

Country	Canada
Region/Province/ or State	Ontario
Web Address	<a href="https://www.escarpment.org">https://www.escarpment.org</a>
Date Founded	1990
Size (hectares)	194,555
Distinguishing Features	largest contiguous stretch of primarily forested land in south-central Ontario
Main Industries (in terms of employment)	silviculture, fishery, agriculture, tourism

In February 1990, the Niagara Escarpment was designated as a United Nations Educational, Scientific, and Cultural Organization (UNESCO) World Biosphere Reserve. This biosphere reserve designation recognizes the Escarpment and the land in its vicinity as a nationally and internationally significant landform that includes representative and scientifically valuable examples of sustainable relationships between human activities and ecosystems. The Niagara Escarpment is one of only 18 biosphere reserves in Canada, and is part of an international network of 669 reserves in 120 countries.

The Niagara Escarpment Commission acts as the central convener of the Niagara Escarpment Biosphere Reserve (NEBR).

Reference:<https://www.escarpment.org/NiagaraEscarpment/UnescoWorldBiosphereReserve>

An “Escarpment” is an area with a steep slope or long cliff that separates two level surfaces. Escarpments are formed during hundreds of millions of years by either the vertical movement of the earth’s crust (faulting) or by the slow, gradual breakdown of rocks and minerals (erosion).

## Contents

- [1 How was the Niagara Escarpment formed?](#)
- [2 Today’s Niagara Escarpment](#)

## **How was the Niagara Escarpment formed?**

Nearly 450 million years ago, a shallow, warm sea covered the region and received sediments (sand, silt and clay) from the rivers flowing into it, as well as lime-rich organic material from the abundant sea life. Over millions of years, these materials were deposited in layers, which later became compressed, resulting in the formation of massive sedimentary rocks.

Millions of years later, the region emerged from the sea as a result of the earth's tectonic activity and developed a network of rivers that removed large amounts of sediment from the newly exposed sea floor. This "carving effect" was intensified when the ice that covered the Escarpment during glaciation started to melt. During the last Ice Age (c. 12,000 years), the erosive forces of glaciers and meltwater carved many of the Escarpment's deep valleys and steep slopes.

## **Today's Niagara Escarpment**

The Niagara Escarpment extends from Rochester, New York, through Ontario, across Lake Huron and Michigan's Upper Peninsula, and down through Wisconsin's Door Peninsula. In Ontario alone, the Niagara Escarpment includes more than 100 sites of geological significance, all of which are protected by the Niagara Escarpment Plan, including some of the world's best exposures of ancient rocks and fossils. Remnants of pre-historic marine organisms - such as the ancestors of squids, cuttlefishes, snails, and corals - are common in the Escarpment's geologically significant sites.

Reference: <https://www.escarpment.org/NiagaraEscarpment/Environment/Geology>