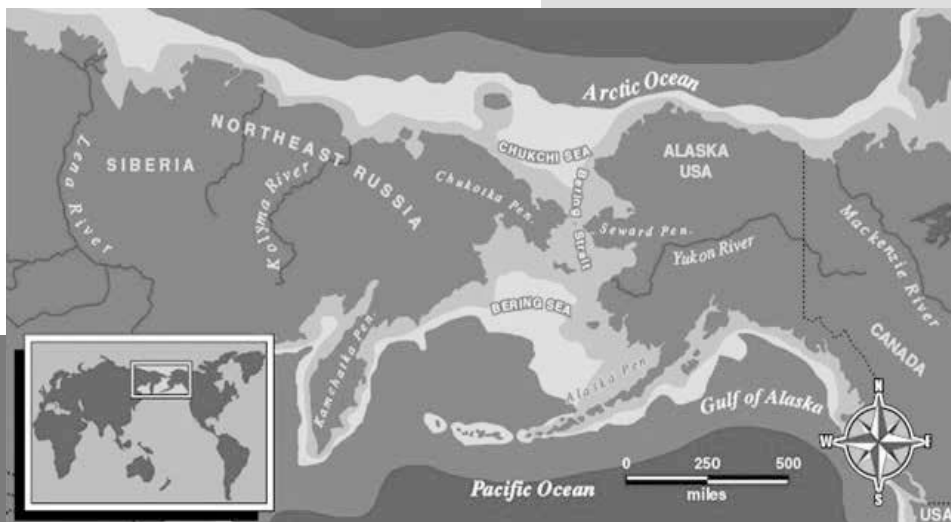


The First Americans



Map showing the maximum extent of Beringia in tan and present land area in brown.

Credit: National Park Service

You probably learned in school that the first Americans came from Siberia, crossing the Bering Strait into Alaska.

That ancient history is still widely accepted—but it has a few new wrinkles.

Archaeological records now show that humans left Siberia 25,000 years ago but didn't arrive in North America till 15,000 years ago. Where were they for 10,000 years in between?

New research suggests they were living *in* the Bering Strait, in a now-submerged land called *Beringia*.

During the peak of the last Ice Age, much of Earth's water was held in continental ice sheets that caused ocean levels to drop 400 ft. The land of Beringia was exposed, as much as 3 million square kilometers.

It appears humans were trapped in this inhospitable terrain by glaciers to the east and west.

This great frozen tundra would not have supported the bison and mammoth that other early humans depended on. But it could have sustained caribou.

Perhaps more important, it held arctic oases of trees and brush, enough to provide shelter and firewood for the Beringians, who survived 10,000 years of winter by burning wood and animal bones.

They stayed in Beringia long enough to become genetically distinct from their Siberian ancestors, which we see in DNA analysis of Native tribes in both North *and* South America—the majority of whom descended from the Beringians.

It's a remarkable testament to human resilience.



Background: The First Americans

Synopsis: Humans evolved in Africa and spread to Europe, Asia, and even Australia long before they showed up in the Americas. How did the first immigrants to the Americas find their way?

