



# STONEHAMMER

## BRUNDAGE POINT RIVER CENTRE

**Location:** Grand Bay-Westfield, Hwy 177, NB  
**GPS:** 45°20.9' N; 66°13.47' W

**Access:** accessible dawn until dusk, free



**Geological Age:** Silurian 435 Million years old;  
 Neogene, modern

**Features:** Visitor Information, interpretation,  
 boat launch, wharf



### ROCKS

Although the bedrock geology is hard to see at the Brundage Point River Centre it still shapes the landscape all around. The rocks at Brundage Point and across the St. John River on the Kingston Peninsula are mostly Silurian age volcanic rocks, about 435 million years old. They are relatively hard rocks and are responsible for the rolling hills seen in the distance. The hills have been smoothed by glaciers that covered the entire area during the most recent glaciation. The river valley has also been smoothed by glaciers. The St. John and Kennebecasis river valleys follow the bedrock structure along the Kingston Peninsula. They are also following major fault boundaries separating geologic terranes.



### TERRANES

A terrane is a fragment of the earth's crust formed on, or broken off from, one piece of the earth's crust (or tectonic plate) and attached or welded to the crust on another plate. The fragment of crust preserves its own distinctive geologic history, that is different from the crust it has become welded to. They are often referred to as 'exotic terranes' since they have come from somewhere else. Some have travelled halfway across the globe. New Brunswick is composed of a series of terranes stacked up against the older core of North America. Each slice has its own geological story and relates to a complex history of how New Brunswick came together. Stonehammer park itself is made of many terranes and has a complicated geologic past. Brundage Point is located on the Kingston Terrane. As the St. John River makes its way to the Bay of Fundy it will cross two more terranes.



### ICE AGE RIVER

The St. John River flows past Brundage Point on its way to the sea. Fifteen kilometres from here the river passes through the Reversing Rapids gorge and into the Bay of Fundy. The view from here has changed dramatically over the years. 15,000 years ago this valley was completely covered by glaciers. When the glaciers retreated the ocean flooded this valley past Fredericton to create an inland sea. Over thousands of years sea level dropped and the land rebounded as the weight of glacial ice was removed. The connection to the sea was cut-off and a series of waterfalls formed at the Reversing Rapids in Saint John. The St. John River became a large lake.

Sea level has been rising again for thousands of years and the land has slowly subsided. The result has been the flooding of the mouth of the Saint John River again as the sea overtopped the rock ridges at the Reversing Rapids. The 'reversing' of the rapids is a relatively recent phenomenon. It has only been about 3,000 years since the rising tides have forced the St. John River to flow backwards. The waterfalls have been drowned and the effect of the tide can be seen upriver of Brundage Point.

