity tree and cavity tree2). **E:** Example of ~ 8 ha regenerating cutover west of the existing quarry (photo point – Cutover Regen3). **F:** White-tail deer pellets found in regenerating cutover (photo point – White-tail Deer Pellets). **G:** Snowshoe hare pellets found in regenerating cutover (photo point – Snowshoe Hare Pellets). **H:** Meadow vole tunnels (photo point – *Microtus* tunnels). **I:** 0.08 ha shallow pond with no discernable inflow or outflow (photo point – Pond2). **J:** Typical immature balsam fir and red spruce found north and east of the quarry (photo point – Immature Softwood). **K:** 0.25 ha pond with no discernable inflow or

outflow. There was beaver activity and a brood of black ducks at this waterbody (photo point – Pond3). **L**: Beaver activity at pond3 (photo point – Beaver Chewings). **M**: One of several forest openings dominated by raspberry and blueberry north of the quarry where white-tail deer and snowshoe hare foraging was observed (photo point – Forest Opening). **N**: Red squirrel seed midden (photo point – Red Squirrel Cone Midden).

Generally speaking, this site exhibited forest habitat features that were typical of early post-recovery harvest sites dominated by early seral vegetation. The presence of three ponds mainly surrounded by pole stage immature softwood and small patches of mature mixed-wood provides a variety of habitat conditions for commonly occurring wildlife. The harvest history of this site has contributed to an overall absence of features such as old forest, large diameter snags, cavity trees, and coarse woody material.



Figure 4. Photo locations for images taken during the survey and presented in Figures 3A – N. Google Earth image from 18 May 2023.

3.2 General Wildlife Survey Results

The general wildlife survey revealed very little sign of non-avian wildlife in general. No evidence of mammalian or herptile species at risk was found. Survey results provided evidence for three common mammal species and one ubiquitous amphibian species. White-tail Deer (*Odocoileus virginianus*), Red Squirrel (*Tamiasciurus hudsonicus*), and Snowshoe Hare (*Lepus americanus*)

were identified based on scat, tracks and/or browse (Figures 3F, G, N). Northern Spring Peeper (*Pseudacris crucifer*) could be heard vocalizing at Pond3 (Figure 3K). Additional species potentially present within or proximate to the study site were inferred from the availability of taxon-specific suitable habitats.

3.2.1 Mammals

By their nature, mammals tend to be nocturnal and therefore, inconspicuous. Consequently, their presence is often indicated by indirect sign (scat, tracks, calls, prey remains etc.) or inferred by habitat availability. Based on the type of habitats present at the study site there is likely a broad range of large, medium, and small mammal species present at this site.

Although no moose sign was observed, the study site is located within a moose concentration area, and identified core moose habitat (NSDNRR 2021). ACCDC records indicate that moose have been reported 4.6 km from the study area. Moose home ranges generally cover tens of square kilometers, and encompass both mature and regenerating forest, wetlands, and riverine habitats. This study area potentially provides a variety of habitat types that could provide moose with foraging and cover opportunities over the next decade as maples and birches regenerate. Although the property itself has limited opportunities for thermal cover (e.g., wetlands and large stands of mature softwood), there are some, so it is possible that the study area could include a portion of moose home range. Additionally, the survey area is central to several waterbodies and softwood stands within 2500 m that would provide moose with their seasonal needs.

Evidence of white-tail deer was found within the survey area in the form of browse, scat, and tracks. Regenerating early successional shrub and tree species provide abundant food resources that are capable of supporting a local population of deer. Signs of winter browse and pellet piles indicate that deer are using the area for foraging and travel, year-round, although it is unlikely that many deer use these higher elevations when snow exceed 50 cm. Deer generally move from high elevation areas in late fall and winter to avoid deep snow conditions; however, during mild winters snow may not reach critical depths and deer may utilize these habitats year-round. While deer sign was observed at this location, it was not abundant.

No black bear (*Ursus americana*) sign was found; however, the heterogeneity and distribution of suitable bear habitats near the quarry site would indicate the potential for black bear to be in the area.

Mid-sized mammals such as American marten (*Martes americana*) and fisher generally prefer mature and late seral forests with large diameter trees and abundant coarse woody material. With the recent salvage-harvest of blown-down trees there was no evidence of these habitat elements on the study site; however, there were some scattered larger diameter tolerant hardwood trees with decay features that may provide suitable denning habitat in stands adjacent to the study area.

Both fisher and American marten are present in Nova Scotia, but marten have not been documented by the ACCDC within 100 kilometers of the study site. Fisher have been reported within approximately 20 km of the quarry property. Eastern coyotes are common throughout the province and their presence in the study area, while not confirmed by scat and tracks is virtually certain. No indications of predators such as bobcat (*Lynx rufus*) were observed. Bobcat generally prefer mature softwood cover in lower elevation, wet areas frequented by snowshoe hare. Even though limited evidence of snowshoe hare was present at the study site, the general elevation of the site and absence of good prey species habitat suggests that bobcat would not be common.

The limited presence of wetlands and watercourses indicates that aquatic furbearers normally associated with these habitats are not common. The only confirmed evidence of furbearers within the study site was for beaver (Figure 3L); however, nearby drainages, the presence of three ponds, and watercourses would provide suitable potential habitat for other species such as river otter (*Lontra canadensis*), mink (*Neovison vison*), and raccoon (*Procyon lotor*). Forested upland habitats and riparian areas would also provide suitable habitat for short-tailed weasel (*Mustela ermineae*).

Bat surveys were not part of the survey protocol; however, the lack of old stands, with abundant standing deadwood structures (e.g., snag and cavity trees) would suggest that bats are probably not present or common at the site. ACCDC records indicate that none of three endangered bat species in Nova Scotia have been reported closer than 17 km from the study site; however, it is very likely that bats do occur closer where there are foraging and roosting habitats (e.g., wet areas, large diameter old or dead trees).

Snowshoe hare and red squirrel were present within the study area (Figures 3G, N). Slash (i.e., brush) piles from recent harvest clearing, and residual wildlife clumps within the proposed expansion area create edge habitat that are preferred by small mammals such as deer mouse (*Peromyscus maniculatus*), and white-footed mouse (*Peromyscus leucopus*). The lack of abundant coarse woody material and late seral conditions would suggest that the red-backed vole (*Myodes gapperi*) and woodland jumping mouse (*Napaeozapus insignis*) are not present, or not present in any significant numbers. The absence of larger mature trees with cavities and cracks in the bole would likely preclude the presence of flying squirrels on site. Insectivores such as shrews (*Blarina* sp., *Sorex* spp.) are most common where there is complex ground cover and coarse woody material present. Long-tailed shrews are uncommon to rare in Nova Scotia, and are associated with late seral-closed canopy hardwood forests on talus slopes (Woolaver *et al.*, 1998). This habitat does not exist at or adjacent to the quarry site so it is unlikely that this species occurs at this location. ACCDC records indicate one record of Long-tailed shrews approximately 35 km from this site. Meadow vole (*Microtus pennsylvanicus*) tunnels were present near Pond2 in the moss (Figure 3H Figure 4).

3.2.2 Herpetofauna

No reptile species were observed at the site; however, several provincial snake species are reported to occur in cutover areas, along roadsides, and in abandoned gravel pits (Gilhen, 1984). Similar habitats at or near the quarry area would indicate the potential presence of Maritime garter snake (*Thamnophis sirtalis*), northern redbelly snake (*Storeria occipitomaculata*), and Eastern smooth green snake (*Opheodrys vernalis*) in exposed sand, gravel, and waste areas, or deciduous forest adjacent to the proposed quarry (Gilhen, 1984). These areas would be used for thermoregulation (i.e., basking), while adjacent habitats with more complex vegetation structure near water could also be used for foraging. There have been no known occurrences of either wood turtle, snapping turtle, or eastern painted turtle reported by the ACCDC within 10, 19, or 44 kilometers of the study area respectively. Suitable habitat conditions for wood turtles were lacking at this site; however, marginal habitat was available for the other two turtle species if connectivity routes from existing populations existed.

It is likely that the wet areas within the study area contains some common amphibian species. Northern spring peeper were heard vocalizing at the first pond nearest the Old Truro Road. Wood frogs (*Lithobates sylvaticus*) are likely present in the study area where there is flowing, or standing water. The green frog (*Rana clamitans*) and American toad (*Bufo americanus*) are ubiquitous and likely to be found wherever there are streams, or ponds. A single green frog was observed at Pond1. Red-backed salamanders (*Plethodon cinereus*) are common in deciduous forests similar to those occurring adjacent to the proposed expansion site.

4.0 References

- Atlantic Canada Conservation Data Center. 1 March 2024. Data Report 7961, East New Annan, NS.
- Gilhen, J. 1984. Amphibians and Reptiles of Nova Scotia. The Nova Scotia Museum of Natural History, Halifax, NS.
- Nova Scotia Department of Natural Resources and Renewables. 2021. Recovery Plan for the Moose (*Alces alces Americana*) in Mainland Nova Scotia. Nova Scotia Endangered Species Act Recovery Plan Series. 96pp.
- Woolaver, L. G., Elderkin, M. F. 1998. *Sorex dispar* in Nova Scotia. Northeastern Naturalist Vol. 5, No. 4, 323-330.

5.0 Incidental Species Observations

Common yellowthroat	<i>Geothlypis trichas</i>
White-throated sparrow	<i>Zonotrichia albicollis</i>

Black-throated green	<i>Setophaga virens</i>
Hairy woodpecker	<i>Leuconotopicus villosus</i>
Blue jay	<i>Cyanocitta cristata</i>
Yellow warbler	<i>Setophaga petchia</i>
Black duck	<i>Anas rubripes</i>

APPENDIX D

ATLANTIC CANADA CONSERVATION DATA CENTRE REPORT

DATA REPORT 7961: East New Annan, NS

Prepared 1 March 2024
by C. Robicheau, Conservation Data
Analyst

CONTENTS OF REPORT

1.0 Preface

1.1 Data List

1.2 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 part of a network of NatureServe data centres and heritage programs serving 50 states in the U.S.A, 10 provinces and 1 territory in Canada, plus several Central and South American countries. The NatureServe network is more than 30 years old and shares a common conservation data methodology. The AC CDC was founded in 1997, and maintains data for the jurisdictions of New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador. Although a non-governmental agency, the AC CDC is supported by 6 federal agencies and 4 provincial governments, as well as through outside grants and data processing fees.

Upon request and for a fee, the AC CDC queries its database and produces customized reports of the rare and endangered flora and fauna known to occur in or near a specified study area. As a supplement to that data, the AC CDC includes locations of managed areas with some level of protection, and known sites of ecological interest or sensitivity.

1.1 DATA LIST

Included datasets:

Filename

ENwAnnanNS_7961ob.xls

ENwAnnanNS_7961ob100km.xls

ENwAnnanNS_7961msa.xls

ENwAnnanNS_7961ff_py.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 Freshwater Fish in your study area (DFO database)

1.2 RESTRICTIONS

The AC CDC makes a strong effort to verify the accuracy of all the data that it manages, but it shall not be held responsible for any inaccuracies in data that it provides. By accepting AC CDC data, recipients assent to the following limits of use:

- a) Data is restricted to use by trained personnel who are sensitive to landowner interests and to potential threats to rare and/or endangered flora and fauna posed by the information provided.
- b) Data is restricted to use by the specified Data User; any third party requiring data must make its own data request.
- c) The AC CDC requires Data Users to cease using and delete data 12 months after receipt, and to make a new request for updated data if necessary at that time.
- d) AC CDC data responses are restricted to the data in our Data System at the time of the data request.
- e) Each record has an estimate of locational uncertainty, which must be referenced in order to understand the record's relevance to a particular location. Please see attached Data Dictionary for details.
- f) AC CDC data responses are not to be construed as exhaustive inventories of taxa in an area.
- g) The absence of a taxon cannot be inferred by its absence in an AC CDC data response.

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

James Churchill
Conservation Data Analyst / Field Biologist
(902) 679-6146
james.churchill@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

Eastern: Elizabeth Walsh
(902) 563-3370
Elizabeth.Walsh@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.

2.0 RARE AND ENDANGERED SPECIES

2.1 FLORA

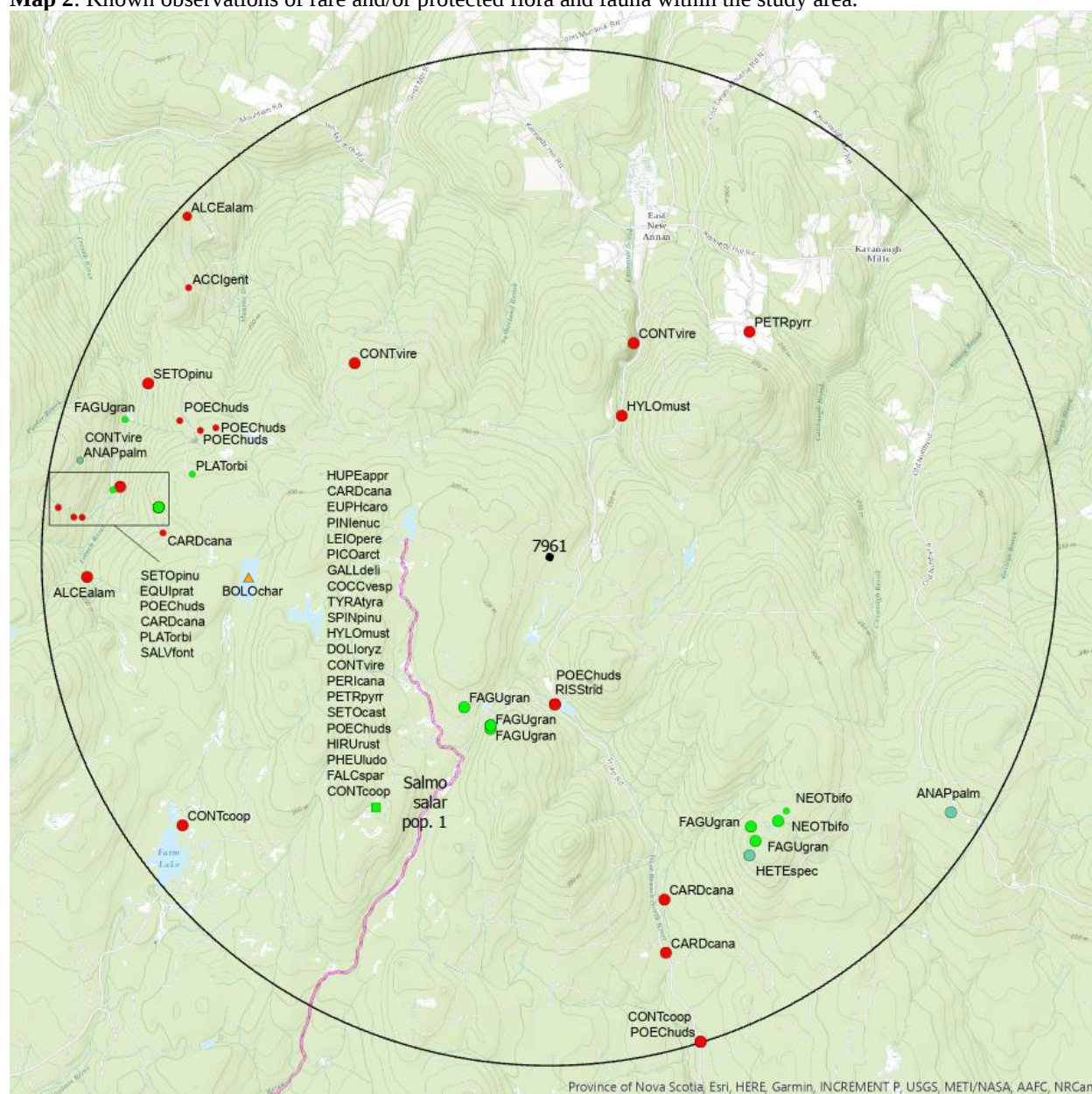
The study area contains 14 records of 5 vascular and 3 records of 2 nonvascular flora (Map 2 and attached: *ob.xls), excluding 'location-sensitive' species.

2.2 FAUNA

The study area contains 79 records of 25 vertebrate and 1 record of 1 invertebrate fauna (Map 2 and attached data files - see 1.1 Data List), excluding 'location-sensitive species'. Please see section 4.3 to determine if 'location-sensitive' species occur near your study site.

see 1.1 Data List). Please see section 4.3 to determine if “location-sensitive” species occur near your study site.

Map 2: Known observations of rare and/or protected flora and fauna within the study area.



3.0 SPECIAL AREAS

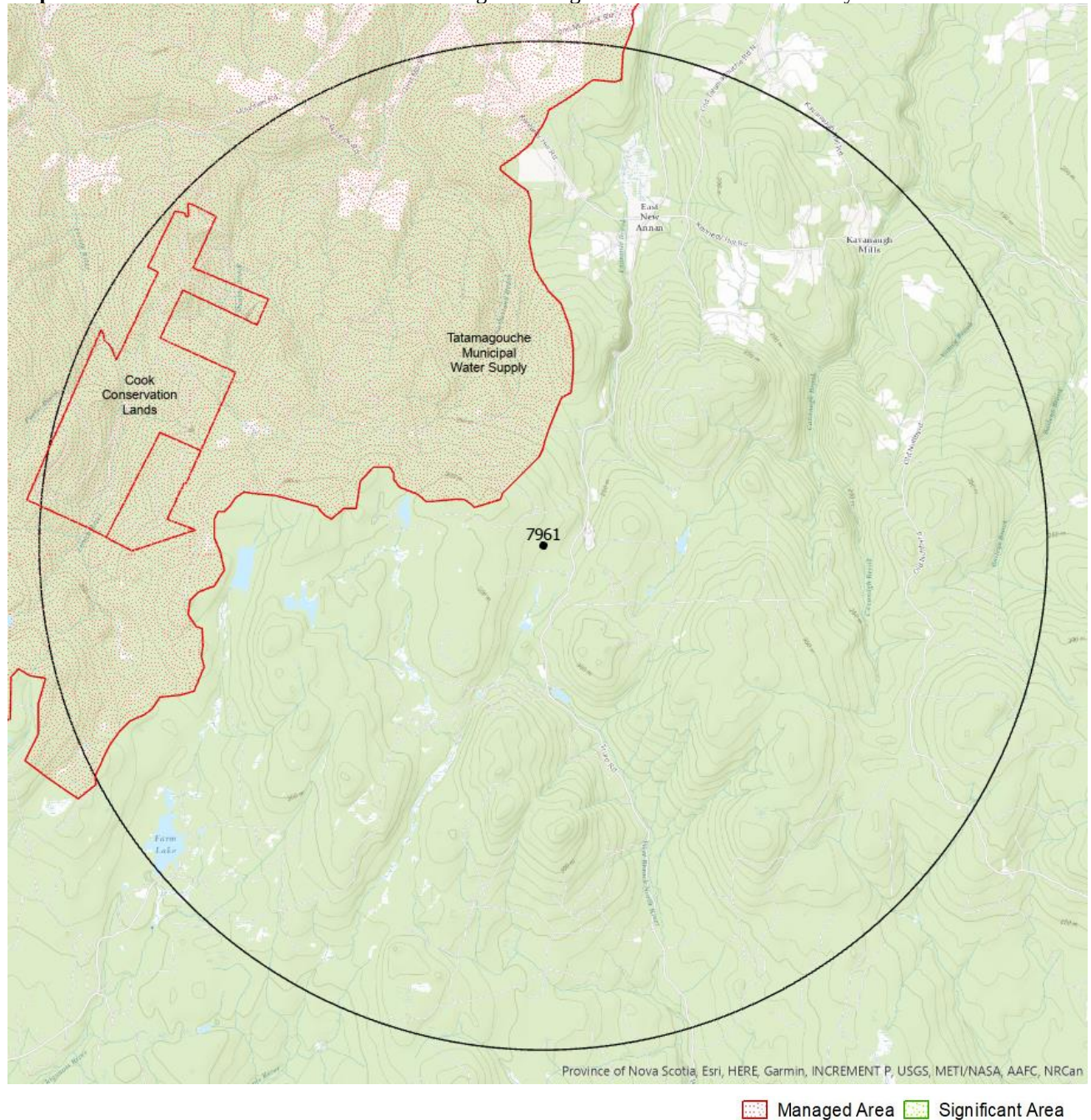
3.1 MANAGED AREAS

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

3.2 SIGNIFICANT AREAS

The GIS scan identified no biologically significant sites in the vicinity of the study area (Map 3 and attached file: *sa*.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>Heterodermia speciosa</i>	Powdered Fringe Lichen				S3S4	1	3.5 $\pm$ 0.2
N	<i>Anaptychia palmulata</i>	Shaggy Fringed Lichen				S3S4	2	4.7 $\pm$ 0.01
P	<i>Neottia bifolia</i>	Southern Twayblade				S3	2	3.4 $\pm$ 0.01
P	<i>Fagus grandifolia</i>	American Beech				S3S4	7	1.7 $\pm$ 0.2
P	<i>Platanthera orbiculata</i>	Small Round-leaved Orchid				S3S4	3	3.6 $\pm$ 0.01
P	<i>Equisetum pratense</i>	Meadow Horsetail				S3S4	1	4.3 $\pm$ 0.01
P	<i>Huperzia appressa</i>	Mountain Firmoss				S3S4	1	3.0 $\pm$ 7.07

4.2 FAUNA

	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)
A	<i>Hylocichla mustelina</i>	Wood Thrush	Threatened	Threatened		SUB	2	1.6 $\pm$ 0.15
A	<i>Euphagus carolinus</i>	Rusty Blackbird	Special Concern	Special Concern	Endangered	S2B	3	3.0 $\pm$ 7.07
A	<i>Hirundo rustica</i>	Barn Swallow	Special Concern	Threatened	Endangered	S3B	2	3.0 $\pm$ 7.07
A	<i>Cardellina canadensis</i>	Canada Warbler	Special Concern	Threatened	Endangered	S3B	13	3.0 $\pm$ 7.07
A	<i>Contopus cooperi</i>	Olive-sided Flycatcher	Special Concern	Special Concern	Threatened	S3B	11	3.0 $\pm$ 7.07
A	<i>Dolichonyx oryzivorus</i>	Bobolink	Special Concern	Threatened	Vulnerable	S3B	1	3.0 $\pm$ 7.07
A	<i>Coccothraustes vespertinus</i>	Evening Grosbeak	Special Concern	Special Concern	Vulnerable	S3B,S3N,S3M	1	3.0 $\pm$ 7.07
A	<i>Contopus virens</i>	Eastern Wood-Pewee	Special Concern	Special Concern	Vulnerable	S3S4B	6	2.3 $\pm$ 0.15
A	<i>Accipiter gentilis</i>	Northern Goshawk	Not At Risk			S3S4	1	4.4 $\pm$ 0.01
A	<i>Alces alces americana</i>	Moose			Endangered	S1	2	4.6 $\pm$ 0.34
A	<i>Rissa tridactyla</i>	Black-legged Kittiwake				S2S3B	1	1.4 $\pm$ 0.15
A	<i>Petrochelidon pyrrhonota</i>	Cliff Swallow				S2S3B	2	3.0 $\pm$ 0.15
A	<i>Setophaga pinus</i>	Pine Warbler				S2S3B,S4S5M	3	3.9 $\pm$ 0.25
A	<i>Perisoreus canadensis</i>	Canada Jay				S3	3	3.0 $\pm$ 7.07
A	<i>Poecile hudsonicus</i>	Boreal Chickadee				S3	9	1.4 $\pm$ 0.15
A	<i>Spinus pinus</i>	Pine Siskin				S3	1	3.0 $\pm$ 7.07
A	<i>Salvelinus fontinalis</i>	Brook Trout				S3	2	4.4 $\pm$ 0.01
A	<i>Tyrannus tyrannus</i>	Eastern Kingbird				S3B	1	3.0 $\pm$ 7.07
A	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak				S3B	2	3.0 $\pm$ 7.07
A	<i>Falco sparverius</i>	American Kestrel				S3B,S4S5M	3	3.0 $\pm$ 7.07
A	<i>Gallinago delicata</i>	Wilson's Snipe				S3B,S5M	2	3.0 $\pm$ 7.07
A	<i>Pinicola enucleator</i>	Pine Grosbeak				S3B,S5N,S5M	1	3.0 $\pm$ 7.07
A	<i>Picoides arcticus</i>	Black-backed Woodpecker				S3S4	2	3.0 $\pm$ 7.07
A	<i>Setophaga castanea</i>	Bay-breasted Warbler				S3S4B,S4S5M	3	3.0 $\pm$ 7.07
A	<i>Leiothlypis peregrina</i>	Tennessee Warbler				S3S4B,S5M	2	3.0 $\pm$ 7.07
I	<i>Boloria chariclea</i>	Arctic Fritillary				S1S2	1	3.0 $\pm$ 2.5

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>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	No
<i>Falco peregrinus pop. 1</i>	Peregrine Falcon - anatum/tundrius pop.		Vulnerable	No
<i>Bat hibernaculum</i> or <i>bat species occurrence</i>		[Endangered] ¹	[Endangered] ¹	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.

