



# Mid Boreal Forest

Located in southeastern Labrador, the Mid Boreal Forest ecoregion covers 18,600 km<sup>2</sup> and is mostly forested. The entire ecoregion ranges in height from 170 to 500 metres above sea level.

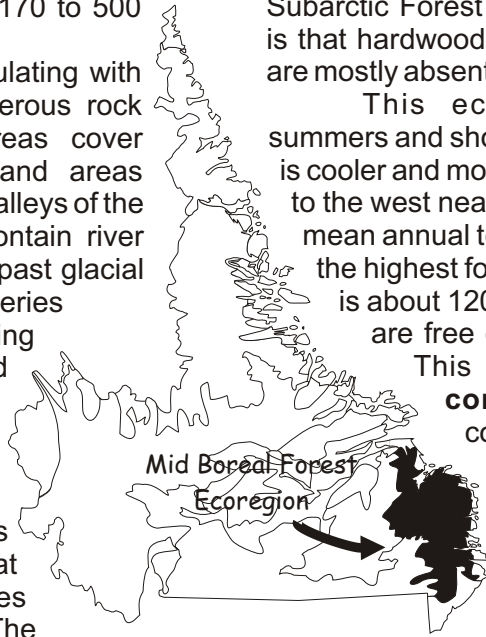
The landscape is undulating with broad river valleys and numerous rock outcrops. Rolling upland areas cover shallow tills, while the lowland areas contain deeper tills. The river valleys of the Eagle and Paradise rivers contain river terraces that are the result of past glacial activity. Eskers — ridges or series of mounds formed by melting glaciers — are scattered throughout. Domed bogs are common in valleys. On upland sites, **kalmia heaths** are common.

The forests of this ecoregion are part of the great **boreal forest** that stretches across northern Canada. The surrounding ecoregions are primarily

barrens, tundra, or contain large areas of peatland. Although forests here aren't as productive and full (that is, plant growth is not as vigorous and there are more open spaces) as those of the High Boreal Forest, they are more productive and full than those of the Low and Mid Subarctic Forest ecoregions. Another difference is that hardwoods are common here, while they are mostly absent from the subarctic forests.

This ecoregion experiences cool summers and short (for Labrador), cold winters. It is cooler and moister than the High Boreal Forest to the west near Lake Melville. Despite this, the mean annual temperature (0 to 2.5 C) is one of the highest for Labrador. The growing season is about 120 days and on average the lakes are free of ice for 200 days of the year.

This ecoregion has more of a **continental climate** than the coastal barrens to the east and a more **maritime climate** than the ecoregions to the west. It is included in the zone of discontinuous **permafrost** that includes much of southern Labrador.



**Soil Profile:** Much of the soil in this ecoregion is acidic. Soils on the upper slopes of the many hills are shallow and well drained. Elsewhere in this ecoregion soils are shallow and poorly drained, which has led to the development of peatlands.

**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.

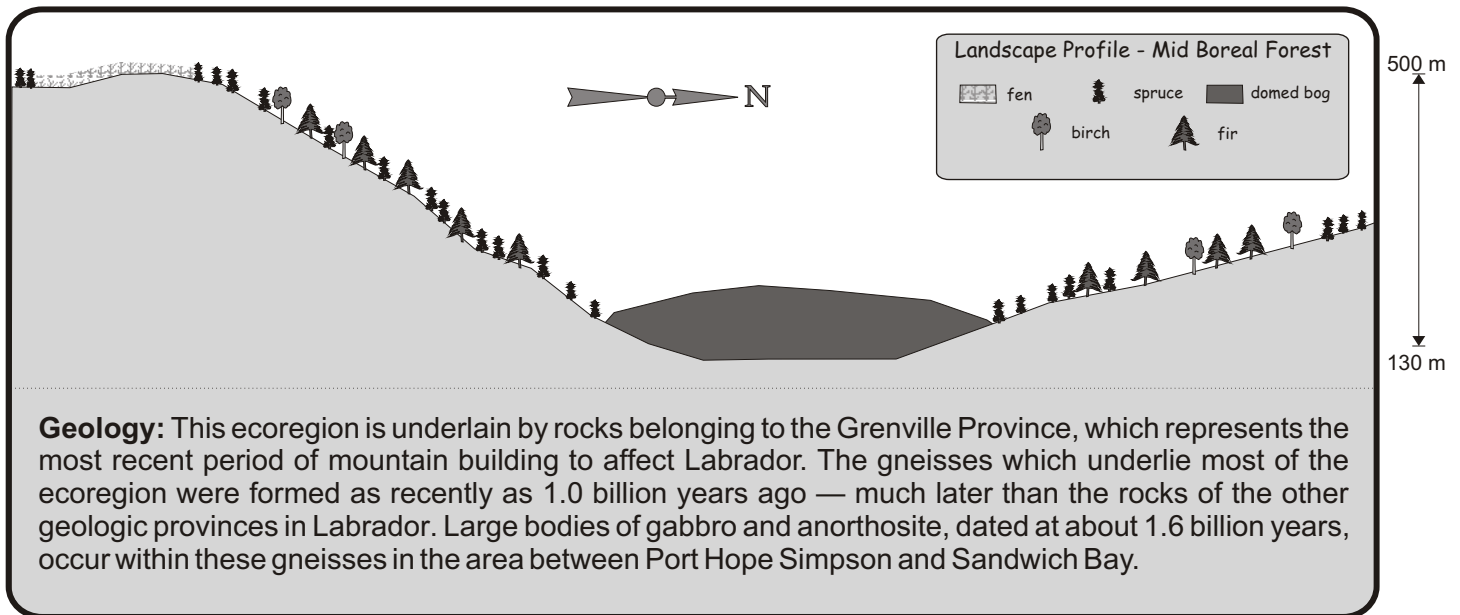
**Kalmia heath:** Barrens found in southern Labrador in sheltered, inland sites and dominated by dwarf shrubs such as sheep laurel, which belongs to the genus, *Kalmia*.