- Humans colonized Africa, Europe, Asia, and even Australia thousands of years before they settled in the Americas.
 - We used to think the oldest *Homo sapiens* skeletal remains were somewhere between 165,000 and 195,000 years old, based on remains found in Ethiopia.
 - But recently, five skeletons and tools found in Morocco were analyzed using state-of-the-art technology and determined to be *Homo sapiens* who lived in the area close to 315,000 years ago.
 - Scientists theorize that humans migrated out of Africa to Europe and Asia between 195,000 and 65,000 years ago.
 - Australian researchers found a human skeleton in southeast Australia, between the cities of Sydney and Adelaide.
 - When they dated it, they discovered the skeleton and the sediments it was buried in were both about 60,000 years old.
- Humans lived in Siberia 32,000 to 27,000 years ago. But then there is a gap of about 10,000 years in the record of humans making their way into the Americas.
 - In Alaska, the oldest remains ever found are 14,400 years old.
 - A woman's skull found in a cavern in Yucatán was found to be between 12,000 and 13,000 years old.
 - In 1932, specialized stone tools from the Clovis culture were found in New Mexico, dating to 13,500 years old. For a long time, it was thought that the Clovis were the oldest human occupation in the Americas.
 - More recently, pre-Clovis tools have been found in Texas that date to more than 16,000 years old.
 - Evidence of pre-Clovis human occupation has been found as far south as Chile, from more than 15,000 years ago.
- Incredibly, ancient humans lived through the last two stages of the Pleistocene glaciation, when vast mile-thick continental ice sheets covered much of Earth.
 - The Illinoian glaciation took place from about 300,000 to 130,000 years ago, when primitive humans lived near the equator in Africa. A warmer interglacial stage occurred after the end of the Illinoian stage.
 - Our human ancestors had to survive the incredibly harsh conditions of the Wisconsinan glacial stage that started about 85,000 years ago.
 - This period included the "Last Glacial Maximum" that culminated about 26,500 years ago with ice sheets covering much of North America, northern Europe, and Antarctica; sea levels dropped by more than 400 ft.
 - Deglaciation began about 20,000 years ago, and an abrupt rise in sea level occurred 14,500 years ago—flooding low-lying areas.
 - The Wisconsinan glacial stage ended 11,700 years ago at the start of the Holocene epoch—the time we live in today.
- As sea level dropped, land bridges formed where the seas were shallow. Humans followed game and vegetation across these bridges
 - More than 60,000 years ago, the sea level dropped enough so that Australia and New Guinea were part of the same landmass. Humans moved from southeast Asia into first New Guinea, then Australia.
 - Closer to the "Last Glacial Maximum," from 28,000 to 17,000 years ago, a 400-ft sea-level drop revealed a new land bridge, called *Beringia*, which was 600–1,000 miles wide and surfaced for more than 3,000 miles from Siberia's Lena River in the west all the way to Canada's Mackenzie River in the east. Humans followed their prey as they migrated eastward.

References: The First Americans

On Way to New World, First Americans Made a 10,000-Year Pit Stop | National Geographic
First Americans Lived on Bering Land Bridge for Thousands of Years | Scientific American
Beringia, the Lost Territory Where Americans Evolved | Gizmodo
Beringia | Wikipedia
Bering Land Bridge National Preserve: Beringia | National Park Service

Contributors: Dr. Connie Mulligan (University of Florida), Juli Hennings, Harry Lynch



EarthDate is
sponsored by
Schlumberger.



EarthDate.org
Fact Sheet:
Episode **ED 057**

Background: The First Americans

- Humans—and their prey—stopped right in the middle of the most severe period of glaciation. As it turns out, the Laurentide and Cordilleran ice sheets blocked entry into the Americas until about 16,000 years ago.
- Proto-Americans appear to have stayed for nearly 10,000 years in Beringia, genetically isolated from other populations, with distinctive DNA. They hunted game, ate plants, and burned shrubs and bones for heat.
- Some isolated human lineages appear to have died out.
- When the ice started melting 20,000 years ago, an inland corridor opened up between the ice sheets, and coastal areas were also exposed. Humans began to migrate eastward again. Their movement was rapid, probably accelerated by rising sea levels about 14,500 years ago that inundated Beringia and cut off access to Asia.
- Some Beringians may have taken to boats to explore the western Pacific.
- Some migrated by land along the coasts, or further inland along with game, to the more hospitable lands of North and South America.
- Their coastal settlements were submerged and may one day reveal more about their lives as archaeological technologies advance.
- The Bering Land Bridge National Preserve was established in Alaska in 1978 to conserve a part of Beringia that records the migrations of flora, fauna, and humans between Asia and North America.

Ancestors of this Inupiat Eskimo family from Alaska in 1929 would have crossed Beringia thousands of years ago.

Credit: Edward S. Curtis (public domain), via Wikimedia Commons



References: The First Americans

On Way to New World, First Americans Made a 10,000-Year Pit Stop | National Geographic
First Americans Lived on Bering Land Bridge for Thousands of Years | Scientific American
Beringia, the Lost Territory Where Americans Evolved | Gizmodo
Beringia | Wikipedia
Bering Land Bridge National Preserve: Beringia | National Park Service

Contributors: Dr. Connie Mulligan (University of Florida), Juli Hennings, Harry Lynch



EarthDate is
sponsored by
Schlumberger.



EarthDate.org
Fact Sheet:
Episode **ED 057**