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
48	Lepage, D. 2014. Maritime Breeding Bird Atlas Database. Bird Studies Canada, Sackville NB, 407,838 recs.
15	Erskine, A.J. 1992. Maritime Breeding Bird Atlas Database. NS Museum & Nimbus Publ., Halifax, 82,125 recs.
9	Nussey, Pat & NCC staff. 2019. AEI tracked species records, 2016-2019. Chapman, C.J. (ed.) Atlantic Canada Conservation Data Centre, 333.
8	iNaturalist.ca. 2023. iNaturalist Data Export December 2022. iNaturalist.org; iNaturalist.ca.
6	Belliveau, A.G. 2018. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre.
3	Patrick, Allison. 2021. Animal and plant records from NCC properties from 2019 and 2020. Nature Conservancy Canada.
3	Walker, J. 2017. Bird inventories at French River, NS, and Memramcook, NB, for Nature Conservancy of Canada. Pers. comm. to AC CDC.
2	Canadian Wildlife Service. 2019. Canadian Protected and Conserved Areas Database (CPCAD). December 2019. ECCC. https://www.canada.ca/en/environment-climate-change/services/national-wildlife-areas/protected-conserved-areas-database.html .
1	Amiro, P.G. 1998. Atlantic Salmon Inner Bay of Fundy SFA 22 & part of 23. DFO Sci. SSR D3-12.
1	Bryson, I. 2013. Nova Scotia rare plant records. CBCL Ltd., 180 records.
1	iNaturalist. 2018. iNaturalist Data Export 2018. iNaturalist.org and iNaturalist.ca, Web site: 11700 recs.
1	iNaturalist. 2020. iNaturalist Data Export 2020. iNaturalist.org and iNaturalist.ca, Web site: 128728 recs.
1	Layberry, R.A. & Hall, P.W., LaFontaine, J.D. 1998. The Butterflies of Canada. University of Toronto Press. 280 pp+plates.
1	Nova Scotia Dept Natural Resources, Forestry Branch. 2007. Restricted & Limited Use Land Database (RLUL). , http://www.gov.ns.ca/natr/FORESTRY/rlul/downloadrlul.htm .
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 64958 records of 151 vertebrate and 1666 records of 77 invertebrate fauna; 10550 records of 277 vascular and 2934 records of 165 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	129	21.2 $\pm$ 0.1	NS
A	<i>Myotis septentrionalis</i>	Northern Myotis	Endangered	Endangered	Endangered	S1	86	30.0 $\pm$ 0.1	NS
A	<i>Perimyotis subflavus</i>	Tricolored Bat	Endangered	Endangered	Endangered	S1	8	39.4 $\pm$ 5.0	NS
A	<i>Salmo salar pop. 1</i>	Atlantic Salmon - Inner Bay of Fundy population	Endangered	Endangered		S1	34	13.9 $\pm$ 0.5	NS
A	<i>Salmo salar pop. 6</i>	Atlantic Salmon - Nova Scotia Southern Upland population	Endangered			S1	27	58.8 $\pm$ 0.5	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Charadrius melodus melodus</i>	Piping Plover <i>melodus</i> subspecies	Endangered	Endangered	Endangered	S1B	1743	23.0 ± 0.2	NS
A	<i>Dermochelys coriacea</i> pop. 2	Leatherback Sea Turtle - Atlantic population	Endangered	Endangered		S1S2N	2	78.9 ± 1.0	NB
A	<i>Morone saxatilis</i> pop. 2	Striped Bass - Bay of Fundy population	Endangered			S2S3B,S2S3N	2	65.1 ± 0.5	NS
A	<i>Lasiurus cinereus</i>	Hoary Bat	Endangered			SUB, S1M	8	73.7 ± 1.0	PE
A	<i>Lasionycteris noctivagans</i>	Silver-haired Bat	Endangered			SUB,S1M	1	99.6 ± 0.03	NB
A	<i>Lasiurus borealis</i>	Eastern Red Bat	Endangered			SUB,S1M	2	93.8 ± 0.2	NB
A	<i>Catharus bicknelli</i>	Bicknell's Thrush	Threatened	Threatened	Endangered	S1B	1	56.1 ± 7.07	NS
A	<i>Asio flammeus</i>	Short-eared Owl	Threatened	Special Concern		S1B	73	29.9 ± 7.07	NS
A	<i>Glyptemys insculpta</i>	Wood Turtle	Threatened	Threatened	Threatened	S2	5276	10.0 ± 1.0	NS
A	<i>Riparia riparia</i>	Bank Swallow	Threatened	Threatened	Endangered	S2B	3199	7.7 ± 7.07	NS
A	<i>Chaetura pelagica</i>	Chimney Swift	Threatened	Threatened	Endangered	S2S3B,S1M	1293	12.0 ± 7.07	NS
A	<i>Limosa haemastica</i>	Hudsonian Godwit	Threatened			S2S3M	509	29.4 ± 0.5	NS
A	<i>Acipenser oxyrinchus</i>	Atlantic Sturgeon	Threatened			S2S3N	13	50.9 ± 0.5	NS
A	<i>Tringa flavipes</i>	Lesser Yellowlegs	Threatened			S3M	2110	17.3 ± 0.5	NS
A	<i>Anguilla rostrata</i>	American Eel	Threatened			S3N	124	19.4 ± 0.2	NS
A	<i>Sturnella magna</i>	Eastern Meadowlark	Threatened	Threatened		SHB	5	86.7 ± 1.0	NB
A	<i>Ixobrychus exilis</i>	Least Bittern	Threatened	Threatened		SUB	9	75.4 ± 0.15	NS
A	<i>Hylocichla mustelina</i>	Wood Thrush	Threatened	Threatened		SUB	51	1.6 ± 0.15	NS
A	<i>Salmo salar</i> pop. 12	Atlantic Salmon - Gaspé - Southern Gulf of St. Lawrence population	Special Concern			S1	40	8.2 ± 0.5	NS
A	<i>Antrostomus vociferus</i>	Eastern Whip-Poor-Will	Special Concern	Threatened	Threatened	S1?B	9	45.2 ± 7.07	NS
A	<i>Passerculus sandwichensis princeps</i>	Ipswich Sparrow	Special Concern	Special Concern		S1B	2	92.0 ± 0.2	NS
A	<i>Bucephala islandica</i>	Barrow's Goldeneye	Special Concern	Special Concern		S1N,SUM	50	40.0 ± 0.2	NS
A	<i>Euphagus carolinus</i>	Rusty Blackbird	Special Concern	Special Concern	Endangered	S2B	242	3.0 ± 7.07	NS
A	<i>Phalaropus lobatus</i>	Red-necked Phalarope	Special Concern	Special Concern		S2S3M	13	29.4 ± 0.5	NS
A	<i>Histrionicus histrionicus</i> pop. 1	Harlequin Duck - Eastern population	Special Concern	Special Concern	Endangered	S2S3N,SUM	7	50.8 ± 0.2	NS
A	<i>Chelydra serpentina</i>	Snapping Turtle	Special Concern	Special Concern	Vulnerable	S3	171	18.6 ± 0.1	NS
A	<i>Hirundo rustica</i>	Barn Swallow	Special Concern	Threatened	Endangered	S3B	2891	3.0 ± 7.07	NS
A	<i>Cardellina canadensis</i>	Canada Warbler	Special Concern	Threatened	Endangered	S3B	1164	3.0 ± 7.07	NS
A	<i>Chordeiles minor</i>	Common Nighthawk	Special Concern	Special Concern	Threatened	S3B	445	11.2 ± 7.07	NS
A	<i>Contopus cooperi</i>	Olive-sided Flycatcher	Special Concern	Special Concern	Threatened	S3B	1176	3.0 ± 7.07	NS
A	<i>Dolichonyx oryzivorus</i>	Bobolink	Special Concern	Threatened	Vulnerable	S3B	3056	3.0 ± 7.07	NS
A	<i>Coccythraustes vespertinus</i>	Evening Grosbeak	Special Concern	Special Concern	Vulnerable	S3B,S3N,S3M	871	3.0 ± 7.07	NS
A	<i>Podiceps auritus</i>	Horned Grebe	Special Concern	Special Concern		S3N,SUM	17	20.1 ± 0.2	NS
A	<i>Contopus virens</i>	Eastern Wood-Pewee	Special Concern	Special Concern	Vulnerable	S3S4B	1395	2.3 ± 0.15	NS
A	<i>Phocoena phocoena</i>	Harbour Porpoise	Special Concern			S4	8	42.5 ± 0.37	NS
A	<i>Phocoena phocoena</i> pop. 1	Harbour Porpoise - Northwest Atlantic Population	Special Concern			S4	1	53.8 ± 1.95	NS
A	<i>Chrysemys picta</i>	Painted Turtle	Special Concern	Special Concern		S4	12	44.4 ± 0.2	NS
A	<i>Chrysemys picta picta</i>	Eastern Painted Turtle	Special Concern	Special Concern		S4	142	18.2 ± 5.0	NS
A	<i>Accipiter cooperii</i>	Cooper's Hawk	Not At Risk			S1?B,SUN,SUM	19	19.7 ± 0.2	NS
A	<i>Fulica americana</i>	American Coot	Not At Risk			S1B	58	20.4 ± 3.53	NS
A	<i>Chlidonias niger</i>	Black Tern	Not At Risk			S1B	179	75.1 ± 0.07	NS
A	<i>Falco peregrinus</i> pop. 1	Peregrine Falcon - anatum/tundrius	Not At Risk		Vulnerable	S1B,SUM	155	28.5 ± 0.2	NS
A	<i>Sorex dispar</i>	Long-tailed Shrew	Not At Risk			S2	2	35.2 ± 0.2	NS
A	<i>Aegolius funereus</i>	Boreal Owl	Not At Risk			S2?B,SUM	9	15.1 ± 0.15	NS
A	<i>Globicephala melas</i>	Long-finned Pilot Whale	Not At Risk			S2S3	1	68.6 ± 100.0	NS
A	<i>Hemidactylium scutatum</i>	Four-toed Salamander	Not At Risk			S3	22	15.4 ± 0.1	NS
A	<i>Megaptera novaeangliae</i>	Humpback Whale	Not At Risk			S3	1	87.1 ± 0.05	NS
A	<i>Sterna hirundo</i>	Common Tern	Not At Risk			S3B	493	13.3 ± 0.5	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Sialia sialis</i>	Eastern Bluebird	Not At Risk			S3B	111	17.1 ± 7.07	NS
A	<i>Buteo lagopus</i>	Rough-legged Hawk	Not At Risk			S3N	25	27.9 ± 0.2	NS
A	<i>Accipiter gentilis</i>	Northern Goshawk	Not At Risk			S3S4	177	4.4 ± 0.01	NS
A	<i>Glaucomys volans</i>	Southern Flying Squirrel	Not At Risk			S3S4	2	54.0 ± 0.2	NS
A	<i>Lagenorhynchus acutus</i>	Atlantic White-sided Dolphin	Not At Risk			S3S4	3	40.9 ± 0.2	NS
A	<i>Ammodramus nelsoni</i>	Nelson's Sparrow	Not At Risk			S3S4B	836	17.6 ± 7.07	NS
A	<i>Calidris canutus rufa</i>	Red Knot rufa subspecies	E,SC	Endangered	Endangered	S2M	646	21.9 ± 0.5	NS
A	<i>Calidris canutus</i>	Red Knot	E,SC	E,T		S2M	42	29.0 ± 0.2	NS
A	<i>Morone saxatilis</i>	Striped Bass	E,SC			S2S3B,S2S3N	33	27.0 ± 0.2	NS
A	<i>Gadus morhua</i>	Atlantic Cod	E,SC,DD			SNR	3	68.1 ± 0.2	NS
A	<i>Salmo salar</i>	Atlantic Salmon	E,T,SC			S1B,S1N	10	21.1 ± 0.2	NS
A	<i>Alces alces americana</i>	Moose			Endangered	S1	234	4.6 ± 0.34	NS
A	<i>Alces alces</i>	Moose				S1	14	15.8 ± 0.2	NS
A	<i>Picoides dorsalis</i>	American Three-toed Woodpecker				S1?	8	49.1 ± 7.07	NS
A	<i>Uria aalge</i>	Common Murre				S1?B	1	98.3 ± 0.2	NS
A	<i>Passerina cyanea</i>	Indigo Bunting				S1?B,SUM	22	19.8 ± 0.15	NS
A	<i>Nycticorax nycticorax</i>	Black-crowned Night-heron				S1B	1	86.6 ± 1.0	NB
A	<i>Oxyura jamaicensis</i>	Ruddy Duck				S1B	65	20.6 ± 0.2	NS
A	<i>Gallinula galeata</i>	Common Gallinule				S1B	47	14.5 ± 7.07	NS
A	<i>Myiarchus crinitus</i>	Great Crested Flycatcher				S1B	20	11.2 ± 7.07	NS
A	<i>Cistothorus palustris</i>	Marsh Wren				S1B	54	69.3 ± 3.22	NB
A	<i>Mimus polyglottos</i>	Northern Mockingbird				S1B	72	23.3 ± 0.2	NS
A	<i>Toxostoma rufum</i>	Brown Thrasher				S1B	13	22.5 ± 7.07	NS
A	<i>Charadrius semipalmatus</i>	Semipalmated Plover				S1B,S4M	2260	14.5 ± 7.07	NS
A	<i>Calidris minutilla</i>	Least Sandpiper				S1B,S4M	1358	17.3 ± 0.5	NS
A	<i>Anas acuta</i>	Northern Pintail				S1B,SUM	134	13.4 ± 0.25	NS
A	<i>Vireo gilvus</i>	Warbling Vireo				S1B,SUM	37	7.7 ± 7.07	NS
A	<i>Vespertilionidae sp.</i>	bat species				S1S2	102	17.3 ± 0.1	NS
A	<i>Poocetes gramineus</i>	Vesper Sparrow				S1S2B,SUM	79	8.6 ± 7.07	NS
A	<i>Vireo philadelphicus</i>	Philadelphia Vireo				S2?B,SUM	124	12.5 ± 0.15	NS
A	<i>Alca torda</i>	Razorbill				S2B	2	74.0 ± 2.42	NS
A	<i>Fratercula arctica</i>	Atlantic Puffin				S2B	1	70.7 ± 0.5	NB
A	<i>Empidonax traillii</i>	Willow Flycatcher				S2B	43	11.2 ± 7.07	NS
A	<i>Molothrus ater</i>	Brown-headed Cowbird				S2B	261	13.3 ± 0.25	NS
A	<i>Spatula clypeata</i>	Northern Shoveler				S2B,SUM	279	23.6 ± 0.2	NS
A	<i>Mareca strepera</i>	Gadwall				S2B,SUM	460	17.0 ± 0.15	NS
A	<i>Piranga olivacea</i>	Scarlet Tanager				S2B,SUM	22	20.0 ± 0.15	NS
A	<i>Calidris alba</i>	Sanderling				S2N,S3M	1211	23.3 ± 0.05	NS
A	<i>Asio otus</i>	Long-eared Owl				S2S3	30	12.5 ± 0.15	NS
A	<i>Rallus limicola</i>	Virginia Rail				S2S3B	270	17.6 ± 7.07	NS
A	<i>Rissa tridactyla</i>	Black-legged Kittiwake				S2S3B	4	1.4 ± 0.15	NS
A	<i>Petrochelidon pyrrhonota</i>	Cliff Swallow				S2S3B	458	3.0 ± 0.15	NS
A	<i>Phalacrocorax carbo</i>	Great Cormorant				S2S3B,S2S3N	107	23.5 ± 0.2	NS
A	<i>Cathartes aura</i>	Turkey Vulture				S2S3B,S4S5M	92	19.9 ± 0.2	NS
A	<i>Setophaga pinus</i>	Pine Warbler				S2S3B,S4S5M	72	3.9 ± 0.25	NS
A	<i>Bucephala clangula</i>	Common Goldeneye				S2S3B,S5N,S5M	185	19.8 ± 9.7	NS
A	<i>Icterus galbula</i>	Baltimore Oriole				S2S3B,SUM	86	21.1 ± 0.25	NS
A	<i>Pluvialis dominica</i>	American Golden-Plover				S2S3M	225	25.7 ± 0.5	NS
A	<i>Numenius phaeopus</i>	Whimbrel				S2S3M	7	46.1 ± 0.2	NS
A	<i>Numenius phaeopus hudsonicus</i>	Whimbrel				S2S3M	230	21.9 ± 0.5	NS
A	<i>Perisoreus canadensis</i>	Canada Jay				S3	647	3.0 ± 7.07	NS
A	<i>Poecile hudsonicus</i>	Boreal Chickadee				S3	834	1.4 ± 0.15	NS
A	<i>Spinus pinus</i>	Pine Siskin				S3	598	3.0 ± 7.07	NS
A	<i>Salvelinus fontinalis</i>	Brook Trout				S3	109	4.4 ± 0.01	NS
A	<i>Salvelinus namaycush</i>	Lake Trout				S3	2	65.0 ± 0.5	NS
A	<i>Sorex maritimensis</i>	Maritime Shrew				S3	107	86.4 ± 1.0	NB

