Elmsdale Business Park Phased Expansion
Class 1 Environmental
Assessment Application

February, 2019

Appendix E - AACCDC Data Report

Atlantic Canada Conservation Data Centre
(AACCDC) Data Report
(October 6th, 2015)

Atlantic Canada Conservation Data Centre
Centre de données sur la conservation du Canada Atlantique

DATA REPORT 5448: Elmsdale, NS

Prepared 6 October 2015
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

2.0 Rare and Endangered Species
- 2.1 Flora
- 2.2 Fauna
- Map 2: Flora and Fauna

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

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

5.0 Rare Species within 100 km
- 5.1 Source Bibliography

Map 1. A 100 km buffer around the study area

1.0 PREFACE

The Atlantic Canada Conservation Data Centre (ACCDC) 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 ACCDC 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 ACCDC is supported by 6 federal agencies and 4 provincial governments, as well as through outside grants and data processing fees. URL: www.ACCDC.com.

Upon request and for a fee, the ACCDC 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 ACCDC includes locations of managed areas with some level of protection, and known sites of ecological interest or sensitivity.

1.1 DATA LIST

Included datasets:

Filename	Contents
ElmsdaleNS_5448ob.xls	All Rare and legally protected *Flora and Fauna* within 5 km of your study area
ElmsdaleNS_5448ob100km.xls	A list of Rare and legally protected *Flora and Fauna* within 100 km of your study area
ElmsdaleNS_5448ma.xls	All *Managed Areas* in your study area
ElmsdaleNS_5448ff.xls	Rare and common *Freshwater Fish* in your study area (DFO database)

1.2 RESTRICTIONS

The ACCDC 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 ACCDC 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 ACCDC 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) ACCDC 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) ACCDC 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 ACCDC data response.

1.3 ADDITIONAL INFORMATION

The attached file DataDictionary 2.1.pdf provides metadata for the data provided.

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

Plants, Lichens, Ranking Methods, All other Inquiries
Sean Blaney, Senior Scientist, Executive Director
Tel: (506) 364-2658
sblaney@mta.ca

Animals (Fauna)
John Klymko, Zoologist
Tel: (506) 364-2660
jklymko@mta.ca

Plant Communities
Sarah Robinson , Community Ecologist
Tel: (506) 364-2664
srobinson@mta.ca

Data Management, GIS
James Churchill, Data Manager
Tel: (902) 679-6146
jlchurchill@mta.ca

Billing
Jean Breau
Tel: (506) 364-2657
jrbreau@mta.ca

Questions on the biology of Federal Species at Risk can be directed to ACCDC: (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 Stewart Lusk, Natural Resources: (506) 453-7110.

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 Sherman Boates, NSDNR: (902) 679-6146. To determine if location-sensitive species (section 4.3) occur near your study site please contact a NSDNR Regional Biologist:

Western: Duncan Bayne
(902) 648-3536
baynedz@gov.ns.ca

Western: Donald Sam
(902) 634-7525
samdx@gov.ns.ca

Central: Shavonne Meyer
(902) 893-6353
meyersj@gov.ns.ca

Central: Kimberly George
(902) 893-5630
georgeka@gov.ns.ca

Eastern: Mark Pulsifer
(902) 863-7523
pulsifmd@gov.ns.ca

Eastern: Donald Anderson
(902) 295-3949
andersdg@gov.ns.ca

Eastern: Terry Power
(902) 563-3370
powertd@gov.ns.ca

For provincial information about rare taxa and protected areas, or information about game animals, fish habitat etc., in Prince Edward Island, please contact Rosemary Curley, PEI Dept. of Agriculture and Forestry: (902) 368-4807.

2.0 RARE AND ENDANGERED SPECIES

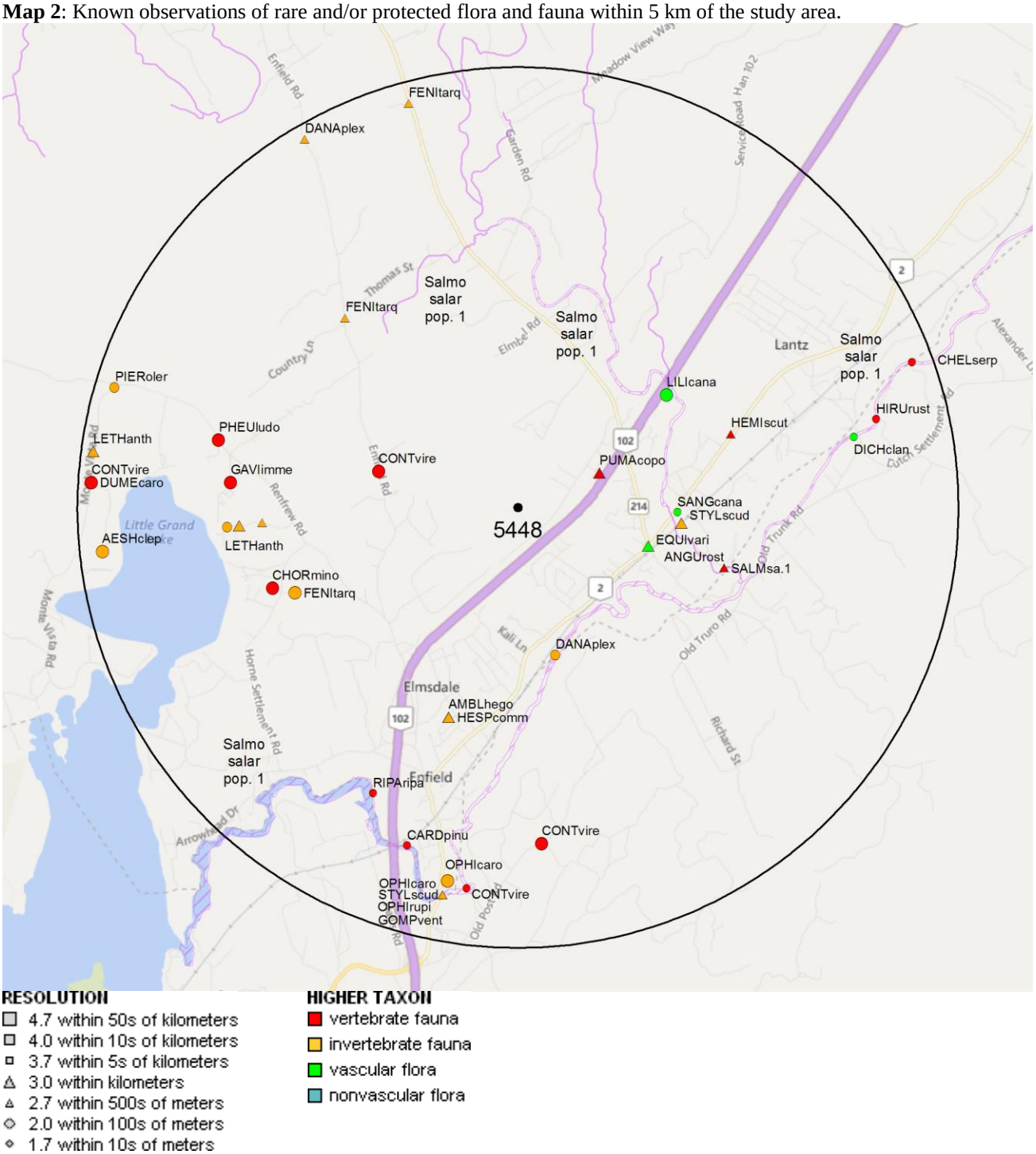
2.1 FLORA

A 5 km buffer around the study area contains 4 records of 4 vascular, no records of nonvascular flora (Map 2 and attached: *ob.xls).

2.2 FAUNA

A 5 km buffer around the study area contains 20 records of 13 vertebrate, 40 records of 11 invertebrate fauna (Map 2 and attached data files - see 1.1 Data List). Please see section 4.3 to determine if 'location-sensitive' species occur near your study site.

Map 2: Known observations of rare and/or protected flora and fauna within 5 km of 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

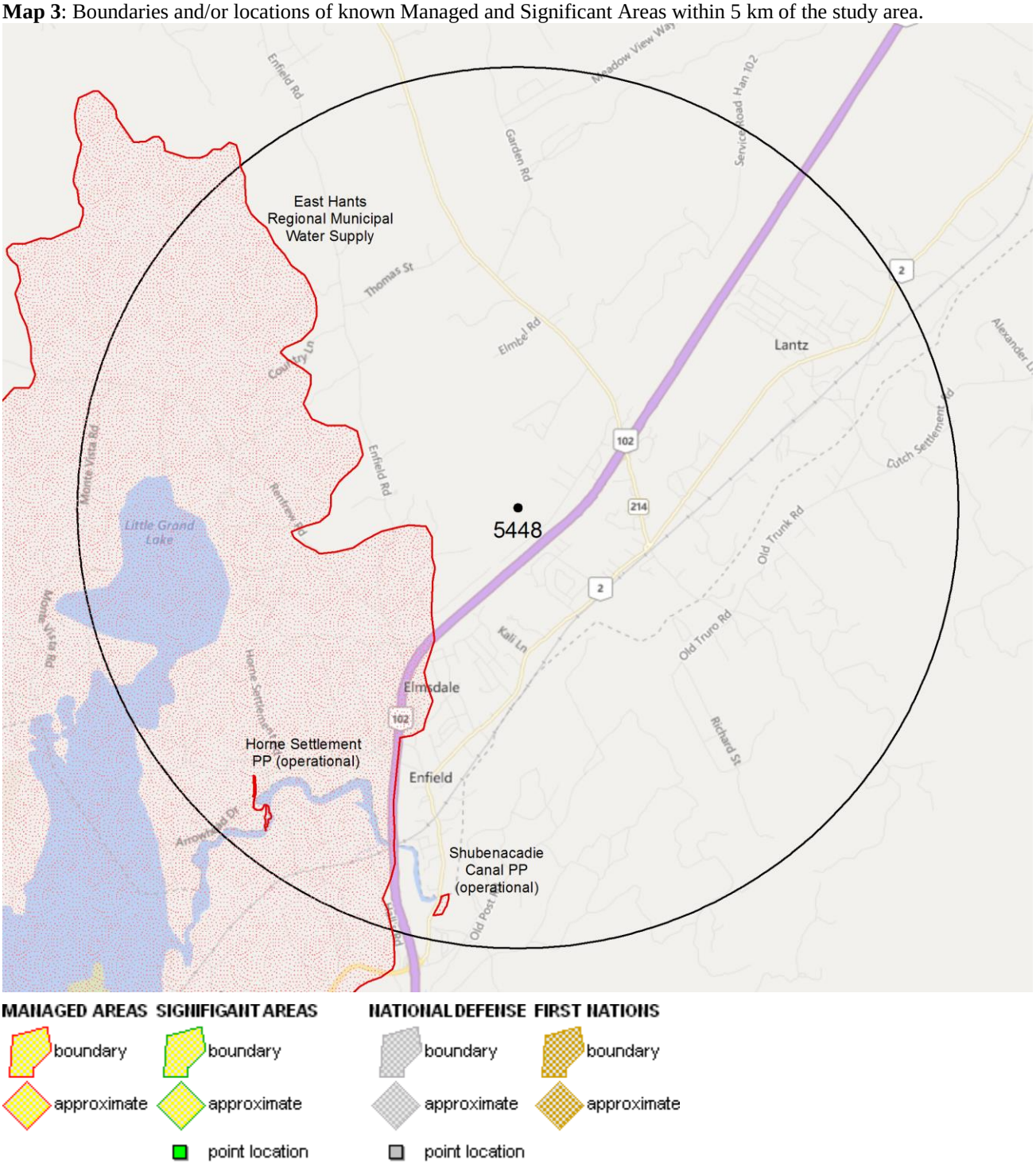
- vertebrate fauna
- invertebrate fauna
- vascular flora
- nonvascular flora

3.0 SPECIAL AREAS

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

3.2 SIGNIFICANT AREAS
The GIS scan identified no biologically significant sites in the vicinity of the study area (Map 3)

Map 3: Boundaries and/or locations of known Managed and Significant Areas within 5 km of the study area.



4.0 RARE SPECIES LISTS

Rare and/or endangered taxa (excluding “location-sensitive” species, section 4.3) within the 5 km-buffered 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 (± the precision, in km, of the record). [P] = vascular plant, [N] = nonvascular plant, [A] = vertebrate animal, [I] = invertebrate animal, [C] = community.

4.1 FLORA

	Scientific *Name*	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
P	*Lilium canadense*	Canada Lily				S2	May Be At Risk	1	2.1 ± 0.0
P	*Dichanthelium clandestinum*	Deer-tongue Panic Grass				S3	4 Secure	1	3.9 ± 0.0
P	*Equisetum variegatum*	Variegated Horsetail				S3	4 Secure	1	1.5 ± 2.0
P	*Sanguinaria canadensis*	Bloodroot				S3S4	4 Secure	1	1.8 ± 0.0

4.2 FAUNA

	Scientific *Name*	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
A	*Salmo salar pop. 1*	Atlantic Salmon - Inner Bay of Fundy pop.	Endangered	Endangered		S2	2 May Be At Risk	1	2.4 ± 0.0
A	*Hirundo rustica*	Barn Swallow	Threatened		Endangered	S3B	1 At Risk	1	4.2 ± 0.0
A	*Chordeiles minor*	Common Nighthawk	Threatened	Threatened	Threatened	S3B	1 At Risk	5	2.9 ± 0.0
A	*Riparia riparia*	Bank Swallow	Threatened			S3B	2 May Be At Risk	1	3.6 ± 0.0
A	*Anguilla rostrata*	American Eel	Threatened			S5	4 Secure	1	2.4 ± 0.0
A	*Chelydra serpentina*	Snapping Turtle	Special Concern	Special Concern	Vulnerable	S3	3 Sensitive	1	4.8 ± 0.0
A	*Contopus virens*	Eastern Wood-Pewee	Special Concern		Vulnerable	S3S4B	3 Sensitive	4	1.6 ± 0.0
A	*Hemidactylium scutatum*	Four-toed Salamander	Not At Risk			S3	4 Secure	1	2.6 ± 0.0
A	*Gavia immer*	Common Loon	Not At Risk			S3B,S4N	2 May Be At Risk	1	3.3 ± 0.0
A	*Puma concolor pop. 1*	Cougar - Eastern pop.	Data Deficient			SH	5 Undetermined	1	1.0 ± 1.0
A	*Dumetella carolinensis*	Gray Catbird				S3B	2 May Be At Risk	1	4.8 ± 0.0
A	*Pheucticus ludovicianus*	Rose-breasted Grosbeak				S3S4B	3 Sensitive	1	3.5 ± 0.0
A	*Carduelis pinus*	Pine Siskin				S3S4B,S5N	3 Sensitive	1	4.0 ± 0.0
I	*Gomphus ventricosus*	Skillet Clubtail	Endangered			S1	2 May Be At Risk	1	4.5 ± 0.0
I	*Danaus plexippus*	Monarch	Special Concern	Special Concern		S2B	3 Sensitive	2	1.7 ± 0.0
I	*Ophiogomphus rupinsulensis*	Rusty Snaketail				S1S2	2 May Be At Risk	16	4.3 ± 0.0
I	*Stylurus scudderi*	Zebra Clubtail				S1S2	2 May Be At Risk	2	1.9 ± 1.0
I	*Amblyscirtes hegon*	Pepper and Salt Skipper				S2	4 Secure	1	2.5 ± 1.0
I	*Pieris oleracea*	Mustard White				S2	3 Sensitive	1	4.8 ± 0.0
I	*Hesperia comma*	Common Branded Skipper				S3	4 Secure	1	2.5 ± 1.0
I	*Lethe anthedon*	Northern Pearly-Eye				S3	4 Secure	5	2.9 ± 0.0
I	*Ophiogomphus carolus*	Riffle Snaketail				S3	4 Secure	7	4.3 ± 0.0
I	*Aeshna clepsydra*	Mottled Darner				S3	4 Secure	1	4.7 ± 0.0
I	*Feniseca tarquinius*	Harvester				S3S4	4 Secure	3	2.7 ± 0.0

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 a 5 km buffer of your study area are indicated below with "YES".

