
Lesson 3.1

THE PATHFINDERS

The Paleoindian Period, before 8000 BC



Hardaway spear point from Stanly
County, North Carolina,
ca. 8500 BC.

In the early evening twilight, Otterwallow stood on a windy ridge and drank in the view. The cold wind stung her face. Unlike the low, rugged mountains she and her family had just crossed, the land stretching before her rolled gently. Stands of tall, nut-bearing trees covered the hills. The bristling air sent showers of their hard, brown fruits clattering to the ground. In places, glades interrupted the trees' black shadows and glimmered in the fading light.

The glades' waving grasses reminded Otterwallow of the country northwest of them where her and her husband's grandparents had lived. As her eyes drifted back to the area just below the ridge, Otterwallow saw caribou and deer eat and drink on the floodplains of a broad, swift river. Here, she decided, was a good place for her family to make camp; food and water were plentiful.

Backing away from the ridge's edge to a place protected from the coldest winds, Otterwallow waited for her family to come. They did not take long. Otterwallow had just slipped off her forehead the wide leather band balancing the carry basket on her back when she recognized their footfalls. Though the wind made the trees' red and gold leaves rustle loudly, she could hear them clambering up the steep, forested slope along the animal path.

Otterwallow had just lowered her basket filled with food and hides when her children pushed aside branches and burst into the opening. First Light, a girl born when the buffalo calved six seasons ago, and Bear's Eyes, a boy born the season before, ran toward her. They hugged her quickly and then started poking through the basket for strips of dried meat to eat. Otterwallow's husband, Lame Wolf, was not far behind. He pushed into the opening and then stopped at the forest edge. Catching Otterwallow's eye, he smiled and waved. Then he set his long wooden spear shaft on end, leaned on it and turned to look back down the trail.

"You are slow like the snake who wakes in winter," he shouted down the path. Voices called back. Otterwallow could not hear what they said, but they rang with laughter. The joking was a game between Lame Wolf and his younger brother, Eagle. Eagle always lagged behind when the families traveled. Even when Lame Wolf got his new name after the buffalo crushed his foot, he could outpace his brother. To Lame Wolf's amusement, Eagle got slower after he married Red Blossom. So much so that Lame Wolf teased during evening camps it was time to change his brother's name to Turtle. Eagle ignored the chiding, especially now that Red Blossom had a baby strapped to her back.

Otterwallow sat and rested while she watched her husband. One ear was cocked toward her children's voices as they explored the ridge. Soon, Eagle and his family broke into the clearing. When they met, the men grasped each others arms, laughing, while Red Blossom passed and led the way toward Otterwallow. After she dropped her pack, Red Blossom walked with Otterwallow to the overlook.

"Yes," she agreed. "This is a good place. Let's stay a while."

Later, as Otterwallow's children collected firewood, she and the others sat by the hearth Red Blossom had built from rocks and planned the next day's hunt. Everybody decided they would stay in this camp just long enough to get meat they needed and rest. They'd also use the time to make new tools from some gray, fine-grained rock they found on a mountain side they crossed the day before. Otterwallow and Red Blossom needed stone scrapers to clean animal hides with. Their old ones were badly chipped. Most of the men's spear points had gotten broken or lost during their hunts.

When that work was done, everyone decided, they would leave the ridge and go toward the rising sun. Otterwallow did not know that land. Elders at the yearly gathering of families told no stories about it except to say that it lay beyond their travels. She'd lead her family on because they, like their ancestors, followed the animals and maybe their curiosity into the corners of a vast, unpopulated country.

Families like Otterwallow's were the pathfinders into North Carolina. Nobody knows exactly when they came, but they were living across the state by 9000 BC. Nobody knows either what they called themselves or even how many of them there were. Archaeologists call these people, and all the other people living in North America then, Paleoindians. Archaeologists chose this word because *Paleo* is a Greek word meaning ancient, and the Paleoindians were our country's—and our state's—most ancient human inhabitants. Like Otterwallow's mythical family, the Paleoindians were skilled explorers. They knew how to learn about the land they moved in to find food and shelter.

But where did the Paleoindians come from? Why did they leave their native lands on a wandering that eventually led them to every part of North and South America? How can we, across so many thousands of years, know anything about them? Archaeologists address these questions by first journeying, themselves, to a very different time and place.

Beringia: The Journey Begins

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 BC. 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.

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*.

