

## Ecodistrict Profile

### Ecological Landscape Analysis Summary Ecodistrict 620: **Minas Lowlands**



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 Minas Lowlands Ecodistrict 620. 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.

The Minas Lowlands Ecodistrict covers the lowland areas of the northern and southern shores of Cobequid Bay – at the eastern end of the Minas Basin – in Colchester and Hants counties.

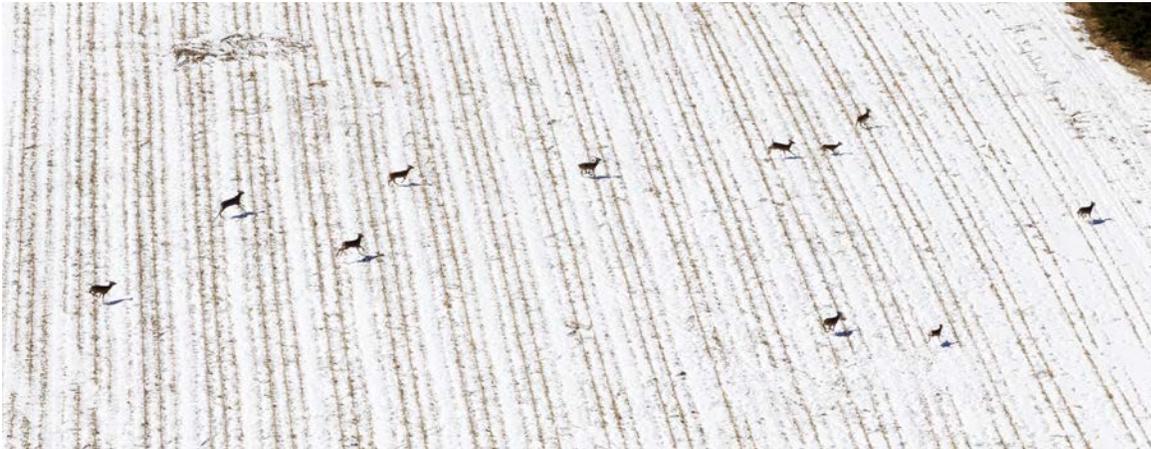
Along the southern shore, the ecodistrict is fairly narrow until it approaches Truro, where it widens and extends inland following the valleys of the Salmon and North rivers to the slopes of the Cobequid Hills. Several other major rivers pass through the ecodistrict, including the Shubenacadie, Chiganois, Folly, Debert, and Bass. The highest elevation seldom exceeds 40 metres above sea level.

The climate, influenced by Cobequid Bay, is such that on the better soils conditions permit the growing of some crops associated with the Annapolis Valley, such as corn and strawberries.

Since European settlement, the construction of dykes has been used to claim farmland from the tidal salt marshes that surround the bay.



The daily tidal fluctuation creates extensive mud flats along Cobequid Bay and river estuaries. Farmland, forests of black spruce and wetlands covers the level topography of this ecodistrict at Lower Debert.



The farmlands in this ecodistrict are foraged extensively by the overwintering deer populations.

The ecodistrict is underlain by the Triassic era red siltstones and sandstones. On the north shore of the Cobequid Bay most of the ecodistrict has been covered by glacial deposits of sand and gravel that have formed deep beds. Along the bay the soft sandstones have been gradually eroding and extensive tidal flats on both sides of the bay are evidence of a once larger land mass.

Private land ownership accounts for 89% of the total Minas Lowlands Ecodistrict area of 43,700 hectares. Only 4% of the ecodistrict is 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 nine key landscape elements – two dominant co-matrix elements, six smaller patch elements, and a corridor element– in Minas Lowlands.

**Red and Black Spruce Hummocks** is one of the co-matrix elements, representing 34% of the ecodistrict. **Spruce Pine Hummocks** is the other co-matrix, accounting for 32% of the area, and together representing nearly two-thirds of the ecodistrict. The dominant species in both ecodistricts is spruce – mainly black and red – with some pine and balsam fir.

Two patch elements – **Marshes and Grasslands** and **Salt Marsh** – are associated with the tidal action in Cobequid Bay and are mainly found at the mouths of major rivers that empty into the bay.

The other patch elements, in order of size, are **Spruce Hemlock Pine Hummocks and Hills**, **Red and Black Spruce Flats**, **Tolerant Hardwood Hills**, and **Wetlands**.

**Valley Corridors** is a linear corridor element associated with the major river systems in the ecodistrict. Over half of these corridors have been converted to other uses, such as farming and settlement.