Nova Scotia

Scientific *Name*	Common Name	SARA	Prov Legal Prot	Known within 5 km of Study Site?
Fraxinus nigra	Black Ash		Threatened	No
Emydoidea blandingii	*Blanding's Turtle - Nova Scotia pop.*	Endangered	Vulnerable	No
Glyptemys insculpta	**Wood Turtle**	**Threatened**	**Threatened**	**YES**
Falco peregrinus pop. 1	Peregrine Falcon - anatum/tundrius pop.	Special Concern	Vulnerable	No
Bat Hibernaculum		[Endangered][1]	[Endangered][1]	No

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

4.4 SOURCE BIBLIOGRAPHY

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

# recs	CITATION
27	Brunelle, P.-M. (compiler). 2009. ADIP/MDDS Odonata Database: data to 2006 inclusive. Atlantic Dragonfly Inventory Program (ADIP), 24200 recs.
11	Lepage, D. 2014. Maritime Breeding Bird Atlas Database. Bird Studies Canada, Sackville NB, 407,838 recs.
6	Klymko, J.J.D. 2012. Maritimes Butterfly Atlas, 2010 and 2011 records. Atlantic Canada Conservation Data Centre, 6318 recs.
6	Klymko, J.J.D.; Robinson, S.L. 2012. 2012 field data. Atlantic Canada Conservation Data Centre, 447 recs.
4	Benjamin, L.K. (compiler). 2007. Significant Habitat & Species Database. Nova Scotia Dept Natural Resources, 8439 recs.
4	Klymko, J.J.D. 2014. Maritimes Butterfly Atlas, 2012 submissions. Atlantic Canada Conservation Data Centre, 8552 records.
3	Staff, DNR 2007. Restricted & Limited Use Land Database (RLUL).
2	Layberry, R.A. & Hall, P.W., LaFontaine, J.D. 1998. The Butterflies of Canada. University of Toronto Press. 280 pp+plates.
1	Amiro, P.G. 1998. Atlantic Salmon Inner Bay of Fundy SFA 22 & part of 23. DFO Sci. SSR D3-12.
1	Benjamin, L.K. (compiler). 2001. Significant Habitat & Species Database. Nova Scotia Dept of Natural Resources, 15 spp, 224 recs.
1	Blaney, C.S.; Mazerolle, D.M. 2010. Fieldwork 2010. Atlantic Canada Conservation Data Centre. Sackville NB, 15508 recs.
1	Jacques Whitford Ltd. 2003. Cananda Lily location. Pers. Comm. to S. Blaney. 2pp, 1 rec, 1 rec.
1	Munro, Marian K. Nova Scotia Provincial Museum of Natural History Herbarium Database. Nova Scotia Provincial Museum of Natural History, Halifax, Nova Scotia. 2013.
1	Newell, R. E. E.C. Smith Digital Herbarium. E.C. Smith Herbarium, Irving Biodiversity Collection, Acadia University. 2013.
1	Scott, Fred W. 1998. Updated Status Report on the Cougar (Puma Concolor couguar) [Eastern population]. Committee on the Status of Endangered Wildlife in Canada, 298 recs.

5.0 RARE SPECIES WITHIN 100 KM

A 100 km buffer around the study area contains 17185 records of 120 vertebrate and 1104 records of 71 invertebrate fauna; 5008 records of 289 vascular, 557 records of 78 nonvascular flora (attached: *ob100km.xls).

Rare and/or endangered taxa within the 100 km-buffered 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 (± the precision, in km, of the record).

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
A	*Myotis lucifugus*	Little Brown Myotis	Endangered	Endangered	Endangered	S1	1 At Risk	39	7.1 ± 0.0
A	*Myotis septentrionalis*	Northern Long-eared Myotis	Endangered	Endangered	Endangered	S1	1 At Risk	5	7.1 ± 0.0
A	*Perimyotis subflavus*	Eastern Pipistrelle	Endangered	Endangered	Endangered	S1	1 At Risk	7	7.1 ± 0.0
A	*Morone saxatilis pop. 2*	Striped Bass- Bay of Fundy pop.	Endangered			S1	2 May Be At Risk	4	5.4 ± 0.0
A	*Charadrius melodus melodus*	Piping Plover melodus ssp	Endangered	Endangered	Endangered	S1B	1 At Risk	427	35.5 ± 7.0
A	*Sterna dougallii*	Roseate Tern	Endangered	Endangered	Endangered	S1B	1 At Risk	64	40.5 ± 0.0
A	*Dermochelys coriacea (Atlantic pop.)*	Leatherback Sea Turtle - Atlantic pop.	Endangered	Endangered		S1S2N		3	54.8 ± 5.0
A	*Salmo salar pop. 1*	Atlantic Salmon - Inner Bay of Fundy pop.	Endangered	Endangered		S2	2 May Be At Risk	32	2.4 ± 0.0
A	*Calidris canutus rufa*	Red Knot rufa ssp	Endangered		Endangered	S2S3M	1 At Risk	131	36.1 ± 0.0
A	*Colinus virginianus*	Northern Bobwhite	Endangered	Endangered				4	17.0 ± 0.0
A	*Acipenser oxyrinchus*	Atlantic Sturgeon	Threatened			S1?	2 May Be At Risk	5	7.9 ± 0.0
A	*Caprimulgus vociferus*	Whip-Poor-Will	Threatened	Threatened	Threatened	S1?B	1 At Risk	12	20.3 ± 7.0
A	*Hylocichla mustelina*	Wood Thrush	Threatened			S1B	5 Undetermined	32	17.0 ± 7.0
A	*Sturnella magna*	Eastern Meadowlark	Threatened			S1B	3 Sensitive	2	55.8 ± 7.0
A	*Glyptemys insculpta*	Wood Turtle	Threatened	Threatened	Threatened	S2	3 Sensitive	196	1.4 ± 1.0
A	*Chaetura pelagica*	Chimney Swift	Threatened	Threatened	Endangered	S2S3B	1 At Risk	167	6.2 ± 7.0
A	*Hirundo rustica*	Barn Swallow	Threatened		Endangered	S3B	1 At Risk	843	4.2 ± 0.0
A	*Wilsonia canadensis*	Canada Warbler	Threatened	Threatened	Endangered	S3B	1 At Risk	628	6.2 ± 7.0
A	*Chordeiles minor*	Common Nighthawk	Threatened	Threatened	Threatened	S3B	1 At Risk	384	2.9 ± 0.0
A	*Contopus cooperi*	Olive-sided Flycatcher	Threatened	Threatened	Threatened	S3B	1 At Risk	652	6.3 ± 7.0
A	*Riparia riparia*	Bank Swallow	Threatened			S3B	2 May Be At Risk	336	3.6 ± 0.0
A	*Dolichonyx oryzivorus*	Bobolink	Threatened		Vulnerable	S3S4B	3 Sensitive	474	6.2 ± 7.0
A	*Anguilla rostrata*	American Eel	Threatened			S5	4 Secure	8	2.4 ± 0.0
A	*Falco peregrinus pop. 1*	Peregrine Falcon - anatum/tundrius	Special Concern	Special Concern	Vulnerable	S1B	3 Sensitive	84	52.2 ± 0.0
A	*Passerculus sandwichensis princeps*	Savannah Sparrow princeps ssp	Special Concern	Special Concern		S1B	3 Sensitive	2	38.0 ± 0.0
A	*Asio flammeus*	Short-eared Owl	Special Concern	Special Concern		S1S2	2 May Be At Risk	12	35.1 ± 7.0
A	*Histrionicus histrionicus pop. 1*	Harlequin Duck - Eastern pop.	Special Concern	Special Concern	Endangered	S2N	1 At Risk	20	58.0 ± 2.0
A	*Euphagus carolinus*	Rusty Blackbird	Special Concern	Special Concern	Endangered	S2S3B	2 May Be At Risk	218	6.2 ± 7.0
A	*Phalaropus lobatus*	Red-necked Phalarope	Special Concern			S2S3M	3 Sensitive	5	36.1 ± 0.0
A	*Chelydra serpentina*	Snapping Turtle	Special Concern	Special Concern	Vulnerable	S3	3 Sensitive	80	4.8 ± 0.0
A	*Contopus virens*	Eastern Wood-Pewee	Special Concern		Vulnerable	S3S4B	3 Sensitive	616	1.6 ± 0.0
A	*Phocoena phocoena (NW Atlantic pop.)*	Harbour Porpoise - Northwest Atlantic pop.	Special Concern	Threatened		S4		3	67.8 ± 1.0
A	*Tryngites subruficollis*	Buff-breasted Sandpiper	Special Concern			SNA	8 Accidental	6	40.9 ± 0.0
A	*Falco peregrinus*	Peregrine Falcon	Special Concern					2	72.0 ± 0.0
A	*Sorex dispar*	Long-tailed Shrew	Not At Risk	Special Concern		S1	3 Sensitive	2	58.4 ± 5.0
A	*Accipiter cooperii*	Cooper's Hawk	Not At Risk			S1?B,SNAN	5 Undetermined	4	26.0 ± 0.0
A	*Fulica americana*	American Coot	Not At Risk			S1B	5 Undetermined	7	25.4 ± 7.0
A	*Aegolius funereus*	Boreal Owl	Not At Risk			S1B	5 Undetermined	8	25.4 ± 7.0
A	*Glaucomys volans*	Southern Flying Squirrel	Not At Risk	Special Concern		S2S3	3 Sensitive	6	65.5 ± 10.0
A	*Globicephala melas*	Long-finned Pilot Whale	Not At Risk			S2S3		1	41.4 ± 100.0

