

200 Highlands

200
Highlands

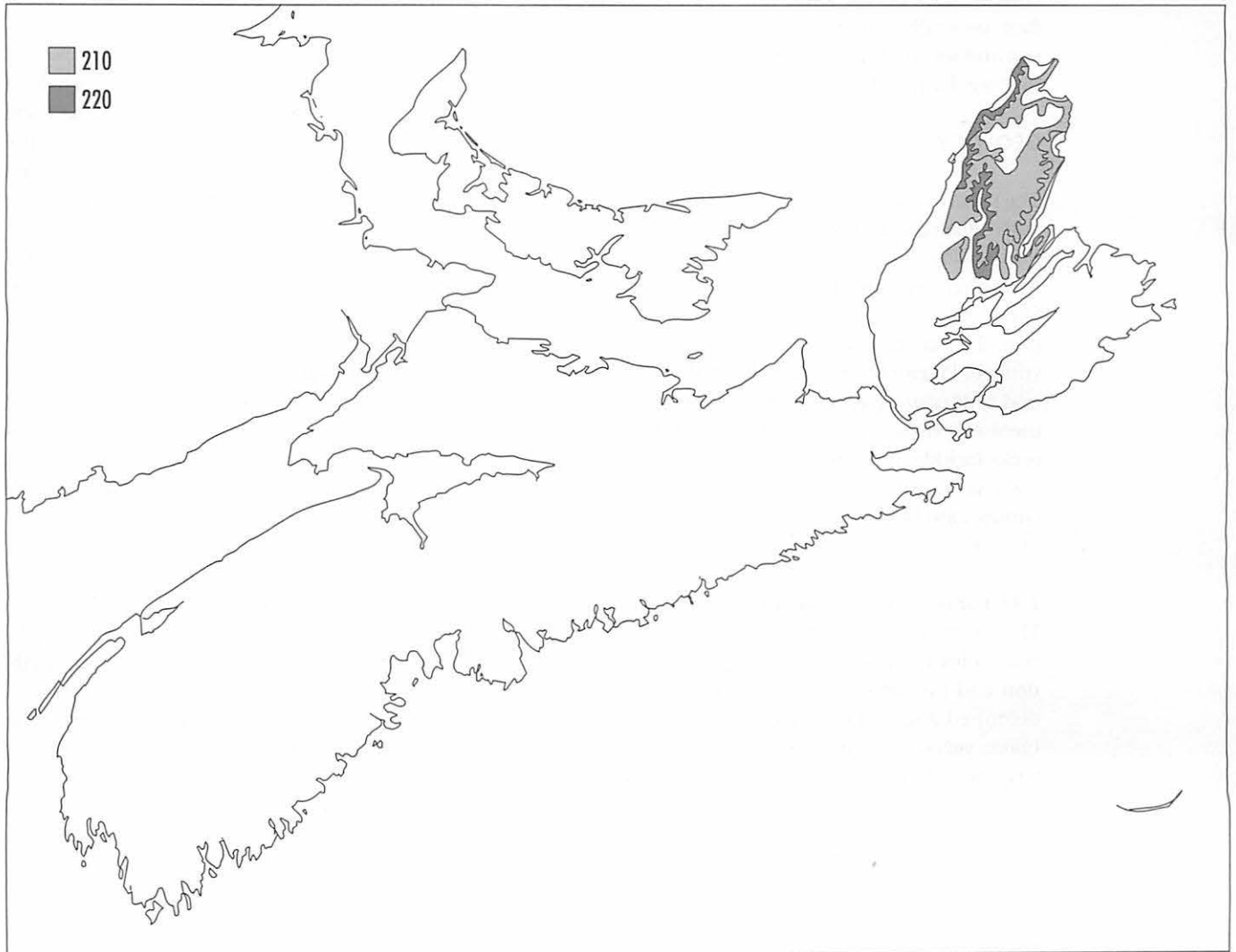


Figure 4: Region 200, Highlands, and its component Districts.

200 HIGHLANDS

The Highlands Region is divided into Districts and sub-Districts as follows:

- 210 Plateau–Fir Forest
 - (a) The Highlands
 - (b) Gairloch Mountain
- 220 Steep Slopes

REGIONAL CHARACTERISTICS

Northern Cape Breton Island is dominated by a highland block of ancient metamorphic and granitic rocks. Deep valleys, which dissect all sides of the block, are habitat for damp, cool deciduous forests (District 220). On the southward-sloping plateau surface, generally above 300 m, the short growing season and severe climate allow only a Balsam Fir forest to grow (District 210).

