

# **Appendices**



**Appendix A      Indigenous and Stakeholder Engagement  
Materials**



## **A.1 Indigenous Engagement Letter**





Spence Aggregates Limited  
126 Stark road, Newport Station  
Office: 4899 Highway 14, Windsor.  
902-798-0178  
[craig@spenceaggregates.ca](mailto:craig@spenceaggregates.ca)

February 12, 2025  
File: 121418141

**ATTENTION:** Chief \_\_\_\_\_  
Address

Dear Chief \_\_\_\_\_,

**Reference: Spence Aggregates Proposed Quarry Expansion, Newport Station, NS**

Spence Aggregates Limited (Spence Aggregates) has owned and operated the Stark Road Quarry in Newport Station, Nova Scotia (NS) since 2007, with a current quarry operation of approximately 4 hectares. Spence Aggregates would like to inform you of a proposed expansion to the quarry area gradually over at least the next 30 years (Figure 1).

The quarry is currently operating under an Industrial Approval (IA) (No. 2007-056319-02) issued in 2017. Spence Aggregates proposes to expand the approved quarry site to occupy approximately an additional 60 hectares of land. This expansion of the existing quarry requires an Environmental Assessment Registration as a Class 1 Undertaking under the Environmental Assessment Regulations of the Nova Scotia *Environmental Act*. The environmental assessment will evaluate the potential effects of the Project on biophysical, socio-economic, and cultural/heritage aspects of the environment either due to their inherent value or interest or as identified concerns by the Mi'kmaq of Nova Scotia, regulatory agencies, resource managers, scientists, key stakeholders, and/or the public. No requirements under the federal *Impact Assessment Act* are anticipated. Spence Aggregates would also seek the applicable amendment to the existing Industrial Approval from the Nova Scotia Department of Environment and Climate Change.

We acknowledge the significance of engaging with the Mi'kmaq of Nova Scotia and anticipate fostering a relationship and ongoing dialogue throughout the Project's duration. Similar letters have been sent to all thirteen First Nations, the Kwilmu'kw Maw-klusuaqn Negotiation Office, and the Office of L'nu Affairs to share information and solicit feedback on the Project. Should you have any inquiries, comments, or concerns regarding the Project, please do not hesitate to contact us at the following address:

Spence Aggregates  
Attn: Craig Bauchman  
126 Stark Road,  
Windsor, NS B0N 2T0  
Phone: (902) 306-9990  
Email: [craig@spenceaggregates.ca](mailto:craig@spenceaggregates.ca)

Please find enclosed a Project Information Sheet and the corresponding Figure 1, which provides more project details and the locations of the existing and proposed expansion areas.

Regards,

---

**Craig Bauchman**  
Project Facilitator

---

**Andrew Spence**  
President

## **A.2 Public Engagement Letter**





Spence Aggregates Limited  
126 Stark road, Newport Station  
Office: 4899 Highway 14, Windsor.  
902-798-0178  
[craig@spenceaggregates.ca](mailto:craig@spenceaggregates.ca)

February 12, 2025  
File: 121418141

Dear Homeowner,

**Reference: Spence Aggregates Proposed Quarry Expansion, Newport Station, NS**

Spence Aggregates Limited (Spence Aggregates) has owned and operated the Stark Road Quarry in Newport Station, Nova Scotia (NS) since 2007, with a current quarry operation of approximately 4 hectares. Spence Aggregates would like to inform you of a proposed expansion to the quarry area gradually over at least the next 30 years (Figure 1).

The quarry is currently operating under an Industrial Approval (IA) (No. 2007-056319-02) issued in 2017. Spence Aggregates proposes to expand the approved quarry site to occupy approximately an additional 60 hectares of land. This expansion of the existing quarry requires an Environmental Assessment Registration as a Class 1 Undertaking under the Environmental Assessment Regulations of the Nova Scotia *Environmental Act*. The environmental assessment will evaluate the potential effects of the Project on biophysical, socio-economic, and cultural/heritage aspects of the environment either due to their inherent value or interest or as identified concerns by the Mi'kmaq of Nova Scotia, regulatory agencies, resource managers, scientists, key stakeholders, and/or the public. No requirements under the federal *Impact Assessment Act* are anticipated. Spence Aggregates would also seek the applicable amendment to the existing Industrial Approval from the Nova Scotia Department of Environment and Climate Change.

We acknowledge the importance of engaging with homeowners and are committed to maintaining open communication throughout the Project's duration. Similar letters have been sent to residents in the area to share information and gather feedback on the Project. If you have any questions, comments, or concerns, please do not hesitate to contact us at the following address:

Spence Aggregates  
Attn: Craig Bauchman  
126 Stark Road,  
Windsor, NS B0N 2T0  
Phone: (902) 306-9990  
Email: [craig@spenceaggregates.ca](mailto:craig@spenceaggregates.ca)

Please find enclosed a Project Information Sheet and the corresponding Figure 1, which provides more project details and the locations of the existing and proposed expansion areas.

Regards,

---

**Craig Bauchman**  
Project Facilitator

---

**Andrew Spence**  
President

### **A.3 Project Information Sheet**



# Spence Aggregates Proposed Quarry Expansion

## Project Information Sheet

### Project Overview

Spence Aggregates Limited (Spence Aggregates) has owned and operated a 4-hectare (ha) quarry in Newport Station, Nova Scotia since 2007, producing approximately 100-tonnes of aggregate annually. They supply materials supporting various clients, from local residents to large-scale infrastructure projects. Spence Aggregates plans a gradual expansion of the quarry to ensure the long-term sustainability of the company.

The quarry currently operates under an Industrial Approval that was most recently renewed by Nova Scotia Environment (NSE) in 2017, pursuant to Division V of the *Activities Designation Regulations*. Spence Aggregates proposes to permit approximately 60 additional ha for a total permitted area of approximately 64 ha. The expansion is anticipated to occur over at least the next 30 years.

Blasting, crushing, and stockpiling are proposed to take place at the expansion site. Approximately one blast per year will be conducted by a licensed blasting technician and will be monitored and reported in compliance with existing permits. Materials will be stored onsite until transport to commercial markets. It is anticipated that activity will remain in line with current production activities. The proposed operating schedule is consistent with the current operating schedule.

### Environmental Assessment Process

Spence Aggregates is required to register this project as a Class I Undertaking pursuant to the Nova Scotia *Environment Act* and Environmental Assessment Regulations. An environmental assessment registration is being prepared by Stantec Consulting Ltd., on behalf of Spence Aggregates, to fulfill these regulatory requirements. The Environmental Assessment Registration will be prepared in consideration of the Guide to Preparing an Environmental Assessment Registration Document for Pit and Quarry Developments in Nova Scotia (NSE 2009).

Other relevant provincial regulations include the *Activities Designation Regulations*, which requires an Industrial Approval amendment from Nova Scotia Environment for the quarry operation, and the General *Blasting Regulations* made pursuant to the Nova Scotia *Occupational Health and Safety Act* (1996).

The environmental assessment registration will evaluate potential environmental effects of the expansion and identify appropriate mitigation and monitoring, where necessary, to reduce any adverse effects. The registration document will be available for public review and comment once it is filed with Nova Scotia Environment and Climate Change (NSECC).

### Environmental Document Components

The environmental registration document focuses on those aspects of the environment that are of most concern. Components to be evaluated include:

- Atmospheric Environment (including noise)
- Water Resources
- Vegetation and Wetlands
- Wildlife and Wildlife Habitat
- Socioeconomic Impacts (including Land Use)
- Archaeological and Heritage Resources
- Indigenous Communities and Activities

Potential effects of quarry activities on these components will be addressed in the registration document.

The proposed expansion will use industry standard mitigation measures and will follow government guidelines and approvals. The expansion area will also be rehabilitated through the life of the project in accordance with permits and approved rehabilitation plans.

### Community Involvement

Spence Aggregates is locally owned and operated with a strong presence in the Newport Station community. The quarry provides direct and indirect benefits to the local economy, and many of its staff live in the surrounding communities.

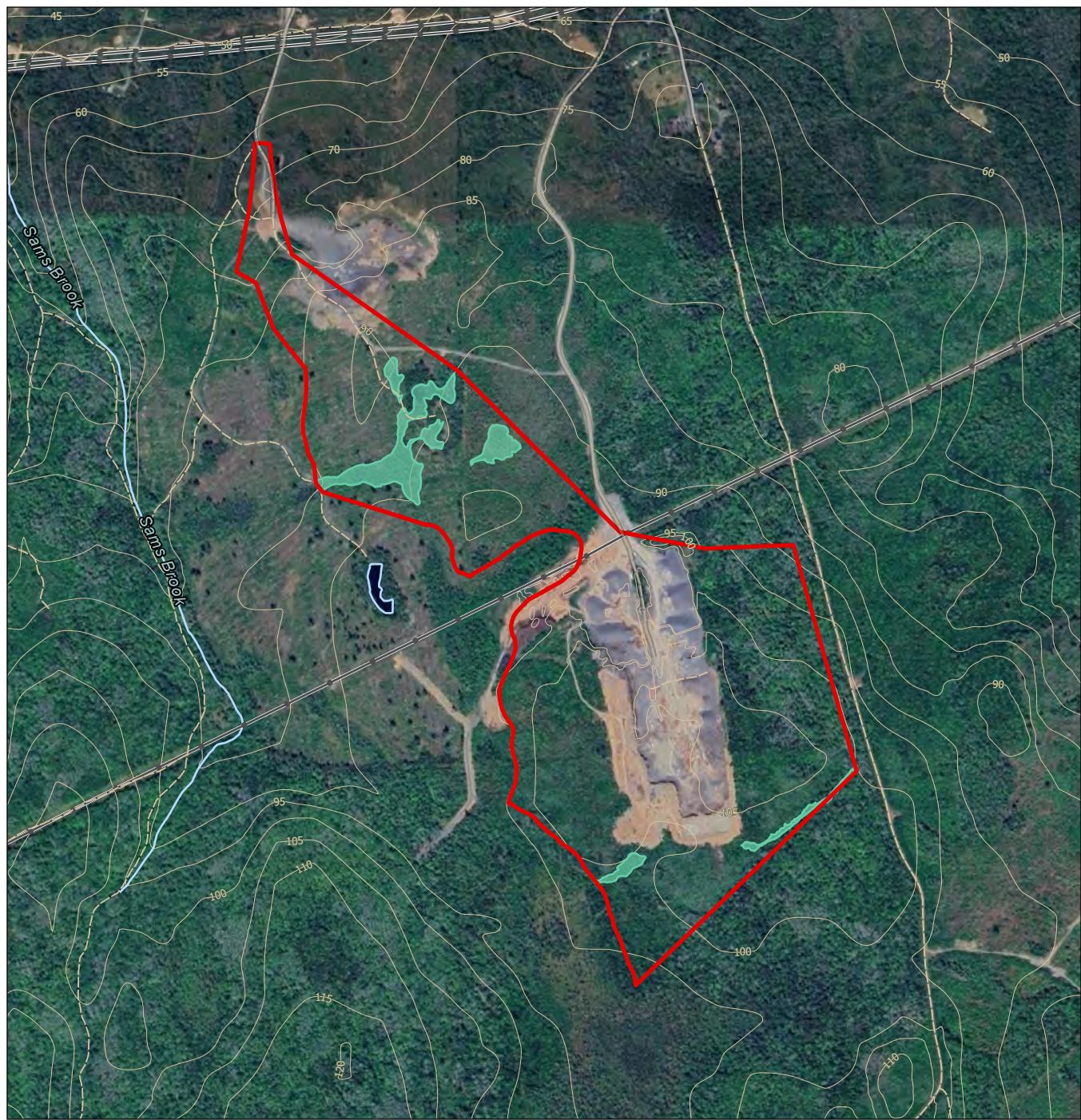
Spence Aggregates is also a proud supporter of the local community. Spence Aggregates has provided financial support to the following organizations in the area: Hants County Exhibition, the Heritage Beef Show, Falmouth Tug of War, Local 4H Market Steer Project, West Hants Minor Hockey, Valley Maple Leaf's Hockey, Green Foot Woman's Hockey, Ninja Turtle Tractor Pulling Team, and Coyote Park Baseball.

### Project Contact

If you have any questions, comments, or concerns about this project, please contact:

#### **Spence Aggregates Limited**

Craig Bauchman, Project Facilitator  
126 Stark Road,  
Windsor, NS B0N 2T0  
Phone: (902) 306-9990  
Email: [craig@spenceaggregates.ca](mailto:craig@spenceaggregates.ca)



**Project Development Area (PDA)**  
 — Local Road  
 - - - Resource Road / Trail  
 — Transmission Line

Contour (5m)  
 Watercourse  
 Waterbody  
 Wetland (Field Delineated)

0 200 400 Metres  
(At original document size of 8.5x11)  
1:12,000



**Stantec**

Project Location  
Spence Quarry  
Windsor, NS  
Prepared by MB on 2025-01-09

Client/Project  
Spence Aggregates Limited

121418141\_009

Spence Quarry

Expansion

Figure No.

1

**Spence Quarry Project  
Development Area**

**Notes**

- Coordinate System: NAD 1983 CSRS UTM Zone 20N
- Data Sources: GeoNOVA, NRCan, OSM, Stantec
- Background: Google (n.d.) [Satellite Map Newport Station, NS]. Retrieved 2025-02-05
- Esi, TomTom, Garmin, FAO, NOAA, USGS, NRCan, Parks Canada, Google, Esri Community Maps Contributors, Province of New Brunswick, Province of Nova Scotia, Esi Canada, Esri, TomTom, Garmin, GeoGraph, GeoTechnologies, Inc, METI/NASA, USGS, NRCan, Parks Canada, Maxar

**Spence Aggregates Quarry Expansion Project - EA Registration Document**

**Appendix B Vascular Plant List**

May 5, 2025

**Appendix B      Vascular Plant List**



## B.1 Vascular Plant List

Table B.1 Vascular Plant List

Scientific Name	Common name	Provincial S-Rank
<i>Abies balsamea</i>	Balsam Fir	S5
<i>Acer negundo</i>	Manitoba Maple	SNA
<i>Acer pensylvanicum</i>	Striped Maple	S5
<i>Acer platanoides</i>	Norway Maple	SNA
<i>Acer rubrum</i>	Red Maple	S5
<i>Acer saccharum</i>	Sugar Maple	S4S5
<i>Agrostis perennans</i>	Upland Bent Grass	S5
<i>Agrostis scabra</i>	Rough Bent Grass	S5
<i>Alisma triviale</i>	Northern Water Plantain	S5
<i>Alnus incana</i>	Speckled Alder	S5
<i>Amauropelta noveboracensis</i>	New York Fern	S5
<i>Amelanchier</i> sp.	a Serviceberry	
<i>Anaphalis margaritacea</i>	Pearly Everlasting	S5
<i>Antennaria howellii</i>	Howell's Pussytoes	S4
<i>Aralia nudicaulis</i>	Wild Sarsaparilla	S5
<i>Athyrium filix-femina</i>	Common Lady Fern	S5
<i>Betula alleghaniensis</i>	Yellow Birch	S5
<i>Betula populifolia</i>	Gray Birch	S5
<i>Carex communis</i>	Fibrous-Root Sedge	S5
<i>Carex echinata</i>	Star Sedge	S5
<i>Carex flava</i>	Yellow Sedge	S5
<i>Carex gracillima</i>	Graceful Sedge	S5
<i>Carex intumescens</i>	Bladder Sedge	S5
<i>Carex leptalea</i>	Bristly-stalked Sedge	S5
<i>Carex lurida</i>	Sallow Sedge	S5
<i>Carex projecta</i>	Necklace Sedge	S5
<i>Carex pseudocyperus</i>	Cyperuslike Sedge	S5
<i>Carex scoparia</i>	Broom Sedge	S5
<i>Centaurea nigra</i>	Black Knapweed	SNA
<i>Chelone glabra</i>	White Turtlehead	S5
<i>Chrysosplenium americanum</i>	American Golden Saxifrage	S5
<i>Cinna latifolia</i>	Drooping Wood Reed Grass	S5
<i>Circaea alpina</i>	Small Enchanter's Nightshade	S5
<i>Claytosmunda claytoniana</i>	Interrupted Fern	S5



**Spence Aggregates Quarry Expansion Project - EA Registration Document**  
**Appendix B Vascular Plant List**  
May 5, 2025

**Table B.1 Vascular Plant List**

Scientific Name	Common name	Provincial S-Rank
<i>Clintonia borealis</i>	Yellow Bluebead Lily	S5
<i>Comptonia peregrina</i>	Sweet-fern	S5
<i>Coptis trifolia</i>	Goldthread	S5
<i>Cornus canadensis</i>	Bunchberry	S5
<i>Cornus sericea</i>	Red Osier Dogwood	S5
<i>Corylus cornuta</i>	Beaked Hazel	S5
<i>Cypripedium acaule</i>	Pink Lady's-Slipper	S5
<i>Danthonia compressa</i>	Flattened Oat Grass	S5
<i>Danthonia spicata</i>	Poverty Oat Grass	S5
<i>Dendrolycopodium dendroideum</i>	Round-branched Tree-clubmoss	S5
<i>Dendrolycopodium hickeyi</i>	Hickey's Tree-clubmoss	S4
<i>Dennstaedtia punctilobula</i>	Eastern Hay-Scented Fern	S5
<i>Dichanthelium acuminatum</i>	Woolly Panic Grass	SNA
<i>Dichanthelium boreale</i>	Northern Panic Grass	S5
<i>Diervilla lonicera</i>	Northern Bush Honeysuckle	S5
<i>Doellingeria umbellata</i>	Hairy Flat-top White Aster	S5
<i>Dryopteris carthusiana</i>	Spinulose Wood Fern	S5
<i>Dryopteris cristata</i>	Crested Wood Fern	S5
<i>Dryopteris marginalis</i>	Marginal Wood Fern	S5
<i>Elaeagnus umbellata</i>	Autumn Olive	SNA
<i>Epigaea repens</i>	Trailing Arbutus	S5
<i>Epilobium ciliatum</i>	Northern Willowherb	S5
<i>Epilobium leptophyllum</i>	Bog Willowherb	S5
<i>Equisetum arvense</i>	Field Horsetail	S5
<i>Equisetum fluviatile</i>	Water Horsetail	S5
<i>Euphrasia nemorosa</i>	Common Eyebright	SNA
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	S5
<i>Eutrochium maculatum</i>	Spotted Joe Pye Weed	S5
<i>Fagus grandifolia</i>	American Beech	S3S4
<i>Fallopia cilinodis</i>	Fringed Black Bindweed	S5
<i>Fraxinus americana</i>	White Ash	S4
<i>Galeopsis tetrahit</i>	Common Hemp-nettle	SNA
<i>Glyceria canadensis</i>	Canada Manna Grass	S5
<i>Glyceria fluitans</i>	Water Manna Grass	SNA
<i>Glyceria striata</i>	Fowl Manna Grass	S5
<i>Goodyera pubescens</i>	Downy Rattlesnake-Plantain	S2S3



**Spence Aggregates Quarry Expansion Project - EA Registration Document**  
**Appendix B Vascular Plant List**  
May 5, 2025

**Table B.1      Vascular Plant List**

Scientific Name	Common name	Provincial S-Rank
<i>Gymnocarpium dryopteris</i>	Common Oak Fern	S5
<i>Hamamelis virginiana</i>	American Witch-Hazel	S5
<i>Hieracium umbellatum</i>	Umbellate Hawkweed	S5
<i>Hypericum perforatum</i>	Common St. John's-wort	SNA
<i>Hypopitys monotropa</i>	Pinesap	S4
<i>Ilex verticillata</i>	Common Winterberry	S5
<i>Impatiens capensis</i>	Spotted Jewelweed	S5
<i>Juncus articulatus</i>	Jointed Rush	S5
<i>Juncus effusus</i>	Soft Rush	S5
<i>Juncus tenuis</i>	Slender Rush	S5
<i>Kalmia angustifolia</i>	Sheep Laurel	S5
<i>Lactuca biennis</i>	Tall Blue Lettuce	S5
<i>Lactuca canadensis</i>	Canada Lettuce	S5
<i>Lemna minor</i>	Lesser Duckweed	SNA
<i>Leucanthemum vulgare</i>	Oxeye Daisy	SNA
<i>Linnaea borealis</i>	Twinflower	S5
<i>Lonicera canadensis</i>	Canada Fly Honeysuckle	S5
<i>Ludwigia palustris</i>	Marsh Seedbox	S5
<i>Luzula multiflora</i>	Common Woodrush	S5
<i>Lysimachia borealis</i>	Northern Starflower	S5
<i>Lysimachia terrestris</i>	Swamp Yellow Loosestrife	S5
<i>Maianthemum canadense</i>	Wild Lily-of-The-Valley	S5
<i>Medeola virginiana</i>	Cucumber Root	S5
<i>Melampyrum lineare</i>	American Cow Wheat	S5
<i>Mitchella repens</i>	Partridgeberry	S5
<i>Nabalus trifoliolatus</i>	Three-leaved Rattlesnakeroot	S5
<i>Oclemena acuminata</i>	Whorled Wood Aster	S5
<i>Onoclea sensibilis</i>	Sensitive Fern	S5
<i>Oryzopsis asperifolia</i>	White-grained Mountain Rice	S5
<i>Osmunda cinnamomeum</i>	Cinnamon Fern	S5
<i>Persicaria robustior</i>	Stout Smartweed	S4
<i>Phegopteris connectilis</i>	Northern Beech Fern	S5
<i>Picea glauca</i>	White Spruce	S5
<i>Picea mariana</i>	Black Spruce	S5
<i>Picea rubens</i>	Red Spruce	S5
<i>Pilosella caespitosa</i>	Meadow Hawkweed	SNA



**Spence Aggregates Quarry Expansion Project - EA Registration Document**  
**Appendix B Vascular Plant List**  
May 5, 2025

**Table B.1      Vascular Plant List**

Scientific Name	Common name	Provincial S-Rank
<i>Pilosella officinarum</i>	Mouse-ear Hawkweed	SNA
<i>Pinus strobus</i>	Eastern White Pine	S5
<i>Platanthera clavellata</i>	Club Spur Orchid	S5
<i>Platanthera hookeri</i>	Hooker's Orchid	S3
<i>Poa compressa</i>	Canada Blue Grass	SNA
<i>Poa palustris</i>	Fowl Blue Grass	S5
<i>Polystichum acrostichoides</i>	Christmas Fern	S5
<i>Populus grandidentata</i>	Large-toothed Aspen	S5
<i>Populus tremuloides</i>	Trembling Aspen	S5
<i>Potamogeton natans</i>	Floating-leaved Pondweed	S5
<i>Potentilla simplex</i>	Old Field Cinquefoil	S5
<i>Prunus pensylvanica</i>	Pin Cherry	S5
<i>Prunus serotina</i>	Black Cherry	S5
<i>Pteridium aquilinum</i>	Bracken Fern	S5
<i>Quercus rubra</i>	Northern Red Oak	S5
<i>Raphanus raphanistrum</i>	Wild Radish	SNA
<i>Rosa multiflora</i>	Multiflora Rose	SNA
<i>Rubus allegheniensis</i>	Alleghany Blackberry	S5
<i>Rubus canadensis</i>	Smooth Blackberry	S5
<i>Rubus hispida</i>	Bristly Dewberry	S5
<i>Rubus idaeus</i>	Red Raspberry	S5
<i>Salix discolor</i>	Pussy Willow	S5
<i>Salix eriocephala</i>	Cottony Willow	S5
<i>Salix lucida</i>	Shining Willow	S5
<i>Salix pyrifolia</i>	Balsam Willow	S5
<i>Scirpus cyperinus</i>	Common Woolly Bulrush	S5
<i>Scirpus hattorianus</i>	Mosquito Bulrush	S5
<i>Sisyrinchium montanum</i>	Mountain Blue-eyed-grass	S5
<i>Solidago juncea</i>	Early Goldenrod	S5
<i>Solidago puberula</i>	Downy Goldenrod	S5
<i>Solidago rugosa</i>	Rough-stemmed Goldenrod	S5
<i>Sparganium americanum</i>	American Burreed	S5
<i>Spinulum annotinum</i>	Stiff Clubmoss	S5
<i>Spiraea alba</i>	White Meadowsweet	S5
<i>Spiranthes lacera</i>	Slender Ladies'-tresses	S5
<i>Streptopus lanceolatus</i>	Rose Twisted-stalk	S5



**Spence Aggregates Quarry Expansion Project - EA Registration Document**  
**Appendix B Vascular Plant List**  
May 5, 2025

**Table B.1      Vascular Plant List**

Scientific Name	Common name	Provincial S-Rank
<i>Sympyotrichum lateriflorum</i>	Calico Aster	S5
<i>Trillidium undulatum</i>	Painted Trillium	S5
<i>Typha angustifolia</i>	Narrow-Leaved Cattail	SNA
<i>Vaccinium angustifolium</i>	Late Lowbush Blueberry	S5
<i>Vaccinium myrtilloides</i>	Velvet-leaved Blueberry	S5
<i>Viburnum cassinoides</i>	Northern Wild Raisin	S5
<i>Vicia cracca</i>	Tufted Vetch	SNA
<i>Vitis riparia</i>	Riverbank Grape	SNA

Notes:

S-Rank definitions (AC CDC 2024):

S1 = Critically Imperiled: Critically imperiled in the province because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state/province.