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A	<i>Synaptomys cooperi</i>	Southern Bog Lemming				S3	1	93.7 ± 0.5	NS
A	<i>Pekania pennanti</i>	Fisher				S3	11	19.9 ± 0.27	NS
A	<i>Calcarius lapponicus</i>	Lapland Longspur				S3?N,SUM	45	52.8 ± 0.2	NS
A	<i>Spatula discors</i>	Blue-winged Teal				S3B	622	11.2 ± 7.07	NS
A	<i>Charadrius vociferus</i>	Killdeer				S3B	1037	7.7 ± 7.07	NS
A	<i>Tringa semipalmata</i>	Willet				S3B	2324	13.4 ± 0.25	NS
A	<i>Sterna paradisaea</i>	Arctic Tern				S3B	23	74.0 ± 0.5	NB
A	<i>Coccyzus erythrophthalmus</i>	Black-billed Cuckoo				S3B	150	11.2 ± 7.07	NS
A	<i>Tyrannus tyrannus</i>	Eastern Kingbird				S3B	526	3.0 ± 7.07	NS
A	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak				S3B	934	3.0 ± 7.07	NS
A	<i>Alosa pseudoharengus</i>	Alewife				S3B	37	22.3 ± 0.1	NS
A	<i>Somateria mollissima</i>	Common Eider				S3B,S3M,S3N	134	19.8 ± 9.7	NS
A	<i>Tringa melanoleuca</i>	Greater Yellowlegs				S3B,S4M	3352	17.0 ± 0.2	NS
A	<i>Falco sparverius</i>	American Kestrel				S3B,S4S5M	656	3.0 ± 7.07	NS
A	<i>Gallinago delicata</i>	Wilson's Snipe				S3B,S5M	1492	3.0 ± 7.07	NS
A	<i>Setophaga striata</i>	Blackpoll Warbler				S3B,S5M	87	11.2 ± 7.07	NS
A	<i>Cardellina pusilla</i>	Wilson's Warbler				S3B,S5M	127	17.1 ± 7.07	NS
A	<i>Pinicola enucleator</i>	Pine Grosbeak				S3B,S5N,S5M	140	3.0 ± 7.07	NS
A	<i>Setophaga tigrina</i>	Cape May Warbler				S3B,SUM	392	16.6 ± 0.25	NS
A	<i>Branta bernicla</i>	Brant				S3M	16	52.7 ± 0.3	NS
A	<i>Pluvialis squatarola</i>	Black-bellied Plover				S3M	2567	17.3 ± 0.5	NS
A	<i>Arenaria interpres</i>	Ruddy Turnstone				S3M	1104	17.3 ± 0.5	NS
A	<i>Calidris pusilla</i>	Semipalmated Sandpiper				S3M	2611	17.3 ± 0.5	NS
A	<i>Calidris melanotos</i>	Pectoral Sandpiper				S3M	409	17.3 ± 0.5	NS
A	<i>Limnodromus griseus</i>	Short-billed Dowitcher				S3M	1567	17.3 ± 0.5	NS
A	<i>Chroicocephalus ridibundus</i>	Black-headed Gull				S3N	14	46.2 ± 0.2	NS
A	<i>Picoides arcticus</i>	Black-backed Woodpecker				S3S4	184	3.0 ± 7.07	NS
A	<i>Loxia curvirostra</i>	Red Crossbill				S3S4	172	11.2 ± 7.07	NS
A	<i>Sorex albibarbis</i>	Eastern Water Shrew				S3S4	6	70.1 ± 0.1	PE
A	<i>Botaurus lentiginosus</i>	American Bittern				S3S4B,S4S5M	1084	7.7 ± 7.07	NS
A	<i>Setophaga castanea</i>	Bay-breasted Warbler				S3S4B,S4S5M	733	3.0 ± 7.07	NS
A	<i>Actitis macularius</i>	Spotted Sandpiper				S3S4B,S5M	983	7.7 ± 7.07	NS
A	<i>Leiothlypis peregrina</i>	Tennessee Warbler				S3S4B,S5M	706	3.0 ± 7.07	NS
A	<i>Passerella iliaca</i>	Fox Sparrow				S3S4B,S5M	41	38.9 ± 7.07	NS
A	<i>Mergus serrator</i>	Red-breasted Merganser				S3S4B,S5M,S5N	184	16.9 ± 0.2	NS
A	<i>Calidris maritima</i>	Purple Sandpiper				S3S4N	53	48.2 ± 0.5	NS
A	<i>Lanius borealis</i>	Northern Shrike				S3S4N	12	76.2 ± 1.5	PE
A	<i>Morus bassanus</i>	Northern Gannet				SHB	102	28.0 ± 4.04	NS
A	<i>Aythya americana</i>	Redhead				SHB	12	45.4 ± 0.24	NS
A	<i>Leucophaeus atricilla</i>	Laughing Gull				SHB	7	71.9 ± 0.5	NB
A	<i>Progne subis</i>	Purple Martin				SHB	23	45.2 ± 7.07	NS
A	<i>Eremophila alpestris</i>	Horned Lark				SHB,S4S5N,S5M	47	21.5 ± 0.24	NS
I	<i>Bombus bohemicus</i>	Ashton Cuckoo Bumble Bee	Endangered	Endangered	Endangered	S1	33	20.1 ± 5.0	NS
I	<i>Danaus plexippus</i>	Monarch	Endangered	Special Concern	Endangered	S2?B,S3M	331	19.5 ± 0.04	NS
I	<i>Danaus plexippus plexippus</i>	Monarch	Endangered	Special Concern		S2?B,S3M	1	88.6 ± 0.01	NS
I	<i>Barnea truncata</i>	Atlantic Mud-piddock	Threatened	Threatened		S1	10	42.9 ± 1.0	NS
I	<i>Bombus suckleyi</i>	Suckley's Cuckoo Bumble Bee	Threatened			SH	4	24.0 ± 5.0	NS
I	<i>Alasmodonta varicosa</i>	Brook Floater	Special Concern	Special Concern	Threatened	S3	13	18.4 ± 0.1	NS
I	<i>Bombus terricola</i>	Yellow-banded Bumble Bee	Special Concern	Special Concern	Vulnerable	S3	177	14.8 ± 0.2	NS
I	<i>Coccinella transversoguttata richardsoni</i>	Transverse Lady Beetle	Special Concern		Endangered	SH	9	6.2 ± 2.5	NS
I	<i>Gomphurus ventricosus</i>	Skillet Clubtail	Special Concern	Endangered		SH	2	74.4 ± 0.5	NS
I	<i>Erora laeta</i>	Early Hairstreak				S1	1	70.2 ± 0.5	PE
I	<i>Pachydiplax longipennis</i>	Blue Dasher				S1	4	97.4 ± 0.2	NS
I	<i>Atlanticoncha ochracea</i>	Tidewater Mucket				S1	29	66.7 ± 0.5	NS
I	<i>Polygonia comma</i>	Eastern Comma				S1?	2	99.2 ± 0.01	NS
I	<i>Polygonia satyrus</i>	Satyr Comma				S1?	24	23.0 ± 5.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
	<i>Euphyes bimacula</i>	Two-spotted Skipper			S1S2		3	64.6 ± 0.1	NS
	<i>Boloria chariclea</i>	Arctic Fritillary			S1S2		10	3.0 ± 2.5	NS
	<i>Somatochlora brevicincta</i>	Quebec Emerald			S1S2		2	80.3 ± 1.0	NS
	<i>Tournotaris bimaculata</i>	Two-spotted Brachycerid Weevil			S2		1	97.6 ± 0.2	PE
	<i>Tharsalea dospassosi</i>	Maritime Copper			S2		108	16.8 ± 0.1	NS
	<i>Satyrus acadica</i>	Acadian Hairstreak			S2		17	15.4 ± 0.05	NS
	<i>Neurocordulia michaeli</i>	Broad-tailed Shadowdragon			S2		19	64.7 ± 0.05	NS
	<i>Coenagrion resolutum</i>	Taiga Bluet			S2		60	29.5 ± 0.1	NS
	<i>Margaritifera margaritifera</i>	Eastern Pearlshell			S2		156	9.8 ± 0.1	NS
	<i>Pantala hymenaea</i>	Spot-Winged Glider			S2?B		1	80.3 ± 1.0	NS
	<i>Nymphalis l-album</i>	Compton Tortoiseshell			S2S3		13	16.8 ± 2.87	NS
	<i>Aglaia milberti</i>	Milbert's Tortoiseshell			S2S3		20	18.5 ± 2.5	NS
	<i>Aglaia milberti milberti</i>	Milbert's Tortoise Shell			S2S3		4	30.5 ± 0.01	NS
	<i>Lanthus vernalis</i>	Southern Pygmy Clubtail			S2S3		7	78.9 ± 0.05	NS
	<i>Somatochlora kennedyi</i>	Kennedy's Emerald			S2S3		5	74.2 ± 0.01	NS
	<i>Somatochlora williamsoni</i>	Williamson's Emerald			S2S3		16	74.1 ± 0.1	NB
	<i>Williamsonia fletcheri</i>	Ebony Boghaunter			S2S3		11	24.5 ± 0.5	NS
	<i>Stylurus scudderi</i>	Zebra Clubtail			S2S3		4	69.6 ± 1.0	NS
	<i>Alasmodonta undulata</i>	Triangle Floater			S2S3		33	39.0 ± 0.9	NS
	<i>Astyleiopus variegatus</i>	Variegated Long-horned Beetle			S3		1	71.2 ± 0.2	NS
	<i>Psephenus herricki</i>	Herrick's Water Penny Beetle			S3		1	42.7 ± 0.2	NS
	<i>Hormorus undulatus</i>	Undulated Broad-nosed Weevil			S3		1	97.6 ± 0.2	PE
	<i>Carabus serratus</i>	Serrated Ground Beetle			S3		1	24.1 ± 0.2	NS
	<i>Hippodamia parenthesis</i>	Parenthesis Lady Beetle			S3		2	92.2 ± 0.01	NB
	<i>Chrysocorus auratus</i>	Dogbane Leaf Beetle			S3		3	46.6 ± 3.04	NS
	<i>Naemia seriata</i>	Seaside Lady Beetle			S3		36	83.6 ± 0.2	NB
	<i>Chilocorus stigma</i>	Twice-stabbed Lady Beetle			S3		6	19.5 ± 0.2	NS
	<i>Myzia pullata</i>	Streaked Lady Beetle			S3		7	85.1 ± 0.2	NB
	<i>Ipthiminius opacus</i>	Cloudy Darkling Beetle			S3		1	76.1 ± 0.2	PE
	<i>Monochamus marmorator</i>	Balsam Fir Sawyer			S3		2	68.9 ± 0.2	NS
	<i>Trachysida aspera</i>	Rough Flower Longhorn Beetle			S3		1	99.1 ± 0.2	NS
	<i>Astylopsis sexguttata</i>	Six-speckled Long-horned Beetle			S3		5	89.8 ± 0.25	NS
	<i>Satyrus calanus</i>	Banded Hairstreak			S3		5	21.0 ± 2.5	NS
	<i>Callophrys lanoraieensis</i>	Bog Elfin			S3		17	45.5 ± 0.01	NS
	<i>Strymon melinus</i>	Gray Hairstreak			S3		1	74.3 ± 2.5	NS
	<i>Phanogomphus descriptus</i>	Harpoon Clubtail			S3		4	29.7 ± 1.0	NS
	<i>Ophiogomphus aspersus</i>	Brook Snaketail			S3		5	46.8 ± 0.1	NS
	<i>Ophiogomphus mainensis</i>	Maine Snaketail			S3		16	60.5 ± 0.05	NS
	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail			S3		36	70.9 ± 0.5	NS
	<i>Epithea princeps</i>	Prince Baskettail			S3		18	24.5 ± 0.5	NS
	<i>Somatochlora forcipata</i>	Forcinate Emerald			S3		3	84.5 ± 1.0	PE
	<i>Enallagma vernale</i>	Vernal Bluet			S3		6	29.7 ± 1.0	NS
	<i>Strophitus undulatus</i>	Creeper			S3		6	48.9 ± 1.0	NS
	<i>Polygonia interrogationis</i>	Question Mark			S3B		97	15.0 ± 0.5	NS
	<i>Cecropterus pylades</i>	Northern Cloudywing			S3S4		22	15.4 ± 0.05	NS
	<i>Amblyscirtes hegon</i>	Pepper and Salt Skipper			S3S4		21	7.1 ± 1.0	NS
	<i>Cupido comyntas</i>	Eastern Tailed Blue			S3S4		6	15.4 ± 0.1	NS
	<i>Argynnis aphrodite</i>	Aphrodite Fritillary			S3S4		32	15.4 ± 0.1	NS
	<i>Polygonia faunus</i>	Green Comma			S3S4		20	23.5 ± 0.2	NS
	<i>Oeneis jutta</i>	Jutta Arctic			S3S4		26	62.6 ± 0.01	NS
	<i>Aeshna clepsydra</i>	Mottled Darner			S3S4		8	71.7 ± 0.1	NS
	<i>Aeshna constricta</i>	Lance-Tipped Darner			S3S4		46	23.0 ± 0.1	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
I	<i>Boyeria grafiana</i>	Ocellated Darner				S3S4	9	23.0 ± 0.1	NS
I	<i>Gomphaeschna furcillata</i>	Harlequin Darner				S3S4	12	48.4 ± 0.2	NS
I	<i>Somatochlora franklini</i>	Delicate Emerald				S3S4	9	31.2 ± 1.0	NS
I	<i>Erythrodiplex berenice</i>	Seaside Dragonlet				S3S4	4	72.0 ± 0.2	NS
I	<i>Nannothemis bella</i>	Elfin Skimmer				S3S4	26	40.1 ± 0.2	NS
I	<i>Sympetrum danae</i>	Black Meadowhawk				S3S4	4	73.4 ± 1.0	PE
I	<i>Enallagma vesperum</i>	Vesper Bluet				S3S4	1	77.5 ± 0.2	NS
I	<i>Amphiagrion saucium</i>	Eastern Red Damsel				S3S4	3	23.4 ± 1.0	NS
I	<i>Sphaerophoria pyrrhina</i>	Violaceous Globetail				SH	1	25.7 ± 5.0	NS
I	<i>Icaricia saepiolus</i>	Greenish Blue				SH	3	14.3 ± 5.0	NS
I	<i>Polygonia gracilis</i>	Hoary Comma				SH	2	23.9 ± 2.5	NS
N	<i>Erioderma mollissimum</i>	Graceful Felt Lichen	Endangered	Endangered	Endangered	S1	21	75.3 ± 0.01	NS
N	<i>Erioderma pedicellatum</i> (Atlantic pop.)	Boreal Felt Lichen - Atlantic pop.	Endangered	Endangered	Endangered	S1	404	71.3 ± 0.01	NS
N	<i>Peltigera hydrothyria</i>	Eastern Waterfan	Threatened	Threatened	Threatened	S1	145	16.5 ± 0.01	NS
N	<i>Pannaria lurida</i>	Wrinkled Shingle Lichen	Threatened	Threatened	Threatened	S2S3	31	52.7 ± 0.01	NS
N	<i>Anzia colpodes</i>	Black-foam Lichen	Threatened	Threatened	Threatened	S3	36	50.1 ± 0.6	NS
N	<i>Fuscopannaria leucosticta</i>	White-rimmed Shingle Lichen	Threatened			S3	7	70.3 ± 0.01	NS
N	<i>Heterodermia squamulosa</i>	Scaly Fringe Lichen	Threatened			S3	78	80.7 ± 0.5	NS
N	<i>Pectenium plumbea</i>	Blue Felt Lichen	Special Concern	Special Concern	Vulnerable	S3	155	14.2 ± 0.5	NS
N	<i>Sclerophora peronella</i> (Atlantic pop.)	Frosted Glass-whiskers (Atlantic population)	Special Concern	Special Concern		S3S4	22	68.1 ± 0.01	NS
N	<i>Pseudevernia cladonia</i>	Ghost Antler Lichen	Not At Risk			S2S3	17	75.4 ± 0.45	NS
N	<i>Fissidens exilis</i>	Pygmy Pocket Moss	Not At Risk			S3	16	36.2 ± 0.01	NS
N	<i>Chaenotheca servitii</i>	Flexuous Golden Stubble	Data Deficient			S1	1	70.7 ± 1.0	NS
N	<i>Aloina brevirostris</i>	Short-Beaked Rigid Screw Moss				S1	2	62.0 ± 0.2	NS
N	<i>Orthotrichum gymnostomum</i>	Aspen Bristle Moss				S1	1	28.5 ± 0.2	NS
N	<i>Sematophyllum demissum</i>	a Moss				S1	1	88.1 ± 2.5	NS
N	<i>Tetradontium brownianum</i>	Little Georgia				S1	1	69.5 ± 0.2	NS
N	<i>Cyrto-hypnum minutulum</i>	Tiny Cedar Moss				S1	1	70.9 ± 0.01	NS
N	<i>Blennothallia crispa</i>	Crinkled Jelly Lichen				S1	1	71.4 ± 0.05	NS
N	<i>Usnea perplexans</i>	Powdered Beard Lichen				S1	1	83.0 ± 0.4	NS
N	<i>Cladonia brevis</i>	Short Peg Lichen				S1	1	94.5 ± 4.9	PE
N	<i>Lathagrium cristatum</i>	Fingered Jelly Lichen				S1	3	87.0 ± 0.05	NS
N	<i>Fuscopannaria praetermissa</i>	Moss Shingles Lichen				S1	1	92.5 ± 0.05	NS
N	<i>Scytinium schraderi</i>	Wrinkled Jellyskin Lichen				S1	1	41.5 ± 0.05	NS
N	<i>Polychidium muscicola</i>	Eyed Mossthorns				S1	1	56.9 ± 0.2	NS
N	<i>Peltigera lepidophora</i>	Scaly Pelt Lichen				S1	7	63.0 ± 0.01	PE
N	<i>Calypogeia neogaea</i>	Common Pouchwort				S1?	1	63.2 ± 0.01	NS
N	<i>Jubula pennsylvanica</i>	a liverwort				S1?	1	90.4 ± 0.2	NS
N	<i>Aloina rigida</i>	Aloe-Like Rigid Screw Moss				S1?	5	20.5 ± 0.1	NS
N	<i>Brachythecium erythrorrhizon</i>	Taiga Ragged Moss				S1?	2	93.7 ± 0.5	PE
N	<i>Campylostelium saxicola</i>	a Moss				S1?	2	69.9 ± 0.8	PE
N	<i>Tortula obtusifolia</i>	a Moss				S1?	3	23.4 ± 1.0	NS
N	<i>Didymodon tophaceus</i>	Olive Beard Moss				S1?	2	71.5 ± 0.01	NS
N	<i>Homomallium adnatum</i>	Adnate Hairy-gray Moss				S1?	1	98.4 ± 0.2	NS
N	<i>Paludella squarrosa</i>	Tufted Fen Moss				S1?	3	82.1 ± 0.1	NS
N	<i>Physcomitrium immersum</i>	a Moss				S1?	1	99.3 ± 0.38	NS
N	<i>Schistostegia pennata</i>	Luminous Moss				S1?	2	76.0 ± 0.2	NS
N	<i>Enchylium limosum</i>	Lime-loving Tarpaper Lichen				S1?	3	71.4 ± 0.2	NS
N	<i>Scytinium intermedium</i>	Forty-five Jellyskin Lichen				S1?	1	71.5 ± 4.0	NS
N	<i>Arrhenopterum heterostichum</i>	One-sided Groove Moss				S1S2	2	61.7 ± 1.6	NS
N	<i>Mnium thomsonii</i>	Thomson's Leafy Moss				S1S2	1	90.7 ± 2.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	<i>Plagiothecium latebricola</i>	Alder Silk Moss			S1S2		1	64.3 ± 3.2	NS
N	<i>Platydictya confervoides</i>	a Moss			S1S2		1	91.8 ± 0.01	NS
N	<i>Seligeria donniana</i>	Donian Beardless Moss			S1S2		1	70.4 ± 3.2	NS
N	<i>Sematophyllum marylandicum</i>	a Moss			S1S2		2	76.9 ± 6.5	NS
N	<i>Timmia megapolitana</i>	Metropolitan Timmia Moss			S1S2		3	19.2 ± 0.01	NS
N	<i>Tortula mucronifolia</i>	Mucronate Screw Moss			S1S2		1	87.1 ± 3.0	NS
N	<i>Pseudotaxiphyllum distichaceum</i>	a Moss			S1S2		1	65.3 ± 0.01	NS
N	<i>Haplocladium microphyllum</i>	Tiny-leaved Haplocladium Moss			S1S2		1	33.1 ± 5.0	NS
N	<i>Enchylium bachmanianum</i>	Bachman's Jelly Lichen			S1S2		2	87.4 ± 0.05	NS
N	<i>Placidium squamulosum</i>	Limy Soil Stipplescale Lichen			S1S2		1	56.6 ± 6.0	NS
N	<i>Peltigera ponojensis</i>	Pale-bellied Pelt Lichen			S1S2		1	42.7 ± 0.5	NS
N	<i>Pilophorus cereolus</i>	Powdered Matchstick Lichen			S1S2		1	51.1 ± 3.0	NS
N	<i>Parmotrema reticulatum</i>	Netted Ruffle Lichen			S1S2		5	92.2 ± 0.01	NS
N	<i>Solorina spongiosa</i>	Blinking Owl Lichen			S1S2		7	96.3 ± 0.2	NS
N	<i>Parmeliella parvula</i>	Poor-man's Shingles Lichen			S1S2		8	77.4 ± 0.5	NS
N	<i>Heterodermia galactophylla</i>	Branching Fringe Lichen			S1S3		2	35.2 ± 0.01	NS
N	<i>Stereocaulon grande</i>	Grand Foam Lichen			S1S3		1	20.9 ± 0.5	NS
N	<i>Stereocaulon intermedium</i>	Pacific Brain Foam Lichen			S1S3		1	95.3 ± 2.6	NS
N	<i>Anacamptodon splachnoides</i>	a Moss			S2		1	64.3 ± 3.2	NS
N	<i>Sphagnum platyphyllum</i>	Flat-leaved Peat Moss			S2		2	84.3 ± 3.0	NS
N	<i>Sphagnum subnitens</i>	Lustrous Peat Moss			S2		1	97.3 ± 2.0	NS
N	<i>Hypotrachyna catawbiensis</i>	Powder-tipped Antler Lichen			S2		6	78.0 ± 0.01	NS
N	<i>Scytinium imbricatum</i>	Scaly Jellyskin Lichen			S2		1	59.3 ± 4.0	NS
N	<i>Nephroma resupinatum</i>	a lichen			S2		2	88.8 ± 1.0	NS
N	<i>Placynthium flabellousum</i>	Scaly Ink Lichen			S2		1	72.8 ± 17.5	NS
N	<i>Anaptychia crinalis</i>	Hanging Fringed Lichen			S2		1	94.5 ± 4.9	PE
N	<i>Moerckia flotoviana</i>	Flotow's Ruffwort			S2?		2	70.9 ± 0.01	NS
N	<i>Riccardia multifida</i>	Delicate Germanderwort			S2?		2	71.3 ± 0.2	NS
N	<i>Anomodon viticulosus</i>	a Moss			S2?		1	21.6 ± 5.0	NS
N	<i>Weissia muhlenbergiana</i>	a Moss			S2?		4	90.7 ± 1.2	NS
N	<i>Atrichum angustatum</i>	Lesser Smoothcap Moss			S2?		2	19.7 ± 2.5	NS
N	<i>Ptychostomum pendulum</i>	Drooping Bryum			S2?		1	89.6 ± 2.5	NS
N	<i>Drepanocladus polygamus</i>	Polygamous Hook Moss			S2?		4	71.5 ± 4.0	NS
N	<i>Ditrichum rhynchostegium</i>	a Moss			S2?		1	59.9 ± 0.5	PE
N	<i>Kiaeria starkei</i>	Starke's Fork Moss			S2?		1	90.9 ± 10.0	NS
N	<i>Orthotrichum anomalum</i>	Anomalous Bristle Moss			S2?		1	96.7 ± 2.0	NS
N	<i>Philonotis marchica</i>	a Moss			S2?		2	22.8 ± 0.01	NS
N	<i>Platydictya jungermannioides</i>	False Willow Moss			S2?		1	60.0 ± 0.01	NS
N	<i>Saelania glaucescens</i>	Blue Dew Moss			S2?		1	7.2 ± 0.1	NS
N	<i>Cyrtomnium hymenophylloides</i>	Short-pointed Lantern Moss			S2?		1	7.2 ± 0.1	NS
N	<i>Platylomella lescurii</i>	a Moss			S2?		2	14.7 ± 0.2	NS
N	<i>Oxyrrhynchium hians</i>	Light Beaked Moss			S2S3		4	63.6 ± 25.0	NS
N	<i>Platydictya subtilis</i>	Bark Willow Moss			S2S3		4	64.3 ± 3.2	NS
N	<i>Scorpidium revolvens</i>	Limprichtia Moss			S2S3		2	65.3 ± 0.01	NS
N	<i>Moelleropsis nebulosa</i>	Blue-gray Moss Shingle Lichen			S2S3		51	44.2 ± 3.0	NS
N	<i>Moelleropsis nebulosa ssp. frullanae</i>	Blue-gray Moss Shingle Lichen			S2S3		3	74.0 ± 0.5	NS
N	<i>Ramalina thrausta</i>	Angelhair Ramalina Lichen			S2S3		12	44.5 ± 0.5	NS
N	<i>Collema leptaleum</i>	Crumpled Bat's Wing Lichen			S2S3		109	24.7 ± 0.05	NS
N	<i>Usnea ceratina</i>	Warty Beard Lichen			S2S3		1	61.4 ± 0.4	NS
N	<i>Usnea rubicunda</i>	Red Beard Lichen			S2S3		4	25.3 ± 0.2	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	<i>Ahtiana aurescens</i>	Eastern Candlewax Lichen			S2S3		7	65.8 ± 0.5	NS
N	<i>Usnocetraria oakesiana</i>	Yellow Band Lichen			S2S3		3	83.2 ± 0.05	NS
N	<i>Cladonia incrassata</i>	Powder-foot British Soldiers Lichen			S2S3		1	95.0 ± 0.05	NS
N	<i>Cladonia parasitica</i>	Fence-rail Lichen			S2S3		4	34.6 ± 1.5	NS
N	<i>Scytinium tenuissimum</i>	Birdnest Jellyskin Lichen			S2S3		14	25.4 ± 0.2	NS
N	<i>Melanohalea septentrionalis</i>	Northern Camouflage Lichen			S2S3		3	82.4 ± 0.6	NS
N	<i>Myelochroa aurulenta</i>	Powdery Axil-bristle Lichen			S2S3		2	95.8 ± 0.01	NS
N	<i>Parmelia fertilis</i>	Fertile Shield Lichen			S2S3		10	11.3 ± 0.5	NS
N	<i>Hypotrachyna minarum</i>	Hairless-spined Shield Lichen			S2S3		2	86.2 ± 0.05	NS
N	<i>Parmeliopsis ambigua</i>	Green Starburst Lichen			S2S3		2	46.4 ± 1.7	NS
N	<i>Racodium rupestre</i>	Rockhair Lichen			S2S3		1	95.4 ± 1.2	NS
N	<i>Usnea cavernosa</i>	Pitted Beard Lichen			S2S3		2	83.0 ± 0.4	NS
N	<i>Usnea mutabilis</i>	Bloody Beard Lichen			S2S3		1	83.1 ± 0.25	NS
N	<i>Fuscopannaria sorediata</i>	a Lichen			S2S3		4	80.7 ± 0.2	NS
N	<i>Stereocaulon condensatum</i>	Granular Soil Foam Lichen			S2S3		12	31.6 ± 0.05	NS
N	<i>Physcia subtilis</i>	Slender Rosette Lichen			S2S3		1	76.0 ± 0.05	NS
N	<i>Cladonia coccifera</i>	Eastern Boreal Pixie-cup Lichen			S2S3		2	67.3 ± 4.0	NS
N	<i>Cladonia deformis</i>	Lesser Sulphur-cup Lichen			S2S3		2	72.8 ± 0.01	PE
N	<i>Cladonia phyllophora</i>	Felt Lichen			S2S3		1	95.1 ± 0.2	NB
N	<i>Ephemerum serratum</i>	a Moss			S3		4	36.2 ± 0.01	NS
N	<i>Fissidens taxifolius</i>	Yew-leaved Pocket Moss			S3		14	36.2 ± 0.01	NS
N	<i>Anomodon tristis</i>	a Moss			S3		11	90.0 ± 0.6	NS
N	<i>Sphagnum contortum</i>	Twisted Peat Moss			S3		4	63.5 ± 4.0	NS
N	<i>Tetraplodon angustatus</i>	Toothed-leaved Nitrogen Moss			S3		3	79.6 ± 0.01	NS
N	<i>Rostania occultata</i>	Crusted Tarpaper Lichen			S3		3	69.2 ± 0.5	NS
N	<i>Collema nigrescens</i>	Blistered Tarpaper Lichen			S3		22	51.7 ± 0.01	NS
N	<i>Solorina saccata</i>	Woodland Owl Lichen			S3		14	59.3 ± 4.0	NS
N	<i>Fuscopannaria ahlneri</i>	Corrugated Shingles Lichen			S3		75	16.3 ± 0.01	NS
N	<i>Scytinium lichenoides</i>	Tattered Jellyskin Lichen			S3		31	37.3 ± 0.01	NS
N	<i>Leptogium milligranum</i>	Stretched Jellyskin Lichen			S3		11	20.9 ± 0.05	NS
N	<i>Nephroma bellum</i>	Naked Kidney Lichen			S3		16	33.9 ± 0.5	NS
N	<i>Placynthium nigrum</i>	Common Ink Lichen			S3		4	57.3 ± 0.05	NS
N	<i>Punctelia appalachensis</i>	Appalachian Speckleback Lichen			S3		109	36.2 ± 0.01	NS
N	<i>Viridothelium virens</i>	a lichen			S3		4	76.9 ± 0.2	PE
N	<i>Ephebe lanata</i>	Waterside Rockshag Lichen			S3		2	56.9 ± 0.2	NS
N	<i>Phaeophyscia adiastrata</i>	Powder-tipped Shadow Lichen			S3		4	72.0 ± 0.01	PE
N	<i>Phaeophyscia pusilloides</i>	Pompom-tipped Shadow Lichen			S3		13	33.1 ± 0.5	NS
N	<i>Peltigera collina</i>	Tree Pelt Lichen			S3		12	6.1 ± 0.2	NS
N	<i>Barbula convoluta</i>	Lesser Bird's-claw Beard Moss			S3?		3	63.8 ± 0.01	PE
N	<i>Calliergon giganteum</i>	Giant Spear Moss			S3?		2	86.5 ± 3.0	NS
N	<i>Elodium blandowii</i>	Blandow's Bog Moss			S3?		5	25.2 ± 3.0	NS
N	<i>Mnium stellare</i>	Star Leafy Moss			S3?		3	61.7 ± 1.6	NS
N	<i>Sphagnum riparium</i>	Streamside Peat Moss			S3?		2	82.8 ± 0.01	NS
N	<i>Cladonia stygia</i>	Black-footed Reindeer Lichen			S3?		19	76.2 ± 0.01	NS
N	<i>Anomodon rugelii</i>	Rugel's Anomodon Moss			S3S4		1	90.0 ± 0.6	NS
N	<i>Dichelyma capillaceum</i>	Hairlike Dichelyma Moss			S3S4		1	92.1 ± 3.0	NS
N	<i>Encalypta ciliata</i>	Fringed Extinguisher Moss			S3S4		2	87.1 ± 3.0	NS
N	<i>Encalypta procera</i>	Slender Extinguisher Moss			S3S4		1	70.4 ± 3.2	NS
N	<i>Myurella julacea</i>	Small Mouse-tail Moss			S3S4		1	7.2 ± 0.1	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	<i>Splachnum ampullaceum</i>	Cruet Dung Moss				S3S4	4	76.6 ± 0.01	NS
N	<i>Thamnobryum alleghaniense</i>	a Moss				S3S4	9	45.6 ± 0.01	NS
N	<i>Tomentypnum nitens</i>	Golden Fuzzy Fen Moss				S3S4	5	65.3 ± 0.2	NS
N	<i>Schistidium agassizii</i>	Elf Bloom Moss				S3S4	1	87.1 ± 0.01	NS
N	<i>Hylocomiastrum pyrenaicum</i>	a Feather Moss				S3S4	1	70.4 ± 3.2	NS
N	<i>Bryoria pseudofuscescens</i>	Mountain Horsehair Lichen				S3S4	20	52.2 ± 4.0	NS
N	<i>Enchylium tenax</i>	Soil Tarpaper Lichen				S3S4	12	37.3 ± 0.01	NS
N	<i>Stictia fuliginosa</i>	Peppered Moon Lichen				S3S4	50	24.8 ± 0.01	NS
N	<i>Arctoparmelia incurva</i>	Finger Ring Lichen				S3S4	2	98.1 ± 0.01	NS
N	<i>Scytinium teretiusculum</i>	Curly Jellyskin Lichen				S3S4	15	54.5 ± 0.01	NS
N	<i>Leptogium acadense</i>	Acadian Jellyskin Lichen				S3S4	51	9.8 ± 0.01	NS
N	<i>Scytinium subtile</i>	Appressed Jellyskin Lichen				S3S4	42	33.7 ± 0.2	NS
N	<i>Cladonia floerkeana</i>	Gritty British Soldiers Lichen				S3S4	1	95.1 ± 0.05	NB
N	<i>Vahlia leucophaea</i>	Shelter Shingle Lichen				S3S4	17	36.4 ± 0.01	NS
N	<i>Heterodermia speciosa</i>	Powdered Fringe Lichen				S3S4	44	3.5 ± 0.2	NS
N	<i>Leptogium corticola</i>	Blistered Jellyskin Lichen				S3S4	47	53.2 ± 0.01	NS
N	<i>Melanohalea olivacea</i>	Spotted Camouflage Lichen				S3S4	8	45.3 ± 3.3	NS
N	<i>Parmeliopsis hyperopta</i>	Gray Starburst Lichen				S3S4	4	28.6 ± 1.6	NS
N	<i>Parmotrema perlatum</i>	Powdered Ruffle Lichen				S3S4	9	92.1 ± 0.01	NS
N	<i>Peltigera hymenina</i>	Cloudy Pelt Lichen				S3S4	1	95.0 ± 1.6	NS
N	<i>Sphaerophorus fragilis</i>	Fragile Coral Lichen				S3S4	1	98.1 ± 0.01	NS
N	<i>Coccocarpia palmicola</i>	Salted Shell Lichen				S3S4	596	51.0 ± 0.5	NS
N	<i>Physcia tenella</i>	Fringed Rosette Lichen				S3S4	5	58.9 ± 0.01	PE
N	<i>Anaptychia palmulata</i>	Shaggy Fringed Lichen				S3S4	104	4.7 ± 0.2	NS
N	<i>Evernia prunastri</i>	Valley Oakmoss Lichen				S3S4	94	19.6 ± 0.01	NS
N	<i>Heterodermia neglecta</i>	Fringe Lichen				S3S4	65	25.5 ± 0.5	NS
P	<i>Clethra alnifolia</i>	Coast Pepper-Bush	Endangered	Threatened	Vulnerable	S2	1	93.3 ± 0.2	PE
P	<i>Fraxinus nigra</i>	Black Ash	Threatened		Threatened	S1S2	1560	6.6 ± 0.01	NS
P	<i>Lilaeopsis chinensis</i>	Eastern Lilaeopsis	Special Concern	Special Concern	Vulnerable	S3	20	43.5 ± 0.01	NS
P	<i>Isoetes prototypus</i>	Prototype Quillwort	Special Concern	Special Concern	Vulnerable	S3	13	30.3 ± 0.05	NS
P	<i>Floerkea proserpinacoides</i>	False Mermaidweed	Not At Risk			S2S3	1	23.9 ± 7.07	NS
P	<i>Acer saccharinum</i>	Silver Maple				S1	7	73.2 ± 0.2	PE
P	<i>Osmorhiza depauperata</i>	Blunt Sweet Cicely				S1	1	100.0 ± 5.0	NS
P	<i>Nabalus racemosus</i>	Glaucous Rattlesnakeroot				S1	1	95.1 ± 20.0	PE
P	<i>Andersonglossum boreale</i>	Northern Wild Comfrey				S1	3	87.9 ± 1.6	NS
P	<i>Lobelia spicata</i>	Pale-Spiked Lobelia				S1	13	29.9 ± 7.07	NS
P	<i>Stellaria crassifolia</i>	Fleshy Stitchwort				S1	1	98.3 ± 5.0	PE
P	<i>Hudsonia tomentosa</i>	Woolly Beach-heath				S1	43	58.8 ± 7.07	NS
P	<i>Callitriche hermaphroditica</i>	Northern Water-starwort				S1	9	89.2 ± 0.04	PE
P	<i>Elatine americana</i>	American Waterwort				S1	2	52.5 ± 0.2	NS
P	<i>Ribes americanum</i>	Wild Black Currant				S1	4	23.4 ± 5.0	NS
P	<i>Utricularia ochroleuca</i>	Yellowish-white Bladderwort				S1	38	76.2 ± 0.01	NS
P	<i>Fraxinus pennsylvanica</i>	Red Ash				S1	14	34.5 ± 0.01	NS
P	<i>Polygonum achoreum</i>	Leathery Knotweed				S1	2	89.2 ± 0.03	NB
P	<i>Persicaria careyi</i>	Carey's Smartweed				S1	1	45.1 ± 3.0	NS
P	<i>Phytolacca americana</i>	Common Pokeweed				S1	1	99.7 ± 0.2	NS
P	<i>Montia fontana</i>	Water Blinks				S1	1	97.1 ± 5.0	PE
P	<i>Clematis occidentalis</i>	Purple Clematis				S1	3	77.3 ± 0.5	NS
P	<i>Ranunculus pensylvanicus</i>	Pennsylvania Buttercup				S1	31	24.4 ± 0.01	NS
P	<i>Amelanchier nantucketensis</i>	Nantucket Serviceberry				S1	1	80.4 ± 1.0	NS
P	<i>Salix myrtilifolia</i>	Blueberry Willow				S1	1	64.8 ± 0.01	NS
P	<i>Salix serissima</i>	Autumn Willow				S1	2	64.8 ± 0.01	NS
P	<i>Carex garberi</i>	Garber's Sedge				S1	4	23.3 ± 0.01	NS
P	<i>Carex granularis</i>	Limestone Meadow Sedge				S1	2	76.5 ± 0.2	NS
P	<i>Carex laxiflora</i>	Loose-Flowered Sedge				S1	1	93.2 ± 1.0	NS
P	<i>Carex ormostachya</i>	Necklace Spike Sedge				S1	1	75.8 ± 1.0	NB
P	<i>Carex plantaginea</i>	Plantain-Leaved Sedge				S1	4	20.8 ± 0.05	NS
P	<i>Carex prairea</i>	Prairie Sedge				S1	1	84.8 ± 0.2	PE

