



Figure 7 a, b. Figure 7a on the left is a recently drained beaver pond with a visible beaver lodge at center left in the photo. Figure 7b is a vernal pool located within the clearcut portion of the study area.

lodge is visible at center left within the photo. Evidense of recent active beaver (*Castor canadensis*) activity (fresh debarked sticks) was found downstream from the culvert at waypoint 122 (Figure 1).

A single vernal pool was located within the recently clearcut portion of the property (Figure 1, waypoint "Vernal Pool"). These are potentially important habitats for invertebrates, amphibians and reptiles.

In addition to the beaver flowage there were at least two treed swamps in, or adjacent to the study area at photo waypoints "Talus Slope" and 145. The former is very near the boundary line; however, ground disturbance likely associated with forest harvesting would suggest that this swamp is within the study area. Photo waypoint 145 (Figure 8 a) is a mixed-wood swamp principally composed of alder (*Alnus* sp.), red maple, tamarack/eastern larch (*Larix laracina*), black spruce (*Picea mariana*) and white pine with several game trails, likely created by white-tail deer and used by a variety of mid to large size mammals such as black bear, coyotes, red fox and raccoons. Figure 8 b (photo waypoint 147) is an ericaceous and shrub bog that also displayed several mammal trails such as those commonly made by mid to large size mammals.





Figures 8 a, b. A mixed-wood swamp on the left (a) and a shrub bog on the right (b).

Riparian habitats were found in the study area at photo waypoints 139 and 140 (Figure 1). Drainage through the beaver flowage provided a sufficient quantity of water at this time of year to maintain a 1-2 m wide channel approximately 30 cm deep (Figure 9 a, b). Fish were observed below the culvert where the stream crossed under the gravel surface road leading to the quarry. Woody riparian vegetation was primarily alder with scattered red maple.





Figure 9 a, b. Photos of stream and riparian vegetation. Figure 9 a (left; photo waypoint 139) shows the downstream end of the culvert that drains the beaver flowage, and the stream flowing northward toward Figure 9b (right; photo waypoint 140). Fish, fresh beaver activity, and green frogs were present at these locations during the survey.

The presence of wetlands and watercourses is generally favorable for aquatic furbearers as well. The watercourse was large enough to be used as a travel corridor for river otter (*Lontra canadensis*) and mink (*Neovison vison*). Although technically not in the study area, there is a wetland- stillwater complex immediately north of the study area that would provide habitat for otter, muskrat, mink and short-tailed weasel (*Mustela erminae*) (Figure 1).

Habitat conditions were also present for early seral small mammals that prefer edge habitat such as deer mice (*Peromyscus maniculatus*), and eastern chipmunk (*Tamias striatus*). Snowshoe hare

and red squirrels were common throughout the study area. The lack of abundant coarse woody material in intact stands and late seral conditions would suggest that red-backed voles (*Myodes gapperi*) and woodland jumping mice (*Napaeozapus insignis*) are not present, or not present in significant numbers. Insectivores such as shrews (*Blarina* sp., *Sorex* spp.) are most common when there is complex ground cover and coarse woody material, which was not generally present.

In addition to forested and aquatic habitats, exposed and weathered bedrock appeared to be the source of numerous talus slopes, or exposed loose rocky slopes. These geological features could potentially provide shelter for small mammals and overwintering, basking, and foraging sites for reptiles such as snakes (Figure 10; Photo waypoint "Talus Slope").



Figure 10. Talus slope with fractured bedrock that may potentially provide cover for small mammals and herpetofauna (Figure 1 photo waypoint "talus slope".

#### 3.2 Observations

A list of mammal and herpetofauna species directly or indirectly observed during surveys on 17-18 May 2022 is presented in Table 3. Individual predetermined transects were not used. All observations were made during random walk-over surveys designed to traverse all representative habitats and conditions found in the study area.

Species	Common Name	Scientific Name	Observation	Comments
Group			Type	
Mammals	White-tail deer	Odocoileus virginianis	Scat, trails	Common throughout the study area
	Snowshoe hare	Lepus americanus	Scat	
	Red squirrel	Tamiasciurius hudsonicus	Seed middens	Found in stands with mature conifer
	Eastern coyote	Canis latrans	Scat, tracks	
	American mink	Neovison vison	Tracks	
	Beaver	Castor canadensis	Foraging sign	
Herpetofauna	Northern spring peeper	Pseudacris crucifer	Sighting, calls	

Pickerel	l frog	Lithobates palustrus	Calls	
Green fi	rog	Rana clamitans	Calls	

Table 3. Mammal and herpetofauna species identified in the study area during transect surveys on 17-18 May 2022 at Colpton.

Common Name	Scientific Name	Observation Type
Northern parula	Setophaga americana	Sighting
Dark-eyed junco	Junco hyemalis	Sighting
Downy woodpecker	Picoides pubescens	Sighting
Black-capped chickadee	Poecile atricapillus	Sighting, call
Mourning dove	Zenaida macroura	Call
Saw-whet owl	Aegolius acadicus	Call

Table 4. Incidental avian observations made during survey of Colpton study area on 17-18 May 2022.

#### 3.2.1 Bats

An acoustic bat survey on the evening of 17 May 2022 between 2030 and 2130 hours did not reveal the presence of any bats. The survey was conducted from a single location at the culvert where the stream from the beaver flowed under the gravel road (Figure 1, waypoint "Pickerel Frog"). Survey conditions were acceptable with clear skies, 16°C, and only a light wind.

#### 4.0 Additional Considerations

By their nature, mammals and amphibians tend to be nocturnal and secretive, and therefore, less conspicuous. Consequently, their presence is often indicated by indirect sign (scat, tracks, calls, prey remains etc.) or inferred by habitat availability. Based on the type of habitats present at the study site there is likely to be a broad range of more common species present. Evidence of large mammals such as white-tail deer was found, and it is likely that black bear use portions of the study area as part of their home ranges. Although moose sign was not observed there has been evidence of moose within 11 km of the study area. Moose have a large home range that encompasses mature and regenerating forest, and wetland habitats. The study area has a variety of wetland and forest types that could support moose so it is possible that the study area could form a portion of moose home range.

Mid-sized forest dwelling mammals such as American marten (*Martes americana*) and fisher (*Pekania pennanti*) generally prefer mature and late seral forests with large diameter trees and abundant coarse woody material. There was little evidence of these habitat elements on the study site. Both fisher and marten are present in western Nova Scotia but have not been documented by the AC CDC within 34 and 26 km respectively of the study site. More common carnivores such

as eastern coyote, red fox, and bobcat (*Lynx rufus*) are present or likely present based on habitat types and prey availability. Physical evidence of coyote (scat), and mink (tracks, Figure 11) was observed.

Species at risk small mammals such as bats were not found but maybe present.

Given the proximity of SAR or SCC herptiles such as Eastern ribbonsnake and Blanding's turtle ( $\leq 1.0$  km) from the center of the study there is a reasonable probability that both species are present either in or very close to the study area. Ribbonsnakes have a low detectability and have been found in a variety of wetland types (NSDNRR 2020 a). Gilhen (1984) reported ribbonsnakes at a pond in Colpton, Lunenburg County in 1978. He further described suitable habitat as vegetated margins of ponds and lakes, or grassy margins along streams. The study area has both wetlands (swamps, marshes) and vegetated stream banks which suggests the potential for habitat and additional investigation.

Blanding's turtle can occupy similar habitats as ribbonsnakes. Important habitat includes shallow vegetated water bodies, slow moving streams, and wetlands. Blanding's turtle will also travel overland through forest stands, and use watercourses as travel ways. These habitat features can be found either in, or immediately adjacent to the study area; therefore, additional directed surveys for this species may be prudent.



Figure 11 a, b. Photographs of probable mink tracks in mud taken near photo waypoint 124 in Figure 1.

#### 5.0 References

Gilhen, J. 1984. Amphibians and Reptiles of Nova Scotia. Nova Scotia Museum of Natural History. Halifax, NS. 162 pp.

Nova Scotia Department of Natural Resources and Renewables. 2021. Recovery Plan for the Moose (*Alces alces Americana*) in Mainland Nova Scotia. Nova Scotia Endangered Species Act Recovery Plan Series. 96pp.

Nova Scotia Department of Lands and Forestry. 2020 a. Recovery Plan for the Eastern Ribbonsnake (*Thamnophis sauritus*) in Nova Scotia [Final]. Nova Scotia Endangered Species Act Recovery Plan Series

Nova Scotia Department of Lands and Forestry. 2020 b. Recovery Plan for the Blanding's turtle (*Emydoidea blandingii*) in Nova Scotia [Final]. Nova Scotia Endangered Species Act Recovery Plan Series.

Nova Scotia Department of Lands and Forestry. 2020 c. Recovery Plan for Tri-colored bat (Perimyotis subflavus) in Nova Scotia [Final]. Nova Scotia Endangered Species Act Recovery Plan Series.

# APPENDIX D ATLANTIC CANADA CONSERVATION DATA CENTRE REPORT



# **DATA REPORT 7253: Colpton Quarry, NS**

Prepared 27 April 2022 by J. Churchill, Data Manager

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5.1 Source Bibliography



Map 1. A 100 km buffer around the study area

# 1.0 PREFACE

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

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

#### 1.1 DATA LIST

Included datasets:

**Filename** Contents ColptonQuarrNS\_7253ob.xls

Rare or legally-protected Flora and Fauna in your study area ColptonQuarrNS\_7253ob100km.xls A list of Rare and legally protected Flora and Fauna within 100 km of your study area

ColptonQuarrNS\_7253msa.xls Managed and Biologically Significant Areas in your study area

#### 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

Data Management, GIS

James Churchill Conservation Data Analyst / Field Biologist (902) 679-6146 james.churchill@accdc.ca Animals (Fauna)
John Klymko
Zoologist
(506) 364-2660
john.klymko@accdc.ca

**Billing**Jean Breau

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

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

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

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

**Western**: Emma Vost (902) 670-8187

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Eastern: Elizabeth Walsh

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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 805 records of 26 vascular, 19 records of 8 nonvascular flora (Map 2 and attached: \*ob.xls).

#### 2.2 FATINA

The study area contains 162 records of 33 vertebrate, 2 records of 2 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 the study area. CAREcryp MONOgroe SPINpinu CHAEpela PROSpect TYRAtyra PANIphil LEIOpere CONTcoop COCCvesp DOLloryz STERhiru PANIphil FAGUgran PINIenuc PHEUludo MOLOater LOXIcurv EUPHcaro PETRpyrr ACTimacu PIRAoliv PERIcana CONTvire CARDcana POEChuds SETOcast HYLOmust PICOarct BOTAlent HIRUrust CHORmino CHARvoci GALLdeli ACTImacu PANIphil FAGUgran DICHline THAMsaur CHORmino SCIRlong COLElong PROSpect UTRIresu AMELspic PANNluri FUSCleuc THAMsau CHELSerp NANNbell LOPHaure CONTvire MONOgroe HEMIscaton THAMsaur LOXIcurv CAREhayd PANNIuri CHELserp PROSpect CHORmino SCIRlong ALNUserr GALIobtu FAGUgran COLElong COLElong SISYatla TETRangu FUSCleuc CHRYpipi CHELserp PIPTcana PANNluri PIPTcana GOMPfurc PANIphil GERAbick PIPTpung ANAPpain THAMsaur LEPTcort Clifford COLElong MONOgroe MONOgroe SALIpedi BETUmich FAGUgran LOPHaure CEPHocci COLElong 325 West Cliffo TRICdich ACTImacu ALNUserr BARTvirg UTRIresu LOPHaure POTApulc PROSpect LEPThibe NEW ELM CARDcana EUPHcaro CONTCO RESOLUTION HIGHER TAXON 4.7 within 50s of kilometers vertebrate fauna ■ 4.0 within 10s of kilometers invertebrate fauna 3.7 within 5s of kilometers vascular flora A 3.0 within kilometers

nonvascular flora

△ 2.7 within 500s of meters ○ 2.0 within 100s of meters ○ 1.7 within 10s of meters

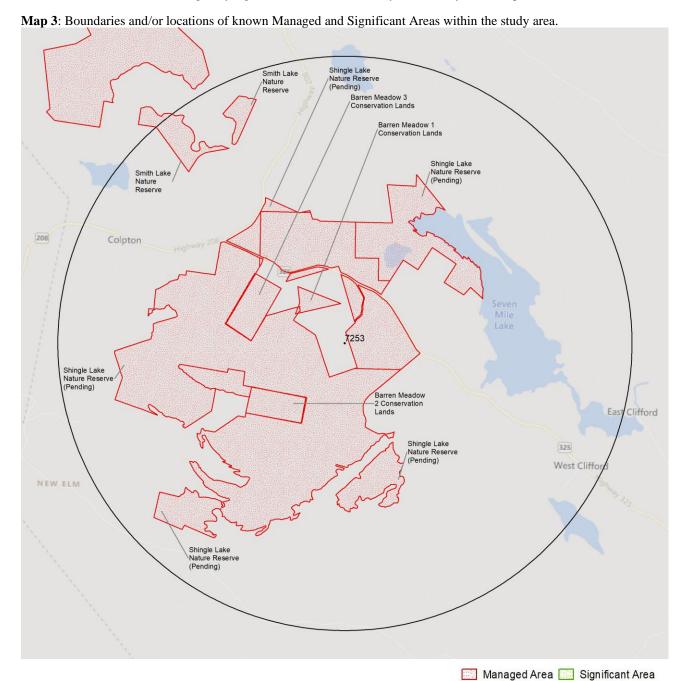
# 3.0 SPECIAL AREAS

# 3.1 MANAGED AREAS

The GIS scan identified 7 managed areas in the vicinity of the study area (Map 3 and attached file: \*msa.xls).

# 3.2 SIGNIFICANT AREAS

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



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# **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)
Ν	Pannaria lurida	Wrinkled Shingle Lichen	Threatened	Threatened	Threatened	S2S3	4	1.1 ± 0.0
Ν	Fuscopannaria leucosticta	White-rimmed Shingle Lichen	Threatened			S3	4	$1.2 \pm 0.0$
Ν	Leptogium hibernicum	Hibernia Jellyskin Lichen				S1	1	$3.6 \pm 0.0$
Ν	Tetraplodon angustatus	Toothed-leaved Nitrogen Moss				S3	1	$0.5 \pm 0.0$
Ν	Heterodermia squamulosa	Scaly Fringe Lichen				S3	4	$1.6 \pm 0.0$
Ν	Leptogium milligranum	Stretched Jellyskin Lichen				S3	2	$1.7 \pm 0.0$
Ν	Leptogium corticola	Blistered Jellyskin Lichen				S3S4	1	$1.6 \pm 0.0$
Ν	Anaptychia palmulata	Shaggy Fringed Lichen				S3S4	2	$1.6 \pm 0.0$
Ρ	Lophiola aurea	Goldencrest	Special Concern	Special Concern	Vulnerable	S2	418	$1.7 \pm 0.0$
Ρ	Scirpus Iongii	Long's Bulrush	Special Concern		Vulnerable	S3	19	$0.8 \pm 0.0$
Ρ	Trichostema dichotomum	Forked Bluecurls				S1	6	$2.3 \pm 0.0$
Ρ	Carex haydenii	Hayden's Sedge				S1S2	2	$1.2 \pm 0.0$
Ρ	Piptatheropsis pungens	Slender Ricegrass				S2	5	$1.1 \pm 0.0$
Ρ	Galium obtusum	Blunt-leaved Bedstraw				S2S3	1	$0.5 \pm 0.0$
Ρ	Potamogeton pulcher	Spotted Pondweed			Vulnerable	S3	2	$2.9 \pm 0.0$
Ρ	Alnus serrulata	Smooth Alder				S3	3	$0.5 \pm 0.0$
Ρ	Betula michauxii	Michaux's Dwarf Birch				S3	36	$1.9 \pm 0.0$
Ρ	Mononeuria groenlandica	Greenland Stitchwort				S3	54	$1.3 \pm 0.0$
Ρ	Geranium bicknellii	Bicknell's Crane's-bill				S3	5	$0.4 \pm 0.0$
Ρ	Utricularia resupinata	Inverted Bladderwort				S3	2	$2.9 \pm 0.0$
Ρ	Cephalanthus occidentalis	Common Buttonbush				S3	9	$2.9 \pm 0.0$
Ρ	Salix pedicellaris	Bog Willow				S3	56	$0.5 \pm 0.0$
Ρ	Carex cryptolepis	Hidden-scaled Sedge				S3	1	$4.0 \pm 0.0$
Ρ	Dichanthelium linearifolium	Narrow-leaved Panic Grass				S3	1	$3.8 \pm 0.0$
Ρ	Piptatheropsis canadensis	Canada Ricegrass				S3	9	$1.5 \pm 0.0$
Ρ	Fagus grandifolia	American Beech				S3S4	6	$2.6 \pm 0.0$
Ρ	Bartonia virginica	Yellow Bartonia				S3S4	1	$2.9 \pm 0.0$
Ρ	Proserpinaca pectinata	Comb-leaved Mermaidweed				S3S4	9	$1.7 \pm 0.0$
Ρ	Amelanchier spicata	Running Serviceberry				S3S4	2	$1.9 \pm 0.0$
Ρ	Ulmus americana	White Elm				S3S4	1	$5.0 \pm 1.0$
Р	Sisyrinchium atlanticum	Eastern Blue-Eyed-Grass				S3S4	1	$3.6 \pm 0.0$
Р	Platanthera obtusata	Blunt-leaved Orchid				S3S4	1	$2.9 \pm 2.0$
Ρ	Coleataenia longifolia	Long-leaved Panicgrass				S3S4	151	$1.8 \pm 0.0$
Р	Panicum philadelphicum	Philadelphia Panicgrass				S3S4	4	$0.5 \pm 0.0$

