



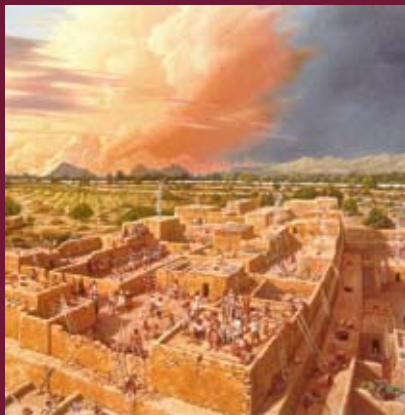
Pueblo Grande Museum

Archaeological Park

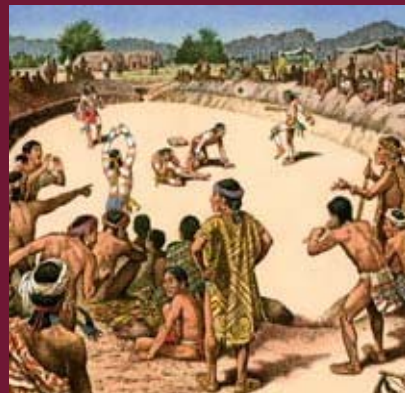
WELCOME TO PUEBLO GRANDE MUSEUM!



Teacher Packet



Pueblo Grande Historical Information



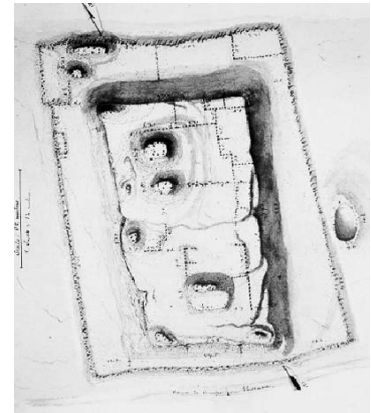
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Illustrations by Michael Hampshire

The Pueblo Grande Village

The Hohokam ruins located on the north side of the Salt River and two miles west of the Papago Buttes were given the name Pueblo Grande (Spanish for Large Town) by Omar Turney in the 1920s. He named Pueblo Grande after its most prominent feature, the platform mound.

Pueblo Grande appears to have been settled sometime before A.D.500, perhaps related to an early canal system that the Hohokam built at the southern edge of the site in the area now called "Park of Four Waters." By about A.D.750, Pueblo Grande had grown into a sizable village containing pithouses, cemeteries, trash mounds (middens), and possibly a ballcourt. The Pueblo Grande canal system had been expanded considerably by then and irrigated approximately 20,000 acres of farmland. In the Sedentary Period (A.D. 900-1150), a small circular platform mound may have been built at the site.



Adolph Bandelier's 1883 watercolor map of the Pueblo Grande platform mound (Courtesy of the Vatican)

During the Classic Period (A.D. 1150-1450), the large platform mound was constructed and expanded on several occasions. It is also during this period that coursed-adobe style houses replace many of the previously occupied pithouses. A tower-like "Big House," like the one still present today at Casa Grande Ruins National Monument outside of Coolidge, Arizona, was also likely built at this time. Furthermore, several large irrigation canals were constructed in the Park of Four Waters. One of these canals was over 2 meters deep, 10 meters wide, and 7 miles long. Another canal was possibly 20 miles in length, an impressive engineering feat considering the canals were dug by hand with digging sticks, stone tools, and baskets (other than the dog, the Hohokam had no domesticated animals to perform laborious tasks).

The population of Pueblo Grande probably reached its peak in the Classic Period, with as many as 1000 people living in the village. At its largest extent it is estimated that the size of the village was approximately 500 acres or one mile in diameter. Studies of burials excavated from the site indicate that the population was suffering from malnutrition, despite their utilization of all available resources, including the intensive harvesting of fish from the Salt River and local irrigation canals.

