

The Paleo-Indians

During the 100,000 years of the most recent Ice Age, while much of the Earth's water was locked up in the ice caps, the level of the oceans at times dropped by as much as 300 feet. At these times the Bering Strait became dry land, and animals migrated across a wide territory known as Beringia. Species that had evolved in the Old World were able to migrate east; these included mammoths, bison and early humans. Horses and camels, which had developed on the American continent, migrated west to Asia and survived there even after they became extinct in the Americas.

Of course, all these movements did not occur suddenly but over immense stretches of time during glacial fluctuations. Mammoths were in the Americas about 1.5 million years ago, while humans were latecomers, probably arriving in various waves of migration between 30,000 and 11,500 years ago. One of the early cultures has been named "**Clovis**" after a type of spear point found at Clovis, New Mexico.

Although the "**Clovis hunters**" have for many years been considered to be the earliest known culture in the New World, recent research has modified the traditional idea of the Clovis being the "**First Americans.**" In a recent issue of *Science* magazine, authors Michael R. Waters and Thomas W. Stafford, Jr. present a series of new radiocarbon dates on several Clovis sites. Using modern radiocarbon dating techniques, the authors advance the view that the **Clovis culture dated from about 13,100 to 12,900** years ago and may have persisted for as little as a few hundred years. If this is correct, this way of life was probably contemporary with other New World cultures such as Folsom and Goshen. [Waters, Michael R. and Thomas W. Stafford Jr. "Redefining the Age of Clovis: Implications for the Peopling of the Americas" in *Science* 23, February 2007, Vol. 315. no. 5815, p. 1049.]

Clovis Spear Points

Some of the early hunter-gatherers in the American Southwest used very distinctive razor-sharp stone spear points to hunt large mammals including bison, horse, deer, elk, mastodon, and mammoth. Scientists named these spear points "**Clovis**" after Clovis, New Mexico. The people who used them probably hunted other species of smaller game as well and very likely supplemented their diet with native nuts, roots, berries, and seeds.

No skeletal evidence of these ancient people has yet been found, and our information about their domestic and social life is minimal. As nomadic hunters their belongings would have been few and easily portable from one camp to the next. Small bands of twenty-five to thirty people would likely have ranged over a territory that might extend several thousand square miles, regulating their movements by the season, the amount of game, and the availability of native plant foods.

These hunters seem to have been fairly widespread across North America, but some of the most interesting sites are found bordering the San Pedro River in **southeast Arizona**, near the Mexican border. At these sites mammoth bones and the bones of other extinct mega-fauna are found in association with **fire hearths, Clovis points, and tools.**

The fact that some of the earliest **Clovis sites** contained mammoth bones sparked a popular idea that these hunters lived primarily on mammoth meat. Closer examination makes this appear unlikely. The primary factor would be the enormous size of the Columbian mammoth, which was considerably larger than the Woolly Mammoths discovered in Siberia. A healthy, full-grown male Columbian Mammoth was about 13 feet high at the shoulder and weighed in at some ten tons. His powerful trunk and tusks up to ten feet long were impressive defenses.

To kill such an animal would be a formidable task, especially for humans unequipped with the claws or teeth of such proficient predators as the saber-tooth cats. However, it would have been much less difficult for humans to "finish off" calves or young individuals who were venturing away from the protection of the herd for the first time, especially if they were in some sort of environmental distress (such as a drought), injured, or immobilized in a pit trap. The archaeological evidence supports this thesis since the sites contain almost exclusively the bones of young mammoths near watering places.

Mammoth Sites in Cochise County

At several sites in **Cochise County, Arizona**, the distinctive **Clovis spear points** have been found in association with bones of bison, camel, tapir, bear, and horse in addition to mammoth.

Naco Mammoth Site

In August 1951, summer rains brought heavy flooding to the Greenbush Creek a mile northwest of Naco, Arizona, a border town **south of Bisbee**. Erosion in the arroyo exposed part of a skull with teeth and the tusk of a large animal. Further excavation revealed ribs, vertebrae, and scapula along with **eight Clovis spear points** of various sizes.

Lehner Mammoth-Kill Site

About ten miles away, the following spring Ed Lehner was inspecting a washout. He found what he judged to be the bones of an extinct animal in an arroyo two miles south of the ghost town of Hereford, Arizona, on the west side of the San Pedro River. He removed a few fragments and took them to the **Arizona State Museum** where some of them were identified as tooth plates of a mammoth.

Another summer of heavy rains in 1955 exposed more bones, and excavation was begun. Shortly two Clovis projectile points were found among ribs of what was adjudged to be a young mammoth. Although the condition of the bones was poor, elements of eight mammoths were counted as well as bones of numerous bison. Thirteen projectile points, eight cutting and scraping tools, and a chopper were also found. The bones were found in a mixture of sand and gravel. The area was probably a shallow pool which attracted animals as a watering place. Some of the animals found there may have died of natural causes, especially if there had been a drought.

Along with the bones of a varied selection of game including one horse, one tapir, several bison, a camel, a bear, several rabbits and a garter snake, the site contained the first definable fire hearth associated with the **Clovis people**. The Lehner site also offers a tantalizing mystery: although mandibles (lower jaws) of eight mammoths were recovered in fair condition, not a single skull was found intact. Several masses of crushed bone were found which might have been parts of skulls but these still would not be sufficient to account for all the crania one would have expected to find. The site was designated a **National Historic Landmark** in 1967 and in 1988 was donated by Mr. & Mrs. Lehner to the Bureau of Land Management for the benefit and education of the public.