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Carex tenuiflora</i>	Sparse-Flowered Sedge				S1	2	76.2 ± 0.01	NS
P	<i>Carex tinctoria</i>	Tinged Sedge				S1	4	83.4 ± 0.03	PE
P	<i>Cyperus lupulinus ssp. macilentus</i>	Hop Flatsedge				S1	4	50.9 ± 0.01	NS
P	<i>Scirpus atrovirens</i>	Dark-green Bulrush				S1	4	37.2 ± 0.2	NS
P	<i>Blysmopsis rufa</i>	Red Bulrush				S1	6	92.6 ± 1.0	PE
P	<i>Elodea nuttallii</i>	Nuttall's Waterweed				S1	2	92.5 ± 1.0	PE
P	<i>Juncus vaseyi</i>	Vasey Rush				S1	4	24.9 ± 0.02	NS
P	<i>Trillium grandiflorum</i>	White Trillium				S1	1	81.2 ± 1.31	PE
P	<i>Malaxis monophyllos var. brachypoda</i>	North American White Adder's-mouth				S1	6	60.5 ± 1.0	NS
P	<i>Calamagrostis stricta ssp. inexpansa</i>	Slim-stemmed Reed Grass				S1	1	85.2 ± 1.0	NB
P	<i>Elymus hystrix</i>	Spreading Wild Rye				S1	12	40.8 ± 1.0	NS
P	<i>Adiantum pedatum</i>	Northern Maidenhair Fern				S1	14	22.8 ± 1.0	NS
P	<i>Selaginella rupestris</i>	Rock Spikemoss				S1	1	87.8 ± 0.01	NS
P	<i>Solidago hispida</i>	Hairy Goldenrod				S1?	1	72.1 ± 7.07	NS
P	<i>Suaeda rolandii</i>	Roland's Sea-Blite				S1?	6	52.7 ± 2.0	NS
P	<i>Carex pensylvanica</i>	Pennsylvania Sedge				S1?	3	36.5 ± 0.5	NS
P	<i>Bolboschoenus robustus</i>	Sturdy Bulrush				S1?	2	29.9 ± 7.07	NS
P	<i>Allium schoenoprasum</i>	Wild Chives				S1?	10	63.6 ± 0.2	PE
P	<i>Allium schoenoprasum var. sibiricum</i>	Wild Chives				S1?	1	22.5 ± 7.07	NS
P	<i>Cypripedium arietinum</i>	Ram's-Head Lady's-Slipper			Endangered	S1S2	329	24.8 ± 0.01	NS
P	<i>Sanicula odorata</i>	Clustered Sanicle				S1S2	9	34.6 ± 10.0	NS
P	<i>Draba glabella</i>	Rock Whitlow-Grass				S1S2	2	87.0 ± 0.05	NS
P	<i>Proserpinaca intermedia</i>	Intermediate Mermaidweed				S1S2	1	64.8 ± 0.9	NS
P	<i>Anemone virginiana var. alba</i>	Virginia Anemone				S1S2	5	22.5 ± 7.07	NS
P	<i>Parnassia parviflora</i>	Small-flowered Grass-of-Parnassus				S1S2	1	90.5 ± 1.5	NS
P	<i>Carex haydenii</i>	Hayden's Sedge				S1S2	4	22.3 ± 1.0	NS
P	<i>Platanthera huronensis</i>	Fragrant Green Orchid				S1S2	4	81.1 ± 10.0	NS
P	<i>Calamagrostis stricta ssp. stricta</i>	Slim-stemmed Reed Grass				S1S2	28	71.8 ± 7.07	NS
P	<i>Carex vacillans</i>	Estuarine Sedge				S1S3	4	82.2 ± 0.01	NB
P	<i>Zizia aurea</i>	Golden Alexanders				S2	44	22.8 ± 0.01	NS
P	<i>Antennaria parlinii ssp. fallax</i>	Parlin's Pussytoes				S2	13	25.0 ± 0.01	NS
P	<i>Rudbeckia laciniata</i>	Cut-Leaved Coneflower				S2	31	21.6 ± 0.01	NS
P	<i>Arabis pycnocarpa</i>	Cream-flowered Rockcress				S2	1	65.3 ± 0.1	NS
P	<i>Cardamine maxima</i>	Large Toothwort				S2	1	94.6 ± 0.01	NS
P	<i>Hudsonia ericoides</i>	Pinebarren Golden Heather				S2	2	93.4 ± 5.0	PE
P	<i>Desmodium canadense</i>	Canada Tick-trefoil				S2	20	22.8 ± 0.05	NS
P	<i>Hylodesmum glutinosum</i>	Large Tick-trefoil				S2	8	78.5 ± 0.01	NS
P	<i>Anemonastrum canadense</i>	Canada Anemone				S2	5	23.5 ± 0.2	NS
P	<i>Hepatica americana</i>	Round-lobed Hepatica				S2	66	23.1 ± 0.01	NS
P	<i>Ranunculus sceleratus</i>	Cursed Buttercup				S2	19	95.8 ± 0.01	NS
P	<i>Galium boreale</i>	Northern Bedstraw				S2	10	30.2 ± 5.0	NS
P	<i>Comandra umbellata</i>	Bastard's Toadflax				S2	14	92.1 ± 1.0	NB
P	<i>Gratiola neglecta</i>	Clammy Hedge-Hyssop				S2	22	36.3 ± 2.5	NS
P	<i>Dirca palustris</i>	Eastern Leatherwood				S2	75	53.8 ± 7.07	NS
P	<i>Carex chordorrhiza</i>	Creeping Sedge				S2	56	75.0 ± 0.05	NS
P	<i>Carex gynocrates</i>	Northern Bog Sedge				S2	2	64.8 ± 0.01	NS
P	<i>Carex pellita</i>	Woolly Sedge				S2	12	22.9 ± 0.01	NS
P	<i>Carex livida</i>	Livid Sedge				S2	49	57.4 ± 0.01	NS
P	<i>Juncus greenii</i>	Greene's Rush				S2	7	41.4 ± 5.0	NS
P	<i>Juncus alpinoarticulatus ssp. americanus</i>	Northern Green Rush				S2	7	93.4 ± 3.5	PE

