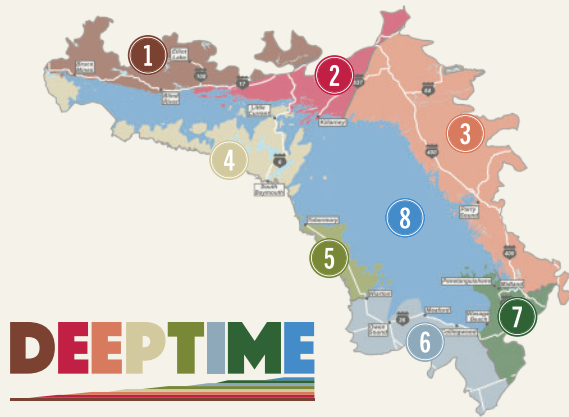


EXPLORE THE GEOLOGICAL PAST. CREATE A SUSTAINABLE FUTURE.

In Anishinaabe culture, rocks are considered as grandfathers, the wisest of elements, with stories to share from as far back as Aki's (Earth's) beginning. By combining this traditional indigenous knowledge with innovative science-based research, the Georgian Bay Geopark educates and promotes informed, responsible tourism and a vibrant sustainable future for this irreplaceable ecosystem.



DEEPTIME ZONE 1: The Huronian Ocean

2.7 billion years - Sault Ste. Marie to Serpent River

DEEPTIME ZONE 2: Continents Collide

1.8 billion years - Serpent River to Killarney

DEEPTIME ZONE 3: The Ancient Himalayas

1.3 billion years - Killarney to Honey Harbour

DEEPTIME ZONE 4: Tropical Seas

500 million years - Manitoulin Island

DEEPTIME ZONE 5: The Limestone Coast

350 million years - Tobermory to Wiarton

DEEPTIME ZONE 6: Ice Ages & Early Cultures

13,000 years - Collingwood to Wiarton

DEEPTIME ZONE 7: The Meeting Place

100,000 to 13,000 years - Honey Harbour to Collingwood

DEEPTIME ZONE 8: Mindo Gami - Great Spirit Lake

4,000 years to today – waters of Georgian Bay

ZONE 2'S CHAPTER IN THE DEEPTIME GEOLOGICAL STORY OF GEORGIAN BAY.

1.8 billion years Volcanic island landmasses collide in the Huronian Ocean on the coastline of ancient continent of Superia, formed 700 million years earlier in DEEPTIME Zone 1. Layers of sedimentary rock push northward into what is now the La Cloche Range.

1.7 billion years Large masses of the molten rock that forms part of the earth's core – magma – cool deep underground, then crystallize into the red granites for which Killarney is known.

1.4 to 1.0 billion years The building of the supercontinent Rodinia raises the 10 km high Grenville Mountains.

500 million years of erosion level the mountains to today's 30,000 Islands. Shallow seaways teeming with life flood North America. Precambrian bedrock is covered with layers of sedimentary rock and fossils.

Over the past 2 million years Rounded features are carved out of bedrock through repeated continental glaciation by ice sheets 2 km thick.

11,000 years ago the last ice sheet withdraws northwards and Georgian Bay is briefly flooded by the ice-dammed Lake Algonquin.

10,000 years ago the region is inhabited by the semi-nomadic Plano people, who crafted white quartzite tools from rocks in the La Cloche Range. Indigenous peoples learn over millennia from the Aki (earth) and rhythms of nature.

In the past 500 years the unique geology, flora and fauna attract 17th century Europeans. In the 20th century the geology is instrumental in the first scientific understandings of how our entire planet was formed.

The goal of the Georgian Bay Geopark is to explore and respect the lessons of DEEPTIME and help create a more sustainable future for this irreplaceable ecosystem.

WELCOME TO DEEPTIME



DEEPTIME ZONE 2 CONTINENTS COLLIDE 1.8 BILLION YEARS SERPENT RIVER TO KILLARNEY.

Killarney Township.

The globally unique 2.7 billion year old geology of Georgian Bay has shaped its land, flora, fauna, cultures, communities, industries and people throughout history.

In DEEPTIME Zone 2, rocks on the edge of the ancient supercontinent Superia were caught up in the tectonic collisions between landmasses that formed supercontinent Nuna about 1.8 billion years ago.

Deep underground, large chambers of molten magma slowly cooled to solid rock and are exposed today in Killarney's red granite hills.

We hope you will explore the Killarney area and all the DEEPTIME zones of the Georgian Bay Geopark to help create a more sustainable future.



Explore the Geological Past. Create a Sustainable Future.

DEEPTIME ZONE 2: SERPENT RIVER TO KILLARNEY

Explore Killarney's past today to help create a more sustainable future tomorrow.



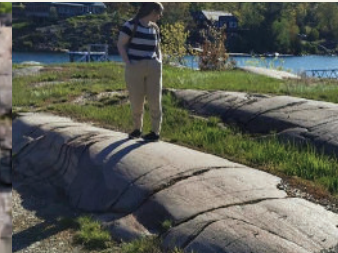
St. Paul Street Boat Launch has excellent views of the La Cloche Range's iconic white ridge, created 1.8 billion years when erosion-resistant quartzite rock was tilted upwards during the Penokean Orogeny (mountain building episode). Look for blocks of quartzite scattered around Killarney for closer inspection.

St. Bonaventure's Church was built in 1851 using local pink granite and white quartzite, along with white sandstone from Manitoulin Island. Several of the stained-glass windows depict the region's characteristic rolling hills.



Killarney Channel / Shebahonaning (safe canoe passage) is one of many prominent ruler-straight fractures throughout the Canadian Shield that weakened the rock, making it vulnerable to glacial erosion and excavation. Such corridors have been used as major transportation routes by indigenous people for millennia because they are sheltered from the rough open waters of the Bay.

Collins Inlet is also home to these fractures, and to indigenous red ochre rock paintings, or 'pictographs' that conveyed important messages or traditional stories and are still sacred teaching places to this day.



killarney
MOUNTAIN RESORTS

Killarney Mountain Lodge The grounds of the Lodge showcase 'whalebacks,' rounded granite rock knobs sculpted by the southerly flow of glacial ice. Deep scratches (striations) and crescentic 'chattermarks' are from debris lodged in the ice scraping the bedrock surface. The Lodge's grey paving stones are made of billion year old gneiss, a metamorphic rock transformed by the intense heat and pressure found 25 km below the Grenville Mountains

The Lighthouse East Trail across Thebo Point is where you will find highly fractured and foliated granites, the result of entering the deformation zone of the Grenville Mountains. If you examine the rock texture closely you may see crystal shapes that were flattened by the deformation.



DEEPTIME

Explore the Geological Past. Create a Sustainable Future.