GEOLOGY

The rocks of the Highlands reflect a long and complicated geological history. The oldest rocks, located north of Pleasant Bay and the Cabot Trail, are similar to strongly metamorphosed rocks of the Canadian Shield and are about as old (about 1.2 billion years old). The central part of the Highlands contains younger Precambrian and Middle Paleozoic volcanic and sedimentary rocks. Deformation (folding) and metamorphism vary in intensity. The Precambrian rocks include marbles and quartzites, as well as volcanic rocks that were mapped as the George River Group. Late Devonian and Carboniferous rocks rest unconformably on the older rocks.

1. *Oldest Rocks in Cape Breton*

The Precambrian geological history of the Highlands is complex and represents many periods of deformation and metamorphism. Precambrian rocks were deformed and metamorphosed approximately one billion years ago, and again about 600 to 570 million years ago. Many geologists believe the very high temperature-and-pressure metamorphic rocks of the northwest Highlands, the Blair River Complex, belongs to ancestral "North America." Precambrian metamorphic rocks of the central Highlands were deposited prior to the Late Precambrian deformation and metamorphism of about 600 to 570 million years

ago. Late Precambrian to early Cambrian diorites and granites were intruded into the older rocks.

2. *Pre–Middle Devonian*

The Early and Middle Paleozoic history of the Highlands is somewhat clouded by variable amounts of deformation and metamorphism. Where rocks are somewhat undeformed, the original textures of volcanic and clastic sedimentary rocks are visible. Radiometric dating of the volcanic units show their ages to range from Middle Ordovician and Late Silurian. Granites were intruded in the Ordovician and Late Silurian. Middle Devonian and younger periods of erosion have stripped away some of the older rocks.

3. *Middle to Late Devonian*

The lack of a strong indication for the Middle to Late Devonian Acadian Orogeny is unique to the Cape Breton Highlands. Elsewhere in Nova Scotia, the Acadian Orogeny was a major folding event created as continental plates collided in the formation of the supercontinent Pangaea. Study of the Highlands indicates that its rocks were deformed and metamorphosed in the Late Silurian, which is not the "usual" Acadian time.

4. *Carboniferous Sea*

During the long period that Nova Scotia was part of Pangaea, sediments deposited in the Carboniferous Sea eventually covered most or all of the Highlands Region and the adjoining Plateau–Taiga Region. Only occasional remnants of these strata are now found on the highland plateau, such as the late Carboniferous block of Canso sandstone that can be seen near the western entrance to Cape Breton Highlands National Park. During the late Carboniferous, the highland block appears to have moved vertically upwards and deformed the Carboniferous strata. In places, these Carboniferous rocks are domed upward at the margins of the Highlands.

5. *Mesozoic Erosion*

During the time between the Permian and Cretaceous periods, the Highlands underwent another period of erosion. The Carboniferous strata were stripped from the older rocks and the area now occupied by Region 100 and 200 was part of a planation surface that extended across the Maritimes.

6. Tertiary Uplift and Erosion

During the Tertiary, the planation surface was uplifted and tilted. After that, another period of erosion once more exploited variations in rock resistance across the flat eroded surface. The Cape Breton Highlands are situated on the highest part of the tilted plain and have thus been subjected to the greatest degree of erosive attack.

LANDSCAPE DEVELOPMENT (FAULTING)

Another important element of the morphological character of the Highlands block is the combination of faults found around its margin and crosscutting its interior. The boundaries of the Highlands are in places depositional (where softer Carboniferous strata have been deposited directly onto older metamorphosed rocks) and in places faulted. In either case, erosion has preferentially exploited the softer material and exposed a steep scarp slope at its margins. Faulting has defined the straight sides of the Highlands on the east and west, influencing the angular drainage patterns of many rivers and streams. The two main fault directions are north-northeast and west-northwest, with the former predominating.

The principal fault in the Highlands is the Aspy Fault, which runs southwards from Cape North (see Figure 5). For 40 km its position is shown by a straight escarpment that continues across the Highlands as a straight line of river valleys and reappears on the south side of the Margaree River Valley. The ancient Aspy Fault shows evidence of movements dating back to the Ordovician period. Other faults have also been exploited by rivers which rise well towards the interior of the Highlands and form long, steep-sided and V-shaped valleys at the margins, e.g., Grand Anse River, Ingonish River.

Some upland masses are isolated by faults, for example, Sugar Loaf Mountain in the interior, and Gairloch Mountain on the southerly margin of the Highlands.

CLIMATE

The climate of the Boreal Forest Region in the Cape Breton Highlands is influenced by elevation and by winds blowing off adjacent ocean waters. Its main features are cold long winters, short cool summers, and high precipitation. It differs from the climate of the Plateau-Taiga Region mostly as a result of the lesser impact of the wind (see Region 100).

Because there are no weather stations in the Region, detailed climatic information is not available.