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
A	*Hemidactylium scutatum*	Four-toed Salamander	Not At Risk			S3	4 Secure	27	2.6 ± 0.0
A	*Sterna hirundo*	Common Tern	Not At Risk			S3B	3 Sensitive	243	6.2 ± 7.0
A	*Sialia sialis*	Eastern Bluebird	Not At Risk			S3B	3 Sensitive	68	6.2 ± 7.0
A	*Gavia immer*	Common Loon	Not At Risk			S3B,S4N	2 May Be At Risk	699	3.3 ± 0.0
A	*Accipiter gentilis*	Northern Goshawk	Not At Risk			S3S4	4 Secure	124	6.2 ± 7.0
A	*Lagenorhynchus acutus*	Atlantic White-sided Dolphin	Not At Risk			S3S4		1	62.5 ± 1.0
A	*Puma concolor pop. 1*	Cougar - Eastern pop.	Data Deficient			SH	5 Undetermined	76	1.0 ± 1.0
A	*Alces americanus*	Moose			Endangered	S1	1 At Risk	18	46.4 ± 0.0
A	*Lasiurus cinereus*	Hoary Bat				S1	2 May Be At Risk	2	21.6 ± 0.0
A	*Toxostoma rufum*	Brown Thrasher				S1?B	5 Undetermined	16	35.1 ± 7.0
A	*Vireo gilvus*	Warbling Vireo				S1?B	5 Undetermined	26	25.2 ± 7.0
A	*Tringa solitaria*	Solitary Sandpiper				S1?B,S4S5M	4 Secure	25	38.3 ± 0.0
A	*Larus delawarensis*	Ring-billed Gull				S1?B,S5N	4 Secure	9	17.0 ± 7.0
A	*Gallinula chloropus*	Common Moorhen				S1B	5 Undetermined	8	44.0 ± 7.0
A	*Progne subis*	Purple Martin				S1B	2 May Be At Risk	4	73.3 ± 7.0
A	*Cistothorus palustris*	Marsh Wren				S1B	5 Undetermined	2	97.1 ± 0.0
A	*Alca torda*	Razorbill				S1B,S4N	3 Sensitive	17	77.4 ± 0.0
A	*Fratercula arctica*	Atlantic Puffin				S1B,S4S5N	3 Sensitive	20	76.3 ± 0.0
A	*Calidris minutilla*	Least Sandpiper				S1B,S5M	4 Secure	376	34.6 ± 0.0
A	*Passerina cyanea*	Indigo Bunting				S1S2B	5 Undetermined	19	16.3 ± 7.0
A	*Eremophila alpestris*	Horned Lark				S1S2B,S4N	4 Secure	6	8.0 ± 7.0
A	*Charadrius semipalmatus*	Semipalmated Plover				S1S2B,S5M	4 Secure	513	36.1 ± 0.0
A	*Asio otus*	Long-eared Owl				S2	2 May Be At Risk	26	17.1 ± 7.0
A	*Salmo salar*	Atlantic Salmon				S2	2 May Be At Risk	55	24.1 ± 0.0
A	*Pekania pennanti*	Fisher				S2	3 Sensitive	3	82.1 ± 5.0
A	*Vireo philadelphicus*	Philadelphia Vireo				S2?B	5 Undetermined	29	16.2 ± 7.0
A	*Anas acuta*	Northern Pintail				S2B	2 May Be At Risk	21	16.3 ± 7.0
A	*Anas clypeata*	Northern Shoveler				S2B	2 May Be At Risk	11	17.0 ± 7.0
A	*Anas strepera*	Gadwall				S2B	2 May Be At Risk	24	35.1 ± 7.0
A	*Rallus limicola*	Virginia Rail				S2B	5 Undetermined	29	10.3 ± 0.0
A	*Empidonax traillii*	Willow Flycatcher				S2B	3 Sensitive	27	17.0 ± 7.0
A	*Myiarchus crinitus*	Great Crested Flycatcher				S2B	2 May Be At Risk	26	25.2 ± 7.0
A	*Piranga olivacea*	Scarlet Tanager				S2B	5 Undetermined	32	25.2 ± 7.0
A	*Rissa tridactyla*	Black-legged Kittiwake				S2B,S4S5N	3 Sensitive	8	68.5 ± 0.0
A	*Bucephala clangula*	Common Goldeneye				S2B,S5N	4 Secure	108	25.2 ± 7.0
A	*Cathartes aura*	Turkey Vulture				S2S3B	3 Sensitive	16	15.4 ± 7.0
A	*Tringa semipalmata*	Willet				S2S3B	2 May Be At Risk	573	17.0 ± 7.0
A	*Pooecetes gramineus*	Vesper Sparrow				S2S3B	2 May Be At Risk	50	6.3 ± 7.0
A	*Molothrus ater*	Brown-headed Cowbird				S2S3B	4 Secure	135	6.3 ± 7.0
A	*Icterus galbula*	Baltimore Oriole				S2S3B	2 May Be At Risk	65	6.2 ± 7.0
A	*Phalaropus fulicarius*	Red Phalarope				S2S3M	3 Sensitive	1	42.8 ± 0.0
A	*Phalacrocorax carbo*	Great Cormorant				S3	3 Sensitive	49	42.6 ± 12.0
A	*Poecile hudsonica*	Boreal Chickadee				S3	3 Sensitive	525	6.2 ± 7.0
A	*Coccyzus erythropthalmus*	Black-billed Cuckoo				S3?B	2 May Be At Risk	67	6.2 ± 7.0
A	*Dendroica tigrina*	Cape May Warbler				S3?B	3 Sensitive	131	6.2 ± 7.0
A	*Pinicola enucleator*	Pine Grosbeak				S3?B,S5N	2 May Be At Risk	126	6.2 ± 7.0
A	*Podilymbus podiceps*	Pied-billed Grebe				S3B	3 Sensitive	104	6.3 ± 7.0
A	*Anas discors*	Blue-winged Teal				S3B	2 May Be At Risk	88	16.3 ± 7.0
A	*Sterna paradisaea*	Arctic Tern				S3B	2 May Be At Risk	65	38.0 ± 0.0
A	*Petrochelidon pyrrhonota*	Cliff Swallow				S3B	2 May Be At Risk	261	5.3 ± 0.0
A	*Dumetella carolinensis*	Gray Catbird				S3B	2 May Be At Risk	422	4.8 ± 0.0
A	*Mimus polyglottos*	Northern Mockingbird				S3B	4 Secure	40	28.4 ± 7.0
A	*Tringa melanoleuca*	Greater Yellowlegs				S3B,S5M	3 Sensitive	570	25.9 ± 7.0
A	*Mergus serrator*	Red-breasted Merganser				S3B,S5N	4 Secure	69	17.1 ± 7.0
A	*Branta bernicla*	Brant				S3M	3 Sensitive	1	61.4 ± 0.0
A	*Pluvialis dominica*	American Golden-Plover				S3M	3 Sensitive	75	36.1 ± 0.0
A	*Numenius phaeopus hudsonicus*	Hudsonian Whimbrel				S3M	3 Sensitive	46	36.1 ± 0.0

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
A	*Limosa haemastica*	Hudsonian Godwit				S3M	3 Sensitive	51	36.1 ± 0.0
A	*Calidris pusilla*	Semipalmated Sandpiper				S3M	3 Sensitive	474	34.6 ± 0.0
A	*Calidris maritima*	Purple Sandpiper				S3N	3 Sensitive	29	28.2 ± 0.0
A	*Cepphus grylle*	Black Guillemot				S3S4	4 Secure	74	38.3 ± 0.0
A	*Picoides arcticus*	Black-backed Woodpecker				S3S4	3 Sensitive	162	6.3 ± 7.0
A	*Perisoreus canadensis*	Gray Jay				S3S4	3 Sensitive	457	6.3 ± 7.0
A	*Cardinalis cardinalis*	Northern Cardinal				S3S4	4 Secure	70	25.3 ± 0.0
A	*Botaurus lentiginosus*	American Bittern				S3S4B	3 Sensitive	177	6.2 ± 7.0
A	*Charadrius vociferus*	Killdeer				S3S4B	3 Sensitive	450	6.1 ± 0.0
A	*Actitis macularius*	Spotted Sandpiper				S3S4B	3 Sensitive	547	6.1 ± 0.0
A	*Gallinago delicata*	Wilson's Snipe				S3S4B	3 Sensitive	388	6.2 ± 7.0
A	*Empidonax flaviventris*	Yellow-bellied Flycatcher				S3S4B	3 Sensitive	519	6.3 ± 7.0
A	*Sayornis phoebe*	Eastern Phoebe				S3S4B	3 Sensitive	167	14.6 ± 7.0
A	*Tyrannus tyrannus*	Eastern Kingbird				S3S4B	3 Sensitive	240	6.2 ± 7.0
A	*Vermivora peregrina*	Tennessee Warbler				S3S4B	3 Sensitive	304	6.2 ± 7.0
A	*Dendroica castanea*	Bay-breasted Warbler				S3S4B	3 Sensitive	400	6.2 ± 7.0
A	*Dendroica striata*	Blackpoll Warbler				S3S4B	3 Sensitive	105	17.0 ± 7.0
A	*Wilsonia pusilla*	Wilson's Warbler				S3S4B	3 Sensitive	70	8.0 ± 7.0
A	*Pheucticus ludovicianus*	Rose-breasted Grosbeak				S3S4B	3 Sensitive	357	3.5 ± 0.0
A	*Passerella iliaca*	Fox Sparrow				S3S4B	4 Secure	78	8.1 ± 7.0
A	*Carduelis pinus*	Pine Siskin				S3S4B,S5N	3 Sensitive	355	4.0 ± 0.0
A	*Leucophaeus atricilla*	Laughing Gull				SHB	4 Secure	1	57.6 ± 0.0
A	*Morus bassanus*	Northern Gannet				SHB,S5M	4 Secure	2	59.1 ± 12.0
I	*Gomphus ventricosus*	Skillet Clubtail	Endangered			S1	2 May Be At Risk	2	4.5 ± 0.0
I	*Barnea truncata*	Atlantic Mud-piddock	Threatened					1	51.8 ± 1.0
I	*Alasmidonta varicosa*	Brook Floater	Special Concern		Threatened	S1S2	3 Sensitive	9	12.5 ± 0.0
I	*Danaus plexippus*	Monarch	Special Concern	Special Concern		S2B	3 Sensitive	79	1.7 ± 0.0
I	*Lycaena hyllus*	Bronze Copper				S1	4 Secure	7	7.8 ± 1.0
I	*Plebejus saepiolus*	Greenish Blue				S1	1 At Risk	1	36.8 ± 1.0
I	*Polygonia satyrus*	Satyr Comma				S1	3 Sensitive	2	38.6 ± 1.0
I	*Polygonia gracilis*	Hoary Comma				S1	3 Sensitive	2	48.3 ± 1.0
I	*Oeneis jutta*	Jutta Arctic				S1	2 May Be At Risk	7	28.2 ± 1.0
I	*Ophiogomphus aspersus*	Brook Snaketail				S1	2 May Be At Risk	6	40.2 ± 0.0
I	*Ophiogomphus mainensis*	Maine Snaketail				S1	2 May Be At Risk	2	78.2 ± 0.0
I	*Neurocordulia michaeli*	Broadtailed Shadowdragon				S1		7	81.8 ± 0.0
I	*Somatochlora brevicincta*	Quebec Emerald				S1	2 May Be At Risk	2	31.9 ± 0.0
I	*Somatochlora franklini*	Delicate Emerald				S1	3 Sensitive	3	28.2 ± 1.0
I	*Williamsonia fletcheri*	Ebony Boghaunter				S1	2 May Be At Risk	5	84.6 ± 0.0
I	*Coenagrion resolutum*	Taiga Bluet				S1	2 May Be At Risk	2	19.8 ± 1.0
I	*Enallagma signatum*	Orange Bluet				S1	2 May Be At Risk	3	13.8 ± 0.0
I	*Leptodea ochracea*	Tidewater Mucket				S1	3 Sensitive	10	88.1 ± 1.0
I	*Strophitus undulatus*	Creeper				S1	2 May Be At Risk	6	87.8 ± 1.0
I	*Cicindela formosa*	Big Sand Tiger Beetle				S1S2	2 May Be At Risk	1	75.8 ± 1.0
I	*Cicindela marginata*	Margined Tiger Beetle				S1S2	2 May Be At Risk	1	72.1 ± 1.0
I	*Callophrys lanoraieensis*	Bog Elfin				S1S2	2 May Be At Risk	14	11.6 ± 1.0
I	*Nymphalis l-album*	Compton Tortoiseshell				S1S2	4 Secure	10	18.7 ± 1.0
I	*Ophiogomphus rupinsulensis*	Rusty Snaketail				S1S2	2 May Be At Risk	19	4.3 ± 0.0
I	*Somatochlora kennedyi*	Kennedy's Emerald				S1S2	2 May Be At Risk	4	28.2 ± 1.0
I	*Stylurus scudderi*	Zebra Clubtail				S1S2	2 May Be At Risk	6	1.9 ± 1.0
I	*Thorybes pylades*	Northern Cloudywing				S2	3 Sensitive	8	49.8 ± 1.0
I	*Amblyscirtes hegon*	Pepper and Salt Skipper				S2	4 Secure	21	2.5 ± 1.0
I	*Amblyscirtes vialis*	Common Roadside-Skipper				S2	4 Secure	11	6.1 ± 1.0
I	*Pieris oleracea*	Mustard White				S2	3 Sensitive	85	4.8 ± 0.0
I	*Lycaena dospassosi*	Salt Marsh Copper				S2	1 At Risk	19	86.4 ± 0.0
I	*Satyrium calanus*	Banded Hairstreak				S2	5 Undetermined	10	28.8 ± 10.0
I	*Satyrium calanus falacer*	Banded Hairstreak				S2	1 At Risk	2	39.0 ± 0.0
I	*Callophrys henrici*	Henry's Elfin				S2	4 Secure	22	18.7 ± 1.0

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
I	*Callophrys niphon*	Eastern Pine Elfin				S2	4 Secure	24	18.7 ± 1.0
I	*Strymon melinus*	Grey Hairstreak				S2	4 Secure	5	78.9 ± 0.0
I	*Boloria chariclea*	Arctic Fritillary				S2	3 Sensitive	5	51.5 ± 1.0
I	*Polygonia comma*	Eastern Comma				S2	1 At Risk	9	36.2 ± 1.0
I	*Aglais milberti*	Milbert's Tortoiseshell				S2	4 Secure	12	29.2 ± 1.0
I	*Gomphus descriptus*	Harpoon Clubtail				S2	3 Sensitive	2	79.7 ± 1.0
I	*Epitheca princeps*	Prince Baskettail				S2	3 Sensitive	21	5.4 ± 0.0
I	*Somatochlora forcipata*	Forcipate Emerald				S2	2 May Be At Risk	4	36.2 ± 1.0
I	*Lampsilis radiata*	Eastern Lampmussel				S2	3 Sensitive	50	12.5 ± 0.0
I	*Pantala hymenaea*	Spot-Winged Glider				S2B	3 Sensitive	7	38.0 ± 1.0
I	*Naemia seriata*	a Ladybird beetle				S2S3	3 Sensitive	1	59.6 ± 1.0
I	*Erynnis juvenalis*	Juvenal's Duskywing				S2S3	4 Secure	43	11.9 ± 0.0
I	*Enallagma vesperum*	Vesper Bluet				S2S3	3 Sensitive	2	93.7 ± 1.0
I	*Alasmidonta undulata*	Triangle Floater				S2S3	4 Secure	33	12.2 ± 1.0
I	*Hesperia comma*	Common Branded Skipper				S3	4 Secure	31	2.5 ± 1.0
I	*Satyrium liparops*	Striped Hairstreak				S3	5 Undetermined	9	20.0 ± 1.0
I	*Satyrium liparops strigosum*	Striped Hairstreak				S3	3 Sensitive	2	39.0 ± 0.0
I	*Euphydryas phaeton*	Baltimore Checkerspot				S3	4 Secure	20	18.7 ± 1.0
I	*Polygonia faunus*	Green Comma				S3	4 Secure	13	18.7 ± 1.0
I	*Lethe anthedon*	Northern Pearly-Eye				S3	4 Secure	54	2.9 ± 0.0
I	*Lanthus parvulus*	Northern Pygmy Clubtail				S3	4 Secure	6	49.2 ± 5.0
I	*Ophiogomphus carolus*	Riffle Snaketail				S3	4 Secure	35	4.3 ± 0.0
I	*Aeshna clepsydra*	Mottled Darner				S3	4 Secure	11	4.7 ± 0.0
I	*Aeshna constricta*	Lance-Tipped Darner				S3	4 Secure	19	16.7 ± 1.0
I	*Boyeria grafiana*	Ocellated Darner				S3	3 Sensitive	6	35.1 ± 1.0
I	*Gomphaeschna furcillata*	Harlequin Darner				S3	3 Sensitive	6	19.9 ± 1.0
I	*Somatochlora tenebrosa*	Clamp-Tipped Emerald				S3	4 Secure	14	28.2 ± 1.0
I	*Erythrodiplax berenice*	Seaside Dragonlet				S3	3 Sensitive	1	85.1 ± 0.0
I	*Nannothemis bella*	Elfin Skimmer				S3	4 Secure	17	24.8 ± 1.0
I	*Amphiagrion saucium*	Eastern Red Damsel				S3	4 Secure	2	47.6 ± 1.0
I	*Polygonia interrogationis*	Question Mark				S3B	4 Secure	120	24.8 ± 0.0
I	*Feniseca tarquinius*	Harvester				S3S4	4 Secure	52	2.7 ± 0.0
I	*Callophrys polios*	Hoary Elfin				S3S4	4 Secure	33	11.6 ± 1.0
I	*Speyeria cybele*	Great Spangled Fritillary				S3S4	4 Secure	2	6.3 ± 5.0
I	*Speyeria aphrodite*	Aphrodite Fritillary				S3S4	4 Secure	19	18.2 ± 1.0
I	*Polygonia progne*	Grey Comma				S3S4	4 Secure	22	20.8 ± 0.0
I	*Megisto cymela*	Little Wood-satyr				S3S4	4 Secure	3	80.6 ± 0.0
N	*Erioderma mollissimum*	Graceful Felt Lichen	Endangered		Endangered	S1S2	2 May Be At Risk	7	32.2 ± 0.0
N	*Erioderma pedicellatum (Atlantic pop.)*	Boreal Felt Lichen - Atlantic pop.	Endangered	Endangered	Endangered	S1S2	1 At Risk	293	32.1 ± 0.0
N	*Peltigera hydrothyria*	Eastern Waterfan	Threatened			S1S2	2 May Be At Risk	2	61.9 ± 1.0
N	*Fissidens exilis*	Pygmy Pocket Moss	Special Concern			S1?	1 At Risk	3	35.0 ± 1.0
N	*Sclerophora peronella (Nova Scotia pop.)*	Frosted Glass-whiskers Lichen - Nova Scotia pop.	Special Concern	Special Concern		S1?		9	11.6 ± 0.0
N	*Degelia plumbea*	Blue Felt Lichen	Special Concern	Special Concern	Vulnerable	S2	4 Secure	39	33.7 ± 0.0
N	*Pseudevernia cladonia*	Ghost Antler Lichen	Not At Risk			S2S3	3 Sensitive	12	35.8 ± 0.0
N	*Aloina brevirostris*	Short-Beaked Rigid Screw Moss				S1		1	40.3 ± 2.0
N	*Aloina rigida*	Aloe-Like Rigid Screw Moss				S1	2 May Be At Risk	3	40.3 ± 2.0
N	*Bryohaplocladium microphyllum*	Tiny-leaved Haplocladium Moss				S1		1	38.6 ± 5.0
N	*Solorina saccata*	Woodland Owl Lichen				S1	2 May Be At Risk	4	44.3 ± 0.0
N	*Parmeliella parvula*	Poor-man's Shingles Lichen				S1?	2 May Be At Risk	1	70.9 ± 0.0
N	*Everniastrum catawbiense*	Powder-tipped Antler Lichen				S1S2	2 May Be At Risk	1	65.9 ± 0.0
N	*Fuscopannaria leucosticta*	Rimmed Shingles Lichen				S1S2	2 May Be At Risk	4	42.1 ± 0.0
N	*Leptogium lichenoides*	Tattered Jellyskin Lichen				S1S2	2 May Be At Risk	5	44.5 ± 0.0
N	*Sticta limbata*	Powdered Moon Lichen				S1S2	2 May Be At Risk	3	64.6 ± 0.0

