



Close to nature.
Close to home.

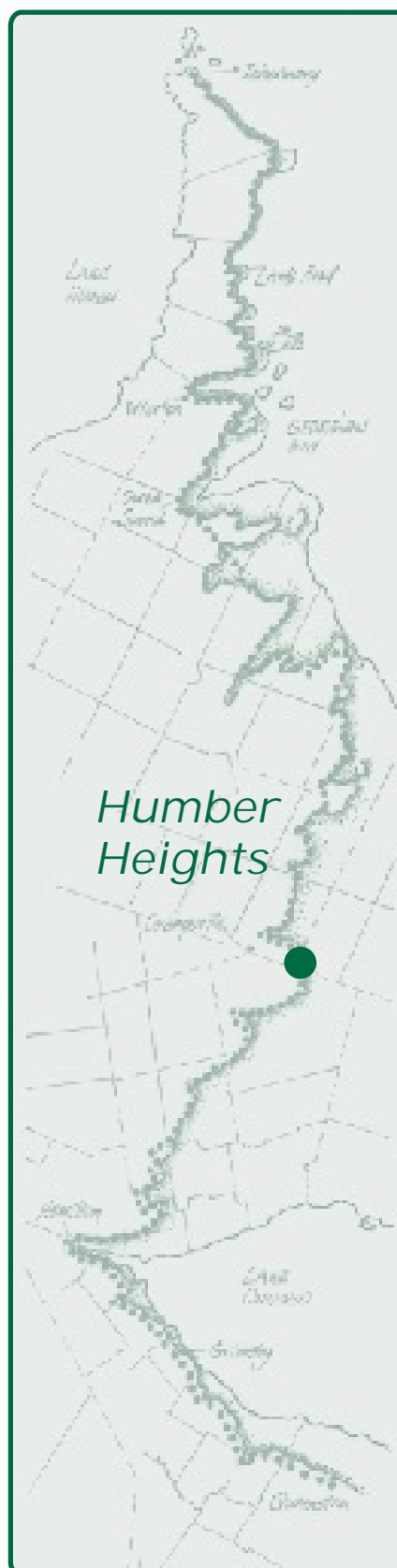
The Bruce Trail Association

Humber Heights

BTA mission statement: To provide a public footpath along the Niagara Escarpment and promote protection of the Escarpment and appreciation of its natural beauty



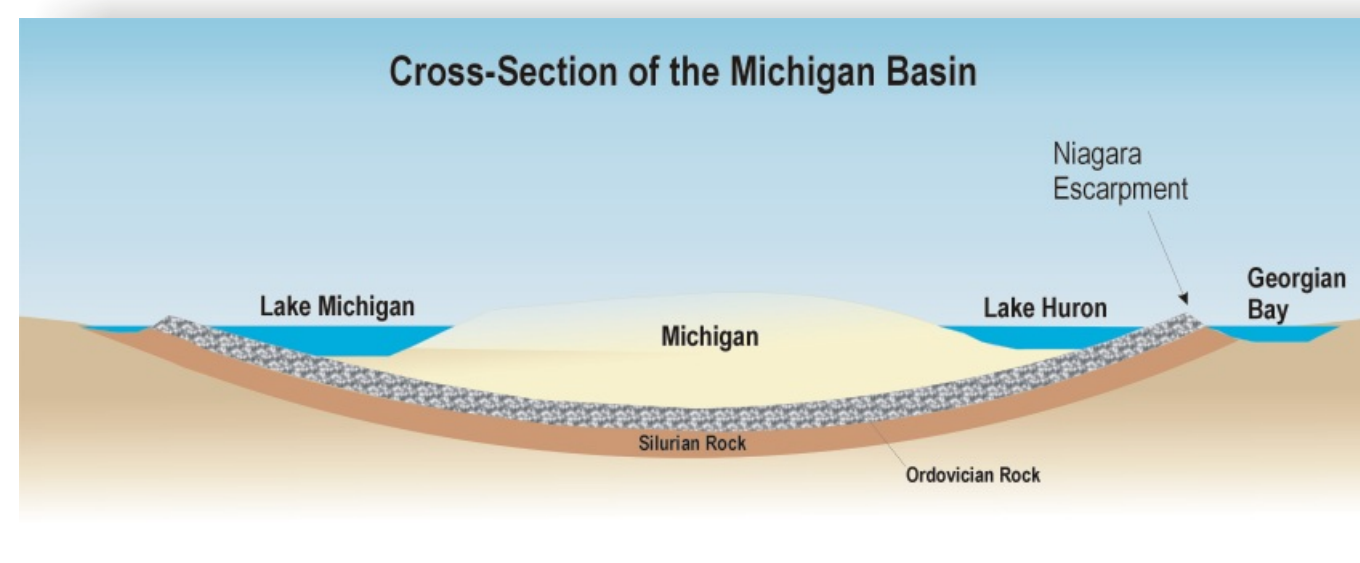
The history of this beautiful spot overlooking the headwaters of the Humber River stretches back more than 400 million years...