#### **4.2 FAUNA**

	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)
Α	Thamnophis saurita	Eastern Ribbonsnake	Threatened	Threatened	Threatened	S2S3	89	1.0 ± 0.0
Α	Chaetura pelagica	Chimney Swift	Threatened	Threatened	Endangered	S2S3B,S1M	1	$3.7 \pm 7.0$
Α	Dolichonyx oryzivorus	Bobolink	Threatened	Threatened	Vulnerable	S3B	2	$3.7 \pm 7.0$
Α	Hylocichla mustelina	Wood Thrush	Threatened	Threatened		SUB	1	$3.7 \pm 7.0$
Α	Euphagus carolinus	Rusty Blackbird	Special Concern	Special Concern	Endangered	S2B	2	$3.7 \pm 7.0$
Α	Chelydra serpentina	Snapping Turtle	Special Concern	Special Concern	Vulnerable	S3	9	$1.0 \pm 0.0$
Α	Hirundo rustica	Barn Swallow	Special Concern	Threatened	Endangered	S3B	4	$3.7 \pm 7.0$

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	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)
Α	Cardellina canadensis	Canada Warbler	Special Concern	Threatened	Endangered	S3B	3	$3.7 \pm 7.0$
Α	Chordeiles minor	Common Nighthawk	Special Concern	Threatened	Threatened	S3B	4	$0.8 \pm 0.0$
Α	Contopus cooperi	Olive-sided Flycatcher	Special Concern	Threatened	Threatened	S3B	4	$3.7 \pm 7.0$
Α	Coccothraustes vespertinus	Evening Grosbeak	Special Concern	Special Concern	Vulnerable	S3B,S3N,S3M	3	$3.7 \pm 7.0$
Α	Contopus virens	Eastern Wood-Pewee	Special Concern	Special Concern	Vulnerable	S3S4B	4	$2.2 \pm 0.0$
Α	Chrysemys picta picta	Eastern Painted Turtle	Special Concern	Special Concern		S4	2	$1.0 \pm 0.0$
Α	Hemidactylium scutatum	Four-toed Salamander	Not At Risk			S3	1	$4.1 \pm 1.0$
Α	Sterna hirundo	Common Tern	Not At Risk			S3B	1	$3.7 \pm 7.0$
Α	Accipiter gentilis	Northern Goshawk	Not At Risk			S3S4	1	$3.7 \pm 7.0$
Α	Molothrus ater	Brown-headed Cowbird				S2B	1	$3.7 \pm 7.0$
Α	Piranga olivacea	Scarlet Tanager				S2B,SUM	1	$3.7 \pm 7.0$
Α	Petrochelidon pyrrhonota	Cliff Swallow				S2S3B	3	$3.7 \pm 7.0$
Α	Perisoreus canadensis	Canada Jay				S3	2	$3.7 \pm 7.0$
Α	Poecile hudsonicus	Boreal Chickadee				S3	2	$3.7 \pm 7.0$
Α	Spinus pinus	Pine Siskin				S3	1	$3.7 \pm 7.0$
Α	Charadrius vociferus	Killdeer				S3B	1	$3.7 \pm 7.0$
Α	Tyrannus tyrannus	Eastern Kingbird				S3B	1	$3.7 \pm 7.0$
Α	Pheucticus Iudovicianus	Rose-breasted Grosbeak				S3B	1	$3.7 \pm 7.0$
Α	Gallinago delicata	Wilson's Snipe				S3B,S5M	4	$3.7 \pm 7.0$
Α	Pinicola enucleator	Pine Grosbeak				S3B,S5N,S5M	1	$3.7 \pm 7.0$
Α	Picoides arcticus	Black-backed Woodpecker				S3S4	1	$3.7 \pm 7.0$
Α	Loxia curvirostra	Red Crossbill				S3S4	2	$1.2 \pm 0.0$
Α	Botaurus lentiginosus	American Bittern				S3S4B,S4S5M	1	$3.7 \pm 7.0$
Α	Setophaga castanea	Bay-breasted Warbler				S3S4B,S4S5M	1	$3.7 \pm 7.0$
Α	Actitis macularius	Spotted Sandpiper				S3S4B,S5M	4	$3.4 \pm 0.0$
Α	Leiothlypis peregrina	Tennessee Warbler				S3S4B,S5M	4	$3.7 \pm 7.0$
- 1	Gomphaeschna furcillata	Harlequin Darner				S3S4	1	$0.4 \pm 0.0$
I	Nannothemis bella	Elfin Skimmer				S3S4	1	$1.7 \pm 0.0$

#### **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 your study area are indicated below with "YES".

# Nova Scotia

Scientific Name	Common Name	SARA	Prov Legal Prot	Known within the Study Site?
Fraxinus nigra	Black Ash		Threatened	YES
Emydoidea blandingii	Blanding's Turtle - Nova Scotia pop.	Endangered	Vulnerable	YES
Glyptemys insculpta	Wood Turtle	Threatened	Threatened	No
Falco peregrinus pop. 1	Peregrine Falcon - anatum/tundrius pop.	Special Concern	Vulnerable	No
Bat hibernaculum or ba	t species occurrence	[Endangered] <sup>1</sup>	[Endangered]1	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.

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#### 4.4 SOURCE BIBLIOGRAPHY

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

#### # recs CITATION

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# 5.0 RARE SPECIES WITHIN 100 KM

Tavonomic

A 100 km buffer around the study area contains 49412 records of 144 vertebrate and 1142 records of 56 invertebrate fauna; 17728 records of 288 vascular, 5844 records of 200 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 (± 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
Α	Coregonus huntsmani	Atlantic Whitefish	Endangered	Endangered	Endangered	S1	128	13.1 ± 1.0	NS
Α	Myotis lucifugus	Little Brown Myotis	Endangered	Endangered	Endangered	S1	770	$3.8 \pm 0.0$	NS
Α	Myotis septentrionalis	Northern Myotis	Endangered	Endangered	Endangered	S1	102	$3.8 \pm 0.0$	NS
Α	Perimyotis subflavus	Tricolored Bat	Endangered	Endangered	Endangered	S1	205	$6.8 \pm 0.0$	NS
Α	Emydoidea blandingii	Blanding's Turtle	Endangered	Endangered	Endangered	S1	10049	$0.7 \pm 0.0$	NS
Α	Salmo salar pop. 1	Atlantic Salmon - Inner Bay of Fundy population Atlantic Salmon - Nova	Endangered	Endangered		S1	22	$49.5 \pm 0.0$	NS NS
Α	Salmo salar pop. 6	Scotia Southern Upland population	Endangered			S1	21	13.1 ± 0.0	NO
Α	Eubalaena glacialis	North Atlantic Right Whale	Endangered	Endangered		S1	1	$75.8 \pm 50.0$	NS
Α	Charadrius melodus melodus	Piping Plover melodus subspecies	Endangered	Endangered	Endangered	S1B	1624	$26.9 \pm 0.0$	NS
Α	Sterna dougallii	Roseate Tern	Endangered	Endangered	Endangered	S1B	64	$36.4 \pm 0.0$	NS
Α	Dermochelys coriacea pop. 2	Leatherback Sea Turtle - Atlantic population	Endangered	Endangered		S1S2N	4	32.7 ± 1.0	NS
Α	Morone saxatilis pop. 2	Striped Bass - Bay of Fundy population	Endangered			S2S3B,S2S3N	4	58.5 ± 1.0	NS
Α	Melanerpes erythrocephalus	Red-headed Woodpecker	Endangered	Threatened		SNA	2	$60.3 \pm 0.0$	NS
Α	Protonotaria citrea	Prothonotary Warbler	Endangered	Endangered		SNA	1	$98.5 \pm 0.0$	NS
Α	Delphinapterus leucas	Beluga	Endangered	Endangered		SNA	1	$97.8 \pm 1.0$	NS
Α	Colinus virginianus	Northern Bobwhite	Endangered	Endangered			8	$32.6 \pm 7.0$	NS
Α	Antrostomus vociferus	Eastern Whip-Poor-Will	Threatened	Threatened	Threatened	S1?B	12	$14.2 \pm 7.0$	NS
Α	Catharus bicknelli	Bicknell's Thrush	Threatened	Threatened	Endangered	S1B	1	$79.4 \pm 7.0$	NS
Α	Asio flammeus	Short-eared Owl	Threatened	Special Concern		S1B	5	$54.8 \pm 0.0$	NS
Α	Glyptemys insculpta	Wood Turtle	Threatened	Threatened	Threatened	S2	743	$15.0 \pm 5.0$	NS
A	Riparia riparia	Bank Swallow	Threatened	Threatened	Endangered	S2B	1418	$6.2 \pm 0.0$	NS
Α	Thamnophis saurita	Eastern Ribbonsnake	Threatened	Threatened	Threatened	S2S3	2133	$1.0 \pm 0.0$	NS
Α	Chaetura pelagica	Chimney Swift	Threatened	Threatened	Endangered	S2S3B,S1M	612	$3.7 \pm 7.0$	NS
Α	Limosa haemastica	Hudsonian Godwit	Threatened			S2S3M	176	$38.1 \pm 0.0$	NS
A	Acipenser oxyrinchus	Atlantic Sturgeon	Threatened			S2S3N	3	$85.0 \pm 0.0$	NS
A	Dolichonyx oryzivorus	Bobolink	Threatened	Threatened	Vulnerable	S3B	1198	$3.7 \pm 7.0$	NS
A	Hydrobates leucorhous	Leach's Storm-Petrel	Threatened			S3B	25	$20.2 \pm 0.0$	NS
Α	Tringa flavipes	Lesser Yellowlegs	Threatened			S3M	695	$26.9 \pm 0.0$	NS
Α	Anguilla rostrata	American Eel	Threatened			S3N	269	$26.0 \pm 1.0$	NS
Α	Sturnella magna	Eastern Meadowlark	Threatened	Threatened		SHB	5	$53.7 \pm 7.0$	NS
Α	Hylocichla mustelina	Wood Thrush	Threatened	Threatened		SUB	23	$3.7 \pm 7.0$	NS
Α	Passerculus sandwichensis princeps	Ipswich Sparrow	Special Concern	Special Concern		S1B	1	$93.4 \pm 0.0$	NS
Α	Bucephala islandica	Barrow's Goldeneye	Special Concern	Special Concern		S1N,SUM	3	$70.6 \pm 0.0$	NS
Α	Euphagus carolinus	Rusty Blackbird	Special Concern	Special Concern	Endangered	S2B	243	$3.7 \pm 7.0$	NS
Α	Balaenoptera physalus	Fin Whale	Special Concern	Special Concern	· ·	S2S3	1	$38.9 \pm 0.0$	NS
A	Phalaropus lobatus	Red-necked Phalarope	Special Concern	Special Concern		S2S3M	5	$39.9 \pm 0.0$	NS
Α	Histrionicus histrionicus pop.	Harlequin Duck - Eastern population	Special Concern	Special Concern	Endangered	S2S3N,SUM	46	$39.2 \pm 0.0$	NS
Α	Chelydra serpentina	Snapping Turtle	Special Concern	Special Concern	Vulnerable	S3	421	$1.0 \pm 0.0$	NS

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Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
Α	Hirundo rustica	Barn Swallow	Special Concern	Threatened	Endangered	S3B	1167	$3.7 \pm 7.0$	NS
Α	Cardellina canadensis	Canada Warbler	Special Concern	Threatened	Endangered	S3B	621	$3.7 \pm 7.0$	NS
Α	Chordeiles minor	Common Nighthawk	Special Concern	Threatened	Threatened	S3B	514	$0.8 \pm 0.0$	NS
Α	Contopus cooperi	Olive-sided Flycatcher	Special Concern	Threatened	Threatened	S3B	886	$3.7 \pm 7.0$	NS
Α	Coccothraustes vespertinus	Evening Grosbeak	Special Concern	Special Concern	Vulnerable	S3B,S3N,S3M	762	$3.7 \pm 7.0$	NS
A	Podiceps auritus	Horned Grebe	Special Concern	Special Concern		S3N,SUM	12	35.6 ± 10.0	NS
A	Contopus virens	Eastern Wood-Pewee	Special Concern	Special Concern	Vulnerable	S3S4B	1233	$2.2 \pm 0.0$	NS
A	Phocoena phocoena	Harbour Porpoise	Special Concern	Openial Collectii	Valiforable	S4	24	38.0 ± 1.0	NS
A	Chrysemys picta picta	Eastern Painted Turtle	Special Concern	Special Concern		S4	720	1.0 ± 0.0	NS
Ä	Calidris subruficollis	Buff-breasted Sandpiper	Special Concern	Special Concern		SNA	50	$38.8 \pm 0.0$	NS
Ä	Accipiter cooperii	Cooper's Hawk	Not At Risk	opediai concern		S1?B,SUN,SUM	3	$92.8 \pm 0.0$	NS
		American Coot	Not At Risk			S17B,SUN,SUM	5 5		NS
Α	Fulica americana		NOT ALKISK			SID	3	$61.8 \pm 7.0$	NS NS
Α	Falco peregrinus pop. 1	Peregrine Falcon - anatum/tundrius	Not At Risk	Special Concern	Vulnerable	S1B,SUM	83	$37.6 \pm 0.0$	NO
Α	Sorex dispar	Long-tailed Shrew	Not At Risk			S2	1	$93.7 \pm 0.0$	NS
Α	Lynx canadensis	Canada Lynx	Not At Risk		Endangered	S2S3	2	$39.0 \pm 1.0$	NS
Α	Hemidactylium scutatum	Four-toed Salamander	Not At Risk		Ü	S3	34	$4.1 \pm 1.0$	NS
A	Megaptera novaeangliae	Humpback Whale	Not At Risk			S3	3	$77.8 \pm 0.0$	NS
A	Sterna hirundo	Common Tern	Not At Risk			S3B	260	$3.7 \pm 7.0$	NS
A	Sialia sialis	Eastern Bluebird	Not At Risk			S3B	36	21.0 ± 0.0	NS
Ä	Accipiter gentilis	Northern Goshawk	Not At Risk			S3S4	84	$3.7 \pm 7.0$	NS
Ä	Glaucomys volans	Southern Flying Squirrel	Not At Risk			S3S4	15	$27.0 \pm 0.0$	NS
A			Not At Risk			S3S4 S3S4	3		NS
	Lagenorhynchus acutus	Atlantic White-sided Dolphin						65.3 ± 2.0	
Α	Ammospiza nelsoni	Nelson's Sparrow Red Knot rufa subspecies -	Not At Risk			S3S4B	95	$36.8 \pm 0.0$	NS NS
Α	Calidris canutus rufa	Tierra del Fuego / Patagonia wintering population	E,SC	Endangered	Endangered	S2M	646	$26.9 \pm 0.0$	
Α	Morone saxatilis	Striped Bass	E.SC			S2S3B,S2S3N	10	$37.0 \pm 1.0$	NS
Α	Gadus morhua	Atlantic Cod	E,SC,DD			SNR	2	$70.1 \pm 0.0$	NS
* *	Gadas memaa	Atlantic Walrus - Nova	2,00,22			· · · · ·	_		NS
Α	Odobenus rosmarus pop. 5	Scotia - Newfoundland - Gulf	Χ			SX	1	$67.6 \pm 5.0$	110
		of St Lawrence population							
Α	Alces alces americana	Moose			Endangered	S1	112	$20.6 \pm 1.0$	NS
Α	Passerina cyanea	Indigo Bunting			Ü	S1?B,SUM	23	$29.7 \pm 7.0$	NS
Α	Oxyura jamaicensis	Ruddy Duck				S1B	4	$61.8 \pm 7.0$	NS
A	Gallinula galeata	Common Gallinule				S1B	7	$60.2 \pm 7.0$	NS
A	Myiarchus crinitus	Great Crested Flycatcher				S1B	38	$12.6 \pm 7.0$	NS
A	Cistothorus palustris	Marsh Wren				S1B	5	$41.4 \pm 7.0$	NS
A	Mimus polyglottos	Northern Mockingbird				S1B	40	$20.6 \pm 0.0$	NS
A	Toxostoma rufum	Brown Thrasher				S1B	13	$53.5 \pm 7.0$	NS
A	Charadrius semipalmatus	Semipalmated Plover				S1B,S4M	1552	26.9 ± 0.0	NS
Ä	Calidris minutilla	Least Sandpiper				S1B,S4M	1173	26.9 ± 0.0	NS
A	Anas acuta	Northern Pintail				S1B,SUM	19	$37.4 \pm 7.0$	NS
A	Vireo gilvus	Warbling Vireo				S1B,SUM	19	57.4 ± 7.0	NS
A	Vespertilionidae sp.	bat species				S1S2	422	$3.8 \pm 0.0$	NS
A	Pooecetes gramineus	Vesper Sparrow				S1S2B,SUM	25	18.7 ± 7.0	NS
Α	Vireo philadelphicus	Philadelphia Vireo				S2?B,SUM	18	$7.4 \pm 7.0$	NS
Α	Alca torda	Razorbill				S2B	24	$58.2 \pm 7.0$	NS
Α	Fratercula arctica	Atlantic Puffin				S2B	24	$51.8 \pm 0.0$	NS
Α	Empidonax traillii	Willow Flycatcher				S2B	52	$43.2 \pm 7.0$	NS
Α	Molothrus ater	Brown-headed Cowbird				S2B	160	$3.7 \pm 7.0$	NS
Α	Spatula clypeata	Northern Shoveler				S2B,SUM	58	$60.2 \pm 7.0$	NS
Α	Mareca strepera	Gadwall				S2B,SUM	76	$59.7 \pm 7.0$	NS
Α	Piranga olivacea	Scarlet Tanager				S2B,SUM	57	$3.7 \pm 7.0$	NS
A	Calidris alba	Sanderling				S2N,S3M	1360	$26.9 \pm 0.0$	NS
A	Martes americana	American Marten			Endangered	S2S3	27	$26.4 \pm 0.0$	NS
A	Asio otus	Long-eared Owl				S2S3	19	$27.1 \pm 0.0$	NS
A	Rallus limicola	Virginia Rail				S2S3B	16	$43.6 \pm 7.0$	NS
		-							

