

Population: 4,000,000  
Surface Area: 2,363,825 km²

# NORTHERN FORESTS

This ecological region is broad and crescent-shaped, extending from northern Saskatchewan east to Newfoundland and south to Pennsylvania—lying to the north of the Eastern Temperate Forests region. It is distinguished by extensive boreal forests and a high density of lakes situated on the Canadian Shield. Despite having many urban areas, highways, railways, roads and airports, much of this ecological region remains a relative wilderness. With a population of 4 million, this is a core area for forest and mining activities. Commercial fishing is extensive on its east coast.



Photo: Ed Wiken

## Physical setting

This region is associated with hilly terrain. Precambrian granitic bedrock outcrops are interspersed with shallow-to-deep deposits of moraine. The bedrock of the Canadian Shield is among the oldest on Earth, having been formed between 2.5 and 3.6 billion years ago. Morainal deposits date from the retreat of the last glaciers, which took place 10,000 to 12,000 years ago. Some fluvial material (including numerous eskers) and colluvium are present. Soils derived from these materials are generally coarse-textured and nutrient-poor. Limited areas of fine-textured silts and clays occur. Peatlands are extensive in central Manitoba, northwest Ontario, northern Minnesota and Newfoundland. The landscape is dotted with numerous lakes. The ecological region includes the headwaters of numerous large drainage basin systems.

The climate is characterized by long, cold winters and short, warm summers. The continental climate is influenced by maritime conditions in coastal areas and by cold arctic air masses from the north. The mean annual temperature ranges between −4°C in northern Saskatchewan to 5.5°C in the Avalon Peninsula of Newfoundland. Mean summer temperatures range between 11°C to 18°C. Mean winter temperatures range between −20.5°C in the west to −1°C in the east. Mean annual precipitation varies from 400 mm in northern Saskatchewan to 1,000 mm in eastern Quebec and Labrador. The maritime influence on Newfoundland results in a higher level of precipitation, ranging between 900-1600 mm. The Great Lakes have a moderating effect on the climate of adjacent lands, warming them in winter and cooling them in summer.

## Biological setting

Over 80 percent forested, the ecological region generally supports closed stands of conifers, largely white and black spruce, jack pine, balsam fir and tamarack. Towards the south and the Maritimes, there is a wider distribution of white birch, trembling aspen, balsam poplar and white and red pine, sugar maple, beech, red spruce and various species of oak. Areas of shallow soils and exposed bedrock are common and tend to be covered with a range of plant communities, dominated by lichens, shrubs and forbs.

Characteristic mammals include woodland caribou, white-tailed deer, moose, black bear, raccoon, marten, fisher, striped skunk, lynx, bobcat and eastern chipmunk. Representative birds include boreal and great horned owl, blue jay and evening grosbeak.

## Human activities

Aboriginal peoples were the sole human dwellers within this ecological region until some 400 years ago when Europeans entered the coastal bays and the Gulf of St. Lawrence to explore and search for furs. In subsequent years, coastal towns and cities were developed for military or commercial fishing purposes. Inland trading posts were established as the fur trade expanded. As the inherent timber and mining resources of the Canadian Shield became evident, exploitation followed and mining- and forestry-based towns became established throughout the region. Today, forestry, mining and the coastal fishery remain major economic pursuits. In addition, hydroelectric power and tourism have blossomed as key economic activities. Agriculture is locally important, involving activities such as dairy and vegetable farming. Orchards are prevalent in local valleys, such as the Annapolis Valley of Nova Scotia, where the soil quality and micro-climate are suitable. The total population of the ecological region is 4 million. Almost 60 percent live in larger urban centres, including St. John’s, Halifax, Bangor, Sudbury, Thunder Bay, Sault Ste. Marie and Duluth

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Photo: Ed Wiken

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Photo: Douglas Kirk

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Photo: Ed Wiken

1 A typical vista in the Northern Forests.

2 Fall colors in Nova Scotia.

3 Vegetable and dairy farming are limited but important.

4 A red pine plantation on a clear-cut area in northern Minnesota.

5 Fishing boats anchored near Lunenburg, Nova Scotia.