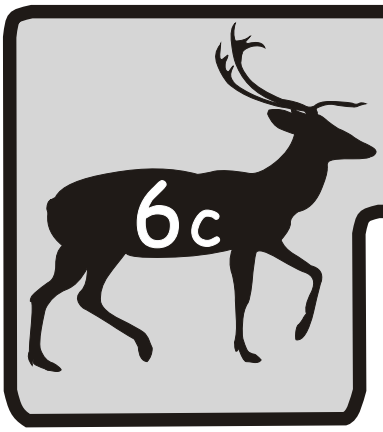
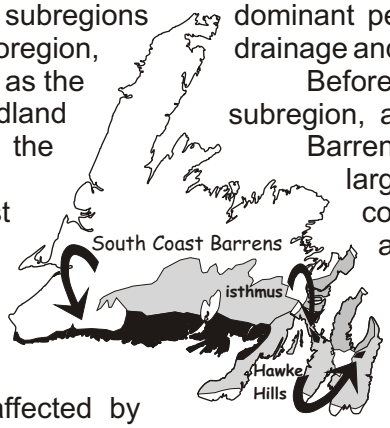


Maritime Barrens

South Coast Barrens subregion

The South Coast Barrens, as its name implies, is characterized by extensive **barrens** along the south coast of the Island of Newfoundland, from the southwestern tip east to the Burin Peninsula. One of four subregions making up the Maritime Barrens ecoregion, it also includes highland areas such as the isthmus between central Newfoundland and the Avalon Peninsula, and the Hawke Hills.



Summers in the South Coast Barrens are typically cool, marked by lots of fog and strong southerly winds; the winters, however, are mild.

The topography of the South Coast Barrens has been affected by glacial activity in the last 10,000 years. Most of the area is covered by gently rolling **ground moraine**, although areas of exposed bedrock are common. The unique hummocky terrain near Burgeo was formed by the deposits of till left by a melting glacier.

Forested areas in the South Coast Barrens are even scarcer than in the two more northerly subregions of this ecoregion, due to more fog and the lower summer temperatures that come with prevailing winds off the ocean. In general, wherever there are sheltered coves, there are trees. A scattering of yellow birch, which favours moist woodlands, sets this subregion apart from its northern subregion counterparts. **Slope** and **basin bogs**, and **fens,** are the dominant peatlands, which reflects the poor drainage and wet climate of this ecoregion.

Before the arrival of Europeans, this subregion, as well as most of the Maritime Barrens, was covered by forest. The large expanses of open barrens so common now are due to the cutting and widespread fires that occurred following European colonization. Forest patches that escaped fire exist primarily in protected valleys and on some hilltops and steep slopes. The general reduction in tree seeds by fire, the thinness of the soil layer, and climatic conditions (strong winds, lack of protective snow cover, and frequent fog) allowed time for competitive dwarf shrub species to invade and dominate the burnt-over areas. As a result, much of this region is today characterized by barrens.

