

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

**Threats to Conservation Priority Habitats and 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 information, please see the final report, Farrow & Nussey 2015.

Threats are the proximate activities or processes that have caused, are causing, or may cause the destruction, degradation, and/or impairment of one or more of the identified conservation priority habitats and the species they host. Threats impact the habitat’s ecological integrity and/or key ecological attributes, and were identified by the SWNS bioregion project team using local expert knowledge, and a review of the literature. Threats identified for BCR 14 and MBU 11 (Environment Canada 2013) were also examined for relevancy to the SWNS bioregion. The threats identified within this Habitat Conservation Strategy are thought to be comprehensive for the bioregion’s priority habitats, though other threats may be revealed through further research or may emerge over time. They were ranked based on their scope, severity, and irreversibility of damage to priority habitats that can reasonably be expected within 10 years given the continuation of current circumstances and management using the Conservation Action Planning Workbook (Low 2003), and were categorized using established international taxonomy (Salafsky *et al.* 2008; IUCN-CMP 2012). Table 1 provides a summary of the threats and their ranks for the SWNS bioregion, and Figures 1 and 2 present the ranked IUCN sub-categories of threats to priority bird species within BCR 14 NS and MBU 11 NS respectively. The overall threat status for the SWNS bioregion is “medium”.

For a description of each threat, as well as a map of their geographic extent within the bioregion (where known), please see the *Habitats, Threats and Species Prioritization* sections of the Southwest Nova Scotia Habitat Conservation Strategy (Farrow & Nussey 2015).

**Table 1. Summary of threats to the Southwest Nova Scotia bioregion conservation priority habitats.**

<b>Very High</b>	The threat is likely to <i>destroy or eliminate</i> the conservation priority	<b>Low</b>	The threat is likely to <i>only slightly impair</i> the conservation priority
<b>High</b>	The threat is likely to <i>seriously degrade</i> the conservation priority	-	The threat’s impact on the conservation priority is <i>negligible</i>
<b>Medium</b>	The threat is likely to <i>moderately degrade</i> the conservation priority	<b>Unknown</b>	The threat’s impact on the conservation priority is <i>unknown</i>

Threats Across Priorities	Beaches/ dunes	Tidal marshes	Tidal flats	Coastal islands	Fresh- water wetlands	Riparian/ floodplain systems	Acadian forest mosaic	Grasslands/ agro- ecosystems	Barrens	Overall threat status
<b>1.1 Cottage &amp; residential development</b>	Medium	Medium	Medium	Medium	Medium	Medium	Low	Low	Medium	Medium
<b>1.3 Beach/recreational development</b>	Medium	-	-	-	-	-	-	-	-	Low
<b>2.1 Annual &amp; perennial non-timber crops</b>	-	Medium	-	-	Medium	Low	-	Medium	-	Medium
<b>2.1 Commercial cranberry production</b>	-	-	-	-	Low	-	-	-	-	Low
<b>2.2 Wood &amp; pulp plantations</b>	-	-	-	-	-	-	Medium	-	-	Low
<b>2.3 Mink farming</b>	-	-	-	-	Low	Low	-	-	-	Low
<b>2.3 Livestock farming &amp; ranching</b>	-	Medium	-	Low	Low	Low	-	Low	-	Low
<b>2.4 Marine shellfish &amp; finfish aquaculture</b>	Medium	Low	Medium	Low	-	-	-	-	-	Medium
<b>3.2 Mining &amp; quarrying</b>	-	-	-	-	-	-	Low	-	Low	Low
<b>3.2 Peat mining</b>	-	-	-	-	Low	-	-	-	-	Low

