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ANCIENT AMERICA BEFORE 1492

This chapter will explore the following questions:

- Why do historians rely on the work of archaeologists?
- When and how did humans migrate into North America?
- When and why did Archaic hunter-gatherers inhabit ancient America?
- How did agriculture influence ancient American cultures?
- What ancient American cultures inhabited North America in the 1490s?
- How did the Mexican empire amass power and riches?
- Conclusion: How did ancient Americans shape their world and ours?

► **Cahokia Mother and Child** This ceramic effigy of a mother nursing her baby illustrates the skill of Cahokia's pottery makers as well as the human face of the tens of thousands of people who inhabited Cahokia and surrounding settlements when the site's massive mounds were used for burials and other rituals. National Geographic Image Collection/Alamy Stock Photo.



AN AMERICAN STORY

Nobody today knows his name. Almost a thousand years ago, ancient Americans buried a man with elaborate rituals at Cahokia, the largest residential and ceremonial site in what is now the United States. Located in southwestern Illinois near the Mississippi River, Cahokia had a population of more than 20,000. Cahokians' burial rituals suggest that the man was a very powerful person who represented spiritual and political authority.

Archaeologists—scientists who study the objects left behind by ancient peoples—discovered what we know about the Cahokians and this leader. Cahokia attracted the attention of archaeologists because ancient Americans built hundreds of earthen mounds in the region. Atop Monks Mound, a huge pyramid that is the single biggest structure ever built by ancient North Americans, Cahokia's political and religious leaders performed ceremonies watched by thousands who crowded a nearby plaza roughly the size of fifty football fields. These ceremonies were probably intended to demonstrate that the leaders had access to supernatural forces. At the far edge of the plaza, Cahokians buried the man in a mound about 6 feet high and 250 feet long.

Before Cahokians lowered their leader into his grave sometime around AD 1050, they first placed the body of another man facedown in the dirt. On top of that man, Cahokians draped a large cape made of 20,000 shell beads crafted into the likeness of a bird. They then laid the leader faceup on the beaded cape with his head pointing southeast, aligned with the passage of the sun across the sky during the summer solstice. Experts speculate that Cahokians sought to pay homage not only to this man of importance but also to the awe-inspiring forces that governed their lives: darkness and light, earth and sun.

To accompany their leader, Cahokians also buried hundreds of beautifully crafted arrowheads and other artifacts along with the bodies of seven adults who probably were the leader's relatives or servants. Not far away, archaeologists discovered several amazing mass graves. One contained fifty-three young women who had been killed by poison, strangulation, or having their throats slit. Other graves contained forty-three more sacrificed women and forty-three additional men and women who had been executed at the burial site. In all, more than 270 people were buried in the mound with the leader.

Nobody knows exactly who the powerful man was or why Cahokians buried him as they did. Most likely he was a supreme leader of some sort.

ca. 25,000–15,000 BP	Glaciation exposes Beringia land bridge.
ca. 20,000 BP	Ancient people inhabit Alaska.
ca. 16,000 BP	Some ancient people move south along Pacific coast.
ca. 14,600–14,200 BP	Coastal migrants occupy sites in Oregon and Chile.
ca. 13,000 BP	Southern overland migrants arrive in United States and spread throughout hemisphere.
	Paleo-Indians use Clovis points.
ca. 10,000–3000 BP	Archaic hunter-gatherer cultures dominate ancient America.
ca. 5000 BP	Chumash culture emerges in southern California.
ca. 4000 BP	Eastern Woodland peoples grow gourds and make pottery.
ca. 3500 BP	Southwestern cultures cultivate corn.
ca. 2500 BP	Eastern Woodland cultures build burial mounds and cultivate corn.
ca. 2500–2100 BP	Adena culture develops in Ohio.
ca. 2100 BP–AD 400	Hopewell culture emerges in Ohio and Mississippi valleys.
ca. AD 200–900	Mogollon culture develops in New Mexico.
ca. AD 500	Bows and arrows appear south of Arctic.
ca. AD 500–1400	Hohokam culture develops in Arizona.
ca. AD 800–1500	Mississippian culture flourishes in Southeast.



- ca. AD 1000–1200** Anasazi peoples build cliff dwellings and pueblos.
- ca. AD 1325** Small bands of Mexica settle on marshy island in Lake Texcoco.
- AD 1492** Christopher Columbus arrives in New World, begins colonization.

To date, archaeologists have found no similar burial site in all of ancient North America. Most likely, the man's burial and the human sacrifices that accompanied it were major public rituals that displayed the fear-some power he wielded, the respect he commanded, and the supernatural authority his survivors intended to honor. Much remains unknown and unknowable about him and his fellow Cahokians, just as it does with other ancient Americans. The history of ancient Americans is therefore necessarily incomplete and controversial. Still, archaeologists have learned a great deal about ancient peoples who shaped the history of America before 1492.

Why do historians rely on the work of archaeologists?

Archaeologists and historians seek to learn about people who lived in the past, but they usually employ different methods to obtain information. Both archaeologists and historians study artifacts as clues to the activities and ideas of the humans who created them. They concentrate, however, on different kinds of artifacts. Archaeologists tend to focus on physical objects such as bones, spear points, pots, baskets, jewelry, clothing, and buildings. Historians direct their attention mostly to writings, such as letters, diaries, laws, speeches, newspapers, and court cases. The concentration of historians on writings and of archaeologists on other physical objects denotes a rough cultural and chronological boundary between the human beings studied by the two groups of scholars, a boundary marked by the use of writing.

Writing is defined as a system of symbols that record spoken language. Writing originated among ancient peoples in China, Egypt, and Central America about eight thousand years ago, within the most recent 2 percent of the 350,000 years that modern human beings have existed. While people who inhabited North America in 1492 expressed themselves with many kinds of symbols (for example, in their pottery, textiles, and tools), they did not use writing. Ancient Americans invented hundreds of spoken languages; they learned to survive in almost every natural environment; they chose and honored leaders; they traded, warred, and worshipped; and above all, they learned from and taught one another. Still, much of what we would like to know about their experiences remains unknown because they did not write about it.

Archaeologists specialize in learning about people who did not document their history in writing. They study the millions of artifacts ancient peoples created. They also examine geological strata, pollen, and other environmental features to reconstruct as much as possible about the world inhabited by ancient peoples. This chapter relies on such archaeological studies to sketch a brief overview of ancient America, the long first phase of the history of what became the United States. Although ancient Americans and their descendants resided in North America for

thousands of years before Europeans arrived, their history cannot be reconstructed with the detail and certainty made possible by writing.

REVIEW

Why do historians rely on archaeologists to understand the history of ancient Americans?

When and how did humans migrate into North America?

