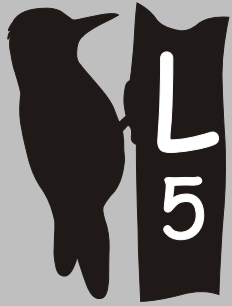


Mid Subarctic Forest



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

rolling upland plateaus of central and western Labrador.

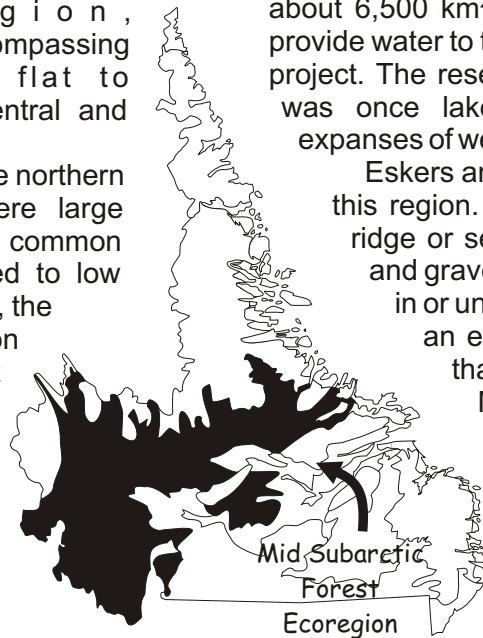
Unlike many of the more northern ecoregions of Labrador, where large expanses of bare ground are common and vegetation is often limited to low shrubs and heath communities, the Mid Subarctic Forest ecoregion is dominated by moist woodlands. Thick, coarse-textured till (sediment deposited directly by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

String bogs and string fens — also known as **ribbed fens** —

occur over large areas. The enormous Smallwood Reservoir is situated in the north-central 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.



Ecoregion: An area that has distinctive and repeating patterns of vegetation and soil development, which are determined and controlled by regional climate. Ecoregions can be distinguished from each other by their plant communities, landscapes, geology, and other features. These characteristics, in turn, influence the kinds of wildlife that can find suitable habitat within each ecoregion.

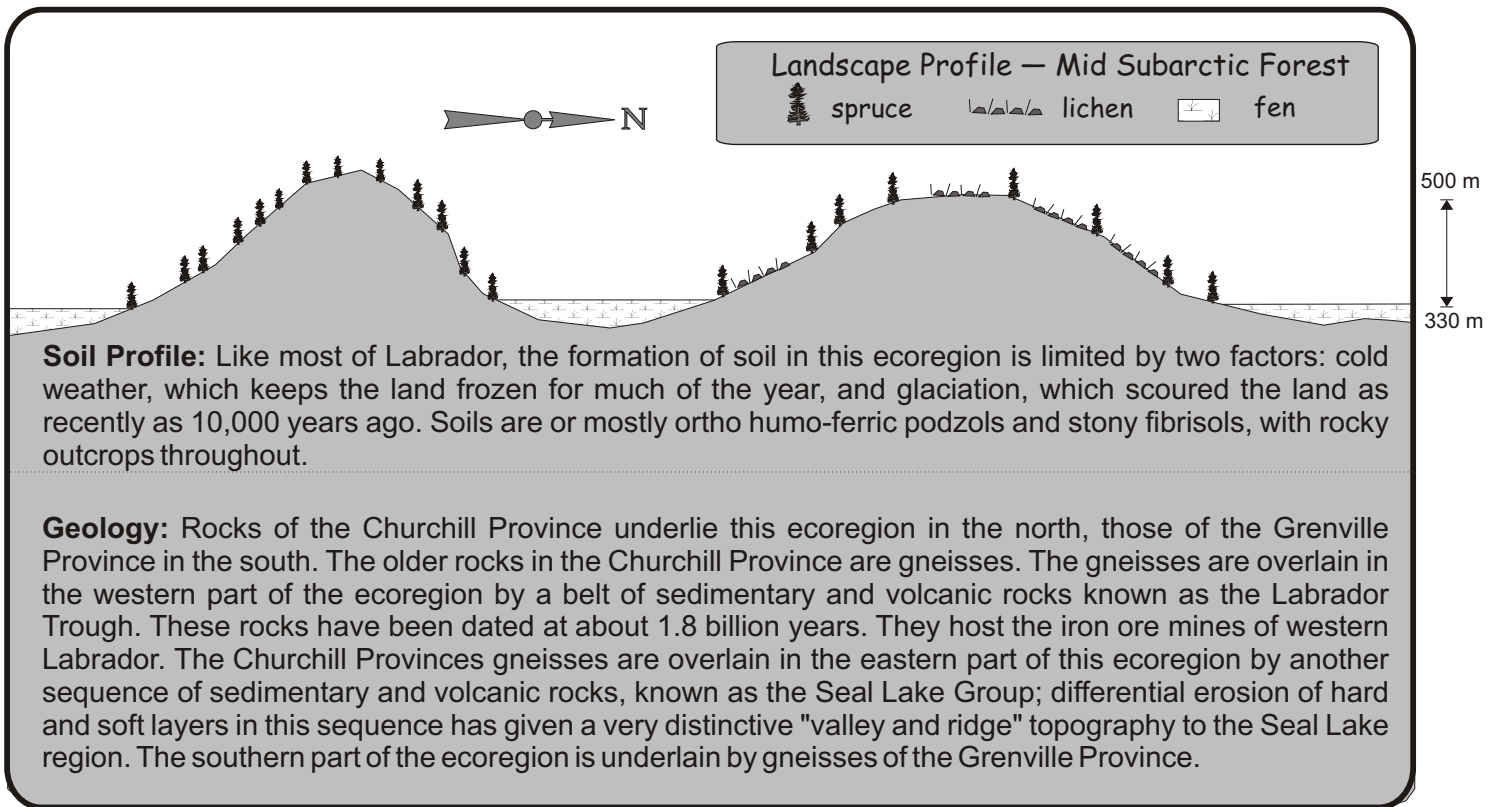
Bogs and fens: Two types of peatlands, which are wetlands characterized by poor drainage and a thick layer of

