

# UNESCO GLOBAL GEOPARKS

UNESCO Global Geoparks are single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education and sustainable development. A UNESCO Global Geopark uses its geological heritage, in connection with all other aspects of the area's natural and cultural heritage, to enhance awareness and understanding of key issues facing society, such as using our earth's resources sustainably, mitigating the effects of climate change and reducing natural disasters-related risks.

By raising awareness of the importance of the area's geological heritage in history and society today, UNESCO Global Geoparks give local people a sense of pride in their region and strengthen their identification with the area. The creation of innovative local enterprises, new jobs and high-quality training courses is stimulated as new sources of revenue are generated through geotourism, while the geological resources of the area are protected.

While a UNESCO Global Geopark must demonstrate geological heritage of international significance, the purpose of a UNESCO Global Geopark is to explore, develop and celebrate the links between that geological heritage and all other aspects of the area's natural, cultural and intangible heritages. It is about reconnecting human society at all levels to the planet we all call home and to celebrate how our planet and its 4,600 million year long history has shaped every aspect of our lives and our societies.











# GEOPARKS IN CANADA

The concept of geoparks in Canada began gaining momentum in the early 2000s, inspired by the growing global movement to recognize and protect sites of significant geological value. Canada's first UNESCO Global Geopark, Stonehammer in New Brunswick, was designated in 2010, marking a major milestone and setting the stage for future development.

Since then, four additional geoparks across the country have earned UNESCO status, each highlighting distinct geological features and deep connections to Indigenous and local cultures. In response to this growing interest, the Canadian Geoparks Network (CGN) was established to unite and support both potential and designated geoparks. The CGN brings together Canada's geoparks to share best practices, coordinating national efforts, and promoting education, geotourism, and sustainable development rooted in Earth sciences. With representation from diverse regions and geological settings, Canada's geoparks and the CGN play a vital role in preserving natural heritage while fostering local pride, scientific awareness, and international cooperation.

The CGN works closely with the Canadian Commission for UNESCO and the Global Geoparks Network, advocating for geopark values and helping new sites navigate the rigorous UNESCO application process. The network promotes best practices in geoconservation, public engagement, and place-based learning, all while encouraging respectful partnerships with Indigenous communities whose traditional knowledge adds invaluable depth to understanding the land.

Today, geoparks in Canada not only protect geological heritage but also serve as catalysts for local pride, sustainable economic development, and lifelong learning across diverse landscapes and cultures.

#### 2004

The **Global Geoparks Network** (GGN) was launched under UNESCO's support.

### 2009

The Canadian National Committee for Geoparks (CNCG) was formed.

### 2010

**Stonehammer** (New Brunswick) was designated as the first UNESCO Global Geopark in North America.

### 2014

**Tumbler Ridge** (British Columbia) was designated as UNESCO Global Geopark

#### 2018

**Percé** (Québec) was designated as UNESCO Global Geopark

#### 2020

The **CNCG** became the **Canadian Geoparks Network** (CGN) and is now a committee under the auspices of the Canadian Commission for UNESCO.

#### 2020

**Cliffs of Fundy** (Nova Scotia) was designated as UNESCO Global Geopark

**Discovery** (Newfoundland and Labrador) was designated as UNESCO Global Geopark Canada is home to five UNESCO Global Geoparks, each showcasing the country's rich and diverse geological heritage. Spread across five provinces, from the dramatic coastal cliffs of Newfoundland and Labrador to the ancient mountain ranges of British Columbia, these geoparks highlight the immense geological variety found across the country. They serve as living laboratories where millions of years of Earth's history are preserved in rock formations, fossils, and landscapes shaped by glaciers, volcanoes, and shifting tectonic plates.



Each geopark tells a unique story of Canada's geological past and cultural connections to the land. Whether it's the fossil-rich beds of Tumbler Ridge in British Columbia, the rugged terrain of Stonehammer in New Brunswick, or the volcanic remnants in the Percé region of Quebec, these protected areas offer educational experiences, recreational opportunities, and a deep appreciation for our planet's dynamic processes. The distribution of these geoparks across Canada reflects not only the geographic breadth of the country but also its geological complexity and significance on a global scale.