Although the mean annual temperature of less than 5°C is not markedly colder, the daily temperature range is considerably greater than in other areas in the Maritimes. The beginning of winter, as marked by a continuous layer of snow 2.5 cm deep, usually occurs in the Highlands in early or mid-November. Snowfall is heavy, but accumulations are limited by frequent episodes of rain and thawing. Records for weather stations in an adjacent Region at Chéticamp and Ingonish Beach show that mean daily temperatures in January, February, and March are consistently lower at Chéticamp, reflecting the influence of winds that blow mainly from the north and north-west over the frigid, ice-covered waters of the Gulf of St. Lawrence. This east-west difference is also noticeable in parts of the Highlands.

Summer temperatures start to rise sharply in May and fall abruptly in September. Mean daily temperatures in July are somewhat cooler in the Highlands than in most other interior areas of the province.

More than 1600 mm of precipitation falls each year in the highest areas of the Region. Elsewhere, amounts range between 1400 and 1600 mm. The higher precipitation recorded on the eastern side of the Region is evidence of the effects of an Atlantic rain shadow. More than 400 cm of snow falls on most of the area, with lesser amounts being recorded on the Atlantic side because of the slightly warmer winter temperatures. The snow cover melts in late April or May.

This Region is shrouded in fog or low-level clouds many days of the year, and relative humidities are high. Interesting microclimatic features include cold-air drainage and fog in the canyons, and high relative humidity and low sunlight exposure for north-facing cliffs in steep-walled canyons.

The growing season is short, but tree growth is rapid, except where strong winds stunt growth on exposed ridges.

FRESH WATER

The main drainage pattern is radial, and rivers follow the fault lines in the bedrock. The steep-sided river valleys do not develop floodplains or wide intervales until they leave the Highlands; however, an exception to this general rule is the Margaree River, which has a broad intervale extending well into the Highlands.

The few small glacial lakes and wetlands are dystrophic and have low conductivity levels. Biological diversity is also low.

