



Ecodistrict Profile

Ecological Landscape Analysis Summary Ecodistrict 820: **Eastern Shore**

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 Shore Ecodistrict 820. 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.

From the Chebucto peninsula of Halifax County to the Chedabucto peninsula in Guysborough County, this narrow coastal ecodistrict spans a variety of landforms, geology, and soils.

The cool moist climatic influence of the Atlantic Ocean creates conditions for a boreal-like coastal forest of spruce and fir. For most of the ecodistrict, the influence of the ocean extends inland for several kilometres but widens to encompass the entire Chedabucto peninsula.

This ecodistrict has several sites of ecological significance. Most of these are relatively undisturbed islands and important breeding sites for colonial nesting seabirds. The outer estuary of Musquodoboit Harbour is a wetland of international importance.

Eastern Shore is one of the most important ecodistricts in the province for breeding eiders. The endangered roseate tern has been reported from several sites. The endangered piping plover has nested on beaches in the ecodistrict.

Lakes are numerous in the ecodistrict and fresh water makes up nearly 6% of the area. Loons are known to breed in some of the larger lakes.



The distinctive landscape at East Quoddy forms part of the Eastern Shore Ecodistrict.

The coastal forests of the Eastern Shore Ecodistrict are primarily coniferous with an overstory dominated by black spruce and balsam fir with a lesser component of white spruce. Red maple and white birch occupy an intermediate position in the canopy.

White spruce will form pure stands on sites previously disturbed by activities such as farming. On severely exposed headlands, white spruce will form krummholz, a severely stunted forest condition due to constant exposure to coastal winds. Jack pine occurs on the granite barren lands of the Chebucto and Chedabucto peninsulas, indicating that drought and fire have played a role in this part of the ecodistrict.

Overlying the bedrock in most parts of Eastern Shore Ecodistrict are glacial deposits of ground moraine and streamlined drift. Many drumlins occur throughout the ecodistrict, helping shape the topography.

Private land ownership accounts for 53% of the total area of 171,604 hectares. Forty-one percent of the ecodistrict is under provincial Crown management.



The endangered piping plover has nested on some of the beaches in Eastern Shore.

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 10 key landscape elements – one dominant matrix element, a locally dominant co-matrix, seven smaller patch elements, and a corridor element– in the Eastern Shore Ecodistrict.

Coastal Spruce is the widely dispersed dominant matrix element, found on 26% of the ecodistrict, occurring on hummocks, drumlins, flats, ridges, and low hills. Soils are well to imperfectly drained, fine to medium-textured glacial tills supporting a typical coastal forest of black spruce, white spruce, and balsam fir. A few small areas of yellow birch, white birch, and red maple also occur.

Coastal Barrens is a locally dominant co-matrix element, covering 35% of the ecodistrict, associated primarily with the Chebucto and Chedabucto peninsulas. Soils are impoverished, derived from glacial till peppered with large granite boulders. Vegetation includes stunted spruce and woody shrubs. Often soils are shallow to bedrock and reindeer lichens form extensive mats.

Three large coastal elements, **Coastal Mixedwood Hills**, **Coastal Spruce Ridges**, and **Coastal Mixedwood Hills and Drumlins**, represent 34% of the ecodistrict. The four other patch elements, in order of size, are **Wetlands**, **Coastal Spruce Flats**, **Coastal Beach**, and **Salt Marsh**.

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