Protecting Canada's geodiversity is vital for understanding our planet's past, present, and future. Geological features provide critical insights into natural processes such as climate change, plate tectonics, and biodiversity evolution. They also support ecosystems, influence soil and water systems, and supply natural resources that communities depend on. Beyond their scientific value, these landscapes hold deep cultural and spiritual significance, particularly for Indigenous peoples whose histories are closely tied to the land. By safeguarding geodiversity through initiatives like UNESCO Global Geoparks, Canada not only preserves irreplaceable natural heritage but also promotes environmental stewardship, community resilience, and sustainable development for generations to come.

# STONEHAMMER UNESCO GLOBAL GEOPARK



#### **NEW BRUNSWICK**



Stonehammer Geopark is a 2500km region in Southern New Brunswick, centered around the city of Saint John and covering a vast area along the Bay of Fundy.

### **GEOLOGY**

The geology of Stonehammer spans over a billion years, making it one of the most geologically diverse regions in the world. Its unique landscape is created by the collision of continents, the closing and opening of oceans, volcanoes, earthquakes, ice ages and climate change. The Geopark also includes geological stories from late precambrian to the most recent Ice Age, and almost everything in between. Fossil discoveries within the geopark, such as early marine life, provide insight into Earth's evolving ecosystems.

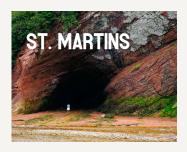




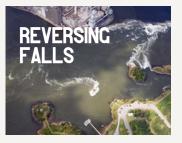
VISIT THEIR WEBSITE
Scan the OR code

HTTPS://STONEHAMMERGEOPARK.COM

# **GEOSITES**









### **HISTORY**

Stonehammer UNESCO Global Geopark weaves together stories of the land with those of the people who live on it. Indigenous peoples have lived in the region for over 13,000 years, witnessing dramatic changes to the landscape at the end of the last ice age. In the early 19th century, Abraham Gesner began the first formal geological survey of the area. Later, members of the Steinhammer Club, a precursor to New Brunswick's Natural History Society, made incredible fossil discoveries that contributed to the global understanding of the evolution of life on Earth. The region has also played a role in Canada's industrial history, with resources mined and processed here used around the world.

The idea of establishing a geopark emerged in the early 2000s, driven by local efforts to promote geological heritage, education, and tourism. In 2010, Stonehammer was officially designated as North America's first UNESCO Global Geopark, marking a major milestone in recognizing Canada's rich geological and historical landscapes.

# PERCÉ UNESCO GLOBAL GEOPARK





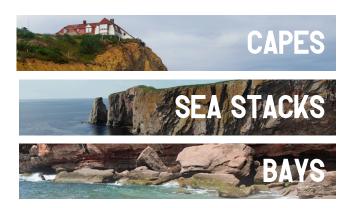
#### QUEBEC

Percé Geopark is located in the geological province of the Appalachians in Percé, a coastal village in the extreme east of the Gaspésie region, in the province of Québec.

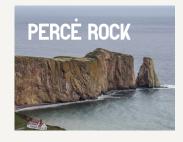
### **GEOLOGY**

The geology of Percé is a remarkable window into Earth's distant past, showcasing rock formations that span over **500 million years**. The region is best known for its famous **Percé Rock**, a massive limestone stack sculpted by **erosion**, and the nearby cliffs and strata that reveal sedimentary layers from the **Cambrian**, **Ordovician**, **Silurian** and **Devonian periods**. Carboniferous formations are capping these older

Carboniferous formations are capping these older formations with an angular unconformity. These rocks were formed in ancient marine environments and later uplifted and shaped by tectonic forces during the formation of the **Appalachian Mountains**. **Fossils** of marine organisms, such as trilobites and brachiopods, are abundant throughout the area, offering important clues about life in prehistoric seas. The Geopark's landscapes, shaped by millions of years of geological processes, make it a natural laboratory for understanding Earth's history.



