

Northern Peninsula Forest Eastern Long Range subregion



More than 8,000 km² of the island of Newfoundland's Great Northern Peninsula belong to the Northern Peninsula Forest

ecoregion. Covering much of the peninsula's coastal areas, it is bordered by the Strait of Belle Isle Barrens ecoregion to the north, and the Western and Central Newfoundland Forest ecoregions to the south and east. As well, this ecoregion almost completely surrounds the northern part of the Long Range Barrens ecoregion, which is located on the peninsula's central highlands.

The Eastern Long Range subregion covers the east coast area of the Northern Peninsula, from Canada Bay south to Adies Pond, near the Humber river. This long narrow stretch of land lies almost completely between the cold North Atlantic Ocean and the interior highland plateau of the Northern Peninsula. The southern portion, however, is flanked on the east and south by the vast expanse of the interior of the Island, which affords this section some shelter from cold winds off the ocean.


The Eastern Long Range subregion is mostly forested. Its terrain ranges from sea level to 450 metres in altitude, and includes much of the eastern slopes of the Long Range Mountains. The forest cover here survives at a much higher altitude than in other subregions. This is because the trees are not as exposed as they are in the western and northern parts of the Northern Peninsula Forest ecoregion. Still, as one travels north along the east coast and the land becomes

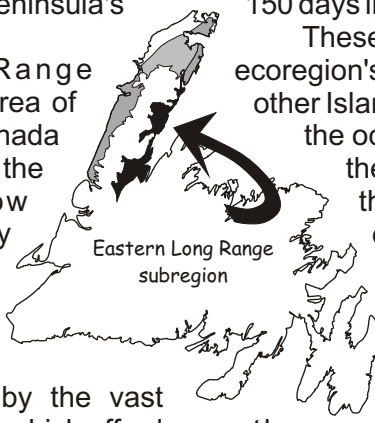
more exposed to the North Atlantic, the forest does begin to retreat and become less productive. These forests belong to the great boreal forest — a mostly coniferous forest that prevails over much of the northern latitudes of North America, Europe, and Asia.

The Northern Peninsula Forest is one of the coldest ecoregions on the Island. Its short cool summers and long cold winters give its subregions the shortest growing seasons on the Island — in fact, the shortest growing seasons of any forested ecoregion in the entire province. This growing season is highly variable, ranging from 150 days in the south to 110 days in the north.

These cold conditions are the result of the ecoregion's northern location compared to other Island ecoregions, and to its exposure to the ocean's cooling influences. No part of the ecoregion is more than 50 km from the sea, so it doesn't experience the dry cold winters and hot summers that occur in the more inland areas of Newfoundland such as the Central Newfoundland Forest.

The Northern Peninsula Forest is generally drier than southern ecoregions because it has less precipitation than most. However, its cool summers also provide less opportunity for moisture to evaporate from the soil. As a result, the moisture deficiencies that occur in the Central Newfoundland Forest are absent here.

This ecoregion marks an important, climate-related change in the vegetation patterns on the Island: many species reach their northern limits just south of this ecoregion. This is mainly because colder summers and a shorter growing season prevent the growth of many species that are common in southern forests. 