S2 = Imperiled: Imperiled in the province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province.

S3 = Vulnerable: Vulnerable in the province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

S4 = Apparently Secure: Uncommon but not rare; some cause for long-term concern due to declines or other factors.

S5 = Secure: Common, widespread, and abundant in the province.

SNR = Unranked: Nation or state/province conservation status not yet assessed.

SNA = A conservation status rank is not applicable because the species is not a suitable target for conservation activities

SU = Unrankable: Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.



**Spence Aggregates Quarry Expansion Project - EA Registration Document**

**Appendix C AC CDC Report**

May 5, 2025

**Appendix C      AC CDC Report**



# DATA REPORT 7881: Newport Station, NS

Prepared 6 November 2023  
by J. Churchill, Data Manager

## CONTENTS OF REPORT

### 1.0 Preface

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

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  - 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](http://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:

<u>Filename</u>	<u>Contents</u>
NewportStatiNS_7881ob.xls	Rare or legally-protected Flora and Fauna in your study area
NewportStatiNS_7881ob100km.xls	A list of Rare and legally protected Flora and Fauna within 100 km of your study area
NewportStatiNS_7881msa.xls	Managed and Biologically Significant Areas in your study area
NewportStatiNS_7881ff_py.xls	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](mailto:sean.blaney@accdc.ca)

### **Animals (Fauna)**

John Klymko  
Zoologist  
(506) 364-2660  
[john.klymko@accdc.ca](mailto:john.klymko@accdc.ca)

### **Data Management, GIS**

James Churchill  
Conservation Data Analyst / Field Biologist  
(902) 679-6146  
[james.churchill@accdc.ca](mailto:james.churchill@accdc.ca)

### **Billing**

Jean Breau  
Financial Manager / Executive Assistant  
(506) 364-2657  
[jean.breau@accdc.ca](mailto: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](mailto:Emma.Vost@novascotia.ca)

**Western:** Sarah Spencer  
(902) 541-0081  
[Sarah.Spencer@novascotia.ca](mailto:Sarah.Spencer@novascotia.ca)

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(902) 893-0816  
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(902) 890-1046  
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**Eastern:** Elizabeth Walsh  
(902) 563-3370  
[Elizabeth.Walsh@novascotia.ca](mailto: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

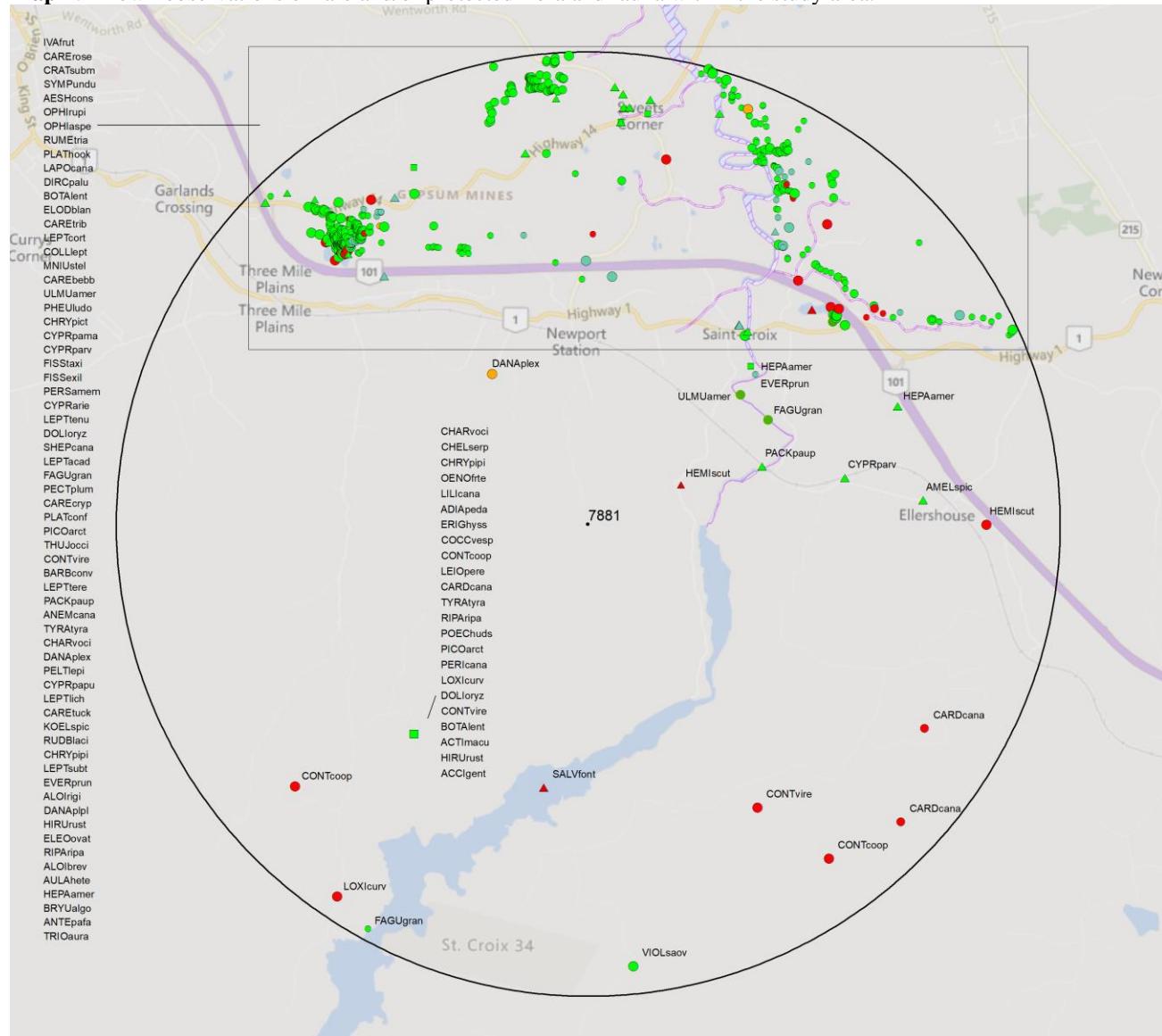
### 2.1 FLORA

The study area contains 562 records of 35 vascular and 45 records of 20 nonvascular flora (Map 2 and attached: \*ob.xls), excluding 'location-sensitive' species.

### 2.2 FAUNA

The study area contains 60 records of 23 vertebrate and 7 records of 5 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.

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



### RESOLUTION

- 4.7 within 50s of kilometers
- 4.0 within 10s of kilometers
- 3.7 within 5s of kilometers
- 3.0 within kilometers
- 2.7 within 500s of meters
- 2.0 within 100s of meters
- 1.7 within 10s of meters

### HIGHER TAXON

- vertebrate fauna
- invertebrate fauna
- vascular flora
- nonvascular flora

## 3.0 SPECIAL AREAS

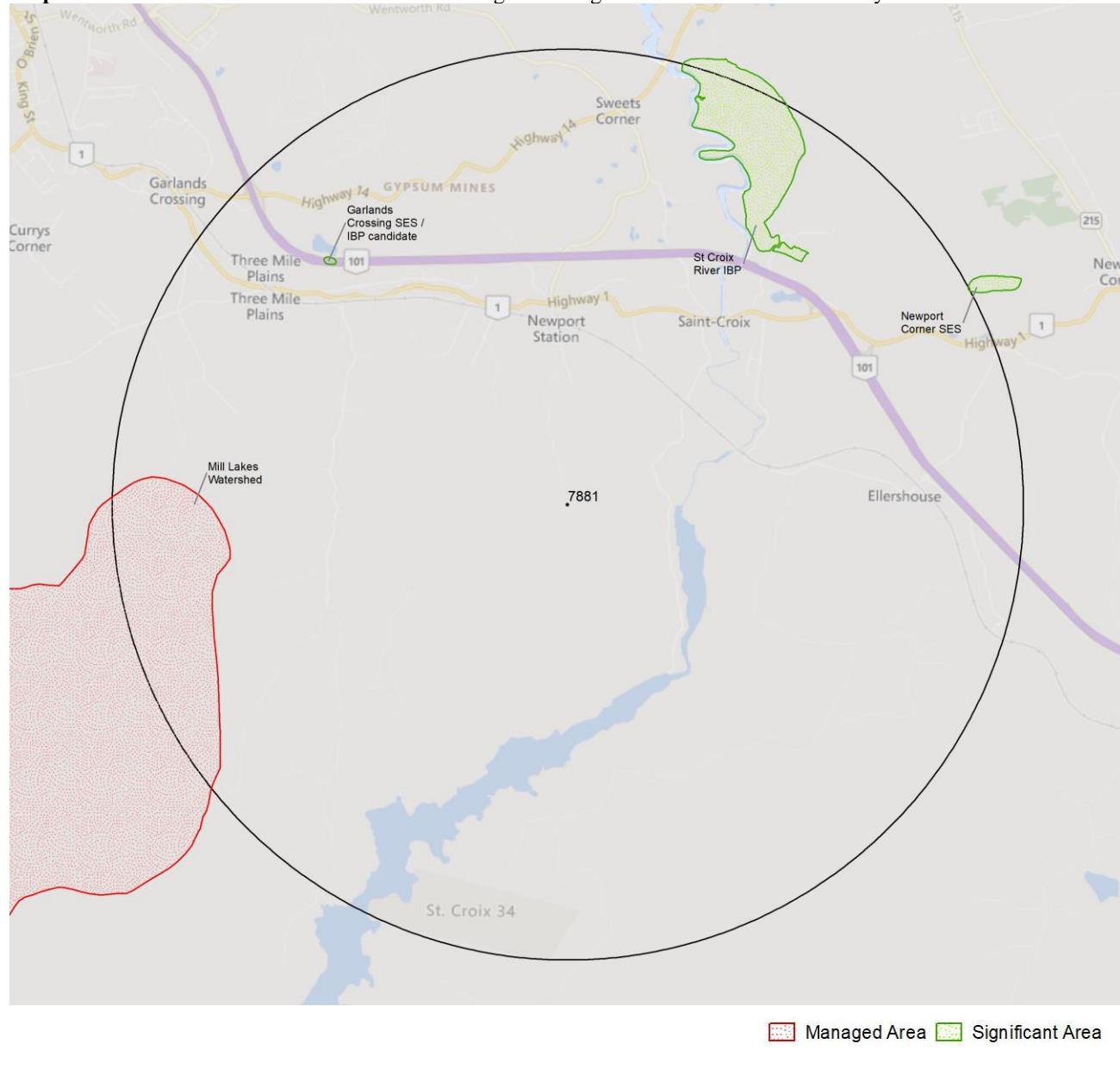
### 3.1 MANAGED AREAS

The GIS scan identified 1 managed area in the vicinity of the study area (Map 3 and attached file: \*msa.xls).

### 3.2 SIGNIFICANT AREAS

The GIS scan identified 3 biologically significant sites in the vicinity of the study area (Map 3 and attached file: \*msa.xls).

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



## 4.0 RARE SPECIES LISTS

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

### 4.1 FLORA

Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)
N <i>Pectenia plumbea</i>	Blue Felt Lichen	Special Concern	Special Concern	Vulnerable	S3	4	3.7 $\pm$ 0.0
N <i>Fissidens exilis</i>	Pygmy Pocket Moss	Not At Risk			S3	3	4.0 $\pm$ 0.0
N <i>Aloina brevirostris</i>	Short-Beaked Rigid Screw Moss				S1	1	2.6 $\pm$ 2.0
N <i>Peltigera lepidophora</i>	Scaly Pelt Lichen				S1	3	3.9 $\pm$ 0.0
N <i>Aloina rigida</i>	Aloe-Like Rigid Screw Moss				S1?	2	2.6 $\pm$ 0.0
N <i>Arrhenopterum heterostichum</i>	One-sided Groove Moss				S1S2	1	2.6 $\pm$ 2.0
N <i>Platydictya confervoides</i>	a Moss				S1S2	1	4.0 $\pm$ 0.0
N <i>Ptychosstomum pendulum</i>	Drooping Bryum				S2?	1	2.6 $\pm$ 2.0
N <i>Collema leptaleum</i>	Crumpled Bat's Wing Lichen				S2S3	1	4.2 $\pm$ 0.0
N <i>Scytinium tenuissimum</i>	Birdnest Jellyskin Lichen				S2S3	2	3.9 $\pm$ 0.0
N <i>Fissidens taxifolius</i>	Yew-leaved Pocket Moss				S3	4	2.6 $\pm$ 2.0
N <i>Scytinium lichenoides</i>	Tattered Jellyskin Lichen				S3	1	3.8 $\pm$ 0.0
N <i>Barbula convoluta</i>	Lesser Bird's-claw Beard Moss				S3?	2	3.9 $\pm$ 0.0
N <i>Eloium blandowii</i>	Blandow's Bog Moss				S3?	1	4.5 $\pm$ 0.0
N <i>Mnium stellare</i>	Star Leafy Moss				S3?	1	4.3 $\pm$ 0.0
N <i>Scytinium teretiusculum</i>	Curly Jellyskin Lichen				S3S4	1	3.1 $\pm$ 0.0
N <i>Leptogium acadiense</i>	Acadian Jellyskin Lichen				S3S4	2	3.8 $\pm$ 0.0
N <i>Scytinium subtile</i>	Appressed Jellyskin Lichen				S3S4	2	2.8 $\pm$ 0.0
N <i>Leptogium corticola</i>	Blistered Jellyskin Lichen				S3S4	1	4.2 $\pm$ 0.0
N <i>Evernia prunastri</i>	Valley Oakmoss Lichen				S3S4	11	2.4 $\pm$ 0.0
P <i>Adiantum pedatum</i>	Northern Maidenhair Fern				S1	1	2.9 $\pm$ 10.0
P <i>Cypripedium arietinum</i>	Ram's-Head Lady's-Slipper	Endangered			S1S2	172	3.8 $\pm$ 0.0
P <i>Antennaria parlinii</i> ssp. <i>fallax</i>	Parlin's Pussytoes				S2	2	2.6 $\pm$ 0.0
P <i>Rudbeckia laciniata</i>	Cut-Leaved Coneflower				S2	2	3.7 $\pm$ 0.0
P <i>Anemonastrum canadense</i>	Canada Anemone				S2	2	4.0 $\pm$ 0.0
P <i>Hepatica americana</i>	Round-lobed Hepatica				S2	15	2.4 $\pm$ 3.0
P <i>Dirca palustris</i>	Eastern Leatherwood				S2	4	4.3 $\pm$ 0.0
P <i>Lilium canadense</i>	Canada Lily				S2	1	2.9 $\pm$ 7.0
P <i>Cypripedium parviflorum</i> var. <i>pubescens</i>	Yellow Lady's-slipper				S2	10	3.9 $\pm$ 0.0
P <i>Cypripedium parviflorum</i> var. <i>makasin</i>	Small Yellow Lady's-Slipper				S2	2	3.9 $\pm$ 0.0
P <i>Crataegus submollis</i>	Quebec Hawthorn				S2?	1	4.5 $\pm$ 1.0
P <i>Thuja occidentalis</i>	Eastern White Cedar	Vulnerable			S2S3	1	3.9 $\pm$ 0.0
P <i>Oenothera fruticosa</i> ssp. <i>tetragona</i>	Narrow-leaved Evening Primrose				S2S3	1	2.9 $\pm$ 7.0
P <i>Rumex triangulivalvis</i>	Triangular-valve Dock				S2S3	2	3.7 $\pm$ 0.0
P <i>Eleocharis ovata</i>	Ovate Spikerush				S2S3	1	3.7 $\pm$ 0.0
P <i>Iva frutescens</i>	Big-leaved Marsh-elder				S3	1	4.9 $\pm$ 0.0
P <i>Symphytum undulatum</i>	Wavy-leaved Aster				S3	2	4.4 $\pm$ 0.0
P <i>Triosteum aurantiacum</i>	Orange-fruited Tinker's Weed				S3	2	3.4 $\pm$ 0.0
P <i>Laportea canadensis</i>	Canada Wood Nettle				S3	3	4.6 $\pm$ 2.0
P <i>Carex bebbii</i>	Bebb's Sedge				S3	2	3.7 $\pm$ 0.0
P <i>Carex cryptolepis</i>	Hidden-scaled Sedge				S3	1	4.1 $\pm$ 0.0
P <i>Carex rosea</i>	Rosy Sedge				S3	3	2.6 $\pm$ 2.0
P <i>Carex tribuloides</i>	Blunt Broom Sedge				S3	1	3.7 $\pm$ 0.0
P <i>Carex tuckermanii</i>	Tuckerman's Sedge				S3	2	3.1 $\pm$ 0.0
P <i>Cypripedium parviflorum</i>	Yellow Lady's-slipper				S3	205	2.8 $\pm$ 1.0

	<b>Scientific Name</b>	<b>Common Name</b>	<b>COSEWIC</b>	<b>SARA</b>	<b>Prov Legal Prot</b>	<b>Prov Rarity Rank</b>	<b># recs</b>	<b>Distance (km)</b>
P	<i>Platanthera hookeri</i>	Hooker's Orchid			S3	1	4.3 ± 1.0	
P	<i>Persicaria amphibia</i> var. <i>emersa</i>	Long-root Smartweed			S3?	1	4.0 ± 0.0	
P	<i>Erigeron hyssopifolius</i>	Hyssop-leaved Fleabane			S3S4	1	2.9 ± 7.0	
P	<i>Packera paupercula</i>	Balsam Groundsel			S3S4	69	1.9 ± 1.0	
P	<i>Shepherdia canadensis</i>	Soapberry			S3S4	33	3.7 ± 0.0	
P	<i>Fagus grandifolia</i>	American Beech			S3S4	10	2.2 ± 0.0	
P	<i>Amelanchier spicata</i>	Running Serviceberry			S3S4	1	3.6 ± 3.0	
P	<i>Ulmus americana</i>	White Elm			S3S4	5	2.1 ± 0.0	
P	<i>Viola sagittata</i> var. <i>ovata</i>	Arrow-Leaved Violet			S3S4	1	4.7 ± 0.0	
P	<i>Koeleria spicata</i>	Narrow False Oats			S3S4	1	3.7 ± 0.0	

**4.2 FAUNA**

	<b>Scientific Name</b>	<b>Common Name</b>	<b>COSEWIC</b>	<b>SARA</b>	<b>Prov Legal Prot</b>	<b>Prov Rarity Rank</b>	<b># recs</b>	<b>Distance (km)</b>
A	<i>Riparia riparia</i>	Bank Swallow	Threatened	Threatened	Endangered	S2B	3	2.9 ± 7.0
A	<i>Chelydra serpentina</i>	Snapping Turtle	Special Concern	Special Concern	Vulnerable	S3	3	2.9 ± 10.0
A	<i>Hirundo rustica</i>	Barn Swallow	Special Concern	Threatened	Endangered	S3B	5	2.9 ± 7.0
A	<i>Cardellina canadensis</i>	Canada Warbler	Special Concern	Threatened	Endangered	S3B	3	2.9 ± 7.0
A	<i>Contopus cooperi</i>	Olive-sided Flycatcher	Special Concern	Special Concern	Threatened	S3B	4	2.9 ± 7.0
A	<i>Dolichonyx oryzivorus</i>	Bobolink	Special Concern	Threatened	Vulnerable	S3B	3	2.9 ± 7.0
A	<i>Coccothraustes vespertinus</i>	Evening Grosbeak	Special Concern	Special Concern	Vulnerable	S3B,S3N,S3M	1	2.9 ± 7.0
A	<i>Contopus virens</i>	Eastern Wood-Pewee	Special Concern	Special Concern	Vulnerable	S3S4B	10	2.9 ± 7.0
A	<i>Chrysemys picta</i>	Painted Turtle	Special Concern	Special Concern	S4	1	4.1 ± 0.0	
A	<i>Chrysemys picta picta</i>	Eastern Painted Turtle	Special Concern	Special Concern	S4	5	2.9 ± 10.0	
A	<i>Hemidactylum scutatum</i>	Four-toed Salamander	Not At Risk		S3	2	1.1 ± 0.0	
A	<i>Accipiter gentilis</i>	Northern Goshawk	Not At Risk		S3S4	1	2.9 ± 7.0	
A	<i>Perisoreus canadensis</i>	Canada Jay			S3	1	2.9 ± 7.0	
A	<i>Poecile hudsonicus</i>	Boreal Chickadee			S3	1	2.9 ± 7.0	
A	<i>Salvelinus fontinalis</i>	Brook Trout			S3	1	2.8 ± 2.0	
A	<i>Charadrius vociferus</i>	Killdeer			S3B	2	2.9 ± 7.0	
A	<i>Tyrannus tyrannus</i>	Eastern Kingbird			S3B	2	2.9 ± 7.0	
A	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak			S3B	2	3.7 ± 0.0	
A	<i>Picoides arcticus</i>	Black-backed Woodpecker			S3S4	2	2.9 ± 7.0	
A	<i>Loxia curvirostra</i>	Red Crossbill			S3S4	3	2.9 ± 7.0	
A	<i>Botaurus lentiginosus</i>	American Bittern			S3S4B,S4S5M	2	2.9 ± 7.0	
A	<i>Actitis macularius</i>	Spotted Sandpiper			S3S4B,S5M	2	2.9 ± 7.0	
A	<i>Leiothlypis peregrina</i>	Tennessee Warbler			S3S4B,S5M	1	2.9 ± 7.0	
I	<i>Danaus plexippus</i>	Monarch	Endangered	Special Concern	Endangered	S2?B,S3M	3	1.9 ± 0.0
I	<i>Danaus plexippus plexippus</i>	Monarch	Endangered	Special Concern		S2?B,S3M	1	3.7 ± 0.0
I	<i>Ophiogomphus aspersus</i>	Brook Snaketail				S3	1	4.7 ± 0.0
I	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail				S3	1	4.7 ± 0.0
I	<i>Aeshna constricta</i>	Lance-Tipped Darner				S3S4	1	4.4 ± 1.0

#### 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	YES
<i>Emydoidea blandingii</i>	Blanding's Turtle - Nova Scotia pop.	Endangered	Endangered	No
<i>Glyptemys insculpta</i>	Wood Turtle	Threatened	Threatened	YES
<i>Falco peregrinus</i> pop. 1	Peregrine Falcon - anatum/tundrius pop.		Vulnerable	No
<i>Bat hibernaculum or bat species occurrence</i>		[Endangered] <sup>1</sup>	[Endangered] <sup>1</sup>	YES

<sup>1</sup> *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.

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4	Munro, Marian K. Tracked lichen specimens, Nova Scotia Provincial Museum of Natural History Herbarium. Atlantic Canada Conservation Data Centre. 2019.
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# recs	CITATION
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1	Bryson, I.C. 2020. Nova Scotia flora and lichen observations 2020. Nova Scotia Environment, 139 recs.
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1	NS DOE. 1991-1992. Nova Scotia Protected Areas database. Nova Scotia Department of Environment.