# **GEOSITES**









### **HISTORY**

Percé Geopark was officially designated in 2018, becoming the first UNESCO Global Geopark in Quebec and the third in Canada. The region holds historical significance as the birthplace of **geological mapping in Canada**, initiated by **Sir William Logan**, the first Director of the **Geological Survey of Canada**. The Geopark's mission encompasses the protection of its diverse landscapes, environmental education, and the promotion of sustainable development, all while celebrating the rich cultural heritage of the **Mi'kmaq** people. Today, it stands as a model for environmental education, conservation, and sustainable tourism.

VISIT THEIR WEBSITE Scan the QR code





# CLIFFS OF FUNDY UNESCO GLOBAL GEOPARK



# Cliffs of Fundy Geopark



#### **NOVA SCOTIA**

Cliffs of Fundy Geopark in Nova Scotia is nestled on the north shore of the Minas Basin in the Bay of Fundy, stretching from Lower Truro in the east to Apple River in the west, a distance of 165 km.

### **GEOLOGY**

Cliffs of Fundy presents an extraordinary geological story that stretches back more than 300 million years. The region's geology captures key moments in Earth's history, including the dramatic breakup of the supercontinent **Pangea** and the opening of the Atlantic Ocean. This extraordinary landscape features towering cliffs, ancient lava flows, fault lines, and fossil-rich deposits, all of which document significant shifts in the planet's crust over time. One of the Geopark's most aweinspiring features is that it is home to the world's highest tides, which can rise and fall by over 16 meters. These powerful tidal forces continue to shape the coastline, carving out stunning formations and revealing the dynamic, ever-changing nature of the landscape. The Geopark offers an unparalleled opportunity to witness geological processes in action, making it a living testament to Earth's long and ongoing geological evolution.



## **GEOSITES**









### **HISTORY**

Cliffs of Fundy was officially designated as a UNESCO Global Geopark in 2020, the result of years of collaboration among local communities, organizations, and governments. The area has been home to Indigenous Mi'kmaq communities for over 13,000 years, who remain deeply connected to its lands through stories, traditions, and stewardship. European settlers later established small, resilient communities whose livelihoods were tied to fishing, farming, and shipbuilding. Today, the Geopark stands as a symbol of cultural endurance and community pride, celebrating the rich human history woven into its landscape.

**VISIT THEIR WEBSITE** 

Scan the QR code

HTTP://FUNDYGEOPARK.CA

# DISCOVERY UNESCO GLOBAL GEOPARK



#### **NEWFOUNDLAND**



Discovery Geopark is located on the upper half of the Bonavista Peninsula on the eastern coast of the island of Newfoundland. The geographic region is approximately 3½ hours from the capital city of St.

John's.

## **GEOLOGY**

Discovery is renowned for its exceptional geological features, showcasing a rich and diverse geological history that spans over 600 million years. The landscape has been sculpted over hundreds of millions of years by plate tectonics, glaciers, and coastal erosion, with significant rock formations that provide a window into Earth's past. The geopark includes some of the oldest rocks on the planet, including the world-famous Bonavista Peninsula, which contains sedimentary layers that reveal the effects of ancient glacial and oceanic processes. One of the most striking geological features is the series of dramatic cliffs and coastal landforms, shaped by the forces of the Atlantic Ocean. Additionally, the region boasts a range of fossils, including traces of ancient life from the Cambrian period, offering crucial insights into the early evolution of life on Earth. The combination of these diverse geological elements makes the geopark a unique and valuable site for both scientific research and education.



# **GEOSITES**









### **HISTORY**

Discovery Geopark was officially designated on **July 10**, **2020**, following over a decade of dedicated planning and community involvement. This grassroots initiative was spearheaded by local volunteers and supported by various stakeholders, including municipal, business, and not-for-profit sectors, as well as federal and provincial governments. Their collective efforts culminated in the successful application to UNESCO, marking the **Bonavista Peninsula** as **Newfoundland and Labrador's** first UNESCO Global Geopark.