Large floods recorded for the Salt River in A.D.1358 and A.D.1380-1382 probably contributed to the collapse and/or restructuring of Hohokam society at Pueblo Grande and elsewhere during the 1400's. Around A.D.1450 the Hohokam abandoned Pueblo Grande as well as other villages in the Salt River Valley. For reasons still under investigation, over 1,000 years of occupation at Pueblo Grande came to an end.

The Hohokam Culture

Who were the Hohokam?

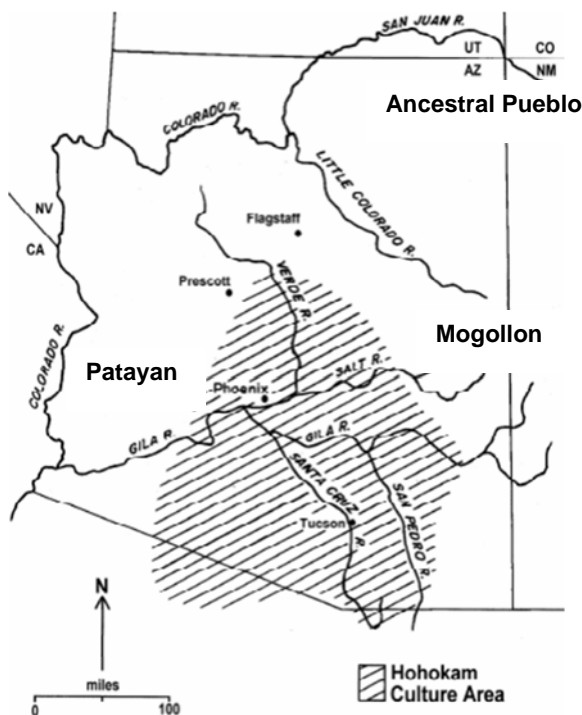
The Hohokam (pronounced ho-ho-KAHM or hoo-hoo-GAHM) were a farming people who lived in large villages along the major rivers of the Sonoran Desert. Most of them lived in the Salt and Gila River valleys. We don't know what the Hohokam called themselves but the name that archaeologists call them comes from a Piman (Akimel O'odham) word meaning those who have gone.

Where did they come from?

The Hohokam traded with, and were influenced by, cultures from Mexico. When archaeologists excavated, or dug, Hohokam villages they would find artifacts made in Mexico. Because of this, many archaeologists thought that the Hohokam may be immigrants or traders from Mexico. Today, however, after a lot more research and excavations of archaeological sites, we now think that the Hohokam most likely were the descendants of the archaic people who lived in the Southwest for thousands of years.

How long did they live in the Sonoran Desert?

The Hohokam settled in the Salt and Gila River valleys around 2,000 years ago. For the next fourteen hundred years they lived by farming the terraces along the rivers. They built hundreds of miles of irrigation canals, raised families, and built large villages. For many reasons still being studied, the Hohokam abandoned their major villages over 560 years ago (A.D.1450).



Who were the neighbors of the Hohokam?

The Hohokam had many neighbors all around them with whom they traded and had relationships. To the north and east, in the mountains of Arizona and New Mexico, lived the Mogollon (pronounced mug-gee-YOHN). In the Four Corners Area of present day Utah, Colorado, New Mexico and Arizona lived the Ancestral Pueblo, who are famous for their spectacular cliff dwellings. To the west lived the Patayan (pronounced puh-TIE-yuhn) along the Colorado River. To the south lived many cultures in Mexico. After A.D.1200, the area where Lake Roosevelt and Globe are today, lived the Salado (pronounced sa-LAH-do). Around Flagstaff and the Verde Valley lived the Sinagua (pronounced sin-NOW-wa). All of these people had an influence on the Hohokam people and in turn the Hohokam influenced them.

Hohokam Ballcourts

What is that hole in the ground?

