



Learning Circle

What Shaped This Land?

Introduction

One of the results of the book study of *Five Little Indians* is that most people who went to school in Ontario don't feel like they ever learned much about the indigenous populations of Canada. So as someone with a BA in Anthropology and having taught both Biology and Earth Science I thought it might be helpful to write a series of short and very introductory articles to help build a framework for larger conversations or individual research on a wide variety of topics. Starting with the land itself; looking at the people who arrived in North America, their cultures and traditions; the arrival of settlers and their interactions with the indigenous populations; and finally the impacts of treaties and government on indigenous communities. These are only snippets of information and I would be happy to expand on any topic if there is interest, or if there is a specific question to answer. If there is anyone else who would like to help with this project that would be great! I hope this is helpful. Thank you. Michele Altermann

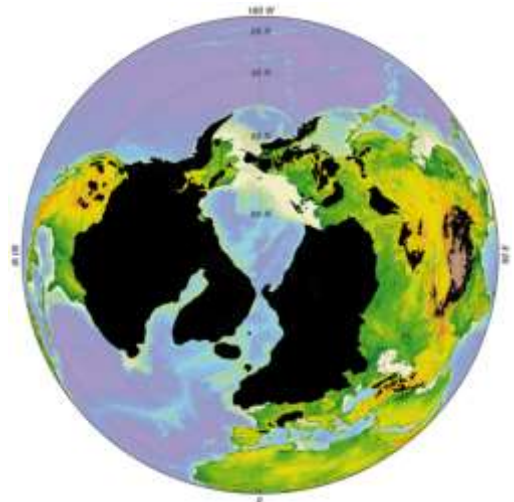
What shaped this land?

There has been a global cycle of ice ages or glaciations during which much of the Northern hemisphere was covered with sheets of ice several kilometers thick. The current Ice Age began 2.5 billion years ago. There were four major advances, and in between three retreats, in which ice almost retreated from NA, resulting in sub-tropical climate in most of southern Ontario.

The last of these advances is known as The Wisconsin Glaciation which began 100,000 years ago and withdrew from southern Ontario between 12,000 and 9,000 years ago, and, like other ice sheets, is still in retreat. The spread of the last ice sheets are shown in black in the diagram which can be found on Wikipedia.

https://en.wikipedia.org/wiki/Wisconsin_glaciation

Ice sheets severely shaped the continent through ice scouring and the lakes, canyons and rivers made by the meltwaters. In North America this last sheet ice is known as the Wisconsin Glacial Episode in case you want to look it up. It shaped the current geography of the area it covered including mountains, plains, and our southern Ontario landscape of the Great Lakes, moraines, drumlins, glacial till – or rocks, etc. Good luck digging anywhere in southern Ontario without finding rocks!



If you look at the area of modern Alaska and eastern Siberia a land bridge existed at the time of the Wisconsin Glaciation (sea levels had dropped because a lot of water was stored in the ice). This land bridge (known as Beringia) allowed animals and people to cross over into North

America. When the ice retreated, people and animals moved into the rest of the opening continent and moved south until humans reached the tip of South America! There is evidence of human settlement in southern Chile 14,500 years ago.

There is good evidence now from archeological sites and DNA (genetic markers) that people were living in North America about 20,000 years ago in the region of Beringia but also that they were living along coast of North America between the ice sheets and the ocean. There is evidence of boat use in Eastern Asia that goes back 30,000 years. Once the ice retreated people followed animals inland through any ice-free corridors – especially along rivers.

The name given to the ice sheet in this part of Canada was the Laurentide Ice Sheet. As global temperatures increased this ice sheet began to retreat towards Hudson Bay starting about 18,000 years ago. By about 12,000 years ago, all of southwestern Ontario was ice free.

People in the “new” world

Imagine that for some reason all humans leave Guelph today and don't return. 10,000 years from now how would future archeologists learn about how people lived in here in 2022? Weathering would ensure that buildings would mostly be gone as well as anything biodegradable (paper, fabric etc.). Future archeologists would be thrilled to discover the dump because there is a better chance of artifacts surviving in a garbage dump because it is buried and protected from the elements. What would they think of our culture? That would be based on what was left – like all the electronics and a million plastic water bottles!

When archeologists discover early human settlements or places where they hunted and butchered animals, often all that is left is the ‘hard’ technology – woven baskets, clothing, food would all be gone but broken items made of stone and bone would remain. Because different groups of people used different raw materials and different styles of manufacture which changed over time, human cultures are often identified by their “tool assemblages” and given names based on where they are found (i.e. ‘Clovis’ based on a site in New Mexico, or ‘Parkhill’ for a tool assemblage in southern Ontario). These names have no relation to the peoples who inhabited this area when first contact with Europeans occurred but are what scholars use.

There is not a lot of evidence left behind by the first peoples who moved into southern Ontario behind the retreating ice.

Archeologists rely on physical evidence and artifacts recovered from different sites (shown in the map from Peter Storck's article) show that people were present between 12,000 and 10,000 years ago in

southwestern Ontario. The term archeologists use for these

cultures are Paleo-Indian. The “fluted points” referred to in the caption on the map refer to stone



Fig. 1. Distribution of isolated surface finds of fluted points in Ontario as mapped by Garrad (1971).

spear points and arrowheads. Points would be broken during hunts and general usage so would end up as 'garbage' for archeologists to find.

Twelve thousand years ago the climate in this area was similar to the boreal forests or taiga now found further north in Ontario. There is not a lot of evidence of a tundra phase in this part of the province. By about 7,500 years ago the area started to look a lot more like it was at the time of contact – a temperate deciduous forest with pockets of Carolinian forest as well.

Resources used:

The Fertile Shore by Fen Montaigne from *The Smithsonian Magazine* January 2020

<https://www.smithsonianmag.com/science-nature/how-humans-came-to-americas-180973739/#:~:text=Now%20our%20understanding%20of%20when,than%20has%20been%20commonly%20believed.>

Holocene Paleoecology of the Boreal Forest and Great Lakes-St. Lawrence Forest in Northern Ontario

Kam-Biu Liu

Ecological Monographs, Vol. 60, No. 2. (Jun., 1990), pp. 179-212.

<https://www.jstor.org>

RESEARCH INTO THE PALEO-INDIAN OCCUPATIONS OF ONTARIO: A REVIEW

By Peter L. Storck

This article is based on a paper delivered at the Tenth Annual Symposium ("Ontario in the Past") of the Ontario Archaeological Society, October 29, 1983, Toronto, Ontario.

<https://ontarioarcheology.org>