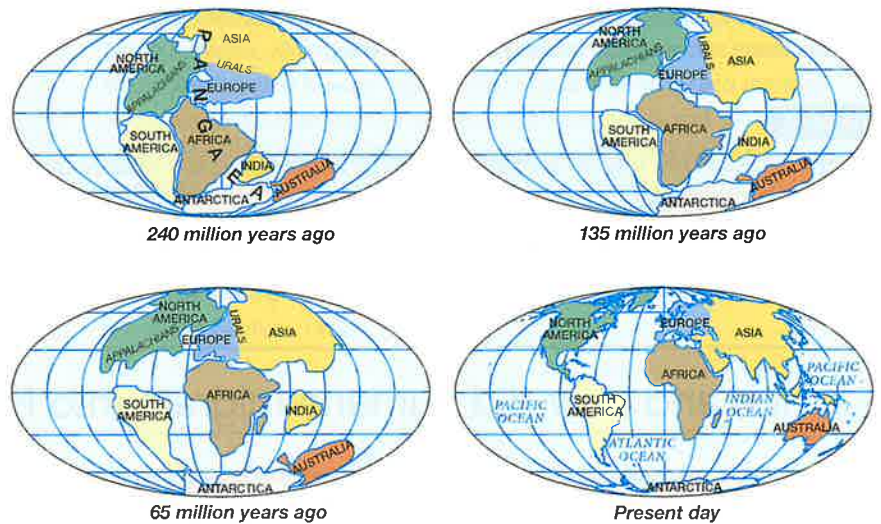
The first human beings to arrive in the Western Hemisphere emigrated from Siberia. They brought with them hunting skills, weapon- and tool-making techniques, and other forms of human knowledge developed millennia earlier in Africa, Europe, and Asia. These first Americans hunted large mammals, such as the mammoths they had learned in Europe and Asia to kill, butcher, and process for food, clothing, and building materials. Most likely, small groups of these first Americans wandered into the Western Hemisphere more or less accidentally in pursuit of prey.

African and Asian Origins

Human beings lived elsewhere in the world for hundreds of thousands of years before they reached the Western Hemisphere. Millions of years before humans existed anywhere on the globe, North and South America became detached from the gigantic common landmass scientists now call Pangaea. About 240 million years ago, powerful forces deep within the earth fractured Pangaea and slowly pushed continents apart to their present positions (**Map 1.1**). This process of continental drift encircled the land of the Western Hemisphere with large oceans that isolated it from the other continents long before the earliest human beings first appeared in Africa about five million years ago.

Millions of years later, about 320,000 BP, modern humans evolved in Africa. (The abbreviation *BP*, which stands for "years before the present," indicates dates earlier than two thousand years ago; for more recent dates, the common and familiar notation *AD* is used, as in AD 1492.) All human beings throughout the world today ultimately came from descendants of these ancient Africans. Slowly, over many thousands of years, some descendants walked out of Africa and scattered into Europe and Asia. Land that connected Africa to Europe and Asia made possible their migration. But for about 97 percent of the time modern humans have inhabited the earth, none of them managed to cross the oceans that isolated North and South America from Africa and Eurasia.

Two major developments made it possible for ancient humans to migrate to the Western Hemisphere. First, people successfully adapted to the frigid environment



MAP 1.1 ▲ Continental Drift Massive geological forces separated North and South America from other continents eons before human beings evolved in Africa five million years ago.

near the Arctic Circle. By about 25,000 BP, humans had become permanent residents of extremely cold regions such as northeastern Siberia. Siberian women used bone needles to sew animal skins into warm clothing to protect their families from the frigid climate.

Second, changes in the earth's climate reconnected North America to Asia. During the last global cold spell—which endured from about 25,000 BP to 15,000 BP—snow piled up in glaciers and sea levels dropped, exposing a wide land bridge that connected Asian Siberia to American Alaska. Experts call this land bridge **Beringia**. Since the global climate is much warmer now, Beringia lies submerged beneath the ocean that separates Siberia from Alaska. While Beringia was above sea level, glaciers a half-mile thick covered what is now western Canada and reached to the Pacific coast, blocking human access to the rest of the hemisphere. Still, Siberian hunters roamed Beringia for thousands of years in search of mammoths, bison, and smaller animals. As these hunters slowly ventured east, they eventually became pioneers of human life in the Western Hemisphere. Although they did not know it, they revolutionized the history of humanity.

DNA extracted from rare fragments of ancient human bones and teeth confirms that several groups of people migrated through Beringia and into North America as the glaciers slowly melted over thousands of years. Scientists can extrapolate the approximate dates of their arrival by analyzing DNA. Archaeological evidence that documents the exact pathways and cultures of the earliest migrants has not been found, and much remains unknown. Still, experts have shown that ancient people inhabited what is now Alaska before 20,000 BP.

Beringia

The land bridge between Siberia and Alaska that allowed people to migrate into the Western Hemisphere.



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They remained there and in the northern reaches of what is now Canada for thousands of years until they eventually died out for unknown reasons.

Around 20,000 BP, another group of ancient people with a distinctive DNA profile took advantage of the gradual shrinking of glaciers to begin to move south into Canada and eventually into what is now the United States. Some of these southern migrants traveled along the narrow strip of coastal land exposed by the melting glaciers until they reached ice-free land along the West Coast. We know little about these coastal migrants because their campsites and burials are now submerged under the Pacific Ocean. Within a thousand years or so after 16,000 BP, these coastal migrants spread all the way to South America. Although their remains are very rare, excavations at Paisley Caves in Oregon and more than 6,000 miles south at Monte Verde in Chile prove that these first hunters descended from ancient Siberians and inhabited these sites between 14,600 and 14,200 BP.

Another group of southern migrants tracked their animal prey over and around the melting glaciers as the climate gradually warmed during roughly the next 6,000 years. Some of them had reached what is now Montana by about 13,000 BP, as proven by recently analyzed DNA from a child's burial. Later generations of almost all Native Americans up to the present day share the distinctive DNA profile of these southern overland migrants. Although these people were not the first humans to arrive in America, they deserve to be called the first Americans since they were the ancestors of almost all the ancient Americans who populated the hemisphere after 13,000 BP. A third, much later pulse of migrants from Siberia arrived about 5,000 BP. Some of them migrated south as far as Arizona and became the ancestors of the Navajo and Apache people.

Paleo-Indian Hunters

Archaeologists refer to these southern overland migrants and their descendants for the next few thousand years as **Paleo-Indians**. They speculate that when Paleo-Indians made it south of the glaciers they entered a hunters' paradise teeming with wildlife that had never before confronted human predators armed with razor-sharp spears. The abundance of game presumably made hunting relatively easy. Ample food permitted the Paleo-Indian population to grow. Within a thousand years or so after 13,000 BP, Paleo-Indians inhabited almost all of the Western Hemisphere.