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Allium tricoccum</i>	Wild Leek			S2		44	21.0 ± 13.59	NS
P	<i>Lilium canadense</i>	Canada Lily			S2		139	12.5 ± 0.2	NS
P	<i>Cypripedium parviflorum</i> var. <i>pubescens</i>	Yellow Lady's-slipper			S2		27	42.1 ± 7.07	NS
P	<i>Cypripedium parviflorum</i> var. <i>makasin</i>	Small Yellow Lady's-Slipper			S2		9	86.9 ± 0.01	NS
P	<i>Cypripedium reginae</i>	Showy Lady's-Slipper			S2		98	39.4 ± 0.01	NS
P	<i>Platanthera flava</i> var. <i>flava</i>	Southern Rein Orchid			S2		1	97.1 ± 7.07	NS
P	<i>Platanthera flava</i> var. <i>herbiola</i>	Pale Green Orchid			S2		9	21.2 ± 1.5	NS
P	<i>Platanthera macrophylla</i>	Large Round-Leaved Orchid			S2		16	11.9 ± 1.0	NS
P	<i>Bromus latiglumis</i>	Broad-Glumed Brome			S2		33	28.4 ± 0.01	NS
P	<i>Cinna arundinacea</i>	Sweet Wood Reed Grass			S2		19	42.2 ± 0.01	NS
P	<i>Elymus wiegandii</i>	Wiegand's Wild Rye			S2		20	23.0 ± 0.05	NS
P	<i>Festuca subverticillata</i>	Nodding Fescue			S2		13	46.3 ± 1.0	NS
P	<i>Cryptogramma stelleri</i>	Steller's Rockbrake			S2		3	50.9 ± 0.01	NS
P	<i>Cuscuta cephalanthi</i>	Buttonbush Dodder			S2?		2	43.6 ± 1.5	NS
P	<i>Rumex persicarioides</i>	Peach-leaved Dock			S2?		3	70.6 ± 5.0	PE
P	<i>Crataegus submollis</i>	Quebec Hawthorn			S2?		7	17.2 ± 5.0	NS
P	<i>Carex peckii</i>	White-Tinged Sedge			S2?		4	18.2 ± 0.1	NS
P	<i>Thuja occidentalis</i>	Eastern White Cedar			S2S3	Vulnerable	969	33.5 ± 0.01	NS
P	<i>Osmorhiza longistylis</i>	Smooth Sweet Cicely			S2S3		30	24.2 ± 5.0	NS
P	<i>Bidens hyperborea</i>	Estuary Beggarticks			S2S3		2	44.3 ± 0.01	NS
P	<i>Erigeron philadelphicus</i>	Philadelphia Fleabane			S2S3		8	56.0 ± 5.0	NS
P	<i>Lactuca hirsuta</i>	Hairy Lettuce			S2S3		4	73.3 ± 5.0	PE
P	<i>Impatiens pallida</i>	Pale Jewelweed			S2S3		3	36.8 ± 0.2	NS
P	<i>Caulophyllum thalictroides</i>	Blue Cohosh			S2S3		100	21.5 ± 0.1	NS
P	<i>Draba arabisans</i>	Rock Whitlow-Grass			S2S3		13	77.8 ± 0.1	NS
P	<i>Boechera stricta</i>	Drummond's Rockcress			S2S3		12	8.3 ± 1.0	NS
P	<i>Stellaria humifusa</i>	Saltmarsh Starwort			S2S3		6	61.8 ± 1.2	NS
P	<i>Oxybasis rubra</i>	Red Goosefoot			S2S3		5	47.5 ± 0.5	NS
P	<i>Hypericum majus</i>	Large St John's-wort			S2S3		22	25.3 ± 0.07	NS
P	<i>Hypericum x dissimulatum</i>	Disguised St. John's-wort			S2S3		7	31.2 ± 1.0	NS
P	<i>Empetrum atropurpureum</i>	Purple Crowberry			S2S3		2	93.4 ± 5.0	PE
P	<i>Euphorbia polygonifolia</i>	Seaside Spurge			S2S3		7	60.0 ± 1.0	PE
P	<i>Myriophyllum farwellii</i>	Farwell's Water Milfoil			S2S3		13	40.8 ± 1.0	NS
P	<i>Hedeoma pulegioides</i>	American False Pennyroyal			S2S3		9	29.3 ± 1.0	NS
P	<i>Oenothera fruticosa</i> ssp. <i>tetragona</i>	Narrow-leaved Evening Primrose			S2S3		6	22.1 ± 7.07	NS
P	<i>Polygonum aviculare</i> ssp. <i>buxiforme</i>	Box Knotweed			S2S3		7	22.5 ± 7.07	NS
P	<i>Polygonum oxyspermum</i> ssp. <i>raii</i>	Ray's Knotweed			S2S3		4	93.1 ± 5.0	PE
P	<i>Polygonum oxyspermum</i>	Sharp-fruit Knotweed			S2S3		1	96.1 ± 0.2	NS
P	<i>Rumex triangulivalvis</i>	Triangular-valve Dock			S2S3		8	28.4 ± 0.01	NS
P	<i>Primula mistassinica</i>	Mistassini Primrose			S2S3		17	22.5 ± 7.07	NS
P	<i>Anemone quinquefolia</i>	Wood Anemone			S2S3		19	24.6 ± 0.01	NS
P	<i>Caltha palustris</i>	Yellow Marsh Marigold			S2S3		105	46.7 ± 0.2	NS
P	<i>Amelanchier fernaldii</i>	Fernald's Serviceberry			S2S3		1	57.8 ± 5.0	NS
P	<i>Potentilla canadensis</i>	Canada Cinquefoil			S2S3		3	39.0 ± 5.0	NS
P	<i>Galium obtusum</i>	Blunt-leaved Bedstraw			S2S3		1	75.8 ± 1.0	NB
P	<i>Salix pellita</i>	Satiny Willow			S2S3		8	27.9 ± 7.07	NS
P	<i>Tiarella cordifolia</i>	Heart-leaved Foamflower			S2S3		223	9.2 ± 1.0	NS
P	<i>Agalinis purpurea</i> var. <i>parviflora</i>	Small-flowered Purple False Foxglove			S2S3		33	21.4 ± 0.01	NS
P	<i>Boehmeria cylindrica</i>	Small-spike False-nettle			S2S3		3	65.7 ± 0.01	NS
P	<i>Carex adusta</i>	Lesser Brown Sedge			S2S3		5	17.1 ± 7.07	NS
P	<i>Carex capillaris</i>	Hairlike Sedge			S2S3		2	65.6 ± 0.02	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Carex comosa</i>	Bearded Sedge				S2S3	22	17.1 ± 7.07	NS
P	<i>Carex houghtoniana</i>	Houghton's Sedge				S2S3	5	43.3 ± 1.2	NS
P	<i>Carex hystericina</i>	Porcupine Sedge				S2S3	10	26.5 ± 0.03	NS
P	<i>Eleocharis ovata</i>	Ovate Spikerush				S2S3	13	13.3 ± 0.4	NS
P	<i>Scirpus pedicellatus</i>	Stalked Bulrush				S2S3	8	43.6 ± 0.01	NS
P	<i>Vallisneria americana</i>	Wild Celery				S2S3	9	35.3 ± 1.34	NS
P	<i>Najas gracillima</i>	Thread-Like Naiad				S2S3	2	86.7 ± 0.45	NS
P	<i>Goodyera pubescens</i>	Downy Rattlesnake-Plantain				S2S3	14	49.7 ± 0.2	NS
P	<i>Spiranthes casei</i> var. <i>novaescotiae</i>	Case's Ladies'-Tresses				S2S3	5	52.0 ± 0.2	NS
P	<i>Spiranthes lucida</i>	Shining Ladies'-Tresses				S2S3	27	22.7 ± 0.01	NS
P	<i>Calamagrostis stricta</i>	Slim-stemmed Reed Grass				S2S3	11	76.1 ± 0.1	NS
P	<i>Potamogeton friesii</i>	Fries' Pondweed				S2S3	16	23.7 ± 5.0	NS
P	<i>Woodsia glabella</i>	Smooth Cliff Fern				S2S3	2	26.6 ± 1.0	NS
P	<i>Botrychium lanceolatum</i> ssp. <i>angustisegmentum</i>	Narrow Triangle Moonwort				S2S3	15	20.5 ± 1.0	NS
P	<i>Botrychium simplex</i>	Least Moonwort				S2S3	5	50.7 ± 0.5	NS
P	<i>Ophioglossum pusillum</i>	Northern Adder's-tongue				S2S3	10	18.8 ± 0.01	NS
P	<i>Potamogeton pulcher</i>	Spotted Pondweed			Vulnerable	S3	3	56.8 ± 2.5	NS
P	<i>Angelica atropurpurea</i>	Purple-stemmed Angelica				S3	10	43.4 ± 0.01	NS
P	<i>Conioselinum chinense</i>	Chinese Hemlock-parsley				S3	7	31.6 ± 5.0	NS
P	<i>Hieracium robinsonii</i>	Robinson's Hawkweed				S3	3	18.7 ± 7.07	NS
P	<i>Iva frutescens</i>	Big-leaved Marsh-elder				S3	50	83.6 ± 0.2	NS
P	<i>Senecio pseudoarnica</i>	Seabeach Ragwort				S3	2	22.5 ± 7.07	NS
P	<i>Symphyotrichum boreale</i>	Boreal Aster				S3	78	22.5 ± 7.07	NS
P	<i>Symphyotrichum undulatum</i>	Wavy-leaved Aster				S3	7	87.7 ± 0.1	NS
P	<i>Symphyotrichum ciliolatum</i>	Fringed Blue Aster				S3	24	41.6 ± 0.25	NS
P	<i>Betula michauxii</i>	Michaux's Dwarf Birch				S3	28	64.3 ± 0.5	NS
P	<i>Betula pumila</i>	Bog Birch				S3	63	65.3 ± 0.01	NS
P	<i>Cardamine parviflora</i>	Small-flowered Bittercress				S3	5	86.9 ± 0.01	NS
P	<i>Palustricodon aparinoides</i>	Marsh Bellflower				S3	42	9.9 ± 1.0	NS
P	<i>Mononeuria groenlandica</i>	Greenland Stitchwort				S3	4	76.9 ± 0.15	NS
P	<i>Sagina nodosa</i>	Knotted Pearlwort				S3	1	99.8 ± 1.0	NS
P	<i>Sagina nodosa</i> ssp. <i>borealis</i>	Knotted Pearlwort				S3	3	93.4 ± 5.0	PE
P	<i>Stellaria longifolia</i>	Long-leaved Starwort				S3	21	15.7 ± 0.01	NS
P	<i>Ceratophyllum echinatum</i>	Prickly Hornwort				S3	39	23.4 ± 0.2	NS
P	<i>Triosteum aurantiacum</i>	Orange-fruited Tinker's Weed				S3	91	15.1 ± 0.2	NS
P	<i>Viburnum edule</i>	Squashberry				S3	3	25.7 ± 0.01	NS
P	<i>Crassula aquatica</i>	Water Pygmyweed				S3	2	93.1 ± 5.0	PE
P	<i>Empetrum eamesii</i>	Pink Crowberry				S3	8	65.3 ± 5.0	PE
P	<i>Geranium bicknellii</i>	Bicknell's Crane's-bill				S3	11	25.2 ± 2.0	NS
P	<i>Myriophyllum verticillatum</i>	Whorled Water Milfoil				S3	12	45.3 ± 0.01	NS
P	<i>Epilobium strictum</i>	Downy Willowherb				S3	84	23.6 ± 5.0	NS
P	<i>Polygala sanguinea</i>	Blood Milkwort				S3	36	9.2 ± 1.0	NS
P	<i>Persicaria arifolia</i>	Halberd-leaved Tearthumb				S3	95	21.4 ± 0.01	NS
P	<i>Plantago rugelii</i>	Rugel's Plantain				S3	7	21.4 ± 0.01	NS
P	<i>Primula laurentiana</i>	Laurentian Primrose				S3	7	93.1 ± 0.01	NS
P	<i>Samolus parviflorus</i>	Seaside Brookweed				S3	12	30.0 ± 0.03	NS
P	<i>Pyrola minor</i>	Lesser Pyrola				S3	3	18.8 ± 0.01	NS
P	<i>Anemone virginiana</i>	Virginia Anemone				S3	19	22.8 ± 0.01	NS
P	<i>Galium labradoricum</i>	Labrador Bedstraw				S3	110	43.5 ± 0.01	NS
P	<i>Salix pedicellaris</i>	Bog Willow				S3	62	44.2 ± 0.01	NS
P	<i>Salix sericea</i>	Silky Willow				S3	1	75.6 ± 1.0	NS
P	<i>Saxifraga paniculata</i> ssp. <i>laestadii</i>	Laestadius' Saxifrage				S3	4	86.8 ± 1.0	NS
P	<i>Lindernia dubia</i>	Yellow-seeded False Pimperel				S3	51	23.2 ± 0.01	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Laportea canadensis</i>	Canada Wood Nettle			S3		64	13.1 ± 0.2	NS
P	<i>Pilea pumila</i>	Dwarf Clearweed			S3		39	35.0 ± 0.01	NS
P	<i>Viola nephrophylla</i>	Northern Bog Violet			S3		9	12.0 ± 1.5	NS
P	<i>Carex bebbii</i>	Bebb's Sedge			S3		35	22.7 ± 0.01	NS
P	<i>Carex castanea</i>	Chestnut Sedge			S3		39	61.5 ± 0.01	NS
P	<i>Carex cryptolepis</i>	Hidden-scaled Sedge			S3		18	21.1 ± 10.0	NS
P	<i>Carex eburnea</i>	Bristle-leaved Sedge			S3		12	37.2 ± 0.01	NS
P	<i>Carex hirtifolia</i>	Pubescent Sedge			S3		55	18.3 ± 0.1	NS
P	<i>Carex lupulina</i>	Hop Sedge			S3		62	21.1 ± 10.0	NS
P	<i>Carex rosea</i>	Rosy Sedge			S3		43	18.3 ± 0.1	NS
P	<i>Carex swanii</i>	Swan's Sedge			S3		1	96.9 ± 0.2	NS
P	<i>Carex tenera</i>	Tender Sedge			S3		11	21.4 ± 0.09	NS
P	<i>Carex tribuloides</i>	Blunt Broom Sedge			S3		14	8.7 ± 0.5	NS
P	<i>Carex tuckermanii</i>	Tuckerman's Sedge			S3		53	21.1 ± 0.01	NS
P	<i>Carex atratifomis</i>	Scabrous Black Sedge			S3		3	76.3 ± 1.0	NS
P	<i>Eleocharis nitida</i>	Quill Spikerush			S3		11	53.2 ± 7.07	NS
P	<i>Eleocharis flavescens</i> var. <i>olivacea</i>	Bright-green Spikerush			S3		5	42.6 ± 0.01	NS
P	<i>Eriophorum gracile</i>	Slender Cottongrass			S3		54	24.0 ± 10.0	NS
P	<i>Juncus stygius</i> ssp. <i>americanus</i>	Moor Rush			S3		76	76.0 ± 0.01	NS
P	<i>Coeloglossum viride</i>	Long-bracted Frog Orchid			S3		1	34.8 ± 0.05	NS
P	<i>Cypripedium parviflorum</i>	Yellow Lady's-slipper			S3		595	37.6 ± 1.5	NS
P	<i>Neottia bifolia</i>	Southern Twayblade			S3		80	3.4 ± 0.01	NS
P	<i>Platanthera grandiflora</i>	Large Purple Fringed Orchid			S3		175	11.1 ± 0.01	NS
P	<i>Platanthera hookeri</i>	Hooker's Orchid			S3		32	24.9 ± 0.01	NS
P	<i>Dichanthelium linearifolium</i>	Narrow-leaved Panic Grass			S3		5	22.8 ± 0.01	NS
P	<i>Piptatheropsis canadensis</i>	Canada Ricegrass			S3		8	20.2 ± 1.5	NS
P	<i>Poa glauca</i>	Glaucous Blue Grass			S3		8	65.6 ± 0.02	NS
P	<i>Stuckenia filiformis</i>	Thread-leaved Pondweed			S3		5	92.5 ± 1.0	PE
P	<i>Potamogeton praelongus</i>	White-stemmed Pondweed			S3		44	13.5 ± 1.0	NS
P	<i>Potamogeton richardsonii</i>	Richardson's Pondweed			S3		5	18.5 ± 7.07	NS
P	<i>Potamogeton zosteriformis</i>	Flat-stemmed Pondweed			S3		28	36.5 ± 0.09	NS
P	<i>Asplenium viride</i>	Green Spleenwort			S3		12	31.8 ± 7.07	NS
P	<i>Dryopteris fragrans</i>	Fragrant Wood Fern			S3		15	10.9 ± 4.0	NS
P	<i>Sceptridium dissectum</i>	Dissected Moonwort			S3		9	21.3 ± 5.0	NS
P	<i>Polypodium appalachianum</i>	Appalachian Polypody			S3		16	18.1 ± 0.01	NS
P	<i>Persicaria amphibia</i> var. <i>emersa</i>	Long-root Smartweed			S3?		5	65.2 ± 0.01	NS
P	<i>Spiranthes ochroleuca</i>	Yellow Ladies'-tresses			S3?		64	6.5 ± 0.5	NS
P	<i>Diphasiastrum x sabinifolium</i>	Savin-leaved Ground-cedar			S3?		13	16.5 ± 0.01	NS
P	<i>Bidens vulgata</i>	Tall Beggarticks			S3S4		6	24.2 ± 0.2	NS
P	<i>Erigeron hyssopifolius</i>	Hyssop-leaved Fleabane			S3S4		35	27.8 ± 0.01	NS
P	<i>Hieracium paniculatum</i>	Panicled Hawkweed			S3S4		9	16.5 ± 0.01	NS
P	<i>Bidens beckii</i>	Water Beggarticks			S3S4		29	18.3 ± 1.0	NS
P	<i>Packera paupercula</i>	Balsam Groundsel			S3S4		116	22.7 ± 0.01	NS
P	<i>Atriplex glabriuscula</i> var. <i>franktonii</i>	Frankton's Saltbush			S3S4		19	28.4 ± 2.5	NS
P	<i>Shepherdia canadensis</i>	Soapberry			S3S4		112	84.7 ± 0.05	NS
P	<i>Vaccinium boreale</i>	Northern Blueberry			S3S4		4	66.7 ± 1.0	NS
P	<i>Vaccinium cespitosum</i>	Dwarf Bilberry			S3S4		50	24.1 ± 0.05	NS
P	<i>Vaccinium corymbosum</i>	Highbush Blueberry			S3S4		3	95.7 ± 0.01	NS
P	<i>Fagus grandifolia</i>	American Beech			S3S4		707	1.7 ± 0.2	NS
P	<i>Bartonia virginica</i>	Yellow Bartonia			S3S4		1	75.6 ± 7.07	NS
P	<i>Proserpinaca pectinata</i>	Comb-leaved Mermaidweed			S3S4		4	56.8 ± 1.0	NS
P	<i>Decodon verticillatus</i>	Swamp Loosestrife			S3S4		1	95.2 ± 0.01	PE
P	<i>Nuphar microphylla</i>	Small Yellow Pond-lily			S3S4		10	24.0 ± 2.1	NS
P	<i>Persicaria pensylvanica</i>	Pennsylvania Smartweed			S3S4		33	19.8 ± 0.2	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Fallopia scandens</i>	Climbing False Buckwheat			S3S4		39	22.5 ± 7.07	NS
P	<i>Rumex pallidus</i>	Seabeach Dock			S3S4		1	94.8 ± 0.01	NS
P	<i>Pyrola asarifolia</i>	Pink Pyrola			S3S4		18	22.8 ± 1.0	NS
P	<i>Endotropis alnifolia</i>	alder-leaved buckthorn			S3S4		471	24.9 ± 0.01	NS
P	<i>Amelanchier spicata</i>	Running Serviceberry			S3S4		15	33.0 ± 5.0	NS
P	<i>Crataegus succulenta</i>	Fleshy Hawthorn			S3S4		5	80.5 ± 5.0	PE
P	<i>Fragaria vesca</i> ssp. <i>americana</i>	Woodland Strawberry			S3S4		71	18.0 ± 0.8	NS
P	<i>Fragaria vesca</i>	Woodland Strawberry			S3S4		11	37.2 ± 0.2	NS
P	<i>Galium aparine</i>	Common Bedstraw			S3S4		17	21.9 ± 0.2	NS
P	<i>Geocaulon lividum</i>	Northern Comandra			S3S4		12	34.7 ± 0.01	NS
P	<i>Limosella australis</i>	Southern Mudwort			S3S4		36	31.1 ± 0.01	NS
P	<i>Ulmus americana</i>	White Elm			S3S4		128	13.2 ± 0.2	NS
P	<i>Verbena hastata</i>	Blue Vervain			S3S4		244	20.9 ± 0.2	NS
P	<i>Viola sagittata</i> var. <i>ovata</i>	Arrow-Leaved Violet			S3S4		10	67.8 ± 0.2	NS
P	<i>Viola selkirkii</i>	Great-Spurred Violet			S3S4		6	34.8 ± 0.05	NS
P	<i>Symplocarpus foetidus</i>	Eastern Skunk Cabbage			S3S4		137	46.7 ± 0.2	NS
P	<i>Carex argyrantha</i>	Silvery-flowered Sedge			S3S4		4	76.0 ± 5.0	PE
P	<i>Triglochin gaspensis</i>	Gasp Arrowgrass			S3S4		4	77.9 ± 0.01	NB
P	<i>Juncus acuminatus</i>	Sharp-Fruit Rush			S3S4		7	47.6 ± 2.0	NS
P	<i>Juncus subcaudatus</i>	Woods-Rush			S3S4		19	27.7 ± 3.0	NS
P	<i>Luzula parviflora</i> ssp. <i>melanocarpa</i>	Black-fruited Woodrush			S3S4		5	50.7 ± 0.01	NS
P	<i>Goodyera repens</i>	Lesser Rattlesnake-plantain			S3S4		20	59.2 ± 1.0	PE
P	<i>Liparis loeselii</i>	Loesel's Twayblade			S3S4		30	19.7 ± 1.0	NS
P	<i>Platanthera obtusata</i>	Blunt-leaved Orchid			S3S4		4	45.3 ± 1.0	NS
P	<i>Platanthera orbiculata</i>	Small Round-leaved Orchid			S3S4		43	3.6 ± 0.01	NS
P	<i>Alopecurus aequalis</i>	Short-awned Foxtail			S3S4		29	22.9 ± 0.01	NS
P	<i>Dichanthelium clandestinum</i>	Deer-tongue Panic Grass			S3S4		158	55.5 ± 5.0	NS
P	<i>Panicum philadelphicum</i>	Philadelphia Panicgrass			S3S4		15	24.2 ± 0.01	NS
P	<i>Koeleria spicata</i>	Narrow False Oats			S3S4		17	22.8 ± 0.01	NS
P	<i>Asplenium trichomanes</i>	Maidenhair Spleenwort			S3S4		12	80.5 ± 1.1	NS
P	<i>Equisetum pratense</i>	Meadow Horsetail			S3S4		15	4.3 ± 0.01	NS
P	<i>Diphasiastrum complanatum</i>	Northern Ground-cedar			S3S4		21	20.2 ± 0.2	NS
P	<i>Diphasiastrum sitchense</i>	Sitka Ground-cedar			S3S4		5	17.0 ± 5.0	NS
P	<i>Huperzia appressa</i>	Mountain Firmoss			S3S4		17	3.0 ± 7.07	NS
P	<i>Sceptridium multifidum</i>	Leathery Moonwort			S3S4		15	41.5 ± 0.8	NS
P	<i>Botrychium matricariifolium</i>	Daisy-leaved Moonwort			S3S4		15	12.8 ± 1.0	NS
P	<i>Viola canadensis</i>	Canada Violet			SH		2	23.9 ± 7.07	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
13904	Morrison, Guy. 2011. Maritime Shorebird Survey (MSS) database. Canadian Wildlife Service, Ottawa, 15939 surveys. 86171 recs.
10586	Lepage, D. 2014. Maritime Breeding Bird Atlas Database. Bird Studies Canada, Sackville NB, 407,838 recs.
6908	Paquet, Julie. 2018. Atlantic Canada Shorebird Survey (ACSS) database 2012-2018. Environment Canada, Canadian Wildlife Service.
5485	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
4594	Erskine, A.J. 1992. Maritime Breeding Bird Atlas Database. NS Museum & Nimbus Publ., Halifax, 82,125 recs.
3948	East Coast Aquatics Inc. 2023. Year 3 (2022) Wood Turtle Monitoring Hwy 104 Sutherlands River To Antigonish.
3886	iNaturalist.ca. 2023. iNaturalist Data Export December 2022. iNaturalist.org; iNaturalist.ca.
2111	Berrigan, L. 2019. Maritimes Marsh Monitoring Project 2013, 2014, 2016, 2017, and 2018 data. Bird Studies Canada, Sackville, NB.
1687	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.