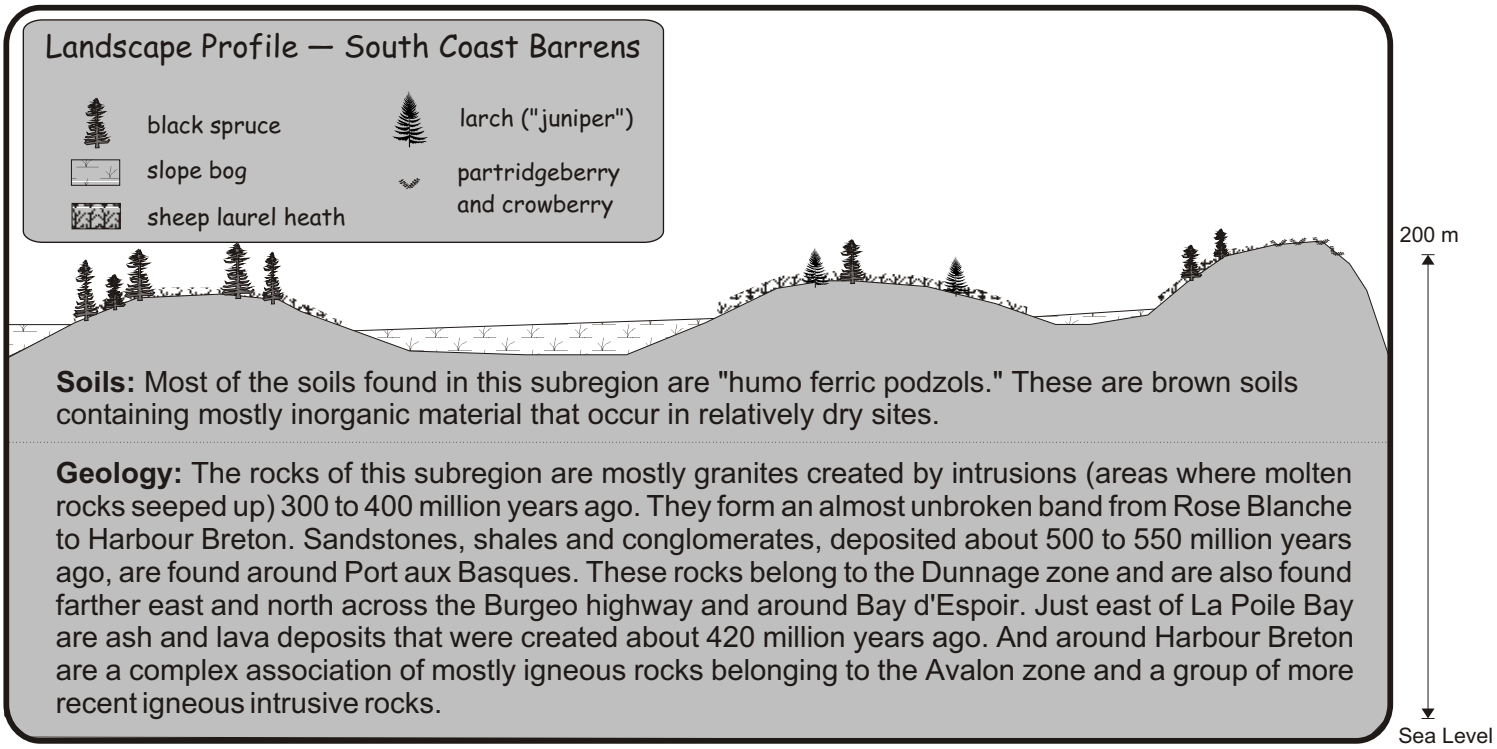
Ecoregion: An area that has distinctive and repeating patterns of vegetation and soil development, which are determined and controlled by regional climate. Ecoregions can be distinguished from each other by their plant communities, landscapes, geology, and other features. These characteristics, in turn, influence the kinds of wildlife that can find suitable habitat within each ecoregion. Subregions occur when distinctive variations within ecoregions are on a smaller scale than between ecoregions. The Maritime Barrens is divided into four subregions.

Barrens: Primarily treeless areas containing low-growing plants that are well adapted to exposed conditions and soils low in nutrients. Barrens are also known as "heath" or "heathlands," since much of the plant life found on them belongs to the heath family.

Ground moraine: The uniform deposit of till — sediment that has a range of particle sizes (sandstones and gravel, for example) — that is left when glacial ice recedes or melts. Ground moraine forms no recognizable topographical feature, so it is not always immediately identifiable.

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. **Slope bogs**, one of several types of bogs that occur throughout Newfoundland, are generally found on slopes in poorly drained areas and can sometimes contain a scattering of pools. **Basin bogs** are small, flat-surfaced bogs that occur in basins and depressions, though they do not often feature pools. Basin bogs are commonly found in eastern and southern Newfoundland.

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.



Soils: Most of the soils found in this subregion are "humo ferric podzols." These are brown soils containing mostly inorganic material that occur in relatively dry sites.