The first Americans used a distinctively shaped spearhead known as a **Clovis point**, named for the place in New Mexico where it was first excavated. Archaeologists' discovery of abundant Clovis points throughout North and Central America in sites occupied about 13,000 BP provides evidence that these nomadic hunters shared not just DNA but also a common way of life. Typically, all Paleo-Indians hunted large game such as mammoths and bison, but they probably also killed smaller animals. Concentration on large animals, when possible, made sense because just one mammoth supplied meat for months. Some Paleo-Indians even

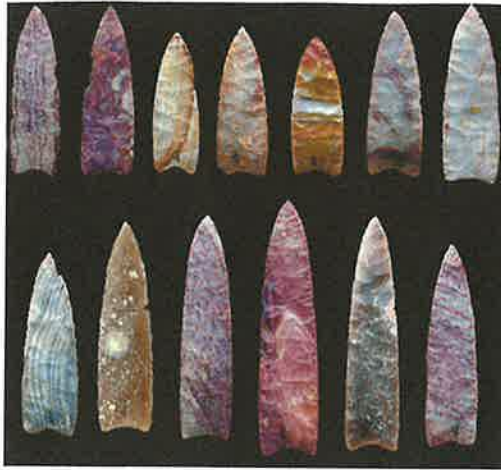


Paleo-Indians

Archaeologists' term for the first migrants into North America and their descendants who spread across the Americas between about 15,000 BP and 13,500 BP.

Clovis point

Distinctively shaped spearhead used by Paleo-Indians and named for the place in New Mexico where it was first excavated.



◀ **Clovis Spear Points** These spear points, discovered in north-central Colorado in 1977, were crafted by Clovis people around 11,000 BP. They illustrate a feature common to Clovis points throughout the hemisphere, namely the design the maker used to skillfully chip away small fragments of stone and create the point used for killing animals. The stone for these points came from sites hundreds of miles away in Texas and Nebraska, documenting long-distance trade among Clovis people. Drake Clovis Cache, Smithsonian Institution, National Museum of Natural History, Department of Anthropology. Image by Marcia Bakry.

refrigerated mammoths they killed by filling the body cavities with stones and submerging the carcasses in icy lakes for later use. In addition to food, mammoths provided Paleo-Indians with hides and bones for clothing, shelter, tools, and much more.

About 11,000 BP, Paleo-Indians confronted a major crisis. The mammoths and other large mammals they hunted became extinct. The extinction occurred gradually, stretching over several hundred years. Scientists are not completely certain why it happened, although environmental change probably contributed to it. About this time, the earth's climate warmed, glaciers melted, and sea levels rose. Mammoths and other large mammals may have had difficulty adapting to the

warmer climate. Many archaeologists also believe, however, that Paleo-Indians contributed to the extinctions in the Western Hemisphere by killing large animals more rapidly than the animals could reproduce. Some experts dispute this overkill interpretation, but warming environmental changes had occurred for millions of years before the arrival of Paleo-Indians without triggering the extinction of large animals. The presence of skilled Paleo-Indian hunters seems to have made a decisive difference. Whatever the causes, after the extinction of large mammals, Paleo-Indians literally inhabited a new world.

Paleo-Indians adapted to the extinction of their large-animal prey by making two important changes in their way of



◀ **Folsom Discovery** The discovery of this spear point stuck between the ribs of an ancient bison near Folsom, New Mexico, revolutionized our understanding of ancient Americans. Since the bison was known to have been extinct for about 10,000 years, ancient Americans must have been hunting them at least 10,000 years ago. This discovery prompted the search for more human artifacts that proved humans resided in America for thousands of years before the extinction of the ancient bison. Courtesy of the Center for the Study of the First Americans, Texas A&M University.

life. First, hunters began to prey more intensively on smaller animals. Second, Paleo-Indians devoted more energy to foraging—that is, to collecting wild plant foods such as roots, seeds, nuts, berries, and fruits. When Paleo-Indians made these changes, they replaced the apparent uniformity of the big-game-oriented Clovis culture with great cultural diversity adapted to the many natural environments throughout the hemisphere.

These post-Clovis adaptations to local environments resulted in an astounding variety of Native American cultures that existed when Europeans arrived in AD 1492. By then, hundreds of tribes inhabited North America alone. Hundreds more lived in Central and South America. Still more hundreds of ancient American cultures had disappeared or been transformed as their people constantly adapted to environmental and other challenges.

REVIEW

How did Paleo-Indians adapt to environmental changes?

When and why did Archaic hunter-gatherers inhabit ancient America?

Archaeologists use the term *Archaic* in two ways: first, to describe the many different hunting and gathering cultures that descended from Paleo-Indians; and second, to refer to the long period of time when those cultures dominated ancient America—roughly from 10,000 BP to somewhere between 4000 BP and 3000 BP. The Archaic era in the history of ancient America followed the Paleo-Indian big-game hunters and came before the development of agriculture. However, even after ancient Americans began to engage in agriculture, the **hunter-gatherer** way of life persisted for millennia.

Like their Paleo-Indian ancestors, **Archaic Indians** hunted with spears, but they also took smaller game with traps, nets, and hooks. Unlike their Paleo-Indian predecessors, many Archaic peoples became excellent basket makers in order to collect and store seeds, roots, nuts, and berries they gathered from wild plants. They prepared food from these plants by using a variety of stone tools. A characteristic Archaic artifact is a grinding stone used to pulverize seeds into edible form. Most Archaic Indians migrated from place to place to gather plant food and hunt animals. They usually did not establish permanent villages, although they often returned to the same river valley or fertile meadow year after year. In regions with especially rich resources—such as present-day California and the Pacific Northwest—they developed permanent settlements. Archaic peoples followed these common practices in distinctive ways in the different environmental regions of North America (**Map 1.2**).

hunter-gatherer

A way of life that involved hunting game and gathering food from naturally occurring sources.

Archaic Indians

Hunting and gathering peoples who descended from Paleo-Indians and dominated the Americas from 10,000 BP to between 4000 and 3000 BP.

MAP ACTIVITY

MAP 1.2 ► Native North

American Cultures Environmental conditions defined the boundaries of the broad zones of cultural similarity among ancient North Americans.

READING THE MAP: What crucial environmental features set the boundaries of each cultural region? (The topography indicated on Map 1.3, "Native North Americans about 1500," may be helpful.)

CONNECTIONS: How did the natural environment affect the development of different groups of Native American cultures?



Great Plains Bison Hunters

After the extinction of the largest game animals, some hunters began to concentrate on bison in the massive herds that grazed the grassy plains that stretched hundreds of miles east of the Rocky Mountains. For almost a thousand years after the big-game extinctions, Archaic Indians hunted bison with Folsom points, named after a



site near Folsom, New Mexico discovered in 1908 by an African American cowboy named George McJunkin. Until this discovery, experts had believed that ancient Americans arrived in the New World fairly recently, about three thousand years ago. McJunkin's discovery revealed a Folsom point stuck between two ribs of a giant bison, where a Stone Age hunter had plunged it more than ten thousand years earlier. McJunkin's discovery proved for the first time that ancient Americans had inhabited the New World for more than ten thousand years.

Like their nomadic ancestors, Folsom and other Archaic hunters moved constantly to maintain contact with their prey. And like Paleo-Indians, these hunters had to get close enough to spear their prey. To make it easier to hunt with spears, Great Plains hunters often stampeded bison herds over cliffs and then slaughtered the injured animals that plunged to the bottom.

