

Mid Subarctic Forest

he Mid Subarctic Forest ecoregion is primarily an inland region, encompassing the flat to

rolling upland plateaus of central and western Labrador.

Unlike many of the more northern ecoregions of Labrador, where large expanses of bare ground are common and vegetation is often limited to low shrubs and heath communities, the Mid Subarctic Forest ecoregion is dominated by moist woodlands. Thick, coarsetextured till (sediment deposited directly by a glacier) and glaciofluvial deposits (sediment deposited by water produced from melting glaciers) cover

fens — also known as ribbed fens —

occur over large areas. The enormous Smallwood Reservoir is situated in the northcentral portion of the region. Encompassing about 6,500 km², it was completed in 1971 to provide water to the Churchill Falls hydro electric project. The reservoir now covers an area that was once lakes, rivers, forests, and vast expanses of wetlands.

> Eskers and drumlins are also common in this region. An esker is a long, snake-like ridge or series of mounds made of sand and gravel deposited by a stream flowing in or under a glacier. A typical drumlin is an egg-shaped hill composed of till that was shaped by a glacial flow.

Many of the drumlins occurring in western Labrador, however, are longer and can have a variety of shapes. Drumlins are frequently separated from each other by pockets of wetlands. some of which were once

streams.

the landscape. String bogs and string **Ecoregion:** An area that has peat — soil consisting of the from rainfall, they are generally

geology, and other features. only does sphagnum moss alternating with numerous within each ecoregion.

peatlands, which are wetlands bogs, and so look more characterized by poor meadow-like. Because bogs drainage and a thick layer of receive most of their nutrients

distinctive and repeating remains of partly decomposed nutrient-poor. Water entering patterns of vegetation and soil plants. Shrubs and mosses are fens, on the other hand, seeps development, which are the common plants in determined and controlled by peatlands — particularly regional climate. Ecoregions sphagnum moss, which acts can be distinguished from like a giant sponge as it soaks each other by their plant up large quantities of water, communities, landscapes, then slowly releases it. Not hummocky vegetation These characteristics, in turn, prevent flooding and erosion, influence the kinds of wildlife but it provides a platform on that can find suitable habitat which other plants can take fens is in the plant cover: string root and grow.

Ecoregion

in from nearby soils and results in a more nutrient-rich habitat.

String bogs and string fens:

Narrow ridges or "strings" of pools. The basic difference between string bogs and string fens contain more sedges and Fens generally have grasses, while string bogs Bogs and fens: Two types of more grasses and sedges than contain more sphagnum moss. Both are common in Labrador.



































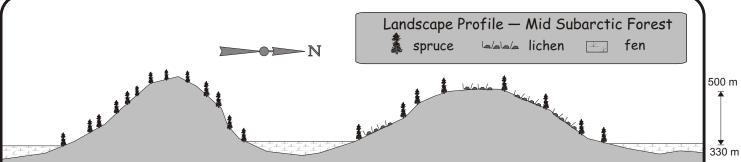












Soil Profile: Like most of Labrador, the formation of soil in this ecoregion is limited by two factors: cold weather, which keeps the land frozen for much of the year, and glaciation, which scoured the land as recently as 10,000 years ago. Soils are or mostly ortho humo-ferric podzols and stony fibrisols, with rocky outcrops throughout.

Geology: Rocks of the Churchill Province underlie this ecoregion in the north, those of the Grenville Province in the south. The older rocks in the Churchill Province are gneisses. The gneisses are overlain in the western part of the ecoregion by a belt of sedimentary and volcanic rocks known as the Labrador Trough. These rocks have been dated at about 1.8 billion years. They host the iron ore mines of western Labrador. The Churchill Provinces gneisses are overlain in the eastern part of this ecoregion by another sequence of sedimentary and volcanic rocks, known as the Seal Lake Group; differential erosion of hard and soft layers in this sequence has given a very distinctive "valley and ridge" topography to the Seal Lake region. The southern part of the ecoregion is underlain by gneisses of the Grenville Province.

Vegetation Profile

Plack spruce, which is tolerant of poorly drained, boggy sites, is the most commonly occurring tree in the Mid Subarctic Forest ecoregion. It is typically found in "lichen woodlands" — open, parklike wooded areas with an understory of light-coloured lichens and shrubs such as Labrador tea and dwarf birch. In moist areas, particularly where bog meets woodland, black spruce forests occur with a rich understory of sphagnum moss.

In the more northern reaches of the ecoregion, wetlands are less common and white spruce, which is better suited to well-drained soils, replaces black spruce. Similarly, on protected slopes where drainage is good, white spruce, as well as balsam fir, grow.

Other tree species found here include larch, which grows

primarily in moist soils bordering bogs, lakes, and streams, and trembling aspen, which reaches its northern limit in this ecoregion. Jack pine, which also occurs here, is not found naturally anywhere else in the province. It normally grows in poor soils and is characterized by a ragged appearance.



Species in Focus: Labrador tea (*Ledum groenlandicum*) is an aromatic shrub that grows to barely a metre in height. Its flowers occur in dense white clusters with protruding stamens, giving it a fuzzy appearance. Like many Labrador flowers, its leaves are thick and curled inward, which protects the plant from wind and cold.

Wildlife Profile

Caribou — primarily from the Red Wine, George River, and Lac Joseph herds — occupy the barrens and woodland areas of this ecoregion. Arctic fox is usually found in barrens, but only near the coast.