In many of their villages the Hohokam built what archaeologists call ballcourts. These ballcourts were where the Hohokam would play games that they probably learned from people in Mexico. Over the course of 450 years (A.D. 750-1200) the Hohokam built over 200 ballcourts. In the Salt River Valley, more than 30 ballcourts from over 20 villages have been recorded. Two and possibly three of these ballcourts were located at Pueblo Grande and one is still viewable by visitors.

Ballcourts may have been the center of village life. They were oval, bowl-shaped depressions (holes) in the ground, surrounded by earthen embankments or mounds of dirt. Similar to the bleachers or grandstands of sports arenas today, these embankments allowed dozens and perhaps hundreds of spectators to watch the games being played. At each end of the courts were openings that may have been a type of goal into which players attempted to place rubber or stone balls.

Were the games similar to those played in Mexico?

It is generally believed that the Hohokam probably borrowed the idea of the ball game from Mexico. In Mexico, ball games had great ceremonial and religious meaning. This was possibly true for the Hohokam as well, however there is no evidence to the meaning of the Hohokam ballcourt game. For example, the Aztec (the American Indian group that lived in Mexico when the Spanish arrived) believed that the ball represented the sun and ballcourts were passageways between the upper and lower spiritual worlds. They believed that humans could communicate with the gods through playing the ball game.

Did the losing team lose their lives?

Although the games the Hohokam played may have been influenced or borrowed from cultures in Mexico, there is no evidence that the Hohokam ball games resulted in the death of the losing team.

What kind of ball game did the Hohokam play?

The Hohokam may have played a game similar to what is called "hip ball," a game in which players could only hit the ball with their hips. Or they may have played a game in which they hit the ball with their chests, shoulders or forearms. Ceramic figurines found in Hohokam sites depict ballplayers wearing protective pads.

Why did the Hohokam stop using the ballcourts?

Over 800 years ago (A.D.1200) the Hohokam stopped using their ballcourts. Why is still unclear. Perhaps the ceremonies that were once performed in the courts were discontinued. Many changes were going on in Hohokam culture at that time, such as the building of platform mounds. All of this may suggest a change in the way the Hohokam viewed the world around them.



Hohokam Platform Mounds

What is that big mound of dirt?



When explorers came to the Salt River Valley in the 1500's they found Hohokam villages in ruins. Among these ruins, they found huge mounds of earth and rock. We now know, through archaeological excavations, that these mounds of dirt are artificial platform mounds, which the Hohokam built mostly during the Classic Period (A.D. 1150-1450). After the Hohokam stopped using the ballcourts, platform mounds became the center of village life. Once there were over 40 platform mounds in the Salt River Valley, but today the platform mound at Pueblo Grande is one of only three mounds left.

What were platform mounds used for?

Platform mounds were surrounded by huge walls, about six feet tall and three feet thick. What was this wall for? Some archaeologists believe that the wall was used as a barrier meant to keep people from getting onto the platform mound or seeing what was happening on top of it. But why? Were people performing ceremonies and rituals on top of the mound? Through excavations we know that the Hohokam built rooms on top of the mound and inside the compound wall. Were these rooms where people lived or were they special rooms in which ceremonies were performed? Many archaeologists think the elite of Hohokam society lived on top of the platform mound and governed Hohokam society. Others think that it was the people who performed ceremonies on top of the mound.

Astronomical Observatories?



Platform mounds may also have had other purposes such as tracking astronomical events. On the platform mound at Pueblo Grande there is a very special room. This room has a corner doorway as well as a side doorway. At sunrise on the summer solstice the sunlight comes through the corner doorway and goes out the center doorway marking the longest

day of the year. In contrast, at sunset on the winter solstice the sunlight passes into the room through the side doorway and exits through the corner doorway marking the shortest day of the year. These markers may have been very important to the Hohokam ceremonial calendar.

