



## Ecodistrict Profile

### Ecological Landscape Analysis Summary Ecodistrict 440: **Eastern Interior**

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 Eastern Interior Ecodistrict 440. 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 Eastern Interior Ecodistrict, one of the largest in the province with an area of 457,493 hectares, includes the eastern part of mainland Nova Scotia that extends from Halifax in the west to the community of Guysborough in the east. The ecodistrict includes the inner coastal waters of some of the longer harbours to the south and extends northerly into the centre of the province.

The bedrock is highly visible in those areas where the glacial till is very thin, exposing the ridged topography. Where the till is deeper, the ridged topography is masked and thick softwood forests occur. Three distinct concentrations of drumlins can be identified roughly by the watersheds of the three rivers that flow through them: Sackville, Tangier, and Moser. Although drumlins are scattered elsewhere in the ecodistrict, these three areas represent the highest concentrations.

The forests of the ecodistrict are primarily coniferous with an overstory dominated by red and black spruce, white pine, and balsam fir with a lesser component of white spruce.

On the drumlins, tolerant hardwood forests of sugar maple, yellow birch, and beech occur. Red maple is a significant component of many hardwood forests.

Forests of black spruce, jack pine, and white pine are found where soils are shallow and bedrock exposure is significant.



Black spruce and white pine forests and sparsely forested open woodlands along the Glencross Rips on the Liscombe River, looking westerly.

The ecodistrict has several sites of ecological significance, most of which are associated with the estuaries of the larger rivers where they meet the Atlantic Ocean. This confluence of fresh and salt water provides important feeding and nesting habitat for migratory birds and as wintering areas for several species of waterfowl.



These mixing areas are also the start of the upstream journey for several important anadromous fish species – those that migrate up river from the sea to spawn – including the Atlantic salmon. Private land ownership accounts for 46% of the ecodistrict area, with 45% under provincial Crown management.

Large areas throughout the ecodistrict are shallow to bedrock and support poorly stocked forests of black spruce and pine.

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 Eastern Interior.

**Spruce Pine Hummocks** is the widely dispersed matrix element on about one-quarter of the ecodistrict occurring on imperfectly drained soils on hummocky terrain. The inherent low soil fertility creates a forest of black spruce with white pine and – on better sites – red spruce. This element is frequently disturbed by windthrow and fire.

**Tolerant Mixedwood Hills** is a widely distributed large patch element occurring on hilly terrain. The well-drained soils support a mixed forest of Acadian species such as red spruce and yellow birch. Early successional species that follow after stand-level disturbances include red maple, white birch, and balsam fir.

Other patch elements, in order of size, are **Red and Black Spruce Hummocks, Tolerant Hardwood Drumlins and Hummocks, Spruce Hemlock Pine Hummocks and Hills, Wetlands, Spruce Pine Flats, and Salt Marsh.** *The ecodistrict also includes an Urban element.*

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