



Ecodistrict Profile

Ecological Landscape Analysis Summary

Ecodistrict 310: Cape Breton Hills

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 Cape Breton Hills Ecodistrict 310. 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 elevations in the Cape Breton Hills Ecodistrict range from 150 to 300 metres above sea level. The total area is 370,183 hectares.

Hardwood forested hills and steep slopes define this ecodistrict. When travelling along the Bras d'Or Lake, the hilly topography of Kellys Mountain, Boisdale Hills, Sporting Mountain, East Bay Hills, Whycocomagh, and Lewis Mountain is easily visible.

The steep slopes are also easily observed where they descend from the plateau to the valleys of major rivers and streams, such as the South West and North East Margaree, Aspy, North, and Cheticamp rivers.

The ecodistrict is influenced by the strong, cold winds of the Gulf of St. Lawrence. Temperatures are slow to warm in the spring, resulting in a short growing season.

Most of the rivers passing through the Inverness and Bras d'Or lowlands have their headwaters originating from wetlands and a few small lakes in the hills.

The Cape Breton Hills Ecodistrict provides important habitat to wildlife, including two species of mammals that are endangered in Nova Scotia: Canada lynx and American marten.



Fall colours on the tolerant hardwood forested slopes of Cape Mabou in the Cape Breton Hills.

Deer wintering yards are common on the sheltered south-facing slopes and numerous eagle nests are found along the ravines of major streams.

Shade-tolerant hardwood forests of yellow birch, sugar maple, and beech, along with red maple and scattered white spruce and balsam fir, are found throughout this ecodistrict on upper to lower slope, well-drained, sandy loam soils. Eastern hemlock, white pine and scattered red spruce are found on ravines with well-drained, medium-textured soils. Old field forests of white spruce are also common.



A distinctive landscape features of the ecodistrict is the community pastures and fields on top of hills in Mabou.

The Cape Breton Hills Ecodistrict includes 31,646 hectares of provincial wilderness areas, parks, protected areas, and other areas of legislated protection, along with 20,740 hectares of national parks.

Private land ownership accounts for 57% of the total area of the ecodistrict, with 35% under provincial Crown management and the remainder owned by others.

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 seven key landscape elements – one dominant matrix element, five smaller patch elements, and a corridor element– in Cape Breton Hills.

Tolerant Hardwood Hills is the matrix element, representing 85% of the ecodistrict. The element is dominated by tolerant hardwoods typical of the Acadian Forest, such as sugar maple, beech, and yellow birch, with white ash and ironwood on richer sites.

Spruce Pine Hummocks, representing 8% of the ecodistrict, is the largest patch element. The main tree species are black spruce, balsam fir, and scattered white pine with some tamarack and red maple. The other patch elements, in order of size, are **Spruce Fir Hills and Hummocks**, **Tolerant Mixedwood Hills**, **Wetlands**, and **Coastal Beach**.

Valley Corridors is a linear element associated with major watercourses in the ecodistrict.