

Research Partners

Dalhousie University
NS Department of Lands and Forestry
Bird Studies Canada
Memorial University of Newfoundland
Mount Saint Vincent University
Port Hawkesbury Paper
along with many other NGOs including
Island Nature Trust and The Nature
Conservancy of Canada,
government agencies, as well as
universities
and students across Atlantic Canada!

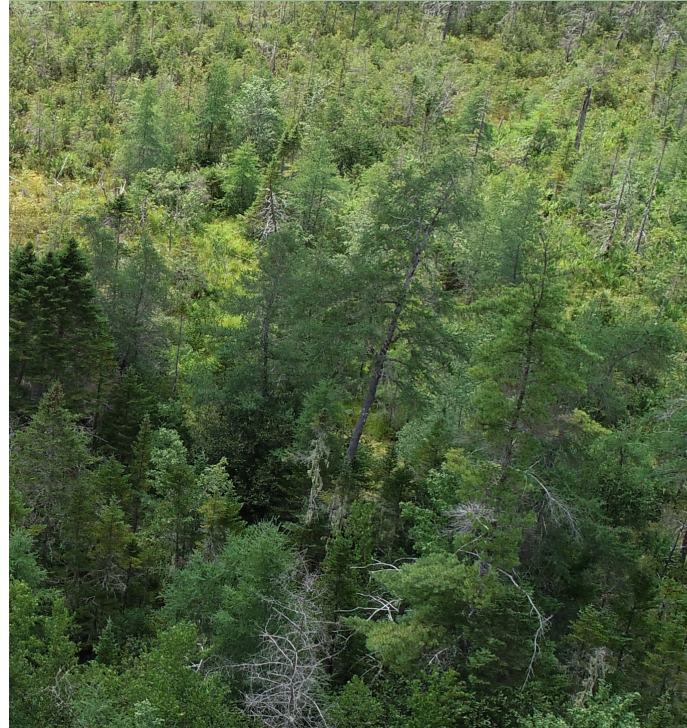


To learn more about forested wetlands in Atlantic Canada, please email: Karen.Harper@dal.ca

Fact sheet created by Morgan Rice

Forested Wetlands

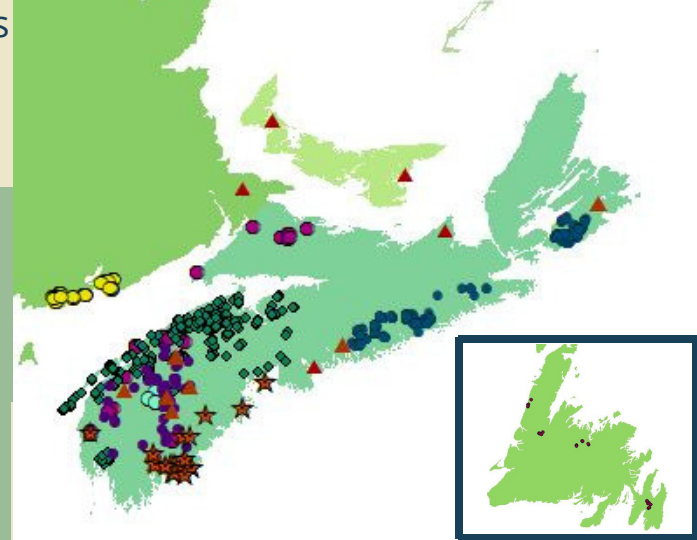
A unique, but poorly understood, ecosystem in Atlantic Canada



Biodiversity and ecosystem functioning of forested wetlands across Atlantic Canada



This multi-institutional project includes **several research studies across Atlantic Canada** from 2016 to 2018.



KEY FINDINGS

1. Significant **carbon sinks**
 - Large C inputs through litterfall
 - Substantially greater C stored in forested wetland soils than in edge or upland forest soils
2. Support **high** bird and lichen **diversity**
 - Support a rich assemblage of breeding birds (**including uncommon and at risk species**)
 - Appear to be biodiversity hotspots relative to upland forests in adjacent landscapes
 - Macrolichen richness and diversity higher in forested swamps than ecotones or upland forest
3. **Habitat** for at-risk species
 - Three species at risk - Canada Warbler, Rusty Blackbird and Olive-sided Flycatcher - associated with forested wetlands
4. **Sensitive** to change
 - Tree establishment in bogs is significantly influenced by microtopography
 - Tree establishment is affected by disturbance to the water regime of the bog
5. **Structural diversity**
 - Vegetation patterns varied for different forested wetlands types
 - Boundaries sometimes demarcated by an abrupt edge of Sphagnum moss cover

What are Forested Wetlands?

Forested Wetlands are unique wetland ecosystems that **combine characteristics of forests and wetlands together**.

Through the ability of some trees to establish themselves in highly saturated soils, this ecosystem functions as both a forest and wetland to provide:

- They play a vital role in **filtering both our water and air** as a forest and wetland.
- They act as a strong **defence against intense storms and floods**.
- They provide **unique habitat** for a diverse number of plants and wildlife.

They are commonly classified as **swamps**, but some are also **fens and bogs**.

However, they have been difficult to classify due to their **complex relationships between vegetation structures and hydrology**.

THREATS

Due to their **dominant canopies and vegetation cover**, their wetland characteristics are often **overlooked** and **mistaken** as being only forests.

This leads to their **vulnerability** to:

