he St. Lawrence River and Mount Royal form nature’s backdrop to the city of Montréal. Both played key roles in its founding and growth. In the river, the Lachine Rapids, which once blocked the progress of explorers seeking a passage to the Northwest, churn over the underlying resistant rock. And Mount Royal must have afforded the first inhabitants a natural lookout from which to observe the surrounding region. This hill, which gave its name to the city, is a remarkable geotourism attraction, offering a full view of the surrounding geological panorama: the broad St. Lawrence Plain, the Monteregian Hills to the east, the Laurentian Plateau to the north, the first hint of the Appalachians to the southeast, and the Adirondack Mountains to the south. In just over 350 years, the Montréal region has become the largest inland port in the world, a major international metropolis, and an important high-technology centre.

Water in Montréal
The St. Lawrence River, majestic gateway to a continent, is an integral part of the landscape of Montréal.
The soil yields its harvest

The rich farmland of the Montréal lowlands owes its existence to deposits left behind after the most recent glaciation and to the volcanic activity known as the Champlain Sea and the lava flows that covered it. Under the ancient climate, soil formation is a function of the types of materials available for its development. Bedrock and till are poorly drained, contain little organic material, and are characterized by the absence of surface storms and bulldozers, these materials do not provide a good soil for fine, easily worked sediment and support different crops.

FROM THE ICE AGE TO THE PRESENT DAY THE STORY OF SOIL FORMATION

Soils are the result of deposition and erosion of rock materials. The composition of the soil depends on the nature of the bedrock beneath the surface, the type and nature of the landscape, and the climate. The soil is a complex mixture of organic matter, mineral particles, water, and air. It is formed by the weathering of rocks and the accumulation of organic matter, which is then mixed and redistributed by natural processes such as erosion and deposition. The soil is a dynamic system that changes over time, and its composition and properties can be influenced by human activities such as agriculture and urbanization.

A billion years of history...

Geoscience

The geological heritage to discover

Grenville Province

The Grenville Province is a geologically significant region in Canada and is home to some of the oldest rocks on Earth. The province is characterized by the presence of ancient metamorphic rocks, which have been subjected to extreme pressures and temperatures. The Grenville Province includes the Grenville Front, a fault that separates the province into two distinct geological units. The Grenville Front is a major tectonic boundary, and it is thought to have played a significant role in the evolution of the Canadian Shield.

Historical links in stone

Cape Saint-Martin, near the eastern end of the island, commonly right on construction sites. However, the Saint-Michel Quarry from Montréal, Logan was (yellow mineral) from the QGC...