



## Ecodistrict Profile

### Ecological Landscape Analysis Summary Ecodistrict 760: **Sable**

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 Sable Ecodistrict 760. 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.

Distinguishing characteristics of the Sable Ecodistrict – which spans Shelburne, Yarmouth and Queens counties – include a generally flat landscape with poor drainage. Only a few hills reach

elevations higher than 100 metres and much of the area is less than 60 metres above sea level. Wetlands account for about 15% of the ecodistrict's area, with bogs – mainly peatland – making up four-fifths of the wetlands. The primary source of water for bogs is rainfall. Several individual bogs are hundreds of hectares in size. Two examples of large continuous bogs are Dunraven Bog in Queens County and Quinns Meadow in Shelburne County.



This ecodistrict has the highest concentration of peat deposits in the province. Some of the peat deposits reach fuel grade and could be an important energy source in the future.

Extensive heathlands, wetlands, and poorly stocked forests of white pine, black spruce and red oak are features of this ecodistrict near Great Pubnico Lake.

A major geological feature within this ecodistrict is the Shelburne Dyke. This is the most prominent dyke in Nova Scotia and extends from Lower West Pubnico to Sambro Island for a distance of 200 kilometres and averages 100 metres in width. A geologic dyke is a flat sheet of rock that cuts through other types of rock.

Sable has some of the longer river systems in the province, such as the Clyde, Roseway, Jordan, Sable, and Broad rivers, which all flow in a north-south direction. The largest lakes within the ecodistrict are Great Pubnico Lake and the complex of Great Barren Lake, Big Gull Lake and Quinan Lake, all located at the western edge of Sable.

The area of the ecodistrict is about 294,500 hectares, and of this about 58% is owned by the Crown. A further 36% is held privately. The remaining 6% is primarily inland waters and transportation routes.

Nearly three-quarters of Sable is forested. Black spruce is common on the less well-drained soils. White pine is abundant where drainage improves and is also found in combination with red spruce and hemlock on the better sites. Red oak is present on some of the drier sites. Mixedwoods are dominated by red maple

occurring with softwoods. The hardwood covertypes is predominately shade-intolerant species, usually red maple.

Shade-tolerant hardwoods are not common. The Sable Ecodistrict supports part of a globally significant cool moist coastal forest that has the highest diversity of lichens in Nova Scotia. A number of lichen species of global significance and rarity occur here, including the nationally endangered boreal felt lichen.

The ecodistrict supports a variety of wildlife, including black bears, which inhabit the forest, preferring wooded areas and swamps.



In preparation for winter hibernation, black bears forage for huckleberries on the extensive heathlands of the Sable ecodistrict.

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 Sable.

**Spruce Pine Hummocks** is the matrix element, representing a little over half of the ecodistrict. Black spruce is the main softwood species, with lesser amounts of white pine and some red spruce and hemlock. Red maple is the most common hardwood. **Wetlands** is the largest patch element, representing about one-fifth of the ecodistrict. This element is dominated by wetlands, with bogs most common.

The other patch elements, in order of size, are **Spruce Hemlock Pine Hummocks and Hills, Pine Oak Hills and Hummocks**, and **Tolerant Mixedwood Drumlins**.

**Valley Corridors** is the corridor element, naturally supporting black spruce in the moister areas and white pine or tolerant softwoods as drainage improves. Past forest harvesting in the corridor has resulted in a large increase in mixedwoods, dominated by intolerant hardwoods.