Bows and arrows did not reach Great Plains hunters until about AD 500. They largely replaced spears, which had been hunters' weapons of choice since the migration across Beringia thousands of years earlier. Bows permitted hunters to wound animals from farther away. Arrows made it possible to shoot repeatedly. Arrowheads were easier to make and therefore less costly to lose than the larger, heavier spear points. These new weapons did not otherwise change age-old ways of hunting. Although we often imagine bison hunters on horseback, in reality ancient Great Plains people hunted on foot. Horses did not arrive on the Great Plains until Europeans imported them after 1492. Only decades later did Great Plains bison hunters obtain horses and become expert riders.

Great Basin Cultures

Archaic peoples in the Great Basin between the Rocky Mountains and the Sierra Nevada inhabited a region of great environmental diversity defined largely by the amount of rain. While some lived on the shores of lakes and marshes fed by the rain and ate fish, others hunted deer, antelope, bison, and smaller game. To protect against shortages in fish and game caused by the fickle rainfall, Great Basin Indians relied on plants as their most important food. Unlike meat and fish, plant food could be collected and stored for long periods. Many Great Basin peoples gathered piñon nuts as a dietary staple. Great Basin peoples adapted to the severe environmental challenges of the region and maintained their Archaic hunter-gatherer way of life for centuries after Europeans arrived in AD 1492.

Pacific Coast Cultures

The richness of the natural environment made present-day California the most densely settled area in all of ancient North America. The land and ocean offered such ample food that California peoples remained hunters and gatherers for hundreds of years after AD 1492. The diversity of California's environment produced variety among native peoples. The mosaic of Archaic settlements in California included about five hundred separate tribes speaking some ninety languages, each with local dialects. No other region of comparable size in ancient North America exhibited such cultural variety.

The Chumash, one of the many California cultures, inhabited the region surrounding what is now Santa Barbara about 5000 BP. Comparatively plentiful food resources—especially acorns—permitted Chumash people to establish relatively

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their advantages compared to leaky and fragile baskets. While pottery and agriculture introduced changes in Woodland cultures, these ancient Americans retained the other basic features of their Archaic hunter-gatherer lifestyle until 1492 and beyond.

REVIEW

Why did Archaic Americans shift away from big-game hunting to foraging and preying on smaller animals?

How did agriculture influence ancient American cultures?

Among Eastern Woodland peoples and most other Archaic cultures, agriculture supplemented but did not replace hunter-gatherers' food sources. **R**eliance on wild animals and plants required most Archaic groups to remain small and mobile. But beginning about 4000 BP, distinctive southwestern cultures began to *depend* on agriculture and to build permanent settlements. Later, around 2500 BP, Woodland peoples in the vast Mississippi valley began to construct burial mounds and other earthworks that suggest the existence of social and political hierarchies that archaeologists term *chiefdoms*. Although the hunter-gatherer lifestyle never entirely disappeared, agricultural settlements and chiefdoms were important innovations in the Archaic way of life.

Southwestern Cultures

Ancient Americans in present-day Arizona, New Mexico, and southern portions of Utah and Colorado developed cultures characterized by agricultural settlements and multiunit dwellings called **pueblos**. All southwestern peoples confronted the challenge of a dry climate and unpredictable fluctuations in rainfall that made the supply of wild plant food very unreliable. They probably adopted agriculture in response to this basic environmental uncertainty.

About 3500 BP, southwestern hunters and gatherers began to cultivate corn, their signature food crop. The demands of corn cultivation required hunter-gatherers to restrict their migratory habits and settle in one place in order to tend the crop. Since they had to water their fields, southwestern people became irrigation experts, conserving water from streams, springs, and rainfall and distributing it to thirsty crops.

About AD 200, small farming settlements began to appear throughout southern New Mexico, marking the emergence of the Mogollon culture. Typically, a Mogollon settlement included a dozen pit houses, each made by digging a pit about fifteen feet in diameter and a foot or two deep and then erecting poles to support a roof of branches or dirt. Larger villages usually had one or two bigger pit houses that may have been the predecessors of the circular kivas, the ceremonial rooms that became

pueblos

Multiunit dwellings, storage spaces, and ceremonial centers—often termed *kivas*—built by ancient Americans in the Southwest for centuries around AD 1000.



Ancient Agriculture Dropping seeds into holes punched in cleared ground by a pointed stick known as a “dibble,” this ancient American farmer sows a new crop. Previously planted seeds—including the corn and beans immediately opposite him—bear fruit for harvest. Created by a sixteenth-century European artist, the drawing misrepresents who did the agricultural work in many ancient American cultures—namely, women. The Morgan Library & Museum/Art Resource, NY.

Pueblo Bonito

The largest residential and ceremonial site, containing more than six hundred rooms and thirty-five kivas, in the major Anasazi cultural center of Chaco Canyon in present-day New Mexico.

a characteristic of nearly all southwestern settlements. About AD 900, Mogollon culture began to decline, for reasons that remain obscure.

Around AD 500, while the Mogollon culture prevailed in New Mexico, other ancient people migrated from Mexico to southern Arizona and established the distinctive Hohokam culture. Hohokam settlements used sophisticated grids of irrigation canals to plant and harvest crops twice a year. Hohokam settlements reflected Mexican cultural practices that northbound migrants brought with them, including the building of sizable platform mounds and ball courts. About AD 1400, Hohokam culture declined partly because centuries of irrigation probably made the soil become salty, which reduced crop yields and led to food shortages.

North of the Hohokam and Mogollon cultures, in a region that encompassed southern Utah and Colorado and northern Arizona and New Mexico, the Anasazi culture began to flourish about AD 100. The early Anasazi built pit houses on mesa tops and used irrigation much as did their neighbors to the south. Beginning around AD 1000, some Anasazi began to

move to large, multistory cliff dwellings whose spectacular ruins still exist at Mesa Verde, Colorado, and elsewhere. Other Anasazi communities—like the one known as **Pueblo Bonito**, whose impressive ruins can be visited at Chaco Canyon, New Mexico—erected huge stone-walled pueblos with enough rooms to house everyone in the settlement. (See “Analyzing Historical Evidence: Artifacts of Daily Life in Chaco Canyon” on page 16.) Anasazi pueblos and cliff dwellings typically included one or more kivas used for secret ceremonies, restricted to men, that sought to communicate with the supernatural world. The alignment of Chaco buildings with movements of the sun and moon shows that Anasazi studied the sky carefully, probably because they believed supernatural powers in the heavens governed their lives in every way. Pueblo Bonito stood at the center of thousands of smaller Chaco pueblos that supplied food and other goods to support Bonito’s spiritual and political elites. Exactly how Pueblo Bonito elites exercised power over the network of smaller pueblos is not known, but it probably involved a combination of violence and spiritual ceremonies performed in the kivas. A disastrous drought plagued the region for about fifty years after AD 1130, triggering the disappearance of the Anasazi culture. The prolonged drought probably intensified conflict among the pueblos and made it

impossible to depend on the tried-and-true techniques of irrigated agriculture that had been successful for centuries. By AD 1200, the large Anasazi pueblos had been abandoned. Some Anasazi migrated toward regions with more reliable rainfall and settled in Hopi, Zuni, and Acoma pueblos that their descendants in Arizona and New Mexico have occupied ever since.