Mammals found in the forest and shrub habitats include porcupine, moose, mink, flying squirrel, red-backed vole, masked shrew, woodchuck, snowshoe hare, star-nosed mole, little brown bat, lynx, marten, red squirrel, heather vole, and woodland jumping mouse. The fisher, which prefers forest habitat in the vicinity of water, has extended its range into western Labrador in recent years.

Meadow vole, northern bog lemming, and meadow jumping mouse occupy wetland habitats, while beaver, water shrew, muskrat, and river otter occur in aquatic habitats. Mammals known to move among a variety of habitats within the ecoregion are black bear, least

Species in Focus:
The red-necked phalarope is a small shorebird that nests in this ecoregion in wetland areas that contain scattered ponds. The female can be recognized by her grey back, white throat, and the striking red patch on her neck.



Unlike the vast majority of bird species, the female phalarope is larger and more brightly coloured than the male. She arrives first at the breeding ground and establishes and defends a territory. Once she lays her eggs, she leaves the male to incubate them, as well as to raise the young.

weasel, red fox, short-tailed weasel, and wolf.

The vast majority of birds found in the Mid Subarctic Forest ecoregion breed here, but migrate south for the winter. Exceptions include the willow ptarmigan and raven, both of which are year-round residents.

A large number and variety of birds breed in the forests of this ecoregion. Some characteristic species include spruce grouse, osprey, merlin, great horned owl,

three-toed woodpecker, black-backed woodpecker, gray jay, boreal chickadee, ruby-crowned kinglet, hermit thrush, and fox sparrow.

Tree sparrow, yellowrumped warbler, Wilson's warbler, white-throated sparrow, and northern waterthrush are common

The Mid Subarctic Forest ecoregion is dominated by forest cover. Black spruce is the most common tree species here, and is often found growing in association with *Cladonia* lichens in open, park-like forests known as "lichen woodlands."

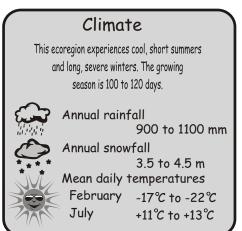
breeders in the shrub/thicket habitats, while rusty blackbird and Lincoln's sparrow can be found nesting in wetlands.

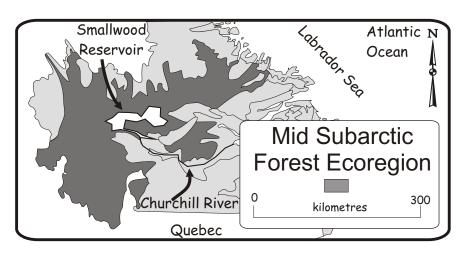
Shorebirds breeding in wetlands include common snipe, greater yellowlegs, least sandpiper, solitary sandpiper, red-necked phalarope, and short-billed dowitcher. Waterfowl known to breed near freshwater are Canada goose, surf scoter, red-breasted merganser, and common loon.

The lakes, rivers, and streams of the ecoregion host arctic char, Atlantic salmon, three-spine stickleback, nine-spine stickleback, brook trout, lake trout, northern pike, rainbow smelt, longnose sucker, and white sucker.

Unlike many of the other ecoregions in the province, the Mid Subarctic Forest has four recorded species of amphibians. The American toad and wood frog are both indigenous to Labrador (they occur naturally and were not introduced). Both the blue-spotted salamander and two-lined salamander are also indigenous to Labrador, but confirmation of their presence in this ecoregion (and elsewhere in Labrador) is based on only one or two reports.







Protected Areas Profile

Duley Lake Provincial Park occurs in this ecoregion, along with the Redfir Lake-Kapitagas Channel Provisional Ecological Reserve and the proposed Lac Joseph-Atikonak Lake Wilderness Reserve.

Focus on "Flying" Mammals

abrador is home to many animals not found on the Island portion of the province, such as the northern flying squirrel. This nocturnal species inhabits coniferous forests across the continent from Labrador to Alaska. The flying squirrel cannot truly fly, but it is an expert glider and has

been recorded gliding 50 metres from the top of a tree to the ground. A loose fold of skin called a "flight membrane" extends from wrist to ankle on both sides of its body: its tail is long and flattened. When preparing to launch itself, it points its head face down, gathers its feet under it, and springs into the air. It then flattens its tail and stretches out its legs, thereby opening the flight membrane and creating a parachute-like effect. By moving its tail and feet, the flying squirrel is able to control the direction and slope of its glide.

Bats are the only mammals that can truly fly. The bat's wing is a layer of skin that extends from the elongated fingers of its hand back to include the legs and tail. The little brown bat is the most common bat in Canada and the only bat species known to Labrador. It is a small bat with long, silky brown hair, an alert little face, small, black eyes (though it's not blind), and large

ears.

The little brown bat's summer days are spent sleeping in a cave, mine shaft, hollow tree, attic, or behind a shutter. Just after sundown it emerges and begins zig-zagging across the evening sky in search of moths and other insects. It occasionally returns to its resting place during the night. All hunting activity ends about a half hour before sunrise.

Young are born in the spring. Nursery colonies occur in caves, buildings, and mine shafts. The female gives birth to a single offspring while hanging by her thumbs. The newborn almost immediately scrambles up the mother's body to nurse, and can remain securely attached to her through the use of clawed thumbs and hind feet while she moves around, including while she flies. After a few days, the young are old enough to be left in the nursery while the mother hunts.



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