## 5.0 RARE SPECIES WITHIN 100 KM

A 100 km buffer around the study area contains 61751 records of 159 vertebrate and 2614 records of 82 invertebrate fauna; 17469 records of 297 vascular and 3455 records of 220 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>Coregonus huntsmani</i>	Atlantic Whitefish	Endangered	Endangered	Endangered	S1	147	48.2 ± 1.0	NS
A	<i>Myotis lucifugus</i>	Little Brown Myotis	Endangered	Endangered	Endangered	S1	531	2.4 ± 0.0	NS
A	<i>Myotis septentrionalis</i>	Northern Myotis	Endangered	Endangered	Endangered	S1	57	3.8 ± 0.0	NS
A	<i>Perimyotis subflavus</i>	Tricolored Bat	Endangered	Endangered	Endangered	S1	72	3.8 ± 0.0	NS
A	<i>Emydoidea blandingii</i>	Blanding's Turtle	Endangered	Endangered	Endangered	S1	5678	50.1 ± 0.0	NS
A	<i>Salmo salar</i> pop. 1	Atlantic Salmon - Inner Bay of Fundy population	Endangered	Endangered		S1	45	6.9 ± 0.0	NS
A	<i>Salmo salar</i> pop. 6	Atlantic Salmon - Nova Scotia Southern Upland population	Endangered			S1	25	17.6 ± 0.0	NS
A	<i>Charadrius melanotos</i>	Piping Plover melanotos subspecies	Endangered	Endangered	Endangered	S1B	1005	49.3 ± 0.0	NS
A	<i>Sterna dougallii</i>	Roseate Tern	Endangered	Endangered	Endangered	S1B	64	37.4 ± 0.0	NS
A	<i>Dermochelys coriacea</i> pop. 2	Leatherback Sea Turtle - Atlantic population	Endangered	Endangered		S1S2N	3	34.0 ± 5.0	NS
A	<i>Morone saxatilis</i> pop. 2	Striped Bass - Bay of Fundy population	Endangered			S2S3B,S2S3N	5	31.5 ± 1.0	NS
A	<i>Lamna nasus</i>	Porbeagle Shark	Endangered			SNR	1	64.0 ± 0.0	NS
A	<i>Lasiusurus cinereus</i>	Hoary Bat	Endangered			SUB, S1M	47	15.4 ± 0.0	NS
A	<i>Lasionycteris noctivagans</i>	Silver-haired Bat	Endangered			SUB,S1M	16	28.9 ± 0.0	NS
A	<i>Lasiusurus borealis</i>	Eastern Red Bat	Endangered			SUB,S1M	1	38.2 ± 0.0	NS
A	<i>Catharus bicknelli</i>	Bicknell's Thrush	Threatened	Threatened	Endangered	S1B	1	78.2 ± 7.0	NS
A	<i>Asio flammeus</i>	Short-eared Owl	Threatened	Special Concern		S1B	36	27.6 ± 0.0	NS
A	<i>Glyptemys insculpta</i>	Wood Turtle	Threatened	Threatened	Threatened	S2	1946	3.6 ± 5.0	NS
A	<i>Riparia riparia</i>	Bank Swallow	Threatened	Threatened	Endangered	S2B	1746	2.9 ± 7.0	NS
A	<i>Thamnophis saurita</i>	Eastern Ribbonsnake	Threatened	Threatened	Threatened	S2S3	790	72.3 ± 0.0	NS
A	<i>Chaetura pelasgica</i>	Chimney Swift	Threatened	Threatened	Endangered	S2S3B,S1M	1525	8.0 ± 7.0	NS
A	<i>Limosa haemastica</i>	Hudsonian Godwit	Threatened			S2S3M	169	8.0 ± 0.0	NS
A	<i>Acipenser oxyrinchus</i>	Atlantic Sturgeon	Threatened			S2S3N	12	7.2 ± 0.0	NS
A	<i>Hydrobates leucorhous</i>	Leach's Storm-Petrel	Threatened			S3B	27	39.5 ± 0.0	NS
A	<i>Tringa flavipes</i>	Lesser Yellowlegs	Threatened			S3M	1271	8.0 ± 0.0	NS
A	<i>Anguilla rostrata</i>	American Eel	Threatened			S3N	118	5.8 ± 0.0	NS
A	<i>Sturnella magna</i>	Eastern Meadowlark	Threatened	Threatened		SHB	5	21.4 ± 7.0	NS
A	<i>Ixobrychus exilis</i>	Least Bittern	Threatened	Threatened		SUB	4	52.5 ± 0.0	NS
A	<i>Hylocichla mustelina</i>	Wood Thrush	Threatened	Threatened		SUB	58	23.2 ± 7.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov	
A	<i>Salmo salar</i> pop. 12	Atlantic Salmon - Gaspe - Southern Gulf of St. Lawrence population	Special Concern		S1		10	79.9 ± 0.0	NS	
A	<i>Antrostomus vociferus</i>	Eastern Whip-Poor-Will	Special Concern	Threatened	Threatened	S1?B	16	30.7 ± 7.0	NS	
A	<i>Passerculus sandwichensis princeps</i>	Ipswich Sparrow	Special Concern	Special Concern		S1B	29	28.3 ± 0.0	NS	
A	<i>Bucephala islandica</i>	Barrow's Goldeneye	Special Concern	Special Concern		S1N,SUM	20	29.2 ± 2.0	NS	
A	<i>Euphagus carolinus</i>	Rusty Blackbird	Special Concern	Special Concern	Endangered	S2B	274	12.4 ± 7.0	NS	
A	<i>Balaenoptera physalus</i>	Fin Whale	Special Concern	Special Concern		S2S3	4	64.2 ± 0.0	NS	
A	<i>Phalaropus lobatus</i>	Red-necked Phalarope	Special Concern	Special Concern		S2S3M	16	21.4 ± 0.0	NS	
A	<i>Histrionicus histrionicus</i> pop. 1	Harlequin Duck - Eastern population	Special Concern	Special Concern	Endangered	S2S3N,SUM	69	50.3 ± 0.0	NS	
A	<i>Chelydra serpentina</i>	Snapping Turtle	Special Concern	Special Concern	Vulnerable	S3	637	2.9 ± 10.0	NS	
A	<i>Hirundo rustica</i>	Barn Swallow	Special Concern	Threatened	Endangered	S3B	1517	2.9 ± 7.0	NS	
A	<i>Cardellina canadensis</i>	Canada Warbler	Special Concern	Threatened	Endangered	S3B	1189	2.9 ± 7.0	NS	
A	<i>Chordeiles minor</i>	Common Nighthawk	Special Concern	Special Concern	Threatened	S3B	677	8.0 ± 7.0	NS	
A	<i>Contopus cooperi</i>	Olive-sided Flycatcher	Special Concern	Special Concern	Threatened	S3B	1097	2.9 ± 7.0	NS	
A	<i>Dolichonyx oryzivorus</i>	Bobolink	Special Concern	Threatened	Vulnerable	S3B	1271	2.9 ± 7.0	NS	
A	<i>Coccothraustes vespertinus</i>	Evening Grosbeak	Special Concern	Special Concern	Vulnerable	S3B,S3N,S3M	818	2.9 ± 7.0	NS	
A	<i>Podiceps auritus</i>	Horned Grebe	Special Concern	Special Concern		S3N,SUM	24	32.5 ± 0.0	NS	
A	<i>Contopus virens</i>	Eastern Wood-Pewee	Special Concern	Special Concern		S3S4B	1378	2.9 ± 7.0	NS	
A	<i>Phocoena phocoena</i>	Harbour Porpoise	Special Concern		Vulnerable		S4	17	25.5 ± 0.0	NS
A	<i>Phocoena phocoena</i> pop. 1	Harbour Porpoise - Northwest Atlantic Population	Special Concern			S4	3	40.5 ± 0.0		
A	<i>Chrysemys picta</i>	Painted Turtle	Special Concern	Special Concern		S4	115	4.1 ± 0.0	NS	
A	<i>Chrysemys picta picta</i>	Eastern Painted Turtle	Special Concern	Special Concern		S4	917	2.9 ± 10.0	NS	
A	<i>Anarhichas lupus</i>	Atlantic Wolffish	Special Concern	Special Concern		SNR	5	33.6 ± 0.0	NS	
A	<i>Accipiter cooperii</i>	Cooper's Hawk	Not At Risk			S1?B,SUN,SUM	14	26.8 ± 0.0	NS	
A	<i>Fulica americana</i>	American Coot	Not At Risk			S1B	51	35.3 ± 0.0	NS	
A	<i>Chlidonias niger</i>	Black Tern	Not At Risk			S1B	13	70.1 ± 0.0	NS	
A	<i>Falco peregrinus</i> pop. 1	Peregrine Falcon - anatum/tundrius	Not At Risk		Vulnerable	S1B,SUM	251	13.0 ± 0.0	NS	
A	<i>Sorex dispar</i>	Long-tailed Shrew	Not At Risk			S2	2	41.2 ± 0.0	NS	
A	<i>Aegolius funereus</i>	Boreal Owl	Not At Risk			S2?B,SUM	4	47.2 ± 7.0	NS	
A	<i>Lynx canadensis</i>	Canada Lynx	Not At Risk		Endangered	S2S3	2	79.2 ± 1.0	NS	
A	<i>Globicephala melas</i>	Long-finned Pilot Whale	Not At Risk			S2S3	3	60.1 ± 0.0	NS	
A	<i>Hemidactylum scutatum</i>	Four-toed Salamander	Not At Risk			S3	46	1.1 ± 0.0	NS	
A	<i>Megaptera novaeangliae</i>	Humpback Whale	Not At Risk			S3	5	34.6 ± 0.0	NS	
A	<i>Sterna hirundo</i>	Common Tern	Not At Risk			S3B	262	23.7 ± 7.0	NS	
A	<i>Sialia sialis</i>	Eastern Bluebird	Not At Risk			S3B	119	28.2 ± 7.0	NS	
A	<i>Buteo lagopus</i>	Rough-legged Hawk	Not At Risk			S3N	6	61.2 ± 0.0	NS	
A	<i>Accipiter gentilis</i>	Northern Goshawk	Not At Risk			S3S4	167	2.9 ± 7.0	NS	
A	<i>Glaucomys volans</i>	Southern Flying Squirrel	Not At Risk			S3S4	8	26.5 ± 0.0	NS	
A	<i>Lagenorhynchus acutus</i>	Atlantic White-sided Dolphin	Not At Risk			S3S4	5	35.7 ± 0.0	NS	
A	<i>Ammospiza nelsoni</i>	Nelson's Sparrow	Not At Risk			S3S4B	204	8.0 ± 7.0	NS	
A	<i>Calidris canutus rufa</i>	Red Knot rufa subspecies	E,SC	Endangered	Endangered	S2M	973	8.0 ± 0.0	NS	
A	<i>Calidris canutus</i>	Red Knot	E,SC	E,T		S2M	4	61.5 ± 1.0	NS	
A	<i>Morone saxatilis</i>	Striped Bass	E,SC			S2S3B,S2S3N	30	10.1 ± 0.0	NS	
A	<i>Gadus morhua</i>	Atlantic Cod	E,SC,DD			SNR	11	33.6 ± 0.0	NS	
A	<i>Salmo salar</i>	Atlantic Salmon	E,T,SC			S1B,S1N	14	10.4 ± 0.0	NS	
A	<i>Alces alces americana</i>	Moose			Endangered	S1	44	19.1 ± 0.0	NS	
A	<i>Alces alces</i>	Moose				S1	10	19.2 ± 0.0	NS	
A	<i>Uria aalge</i>	Common Murre				S1?B	7	49.9 ± 0.0	NS	
A	<i>Passerina cyanea</i>	Indigo Bunting				S1?B,SUM	47	25.0 ± 7.0	NS	
A	<i>Oxyura jamaicensis</i>	Ruddy Duck				S1B	14	49.8 ± 0.0	NS	
A	<i>Gallinula galeata</i>	Common Gallinule				S1B	12	8.0 ± 7.0	NS	
A	<i>Myiarchus crinitus</i>	Great Crested Flycatcher				S1B	36	23.2 ± 7.0	NS	

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A	<i>Cistothorus palustris</i>	Marsh Wren			S1B	8	75.5 ± 7.0	NS	
A	<i>Mimus polyglottos</i>	Northern Mockingbird			S1B	95	8.0 ± 7.0	NS	
A	<i>Toxostoma rufum</i>	Brown Thrasher			S1B	24	36.5 ± 7.0	NS	
A	<i>Charadrius semipalmatus</i>	Semipalmated Plover			S1B,S4M	2681	8.0 ± 0.0	NS	
A	<i>Calidris minutilla</i>	Least Sandpiper			S1B,S4M	1996	8.0 ± 0.0	NS	
A	<i>Anas acuta</i>	Northern Pintail			S1B,SUM	88	9.0 ± 0.0	NS	
A	<i>Vireo gilvus</i>	Warbling Vireo			S1B,SUM	25	27.7 ± 0.0	NS	
A	<i>Vesperornithidae sp.</i>	bat species			S1S2	337	3.1 ± 0.0	NS	
A	<i>Pooecetes gramineus</i>	Vesper Sparrow			S1S2B,SUM	79	21.4 ± 7.0	NS	
A	<i>Vireo philadelphicus</i>	Philadelphia Vireo			S2?B,SUM	94	46.9 ± 0.0	NS	
A	<i>Alca torda</i>	Razorbill			S2B	26	46.0 ± 0.0	NS	
A	<i>Fratercula arctica</i>	Atlantic Puffin			S2B	31	51.4 ± 0.0	NS	
A	<i>Empidonax traillii</i>	Willow Flycatcher			S2B	43	27.7 ± 0.0	NS	
A	<i>Molothrus ater</i>	Brown-headed Cowbird			S2B	230	8.0 ± 7.0	NS	
A	<i>Spatula clypeata</i>	Northern Shoveler			S2B,SUM	77	8.0 ± 0.0	NS	
A	<i>Mareca strepera</i>	Gadwall			S2B,SUM	94	31.9 ± 7.0	NS	
A	<i>Piranga olivacea</i>	Scarlet Tanager			S2B,SUM	57	12.1 ± 7.0	NS	
A	<i>Calidris alba</i>	Sanderling			S2N,S3M	2362	8.0 ± 0.0	NS	
A	<i>Martes americana</i>	American Marten	Endangered		S2S3	8	69.2 ± 0.0	NS	
A	<i>Asio otus</i>	Long-eared Owl			S2S3	28	21.9 ± 7.0	NS	
A	<i>Rallus limicola</i>	Virginia Rail			S2S3B	49	38.0 ± 7.0	NS	
A	<i>Rissa tridactyla</i>	Black-legged Kittiwake			S2S3B	19	51.4 ± 0.0	NS	
A	<i>Petrochelidon pyrrhonota</i>	Cliff Swallow			S2S3B	371	8.0 ± 7.0	NS	
A	<i>Phalacrocorax carbo</i>	Great Cormorant			S2S3B,S2S3N	71	25.0 ± 0.0	NS	
A	<i>Cathartes aura</i>	Turkey Vulture			S2S3B,S4S5M	189	24.3 ± 0.0	NS	
A	<i>Setophaga pinus</i>	Pine Warbler			S2S3B,S4S5M	64	19.8 ± 7.0	NS	
A	<i>Bucephala clangula</i>	Common Goldeneye			S2S3B,S5N,S5M	287	13.7 ± 11.0	NS	
A	<i>Icterus galbula</i>	Baltimore Oriole			S2S3B,SUM	124	8.0 ± 7.0	NS	
A	<i>Pluvialis dominica</i>	American Golden-Plover			S2S3M	327	8.0 ± 0.0	NS	
A	<i>Numenius phaeopus</i>	Whimbrel			S2S3M	19	29.2 ± 0.0	NS	
A	<i>Numenius phaeopus hudsonicus</i>	Whimbrel			S2S3M	363	24.4 ± 0.0	NS	
A	<i>Phalaropus fulicarius</i>	Red Phalarope			S2S3M	5	59.4 ± 0.0	NS	
A	<i>Perisoreus canadensis</i>	Canada Jay			S3	652	2.9 ± 7.0	NS	
A	<i>Poecile hudsonicus</i>	Boreal Chickadee			S3	559	2.9 ± 7.0	NS	
A	<i>Spinus pinus</i>	Pine Siskin			S3	628	8.0 ± 7.0	NS	
A	<i>Salvelinus fontinalis</i>	Brook Trout			S3	140	2.8 ± 2.0	NS	
A	<i>Salvelinus namaycush</i>	Lake Trout			S3	1	57.8 ± 0.0	NS	
A	<i>Sorex maritimensis</i>	Maritime Shrew			S3	1	28.9 ± 1.0	NS	
A	<i>Synaptomys cooperi</i>	Southern Bog Lemming			S3	1	41.2 ± 0.0	NS	
A	<i>Pekania pennanti</i>	Fisher			S3	17	19.8 ± 0.0	NS	
A	<i>Calcarius lapponicus</i>	Lapland Longspur			S3?N,SUM	7	28.2 ± 0.0	NS	
A	<i>Spatula discors</i>	Blue-winged Teal			S3B	208	8.0 ± 7.0	NS	
A	<i>Charadrius vociferus</i>	Killdeer			S3B	828	2.9 ± 7.0	NS	
A	<i>Tringa semipalmata</i>	Willet			S3B	1840	8.0 ± 7.0	NS	
A	<i>Sterna paradisaea</i>	Arctic Tern			S3B	50	31.3 ± 7.0	NS	
A	<i>Coccyzus erythrophthalmus</i>	Black-billed Cuckoo			S3B	72	28.2 ± 7.0	NS	
A	<i>Tyrannus tyrannus</i>	Eastern Kingbird			S3B	348	2.9 ± 7.0	NS	
A	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak			S3B	617	3.7 ± 0.0	NS	
A	<i>Alosa pseudoharengus</i>	Alewife			S3B	31	9.2 ± 0.0	NS	
A	<i>Somateria mollissima</i>	Common Eider			S3B,S3M,S3N	950	27.8 ± 0.0	NS	
A	<i>Tringa melanoleuca</i>	Greater Yellowlegs			S3B,S4M	2696	8.0 ± 0.0	NS	
A	<i>Falco sparverius</i>	American Kestrel			S3B,S4S5M	393	8.0 ± 7.0	NS	
A	<i>Gallinago delicata</i>	Wilson's Snipe			S3B,S5M	789	8.0 ± 7.0	NS	
A	<i>Setophaga striata</i>	Blackpoll Warbler			S3B,S5M	136	8.5 ± 7.0	NS	
A	<i>Cardellina pusilla</i>	Wilson's Warbler			S3B,S5M	122	10.6 ± 0.0	NS	
A	<i>Pinicola enucleator</i>	Pine Grosbeak			S3B,S5N,S5M	145	8.5 ± 7.0	NS	
A	<i>Setophaga tigrina</i>	Cape May Warbler			S3B,SUM	163	14.2 ± 7.0	NS	