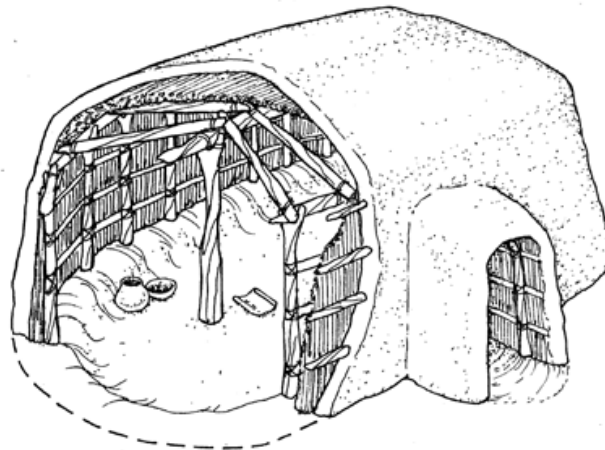
How were platform mounds built?

Platform mounds started out as low circular mounds of dirt. Over time many of these mounds were expanded into large rectangular mounds. At Pueblo Grande, the platform mound started out as two separate mounds that eventually grew together forming one rectangular mound. Today it is roughly the size of a football field and was the largest platform mound the Hohokam built. The Pueblo Grande platform mound was built by constructing square or rectangular adobe and rock walled rooms. These rooms were filled with dirt and trash. Once filled, the rooms were covered with a layer of caliche (pronounced ca-LEECH-ee) plaster. This formed the mound on which rooms for food storage and ceremonies were built.

Hohokam Houses

What is a Pithouse?

Pithouse is a term that refers to a building constructed within a depression dug in the ground. The Hohokam built their houses in a shallow pit, about one or one-half feet deep. The shape of a pithouse was oval, square or rectangular with rounded corners. A short entryway was usually located midway along one side. The pithouse superstructure was constructed of wooden beams erected to support the upper portion of the building. These beams were made with large Sonoran Desert trees such as mesquite or cottonwood. Small branches, saguaro and cholla cactus skeletons were attached to the beams, becoming the building's skeleton. Grass or reeds covered the framework. Adobe was applied over the surface of the superstructure. This helped the building to retain warmth in the winter and stay cooler in the hot, desert summer.

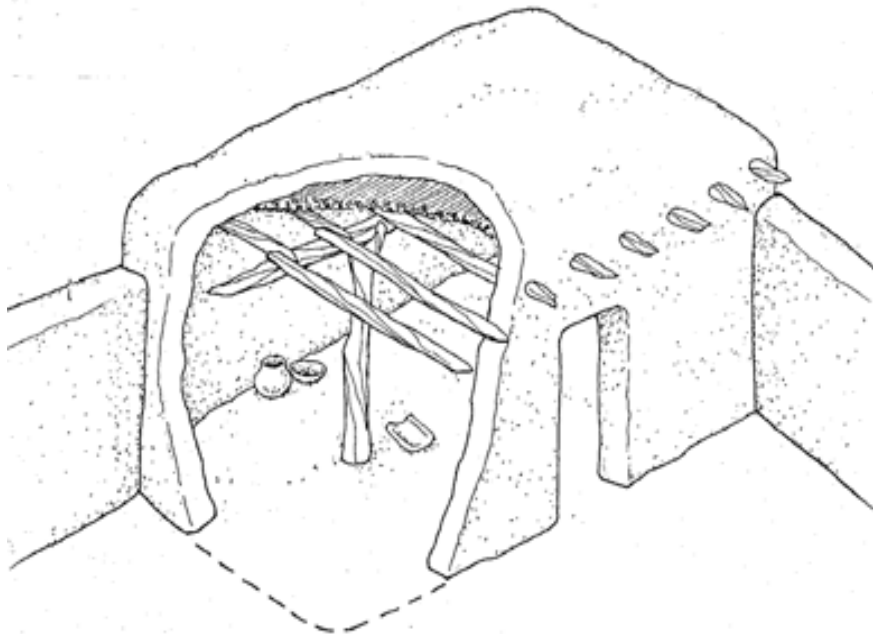


What were Pithouse “Neighborhoods” like?