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#### Taxonomic

A Petrochelidon pyrrhonola Cliff Swallow S253B 8 8 58.2 *7.0 NS A Petrochelidon pyrrhonola Cliff Swallow S253B S253N 16 6 46.4 *7.0 NS A Catharines aura Turkey Vulture S253B S253N 16 6 46.4 *7.0 NS A Catharines aura Turkey Vulture S253B S253N 16 6 46.4 *7.0 NS A Catharines aura Turkey Vulture S253B S253N 16 6 46.4 *7.0 NS A Setophaga pinus Prine Watther S253B S455M 20 8.3 *7.0 NS A Bucphala cliengula Common Corticle S253B S455M 20 8.3 *7.0 NS A Bucphala cliengula Common Corticle S253B S455M 20 8.3 *7.0 NS A Bucphala cliengula Common Corticle S253B M 20 8.3 *7.0 NS A Pretrocortic corticle S253M 24 8 38.1 *0.0 NS A Pretrocortic canade corticle S253M 24 8 38.1 *0.0 NS A Marmenius phaeopus Nhudsonicus Whimbrel S253M 27 26.9 *1.0 NS A Pretrocortic canadensis Canada Jay S353M 27 26.9 *1.0 NS A Pretrocortic canadensis Canada Jay S353M 27 26.9 *1.0 NS A Pretrocortic canadensis Canada Jay S353M 27 26.9 *1.0 NS A Pretrocortic canadensis Canada Jay S353M 27 26.9 *1.0 NS A Pretrocortic canadensis Canada Jay S353M 27 26.9 *1.0 NS A Pretrocortic canadensis Canada Jay S353M 27 26.9 *1.0 NS A Pretrocortic canadensis Canada Jay S353M 27 26.9 *1.0 NS A Pretrocortic canadensis Canada Jay S353M 27 26.9 *1.0 NS A Pretrocortic canadensis Canada Jay S353M 27 26.9 *1.0 NS A Pretrocortic canadensis Canada Jay S353M 27 26.9 *1.0 NS A Pretrocortic canadensis Canada Jay S353M 27 26.9 *1.0 NS A Sanderinus fortinalis Canada Jay S353M 27 26.9 *1.0 NS A Sanderinus fortinalis Canada Jay S353M 27 26.9 *1.0 NS A Sanderinus fortinalis Canada Jay S353M 27 26.9 *1.0 NS A Sanderinus fortinalis Canada Jay S353M 27 26.9 *1.0 NS A Sanderinus fortinalis Canada Jay S37 2.0 NS A Pretrocortic	Group	Scientific Name	Common Name	COSEWIC	SADA	Prov Logal Prot	Drov Parity Pank	# roce	Distance (km)	Drov
A   Petrocheidic pyrthorata   Cittle Svallow   S258B   216   3,7 ± 7.0   NS		Scientific Name		COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
A Phalacroconx carbo Great Commant Control S258B S458M 46 22 9 10 NS Control S258B S458M 45 22 9 10 NS Control S258B S458M 45 22 9 10 NS Control S258B S458M 46 22 8 38 1 a 0.0 Control S258B S458M 46 22 8 38 1 a 0.0 Control S258B S458M 46 22 8 38 1 a 0.0 Control S258B S458M 47 NS Co										
Catharies aura										
A Beophelae January Pine Warther										
A   Bucophalia clargula   Baltimore Oriole   \$2588,55N,55M   16   \$2.5 ± 7.0   NS							,			
A										
A Numenus phaeopus Whitheral										
Murraenius priaeepius   Nimbre    S2S3M   327   26.9 ± 0.0   NS	A									
A Prelatorque Micilarius Red Phalarope A Prelatorque Micilarius Brew A Prelatorque Micilarius Brew A Sorums prince A Sorums prince A Sorums prince A Sorums prince A Sorums martimensis A Sorum martimensis A Prelatorque Micilarius Shrew A Soruma prince A Sor	A	Pluvialis dominica	American Golden-Plover				S2S3M	248	$38.1 \pm 0.0$	NS
A Phalaropus Milicarius A Perisorous Canadas lay A Perisorous Canadas S A Spirus pinus Pino Siskin Pino	Α		Whimbrel				S2S3M	327	$26.9 \pm 0.0$	NS
A Poecile hudsonicus Boreal Chickadee	A		Red Phalarope				S2S3M	2	$38.8 \pm 0.0$	NS
A Spinus pinus	Α	Perisoreus canadensis	Canada Jay				S3	389	$3.7 \pm 7.0$	NS
A Salvelinus fontrinalis	Α	Poecile hudsonicus	Boreal Chickadee				S3	311	$3.7 \pm 7.0$	NS
A Salvelinus fontinalis   Brook Trout   S3   38   21.0±0.0   NS   A Sorve maritimensis   Mittime Shrew   S3   1   62.1±0.0   NS   A Sorve maritimensis   S3   1   93.7±0.0   NS   A Pekania pennani   Fisher   S3   12   93.7±0.0   NS   A Pekania pennani   Fisher   S3   12   93.7±0.0   NS   A Calcarius iapponicus   Lapland Longspur   S3N,SUM   1   77.9±0.0   NS   A Spatula discore   Buewinged Teal   S3B   429   3.7±7.0   NS   A Charadrius vociferus   Kilideer   S3B   429   3.7±7.0   NS   A Tringa semiparimata   Wile   S3B   429   3.7±7.0   NS   A Tringa semiparimata   Mile   S3B   429   3.7±7.0   NS   A Tringa semiparimata   Salve   S3B   385   3.7±7.0   NS   A Falve   S3B   S3B   S3B   385   3.7±7.0   NS   A Alvas   Salve   S3B   S3	Α	Spinus pinus	Pine Siskin				S3	375	$3.7 \pm 7.0$	NS
A Sorew maritimensis Maritime Shrew  S Sorew maritimensis Maritime Shrew  S Symptomys cooper of Southern Bog Lemming  Fisher  A Calearius lapponicus  A Calearius lapponicus  A Calearius lapponicus  A Calearius lapponicus  A Chardrius vociferus  Kildeer  Willet	Α		Brook Trout					38	$21.0 \pm 0.0$	
A   Synaptomys cooper    Southern Bog Lemming   S3   1   93,7 ± 0.0   NS   A   Pekania pennani   Fisher   S3   1   23,7 ± 0.0   NS   A   Calcarius fapponicus   Lapland Longspur   S37N,SUM   1   77,9 ± 0.0   NS   A   Spatula discors   Blue-winged Teal   S3B   89   27,9 ± 7.0   NS   A   Chrardrius vociferus   Killdeer   S3B   89   27,9 ± 7.0   NS   A   Tringa semipaimate   Willet   S3B   429   3,7 ± 7.0   NS   A   Tringa semipaimate   Willet   S3B   429   3,7 ± 7.0   NS   A   Cocyzus erythrophtalmus   Cocyz	Α									
Pekania pennanti										
A Calcarius lapponicus										
Solid Biscors   Blue-winged Teal   Sab   49   37,71,70   NS										
A Charadrius vociferus Killdeer   S3B   429   3.7 ± 7.0   NS   A Tringa semipalmata Willet   S3B   68   36.9 ± 0.0   NS   A Stema paradisaea   Arctic Tem   S3B   68   36.3 ± 0.0   NS   A Coccyzus erytroptalmatus   S3B   68   36.3 ± 0.0   NS   A Concyzus erytroptalmatus   S3B   68   36.3 ± 0.0   NS   A Flyrannus tyrannus   S3B   205   3.7 ± 7.0   NS   A Pheucticus Moderangus   Alewife   S3B   38   37 ± 7.0   NS   A A Alosa pseudoharengus   Alewife   S3B   38   37 ± 7.0   NS   A A Somaleria mollissima   Common Elder   S3B   S3B   31   59.4 ± 1.0   NS   A A Somaleria mollissima   Common Elder   S3B   S										
A Stema paradisaea Arctic Tem										
A										
A										
A   Tyrannus yrannus										
A										
A A Songaeira mollissima Common Eider S3B, S3M, 33M, 479, 32,5 ± 7.0 NS Somateria mollissima Common Eider S3B, S3M, 33M, 479, 32,5 ± 7.0 NS A Falco sparverius American Kestrel S3B, S4M, 1607, 26,9 ± 0.0 NS A Gallinago delicate Wilson's Snipe S3B, S4M, 1607, 26,9 ± 0.0 NS A Gallinago delicate Wilson's Snipe S3B, S5M, 53, 37,7.0 NS A Setophaga striata Blackpoll Warbler S3B, S5M, 53, 18,0 ± 7.0 NS A Cardellina pusilia Wilson's Warbler S3B, S5M, 53, 18,0 ± 7.0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 53, 18,0 ± 7.0 NS A Setophaga gligrina Cape May Warbler S3B, S5M, 50, 106, 3,7 ± 7.0 NS A Setophaga gligrina Black-bellied Plover S3M, 1778, 26,9 ± 0.0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 55M, 106, 3,7 ± 7.0 NS A Setophaga gligrina Black-bellied Plover S3M, 1778, 26,9 ± 0.0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 55M, 106, 3,7 ± 7.0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 55M, 106, 3,7 ± 7.0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 55M, 106, 3,7 ± 7.0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 57, 10,0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 55M, 106, 3,7 ± 7.0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 55M, 106, 3,7 ± 7.0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 57, 10,0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 55M, 106, 3,7 ± 7.0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 55M, 106, 3,7 ± 7.0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 55M, 11,0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 55M, 11,0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 55M, 11,0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 11,0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 11,0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 11,0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 11,0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 11,0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 11,0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 11,0 NS A Pilnicola enucleator Pine Grosbeak S3B, S5M, 11,0 NS A Pilnicola enu										
A Somateria mollissima Common Eider										
A Tringa melanoleuca   Greater Yellowlegs   American Kestrel   S3B, S4M   1607   26.9 ± 0.0   NS   A Falco sparverius   American Kestrel   S3B, S4SSM   157   8.3 ± 7.0   NS   A Gallinago delicata   Wilson's Snipe   S3B, S5M   503   3.7 ± 7.0   NS   A Setophaga striata   Blackpoll Warbler   S3B, S5M   53   18.0 ± 7.0   NS   A Cardellina pusile   Wilson's Warbler   S3B, S5M   53   18.0 ± 7.0   NS   A Pinicola enucleator   Pine Grosbeak   S3B, S5M   161   15.1 ± 7.0   NS   A Setophaga digrina   Sab, S5M   S3B, S5M   161   15.1 ± 7.0   NS   A Setophaga digrina   Brant   S3B, SUM   57   15.0 ± 0.0   NS   A Branta bernicla   Brant   S3M   2   79.6 ± 0.0   NS   A Pilvialis squatarola   Black-bellied Plover   S3M   1778   26.9 ± 0.0   NS   A Arenaria interpres   Ruddy Turnstone   S3M   756   26.9 ± 0.0   NS   A Calidris pusilla   Semipalmated Sandpiper   S3M   36   38.1 ± 0.0   NS   A Calidris melanotos   Pectoral Sandpiper   S3M   336   38.1 ± 0.0   NS   A Limnodromus griseus   Short-billed Dowitcher   S3M   336   38.1 ± 0.0   NS   A Bolaurus lentiginosus   Black-backed Woodpecker   S3S4   80   3.7 ± 7.0   NS   A Bolaurus lentiginosus   Short-billed Dowitcher   S3S4B, S4SSM   279   3.7 ± 7.0   NS   A Setophaga castanea   Bay-breasted Warbler   S3S4B, S4SSM   270   3.7 ± 7.0   NS   A Setophaga castanea   Bay-breasted Warbler   S3S4B, SSM   343   3.7 ± 7.0   NS   A Calidris melania   Sported Sandpiper   S3S4B, SSM   343   3.7 ± 7.0   NS   A Calidris mentalitien   S3S4B, SSM   343   3.7 ± 7.0   NS   A Setophaga castanea   Bay-breasted Warbler   S3S4B, SSM   343   3.7 ± 7.0   NS   A Progres subs   Purple Martin   S4B, SSM, SSM   90   8.3 ± 7.0   NS   A Leiothypis peregrina   Fensesee Warbler   S3S4B, SSM   59   2.7 ± 2.5   NS   A Leiothypis peregrina   Fensesee Warbler   S3S4B, SSM, SSM   90   8.3 ± 7.0   NS   A Leiothypis peregrina   Fensesee Warbler   S3S4B, SSM, SSM   90   8.3 ± 7.0   NS   A Leiothypis peregrina   Fensesee Warbler   S3S4B, SSM, SSM   90   9.5 ± 0.0   NS   A Leiothypis peregrina   Fensesee Warbler   S3S										
A Falco sparverius American Kestrel S3B, S455M 157 8.3 ± 7.0 NS Gallinago delicate Wilson's Snipe S3B, SSM 503 3.7 ± 7.0 NS A Setophaga striata Blackpoll Warbler S3B, SSM 503 3.7 ± 7.0 NS A Cardellina pusilia Wilson's Warbler S3B, SSM 503 18.0 ± 7.0 NS A Princola enucleator Princola control striator S3B, SSM 503 18.0 ± 7.0 NS A Princola enucleator Princola control striator S3B, SSM 503 18.0 ± 7.0 NS A Princola enucleator Princola enucleator S3B, SSM 503 3.7 ± 7.0 NS A Branta bernricla Black place Black S4B, SSM, SSM 106 3.7 ± 7.0 NS A Branta bernricla Black pellied Plover S3B, SSM, SSM 106 3.7 ± 7.0 NS A Branta bernricla Black bellied Plover S3B, SSM, SSM 2 79.6 ± 0.0 NS A Pluvialis squatarola Black bellied Plover S3M 1778 26.9 ± 0.0 NS A Arenaria interpres S3M 1778 26.9 ± 0.0 NS A Arenaria interpres S3M 1788 26.9 ± 0.0 NS A Calidris melanotos Pectoral Sandipiper S3M 33M 336 38.1 ± 0.0 NS A Calidris melanotos Pectoral Sandipiper S3M 33M 336 38.1 ± 0.0 NS A Picoides arcticus Black-backed Woodpecker S3M 1153 38.1 ± 0.0 NS A Picoides arcticus Black-backed Woodpecker S3SM 338 38.1 ± 0.0 NS A Botaurus lentiginosus American Bittern S4A Botaurus lentiginosus American Bittern S4A Actitis macularius Spotted Sandipiper S3S4B, S4S5M 270 3.7 ± 7.0 NS A Setophaga castanea Bay-breasted Warbler S3S4B, S5M, 55M 709 3.4 ± 0.0 NS A Progres servator Red-breasted Merganser S3S4B, S5M, 55M 90 8.3 ± 7.0 NS A Red-breasted Merganser S3S4B, S5M, 55M 90 8.3 ± 7.0 NS A Red-breasted Merganser S3S4B, S5M, S5M 90 8.3 ± 7.0 NS A Red-breasted Merganser S3S4B, S5M, S5M 90 8.3 ± 7.0 NS A Red-breasted Merganser S3S4B, S5M, S5M 90 8.3 ± 7.0 NS S5B, S5M 90 8.3	A								$32.5 \pm 7.0$	
A         Gallinago delicata         Wilson's Snipe         \$38,85M         503         3.7±7.0         NS           A         Setophaga striata         Blackpoll Warbler         \$38,55M         53         18.0±7.0         NS           A         Cardellina pusilla         Wilson's Warbler         \$38,55M         61         15.1±7.0         NS           A         Princola enucleator         Pine Grosbeak         \$38,55M         61         15.1±7.0         NS           A         Setophaga striata         Brant         \$38,55M         61         15.1±7.0         NS           A         Setophaga stigrina         Brant         \$38,55M         61         15.1±7.0         NS           A         Branta bernicla         Brant         \$3M         2         79.6±0.0         NS           A         Pluvialis squatarola         Black-bellied Plover         \$3M         178         26.9±0.0         NS           A         A Pluvialis squatarola         Black-bellied Plover         \$3M         1459         26.9±0.0         NS           A         Calidris pusilla         Serpidinated Sandpiper         \$3M         1459         26.9±0.0         NS           A         Calidris pusilla         Sectoria stricu	A	Tringa melanoleuca	Greater Yellowlegs				S3B,S4M	1607	$26.9 \pm 0.0$	NS
A	Α	Falco sparverius	American Kestrel				S3B,S4S5M	157	$8.3 \pm 7.0$	
A Caridellina pusilla Wilson's Warbler S3B,SSM 61 15.1 ± 7.0 NS Pine Grosbeak S3B,SSN,SSM 106 3.7 ± 7.0 NS A Pinicola enucleator Pine Grosbeak S3B,SSN,SSM 106 3.7 ± 7.0 NS A Pintola enucleator S3B,SSUM 57 15.0 ± 0.0 NS A Branta bernicla Brant S3B, SSN,SSM 106 3.7 ± 7.0 NS A Pluvialis squatarola Black-bellied Plover S3M 2 79.6 ± 0.0 NS A Pluvialis squatarola Black-bellied Plover S3M 1778 £9.9 ± 0.0 NS A Calidris pusilla Squatarola Black-bellied Plover S3M 1778 £9.9 ± 0.0 NS A Calidris pusilla Semipalmated Sandpiper S3M 756 26.9 ± 0.0 NS A Calidris melanotos Pectoral Sandpiper S3M 336 38.1 ± 0.0 NS A Calidris melanotos Pectoral Sandpiper S3M 336 38.1 ± 0.0 NS A Picoides arcticus Black-backed Woodpecker S3S4 80 3.7 ± 7.0 NS A Picoides arcticus Black-backed Woodpecker S3S4 80 3.7 ± 7.0 NS A Botaurus lentiginosus American Bittern S3S4B, S4S5M 242 3.7 ± 7.0 NS A Setophaga castanea Bay-breasted Warbler S3S4B, S4S5M 242 3.7 ± 7.0 NS A A Calidris macularius Spotted Sandpiper S3S4B, S4S5M 242 3.7 ± 7.0 NS A Leitothipps peregrina Tennessee Warbler S3S4B, S5M, S5M 709 3.4 ± 0.0 NS A Leitothipps peregrina Tennessee Warbler S3S4B, S5M, S5M 143 3.7 ± 7.0 NS A Passerella Iliaca Fox Sparrow S3S4B, S5M, S5M 90 3.4 ± 0.0 NS A Mergus serrator Red-breasted Merganser S3S4B, S5M, S5M 90 27.2 ± 7.0 NS A Mergus serrator Red-breasted Merganser S3S4B, S5M, S5M 90 3.3 ± 7.0 NS A Progne subis Purple Sandpiper S3S4B, S5M, S5M 90 3.3 ± 7.0 NS A Progne subis Homed Lark SHB 3 3.0 ± 0.0 NS SHB 3.3 ± 2 5.0 ± 7.0 NS SHB 3.3 ± 7.0 NS	A	Gallinago delicata	Wilson's Snipe				S3B,S5M	503	$3.7 \pm 7.0$	NS
A Caridellina pusilla Wilson's Warbler S3B,SSM 61 15.1 ± 7.0 NS Pine Grosbeak S3B,SSN,SSM 106 3.7 ± 7.0 NS A Pinicola enucleator Pine Grosbeak S3B,SSN,SSM 106 3.7 ± 7.0 NS A Pintola enucleator S3B,SSUM 57 15.0 ± 0.0 NS A Branta bernicla Brant S3B, SSN,SSM 106 3.7 ± 7.0 NS A Pluvialis squatarola Black-bellied Plover S3M 2 79.6 ± 0.0 NS A Pluvialis squatarola Black-bellied Plover S3M 1778 £9.9 ± 0.0 NS A Calidris pusilla Squatarola Black-bellied Plover S3M 1778 £9.9 ± 0.0 NS A Calidris pusilla Semipalmated Sandpiper S3M 756 26.9 ± 0.0 NS A Calidris melanotos Pectoral Sandpiper S3M 336 38.1 ± 0.0 NS A Calidris melanotos Pectoral Sandpiper S3M 336 38.1 ± 0.0 NS A Picoides arcticus Black-backed Woodpecker S3S4 80 3.7 ± 7.0 NS A Picoides arcticus Black-backed Woodpecker S3S4 80 3.7 ± 7.0 NS A Botaurus lentiginosus American Bittern S3S4B, S4S5M 242 3.7 ± 7.0 NS A Setophaga castanea Bay-breasted Warbler S3S4B, S4S5M 242 3.7 ± 7.0 NS A A Calidris macularius Spotted Sandpiper S3S4B, S4S5M 242 3.7 ± 7.0 NS A Leitothipps peregrina Tennessee Warbler S3S4B, S5M, S5M 709 3.4 ± 0.0 NS A Leitothipps peregrina Tennessee Warbler S3S4B, S5M, S5M 143 3.7 ± 7.0 NS A Passerella Iliaca Fox Sparrow S3S4B, S5M, S5M 90 3.4 ± 0.0 NS A Mergus serrator Red-breasted Merganser S3S4B, S5M, S5M 90 27.2 ± 7.0 NS A Mergus serrator Red-breasted Merganser S3S4B, S5M, S5M 90 3.3 ± 7.0 NS A Progne subis Purple Sandpiper S3S4B, S5M, S5M 90 3.3 ± 7.0 NS A Progne subis Homed Lark SHB 3 3.0 ± 0.0 NS SHB 3.3 ± 2 5.0 ± 7.0 NS SHB 3.3 ± 7.0 NS	Α	Setophaga striata	Blackpoll Warbler				S3B.S5M	53	$18.0 \pm 7.0$	NS
A Pinicola enucleator Pine Grosbeak Cape May Warbler S3B, SSN, SSM 106 3.7 ± 7.0 NS A Setophaga tigrina Cape May Warbler S3B, SUM 57 15.0 ± 0.0 NS A Branta bernicla Brant S3M 2 79.6 ± 0.0 NS A Pluvialis squatarola A A Pluvialis squatarola A A Arenaria interpres Ruddy Turnstone S3M 1778 26.9 ± 0.0 NS A Arenaria interpres Ruddy Turnstone S3M 1778 26.9 ± 0.0 NS A Calidris pusilla Semipalmated Sandpiper S3M 1459 26.9 ± 0.0 NS A Calidris melanotos Pectoral Sandpiper S3M 1459 26.9 ± 0.0 NS A Calidris melanotos Pectoral Sandpiper S3M 1459 26.9 ± 0.0 NS A Calidris melanotos S4D Pectoral Sandpiper S3M 1459 26.9 ± 0.0 NS A Piccides arcticus Black-backed Woodpecker S3M 153 38.1 ± 0.0 NS A Loxia curvirostra Red Crossbill S3M 153 38.1 ± 0.0 NS A Loxia curvirostra Red Crossbill S3M 259 1.2 ± 0.0 NS A Boiaurus lentiginosus American Bittern S3S4B, S4S5M 242 3.7 ± 7.0 NS A Setophaga castanea Bay-breasted Warbler S3S4B, S4S5M 242 3.7 ± 7.0 NS A Leicthlypis peregrina Tennessee Warbler S3S4B, S4S5M 270 3.7 ± 7.0 NS A Passerella iliaca Fox Sparrow S3S4B, S5M 709 3.4 ± 0.0 NS A Passerella iliaca Fox Sparrow Red-breasted Merganser S3S4B, S5M, S5M 59 27.2 ± 7.0 NS A Morgus serator Red-breasted Merganser S3S4B, S5M, S5M 90 8.3 ± 7.0 NS A Propse subis Purple Martin A Leucophaeus articilla Laughing Gull SHB 16 42.6 ± 0.0 NS SHB, S4S5N, S5M 90 60.9 ± 0.0 NS S	Α								$15.1 \pm 7.0$	
A         Setophaga tigrina         Cape May Warbler         \$38,SUM         57         15.0 ± 0.0         NS           A         Branta bernicla         Brant         \$3M         2         79.6 ± 0.0         NS           A         Pluvialis squatarola         Black-bellied Plover         \$3M         1778         26.9 ± 0.0         NS           A         A renaria interpres         Ruddy Turnstone         \$3M         756         26.9 ± 0.0         NS           A         Calidris pusilla         Semipalmated Sandpiper         \$3M         1459         26.9 ± 0.0         NS           A         Calidris melanotos         Pectoral Sandpiper         \$3M         1459         26.9 ± 0.0         NS           A         Calidris melanotos         Pectoral Sandpiper         \$3M         1153         38.1 ± 0.0         NS           A         Limnodromus griseus         Short-billed Dowitcher         \$3M         1153         38.1 ± 0.0         NS           A         Picoides arcticus         Black-backed Woodpecker         \$3M         1153         38.1 ± 0.0         NS           A         Loxia curvirostra         Red Crossbill         \$354         80         3.7 ± 7.0         NS           A         Botaurus l	A									
A         Branta bernicla         Brant         \$34         2         79.6 ± 0.0         NS           A         Pluvialis squatarola         Black-bellied Plover         \$34         1778         26.9 ± 0.0         NS           A         Arenaria interpres         Ruddy Turnstone         \$34         1778         26.9 ± 0.0         NS           A         Calidris pusilla         Semipalmated Sandpiper         \$34         1459         26.9 ± 0.0         NS           A         Calidris melanotos         Pectoral Sandpiper         \$34         1459         26.9 ± 0.0         NS           A         Limnodromus griseus         Short-billed Dowitcher         \$34         153         38.1 ± 0.0         NS           A         Limnodromus griseus         Short-billed Dowitcher         \$34         80         3.7 ± 7.0         NS           A         Limnodromus griseus         Short-billed Dowitcher         \$354         80         3.7 ± 7.0         NS           A         Limnodromus griseus         Short-billed Dowitcher         \$354         80         3.7 ± 7.0         NS           A         Loxia curvirostra         Red Crossbill         \$354         259         1.2 ± 0.0         NS           A         Estop										
A         Pluvialis squatarola         Black-bellied Plover         \$3M         1778         26.9 ± 0.0         NS           A         Arenaria interpres         Ruddy Turnstone         \$3M         756         26.9 ± 0.0         NS           A         Calidris pusilla         Semipalmated Sandpiper         \$3M         1459         26.9 ± 0.0         NS           A         Calidris melanotos         Pectoral Sandpiper         \$3M         136         38.1 ± 0.0         NS           A         Limnodromus griseus         Short-billed Dowitcher         \$3M         1153         38.1 ± 0.0         NS           A         Picoides arcticus         Black-backed Woodpecker         \$33M         1153         38.1 ± 0.0         NS           A         Picoides arcticus         Black-backed Woodpecker         \$33M         1153         38.1 ± 0.0         NS           A         Picoides arcticus         Black-backed Woodpecker         \$33M         1153         38.1 ± 0.0         NS           A         Picoides arcticus         Black-backed Woodpecker         \$33M         13.7 ± 7.0         NS           A         Botaurus lentiginosus         American Bittern         \$334B, 855M         259         1.2 ± 0.0         NS           A<										
