Sources

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http://www.great-lakes.net/

The Great Lakes
Harlan Hatcher

The Living Great Lakes
Jerry Dennis

Great Lakes Journey: A New Look at America's Freshwater Coast
William Ashworth

The Great Lakes : An Environment Atlas and Resource Book
http://www.epa.gov/glnpo/atlas/index.html

Great Lakes Facts

-Connecting channels composing the largest reservoir of fresh surface water on the planet.
-The lakes sprawl over 100,000 square miles, and contains 5500 cubic miles of water
-The great lakes hold just under 20% of total world supply of fresh water
-37 million people populate the basin, and 26 million rely on great lakes for drinking water
-Great Lakes basin is home to more than one-tenth of the population of the United States and one-quarter of the population of Canada.
-Nearly 25 percent of the total Canadian agricultural production and 7 percent of the American production are located in the basin.

Settlement

Native People

-Natives settled the region as far back as **10,000 years ago.**
-They came to the Great Lakes region at the end of the last Ice Age, **migrating north as glaciers retreated.**
-People of the great lakes were tailing animals, which followed the glacial retreat.
-These native people were the first to utilize the many **natural resources** of the Great Lakes Basin. This enabled the early development of hunting, agriculture, and fishing. Trade was encouraged by the plentiful tributaries of the lakes.
-Hunting and fishing communities were widespread throughout the basin.
-Eventually, **many tribes** inhabited the Great Lakes Basin.

Distribution of Eastern Woodlands Indians.
Courtesy Britannica

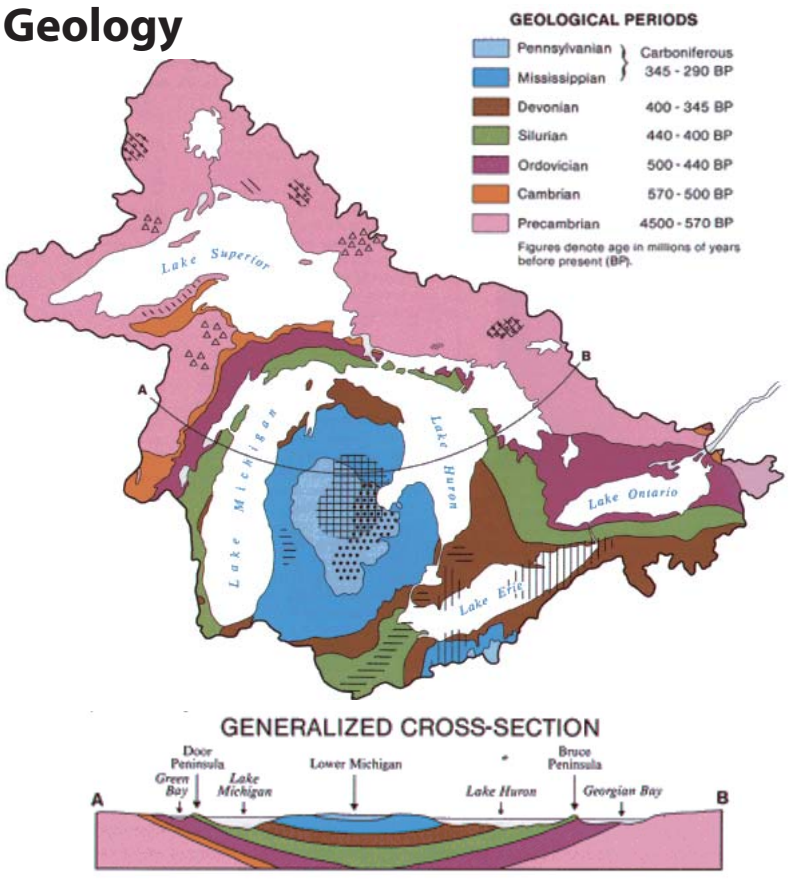
Europeans Arrive 16th Century

-The natives occupied widely **scattered villages** and grew corn, squash, beans, and tobacco. They worked the land, moving once or twice a genera tion when resources were exhausted.
-By the time foreign settlers came, the **native cultures had spanned 500 generations.**
-In the 1600s, the basin included 60,000-177,000 people
-The Europeans were **exploring the Lakes** for a passage to the Orient.
-Relations between the first Europeans, French fur traders, and the natives were relatively friendly
-Soon, however, territorial feuds began, and settlement was a major factor in **wars**, including the American Revolution, the War of 1812, and the French & Indian War.

