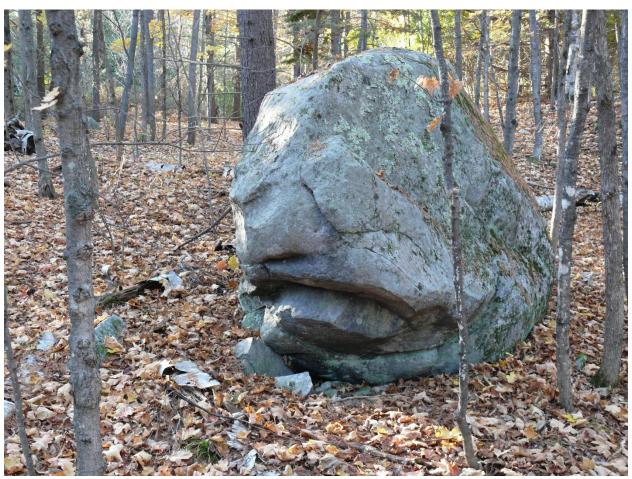


ENVIRONMENT BULLETIN

Conrad Grégoire and David Overholt January, 2022

Glacial Erratics



"The Old Man of the Forest"

photo by David Overholt

Strewn about the landscape around White Lake are large smooth boulders of varied size and shape. They somehow just don't seem to belong. What are they, where do they come from, and how did they get here?

Boulders, such as the one pictured above, were once considered evidence of a biblical flood. Over time, scientists began to understand that these boulders were connected to an ice age in the earth's past. Their very name, erratics, derives from the Latin word *errare* which means to wander.

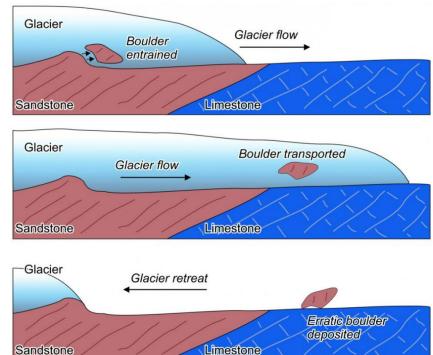
Now we know that the erratics we see around us come from glaciers which covered the northern half of North America starting about 79 thousand years ago. At one time, the White Lake area was covered by a layer of ice two kilometres thick.

When glaciers melted away about 11,000 years ago, they left in their wake ample evidence that they were here in the form of gravel eskers and other glacial formations and glacial erratics. Glacial erratics can be very small to as large as a two-story house.

The diagram to the right shows how rocks are broken off by flowing glaciers and carried up to 2000 km from their original locations. As they travel, boulders are ground smooth by contact with other rocks or bedrock.

Erratics can also be carried on top of glaciers when rocks are broken off the sides of mountains by the glacier. These erratics are often more jagged and can also be odd-shaped.

Scientists use the composition of the erratics, their location, distribution, and other glacial markers to show the pathway and direction of flow of the glacier.



Although the start of the next ice age is not talked about very much at present, when it does end, the glacial erratics we are familiar with near White Lake will very likely be found in somebody else's back yard.

For more information on glacial erratics, please see references consulted for this bulletin: https://fossilslanark.blogspot.com/2013/04/glacial-erratics-and-eskers-in-township.html