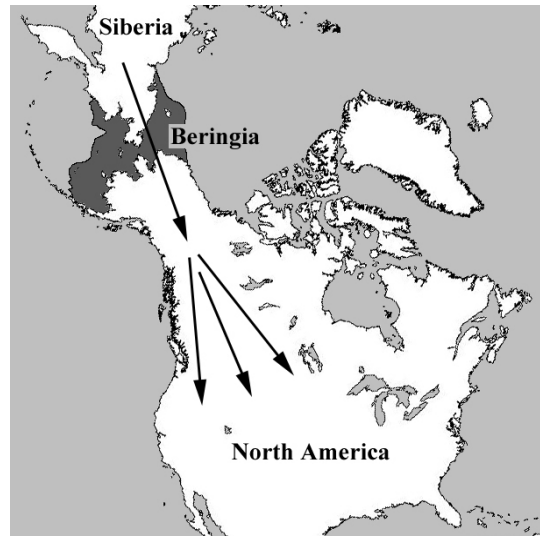
The Paleoindians living in North Carolina by 9000 BC were descendants of Asians who followed and hunted the animal herds across Beringia. Archaeologists disagree about when people first crossed Beringia, but most think they did so when the land bridge formed the second time. Unknowingly, the Paleoindians 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.

Canada's tremendous glaciers did not dip far below this line. Because they were so tall and covered most of Canada, the glaciers acted like walls that kept the coldest northern winds behind them. As the people left the corridor and got farther away from the glaciated area, they found a more hospitable climate. It was still quite cold compared to today, but it was warmer and had more rains than the lands the people had passed through. Vast grasslands, dotted with large and small lakes, seemed to stretch forever. Animals were plentiful. Into this inviting land, the people spread out to hunt and live. Eventually, they reached every corner of it.

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.



Beringia.

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?

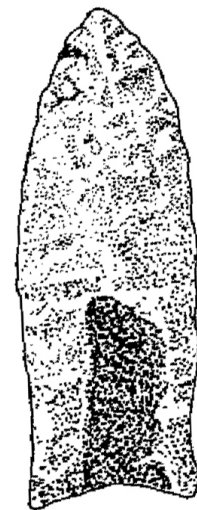
Blackwater Draw—a windswept, arid basin located between the small towns of Clovis and Portales in New Mexico—helped archaeologists answer this question. The site was stratified, meaning it contained several different layers of soil deposited over a long period of time. As archaeologists excavated each 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.

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*.

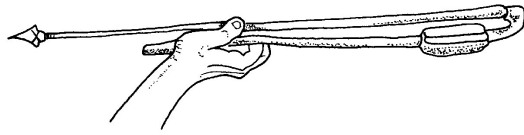
Clovis points are shaped like long, thin blades with a shallow channel, or flute, on each side. The edges on both sides near the point's base were dulled, probably to keep them from cutting through the bindings with which the point was attached to the spear shaft. Archaeologists are not sure about the 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,



Clovis point.

however, is this: Clovis points are the earliest, indisputable evidence of people in North and South America.



An atlatl, or spear thrower.

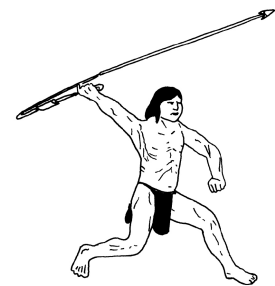
North Carolina's First Peoples

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 BC. 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 BC, 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.



Hunter using an atlatl.

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. Some archaeologists think the earliest Paleoindians lived mostly on the Piedmont. More Clovis points turn up there than elsewhere in the state. In part, this pattern may hold because the Piedmont was an easier place to live than the colder Mountains. But it may also have to do with preservation, in that Paleoindian sites on the low-lying Coastal Plain may now be archaeologically invisible—having been inundated by rising sea levels or deeply buried in floodplain soils.

Archaeologists debate whether Paleoindians in North Carolina hunted megafauna. So far no definitive evidence—a Paleoindian site with stone tools and animal bones—has been found in this state. The humid air and the acid soils cause organic remains to decay quickly. Even without this kind of evidence, however, archaeologists can form hypotheses about Paleoindian lifeways by relying on other clues. As part of their research grab-bag, North Carolina archaeologists study ancient pollen and soil samples. This helps them understand what North Carolina's environment was like and how it changed. Based on what they learn, archaeologists can infer what sorts of plants and animals could live here and thus would be available for people to eat.

In the West, Clovis culture Paleoindians may have depended mostly on megafauna for meat. But when they pushed east of the Mississippi River and into North Carolina, it is unlikely they did. The forested environments of the East seem to have fostered a more diverse diet, in which megafauna were taken less frequently, if at all. And as the Ice Age died, so did the megafauna. By 8500 BC all the Ice Age mammals were extinct. So thereafter the Paleoindians hunted only small and medium-sized game. They stalked the caribou until the herds wandered north. They also learned the ways of the deer and the bear.