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A	<i>Branta bernicla</i>	Brant			S3M	14	27.8 ± 0.0	NS	
A	<i>Pluvialis squatarola</i>	Black-bellied Plover			S3M	2826	8.0 ± 0.0	NS	
A	<i>Arenaria interpres</i>	Ruddy Turnstone			S3M	1040	8.0 ± 0.0	NS	
A	<i>Calidris pusilla</i>	Semipalmated Sandpiper			S3M	2577	8.0 ± 0.0	NS	
A	<i>Calidris melanotos</i>	Pectoral Sandpiper			S3M	418	8.0 ± 0.0	NS	
A	<i>Limnodromus griseus</i>	Short-billed Dowitcher			S3M	1801	8.0 ± 0.0	NS	
A	<i>Chroicocephalus ridibundus</i>	Black-headed Gull			S3N	29	49.1 ± 0.0	NS	
A	<i>Picoides arcticus</i>	Black-backed Woodpecker			S3S4	154	2.9 ± 7.0	NS	
A	<i>Loxia curvirostra</i>	Red Crossbill			S3S4	287	2.9 ± 7.0	NS	
A	<i>Botaurus lentiginosus</i>	American Bittern			S3S4B,S4S5M	308	2.9 ± 7.0	NS	
A	<i>Setophaga castanea</i>	Bay-breasted Warbler			S3S4B,S4S5M	448	8.5 ± 7.0	NS	
A	<i>Actitis macularius</i>	Spotted Sandpiper			S3S4B,S5M	993	2.9 ± 7.0	NS	
A	<i>Leiothlypis peregrina</i>	Tennessee Warbler			S3S4B,S5M	444	2.9 ± 7.0	NS	
A	<i>Passerella iliaca</i>	Fox Sparrow			S3S4B,S5M	90	30.7 ± 0.0	NS	
A	<i>Mergus serrator</i>	Red-breasted Merganser			S3S4B,S5M,S5N	349	8.0 ± 7.0	NS	
A	<i>Calidris maritima</i>	Purple Sandpiper			S3S4N	262	28.5 ± 10.0	NS	
A	<i>Lanius borealis</i>	Northern Shrike			S3S4N	36	30.0 ± 0.0	NS	
A	<i>Morus bassanus</i>	Northern Gannet			SHB	69	34.3 ± 0.0	NS	
A	<i>Aythya americana</i>	Redhead			SHB	7	49.0 ± 0.0	NS	
A	<i>Leucophaeus atricilla</i>	Laughing Gull			SHB	13	33.6 ± 0.0	NS	
A	<i>Progne subis</i>	Purple Martin			SHB	13	57.4 ± 7.0	NS	
A	<i>Eremophila alpestris</i>	Horned Lark			SHB,S4S5N,S5M	36	27.8 ± 0.0	NS	
I	<i>Bombus bohemicus</i>	Ashton Cuckoo Bumble Bee	Endangered	Endangered	Endangered	S1	32	18.3 ± 5.0	NS
I	<i>Epeoloides pilosulus</i>	Macropis Cuckoo Bee	Endangered	Endangered	Endangered	S1	2	79.9 ± 5.0	NS
I	<i>Danaus plexippus</i>	Monarch	Endangered	Special Concern	Endangered	S2?B,S3M	1195	1.9 ± 0.0	NS
I	<i>Danaus plexippus plexippus</i>	Monarch	Endangered	Special Concern	Endangered	S2?B,S3M	4	3.7 ± 0.0	NS
I	<i>Barnea truncata</i>	Atlantic Mud-piddock	Threatened	Threatened		S1	10	28.2 ± 0.0	NS
I	<i>Bombus suckleyi</i>	Suckley's Cuckoo Bumble Bee	Threatened			SH	4	20.4 ± 5.0	NS
I	<i>Alasmidonta varicosa</i>	Brook Floater	Special Concern	Special Concern	Threatened	S3	11	53.3 ± 0.0	NS
I	<i>Bombus terricola</i>	Yellow-banded Bumble Bee	Special Concern	Special Concern	Vulnerable	S3	206	8.3 ± 3.0	NS
I	<i>Coccinella transversoguttata richardsoni</i>	Transverse Lady Beetle	Special Concern		Endangered	SH	6	9.6 ± 2.0	NS
I	<i>Gomphurus ventricosus</i>	Skillet Clubtail	Special Concern	Endangered		SH	2	15.6 ± 1.0	NS
I	<i>Cicindela formosa</i>	Big Sand Tiger Beetle				S1	1	35.9 ± 1.0	NS
I	<i>Eraora laeta</i>	Early Hairstreak				S1	1	46.9 ± 1.0	NS
I	<i>Ophiogomphus anomalus</i>	Extra-Striped Snaketail				S1	8	98.1 ± 0.0	NS
I	<i>Pachydiplax longipennis</i>	Blue Dasher				S1	28	8.1 ± 0.0	NS
I	<i>Atlanticoncha ochracea</i>	Tidewater Mucket				S1	11	67.3 ± 1.0	NS
I	<i>Polygonia comma</i>	Eastern Comma				S1?	21	24.7 ± 0.0	NS
I	<i>Polygonia satyrus</i>	Satyr Comma				S1?	7	7.7 ± 2.0	NS
I	<i>Boloria chariclea</i>	Arctic Fritillary				S1S2	3	54.4 ± 2.0	NS
I	<i>Somatochlora brevicincta</i>	Quebec Emerald				S1S2	2	63.3 ± 0.0	NS
I	<i>Tharsalea dobspassosi</i>	Maritime Copper				S2	6	49.8 ± 5.0	NS
I	<i>Satyrium acadica</i>	Acadian Hairstreak				S2	6	71.3 ± 2.0	NS
I	<i>Coenagrion resolutum</i>	Taiga Bluet				S2	5	39.2 ± 1.0	NS
I	<i>Margarifera margarifera</i>	Eastern Pearlshell				S2	120	36.0 ± 0.0	NS
I	<i>Pantala hymenaea</i>	Spot-Winged Glider				S2?B	7	51.1 ± 1.0	NS
I	<i>Nymphalis l-album</i>	Compton Tortoiseshell				S2S3	22	36.6 ± 0.0	NS
I	<i>Aglais milberti</i>	Milbert's Tortoiseshell				S2S3	22	39.8 ± 1.0	NS
I	<i>Aglais milberti milberti</i>	Milbert's Tortoise Shell				S2S3	1	99.9 ± 0.0	NB
I	<i>Somatochlora kennedyi</i>	Kennedy's Emerald				S2S3	4	15.6 ± 1.0	NS
I	<i>Somatochlora williamsoni</i>	Williamson's Emerald				S2S3	1	62.7 ± 0.0	NS
I	<i>Williamsonia fletcheri</i>	Ebony Boghaunter				S2S3	5	81.0 ± 0.0	NS
I	<i>Enallagma geminatum</i>	Skimming Bluet				S2S3	2	68.6 ± 0.0	NS
I	<i>Stylurus scudderi</i>	Zebra Clubtail				S2S3	28	41.1 ± 0.0	NS
I	<i>Alasmidonta undulata</i>	Triangle Floater				S2S3	34	23.3 ± 1.0	NS
I	<i>Strophiona nitens</i>	Chestnut Bark Long-horned				S3	4	39.9 ± 0.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
	<i>Psephenus herricki</i>	Beetle Herrick's Water Penny			S3		1	86.0 ± 0.0	NS
	<i>Lebia ornata</i>	Beetle Ornate Harp Ground Beetle			S3		1	82.8 ± 0.0	NS
	<i>Carabus serratus</i>	Serrated Ground Beetle			S3		1	68.2 ± 0.0	NS
	<i>Hippodamia parenthesis</i>	Parenthesis Lady Beetle			S3		3	56.3 ± 0.0	NS
	<i>Disonycha pensylvanica</i>	Pennsylvania Flea Beetle			S3		1	38.1 ± 0.0	NS
	<i>Chrysolochus auratus</i>	Dogbane Leaf Beetle			S3		2	60.6 ± 0.0	NS
	<i>Naemia seriata</i>	Seaside Lady Beetle			S3		43	21.4 ± 0.0	NS
	<i>Pachyrhinus elegans</i>	Elegant Broad-nosed Weevil			S3		1	97.1 ± 0.0	NS
	<i>Elateroides lugubris</i>	Sapwood Ship-timber Beetle			S3		1	47.1 ± 0.0	NS
	<i>Chilocorus stigma</i>	Twice-stabbed Lady Beetle			S3		17	34.0 ± 0.0	NS
	<i>Myzia pullata</i>	Streaked Lady Beetle			S3		5	38.3 ± 0.0	NS
	<i>Monochamus marmorator</i>	Balsam Fir Sawyer			S3		1	36.2 ± 0.0	NS
	<i>Trachysida aspera</i>	Rough Flower Longhorn			S3		2	47.3 ± 0.0	NS
	<i>Dicerca tenebrosa</i>	Beetle Dark Jewel Beetle			S3		1	81.2 ± 0.0	NS
	<i>Dicerca tuberculata</i>	Swollen Jewel Beetle			S3		1	31.0 ± 9.0	NS
	<i>Astylopsis sexguttata</i>	Six-speckled Long-horned			S3		2	37.5 ± 0.0	NS
	<i>Satyrium calanus</i>	Beetle Banded Hairstreak			S3		75	29.7 ± 0.0	NS
	<i>Callophrys lanoraieensis</i>	Bog Elfin			S3		22	22.6 ± 1.0	NS
	<i>Strymon melinus</i>	Gray Hairstreak			S3		14	24.0 ± 2.0	NS
	<i>Phanogomphus descriptus</i>	Harpoon Clubtail			S3		4	83.7 ± 0.0	NS
	<i>Ophiogomphus aspersus</i>	Brook Snaketail			S3		6	4.7 ± 0.0	NS
	<i>Ophiogomphus mainensis</i>	Maine Snaketail			S3		12	31.0 ± 0.0	NS
	<i>Ophiogomphus rupinsulensis</i>	Rusty Snaketail			S3		31	4.7 ± 0.0	NS
	<i>Epitheca princeps</i>	Prince Baskettail			S3		23	35.3 ± 0.0	NS
	<i>Somatochlora forcipata</i>	Forcipate Emerald			S3		5	48.1 ± 1.0	NS
	<i>Enallagma vernale</i>	Vernal Bluet			S3		6	15.6 ± 1.0	NS
	<i>Strophitus undulatus</i>	Creeper			S3		6	86.7 ± 0.0	NS
	<i>Polygonia interrogationis</i>	Question Mark			S3B		215	10.5 ± 1.0	NS
	<i>Lepturopsis biforis</i>	Two-spotted Long-horned			S3S4		1	41.3 ± 0.0	NS
	<i>Cecropterus pylades</i>	Beetle Northern Cloudywing			S3S4		5	63.6 ± 2.0	NS
	<i>Amblyscirtes hegon</i>	Pepper and Salt Skipper			S3S4		29	9.6 ± 5.0	NS
	<i>Cupido comyntas</i>	Eastern Tailed Blue			S3S4		39	9.6 ± 5.0	NS
	<i>Argynnis aphrodite</i>	Aphrodite Fritillary			S3S4		48	15.6 ± 2.0	NS
	<i>Polygonia faunus</i>	Green Comma			S3S4		18	18.1 ± 2.0	NS
	<i>Oeneis jutta</i>	Jutta Arctic			S3S4		26	15.6 ± 2.0	NS
	<i>Aeshna clepsydra</i>	Mottled Darner			S3S4		13	37.2 ± 0.0	NS
	<i>Aeshna constricta</i>	Lance-Tipped Darner			S3S4		28	4.4 ± 1.0	NS
	<i>Boyeria grafiana</i>	Ocellated Darner			S3S4		13	8.1 ± 0.0	NS
	<i>Gomphaeschna furcillata</i>	Harlequin Darner			S3S4		21	8.9 ± 0.0	NS
	<i>Somatochlora franklini</i>	Delicate Emerald			S3S4		6	15.6 ± 1.0	NS
	<i>Erythrodiplax berenice</i>	Seaside Dragonlet			S3S4		7	57.9 ± 0.0	NS
	<i>Nannothemis bella</i>	Elfin Skimmer			S3S4		21	15.6 ± 1.0	NS
	<i>Enallagma vesperum</i>	Vesper Bluet			S3S4		10	23.4 ± 0.0	NS
	<i>Amphiarion saucium</i>	Eastern Red Damself			S3S4		2	75.9 ± 1.0	NS
	<i>Sphaerophoria pyrrhina</i>	Violaceous Globetail			SH		1	76.6 ± 5.0	NS
	<i>Icaricia saepiolus</i>	Greenish Blue			SH		1	46.6 ± 2.0	NS
	<i>Polygonia gracilis</i>	Hoary Comma			SH		1	77.8 ± 2.0	NS
	<i>Eristalis brousii</i>	Hourglass Drone Fly			SX		1	81.2 ± 0.0	NS
N	<i>Erioderma mollissimum</i>	Graceful Felt Lichen	Endangered	Endangered	Endangered	S1	19	45.5 ± 0.0	NS
N	<i>Erioderma pedicellatum</i> (Atlantic pop.)	Boreal Felt Lichen - Atlantic	Endangered	Endangered	Endangered	S1	189	35.3 ± 1.0	NS
N	<i>Peltigera hydrothyria</i>	Eastern Waterfan	Threatened	Threatened	Threatened	S1	145	21.5 ± 0.0	NS
N	<i>Pannaria lurida</i>	Wrinkled Shingle Lichen	Threatened	Threatened	Threatened	S2S3	226	5.7 ± 0.0	NS

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N	<i>Anzia colpodes</i>	Black-foam Lichen	Threatened	Threatened	Threatened	S3	99	18.1 ± 0.0	NS
N	<i>Fuscopannaria leucosticta</i>	White-rimmed Shingle Lichen	Threatened			S3	28	23.4 ± 0.0	NS
N	<i>Heterodermia squamulosa</i>	Scaly Fringe Lichen	Threatened			S3	108	48.0 ± 3.0	NS
N	<i>Pectenia plumbea</i>	Blue Felt Lichen	Special Concern	Special Concern	Vulnerable	S3	207	3.7 ± 0.0	NS
N	<i>Sclerophora peronella</i> (Atlantic pop.)	Frosted Glass-whiskers (Atlantic population)	Special Concern	Special Concern		S3S4	27	23.3 ± 0.0	NS
N	<i>Pseudevernia cladonia</i>	Ghost Antler Lichen	Not At Risk			S2S3	41	34.8 ± 1.0	NS
N	<i>Fissidens exilis</i>	Pygmy Pocket Moss	Not At Risk			S3	17	4.0 ± 0.0	NS
N	<i>Aloina brevirostris</i>	Short-Beaked Rigid Screw Moss				S1	2	2.6 ± 2.0	NS
N	<i>Orthotrichum gymnostomum</i>	Aspen Bristle Moss				S1	1	64.0 ± 0.0	NS
N	<i>Sematophyllum demissum</i>	a Moss				S1	2	37.7 ± 2.0	NS
N	<i>Tetradontium brownianum</i>	Little Georgia				S1	1	96.1 ± 0.0	NS
N	<i>Blepharothallia crispa</i>	Crinkled Jelly Lichen				S1	1	29.1 ± 0.0	NS
N	<i>Umbilicaria vellea</i>	Grizzled Rocktripe Lichen				S1	1	31.0 ± 5.0	NS
N	<i>Usnea perplexans</i>	Powdered Beard Lichen				S1	1	25.1 ± 0.0	NS
N	<i>Scytonium dactylinum</i>	Brown-buttoned Jellyskin Lichen				S1	2	49.0 ± 0.0	NS
N	<i>Lathagrium cristatum</i>	Fingered Jelly Lichen				S1	3	9.1 ± 0.0	NS
N	<i>Ephebe hispidula</i>	Dryside Rockshag Lichen				S1	1	90.2 ± 0.0	NS
N	<i>Ephebe perspinulosa</i>	Thread Lichen				S1	2	48.9 ± 1.0	NS
N	<i>Fuscopannaria praetermissa</i>	Moss Shingles Lichen				S1	1	5.1 ± 0.0	NS
N	<i>Scytonium schraderi</i>	Wrinkled Jellyskin Lichen				S1	1	53.2 ± 0.0	NS
N	<i>Lichina confinis</i>	Marine Seaweed Lichen				S1	2	65.6 ± 0.0	NS
N	<i>Parmotrema perforatum</i>	Perforated Ruffle Lichen				S1	2	97.6 ± 0.0	NS
N	<i>Polychidium muscicola</i>	Eyed Mossthorns Woollybear Lichen				S1	4	74.1 ± 0.0	NS
N	<i>Pseudevernia consocians</i>	Common Antler Lichen				S1	1	73.7 ± 0.0	NS
N	<i>Spilonema revertens</i>	Rock Hairball Lichen				S1	4	97.0 ± 0.0	NS
N	<i>Sticta limbata</i>	Powdered Moon Lichen				S1	12	39.6 ± 3.0	NS
N	<i>Lathagrium fuscovirens</i>	Crumpled Rock Tarpaper Lichen				S1	1	84.9 ± 0.0	NS
N	<i>Dermatocarpon miniatum</i>	Common Stippleback Lichen				S1	1	77.2 ± 0.0	NS
N	<i>Peltigera lepidophora</i>	Scaly Pelt Lichen				S1	8	3.9 ± 0.0	NS
N	<i>Bryoria nitidula</i>	Tundra Horsehair Lichen				S1	2	64.2 ± 0.0	NS
N	<i>Hypogymnia hultenii</i>	Powdered Honeycomb Lichen				S1	13	52.2 ± 0.0	NS
N	<i>Calypogeia neogaea</i>	Common Pouchwort				S1?	2	33.1 ± 0.0	NS
N	<i>Jubula pennsylvanica</i>	a liverwort				S1?	1	6.3 ± 0.0	NS
N	<i>Aloina rigida</i>	Aloe-Like Rigid Screw Moss				S1?	5	2.6 ± 0.0	NS
N	<i>Imbrizbryum muehlenbeckii</i>	Muehlenbeck's Bryum Moss				S1?	2	21.8 ± 0.0	NS
N	<i>Cirriphyllum piliferum</i>	Hair-pointed Moss				S1?	1	80.8 ± 0.0	NS
N	<i>Conardia compacta</i>	Coast Creeping Moss				S1?	1	50.8 ± 2.0	NS
N	<i>Tortula obtusifolia</i>	a Moss				S1?	3	76.9 ± 1.0	NS
N	<i>Didymodon tophaceus</i>	Olive Beard Moss				S1?	2	28.8 ± 4.0	NS
N	<i>Homomallium adnatum</i>	Adnate Hairy-gray Moss				S1?	1	35.8 ± 0.0	NS
N	<i>Paludella squarrosa</i>	Tufted Fen Moss				S1?	3	10.2 ± 0.0	NS
N	<i>Physcomitrium immersum</i>	a Moss				S1?	8	36.3 ± 0.0	NS
N	<i>Schistostega pennata</i>	Luminous Moss				S1?	2	17.6 ± 0.0	NS
N	<i>Trichodon cylindricus</i>	Cylindric Hairy-teeth Moss				S1?	3	55.0 ± 0.0	NS
N	<i>Plagiomnium ellipticum</i>	Marsh Leafy Moss				S1?	1	71.6 ± 0.0	NS
N	<i>Enchylium limosum</i>	Lime-loving Tarpaper Lichen				S1?	2	28.8 ± 4.0	NS
N	<i>Euopsis granatina</i>	Lesser Rockbud Lichen				S1?	1	92.8 ± 1.0	NS
N	<i>Scytonium intermedium</i>	Forty-five Jellyskin Lichen				S1?	1	28.8 ± 4.0	NS
N	<i>Melanelia culbersonii</i>	Appalachian Camouflage Lichen				S1?	1	43.6 ± 0.0	NS
N	<i>Porella pinnata</i>	Pinnate Scalewort				S1S2	2	55.6 ± 0.0	NS

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N	<i>Reboulia hemisphaerica</i>	Purple-margined Liverwort			S1S2		2	76.2 ± 0.0	NS
N	<i>Arrhenopterum heterostichum</i>	One-sided Groove Moss			S1S2		3	2.6 ± 2.0	NS
N	<i>Brachythecium turgidum</i>	Thick Ragged Moss			S1S2		3	61.2 ± 3.0	NS
N	<i>Hypnum pratense</i>	Meadow Plait Moss			S1S2		1	47.7 ± 3.0	NS
N	<i>Mnium thomsonii</i>	Thomson's Leafy Moss			S1S2		1	6.1 ± 2.0	NS
N	<i>Tortula acaulon</i>	Cuspidate Earth Moss			S1S2		5	41.7 ± 0.0	NS
N	<i>Plagiothecium latebricola</i>	Alder Silk Moss			S1S2		2	44.1 ± 5.0	NS
N	<i>Platydictya confervoides</i>	a Moss			S1S2		1	4.0 ± 0.0	NS
N	<i>Seligeria donniana</i>	Donian Beardless Moss			S1S2		1	93.6 ± 3.0	NS
N	<i>Sematophyllum marylandicum</i>	a Moss			S1S2		2	36.5 ± 6.0	NS
N	<i>Timmia megapolitana</i>	Metropolitan Timmia Moss			S1S2		3	49.1 ± 1.0	NS
N	<i>Tortula mucronifolia</i>	Mucronate Screw Moss			S1S2		1	43.0 ± 3.0	NS
N	<i>Syntrichia papillosa</i>	a Moss			S1S2		2	64.3 ± 0.0	NS
N	<i>Pseudotaxiphyllum distichaceum</i>	a Moss			S1S2		2	68.9 ± 0.0	NS
N	<i>Haplocladium microphyllum</i>	Tiny-leaved Haplocladium Moss			S1S2		1	60.3 ± 5.0	NS
N	<i>Rhynchostegium serrulatum</i>	Dark Beaked Moss			S1S2		1	33.5 ± 2.0	NS
N	<i>Enchylium bachmanianum</i>	Bachman's Jelly Lichen			S1S2		2	9.2 ± 0.0	NS
N	<i>Placidium squamulosum</i>	Limy Soil Stipplescale Lichen			S1S2		1	88.9 ± 6.0	NS
N	<i>Pilophorus cereolus</i>	Powdered Matchstick Lichen			S1S2		1	54.8 ± 3.0	NS
N	<i>Rhizoplaca subdiscrepans</i>	Scattered Rock-posy Lichen			S1S2		1	45.1 ± 1.0	NS
N	<i>Parmotrema reticulatum</i>	Netted Ruffle Lichen			S1S2		11	50.9 ± 0.0	NS
N	<i>Parmeliella parvula</i>	Poor-man's Shingles Lichen			S1S2		6	52.3 ± 0.0	NS
N	<i>Chaenotheca hygrophila</i>	a lichen			S1S3		1	94.8 ± 0.0	NS
N	<i>Umbilicaria polyrhiza</i>	Ballpoint Rocktripe Lichen			S1S3		1	87.7 ± 0.0	NS
N	<i>Lecanora polytropa</i>	a lichen			S1S3		3	65.0 ± 1.0	NS
N	<i>Acarospora sinopica</i>	a cracked lichen			S1S3		2	47.0 ± 0.0	NS
N	<i>Heterodermia galactophylla</i>	Branching Fringe Lichen			S1S3		2	45.6 ± 0.0	NS
N	<i>Xylopsora friesii</i>	a Lichen			S1S3		2	50.3 ± 0.0	NS
N	<i>Usnea fragilis</i>	Inflationary Beard Lichen			S1S3		1	95.7 ± 0.0	NS
N	<i>Usnea chaetophora</i>	Articulated Beard Lichen			S1S3		1	80.0 ± 0.0	NS
N	<i>Stereocaulon grande</i>	Grand Foam Lichen			S1S3		1	74.7 ± 0.0	NS
N	<i>Stereocaulon intermedium</i>	Pacific Brain Foam Lichen			S1S3		6	41.2 ± 0.0	NS
N	<i>Anacamptodon splachnoides</i>	a Moss			S2		4	47.7 ± 30.0	NS
N	<i>Sphagnum platyphyllum</i>	Flat-leaved Peat Moss			S2		3	39.7 ± 3.0	NS
N	<i>Sphagnum subnitens</i>	Lustrous Peat Moss			S2		1	93.8 ± 2.0	NS
N	<i>Usnea flavocardia</i>	Blood-splattered Beard Lichen			S2		1	40.1 ± 4.0	NS
N	<i>Cystocoleus ebeneus</i>	Rockgossamer Lichen			S2		6	39.5 ± 0.0	NS
N	<i>Hypotrachyna catawbiensis</i>	Powder-tipped Antler Lichen			S2		25	44.2 ± 0.0	NS
N	<i>Scytonium imbricatum</i>	Scaly Jellyskin Lichen			S2		2	34.4 ± 4.0	NS
N	<i>Nephroma arcticum</i>	Arctic Kidney Lichen			S2		2	58.6 ± 1.0	NS
N	<i>Nephroma resupinatum</i>	a lichen			S2		12	29.6 ± 0.0	NS
N	<i>Placynthium flabellosum</i>	Scaly Ink Lichen			S2		2	64.7 ± 17.0	NS
N	<i>Cololejeunea biddlecomiae</i>	Biddlecome's Pouncewort			S2?		1	70.4 ± 0.0	NS
N	<i>Moerckia flotoviana</i>	Flotow's Ruffwort			S2?		1	29.7 ± 0.0	NS
N	<i>Riccardia multifida</i>	Delicate Germanderwort			S2?		3	24.3 ± 0.0	NS
N	<i>Anomodon viticulosus</i>	a Moss			S2?		2	45.2 ± 0.0	NS
N	<i>Weissia muhlenbergiana</i>	a Moss			S2?		6	6.1 ± 1.0	NS
N	<i>Atrichum angustatum</i>	Lesser Smoothcap Moss			S2?		2	60.5 ± 5.0	NS
N	<i>Ptychostomum pendulum</i>	Drooping Bryum			S2?		1	2.6 ± 2.0	NS
N	<i>Drepanocladus polygamus</i>	Polygamous Hook Moss			S2?		8	28.8 ± 4.0	NS
N	<i>Pseudocampylium radicans</i>	Long-stalked Fine Wet Moss			S2?		1	47.7 ± 3.0	NS
N	<i>Climaciump americanum</i>	American Tree Moss			S2?		1	84.7 ± 0.0	NS

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	<i>Dicranum condensatum</i>	Condensed Broom Moss			S2?		3	42.1 ± 0.0	NS
N	<i>Ditrichum rhyndostegium</i>	a Moss			S2?		1	39.6 ± 1.0	NS
N	<i>Fissidens bushii</i>	Bush's Pocket Moss			S2?		10	76.9 ± 0.0	NS
N	<i>Fontinalis sullivantii</i>	Sullivant's Water Moss			S2?		1	98.2 ± 0.0	NS
N	<i>Grimmia anomala</i>	Mountain Forest Grimmia			S2?		1	48.2 ± 1.0	NS
N	<i>Hygrohypnum bestii</i>	Best's Brook Moss			S2?		1	81.7 ± 0.0	NS
N	<i>Kiaeria starkei</i>	Starke's Fork Moss			S2?		1	79.8 ± 10.0	NS
N	<i>Orthotrichum anomalum</i>	Anomalous Bristle Moss			S2?		2	8.3 ± 2.0	NS
N	<i>Philonotis marchica</i>	a Moss			S2?		2	86.3 ± 0.0	NS
N	<i>Physcomitrium</i>								NS
	<i>collenchymatum</i>								
N	<i>Platydictya</i>								
	<i>jungermanniooides</i>	False Willow Moss			S2?		1	55.3 ± 0.0	NS
N	<i>Saelania glaucescens</i>	Blue Dew Moss			S2?		1	99.4 ± 0.0	NS
N	<i>Cyrtomnium</i>								
	<i>hymenophylloides</i>	Short-pointed Lantern Moss			S2?		2	48.3 ± 5.0	NS
N	<i>Platylomella lescurii</i>	a Moss			S2?		8	20.9 ± 0.0	NS
N	<i>Phylliscum demangeorii</i>	Black Rock-wafer Lichen			S2?		6	14.0 ± 0.0	NS
N	<i>Oxyrrhynchium hians</i>	Light Beaked Moss			S2S3		5	5.5 ± 0.0	NS
N	<i>Platydictya subtilis</i>	Bark Willow Moss			S2S3		4	57.4 ± 3.0	NS
N	<i>Plagiomnium rostratum</i>	Long-beaked Leafy Moss			S2S3		1	60.1 ± 2.0	NS
N	<i>Scorpidium revolvens</i>	Limprechtia Moss			S2S3		3	10.2 ± 0.0	NS
N	<i>Moelleropsis nebulosa</i>	Blue-gray Moss Shingle			S2S3		35	32.0 ± 1.0	NS
N	<i>Moelleropsis nebulosa</i> ssp. <i>frullaniae</i>	Lichen			S2S3		3	79.8 ± 0.0	NS
N	<i>Ramalina thrausta</i>	Angelhair Ramalina Lichen			S2S3		11	59.5 ± 5.0	NS
N	<i>Collema leptaleum</i>	Crumpled Bat's Wing Lichen			S2S3		92	4.2 ± 0.0	NS
N	<i>Usnea ceratina</i>	Warty Beard Lichen			S2S3		3	50.7 ± 0.0	NS
N	<i>Usnea rubicunda</i>	Red Beard Lichen			S2S3		7	25.1 ± 0.0	NS
N	<i>Ahtiana aurescens</i>	Eastern Candlewax Lichen			S2S3		18	14.1 ± 2.0	NS
N	<i>Usnocetraria oakesiana</i>	Yellow Band Lichen			S2S3		15	16.5 ± 0.0	NS
N	<i>Cladonia mateocyatha</i>	Mixed-up Pixie-cup			S2S3		5	14.9 ± 6.0	NS
N	<i>Cladonia parasitica</i>	Fence-rail Lichen			S2S3		3	27.9 ± 0.0	NS
N	<i>Chaenotheca gracilenta</i>	a lichen			S2S3		1	51.0 ± 0.0	NS
N	<i>Scytonium tenuissimum</i>	Birdnest Jellyskin Lichen			S2S3		9	3.9 ± 0.0	NS
N	<i>Melanohalea septentrionalis</i>	Northern Camouflage Lichen			S2S3		1	25.3 ± 0.0	NS
N	<i>Myelochroa aurulenta</i>	Powdery Axil-bristle Lichen			S2S3		6	29.9 ± 2.0	NS
N	<i>Parmelia fertilis</i>	Fertile Shield Lichen			S2S3		10	18.1 ± 0.0	NS
N	<i>Hypotrachyna minarum</i>	Hairless-spined Shield			S2S3		7	50.4 ± 0.0	NS
N	<i>Parmeliopsis ambigua</i>	Lichen			S2S3		2	30.8 ± 2.0	NS
N	<i>Racodium rupestre</i>	Green Starburst Lichen			S2S3		4	32.0 ± 1.0	NS
N	<i>Umbilicaria polyphylla</i>	Rockhair Lichen			S2S3		2	30.8 ± 2.0	NS
N	<i>Usnea cavernosa</i>	Petalled Rocktripe Lichen			S2S3		4	25.1 ± 0.0	NS
N	<i>Usnea mutabilis</i>	Pitted Beard Lichen			S2S3		1	25.1 ± 0.0	NS
N	<i>Fuscopannaria sorediata</i>	Bloody Beard Lichen			S2S3		8	32.0 ± 1.0	NS
N	<i>Stereocaulon condensatum</i>	a Lichen			S2S3		3	55.6 ± 0.0	NS
N	<i>Physcia subtilis</i>	Granular Soil Foam Lichen			S2S3		2	57.4 ± 0.0	NS
N	<i>Dimelaena oreina</i>	Slender Rosette Lichen			S2S3		2	57.1 ± 0.0	NS
N	<i>Hypotrachyna revoluta</i>	Golden Moonglow Lichen			S2S3		1	79.5 ± 2.0	NS
N	<i>Cetraria arenaria</i>	Granulating Loop Lichen			S2S3		33	64.7 ± 0.0	NS
N	<i>Cladonia coccifera</i>	Sand-loving Icelandmoss			S2S3		3	49.1 ± 4.0	NS
N	<i>Cladonia deformis</i>	Lichen			S2S3		3	22.0 ± 4.0	NS
N	<i>Cladonia phyllophora</i>	Lesser Sulphur-cup Lichen			S2S3		2	42.6 ± 4.0	NS
N	<i>Hypotrachyna afrorevoluta</i>	Felt Lichen			S2S3		3	79.7 ± 0.0	NS
N		Pustulate Revolute Loop							