Woodland Burial Mounds and Chiefdoms

No other ancient Americans created dwellings similar to southwestern pueblos, but around 2500 BP, Woodland peoples throughout the Mississippi River watershed began to build burial mounds. The size of the mounds, the labor and organization required to erect them, and differences in the artifacts buried with certain individuals suggest the existence of a social and political hierarchy that archaeologists term a chiefdom. Experts do not know the name of a single chief, nor do they understand how chiefs exercised their power. But the only way archaeologists can account for the complex and labor-intensive burial mounds is to assume that a person—whom scholars term a chief—commanded the labor and obedience of very large numbers of other people, who made up the chief's chiefdom.

Between 2500 BP and 2100 BP, Adena people built hundreds of burial mounds radiating from central Ohio. In the mounds, the Adena usually included grave goods such as spear points and stone pipes as well as thin sheets of mica (a glasslike mineral) crafted into animal or human shapes. Sometimes burial mounds were constructed all at once, but often they were built up slowly over many years.

About 2100 BP, Adena culture evolved into the more elaborate Hopewell culture, which lasted about five hundred years. Centered in Ohio, Hopewell culture extended throughout the enormous drainage of the Ohio and Mississippi rivers. Hopewell people built larger mounds than their Adena predecessors and filled them with magnificent grave goods that Hopewell groups reserved for their most important leaders. Most people were cremated, not buried. Hopewell burial rituals brought many people together to honor the dead person and to help build the mound. Hopewell mounds often reached one hundred feet high and thirty feet in diameter. Grave goods at Hopewell sites testify to the high quality of Hopewell crafts and to a thriving trade network that ranged west to Wyoming and south and east to Florida.

Hopewell culture declined about AD 400 for reasons that are unknown. Archaeologists speculate that bows and arrows, along with increasing reliance on agriculture, made small settlements more self-sufficient and therefore less dependent on the central authority of the Hopewell chiefs who were responsible for the burial mounds.

Four hundred years later, another mound-building culture flourished. The Mississippian culture emerged in the floodplains of the major southeastern river systems about AD 800 and lasted until about AD 1500. Major Mississippian sites, such as the one at Cahokia, included huge mounds with platforms on top for ceremonies and for the residences of great chiefs. Most likely, the ceremonial mounds and ritual practices were influenced by Mexican cultural expressions brought north by traders and migrants. At Cahokia, skilled farmers supported the large population with

burial mounds

Earthen mounds constructed by ancient American peoples, especially throughout the gigantic drainage of the Ohio and Mississippi rivers, after about 2500 BP.

chiefdom

Hierarchical social organization headed by a chief. Archaeologists believe Woodland chiefdoms commanded the labor required to construct burial mounds.

Cahokia

The largest ceremonial site in ancient North America, located near the Mississippi River across from present-day St. Louis, where thousands of inhabitants built hundreds of earthen mounds between about AD 800 and AD 1500.

ANALYZING HISTORICAL EVIDENCE

Artifacts of Daily Life in Chaco Canyon

Like archaeologists, historians study artifacts—physical objects—to investigate the past. Since ancient Americans did not use writing, their artifacts serve as documents of a sort. Pictured here are artifacts made and used more than a thousand years ago by residents of Pueblo Bonito in Chaco Canyon, located in the arid region at the intersection of present-day Utah, Colorado, Arizona, and New Mexico.

The largest of many buildings in Chaco Canyon, Pueblo Bonito originally stood four or five stories tall and included more than six hundred rooms, including thirty-five kivas, the circular structures visible around the perimeter of the large plazas. Chaco residents covered each kiva with a roof, creating a darkened underground space for ceremonial rituals. The ceremonies remain unknown, but less mysterious are the routines of daily life that sustained Chacoan people for centuries at Pueblo Bonito.

Among the thousands of artifacts excavated at Pueblo Bonito are these objects Chaco residents used routinely in their daily lives. Imagine a woman at Pueblo Bonito setting out on a spring day to plant corn, her family's most important food. She might strap on sandals, like the one shown on the facing page woven from fibers of the yucca plant. To dig a hole for planting corn seeds, the woman might use a digging stick like the one shown on the facing page, tipped by the horn of a mountain sheep and tightly bound with sinew to a cottonwood branch and covered with animal hide to protect the binding.

Once harvested and dried, corn needed to be ground in order to be cooked and eaten. Our imagined woman used the small flat stone (the *mano*) and the larger stone slab (the *metate*) to grind the corn. Some



Pueblo Bonito, Chaco Canyon, New Mexico. Manfred Gottschalk/Alamy Stock Photo.

rooms at Pueblo Bonito contained numerous grinding stones.

To cook the cornmeal, the woman mixed it with water, perhaps using a ceramic ladle—like the one shown on the facing page crafted by a Chaco potter— to dip water from a storage pot. To kindle a fire, she might use the Chacoan fire starter kit shown here. After heating the cornmeal gruel in a ceramic pot, she might use the ladle again to transfer servings into small bowls for eating.

Examine these objects and think carefully about them. Each object required a great deal of learning and experience to create it and use it effectively. Consider in detail, step by step, what activities went into the making and use of each artifact.



Manfred Gottschalk/Alamy

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▲ Sandal

▼ Fire Starter Kit



▲ Digging Stick



▶ Ladle



▶ Mano and Metate

Questions for Analysis

ANALYZE THE EVIDENCE: What kinds of material, knowledge, skill, and activity were required to make and use each of these artifacts?

CONSIDER THE CONTEXT: What do these artifacts suggest about food production and consumption in Chaco Canyon? What do these artifacts reveal about the society and culture of Chacoan people?

ASK HISTORICAL QUESTIONS: How did Chacoan culture, as revealed by these artifacts, compare to the lifestyles of ancient Americans in other regions at about the same time? How do these artifacts differ from artifacts of Paleo-Indians and Archaic hunters and gatherers described in the chapter? What changes might account for the differences?

Source: All images courtesy National Park Service, Chaco Culture National Historic Park.



◀ **Mexican Ball Court** The Mexica and other Mesoamerican peoples commonly built special courts (or playing fields) for their intensely competitive ball games. This rare model of a ball court, made in Mexico sometime between 2200 BP and AD 250, shows a game in progress, complete with players and spectators. Players wore padded belts and used their hips to hit the hard rubber ball through the goal. Spectators bet on the games, and losing players were often killed. A few ball courts have been excavated in North America, providing compelling evidence of one of the many connections between ancient Mesoamericans and North Americans. Yale University Art Gallery.

ample crops of corn. In addition to mounds, Cahokians erected what archaeologists call woodhenges (after the famous Stonehenge in England)—long wooden poles set upright in the ground and carefully arranged in huge circles. Experts believe that Cahokians probably built woodhenges partly for ceremonies linked to celestial observations. The large plazas at Cahokia were used for religious and political ceremonies as well as for playing the Cahokians' signature game of chunky, which involved rolling a concave stone disk and trying to throw a spear that landed as close as possible to where the stone stopped. The game of chunky spread throughout Mississippian cultures. Chunky stones are commonly found in Mississippian graves, evidence of the importance Cahokians attached to chunky, even in the hereafter.

