



STONE HAMMER

FUNDY TRAIL PARKWAY

Location: Hwy 111, & 10km east of St. Martins, NB.
GPS: 45°23.18' N; 66°27.92' W

Access: Mid-May (Victoria Day weekend) to mid-October, Big Salmon River
 Interpretive Centre is open 8 to 8 daily, fee charged, October to March, hiking and winter sports, no facilities



Geological Age: Precambrian to Cambrian
 600 to 500 million years old; Triassic 251 to 199 million years old

Features: scenic drive and hiking trails, interpretation centre, picnic tables, boardwalks



ROCKS

The rock outcrops along the Fundy Trail Parkway expose both Precambrian to Cambrian rocks near the bridge at Big Salmon River, and Triassic age rocks along the coast to the west. About 400 million years of Earth history can be seen here. The older rocks tell the story of the ancient Iapetus Ocean. In Greek mythology Iapetus was a Titan, and father of Atlas. The modern Atlantic Ocean is named after Atlas.



THE ATLANTIC OCEAN

The Atlantic Ocean is a relatively recent geological feature, only about 200 million years old. The rocks at Big Salmon River are 600 million years old! The Atlantic Ocean was created by sea-floor spreading. Molten rock from the Earth's interior rises to the surface to create new crust. As it rises and cools the new crust expands along volcanic mountain chains on the seafloor. Old crust returns to the Earth's interior along deep ocean trenches. Seafloor volcanic mountain chains mark the middle of an expanding ocean basin. The rising molten material creates a 'bubble' in the crust that eventually breaks (to create volcanoes). The cracks are called a triple rift.



Bay of Fundy rift valley

They eventually join to form a long break in the crust where a new ocean is born. One crack fails to join another. The 'failed rift' is called an aulacogen. The Bay of Fundy is a 'failed rift' created when the Atlantic Ocean was born. Instead of becoming part of a new ocean, it became a 'rift valley' that filled with sediment.



COASTAL EROSION

Rocks are eroded by the action of water slowly breaking down the layers into smaller pieces. As the rocks are slowly worn down the sand and mud will be washed out into the Bay of Fundy. They will eventually become sedimentary rocks again as part of the recycling of the Earth's crust. 'Flower pots' are a picturesque result of coastal erosion. They are small fragments of the eroding coastline that have withstood the pounding of the sea. They remind us where the coastline once stood.