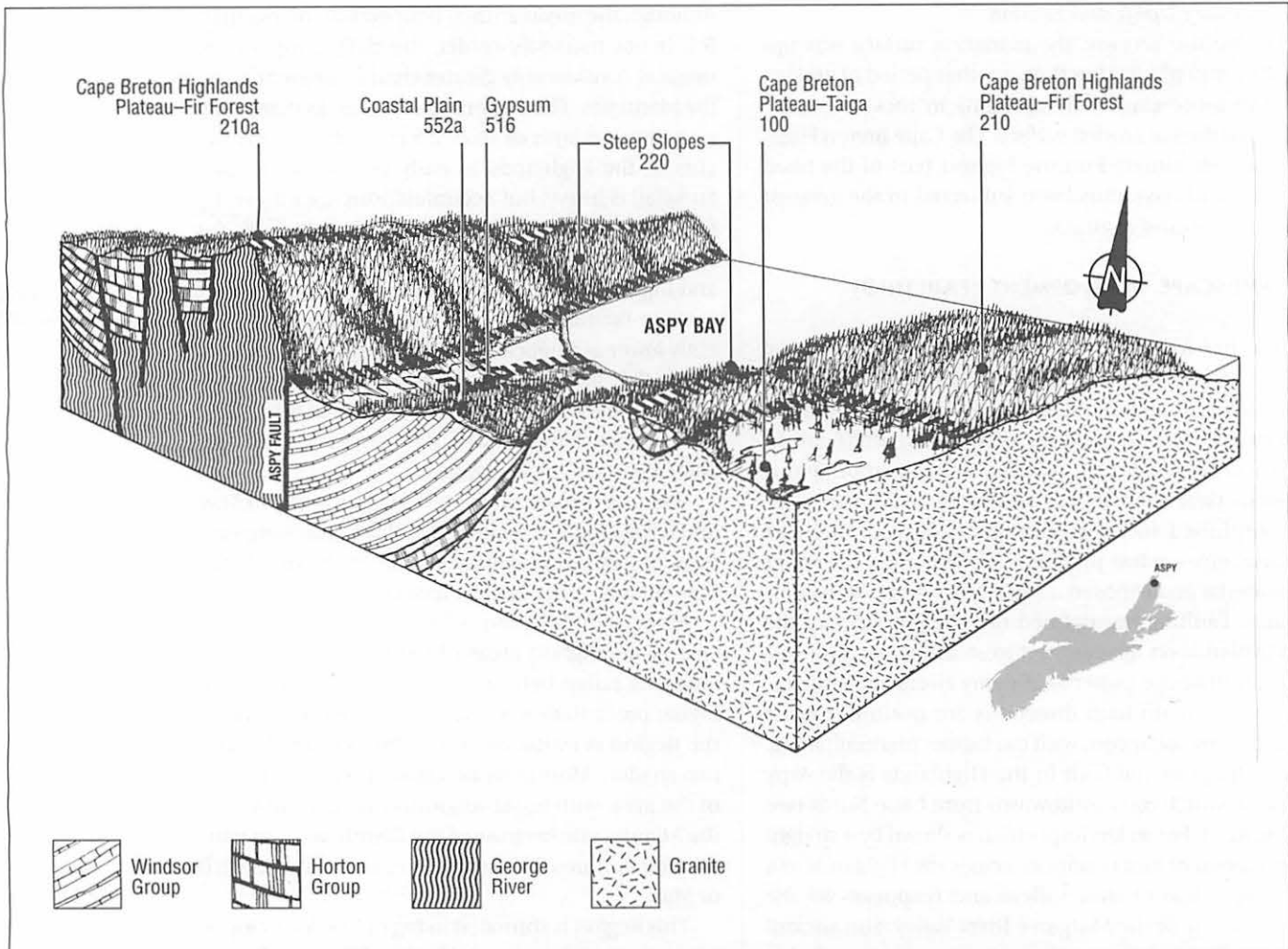


Figure 5: Aspy Bay area. The straight, steep scarp (District 220) of the Aspy Fault separates the northern extension of the Cape Breton Highlands Plateau-Fir Forest (District 210) from the Coastal Plain (Unit 552). In the foreground the vegetation of the Cape Breton Plateau-Taiga (Region 100) above 500 m is seen on the granite massif which dominates northern Cape Breton Island.

SOILS

This area was not mapped in the soil survey of Cape Breton Island because of its inaccessibility. However, it is now known that the soils are considerably better than the blanket designation "Rough mountain land" would suggest. The soils are mostly heavily podzolized sandy loams, which are surprisingly deep considering that the underlying rocks are highly resistant. The depth of the soils suggests that the Highlands were protected by a static ice cover during the last glaciation. One interesting feature is the steep slope of the sides of the Highlands plateau surface.

PLANTS

The Cape Breton Highlands Region falls within Loucks' Gaspé-Cape Breton Ecoregion. Balsam Fir, White Birch, and White Spruce are the main species, forming what is essentially the true Boreal Forest Region in Nova Scotia. The main influences on the regional vegetation are cool temperatures, high precipitation, and the effects of wind and insect damage. Because of inaccessibility, cutting was not a major disturbance factor until the 1970s. Since the Spruce Budworm salvage project, large areas of dead Balsam Fir have been removed. Replanting with Black Spruce is taking place in some areas. Stands of fire origin are present but uncommon.

On the slopes fringing the plateau the true boreal forest is replaced by the Acadian Forest association—

shade-tolerant hardwoods along the steep-walled canyons on the eastern and western coasts, and predominantly softwoods on the Atlantic slope in the northeast corner of the Region. The shade-tolerant hardwoods—Yellow Birch, White Birch, and Sugar Maple—are mainly found between 200 m and 300 m above sea level. On the plateau, barrens and bogs are common.

This Region is interesting because of the diversity of floral elements represented. The northernmost limit for Alleghanian tree species (for example, Sugar Maple) in the Atlantic Provinces is found here. Also represented are the arctic-alpine and the Cordilleran elements. The Cordilleran flora in Cape Breton is usually restricted to wooded ravines, or damp, cool deciduous and mixed woods; it is more commonly found in similar cool, moist habitats on the Pacific coast or along the Rocky Mountains.

ANIMALS

The fauna of the Highlands reflects this Region's boreal character and its status as one of the few large areas in Nova Scotia which remain relatively inaccessible. Boreal species such as the moose, Snowshoe Hare, and lynx are found here. Larger carnivores such as bear and perhaps cougar have a large range of undisturbed habitat. Deer are present during summer and fall but are restricted in distribution by the deep snow in winter and spring. Also present here are disjunct species with a generally northern or mountain distribution elsewhere, for example, the Rock Vole and the Gaspé Shrew. Region 200 offers a wide range of habitats, which include more areas of mature woodland, both hardwoods and softwoods, than are found in the other Regions. Other habitats include bogs, barrens, cliffs, and talus slopes.

CULTURAL ENVIRONMENT

The Highlands form a distinct landscape component of Cape Breton, and its many communities are largely of Scottish descent. Where soil was good, farming was undertaken in the early 1800s; however, by 1820 only marginal farmlands were available. Many Scottish migrants later abandoned these less-productive soils, permitting successional forest regeneration. Today, only the best land in this area is farmed, and many communities depend on the sea for a living. Balsam Fir forests on the plateau have been impacted by fires, Spruce Budworm, and, more recently, clearcutting to salvage timber ravaged by budworm infestations. Seasonal hunting continues in this area; however, tourism and recreational activi-

ties predominate because of the impressive scenery and wildlife attractions of the Cabot Trail and Cape Breton Highlands National Park. Highlands watersheds were harnessed to create a major hydroelectric power plant in Wreck Cove in the early 1970s.