Cahokia and other Mississippian cultures dwindled by AD 1500. When Europeans arrived, most of the descendants of Mississippian cultures, like those of the Hopewell culture, lived in small, dispersed agricultural villages supported by hunting and gathering. Clearly, the conditions that caused large chiefdoms to emerge—whatever they were—had changed, and chiefs no longer commanded the sweeping powers they had once enjoyed.

REVIEW

How and why did southwestern cultures differ from Woodland cultures?

What ancient American cultures inhabited North America in the 1490s?

On the eve of European colonization in the 1490s, Native Americans lived throughout North and South America, but their total population is uncertain. Some experts claim that Native Americans who inhabited what are now the United States and Canada numbered eighteen million to twenty million. Other experts place the population at no more than one million. A prudent estimate is about four million, or about the same as the number of people living on the small island nation of England at that time. The vastness of North America meant that the overall density of the ancient American population in North America was low, just 60 people per 100 square miles, compared to more than 8,000 in England. The survival strategies of hunting, gathering, and agriculture spread ancient Americans across the continent, but some regions supported more people than others (**Figure 1.1**).

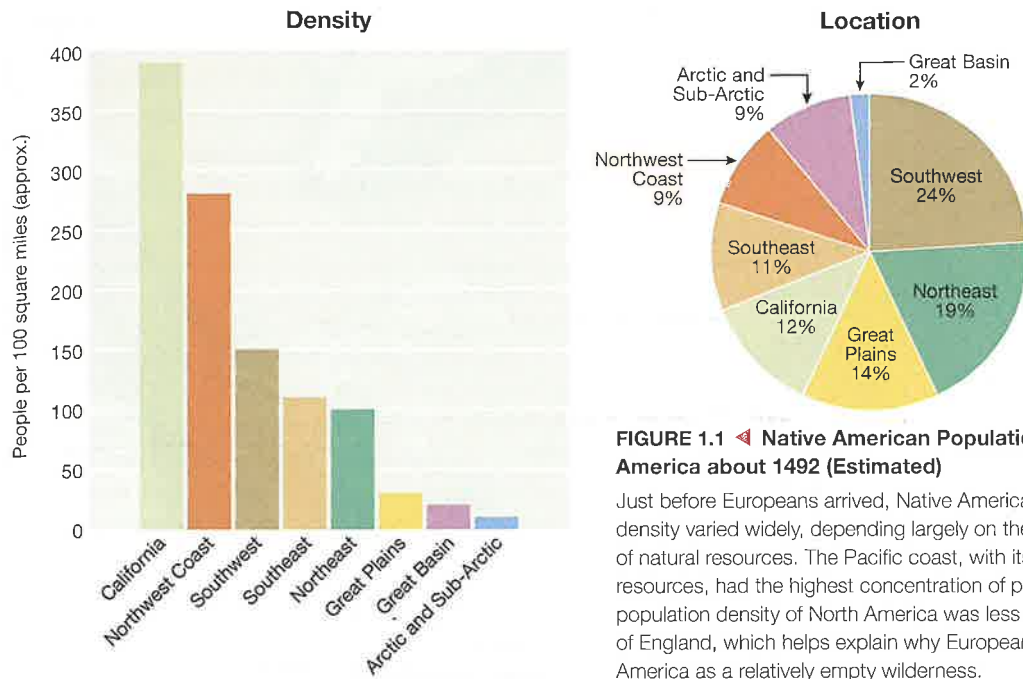


FIGURE 1.1 Native American Population in North America about 1492 (Estimated)

Just before Europeans arrived, Native American population density varied widely, depending largely on the availability of natural resources. The Pacific coast, with its rich marine resources, had the highest concentration of people. Overall, the population density of North America was less than 1 percent that of England, which helps explain why Europeans viewed North America as a relatively empty wilderness.

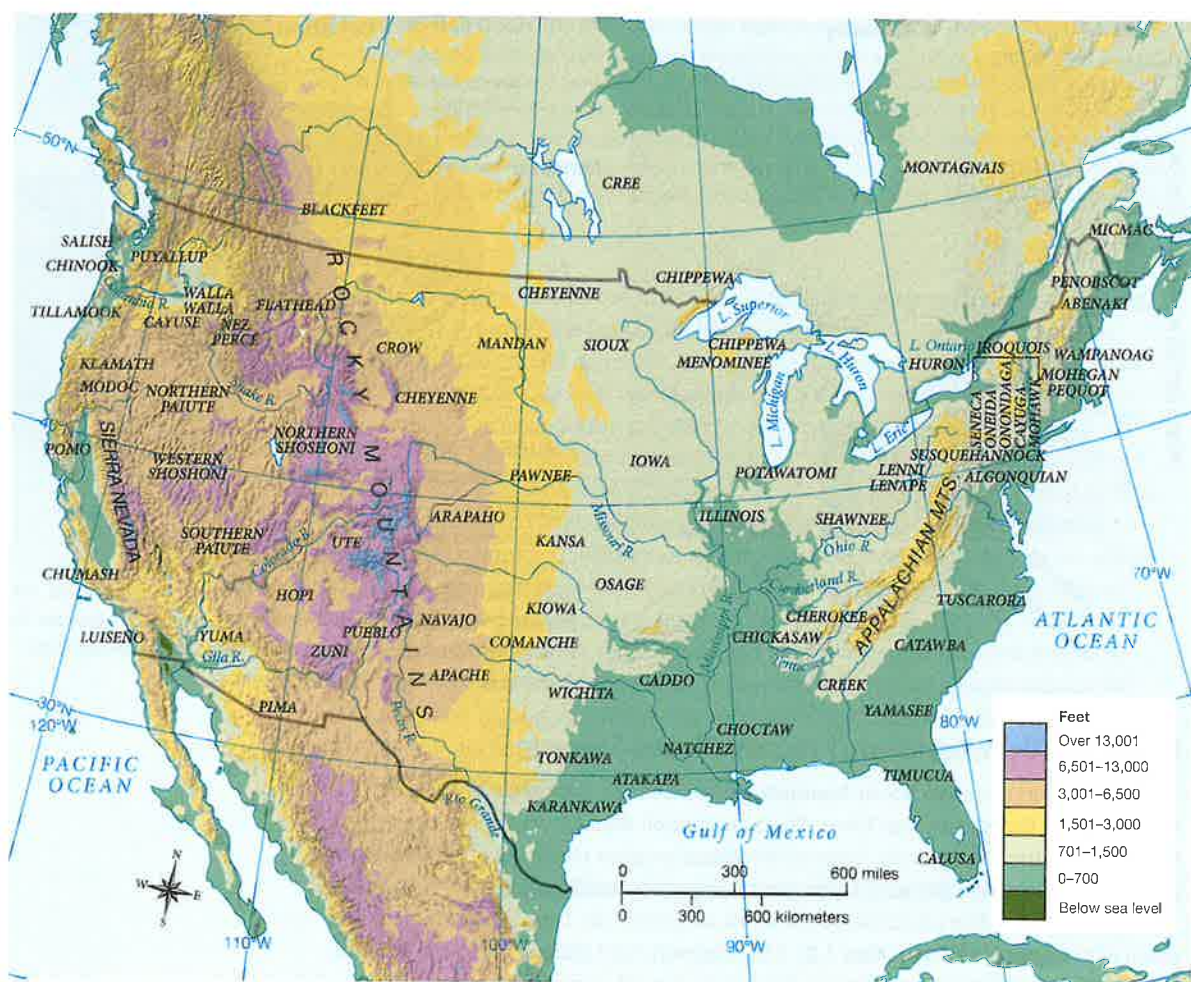
Eastern Woodland and Great Plains Peoples

About one-third of native North Americans inhabited the enormous Woodland region east of the Mississippi River. Their population density was about average for North America as a whole. Eastern Woodland peoples clustered into three broad linguistic and cultural groups: Algonquian, Iroquoian, and Muskogean.

