

First peoples

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PROVIDED BY RESEARCH LABORATORIES OF ARCHAEOLOGY



Figure 1. The “first Americans” crossed a land bridge from Asia at least 14,000 years ago.

Thousands of years ago, Canada’s ancient landscape was stark and forbidding. Much of it was buried beneath sheets of ice taller than the tallest city skyscraper. The air was frigid. Snow and sleet pelted the ground in storm after storm. Even when the sun was shining, Canada, like all northern countries, got little warmth from the sun’s rays. The cold’s grip was too strong, and ice sheets, called glaciers, got thicker with each storm. In the places where no glaciers existed (along the coasts and in the center of the country) wiry grasslands waved in the steady winds. Herds of shaggy, heavy-coated animals grazed. This was the time when the last Great Ice Age, known as the Pleistocene, hung over North America.

The Pleistocene epoch lasted from 2 million years ago to 8000 BCE. During the Pleistocene, so much of the earth’s water was frozen in glaciers that the sea levels dropped. The glaciers formed because the climate stayed too cold for the snow and ice to melt. Most of the water the atmosphere could find to take up to make the snow and ice came from the oceans. Very gradually, after giving up its moisture for so long and having no melt water to replace it, sea levels fell. As the oceans got smaller, they shrunk away from the coastlines, and newly exposed land felt the touch of air. Tough grass seeds lodged and grew; mosses crept over the bare spots; small lakes formed, and animal herds found new homes.



Figure 2. Ancient bison were as much as 25 percent larger than present-day bison.

Beringia was one of these places. When the sea levels dropped, a wide strip of land was exposed between Alaska and Siberia, where the Bering Sea is today. Beringia was exposed twice during the Pleistocene. The land bridge existed once between 50,000 and 40,000 years ago and again between 28,000 and 10,000 years ago. Each time the seas fell away from Beringia, North America and Asia were joined by a vast, tundra-like land. Herds of animals found homes there. Many of the herds were of very large animals called megafauna. They included the mammoth, an enormous animal related to the elephant, and a species of bison called *Bison antiquus*.

The Paleoindians living in North Carolina by 9000 BCE were descendants of Asians who followed and hunted the animal herds across Beringia. Archaeologists disagree about when people first crossed Beringia, but most think they did so when the land bridge formed the second time. Unknowingly, the Paleoindians came into a land no humans had ever lived in before. Shadowing the herds, the people went south through the middle of

Canada. There, a wide tundra-like path cut between two huge glaciers that covered the rest of the country. Even though this path from Beringia through Canada was ice-free, its nearness to the blue-tinged glaciers probably made the passage cold and difficult. Perhaps some people wondered if they should go on; some may have turned back. However, for those who continued, they saw changes in the landscape when they got to where the United States border is now.

Nobody knows how long the journey took before the first Paleoindians reached North Carolina. Nobody knows, either, the hardships or joys they faced. Because Paleoindians lived so long ago, there is little left to tell us the story of their lives. Only traces of them remain: a stone spear point here, a stone scraper there. But these artifacts, or things made by people, are like the Paleoindians' shadows projected into the earth; they create an image of their past.

Shadows in the ground

Archaeologists learn about Paleoindians mainly from three kinds of physical evidence: the distinctive stone spear points and stone tools the people made; the bones of the animals that these people hunted and ate; and traces of the camp sites that they once inhabited.



Figure 3. The Columbian mammoth was one of many species of megafauna — giant animals — that became extinct soon after humans arrived in North America.

The first scientific evidence archaeologists found about Paleoindians was not from North Carolina; it came from 12,000-year-old sites out West, in places like Colorado and New Mexico. In the early 1930s, at the Dent site in Colorado, a railroad foreman and a Catholic priest were walking along a small gully when they noticed animal bones and stone spear points falling out of a bank. As the men examined the bones, they realized the bones belonged to no animal they recognized, so they asked archaeologists to come take a look. It didn't take long for the investigating archaeologists to become excited. The bones once formed the skeleton of a type of elephant called a mammoth that lived during the Pleistocene. Was it possible, the archaeologists wondered, that ancient people used the spear points to kill this immense 7-ton creature?

Blackwater Draw — a windswept, arid basin located between the small towns of Clovis and Portales in New Mexico—helped archaeologists answer this question. The site was stratified, meaning it contained several different layers of soil deposited over a long period of time. As archaeologists excavated each layer, they analyzed what they found. On the bottom and oldest level, stone spear points were lying next to megafauna bones. The association was unmistakable, and it showed people used the spear points to kill mammoths, along with other large animals, such as *Bison antiquus*. Because archaeologists knew megafauna were extinct by the end of the Pleistocene, they could infer people hunted at Blackwater Draw about 12,000 years ago.

Other kinds of physical evidence helped archaeologists understand that Blackwater Draw was no hot desert when the Paleoindians visited there. By studying soils and plant pollens from the site, archaeologists learned that Blackwater Draw was once a small Ice Age pond surrounded by a lush grassland. The abundant grass and water attracted herds of animals—and people, too. Perhaps, archaeologists hypothesized, Paleoindians speared the mammoths and bison that got stuck in the pond's mud when drinking. Then the people butchered the large animals where they fell and died. Besides the spear points,

archaeologists found other tools suggesting this happened. Long, thin flint knives and stone hide scrapers littered the area. Some archaeologists think there is even evidence for a camp site with a hearth.