ECOREGION
Forest 
Barren 
Tundra 
Bog 

NF

- 1 
- 2 
- 3 
- 4 
- 5 
- 6 
- 7 
- 8 
- 9 
- LAB
- 1 
- 2 
- 3 
- 4 
- 5 
- 6 
- 7 
- 8 
- 9 
- 10 

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

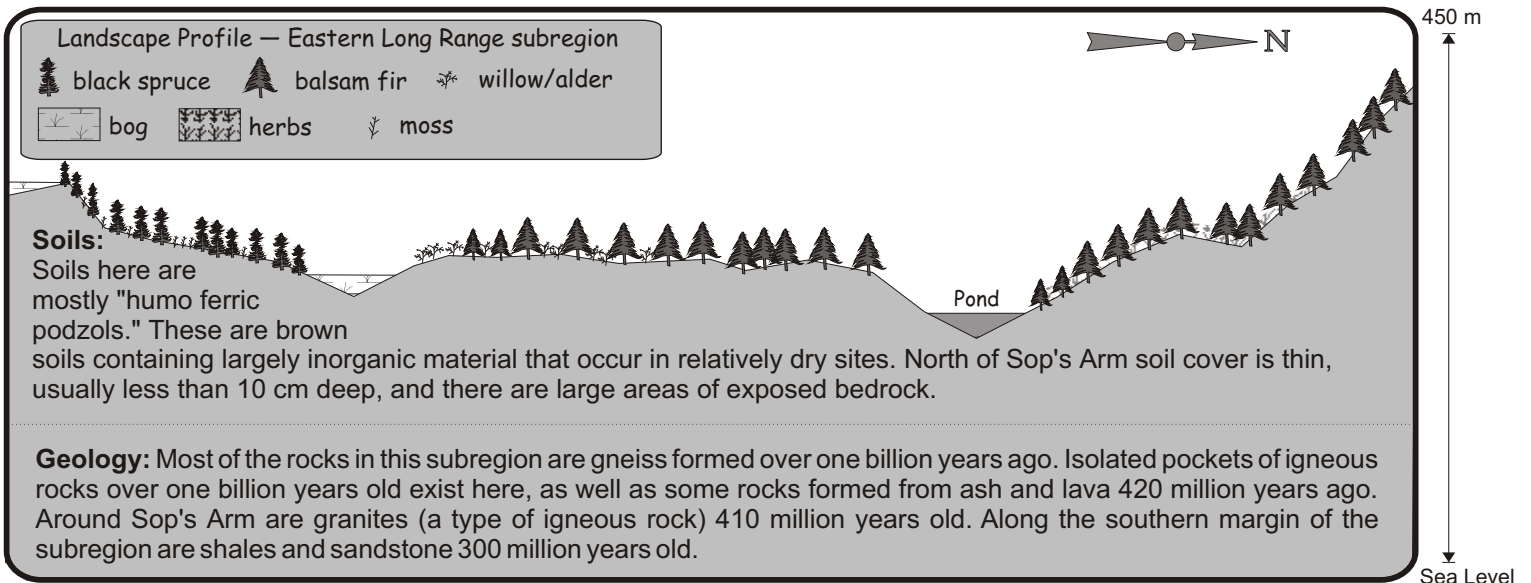
kinds of wildlife that can find suitable habitat within each ecoregion.

Empetrum heath: Barrens found throughout the Island on exposed coastal headlands and inland ridges at altitudes approaching the treeline. Empetrum heath is dominated by carpets of black or pink crowberry,

which belong to the genus *Empetrum*.

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

Check your public library for a full set (36) of these booklets: one introductory document and one for each of the 35 ecoregions and subregions in the province. For more information about the series see page 4.



Vegetation Profile

The Eastern Long Range subregion is covered by extensive and moderately open forests, where trees do not grow as close together as they do in southern forest ecoregions. The open spaces allow sunlight to reach much of the forest floor. There is little forest fire history, and balsam fir is the dominant species, except at higher altitudes where black spruce becomes more common.

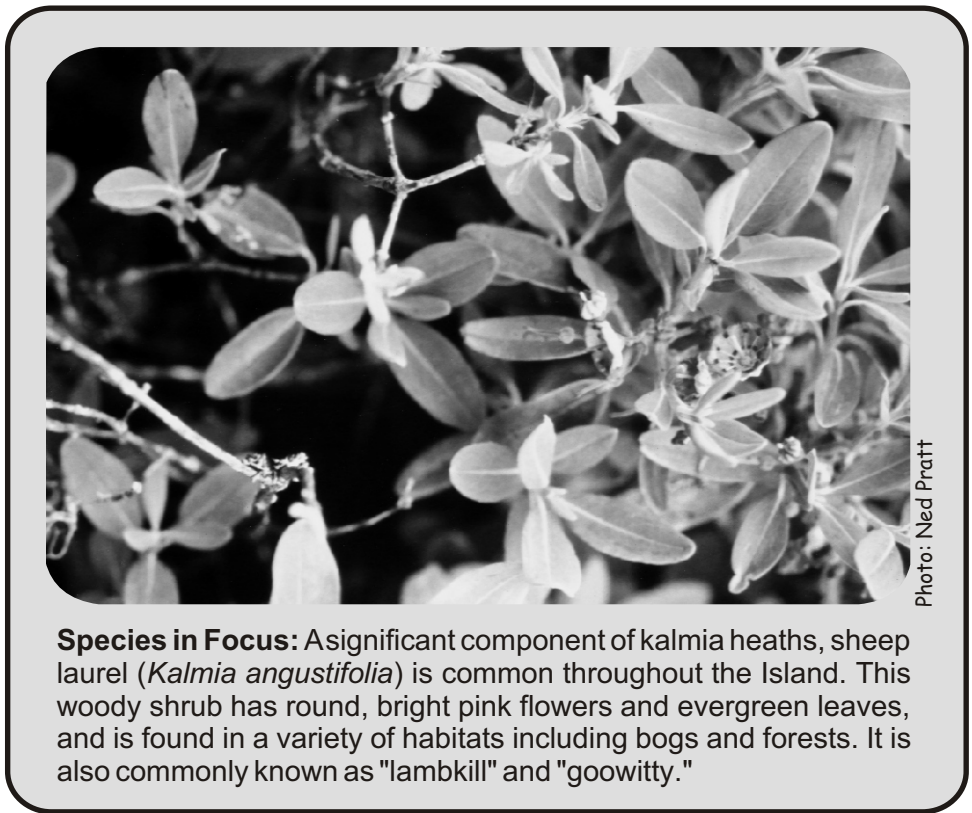
In other areas where fires frequently occur, such as the Central Newfoundland Forest, many colonizing species such as birch and aspen form significant portions of the forest. Since this subregion experiences few such disturbances, there is little opportunity for these species to establish themselves.

