
The development of an aspiring geopark on the Bonavista Peninsula of Newfoundland and Labrador

JOHN NORMAN

Bonavista Geopark Committee, P.O. Box 40, Port Union, Newfoundland A0C2J0, Canada

As stated in the Guidelines and Criteria for National Geoparks seeking UNESCO's assistance to join the Global Geoparks Network (GGN), National Geopark initiatives, which seek UNESCO's assistance, should integrate the preservation of significant examples of geological heritage in a strategy for regional sustainable socio-economic and cultural development, safeguarding the environment. A group of local citizens on the Bonavista Peninsula in the province of Newfoundland and Labrador are aspiring to create a geological park that will one day be able to join the Global Geoparks Network (GGN).

Providing 500 years of fishing history and creating a resilient people who made their living off the cold harsh North Atlantic Ocean, Newfoundland is not only known for its unique culture, but also its geology. The island itself contains parts of the ancient continent "Laurentia" on the west coast, fragments of "Gondwana" on the east coast, and the seafloor of the "Iapetus Ocean" in between.

The rocks of the Bonavista Peninsula are part of the Iapetus Ocean's seafloor that created the micro-continent "Avalonia" approximately 480 million years ago in the early Ordovician period, which also resulted in the formation of the Rheic Ocean between it and Gondwana. With the collision of Laurentia and Gondwana in the formation of the continent "Pangaea" approximately 420 million years ago, Avalonia and the two seafloors were merged together with the two continents. After Pangaea broke apart, the Atlantic Ocean was created as the modern continents began to form. The Bonavista Peninsula, being left with pieces of Avalonia, is now a part of the present day "Avalonian Belt."

The earth history recorded on the Bonavista Peninsula spans from the late Precambrian to the Devonian (600 – 400 million years ago), and the rocks themselves range in age from the Ediacaran Period to the Cambrian Period. The area holds Precambrian fossils that provide evidence of the earliest multicellular life after "Snowball Earth" during the Ediacaran Period, approximately 580 million years ago. Among them are excellent examples of the "sun-like" *hiemalora*, "disc shaped" *aspidella*, "spindle-like" *fractofusus*, and *charniodiscus*, which are fern-like with disc shaped holdfasts. In an effort of protection, and with lobbying from local groups, the provincial government recently passed legislation prohibiting the removal or vandalism of these unique fossils.

With a unique geology, a distinct culture, and the desire to protect and conserve the geological heritage, the steering committee of the Discovery Geopark Project are well on their way to establishing North America's second Geopark.