Murray Springs Clovis Site

Excavations at the **Murray Springs Site**, just east of Sierra Vista, were conducted from 1966-71 and revealed a wealth of material about the Clovis hunters. In addition to the bones of a mammoth, North American horse, camel, lion, and dire wolf were found. Bison appears to have been a favorite with the Clovis hunters since the bones of eleven young bison were found. Of course, the animals were most likely killed one by one, perhaps over a period of years, as the nomadic hunters traveled back and forth over their range to check their favorite hunting grounds. It is likely that the young mammoth and bison were ambushed as they came to the water. The site also contained *sixteen Clovis spear points and a wrench-type tool fashioned from a mammoth leg bone*.

The **Murray Springs site** is readily accessible by the public since it is located on one of the trails of the San Pedro Riparian National Conservation Area.

Double Adobe

At this site twelve miles northwest of Douglas in the **Whitewater Draw area**, bones of mammoth, horse, bison, antelope, coyote and dire wolf were found associated with artifacts in re-deposited stream sediments. Artifacts included fire-cracked rock, projectile points, and small grinding stones. Although there are hunting tools at the site, the **316 milling stones** are the most prominent evidence. The presence of grinding stones has been interpreted to mean that humans were beginning to adapt to the changing environment that followed the end of the Ice Age and the extinction of many of the large mammals. The coming of the Holocene Era (10,000 Before Present Era) brought warmer and drier conditions to the southwest, and people either moved on to other areas or modified their lifestyles to suit local resources.

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Archaic culture

Double Adobe Shows Changing Lifestyles

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As a result, by 11,000-10,500 B.P.E. the **Clovis culture** was beginning to give way to more regional variants, which are generally called **Archaic cultures**. Except on the Great Plains, where the focus remained on hunting bison, the human subsistence strategy seems to have become more diversified, with medium and small mammals and various plant foods being added to the menu. These people were highly mobile and lived by plant and seed gathering, supplemented by hunting of modern fauna. Though the herds of large grazing herbivores were gone, browsing animals such as pronghorn and deer were still living in the mountains. The people probably came down to the lowlands when the rains made the desert fruitful and retreated to the mountain regions when water was scarce. They developed **milling stones** such as those found at **Double Adobe** to process tiny seed grains.



Building a pit house, 250 B.C. to 1450 A.D

Later, as the climate became even hotter than it is at present, the people became more dependent on plant foods, as animal prey became scarce. A more sedentary lifestyle followed the introduction of squash, maize, and beans. Pit homes, which may have originally been below-ground storage areas, began to appear.

These dwellings, which formed the basic domestic architecture in the area for more than a thousand years, were built by forming a pit in the ground, pounding the dirt floor and roofing it over with a framework of heavy sticks which were covered with grass, sticks and earth. During periods of drought the people could easily move back up into the mountainous areas, where there was greater rainfall and seepage springs provided water. These areas were also easier to defend in case of attacks by intruders.

Although the Archaic people left few artifacts and disappeared before the time of the birth of Christ, many of the later developments of Native North American culture in the Southwest are rooted in this period.

Mogollon Culture in Cochise County

Later Indian cultures arose further north in the area of the Casa Grande ruins and the pueblos of northern Arizona and New Mexico. These more advanced villages were inhabited first by Hohokam, Anasazi, Mogollon, Sinagua and Patayan Indians, and later by the Hopi and Zuni.

The Mogollon people began expanding down into the mountains of **southeastern Arizona** and southwestern New Mexico about 200 BC. There they found easily defensible home sites on rocky promontories from which they could descend into the valley to carry on rudimentary farming, growing first corn and later beans, squash and bottle gourds. They did not build cities like the impressive pueblo villages, but their pit houses gradually became more complex, sometimes including a larger building for communal gatherings. The people continued to rely on native plants and animals for much of their subsistence.

Mogollon culture was named by Emil Haury after the Mogollon area of New Mexico. Haury defined this culture, which existed from about 200 AD to 1000 AD, as characterized initially by pit houses and brown pottery. Villages at first were on hilltops near the river valleys, but later larger villages were frequently located near rivers. Pit homes gradually became more numerous and complex. Although the people did significant farming, it is not known to what extent they continued to rely on native plants and animals for their subsistence.

Excavations at San Simon Village and Cave Creek Village are **significant Mogollon culture sites in Cochise County**. The **Gleeson** site, occupied about 900 AD, shows some cultural diversity, with features of both Mogollon and Hohokam cultures. Thirty-five houses were excavated there as well as pottery, projectile points, carved figurines and a variety of tools.

The best-known remains of the Mogollon are their pottery.

The art was developed over a period of nearly a thousand years. As it became more diverse, simple geometric designs on brown were replaced by more complex red-on-white and finally by the well-known black-on-white designs of the famous Mimbres pottery.

The Amerind Foundation in **Draoon, Arizona**, has a striking collection of Native American pottery.

After the early innovations, the Mogollon culture evolved very little and was gradually swallowed up by the more dynamic cultures of the north. By about 1450 AD they had merged physically and culturally with the Anasazi. The prehistoric Pueblo cultures, which included the Anasazi, developed in the northern areas of what is now Arizona and spread south, reaching the Salt and Gila Rivers by about 1200 AD. By 1400 AD, however, those cultures were breaking up and soon disappeared. By the time the Spaniards arrived in the sixteenth century, the local Indians had no recollection of the people who had built the magnificent Casa Grande structures or the cliff dwellings.

