

**Southwest Nova Scotia Habitat Conservation Strategy  
Summary Report, January 2017**

**Conservation Priority Species**

The following represents one of a series of summary documents that have been developed to aid in the dissemination of information presented in the *Southwest Nova Scotia Habitat Conservation Strategy*. For more detailed descriptions of a number of the bioregion's priority species and their conservation concerns see the *Ecological Context* section of the final report, Farrow & Nussey 2015.

**Conservation Priority species** are objectively defined as:

- Any species with a federal assessment (COSEWIC) of Special Concern, Threatened or Endangered (including all species on Schedule 1 of the *Species at Risk Act*)
- Any species at risk with a provincial listing (*Nova Scotia Endangered Species Act*) of Vulnerable, Threatened, or Endangered
- Any species with a provincial rank of S1, S2, or S3 (with a global rank of G1, G2, or G3) by the Atlantic Canada Conservation Data Centre (ACDC)
- Any Bird Conservation Region (BCR) 14 or Marine Biogeographic Unit (MBU) 11 priority bird species that occurs with regularity in the bioregion

**Species at Risk**

Due to its unique geological and climatic history, as well as its southerly position in peninsular Nova Scotia, the SWNS bioregion hosts a number of peripheral and disjunct populations of temperate flora and fauna (McAlpine & Smith 2010), including a number of Nova Scotia's rarest species. Consequently, the region contains a high concentration of federally assessed and provincially listed species at risk, including 39 species listed on Schedule 1 of the SARA, an additional 16 species assessed as at risk by COSEWIC, and 46 species listed in the NS ESA, six of which are not assessed as species at risk nationally (Table 1). The full list of conservation priority species with associated conservation status, source of occurrence data, and habitat associations can be found in a separate summary report and in the final report (Farrow & Nussey 2015).

**Table 1. Nationally assessed and provincially listed species at risk in the Southwest Nova Scotia bioregion, listed alphabetically by common name within their respective taxonomic group.**

Common Name	Scientific Name	COSEWIC	SARA	NS ESA
<b>Invertebrates</b>				
Brook Floater	<i>Alasmidonta varicosa</i>	Special Concern	Special Concern	Threatened
Macropis Cuckoo Bee	<i>Epeoloides pilosulus</i>	Endangered		Endangered
Monarch	<i>Danaus plexippus</i>	Special Concern	Special Concern	
Yellow Banded Bumble Bee	<i>Bombus terricola</i>	Special Concern		
<b>Fishes</b>				
American Eel	<i>Anguilla rostrata</i>	Threatened		
Atlantic Salmon	<i>Salmo salar</i>	Endangered	Endangered	
Atlantic Sturgeon	<i>Acipenser oxyrinchus</i>	Threatened		
Atlantic Whitefish	<i>Coregonus huntsmani</i>	Endangered	Endangered	Endangered
Striped Bass	<i>Morone saxatilis</i>	Endangered		
<b>Birds</b>				
Bank Swallow	<i>Riparia riparia</i>	Threatened		
Barn Swallow	<i>Hirundo rustica</i>	Threatened		Endangered
Barrow's Goldeneye (E.)	<i>Bucephala islandica</i>	Special Concern	Special Concern	
Bobolink	<i>Dolichonyx oryzivorus</i>	Threatened		Vulnerable
Buff-breasted Sandpiper	<i>Tryngites subruficollis</i>	Special Concern		
Canada Warbler	<i>Cardellina canadensis</i>	Threatened	Threatened	Endangered
Chimney Swift	<i>Chaetura pelagica</i>	Threatened	Threatened	Endangered
Common Nighthawk	<i>Chordeiles minor</i>	Threatened	Threatened	Threatened
Eastern Meadowlark	<i>Sturnella magna</i>	Threatened		
Eastern Whip-poor-will	<i>Antrastomus vociferus</i>	Threatened	Threatened	Threatened
Eastern Wood-pewee	<i>Contopus virens</i>	Special Concern		Vulnerable

