

Wetlands of the Land Between Part 2: Swamps and Marshes

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Continuing from last week's theme, this week we will discuss the remaining two wetland types: swamps and marshes. When you think of a swamp or marsh where does your mind go? Smelly, stinky mud? Black Fly and Horse Fly paradise? Shrek?

Swamps and marshes differ from peatlands (bogs and fens) because generally they have minimal or no accumulation of peat (a dark layer of plant matter that is only partially decomposed). Swamps and marshes have more open water and higher plant diversity than bogs and fens. They provide critical habitat for many wildlife species at different points in their life cycles.

Swamps

Swamps are wooded wetlands, and are defined by having at least 25% tree cover. Swamps often have gently flowing water with pools and channels, and waterlogged soils because they are covered with water for most (if not all) of the year. However, water is shallow enough, or recedes periodically so that certain tree species can grow in the wet and low oxygen soils. Trees you can find in Swamps in southern Ontario include: Silver Maple, Black Ash, Red Maple, Tamarack, Eastern White Cedar and Black Spruce.



A swamp is characterized by having at least 25% cover of trees. This swamp has many Silver Maple trees and some fern species.

Swamps can be found along the edges of rivers, lakes, streams and ponds and are the most common and diverse type of wetland in southern Ontario. Species that you might find in a swamp in the Land Between include: Mink, Great Horned Owl, Pileated Wood Pecker, Wood Frog, and Gray Treefrog. The four turtle species you

might encounter in a swamp are Blanding's Turtles, Painted Turtles, Spotted Turtles and Eastern Musk Turtles (COSEWIC).

Marshes

Unlike swamps, marshes lack trees, and are defined by abundant submerged, emergent and floating aquatic vegetation. Familiar marsh plants include water lilies / lily pads, cattails, duckweed and milfoils. Marshes flood deeper than swamps, but can be found in similar areas – along the edges of rivers, lakes, streams and ponds. Marsh sediments are water logged and high in mineral content, and water is high in oxygen because of so many submerged plants.



Marshes are characterized by submerged, emergent and floating vegetation. Here we see emergent sedges and “lily pads” which could be the leaves from a number of species: Water Lilies, Floating Heart, or Watershield.

Marshes are less common than the other three wetland types in southern Ontario. Despite being less common, many species rely on them for habitat during part of their life cycle. Many frog species lay eggs in marshes because their high amount of aquatic vegetation means lots of food and protection from predators for growing tadpoles who eat algae and small pieces of plant matter. Many bird species rely on marsh habitats for food throughout the year or along their migratory routes. Wildlife you might come across in a marsh

include: Moose, Muskrat, Northern Watersnake, Red Winged Blackbird, Great Blue Heron, Spring Peeper Frog and many more. All seven of the turtle species found in the Land Between can be found in marshes, although some use them much more regularly (COSEWIC). **The turtles that use marsh habitat the most are:**

Blanding's Turtles, Painted Turtles, Spotted Turtles and Eastern Musk Turtles.

In addition to providing important habitat, food sources, and shelter from predators, marshes help to filter out pollutants and extra nutrients that make their way from nearby lands into waterbodies. Because marshes are often found along the edges of waterbodies, their many aquatic plants will capture sediments carried from land runoff before they make it into main waterbodies. These sediments can

contain pollutants and nutrients from fertilizers, pesticides, and other sources. For this reason, marshes can be thought of as natural filtration systems for aquatic ecosystems.

References and additional resources

Ontario Wetland evaluation System, Southern Manual

<https://dr6j45jk9xcmk.cloudfront.net/documents/2685/stdprod-103924.pdf>

Wetland Conservation in Ontario

https://www.ossqa.com/multimedia/2016-03-15-115020-49198/wetland_conservation_in_ontario.pdf

COSEWIC reports for all 7 turtle species found in TLB

<https://speciesregistry.canada.ca/indexen.html#/documents?documentTypeId=18&sortBy=documentTypeSort&sortDirection=asc&pageSize=10&keywords=turtle>