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Discussion

Niagara Falls is a unique combination of three waterfalls that are Horseshoe Falls, American Falls, and Bridal veil falls. Niagara Falls is located at the southern end of Niagara Gorge which is located between Canada and the US. It was first documented by a European priest during his expenditure in 1678 (Tinkler). The beauty of the Niagara Falls fascinates every person however after seeing it I always wonder about how old is Niagara Falls. According to several studies published on the potential age of Niagara Falls, it is approximately 12,000 years old. This piece of information made me think that how scientists would have known the age of Niagara Falls in the first place as it is not man-made. So what evidence do they have regarding the age of this wonder? As far as my knowledge several methods are there that are used by scientists to measure the age of any geographical place or object such as rate of erosion, rate of deposition, varve count and radiometric dating.

To determine the age of river scientist measure fast does a river erode. However, it has a limitation as this method only works when the age is almost 10,000 or 20,000 years old. Another method to measure age is the rate of deposition in which geologists can get a rough idea of the age of any place. Typically, it takes a thousand years to deposit 30 centimeters of sedimentary rocks yet his method does not provide helpful insight in determining the age of any place. I believe that the best way to determine the age of Niagara Falls is by utilizing the first method that is measuring the rate of erosion. While measuring the erosion rate of Niagara Falls geologists have concluded that it erodes 1.3 meters per year (Philbrick). This information helped scientists a lot in determining the age of Niagara Falls.

**Works Cited**

Philbrick, Shailer S. "Horizontal configuration and the rate of erosion of Niagara Falls." *Geological Society of America Bulletin* 81.12 (1970): 3723-3732.

Tinkler, Keith. "Niagara Falls 1750–1845: the idea of a history and the history of an idea." *Geomorphology* 1.1 (1987): 69-85.