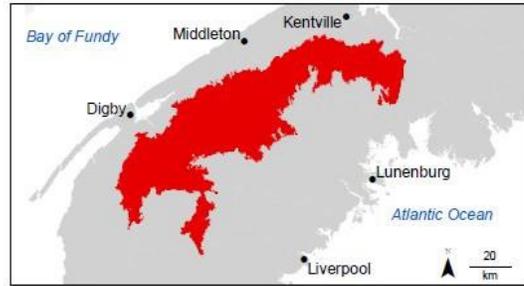


Ecodistrict Profile

Ecological Landscape Analysis Summary Ecodistrict 720: **South Mountain**



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 South Mountain Ecodistrict 720. 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.

South Mountain is one of the largest ecodistricts in the province, sprawling across nine counties, from Hants in the northeast to Yarmouth in the southwest, with an area of more than 455,000 hectares. The foundation for South Mountain, part of the Western Ecoregion, is a fairly homogenous land mass underlain by granite.

The ecodistrict extends from the headwaters of the Sissiboo River to Panuke Lake and includes some of the province's longest rivers, such as the Medway, Mersey, LaHave, Jordan, and Roseway. Larger lakes include Panuke, Paradise, Fisher, Aylesford, Fourth, Fifth, Mulgrave and Gaspereau. Some of these lakes have been developed for hydro power.

The climate features warm, early springs and warm, dry summers. Combined with coarse, shallow soils, this can create periods in the growing season where a lack of moisture is a problem. Winters are moderately mild, although if snow is going to accumulate in western Nova Scotia, it is most likely to do so in this ecodistrict due to the higher elevation.

The Acadian Forest is well represented, particularly with softwood species such as eastern hemlock, red spruce, and white pine, mainly occurring on sites with soils that are well-drained and of a sandy loam texture. Scattered throughout the ecodistrict, on the richer sites, will be hardwood climax forests of sugar maple, yellow birch, and beech, particularly on drumlins and the upper slopes of long hills.



Wetlands in the forms of bogs and streams or riverside fens can be found throughout the ecodistrict.

Abandoned farmland on drumlins tends to reforest with white pine.

Fire has played a dominant role in shaping the forests of this ecodistrict and fire species such as white pine, red pine, white birch and red oak are extensive. Continued efforts on fire suppression may allow later successional species of the Acadian Forest to become more common.

The ecodistrict provides habitat for several species of plants belonging to a group known as Atlantic Coastal Plain Flora. These rare plants became established in southwestern Nova Scotia as a result of a land bridge between the province and Massachusetts 10,000 to 14,000 years ago. Sea level was likely about 110 metres lower than today.

Raptors that nest in South Mountain include bald eagles, ospreys, and hawks.

Endangered mainland moose occur in this ecodistrict, primarily as part of the remnant population of mainland moose found in the Tobeatic Wilderness Area. The southern flying squirrel has also been found in the ecodistrict.



Both northern and southern flying squirrels occur in the older forests of this ecodistrict. (*Kiyono Katsumata photo*)

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 profile identified and mapped nine key landscape elements – one dominant matrix element, seven smaller patch elements, and a corridor element – in South Mountain.

Red and Black Spruce Hummocks is the matrix element, covering more than 60% of the ecodistrict. The climax forest is dominated by late successional shade-tolerant softwoods, such as red spruce and eastern hemlock, along with white pine.

The largest patch element is **Spruce Hemlock Pine Hummocks and Hills**. This element supports a climax forest of red spruce, eastern hemlock and white pine on the slightly moister sites, with white pine, red oak and red pine on the drier hilltops.

Other patch elements, in order of size, are **Spruce Pine Flats, Tolerant Mixedwood Drumlins, Wetlands, Tolerant Mixedwood Hummocks, Tolerant Hardwood Hills, and Spruce Pine Hummocks**.

Valley Corridors is a linear corridor element found mainly along some of the ecodistrict's major waterways. Corridors are extremely important for biodiversity and ecosystem functioning.