



Ecodistrict Profile

Ecological Landscape Analysis Summary Ecodistrict 630: **Central 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 Central Lowlands Ecodistrict 630. 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 Central Lowlands Ecodistrict encompasses parts of East and West Hants, Colchester, and Halifax counties. The ecodistrict covers an area of 270,250 hectares and is the largest ecodistrict in the Valley and Central Lowlands Ecoregion.

A significant feature of this ecodistrict is the several tidal rivers influenced by the Bay of Fundy, such as the Shubenacadie, Tennycape, Walton, Kennetcook, Cogmagun, Tomcod, and Meander. The only exception is the Musquodoboit River, which drains east to the Atlantic Ocean.

Most of the ecodistrict is fairly level with hummocky to undulating topography, with elevations seldom exceeding 90 metres above sea level.

Reddish-brown, fine-textured soils comprising loams, silts, and clays are common. The climate is conducive to farming and the area has been used extensively for dairy and beef production and the growing of forage, corn, and soybeans.

This ecodistrict is underlain by Carboniferous era shale, limestone, sandstone, and gypsum. Karst topography – sometimes indicated by the presence of sink holes – is found on areas underlain by gypsum. Glacial outwash deposits – some of which have been quarried for gravel and sand – are abundant, especially along the rivers.



A complex of red maple, aspen and black spruce forests along the Walton Woods Road, Hants County.

Rivers in the ecodistrict are important for populations of anadromous fish – that migrate up river from the sea to spawn – such as gaspereau, shad, and eels, as well for nesting and overwintering bald eagles. Wood turtles have been found within the Shubenacadie, Walton, Kennetcook, and Herbert watersheds.

Wildlife can be viewed at the Shubenacadie Provincial Wildlife Park.



The tidally influenced Shubenacadie River near Stewiacke showing the dyke used to keep salt water off the farmlands.

The soils and climate of the ecodistrict support coniferous forests of black and red spruce, white pine and hemlock, and earlier successional species of white birch, red maple, and aspen. On the better-drained hills, climax forests of mixed Acadian Forest species of yellow birch, red spruce, hemlock, beech, and sugar maple will occur.

Private land ownership accounts for 80% of the total Central Lowlands Ecodistrict area. Sixteen percent is under provincial Crown management. Less than 1% is considered aboriginal lands. The remaining lands are in transportation corridors and inland waters.

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 ten key landscape elements – one dominant matrix element, eight smaller patch elements, and a corridor element– in Central Lowlands.

Red and Black Spruce Hummocks is the matrix element, representing 40% of the ecodistrict. Red and black spruce are the main species. White and red pine form a significant component, indicating a history of disturbances by fire.

Tolerant Hardwood Hills, representing 27% of the ecodistrict, is the largest patch element. This element supports shade-tolerant species of the Acadian Forest, such as sugar maple, yellow birch, beech, red spruce, and hemlock.

The other patch elements, in order of size, are **Tolerant Mixedwood Hummocks, Spruce Pine Flats, Floodplain, Wetlands, Marshes and Grasslands, Salt Marsh, and Tolerant Hardwood Drumlins and Hummocks.**

Valley Corridors is a linear element associated with the main rivers in the ecodistrict, including the Musquodoboit, Shubenacadie, Stewiacke, Kennetcook, St. Croix, and St. Andrews.