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	<i>Usnea flammnea</i>	Lichen			S2S3		2	65.5 ± 1.0	NS
N	<i>Ephemerum serratum</i>	Coastal Bushy Beard Lichen a Moss			S3		6	7.7 ± 5.0	NS
N	<i>Fissidens taxifolius</i>	Yew-leaved Pocket Moss			S3		17	2.6 ± 2.0	NS
N	<i>Anomodon tristis</i>	a Moss			S3		11	42.3 ± 0.0	NS
N	<i>Sphagnum contortum</i>	Twisted Peat Moss			S3		6	32.7 ± 0.0	NS
N	<i>Tetrapodon angustatus</i>	Toothed-leaved Nitrogen Moss			S3		5	81.6 ± 0.0	NS
N	<i>Rostania occultata</i>	Crusted Tarpaper Lichen			S3		8	49.7 ± 0.0	NS
N	<i>Collema nigrescens</i>	Blistered Tarpaper Lichen			S3		43	9.1 ± 0.0	NS
N	<i>Solorina saccata</i>	Woodland Owl Lichen			S3		11	9.3 ± 0.0	NS
N	<i>Fuscopannaria ahlneri</i>	Corrugated Shingles Lichen			S3		79	18.1 ± 0.0	NS
N	<i>Scutinium lichenoides</i>	Tattered Jellyskin Lichen			S3		32	3.8 ± 0.0	NS
N	<i>Leptogium milligranum</i>	Stretched Jellyskin Lichen			S3		26	10.5 ± 0.0	NS
N	<i>Nephroma bellum</i>	Naked Kidney Lichen			S3		13	28.1 ± 0.0	NS
N	<i>Placynthium nigrum</i>	Common Ink Lichen			S3		1	90.3 ± 0.0	NS
N	<i>Platismatia norvegica</i>	Oldgrowth Rag Lichen			S3		1	96.3 ± 0.0	NS
N	<i>Punctelia appalachensis</i>	Appalachian Speckleback Lichen			S3		150	42.5 ± 0.0	NS
N	<i>Viridothelium virens</i>	a lichen			S3		4	10.9 ± 0.0	NS
N	<i>Ephebe lanata</i>	Waterside Rockshag Lichen			S3		6	21.8 ± 0.0	NS
N	<i>Phaeophyscia adiastola</i>	Powder-tipped Shadow Lichen			S3		19	49.9 ± 0.0	NS
N	<i>Phaeophyscia pusilloides</i>	Pompom-tipped Shadow Lichen			S3		11	15.8 ± 1.0	NS
N	<i>Peltigera collina</i>	Tree Pelt Lichen			S3		11	5.2 ± 2.0	NS
N	<i>Metzgeria conjugata</i>	Rock Veilwort			S3?		2	70.6 ± 0.0	NS
N	<i>Barbula convoluta</i>	Lesser Bird's-claw Beard Moss			S3?		4	3.9 ± 0.0	NS
N	<i>Calliergon giganteum</i>	Giant Spear Moss			S3?		3	6.6 ± 3.0	NS
N	<i>Drummondia prorepens</i>	a Moss			S3?		5	9.7 ± 5.0	NS
N	<i>Elodium blandowii</i>	Blandow's Bog Moss			S3?		6	4.5 ± 0.0	NS
N	<i>Mnium stellare</i>	Star Leafy Moss			S3?		3	4.3 ± 0.0	NS
N	<i>Sphagnum riparium</i>	Streamsde Peat Moss			S3?		4	72.3 ± 1.0	NS
N	<i>Cladonia stygia</i>	Black-footed Reindeer Lichen			S3?		9	52.8 ± 0.0	NS
N	<i>Anomodon rugelii</i>	Rugel's Anomodon Moss			S3S4		5	42.3 ± 0.0	NS
N	<i>Dichelyma capillaceum</i>	Hairlike Dichelyma Moss			S3S4		3	37.3 ± 3.0	NS
N	<i>Dicranum leioneuron</i>	a Dicranum Moss			S3S4		1	51.9 ± 0.0	NS
N	<i>Encalypta ciliata</i>	Fringed Extinguisher Moss			S3S4		2	43.0 ± 3.0	NS
N	<i>Encalypta procura</i>	Slender Extinguisher Moss			S3S4		2	92.1 ± 0.0	NS
N	<i>Myurella julacea</i>	Small Mouse-tail Moss			S3S4		2	97.0 ± 0.0	NS
N	<i>Splachnum ampullaceum</i>	Cruet Dung Moss			S3S4		3	76.6 ± 0.0	NS
N	<i>Thamnobryum alleghaniense</i>	a Moss			S3S4		21	24.9 ± 0.0	NS
N	<i>Tomentypnum nitens</i>	Golden Fuzzy Fen Moss			S3S4		4	10.2 ± 0.0	NS
N	<i>Schistidium agassizii</i>	Elf Bloom Moss			S3S4		4	48.2 ± 1.0	NS
N	<i>Hylocomiastrium pyrenaicum</i>	a Feather Moss			S3S4		5	50.2 ± 0.0	NS
N	<i>Bryoria pseudofuscescens</i>	Mountain Horsehair Lichen			S3S4		8	18.8 ± 5.0	NS
N	<i>Enchylium tenax</i>	Soil Tarpaper Lichen			S3S4		11	9.1 ± 0.0	NS
N	<i>Sticta fuliginosa</i>	Peppered Moon Lichen			S3S4		69	21.1 ± 0.0	NS
N	<i>Arctoparmelia incurva</i>	Finger Ring Lichen			S3S4		87	34.6 ± 0.0	NS
N	<i>Scutinium teretiusculum</i>	Curly Jellyskin Lichen			S3S4		23	3.1 ± 0.0	NS
N	<i>Leptogium acadiense</i>	Acadian Jellyskin Lichen			S3S4		57	3.8 ± 0.0	NS
N	<i>Scutinium subtile</i>	Appressed Jellyskin Lichen			S3S4		36	2.8 ± 0.0	NS
N	<i>Felipes leucopellaeus</i>	a lichen			S3S4		2	85.5 ± 0.0	NS
N	<i>Cladonia floerkeana</i>	Gritty British Soldiers Lichen			S3S4		4	27.3 ± 0.0	NS
N	<i>Vahliella leucophaea</i>	Shelter Shingle Lichen			S3S4		18	46.9 ± 0.0	NS
N	<i>Heterodermia speciosa</i>	Powdered Fringe Lichen			S3S4		84	22.1 ± 0.0	NS

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N	<i>Leptogium corticola</i>	Blistered Jellyskin Lichen			S3S4	96	4.2 ± 0.0	NS	
N	<i>Melanohalea olivacea</i>	Spotted Camouflage Lichen			S3S4	5	25.1 ± 0.0	NS	
N	<i>Parmeliopsis hyperopta</i>	Gray Starburst Lichen			S3S4	3	62.1 ± 0.0	NS	
N	<i>Parmotrema perlatum</i>	Powdered Ruffle Lichen			S3S4	53	50.8 ± 0.0	NS	
N	<i>Peltigera hymenina</i>	Cloudy Pelt Lichen			S3S4	2	64.6 ± 2.0	NS	
N	<i>Sphaerophorus fragilis</i>	Fragile Coral Lichen			S3S4	11	51.1 ± 3.0	NS	
N	<i>Sclerophora peronella</i>	Frosted Glass-whiskers Lichen			S3S4	3	41.4 ± 0.0	NS	
N	<i>Coccocarpia palmicola</i>	Salted Shell Lichen			S3S4	232	14.1 ± 0.0	NS	
N	<i>Physcia caesia</i>	Blue-gray Rosette Lichen			S3S4	3	47.5 ± 0.0	NS	
N	<i>Physcia tenella</i>	Fringed Rosette Lichen			S3S4	7	45.3 ± 0.0	NS	
N	<i>Anaptychia palmulata</i>	Shaggy Fringed Lichen			S3S4	193	19.1 ± 0.0	NS	
N	<i>Evernia prunastri</i>	Valley Oakmoss Lichen			S3S4	43	2.4 ± 0.0	NS	
N	<i>Heterodermia neglecta</i>	Fringe Lichen			S3S4	128	15.1 ± 0.0	NS	
P	<i>Rhynchospora macrostachya</i>	Tall Beakrush	Endangered	Endangered	Endangered	S1	7	87.1 ± 0.0	NS
P	<i>Clethra alnifolia</i>	Coast Pepper-Bush	Endangered	Threatened	Vulnerable	S2	32	52.1 ± 0.0	NS
P	<i>Fraxinus nigra</i>	Black Ash	Threatened		Threatened	S1S2	1406	3.2 ± 0.0	NS
P	<i>Lachnanthes caroliniana</i>	Redroot	Special Concern	Special Concern	Vulnerable	S2	1483	86.5 ± 0.0	NS
P	<i>Lophiola aurea</i>	Goldcrest	Special Concern	Special Concern	Vulnerable	S2	792	77.8 ± 0.0	NS
P	<i>Lilaeopsis chinensis</i>	Eastern Lilaeopsis	Special Concern	Special Concern	Vulnerable	S3	161	71.3 ± 1.0	NS
P	<i>Scirpus longii</i>	Long's Bulrush	Special Concern		Vulnerable	S3	339	77.6 ± 0.0	NS
P	<i>Isoetes prototypus</i>	Prototype Quillwort	Special Concern	Special Concern	Vulnerable	S3	18	61.2 ± 0.0	NS
P	<i>Floerkea proserpinacoides</i>	False Mermaidweed		Not At Risk		S2S3	39	41.3 ± 1.0	NS
P	<i>Acer saccharinum</i>	Silver Maple				S1	12	27.5 ± 0.0	NS
P	<i>Osmorrhiza depauperata</i>	Blunt Sweet Cicely				S1	1	29.4 ± 5.0	NS
P	<i>Antennaria rosea</i> ssp. <i>arida</i>	Rosy Pussytoes				S1	1	68.6 ± 0.0	NS
P	<i>Andersonglossum boreale</i>	Northern Wild Comfrey				S1	5	5.4 ± 1.0	NS
P	<i>Turritis glabra</i>	Tower Mustard				S1	1	49.1 ± 0.0	NS
P	<i>Lobelia spicata</i>	Pale-Spiked Lobelia				S1	8	35.3 ± 7.0	NS
P	<i>Silene antirrhina</i>	Sleepy Catchfly				S1	5	66.8 ± 0.0	NS
P	<i>Astragalus robbinsii</i> var. <i>minor</i>	Robbins' Milkvetch				S1	32	68.6 ± 0.0	NS
P	<i>Ribes americanum</i>	Wild Black Currant				S1	4	7.7 ± 3.0	NS
P	<i>Trichostema dichotomum</i>	Forked Bluecurls				S1	9	83.4 ± 0.0	NS
P	<i>Fraxinus pennsylvanica</i>	Red Ash				S1	14	13.2 ± 2.0	NS
P	<i>Persicaria careyi</i>	Carey's Smartweed				S1	1	70.6 ± 3.0	NS
P	<i>Phytolacca americana</i>	Common Pokeweed				S1	4	37.7 ± 0.0	NS
P	<i>Podostemum ceratophyllum</i>	Horn-leaved Riverweed				S1	4	68.5 ± 0.0	NS
P	<i>Montia fontana</i>	Water Blinks				S1	3	50.1 ± 1.0	NS
P	<i>Lysimachia quadrifolia</i>	Whorled Yellow Loosestrife				S1	1	28.5 ± 0.0	NS
P	<i>Clematis occidentalis</i>	Purple Clematis				S1	3	94.9 ± 0.0	NS
P	<i>Ranunculus pensylvanicus</i>	Pennsylvania Buttercup				S1	31	85.4 ± 0.0	NS
P	<i>Amelanchier nantucketensis</i>	Nantucket Serviceberry				S1	1	57.4 ± 1.0	NS
P	<i>Salix myrtillifolia</i>	Blueberry Willow				S1	1	69.1 ± 0.0	NS
P	<i>Salix serissima</i>	Autumn Willow				S1	2	69.1 ± 0.0	NS
P	<i>Scrophularia lanceolata</i>	Lance-leaved Figwort				S1	2	64.4 ± 1.0	NS
P	<i>Carex digitalis</i>	Slender Wood Sedge				S1	2	93.2 ± 0.0	NS
P	<i>Carex garberi</i>	Garber's Sedge				S1	4	87.9 ± 0.0	NS
P	<i>Carex laxiflora</i>	Loose-Flowered Sedge				S1	3	41.2 ± 1.0	NS
P	<i>Carex ormostachya</i>	Necklace Spike Sedge				S1	4	51.7 ± 5.0	NS
P	<i>Carex plantaginea</i>	Plantain-Leaved Sedge				S1	2	80.7 ± 0.0	NS
P	<i>Carex prairea</i>	Prairie Sedge				S1	2	43.2 ± 1.0	NS
P	<i>Carex viridula</i> var. <i>saxillitoralis</i>	Greenish Sedge				S1	1	47.5 ± 0.0	NS
P	<i>Scirpus atrovirens</i>	Dark-green Bulrush				S1	4	6.2 ± 0.0	NS
P	<i>Schoenoplectus torreyi</i>	Torrey's Bulrush				S1	6	79.9 ± 0.0	NS
P	<i>Iris prismatica</i>	Slender Blue Flag				S1	1	43.3 ± 100.0	NS

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P	<i>Sisyrinchium fuscatum</i>	Coastal Plain Blue-eyed-grass			S1		3	68.5 ± 0.0	NS
P	<i>Juncus secundus</i>	Secund Rush			S1		2	47.0 ± 0.0	NS
P	<i>Juncus vaseyi</i>	Vasey Rush			S1		2	75.5 ± 0.0	NS
P	<i>Trillium grandiflorum</i>	White Trillium			S1		3	43.2 ± 1.0	NS
P	<i>Malaxis monophyllos</i> var. <i>brachypoda</i>	North American White Adder's-mouth			S1		6	35.3 ± 10.0	NS
P	<i>Spiranthes casei</i> var. <i>casei</i>	Case's Ladies'-Tresses			S1		1	29.3 ± 0.0	NS
P	<i>Dichanthelium xanthophysum</i>	Slender Panic Grass			S1		10	69.8 ± 0.0	NS
P	<i>Elymus hystrix</i>	Spreading Wild Rye			S1		11	6.4 ± 0.0	NS
P	<i>Torreyochloa pallida</i> var. <i>pallida</i>	Pale False Manna Grass			S1		2	65.8 ± 1.0	NS
P	<i>Adiantum pedatum</i>	Northern Maidenhair Fern			S1		26	2.9 ± 10.0	NS
P	<i>Dryopteris goldieana</i>	Goldie's Woodfern			S1		1	60.9 ± 1.0	NS
P	<i>Equisetum palustre</i>	Marsh Horsetail			S1		1	38.2 ± 5.0	NS
P	<i>Botrychium lunaria</i>	Common Moonwort			S1		10	63.2 ± 0.0	NS
P	<i>Selaginella rupestris</i>	Rock Spikemoss			S1		1	5.0 ± 0.0	NS
P	<i>Solidago hispida</i>	Hairy Goldenrod			S1?		1	49.9 ± 7.0	NS
P	<i>Suaeda rolandii</i>	Roland's Sea-Blite			S1?		6	5.5 ± 2.0	NS
P	<i>Carex pensylvanica</i>	Pennsylvania Sedge			S1?		4	42.3 ± 0.0	NS
P	<i>Juncus antarcticus</i>	Greater Poverty Rush			S1?		1	79.5 ± 0.0	NS
P	<i>Allium schoenoprasum</i>	Wild Chives			S1?		2	39.6 ± 0.0	NS
P	<i>Allium schoenoprasum</i> var. <i>sibiricum</i>	Wild Chives			S1?		1	75.3 ± 7.0	NS
P	<i>Huperzia selago</i>	Northern Firmoss			S1?		1	82.1 ± 1.0	NS
P	<i>Crocanthemum canadense</i>	Long-branched Frostweed		Endangered	S1S2		151	36.4 ± 1.0	NS
P	<i>Cypripedium arietinum</i>	Ram's-Head Lady's-Slipper			S1S2		329	3.8 ± 0.0	NS
P	<i>Sanicula odorata</i>	Clustered Sanicle			S1S2		10	6.5 ± 0.0	NS
P	<i>Ageratina altissima</i>	White Snakeroot			S1S2		23	69.1 ± 0.0	NS
P	<i>Draba glabella</i>	Rock Whitlow-Grass			S1S2		6	43.8 ± 0.0	NS
P	<i>Proserpinaca intermedia</i>	Intermediate Mermaidweed			S1S2		5	44.0 ± 2.0	NS
P	<i>Anemone virginiana</i> var. <i>alba</i>	Virginia Anemone			S1S2		5	75.3 ± 7.0	NS
P	<i>Carex haydenii</i>	Hayden's Sedge			S1S2		5	36.1 ± 1.0	NS
P	<i>Platanthera huronensis</i>	Fragrant Green Orchid			S1S2		2	11.3 ± 10.0	NS
P	<i>Calamagrostis stricta</i> ssp. <i>stricta</i>	Slim-stemmed Reed Grass			S1S2		5	68.8 ± 7.0	NS
P	<i>Euphrasia farlowii</i>	Farlow's Eyebright			S1S3		2	86.6 ± 0.0	NS
P	<i>Zizia aurea</i>	Golden Alexanders			S2		41	31.9 ± 0.0	NS
P	<i>Antennaria parlinii</i> ssp. <i>fallax</i>	Parlin's Pussytoes			S2		37	2.6 ± 0.0	NS
P	<i>Rudbeckia laciniata</i>	Cut-Leaved Coneflower			S2		33	3.7 ± 0.0	NS
P	<i>Arabis pycnocarpa</i>	Cream-flowered Rockcress			S2		2	49.0 ± 0.0	NS
P	<i>Cardamine maxima</i>	Large Toothwort			S2		20	29.4 ± 0.0	NS
P	<i>Hudsonia ericoides</i>	Pinebarren Golden Heather			S2		314	38.4 ± 0.0	NS
P	<i>Desmodium canadense</i>	Canada Tick-trefoil			S2		13	31.5 ± 1.0	NS
P	<i>Hydrodesmum glutinosum</i>	Large Tick-trefoil			S2		37	8.6 ± 0.0	NS
P	<i>Oxytropis campestris</i> var. <i>johannensis</i>	Field Locoweed			S2		27	68.6 ± 0.0	NS
P	<i>Conopholis americana</i>	American Cancer-root			S2		37	36.2 ± 1.0	NS
P	<i>Anemonastrum canadense</i>	Canada Anemone			S2		17	4.0 ± 0.0	NS
P	<i>Hepatica americana</i>	Round-lobed Hepatica			S2		83	2.4 ± 3.0	NS
P	<i>Ranunculus sceleratus</i>	Cursed Buttercup			S2		24	38.2 ± 1.0	NS
P	<i>Galium boreale</i>	Northern Bedstraw			S2		8	35.3 ± 7.0	NS
P	<i>Gratiola neglecta</i>	Clammy Hedge-Hyssop			S2		6	51.1 ± 0.0	NS
P	<i>Dirca palustris</i>	Eastern Leatherwood			S2		75	4.3 ± 0.0	NS
P	<i>Carex gynocrates</i>	Northern Bog Sedge			S2		2	69.1 ± 0.0	NS
P	<i>Carex pellita</i>	Woolly Sedge			S2		4	86.8 ± 0.0	NS

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P	<i>Carex livida</i>	Livid Sedge			S2	13	8.1 ± 10.0	NS	
P	<i>Juncus greenei</i>	Greene's Rush			S2	5	29.6 ± 0.0	NS	
P	<i>Allium tricoccum</i>	Wild Leek			S2	108	29.5 ± 0.0	NS	
P	<i>Lilium canadense</i>	Canada Lily			S2	94	2.9 ± 7.0	NS	
P	<i>Cypripedium parviflorum var. pubescens</i>	Yellow Lady's-slipper			S2	27	3.9 ± 0.0	NS	
P	<i>Cypripedium parviflorum var. makasin</i>	Small Yellow Lady's-Slipper			S2	13	3.9 ± 0.0	NS	
P	<i>Cypripedium reginae</i>	Showy Lady's-Slipper			S2	58	8.1 ± 0.0	NS	
P	<i>Platanthera flava var. flava</i>	Southern Rein Orchid			S2	16	28.2 ± 7.0	NS	
P	<i>Platanthera flava var. herbola</i>	Pale Green Orchid			S2	30	27.3 ± 1.0	NS	
P	<i>Platanthera macrophylla</i>	Large Round-Leaved Orchid			S2	6	13.0 ± 1.0	NS	
P	<i>Bromus latiglumis</i>	Broad-Glumed Brome			S2	33	79.4 ± 0.0	NS	
P	<i>Cinna arundinacea</i>	Sweet Wood Reed Grass			S2	60	43.2 ± 0.0	NS	
P	<i>Elymus wiegandii</i>	Wiegand's Wild Rye			S2	13	49.9 ± 7.0	NS	
P	<i>Festuca subverticillata</i>	Nodding Fescue			S2	15	17.9 ± 7.0	NS	
P	<i>Piptatheropsis pungens</i>	Slender Ricegrass			S2	11	66.6 ± 0.0	NS	
P	<i>Cryptogramma stelleri</i>	Steller's Rockbrake			S2	3	8.2 ± 0.0	NS	
P	<i>Cuscuta cephalanthi</i>	Buttonbush Dodder			S2?	2	34.4 ± 0.0	NS	
P	<i>Rumex persicariaoides</i>	Peach-leaved Dock			S2?	1	42.9 ± 0.0	NS	
P	<i>Crataegus submollis</i>	Quebec Hawthorn			S2?	5	4.5 ± 1.0	NS	
P	<i>Carex peckii</i>	White-Tinged Sedge			S2?	4	7.6 ± 5.0	NS	
P	<i>Thuja occidentalis</i>	Eastern White Cedar		Vulnerable	S2S3	1090	3.9 ± 0.0	NS	
P	<i>Osmorhiza longistylis</i>	Smooth Sweet Cicely			S2S3	22	9.1 ± 0.0	NS	
P	<i>Bidens hyperborea</i>	Estuary Beggarticks			S2S3	2	94.3 ± 0.0	NS	
P	<i>Erigeron philadelphicus</i>	Philadelphia Fleabane			S2S3	5	82.2 ± 0.0	NS	
P	<i>Eutrochium dubium</i>	Coastal Plain Joe Pye Weed			S2S3	2	95.9 ± 0.0	NS	
P	<i>Lactuca hirsuta</i>	Hairy Lettuce			S2S3	5	25.8 ± 1.0	NS	
P	<i>Impatiens pallida</i>	Pale Jewelweed			S2S3	13	43.5 ± 1.0	NS	
P	<i>Caulophyllum thalictroides</i>	Blue Cohosh			S2S3	116	7.8 ± 1.0	NS	
P	<i>Draba arabisans</i>	Rock Whitlow-Grass			S2S3	30	41.2 ± 1.0	NS	
P	<i>Boechera stricta</i>	Drummond's Rockcress			S2S3	16	41.2 ± 1.0	NS	
P	<i>Stellaria humifusa</i>	Saltmarsh Starwort			S2S3	14	49.0 ± 1.0	NS	
P	<i>Hypericum majus</i>	Large St John's-wort			S2S3	21	31.6 ± 10.0	NS	
P	<i>Hypericum x dissimilatum</i>	Disguised St. John's-wort			S2S3	9	36.7 ± 0.0	NS	
P	<i>Empetrum atropurpureum</i>	Purple Crowberry			S2S3	5	42.8 ± 7.0	NS	
P	<i>Euphorbia polygonifolia</i>	Seaside Spurge			S2S3	12	57.6 ± 3.0	NS	
P	<i>Myriophyllum farwellii</i>	Farwell's Water Milfoil			S2S3	10	16.8 ± 1.0	NS	
P	<i>Hedemora pulegioides</i>	American False Pennyroyal			S2S3	19	28.8 ± 2.0	NS	
P	<i>Oenothera fruticosa</i> ssp. <i>tetragona</i>	Narrow-leaved Evening Primrose			S2S3	8	2.9 ± 7.0	NS	
P	<i>Polygala polygama</i>	Racemed Milkwort			S2S3	5	49.1 ± 1.0	NS	
P	<i>Polygonum aviculare</i> ssp. <i>buxiforme</i>	Box Knotweed			S2S3	8	8.4 ± 0.0	NS	
P	<i>Polygonum oxyspermum</i> ssp. <i>raii</i>	Ray's Knotweed			S2S3	3	42.1 ± 1.0	NS	
P	<i>Polygonum oxyspermum</i>	Sharp-fruit Knotweed			S2S3	1	33.6 ± 0.0	NS	
P	<i>Rumex triangulivalvis</i>	Triangular-valve Dock			S2S3	12	3.7 ± 0.0	NS	
P	<i>Primula mistassinica</i>	Mistassini Primrose			S2S3	17	75.3 ± 7.0	NS	
P	<i>Anemone quinquefolia</i>	Wood Anemone			S2S3	42	50.6 ± 0.0	NS	
P	<i>Caltha palustris</i>	Yellow Marsh Marigold			S2S3	32	8.2 ± 0.0	NS	
P	<i>Amelanchier alnifolia</i>	Fernald's Serviceberry			S2S3	2	66.9 ± 7.0	NS	
P	<i>Potentilla canadensis</i>	Canada Cinquefoil			S2S3	10	27.9 ± 0.0	NS	
P	<i>Galium obtusum</i>	Blunt-leaved Bedstraw			S2S3	3	78.6 ± 0.0	NS	
P	<i>Salix pellita</i>	Satin Willow			S2S3	10	64.4 ± 4.0	NS	
P	<i>Tiarella cordifolia</i>	Heart-leaved Foamflower			S2S3	24	52.1 ± 0.0	NS	
P	<i>Agalinis purpurea</i> var.	Small-flowered Purple False			S2S3	1	64.3 ± 0.0	NS	