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
N	*Peltigera lepidophora*	Scaly Pelt Lichen				S1S2	2 May Be At Risk	1	45.2 ± 0.0
N	*Leptogium subtile*	Appressed Jellyskin Lichen				S1S3	3 Sensitive	3	62.7 ± 0.0
N	*Anacamptodon splachnoides*	a Moss				S2?	3 Sensitive	2	35.9 ± 30.0
N	*Anomodon viticulosus*	a Moss				S2?	3 Sensitive	1	77.4 ± 5.0
N	*Weissia muhlenbergiana*	a Moss				S2?	3 Sensitive	5	45.2 ± 1.0
N	*Atrichum angustatum*	Lesser Smoothcap Moss				S2?	3 Sensitive	2	55.3 ± 2.0
N	*Aulacomnium heterostichum*	One-sided Groove Moss				S2?	3 Sensitive	2	40.3 ± 2.0
N	*Brachythecium turgidum*	Thick Ragged Moss				S2?	3 Sensitive	2	100.0 ± 3.0
N	*Bryum algovicum*	a Moss				S2?	3 Sensitive	1	40.3 ± 2.0
N	*Conardia compacta*	Coast Creeping Moss				S2?	3 Sensitive	1	61.1 ± 2.0
N	*Ditrichum rhynchostegium*	a Moss				S2?	3 Sensitive	1	33.6 ± 1.0
N	*Drummondia prorepens*	a Moss				S2?	3 Sensitive	1	51.4 ± 5.0
N	*Eurhynchium hians*	Light Beaked Moss				S2?	3 Sensitive	3	22.0 ± 5.0
N	*Fissidens taxifolius*	Yew-leaved Pocket Moss				S2?	3 Sensitive	2	40.3 ± 2.0
N	*Grimmia anomala*	Mountain Forest Grimmia				S2?	3 Sensitive	1	79.7 ± 1.0
N	*Anomodon tristis*	a Moss				S2?	3 Sensitive	8	50.2 ± 15.0
N	*Hypnum pratense*	Meadow Plait Moss				S2?	3 Sensitive	1	88.2 ± 3.0
N	*Kiaeria starkei*	Starke's Fork Moss				S2?	3 Sensitive	1	41.8 ± 10.0
N	*Mnium thomsonii*	Thomson's Leafy Moss				S2?	3 Sensitive	1	45.2 ± 2.0
N	*Paludella squarrosa*	Tufted Fen Moss				S2?	3 Sensitive	2	35.4 ± 0.0
N	*Physcomitrium collenchymatum*	a Moss				S2?	3 Sensitive	1	100.0 ± 0.0
N	*Plagiothecium latebricola*	Alder Silk Moss				S2?	3 Sensitive	2	70.8 ± 3.0
N	*Saelania glaucescens*	Blue Dew Moss				S2?	3 Sensitive	1	76.9 ± 0.0
N	*Sematophyllum demissum*	a Moss				S2?	3 Sensitive	1	18.3 ± 2.0
N	*Sematophyllum marylandicum*	a Moss				S2?	3 Sensitive	2	7.9 ± 6.0
N	*Sphagnum subnitens*	Lustrous Peat Moss				S2?	3 Sensitive	1	55.1 ± 2.0
N	*Thamnobryum alleghaniense*	a Moss				S2?	3 Sensitive	3	68.6 ± 4.0
N	*Thelia hirtella*	a Moss				S2?	3 Sensitive	1	54.0 ± 12.0
N	*Timmia megapolitana*	Metropolitan Timmia Moss				S2?	3 Sensitive	3	61.3 ± 1.0
N	*Tortula mucronifolia*	Mucronate Screw Moss				S2?	3 Sensitive	1	71.8 ± 3.0
N	*Zygodon conoideus*	a Moss				S2?	3 Sensitive	2	77.9 ± 5.0
N	*Cyrto-hypnum minutulum*	Tiny Cedar Moss				S2?	3 Sensitive	1	74.5 ± 0.0
N	*Cyrtomnium hymenophylloides*	Short-pointed Lantern Moss				S2?	3 Sensitive	2	33.5 ± 5.0
N	*Platylomella lescurii*	a Moss				S2?	3 Sensitive	3	57.0 ± 0.0
N	*Anomodon rugelii*	Rugel's Anomodon Moss				S2S3	3 Sensitive	2	72.8 ± 0.0
N	*Calliergon giganteum*	Giant Spear Moss				S2S3	3 Sensitive	2	35.7 ± 3.0
N	*Ephemerum serratum*	a Moss				S2S3	3 Sensitive	4	47.7 ± 5.0
N	*Hygrohypnum luridum*	Drab Brook Moss				S2S3	3 Sensitive	2	57.1 ± 1.0
N	*Leucodon andrewsianus*	a Moss				S2S3	3 Sensitive	11	36.9 ± 0.0
N	*Myurella julacea*	Small Mouse-tail Moss				S2S3	3 Sensitive	1	76.9 ± 0.0
N	*Orthotrichum anomalum*	Anomalous Bristle Moss				S2S3	3 Sensitive	1	50.0 ± 2.0
N	*Platydictya subtilis*	Bark Willow Moss				S2S3	3 Sensitive	1	70.8 ± 3.0
N	*Pleuridium subulatum*	a Moss				S2S3	3 Sensitive	5	66.6 ± 0.0
N	*Tortula truncata*	a Moss				S2S3	3 Sensitive	3	33.0 ± 300.0
N	*Sphagnum wulfianum*	Wulf's Peat Moss				S2S3	3 Sensitive	12	15.4 ± 0.0
N	*Tetraplodon angustatus*	Toothed-leaved Nitrogen Moss				S2S3	3 Sensitive	1	55.1 ± 2.0
N	*Limprichtia revolvens*	a Moss				S2S3	3 Sensitive	2	35.4 ± 0.0
N	*Hylocomiastrum pyrenaicum*	a Feather Moss				S2S3	3 Sensitive	1	38.4 ± 0.0
N	*Collema nigrescens*	Blistered Tarpaper Lichen				S2S3	3 Sensitive	5	15.5 ± 0.0
N	*Leptogium teretiusculum*	Beaded Jellyskin Lichen				S2S3	3 Sensitive	3	15.6 ± 0.0
N	*Leptogium corticola*	Blistered Jellyskin Lichen				S2S3	3 Sensitive	14	32.8 ± 0.0
N	*Parmeliopsis ambigua*	Green Starburst Lichen				S2S3	3 Sensitive	1	70.7 ± 2.0
N	*Physconia detersa*	Bottlebrush Frost Lichen				S2S3	3 Sensitive	1	50.5 ± 0.0
N	*Umbilicaria polyphylla*	Petalled Rocktripe Lichen				S2S3	3 Sensitive	1	70.7 ± 2.0
N	*Peltigera collina*	Tree Pelt Lichen				S2S3	3 Sensitive	3	37.7 ± 0.0
N	*Cladina stygia*	Black-footed Reindeer Lichen				S2S3	3 Sensitive	2	53.3 ± 0.0
N	*Evernia prunastri*	Valley Oakmoss Lichen				S2S3	3 Sensitive	1	44.0 ± 2.0

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
N	*Usnea flammea*	Coastal Bushy Beard Lichen				S2S3	3 Sensitive	1	55.7 ± 1.0
N	*Anzia colpodes*	Black-foam Lichen				S3?	3 Sensitive	2	41.4 ± 0.0
N	*Sticta fuliginosa*	Peppered Moon Lichen				S3?	3 Sensitive	19	24.2 ± 0.0
N	*Nephroma bellum*	Naked Kidney Lichen				S3?	3 Sensitive	1	62.9 ± 0.0
N	*Collema furfuraceum*	Blistered Tarpaper Lichen				S3?	3 Sensitive	2	43.6 ± 0.0
P	*Juglans cinerea*	Butternut	Endangered	Endangered		SNA	7 Exotic	1	32.2 ± 0.0
P	*Bartonia paniculata ssp. paniculata*	Branched Bartonia	Threatened	Threatened		SNA		1	61.6 ± 10.0
P	*Liatris spicata*	Dense Blazing Star	Threatened	Threatened				1	37.6 ± 0.0
P	*Clethra alnifolia*	Coast Pepper-Bush	Special Concern	Special Concern	Vulnerable	S1	1 At Risk	2	39.8 ± 0.0
P	*Lilaeopsis chinensis*	Eastern Lilaeopsis	Special Concern	Special Concern	Vulnerable	S2	3 Sensitive	53	90.7 ± 1.0
P	*Isoetes prototypus*	Prototype Quillwort	Special Concern	Special Concern	Vulnerable	S2	3 Sensitive	13	61.6 ± 0.0
P	*Floerkea proserpinacoides*	False Mermaidweed	Not At Risk			S2	3 Sensitive	19	52.2 ± 7.0
P	*Helianthemum canadense*	Long-branched Frostweed			Endangered	S1	At Risk	2	40.7 ± 1.0
P	*Cypripedium arietinum*	Ram's-Head Lady's-Slipper			Endangered	S1	1 At Risk	157	37.4 ± 2.0
P	*Thuja occidentalis*	Eastern White Cedar			Vulnerable	S1	At Risk	36	21.7 ± 1.0
P	*Acer saccharinum*	Silver Maple				S1	Undetermined	12	64.0 ± 2.0
P	*Osmorhiza depauperata*	Blunt Sweet Cicely				S1	2 May Be At Risk	1	67.7 ± 5.0
P	*Sanicula odorata*	Clustered Sanicle				S1	2 May Be At Risk	11	30.6 ± 10.0
P	*Zizia aurea*	Golden Alexanders				S1	2 May Be At Risk	35	48.8 ± 1.0
P	*Antennaria parlinii*	a Pussytoes				S1	2 May Be At Risk	13	20.4 ± 7.0
P	*Bidens hyperborea*	Estuary Beggarticks				S1	2 May Be At Risk	2	91.6 ± 0.0
P	*Cynoglossum virginianum var. boreale*	Wild Comfrey				S1	2 May Be At Risk	5	41.4 ± 1.0
P	*Arabis glabra*	Tower Mustard				S1	5 Undetermined	1	89.1 ± 0.0
P	*Cardamine maxima*	Large Toothwort				S1	2 May Be At Risk	2	50.0 ± 0.0
P	*Draba glabella*	Rock Whitlow-Grass				S1	2 May Be At Risk	2	72.4 ± 0.0
P	*Lobelia spicata*	Pale-Spiked Lobelia				S1	2 May Be At Risk	9	45.2 ± 7.0
P	*Desmodium canadense*	Canada Tick-trefoil				S1	2 May Be At Risk	22	47.9 ± 5.0
P	*Desmodium glutinosum*	Large Tick-Trefoil				S1	2 May Be At Risk	17	34.3 ± 0.0
P	*Ribes americanum*	Wild Black Currant				S1	5 Undetermined	4	30.0 ± 1.0
P	*Proserpinaca intermedia*	Intermediate Mermaidweed				S1	2 May Be At Risk	2	18.0 ± 0.0
P	*Fraxinus pennsylvanica*	Red Ash				S1	2 May Be At Risk	8	25.7 ± 5.0
P	*Polygala polygama*	Racemed Milkwort				S1	5 Undetermined	1	36.4 ± 1.0
P	*Polygonum careyi*	Carey's Smartweed				S1	5 Undetermined	1	33.1 ± 3.0
P	*Montia fontana*	Water Blinks				S1	2 May Be At Risk	1	38.4 ± 1.0
P	*Lysimachia quadrifolia*	Whorled Yellow Loosestrife				S1	5 Undetermined	1	41.9 ± 0.0
P	*Ranunculus pensylvanicus*	Pennsylvania Buttercup				S1	2 May Be At Risk	25	76.8 ± 0.0
P	*Amelanchier nantucketensis*	Nantucket Serviceberry				S1	2 May Be At Risk	1	79.6 ± 1.0
P	*Salix serissima*	Autumn Willow				S1	2 May Be At Risk	1	27.2 ± 0.0
P	*Dirca palustris*	Eastern Leatherwood				S1	2 May Be At Risk	47	5.5 ± 1.0
P	*Boehmeria cylindrica*	Small-spike False-nettle				S1	2 May Be At Risk	2	6.3 ± 0.0
P	*Pilea pumila*	Dwarf Clearweed				S1	2 May Be At Risk	3	27.0 ± 0.0
P	*Carex garberi*	Garber's Sedge				S1	2 May Be At Risk	4	56.5 ± 0.0
P	*Carex gynocrates*	Northern Bog Sedge				S1	2 May Be At Risk	2	27.2 ± 0.0
P	*Carex haydenii*	Hayden's Sedge				S1	2 May Be At Risk	3	48.8 ± 1.0
P	*Carex pellita*	Woolly Sedge				S1	2 May Be At Risk	12	48.7 ± 10.0
P	*Carex laxiflora*	Loose-Flowered Sedge				S1	2 May Be At Risk	2	73.5 ± 1.0
P	*Carex livida var. radicaulis*	Livid Sedge				S1	2 May Be At Risk	1	48.4 ± 10.0
P	*Carex ormostachya*	Necklace Spike Sedge				S1	2 May Be At Risk	1	93.1 ± 5.0
P	*Carex plantaginea*	Plantain-Leaved Sedge				S1	2 May Be At Risk	3	51.4 ± 0.0
P	*Carex prairea*	Prairie Sedge				S1	2 May Be At Risk	2	81.5 ± 1.0
P	*Carex viridula var. saxilittoralis*	Greenish Sedge				S1	May Be At Risk	4	67.6 ± 2.0
P	*Iris prismatica*	Slender Blue Flag				S1	2 May Be At Risk	1	84.7 ± 100.0
P	*Juncus secundus*	Secund Rush				S1	2 May Be At Risk	1	87.4 ± 0.0
P	*Juncus vaseyi*	Vasey Rush				S1	2 May Be At Risk	2	57.2 ± 0.0
P	*Allium tricoccum*	Wild Leek				S1	2 May Be At Risk	20	65.1 ± 0.0
P	*Trillium grandiflorum*	White Trillium				S1	5 Undetermined	3	81.5 ± 1.0
P	*Malaxis brachypoda*	White Adder's-Mouth				S1	2 May Be At Risk	4	62.8 ± 10.0