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3.3 Wind energy production	Low	Low	Low	Low	-	-	Low	-	Low	Low
4.1 Roads & railroads	Low	Medium	Low	-	Low	Low	Medium	-	Low	Medium
4.3 Shipping activity oil spills & discharges	Low	Low	Medium	Low	-	-	-	-	-	Low
5.3 Forest harvesting practices	-	-	-	Low	Medium	Medium	High	-	-	Medium
5.4 Clam & baitworm harvesting	-	-	Low	-	-	-	-	-	-	Low
6.1 Recreational beach use	High	-	-	Low	-	-	-	-	-	Medium
6.1 Off-highway vehicle use	Medium	-	-	Low	Low	Low	Low	-	Low	Low
7.2 Dams & other aquatic barriers	-	High	-	-	Low	Medium	-	-	-	Low
8.1 Invasive European Green Crab	-	Low	High	-	-	-	-	-	-	Medium
8.1 Invasive predatory fish species	-	-	-	-	-	Medium	-	-	-	Low
8.1 Invasive plants	Low	Low	-	Low	Low	Low	Low	-	Low	Low
8.4 Invasive pathogens	-	-	-	-	-	-	Low	-	-	Low
8.2 Problematic native species	Medium	-	-	Medium	Medium	Low	Low	Low	-	Medium
9.1 Household sewage & urban waste water	-	Low	Low	-	Low	Low	-	-	-	Low
9.3 Agricultural & forestry effluents	-	Low	Low	-	Low	Low	Medium	Medium	Low	Medium
9.5 Air pollution & acid precipitation	-	-	-	-	Medium	Medium	Low	-	Low	Medium
11.1 Sea-level rise & coastal erosion	Medium	Medium	Medium	Medium	-	-	-	-	Low	Medium
11.5 Storm-induced coastal erosion	High	Medium	Low	Low	-	-	-	-	-	Medium
Overall threat status for priority habitats	High	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium

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., & P. Nussey. 2015. Southwest Nova Scotia Habitat Conservation Strategy. Mersey Tobeatic Research Institute, Kempt, NS.

International Union for Conservation of Nature (IUCN-CMP). 2012. IUCN-CMP Unified Classification of Direct Threats, Version: 3.2. <http://www.iucnredlist.org/technical-documents/classification-schemes/threats-classification-scheme>.

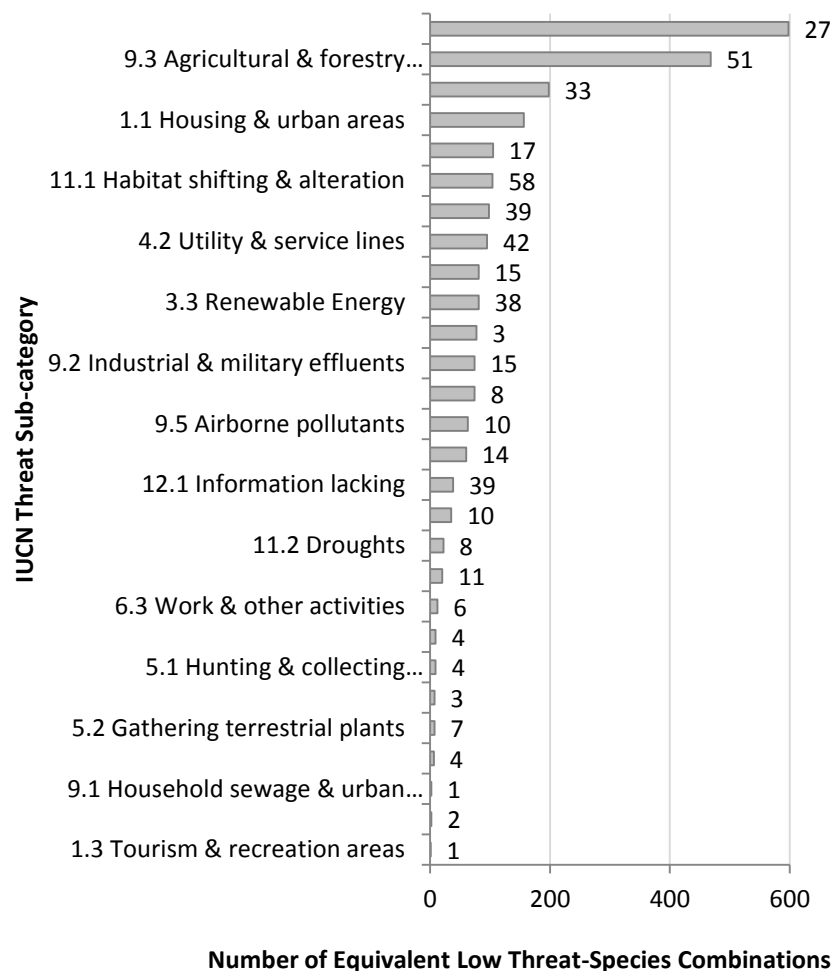
Low, G. 2003. Landscape-Scale Conservation: A Practitioner's Guide. The Nature Conservancy.