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>parviflora</i>	Foxglove			S2S3	60	47.5 ± 0.0		NS
P	<i>Boehmeria cylindrica</i>	Small-spike False-nettle			S2S3	11	43.7 ± 0.0		NS
P	<i>Carex adusta</i>	Lesser Brown Sedge			S2S3	9	57.3 ± 0.0		NS
P	<i>Carex capillaris</i>	Hairlike Sedge			S2S3	9	8.0 ± 7.0		NS
P	<i>Carex comosa</i>	Bearded Sedge			S2S3	6	65.2 ± 1.0		NS
P	<i>Carex houghtoniana</i>	Houghton's Sedge			S2S3	9	37.6 ± 0.0		NS
P	<i>Carex hystericina</i>	Porcupine Sedge			S2S3	9	3.7 ± 0.0		NS
P	<i>Eleocharis ovata</i>	Ovate Spikerush			S2S3	7	49.1 ± 0.0		NS
P	<i>Scirpus pedicellatus</i>	Stalked Bulrush			S2S3	15	63.7 ± 1.0		NS
P	<i>Vallisneria americana</i>	Wild Celery			S2S3	6	10.3 ± 0.0		NS
P	<i>Najas gracillima</i>	Thread-Like Naiad			S2S3	31	5.2 ± 0.0		NS
P	<i>Goodyera pubescens</i>	Downy Rattlesnake-Plantain			S2S3	1	91.0 ± 0.0		NS
P	<i>Spiranthes casei</i>	Case's Ladies'-Tresses			S2S3	4	68.2 ± 0.0		NS
P	<i>Spiranthes casei</i> var. <i>novaescotiae</i>	Case's Ladies'-Tresses			S2S3	15	8.4 ± 1.0		NS
P	<i>Spiranthes lucida</i>	Shining Ladies'-Tresses			S2S3	2	97.8 ± 2.0		NB
P	<i>Calamagrostis stricta</i>	Slim-stemmed Reed Grass			S2S3	11	36.3 ± 1.0		NS
P	<i>Potamogeton friesii</i>	Fries' Pondweed			S2S3	2	62.2 ± 1.0		NS
P	<i>Woodsia glabella</i>	Smooth Cliff Fern			S2S3	8	35.8 ± 0.0		NS
P	<i>Botrychium lanceolatum</i> ssp. <i>angustisegmentum</i>	Narrow Triangle Moonwort			S2S3	4	8.4 ± 1.0		NS
P	<i>Botrychium simplex</i>	Least Moonwort			S2S3	8	30.7 ± 7.0		NS
P	<i>Ophioglossum pusillum</i>	Northern Adder's-tongue			S2S3	18	69.9 ± 0.0		NS
P	<i>Potamogeton pulcher</i>	Spotted Pondweed			S3	1	83.0 ± 0.0		NS
P	<i>Angelica atropurpurea</i>	Purple-stemmed Angelica			S3	9	34.8 ± 0.0		NS
P	<i>Conioselinum chinense</i>	Chinese Hemlock-parsley			S3	2	76.7 ± 1.0		NS
P	<i>Hieracium robinsonii</i>	Robinson's Hawkweed			S3	59	4.9 ± 0.0		NS
P	<i>Iva frutescens</i>	Big-leaved Marsh-elder			S3	17	40.7 ± 0.0		NS
P	<i>Senecio pseudoarnica</i>	Seabeach Ragwort			S3	8	36.0 ± 5.0		NS
P	<i>Symphyotrichum boreale</i>	Boreal Aster			S3	148	4.4 ± 0.0		NS
P	<i>Symphyotrichum undulatum</i>	Wavy-leaved Aster			S3	22	12.3 ± 0.0		NS
P	<i>Symphyotrichum ciliolatum</i>	Fringed Blue Aster			S3	564	68.8 ± 0.0		NS
P	<i>Alnus serrulata</i>	Smooth Alder			S3	70	23.9 ± 0.0		NS
P	<i>Betula michauxii</i>	Michaux's Dwarf Birch			S3	4	67.4 ± 0.0		NS
P	<i>Betula pumila</i>	Bog Birch			S3	17	23.2 ± 7.0		NS
P	<i>Cardamine parviflora</i>	Small-flowered Bittercress			S3	28	16.3 ± 1.0		NS
P	<i>Palustricodon aparinoides</i>	Marsh Bellflower			S3	239	37.4 ± 0.0		NS
P	<i>Mononeuria groenlandica</i>	Greenland Stitchwort			S3	52	49.4 ± 0.0		NS
P	<i>Sagina nodosa</i>	Knotted Pearlwort			S3	5	60.5 ± 0.0		NS
P	<i>Sagina nodosa</i> ssp. <i>borealis</i>	Knotted Pearlwort			S3	11	54.3 ± 0.0		NS
P	<i>Stellaria longifolia</i>	Long-leaved Starwort			S3	17	36.2 ± 3.0		NS
P	<i>Ceratophyllum echinatum</i>	Prickly Hornwort			S3	47	3.4 ± 0.0		NS
P	<i>Triosteum aurantiacum</i>	Orange-fruited Tinker's Weed			S3	1	51.3 ± 0.0		NS
P	<i>Crassula aquatica</i>	Water Pygmyweed			S3	94	31.7 ± 0.0		NS
P	<i>Empetrum eamesii</i>	Pink Crowberry			S3	4	62.9 ± 1.0		NS
P	<i>Vaccinium uliginosum</i>	Alpine Bilberry			S3	3	54.4 ± 0.0		NS
P	<i>Halenia deflexa</i>	Spurred Gentian			S3	27	8.0 ± 3.0		NS
P	<i>Geranium bicknellii</i>	Bicknell's Crane's-bill			S3	6	16.4 ± 3.0		NS
P	<i>Myriophyllum verticillatum</i>	Whorled Water Milfoil			S3	13	78.2 ± 0.0		NS
P	<i>Utricularia resupinata</i>	Inverted Bladderwort			S3	10	9.5 ± 0.0		NS
P	<i>Epilobium strictum</i>	Downy Willowherb			S3	50	31.6 ± 0.0		NS
P	<i>Polygala sanguinea</i>	Blood Milkwort			S3	26	39.7 ± 1.0		NS
P	<i>Persicaria arifolia</i>	Halberd-leaved Tearthumb			S3	14	28.9 ± 3.0		NS
P	<i>Plantago rugelii</i>	Rugel's Plantain			S3	58	36.5 ± 7.0		NS
P	<i>Primula laurentiana</i>	Laurentian Primrose			S3	49	44.5 ± 1.0		NS
P	<i>Samolus parviflorus</i>	Seaside Brookweed			S3	2	45.5 ± 7.0		NS
P	<i>Pyrola minor</i>	Lesser Pyrola							

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Anemone virginiana</i>	Virginia Anemone			S3	19	6.1 ± 1.0	NS	
P	<i>Cephalanthus occidentalis</i>	Common Buttonbush			S3	1432	50.0 ± 0.0	NS	
P	<i>Galium labradoricum</i>	Labrador Bedstraw			S3	79	65.8 ± 0.0	NS	
P	<i>Salix pedicellaris</i>	Bog Willow			S3	132	47.3 ± 0.0	NS	
P	<i>Salix sericea</i>	Silky Willow			S3	125	38.2 ± 1.0	NS	
P	<i>Saxifraga paniculata</i> ssp. <i>laestadii</i>	Laestadius' Saxifrage			S3	13	35.3 ± 7.0	NS	
P	<i>Lindernia dubia</i>	Yellow-seeded False Pimperel			S3	38	9.3 ± 0.0	NS	
P	<i>Laportea canadensis</i>	Canada Wood Nettle			S3	58	4.6 ± 2.0	NS	
P	<i>Pilea pumila</i>	Dwarf Clearweed			S3	9	6.0 ± 0.0	NS	
P	<i>Viola nephrophylla</i>	Northern Bog Violet			S3	7	25.8 ± 1.0	NS	
P	<i>Carex bebbii</i>	Bebb's Sedge			S3	25	3.7 ± 0.0	NS	
P	<i>Carex castanea</i>	Chestnut Sedge			S3	39	25.1 ± 0.0	NS	
P	<i>Carex cryptolepis</i>	Hidden-scaled Sedge			S3	16	4.1 ± 0.0	NS	
P	<i>Carex eburnea</i>	Bristle-leaved Sedge			S3	11	52.9 ± 0.0	NS	
P	<i>Carex hirtifolia</i>	Pubescent Sedge			S3	42	6.5 ± 0.0	NS	
P	<i>Carex lupulina</i>	Hop Sedge			S3	71	5.7 ± 0.0	NS	
P	<i>Carex rosea</i>	Rosy Sedge			S3	46	2.6 ± 2.0	NS	
P	<i>Carex swanii</i>	Swan's Sedge			S3	14	36.1 ± 0.0	NS	
P	<i>Carex tenera</i>	Tender Sedge			S3	11	13.6 ± 0.0	NS	
P	<i>Carex tribuloides</i>	Blunt Broom Sedge			S3	15	3.7 ± 0.0	NS	
P	<i>Carex tuckermanii</i>	Tuckerman's Sedge			S3	50	3.1 ± 0.0	NS	
P	<i>Carex atratiformis</i>	Scabrous Black Sedge			S3	3	56.5 ± 0.0	NS	
P	<i>Eleocharis nitida</i>	Quill Spikerush			S3	18	23.6 ± 5.0	NS	
P	<i>Eleocharis flavescens</i> var. <i>olivacea</i>	Bright-green Spikerush			S3	12	42.7 ± 0.0	NS	
P	<i>Eriophorum gracile</i>	Slender Cottongrass			S3	15	26.1 ± 1.0	NS	
P	<i>Coeloglossum viride</i>	Long-bracted Frog Orchid			S3	13	26.2 ± 1.0	NS	
P	<i>Cypripedium parviflorum</i>	Yellow Lady's-slipper			S3	580	2.8 ± 1.0	NS	
P	<i>Neottia bifolia</i>	Southern Twayblade			S3	134	14.3 ± 0.0	NS	
P	<i>Platanthera flava</i>	Southern Rein-Orchid			S3	36	68.1 ± 0.0	NS	
P	<i>Platanthera grandiflora</i>	Large Purple Fringed Orchid			S3	76	13.1 ± 1.0	NS	
P	<i>Platanthera hookeri</i>	Hooker's Orchid			S3	44	4.3 ± 1.0	NS	
P	<i>Dichanthelium linearifolium</i>	Narrow-leaved Panic Grass			S3	18	8.0 ± 7.0	NS	
P	<i>Piptatheropsis canadensis</i>	Canada Ricegrass			S3	20	25.1 ± 0.0	NS	
P	<i>Poa glauca</i>	Glaucous Blue Grass			S3	16	13.8 ± 1.0	NS	
P	<i>Potamogeton praelongus</i>	White-stemmed Pondweed			S3	5	37.2 ± 1.0	NS	
P	<i>Potamogeton richardsonii</i>	Richardson's Pondweed			S3	7	34.6 ± 0.0	NS	
P	<i>Potamogeton zosteriformis</i>	Flat-stemmed Pondweed			S3	19	40.4 ± 1.0	NS	
P	<i>Asplenium viride</i>	Green Spleenwort			S3	12	47.8 ± 7.0	NS	
P	<i>Dryopteris fragrans</i>	Fragrant Wood Fern			S3	15	49.7 ± 0.0	NS	
P	<i>Sceptridium dissectum</i>	Dissected Moonwort			S3	7	52.1 ± 0.0	NS	
P	<i>Polypodium appalachianum</i>	Appalachian Polypody			S3	25	24.5 ± 0.0	NS	
P	<i>Persicaria amphibia</i> var. <i>emersa</i>	Long-root Smartweed			S3?	26	4.0 ± 0.0	NS	
P	<i>Spiranthes ochroleuca</i>	Yellow Ladies'-tresses			S3?	47	18.4 ± 4.0	NS	
P	<i>Diphasiastrum x sabinifolium</i>	Savin-leaved Ground-cedar			S3?	10	68.1 ± 1.0	NS	
P	<i>Bidens vulgata</i>	Tall Beggarticks			S3S4	6	15.3 ± 0.0	NS	
P	<i>Erigeron hyssopifolius</i>	Hyssop-leaved Fleabane			S3S4	25	2.9 ± 7.0	NS	
P	<i>Hieracium paniculatum</i>	Panicled Hawkweed			S3S4	36	9.2 ± 11.0	NS	
P	<i>Bidens beckii</i>	Water Beggarticks			S3S4	11	55.9 ± 0.0	NS	
P	<i>Packera paupercula</i>	Balsam Groundsel			S3S4	104	1.9 ± 1.0	NS	
P	<i>Atriplex glabriuscula</i> var. <i>franktonii</i>	Frankton's Saltbush			S3S4	15	9.0 ± 0.0	NS	
P	<i>Shepherdia canadensis</i>	Soapberry			S3S4	113	3.7 ± 0.0	NS	
P	<i>Vaccinium boreale</i>	Northern Blueberry			S3S4	5	77.0 ± 0.0	NS	
P	<i>Vaccinium cespitosum</i>	Dwarf Bilberry			S3S4	51	13.6 ± 0.0	NS	

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	<i>Vaccinium corymbosum</i>	Highbush Blueberry			S3S4	16	29.5 ± 0.0	NS	
P	<i>Fagus grandifolia</i>	American Beech			S3S4	921	2.2 ± 0.0	NS	
P	<i>Bartonia virginica</i>	Yellow Bartonia			S3S4	33	38.2 ± 7.0	NS	
P	<i>Proserpinaca pectinata</i>	Comb-leaved Mermaidweed			S3S4	59	39.8 ± 1.0	NS	
P	<i>Decodon verticillatus</i>	Swamp Loosestrife			S3S4	6	14.4 ± 0.0	NS	
P	<i>Nuphar microphylla</i>	Small Yellow Pond-lily			S3S4	3	19.9 ± 0.0	NS	
P	<i>Persicaria pensylvanica</i>	Pennsylvania Smartweed			S3S4	33	8.6 ± 1.0	NS	
P	<i>Fallopia scandens</i>	Climbing False Buckwheat			S3S4	29	8.5 ± 7.0	NS	
P	<i>Rumex pallidus</i>	Seabeach Dock			S3S4	2	76.8 ± 0.0	NS	
P	<i>Pyrola asarifolia</i>	Pink Pyrola			S3S4	12	27.4 ± 1.0	NS	
P	<i>Endotropis alnifolia</i>	alder-leaved buckthorn			S3S4	278	7.2 ± 1.0	NS	
P	<i>Amelanchier spicata</i>	Running Serviceberry			S3S4	61	3.6 ± 3.0	NS	
P	<i>Crataegus succulenta</i>	Fleshy Hawthorn			S3S4	1	39.9 ± 0.0	NS	
P	<i>Fragaria vesca</i> ssp. <i>americana</i>	Woodland Strawberry			S3S4	71	5.4 ± 0.0	NS	
P	<i>Fragaria vesca</i>	Woodland Strawberry			S3S4	17	12.6 ± 0.0	NS	
P	<i>Galium aparine</i>	Common Bedstraw			S3S4	36	6.3 ± 0.0	NS	
P	<i>Geocaulon lividum</i>	Northern Comandra			S3S4	7	24.0 ± 0.0	NS	
P	<i>Limosella australis</i>	Southern Mudwort			S3S4	21	56.9 ± 3.0	NS	
P	<i>Ulmus americana</i>	White Elm			S3S4	105	2.1 ± 0.0	NS	
P	<i>Verbena hastata</i>	Blue Vervain			S3S4	272	5.5 ± 5.0	NS	
P	<i>Viola sagittata</i> var. <i>ovata</i>	Arrow-Leaved Violet			S3S4	50	4.7 ± 0.0	NS	
P	<i>Viola selkirkii</i>	Great-Spurred Violet			S3S4	8	13.4 ± 4.0	NS	
P	<i>Symplocarpus foetidus</i>	Eastern Skunk Cabbage			S3S4	10	50.0 ± 0.0	NS	
P	<i>Carex argyranthia</i>	Silvery-flowered Sedge			S3S4	11	11.7 ± 1.0	NS	
P	<i>Sisyrinchium atlanticum</i>	Eastern Blue-Eyed-Grass			S3S4	99	58.9 ± 0.0	NS	
P	<i>Triglochin gaspensis</i>	Gasp  - Arrowgrass			S3S4	13	54.4 ± 0.0	NS	
P	<i>Juncus acuminatus</i>	Sharp-Fruit Rush			S3S4	15	12.9 ± 0.0	NS	
P	<i>Juncus subcaudatus</i>	Woods-Rush			S3S4	25	23.1 ± 1.0	NS	
P	<i>Luzula parviflora</i> ssp. <i>melanocarpa</i>	Black-fruited Woodrush			S3S4	7	52.5 ± 0.0	NS	
P	<i>Goodyera repens</i>	Lesser Rattlesnake-plantain			S3S4	29	20.7 ± 0.0	NS	
P	<i>Liparis loeselii</i>	Loesel's Twayblade			S3S4	13	28.6 ± 0.0	NS	
P	<i>Platanthera obtusata</i>	Blunt-leaved Orchid			S3S4	16	32.8 ± 10.0	NS	
P	<i>Platanthera orbiculata</i>	Small Round-leaved Orchid			S3S4	53	13.4 ± 4.0	NS	
P	<i>Alopecurus aequalis</i>	Short-awned Foxtail			S3S4	26	44.2 ± 1.0	NS	
P	<i>Dichanthelium clandestinum</i>	Deer-tongue Panic Grass			S3S4	302	6.9 ± 0.0	NS	
P	<i>Coleataenia longifolia</i>	Long-leaved Panicgrass			S3S4	1004	78.1 ± 0.0	NS	
P	<i>Panicum philadelphicum</i>	Philadelphia Panicgrass			S3S4	31	13.6 ± 0.0	NS	
P	<i>Koeleria spicata</i>	Narrow False Oats			S3S4	20	3.7 ± 0.0	NS	
P	<i>Asplenium trichomanes</i>	Maidenhair Spleenwort			S3S4	18	24.5 ± 0.0	NS	
P	<i>Equisetum pratense</i>	Meadow Horsetail			S3S4	18	7.6 ± 0.0	NS	
P	<i>Diphasiastrum complanatum</i>	Northern Ground-cedar			S3S4	19	12.3 ± 0.0	NS	
P	<i>Diphasiastrum sitchense</i>	Sitka Ground-cedar			S3S4	3	29.4 ± 1.0	NS	
P	<i>Hypozia appressa</i>	Mountain Firmoss			S3S4	20	47.2 ± 1.0	NS	
P	<i>Sceptridium multifidum</i>	Leathery Moonwort			S3S4	14	22.0 ± 10.0	NS	
P	<i>Botrychium matricariifolium</i>	Daisy-leaved Moonwort			S3S4	6	17.0 ± 10.0	NS	
P	<i>Viola canadensis</i>	Canada Violet			SH	2	8.9 ± 0.0	NS	
P	<i>Greeneochloa coarctata</i>	Small Reedgrass			SH	1	47.2 ± 6.0	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
19439	Morrison, Guy. 2011. Maritime Shorebird Survey (MSS) database. Canadian Wildlife Service, Ottawa, 15939 surveys. 86171 recs.
8160	Lepage, D. 2014. Maritime Breeding Bird Atlas Database. Bird Studies Canada, Sackville NB, 407,838 recs.
6680	iNaturalist.ca. 2023. iNaturalist Data Export December 2022. iNaturalist.org; iNaturalist.ca.
3776	Erskine, A.J. 1992. Maritime Breeding Bird Atlas Database. NS Museum & Nimbus Publ., Halifax, 82,125 recs.
3531	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, <a href="https://doi.org/10.5066/P9J6QUF6">https://doi.org/10.5066/P9J6QUF6</a>
3299	McNeil, J.A. 2010. Blanding's Turtle ( <i>Emydoidea blandingii</i> ) sightings, 1946-2009. Parks Canada, 12,871 recs of 597+ individuals.
2634	Paquet, Julie. 2018. Atlantic Canada Shorebird Survey (ACSS) database 2012-2018. Environment Canada, Canadian Wildlife Service.
2563	iNaturalist. 2020. iNaturalist Data Export 2020. iNaturalist.org and iNaturalist.ca, Web site: 128728 recs.
1417	Blaney, C.S.; Mazerolle, D.M. 2010. Fieldwork 2010. Atlantic Canada Conservation Data Centre. Sackville NB, 15508 recs.
1252	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.
1015	Blaney, C.S.; Mazerolle, D.M. 2012. Fieldwork 2012. Atlantic Canada Conservation Data Centre, 13,278 recs.
955	Eaton, S. 2014. Nova Scotia Wood Turtle Database. Environment and Climate Change Canada, 4843 recs.
934	Paquet, Julie. 2019. Atlantic Canada Shorebird Survey ACSS database for 2019. Environment Canada, Canadian Wildlife Service.
905	Patrick, A.; Horne, D.; Noseworthy, J. et. al. 2017. Field data for Nova Scotia and New Brunswick, 2015 and 2017. Nature Conservancy of Canada.
899	SwiftWatch. 2022. Total Chimney Swift counts from roost watches for the duration of the SwiftWatch program (2011-2021). Birds Canada.
874	Blaney, C.S.; Mazerolle, D.M.; Belliveau, A.B. 2013. Atlantic Canada Conservation Data Centre Fieldwork 2013. Atlantic Canada Conservation Data Centre, 9000+ recs.
854	Belliveau, A. 2012. 2012 Atlantic Coastal Plain Flora observations. Mersey Tobeatic Research Institute, 1543.
846	Blaney, C.S.; Mazerolle, D.M.; Belliveau, A.B. 2014. Atlantic Canada Conservation Data Centre Fieldwork 2014. Atlantic Canada Conservation Data Centre, # recs.
816	Benjamin, L.K. (compiler). 2007. Significant Habitat & Species Database. Nova Scotia Dept Natural Resources, 8439 recs.
762	McNeil, J.A. 2016. Blanding's Turtle ( <i>Emydoidea blandingii</i> ), Eastern Ribbonsnake ( <i>Thamnophis sauritus</i> ), Wood Turtle ( <i>Glyptemys insculpta</i> ), and Snapping Turtle ( <i>Chelydra serpentina</i> ) sightings, 2016. Mersey Tobeatic Research Institute, 774 records.
751	Pinney, Lori. 2020. Pre- and post White-nose Syndrome bat acoustic monitoring, NS. Mersey Tobeatic Research Institute, 1279 recs.
726	Toms, Brad. 2012. Atlantic Coastal Plain Flora records, 2011. Mersey-Tobeatic Research Institute, 1109 recs.
622	Cameron, E. 2008. Canadian Gypsum Co. survey 2007-08. Conestoga-Rovers & Assoc., 623 recs.
607	Blaney, C.S.; Mazerolle, D.M.; Belliveau, A.B. 2015. Atlantic Canada Conservation Data Centre Fieldwork 2015. Atlantic Canada Conservation Data Centre, # recs.
563	Wildlife Division. 2021. <i>Fraxinus nigra</i> records assembled to define and model habitat. Nova Scotia Department of Natural Resources and Renewables.
537	Belliveau, A.G. 2020. E.C. Smith Herbarium and Atlantic Canada Conservation Data Centre Fieldwork 2019, 2020. E.C. Smith Herbarium.
524	Newell, R.E. 2000. E.C. Smith Herbarium Database. Acadia University, Wolfville NS, 7139 recs.
476	Clayden, S. Digitization of Wolfgang Maass Nova Scotia forest lichen collections, 1964-2004. New Brunswick Museum. 2018.
464	McNeil, J.A. 2010. Ribbonsnake ( <i>Thamnophis sauritus</i> ) sightings, 1900-2009. Parks Canada, 2521 recs of 716+ individuals.
444	Newell, R.E. 2005. E.C. Smith Digital Herbarium. E.C. Smith Herbarium, Irving Biodiversity Collection, Acadia University, Web site: <a href="http://luxor.acadiau.ca/library/Herbarium/project/">http://luxor.acadiau.ca/library/Herbarium/project/</a> . 582 recs.
435	McNeil, J.A. 2019. Blanding's Turtle records, 2017. Mersey Tobeatic Research Institute, 372 recs.
427	Scott, F.W. 2002. Nova Scotia Herpetofauna Atlas Database. Acadia University, Wolfville NS, 8856 recs.
398	Brazner, John. 2022. Clearcut Transect Study. Nova Scotia Department of Natural Resources and Renewables Wildlife Division.
371	McNeil, J.A. 2018. Blanding's Turtle records, 2018. Mersey Tobeatic Research Institute, 372 recs.
366	Benjamin, L.K. (compiler). 2012. Significant Habitat & Species Database. Nova Scotia Dept Natural Resources, 4965 recs.
342	Belliveau, A.G. 2018. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre.
319	Hicks, Andrew. 2009. Coastal Waterfowl Surveys Database, 2000-08. Canadian Wildlife Service, Sackville, 46488 recs (11149 non-zero).
316	Toms, Brad. 2011. Atlantic Coastal Plain Flora records 2010. Mersey-Tobeatic Research Institute, 1074 recs.
314	Blaney, C.S.; Mazerolle, D.M.; Oberndorfer, E. 2007. Fieldwork 2007. Atlantic Canada Conservation Data Centre. Sackville NB, 13770 recs.
314	Churchill, J.L. 2022. Atlantic Canada Conservation Data Centre Fieldwork 2022. Atlantic Canada Conservation Data Centre.
304	Churchill, J.L. 2018. Atlantic Canada Conservation Data Centre Fieldwork 2018. Atlantic Canada Conservation Data Centre, 907 recs.
303	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.
300	McNeil, Jeffie. 2022. Wood Turtle GPS Tracking data, 2021. Mersey Tobeatic Research Institute.
275	Amirault, D.L. & Stewart, J. 2007. Piping Plover Database 1894-2006. Canadian Wildlife Service, Sackville, 3344 recs, 1228 new.
265	McNeil, J.A. 2015. Blanding's Turtle ( <i>Emydoidea blandingii</i> ), Eastern Ribbonsnake ( <i>Thamnophis sauritus</i> ), and Snapping Turtle ( <i>Chelydra serpentina</i> ) sightings, 2015. Mersey Tobeatic Research Institute.
252	Klymko, J. 2018. Maritimes Butterfly Atlas database. Atlantic Canada Conservation Data Centre.
251	Neily, T.H. & Pepper, C.; Toms, B. 2018. Nova Scotia lichen database [as of 2018-03]. Mersey Tobeatic Research Institute.
245	eBird. 2014. eBird Basic Dataset. Version: EBD_relNov-2014. Ithaca, New York. Nov 2014. Cornell Lab of Ornithology, 25036 recs.
242	Toms, B. 2018. Bat Species data from www.batconservation.ca for Nova Scotia. Mersey Tobeatic Research Institute, 547 Records.
241	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.
209	Brazner, J. 2016. Nova Scotia Forested Wetland Bird Surveys. Nova Scotia Department of Lands and Forestry.
201	Munro, Marian K. Tracked lichen specimens, Nova Scotia Provincial Museum of Natural History Herbarium. Atlantic Canada Conservation Data Centre. 2019.