A         Arenaria interpres         Ruddy Turnstone         S3M         756         26.9 ± 0.0         NS           A         Calidris pusilla         Semipalmated Sandpiper         S3M         1459         26.9 ± 0.0         NS           A         Calidris melanotos         Pectoral Sandpiper         S3M         336         38.1 ± 0.0         NS           A         Limnodromus griseus         Short-billed Dowitcher         S3M         1153         38.1 ± 0.0         NS           A         Picoides arcticus         Black-backed Woodpecker         S3M         1153         38.1 ± 0.0         NS           A         Picoides arcticus         Black-backed Woodpecker         S3S4         80         3.7 ± 7.0         NS           A         Loxia curvirostra         Red Crossbill         S3S4         259         1.2 ± 0.0         NS           A         Botaurus lentiginosus         American Biltern         S3S4B,S4S5M         242         3.7 ± 7.0         NS           A         A Catiditis macularius         Spotted Sandpiper         S3S4B,S4S5M         270         3.7 ± 7.0         NS           A         A Leiothlypis peregrina         Tennessee Warbler         S3S4B,S5M         709         3.4 ± 0.0         NS										
A         Calidris pusilla         Semipalmated Sandpiper         S3M         1459         26.9 ± 0.0         NS           A         Calidris melanotos         Pectoral Sandpiper         S3M         336         38.1 ± 0.0         NS           A         Limnordormus griseus         Short-billed Dowitcher         S3M         1153         38.1 ± 0.0         NS           A         Picoides arcticus         Black-backed Woodpecker         S3S4         80         3.7 ± 7.0         NS           A         Loxia curvirostra         Red Crossbill         S3S4         259         1.2 ± 0.0         NS           A         Botaurus lentiginosus         American Bittern         S3S4B,S4S5M         242         3.7 ± 7.0         NS           A         Setophaga castanea         Bay-breasted Warbler         S3S4B,S4S5M         270         3.7 ± 7.0         NS           A         Actitis macularius         Spotted Sandpiper         S3S4B,S55M         790         3.4 ± 0.0         NS           A         Passerella iliaca         Fox Sparrow         S3S4B,S55M         799         3.4 ± 0.0         NS           A         Passerella iliaca         Fox Sparrow         S3S4B,S55M,S5N         90         8.3 ± 7.0         NS										
A         Calidris melanotos         Pectoral Sandpiper         S3M         336         38.1 ± 0.0         NS           A         Limnodromus griseus         Short-billed Dowitcher         S3M         1153         38.1 ± 0.0         NS           A         Piciodes arcticus         Black-backed Woodpecker         S3S4         80         3.7 ± 7.0         NS           A         Loxia curvirostra         Red Crossbill         S3S4         259         1.2 ± 0.0         NS           A         Botaurus lentiginosus         American Bittern         S3S4B, S4S5M         242         3.7 ± 7.0         NS           A         Setophaga castanea         Bay-breasted Warbler         S3S4B, S4S5M         270         3.7 ± 7.0         NS           A         Actitis macularius         Spotted Sandpiper         S3S4B, S5M         709         3.4 ± 0.0         NS           A         Leiothlypis peregrina         Tennessee Warbler         S3S4B, S5M         709         3.4 ± 0.0         NS           A         Passerella iliaca         Fox Sparrow         S3S4B, S5M         59         27.2 ± 7.0         NS           A         Mergus serrator         Red-breasted Merganser         S3S4B, S5M, S5M         59         27.2 ± 7.0         NS		•	,							
A         Limnodromus griseus         Short-billed Dowitcher         S3M         1153         38.1 ± 0.0         NS           A         Picoides arcticus         Black-backed Woodpecker         S3S4         80         3.7 ± 7.0         NS           A         Loxia curvirostra         Red Crossbill         S3S4         259         1.2 ± 0.0         NS           A         Botaurus lentiginosus         American Bittern         S3S4B,S4S5M         259         1.2 ± 0.0         NS           A         Setophaga castanea         Bay-breasted Warbler         S3S4B,S4S5M         270         3.7 ± 7.0         NS           A         Actitis macularius         Spotted Sandpiper         S3S4B,S5M         270         3.7 ± 7.0         NS           A         Leiothlypis peregrina         Tennessee Warbler         S3S4B,S5M         709         3.4 ± 0.0         NS           A         Passerella iliaca         Fox Sparrow         S3S4B,S5M         143         3.7 ± 7.0         NS           A         Mergus serrator         Red-breasted Merganser         S3S4B,S5M,S5N         90         8.3 ± 7.0         NS           A         Mergus serrator         Red-breasted Merganser         S3S4B,S5M,S5N         90         8.3 ± 7.0         NS <td></td>										
A         Picoides arcticus         Black-backed Woodpecker         S3S4         80         3.7 ± 7.0         NS           A         Loxia curvirostra         Red Crossbill         S3S4         259         1.2 ± 0.0         NS           A         Botaurus lentiginosus         American Bittern         S3S4B,S4S5M         242         3.7 ± 7.0         NS           A         Setophaga castanea         Bay-breasted Warbler         S3S4B,S4S5M         270         3.7 ± 7.0         NS           A         Actitis macularius         Spotted Sandpiper         S3S4B,S5M         709         3.4 ± 0.0         NS           A         Leiothilypis peregrina         Tennessee Warbler         S3S4B,S5M         709         3.4 ± 0.0         NS           A         Passerella iliaca         Fox Sparrow         S3S4B,S5M         59         27.2 ± 7.0         NS           A         Mergus serrator         Red-breasted Merganser         S3S4B,S5M,S5N         90         8.3 ± 7.0         NS           A         Calidris maritima         Purple Sandpiper         S3S4B,S5M,S5N         90         8.3 ± 7.0         NS           A         Morus bassanus         Northern Gannet         S1B         16         42.6 ± 0.0         NS										
A         Loxia curvirostra         Red Crossbill         S3S4         259         1.2 ± 0.0         NS           A         Botaurus lentiginosus         American Bittern         \$3S4B,S4S5M         242         3.7 ± 7.0         NS           A         Setophaga castanea         Bay-breasted Warbler         \$3S4B,S4S5M         270         3.7 ± 7.0         NS           A         Actitis macularius         Spotted Sandpiper         \$3S4B,S5M         709         3.4 ± 0.0         NS           A         Leiothlypis peregrina         Tennessee Warbler         \$3S4B,S5M         709         3.4 ± 0.0         NS           A         Passerella iliaca         Fox Sparrow         \$3S4B,S5M         59         27.2 ± 7.0         NS           A         Mergus serrator         Red-breasted Merganser         \$3S4B,S5M,S5N         90         8.3 ± 7.0         NS           A         Calidris maritima         Purple Sandpiper         \$3S4B,S5M,S5N         90         8.3 ± 7.0         NS           A         Morus bassanus         Northern Gannet         SHB         16         42.6 ± 0.0         NS           A         Leucophaeus atricilla         Laughing Gull         SHB         3         38.0 ± 0.0         NS           A<										
A         Botaurus lentiginosus         American Bittern         \$334B,\$455M         242         3.7 ± 7.0         NS           A         Setophaga castanea         Bay-breasted Warbler         \$354B,\$455M         270         3.7 ± 7.0         NS           A         Actitis macularius         Spotted Sandpiper         \$354B,\$55M         709         3.4 ± 0.0         NS           A         Leiothlypis peregrina         Tennessee Warbler         \$354B,\$55M         709         3.7 ± 7.0         NS           A         Passerella iliaca         Fox Sparrow         \$354B,\$55M         59         27.2 ± 7.0         NS           A         Mergus serrator         Red-breasted Merganser         \$354B,\$55M         59         27.2 ± 7.0         NS           A         Calidris maritima         Purple Sandpiper         \$354B,\$5M,\$5M,\$5N         90         8.3 ± 7.0         NS           A         Morus bassanus         Northern Gannet         \$354B,\$5M,\$5M,\$5M         192         35.6 ± 10.0         NS           A         Leucophaeus atricilla         Laughing Gull         \$34B,\$5M,\$5M,\$5M,\$5M         192         36.0 ± 0.0         NS           A         Progne subis         Purple Martin         \$34B,\$345M,\$34B,\$34B,\$34B,\$34B,\$34B,\$34B,\$34B,\$34B										
A         Setophaga castanea         Bay-breasted Warbler         S3S4B,S4S5M         270         3.7 ± 7.0         NS           A         Actitis macularius         Spotted Sandpiper         S3S4B,S5M         709         3.4 ± 0.0         NS           A         Leiothlypis peregrina         Tennessee Warbler         S3S4B,S5M         143         3.7 ± 7.0         NS           A         Passerella iliaca         Fox Sparrow         S3S4B,S5M         59         27.2 ± 7.0         NS           A         Mergus serrator         Red-breasted Merganser         S3S4B,S5M,S5N         59         27.2 ± 7.0         NS           A         Calidris maritima         Purple Sandpiper         S3S4B,S5M,S5N         90         8.3 ± 7.0         NS           A         Morus bassanus         Northern Gannet         S1BB         16         42.6 ± 0.0         NS           A         Leucophaeus atricilla         Laughing Gull         SHB         3         38.0 ± 0.0         NS           A         Progne subis         Purple Martin         SHB         2         32.0 ± 7.0         NS           A         Eremophila alpestris         Horned Lark         SHB,S4S5N,S5M         9         60.9 ± 5.0         NS           I										
A         Actitis macularius         Spotted Sandpiper         S3S4B,S5M         709         3.4 ± 0.0         NS           A         Leiothlypis peregrina         Tennessee Warbler         S3S4B,S5M         143         3.7 ± 7.0         NS           A         Passerella iliaca         Fox Sparrow         S3S4B,S5M         59         27.2 ± 7.0         NS           A         Mergus serrator         Red-breasted Merganser         S3S4B,S5M,S5N         90         8.3 ± 7.0         NS           A         Calidris maritima         Purple Sandpiper         S3S4B,S5M,S5N         90         8.3 ± 7.0         NS           A         Morus bassanus         Northern Gannet         SHB         16         42.6 ± 0.0         NS           A         Leucophaeus atricilla         Laughing Gull         SHB         3         38.0 ± 0.0         NS           A         Progne subis         Purple Martin         SHB         3         38.0 ± 0.0         NS           A         Eremophila alpestris         Horned Lark         SHB, S4S5N,S5M         9         60.9 ± 0.0         NS           I         Bombus bohemicus         Ashton Cuckoo Bumble Bee         Endangered         Endangered         Endangered         Endangered         S1	A	Botaurus lentiginosus	American Bittern				S3S4B,S4S5M		$3.7 \pm 7.0$	
A         Leiothlypis peregrina         Tennessee Warbler         S3S4B,S5M         143         3.7 ± 7.0         NS           A         Passerella iliaca         Fox Sparrow         S3S4B,S5M         59         27.2 ± 7.0         NS           A         Mergus serrator         Red-breasted Merganser         S3S4B,S5M,S5N         90         8.3 ± 7.0         NS           A         Calidris maritima         Purple Sandpiper         S3S4N         192         35.6 ± 10.0         NS           A         Morus bassanus         Northern Gannet         SHB         16         42.6 ± 0.0         NS           A         Leucophaeus atricilla         Laughing Gull         SHB         3         38.0 ± 0.0         NS           A         Progne subis         Purple Martin         SHB         2         32.0 ± 7.0         NS           A         Eremophila alpestris         Horned Lark         SHB         2         32.0 ± 7.0         NS           I         Bombus bohemicus         Ashton Cuckoo Bumble Bee         Endangered         Endangered         Endangered         Endangered         Endangered         Endangered         51         2         60.9 ± 5.0         NS           I         Danaus plexippus         Monarch	A	Setophaga castanea	Bay-breasted Warbler				S3S4B,S4S5M	270	$3.7 \pm 7.0$	
A         Passerella iliaca         Fox Sparrow         S3S4B,S5M         59         27.2 ± 7.0         NS           A         Mergus serrator         Red-breasted Merganser         S3S4B,S5M,S5N         90         8.3 ± 7.0         NS           A         Calidris maritima         Purple Sandpiper         S3S4B,S5M,S5N         90         8.3 ± 7.0         NS           A         Morus bassanus         Northern Gannet         SHB         16         42.6 ± 0.0         NS           A         Leucophaeus atricilla         Laughing Gull         SHB         3         38.0 ± 0.0         NS           A         Progne subis         Purple Martin         SHB         2         32.0 ± 7.0         NS           A         Eremophila alpestris         Horned Lark         SHB,S4S5N,S5M         9         60.9 ± 0.0         NS           I         Bombus bohemicus         Ashton Cuckoo Bumble Bee         Endangered         Endangered         Endangered         Endangered         Endangered         S1         2         60.9 ± 5.0         NS           I         Danaus plexippus         Monarch         Endangered         Endangered         Endangered         Endangered         S2?B,S3M         401         7.1 ± 0.0         NS	Α	Actitis macularius	Spotted Sandpiper				S3S4B,S5M	709	$3.4 \pm 0.0$	NS
A         Mergus serrator         Red-breasted Merganser         S3S4B,S5M,S5N         90         8.3 ± 7.0         NS           A         Calidris maritima         Purple Sandpiper         S3S4N         192         35.6 ± 10.0         NS           A         Morus bassanus         Northem Gannet         SHB         16         42.6 ± 0.0         NS           A         Leucophaeus atricilla         Laughing Gull         SHB         3         38.0 ± 0.0         NS           A         Progne subis         Purple Martin         SHB         2         32.0 ± 7.0         NS           A         Eremophila alpestris         Horned Lark         SHB,S4S5N,S5M         9         60.9 ± 0.0         NS           I         Bombus bohemicus         Ashton Cuckoo Bumble Bee         Endangered         Endangered         Endangered         S1         22         7.2 ± 5.0         NS           I         Epooloides pilosulus         Macropis Cuckoo Bee         Endangered         Endangered         Endangered         Endangered         S1         2         60.9 ± 5.0         NS           I         Danaus plexippus         Monarch         Endangered         Special Concern         Endangered         S2?B,S3M         401         7.1 ± 0.0 <td< td=""><td>A</td><td>Leiothlypis peregrina</td><td>Tennessee Warbler</td><td></td><td></td><td></td><td>S3S4B,S5M</td><td>143</td><td><math>3.7 \pm 7.0</math></td><td>NS</td></td<>	A	Leiothlypis peregrina	Tennessee Warbler				S3S4B,S5M	143	$3.7 \pm 7.0$	NS
A         Calidris maritima         Purple Sandpiper         S3S4N         192         35.6 ± 10.0         NS           A         Morus bassanus         Northern Gannet         SHB         16         42.6 ± 0.0         NS           A         Leucophaeus atricilla         Laughing Gull         SHB         3         38.0 ± 0.0         NS           A         Progne subis         Purple Martin         SHB         2         32.0 ± 7.0         NS           A         Eremophila alpestris         Horned Lark         SHB,S4S5N,S5M         9         60.9 ± 0.0         NS           I         Bombus bohemicus         Ashton Cuckoo Bumble Bee         Endangered         Endangered         S1         22         7.2 ± 5.0         NS           I         Epeoloides pilosulus         Macropis Cuckoo Bee         Endangered         Endangered         Endangered         Endangered         S1         2         60.9 ± 5.0         NS           I         Danaus plexippus         Monarch         Endangered         Special Concern         Endangered         S2?B,S3M         401         7.1 ± 0.0         NS	A	Passerella iliaca	Fox Sparrow				S3S4B,S5M	59	$27.2 \pm 7.0$	NS
A         Calidris maritima         Purple Sandpiper         S3S4N         192         35.6 ± 10.0         NS           A         Morus bassanus         Northern Gannet         SHB         16         42.6 ± 0.0         NS           A         Leucophaeus atricilla         Laughing Gull         SHB         3         38.0 ± 0.0         NS           A         Progne subis         Purple Martin         SHB         2         32.0 ± 7.0         NS           A         Eremophila alpestris         Horned Lark         SHB,S4S5N,S5M         9         60.9 ± 0.0         NS           I         Bombus bohemicus         Ashton Cuckoo Bumble Bee         Endangered         Endangered         S1         22         7.2 ± 5.0         NS           I         Epeoloides pilosulus         Macropis Cuckoo Bee         Endangered         Endangered         Endangered         Endangered         S1         2         60.9 ± 5.0         NS           I         Danaus plexippus         Monarch         Endangered         Special Concern         Endangered         S2?B,S3M         401         7.1 ± 0.0         NS	Α									
A         Morus bassanus         Northern Garnet         SHB         16         42.6 ± 0.0         NS           A         Leucophaeus atricilla         Laughing Gull         SHB         3         38.0 ± 0.0         NS           A         Progne subis         Purple Martin         SHB         2         32.0 ± 7.0         NS           A         Eremophila alpestris         Horned Lark         SHB,S4S5N,S5M         9         60.9 ± 0.0         NS           I         Bombus bohemicus         Ashton Cuckoo Bumble Bee         Endangered         Endangered         S1         22         7.2 ± 5.0         NS           I         Epeoloides pilosulus         Macropis Cuckoo Bee         Endangered         Endangered         Endangered         Endangered         S1         2         60.9 ± 5.0         NS           I         Danaus plexippus         Monarch         Endangered         Special Concern         Endangered         S2?B,S3M         401         7.1 ± 0.0         NS		· ·	3							
A         Leucophaeus atricilla         Laughing Gull         SHB         3         38.0 ± 0.0         NS           A         Progne subis         Purple Martin         SHB         2         32.0 ± 7.0         NS           A         Eremophila alpestris         Horned Lark         SHB,S4S5N,S5M         9         60.9 ± 0.0         NS           I         Bombus bohemicus         Ashton Cuckoo Bumble Bee         Endangered         Endangered         S1         22         7.2 ± 5.0         NS           I         Epeoloides pilosulus         Macropis Cuckoo Bee         Endangered         Endangered         Endangered         Endangered         S1         2         60.9 ± 5.0         NS           I         Danaus plexippus         Monarch         Endangered         Special Concern         Endangered         S2?B,S3M         401         7.1 ± 0.0         NS										
A         Progre subis         Purple Martin         SHB         2         32.0 ± 7.0         NS           A         Eremophila alpestris         Horned Lark         SHB,S4S5N,S5M         9         60.9 ± 0.0         NS           I         Bombus bohemicus         Ashton Cuckoo Bumble Bee         Endangered         Endangered         S1         22         7.2 ± 5.0         NS           I         Epeoloides pilosulus         Macropis Cuckoo Bee         Endangered         Endangered         Endangered         Endangered         S1         2         60.9 ± 5.0         NS           I         Danaus plexippus         Monarch         Endangered         Special Concern         Endangered         S2?B,S3M         401         7.1 ± 0.0         NS										
A Eremophila alpestris Horned Lark  I Bombus bohemicus Ashton Cuckoo Bumble Bee Endangered Endangered Endangered Endangered Endangered Endangered Endangered S1 22 7.2 ± 5.0 NS  I Epeoloides pilosulus Macropis Cuckoo Bee Endangered Endangered Endangered S1 2 60.9 ± 5.0 NS  I Danaus plexippus Monarch Endangered Special Concern Endangered S2?B,S3M 401 7.1 ± 0.0 NS										
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	A .			Fadana	Endona	Fadana				
I Danaus plexippus Monarch Endangered Special Concern Endangered S2?B,S3M 401 7.1 ± 0.0 NS	1									
	!									
1 Danaus plexippus plexippus Monarch Endangered Special Concern S2?B,S3M 2 $84.9 \pm 0.0$ NS	1					∟ndangered				
	I	Danaus plexippus plexippus	Monarch	Endangered	Special Concern		S2?B,S3M	2	$84.9 \pm 0.0$	NS