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# TUMBLER RIDGE UNESCO GLOBAL GEOPARK

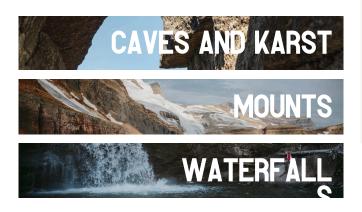


#### **BRITISH COLUMBIA**

Tumbler Ridge Geopark is located on the eastern slopes of the northern Rocky Mountains in British Columbia, east of the Alberta border and to the west the Sukunka Valley. The total area is 8478 km².

### **GEOLOGY**

Tumbler Ridge showcases a remarkable geological tapestry spanning over 600 million years. Nestled within the eastern slopes of the Hart Ranges of the northern Rocky Mountains, the geopark's terrain is characterized by rugged mountain peaks, deep valleys, and glaciated summits, with Bulley Glacier Peak standing as its highest point at 2,630 meters above sea level. This diverse landscape reflects the dynamic geological processes that have shaped the region, including sedimentary deposition within the Western Canadian Foreland Basin and subsequent deformation during past mountain-building events. Notably, the geopark is renowned for its paleontological significance, housing globally important Cretaceous dinosaur trackways and bone beds, as well as Triassic marine reptile fossils. These features not only highlight the area's rich geological history but also offer visitors a unique opportunity to explore Earth's ancient past through its preserved landscapes and fossil records.



## **GEOSITES**









### **HISTORY**

Tumbler Ridge Geopark was officially designated on September 23, 2014. This achievement followed a concerted effort by local organizations, including the Tumbler Ridge Museum Foundation and the Peace Region Paleontology Research Centre, who had been advocating for the region's geological significance. By highlighting the area's rich geological heritage, the community aimed to attract tourism and foster sustainable development. In 2023, Tumbler Ridge Global Geopark Society further invested in tourism and community development by constructing a new interpretive centre, enhancing visitor engagement and educational opportunities.

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HTTPS://WWW.TUMBLERRIDGEGEOPARK.CA/



# POTENTIAL GEOPARKS IN CANADA

Canada is home to a growing network of potential Geoparks each showcasing unique geological and cultural landscapes. These regions are working toward UNESCO designation to promote sustainable development, education, and tourism.



#### CHARLEVOIX (QUEBEC)

Located northeast of Quebec City, Charlevoix is distinguished by its ancient igneous and sedimentary rocks, as well as a massive meteorite impact crater formed 400 million years ago. This region offers a rich tapestry of geological history and cultural heritage.

#### FIRE & ICE (BRITISH COLUMBIA)

Spanning from coastal rainforests to volcanic peaks, Fire & Ice showcases over 70 geosites that tell the story of mountain building, glaciation, and volcanism. It is one of Canada's most geologically active areas.

### **NIAGARA (ONTARIO)**

Home to the world-renowned Niagara Falls, this geopark highlights the region's rich geological foundation, including the ancient Niagara Escarpment. It emphasizes sustainable tourism and community engagement.

### CABOX (NEWFOUNDLAND)

Situated in Western Newfoundland, Cabox features significant geological formations such as the Bay of Islands Ophiolite Complex. The area provides insights into plate tectonics and mountainbuilding processes.

#### **CEORGIAN BAY (ONTARIO)**

Encompassing the 30,000 Islands, Georgian Bay offers a diverse geological landscape, from ancient Precambrian rocks to fossil-rich sedimentary layers. It aims to foster community resilience and sustainable development.











# STRENGTHENING GLOBAL CONNECTIONS THROUGH GEOSCIENCE AND COMMUNITY

Canada's UNESCO Global Geoparks form a dynamic network where science, culture, and community meet. Through the Canadian Geoparks Network, these UNESCO designated sites collaborate to share expertise, foster innovation in sustainable development, and highlight the essential links between people and the planet.

Rooted in the values of the UNESCO Global Geoparks program, the Network promotes education, inclusion, and resilience — advancing local and Indigenous knowledge alongside cutting-edge geoscience.

By building partnerships across borders, Canada contributes to a global movement that values Earth's heritage as a foundation for learning, cooperation, and sustainable futures.

Together, we connect knowledge, communities, and Earth's geological heritage.

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