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Common Name	Scientific Name	COSEWIC	SARA	NS ESA
Harlequin Duck (East.)	<i>Histrionicus histrionicus</i>	Special Concern	Special Concern	Endangered
Horned Grebe (West.)	<i>Podiceps auritus</i>	Special Concern		
Olive-sided Flycatcher	<i>Contopus cooperi</i>	Threatened	Threatened	Threatened
Peregrine Falcon (anatum/tundrius ssp.)	<i>Falco peregrinus anatum/tundrius</i>	Special Concern	Special Concern	Vulnerable
Piping Plover (melodus ssp.)	<i>Charadrius melodus melodus</i>	Endangered	Endangered	Endangered
Red Knot (rufa ssp.)	<i>Calidris canutus rufa</i>	Endangered	Endangered	Endangered
Red Necked Phalarope	<i>Phalaropus lobatus</i>	Special Concern		
Roseate Tern	<i>Sterna dougallii</i>	Endangered	Endangered	Endangered
Rusty Blackbird	<i>Euphagus carolinus</i>	Special Concern	Special Concern	Endangered
Savannah Sparrow (princeps ssp.)	<i>Passerculus sandwichensis princeps</i>	Special Concern	Special Concern	
Short-eared Owl	<i>Asio flammeus</i>	Special Concern	Special Concern	
Wood Thrush	<i>Hylocichla mustelina</i>	Threatened		
<b>Reptiles</b>				
Blanding's Turtle	<i>Emydoidea blandingii</i>	Endangered	Endangered	Endangered
Eastern Ribbonsnake	<i>Thamnophis sauritus</i>	Threatened	Threatened	Threatened
Snapping Turtle	<i>Chelydra serpentina</i>	Special Concern	Special Concern	Vulnerable
Wood Turtle	<i>Glyptemys insculpta</i>	Threatened	Threatened	Threatened
<b>Mammals</b>				
American Marten	<i>Martes americana</i>			Endangered
Little Brown Myotis	<i>Myotis lucifugus</i>	Endangered	Endangered	Endangered
Moose (Mainland NS)	<i>Alces alces americana</i>			Endangered
Northern Myotis	<i>Myotis septentrionalis</i>	Endangered	Endangered	Endangered
Tri-colored Bat	<i>Perimyotis subflavus</i>	Endangered	Endangered	Endangered
<b>Lichens</b>				
Blue Felt Lichen	<i>Degelia plumbea</i>	Special Concern		Vulnerable
Boreal Felt Lichen	<i>Erioderma pedicellatum</i>	Endangered	Endangered	Endangered
Vole Ears Lichen	<i>Erioderma mollissimum</i>	Endangered	Endangered	Endangered
<b>Vascular Plants</b>				
Black Ash	<i>Fraxinus nigra</i>			Threatened
Eastern Mountain Avens	<i>Geum peckii</i>	Endangered	Endangered	Endangered
Eastern White Cedar	<i>Thuja occidentalis</i>			Vulnerable
Prototype Quillwort	<i>Isoetes prototypus</i>	Special Concern	Special Concern	Vulnerable
Rockrose	<i>Helianthemum canadense</i>			Endangered
<b>Vascular Plants – Atlantic Coastal Plain Flora</b>				
Eastern Baccharis	<i>Baccharis halimifolia</i>	Threatened		Threatened
Eastern Lilaopsis	<i>Lilaopsis chinensis</i>	Special Concern	Special Concern	Vulnerable
Goldencrest	<i>Lophiola aurea</i>	Special Concern	Threatened	Vulnerable
Long's Bulrush	<i>Scirpus longii</i>	Special Concern	Special Concern	Vulnerable
Pink Coreopsis	<i>Coreopsis rosea</i>	Endangered	Endangered	Endangered
Plymouth Gentian	<i>Sabatia kennedyana</i>	Endangered	Threatened	Endangered
Redroot	<i>Lachnanthes caroliniana</i>	Special Concern	Special Concern	Vulnerable
Spotted Pondweed	<i>Potamogeton pulcher</i>			Vulnerable
Sweet Pepperbush	<i>Clethra alnifolia</i>	Special Concern	Special Concern	Vulnerable
Thread-leaved Sundew	<i>Drosera filiformis</i>	Endangered	Endangered	Endangered
Tuberclad Spike-rush	<i>Eleocharis tuberculosa</i>	Special Concern	Special Concern	Vulnerable
Water-pennywort	<i>Hydrocotyle umbellata</i>	Threatened	Threatened	Endangered