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188	McNeil, J.A. 2019. Blanding's Turtle records, 2019. Mersey Tobeatic Research Institute.
183	East Coast Aquatics Inc. 2023. Year 3 (2022) Wood Turtle Monitoring Hwy 104 Sutherlands River To Antigonish.
183	McNeil, J.A. 2019. Eastern Painted Turtle trapping records, 2019. Mersey Tobeatic Research Institute.
178	Hagerman, Christianne. 2022. Wisqoq and Eastern White Cedar field work. E.C. Smith Herbarium, Acadia University.
171	Staicer, C. 2021. Additional compiled Nova Scotia Species at Risk bird records, 2005-2020. Dalhousie University.
169	McNeil, Jeffie. 2023. 2022 Turtle Records. Mersey Tobeatic Research Institute.
169	Munro, Marian K. Nova Scotia Provincial Museum of Natural History Herbarium Database. Nova Scotia Provincial Museum of Natural History, Halifax, Nova Scotia. 2013.
159	Belliveau, A.G. 2021. E.C. Smith Herbarium and Atlantic Canada Conservation Data Centre Fieldwork 2021. E.C. Smith Herbarium.
159	Manthorne, A. 2014. MaritimesSwiftwatch Project database 2013-2014. Bird Studies Canada, Sackville NB, 326 recs.
158	Brunelle, P.-M. (compiler). 2009. ADIP/MDDS Odonata Database: data to 2006 inclusive. Atlantic Dragonfly Inventory Program (ADIP), 24200 recs.
156	Gallop, John. 2023. Species at Risk and Species of Conservation Interest records. McCallum Environmental.
153	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.
151	Belliveau, A.G. 2018. E.C. Smith Herbarium and Atlantic Canada Conservation Data Centre Fieldwork 2018. E.C. Smith Herbarium, 6226 recs.
144	Bryson, I.C. 2020. Nova Scotia flora and lichen observations 2020. Nova Scotia Environment, 139 recs.
144	e-Butterfly. 2016. Export of Maritimes records and photos. Maxim Larrivee, Sambo Zhang (ed.) e-butterfly.org.
140	Cameron, R.P. 2009. Cyanolichen database. Nova Scotia Environment & Labour, 1724 recs.
138	McNeil, J.A. 2014. Blandings Turtle ( <i>Emydoidea blandingsii</i> ) and Snapping Turtle ( <i>Chelydra serpentina</i> ) sightings, 2014. Mersey Tobeatic Research Institute.
134	Staicer, Cindy. 2023. 2022 SAR Bird ARU occurrences. Dalhousie University, 379 records.
131	Berrigan, L. 2019. Maritimes Marsh Monitoring Project 2013, 2014, 2016, 2017, and 2018 data. Bird Studies Canada, Sackville, NB.
130	Keddy, C.J. 1989. Habitat securement for redroot, golden crest and Long's bulrush in Ponhook Lake, NS. World Wildlife Fund (Canada), 131 recs.
129	McNeil, Jeffie. 2022. 2021 Turtle Records. Mersey Tobeatic Research Institute.
128	Pepper, C. 2013. 2013 rare bird and plant observations in Nova Scotia. , 181 records.
127	MacDonald, Haley. 2022. Updates to <i>Fraxinus nigra</i> observations on NCC Docherty's Brook property. Nature Conservancy of Canada.
125	Toms, Brad & Pepper, Chris; Neily, Tom. 2022. Nova Scotia lichen database [as of 2022-04]. Mersey Tobeatic Research Institute.
124	Blaney, C.S.; Mazerolle, D.M. 2008. Fieldwork 2008. Atlantic Canada Conservation Data Centre. Sackville NB, 13343 recs.
124	Blaney, C.S.; Mazerolle, D.M. 2011. Fieldwork 2011. Atlantic Canada Conservation Data Centre. Sackville NB.
122	Chapman-Lam, C.J. 2021. Atlantic Canada Conservation Data Centre 2020 botanical fieldwork. Atlantic Canada Conservation Data Centre, 17309 recs.
122	iNaturalist. 2018. iNaturalist Data Export 2018. iNaturalist.org and iNaturalist.ca, Web site: 11700 recs.
121	Blaney, C.S. 2000. Fieldwork 2000. Atlantic Canada Conservation Data Centre. Sackville NB, 1265 recs.
120	McNeil, J.A. 2018. Wood Turtle records, 2018. Mersey Tobeatic Research Institute, 68 recs.
119	Staicer, Cindy. 2022. 2021 Landbird Species at Risk observations. Dalhousie University.
112	e-Butterfly. 2019. Export of Maritimes records and photos. McFarland, K. (ed.) e-butterfly.org.
107	Richardson, Leif. 2018. Maritimes Bombus records from various sources. Richardson, Leif.
106	McNeil, J.A. 2020. Blanding's Turtle records, 2020. Mersey Tobeatic Research Institute.
102	Wilhelm, S.I. et al. 2011. Colonial Waterbird Database. Canadian Wildlife Service, Sackville, 2698 sites, 9718 recs (8192 obs).
101	Birds Canada. 2022. Maritimes Swiftwatch project data for 2022. Pers. comm., 155 records.
101	Chapman, C.J. 2018. Atlantic Canada Conservation Data Centre botanical fieldwork 2018. Atlantic Canada Conservation Data Centre, 11171 recs.
100	Belliveau, A.G. 2014. Plant Records from Southern and Central Nova Scotia. Atlantic Canada Conservation Data Centre, 919 recs.
100	Hubley, Nicole. 2022. Monarch ( <i>Danaus plexippus</i> ) records submitted to MTRI from the 2021 field season. Mersey Tobeatic Research Institute.
99	Churchill, J.L. 2019. Atlantic Canada Conservation Data Centre Fieldwork 2019. Atlantic Canada Conservation Data Centre.
99	Mazerolle, D.M. 2017. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre.
97	Stewart, J.I. 2010. Peregrine Falcon Surveys in New Brunswick, 2002-09. Canadian Wildlife Service, Sackville, 58 recs.
96	Belliveau, A.G. & Churchill, J.L.; Anderson, F.; Brooks, F. 2023. Lichen Inventory of Blue Rocks, NS. E.C. Smith Herbarium.
95	Breen, A. 2019. 2019 Atlantic Whitefish observations. Coastal Action, 95 recs.
94	Blaney, C.S.; Mazerolle, D.M. 2009. Fieldwork 2009. Atlantic Canada Conservation Data Centre. Sackville NB, 13395 recs.
94	Layberry, R.A. & Hall, P.W., LaFontaine, J.D. 1998. The Butterflies of Canada. University of Toronto Press. 280 pp+plates.
94	Nussey, Pat & NCC staff. 2019. AEI tracked species records, 2016-2019. Chapman, C.J. (ed.) Atlantic Canada Conservation Data Centre, 333.
93	Nature Conservancy of Canada. 2022. NCC Field data for Nova Scotia. Nature Conservancy of Canada.
90	NatureServe Canada. 2019. iNaturalist Maritimes Butterfly Records. iNaturalist.org and iNaturalist.ca.
89	Neily, T.H. & Pepper, C.; Toms, B. 2013. Nova Scotia lichen location database. Mersey Tobeatic Research Institute, 1301 records.
88	LaPaix, R.W.; Crowell, M.J.; MacDonald, M. 2011. Stantec rare plant records, 2010-11. Stantec Consulting, 334 recs.
88	McNeil, J.A. 2019. Eastern Painted Turtle trapping records, 2017. Mersey Tobeatic Research Institute.
88	Roland, A.E. & Smith, E.C. 1969. The Flora of Nova Scotia, 1st Ed. Nova Scotia Museum, Halifax, 743pp.
87	Westwood, A., Staicer, C. 2016. Nova Scotia landbird Species at Risk observations. Dalhousie University.
87	Zinck, M. & Roland, A.E. 1998. Roland's Flora of Nova Scotia. Nova Scotia Museum, 3rd ed., rev. M. Zinck; 2 Vol., 1297 pp.
86	Belland, R.J. Maritimes moss records from various herbarium databases. 2014.
82	McNeil, J.A. 2020. Snapping Turtle and Eastern Painted Turtle records, 2020. Mersey Tobeatic Research Institute.
81	McNeil, Jeffie. 2022. Ribbonsnake records, 2021. Mersey Tobeatic Research Institute.
81	Staicer, Cindy. 2023. 2022 SAR Bird field occurrences from the Landbirds at Risk Project, NS. Dalhousie University, 446 records.

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76	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.
76	Blaney, C.S. 2020. Sean Blaney 2020 field data. Atlantic Canada Conservation Data Centre, 4407 records.
73	Bryson, I. 2020. Nova Scotia and Newfoundland rare species observations, 2018-2020. Nova Scotia Environment.
66	iNaturalist. 2020. iNaturalist butterfly records selected for the Maritimes Butterfly Atlas. iNaturalist.
64	Klymko, John. 2022. Atlantic Canada Conservation Data Centre zoological fieldwork 2021. Atlantic Canada Conservation Data Centre.
63	Staicer, C. & Bliss, S.; Achenbach, L. 2017. Occurrences of tracked breeding birds in forested wetlands. , 303 records.
59	McNeil, Jeffie. 2023. Ribbonsnake records from 2022. Mersey Tobeatic Research Institute.
57	Belliveau, A.G. 2016. Atlantic Canada Conservation Data Centre Fieldwork 2016. Atlantic Canada Conservation Data Centre, 10695 recs.
57	McNeil, J.A. 2019. Snapping Turtle records, 2019. Mersey Tobeatic Research Institute.
55	Belliveau, A. 2013. Rare species records from Nova Scotia. Mersey Tobeatic Research Institute, 296 records. 296 recs.
55	Chapman, C.J. 2019. Atlantic Canada Conservation Data Centre 2019 botanical fieldwork. Atlantic Canada Conservation Data Centre, 11729 recs.
55	LaPaix, R.W.; Crowell, M.J.; MacDonald, M.; Neily, T.D.; Quinn, G. 2017. Stantec Nova Scotia rare plant records, 2012-2016. Stantec Consulting.
54	Feltham, Carter. 2022. Monarch ( <i>Danaus plexippus</i> ) and Milkweed MTRI records from the 2022 Field Season. Mersey Tobeatic Research Institute.
53	Churchill, J.L. 2020. Atlantic Canada Conservation Data Centre Fieldwork 2020. Atlantic Canada Conservation Data Centre, 1083 recs.
53	Mersey Tobeatic Research Institute. 2021. 2020 Monarch records from the MTRI monitoring program. Mersey Tobeatic Research Institute, 72 records.
52	Belliveau, A.G., Churchill, J.L. 2019. Compilation of flora and fauna observation records from Isle Haute, Nova Scotia. Acadia University; Atlantic Canada Conservation Data Centre, 522 recs.
51	Churchill, J.L.; Klymko, J.D. 2015. Chignecto and Tintamarre National Wildlife Area Bird Surveys 2015. Atlantic Canada Conservation Data Centre, 2238 recs.
50	Neily, T.H. 2019. Tom Neily NS Bryophyte records (2009-2013). T.H. Neily, Atlantic Canada Conservation Data Centre, 1029 specimen records.
49	Benjamin, L.K. (compiler). 2001. Significant Habitat & Species Database. Nova Scotia Dept of Natural Resources, 15 spp, 224 recs.
49	Cameron, R.P. 2011. Lichen observations. 2011. Nova Scotia Environment & Labour, 731 recs.
49	McNeil, J.A. 2017. Updates to Blanding's Turtle database, 1984-2014. Mersey Tobeatic Research Institute.
45	Bayne, D.M. 2007. Atlantic Coastal Plain Flora record, 2004-06. Nova Scotia Nature Trust. Pers. comm. to C.S. Blaney, 57 recs.
44	Blaney, C.S.; Spicer, C.D.; Rothfels, C. 2004. Fieldwork 2004. Atlantic Canada Conservation Data Centre. Sackville NB, 1343 recs.
44	McLean, K. 2019. Wood Turtle observations . Clean Annapolis River Project.
43	Amirault, D.L. & McKnight, J. 2003. Piping Plover Database 1991-2003. Canadian Wildlife Service, Sackville, unpublished data. 7 recs.
43	Hall, R.A. 2001. S.. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 178 recs.
43	Hall, R.A. 2003. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 189 recs.
41	Blaney, C.S.; Spicer, C.D.; Popma, T.M.; Hanel, C. 2002. Fieldwork 2002. Atlantic Canada Conservation Data Centre. Sackville NB, 2252 recs.
40	Cameron, E. 2007. Canadian Gypsum Co. survey 2005-07. Dillon Consulting Ltd, 40 recs.
40	MacDonald, E.C. 2018. Piping Plover nest records from 2010-2017. Canadian Wildlife Service.
40	Neily, T.H. 2017. Nova Scotia lichen records. Mersey Tobeatic Research Institute.
39	Mazerolle, D.M. 2018. Atlantic Canada Conservation Data Centre botanical fieldwork 2018. Atlantic Canada Conservation Data Centre, 13515 recs.
38	Tranquilla, L. 2015. Maritimes Marsh Monitoring Project 2015 data. Bird Studies Canada, Sackville NB, 5062 recs.
37	Bryson, I. 2013. Nova Scotia rare plant records. CBCL Ltd., 180 records.
37	LaPaix, Rich. 2022. Rare species observations, 2018-2022. Nova Scotia Nature Trust.
37	Newell, R.E. 2019. <i>Crocanthemum canadense</i> records compiled for provincial status report. pers. comm. from Ruth Newell to AC CDC.
37	Tschevik, M.; Leblanc, M.; Creaser, T. 2020. Coastal Action: 2020 Species at Risk Data. Coastal Action, 40 records.
36	Brazner, John; MacKinnon, Frances. 2020. Relative conservation value of Nova Scotia's forests: forested wetlands as avian biodiversity hotspots. Canadian Journal of Forest Research, 50(12): 1307-1322. dx.doi.org/10.1139/cjfr-2020-0101.
36	Churchill, J.L. 2018. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre, 2318 recs.
33	Blaney, C.S. 2018. Atlantic Canada Conservation Data Centre Fieldwork 2018. Atlantic Canada Conservation Data Centre.
33	Klymko, J.J.D.; Robinson, S.L. 2012. 2012 field data. Atlantic Canada Conservation Data Centre, 447 recs.
33	Ogden, J. NS DNR Butterfly Collection Dataset. Nova Scotia Department of Natural Resources. 2014.
32	Atlantic Canada Conservation Data Centre. 2020. Cape LaHave Island observations from August 2020. Atlantic Canada Conservation Data Centre, 605 records.
32	Blaney, C.S.; Spicer, C.D. 2001. Fieldwork 2001. Atlantic Canada Conservation Data Centre. Sackville NB, 981 recs.
32	Cameron, R.P. 2009. <i>Erioderma pedicellatum</i> database, 1979-2008. Dept Environment & Labour, 103 recs.
32	Frittation, C. 2012. NSNT 2012 Field Observations. Nova Scotia Nature Trust, Pers comm. to S. Blaney Feb. 7, 34 recs.
31	Cameron, R.P. 2018. <i>Degelia plumbea</i> records. Nova Scotia Environment.
30	Ferguson, D.C. 1954. The Lepidoptera of Nova Scotia. Part I, macrolepidoptera. Proceedings of the Nova Scotian Institute of Science, 23(3), 161-375.
29	Chapman-Lam, C.J. 2022. Atlantic Canada Conservation Data Centre 2021 botanical fieldwork. Atlantic Canada Conservation Data Centre, 15099 recs.
29	Porter, C.J.M. 2014. Field work data 2007-2014. Nova Scotia Nature Trust, 96 recs.
29	Richardson, D., Anderson, F., Cameron, R, McMullin, T., Clayden, S. 2014. Field Work Report on Black Foam Lichen ( <i>Anzia colpodes</i> ). COSEWIC.
29	Wallace, S. 2020. Stewardship Department species occurrence data on NTNBNP preserves. Nature Trust of New Brunswick.
27	Manthorne, A. 2019. Incidental aerial insectivore observations. Birds Canada.
27	McLean, K. 2020. Species occurrence records from Clean Annapolis River Project fieldwork in 2020. Clean Annapolis River Project, 206 records.
27	Pepper, Chris. 2012. Observations of breeding Canada Warbler's along the Eastern Shore, NS. Pers. comm. to S. Blaney, Jan. 20, 28 recs.
26	Canadian Wildlife Service, Dartmouth. 2010. Piping Plover censuses 2007-09, 304 recs.
26	McLean, K. 2020. Wood Turtle observations . Clean Annapolis River Project.
26	Neily, T.H. 2013. Email communication to Sean Blaney regarding <i>Listera australis</i> observations made from 2007 to 2011 in Nova Scotia. , 50.