The Paleoindians ate more than meat, of course. North Carolina's forested land filled with nut trees, berry vines, seed-bearing plants, and many kinds of birds was like their grocery store. As the Paleoindians explored along the state's stream and river beds and went across the Piedmont toward the coast, they learned where to find plant foods in different seasons. Chunks of the landscape were like supermarket aisles: hickory nuts in one place, ripe berries in another. Archaeologists call this way of life *generalized foraging*.

In most other ways, North Carolina's Paleoindians were like those in other parts of North America. All were hunters and gatherers, even though the foods available to them were different.

Because physical evidence is limited, archaeologists study groups of modern hunters and gatherers to get ideas about how Paleoindians may have lived. From their studies and a general knowledge about the lives of foraging peoples, archaeologists think Paleoindians joined together in small family groups called *bands*. Each band went from place to place according to the

seasons and the foods they could gather and hunt. Their territories, or the geographic areas they used, were large. In North Carolina, a band's territory probably covered much of the Piedmont, extending north into Virginia and south into South Carolina.

Most of the time, a band moved about its territory alone, living in short-term camps. Sometimes during the year, however, different bands came together to camp in one place for a while. Maybe they did this for social and ceremonial reasons. They may have also done this for economic reasons, such as staying at the camp while they collected local resources. The Paleoindians built no permanent homes. When they needed shelter, they presumably put animal skins or brush over bent poles made from cut saplings they stuck into the ground. Camp fires kindled in the middle of rock hearths kept them warm and let them cook. They made clothes from animal skins. Tools were shaped from stone and bone. Paleoindians had few other possessions. They kept only what they could easily carry.



Short-term camp.

The Paleoindian period in North Carolina lasted from 10,000 to 8000 BC. Even though the Paleoindians' hunting and gathering lifeway stayed much the same throughout the 2,000 years, it was not locked into sameness. Slow changes did occur, and a notable one was technological. Just like we do today, earlier peoples modified their tools to suit their needs. One tool Paleoindians modified was their main hunting weapon—the spear point.

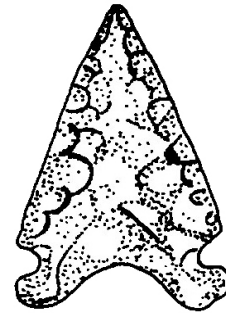
The way people styled points depended on when they lived, where they lived, and what conditions they faced. Some Paleoindians settling in North Carolina's frontiers started making a different kind of spear point around 8500 BC. Rather than make the slender, fluted Clovis point, they started chipping large stone flakes into a different, leaf-shaped form archaeologists call *Hardaway*. The waist-like narrowing of Hardaway's base, which is the part attached to the spear shaft, makes the point look like it has ears.

Just like Clovis points were named after a town, Hardaway points got their name from a place, too. Nested in the Uwharrie Mountains, a saddle-shaped ridge stands high above the Yadkin River near the small town of Badin in Stanly County. Its steep side falls toward the river and forms the west side of the Narrows gorge, which is where the Yadkin cuts through the mountains. About the same time important western sites like Blackwater Draw were being excavated, North Carolina archaeologists found on this ridge another link to the ancient past.

It happened, like many discoveries in archaeology, by chance. In 1916, a dam was built at the Narrows to provide hydroelectric power. This dam led to the establishment nearby of a smelting plant, which used the energy created by the dam's spill waters to produce aluminum from bauxite ore shipped in by train. In the 1930s, one of the aluminum company's electrical engineers, Herbert Doerschuk, enjoyed archaeology and spent his time off roaming the Uwharrie Mountains looking for clues of past cultures. Eventually his search led him to the ridge top near Badin in Stanly County. As Mr. Doerschuk walked across it, he spied lots of broken and whole stone tools poking up through the grass. Just like the Catholic priest and the railroad foreman did when they found the Dent site, Doerschuk contacted an archaeologist. Just as Dent gave evidence for the earliest Paleoindian culture in North America, the site Mr. Doerschuk found gave archaeologists their first evidence about the lives of North Carolina's earliest peoples.

Archaeologists called the site Hardaway, naming it after a construction company which had worked on the dam and whose camp had formerly been located there. The Hardaway site is

tremendously important. It is one of the few stratified sites—for *any* period—in North Carolina. As archaeologists collected artifacts on the ground’s surface and dug down through the dirt layers of history, they wove the evidence into a story of different peoples coming and going over thousands of years. Each level was like a chapter, and the story—which archaeologists are still learning—started on the bottom level. Scraping the dirt aside, archaeologists found the leaf-shaped, eared spear points people made about 8500 BC. Other stone tools, such as scrapers and drills, turned up in this oldest level, too. The spear points, found for the first time in context in a stratified site, were the Hardaways, named (not surprisingly) after the site. All the tools associated with the points were called the *Hardaway complex*.