450 million years ago this area was covered by a warm, shallow sea. Far to the southeast a large mountain range was rising. No plants or animals had yet ventured on land, but the sea was teeming with life.

The sea inhabiting the area (called the "Michigan Basin") rose and fell over time. In shallow waters, layers of mud were deposited which hardened to shale. In deeper waters, coral reefs developed, which hardened into thick, magnesium-rich limestone and dolostone. Fossils of creatures from these coral reefs can be found in the rocks. Over millions of years, layer upon layer was deposited.

Then, 250 million years ago, the sea left the area for the last time; the rock of the Niagara Escarpment was exposed, and a long period of erosion began.



About 14,000 years ago, which is relatively recent in geological time, this site lay beneath a 2 to 3 kilometre-thick sheet of ice carrying millions of tonnes of sand and gravel.

Up until about 14,000 years ago the Niagara Escarpment and Southern Ontario were entirely buried under glacial ice. Glaciers pick up sand and gravel as they advance, and drop it as they melt (some of the material deposited is known as "glacial till").

About 13,000 years ago the edge of the melting glacier lay just to the south and east at Glen Haffy (south of Highway 9).

Meltwater from the glacier flowed north, carrying sand and gravel which was deposited in this area, completely covering the escarpment bedrock.

The Humber River and its headwaters have carved a path in the glacial sediments just below the escarpment.

Only a few decades ago the smooth "bowl" just to the west was an active gravel pit. Gravel left behind by the glacier was removed, and unwanted material was dumped here at the edge of the escarpment.

Responding to the huge and growing demand for building materials, the gravel pit was part of a tradition that began in the early 1800s.

Pits and quarries along the escarpment were amongst the earliest suppliers of aggregate for construction of roads and buildings, and continue to be a source of aggregate for Southern Ontario.

It is not clear when extraction of aggregate at the Humber Heights site began, but it continued into the early 1980s. Abandoned pits such as these are an important part of the Niagara Escarpment's cultural landscape.

The Site Today . . .

The Humber Heights property has two distinct "personalities": the partially rehabilitated gravel pit, which is dominated by grasses, goldenrod and vetch, and the broadleaf forest that inhabits the escarpment slope and base. Species present at and below the escarpment are Sugar Maple, American Beech and Eastern White Cedar. A wide variety of mosses and lichens can also be found. Black Cherry trees have grown along the stone fence line bordering the field, which also provides a home to small mammals.

To further encourage the process of natural regeneration in the quarry, the BTA planted a variety of native trees and shrubs throughout the bowl in 2002. Species that commonly appear first in old fields and disturbed areas (known as pioneer or early successional species) have shallower root systems, making it easier for them to thrive in the conditions found in the bowl.

By planting these species, an environment more suitable to the species found in the surrounding woodlots will eventually be created. It is expected that these species will, over time, reseed the bowl. In addition, this project will greatly improve the wildlife value of the site by providing sources of food and shelter.

The Humber Heights property was purchased in 1998 with funds from the *Natural Areas Protection Program*. Title was vested to the Ontario Heritage Foundation to ensure its long term protection. The property is on the Niagara Escarpment, which is a *UNESCO World Biosphere Reserve*, and is traversed by 1 km of the Bruce Trail Optimum Route. The Bruce Trail Association is a charitable, membership-based, volunteer organisation who manages the property with the assistance of the Caledon Hills Bruce Trail Club and a volunteer Land Steward.

Geological Cross-Section of Humber Heights Property



For more information about the Bruce Trail, call 1-800-665-HIKE or visit our web site at www.brucetrail.org

Purchase of the property and the interpretive sign were funded by the Natural Areas Protection Program of the Ontario Ministry of Natural Resources

Prepared by the Bruce Trail Association Environment Committee

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