Geology: The rocks of this subregion are mostly granites created by intrusions (areas where molten rocks seeped up) 300 to 400 million years ago. They form an almost unbroken band from Rose Blanche to Harbour Breton. Sandstones, shales and conglomerates, deposited about 500 to 550 million years ago, are found around Port aux Basques. These rocks belong to the Dunnage zone and are also found farther east and north across the Burgeo highway and around Bay d'Espoir. Just east of La Poile Bay are ash and lava deposits that were created about 420 million years ago. And around Harbour Breton are a complex association of mostly igneous rocks belonging to the Avalon zone and a group of more recent igneous intrusive rocks.

Vegetation Profile

The extensive barrens of this subregion are home to a plant community known as "dwarf shrub heaths." These are thickets 30-50 cm in height of plants belonging mostly to the heath family. Sheep laurel is the most common of these, particularly in protected valleys where it forms a dense cover and bears clusters of rose-pink flowers in summer. Purple-flowering rhodora and low bush blueberry are also well represented. Other common plants include dogberry, larch, mountain holly, and stunted balsam fir.

On inland hills and coastal headlands, black crowberry and partridgeberry take the place of sheep laurel. On the coldest and most wind-exposed of these sites such as the Hawke Hills, diapensia and alpine azalea occur.

Forests here are limited to isolated, protected pockets; where they do grow, balsam fir is the dominant tree. Mosses, such as broom moss and feathermoss, are abundant on the ground in these small forested areas. Along the edges of brooks, speckled alder forms dense thickets; these are replaced by mountain alder in the eastern subregions of the Maritime Barrens.

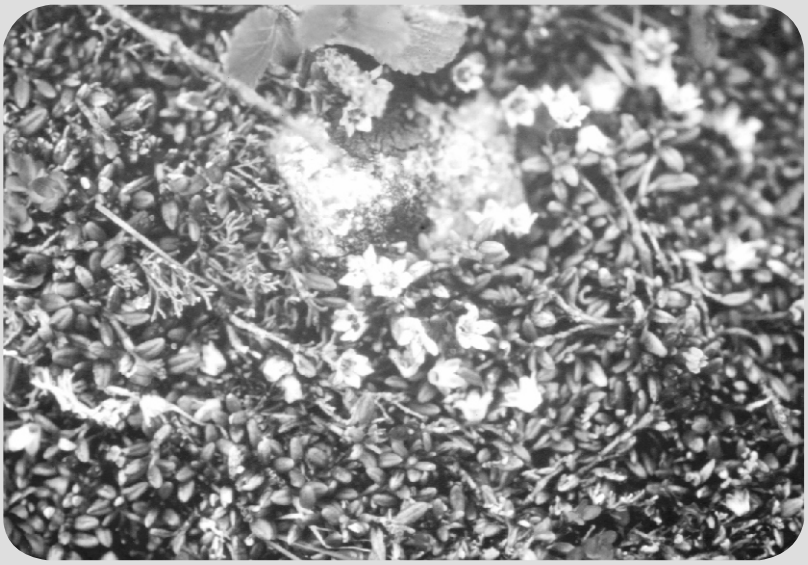


Photo: Todd Boland

Species in Focus: Alpine azalea (*Loiseleuria procumbens*), which prefers cool summer temperatures, occurs on exposed headlands along the South Coast Barrens subregion. It is often found with diapensia — another low-growing, mat-like plant adapted to wind and cold. Alpine azalea bears small pink, bell-shaped flowers set among leathery, evergreen leaves.

Wildlife Profile

Unlike the Southeastern Barrens, seabird nesting occurs in low numbers in this subregion. However, on Ramea Colombier Island, just southwest of Ramea, 1,000 breeding pairs of Leach's storm-petrel have been recorded. Smaller numbers of Atlantic puffin, great black-backed gull, and terns nest there as well.

Low numbers of waterfowl, such as Canada goose, American black duck, and green-winged teal, use the area for breeding.