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Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
l	Gomphurus ventricosus	Skillet Clubtail	Endangered	Endangered	1101 Logari rot	SH	1	89.6 ± 1.0	NS
1	Bombus suckleyi	Suckley's Cuckoo Bumble Bee	Threatened	J		SH	1	$39.0 \pm 5.0$	NS
1	Alasmidonta varicosa	Brook Floater	Special Concern	Special Concern	Threatened	S3	2	16.1 ± 0.0	NS
i	Bombus terricola	Yellow-banded Bumble Bee	Special Concern	Special Concern	Vulnerable	S3	75	$9.0 \pm 0.0$	NS
Ī	Coccinella transversoguttata richardsoni	Transverse Lady Beetle	Special Concern	opodiai comodini	Endangered	SH	3	$60.2 \pm 2.0$	NS
1	Cicindela formosa	Big Sand Tiger Beetle				S1	1	74.1 ± 1.0	NS
i	Erora laeta	Early Hairstreak				S1	3	80.8 ± 2.0	NS
1	Ophiogomphus anomalus	Extra-Striped Snaketail				S1	8	$21.7 \pm 0.0$	NS
1	Atlanticoncha ochracea	Tidewater Mucket				S1	1	$93.3 \pm 0.0$	NS
1	Polygonia comma	Eastern Comma				S1?	20	$73.4 \pm 0.0$	NS
1	Polygonia satyrus	Satyr Comma				S1?	11	$79.2 \pm 2.0$	NS
1	Margaritifera margaritifera	Eastern Pearlshell				S2	5	$13.9 \pm 0.0$	NS
I	Pantala hymenaea	Spot-Winged Glider				S2?B	3	$83.9 \pm 0.0$	NS
1	Nymphalis I-album	Compton Tortoiseshell				S2S3	20	$20.4 \pm 2.0$	NS
!	Aglais milberti	Milbert's Tortoiseshell				S2S3	9	67.0 ± 2.0	NS
!	Somatochlora kennedyi	Kennedy's Emerald				S2S3	5	$30.2 \pm 0.0$	NS
!	Williamsonia fletcheri	Ebony Boghaunter				S2S3	3	$20.8 \pm 0.0$	NS
-	Enallagma geminatum	Skimming Bluet				S2S3	4 5	9.6 ± 0.0 59.2 ± 0.0	NS NS
!	Stylurus scudderi Alasmidonta undulata	Zebra Clubtail Triangle Floater				S2S3 S2S3	5 4	$97.3 \pm 0.0$	NS NS
1	Alasmidonia undulala	Chestnut Bark Long-horned							NS NS
1	Strophiona nitens	Beetle				S3	2	$87.0 \pm 0.0$	
1	Hippodamia parenthesis	Parenthesis Lady Beetle				S3	2	$15.2 \pm 0.0$	NS
!	Naemia seriata	Seaside Lady Beetle				S3	17	66.5 ± 1.0	NS
!	Chilocorus stigma	Twice-stabbed Lady Beetle				S3	5	$17.6 \pm 0.0$	NS
Į.	Dicerca tenebrosa	Dark Jewel Beetle				S3	1	$61.1 \pm 0.0$	NS
1	Astylopsis sexguttata	Six-speckled Long-horned Beetle				S3	1	$55.9 \pm 0.0$	NS
1	Satyrium calanus	Banded Hairstreak				S3	60	$50.3 \pm 2.0$	NS
I	Callophrys lanoraieensis	Bog Elfin				S3	17	$22.9 \pm 2.0$	NS
!	Strymon melinus	Gray Hairstreak				S3	18	$26.5 \pm 0.0$	NS
!	Ophiogomphus aspersus	Brook Snaketail				S3	4	41.3 ± 1.0	NS
!	Ophiogomphus mainensis	Maine Snaketail				S3	9	13.6 ± 0.0	NS
!	Ophiogomphus rupinsulensis	Rusty Snaketail				S3	13	19.6 ± 0.0	NS
-	Epitheca princeps	Prince Baskettail				S3 S3	11	21.4 ± 0.0 37.5 ± 1.0	NS NS
1	Somatochlora forcipata	Forcipate Emerald				S3	5 3	37.5 ± 1.0 81.8 ± 1.0	NS NS
!	Enallagma vernale Polygonia interrogationis	Vernal Bluet Question Mark				S3B	126	$30.6 \pm 7.0$	NS NS
<u> </u>	Amblyscirtes hegon	Pepper and Salt Skipper				S3S4	15	$71.3 \pm 7.0$	NS
i	Cupido comyntas	Eastern Tailed Blue				S3S4	25	$71.3 \pm 7.0$ $30.8 \pm 2.0$	NS
i	Argynnis aphrodite	Aphrodite Fritillary				S3S4	21	13.2 ± 2.0	NS
i	Polygonia faunus	Green Comma				S3S4	10	68.5 ± 1.0	NS
i	Oeneis jutta	Jutta Arctic				S3S4	3	89.7 ± 2.0	NS
i	Aeshna clepsydra	Mottled Darner				S3S4	31	22.4 ± 1.0	NS
i	Aeshna constricta	Lance-Tipped Darner				S3S4	7	67.3 ± 1.0	NS
i	Boyeria grafiana	Ocellated Darner				S3S4	18	16.0 ± 0.0	NS
İ	Gomphaeschna furcillata	Harleguin Darner				S3S4	33	$0.4 \pm 0.0$	NS
1	Somatochlora franklini	Delicate Emerald				S3S4	2	50.7 ± 1.0	NS
1	Erythrodiplax berenice	Seaside Dragonlet				S3S4	11	$37.6 \pm 0.0$	NS
1	Nannothemis bella	Elfin Skimmer				S3S4	32	$1.7 \pm 0.0$	NS
1	Sympetrum danae	Black Meadowhawk				S3S4	1	$39.3 \pm 0.0$	NS
1	Enallagma vesperum	Vesper Bluet				S3S4	22	$13.3 \pm 0.0$	NS
I	Icaricia saepiolus	Greenish Blue				SH	2	$79.2 \pm 2.0$	NS
I	Chlosyne nycteis	Silvery Checkerspot				SH	4	$50.3 \pm 2.0$	NS
N	Erioderma mollissimum	Graceful Felt Lichen	Endangered	Endangered	Endangered	S1	271	$41.2 \pm 0.0$	NS
N	Erioderma pedicellatum	Boreal Felt Lichen - Atlantic	Endangered	Endangered	Endangered	S1	64	$53.5 \pm 0.0$	NS