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
P	*Spiranthes casei var. casei*	Case's Ladies'-Tresses				S1	2 May Be At Risk	1	71.2 ± 0.0
P	*Bromus latiglumis*	Broad-Glumed Brome				S1	2 May Be At Risk	31	41.9 ± 0.0
P	*Cinna arundinacea*	Sweet Wood Reed Grass				S1	2 May Be At Risk	20	42.1 ± 0.0
P	*Elymus wiegandii*	Wiegand's Wild Rye				S1	2 May Be At Risk	22	35.1 ± 7.0
P	*Elymus hystrix var. bigeloviana*	Spreading Wild Rye				S1	2 May Be At Risk	10	21.6 ± 1.0
P	*Festuca subverticillata*	Nodding Fescue				S1	2 May Be At Risk	12	28.8 ± 5.0
P	*Puccinellia fasciculata*	Saltmarsh Alkali Grass				S1	5 Undetermined	2	64.5 ± 1.0
P	*Adiantum pedatum*	Northern Maidenhair Fern				S1	2 May Be At Risk	11	35.7 ± 0.0
P	*Equisetum palustre*	Marsh Horsetail				S1	2 May Be At Risk	1	77.9 ± 5.0
P	*Botrychium lunaria*	Common Moonwort				S1	2 May Be At Risk	3	39.0 ± 2.0
P	*Selaginella rupestris*	Rock Spikemoss				S1	2 May Be At Risk	1	40.7 ± 0.0
P	*Solidago hispida*	Hairy Goldenrod				S1?	2 May Be At Risk	2	35.1 ± 7.0
P	*Suaeda rolandii*	Roland's Sea-Blite				S1?	2 May Be At Risk	3	41.8 ± 2.0
P	*Proserpinaca palustris var. palustris*	Marsh Mermaidweed				S1?	2 May Be At Risk	2	99.5 ± 1.0
P	*Crataegus robinsonii*	Robinson's Hawthorn				S1?	5 Undetermined	2	48.1 ± 5.0
P	*Crataegus submollis*	Quebec Hawthorn				S1?	5 Undetermined	6	6.3 ± 7.0
P	*Rubus flagellaris*	Northern Dewberry				S1?	5 Undetermined	1	76.1 ± 1.0
P	*Carex pensylvanica*	Pennsylvania Sedge				S1?	May Be At Risk	2	11.2 ± 0.0
P	*Schoenoplectus robustus*	Sturdy Bulrush				S1?	5 Undetermined	2	94.0 ± 5.0
P	*Dichanthelium acuminatum var. lindheimeri*	Woolly Panic Grass				S1?	5 Undetermined	1	98.1 ± 0.0
P	*Huperzia selago*	Northern Firmoss				S1?	May Be At Risk	8	35.3 ± 7.0
P	*Fraxinus nigra*	Black Ash			Threatened	S1S2	At Risk	165	6.9 ± 0.0
P	*Rudbeckia laciniata*	Cut-Leaved Coneflower				S1S2	May Be At Risk	15	36.9 ± 7.0
P	*Rudbeckia laciniata var. gaspereauensis*	Cut-Leaved Coneflower				S1S2	May Be At Risk	9	66.2 ± 0.0
P	*Arabis hirsuta var. pycnocarpa*	Western Hairy Rockcress				S1S2	2 May Be At Risk	1	63.7 ± 0.0
P	*Chenopodium rubrum*	Red Pigweed				S1S2	May Be At Risk	2	67.6 ± 2.0
P	*Conopholis americana*	American Cancer-root				S1S2	2 May Be At Risk	3	75.5 ± 1.0
P	*Anemone virginiana var. alba*	Virginia Anemone				S1S2	3 Sensitive	5	47.9 ± 7.0
P	*Hepatica nobilis var. obtusa*	Round-lobed Hepatica				S1S2	May Be At Risk	46	15.9 ± 0.0
P	*Ranunculus sceleratus*	Cursed Buttercup				S1S2	2 May Be At Risk	20	26.0 ± 0.0
P	*Gratiola neglecta*	Clammy Hedge-Hyssop				S1S2	3 Sensitive	5	36.8 ± 2.0
P	*Juncus greenei*	Greene's Rush				S1S2	2 May Be At Risk	6	29.9 ± 1.0
P	*Calamagrostis stricta ssp. stricta*	Slim-stemmed Reed Grass				S1S2	3 Sensitive	3	84.4 ± 7.0
P	*Cryptogramma stelleri*	Steller's Rockbrake				S1S2	May Be At Risk	3	48.5 ± 0.0
P	*Carex vacillans*	Estuarine Sedge				S1S3	5 Undetermined	2	62.5 ± 0.0
P	*Conioselinum chinense*	Chinese Hemlock-parsley				S2	3 Sensitive	3	27.3 ± 0.0
P	*Osmorhiza longistylis*	Smooth Sweet Cicely				S2	May Be At Risk	31	38.4 ± 0.0
P	*Erigeron philadelphicus*	Philadelphia Fleabane				S2	3 Sensitive	2	48.7 ± 1.0
P	*Hieracium robinsonii*	Robinson's Hawkweed				S2	3 Sensitive	3	46.8 ± 1.0
P	*Iva frutescens ssp. oraria*	Big-leaved Marsh-elder				S2	Sensitive	17	48.1 ± 1.0
P	*Lactuca hirsuta var. sanguinea*	Hairy Lettuce				S2	3 Sensitive	4	29.8 ± 7.0
P	*Senecio pseudoarnica*	Seabeach Ragwort				S2	3 Sensitive	17	40.4 ± 0.0
P	*Symphyotrichum undulatum*	Wavy-leaved Aster				S2	3 Sensitive	7	28.4 ± 7.0
P	*Symphyotrichum ciliolatum*	Fringed Blue Aster				S2	Sensitive	16	23.1 ± 1.0
P	*Impatiens pallida*	Pale Jewelweed				S2	3 Sensitive	2	72.2 ± 1.0
P	*Caulophyllum thalictroides*	Blue Cohosh				S2	2 May Be At Risk	62	8.5 ± 0.0
P	*Betula michauxii*	Michaux's Dwarf Birch				S2	3 Sensitive	16	7.5 ± 0.0
P	*Arabis drummondii*	Drummond's Rockcress				S2	3 Sensitive	11	54.7 ± 0.0
P	*Cardamine parviflora var. arenicola*	Small-flowered Bittercress				S2	3 Sensitive	9	55.6 ± 50.0
P	*Draba arabisans*	Rock Whitlow-Grass				S2	3 Sensitive	7	73.1 ± 0.0
P	*Stellaria humifusa*	Saltmarsh Starwort				S2	3 Sensitive	5	53.3 ± 0.0
P	*Stellaria longifolia*	Long-leaved Starwort				S2	Sensitive	12	28.9 ± 0.0
P	*Hudsonia ericoides*	Pinebarren Golden Heather				S2	3 Sensitive	25	35.1 ± 7.0
P	*Hypericum majus*	Large St John's-wort				S2	Sensitive	6	26.2 ± 0.0
P	*Crassula aquatica*	Water Pygmyweed				S2	3 Sensitive	1	61.7 ± 0.0
P	*Myriophyllum farwellii*	Farwell's Water Milfoil				S2	3 Sensitive	9	22.2 ± 7.0
P	*Myriophyllum verticillatum*	Whorled Water Milfoil				S2	3 Sensitive	4	28.1 ± 7.0

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
P	*Oenothera fruticosa ssp. glauca*	Narrow-leaved Evening Primrose				S2	5 Undetermined	8	44.0 ± 7.0
P	*Polygonum arifolium*	Halberd-leaved Tearthumb				S2	3 Sensitive	10	79.4 ± 1.0
P	*Rumex salicifolius var. mexicanus*	Triangular-valve Dock				S2	3 Sensitive	9	35.0 ± 0.0
P	*Primula mistassinica*	Mistassini Primrose				S2	3 Sensitive	16	47.9 ± 7.0
P	*Anemone canadensis*	Canada Anemone				S2	2 May Be At Risk	3	34.1 ± 7.0
P	*Anemone quinquefolia*	Wood Anemone				S2	3 Sensitive	14	21.3 ± 0.0
P	*Anemone virginiana*	Virginia Anemone				S2	3 Sensitive	17	33.6 ± 5.0
P	*Anemone virginiana var. virginiana*	Virginia Anemone				S2	3 Sensitive	2	34.1 ± 7.0
P	*Caltha palustris*	Yellow Marsh Marigold				S2	3 Sensitive	1	67.9 ± 5.0
P	*Galium boreale*	Northern Bedstraw				S2	2 May Be At Risk	7	55.2 ± 1.0
P	*Galium labradoricum*	Labrador Bedstraw				S2	3 Sensitive	34	26.9 ± 0.0
P	*Salix pedicellaris*	Bog Willow				S2	3 Sensitive	38	46.8 ± 0.0
P	*Salix sericea*	Silky Willow				S2	2 May Be At Risk	1	6.2 ± 1.0
P	*Saxifraga paniculata ssp. neogaea*	White Mountain Saxifrage				S2	3 Sensitive	4	68.5 ± 7.0
P	*Tiarella cordifolia*	Heart-leaved Foamflower				S2	3 Sensitive	222	20.6 ± 0.0
P	*Agalinis maritima*	Saltmarsh Agalinis				S2	Sensitive	1	37.6 ± 0.0
P	*Viola nephrophylla*	Northern Bog Violet				S2	3 Sensitive	9	24.5 ± 1.0
P	*Carex atratiformis*	Scabrous Black Sedge				S2	3 Sensitive	3	76.8 ± 0.0
P	*Carex bebbii*	Bebb's Sedge				S2	Sensitive	12	40.6 ± 0.0
P	*Carex castanea*	Chestnut Sedge				S2	2 May Be At Risk	3	26.7 ± 0.0
P	*Carex comosa*	Bearded Sedge				S2	3 Sensitive	5	44.0 ± 7.0
P	*Carex hystericina*	Porcupine Sedge				S2	2 May Be At Risk	8	60.0 ± 1.0
P	*Carex tenera*	Tender Sedge				S2	Sensitive	8	33.8 ± 0.0
P	*Carex tuckermanii*	Tuckerman's Sedge				S2	Sensitive	34	33.3 ± 0.0
P	*Eriophorum gracile*	Slender Cottongrass				S2	3 Sensitive	12	38.5 ± 7.0
P	*Vallisneria americana*	Wild Celery				S2	2 May Be At Risk	4	23.7 ± 1.0
P	*Allium schoenoprasum var. sibiricum*	Wild Chives				S2	2 May Be At Risk	1	47.9 ± 7.0
P	*Lilium canadense*	Canada Lily				S2	May Be At Risk	97	2.1 ± 0.0
P	*Najas gracillima*	Thread-Like Naiad				S2	Sensitive	2	31.8 ± 0.0
P	*Cypripedium parviflorum var. pubescens*	Yellow Lady's-slipper				S2	3 Sensitive	9	20.3 ± 7.0
P	*Cypripedium parviflorum var. makasin*	Small Yellow Lady's-Slipper				S2	3 Sensitive	8	43.7 ± 0.0
P	*Cypripedium reginae*	Showy Lady's-Slipper				S2	2 May Be At Risk	28	24.3 ± 0.0
P	*Goodyera pubescens*	Downy Rattlesnake-Plantain				S2	Sensitive	9	12.7 ± 1.0
P	*Platanthera flava var. flava*	Southern Rein Orchid				S2	3 Sensitive	1	65.5 ± 7.0
P	*Platanthera flava var. herbiola*	Pale Green Orchid				S2	Undetermined	12	65.2 ± 0.0
P	*Platanthera macrophylla*	Large Round-Leaved Orchid				S2	3 Sensitive	13	54.9 ± 1.0
P	*Spiranthes lucida*	Shining Ladies'-Tresses				S2	May Be At Risk	28	11.0 ± 1.0
P	*Dichanthelium linearifolium*	Narrow-leaved Panic Grass				S2	Sensitive	7	44.0 ± 7.0
P	*Piptatherum canadense*	Canada Rice Grass				S2	3 Sensitive	8	16.4 ± 1.0
P	*Piptatherum pungens*	Slender Rice Grass				S2	3 Sensitive	1	93.3 ± 10.0
P	*Potamogeton friesii*	Fries' Pondweed				S2	2 May Be At Risk	10	49.6 ± 5.0
P	*Potamogeton richardsonii*	Richardson's Pondweed				S2	May Be At Risk	9	27.3 ± 0.0
P	*Asplenium trichomanes-ramosum*	Green Spleenwort				S2	3 Sensitive	8	62.8 ± 7.0
P	*Dryopteris fragrans var. remotiuscula*	Fragrant Wood Fern				S2	3 Sensitive	11	58.9 ± 1.0
P	*Woodsia glabella*	Smooth Cliff Fern				S2	3 Sensitive	2	58.5 ± 1.0
P	*Symphyotrichum boreale*	Boreal Aster				S2?	3 Sensitive	6	9.2 ± 5.0
P	*Cuscuta cephalanthi*	Buttonbush Dodder				S2?	Undetermined	3	54.8 ± 0.0
P	*Epilobium coloratum*	Purple-veined Willowherb				S2?	3 Sensitive	5	23.1 ± 0.0
P	*Amelanchier fernaldii*	Fernald's Serviceberry				S2?	5 Undetermined	1	97.9 ± 5.0
P	*Carex peckii*	White-Tinged Sedge				S2?	2 May Be At Risk	4	14.5 ± 0.0
P	*Eleocharis ovata*	Ovate Spikerush				S2?	3 Sensitive	8	39.1 ± 0.0
P	*Scirpus pedicellatus*	Stalked Bulrush				S2?	Sensitive	8	7.6 ± 0.0
P	*Potamogeton pulcher*	Spotted Pondweed			Vulnerable	S2S3	Sensitive	8	47.8 ± 2.0
P	*Betula pumila var. pumila*	Bog Birch				S2S3	3 Sensitive	1	99.6 ± 1.0
P	*Sagina nodosa*	Knotted Pearlwort				S2S3	4 Secure	38	36.9 ± 5.0
P	*Sagina nodosa ssp. borealis*	Knotted Pearlwort				S2S3	4 Secure	6	62.2 ± 0.0