Industrial Development

-**Agriculture** was the greatest draw to the region in the 19th century
-By the mid-1800s, most of the farmland was settled.
-The **population had swelled** : 400,000 people were in Michigan, 300,000 in Wisconsin, and 500,000 were in Canada
-**Canals** led to broader exploring, and the trading of agricultural product as a commodity began.
-Grist mills became the one of the region's first industries. The dairy and meat industry grew with the population
-**Logging and Forestry** developed quickly during the 1830s, moving from Canada to Michigan, and then to Wisconsin and Minnesota. Loggers **quickly exhausted the white pine**, and had to utilize other species.
-This, among other industries, began a history of **exploiting the natural resources** of the Great Lakes Basin.
-By 1825, the Erie Canal was carrying settlers west and freight east.
-The **development of the railroads** in 1800s further connected the Great Lakes to the coasts.
-In 1959, the completion of the St. Lawrence Seaway allowed **modern ocean vessels** to enter the lakes
-Commercial Fisheries were important to the region beginning in 1820.
-Urban centers grew up around the mouths of major tributaries.

Geology



Precambrian Era

Three Billion Years Ago

Volcanic activity created mountains
-Mountains eroded to become the **Canadian Shield,** rolling hills, small mountians and flat regions of exposed bedrock stretching from Canada to Greenland. The Canadian Shield boarders the northwestern shores of Lake Superior
-To the south, around the rest of the lake, bedrock is buried beneath sedimentary remnants of ancient ocean and glacial debris

Paleozoic Era

Five hundred seventy million years ago

-Age of **ancient life**
-Explosion of marine organisms
-Laurentia, the ancient continent that would become America and Greenland was covered with a shallow, warm saltwater sea

Paleozoic Era Ended

Three hundred million years later

-The **great extinction** occurred
-The adbundence of life died, settling to the bottom of the sea eventually becoming compressed into hundreds of feet of limestone.

Pleistocene Epoch

1.8 million years ago

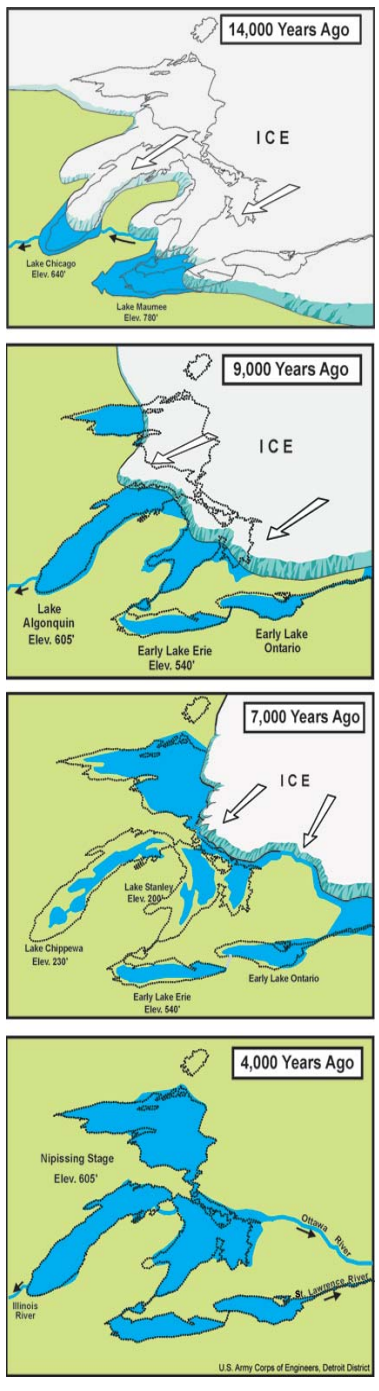
-Ice age began
-Glaciers formed upto **2 miles deep**, before the ice began to flow southward at the rate of a few inches per day.
-**10 or more advances** may have reached the Great
-Lakes regions, each obliterating a majority of the evidence of the previous advances.
-During the time of the glaciers the Ocean's shrank by 300 feet, from their current levels.
-The weight of the ice compressed the land by 2000 feet.
-Old river valley became reservoirs sinking beneath the weight of the ice and scoured deep by the glaciers
-Through the shear weight of the ice, coupled with the varying hardness of the rocks beneath it, the **glaciers tore up the river terrain**, creating natural dams and dikes that obstructed the drainage.

7,000 to 14,000 years ago

-Last glacier began retreating
-The regions **climate warmed**, ushering in the "inter glacial period", with vegetation and wildlife returning to the area.
-As the last glaciers began retreating the great lakes began to form from the **melting receding glacial water**.
-St. Mary's river opened connecting Lake Superior to Lake Huron
-The St. Lawrence river provided the great lakes with an outlet to the Atlantic Ocean.

Modern Day

-The Great Lakes have yet to establish a permanent elevation due to **Isostatic rebound**, the land is slowly rising back to pre-ice age height.



History of the Great Lakes: America's Inland Seas

Nick Robertson + Jenna Gibson