**Boreal forest:** The mainly coniferous forest found in northern latitudes, which extends in a band around the globe, covering large portions of the northern temperate zones of North America, Europe, and Asia.

**Continental climate:** Climate resulting from a geographic location in the interior of a landmass, which reduces the modifying effects of the ocean. This leads to colder winters and warmer summers than areas that have a similar latitude but are close to a large body of water.

**Maritime climate:** Climate resulting from a geographic location close to a large body of water. This leads to cool summers, mild winters, and a high level of fog, storms, and precipitation.

**Permafrost:** Areas where the ground is frozen throughout the year. A “continuous permafrost zone” is where permafrost is present without interruption; a “discontinuous permafrost zone” is where it occurs only in patches.



## Vegetation Profile

The forests here are not as productive (trees don't grow as fast, and are smaller and not as close together) as those of the High Boreal Forest, but are more productive than other ecoregions of Labrador. Balsam fir and black spruce are the most common vegetation cover. Hardwood species such as white birch and trembling aspen also occur. The upper slopes of the many hills found here are dominated by black spruce forests with a feathermoss floor covering. Midway up these slopes where there is seepage and wet soils, forests are found containing black spruce, balsam fir, and white birch with a rich floor covering of herbs.

Evidence of both recent and past forest fire activity can be found throughout this region. However, regeneration after these fires is not always complete, and lichen-dominated woodlands frequently replace the black spruce/feathermoss forests on well-drained sites. On moist slopes after a fire, white birch and trembling aspen are often more abundant. The rocky outcrops of exposed bedrock are partially

covered by dense black spruce scrub. Clearings are usually characterized by lichens and mosses.

Domed bogs occur in valleys. These bogs are the principal peatland of this region with peat accumulations of four to nine metres deep. They are composed mostly of sphagnum and heath mosses. They also

include plants such as the pitcher plant, round-leaved sundew, bog rosemary, bog laurel, and Labrador tea.

Kalmia heaths form on some of the more exposed highland areas. These areas support plants such as sheep laurel, Labrador tea, and lowland blueberry.

### Species in Focus:

The round-leaved sundew (*Drosera rotundifolia*) is a small, insectivorous plant found in bogs. The small, round leaves are covered with reddish hairs that produce a sweet-smelling sticky juice, which attracts insects. Once an insect becomes stuck, these hairs bend over and pin the insect down. The insect is then digested by enzymes in the plant's leaves.



Photo: George Draskoy

## Wildlife Profile

A large number of mammals are known to occur in the forests of this ecoregion, such as moose, porcupine, lynx, little brown bat, flying squirrel, and snowshoe hare. Caribou and northern bog lemming are both characteristic of the barrens. The black bear, red fox, short-tailed weasel, and wolf are examples of mammals common in all habitats. The beaver, muskrat, water shrew, and river otter occur near rivers, ponds, and lakes.

Most of the birds found in this ecoregion are those typically found in forested habitat, such as blackpoll warbler, hermit thrush, northern flicker, yellow-bellied flycatcher, boreal chickadee, fox sparrow, and white-throated sparrow. Also found in these forests is the northern hawk owl — an owl named for its hawk-like flight, and habit of hunting and perching openly at the tops of trees during the day.

Birds common to aquatic habitats are greater yellowlegs, common snipe, belted kingfisher, Canada goose, and red-breasted merganser. Also found here is the red-necked phalarope. Phalaropes are equipped with lobed toes and are the only shorebirds to spend a lot of time swimming. They often spin in small circles on the water, stirring up food from the bottom on which to feed.