Associated Topics

T2.1 Introduction to the Geological History of Nova Scotia, T2.3 Granite in Nova Scotia, T3.1 Development of the Ancient Landscape, T5.2 Nova Scotia's Climate, T9.1 Soil-forming Factors, T10.4 Plant Communities in Nova Scotia, T11.9 Carnivores, T11.10 Ungulates.

Associated Habitats

H3 Fresh Water, H4.1 Bog, H5.1 Barren, H5.3 Cliff and Bank, H5.4 Talus Slope, H6.1 Hardwood Forest (Sugar Maple, Yellow Birch, Beech Association), H6.3 Mixedwood Forest (Spruce, Fir-Maple, Birch Association).

210 PLATEAU-FIR FOREST

The Plateau-Fir Forest District is divided into two sub-Districts:

- (a) The Highlands
- (b) Gairloch Mountain

GEOLOGY AND LANDSCAPE DEVELOPMENT

The undulating plateau crest of the Cape Breton Highlands is dissected by faults into two parts: the Highlands (including part of Kellys Mountain) and Gairloch Mountain (an isolated section on the southern fringe). The plateau surface is tilted to the southeast, and the average elevation drops from about 500 m to about 400 m at the edge of the Highlands. This may represent the slope of the original upland surface.

Long periods of erosion on the Cape Breton Plateau have uncovered severely altered rocks which were once deeply buried. These rocks are very hard and resistant, and at present are being eroded very slowly. Even the last glaciation did little to modify the plateau surface. There is some controversy about the exact sequence of events during the Wisconsin ice advance across Cape Breton, but it appears that the Highlands was covered by an ice-cap at least during the later stages. This ice-cap may have protected the underlying plateau but generated glaciers which radiated down the marginal slopes. The glacial deposits on the plateau surface are dominated by compacted subglacial till. Exposed bedrock may be ice-plucked or display striations. Erratics are common.

Gairloch Mountain is cut off from the southern part of the Highlands by two major faults. The boundaries of this block are sharp and steep where softer rocks have been eroded away. In the northwest, where metamorphic rocks are faulted against resistant early Carboniferous Horton deposits, no steep scarp slope is present. Similarly, on the south side, where there is a depositional boundary with resistant Devonian-Carboniferous rocks, the contact is not topographically distinctive (see Figure 21). However, on the north side, where easily eroded Windsor deposits are set against the metamorphic rocks, a pronounced scarp slope is found.

The maximum elevation of Gairloch Mountain is almost 430 m, about 100 m less than the highest part of the Highlands. This reflects its more southerly, and therefore lower, position on the tilted planation surface.

FRESH WATER

The drainage pattern across the Cape Breton Highlands is radial. Streams flowing on the plateau surface are relatively slow-moving but in their middle sections cascade down the scarp slopes. In many cases the tributary streams appear to follow joint and fault directions very closely; e.g., North Aspy River. Individual brooks flowing down the scarp slopes on the north side are short and straight, whereas those in the south, where there is no escarpment, tend to have branching tributary patterns.

District 210 contains relatively few glacial lakes. Conductivity averages 33 micromhos/cm. The pH in Warren Lake averages 5.8.

Blanket bogs are typical of sub-District 210a; the systems form concentric patterns with some flow between adjacent bogs. Ribbed fens are associated with this type of formation.

PLANTS

The vegetation of the Highlands is characterized by largely even-aged boreal forest, with Balsam Fir, White Birch, and White Spruce as the main species. The main successional agents are windthrow and insect damage, particularly Spruce Budworm. Fire influences are mainly restricted to the area behind Neils Harbour, where pure stands of Jack Pine are found. Elsewhere in the District, pine is uncommon.

Typically, in the central and western Highlands, the Balsam Fir is 50–75 years old. White Birch readily colonizes openings caused by windthrow, but fir eventually reasserts itself. White Spruce is scattered through the forest, and often individual trees are much older (150 years) than the surrounding fir. Most of the Balsam Fir has died following Spruce Budworm infestation in the late 1970s and was replaced by a dense growth of raspberries with some Elderberry. The only tree species able to survive this competition are White Birch, Mountain Ash and Pin Cherry. Eventually the birch shades out the raspberry, enabling Balsam Fir to re-establish itself. Ground vegetation in the mature Balsam Fir forest is often luxuriant. Mountain Maple and Hobblebush frequently form a dense shrub canopy, with ferns, Wood-sorrel, and mosses below. South of the South Aspy River an area dominated by crescent-shaped

granite ridges produces a vegetation pattern similar to that found in the Plateau-Taiga Region: barrens on the dry ridge tops, bogs in the depressions, and open stands of Balsam Fir in between.

