



Ecodistrict Profile

Ecological Landscape Analysis Summary Ecodistrict 100: **Northern Plateau**

An objective of ecosystem-based management is to manage landscapes in as close to a natural state as possible. The intent of this approach is to promote biodiversity, sustain ecological processes, and support the long-term production of goods and services. Each of the province's 38 ecodistricts is an ecological landscape with distinctive patterns of physical features. (Definitions of underlined terms are included in the print and electronic glossary.)

This Ecological Landscape Analysis (ELA) provides detailed information on the forest and timber resources of the various landscape components of Northern Plateau Ecodistrict 100. The ELA also provides brief summaries of other land values, such as minerals, energy and geology, water resources, parks and protected areas, wildlife and wildlife habitat.

Most of the Northern Plateau Ecodistrict, which also forms a similarly named ecoregion, is located within the boundaries of the Cape Breton Highlands National Park. The ecodistrict includes a separate area known as the Jim Campbells Barren Wilderness Area, southeast of Chéticamp. The total area of this ecodistrict is 44,434 hectares, or 1% of the province.

The maximum elevation is 535 metres at White Hill, the highest point in Nova Scotia, while much of the region exceeds 425 metres. The terrain is gently undulating with large expanses of exposed bedrock, treeless bogs, and stunted conifer forests. This ecodistrict forms the headwaters for several major rivers in northern Cape Breton – including the Chéticamp, North Aspy, Middle Aspy, South Aspy, Ingonish, and Black – and contains the Chéticamp Flowage, a key component in the Wreck Cove hydroelectric project.



The Northern Plateau landscapes includes generally a flat terrain with extensive wetlands, barrens and forests of stunted balsam fir and black spruce.
(J.-F. Bergeron, Enviro foto)

The climate of Northern Plateau is one of the coldest and wettest in Nova Scotia, with harsh, long winters of heavy snowfall, short growing seasons and almost constant winds.

The barrens of the Northern Plateau are made up of areas of exposed bedrock – primarily composed of igneous and metamorphic rocks (granitic) – that may be completely devoid of vegetation or may be covered in lichens. Where a thin layer of mineral soil has developed on this bedrock, various mosses and other plants have become established.



Moose pastures or meadows.
(J.-F. Bergeron, Enviro foto)

The habitat of the ecodistrict is favourable to moose. Highly elevated moose population levels have created "moose pastures and meadows". These are areas where intense moose browsing has prevented regeneration of balsam fir following the spruce budworm epidemic of the late 1970's.

Stunted black spruce and balsam fir form scattered patches where soil availability permits. Wetter areas are dominated by black spruce and eastern larch, whereas upper slopes contain predominantly balsam fir. Dwarf trees, only a metre or less in height but that may reach ages of 150 years, are common.

Federal land ownership accounts for 76% of area of the Northern Plateau Ecodistrict, with 21% under provincial Crown management.

Landscapes are large areas that function as ecological systems and respond to a variety of influences. Landscapes are composed of smaller ecosystems, known as elements. These elements are described by their physical features – such as soil and landform – and ecological features – such as climax forest type. These characteristics help determine vegetation development.

Element descriptions promote an understanding of historical vegetation patterns and the effects of current disturbances. This landscape analysis identified and mapped four key landscape elements – one dominant matrix element, two smaller patch elements, and a corridor element – in Northern Plateau.

Highland Spruce Fir is the matrix element, accounting for nearly 71% of the ecodistrict. Balsam fir and black spruce are the main species in this element.

In the Highland Barrens patch element, the most widely distributed barren type is the dwarf shrub spruce heath type, which occurs as a patchwork of low mounds or hummocks. The Wetlands element comprises freshwater bogs, fens, swamps, and poorly drained areas. Valley Corridors is a small linear element associated with major watercourses in the ecodistrict.