# recs	CITATION
1620	eBird. 2014. eBird Basic Dataset. Version: EBD_relNov-2014. Ithaca, New York. Nov 2014. Cornell Lab of Ornithology, 25036 recs.
1525	iNaturalist. 2020. iNaturalist Data Export 2020. iNaturalist.org and iNaturalist.ca, Web site: 128728 recs.
980	Eaton, S. 2014. Nova Scotia Wood Turtle Database. Environment and Climate Change Canada, 4843 recs.
931	Henger, Benjamin. 2023. Barn Swallow observations since 2017. Island Nature Trust.
895	Patrick, A.; Horne, D.; Noseworthy, J. et. al. 2017. Field data for Nova Scotia and New Brunswick, 2015 and 2017. Nature Conservancy of Canada.
887	SwiftWatch. 2022. Total Chimney Swift counts from roost watches for the duration of the SwiftWatch program (2011-2021). Birds Canada.
861	Island Nature Trust. 2023. Bobolink observations from Farmland Bird Program, 2017-2022. Island Nature Trust. Pers. comm., 1346 records.
622	Cameron, E. 2008. Canadian Gypsum Co. survey 2007-08. Conestoga-Rovers & Assoc., 623 recs.
619	Parks Canada. 2021. PEI National Park Bank swallow nest records from 2010-2019. Parks Canada, 1535 records.
603	Neily, T.H. & Pepper, C.; Toms, B. 2018. Nova Scotia lichen database [as of 2018-03]. Mersey Tobeatic Research Institute.
572	Amirault, D.L. & Stewart, J. 2007. Piping Plover Database 1894-2006. Canadian Wildlife Service, Sackville, 3344 recs, 1228 new.
566	Blaney, C.S.; Mazerolle, D.M.; Belliveau, A.B. 2015. Atlantic Canada Conservation Data Centre Fieldwork 2015. Atlantic Canada Conservation Data Centre, # recs.
499	Wildlife Division. 2021. Fraxinus nigra records assembled to define and model habitat. Nova Scotia Department of Natural Resources and Renewables.
482	Paquet, Julie. 2019. Atlantic Canada Shorebird Survey ACSS database for 2019. Environment Canada, Canadian Wildlife Service.
427	Tranquilla, L. 2015. Maritimes Marsh Monitoring Project 2015 data. Bird Studies Canada, Sackville NB, 5062 recs.
388	Benjamin, L.K. (compiler). 2007. Significant Habitat & Species Database. Nova Scotia Dept Natural Resources, 8439 recs.
372	Clayden, S. Digitization of Wolfgang Maass Nova Scotia forest lichen collections, 1964-2004. New Brunswick Museum. 2018.
358	Belliveau, A.G. 2020. E.C. Smith Herbarium and Atlantic Canada Conservation Data Centre Fieldwork 2019, 2020. E.C. Smith Herbarium.
355	Blaney, C.S.; Mazerolle, D.M. 2010. Fieldwork 2010. Atlantic Canada Conservation Data Centre. Sackville NB, 15508 recs.
299	McRae, Daniel. 2023. Black Ash and other flora records on Prince Edward Island. MacPhail Woods Ecological Forestry Project, 443 records.
289	Newell, R.E. 2000. E.C. Smith Herbarium Database. Acadia University, Wolfville NS, 7139 recs.
276	Blaney, C.S.; Mazerolle, D.M. 2012. Fieldwork 2012. Atlantic Canada Conservation Data Centre, 13,278 recs.
260	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.
255	Blaney, C.S.; Mazerolle, D.M.; Belliveau, A.B. 2014. Atlantic Canada Conservation Data Centre Fieldwork 2014. Atlantic Canada Conservation Data Centre, # recs.
252	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.
248	Neily, T.H. & Pepper, C.; Toms, B. 2013. Nova Scotia lichen location database. Mersey Tobeatic Research Institute, 1301 records.
240	Blaney, C.S.; Korol, J.B.; Crowell, I. 2023. 2022 AC CDC Botany program field data. Atlantic Canada Conservation Data Centre, 5293 records.
239	Chapman-Lam, C.J. 2022. Atlantic Canada Conservation Data Centre 2021 botanical fieldwork. Atlantic Canada Conservation Data Centre, 15099 recs.
234	Benjamin, L.K. (compiler). 2012. Significant Habitat & Species Database. Nova Scotia Dept Natural Resources, 4965 recs.
223	Scott, F.W. 2002. Nova Scotia Herpetofauna Atlas Database. Acadia University, Wolfville NS, 8856 recs.
202	Brunelle, P.-M. (compiler). 2009. ADIP/MDDS Odonata Database: data to 2006 inclusive. Atlantic Dragonfly Inventory Program (ADIP), 24200 recs.
198	Churchill, J.L.; Klymko, J.D. 2015. Chignecto and Tintamarre National Wildlife Area Bird Surveys 2015. Atlantic Canada Conservation Data Centre, 2238 recs.
197	Island Nature Trust. 2016. Farmland birds project. Mader, Shannon (ed.) .
196	LaPaix, R.W.; Crowell, M.J.; MacDonald, M. 2011. Stantec rare plant records, 2010-11. Stantec Consulting, 334 recs.
194	Churchill, J.L. 2022. Atlantic Canada Conservation Data Centre Fieldwork 2022. Atlantic Canada Conservation Data Centre.
190	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.
187	Neily, T.H. 2017. Nova Scotia lichen records. Mersey Tobeatic Research Institute.
181	Klymko, J. 2018. Maritimes Butterfly Atlas database. Atlantic Canada Conservation Data Centre.
180	Blaney, C.S. & Mazerolle, D.M. 2011. Field data from NCC properties at Musquash Harbour NB & Goose Lake NS. Atlantic Canada Conservation Data Centre, 1739 recs.
178	Bryson, I. 2013. Nova Scotia rare plant records. CBCL Ltd., 180 records.
166	Hicks, Andrew. 2009. Coastal Waterfowl Surveys Database, 2000-08. Canadian Wildlife Service, Sackville, 46488 recs (11149 non-zero).
160	Chapman, C.J. 2018. Atlantic Canada Conservation Data Centre botanical fieldwork 2018. Atlantic Canada Conservation Data Centre, 11171 recs.
156	Gallop, John. 2023. Species at Risk and Species of Conservation Interest records. McCallum Environmental.
155	Wilhelm, S.I. et al. 2011. Colonial Waterbird Database. Canadian Wildlife Service, Sackville, 2698 sites, 9718 recs (8192 obs).
154	Hagerman, Christianne. 2022. Wisqog and Eastern White Cedar field work. E.C. Smith Herbarium, Acadia University.
148	Mazerolle, D.M. 2018. Atlantic Canada Conservation Data Centre botanical fieldwork 2018. Atlantic Canada Conservation Data Centre, 13515 recs.
146	Chapman-Lam, C.J. 2021. Atlantic Canada Conservation Data Centre 2020 botanical fieldwork. Atlantic Canada Conservation Data Centre, 17309 recs.
140	Burke, Lindsey. 2022. Species data recorded during the 2021 season at Prince Edward Island National Park. Parks Canada.
139	Pepper, C. 2013. 2013 rare bird and plant observations in Nova Scotia. , 181 records.
136	Churchill, J.L. 2018. Atlantic Canada Conservation Data Centre Fieldwork 2018. Atlantic Canada Conservation Data Centre, 907 recs.
135	Belliveau, A.G. 2018. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre.
129	Manthorne, A. 2014. MaritimesSwiftwatch Project database 2013-2014. Bird Studies Canada, Sackville NB, 326 recs.
127	MacDonald, Haley. 2022. Updates to Fraxinus nigra observations on NCC Docherty's Brook property. Nature Conservancy of Canada.
126	Toms, B. 2018. Bat Species data from www.batconservation.ca for Nova Scotia. Mersey Tobeatic Research Institute, 547 Records.
123	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.
122	Richardson, Leif. 2018. Maritimes Bombus records from various sources. Richardson, Leif.
118	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.
114	Blaney, C.S. 2000. Fieldwork 2000. Atlantic Canada Conservation Data Centre. Sackville NB, 1265 recs.

# recs	CITATION
113	Blaney, C.S. 2020. Sean Blaney 2020 field data. Atlantic Canada Conservation Data Centre, 4407 records.
113	MacDonald, E.C. 2018. Piping Plover nest records from 2010-2017. Canadian Wildlife Service.
112	Bryson, I.C. 2020. Nova Scotia flora and lichen observations 2020. Nova Scotia Environment, 139 recs.
107	McAlpine, D.F. 1998. NBM Science Collections databases to 1998. New Brunswick Museum, Saint John NB, 241 recs.
97	Cameron, R.P. 2009. Cyanolichen database. Nova Scotia Environment & Labour, 1724 recs.
97	MacDonald, E.C. 2018. CWS Piping Plover Census, 2010-2017. Canadian Wildlife Service, 672 recs.
96	LaPaix, R.W.; Crowell, M.J.; MacDonald, M.; Neily, T.D.; Quinn, G. 2017. Stantec Nova Scotia rare plant records, 2012-2016. Stantec Consulting.
95	Munro, Marian K. Nova Scotia Provincial Museum of Natural History Herbarium Database. Nova Scotia Provincial Museum of Natural History, Halifax, Nova Scotia. 2013.
87	McNeil, J.A. 2018. Wood Turtle records, 2018. Mersey Tobeatic Research Institute, 68 recs.
86	Blaney, C.S.; Mazerolle, D.M.; Belliveau, A.B. 2013. Atlantic Canada Conservation Data Centre Fieldwork 2013. Atlantic Canada Conservation Data Centre, 9000+ recs.
85	Burns, L. 2013. Personal communication concerning bat occurrence on PEI. Winter 2013. Pers. comm.
85	Munro, Marian K. Tracked lichen specimens, Nova Scotia Provincial Museum of Natural History Herbarium. Atlantic Canada Conservation Data Centre. 2019.
80	Nature Conservancy of Canada. 2022. NCC Field data for Nova Scotia. Nature Conservancy of Canada.
79	Belliveau, A.G. 2016. Atlantic Canada Conservation Data Centre Fieldwork 2016. Atlantic Canada Conservation Data Centre, 10695 recs.
72	Blaney, C.S. 2016. Atlantic Canada Conservation Data Centre Fieldwork 2016. Atlantic Canada Conservation Data Centre, 6719 recs.
71	Cameron, R.P. 2011. Lichen observations, 2011. Nova Scotia Environment & Labour, 731 recs.
69	Blaney, C.S.; Mazerolle, D.M. 2008. Fieldwork 2008. Atlantic Canada Conservation Data Centre. Sackville NB, 13343 recs.
69	Blaney, C.S.; Mazerolle, D.M.; Oberndorfer, E. 2007. Fieldwork 2007. Atlantic Canada Conservation Data Centre. Sackville NB, 13770 recs.
69	Klymko, J.J.D. 2012. Insect fieldwork & submissions, 2011. Atlantic Canada Conservation Data Centre. Sackville NB, 760 recs.
68	Glen, W. 1991. 1991 Prince Edward Island Forest Biomass Inventory Data. PEI Dept of Energy and Forestry, 10059 recs.
68	iNaturalist. 2018. iNaturalist Data Export 2018. iNaturalist.org and iNaturalist.ca, Web site: 11700 recs.
67	Roland, A.E. & Smith, E.C. 1969. The Flora of Nova Scotia, 1st Ed. Nova Scotia Museum, Halifax, 743pp.
64	Tims, J. & Craig, N. 1995. Environmentally Significant Areas in New Brunswick (NBESA). NB Dept of Environment & Nature Trust of New Brunswick Inc, 6042 recs. https://doi.org/10.1037/arc0000014 .
64	Zinck, M. & Roland, A.E. 1998. Roland's Flora of Nova Scotia. Nova Scotia Museum, 3rd ed., rev. M. Zinck; 2 Vol., 1297 pp.
63	Mazerolle, D.M. 2017. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre.
63	PEI National Park. 2019. SAR and Bombus records from PEI NP from the 2019 field season. Moody, Allison (ed.) PEI National Park, 158 recs.
62	Belliveau, A.G. 2021. E.C. Smith Herbarium and Atlantic Canada Conservation Data Centre Fieldwork 2021. E.C. Smith Herbarium.
61	Blaney, C.S.; Spicer, C.D. 2001. Fieldwork 2001. Atlantic Canada Conservation Data Centre. Sackville NB, 981 recs.
61	Blaney, C.S.; Spicer, C.D.; Rothfels, C. 2004. Fieldwork 2004. Atlantic Canada Conservation Data Centre. Sackville NB, 1343 recs.
60	Nussey, Pat & NCC staff. 2019. AEI tracked species records, 2016-2019. Chapman, C.J. (ed.) Atlantic Canada Conservation Data Centre, 333.
60	Staicer, C. & Bliss, S.; Achenbach, L. 2017. Occurrences of tracked breeding birds in forested wetlands. , 303 records.
59	Patrick, Allison. 2021. Animal and plant records from NCC properties from 2019 and 2020. Nature Conservancy Canada.
58	Belland, R.J. Maritimes moss records from various herbarium databases. 2014.
57	Blaney, C.S. 2003. Fieldwork 2003. Atlantic Canada Conservation Data Centre. Sackville NB, 1042 recs.
56	Blaney, C.S.; Spicer, C.D.; Popma, T.M.; Hanel, C. 2002. Fieldwork 2002. Atlantic Canada Conservation Data Centre. Sackville NB, 2252 recs.
53	Blaney, C.S.; Mazerolle, D.M.; Klymko, J.; Spicer, C.D. 2006. Fieldwork 2006. Atlantic Canada Conservation Data Centre. Sackville NB, 8399 recs.
53	Canadian Wildlife Service, Dartmouth. 2010. Piping Plover censuses 2007-09, 304 recs.
52	Blaney, C.S. 2018. Atlantic Canada Conservation Data Centre Fieldwork 2018. Atlantic Canada Conservation Data Centre.
50	Amirault, D.L. & McKnight, J. 2003. Piping Plover Database 1991-2003. Canadian Wildlife Service, Sackville, unpublished data. 7 recs.
50	Hall, R.A. 2003. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 189 recs.
49	Hall, R.A. 2001. S. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 178 recs.
48	Pepper, C. 2021. Rare bird, plant and mammal observations in Nova Scotia, 2017-2021.
48	Porter, Caitlin et al. 2022. 2021 wildlife observations from the Caemmerer NCC site. Atlantic Canada Conservation Data Centre.
47	Churchill, J.L. 2020. Atlantic Canada Conservation Data Centre Fieldwork 2020. Atlantic Canada Conservation Data Centre, 1083 recs.
45	Spicer, C.D. & Harries, H. 2001. Mount Allison Herbarium Specimens. Mount Allison University, 128 recs.
45	Toms, Brad & Pepper, Chris; Neily, Tom. 2022. Nova Scotia lichen database [as of 2022-04]. Mersey Tobeatic Research Institute.
44	Ayles, P. 2006. Prince Edward Island National Park Digital Database. Parks Canada, 179 recs.
44	Layberry, R.A. & Hall, P.W., LaFontaine, J.D. 1998. The Butterflies of Canada. University of Toronto Press. 280 pp+plates.
43	e-Butterfly. 2016. Export of Maritimes records and photos. Maxim Larrivee, Sambo Zhang (ed.) e-butterfly.org.
43	Staicer, Cindy. 2023. 2022 SAR Bird field occurrences from the Landbirds at Risk Project, NS. Dalhousie University, 446 records.
42	Cameron, R.P. 2009. Erioderma pedicellatum database, 1979-2008. Dept Environment & Labour, 103 recs.
42	Erskine, D. 1960. The plants of Prince Edward Island, 1st Ed. Research Branch, Agriculture Canada, Ottawa., Publication 1088. 1238 recs.
41	eBird. 2021. eBird Basic Dataset. Version: EBD_relOct-2020. Ithaca, New York. Oct 2020, Prince Edward Island Bird SAR subset. Cornell Lab of Ornithology.
41	Klymko, John. 2022. Atlantic Canada Conservation Data Centre zoological fieldwork 2021. Atlantic Canada Conservation Data Centre.
40	Blaney, C.S. 2017. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre.
40	Cameron, E. 2007. Canadian Gypsum Co. survey 2005-07. Dillon Consulting Ltd, 40 recs.
40	iNaturalist. 2020. iNaturalist butterfly records selected for the Maritimes Butterfly Atlas. iNaturalist.
40	Sharkie, R., MacQuarrie, K., Fraser, M. 2003. A Floral Inventory of the Western Section of Prince Edward Island National Park and adjacent Crown lands. Parks Canada Agency, v + 106 pp.
39	Chapman, C.J. 2019. Atlantic Canada Conservation Data Centre 2019 botanical fieldwork. Atlantic Canada Conservation Data Centre, 11729 recs.

# recs	CITATION
39	Neily, T.H. & Pepper, C.; Toms, B. 2015. Nova Scotia lichen location database [as of 2015-02-15]. Mersey Tobeatic Research Institute, 1691 records.
39	Staicer, Cindy. 2022. 2021 Landbird Species at Risk observations. Dalhousie University.
38	Benjamin, L.K. (compiler). 2001. Significant Habitat & Species Database. Nova Scotia Dept of Natural Resources, 15 spp, 224 recs.
37	Brazner, J. 2016. Nova Scotia Forested Wetland Bird Surveys. Nova Scotia Department of Lands and Forestry.
37	Klymko, J. 2016. Atlantic Canada Conservation Data Centre Fieldwork 2016. Atlantic Canada Conservation Data Centre.
37	Neily, T.H. & Pepper, C.; Toms, B. 2020. Nova Scotia lichen database [as of 2020-03-18]. Mersey Tobeatic Research Institute.
35	Birds Canada. 2022. Maritimes Swiftwatch project data for 2022. Pers. comm., 155 records.
34	Churchill, J.L.; Walker, J. 2017. Species at Risk Surveys at Correctional Services Canada Properties in Nova Scotia and New Brunswick. Atlantic Canada Conservation Data Centre.
34	Staicer, C. 2021. Additional compiled Nova Scotia Species at Risk bird records, 2005-2020. Dalhousie University.
33	Arsenault, M. 2019. Cormorant colony nest counts. PE Department of Communities, Land, and Environment.
33	Stewart, J.I. 2010. Peregrine Falcon Surveys in New Brunswick, 2002-09. Canadian Wildlife Service, Sackville, 58 recs.
30	Curley, F.R. 2005. PEF&W Collection 2003-04. PEI Fish & Wildlife Div., 716 recs.
29	Hubley, Nicole. 2022. Monarch (<i>Danaus plexippus</i>) records submitted to MTRI from the 2021 field season. Mersey Tobeatic Research Institute.
29	Parks Canada. 2021. PEI National Park 2020 Species at Risk records. Parks Canada, 40 records.
29	Sollows, M.C.. 2008. NBM Science Collections databases: mammals. New Brunswick Museum, Saint John NB, download Jan. 2008, 4983 recs.
28	Belliveau, A.G. 2018. E.C. Smith Herbarium and Atlantic Canada Conservation Data Centre Fieldwork 2018. E.C. Smith Herbarium, 6226 recs.
28	Neily, T.H. 2019. Tom Neily NS Bryophyte records (2009-2013). T.H. Neily, Atlantic Canada Conservation Data Centre, 1029 specimen records.
28	Pepper, Chris. 2012. Observations of breeding Canada Warbler's along the Eastern Shore, NS. Pers. comm. to S. Blaney, Jan. 20, 28 recs.
26	Erskine, A.J. 1999. Maritime Nest Records Scheme (MNRS) 1937-1999. Canadian Wildlife Service, Sackville, 313 recs.
26	Neily, T.H. & Pepper, C. 2020. Nova Scotia SMP lichen surveys 2020. Mersey Tobeatic Research Institute.
26	Popma, T.M. 2003. Fieldwork 2003. Atlantic Canada Conservation Data Centre. Sackville NB, 113 recs.
25	Porter, Caitlin. 2021. Field data for 2020 in various locations across the Maritimes. Atlantic Canada Conservation Data Centre, 3977 records.
24	Archibald, D.R. 2003. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 213 recs.
24	Powell, B.C. 1967. Female sexual cycles of <i>Chrysemy spicta</i> & <i>Clemmys insculpta</i> in Nova Scotia. Can. Field-Nat., 81:134-139. 26 recs.
23	Blaney, C.S.; Spicer, C.D.; Mazerolle, D.M. 2005. Fieldwork 2005. Atlantic Canada Conservation Data Centre. Sackville NB, 2333 recs.
23	Cameron, R.P. 2018. <i>Degelia plumbea</i> records. Nova Scotia Environment.
23	Westwood, A., Staicer, C. 2016. Nova Scotia landbird Species at Risk observations. Dalhousie University.
22	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.
22	Klymko, J.J.D.; Robinson, S.L. 2012. 2012 field data. Atlantic Canada Conservation Data Centre, 447 recs.
22	NatureServe Canada. 2019. iNaturalist Maritimes Butterfly Records. iNaturalist.org and iNaturalist.ca.
22	Nelly, T.H. 2006. <i>Cyrtopodium arietinum</i> in Hants Co. Pers. comm. to C.S. Blaney. 22 recs, 22 recs.
22	Ogden, J. NS DNR Butterfly Collection Dataset. Nova Scotia Department of Natural Resources. 2014.
22	Phinney, Lori. 2020. Pre- and post White-nose Syndrome bat acoustic monitoring, NS. Mersey Tobeatic Research Institute, 1279 recs.
22	Porter, C.J.M. 2014. Field work data 2007-2014. Nova Scotia Nature Trust, 96 recs.
22	Staicer, Cindy. 2023. 2022 SAR Bird ARU occurrences. Dalhousie University, 379 records.
21	Belliveau, A. 2013. Rare species records from Nova Scotia. Mersey Tobeatic Research Institute, 296 records. 296 recs.
21	Churchill, J.L., Klymko, J.D.D. 2016. Atlantic Canada Conservation Data Centre Fieldwork 2016. Atlantic Canada Conservation Data Centre.
21	Grandtner, M.M. 1971. Ecological Study of the Interior Dunes of West Brackley Beach, Prince Edward Island National Park. Parks Canada, 1: 70. 41 recs.
21	Neily, T. H. 2018. Lichen and Bryophyte records, AEI 2017-2018. Tom Neily; Atlantic Canada Conservation Data Centre.
21	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.
20	Klymko, J.J.D. 2016. 2015 field data. Atlantic Canada Conservation Data Centre.
20	LaPaix, Rich. 2022. Rare species observations, 2018-2022. Nova Scotia Nature Trust.
20	Phinney, Lori; Toms, Brad; et. al. 2016. Bank Swallows (<i>Riparia riparia</i>) in Nova Scotia: inventory and assessment of colonies. Merser Tobeiatc Research Institute, 25 recs.
19	Godbout, V. 2002. SAR Inventory: Birds in Fort Beauséjour NHS. Parks Canada, Atlantic, SARINV02-01. 202 recs.
19	Haughian, Sean. 2021. Update to lichen data from 2017-2021. Nova Scotia Museum.
19	Munro, Marian K. Nova Scotia Provincial Museum of Natural History Herbarium Database. Nova Scotia Provincial Museum of Natural History, Halifax, Nova Scotia. 2014.
19	NS DNR. 2017. Black Ash records from NS DNR Permanent Sample Plots (PSPs), 1965-2016. NS Dept of Natural Resources.
18	Hirtle, Sarah. 2023. 2022 Bank Swallow occurrence data. Island Nature Trust.
18	Manthorne, A. 2019. Incidental aerial insectivore observations. Birds Canada.
17	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.
17	Belliveau, A.G. 2014. Plant Records from Southern and Central Nova Scotia. Atlantic Canada Conservation Data Centre, 919 recs.
17	Benjamin, L.K. 2011. NSDNR fieldwork & consultant reports 1997, 2009-10. Nova Scotia Dept Natural Resources, 85 recs.
17	Cameron, R.P. 2014. 2013-14 rare species field data. Nova Scotia Department of Environment, 35 recs.
17	Ferguson, D.C. 1954. The Lepidoptera of Nova Scotia. Part I, macrolepidoptera. Proceedings of the Nova Scotian Institute of Science, 23(3), 161-375.
17	Klymko, J. 2021. Atlantic Canada Conservation Data Centre zoological fieldwork 2020. Atlantic Canada Conservation Data Centre.
17	McMullin, R.T. 2022. Maritimes lichen records. Canadian Museum of Nature.
17	Neily, T.H. 2010. <i>Erioderma pedicellatum</i> records 2005-09. Mersey Tobiatic Research Institute, 67 recs.
16	Cameron, R.P. 2013. 2013 rare species field data. Nova Scotia Department of Environment, 71 recs.
16	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

