



Ecodistrict Profile

Ecological Landscape Analysis Summary Ecodistrict 540: **Cumberland 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 Cumberland Hills Ecodistrict 540. 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.

Rounded hills, seldom exceeding 150 metres above sea level though sometimes slightly over 180 metres near Springhill and Leicester, help define the Cumberland Hills Ecodistrict.

Total area of the ecodistrict is 90,214 hectares. Eighty-five percent of Cumberland Hills is forested, considerably above the provincial average of 72%.

Upland sites are a mixture of shade-tolerant softwood and hardwood stands, including red spruce, sugar maple, beech, and yellow birch. Imperfectly drained sites are occupied by black spruce. Areas with coarse-textured soils are prone to moisture deficits in the summer and are susceptible to fire.

Agriculture is the main non-forest sector and the primary agricultural activity is blueberry production. The largest producer of frozen blueberries in the world is located in the ecodistrict.

The bedrock geology is generally sedimentary rocks, such as sandstone, shale, conglomerate, and coal. The Springhill coalfield, one of the province's most important past coal mining districts, still contains significant deposits of deep coal as well as smaller blocks of high quality coal accessible by surface mining.



The lower Cumberland Hills in the foreground contrast to the higher elevations of the Cobequid Hills ecodistrict in the background. Cultivated wild blueberry fields and forest of red spruce cover the rolling landscape.

Leicester Ridge divides two watersheds, with the Little River draining east to the River Philip and the Little Forks River flowing west to the Maccan River. Near Springhill, the Black River flows to the Maccan River.

These and other rivers provide valuable wildlife habitat. There are reports of wood turtle in the Black River system. Further surveys are required to confirm the reports. Several uncommon plants are associated with the rivers, including blue cohosh, small white leek, and Canada lily.

Private land ownership accounts for 83.5%, or 75,357 hectares, of the total area in the ecodistrict. Nearly 14%, or 12,516 hectares, is under provincial Crown control. Less than 1% is considered Aboriginal lands or is federal land. The remaining lands are in transportation corridors and inland waters.

The ecodistrict includes 209 hectares of provincial parks and park reserves and 26 hectares of the Economy River Wilderness Area. Wentworth, covering 143 hectares, is the largest operational provincial park in the ecodistrict. The day-use park borders the former Trans-Canada Highway along Route 4.



Plastic pipelines are used to transport the sap from sugar maple to the boilers. Maple syrup production is a common activity in the Cumberland Hills ecodistrict.

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 nine key landscape elements – one dominant matrix element, seven smaller patch elements, and a corridor element – in Cumberland Hills.

Tolerant Mixedwood Hills, the matrix element representing about half of the ecodistrict, has been altered from what was once a climax forest of shade-tolerant hardwoods – sugar maple, yellow birch, and beech (60%) – and tolerant softwoods – red spruce, hemlock, and white pine (40%) – to a forest with relatively equal areas in all covertypes.

In **Tolerant Mixedwood Hummocks**, much of the largest patch element has been converted to agricultural or other uses. Abandoned farmland has been reforested to white spruce or cultivated to grow wild blueberries. Other patch elements, in order of size, are **Spruce Pine Hummocks**, **Red Spruce Hummocks**, **Wetlands**, **Spruce Hemlock Pine Hummocks and Hills**, **Floodplain**, and **Spruce Pine Flats**.

Numerous valley bottoms and slope systems, represented by **Valley Corridors**, a corridor element, follow the main river valleys and provide linkages to adjacent ecodistricts.