Algonquian tribes inhabited the Atlantic seaboard, the Great Lakes region, and much of the upper Midwest (**Map 1.3**). The relatively mild climate along the Atlantic permitted the coastal Algonquians to grow corn and other crops as well as to hunt and fish. Around the Great Lakes and in northern New England, however, cool summers and severe winters made agriculture impractical. Instead, the Abenaki, Penobscot, Chippewa, and other tribes concentrated on hunting and fishing, using canoes both for transportation and for gathering wild rice.

Inland from the Algonquian region, Iroquoian tribes occupied territories centered in Pennsylvania and upstate New York, as well as in the hilly upland regions of the Carolinas and Georgia. Iroquoian tribes differed from their neighbors in three important ways. First, their success in cultivating corn and other crops allowed them to build permanent settlements, usually consisting of several longhouses housing five to ten families. Second, Iroquoian women headed family clans and even selected the chiefs (normally men) who governed the tribes. Property of all sorts belonged to women. Third, for purposes of war and diplomacy, Iroquoian tribes—including the Seneca, Onondaga, Mohawk, Oneida, and Cayuga—allied in the League of Five Nations, which remained powerful well into the eighteenth century.

Muskogean peoples spread throughout the woodlands of the Southeast, south of the Ohio River and east of the Mississippi. Including the Creek, Choctaw, Chickasaw,



MAP 1.3 ▲ **Native North Americans about 1500** Distinctive Native American peoples resided throughout the area that, centuries later, became the United States. This map shows the approximate location of some of the larger tribes about 1500. Lack of space on the map requires many other peoples who inhabited North America at the time to be omitted.

and Natchez tribes, Muskogean inhabited a bountiful natural environment that provided abundant food from hunting, gathering, and agriculture. Remnants of the earlier Mississippian culture still existed in Muskogean religion. The Natchez, for example, worshipped the sun and built temple mounds modeled after those of their Mississippian ancestors, including Cahokia.

Great Plains peoples accounted for about one out of seven native North Americans. Inhabiting the huge region between the Rocky Mountains and the Mississippi River, many tribes had migrated to the Great Plains within the century or two before the 1490s, forced westward by Iroquoian and Algonquian tribes. Some



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Great Plains tribes—especially the Mandan and Pawnee—farmed successfully, growing both corn and sunflowers. But the Teton Sioux, Blackfeet, Comanche, Cheyenne, and Crow on the northern plains, and the Apache and other nomadic tribes on the southern plains, depended on bison for subsistence.

Southwestern and Western Peoples

Southwestern cultures included about a quarter of all native North Americans. These descendants of the Mogollon, Hohokam, and Anasazi cultures lived in settled agricultural communities, many of them pueblos. They continued to grow corn, beans, and squash using methods they had refined for centuries.

However, their communities came under attack by a large number of warlike Athapascans who invaded the Southwest beginning around AD 1300. The Athapascans—principally Apache and Navajo—were skillful warriors who preyed on the sedentary Pueblo Indians, reaping the fruits of agriculture without the work of farming.

About a fifth of all native North Americans resided along the Pacific coast. In California, abundant acorns and nutritious marine life continued to support high population densities, but this abundance retarded the development of agriculture. Similar dependence on hunting and gathering persisted along the Northwest coast, where fishing reigned supreme. Salmon were so plentiful at The Dalles, a prime fishing site on the Columbia River on the border of present-day Oregon and Washington, that Northwest peoples caught enough to trade dried fish as far away as California and the Great Plains. It is likely that The Dalles was the largest Native American trading center in ancient North America, although other ancient trading centers, such as Pueblo Bonito and Cahokia, also existed.

Cultural Similarities

While trading was common, all native North Americans in the 1490s still depended on hunting and gathering for a major portion of their food. Most of them also practiced agriculture. Some used agriculture to supplement hunting and gathering; for others, the balance was reversed. People throughout North America used bows, arrows, and other weapons for hunting and warfare. To express themselves, they drew on stones, wood, and animal skins; wove baskets and textiles; crafted pottery, beads, and carvings; and created songs, dances, and rituals.

North American life did not include features common in Europe during the 1490s. Native North Americans did not use writing, wheels, or sailing ships. They had no large domesticated animals such as horses or cows. Their only metal was copper. However, the absence of these European conveniences mattered less than Native Americans' adaptations to local natural environments and to the social environment among neighboring peoples, adaptations that all native North Americans held in common.

It would be a mistake, however, to conclude that native North Americans lived in blissful harmony. Archaeological sites provide ample evidence of violent conflict. Warfare was common, making violence and fear typical features of ancient American life. Warfare not only killed people and destroyed their settlements, but victors usually took captives, especially women and children, and often treated them as slaves. Skeletons, like those at Cahokia, not only bear marks of wounds but also

VISUAL ACTIVITY



◀ **Ancient American Weaving** This workbasket of a master weaver illustrates the technology of ancient American textile production. Found in a woman's grave in the Andes dating from one thousand years ago, the workbasket contains tools and thread for every stage of textile production. Weaving—like cooking, hunting, and worship—depended on human knowledge that survived only when passed from an experienced person to a novice. Museum of Fine Arts, Boston, Massachusetts, USA/Gift of Charles H. White/Bridgeman Images.

READING THE IMAGE: What human activities produced the tools in the workbasket?

CONNECTIONS: How did young people learn such survival skills as hunting, food gathering, cooking, weaving, and cooperation from their elders?

exhibit clear signs of ritualistic human sacrifice. Religious, ethnic, economic, and familial conflicts must have occurred, but they remain in obscurity because they left few archaeological traces. In general, anxiety and instability must have been at least as common among ancient North Americans as feelings of peace and security.

Native North Americans not only adapted to the natural environment but also changed it in many ways. They built thousands of structures, from small dwellings to massive pueblos and enormous mounds, permanently altering the landscape. Their food-gathering techniques selected productive and nutritious varieties of plants, thereby shifting the balance of local plants toward useful varieties. The first stages of North American agriculture, for example, probably involved ancient Americans gathering wild seeds and then sowing them in a meadow for later harvest. To clear land for planting seeds, native North Americans set fires that burned thousands of acres of forest.