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
P	*Ceratophyllum echinatum*	Prickly Hornwort				S2S3	Sensitive	9	46.4 ± 0.0
P	*Hypericum dissimulatum*	Disguised St John's-wort				S2S3	3 Sensitive	4	21.7 ± 0.0
P	*Triosteum aurantiacum*	Orange-fruited Tinker's Weed				S2S3	Sensitive	44	35.3 ± 0.0
P	*Shepherdia canadensis*	Soapberry				S2S3	Sensitive	71	34.1 ± 7.0
P	*Empetrum eamesii ssp. atropurpureum*	Pink Crowberry				S2S3	3 Sensitive	5	34.9 ± 7.0
P	*Empetrum eamesii ssp. eamesii*	Pink Crowberry				S2S3	3 Sensitive	5	34.9 ± 7.0
P	*Chamaesyce polygonifolia*	Seaside Spurge				S2S3	Sensitive	2	84.6 ± 3.0
P	*Halenia deflexa*	Spurred Gentian				S2S3	3 Sensitive	3	59.0 ± 0.0
P	*Hedeoma pulegioides*	American False Pennyroyal				S2S3	3 Sensitive	19	30.5 ± 5.0
P	*Polygala sanguinea*	Blood Milkwort				S2S3	3 Sensitive	21	26.2 ± 0.0
P	*Polygonum buxiforme*	Small's Knotweed				S2S3	5 Undetermined	8	47.8 ± 0.0
P	*Polygonum raii*	Sharp-fruited Knotweed				S2S3	5 Undetermined	1	67.4 ± 1.0
P	*Plantago rugelii*	Rugel's Plantain				S2S3	Secure	8	26.4 ± 0.0
P	*Potentilla canadensis*	Canada Cinquefoil				S2S3	Sensitive	1	31.3 ± 5.0
P	*Galium aparine*	Common Bedstraw				S2S3	Sensitive	20	37.8 ± 0.0
P	*Salix pellita*	Satiny Willow				S2S3	Sensitive	8	27.1 ± 4.0
P	*Veronica serpyllifolia ssp. humifusa*	Thyme-Leaved Speedwell				S2S3	Sensitive	1	99.0 ± 0.0
P	*Carex adusta*	Lesser Brown Sedge				S2S3	3 Sensitive	7	36.3 ± 7.0
P	*Carex hirtifolia*	Pubescent Sedge				S2S3	Sensitive	45	15.4 ± 7.0
P	*Carex houghtoniana*	Houghton's Sedge				S2S3	Sensitive	4	29.9 ± 1.0
P	*Carex swanii*	Swan's Sedge				S2S3	3 Sensitive	2	33.0 ± 0.0
P	*Eleocharis olivacea*	Yellow Spikerush				S2S3	3 Sensitive	3	25.7 ± 0.0
P	*Elodea canadensis*	Canada Waterweed				S2S3	Secure	8	5.8 ± 0.0
P	*Coeloglossum viride var. virescens*	Long-bracted Frog Orchid				S2S3	2 May Be At Risk	2	57.5 ± 0.0
P	*Cypripedium parviflorum*	Yellow Lady's-slipper				S2S3	3 Sensitive	506	34.3 ± 0.0
P	*Poa glauca*	Glaucous Blue Grass				S2S3	3 Sensitive	5	34.3 ± 1.0
P	*Potamogeton zosteriformis*	Flat-stemmed Pondweed				S2S3	Sensitive	15	14.8 ± 0.0
P	*Botrychium lanceolatum var. angustisegmentum*	Lance-Leaf Grape-Fern				S2S3	3 Sensitive	8	29.8 ± 5.0
P	*Botrychium simplex*	Least Moonwort				S2S3	3 Sensitive	5	44.2 ± 0.0
P	*Ophioglossum pusillum*	Northern Adder's-tongue				S2S3	3 Sensitive	6	20.3 ± 7.0
P	*Angelica atropurpurea*	Purple-stemmed Angelica				S3	Secure	1	44.9 ± 0.0
P	*Erigeron hyssopifolius*	Hyssop-leaved Fleabane				S3	3 Sensitive	16	30.1 ± 1.0
P	*Hieracium paniculatum*	Panicled Hawkweed				S3	4 Secure	18	46.8 ± 11.0
P	*Megalodonta beckii*	Water Beggarticks				S3	Secure	9	14.8 ± 0.0
P	*Packera paupercula*	Balsam Groundsel				S3	4 Secure	32	26.5 ± 0.0
P	*Campanula aparinoides*	Marsh Bellflower				S3	3 Sensitive	37	36.0 ± 1.0
P	*Minuartia groenlandica*	Greenland Stitchwort				S3	Sensitive	35	23.8 ± 0.0
P	*Viburnum edule*	Squashberry				S3	3 Sensitive	2	79.8 ± 0.0
P	*Empetrum eamesii*	Pink Crowberry				S3	3 Sensitive	83	35.1 ± 7.0
P	*Vaccinium boreale*	Northern Blueberry				S3	Sensitive	3	46.7 ± 0.0
P	*Vaccinium caespitosum*	Dwarf Bilberry				S3	Secure	59	29.3 ± 0.0
P	*Vaccinium uliginosum*	Alpine Bilberry				S3	Sensitive	3	50.7 ± 1.0
P	*Bartonia virginica*	Yellow Bartonia				S3	4 Secure	26	6.2 ± 7.0
P	*Geranium bicknellii*	Bicknell's Crane's-bill				S3	4 Secure	13	48.1 ± 3.0
P	*Proserpinaca palustris*	Marsh Mermaidweed				S3	4 Secure	13	44.4 ± 0.0
P	*Proserpinaca palustris var. crebra*	Marsh Mermaidweed				S3	4 Secure	27	6.9 ± 0.0
P	*Proserpinaca pectinata*	Comb-leaved Mermaidweed				S3	Secure	9	33.6 ± 1.0
P	*Teucrium canadense*	Canada Germander				S3	3 Sensitive	9	30.8 ± 5.0
P	*Rhexia virginica*	Virginia Meadow Beauty				S3	Secure	14	91.1 ± 5.0
P	*Epilobium strictum*	Downy Willowherb				S3	3 Sensitive	6	27.0 ± 0.0
P	*Polygonum pensylvanicum*	Pennsylvania Smartweed				S3	4 Secure	28	6.3 ± 7.0
P	*Polygonum scandens*	Climbing False Buckwheat				S3	3 Sensitive	27	34.1 ± 7.0
P	*Primula laurentiana*	Laurentian Primrose				S3	4 Secure	12	75.2 ± 7.0
P	*Samolus valerandi ssp. parviflorus*	Seaside Brookweed				S3	Sensitive	11	34.6 ± 5.0
P	*Pyrola asarifolia*	Pink Pyrola				S3	4 Secure	9	24.3 ± 1.0
P	*Pyrola minor*	Lesser Pyrola				S3	Sensitive	2	79.8 ± 0.0

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
P	*Ranunculus gmelinii*	Gmelin's Water Buttercup				S3	4 Secure	26	7.1 ± 0.0
P	*Rhamnus alnifolia*	Alder-leaved Buckthorn				S3	Secure	54	7.0 ± 0.0
P	*Agrimonia gryposepala*	Hooked Agrimony				S3	4 Secure	91	17.8 ± 0.0
P	*Salix petiolaris*	Meadow Willow				S3	4 Secure	25	27.2 ± 0.0
P	*Geocaulon lividum*	Northern Comandra				S3	Secure	6	78.2 ± 5.0
P	*Agalinis neoscotica*	Nova Scotia Agalinis				S3	4 Secure	8	26.2 ± 0.0
P	*Limosella australis*	Southern Mudwort				S3	Secure	22	39.4 ± 3.0
P	*Lindernia dubia*	Yellow-seeded False Pimperel				S3	Secure	30	33.8 ± 0.0
P	*Laportea canadensis*	Canada Wood Nettle				S3	3 Sensitive	36	5.8 ± 0.0
P	*Verbena hastata*	Blue Vervain				S3	Secure	113	7.9 ± 0.0
P	*Carex eburnea*	Bristle-leaved Sedge				S3	3 Sensitive	5	30.1 ± 1.0
P	*Carex lupulina*	Hop Sedge				S3	4 Secure	40	8.2 ± 6.0
P	*Carex rosea*	Rosy Sedge				S3	4 Secure	31	25.0 ± 0.0
P	*Carex wiegandii*	Wiegand's Sedge				S3	Sensitive	4	26.9 ± 0.0
P	*Eleocharis nitida*	Quill Spikerush				S3	4 Secure	11	23.7 ± 5.0
P	*Juncus subcaudatus var. planisepalus*	Woods-Rush				S3	3 Sensitive	16	8.4 ± 1.0
P	*Juncus dudleyi*	Dudley's Rush				S3	Secure	26	31.7 ± 1.0
P	*Goodyera repens*	Lesser Rattlesnake-plantain				S3	3 Sensitive	6	42.2 ± 0.0
P	*Listera australis*	Southern Twayblade				S3	Secure	105	11.5 ± 0.0
P	*Platanthera grandiflora*	Large Purple Fringed Orchid				S3	4 Secure	96	26.9 ± 0.0
P	*Platanthera hookeri*	Hooker's Orchid				S3	4 Secure	17	33.5 ± 0.0
P	*Platanthera orbiculata*	Small Round-leaved Orchid				S3	4 Secure	22	30.2 ± 4.0
P	*Spiranthes ochroleuca*	Yellow Ladies'-tresses				S3	Secure	13	24.3 ± 1.0
P	*Alopecurus aequalis*	Short-awned Foxtail				S3	Secure	20	26.4 ± 0.0
P	*Dichanthelium clandestinum*	Deer-tongue Panic Grass				S3	4 Secure	83	3.9 ± 0.0
P	*Potamogeton obtusifolius*	Blunt-leaved Pondweed				S3	Secure	1	85.3 ± 0.0
P	*Sparganium natans*	Small Burreed				S3	4 Secure	11	31.2 ± 1.0
P	*Asplenium trichomanes*	Maidenhair Spleenwort				S3	Secure	12	63.1 ± 0.0
P	*Equisetum pratense*	Meadow Horsetail				S3	Sensitive	14	36.8 ± 0.0
P	*Equisetum variegatum*	Variegated Horsetail				S3	4 Secure	24	1.5 ± 2.0
P	*Isoetes acadiensis*	Acadian Quillwort				S3	3 Sensitive	7	7.0 ± 0.0
P	*Huperzia appalachiana*	Appalachian Fir-Clubmoss				S3	Sensitive	9	58.9 ± 1.0
P	*Botrychium dissectum*	Cut-leaved Moonwort				S3	4 Secure	8	61.0 ± 0.0
P	*Schizaea pusilla*	Little Curlygrass Fern				S3	4 Secure	5	31.8 ± 1.0
P	*Asclepias incarnata ssp. pulchra*	Swamp Milkweed				S3?	Undetermined	39	9.0 ± 5.0
P	*Polygonum amphibium var. emersum*	Water Smartweed				S3?	Undetermined	1	7.8 ± 0.0
P	*Amelanchier stolonifera*	Running Serviceberry				S3?	4 Secure	17	38.4 ± 3.0
P	*Carex cryptolepis*	Hidden-scaled Sedge				S3?	4 Secure	9	8.1 ± 6.0
P	*Carex tribuloides*	Blunt Broom Sedge				S3?	4 Secure	12	28.0 ± 0.0
P	*Carex foenea*	Fernald's Hay Sedge				S3?	4 Secure	16	14.7 ± 0.0
P	*Triglochin gaspensis*	Gasp├─ Arrowgrass				S3?	Undetermined	19	59.0 ± 0.0
P	*Potamogeton praelongus*	White-stemmed Pondweed				S3?	3 Sensitive	7	35.6 ± 5.0
P	*Lycopodium sabinifolium*	Ground-Fir				S3?	4 Secure	3	47.9 ± 0.0
P	*Lycopodium sitchense*	Sitka Clubmoss				S3?	4 Secure	2	55.7 ± 5.0
P	*Polypodium appalachianum*	Appalachian Polypody				S3?	5 Undetermined	13	26.4 ± 0.0
P	*Atriplex franktonii*	Frankton's Saltbush				S3S4	4 Secure	1	97.3 ± 2.0
P	*Suaeda calceoliformis*	Horned Sea-blite				S3S4	Secure	11	35.1 ± 7.0
P	*Vaccinium corymbosum*	Highbush Blueberry				S3S4	Secure	2	25.9 ± 0.0
P	*Myriophyllum sibiricum*	Siberian Water Milfoil				S3S4	4 Secure	5	47.9 ± 0.0
P	*Sanguinaria canadensis*	Bloodroot				S3S4	4 Secure	81	1.8 ± 0.0
P	*Polygonum fowleri*	Fowler's Knotweed				S3S4	Secure	2	49.6 ± 1.0
P	*Rumex maritimus*	Sea-Side Dock				S3S4		5	66.1 ± 0.0
P	*Rumex maritimus var. fueginus*	Tierra del Fuego Dock				S3S4	4 Secure	12	58.5 ± 0.0
P	*Fragaria vesca ssp. americana*	Woodland Strawberry				S3S4	Secure	48	6.8 ± 0.0
P	*Viola sagittata var. ovata*	Arrow-Leaved Violet				S3S4	4 Secure	12	27.9 ± 0.0
P	*Carex argyrantha*	Silvery-flowered Sedge				S3S4	4 Secure	9	53.7 ± 1.0
P	*Eriophorum chamissonis*	Russet Cotton-Grass				S3S4	4 Secure	9	55.0 ± 3.0

Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	Prov GS Rank	# recs	Distance (km)
P	*Sisyrinchium atlanticum*	Eastern Blue-Eyed-Grass				S3S4	4 Secure	2	87.3 ± 0.0
P	*Juncus acuminatus*	Sharp-Fruit Rush				S3S4	Secure	5	5.8 ± 0.0
P	*Luzula parviflora*	Small-flowered Woodrush				S3S4	4 Secure	3	56.2 ± 0.0
P	*Liparis loeselii*	Loesel's Twayblade				S3S4	4 Secure	6	14.3 ± 5.0
P	*Panicum tuckermanii*	Tuckerman's Panic Grass				S3S4	Secure	14	33.8 ± 0.0
P	*Trisetum spicatum*	Narrow False Oats				S3S4	4 Secure	13	27.4 ± 0.0
P	*Cystopteris bulbifera*	Bulblet Bladder Fern				S3S4	4 Secure	62	7.3 ± 0.0
P	*Equisetum hyemale var. affine*	Common Scouring-rush				S3S4	4 Secure	36	18.1 ± 0.0
P	*Equisetum scirpoides*	Dwarf Scouring-Rush				S3S4	4 Secure	57	9.9 ± 4.0
P	*Lycopodium complanatum*	Northern Clubmoss				S3S4	4 Secure	13	31.5 ± 0.0
P	*Viola canadensis*	Canada Violet				SH	Extirpated	2	43.2 ± 0.0

5.1 SOURCE BIBLIOGRAPHY (100 km)

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

# recs	CITATION
9042	Lepage, D. 2014. Maritime Breeding Bird Atlas Database. Bird Studies Canada, Sackville NB, 407,838 recs.
3487	Erskine, A.J. 1992. Maritime Breeding Bird Atlas Database. NS Museum & Nimbus Publ., Halifax, 82,125 recs.
2696	Morrison, Guy. 2011. Maritime Shorebird Survey (MSS) database. Canadian Wildlife Service, Ottawa, 15939 surveys. 86171 recs.
623	Cameron, E. 2008. Canadian Gypsum Co. survey 2007-08. Conestoga-Rovers & Assoc., 623 recs.
435	Blaney, C.S.; Mazerolle, D.M. 2010. Fieldwork 2010. Atlantic Canada Conservation Data Centre. Sackville NB, 15508 recs.
427	Newell, R.E. 2000. E.C. Smith Herbarium Database. Acadia University, Wolfville NS, 7139 recs.
369	Blaney, C.S.; Mazerolle, D.M.; Belliveau, A.B. 2014. Atlantic Canada Conservation Data Centre Fieldwork 2014. Atlantic Canada Conservation Data Centre, # recs.
366	Blaney, C.S.; Mazerolle, D.M. 2012. Fieldwork 2012. Atlantic Canada Conservation Data Centre, 13,278 recs.
345	Benjamin, L.K. (compiler). 2007. Significant Habitat & Species Database. Nova Scotia Dept Natural Resources, 8439 recs.
345	Benjamin, L.K. (compiler). 2012. Significant Habitat & Species Database. Nova Scotia Dept Natural Resources, 4965 recs.
305	Layberry, R.A. & Hall, P.W., LaFontaine, J.D. 1998. The Butterflies of Canada. University of Toronto Press. 280 pp+plates.
285	Klymko, J.J.D. 2014. Maritimes Butterfly Atlas, 2012 submissions. Atlantic Canada Conservation Data Centre, 8552 records.
277	Newell, R. E. E.C. Smith Digital Herbarium. E.C. Smith Herbarium, Irving Biodiversity Collection, Acadia University. 2013.
275	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.
254	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.
252	Amirault, D.L. & Stewart, J. 2007. Piping Plover Database 1894-2006. Canadian Wildlife Service, Sackville, 3344 recs, 1228 new.
225	Hicks, Andrew. 2009. Coastal Waterfowl Surveys Database, 2000-08. Canadian Wildlife Service, Sackville, 46488 recs (11149 non-zero).
217	LaPaix, R.W.; Crowell, M.J.; MacDonald, M. 2011. Stantec rare plant records, 2010-11. Stantec Consulting, 334 recs.
189	Brunelle, P.-M. (compiler). 2009. ADIP/MDDS Odonata Database: data to 2006 inclusive. Atlantic Dragonfly Inventory Program (ADIP), 24200 recs.
187	Neily, T.H. & Pepper, C.; Toms, B. 2013. Nova Scotia lichen location database. Mersey Tobeatic Research Institute, 1301 records.
180	Munro, Marian K. Nova Scotia Provincial Museum of Natural History Herbarium Database. Nova Scotia Provincial Museum of Natural History, Halifax, Nova Scotia. 2013.
170	Bryson, I. 2013. Nova Scotia rare plant records. CBCL Ltd., 180 records.
167	Scott, F.W. 2002. Nova Scotia Herpetofauna Atlas Database. Acadia University, Wolfville NS, 8856 recs.
155	Newell, R.E. 2005. E.C. Smith Digital Herbarium. E.C. Smith Herbarium, Irving Biodiversity Collection, Acadia University, Web site: http://luxor.acadiau.ca/library/Herbarium/project/. 582 recs.
141	Pepper, C. 2013. 2013 rare bird and plant observations in Nova Scotia. , 181 records.
139	Klymko, J.J.D. 2012. Maritimes Butterfly Atlas, 2010 and 2011 records. Atlantic Canada Conservation Data Centre, 6318 recs.
121	Blaney, C.S.; Mazerolle, D.M. 2011. Fieldwork 2011. Atlantic Canada Conservation Data Centre. Sackville NB.
113	Wilhelm, S.I. et al. 2011. Colonial Waterbird Database. Canadian Wildlife Service, Sackville, 2698 sites, 9718 recs (8192 obs).
99	Blaney, C.S. 2000. Fieldwork 2000. Atlantic Canada Conservation Data Centre. Sackville NB, 1265 recs.
89	Zinck, M. & Roland, A.E. 1998. Roland's Flora of Nova Scotia. Nova Scotia Museum, 3rd ed., rev. M. Zinck; 2 Vol., 1297 pp.
80	Roland, A.E. & Smith, E.C. 1969. The Flora of Nova Scotia, 1st Ed. Nova Scotia Museum, Halifax, 743pp.
76	Scott, Fred W. 1998. Updated Status Report on the Cougar (Puma Concolor couguar) [Eastern population]. Committee on the Status of Endangered Wildlife in Canada, 298 recs.
73	Belland, R.J. Maritimes moss records from various herbarium databases. 2014.
73	Belliveau, A.G. 2014. Plant Records from Southern and Central Nova Scotia. Atlantic Canada Conservation Data Centre, 919 recs.
63	Blaney, C.S.; Mazerolle, D.M.; Belliveau, A.B. 2013. Atlantic Canada Conservation Data Centre Fieldwork 2013. Atlantic Canada Conservation Data Centre, 9000+ recs.
50	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.
49	Cameron, R.P. 2009. Cyanolichen database. Nova Scotia Environment & Labour, 1724 recs.
49	Cameron, R.P. 2009. Erioderma pedicellatum database, 1979-2008. Dept Environment & Labour, 103 recs.

# recs	CITATION
47	Blaney, C.S.; Mazerolle, D.M.; Oberndorfer, E. 2007. Fieldwork 2007. Atlantic Canada Conservation Data Centre. Sackville NB, 13770 recs.
45	Benjamin, L.K. (compiler). 2001. Significant Habitat & Species Database. Nova Scotia Dept of Natural Resources, 15 spp, 224 recs.
44	Blaney, C.S.; Spicer, C.D.; Popma, T.M.; Hanel, C. 2002. Fieldwork 2002. Atlantic Canada Conservation Data Centre. Sackville NB, 2252 recs.
43	Nova Scotia Nature Trust. 2013. Nova Scotia Nature Trust 2013 Species records. Nova Scotia Nature Trust, 95 recs.
42	Stewart, J.I. 2010. Peregrine Falcon Surveys in New Brunswick, 2002-09. Canadian Wildlife Service, Sackville, 58 recs.
40	Blaney, C.S.; Spicer, C.D.; Rothfels, C. 2004. Fieldwork 2004. Atlantic Canada Conservation Data Centre. Sackville NB, 1343 recs.
39	Porter, C.J.M. 2014. Field work data 2007-2014. Nova Scotia Nature Trust, 96 recs.
37	Cameron, E. 2007. Canadian Gypsum Co. survey 2005-07. Dillon Consulting Ltd, 40 recs.
34	Klymko, J.J.D.; Robinson, S.L. 2012. 2012 field data. Atlantic Canada Conservation Data Centre, 447 recs.
31	Blaney, C.S.; Spicer, C.D. 2001. Fieldwork 2001. Atlantic Canada Conservation Data Centre. Sackville NB, 981 recs.
31	Cameron, R.P. 2011. Lichen observations, 2011. Nova Scotia Environment & Labour, 731 recs.
30	Popma, T.M. 2003. Fieldwork 2003. Atlantic Canada Conservation Data Centre. Sackville NB, 113 recs.
29	Benjamin, L.K. (compiler). 2002. Significant Habitat & Species Database. Nova Scotia Dept of Natural Resources, 32 spp, 683 recs.
29	Benjamin, L.K. 2011. NSDNR fieldwork & consultant reports 1997, 2009-10. Nova Scotia Dept Natural Resources, 85 recs.
29	Cameron, R.P. 2014. 2013-14 rare species field data. Nova Scotia Department of Environment, 35 recs.
28	Hall, R.A. 2003. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 189 recs.
28	Pepper, Chris. 2012. Observations of breeding Canada Warbler's along the Eastern Shore, NS. Pers. comm. to S. Blaney, Jan. 20, 28 recs.
27	Amirault, D.L. & McKnight, J. 2003. Piping Plover Database 1991-2003. Canadian Wildlife Service, Sackville, unpublished data. 7 recs.
26	Neily, T.H. 2013. Email communication to Sean Blaney regarding Listera australis observations made from 2007 to 2011 in Nova Scotia. , 50.
25	Belliveau, A. 2013. Rare species records from Nova Scotia. Mersey Tobeatic Research Institute, 296 records. 296 recs.
24	Edsall, J. 2007. Personal Butterfly Collection: specimens collected in the Canadian Maritimes, 1961-2007. J. Edsall, unpubl. report, 137 recs.
24	Hall, R.A. 2001. S.. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 178 recs.
23	Powell, B.C. 1967. Female sexual cycles of Chrysemy spicta & Clemmys insculpta in Nova Scotia. Can. Field-Nat., 81:134-139. 26 recs.
22	Blaney, C.S.; Mazerolle, D.M.; Klymko, J; Spicer, C.D. 2006. Fieldwork 2006. Atlantic Canada Conservation Data Centre. Sackville NB, 8399 recs.
22	Cameron, R.P. 2013. 2013 rare species field data. Nova Scotia Department of Environment, 71 recs.
22	Canadian Wildlife Service, Dartmouth. 2010. Piping Plover censuses 2007-09, 304 recs.
22	Neily, T.H. 2010. Erioderma Pedicellatum records 2005-09. Mersey Tobiatic Research Institute, 67 recs.
22	Nelly, T.H. 2006. Cypripedium arietinum in Hants Co. Pers. comm. to C.S. Blaney. 22 recs, 22 recs.
19	Blaney, C.S. 2003. Fieldwork 2003. Atlantic Canada Conservation Data Centre. Sackville NB, 1042 recs.
19	Robinson, S.L. 2014. 2013 Field Data. Atlantic Canada Conservation Data Centre.
16	Klymko, J.J.D. 2012. Insect fieldwork & submissions, 2011. Atlantic Canada Conservation Data Centre. Sackville NB, 760 recs.
15	Basquill, S.P. 2011 vascular plant field data. Nova Scotia Department of Natural Resources, 37 recs.
15	Munro, Marian K. Nova Scotia Provincial Museum of Natural History Herbarium Database. Nova Scotia Provincial Museum of Natural History, Halifax, Nova Scotia. 2014.
13	Basquill, S.P. 2003. Fieldwork 2003. Atlantic Canada Conservation Data Centre, Sackville NB, 69 recs.
13	Chaput, G. 2002. Atlantic Salmon: Maritime Provinces Overview for 2001. Dept of Fisheries & Oceans, Atlantic Region, Science Stock Status Report D3-14. 39 recs.
13	Goltz, J.P. & Bishop, G. 2005. Confidential supplement to Status Report on Prototype Quillwort (Isoetes prototypus). Committee on the Status of Endangered Wildlife in Canada, 111 recs.
13	Neily, T.H. 2012. 2012 Erioderma pedicellatum records in Nova Scotia.
13	Nova Scotia Nature Trust. 2014. Ladyslipper records from Saint Croix Nova Scotia, JLC Ed. Nova Scotia Nature Trust.
12	Basquill, S.P. 2012. 2012 rare vascular plant field data. Nova Scotia Department of Natural Resources, 37 recs.
12	Gilhen, J. 1984. Amphibians & Reptiles of Nova Scotia, 1st Ed. Nova Scotia Museum, 164pp.
11	Archibald, D.R. 2003. NS Freshwater Mussel Fieldwork. Nova Scotia Dept Natural Resources, 213 recs.
10	Adams, J. & Herman, T.B. 1998. Thesis, Unpublished map of C. insculpta sightings. Acadia University, Wolfville NS, 88 recs.
10	Blaney, C.S.; Mazerolle, D.M. 2008. Fieldwork 2008. Atlantic Canada Conservation Data Centre. Sackville NB, 13343 recs.
9	Benjamin, L.K. 2006. Cypripedium arietinum. Pers. comm. to D. Mazerolle. 9 recs, 9 recs.
9	Benjamin, L.K. 2012. NSDNR fieldwork & consultant reports 2008-2012. Nova Scotia Dept Natural Resources, 196 recs.
9	Cameron, R.P. 2005. Erioderma pedicellatum unpublished data. NS Dept of Environment, 9 recs.
9	Cameron, R.P. 2006. Erioderma pedicellatum 2006 field data. NS Dept of Environment, 9 recs.
8	Doucet, D.A. 2009. Census of Globally Rare, Endemic Butterflies of Nova Scotia Gulf of St Lawrence Salt Marshes. Nova Scotia Dept of Natural Resources, Species at Risk, 155 recs.
8	Olsen, R. Herbarium Specimens. Nova Scotia Agricultural College, Truro. 2003.
7	Boyne, A.W. & Grecian, V.D. 1999. Tern Surveys. Canadian Wildlife Service, Sackville, unpublished data. 23 recs.
7	Cameron, B. 2006. Hepatica americana Survey at Scotia Mine Site in Gays River, and Discovery of Three Yellow-listed Species. Conestoga-Rovers and Associates, (a consulting firm), october 25. 7 recs.
7	Cameron, R.P. 2009. Nova Scotia nonvascular plant observations, 1995-2007. Nova Scotia Dept Natural Resources, 27 recs.
7	Downes, C. 1998-2000. Breeding Bird Survey Data. Canadian Wildlife Service, Ottawa, 111 recs.
6	Benjamin, L.K. 2009. Boreal Felt Lichen, Mountain Avens, Orchid and other recent records. Nova Scotia Dept Natural Resources, 105 recs.
6	Blaney, C.S.; Spicer, C.D.; Mazerolle, D.M. 2005. Fieldwork 2005. Atlantic Canada Conservation Data Centre. Sackville NB, 2333 recs.
6	Cameron, R.P. 2012. Additional rare plant records, 2009. , 7 recs.
6	Clayden, S.R. 2005. Confidential supplement to Status Report on Ghost Antler Lichen (Pseudevernia cladonia). Committee on the Status of Endangered Wildlife in Canada, 27 recs.
6	Hall, R. 2008. Rare plant records in old fieldbook notes from Truro area. Pers. comm. to C.S. Blaney. 6 recs, 6 recs.