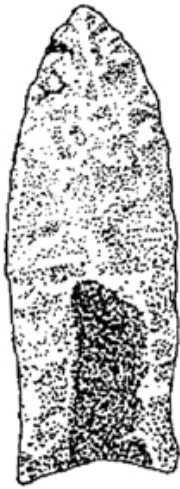


Figure 4. A Clovis point.



Figure 5. An atlatl, or spear thrower.

The spear points archaeologists found with the mammoth bones at Blackwater Draw are very distinctive. Archaeologists called these artifacts *Clovis points*, naming them after one of the nearby towns. For convenience, archaeologists also call the lifeway of the Paleoindians who made the points the *Clovis culture*.

Clovis points are shaped like long, thin blades with a shallow channel, or flute, on each side. The edges on both sides near the point's base were dulled, probably to keep them from cutting through the bindings with which the point was attached to the spear shaft. Archaeologists are not sure about the flute's purpose. Maybe it made it easier to attach the point to the spear. Then again, maybe the flute was just a matter of style. Whatever the case, the spear itself was most likely propelled using a spear thrower, or *atlatl* — a wooden stick with a handle at one end and a hook at the other. The atlatl acts as a lever that, in effect, extends the arm of the person throwing the spear. The hook engages the back end of the spear as it is propelled forward with an overhand motion, like that of a baseball pitcher. The atlatl, properly used, greatly increases the accuracy and force with which a spear can be thrown.

Archaeologists can never know for sure why the Paleoindians who made Clovis points shaped them the way they did. The voices, minds, and reasons of people don't exist in the ground. Only their physical traces—their artifacts—do. One thing archaeologists are sure of, however, is this: Clovis points are the earliest, indisputable evidence of people in North and South America.

North Carolina's first peoples

North Carolina is a long way from New Mexico and other places with sites having Clovis spear points associated with megafauna bones. Yet what archaeologists learn from these far away places helps them infer when people first lived in North Carolina and what their lives may have been like.

Clovis points—those earliest traces of people — were actually not *discovered* at Dent and Blackwater Draw. For years before shovels sunk there, archaeologists all over the country had collected them during surveys. But they were always on the ground's surface. Clovis points turned up in North Carolina, too. Farmers' plows churned them up. They tumbled out of stream banks. However, such Clovis points weren't found in context with other evidence. So archaeologists could not answer questions like: When were the points made? Whose hands made them? What were they used for?

The Blackwater Draw excavations allowed archaeologists to place Clovis points found everywhere else in North America in time. To do this, they used a technique called cross-dating. Cross-dating means that if a style of point dated in one place is found someplace else, then the point was probably made about the same time by people of the same culture. This technique lets archaeologists infer that Clovis points found in North Carolina are as old as those excavated from western sites. Dates from Blackwater Draw put Paleoindians making Clovis points about 9500 BCE. This leads archaeologists to think

Clovis culture Paleoindians began arriving in North Carolina—as they did in many other parts of the country—about that time. Losing some tools along the way, they crossed the Appalachians and flowed onto the gently rolling Piedmont to begin human history in North Carolina.

These pathfinders walked into a land transforming itself. The Ice Age was ending, and the transition to the Holocene, or modern, epoch was underway. Between 10,000 and 7000 BCE, the glaciers gradually melted and retreated to the Arctic. In North Carolina, the warming air affected the plants and animals. Forests and other habitats changed as the climate slowly became like it is today. Those early settlers confronted, thus, an environment where megafauna were hard to find. Different kinds of animals faced the hunters' spears, and different plants were available to those who gathered them for food and medicine. Even the coastline was altering because water from melting glaciers was raising sea levels. Of course, the changes were not so quick the Paleoindians could see them happening. The climatic shift was probably like trying to watch a flower bud bloom.



Figure 6. The forests of the Ice Age survive today in North Carolina only at the peak of the Blue Ridge, where high elevation makes the climate much like that of Canada.

Before people came, North Carolina's Ice-Age landscape had forests of cold-weather adapted trees, such as jack pine and spruce. Called boreal, this kind of forest is in Canada today. When boreal forests existed in North Carolina, parklands scattered through them. Caribou and megafauna, such as mammoths, camels, and horses, grazed on the grasses. Another elephant-like animal called the mastodon lived in the forests. Eastern megafauna herds were probably not large like those in the West. Archaeologists think the grasslands were too small here to support many of the large grazers. By the time Paleoindians arrived, winters were more harsh and summers cooler and wetter than today, but the air was distinctly milder compared to earlier Pleistocene times. This allowed hardwood seeds to sprout, and stands of hickory, oak, birch, and elm had begun replacing the conifers. As these forests grew, they spread into the grasslands. This resulted in the caribou and megafauna having less to eat, and their numbers declined. Other kinds of animals, however, thrived in the deciduous forests. There were deer and bear; squirrels and rabbits; raccoons and beavers.

The first Paleoindians exploring North Carolina faced these changing ecological conditions. They adapted and stayed.

On the web

Paleoindians and the Great Pleistocene Die-Off

<http://nationalhumanitiescenter.org/tserve/nattrans/ntecoindian/essays/pleistocene.htm>

Shortly after humans arrived in the Americas, the megafauna — very large animals, such as mammoths — died out. Did human hunters drive them to extinction? This article by Shepard Krech III of Brown University weighs the evidence.

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