Many landbirds live in the forests of this subregion, most as migratory breeders (they breed here but migrate elsewhere for the winter), although some are residents (they remain year-round). The migratory breeders include the ruby-crowned kinglet, northern waterthrush, white- throated sparrow, gray-cheeked thrush, fox sparrow, and yellow-rumped warbler. Dark-eyed junco and pine grosbeak are examples of forest residents.

In the barrens, willow ptarmigan, or "partridge," are resident, while savannah sparrow and horned lark are migratory breeders. The American pipit, a slender brownish bird that wags its tail up and down and makes a tinkling song in flight, is another barrens nester in this subregion. Lincoln's sparrow and shorebirds such as common snipe, greater yellowlegs, and least sandpiper breed in wetland areas.

As elsewhere in the province, moose, black bear, mink, snowshoe hare, and red fox live in the forest and shrub habitats. Other mammals that can occur here include the red squirrel, little brown bat, meadow vole, masked shrew, and eastern chipmunk. Beaver and muskrat are found in the vicinity of ponds and streams.

Species in Focus: The piping plover, one of the province's endangered species, gets its name from its distinctive, piping whistle. In the 19th century its population was reduced because of hunting for its meat as well as feathers, which were popular as decoration on women's hats. Today, the sparsely vegetated sand dunes and beaches it needs for nesting are threatened by ATV use and other human activities. One of the largest breeding areas in Newfoundland for piping plover is in the Big Barasway Piping Plover Wildlife Reserve near Burgeo.

Photo: Helen Jones

The short-tailed weasel, or ermine, also occurs in low numbers. This relative of the otter, mink, and pine marten is primarily an animal of the forest, though it can be found in a variety of habitats. Its summer coat (brown above with a white to yellowish belly) turns all white with a black- tipped tail in winter.

Because of thin snow cover, the South Coast Barrens also provides valuable wintering grounds for caribou: the Middle Ridge (about 22,000 animals) and the Sandy Lake/Gray River herds (about 18-19,000 animals). A portion of the western end of this subregion is also used by the La Poile caribou herd (about 9,000 animals) as calving grounds.

The region's many lakes and rivers support a variety of fish, the most common of which include Atlantic salmon, brook trout, brown trout, American eel, rainbow smelt, and three-spine and nine-spine sticklebacks. However no reptiles or amphibians inhabit the South Coast Barrens.