Ancient North Americans also used fires for hunting. Hunters often started fires to frighten and force together deer, bison, and other animals, making them easier to kill. Indians also started fires along the edges of woods to burn off shrubby undergrowth. The fires allowed tender young plants to sprout and attract deer and other game, who then came within convenient range of hunters' weapons. The burns also encouraged the growth of sun-loving food plants that Indians relished, such as blackberries, strawberries, and raspberries.

Because the fires set by native North Americans usually burned until they ran out of fuel or were extinguished by rain or wind, enormous regions of North America were burned. In the long run, fires created and maintained a diverse and productive natural environment. Fires, like other activities of native North Americans, shaped the landscape of North America long before Europeans arrived in 1492.

REVIEW

What traits did native North American cultures share?

How did the Mexican empire amass power and riches?

The vast majority of ancient Americans who lived in the Western Hemisphere in the 1490s inhabited Mesoamerica and South America, where the population approximately equaled that of Europe. Like their counterparts north of the Rio Grande, these people lived in a natural environment of tremendous diversity. Among all these cultures, the Mexica stood out. Their empire stretched from coast to coast across central Mexico, encompassing approximately six million people. Their significance in the history of the New World after 1492 dictates a brief survey of their culture and society.

The Mexica began their rise to prominence about 1325, when small bands settled on a marshy island in Lake Texcoco, the site of the future city of Tenochtitlán, the capital of the Mexican empire. Resourceful, courageous, and cold-blooded warriors, the Mexica often hired out as mercenaries for richer, more settled tribes.

By 1430, the Mexica succeeded in asserting their dominance and leading their own military campaigns in an ever-widening arc of empire building. Despite pockets of resistance, by the 1490s the Mexica ruled an empire that contained about as many people as lived in Spain. The empire exemplified the central values of Mexican society. The Mexica worshipped the war god Huitzilopochtli. Warriors held the most exalted positions in the social hierarchy, even above the priests who performed the sacred ceremonies that won Huitzilopochtli's favor. In almost constant battles to defend and extend the empire, young Mexican men exhibited the courage and daring that would allow them to rise in the carefully graduated ranks of warriors. The Mexica believed capturing prisoners was the ultimate act of bravery. Warriors usually turned over the captives to Mexican priests, who sacrificed many of them to Huitzilopochtli by cutting out their hearts. The Mexica believed that human sacrifice fed the sun's craving for blood, which kept the sun aflame and prevented the coming of everlasting darkness and chaos.

The empire contributed far more to Mexican society than victims for sacrifice. At the most basic level, the empire functioned as a military and political system that collected tribute from subject peoples. The Mexica forced conquered tribes to pay tribute in goods, not money. Tribute gave the Mexica as much as one-third of the goods produced by conquered tribes. It included everything from candidates for human sacrifice to textiles and basic food products, as well as exotic luxury items such as gold, turquoise, and rare bird feathers.

Tribute reflected the fundamental relations of power and wealth that pervaded the Mexican empire. The relatively small nobility of Mexican warriors, supported by a still smaller group of priests, possessed the military and religious power to command the obedience of hundreds of thousands of non-noble Mexicans and of millions of non-Mexicans in subjugated colonies. Mexican elites exercised their power to obtain tribute and thereby to redistribute wealth from the conquered to the conquerors, from the commoners to the nobility, from the poor to the rich. This redistribution of wealth made possible the achievements of Mexican society that amazed Spaniards after AD 1492: the huge cities, teeming markets, productive gardens, and storehouses stuffed with gold and other treasures.

Mexica

The Mexica commanded an empire that stretched from coast to coast across central Mexico and encompassed as many as six million people.

tribute

The goods, ranging from food and luxury items to candidates for human sacrifice, that the Mexica collected from people they conquered.

On the whole, the Mexica did not interfere much with the internal government of conquered regions. Instead, they usually permitted the traditional ruling elites to stay in power—so long as they paid tribute. Subjugated communities felt exploited by the constant payment of tribute to the Mexica. The high level of discontent among subject peoples was the soft, vulnerable underbelly of the Mexican empire, a fact that Spanish intruders exploited after 1492 to conquer the Mexica.

REVIEW

How did the Mexican empire display the central values of Mexican society?

Conclusion: How did ancient Americans shape their world and ours?

Ancient Americans shaped the history of human beings in the New World for more than thirteen thousand years. They established continuous human **habitation** in the Western Hemisphere from the time the first big-game hunters crossed Beringia until 1492 and beyond. Much of their history remains lost because they relied on oral rather than written communication. But much can be pieced together from artifacts they left behind at camps, kill sites, and ceremonial and residential centers such as Cahokia and Pueblo Bonito. Ancient Americans achieved their success through resourceful adaptation to the hemisphere's many and changing natural environments. They also adapted to social and cultural changes caused by human beings—such as marriages and deaths as well as political struggles and warfare among chiefdoms. Their creativity and artistry are unmistakably documented in their numerous artifacts. Those material objects sketch the only likenesses of ancient Americans we will ever have—blurred, shadowy images that are unmistakably human but forever silent.

When European intruders began arriving in the Western Hemisphere after 1492, their ideas about the promise of the New World were strongly influenced by the diverse peoples they encountered. Europeans coveted Native Americans' wealth, labor, and land. Christian missionaries sought to save Native Americans' souls. For their part, Native Americans marveled at European technological novelties such as sailing ships, steel weapons, gunpowder, and horses, while often reserving judgment about or rejecting Europeans' Christian religion.

In the centuries following 1492, as the trickle of European strangers became a flood of newcomers from both Europe and Africa, Native Americans and colonial settlers continued to encounter one another. Peaceful negotiations as well as violent conflicts over both land and trading rights resulted in chronic fear and mistrust. While the era of European colonization marked the beginning of the end of ancient America, the ideas, subsistence strategies, and cultural beliefs of native North Americans remained powerful among their descendants for generations, and they persist today.

CHAPTER REVIEW

EXPLAIN WHY IT MATTERS

Beringia (p. 6)

Paleo-Indians (p. 7)

Clovis point (p. 7)

hunter-gatherer (p. 9)

Archaic Indians (p. 9)

pueblos (p. 13)

Pueblo Bonito (p. 14)

burial mounds (p. 15)

chiefdom (p. 15)

Cahokia (p. 15)

Mexica (p. 23)

tribute (p. 23)

PUT IT ALL TOGETHER

THE FIRST AMERICANS

- When and how did humans first arrive in the Americas?
- How did Paleo-Indians adapt to the extinction of large mammals around 11,000 BP?

AGRICULTURE AND ADAPTATION

- How did Archaic Americans differ from their Paleo-Indian ancestors?
- How did the advent of agriculture change the cultures of ancient Americans?

NATIVE AMERICAN CULTURES IN 1490

- What accounts for the different regional Native American populations about 1490?
- How did the Mexica differ from the ancient Americans in North America?

LOOKING BACKWARD, LOOKING AHEAD

- What accounts for the diversity of Indian peoples on the eve of European contact?