

The Oak Ridges Moraine

The Oak Ridges Moraine is a ridge of land that runs parallel to and about 60 km north of Lake Ontario. It extends about 160 km from the Niagara Escarpment in the west to the Trent River in the east.

One of the most significant features of the Moraine is the ground water, which results from rainwater percolation into the generally porous soils of the Moraine. The Moraine forms the watershed divide between Lake Ontario and Lake Simcoe and is the headwaters to more than 30 rivers.

The Moraine was formed as a result of actions by massive sheets of ice that covered much of North America in the last million years. During advances and retreats of the glaciers, materials were scraped and deposited from the land creating a "new" landscape. The Oak Ridges Moraine is one of these new landscapes.

When the glaciers last began to melt, a crack developed in the area of the current Moraine, which eventually widened to form an opening where melt water and debris such as sand and gravel that were previously trapped within the glaciers were deposited.

The complicated geological history, which has led to the development of the Oak Ridges Moraine, makes the landform what it is today. It ranges in width from 1 km to 15 km and has undulating topography made up of gravel, sand and some silt. One of the most significant features of the Moraine is the ground water, which results from rainwater percolation into the generally porous soils of the Moraine. The Moraine forms the watershed divide between Lake Ontario and Lake Simcoe and is the headwaters to more than 30 rivers. The aquifer below the Moraine contributes to both local and regional ground water flows.

The varied geology of the Moraine has also contributed to the diversity of vegetation that can be found there. This includes 100 regionally rare, 5 provincially rare as well as a few endangered species.