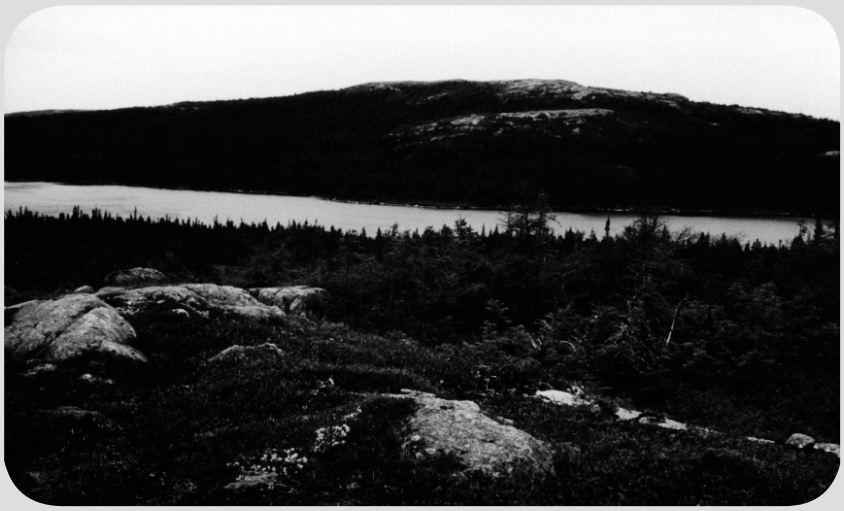
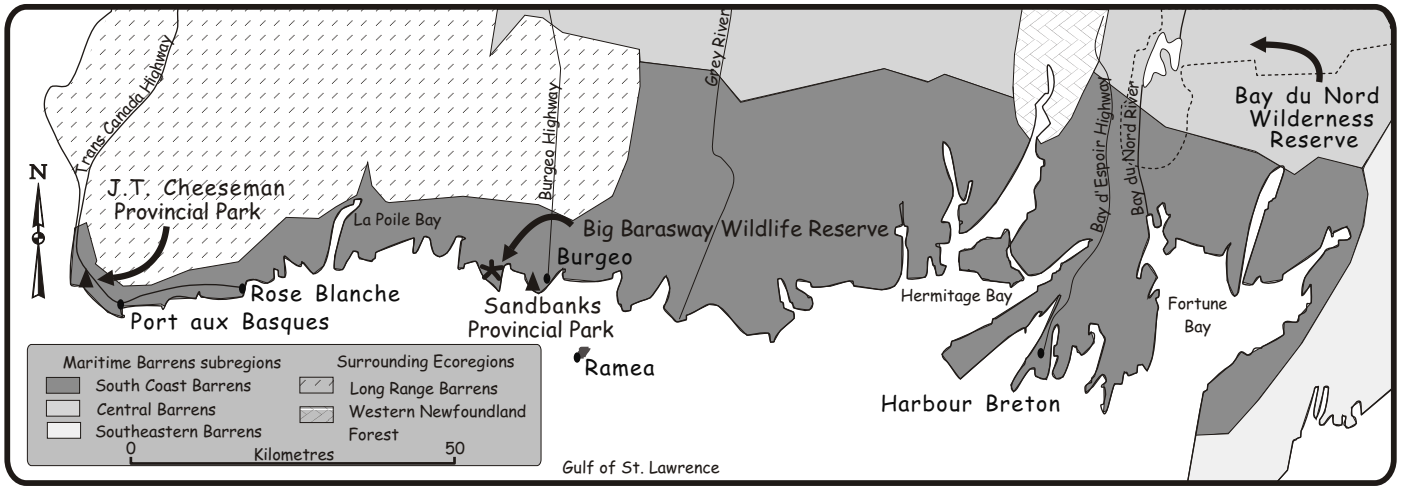


Photo: George Draskoy

Extensive barrens have replaced much of the original forest cover in the South Coast Barrens subregion, following widespread fires that began over 300 years ago. Fires were most destructive in the late 1800's after construction of the railway.



Protected Areas Profile

Wilderness and Ecological Reserves, and Provincial Parks, provide a number of opportunities for the public to enjoy the province's natural heritage. To varying degrees they also help preserve our natural landscapes, and native plants and animals. Ecological and Wilderness Reserves are unique in another way: they are natural areas that have been chosen for protection as representative examples of important habitats, ecosystems, and wildlife populations.

Situated at the southwest tip of the Island is the J.T. Cheeseman Provincial Park, where visitors can camp, fish, hike, and canoe. Because it is on the flight path of many migratory species, and because of its ideal coastal habitat (sand dunes, beaches, and barachois), this park boasts one of the largest variety of shorebirds in the province. Of particular interest is the endangered piping plover, which nests on beaches and dunes within the park.

Sandbanks Provincial Park, near the community of Burgeo, is named after its rolling coastal sand dunes and long stretches of flat, sandy beaches. Not far from it is the Big Barasway Piping Plover Wildlife Reserve, which provides protection to the population of plovers that nests there.

Farther east, the Hawke Hills Ecological Reserve contains one of the best sites of arctic-alpine plants east of the Long Range Mountains. This area is separated from the main portion of the South Coast Barrens, but because of its high elevation it shares many of the subregion's characteristics.

Each of these protected areas is vital for the special features they protect. However, none is large enough to provide full subregion representation.

Climate

This subregion experiences cool summers with frequent fog. Winters are generally mild with little permanent snow cover.

Annual rainfall
1250 - 2000mm

Mean daily temperatures
February -3°C to -8°C
July +13°C to +16°C

Protected Areas Association of Newfoundland and Labrador (PAA) gratefully acknowledges the following partners for their generous contributions to the Newfoundland and Labrador Ecoregion Brochures project:

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