# recs	CITATION
	Tobeatic Research Institute, 774 records.
16	Richardson, D., Anderson, F., Cameron, R., McMullin, T., Clayden, S. 2014. Field Work Report on Black Foam Lichen (<i>Anzia colpodes</i>). COSEWIC.
15	Chiasson, R. 2018. Breeding bird observations from NBWTF project. pers. comm. to S. Blaney.
15	Gilhen, J. 1984. Amphibians & Reptiles of Nova Scotia, 1st Ed. Nova Scotia Museum, 164pp.
15	Klymko, John. 2023. Atlantic Canada Conservation Data Centre zoological fieldwork 2022. Atlantic Canada Conservation Data Centre.
15	Pulsifer, M.D. 2002. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 369 recs.
14	Chaput, G. 2002. Atlantic Salmon: Maritime Provinces Overview for 2001. Dept of Fisheries & Oceans, Atlantic Region, Science Stock Status Report D3-14. 39 recs.
14	McNeil, Jeffie. 2023. 2022 Turtle Records. Mersey Tobeatic Research Institute.
13	Blaney, C.S. 2019. Sean Blaney 2019 field data. Atlantic Canada Conservation Data Centre, 4407 records.
13	Blaney, C.S.; Mazerolle, D.M. 2011. Fieldwork 2011. Atlantic Canada Conservation Data Centre. Sackville NB.
13	Canadian Wildlife Service, Atlantic Region. 2010. Piping Plover censuses 2006-09. , 35 recs.
13	Neily, T.H. 2012. 2012 <i>Erioderma pedicellatum</i> records in Nova Scotia.
13	Nova Scotia Nature Trust. 2014. Ladyslipper records from Saint Croix Nova Scotia, JLC Ed. Nova Scotia Nature Trust.
12	Basquill, S.P. 2012. 2012 rare vascular plant field data. Nova Scotia Department of Natural Resources, 37 recs.
12	Benedict, B. Connell Herbarium Specimens (Data) . University New Brunswick, Fredericton. 2003.
12	e-Butterfly. 2019. Export of Maritimes records and photos. McFarland, K. (ed.) e-butterfly.org.
12	Mersey Tobetic Research Institute. 2021. 2020 Monarch records from the MTRI monitoring program. Mersey Tobetic Research Institute, 72 records.
12	Spicer, C.D. 2002. Fieldwork 2002. Atlantic Canada Conservation Data Centre. Sackville NB, 211 recs.
11	Adams, J. & Herman, T.B. 1998. Thesis, Unpublished map of <i>C. insculpta</i> sightings. Acadia University, Wolfville NS, 88 recs.
11	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.
11	Downes, C. 1998-2000. Breeding Bird Survey Data. Canadian Wildlife Service, Ottawa, 111 recs.
11	Klymko, J. Dataset of butterfly records at the New Brunswick Museum not yet accessioned by the museum. Atlantic Canada Conservation Data Centre. 2016.
11	Ogden, K. Nova Scotia Museum butterfly specimen database. Nova Scotia Museum. 2017.
11	Zahavich, J.L. 2020. Canada Warbler, Olive-sided Flycatcher and Eastern Wood-Pewee observations, Prince Edward Island, 2017-2019. Island Nature Trust.
10	Bateman, M.C. 2001. Coastal Waterfowl Surveys Database, 1965-2001. Canadian Wildlife Service, Sackville, 667 recs.
10	Blaney, C.S.; Mazerolle, D.M. 2009. Fieldwork 2009. Atlantic Canada Conservation Data Centre. Sackville NB, 13395 recs.
10	Goltz, J.P. & Bishop, G. 2005. Confidential supplement to Status Report on Prototype Quillwort (<i>Isoetes prototypus</i>). Committee on the Status of Endangered Wildlife in Canada, 111 recs.
10	Klymko, J.J.D. 2018. 2017 field data. Atlantic Canada Conservation Data Centre.
10	Plissner, J.H. & Haig, S.M. 1997. 1996 International piping plover census. US Geological Survey, Corvallis OR, 231 pp.
9	Benedict, B. Connell Herbarium Specimens. University New Brunswick, Fredericton. 2003.
9	Benjamin, L.K. 2006. <i>Cypripedium arietinum</i> . Pers. comm. to D. Mazerolle. 9 recs, 9 recs.
9	Benjamin, L.K. 2012. NSDNR fieldwork & consultant reports 2008-2012. Nova Scotia Dept Natural Resources, 196 recs.
9	Blacquiere, Hailey. 2022. Black Ash locations in August 2022. PEI Forests Fish and Wildlife Division. Pers. comm., 9 records.
9	Cameron, R.P. 2005. <i>Erioderma pedicellatum</i> unpublished data. NS Dept of Environment, 9 recs.
9	Cameron, R.P. 2006. <i>Erioderma pedicellatum</i> 2006 field data. NS Dept of Environment, 9 recs.
9	Cameron, R.P. 2017. 2017 rare species field data. Nova Scotia Environment, 64 recs.
9	Hughes, Cory. 2020. Atlantic Forestry Centre <i>Coccinella transversoguttata</i> collections. Canadian Forest Service, Atlantic Forestry Centre.
9	Nova Scotia Nature Trust. 2013. Nova Scotia Nature Trust 2013 Species records. Nova Scotia Nature Trust, 95 recs.
9	Webster, R.P. Atlantic Forestry Centre Insect Collection, Maritimes butterfly records. Natural Resources Canada. 2014.
9	Zahavich, J. 2018. Canada Warbler and Olive-sided Flycatcher records 2018. Island Nature Trust, 14 recs.
8	Blaney, C.S. Miscellaneous specimens received by ACCDC (botany). Various persons. 2001-08.
8	Bryson, I. 2020. Nova Scotia and Newfoundland rare species observations, 2018-2020. Nova Scotia Environment.
8	Cameron-MacMillan, Maureen. 2020. Northern Goshawk Nests in Eastern Nova Scotia, as of November, 2020. Nova Scotia Department of Lands and Forestry.
8	Doucet, D.A. 2007. Lepidopteran Records, 1988-2006. Doucet, 700 recs.
8	Hill, N.M. 1994. Status report on the Long's bulrush <i>Scirpus longii</i> in Canada. Committee on the Status of Endangered Wildlife in Canada, 7 recs.
8	Holder, M.L.; Kingsley, A.L. 2000. Kinglsey and Holder observations from 2000 field work.
8	King, Katie; Jean, Samuel. 2021. Black ash observations near Booklyn, NS. E.C. Smith Herbarium.
8	Klymko, J.J.D.; Robinson, S.L. 2014. 2013 field data. Atlantic Canada Conservation Data Centre.
8	McRae, Daniel. 2023. PEI EcoGiftsSite Records for 2022. Pers. comm., 990 records.
8	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.
8	Sollows, M.C. 2009. NBM Science Collections databases: molluscs. New Brunswick Museum, Saint John NB, download Jan. 2009, 6951 recs (2957 in Atlantic Canada).
7	Basquill, S.P. 2003. Fieldwork 2003. Atlantic Canada Conservation Data Centre, Sackville NB, 69 recs.
7	Belland, R.J. 2012. PEI moss records from Devonian Botanical Garden. DBG Cryptogam Database, Web site: https://secure.devonian.ualberta.ca/bryo_search.php 748 recs.
7	Benjamin, L.K. 2009. Boreal Felt Lichen, Mountain Avens, Orchid and other recent records. Nova Scotia Dept Natural Resources, 105 recs.
7	Cameron, B. 2006. <i>Hepatica americana</i> Survey at Scotia Mine Site in Gays River, and Discovery of Three Yellow-listed Species. Conestoga-Rovers and Associates, (a consulting firm), october 25. 7 recs.
7	Clayden, S.R. 1998. NBM Science Collections databases: vascular plants. New Brunswick Museum, Saint John NB, 19759 recs.
7	Feltham, Carter. 2022. Monarch (<i>Danaus plexippus</i>) and Milkweed MTRI records from the 2022 Field Season. Mersey Tobeatic Research Institute.
7	Harding, R.W. 2008. Harding Personal Insect Collection 1999-2007. R.W. Harding, 309 recs.
7	McLelland, Don. 2022. Orchid records for Prince Edward Island. Pers. comm.

# recs	CITATION
7	Neily, Tom. 2020. Lichen surveys for PEI Forested Landscapes Priority Place. Chapman, C.J. (ed.) Atlantic Canada Conservation Data Centre, 158 records.
7	Spicer, C.D. 2004. Specimens from CWS Herbarium, Mount Allison Herbarium Database. Mount Allison University, 5939 recs.
6	Curley, F.R. 2007. PEF&W Collection. PEI Fish & Wildlife Div., 199 recs.
6	Hall, R. 2008. Rare plant records in old fieldbook notes from Truro area. Pers. comm. to C.S. Blaney. 6 recs, 6 recs.
6	Klymko, J. 2019. Atlantic Canada Conservation Data Centre zoological fieldwork 2018. Atlantic Canada Conservation Data Centre.
6	Matthew Smith. 2010. Field trip report from Avon Caving Club outlining the discovery of <i>Cypripedium arietinum</i> and <i>Hepatica nobilis</i> populations. Public Works and Government Services Canada.
6	Mazerolle, D.M. 2020. Atlantic Canada Conservation Data Centre botanical fieldwork 2019. Atlantic Canada Conservation Data Centre.
6	McMullin, R.T. 2015. Prince Edward Island's lichen biodiversity and proposed conservation status in a report prepared for the province of PEI. Biodiversity Institute of Ontario Herbarium, University of Guelph, 776 records.
6	Neily, T.H. & Pepper, C.; Toms, B. 2020. Nova Scotia lichen database [as of 2020-05-25]. Mersey Tobeatic Research Institute, 668 recs.
6	Nova Scotia Nature Trust. 2022. Ram's Head Lady Slipper observations from 2015 and 2019. , 6 records.
6	Richardson, D., Anderson, F., Cameron, R, Pepper, C., Clayden, S. 2015. Field Work Report on the Wrinkled Shingle lichen (<i>Pannaria lurida</i>). COSEWIC.
6	Sabine, D.L. 2013. Dwaine Sabine butterfly records, 2009 and earlier.
6	Speers, L. 2008. Butterflies of Canada database: New Brunswick 1897-1999. Agriculture & Agri-Food Canada, Biological Resources Program, Ottawa, 2048 recs.
6	Stevens, C. 1999. Cam Stevens field data from PEI vegetation plots. Sent along with specimens to C.S. Blaney. UNB masters research project, 732 recs.
6	White, S. 2019. Notable species sightings, 2018. East Coast Aquatics.
6	Wilhelm, S.I. et al. 2019. Colonial Waterbird Database. Canadian Wildlife Service.
5	Basquill, S.P. 2010. Plant data from Prince Edward Island National Park Forest Community Plots. Atlantic Canada Conservation Data Centre, 150 records.
5	Carter, Jeff; Churchill, J.; Churchill, I.; Churchill, L. 2020. Bank Swallow colony Scots Bay, NS. Atlantic Canada Conservation Data Centre.
5	Daury, R.W. & Bateman, M.C. 1996. The Barrow's Goldeneye (<i>Bucephala islandica</i>) in the Atlantic Provinces and Maine. Canadian Wildlife Service, Sackville, 47pp.
5	Gallop, John. 2021. Sheet Harbour rare lichen observations. McCallum Environmental.
5	Giberson, D. 2008. UPEI Insect Collection. University of Prince Edward Island, 157 recs.
5	Majka, C.G. 2008. Lepidoptera at St Patricks, 1993-2007. Pers. comm. to R. Curley, 8 Jan. 29 recs, 29 recs.
5	Neily, T.H. Atlantic Canada Conservation Data Centre botanical fieldwork 2018. T.H. Neily, Atlantic Canada Conservation Data Centre.
5	Neily, T.H. Tom Neily NS Sphagnum records (2009-2014). T.H. Neily, Atlantic Canada Conservation Data Centre. 2019.
5	Olsen, R. Herbarium Specimens. Nova Scotia Agricultural College, Truro. 2003.
5	Pohl, G.P. Specimen data from Northern Forest Research Centre. Northern Forest Research Centre. 2022.
5	Prince Edward Island National Park. 2014. Prince Edward Island National Park Herbarium. Parks Canada Agency, PEINP, 39 recs.
5	Smith, M.E.M. 2008. AgCan Collection. Agriculture Canada, Charlottetown PE, 44 recs.
5	Toms, Brad. 2022. Non-Lichen Observations from Lichen SMP and NCC Property Searches. Mersey Tobeatic Research Institute.
5	Towell, C. 2014. 2014 Northern Goshawk and Common Nighthawk email reports, NS. NS Department of Natural Resources.
5	Walker, J. 2017. Bird inventories at French River, NS, and Memramcook, NB, for Nature Conservancy of Canada. Pers. comm. to AC CDC.
5	Webster, R.P. & Edsall, J. 2007. 2005 New Brunswick Rare Butterfly Survey. Environmental Trust Fund, unpublished report, 232 recs.
4	Atlantic Canada Bank Swallow Working Group. 2022. 2021 Bank Swallow colony records. Birds Canada.
4	Bagnell, B.A. 2001. New Brunswick Bryophyte Occurrences. B&B Botanical, Sussex, 478 recs.
4	Bredin, K.A. 2002. NS Freshwater Mussel Fieldwork. Atlantic Canada Conservation Data Center, 30 recs.
4	Cameron, R.P. 2012. Rob Cameron 2012 vascular plant data. NS Department of Environment, 30 recs.
4	Canadian National Collection of Insects Arachnids, and Nematodes <i>Bombus</i> specimen database export. Government of Canada. 2022.
4	Forsythe, B. 2006. <i>Cypripedium arietinum</i> at Meadow Pond, Hants Co. Pers. comm. to C.S. Blaney. 4 recs, 4 recs.
4	Golder Associates. 2018. Dorchester wind turbine bat detections. Owens, Luke, Firman, Mitch, Melcher, Heather (ed.) Golder Associates Ltd.
4	Mazerolle, D.M. 2016. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre.
4	McNeil, J.A. 2020. Snapping Turtle and Eastern Painted Turtle records, 2020. Mersey Tobeatic Research Institute.
4	Mills, Pamela. 2007. <i>Iva frutescens</i> records. Nova Scotia Dept of Natural Resources, Wildlife Div. Pers. comm. to S. Basquill, 4 recs.
4	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.
4	Pike, E., Tingley, S. & Christie, D.S. 2000. Nature NB Listserve. University of New Brunswick, listserv.unb.ca/archives/naturenb. 68 recs.
4	Benjamin, L.K. 2009. NSDNR Fieldwork & Consultants Reports. Nova Scotia Dept Natural Resources, 143 recs.
3	Brunelle, P.-M. (compiler). 2010. ADIP/MDDS Odonata Database: NB, NS Update 1900-09. Atlantic Dragonfly Inventory Program (ADIP), 935 recs.
3	Calhoun, J.C. Butterfly records databased at the McGuire Center for Lepidoptera and Biodiversity. Calhoun, J.C. 2020.
3	Cameron, R.P. 2012. Additional rare plant records, 2009. , 7 recs.
3	Chiasson, Roland. 2017. New Brunswick Breeding bird observations from NBWTF project. pers. comm. to J. Churchill.
3	Clayden, S.R. 2007. NBM Science Collections databases: vascular plants. New Brunswick Museum, Saint John NB, download Mar. 2007, 6914 recs.
3	Cody, W.J. 2003. Nova Scotia specimens of <i>Equisetum pratense</i> at the DAO herbarium in Ottawa. , Pers. comm. to C.S. Blaney. 4 recs.
3	Doubt, J. 2013. Email to Sean Blaney with Nova Scotia records of <i>Fissidens exilis</i> at Canadian Museum of Nature. pers. comm., 3 records.
3	e-Butterfly. 2018. Selected Maritimes butterfly records from 2016 and 2017. Maxim Larrivee, Sambo Zhang (ed.) e-butterfly.org.
3	Edsall, J. 2001. Lepidopteran records in New Brunswick, 1997-99. , Pers. comm. to K.A. Bredin. 91 recs.
3	Heron, J. 2022. <i>Bombus</i> records communicated to J. Klymko over email in autumn 2022. Pers. comm.
3	Kelly, G. 2005. <i>Fraxinus nigra</i> . Dept of Agriculture, Fisheries, Aquaculture & Forestry. Pers. comm. to C.S. Blaney, Mar. 2, 11 recs.
3	Klymko, J.J.D. 2011. Insect fieldwork & submissions, 2010. Atlantic Canada Conservation Data Centre. Sackville NB, 742 recs.
3	McLelland, Don. 2021. Orchid observations on PEI. Don McLelland. Pers. comm. to C.S. Blaney.

# recs	CITATION
3	McMullin, R.T.; van Miltenburg, N.; Atkinson, K.-L.; Ayles, P. 2022. A Provisional List of the Lichens and Allied Fungi of Prince Edward Island National Park. Canadian Museum of Nature, 37 pp.
3	Mersey Tobeatic Research Institute. 2022. Nova Scotia Bobolink observations. pers. comm. to J. Churchill.
3	Nature Conservancy Canada, Prince Edward Island. 2022. NCC PEI 2022 occurrence data. NCC PEI. Pers. comm., 214 records.
3	Oldham, M.J. 2000. Oldham database records from Maritime provinces. Oldham, M.J.; ONHIC, 487 recs.
3	Parker, M. 2016. Wood turtle (<i>Glyptemys insculpta</i>) Visual Surveys at Black, Wallace, Musquodobit and Sackville Rivers, Nova Scotia. East Coast Aquatics Inc., 3 records.
3	Sabine, D.L. <i>Bombus terricola</i> specimens in Dwayne Sabine's personal collection. pers. comm. 2022.
3	Speers, L. 2001. Butterflies of Canada database. Agriculture & Agri-Food Canada, Biological Resources Program, Ottawa, 190 recs.
3	Standley, L.A. 2002. <i>Carex haydenii</i> in Nova Scotia. , Pers. comm. to C.S. Blaney. 4 recs.
3	Thompson, R. 2018. Williamsdale Quarry Expansion Project, NS, Environmental Assessment rare plants. Dexter Construction Company Limited.
3	Tingley, S. (compiler). 2001. Butterflies of New Brunswick. , Web site: www.geocities.com/Yosemite/8425/buttrfly . 142 recs.
3	White, S. 2018. Notable species sightings, 2016-2017. East Coast Aquatics.
2	Amirault, D.L. 1997-2000. Unpublished files. Canadian Wildlife Service, Sackville, 470 recs.
2	Amirault, D.L. 2003. 2003 Peregrine Falcon Survey. Canadian Wildlife Service, Sackville, unpublished data. 7 recs.
2	Basquill, S.P., Porter, C. 2019. Bryophyte and lichen specimens submitted to the E.C. Smith Herbarium. NS Department of Lands and Forestry.
2	Basset, I.J. & Crompton, C.W. 1978. The Genus <i>Suaeda</i> (Chenopodiaceae) in Canada. Canadian Journal of Botany, 56: 581-591.
2	Boyne, A.W. & Grecian, V.D. 1999. Tern Surveys. Canadian Wildlife Service, Sackville, unpublished data. 23 recs.
2	Bredin, K.A. 2001. WTF Project: Freshwater Mussel Fieldwork in Freshwater Species data. Atlantic Canada Conservation Data Centre, 101 recs.
2	Cameron, B. 2005. <i>C. palmicola</i> , <i>E. pedicellatum</i> records from Sixth Lake. Pers. comm. to C.S. Blaney. 3 recs, 3 recs.
2	Cameron, R.P. 2009. Nova Scotia nonvascular plant observations, 1995-2007. Nova Scotia Dept Natural Resources, 27 recs.
2	Chapman, Cody. Unreported Species at Risk Records across Nova Scotia. Chapman, Cody, 5 records.
2	COSEWIC (Committee on the Status of Wildlife in Canada). 2013. COSEWIC Assessment and Status Report on the Eastern Waterfowl <i>Peltigera hydrothyria</i> in Canada. COSEWIC, 46 pp.
2	Curley, F.R. 2003. Glen Kelly records for <i>Betula pumila</i> & <i>Asclepias syriaca</i> on PEI. , Pers. comm. to C.S. Blaney. 9 recs.
2	de Graaf, M.; Miller, D. 2020. Records of <i>Cypripedium reginae</i> and <i>Equisetum variegatum</i> from CFI property at Scoudouc Road and <i>Symplocarpus foetidus</i> from CFI properties at Upper Cape, Westmorland County, NB. pers. comm. (ed.) Community Forests International, 4 records.
2	Dibblee, R.L. 1999. PEI Cormorant Survey. Prince Edward Island Fisheries, Aquaculture & Environment, 1p. 21 recs.
2	Giroux, P. 2013. Personal communication concerning species at risk in and around PEI NP, PE. Winter 2013. Pers. comm.
2	Harris, P. 2004. Plant records from 1997-2003. Island Nature Trust, Charlottetown PE, 71 recs.
2	Hill, Nick. 2021. <i>Fraxinus nigra</i> observations at Marshy Hope. Fern Hill Institute of Plant Conservation.
2	Honeyman, K. 2019. Unique Areas Database, 2018. J.D. Irving Ltd.
2	Klymko, J.J.D. 2010. Miscellaneous observations reported to ACCDC (zoology). Pers. comm. from various persons, 3 recs.
2	Layberry, R.A. 2012. Lepidopteran records for the Maritimes, 1974-2008. Layberry Collection, 1060 recs.
2	Macaulay, M. Notes on newly discovered <i>Hepatica nobilis</i> var. <i>obtusa</i> population in Cumberland Co. NS. Pers. comm. to S. Blaney, 1 rec.
2	Mazerolle, D.M. 2005. Bouctouche Irving Eco-Centre rare coastal plant fieldwork results 2004-05. Irving Eco-centre, la Dune du Bouctouche, 174 recs.
2	Mazerolle, David. 2021. Botanical fieldwork 2019-2020. Parks Canada.
2	McAlpine, D.F. New Brunswick Museum bee specimens. New Brunswick Museum. 2013.
2	McNeil, J.A. 2019. Snapping Turtle records, 2019. Mersey Tobeatic Research Institute.
2	Munro, M. 2003. <i>Caulophyllum thalictroides</i> & <i>Carex hirtifolia</i> at Herbert River, Brooklyn, NS. , Pers. comm. to C.S. Blaney. 2 recs.
2	Munro, M. 2003. <i>Dirca palustris</i> & <i>Hepatica nobilis</i> var. <i>obtusa</i> at Cogmagun River, NS. , Pers. comm. to C.S. Blaney. 2 recs.
2	Neily, T.H.; Smith, C.; Whitman, E. 2011. NCC Logging Lake (Halifax Co. NS) properties baseline survey data. Nature Conservancy of Canada, 2 recs.
2	Newell, R. E., MacKinnon, C. M. & Kennedy, A. C. 2006. Botanical Survey of Boot Island National Wildlife Area, Nova Scotia, 2004. Canadian Wildlife Service, Atlantic Region, Technical Report Series Number 450. 3 recs.
2	Newell, R.E. 2006. Rare plant observations in Digby Neck. Pers. comm. to S. Blaney, 6 recs.
2	Parks Canada. 2010. Specimens in or near National Parks in Atlantic Canada. Canadian National Museum, 3925 recs.
2	Robinson, S.L. 2010. Fieldwork 2009 (dune ecology). Atlantic Canada Conservation Data Centre. Sackville NB, 408 recs.
2	Robinson, S.L. 2011. 2011 ND dune survey field data. Atlantic Canada Conservation Data Centre, 2715 recs.
2	Shafer, A.B.A., D.T. Stewart. 2006. A Disjunct Population of <i>Sorex dispar</i> (Long-Tailed Shrew) in Nova Scotia. Northeastern Naturalist, 13(4): 603-608.
2	Shortt, R. UNB specimen data for various tracked species formerly considered secure. Connell Memorial Herbarium, UNB, Fredericton NB. 2019.
2	Sollows, M.C. 2008. NBM Science Collections databases: herpetiles. New Brunswick Museum, Saint John NB, download Jan. 2008, 8636 recs.
2	Taylor, B.R., and Tam, J.C. 2012. Local distribution of the rare plant <i>Triosteum aurantiacum</i> in northeastern Nova Scotia, Canada. Rhodora, 114(960): 366-382.
2	Zahavich, J. 2017. Canada Warbler and Olive-sided Flycatcher records 2017. Island Nature Trust, 14 recs.
1	Amirault, D.L. 2000. Piping Plover Surveys, 1983-2000. Canadian Wildlife Service, Sackville, unpublished data. 70 recs.
1	Amirault, D.L. 2005. 2005 Peregrine Falcon Survey. Canadian Wildlife Service, Sackville, unpublished data. 27 recs.
1	Amiro, Peter G. 1998. Atlantic Salmon: Inner Bay of Fundy SFA 22 & part of SFA 23. Dept of Fisheries & Oceans, Atlantic Region, Science Stock Status Report D3-12. 4 recs.
1	Barney, T. 2020. Text message to Sean Blaney from Ted Barney with photograph of large Snapping Turtle at White Birch Impoundment, Westmorland Co., NB. pers. comm., 1 record.
1	Basquill, S. P. 2008. Nova Scotia Dept of Natural Resources.
1	Basquill, S.P. 2009. 2009 field observations. Nova Scotia Dept of Natural Resources.
1	Basquill, S.P. 2012. 2012 Bryophyte specimen data. Nova Scotia Department of Natural Resources, 37 recs.
1	Bateman, M.C. & Prescott, W.H. 1984. The Mammals of Prince Edward Island National Park. Canadian Wildlife Service, vol 2:5. 3 recs.
1	Belland, R.J. 2012. PEI moss records from New York Botanical Garden. NYBG Virtual Herbarium, Web site: http://sciweb.nybg.org/science2/vii2.asp 135 recs.