Archaeologists have observed that pithouses were regularly arranged in groups around an open central courtyard area, called a pithouse cluster. The doorways of the structures in a pithouse cluster tended to face inwards toward the courtyard. People engaged in most activities outside. Other structures were present in and around pithouse clusters. Ramadas, shade structures, gave protection from the sun during the day when people were active outside. Residents of a pithouse cluster are thought to have been related to one another and may have been both nuclear and extended families.

Adobe Houses: How did they differ from pithouses?

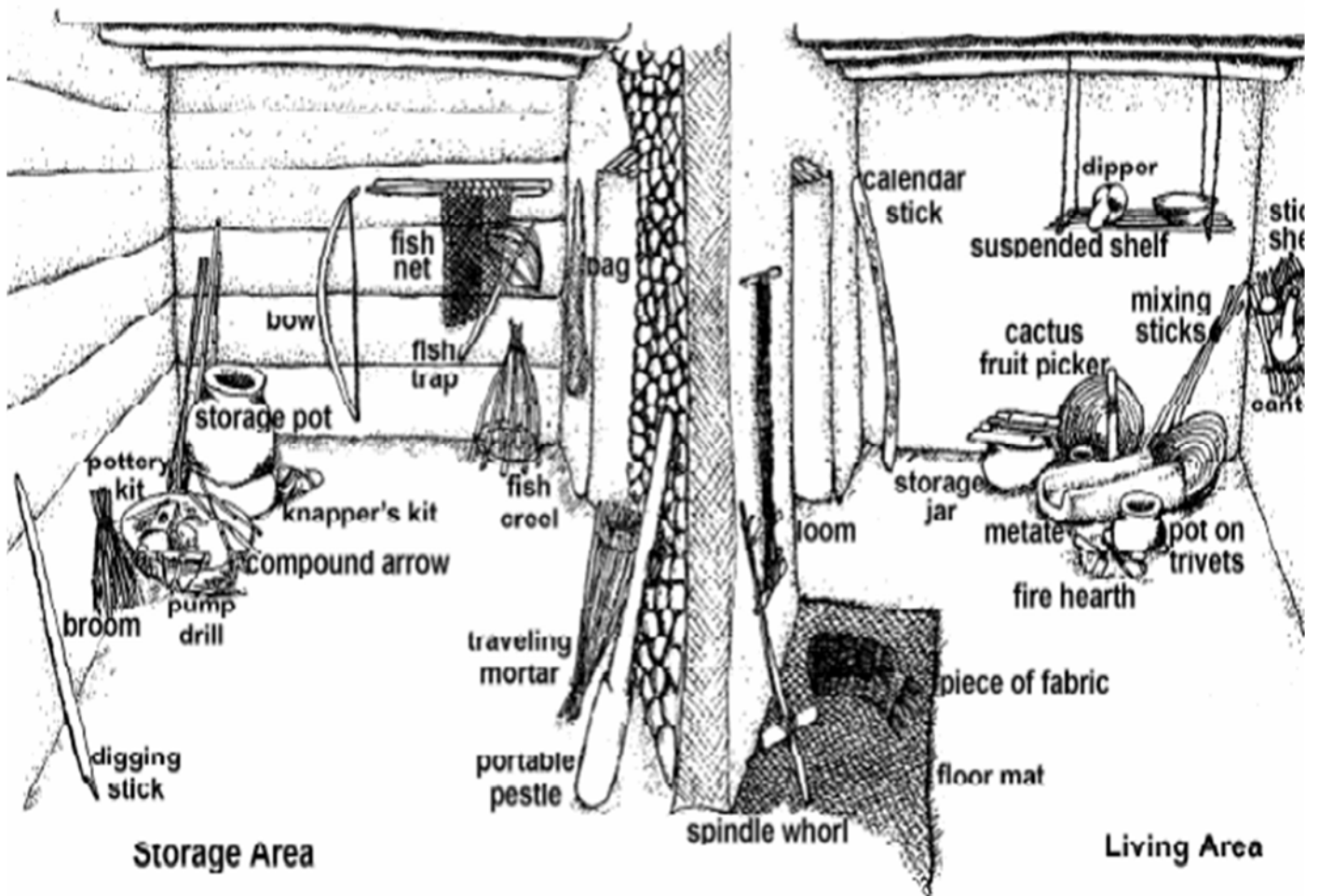
During the Classic period (A.D. 1150-1450), coursed adobe houses became more common. These houses had square corners and were rectangular or square in shape. Adobe houses were built on the surface of the ground, not within the traditional pit foundation. Coursed adobe houses were constructed in layers of mud, like modern brick or concrete block construction. Wet, caliche-rich adobe was piled up and allowed to dry in repeated construction episodes until the desired wall height was reached. In some of these buildings, upright wooden posts were used to support a central ridgepole. Wooden beams ran from the ridgepole to the tops of the adobe walls. Saguaro ribs, reeds, grasses or similar materials were laced together to make the ceiling. Mud plaster coated the surface, making a flat roof. Like the pithouses, adobe houses had a doorway opening but probably no windows or smoke holes.