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Taxonomic								<b>-</b>	_
Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
	(Atlantic pop.)	pop.							
N	Pannaria lurida	Wrinkled Shingle Lichen	Threatened	Threatened	Threatened	S2S3	195	$1.1 \pm 0.0$	NS
N	Pannaria lurida ssp. russellii	Wrinkled Shingle Lichen	Threatened	Threatened		S2S3	1	$33.0 \pm 0.0$	NS
N	Anzia colpodes	Black-foam Lichen	Threatened	Threatened	Threatened	S3	213	$6.0 \pm 0.0$	NS
N	Fuscopannaria leucosticta	White-rimmed Shingle	Threatened			S3	414	$1.2 \pm 0.0$	NS
	•	Lichen							
N	Pectenia plumbea	Blue Felt Lichen	Special Concern	Special Concern	Vulnerable	S3	961	$16.3 \pm 0.0$	NS
N	Sclerophora peronella	Frosted Glass-whiskers	Special Concern	Special Concern		S3S4	105	$32.5 \pm 0.0$	NS
	(Atlantic pop.)	(Atlantic population)	•	oposiai oonooni					
N	Pseudevernia cladonia	Ghost Antler Lichen	Not At Risk			S2S3	21	$32.0 \pm 0.0$	NS
N	Fissidens exilis	Pygmy Pocket Moss	Not At Risk			S3	13	$65.0 \pm 3.0$	NS
N	Aloina brevirostris	Short-Beaked Rigid Screw				S1	1	83.8 ± 2.0	NS
		Moss							
N	Orthotrichum pallens	Pale Bristle Moss				S1	1	$33.1 \pm 0.0$	NS
N	Sematophyllum demissum	a Moss				S1	1	14.2 ± 1.0	NS
N	Cyrto-hypnum minutulum	Tiny Cedar Moss				S1	1	$33.9 \pm 0.0$	NS
N	Umbilicaria vellea	Grizzled Rocktripe Lichen				S1	4	$53.3 \pm 0.0$	NS
N	Usnea perplexans	Powdered Beard Lichen				S1	1	$93.7 \pm 0.0$	NS
N	Heterodermia leucomela	Elegant Fringe Lichen				S1	1	$41.2 \pm 0.0$	NS
N.I.	On the large of the discussion	Brown-buttoned Jellyskin				04	0	040.00	NS
N	Scytinium dactylinum	Lichen				S1	2	$64.6 \pm 0.0$	
N	Flavoparmelia baltimorensis	Rock Greenshield Lichen				S1	1	69.1 ± 1.0	NS
N	Lathagrium cristatum	Fingered Jelly Lichen				S1	3	$85.8 \pm 0.0$	NS
N	Ephebe hispidula	Dryside Rockshag Lichen				S1	2	53.7 ± 1.0	NS
N	Ephebe perspinulosa	Thread Lichen				S1	2	64.1 ± 0.0	NS
N	Fuscopannaria praetermissa	Moss Shingles Lichen				S1	1	80.7 ± 0.0	NS
N	Lichina confinis	Marine Seaweed Lichen				S1	2	97.8 ± 1.0	NS
N	Parmotrema perforatum	Perforated Ruffle Lichen				S1	4	$35.8 \pm 0.0$	NS
14	r annouema peneratam	Eyed Mossthorns							NS
N	Polychidium muscicola	Woollybear Lichen				S1	2	$52.5 \pm 0.0$	INO
N	Pseudevernia consocians	Common Antler Lichen				S1	1	$32.2 \pm 0.0$	NS
N	Spilonema revertens	Rock Hairball Lichen				S1	4	62.8 ± 0.0	NS
N	Sticta limbata	Powdered Moon Lichen				S1	8	55.1 ± 0.0	NS
N	Leptogium hibernicum	Hibernia Jellyskin Lichen				S1	59	$3.6 \pm 0.0$	NS
N	Hypotrachyna horrescens	Hairy-spined Shield Lichen				S1	4	$73.7 \pm 0.0$	NS
N	Peltigera lepidophora	Scaly Pelt Lichen				S1	5	$33.9 \pm 0.0$	NS
IN	r enigera reproopriora	Powdered Honeycomb				_		33.3 ± 0.0	NS
N	Hypogymnia hultenii	Lichen				S1	3	$56.4 \pm 0.0$	INO
NI	Alaina visida					S1?	2	83.2 ± 0.0	NS
N	Aloina rigida	Aloe-Like Rigid Screw Moss				S1? S1?		$63.2 \pm 0.0$ $63.4 \pm 0.0$	
N	Imbribryum muehlenbeckii	Muehlenbeck's Bryum Moss				-	2		NS
N	Campylostelium saxicola	a Moss				S1?	1	59.1 ± 1.0	NS
N	Conardia compacta	Coast Creeping Moss				S1?	1	70.2 ± 2.0	NS
N	Grimmia anodon	Toothless Grimmia Moss				S1?	2	$37.2 \pm 3.0$	NS
N	Homomallium adnatum	Adnate Hairy-gray Moss				S1?	1	$36.6 \pm 5.0$	NS
N	Meesia triquetra	Three-ranked Cold Moss				S1?	1	$72.1 \pm 0.0$	NS
N	Paludella squarrosa	Tufted Fen Moss				S1?	3	$91.4 \pm 0.0$	NS
N	Physcomitrium immersum	a Moss				S1?	1	$84.9 \pm 0.0$	NS
N	Schistostega pennata	Luminous Moss				S1?	1	$98.4 \pm 0.0$	NS
N	Sphagnum cyclophyllum	a Moss				S1?	9	$99.0 \pm 0.0$	NS
N	Sphagnum molle	Blushing Peat Moss				S1?	1	$93.0 \pm 0.0$	NS
N	Trichodon cylindricus	Cylindric Hairy-teeth Moss				S1?	1	$81.4 \pm 3.0$	NS
N	Plagiomnium ellipticum	Marsh Leafy Moss				S1?	1	$61.2 \pm 0.0$	NS
N	Syntrichia ruralis	a Moss				S1?	1	$86.5 \pm 0.0$	NS
N	Euopsis granatina	Lesser Rockbud Lichen				S1?	1	$66.0 \pm 1.0$	NS
N	Scytinium intermedium	Forty-five Jellyskin Lichen				S1?	1	91.5 ± 1.0	NS
	•	Appalachain Camouflage							NS
N	Melanelia culbersonii	Lichen				S1?	1	$57.1 \pm 0.0$	
N	Metzgeria crassipilis	Hairy Veilwort				S1S2	3	$47.3 \pm 0.0$	NS
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<b>Group</b> N	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
/N	Porella pinnata	Pinnate Scalewort			-	S1S2	1	15.1 ± 0.0	NS
N	Arrhenopterum heterostichum	One-sided Groove Moss				S1S2	2	$9.0 \pm 5.0$	NS
N	Brachythecium turgidum	Thick Ragged Moss				S1S2	3	81.4 ± 3.0	NS
N	Didymodon rigidulus	Rigid Screw Moss				S1S2	2	$33.6 \pm 0.0$	NS
N	Hypnum pratense	Meadow Plait Moss				S1S2	1	$70.3 \pm 3.0$	NS
N	Mnium thomsonii	Thomson's Leafy Moss				S1S2	1	82.5 ± 2.0	NS
N	Tortula acaulon	Cuspidate Earth Moss				S1S2	1	$74.4 \pm 2.0$	NS
N	Plagiothecium latebricola	Alder Silk Moss				S1S2	1	$47.5 \pm 5.0$	NS
N N	Platydictya confervoides	a Moss				S1S2 S1S2	1	$81.4 \pm 0.0$	NS NS
·N		a IVIOSS				3132		01.4 ± 0.0	
N	Sematophyllum marylandicum	a Moss				S1S2	1	$33.5 \pm 0.0$	NS
N	Sphagnum trinitense	a peatmoss				S1S2	2	$92.5 \pm 0.0$	NS
N	Tortula mucronifolia	Mucronate Screw Moss				S1S2	1	$37.2 \pm 3.0$	NS
NI.	Pseudotaxiphyllum	a Mass				0400	5	46.6 ± 4.0	NS
N	distichaceum	a Moss				S1S2	5	46.6 ± 4.0	
N	Hamatocaulis vernicosus	a Moss				S1S2	2	$72.3 \pm 0.0$	NS
		Tiny-leaved Haplocladium							NS
N	Haplocladium microphyllum	Moss				S1S2	1	$69.5 \pm 3.0$	
N	Enchylium bachmanianum	Bachman's Jelly Lichen				S1S2	1	$85.8 \pm 0.0$	NS
N	Pilophorus cereolus	Powdered Matchstick Lichen				S1S2	1	$67.1 \pm 3.0$	NS
N	Rhizoplaca subdiscrepans	Scattered Rock-posy Lichen				S1S2	1	$56.0 \pm 1.0$	NS
N	Parmotrema reticulatum	Netted Ruffle Lichen				S1S2	5	$31.7 \pm 0.0$	NS
N	Parmeliella parvula	Poor-man's Shingles Lichen				S1S2	40	$56.6 \pm 0.0$	NS
N	Umbilicaria polyrhiza	Ballpoint Rocktripe Lichen				S1S3	2	$41.8 \pm 0.0$	NS
N	Lecanora polytropa	a lichen				S1S3	2	91.8 ± 1.0	NS
N	Heterodermia galactophylla	Branching Fringe Lichen				S1S3	1	$56.0 \pm 0.0$	NS
N	Xylopsora friesii	a Lichen				S1S3	2	$97.0 \pm 0.0$	NS
N	Peltigera neckeri	Black-saddle Pelt Lichen				S1S3	1	$43.9 \pm 0.0$	NS
N	Usnea fragilescens	Inflationary Beard Lichen				S1S3	2	59.9 ± 2.0	NS
N	Stereocaulon intermedium	Pacific Brain Foam Lichen				S1S3	4	18.0 ± 0.0	NS
N	Anacamptodon splachnoides	a Moss				S2	2	$36.3 \pm 0.0$	NS
N	Sphagnum platyphyllum	Flat-leaved Peat Moss				S2	2	65.7 ± 0.0	NS
N	Sphagnum subnitens	Lustrous Peat Moss				S2	4	$37.3 \pm 0.0$	NS
. N	Spriagrium subritiens					32	4	37.3 ± 0.0	
N	Usnea flavocardia	Blood-splattered Beard Lichen				S2	2	67.2 ± 1.0	NS
N	Cystocoleus ebeneus	Rockgossamer Lichen				S2	6	$41.6 \pm 0.0$	NS
N	Hypotrachyna catawbiensis	Powder-tipped Antler Lichen				S2	12	$36.1 \pm 0.0$	NS
N	Scytinium imbricatum	Scaly Jellyskin Lichen				S2	1	$47.0 \pm 0.0$	NS
N	Nephroma arcticum	Arctic Kidney Lichen				S2	1	$98.9 \pm 1.0$	NS
N	Nephroma resupinatum	a lichen				S2	13	$47.8 \pm 0.0$	NS
N	Placynthium flabellosum	Scaly Ink Lichen				S2	1	$52.5 \pm 0.0$	NS
N	Weissia muhlenbergiana	a Moss				S2?	5	$70.3 \pm 3.0$	NS
N	Atrichum angustatum	Lesser Smoothcap Moss				S2?	7	$33.8 \pm 0.0$	NS
N	Ptychostomum pendulum	Drooping Bryum				S2?	2	83.8 ± 2.0	NS
N	Drepanocladus polygamus	Polygamous Hook Moss				S2?	2	$34.2 \pm 0.0$	NS
N	Pseudocampylium radicale	Long-stalked Fine Wet Moss				S2?	3	$33.2 \pm 0.0$	NS
N	Climacium americanum	American Tree Moss				S2?	9	$33.2 \pm 0.0$ $33.2 \pm 0.0$	NS
N N	Dicranum condensatum	Condensed Broom Moss				S2? S2?	6	$33.2 \pm 0.0$ $33.8 \pm 0.0$	NS NS
N	Ditrichum rhynchostegium	a Moss				S2?	6	31.7 ± 1.0	NS
N	Fissidens bushii	Bush's Pocket Moss				S2?	6	$33.9 \pm 0.0$	NS
N	Fontinalis hypnoides	a moss				S2?	1	$34.4 \pm 0.0$	NS
N	Fontinalis sullivantii	Sullivant's Water Moss				S2?	4	29.1 ± 0.0	NS
N	Grimmia olneyi	a Moss				S2?	10	$33.5 \pm 0.0$	NS
N	Grimmia anomala	Mountain Forest Grimmia				S2?	1	$37.7 \pm 1.0$	NS
N	Hygrohypnum bestii	Best's Brook Moss				S2?	1	$69.8 \pm 0.0$	NS
N	Orthotrichum anomalum	Anomalous Bristle Moss				S2?	2	$33.1 \pm 0.0$	NS
	Philonotis marchica	a Moss				S2?	1	$33.6 \pm 0.0$	NS