# recs	CITATION
6	Matthew Smith. 2010. Field trip report from Avon Caving Club outlining the discovery of Cyrpipedium arietinum and Hepatica nobilis populations. Public Works and Government Services Canada.
6	O'Neil, S. 1998. Atlantic Salmon: Northumberland Strait Nova Scotia part of SFA 18. Dept of Fisheries & Oceans, Atlantic Region, Science. Stock Status Report D3-08. 9 recs.
6	Sollows, M.C,. 2008. NBM Science Collections databases: mammals. New Brunswick Museum, Saint John NB, download Jan. 2008, 4983 recs.
6	Whittam, R.M. 1999. Status Report on the Roseate Tern (update) in Canada. Committee on the Status of Endangered Wildlife in Canada, 36 recs.
5	Blaney, C.S.; Mazerolle, D.M. 2009. Fieldwork 2009. Atlantic Canada Conservation Data Centre. Sackville NB, 13395 recs.
5	Brunelle, P.-M. (compiler). 2010. ADIP/MDDS Odonata Database: NB, NS Update 1900-09. Atlantic Dragonfly Inventory Program (ADIP), 935 recs.
5	Cameron, R.P. 2012. Rob Cameron 2012 vascular plant data. NS Department of Environment, 30 recs.
5	Doucet, D.A. 2007. Lepidopteran Records, 1988-2006. Doucet, 700 recs.
5	Holder, M. 2003. Assessment and update status report on the Eastern Lilaeopsis (Lilaeopsis chinensis) in Canada. Committee on the Status of Endangered Wildlife in Canada, 16 recs.
5	Towell, C. 2014. 2014 Northern Goshawk and Common Nighthawk email reports, NS. NS Department of Natural Resources.
4	Bredin, K.A. 2002. NS Freshwater Mussel Fieldwork. Atlantic Canada Conservation Data Centere, 30 recs.
4	Clayden, S.R. 1998. NBM Science Collections databases: vascular plants. New Brunswick Museum, Saint John NB, 19759 recs.
4	Cody, W.J. 2003. Nova Scotia specimens of Equisetum pratense at the DAO herbarium in Ottawa. , Pers. comm. to C.S. Blaney. 4 recs.
4	Forsythe, B. 2006. Cypripedium arietinum at Meadow Pond, Hants Co. Pers. comm. to C.S. Blaney. 4 recs, 4 recs.
4	Klymko, J.J.D.; Robinson, S.L. 2014. 2013 field data. Atlantic Canada Conservation Data Centre.
4	Mills, Pamela. 2007. Iva frutescens records. Nova Scotia Dept of Natural Resources, Wildlife Div. Pers. comm. to S. Basquil, 4 recs.
4	Newell, R. & Neily, T.; Toms, B.; Proulx, G. et al. 2011. NCC Properties Fieldwork in NS: August-September 2010. Nature Conservancy Canada, 106 recs.
4	O'Neil, S. 1998. Atlantic Salmon: Eastern Shore Nova Scotia SFA 20. Dept of Fisheries & Oceans, Atlantic Region, Science. Stock Status Report D3-10. 4 recs.
4	Oldham, M.J. 2000. Oldham database records from Maritime provinces. Oldham, M.J; ONHIC, 487 recs.
4	Porter, K. 2013. 2013 rare and non-rare vascular plant field data. St. Mary's University, 57 recs.
3	Basquill, S.P. 2009. 2009 field observations. Nova Scotia Dept of Natural Resources.
3	Benjamin, L.K. 2009. NSDNR Fieldwork & Consultants Reports. Nova Scotia Dept Natural Resources, 143 recs.
3	Blaney, C.S. Miscellaneous specimens received by ACCDC (botany). Various persons. 2001-08.
3	Christie, D.S. 2000. Christmas Bird Count Data, 1997-2000. Nature NB, 54 recs.
3	Doubt, J. 2013. Email to Sean Blaney with Nova Scotia records of Fissidens exilis at Canadian Museum of Nature. pers. comm., 3 records.
3	Frittaion, C. 2012. NSNT 2012 Field Observations. Nova Scotia Nature Trust, Pers comm. to S. Blaney Feb. 7, 34 recs.
3	LaPaix, R.; Parker, M. 2013. email to Sean Blaney regarding Listera australis observations near Kearney Lake. East Coast Aquatics, 2.
3	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.
3	Standley, L.A. 2002. Carex haydenii in Nova Scotia. , Pers. comm. to C.S. Blaney. 4 recs.
3	WIlliams, M. Cape Breton University Digital Herbarium. Cape Breton University Digital Herbarium. 2013.
2	Amiro, Peter G. 1998. Atlantic Salmon: Inner Bay of Fundy SFA 22 & part of SFA 23. Dept of Fisheries & Oceans, Atlantic Region, Science Stock Status Report D3-12. 4 recs.
2	Bagnell, B.A. 2001. New Brunswick Bryophyte Occurrences. B&B Botanical, Sussex, 478 recs.
2	Basquill, S.P. 2011. Field observations & specimen collections, 2010. Nova Scotia Department of Natural Resources, Pers. comm. , 8 Recs.
2	Blaney, C.S. 1999. Fieldwork 1999. Atlantic Canada Conservation Data Centre. Sackville NB, 292 recs.
2	Klymko, J.J.D. 2010. Miscellaneous observations reported to ACCDC (zoology). Pers. comm. from various persons, 3 recs.
2	Lock, A.R., Brown, R.G.B. & Gerriets, S.H. 1994. Gazetteer of Marine Birds in Atlantic Canada. Canadian Wildlife Service, Atlantic Region, 137 pp.
2	Macaulay, M. Notes on newly discovered Hepatica nobilis var. obtusa population in Cumberland Co. NS. Pers. comm. to S. Blaney, 1 rec.
2	Macauley, M. 2008. Email to Sean Blaney regarding rich hardwood floodplain site at Howards Pool, Wallace River, NS.
2	Munro, M. 2003. Caulophyllum thalictroides & Carex hirtifolia at Herbert River, Brooklyn, NS. , Pers. comm. to C.S. Blaney. 2 recs.
2	Munro, M. 2003. Dirca palustris & Hepatica nobilis var. obtusa at Cogmagun River, NS. , Pers. comm. to C.S. Blaney . 2 recs.
2	Neily, T.H.; Smith, C.; Whitman, E. 2011. NCC Logging Lake (Halifax Co. NS) properties baseline survey data. Nature Conservancy of Canada, 2 recs.
2	Newell, R.E. 2006. Rare plant observations in Digby Neck. Pers. comm. to S. Blaney, 6 recs.
2	Niel, K. & Majka, C. 2008. New Records of Tiger Beetles (Coleoptera: Carabidae: Cicindelinae) in Nova Scotia. Journal of the Acadian Entomological Society, 4: 3-6.
2	Plissner, J.H. & Haig, S.M. 1997. 1996 International piping plover census. US Geological Survey, Corvallis OR, 231 pp.
2	Sabine, D.L. 2013. Dwaine Sabine butterfly records, 2009 and earlier.
2	Sollows, M.C,. 2009. NBM Science Collections databases: molluscs. New Brunswick Museum, Saint John NB, download Jan. 2009, 6951 recs (2957 in Atlantic Canada).
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	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 Minuartia groenlandica record for NS. Pers. comm. to C.S. Blaney, Oct 6, 1 rec.
1	Benedict, B. Connell Herbarium Specimens (Data) . University New Brunswick, Fredericton. 2003.
1	Benedict, B. Connell Herbarium Specimens, Digital photos. University New Brunswick, Fredericton. 2005.
1	Benjamin, L.K. 2003. Cypripedium arietinum in Cogmagun River NS. Pers. comm. to S. Blaney, 1 rec.
1	Bruce, J. 2014. 2014 Wood Turtle email report, Nine Mile River, NS. NS Department of Natural Resources.

# recs	CITATION
1	Clayden, S.R. 2006. Pseudevernia cladonia records. NB Museum. Pers. comm. to S. Blaney, Dec, 4 recs.
1	Crowell, A. 2004. Cypripedium arietinum in Weir Brook, Hants Co. Pers. comm. to S. Blaney, 1 rec.
1	Crowell, M. 2013. email to Sean Blaney regarding Listera australis at Bear Head and Mill Cove Canadian Forces Station. Jacques Whitford Environmental Ltd., 2.
1	Hill, N.M. 2013. email communications to Sean Blaney and David Mazerolle regarding the discovery of Listera australis populations at Black River Lake and Middlewood. , 2.
1	Jacques Whitford Ltd. 2003. Cananda Lily location. Pers. Comm. to S. Blaney. 2pp, 1 rec, 1 rec.
1	Klymko, J.J.D. 2011. Insect fieldwork & submissions, 2010. Atlantic Canada Conservation Data Centre. Sackville NB, 742 recs.
1	Lautenschlager, R.A. 2010. Miscellaneous observations reported to ACCDC (zoology). Pers. comm. from various persons, 2 recs.
1	MacKinnon, D.; Wright, P.; Smith, D. 2014. 2014 Common Tern email report, Eastern Passage, NS. NS Department of Environment.
1	Majka, C.G. & McCorquodale, D.B. 2006. The Coccinellidae (Coleoptera) of the Maritime Provinces of Canada: new records, biogeographic notes, and conservation concerns. Zootaxa. Zootaxa, 1154: 49–68. 7 recs.
1	McAlpine, D.F. 1998. NBM Science Collections databases to 1998. New Brunswick Museum, Saint John NB, 241 recs.
1	Neily, P.D. Plant Specimens. Nova Scotia Dept Natural Resources, Truro. 2006.
1	Neily, T.H. & Anderson, F. 2011. Lichen observations from NRC site at Sandy Cove. , 97.
1	Neily, T.H. 2004. Hepatica nobilis var. obtusa record for Falmouth NS. Pers. comm. to C.S. Blaney, 1 rec.
1	Newell, R.E. 2004. Hepatica nobilis var. obtusa record. Pers. comm. to S. Blaney, 1 rec.
1	Robinson, C.B. 1907. Early intervale flora of eastern Nova Scotia. Transactions of the Nova Scotia Institute of Science, 10:502-506. 1 rec.
1	Scott, F.W. 1988. Status Report on the Southern Flying Squirrel (Glaucomys volans) in Canada. Committee on the Status of Endangered Wildlife in Canada, 2 recs.
1	Sollows, M.C. 2008. NBM Science Collections databases: herpetiles. New Brunswick Museum, Saint John NB, download Jan. 2008, 8636 recs.
1	Speers, L. 2008. Butterflies of Canada database: New Brunswick 1897-1999. Agriculture & Agri-Food Canada, Biological Resources Program, Ottawa, 2048 recs.
1	Stewart, P. 2013. email to Sean Blaney regarding the discovery of a Listera australis population at Blockhouse. Envirosphere Consultants Limited, 1.
1	Wilson, G. 2013. 2013 Snapping Turtle email report, Wentworth, NS. Pers. comm.