peat — soil consisting of the remains of partly decomposed plants. Shrubs and mosses are the common plants in peatlands — particularly sphagnum moss, which acts like a giant sponge as it soaks up large quantities of water, then slowly releases it. Not only does sphagnum moss prevent flooding and erosion, but it provides a platform on which other plants can take root and grow.

Fens generally have more grasses and sedges than bogs, and so look more meadow-like. Because bogs receive most of their nutrients

from rainfall, they are generally nutrient-poor. Water entering fens, on the other hand, seeps in from nearby soils and results in a more nutrient-rich habitat.

String bogs and string fens: Narrow ridges or "strings" of hummocky vegetation alternating with numerous pools. The basic difference between string bogs and string fens is in the plant cover: string fens contain more sedges and grasses, while string bogs contain more sphagnum moss. Both are common in Labrador.



Vegetation Profile

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.

Black 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, park-like 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 (also known locally as juniper), which grows



Photo: Todd Boland

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, American marten (known locally as pine 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



Photo: Paul Linegar

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.



Photo: Bruce Mactavish

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.

the ecoregion are black bear, least 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, yellow-rumped warbler, Wilson's warbler, white-throated sparrow, and northern

waterthrush are common 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. 🦎

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.

Protected Areas Profile

Within the Mid Subarctic Forest ecoregion, there are two protected areas, together making up 0.1% of the ecoregion. Duley Lake Provincial Park Reserve, at 6.9 km², protects open lichen woodland. Redfir Lake-Kapitagas Channel Ecological Reserve protects the province's only natural stand of jack pine. At 82 km², the reserve is located in two parcels. The separation of the reserve's two sites is important to the management of the species. In the unfortunate event that one site is destroyed (by disease or infestation, for example), the other may remain healthy and serve as a seed source.

The proposed Lac Joseph-Atikonak Wilderness Reserve will be an important addition in preserving this ecoregion as it will protect the threatened Lac Joseph woodland caribou herd and Labrador's last large undammed ground moraine lakes.

Focus on "Flying" Mammals


Labrador 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

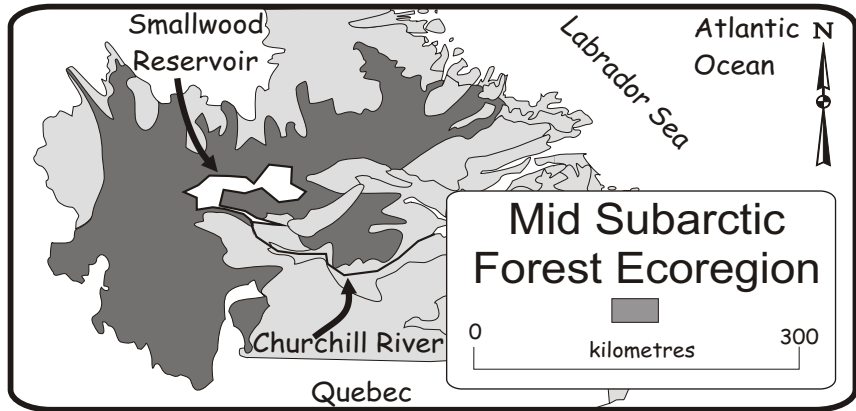
called a flight membrane extends from wrist to ankle on both sides of its body; its tail is long and flattened. When preparing to launch itself, it points its head face down, gathers its feet under it, and springs into the air. It then flattens its tail and stretches out its legs, thereby opening the 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 its legs and tail. The little brown bat is the most common bat in Canada and the only bat 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. 



Climate

This ecoregion experiences cool, short summers and long, severe winters. The growing season is 100 to 120 days.

	Annual rainfall	900 to 1100 mm
	Annual snowfall	3.5 to 4.5 m
	Mean daily temperatures	February -17°C to -22°C July +11°C to +13°C



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