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Taxonomic Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	Physcomitrium collenchymatum	a Moss				S2?	1	81.4 ± 0.0	NS
N	Rauiella scita	Smaller Fern Moss				S2?	16	$33.8 \pm 0.0$	NS
N	Platylomella lescurii	a Moss				S2?	8	14.2 ± 1.0	NS
N	Phylliscum demangeonii	Black Rock-wafer Lichen				S2?	5	$19.3 \pm 0.0$	NS
N	Oxyrrhynchium hians	Light Beaked Moss				S2S3	5	$36.6 \pm 5.0$	NS
N	Platydictya subtilis	Bark Willow Moss				S2S3	3	$33.4 \pm 0.0$	NS
N	Plagiomnium rostratum	Long-beaked Leafy Moss				S2S3	5	$34.2 \pm 0.0$	NS
N	Scorpidium revolvens	Limprichtia Moss				S2S3	2	70.1 ± 2.0	NS
N	Moelleropsis nebulosa	Blue-gray Moss Shingle Lichen				S2S3	156	19.2 ± 0.0	NS
N	Moelleropsis nebulosa ssp. frullaniae	Blue-gray Moss Shingle Lichen				S2S3	8	28.3 ± 0.0	NS
NI						S2S3	1	00.6 . 0.0	NS
N	Ramalina thrausta	Angelhair Ramalina Lichen						99.6 ± 2.0	
N	Collema leptaleum	Crumpled Bat's Wing Lichen				S2S3	68	13.8 ± 0.0	NS
N	Usnea ceratina	Warty Beard Lichen				S2S3	1	$32.3 \pm 0.0$	NS
N	Usnea hirta	Bristly Beard Lichen				S2S3	2	$97.9 \pm 0.0$	NS
N	Usnea rubicunda	Red Beard Lichen				S2S3	7	$40.5 \pm 0.0$	NS
N	Ahtiana aurescens	Eastern Candlewax Lichen				S2S3	23	$13.8 \pm 0.0$	NS
N	Usnocetraria oakesiana	Yellow Band Lichen Powder-foot British Soldiers				S2S3	16	$35.9 \pm 0.0$	NS NS
N	Cladonia incrassata	Lichen				S2S3	2	$31.7 \pm 3.0$	
N	Cladonia mateocyatha	Mixed-up Pixie-cup				S2S3	5	$17.7 \pm 0.0$	NS
N	Cladonia parasitica	Fence-rail Lichen				S2S3	2	66.1 ± 1.0	NS
N	Chaenotheca gracilenta	a lichen				S2S3	1	$99.0 \pm 0.0$	NS
N	Scytinium tenuissimum	Birdnest Jellyskin Lichen				S2S3	7	$39.6 \pm 1.0$	NS
N	Melanohalea septentrionalis	Northern Camouflage Lichen				S2S3	1	$94.2 \pm 0.0$	NS
N	Myelochroa aurulenta	Powdery Axil-bristle Lichen				S2S3	1	$75.6 \pm 2.0$	NS
N	Parmelia fertilis	Fertile Shield Lichen				S2S3	2	$22.3 \pm 0.0$	NS
N	Hypotrachyna minarum	Hairless-spined Shield Lichen				S2S3	4	$31.9 \pm 0.0$	NS
N	Parmeliopsis ambigua	Green Starburst Lichen				S2S3	2	$74.7 \pm 2.0$	NS
N	Racodium rupestre	Rockhair Lichen				S2S3	3	$56.5 \pm 0.0$	NS
N	Umbilicaria polyphylla	Petalled Rocktripe Lichen				S2S3	1	$74.7 \pm 2.0$	NS
N	Usnea cavernosa	Pitted Beard Lichen				S2S3	4	$67.1 \pm 0.0$	NS
N	Usnea mutabilis	Bloody Beard Lichen				S2S3	1	$93.6 \pm 0.0$	NS
N	Fuscopannaria sorediata	a Lichen				S2S3	18	$32.2 \pm 0.0$	NS
N	Stereocaulon condensatum	Granular Soil Foam Lichen				S2S3	2	$63.3 \pm 0.0$	NS
N	Dimelaena oreina	Golden Moonglow Lichen				S2S3	1	98.3 ± 1.0	NS
N	Hypotrachyna revoluta	Granulating Loop Lichen				S2S3	4	97.1 ± 0.0	NS
N	Cetraria arenaria	Sand-loving Icelandmoss Lichen				S2S3	18	$45.6 \pm 0.0$	NS
N	Cladonia coccifera	Eastern Boreal Pixie-cup Lichen				S2S3	1	$50.9 \pm 0.0$	NS
N	Cladonia deformis	Lesser Sulphur-cup Lichen				S2S3	2	59.4 ± 4.0	NS
N	Cladonia phyllophora	Felt Lichen				S2S3	2	73.2 ± 4.0	NS
N	Usnea flammea	Coastal Bushy Beard Lichen				S2S3	3	69.2 ± 0.0	NS
N	Ephemerum serratum	a Moss				S3	4	80.7 ± 5.0	NS
N	Fissidens taxifolius	Yew-leaved Pocket Moss				S3	7	80.7 ± 5.0	NS
N		a Moss				S3	6	$36.3 \pm 0.0$	NS
N N	Anomodon tristis	a Moss Twisted Peat Moss				S3 S3		$36.3 \pm 0.0$ $65.6 \pm 0.0$	NS NS
	Sphagnum contortum	Toothed-leaved Nitrogen					1		NS NS
N	Tetraplodon angustatus	Moss				S3	3	$0.5 \pm 0.0$	
N	Rostania occultata	Crusted Tarpaper Lichen				S3	4	$32.5 \pm 2.0$	NS
N	Collema nigrescens	Blistered Tarpaper Lichen				S3	78	$14.2 \pm 0.0$	NS
N	Solorina saccata	Woodland Owl Lichen				S3	9	$85.6 \pm 0.0$	NS
N	Fuscopannaria ahlneri	Corrugated Shingles Lichen				S3	102	$6.0 \pm 0.0$	NS

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Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
N	Scytinium lichenoides	Tattered Jellyskin Lichen				S3	19	$7.7 \pm 0.0$	NS
N	Leptogium milligranum	Stretched Jellyskin Lichen				S3	44	$1.7 \pm 0.0$	NS
N	Nephroma bellum	Naked Kidney Lichen				S3	14	$27.6 \pm 9.0$	NS
N	Placynthium nigrum	Common Ink Lichen				S3	1	$45.3 \pm 3.0$	NS
N	Punctelia appalachensis	Appalachian Speckleback Lichen				S3	41	62.8 ± 0.0	NS
N	Viridothelium virens	2.6.7677				S3	6	$28.4 \pm 0.0$	NS
N	Ephebe lanata	Waterside Rockshag Lichen				S3	1	$34.0 \pm 0.0$	NS
14	Ephobe idridia	Powder-tipped Shadow							NS
N	Phaeophyscia adiastola	Lichen				S3	18	$91.6 \pm 0.0$	INO
N	Phaeophyscia pusilloides	Pompom-tipped Shadow Lichen				S3	8	$27.3 \pm 0.0$	NS
N	Peltigera collina	Tree Pelt Lichen				S3	11	$27.3 \pm 0.0$	NS
N	Metzgeria conjugata	Rock Veilwort				S3?	1	$64.5 \pm 0.0$	NS
		Lesser Bird's-claw Beard							NS
N	Barbula convoluta	Moss				S3?	3	69.4 ± 0.0	
N	Calliergon giganteum	Giant Spear Moss				S3?	3	$65.8 \pm 0.0$	NS
N	Drummondia prorepens	a Moss				S3?	5	$33.8 \pm 0.0$	NS
N	Elodium blandowii	Blandow's Bog Moss				S3?	5	$61.2 \pm 0.0$	NS
N	Mnium stellare	Star Leafy Moss				S3?	2	$85.3 \pm 0.0$	NS
N	Cladonia stygia	Black-footed Reindeer Lichen				S3?	2	$63.8 \pm 0.0$	NS
N	Anomodon rugelii	Rugel's Anomodon Moss				S3S4	11	$35.3 \pm 4.0$	NS
N	Dichelyma capillaceum	Hairlike Dichelyma Moss				S3S4	9	$32.4 \pm 1.0$	NS
N	Dicranum leioneuron	a Dicranum Moss				S3S4	3	$67.6 \pm 0.0$	NS
N	Myurella julacea	Small Mouse-tail Moss				S3S4	1	$62.8 \pm 0.0$	NS
N	Splachnum ampullaceum	Cruet Dung Moss				S3S4	1	$41.7 \pm 0.0$	NS
N	Thamnobryum alleghaniense	a Moss				S3S4	5	$8.8 \pm 1.0$	NS
N	Tomentypnum nitens	Golden Fuzzy Fen Moss				S3S4	1	$91.4 \pm 0.0$	NS
N	Schistidium agassizii	Elf Bloom Moss				S3S4	3	14.2 ± 1.0	NS
N	Hylocomiastrum pyrenaicum	a Feather Moss				S3S4	4	$36.3 \pm 0.0$	NS
N	Enchylium tenax	Soil Tarpaper Lichen				S3S4	5	85.8 ± 0.0	NS
N N						S3S4	271	$38.6 \pm 0.0$	NS NS
	Sticta fuliginosa	Peppered Moon Lichen							
N	Arctoparmelia incurva	Finger Ring Lichen				S3S4	63	$27.6 \pm 0.0$	NS
N	Scytinium teretiusculum	Curly Jellyskin Lichen				S3S4	19	$38.6 \pm 0.0$	NS
N	Leptogium acadiense	Acadian Jellyskin Lichen				S3S4	55	$21.0 \pm 0.0$	NS
N	Scytinium subtile	Appressed Jellyskin Lichen				S3S4	33	$24.1 \pm 0.0$	NS
N	Cladonia floerkeana	Gritty British Soldiers Lichen				S3S4	2	$42.5 \pm 0.0$	NS
N	Vahliella leucophaea	Shelter Shingle Lichen				S3S4	1	$52.5 \pm 0.0$	NS
N	Heterodermia speciosa	Powdered Fringe Lichen				S3S4	62	$6.0 \pm 0.0$	NS
N	Leptogium corticola	Blistered Jellyskin Lichen				S3S4	366	$1.6 \pm 0.0$	NS
N	Melanohalea olivacea	Spotted Camouflage Lichen				S3S4	5	$60.2 \pm 0.0$	NS
N	Parmotrema perlatum	Powdered Ruffle Lichen				S3S4	49	31.5 ± 19.0	NS
N	Sphaerophorus fragilis	Fragile Coral Lichen				S3S4	6	70.7 ± 3.0	NS
N	Coccocarpia palmicola	Salted Shell Lichen				S3S4	1002	$6.0 \pm 0.0$	NS
N	Physcia caesia	Blue-gray Rosette Lichen				S3S4	3	54.7 ± 20.0	NS
N	Physcia tenella	Fringed Rosette Lichen				S3S4	5	69.1 ± 1.0	NS
N	Anaptychia palmulata	Shaggy Fringed Lichen				S3S4	132	1.6 ± 0.0	NS
N	Evernia prunastri	Valley Oakmoss Lichen				S3S4	31	46.6 ± 1.0	NS
N	Heterodermia neglecta	Fringe Lichen				S3S4	257	$35.7 \pm 0.0$	NS
Р	Rhynchospora macrostachya	Tall Beakrush	Endangered	Endangered	Endangered	S1	57	$7.6 \pm 0.0$	NS
Р	Coreopsis rosea	Pink Coreopsis	Endangered	Endangered	Endangered	S2	7	$97.0 \pm 0.0$	NS
Р	Clethra alnifolia	Coast Pepper-Bush	Endangered	Threatened	Vulnerable	S2	282	$26.6 \pm 0.0$	NS
P	Sabatia kennedyana	Plymouth Gentian	Endangered	Endangered	Endangered	S2S3	837	$78.7 \pm 0.0$	NS
P	Juglans cinerea	Butternut	Endangered	Endangered	· · · · · · · · · · · · · · · · · ·	SNA	12	19.0 ± 0.0	NS
Р	Fraxinus nigra	Black Ash	Threatened	3090.00	Threatened	S1S2	274	1.6 ± 0.0	NS
P	Liatris spicata	Dense Blazing Star	Threatened	Threatened		SNA	4	59.3 ± 0.0	NS
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Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	Hydrocotyle umbellata	Water Pennywort	Special Concern	Special Concern	Endangered	S2	72	33.0 ± 0.0	NS
P	Eleocharis tuberculosa	Tubercled Spike-rush	Special Concern	Special Concern	Vulnerable	S2	80	$32.9 \pm 0.0$	NS
P	Lachnanthes caroliniana	Redroot	Special Concern	Special Concern	Vulnerable	S2	1470	$7.1 \pm 0.0$	NS
P	Lophiola aurea	Goldencrest	Special Concern	Special Concern	Vulnerable	S2	798	$1.7 \pm 0.0$	NS
Р	Lilaeopsis chinensis	Eastern Lilaeopsis	Special Concern	Special Concern	Vulnerable	S3	153	$23.3 \pm 0.0$	NS
P	Scirpus Iongii	Long's Bulrush	Special Concern	•	Vulnerable	S3	682	$0.8 \pm 0.0$	NS
Р	Isoetes prototypus	Prototype Quillwort	Special Concern	Special Concern	Vulnerable	S3	6	$63.4 \pm 0.0$	NS
Р	Floerkea proserpinacoides	False Mermaidweed	Not At Risk			S2S3	36	$70.0 \pm 1.0$	NS
Р	Acer saccharinum	Silver Maple				S1	11	$74.0 \pm 0.0$	NS
P	Toxicodendron vernix	Poison Sumac				S1	41	$24.5 \pm 0.0$	NS
P	Osmorhiza depauperata	Blunt Sweet Cicely				S1	1	79.8 ± 5.0	NS
P	Antennaria rosea ssp. arida	Rosy Pussytoes				S1	1	94.9 ± 0.0	NS
P	Nabalus racemosus	Glaucous Rattlesnakeroot				S1	2	84.6 ± 0.0	NS
P	Andersonglossum boreale	Northern Wild Comfrey				S1	5	$73.6 \pm 0.0$	NS
Р	Turritis glabra	Tower Mustard				S1	1	$36.0 \pm 0.0$	NS
Р	Lobelia spicata	Pale-Spiked Lobelia				S1	5	90.7 ± 50.0	NS
Р	Silene antirrhina	Sleepy Catchfly				S1	5	61.5 ± 2.0	NS
P	Stellaria crassifolia	Fleshy Stitchwort				S1	1	45.8 ± 2.0	NS
	Astragalus robbinsii var.	riestry Sutchwort					'	45.0 ± 2.0	NS
P	minor	Robbins' Milkvetch				S1	28	$94.8 \pm 0.0$	NO
Р		Wild Black Currant				S1	2	80.5 ± 1.0	NS
P	Ribes americanum Trichostema dichotomum	Forked Bluecurls				S1	6	$2.3 \pm 0.0$	NS
P						S1 S1			NS NS
	Fraxinus pennsylvanica	Red Ash					11	$77.2 \pm 0.0$	
P	Polygonum achoreum	Leathery Knotweed				S1	1	60.2 ± 10.0	NS
P	Phytolacca americana	Common Pokeweed				S1	1	99.1 ± 0.0	NS
P	Podostemum ceratophyllum	Horn-leaved Riverweed				S1	4	12.7 ± 0.0	NS
P	Montia fontana	Water Blinks				S1	3	97.3 ± 1.0	NS
P	Lysimachia minima	Chaffweed				S1	1	$34.3 \pm 0.0$	NS
P	Lysimachia quadrifolia	Whorled Yellow Loosestrife				S1	1	$76.7 \pm 0.0$	NS
P	Amelanchier nantucketensis	Nantucket Serviceberry				S1	1	$88.2 \pm 0.0$	NS
P	Scrophularia lanceolata	Lance-leaved Figwort				S1	2	57.8 ± 1.0	NS
P	Carex digitalis	Slender Wood Sedge				S1	4	$12.0 \pm 0.0$	NS
P	Carex laxiflora	Loose-Flowered Sedge				S1	6	$38.1 \pm 2.0$	NS
P	Carex ormostachya	Necklace Spike Sedge				S1	5	$34.6 \pm 0.0$	NS
Р	Carex prairea	Prairie Sedge				S1	3	79.5 ± 1.0	NS
Р	Carex viridula var.	Greenish Sedge				S1	1	91.8 ± 0.0	NS
	saxilittoralis	Oreenish Deage							
P	Cyperus diandrus	Low Flatsedge				S1	1	$97.1 \pm 0.0$	NS
Р	Fimbristylis autumnalis	Slender Fimbry				S1	3	$34.0 \pm 0.0$	NS
Р	Scirpus atrovirens	Dark-green Bulrush				S1	3	$45.3 \pm 0.0$	NS
P	Schoenoplectus torreyi	Torrey's Bulrush				S1	8	$5.1 \pm 0.0$	NS
P	Iris prismatica	Slender Blue Flag				S1	1	64.4 ± 100.0	NS
Б	•	Coastal Plain Blue-eyed-				C4			NS
Р	Sisyrinchium fuscatum	grass				S1	6	$13.9 \pm 0.0$	-
Р	Juncus secundus	Secund Rush				S1	3	13.6 ± 1.0	NS
Р	Trillium grandiflorum	White Trillium				S1	3	79.6 ± 1.0	NS
	Malaxis monophyllos var.	North American White							NS
P	brachypoda	Adder's-mouth				S1	2	91.1 ± 10.0	.10
Р	Spiranthes casei var. casei	Case's Ladies'-Tresses				S1	3	$37.7 \pm 0.0$	NS
•	Dichanthelium	Juse 3 Laules - 1153553				_	3	J1.1 ± U.U	NS
P		Slender Panic Grass				S1	9	$15.3 \pm 0.0$	INO
D	xanthophysum	Caroading Wild Dua				C1			NC
Р	Elymus hystrix	Spreading Wild Rye				S1	8	$87.4 \pm 0.0$	NS
Р	Torreyochloa pallida var.	Pale False Manna Grass				S1	2	$48.9 \pm 0.0$	NS
-	pallida								
P	Adiantum pedatum	Northern Maidenhair Fern				S1	10	64.4 ± 100.0	NS
P	Dryopteris goldieana	Goldie's Woodfern				S1	1	$32.8 \pm 1.0$	NS
P	Equisetum palustre	Marsh Horsetail				S1	1	$74.4 \pm 5.0$	NS
P	Selaginella rupestris	Rock Spikemoss				S1	25	$85.5 \pm 0.0$	NS