The extensive system of rivers, lakes, and ponds is home to many species of fish. The most common ones are arctic char, Atlantic salmon, three-spine and nine-spine sticklebacks, brook trout, rainbow smelt, longnose sucker, white sucker, and northern pike. The American toad and the northern leopard frog occur in this ecoregion. **W**



Photo: Paul Linegar

**Species in Focus:** The gray jay belongs to the Corvids, a family of birds that includes the crow, magpie, and raven. A forest resident, the gray jay can be recognized by its fluffy gray body and white head with a dark cap. It is curious and bold, and is a common visitor to picnic sites and campgrounds where it feeds on scraps. Human noises in the woods usually result in the arrival of several individuals, who glide silently to nearby branches or perch at the end of picnic tables, ready to share food and fly off with anything else of interest.

**Focus on the Meadow Jumping Mouse:** The meadow jumping mouse is found in central and southern Labrador near wet meadows and shrubby wetlands, and along stream banks. It is a small, slim mouse with an extremely long, wire-like tail, an olive-brown back, and white belly. It usually moves in small hops, but when alarmed it can bound off in a series of erratic leaps about a metre long, using its long tail for balance. Jumping mice are primarily seed eaters, but will also eat berries and insects.



Photo: Ian Goudie

Domed bogs are a common peatland in the Mid Boreal Forest. They are often found in valleys and can have peat layers up to nine metres deep.

## Climate

This ecoregion experiences cool to warm summers and short cold winters. The growing season is 120 - 140 days.



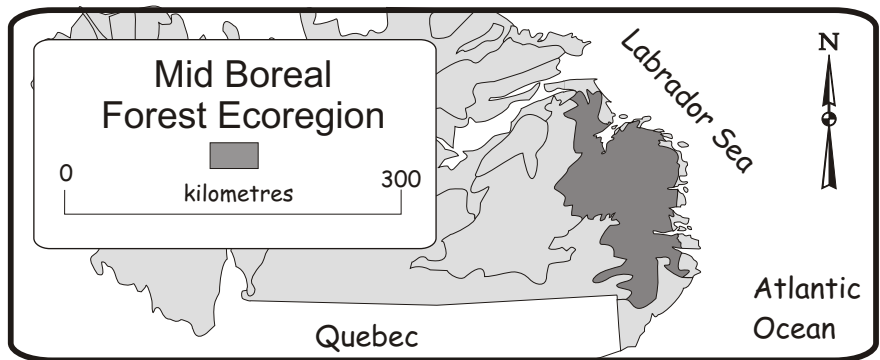
Annual rainfall  
1000 to 1300 mm



Annual snowfall  
4.0 to 5.0 m



Mean daily temperatures  
February -12°C to -15°C  
July +12°C to +13°C



## Protected Areas Profile

There are no protected areas currently located in this ecoregion. However, part of the ecoregion falls within the proposed Mealy Mountains National Park.

## Focus on Wolverine

The wolverine has a holarctic distribution — that is, it is distributed across the northern, or arctic, regions of the world. Originally, it was found mainly in boreal forests, but it now ranges widely throughout tundra habitat. While its population is secure in northern and western Canada, the

wolverine is an endangered species in eastern Canada. It never lived on the island of Newfoundland, and though it was once found throughout the forests of Labrador, it is now very rare.


The wolverine is a heavily built animal about the size of a fat spaniel or bear cub. It has short legs and large, bear-like paws with five claws that make it an excellent tree climber — it sometimes uses the lower branches of trees to drop onto the back of prey. The fur is long and dark brown, with two pale buff stripes that sweep from the shoulders to the base of the tail. Wolverines have powerful jaws and massive teeth that allow them to easily crush bones and sinew.

Wolverines eat a wide range of food items, from berries and roots to small game such as mice and fish. Though they may kill larger prey such as caribou, they are primarily scavengers — they follow caribou herds and eat the carcasses left by wolves and bears.

The wolverine's decline is

not well understood. Because individual territories are vast, with one animal occupying up to 1,000 km<sup>2</sup>, it is an animal that has always occurred in low densities. In the early 1900s Labrador caribou — primarily the George River herd — experienced a serious decline. It is possible that this decline in caribou resulted in a similar decline in wolverine. However, while caribou numbers have increased since then, wolverine numbers have not.

Trapping has certainly played a role. Wolverine fur is valued as trim on parkas. And because they are scavengers and successful at robbing traps, trappers consider wolverines a nuisance.

The last "confirmed" report of a wolverine in Labrador was in the 50s, although an "unconfirmed" report is made every two to three years. A confirmed report is one which is supported by a photograph, fur sample, or positively identified tracks. 



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