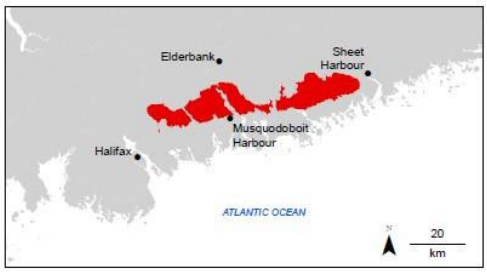
A NOVA SCOTIA DEPARTMENT OF NATURAL RESOURCES PUBLICATION

Ecodistrict Profile

Ecological Landscape Analysis Summary
Ecodistrict 430: **Eastern Granite Uplands**



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 Granite Uplands Ecodistrict 430. 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.

Eastern Granite Uplands is a narrow ridge about 80 kilometres long by 8 to 10 kilometres wide running east of Waverley to Sheet Harbour, with a total area of 60,224 hectares. The ecodistrict lies north of the coastal Eastern Shore Ecodistrict.

Rising sharply up to 100 metres above the adjacent coastal area, often with steep cliffs, this rocky ridge is dissected by narrow river gorges, the most notable being the Musquodoboit River. Also of note are long narrow lakes, such as Lake Charlotte and Porters Lake. Freshwater lakes and streams are abundant, representing 11% of the area.

Three wilderness areas – Waverley-Salmon River Long Lake, White Lake, and Tangier Grand Lake – cover 22,700 hectares, or more than one-third of the ecodistrict. These wilderness areas offer unique outdoor recreational opportunities, such as hiking, cross-country skiing, fishing, canoeing, hunting, and trapping.

The granite that underlies this ecodistrict is similar to the granite of the South Mountain Ecodistrict and other outcrops throughout the western and eastern ecoregions. Granite is highly resistant to erosion and most of the soils associated with this granite are coarse-textured and shallow.

Freshwater lakes account for 11% of the ecodistrict with Tangier Grand Lake as one of the largest. This site is also one of three wilderness areas in the ecodistrict.

Many areas in this ecodistrict have exposed bedrock and are scattered with huge, sometimes house-size, granite boulders deposited by glaciers. It is estimated that approximately 15% of the ecodistrict is exposed bedrock.

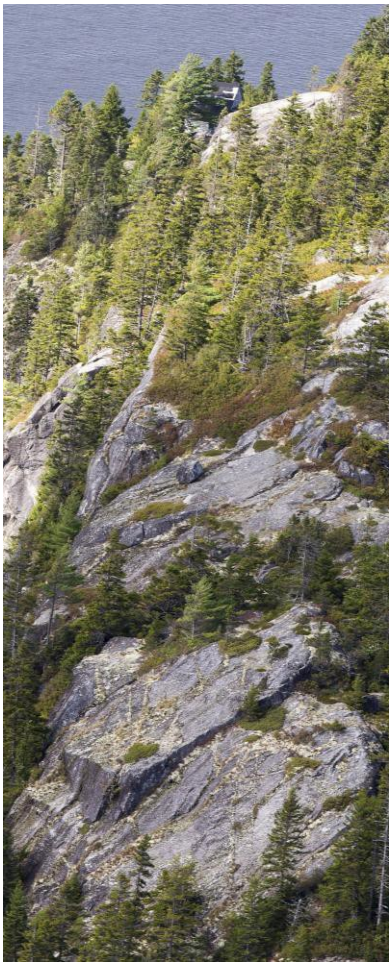
Few bogs and fens are found in this ecodistrict, but there are several notable wetlands bordering the Musquodoboit River.

The forests of this ecodistrict are predominantly softwood, with red spruce stands on the better-drained and deeper soils associated with hummocky terrain. Elsewhere, the shallow soils give rise to forests of black spruce and white pine with scattered red pine indicating fire disturbances in the past.

Jack pines are found on the shallow soils of ridge tops. Shade-tolerant hardwoods are usually only found on the few scattered drumlins. Stands of hemlock occur on steep slopes of hills and hummocks alongside rivers and streams.

Private land ownership accounts for 24% of the ecodistrict area, with 65% 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.



Granite cliffs, exposed bedrock and large surface boulders give a rugged appearance to this ecodistrict.

Element descriptions promote an understanding of historical vegetation patterns and the effects of current disturbances. This landscape analysis identified and mapped seven key landscape elements – one dominant matrix element, five smaller patch elements, and a corridor element– in Eastern Granite Uplands.

Spruce Hemlock Pine Hummocks and Hills is the matrix element, representing 43% of the area in the ecodistrict. Most of the element occurs as large hilly areas with a forest of red spruce and white pine. Hemlock will be found on soils with higher moisture and nutrient content. Drier and less fertile soils are dominated by black spruce, white pine, red pine, red oak, and red maple.

Spruce Pine Hummocks and **Jack Pine Hummocks and Ridges** are the two largest patch elements, representing a combined 53% of the area. Black spruce, white pine, jack pine, and hybrid red and black spruce are the most common species. The other patch elements, in order of size, are **Tolerant Hardwood Drumlins and Hummocks**, **Spruce Pine Flats**, and **Wetlands**.

Valley Corridors, a linear element, consists of four prominent river and lake corridors.