The forests of this ecoregion differ most notably from those in more southern regions, however, by the absence of a number of species. The most dramatic changes in plants species can be linked directly to the changes in climate as one travels from south to north. For example, white pine, red maple,

trembling aspen, rhodora, mountain holly, and about 100 other species of plants that are frequent in the Island's other forests can be found no farther north than the southern edges of the Eastern Long Range subregion. As well, the speckled alder swamps found in rich, wet soils farther south are replaced here by mountain alder and/or willow thickets.

Empetrum heaths are

common near the coast. On these open, exposed areas species such as black crowberry, pink crowberry, alpine bilberry, partridgeberry, common juniper, bog goldenrod, heath grass, and caribou lichen grow. Farther inland, in more sheltered locations, **kalmia heaths** have formed, where sheep laurel, wild raisin, Labrador tea, a variety of mosses, and caribou lichen can be found.



Wildlife Profile


Mammals known to occur in the Eastern Long Range subregion are moose, lynx, mink, snowshoe hare, black bear, red fox, beaver, muskrat, otter, and caribou.

Caribou found here are members of the Northern Peninsula herd; they occur both in this subregion and in the Long Range Barrens ecoregion to the west. During the winter, members of the Humber herd, whose summer habitat is in the Long Range Barrens and Coastal Plain subregions, can also be seen here.

Many forest bird species occurring throughout the island of Newfoundland are also found here, such as ruffed grouse, black-capped chickadee, boreal chickadee, ruby-crowned kinglet, fox sparrow, junco, white-throated sparrow, yellow-bellied flycatcher, blackpoll warbler, yellow-rumped warbler, and northern waterthrush.

A variety of thrushes are also at home in these forests, including the Swainson's, hermit, and gray-cheeked thrushes.

Bald eagles inhabit coastal sites, while in the barrens and shrublands, willow ptarmigan, American pipit, horned lark, swamp sparrow, mourning warbler, Wilson's warbler, and yellow warbler can occur.

The rivers and lakes of the Eastern Long Range subregion are home to three-spine stickleback, nine-spine stickleback, Atlantic salmon, brook trout, rainbow smelt, and American eel. 