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Taxonomic	Out off Nove	<b>0</b>	000514/10	0454	5	B. B. W. B. J.		<b>D</b> ****************	-
Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
Р	Suaeda rolandii	Roland's Sea-Blite				S1?	4	$80.9 \pm 0.0$	NS
Р	Carex pensylvanica	Pennsylvania Sedge				S1?	1	$22.3 \pm 10.0$	NS
Р	Bolboschoenus robustus	Sturdy Bulrush				S1?	1	$64.6 \pm 5.0$	NS
Р	Juncus anthelatus	Greater Poverty Rush				S1?	1	$52.5 \pm 0.0$	NS
Р	Allium schoenoprasum	Wild Chives				S1?	2	$79.8 \pm 0.0$	NS
-	Allium schoenoprasum var.								NS
Р	sibiricum	Wild Chives				S1?	2	$75.6 \pm 7.0$	140
									NC
Р	Panicum dichotomiflorum	Spreading Panicgrass				S1?	17	19.1 ± 0.0	NS
_	ssp. puritanorum								
P	Huperzia selago	Northern Firmoss				S1?	1	91.8 ± 1.0	NS
Р	Crocanthemum canadense	Long-branched Frostweed			Endangered	S1S2	135	$10.5 \pm 0.0$	NS
Р	Cypripedium arietinum	Ram's-Head Lady's-Slipper			Endangered	S1S2	278	$81.3 \pm 0.0$	NS
Р	Sanicula odorata	Clustered Sanicle			· ·	S1S2	9	$71.0 \pm 2.0$	NS
Р	Ageratina altissima	White Snakeroot				S1S2	1	$96.4 \pm 0.0$	NS
Р	Draba glabella	Rock Whitlow-Grass				S1S2	4	91.8 ± 1.0	NS
P		Swedish Bunchberry				S1S2	2	57.3 ± 0.0	NS
•	Cornus suecica								
P	Proserpinaca intermedia	Intermediate Mermaidweed				S1S2	4	$30.0 \pm 1.0$	NS
P	Carex haydenii	Hayden's Sedge				S1S2	3	$1.2 \pm 0.0$	NS
Р	Platanthera huronensis	Fragrant Green Orchid				S1S2	1	$92.5 \pm 10.0$	NS
Р	Euphrasia farlowii	Farlow's Eyebright				S1S3	2	$42.8 \pm 0.0$	NS
Р	Carex vacillans	Estuarine Sedge				S1S3	1	$65.9 \pm 0.0$	NS
P	Antennaria parlinii ssp. fallax	Parlin's Pussytoes				S2	24	$7.7 \pm 0.0$	NS
Р	Rudbeckia laciniata	Cut-Leaved Coneflower				S2	14	61.1 ± 5.0	NS
г		Cut-Leaved Coriellower				32	14	01.1 ± 5.0	
Р	Rudbeckia laciniata var.	Cut-Leaved Coneflower				S2	9	$64.5 \pm 2.0$	NS
•	laciniata								
Р	Cardamine maxima	Large Toothwort				S2	18	$69.3 \pm 4.0$	NS
Р	Hudsonia ericoides	Pinebarren Golden Heather				S2	201	$21.0 \pm 0.0$	NS
Р	Desmodium canadense	Canada Tick-trefoil				S2	9	$33.6 \pm 1.0$	NS
Р	Hylodesmum glutinosum	Large Tick-trefoil				S2	38	$33.1 \pm 0.0$	NS
•	Oxytropis campestris var.	<u> </u>							NS
Р	johannensis	Field Locoweed				S2	26	$94.9 \pm 0.0$	NO
	,	<b>.</b>				00		000 00	NO
P	Conopholis americana	American Cancer-root				S2	59	$20.9 \pm 0.0$	NS
P	Anemonastrum canadense	Canada Anemone				S2	13	32.1 ± 1.0	NS
Р	Hepatica americana	Round-lobed Hepatica				S2	44	$21.2 \pm 1.0$	NS
Р	Ranunculus sceleratus	Cursed Buttercup				S2	20	$43.9 \pm 0.0$	NS
Р	Galium boreale	Northern Bedstraw				S2	6	$51.9 \pm 0.0$	NS
Р	Dirca palustris	Eastern Leatherwood				S2	60	84.5 ± 1.0	NS
Р	Carex livida	Livid Sedge				S2	2	80.0 ± 10.0	NS
P						S2	4	67.8 ± 0.0	NS
	Juncus greenei	Greene's Rush							
P	Allium tricoccum	Wild Leek				S2	88	$58.8 \pm 0.0$	NS
Р	Lilium canadense	Canada Lily				S2	21	71.1 ± 1.0	NS
Р	Cypripedium parviflorum var.	Yellow Lady's-slipper				S2	13	73.8 ± 1.0	NS
г	pubescens	reliow Lady s-slipper				32	13	73.0 ± 1.0	
_	Cypripedium parviflorum var.								NS
Р	makasin	Small Yellow Lady's-Slipper				S2	13	$63.7 \pm 0.0$	
Р		Chaus Ladyla Clippor				S2	17	88.2 ± 0.0	NS
•	Cypripedium reginae	Showy Lady's-Slipper							
Р	Platanthera flava var. flava	Southern Rein Orchid				S2	275	$7.8 \pm 0.0$	NS
Р	Platanthera flava var.	Pale Green Orchid				S2	25	$12.7 \pm 0.0$	NS
Г	herbiola	Fale Green Ordina				32	23	12.7 ± 0.0	
Р	Platanthera macrophylla	Large Round-Leaved Orchid				S2	3	$42.2 \pm 0.0$	NS
P	Cinna arundinacea	Sweet Wood Reed Grass				S2	36	12.6 ± 0.0	NS
P	Festuca subverticillata	Nodding Fescue				S2	3	82.1 ± 7.0	NS
P									
•	Piptatheropsis pungens	Slender Ricegrass				S2	12	1.1 ± 0.0	NS
P	Cryptogramma stelleri	Steller's Rockbrake				S2	2	$80.0 \pm 0.0$	NS
Р	Cuscuta cephalanthi	Buttonbush Dodder				S2?	6	$13.7 \pm 0.0$	NS
Р	Rumex persicarioides	Peach-leaved Dock				S2?	5	$48.4 \pm 0.0$	NS
Р	Crataegus submollis	Quebec Hawthorn				S2?	3	$59.2 \pm 7.0$	NS
Р	Carex peckii	White-Tinged Sedge				S2?	1	88.3 ± 5.0	NS
•	Caron pooru	to ranged deage				J	•	30.0 ± 0.0	

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Taxonomic	Out official sections	O	000514/10	0484	5	B. B. # B. I		<b>D</b> (1)	_
Group	Scientific Name	Common Name	COSEWIC	SARA	Prov Legal Prot	Prov Rarity Rank	# recs	Distance (km)	Prov
P	Thuja occidentalis	Eastern White Cedar			Vulnerable	S2S3	322	$28.9 \pm 0.0$	NS
Р	Osmorhiza longistylis	Smooth Sweet Cicely				S2S3	11	$67.2 \pm 0.0$	NS
P	Erigeron philadelphicus	Philadelphia Fleabane				S2S3	1	$91.8 \pm 0.0$	NS
Р	Eutrochium dubium	Coastal Plain Joe Pye Weed				S2S3	49	$16.3 \pm 0.0$	NS
P	Lactuca hirsuta	Hairy Lettuce				S2S3	6	$10.5 \pm 0.0$	NS
P	Impatiens pallida	Pale Jewelweed				S2S3	6	$75.0 \pm 7.0$	NS
Р	Caulophyllum thalictroides	Blue Cohosh				S2S3	46	$59.1 \pm 0.0$	NS
Р	Boechera stricta	Drummond's Rockcress				S2S3	5	$91.8 \pm 0.0$	NS
Р	Draba arabisans	Rock Whitlow-Grass				S2S3	14	91.6 ± 0.0	NS
P	Stellaria humifusa	Saltmarsh Starwort				S2S3	1	96.2 ± 1.0	NS
P	Oxybasis rubra	Red Goosefoot				S2S3	3	$66.6 \pm 0.0$	NS
P	Hypericum majus	Large St John's-wort				S2S3	4	10.6 ± 0.0	NS
P	Hypericum x dissimulatum	Disguised St. John's-wort				S2S3	8	15.2 ± 0.0	NS
Р	Empetrum atropurpureum	Purple Crowberry				S2S3	4	69.1 ± 7.0	NS
P	Euphorbia polygonifolia	Seaside Spurge				S2S3	16	37.4 ± 1.0	NS
P									
	Myriophyllum farwellii	Farwell's Water Milfoil				S2S3	9	18.4 ± 0.0	NS
Р	Hedeoma pulegioides	American False Pennyroyal				S2S3	56	$8.7 \pm 5.0$	NS
Р	Oenothera fruticosa ssp.	Narrow-leaved Evening				S2S3	26	$37.2 \pm 0.0$	NS
	tetragona	Primrose							
Р	Polygala polygama	Racemed Milkwort				S2S3	26	$32.0 \pm 0.0$	NS
Р	Polygonum aviculare ssp.	Box Knotweed				S2S3	5	$42.8 \pm 0.0$	NS
Г	buxiforme	DOX KHOLWEEU				3233	3	42.0 ± 0.0	
Р	Polygonum oxyspermum	Davis Knotwood				S2S3	8	35.8 ± 5.0	NS
P	ssp. raii	Ray's Knotweed				5253	0	35.8 ± 5.0	
Р	Polygonum oxyspermum	Sharp-fruit Knotweed				S2S3	1	$93.4 \pm 0.0$	NS
Р	Rumex triangulivalvis	Triangular-valve Dock				S2S3	7	22.8 ± 1.0	NS
P	Anemone quinquefolia	Wood Anemone				S2S3	23	49.9 ± 0.0	NS
Р	Caltha palustris	Yellow Marsh Marigold				S2S3	8	16.3 ± 0.0	NS
Р	Amelanchier fernaldii	Fernald's Serviceberry				S2S3	2	18.0 ± 7.0	NS
Р	Potentilla canadensis	Canada Cinquefoil				S2S3	15	$23.3 \pm 0.0$	NS
P	Galium obtusum	Blunt-leaved Bedstraw				S2S3	12	$0.5 \pm 0.0$	NS
P									
P	Salix pellita	Satiny Willow				S2S3	1	$70.6 \pm 7.0$	NS
•	Tiarella cordifolia	Heart-leaved Foamflower				S2S3	10	$82.4 \pm 0.0$	NS
P	Boehmeria cylindrica	Small-spike False-nettle				S2S3	48	$12.6 \pm 0.0$	NS
P	Carex adusta	Lesser Brown Sedge				S2S3	4	$45.6 \pm 7.0$	NS
Р	Carex capillaris	Hairlike Sedge				S2S3	7	$94.9 \pm 0.0$	NS
Р	Carex comosa	Bearded Sedge				S2S3	10	65.6 ± 1.0	NS
P	Carex houghtoniana	Houghton's Sedge				S2S3	7	$14.4 \pm 0.0$	NS
Р	Carex hystericina	Porcupine Sedge				S2S3	7	58.2 ± 1.0	NS
Р	Carex longii	Long's Sedge				S2S3	7	$35.3 \pm 10.0$	NS
Р	Eleocharis ovata	Ovate Spikerush				S2S3	5	$31.5 \pm 0.0$	NS
P	Scirpus pedicellatus	Stalked Bulrush				S2S3	1	92.7 ± 5.0	NS
Р	Vallisneria americana	Wild Celery				S2S3	11	13.6 ± 0.0	NS
P	Najas gracillima	Thread-Like Naiad				S2S3	22	11.1 ± 0.0	NS
P	Goodyera pubescens	Downy Rattlesnake-Plantain				S2S3	90	$5.9 \pm 5.0$	NS
P	Spiranthes casei	Case's Ladies'-Tresses				S2S3	2	10.5 ± 0.0	NS NS
•	Spiranthes casei var.	Case's Laules - 1165565							NS NS
Р	•	Case's Ladies'-Tresses				S2S3	12	$45.6 \pm 7.0$	INO
Р	novaescotiae	Objete a Ladical Tarres							NO
•	Spiranthes lucida	Shining Ladies'-Tresses				S2S3	9	57.9 ± 1.0	NS
P	Potamogeton friesii	Fries' Pondweed				S2S3	8	$74.2 \pm 2.0$	NS
Р	Botrychium lanceolatum ssp. angustisegmentum	Narrow Triangle Moonwort				S2S3	7	$74.1 \pm 0.0$	NS
Р	Botrychium simplex	Least Moonwort				S2S3	5	43.8 ± 1.0	NS
P	Ophioglossum pusillum	Northern Adder's-tongue				S2S3	7	51.1 ± 7.0	NS
P	Potamogeton pulcher	Spotted Pondweed			Vulnerable	S3	30	$2.9 \pm 0.0$	NS
P	Conioselinum chinense	Chinese Hemlock-parsley			v an iorabio	S3	7	54.0 ± 0.0	NS
P	Iva frutescens	Big-leaved Marsh-elder				S3	33	$78.0 \pm 0.0$	NS
P		Seabeach Ragwort				S3	2	$78.4 \pm 0.0$	NS
г	Senecio pseudoarnica	Seabeach Ragwort				33	2	10.4 ± U.U	INO