**BCR 14 and MBU 11 Priority Bird Species**

In 2013, Environment Canada completed a strategy for the Nova Scotia portion of BCR 14, incorporating consideration of MBU 11 and 12. The BCR 14 Strategy (Environment Canada 2013) identified 99 priority species for Nova Scotia, primarily for conservation, but also management action; 97 of these occur in the SWNS bioregion with regularity. These species are grouped into four pillar groups based on their characteristics and the habitats they occupy (**Error! Not a valid bookmark self-reference.**). Wetlands are used by the greatest number of species (45%), followed by forests (35%), and cultivated and managed areas (i.e., grasslands; 34%). Of the 97 priority bird species occurring in the bioregion, 20 have been assessed as at risk by COSEWIC (Table 1).

**Table 2. Summary of BCR 14 and MBU 11 priority bird species that occur with regularity in the Southwest Nova Scotia bioregion.**

Bird Group	Total	BCR 14	MBU 11	COSEWIC	NS ESA
Landbirds	39 (42%)	39	-	13	10
Shorebirds	19 (20%)	8	14	2	2
Waterbirds	22 (24%)	6	18	2	1
Waterfowl	13 (14%)	7	10	2	1
<b>Total</b>	<b>93</b>	<b>61</b>	<b>42</b>	<b>19</b>	<b>14</b>

**Priority Species by Habitat Type**

Central to the Southwest Nova Scotia Habitat Conservation Strategy is the identification of priority habitat types that host priority species identified within the bioregion. Priority habitats are the ecological systems that the HCS is aiming to conserve. Descriptions and status assessments of each of the priority habitat types are presented in separate summaries, however, the following table provides the number of priority species within various groupings by priority habitat type.

**Table 3. Priority species associated with each conservation priority habitat type in the Southwest Nova Scotia bioregion (see the full list of priority species with coarse-filter habitat associations).**

Priority species group	Beaches/ dunes	Tidal marshes	Tidal flats	Coastal islands	Freshwater wetlands	Riparian/ floodplain systems	Acadian forest mosaic	Grasslands/ agro- ecosystems	Barrens
Birds	11	25	20	10	31	33	34	24	16
Invertebrates	0	0	0	0	6	10	15	4	3
Reptiles	0	0	0	0	3	4	0	0	0
Mammals	0	0	0	0	2	4	11	0	0
Plants	11	16	1	0	58	78	42	22	11
Species at risk	3	5	2	3	23	33	20	8	6
Unique species <sup>1</sup>	1	9	1	0	13	30	35	5	2
<b>Total priority species</b>	<b>26</b>	<b>48</b>	<b>23</b>	<b>12</b>	<b>111</b>	<b>149</b>	<b>114</b>	<b>60</b>	<b>35</b>

**References**

- Environment Canada. 2013. Bird Conservation Strategy for Bird Conservation Region 14 and Marine Biogeographic Units 11 and 12 in Nova Scotia: Atlantic Northern Forest, Scotian Shelf and Bay of Fundy, and Gulf of St. Lawrence. Canadian Wildlife Service, Environment Canada, Sackville, NB.
- Farrow, L. J., and P. Nussey. 2015. Southwest Nova Scotia Habitat Conservation Strategy. Mersey Tobeatic Research Institute, Kempt, NS.
- McAlpine, D. F. & I. M. Smith. 2010. Assessment of Species Diversity in the Atlantic Maritime Ecozone. NRC Research Press Canada.

<sup>1</sup> Species that are unique to that particular coarse-filter habitat type and are not associated with any of the other coarse-filter habitat types, based on literature review.