Salafsky, N, D. Salzer, J. Ervin, T. Boucher, & W. Ostlie. 2003. Conventions for Defining, Naming, Measuring, Combining, and Mapping Threats in Conservation: An Initial Proposal for a Standard System. Conservation Measures Partnership, Washington, DC.

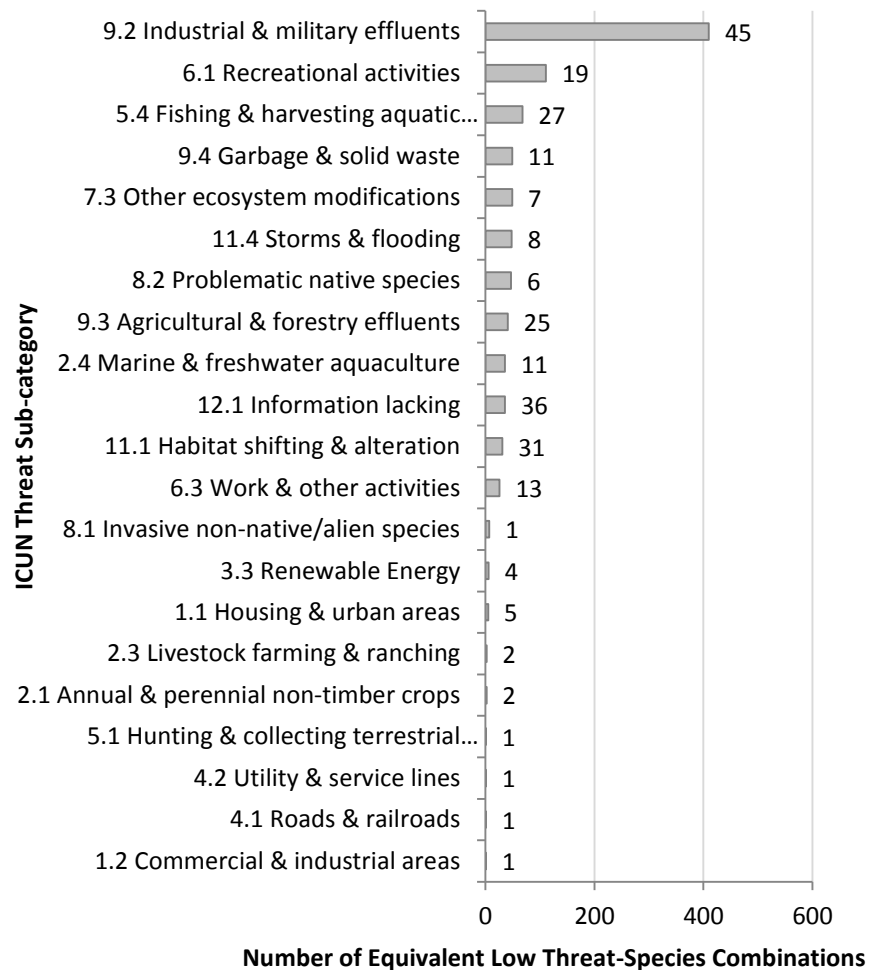
Salafsky, N., D. Salzer, A. J. Stattersfield, C. Hilton-Taylor, R. Neugarten, S. H. M. Butchart, B. Collen, N. Cox, L. L. Master, S. O'Connor, & D. Wilkie. 2008. A standard lexicon for biodiversity conservation: Unified classifications of threats and actions. *Conservation Biology* 22: 897-911.

## Southwest Nova Scotia Habitat Threats

### BCR 14 and MBU 11 NS Threats



**Figure 11.** Ranked IUCN sub-categories of threats to priority bird species within BCR 14 NS based on the number of priority bird species affected (at the end of the bar) and the magnitude of the threats (calculated using an inverse of the 3:5:7 rule; Salaksky 2003). Modified from Environment Canada 2013 by A. R. Benoît.



**Figure 2.** Ranked IUCN sub-categories of threats to priority bird species within MBU 11 NS based on the number of priority bird species affected (at the end of the bar) and the magnitude of the threats (calculated using an inverse of the 3:5:7 rule; Salaksky 2003). Modified from Environment Canada 2013 by A. R. Benoît.