On the broad, flat plain which slopes down to the Atlantic Ocean between Neils Harbour and Broad Cove, the vegetation has been more influenced by fire and cutting, and is therefore at an earlier successional stage. On the shallow granitic soils, Balsam Fir, Black Spruce, Jack Pine, and White Pine form younger stands, with Bracken Fern underneath.

ANIMALS

The fauna found in this District is, for the most part, characteristically boreal. The Snowshoe Hare is common, but it is subject to cyclic population fluctuations. The Highlands provide one of the last significant refugia for its predator, the lynx. The bobcat is rarely found in the area, and unconfirmed sightings of cougar have been reported. Deer and moose are both present. The moose subspecies *Alces alces andersoni* was introduced to the area and is flourishing. Deer use the area for summer range but generally move to sheltered lower slopes in winter. The brain parasite *Parelaphostrongylus tenuis* has been identified in deer, but the seasonal separation of moose and deer during concentration periods has apparently helped retard its transfer between the species.

A small relict population of Pine Marten existed in northern Cape Breton in the 1980s, but no recent reports are available to confirm its continued existence. The boreal forest does not support large or diverse populations of small mammals.

Spruce Budworm has resulted in many dead and dying trees, changing the habitat structure. Birds that bore into dead wood for insects, particularly woodpeckers, are abundant. Nuthatches are also common. Fish species include Brook Trout and Gaspereau.

SCENIC QUALITY

This area can often appear bleak and forbidding, and where the fir forest is unbroken there is little visual diversity. The infestation of Spruce Budworm is still apparent in many areas. Nevertheless, the presence of bogs and barrens adds variety, and the crests overlooking the deeper valleys have great scenic potential. Those areas accessed by the Cabot Trail and Trans-Canada Highway provide some spectacular viewpoints (see Sites of Special Interest).

CULTURAL ENVIRONMENT

Various parts of the Plateau-Fir Forest have experienced the impact of major fires and heavy Spruce Budworm infestation. Large expanses of affected trees were clearcut as part of a salvage operation in the early 1990s. Although woodlot lumbering has been practised by some residents of these areas, most communities are focused on the resources of the surrounding sea. Seasonal hunting also characterizes land use. The Cabot Trail and the Cape Breton Highlands National Park are key tourism and recreational attractions. Peat resources underlie large expanses of the Plateau-Fir Forest.



Sites of Special Interest

The geological and geomorphological features of most interest in the Cape Breton Plateau-Fir Forest District are:

- the relationships between the metamorphic rocks and intrusive igneous rocks
- the banded schists and gneisses
- faults, fault scarps, and fault valleys
- waterfalls, coastal cliffs, and narrow beaches
- *Geological Highway Map of Nova Scotia* (1980) references:
 - 68 Near Fox Back Lake—Precambrian granitic rocks and a view of intruding gneisses
 - 69 Aspy Fault scarp
 - 71 Green Cove—gneisses intruded by pink and white granites
 - 73 Cape Smokey Lookoff—Precambrian granite intruded by dark-coloured diabase dykes
 - 74 Kellys Mountain Viewpoint (St. Anns Lookoff)—a road cut through Precambrian high-grade gneisses from which one can look across fault-controlled St. Anns Harbour to the main mass of the Highlands
- Bras d'Or Lookoff—on Kellys Mountain overlooking Bras d'Or Channel and the Sydney area
- Cabot Trail between Jumping Brook and Pleasant Bay—view of the plateau and an exposure of granite
- North of Chéticamp, near Jerome Mountain—a faulted contact between granite and gneiss
- Cabot Trail, west park entrance—a cliff of Precambrian granite veined with quartz
- Ingonish, Middle Head peninsula—pink granite cutting dark rocks
- Sugar Loaf Mountain—a granite mass rising to more than 460 m

- French Mountain Lake (IBP Proposed Ecological Site 17)—raised and sloping bogs, dystrophic lake
- French Mountain Bog (IBP Proposed Ecological Site 18)—good example of species-rich minerotrophic bog

Provincial Parks and Park Reserves

- Kellys Mountain

210
Plateau-Fir
Forest

Proposed Parks and Protected Areas System includes Natural Landscapes 64a, b, c, d, and e and Candidate Protected Areas 1 Pollet Cove-Aspy Fault, 2 Jim Campbells Barren, and 4 French River.