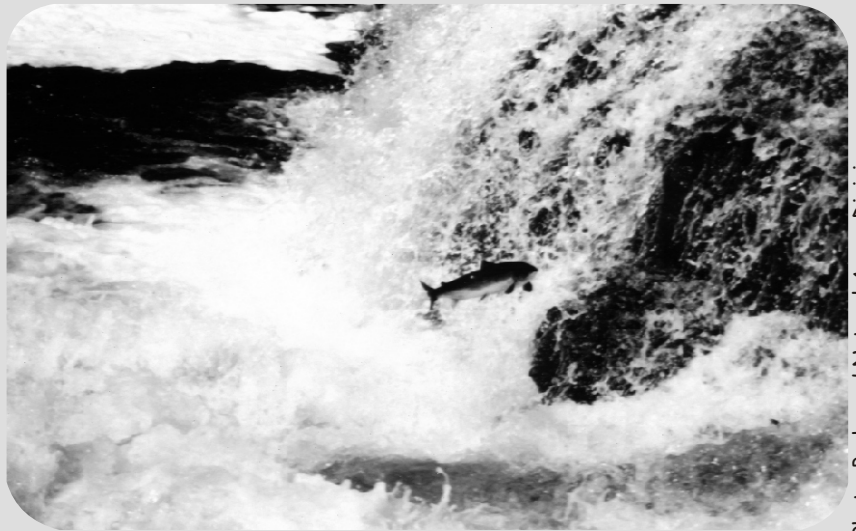


Photo: Parks and Natural Areas Division

Species in Focus: Muscular Atlantic salmon can leap over seemingly insurmountable obstacles and distances on their way upstream to spawn. In this subregion, these powerful fish begin their life cycle as small fry in shallow upriver recesses, and finally reach adulthood in the vast expanse of the Atlantic Ocean. They return to the same river to spawn as their parents did before them. A powerful fish, the salmon is able to navigate waterfalls and shallows as it travels against the current. Though they are built for endurance, many spend their last efforts on this journey to their spawning grounds. Salmon in rivers such as the Main, which starts high in the Long Range Mountains and empties near Sop's Arm in White Bay, attract anglers from all over the world.



Photo: B. Pirsent

Balsam fir and black spruce forests grow on the eastern slopes of the Long Range Mountains, but other tree species common to fir and spruce forests elsewhere on the Island do not. This is mainly due to the colder, more northern climate.

Protected Areas Profile

There are no protected areas in this subregion. However, Main River has been nominated to the Canadian Heritage River System (like the Bay du Nord River in the Maritime Barrens ecoregion and other key rivers in Canada). Heritage river status would give national recognition to Main River and would provide excellent recreational opportunities. Unfortunately, it would afford little protection to the river, and would not provide subregion representation.

Focus on Old Growth Forests

Much of the forests on the east side of the Great Northern Peninsula are, unlike the vast majority of Newfoundland's forests, true "old-growth boreal forests." This means they have not experienced large-scale disturbances such as forest fire, logging, or insect infestations, which often result in new forests that are made up of trees the same age and same height. Overall, there is less diversity in such forests.

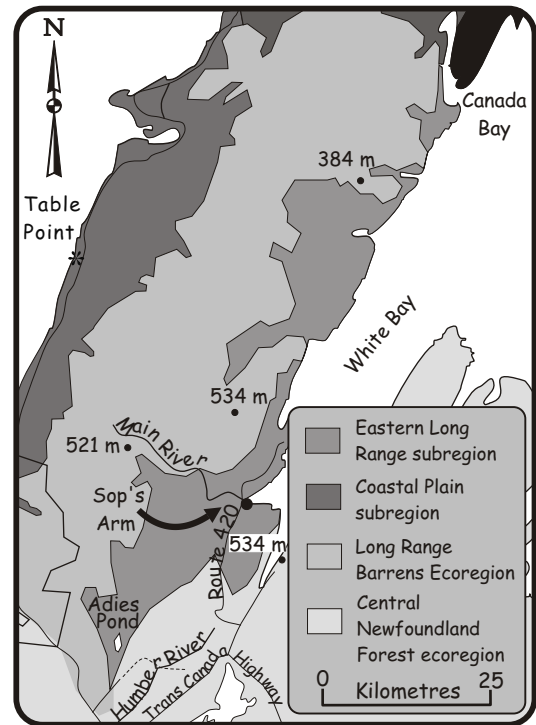
In contrast, old-growth forests are characterized by both a multi-age and multi-storied structure. When re-growth occurs in

these forests, it is in small, scattered pockets, rather than over the vast areas that follow a forest fire, for example. There are young trees in old-growth forests, as well as some extremely old ones. In fact, in the forests of the Main River watershed most of the trees exceed 160 years, while balsam fir and black spruce over 230 years old are not uncommon.

With varying heights and ages of trees, along with dead standing trees and large accumulations of woody debris, old-growth forests clearly provide a wider variety of habitat types than do young, or managed, forests. This results in greater biodiversity — that is, a greater variety of animal and plant species.

In Sweden, there has been a gradual change from old-growth forests to managed forests over the past two centuries. This has put about 600 boreal forest species at risk. As habitat diversity has decreased in the Swedish forests, so has species diversity.




The east side of the Great Northern Peninsula, from the Main River in the Eastern Long Range subregion north to the Cloud River, currently supports extensive old-growth forests that are unique for the Island. The survival of these special forests, as well as the biodiversity that they support, depends on the



establishment and management of protected areas free from logging, hydro electric projects, and mining — activities that could result in their irreversible loss. ❖

Climate

The Northern Peninsula Forest ecoregion experiences long cold winters and short cool summers, and its growing season (110 to 150 days) is the shortest of any forested ecoregion on the Island.

	Annual rainfall 1300 mm - 1500 mm
	Annual snowfall 3-3.5 m
	Mean daily temperatures February -8°C to -13°C July +13°C to +15°C



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