Hardaway point.

Some archaeologists think the Hardaway and the Clovis spear points were made at the same time, but by different groups of Paleoindians. For reasons we can never really know, they think some Paleoindians experimented and started making Hardaways while some bands kept chipping out Clovis points. Other archaeologists think people made Hardaway points later, after people gave up using Clovis ones. This debate will go on until more research settles it.

But there is no debating this: Paleoindians were living in North Carolina by 9500 BC. They were hunters and gatherers, carrying their possessions on their backs as they wandered through the Mountains, the Piedmont and the Coastal Plain. As little as archaeologists know about them, they do know that these First Peoples entered a changing land, and that they adapted skillfully.

Links

Lesson 4.1: “Shadows of North Carolina’s Past.”

Lesson 4.2: “Shifting Coastlines.”

Sources

Goodyear, Albert C., III, James L. Michie, and Tommy Charles. 1990. *The Earliest South Carolinians: The Paleoindian Occupation of South Carolina*. Occasional Papers 2. Columbia: Archaeological Society of South Carolina.

Ward, H. Trawick, and R. P. Stephen Davis, Jr. 1999. *Time Before History: The Archaeology of North Carolina*. Chapel Hill: University of North Carolina Press. [The image in this chapter’s main heading is taken from Figure 2.4.]

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Quick Study

Paleoindian Period (before 8000 BC)

Paleoindians belong to the oldest known cultural period in North America. Archaeologists think they arrived in North America during the last Ice Age by crossing a land bridge connecting Siberia and Alaska. Called Beringia, this bridge was sometimes exposed when enough of the oceans' waters were locked into glaciers to drop sea levels.

Archaeologists aren't sure when Paleoindians first arrived from Siberia. But by 10,000 BC, they were living throughout North America. Some had made it to the southern margin of South America.

Within the Paleoindian period, North Carolina archaeologists recognize two main cultures: Clovis culture (9500 to 8500 BC) and Hardaway-Dalton culture (8500 to 8000 BC).

Paleoindians were nomadic hunters and gatherers who moved regularly through vast territories. In western North America, Paleoindians survived, at least in part, by hunting large, now-extinct animals called megafauna. They used spears to kill the mammoth and extinct forms of bison. They probably also ate a wide variety of other foods, but little evidence remains to say just what these foods were.

Archaeologists think Paleoindians in North Carolina and in other places east of the Mississippi River probably did not eat much "big game." Although the occasional mastodon or bison may have been hunted, by 8500 BC most megafauna species were extinct or quickly dying out. The Ice Age was ending and the eastern ecosystem was changing. Deciduous nuts trees were replacing straggly stands of cold-loving boreal forests, and modern animals like deer were becoming abundant. So eastern Paleoindians apparently ate a variety of nuts, wild fruits, and smaller, modern game.

Even though the Paleoindian period ended about 8000 BC, it laid the groundwork for subsequent cultural developments.

Key Characteristics

- The Ice Age (or Pleistocene) is in its last centuries. In North Carolina, the weather is wetter and cooler than today. But it is warming enough that deciduous, nut-bearing trees are replacing most remaining stands of cold-loving boreal forests.
- People migrate to North Carolina for the first time. Their ancestors came from Siberia, having crossed the now submerged Bering land bridge (called Beringia) into Alaska.
- People live in small family groups archaeologists call bands; they are nomadic.
- Subsistence comes from hunting and gathering wild foods.
- Local people do *not* depend on big game like mammoths for meat; by the time people arrive in the East, megafauna herds are small and quickly becoming extinct. Instead, people rely on deer and other small animals living in the deciduous forests.

- Spears tipped with stone points are the main hunting tool. In North Carolina, archaeologists find ancient people made two styles of spear point. One style dates to between 9500 and 8500 BC, and archaeologists call it Clovis. Slender, with a long channel (flute) chipped from the base for attaching a spear shaft, the Clovis point is what people living across North America then used to hunt. Presumably, the first people arriving east brought this style with them. But by 8500 BC, those who settled in North Carolina start making a differently styled spear point. This regional variety has no flutes, but has shallow indentations on each side of the blade near the base. Archaeologists call this point Hardaway-Dalton; people made Hardaway-Daltons until about 8000 BC.
- Baskets as well as leather and bark containers are used; there is no pottery. Possessions are lightweight and few, suited to a life on the move.
- Shelters are temporary, perhaps tents covered with hides or lean-tos made of brush.
- Archaeologists call these first people Paleoindians. They are the founding population for all later Indian groups.