Associated Offshore Unit

915 Sydney Bight.

Associated Topics

T2.4 The Carboniferous Basin, T3.2 Ancient Drainage Patterns, T3.3 Glaciation, Deglaciation and Sea-level Changes, T3.4 Terrestrial Glacial Deposits and Landscape Features, T10.1 Vegetation Change, T10.2 Successional Trends in Vegetation, T10.6 Trees, T10.7 Ferns and Their Allies, T11.2 Forest and Edge-habitat Birds, T11.16 Land and Freshwater Invertebrates, T11.17 Marine Invertebrates, T12.10 Plants and Resources, T12.11 Animals and Resources, T12.12 Recreational Resources.

Associated Habitats

H3.1 Freshwater Open-Water Lotic, H3.3 Freshwater Bottom Lotic, H4.1 Bog, H5.1 Barren, H6.2 Softwood Forest (Pine Association; Balsam Fir Association).

220 STEEP SLOPES

GEOLOGY AND LANDSCAPE DEVELOPMENT

The margins of the Cape Breton Highlands are, for the most part, clearly visible and are marked by steep slopes and deep valleys. In many cases these slopes and valleys have formed along faults where rubbly rocks in the zone of movement have been washed away (see Figure 21).

In those places where the metamorphic rocks of the Highlands have a depositional contact with softer, erodible strata, an abrupt change of relief is produced by differential erosion; e.g., North Bay Ingonish, St. Lawrence Bay, south of the Middle Aspy River. In each of these examples the situation is complicated by faulting.

Unlike the plateau, where the undulating terrain is undergoing little modification, erosion is very active in the slopes and valleys. The steep slopes are frequently covered by talus, the product of cryogenic (freeze-thaw) action. The angle of repose of the talus varies according to its texture and coarseness. Rapid downslope wasting is generally impeded by vegetation, particularly where trees and ground cover stabilize the slope. Slumping occurs in some places where abundant material is present; in other places, downslope movement has produced a line of boulders.

Steep cliffs which rise almost directly from the sea occur where District 220 intersects the coastline. Sediment supply is very sparse and beaches are few and narrow.

220
Steep
Slopes



Plate 2: Region 200. Oblique aerial view of the deeply dissected slopes (District 220) of the Cape Breton Highlands landscape in winter. Photo: O. Maass.

FRESH WATER

The drainage pattern is dendritic. Several important rivers flow in fault-controlled valleys; e.g., Margaree, Grand Anse, North Aspy, Warren Brook, Clyburn Brook. Waterfalls are common at the edge of the scarp slopes. The pH levels in Kellys Mountain Brook average between 6.5 and 8.5. Groundwater in the bedrock is soft and corrosive. Groundwater comes to the surface in the colluvial deposits as seeps and springs.

PLANTS

The vegetation of this District is characterized by deciduous woodlands on steep slopes. Eastern Hemlock and White Pine are dominant on the slopes, giving way to early successional White Birch, White Spruce, and Balsam Fir on unstable slopes or valley bottoms. Canyon systems are an important feature of this District. The canyon slopes are often covered with a mantle of colluvial material in which White Birch, Yellow Birch, Sugar Maple, and Balsam Fir grow. Along the western coast, the steep slopes are exposed to the influence of the Gulf of St. Lawrence. White Birch, Yellow Birch, White Spruce, and Pin Cherry are often stunted by salt spray-laden winds. Insects and diseases have dramatically reduced the American Beech in this District.

Where Eastern Hemlock stands occur, usually on the upper slopes, mosses dominate the ground vegetation. Under mature hardwood stands the fern-Striped Maple association is found with a rich diversity of species.

Arctic-alpine and Cordilleran disjunct plants are found in this District, especially on wet, north-facing canyon rock walls and in other shady, moist habitats. These include Rusty, Smooth, and Alpine Woodsia; Common Bladderfern; Willowherb; Western Rattlesnake-plantain; Northern Bedstraw; and Sweet Cicely.

ANIMALS

Habitats for fauna in this District are varied and relatively productive, including mature hardwood forest, conifers, talus slopes, cliffs, and moist valley bottoms. The rich, well-drained soils, deep leaf litter, and varied ground vegetation in the predominantly hardwood district create ideal habitat for small mammals. In fact, the most diverse small-mammal fauna in the entire province is found in the hardwood forests growing on talus slopes. Fourteen of the seventeen insectivore and rodent species known to occur on

Cape Breton Island are found here. These include the Gaspé Shrew and the Rock Vole, relict species normally limited to more northerly regions and higher altitudes. The Rock Vole and Southern Bog Lemming are particularly associated with a combination of talus slope and hardwood forest habitats, like those most frequently found along the eastern side of the District. Although small-mammal populations are diverse, they do not tend to exist in large numbers. However, the weasel is one predator that occurs frequently.