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26	Porter, Caitlin. 2021. Field data for 2020 in various locations across the Maritimes. Atlantic Canada Conservation Data Centre, 3977 records.
25	Benjamin, L.K. 2011. NSDNR fieldwork & consultant reports 1997, 2009-10. Nova Scotia Dept Natural Resources, 85 recs.
25	MacDonald, E.C. 2018. CWS Piping Plover Census, 2010-2017. Canadian Wildlife Service, 672 recs.
24	Belliveau, A.G. 2021. New Black ash site records near Kentville, NS. Acadia University, 47 records.
24	Blaney, C.S. 2003. Fieldwork 2003. Atlantic Canada Conservation Data Centre. Sackville NB, 1042 recs.
24	Haughian, Sean. 2021. Update to lichen data from 2017-2021. Nova Scotia Museum.
24	Klymko, J.J.D. 2018. 2017 field data. Atlantic Canada Conservation Data Centre.
24	McNeil, J.A. 2017. Eastern Ribbonsnake ( <i>Thamnophis sauritus</i> ) sightings, 2017. Mersey Tobeatic Research Institute, 36 recs.
23	McNeil, J.A. 2019. Snapping Turtle records, 2017. Mersey Tobeatic Research Institute.
22	Breen, A. 2018. 2018 Atlantic Whitefish observations. Coastal Action.
22	Neily, T.H. & Pepper, C.; Toms, B. 2020. Nova Scotia lichen database [as of 2020-03-18]. Mersey Tobeatic Research Institute.
22	Nelly, T.H. 2006. <i>Cypripedium arietinum</i> in Hants Co. Pers. comm. to C.S. Blaney. 22 recs, 22 recs.
22	NS DNR. 2017. Black Ash records from NS DNR Permanent Sample Plots (PSPs), 1965-2016. NS Dept of Natural Resources.
21	MacKinnon, D.S. & O'Brien, M.K.H.; Cameron, R.P. 2002. Fieldwork 2000. Dept of Environment & Labour, Protected Areas Branch, 252 recs.
21	Ogden, K. Nova Scotia Museum butterfly specimen database. Nova Scotia Museum. 2017.
20	Richardson, D., Anderson, F., Cameron, R., Pepper, C., Clayden, S. 2015. Field Work Report on the Wrinkled Shingle lichen ( <i>Pannaria lurida</i> ). COSEWIC.
19	McMullin, R.T. 2022. Maritimes lichen records. Canadian Museum of Nature.
19	Powell, B.C. 1967. Female sexual cycles of <i>Chrysemys picta</i> & <i>Clemmys insculpta</i> in Nova Scotia. Can. Field-Nat., 81:134-139. 26 recs.
19	Robinson, S.L. 2014. 2013 Field Data. Atlantic Canada Conservation Data Centre.
18	Basquill, S.; Sam, D. 2019. Crocanthemum canadense observations near Greenwood, NS, 2015-2019. pers. commun. from Nova Scotia Department of Lands and Forestry to AC CDC, 18 recs.
18	Blaney, C.S.; Korol, J.B.; Crowell, I. 2023. 2022 AC CDC Botany program field data. Atlantic Canada Conservation Data Centre, 5293 records.
18	Cameron, R.P. 2014. 2013-14 rare species field data. Nova Scotia Department of Environment, 35 recs.
18	McNeil, J.A. 2011. Ribbonsnake ( <i>Thamnophis sauritus</i> ) sightings, 2010. Parks Canada, 148 recs of 70+ individuals.
18	Nova Scotia Nature Trust. 2013. Nova Scotia Nature Trust 2013 Species records. Nova Scotia Nature Trust, 95 recs.
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	Benjamin, L.K. 2012. NSDNR fieldwork & consultant reports 2008-2012. Nova Scotia Dept Natural Resources, 196 recs.
17	Blaney, C.S.; Mazerolle, D.M.; Klymko, J.; Spicer, C.D. 2006. Fieldwork 2006. Atlantic Canada Conservation Data Centre. Sackville NB, 8399 recs.
17	Cameron, R.P. 2013. 2013 rare species field data. Nova Scotia Department of Environment, 71 recs.
17	Munro, Marian K. Nova Scotia Provincial Museum of Natural History Herbarium Database. Nova Scotia Provincial Museum of Natural History, Halifax, Nova Scotia. 2014.
17	Neily, T.H. 2010. <i>Erioderma Pedicellatum</i> records 2005-09. Mersey Tobeatic Research Institute, 67 recs.
17	Patrick, Allison. 2021. Animal and plant records from NCC properties from 2019 and 2020. Nature Conservancy Canada.
15	Basquill, S.P. 2011 vascular plant field data. Nova Scotia Department of Natural Resources, 37 recs.
15	Basquill, S.P., Porter, C. 2019. Bryophyte and lichen specimens submitted to the E.C. Smith Herbarium. NS Department of Lands and Forestry.
15	Klymko, J.J.D. 2012. Odonata specimens & observations, 2010. Atlantic Canada Conservation Data Centre, 425 recs.
15	Neily, T.H. & Pepper, C.; Toms, B. 2020. Nova Scotia lichen database [as of 2020-05-25]. Mersey Tobeatic Research Institute, 668 recs.
14	Basquill, S.P. 2003. Fieldwork 2003. Atlantic Canada Conservation Data Centre, Sackville NB, 69 recs.
14	e-Butterfly. 2018. Selected Maritimes butterfly records from 2016 and 2017. Maxim Larrivee, Sambo Zhang (ed.) e-butterfly.org.
14	Holder, M. 2003. Assessment and update status report on the Eastern <i>Lilaeopsis</i> ( <i>Lilaeopsis chinensis</i> ) in Canada. Committee on the Status of Endangered Wildlife in Canada, 16 recs.
14	McLean, K. 2019. Species At Risk observations. Clean Annapolis River Project.
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12	Benjamin, L.K. 2009. NSDNR Fieldwork & Consultants Reports. Nova Scotia Dept Natural Resources, 143 recs.
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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.
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4	Sabine, D.L. <i>Bombus terricola</i> specimens in Dwayne Sabine's personal collection. pers. comm. 2022.
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4	Toms, B. 2015. <i>Lophiola aurea</i> (Goldencrest) records from Molega Lake. Mersey Tobeatic Research Institute, 4 records.
4	Toms, B. 2016. Email list of four GPS locations of Golden Crest ( <i>Lophiola aurea</i> ) from the previously documented site on Molega Lake, NS. Mersey Tobeatic Research Institute, 4 records.
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3	Blaney, C.S. 2017. Atlantic Canada Conservation Data Centre Fieldwork 2017. Atlantic Canada Conservation Data Centre.
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3	Cameron, R.P. 2005. <i>Erioderma pedicellatum</i> unpublished data. NS Dept of Environment, 9 recs.
3	Cameron, R.P. 2012. Rob Cameron 2012 vascular plant data. NS Department of Environment, 30 recs.
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3	Hill, N. and D. Patriquin. 2013. 2013 rare plant observations in Williams Lake Backlands area. Fern Hill Institute of Plant Conservation, Berwick, Nova Scotia, 3 records.
3	Hill, N.M., Myra, M. 2017. Email to Sean Blaney regarding rich intervale flora on Nictaux River. Fern Hill Institute, 3 records.
3	Mersey Tobeatic Research Institute. 2022. Nova Scotia Bobolink observations. pers. comm. to J. Churchill.
3	Nature Trust of New Brunswick. 2021. Nature Trust of New Brunswick site inventory data submitted in April 2021. Nature Trust of New Brunswick, 2189 records.
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3	Newington, Nina. 2023. <i>Anzia colpodes</i> at Beal's Brook, NS. Pers. comm. to J. Churchill.
3	Nova Scotia Department of Lands and Forestry. 2018. Wood Turtle observations in, or near, the cornwallis River watershed. NS DLF, pers. comm. to AC CDC.
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	Plissner, J.H. & Haig, S.M. 1997. 1996 International piping plover census. US Geological Survey, Corvallis OR, 231 pp.
3	Sabine, M. 2016. NB DNR staff incidental Black Ash observations. New Brunswick Department of Natural Resources.
3	Sollows, M.C. 2009. NBM Science Collections databases: molluscs. New Brunswick Museum, Saint John NB, download Jan. 2009, 6951 recs (2957 in Atlantic Canada).
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3	Thompson, R. 2018. Williamsdale Quarry Expansion Project, NS, Environmental Assessment rare plants. Dexter Construction Company Limited.
3	White, S. 2018. Notable species sightings, 2016-2017. East Coast Aquatics.
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2	Benedict, B. Connell Herbarium Specimens. University New Brunswick, Fredericton. 2003.
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2	Klymko, J.J.D. 2010. Miscellaneous observations reported to ACCDC (zoology). Pers. comm. from various persons, 3 recs.
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2	Klymko, J.J.D. 2016. 2015 field data. Atlantic Canada Conservation Data Centre.
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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	Manning, I. 2020. Peregrine Falcon nest site observations. pers. comm. to J. Churchill.
2	Mazerolle, David. 2021. Botanical fieldwork 2019-2020. Parks Canada.
2	McAlpine, D.F. 1998. NBM Science Collections databases to 1998. New Brunswick Museum, Saint John NB, 241 recs.
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.

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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.
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2	Parker, M. 2018. East Coast Aquatics ACCDC 2018 Report. East Coast Aquatics, 12 records.
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2	Tingley, S. (compiler). 2001. Butterflies of New Brunswick. , Web site: www.geocities.com/Yosemite/8425/butterfly. 142 recs.
2	Toms, Brad. 2022. Non-Lichen Observations from Lichen SMP and NCC Property Searches. Mersey Tobeatic Research Institute.
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1	Amirault, D.L. 2003. 2003 Peregrine Falcon Survey. Canadian Wildlife Service, Sackville, unpublished data. 7 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: Southern Nova Scotia SFA 21. Dept of Fisheries & Oceans, Atlantic Region, Science. Stock Status Report D3-11. 1 rec.
1	Anderson, Frances. 2022. <i>Heteroderma squamulosa</i> record near Lunenburg, NS. pers. comm.
1	Anon. Dataset of butterfly records for the Maritime provinces. Museum of Comparative Zoology, Harvard University. 2017.
1	Austin-Smith, P. 2014. 2014 Common Nighthawk personal communication report, NS. NS Department of Natural Resources.
1	Basquill, S. P. 2008. Nova Scotia Dept of Natural Resources.
1	Basquill, S.P. 2004. C. americana and Sedum sp records, 2002. Pers. comm. to C.S. Blaney. 2 recs, 2 recs.
1	Basquill, S.P. 2012. 2012 Bryophyte specimen data. Nova Scotia Department of Natural Resources, 37 recs.
1	Basquill, S.P.; Quigley, E. 2006. New <i>Minuartia groenlandica</i> record for NS. Pers. comm. to C.S. Blaney, Oct 6, 1 rec.
1	Belliveau, A. & Toms, B. 2012. Email regarding <i>Lophiola aurea</i> (Goldencrest) location on Molega Lake, NS. Mersey Tobeatic Research Institute, 3 records.
1	Belliveau, A.G. 2020. Email to Colin Chapman on new NS locations for <i>Allium tricoccum</i> . Chapman, C.J. (ed.) Acadia University.
1	Benjamin, L.K. 2003. <i>Cypripedium arietinum</i> in Cogmagun River NS. Pers. comm. to S. Blaney, 1 rec.
1	Berg, L. 2020. Canada Warbler observations, Birch Lake, NS. pers. comm. to J. Churchill.
1	Blaney, C.S. Miscellaneous specimens received by ACCDC (botany). Various persons. 2001-08.
1	Brach, A.R. 2019. Correspondence to Sean Blaney regarding <i>Calamagrostis cinnoides</i> specimen from Halifax NS. pers. comm., Harvard University Herbaria, 1 record.
1	Breen, A. 2017. 2017 Atlantic Whitefish observation. Coastal Action.
1	Brooks, Fiona. <i>Erioderma mollissimum</i> records in Lunenburg County, NS. Pers. comm., 2 records.
1	Bruce, J. 2014. 2014 Wood Turtle email report, Nine Mile River, NS. NS Department of Natural Resources.
1	Brunton, Dan. 2022. Record of <i>Isoetes prototypus</i> near Sand Lake, NS. pers. comm.
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	Cook, K. 2016. Wood Turtle record. Pers comm. to Nova Scotia Department of Lands and Forestry.
1	Creaser, Alissa & Belliveau, Alain Bombus specimens collected in Wolfville, Nova Scotia, in July 2022. E.C. Smith Herbarium. 2022.
1	Crowell, A. 2004. <i>Cypripedium arietinum</i> in Weir Brook, Hants Co. Pers. comm. to S. Blaney, 1 rec.
1	Crowell, M. 2013. email to Sean Blaney regarding <i>Listera australis</i> at Bear Head and Mill Cove Canadian Forces Station. Jacques Whitford Environmental Ltd., 2.
1	Crowell, M.J. Plant specimens from Nictaux, NS sent to Sean Blaney for identification. Jacques Whitford Limited. 2005.
1	deGoyer, K. 2018. <i>Chelydra serpentina</i> observation record. Nova Scotia Environment.
1	deGoyer, K. 2019. Snapping Turtle and Eastern White Cedar observations. Nova Scotia Environment.
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. Lepidopteran Records, 1988-2006. Doucet, 700 recs.
1	Eastman, A. 2019. Snapping Turtle observation at Brookfield, Colchester Co. NS. Halifax Field Naturalists Nova Scotia Nature Archive Facebook Page, 1 record.
1	Edge, Thomas A. 1984. Status report on the Atlantic Whitefish ( <i>Coregonus huntsmani</i> ). Committee on the Status of Endangered Wildlife in Canada.
1	Erskine, A.J. 1999. Maritime Nest Records Scheme (MNRS) 1937-1999. Canadian Wildlife Service, Sackville, 313 recs.
1	Golder Associates Ltd. 2021. Black Ash location from Goff's Quarry Expansion Environment Assessment, 2017. Golder Associates Ltd., 1 record.
1	Goltz, J.P. 2001. Botany Ramblings April 29-June 30, 2001. N.B. Naturalist, 28 (2): 51-2. 8 recs.
1	Hill, N. 2014. 2014 Monarch email report, Bridgetown, NS. Fern Hill Institute for Plant Conservation.
1	Hill, N.; Manning, I. 2020. Wild Leek observation, Cornwallis River, NS, floodplain. pers. comm. to J. Churchill.
1	Honeyman, K. 2019. Unique Areas Database, 2018. J.D. Irving Ltd.
1	Horace Moulard. 2022. Monarch observation in Wilmot, Nova Scotia. Personal communication, 1 record.
1	Jacques Whitford Ltd. 2003. Canada Lily location. Pers. Comm. to S. Blaney. 2pp, 1 rec, 1 rec.
1	Kennedy, B. 2019. observations of <i>Crocanthemum canadense</i> at Bangs Falls, Nova Scotia. iNaturalist.ca.
1	Kennedy, Joseph. 2010. New Brunswick Peregrine records, 2009. New Brunswick Dept Natural Resources, 19 recs (14 active).
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	Macauley, M. 2008. Email to Sean Blaney regarding rich hardwood floodplain site at Howards Pool, Wallace River, NS.

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1	MacKinnon, D.S. 2002. Fieldwork 2002. Dept of Environment & Labour, Protected Areas Branch, 1 rec.
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**Appendix D Summary of Avifauna Observations**

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**Appendix D      Summary of Avifauna Observations**



## D.1 Pileated Woodpecker Surveys

Table D.1 Pileated Woodpecker Surveys

Common Name	Scientific Name	Date 2024	Observation
<b>Direct Observations</b>			
Pileated Woodpecker	<i>Dryocopus pileatus</i>	10-Apr	Drumming
Pileated Woodpecker	<i>Dryocopus pileatus</i>	10-Apr	Foraging
Pileated Woodpecker	<i>Dryocopus pileatus</i>	10-Apr	Drumming
<b>Indirect Observations</b>			
Pileated Woodpecker	<i>Dryocopus pileatus</i>	10-Apr	Workings
Pileated Woodpecker	<i>Dryocopus pileatus</i>	10-Apr	Workings
Pileated Woodpecker	<i>Dryocopus pileatus</i>	10-Apr	Workings
Pileated Woodpecker	<i>Dryocopus pileatus</i>	10-Apr	Workings
Pileated Woodpecker	<i>Dryocopus pileatus</i>	10-Apr	Roost tree



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## D.2 Common Nighthawk Surveys

**Table D.2 Common Nighthawk Surveys**

Date (2024)	Station ID	Wind Beaufort <sup>1</sup>	Cloud	Moon	Noise	Common Name	Repeat Bird	Distance (m)	Cardinal Direction	Observation Comment
June 20	Site 2	1	35%	N	2	Common Nighthawk	N	>100	S	First three birds seen at once in one visual plane
June 20	Site 2	1	35%	N	2	Common Nighthawk	N	>100	SW	
June 20	Site 2	1	35%	N	2	Common Nighthawk	N	>100	W	
June 20	Site 2	1	35%	N	2	Common Nighthawk	N	<100	SW	Different individual calling from a different quadrant
June 20	Site 2	1	30%	Y	1	Common Nighthawk	N	<100	SE	Saw two fly in from a distance while driving here and they flew into the site
June 20	Site 2	1	30%	Y	1	Common Nighthawk	N	<100	SE	Saw two fly in from a distance while driving here and they flew into the site
June 20	Site 2	1	30%	Y	1	Common Nighthawk	Y	>100	SW	Calling at the same location as ones before
June 20	Site 1	1	30%	N	1	Common Nighthawk	N	<100	W	These three flying around foraging together. Booming over
June 20	Site 1	1	30%	N	1	Common Nighthawk	N	<100	NW	
June 20	Site 1	1	30%	N	1	Common Nighthawk	N	<100	NW	
June 20	Site 1	1	30%	Y	1	Common Nighthawk	Y	<100	W	Booming very closeby, continually. Repeat bird
June 20	Site 1	1	30%	Y	1	Common Nighthawk	Y	>100	NW	
June 20	Site 1	1	30%	Y	1	Common Nighthawk	Y	>100	NW	
June 20	Site 1	1	30%	Y	1	Common Nighthawk	N	>100	N	A fourth bird was present

Notes: <sup>1</sup>Beaufort Codes Used (effects observed on land):

1 = Direction of wind shown by smoke drift, but not wind vanes



## D.3 Breeding Bird Surveys

Table D.3 Breeding Bird Surveys

Common Name	Scientific Name	SARA	COSEWIC	NB ESA	AC CDC Rank	Highest Breeding Evidence	Individuals	Relative Abundance (%)
Alder Flycatcher	<i>Empidonax alnorum</i>	-	-	-	S5B	Possible	4	2.40
American Goldfinch	<i>Spinus tristis</i>	-	-	-	S5	Possible	9	5.39
American Kestrel	<i>Falco sparverius</i>	-	-	-	S3B,S4S5M	Probable	2	1.20
American Redstart	<i>Setophaga ruticilla</i>	-	-	-	S5B	Possible	2	1.20
American Robin	<i>Turdus migratorius</i>	-	-	-	S5B,S3N	Possible	4	2.40
Black-and-white Warbler	<i>Mniotilla varia</i>	-	-	-	S5B	Possible	7	4.19
Black-capped Chickadee	<i>Poecile atricapillus</i>	-	-	-	S5	Possible	2	1.20
Black-throated Blue Warbler	<i>Setophaga caerulescens</i>	-	-	-	S5B	Possible	2	1.20
Black-throated Green Warbler	<i>Setophaga virens</i>	-	-	-	S5B	Possible	3	1.80
Blue Jay	<i>Cyanocitta cristata</i>	-	-	-	S5	Possible	6	3.59
<b>Canada Warbler</b>	<b><i>Cardellina canadensis</i></b>	<b>TH</b>	<b>SC</b>	<b>EN</b>	<b>S3B</b>	<b>Possible</b>	<b>1</b>	<b>0.60</b>
Cedar Waxwing	<i>Bombycilla cedrorum</i>	-	-	-	S5B	Possible	4	2.40
Chestnut-sided Warbler	<i>Setophaga pensylvanica</i>	-	-	-	S5B	Possible	1	0.60
<b>Common Nighthawk</b>	<b><i>Chordeiles minor</i></b>	<b>SC</b>	<b>SC</b>	<b>TH</b>	<b>S3B</b>		<b>20</b>	<b>11.98</b>
Common Raven	<i>Corvus corax</i>	-	-	-	S5		1	0.60
Common Yellowthroat	<i>Geothlypis trichas</i>	-	-	-	S5B	Probable	10	5.99
<b>Eastern Wood-Pewee</b>	<b><i>Contopus virens</i></b>	<b>SC</b>	<b>SC</b>	<b>VU</b>	<b>S3S4B</b>	<b>Possible</b>	<b>6</b>	<b>3.59</b>
Great Blue Heron	<i>Ardea herodias</i>	-	-	-	S4B,S4S5M		1	0.60
Hermit Thrush	<i>Catharus guttatus</i>	-	-	-	S5B	Possible	6	3.59
Killdeer	<i>Charadrius vociferus</i>	-	-	-	S3B	Confirmed	11	6.59
Least Flycatcher	<i>Empidonax minimus</i>	-	-	-	S4S5B,S5M		1	0.60
Least Sandpiper	<i>Calidris minutilla</i>	-	-	-	S1B,S4M		1	0.60



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Appendix D Summary of Avifauna Observations

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**Table D.3 Breeding Bird Surveys**

Common Name	Scientific Name	SARA	COSEWIC	NB ESA	AC CDC Rank	Highest Breeding Evidence	Individuals	Relative Abundance (%)
Magnolia Warbler	<i>Setophaga magnolia</i>	-	-	-	S5B	Possible	2	1.20
Mourning Dove	<i>Zenaida macroura</i>	-	-	-	S5	Possible	7	4.19
Nashville Warbler	<i>Leiothlypis ruficapilla</i>	-	-	-	S4B,S5M	Possible	1	0.60
Northern Flicker	<i>Colaptes auratus</i>	-	-	-	S5B	Probable	4	2.40
Northern Parula	<i>Setophaga americana</i>	-	-	-	S5B	Possible	3	1.80
Northern Waterthrush	<i>Parkesia noveboracensis</i>	-	-	-	S4B,S5M	Possible	1	0.60
Ovenbird	<i>Seiurus aurocapilla</i>	-	-	-	S5B	Possible	10	5.99
Palm Warbler	<i>Setophaga palmarum</i>	-	-	-	S5B	Confirmed	4	2.40
Pileated Woodpecker	<i>Dryocopus pileatus</i>	-	-	-	S5		2	1.20
Red-eyed Vireo	<i>Vireo olivaceus</i>	-	-	-	S5B	Possible	8	4.79
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	-	-	-	S4B	Possible	1	0.60
Song Sparrow	<i>Melospiza melodia</i>	-	-	-	S5B	Possible	4	2.40
Swamp Sparrow	<i>Melospiza georgiana</i>	-	-	-	S5B	Possible	1	0.60
Veery	<i>Catharus fuscescens</i>	-	-	-	S4B		2	1.20
White-throated Sparrow	<i>Zonotrichia albicollis</i>	-	-	-	S4S5B,S5M	Possible	11	6.59



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Appendix D Summary of Avifauna Observations

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**Table D.3 Breeding Bird Surveys**

Common Name	Scientific Name	SARA	COSEWIC	NB ESA	AC CDC Rank	Highest Breeding Evidence	Individuals	Relative Abundance (%)
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	-	-	-	S5B		2	1.20
Black-throated Green Warbler	<i>Setophaga virens</i>	-	-	-	S5B	Possible	3	1.80

Notes:

**Bold** indicates SAR

<sup>1</sup> = Subspecies/population not identified, so multiple ranks possible.

SAR / COSEIWC / NB ESA codes used:

SC = Special Concern; TH = Threatened; VU = Vulnerable; EN = Endangered; NAR = Not at Risk

S-Rank definitions (AC CDC 2024):

S1 = Critically Imperiled: Critically imperiled in the province because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state/province.

S2 = Imperiled: Imperiled in the province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province.

S3 = Vulnerable: Vulnerable in the province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

S4 = Apparently Secure: Uncommon but not rare; some cause for long-term concern due to declines or other factors.

S5 = Secure: Common, widespread, and abundant in the province.

SNR = Unranked: Nation or state/province conservation status not yet assessed.

SNA = A conservation status rank is not applicable because the species is not a suitable target for conservation activities

SU = Unrankable: Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.



## D.4 Incidental Wildlife Observations

Table D.4 Incidental Wildlife Observations

Common Name	Scientific Name	COSEWIC	NS ESA	SARA	S-Rank
American Black Bear	<i>Ursus americanus</i>	NAR	-	-	S5
Coyote	<i>Canis latrans</i>	-	-	-	S5
Eastern Chipmunk	<i>Tamias striatus</i>	-	-	-	S5
Snowshoe Hare	<i>Lepus americanus</i>	-	-	-	S5

Notes:  
SAR / SOCC codes used  
NAR = Not at Risk



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**Appendix E Summary of Bat Survey Data**

May 5, 2025

**Appendix E      Summary of Bat Survey Data**



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Appendix E Summary of Bat Survey Data

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## E.1 Summary of Bat Surveys

**Table E.1** Summary of Bat Surveys

Forest Stand ID	Date (2024)	Approximate Stand Age	Clumps of Usnea Lichen	Snags	Trees in Decay Classes 1-3	Trees with DBH > 25 cm		Trees with DBH > 10 cm	
						Cavities Cracks Crevices	Loose peeling bark	Cavities Cracks Crevices	Loose peeling bark
S1	10-Apr	60	Common	Common	Uncommon	N/A	N/A	Uncommon	Uncommon
S2	10-Apr	60	Uncommon	Common	Uncommon	Uncommon	Uncommon	Uncommon	Uncommon
S3	10-Apr	60	Common	Common	Uncommon	Uncommon	Uncommon	Uncommon	Uncommon
S4	10-Apr	12	Uncommon	N/A	N/A	N/A	N/A	N/A	N/A
S5	10-Apr	70	Uncommon	Common	Common	Uncommon	Uncommon	N/A	Uncommon
S6	10-Apr	30	Uncommon	Uncommon	Uncommon	N/A	N/A	N/A	N/A
S7	10-Apr	50	Common	Common	Common	Uncommon	Uncommon	N/A	Common
S8	10-Apr	60	Common	Common	N/A	Uncommon	Uncommon	N/A	Uncommon
S9	10-Apr	50	Common	Common	Common	Uncommon	Uncommon	N/A	N/A
S10	10-Apr	60	Uncommon	Common	Uncommon	N/A	Uncommon	N/A	Uncommon
S11	10-Apr	8	Uncommon	Uncommon	Uncommon	N/A	N/A	Uncommon	Uncommon
S12	10-Apr	50	Uncommon	Uncommon	N/A	N/A	N/A	Uncommon	Uncommon
S13	10-Apr	60	Uncommon	Common	Uncommon	N/A	Uncommon	N/A	Uncommon
S14	11-Apr	45	Common	Common	Common	N/A	N/A	N/A	N/A
S15	11-Apr	30	Uncommon	Uncommon	Uncommon	N/A	N/A	N/A	Uncommon
S16	11-Apr	30	Uncommon	Common	Uncommon	Uncommon	Uncommon	Uncommon	Uncommon
S17	11-Apr	60	Common	Common	Uncommon	N/A	N/A	N/A	Uncommon

