



## Ecodistrict Profile

### Ecological Landscape Analysis Summary Ecodistrict 740: **LaHave Drumlins**

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 LaHave Drumlins Ecodistrict 740. 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.

As the name indicates, one of the defining features of this ecodistrict is its many drumlins. These are teardrop-shaped hilly deposits left behind as glaciers melted. The LaHave Drumlins area is considered one of the finest examples of drumlins in eastern North America.

The total area of the ecodistrict is 275,071 hectares, of which about three-quarters is privately owned.



The drumlinized till plain of this ecodistrict is considered one of the best drumlin landscapes in eastern North America. The classic streamlined, teardrop-shaped deposits of glacial till rise roughly 4-50 m with the tapered or narrow end pointing in the direction of glacial movement.

This ecodistrict encompasses an area from New Ross in the east to the Kejimikujik National Park in the west. This part of the province generally has early, warm springs and a long growing season, followed by a relatively mild winter. The area receives approximately 1,400 to 1,500 mm of precipitation annually.

About 75% of LaHave Drumlins is forested. Softwood forests largely comprise mature or multi-aged species of trees that grow well in shade, such as red spruce, white pine, and hemlock. The hardwood forests have a more balanced representation of all development types. Red maple is the dominant species with lesser amounts of white birch. Shade-tolerant species include sugar maple, beech, and yellow birch. Red oak occurs occasionally.

Shallow, stony till derived from the underlying slates dominates the ecodistrict. Most of the soils can be characterized as well-drained, shallow, sandy loams except those developed on drumlins, which tend to be deeper and less stony.

Total freshwater area in the ecodistrict is 27,634 hectares, or about 10%. The main rivers are the LaHave and Medway. There are a number of lakes of varying sizes. Rivers and abundant small streams are often shallow and fast-moving. There are also many wetlands.

Nine gold districts are scattered throughout the ecodistrict and they produced more than 110,000 ounces of gold from the late 1880s until the 1950s.

About twenty-five offshore islands in Mahone Bay are included in the LaHave Drumlins Ecodistrict. These islands are important wildlife habitats, serving as breeding and roosting areas for many seabirds that breed in colonies, such as herons, terns, gulls, sea ducks, puffins, black guillemots and cormorants.



The Atlantic whitefish is a species at risk only found in the Petite Rivière watershed in the LaHave Drumlins Ecodistrict.

Species in the ecodistrict considered to be at risk include fish species (Atlantic whitefish, Atlantic salmon), and coastal bird species (piping plover, roseate tern).

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 six key landscape elements – one dominant matrix element, four smaller patch elements, and a corridor element – in LaHave Drumlins.

**Tolerant Mixedwood Drumlins** is the matrix element. Prior to European settlement, this element would have supported a forest of trees that grow well in shade. These include hardwoods – sugar maple, yellow birch, and beech – and softwoods, such as red spruce, eastern hemlock, and white pine. The matrix, representing close to half the ecodistrict, has been fragmented as a result of farming, forestry, and Christmas tree cultivation.

**Spruce Hemlock Pine Hummocks and Hills** is the largest patch element, representing a little more than a quarter of the ecodistrict's area. Shade-tolerant softwoods are most common, while mixedwoods generally include red maple. The other patch elements, in order of size, are **Spruce Pine Flats, Wetlands, and Pine Oaks Hills and Hummocks**.

**Valley Corridors** is a linear element associated with the major watercourses in the ecodistrict. With the exception of sections along the LaHave River, the corridor is usually well forested. *Coastal Beach is a tiny element also found in the ecodistrict.*