# recs	CITATION
1	Belliveau, A.G. E.C. Smith Herbarium Specimen Database 2019. E.C. Smith Herbarium, Acadia University. 2019.
1	Benjamin, L.K. 2003. <i>Cypripedium arietinum</i> in Cogmagun River NS. Pers. comm. to S. Blaney, 1 rec.
1	Blaney, C.S. 2014. 2014 Bank Swallow colony observation, Westcock, NB. Atlantic Canada Conservation Data Centre.
1	Bonnyman, Vanessa. 2021. Eastern Wood-Pewee Observation on Bonshaw Trail, PEI.
1	Bruce, J. 2014. 2014 Wood Turtle email report, Nine Mile River, NS. NS Department of Natural Resources.
1	Cairns, D. 1998. Atlantic Salmon: Prince Edward Island SFA 17. Dept of Fisheries & Oceans, Atlantic Region, Science. Stock Status Report D3-07. 1 rec.
1	Christie, D.S. 2000. Christmas Bird Count Data, 1997-2000. Nature NB, 54 recs.
1	Clayden, S.R. 2006. <i>Pseudevernia cladonia</i> records. NB Museum. Pers. comm. to S. Blaney, Dec, 4 recs.
1	Clayden, S.R. 2020. Email to Sean Blaney regarding <i>Pilophorus cereus</i> and <i>P. fibula</i> at Fidele Lake area, Charlotte County, NB. pers. comm., 2 records.
1	Crowell, A. 2004. <i>Cypripedium arietinum</i> in Weir Brook, Hants Co. Pers. comm. to S. Blaney, 1 rec.
1	Curley, F.R. 2021. <i>Nymphalis l-album</i> record from near Belfast PEI. Pers. comm. to J. Klymko.
1	Day, R. & Catling, P.M. 1991. The Rare Vascular Plants of Prince Edward Island, 1st Ed. Canadian Museum of Nature, Ottawa. Syllogeus. 67.
1	Docherty, Joanne. 2022. Phone call to John Klymko about <i>Danaus plexippus</i> observation in Nova Scotia. Personal communication.
1	Doucet, D.A. 2007. PEI National Park Odonata Survey. Parks Canada, PEI National Park, 1 rec.
1	Doucet, D.A. ACCDC Reference Collection. Atlantic Canada Conservation Data Centre, Sackville NB. 2008.
1	Eastman, A. 2019. Snapping Turtle observation at Brookfield, Colchester Co. NS. Halifax Field Naturalists Nova Scotia Nature Archive Facebook Page, 1 record.
1	Elizabeth Spence. 2020. Email from Elizabeth Spence to John Klymko about the occurrence of a Wood Turtle in Westmorland County, New Brunswick. Pers. comm.
1	Frittaion, C. 2012. NSNT 2012 Field Observations. Nova Scotia Nature Trust, Pers comm. to S. Blaney Feb. 7, 34 recs.
1	Gagnon, J. 2004. Specimen data from 2002 visit to Prince Edward Island. , 104 recs.
1	Gerriets, S.H. 1997-2001. Element Occurrence Database. Atlantic Canada Conservation Data Centre, Sackville NB, 1 rec.
1	Golder Associates Ltd. 2021. Black Ash location from Goff's Quarry Expansion Environment Assessment, 2017. Golder Associates Ltd., 1 record.
1	Harling, L. & Silva, M. 2004. Abundance & species richness of shrews within forested habitats on PEI. Am. Midl. Nat., 151:399-407. 2 recs.
1	Harris, Megan. 2018. Miscellaneous <i>Sorex palustris</i> record. Pers. comm. to S. Blaney.
1	Haughian, S.R. 2018. Description of <i>Fuscopannaria leucosticta</i> field work in 2017. New Brunswick Museum, 314 recs.
1	Hill, N.M. 2021. Observation of <i>Carex haydenii</i> and black ash near Marshy Hope and Ponhook Lake. pers. comm.
1	Hinds, H.R. 1986. Notes on New Brunswick plant collections. Connell Memorial Herbarium, unpubl, 739 recs.
1	Hinds, H.R. 1989. Greenwich, Blooming Point plant collections in Plant locations. Pers. Comm. to Robin Day (Ag. Can). 2pp, 8 recs, 8 recs.
1	iNaturalist.ca. 2022. iNaturalist records 2022. iNaturalist.ca (ed.) iNaturalist.org; iNaturalist.ca, Web site: 3 recs.
1	Jacques Whitford Ltd. 2003. Cananda Lily location. Pers. Comm. to S. Blaney. 2pp, 1 rec, 1 rec.
1	Jardine, Don. 2022. Email to AC CDC reporting an Evening Grosbeak Sighting in Winsloe South, PEI. pers. comm.
1	Kelly, Glen 2004. Botanical records from 2004 PEI Forestry fieldwork. Dept of Environment, Energy & Forestry, 71 recs.
1	Klymko, J. Henry Hensel's Butterfly Collection Database. Atlantic Canada Conservation Data Centre. 2016.
1	Klymko, J. Partial database of the Agriculture Canada Charlottetown Research Station Insect Collection butterfly specimens. Atlantic Canada Conservation Data Centre. 2016.
1	Klymko, J.J.D. 2012. Insect field work & submissions. Atlantic Canada Conservation Data Centre, 852 recs.
1	Lautenschlager, R.A. 2010. Miscellaneous observations reported to ACCDC (zoology). Pers. comm. from various persons, 2 recs.
1	Lautenschlager, R.A. 2020. Email to John Klymko about fisher sighting in Baie Verte. Klymko, J. (ed.) Lautenschlager, R.A., pers. comm.
1	Macauley, M. 2008. Email to Sean Blaney regarding rich hardwood floodplain site at Howards Pool, Wallace River, NS.
1	MacAuley, M. 2020. Email to Sean Blaney regarding <i>Agalinis paupercula</i> var. <i>parviflora</i> at Malagash Station, NS. pers. comm., 2 records.
1	MacPhail, V. Bee and syrphid specimens from MSc research. Pers. comm., J. Klymko. 2006.
1	MacQuarrie, K. and R. Sharkie. 2004. Plant lists for selected areas at Brackley and Dalvay, Prince Edward Island National Park. Island Nature Trust, 168 recs.
1	Majka, C.G. & McCorquodale, D.B. 2006. The Coccinellidae (Coleoptera) of the Maritime Provinces of Canada: new records, biogeographic notes, and conservation concerns. Zootaxa. Zootaxa, 1154: 49–68. 7 recs.
1	Mazerolle, D. 2003. Assessment of Seaside Pinweed (<i>Lechea maritima</i> var. <i>subcylindrica</i>) in Southeastern New Brunswick. Irving Eco-centre, la Dune du Bouctouche, 18 recs.
1	Morrison, Annie. 2010. NCC Properties Fieldwork: June-August 2010. Nature Conservancy Canada, 508 recs.
1	Neily, P.D. Plant Specimens. Nova Scotia Dept Natural Resources, Truro. 2006.
1	Neily, T.H. & Pepper, C.; Toms, B. 2019. Boreal Felt Lichen Observation, April 2019. Mersey Tobeatic Research Institute.
1	Neily, T.H. 2004. <i>Hepatica nobilis</i> var. <i>obtusata</i> record for Falmouth NS. Pers. comm. to C.S. Blaney, 1 rec.
1	Neily, T.H. 2013. Email communication to Sean Blaney regarding <i>Agalinis paupercula</i> observations made in 2013 in Nova Scotia. , 1 rec.
1	Newell, R.E. 2004. <i>Hepatica nobilis</i> var. <i>obtusata</i> record. Pers. comm. to S. Blaney, 1 rec.
1	Oehlke, W. 1999. Record of <i>Polygonia satyrus</i> from Prince Edward Island. http://www.silkmoths.bizland.com/ppsatyr.htm .
1	Parker, M. 2018. East Coast Aquatics ACCDC 2018 Report. East Coast Aquatics, 12 records.
1	Payzant, P. 2018. Satyr Comma record from Bible Hill, NS. https://novascotiabutterflies.ca .
1	Popma, K. 2001. Phalarope & other bird observations in Westmorland Co. , Pers. comm. to K.A. Bredin. 5 recs.
1	Quigley, E.J. 2021. Email to Sean Blaney regarding Eastern White Cedar (<i>Thuja occidentalis</i>) stand near Shinimicas Bridge. NSDLF, 1 record.
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	Sabine, M. 2016. Black Ash records from NB DNR permanent forest sampling Plots. New Brunswick Department of Natural Resources, 39 recs.
1	Sabine, M. 2016. NB DNR staff incidental Black Ash observations. New Brunswick Department of Natural Resources.
1	Scott, F.W. 1988. Status Report on the Southern Flying Squirrel (<i>Glaucomys volans</i>) in Canada. Committee on the Status of Endangered Wildlife in Canada, 2 recs.
1	Skevington, Jeffrey H. 2020. Syrphid records used for the Field Guide to the Flower Flies of Northeastern North America. Canadian National Collection of Insects.
1	te Raa, J. 2016. Island Naturalist. Nature PEI, 219.

# recs	CITATION
1	Thomas, A.W. 1996. A preliminary atlas of the butterflies of New Brunswick. New Brunswick Museum.
1	Thomas, H.H., Jones, G.S. & Diblee, R.L. 1980. Sorex palustris on Prince Edward Island. Can. Field Nat., vol 94:329-331. 2 recs.
1	Williams, M. Cape Breton University Digital Herbarium. Cape Breton University Digital Herbarium. 2013.
1	Wilson, G. 2013. 2013 Snapping Turtle email report, Wentworth, NS. Pers. comm.

APPENDIX E

NOVA SCOTIA MUSEUM REPORT

HERITAGE AND BIOLOGICAL RESOURCES

March 18, 2024

Kyra Scott, Junior Biologist
Envirosphere Consultants Limited| Envirosphere Labs
PO Box 2906, Unit 5 - 120 Morison Dr.
Windsor, NS, B0N 2T0

Dear Kyra Scott:

RE: Environmental Screening 2024_02_16_New Annan Quarry_KScott_ Envirosphere

Further to your request of February 16, 2024, staff at Communities, Culture, Tourism & Heritage have reviewed their files for reference to the presence of natural and heritage resources in the study area. Please be aware that the information is not comprehensive and may include varying degrees of accuracy with respect to the precise location and condition of natural and heritage resources.

It should be noted that the amount and degree of disturbance from previous developments could have a significant role in establishing the presence, absence, or condition of natural and heritage resources in this area.

Archaeology

CCTH have reviewed the provided mapping and proposed development area for archaeological potential. Much of the study area has been heavily disturbed and there is no significant archaeology site or watercourse nearby. The 3 small waterbodies are recent. They do not show up on historic maps. Historic maps do not show settlement in the area. No Archaeological Resource Impact Assessment (ARIA) is recommended.

Botany

The Curator of Botany examined records of rare species within 10 km of the provided point using three sources: the NSM Rare Plants Atlas, the NSM Specimen catalogue, and the public iNaturalist platform.

The following rare species are likely located within 10 km of the intended development.

Table 1: Records of vascular plants from the Rare Plants Atlas

Genus	species	Synonym	Provincial status	Subnational Status Rank	COSEWIC / SARA status
<i>Boechera</i>	<i>stricta</i>	<i>Arabis drummondii</i>	Yellow	S2S3	
		<i>Campanula</i>		S3	
<i>Palustricodon</i>	<i>aparinoides</i>	<i>aparinoides</i>	Yellow		
<i>Dryopteris</i>	<i>fragrans</i>		Yellow	S3	

*Tiarella**stolonifera**Tiarella cordifolia*

Yellow

S2S3

Geology

The area of the New Annan Quarry is composed of bedrock mapped as Byers Brook Formation, felsic, volcanic rocks with minor siltstone. Fossils are not known to be associated with these units, so no paleontology resource issues are anticipated.

Zoology

It is recommended that the Maritime Breeding Bird Atlas be consulted for up-to date information on bird species that have been observed in the project area and immediate vicinity. The following species have been reported to potentially use areas around the project area for breeding activities:

Common Name	Scientific name	Breeding evidence?	Provincial Status	Federal Status
Bank Swallow	<i>Riparia riparia</i>	Confirmed	Endangered	Threatened
Barn Swallow	<i>Hirundo rustica</i>	Confirmed	Endangered	Threatened
Canada Warbler	<i>Cardellina canadensis</i>	Possible	Endangered	Threatened
Common Nighthawk	<i>Chordeiles minor</i>	Probable	Threatened	Threatened
Eastern Wood-pewee	<i>Contopus virens</i>	Confirmed	Vulnerable	Special Concern
Evening Grosbeak	<i>Coccothraustes vespertinus</i>	Possible	Vulnerable	Special Concern
Olive-sided Flycatcher	<i>Contopus cooperi</i>	Confirmed	Threatened	Threatened
Rusty Blackbird	<i>Euphagus carolinus</i>	Probable	Endangered	Special Concern

The identified site is within the distribution of mainland moose (*Alces alces americana*) habitat areas in the province of Nova Scotia. This population is considered endangered in Nova Scotia.

If you have any questions, please contact John.Cormier@novascotia.ca.

Sincerely,

A handwritten signature in black ink, appearing to read "John Cormier", enclosed within a thin black rectangular border.

John Cormier
Coordinator, Special Places

APPENDIX F

LABORATORY

RESULTS

TSS & pH

Envirosphere Consultants Limited

Unit 5—120 Morison Drive, Box 2906, Windsor, Nova Scotia, B0N 2T0

ph: (902) 798-4022, fax: (902) 798-2614, e-mail: enviroco@ns.sympatico.ca, website: www.envirosphere.ca

Environmental Sample Analysis Report

Report Number: A1108

Lab Number: L2024-030

Project: New Annan

Envirosphere Consultants Ltd

Unit 5 - 120 Morison Drive

Windsor, NS | B0N 2T0

Report Date: August 19, 2024

Sample ID	Location	Site	Sample Material	Date Received	Date Analyzed	TSS (mg/L)	Type of Sample	Detection Limit	Sample Comments
24064	New Annan	Wetland 2	surface water	Aug 15 2024	Aug 19 2024	6.5	REG	1.0 mg/L	WP 678 WS1
24064 (dup)	New Annan	Wetland 2	surface water	Aug 15 2024	Aug 19 2024	6.5	DUP	1.0 mg/L	WP 678 WS1
24065	New Annan	Drainage Ditch	surface water	Aug 15 2024	Aug 19 2024	<1.0	REG	1.0 mg/L	WP 684 WS2
24066	New Annan	Wetland 1	surface water	Aug 15 2024	Aug 19 2024	4.0	REG	1.0 mg/L	WP 688 WS3
24067	New Annan	Wetland 5	surface water	Aug 15 2024	Aug 19 2024	12.0	REG	1.0 mg/L	WP 706 WS4
24068	New Annan	Wetland 3	surface water	Aug 15 2024	Aug 19 2024	<1.0	REG	1.0 mg/L	WP 709 WS5
24069	New Annan	Stream 1 Site 1	surface water	Aug 15 2024	Aug 19 2024	2.5	REG	1.0 mg/L	WP 715 WS8
24070	New Annan	Wetland 4	surface water	Aug 15 2024	Aug 19 2024	1.5	REG	1.0 mg/L	WP 717 WS9
24071	New Annan	Stream 1 Site 2	surface water	Aug 15 2024	Aug 19 2024	6.0	REG	1.0 mg/L	WP 718 WS10
24072	New Annan	Stream 1 Site 3	surface water	Aug 15 2024	Aug 19 2024	<1.0	REG	1.0 mg/L	WP 720 WS11
24073	New Annan	Stream 1 Site 4	surface water	Aug 15 2024	Aug 19 2024	<1.0	REG	1.0 mg/L	WP 721 WS12
BLK	New Annan		dH2O	Aug 15 2024	Aug 19 2024	<1.0	BLANK	1.0 mg/L	
CRM	New Annan		CRM	Aug 15 2024	Aug 19 2024	214.0	DUP	1.0 mg/L	CRM = 209mg/L (ECL 979)

Name of Analyst: [Signature] Analyses reviewed by: [Signature] Director / Lab Manager (circle one)

This laboratory applies standard practice in conformance with ISO/IEC 17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories".

Validation Range: 1-1000 mg/L. The results in this report relate only to the items tested. More information is available upon request. The quality of the results is dependent on the quality of sample provided.

Samples for TSS analysis should be kept cool until delivery to the lab unless they are analyzed immediately. A minimum sample volume of 500 ml is preferred. Place sample in a clean plastic container free of cracks or contamination. Fill the bottle to the top and then cap. Samples should reach the lab within 24 hours of sampling, but will be accepted up to 7 days.

Methods: Modified from Standard Methods for the Examination of Water and Wastewater 23rd Edition, 2017 and online version, 2540D. Total Suspended Solids. ECL method 3, Total Suspended Solids.

Type of Sample: REG = regular; STD = standard; DUP = duplicate; CRM = certified reference material.

Sample Comments: BDL = Below Detection limit; QR = Qualified result; NR = No result, damaged or insufficient sample; MAC = Maximum Allowable Concentration.

Envirosphere Consultants Limited

Unit 5—120 Morison Drive, Box 2906, Windsor, Nova Scotia, B0N 2T0

ph: (902) 798-4022, fax: (902) 798-2614, e-mail: enviroco@ns.sympatico.ca, website: www.envirosphere.ca

Environmental Sample Analysis Report

Report Number: A1108

Lab Number: L2024-030

Project: New Annan

Envirosphere Consultants Ltd

Unit 5 - 120 Morison Drive

Windsor, NS | B0N 2T0

Report Date: October 8, 2024

Sample ID	Location	Site	Sample Material	Date Received	Date Analyzed	TSS (mg/L)	Type of Sample	Detection Limit	Sample Comments
24064	New Annan	WS-1	surface water	Aug 15 2024	Aug 19 2024	6.5	REG	1.0 mg/L	Wetland 2
24064 (dup)	New Annan	WS-1	surface water	Aug 15 2024	Aug 19 2024	6.5	DUP	1.0 mg/L	Wetland 2
24065	New Annan	WS-2	surface water	Aug 15 2024	Aug 19 2024	<1.0	REG	1.0 mg/L	Drainage Ditch
24066	New Annan	WS-3	surface water	Aug 15 2024	Aug 19 2024	4.0	REG	1.0 mg/L	Wetland 1
24067	New Annan	WS-4	surface water	Aug 15 2024	Aug 19 2024	12.0	REG	1.0 mg/L	Wetland 5
24068	New Annan	WS-5	surface water	Aug 15 2024	Aug 19 2024	<1.0	REG	1.0 mg/L	Wetland 3
24069	New Annan	WS-8	surface water	Aug 15 2024	Aug 19 2024	2.5	REG	1.0 mg/L	Stream 1 Site 1
24070	New Annan	WS-9	surface water	Aug 15 2024	Aug 19 2024	1.5	REG	1.0 mg/L	Wetland 4
24071	New Annan	WS-10	surface water	Aug 15 2024	Aug 19 2024	6.0	REG	1.0 mg/L	Stream 1 Site 2
24072	New Annan	WS-11	surface water	Aug 15 2024	Aug 19 2024	<1.0	REG	1.0 mg/L	Stream 1 Site 3
24073	New Annan	WS-12	surface water	Aug 15 2024	Aug 19 2024	<1.0	REG	1.0 mg/L	Stream 1 Site 4
BLK	New Annan		dH2O	Aug 15 2024	Aug 19 2024	<1.0	BLANK	1.0 mg/L	
CRM	New Annan		CRM	Aug 15 2024	Aug 19 2024	214.0	DUP	1.0 mg/L	CRM = 209mg/L (ECL 979)

Name of Analyst: [Signature] Analyses reviewed by: [Signature] Director / Lab Manager (circle one)

This laboratory applies standard practice in conformance with ISO/IEC 17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories".

Validation Range: 1-1000 mg/L The results in this report relate only to the items tested. More information is available upon request.

The quality of the results is dependent on the quality of sample provided.

Samples for TSS analysis should be kept cool until delivery to the lab unless they are analyzed immediately. A minimum sample volume of 500 ml is preferred. Place sample in a clean plastic container free of cracks or contamination. Fill the bottle to the top and then cap. Samples should reach the lab within 24 hours of sampling, but will be accepted up to 7 days.

Methods: Modified from Standard Methods for the Examination of Water and Wastewater 23rd Edition, 2017 and online version. 2540D. Total Suspended Solids. ECL method 3, Total Suspended Solids.

Type of Sample: REG = regular; STD = standard; DUP = duplicate; CRM = certified reference material.

Sample Comments: BDL = Below Detection limit; QR = Qualified result; NR = No result, damaged or insufficient sample; MAC = Maximum Allowable Concentration.