The coniferous forests more commonly found on the western side of the District do not provide good small-mammal habitat.

The steep slopes of 40–45° inhibit the movements of larger mammals, although deer make use of the hardwood browse in more accessible areas.

The diversity of vegetation and the well-developed structural profile of the mature hardwood forest ensure a rich avifauna, dominated by warblers, nuthatches, and woodpeckers. Bald Eagles are common in the eastern areas.

SCENIC QUALITY

This District boasts some of the most spectacular scenery in the province, owing largely to its tremendous range of elevation over short distances (as much as 300 m over one kilometre). Where the mountains meet the sea, as at Jerome Mountain and Cape Smokey, there are excellent coastal panoramas. Fortunately, many of these may be viewed from scenic lookoffs along the Cabot Trail. The deep interior valleys of the Aspy, Chéticamp, Ingonish, Northeast Margaree, and other major rivers and streams provide drama and mystery, and offer waterfalls and rapids. Mature deciduous stands, particularly those of beech, are an added attraction. Only the Aspy River valley is accessible by paved road.

CULTURAL ENVIRONMENT

Forests of the Steep Slopes have been impacted by fire. The Pleasant Bay fire of 1947 transformed much of this landscape for a period of time. Steep highland inclines proved a major challenge to the construction of the Cabot Trail, which was completed in 1932 but later considerably upgraded and improved. Slopes buttressing river-valley farmlands were sometimes cleared for pastureland; however, much of this farmland was abandoned and subsequently experienced oldfield regeneration to White Spruce. The old French name for Cape Smokey was "Cape Enfumé," so named because of the clouds of mist which often

cloak this area. Northern slopes of Cape Smokey were cleared to build a ski hill in 1970. In the early 1970s the Wreck Cove power plant was built, harnessing the hydro power of highland watersheds. In Mi'kmaq culture, the Fairy Hole cave in Kellys Mountain is believed to be Kluscap's (Glooscap's) final home before he left the Earth World behind.

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Sites of Special Interest

- Indian Brook—waterfall
- Grand Anse River (IBP Proposed Ecological Site 19)—old Sugar Maple stand in the steeply sloping valley (possibly typical of pre-settlement forest); rare arctic-alpine plants including Green Spleenwort
- North Aspy River (IBP Proposed Ecological Site 21)—old Sugar Maple forest
- French River (IBP Proposed Ecological Site 22)—old mixedwood forest, cliffs, and talus slopes
- Oregon (IBP Proposed Ecological Site 23)—old Eastern Hemlock stand above North River
- Second Fork Brook (IBP Proposed Ecological Site 15)—old Sugar Maple stand, waterfall (Margaree River)
- Lone Shieling Black House—trail system through hardwood forest

Provincial Parks and Park Reserves

- Cape Smokey
- North River
- South Lake-O-Law

Proposed Parks and Protected Areas System includes Natural Landscapes 69, 70, 71, and 76, and Candidate Protected Areas 1 Pollets Cove–Aspy Fault, 3 Margaree River, 4 French River, 5 Sugarloaf Mountain, 6 Middle River, and 7 North River.

Scenic Viewpoints

- Cabot Trail (paved road): Lookoffs at Presqu'île, Cap Rouge, Pleasant Bay, Aspy River, Cape Smokey
- Trails: Chéticamp River, Aspy River, Clyburn Brook, Cape Smokey, North River

Associated Offshore Units

914 Northumberland Strait, 915 Sydney Bight.

Associated Topics

T2.2 The Avalon and Meguma Zones, T2.3 Granite in Nova Scotia, T2.4 The Carboniferous Basin, T3.1 Development of the Ancient Landscape, T4.2 Post-glacial Colonization by Plants, T7.3 Coastal Landforms, T8.1 Freshwater Hydrology, T8.2 Freshwater Environments, T9.1 Soil-forming Factors, T10.4 Plant Communities in Nova Scotia, T10.6 Trees, T10.7 Ferns and Their Allies, T10.8 Mosses, Liverworts and Hornworts, T10.12 Rare and Endangered Plants, T11.2 Forest and Edge-habitat Birds, T11.3 Open-habitat Birds, T11.10 Ungulates, T11.11 Small Mammals, T.12.8 Fresh Water and Resources.

Associated Habitats

H3.1 Freshwater Open-Water Lotic, H3.3 Freshwater Bottom Lotic, H4.1 Bog, H5.3 Cliff and Bank, H5.4 Talus Slope, H6.1 Hardwood Forest (Maple, Oak, Birch Association; Sugar Maple, Yellow Birch, Beech Association), H6.2 Softwood Forest (Spruce, Hemlock, Pine Association; Balsam Fir Association), H6.3 Mixedwood Forest (White Spruce, Fir–Maple, Birch Association).