What were Adobe Compounds “Neighborhoods” like?

Each adobe building contained one large room. Often, several rooms were built side-by-side and were arranged within walled compounds. A thick adobe wall enclosed an area in which one or more rooms were built. Adobe compounds were like small apartment complexes. The rooms within an adobe compound were places where people slept and kept their possessions. Like with the pithouses, small hearths were located in the floor and used for heat and light. Cooking was done outside in roasting pits or in hornos.

A Classic period (A.D. 1150-1450) Hohokam coursed-adobe house with compound wall. These types of houses were built above-ground and walls were made of abode mud stacked in layers.



A Hohokam House A.D. 1300

Archaeology Vocabulary

Adobe	Sun dried mud or bricks made of dirt and clay.
Agriculture	Farming.
Archaeology	The study of humans and their material remains.
Archaeological Site	A place where humans lived and artifacts were left.
Artifact	Any object made or used by humans.
Caliche	A rock-like calcium carbonate material deposited in layers and created by the filtering of water through desert soil.
Ceramics	Objects of fired clay such as pottery, pipes, and figurines.
Cremation	A method in which the body is burned after death.
Culture	A group of people that share the same ideas, beliefs, laws, and customs.
Domestication	The taming of plants and animals for use by humans.
Effigy	An object that represents a human, animal or plant.
Excavation	The digging and recording of archaeological sites.
Feature	Made or produced by humans, but unlike an artifact it cannot be removed without destroying it. Features are things such as houses, fire pits, storage pits, ballcourts, or platform mounds.
Horno	Spanish for "oven," Hohokam pits used to bake foods.
Irrigation Canal	An artificially constructed ditch or channel used to bring water from a river to fields.
Mano	A flat hand-held stone used with a metate to grind dried foods.
Metate	A base stone with a flat or depressed surface on which foods are ground using a mano.
Obsidian	A naturally occurring volcanic glass used to make tools.
Olla	A large ceramic pot, usually used to hold water.
Petroglyph	A design chiseled or chipped into rock.
Pictograph	A design painted on rock.
Pithouse	A common type of prehistoric house built by the Hohokam and other Southwestern cultures. This type of house is placed in a shallow pit (1 to 1 ½ feet deep) dug into the ground.
Pot Sherd	A fragment of a ceramic vessel (pottery); often called a sherd.
Prehistory	A portion of human history extending back before the time of written documentation. In the Southwest, written history begins with the Spanish explorers in the 1600's.
Projectile Point	Term used by archaeologists to describe arrowheads, spearheads and dart points.
Rock Art	A general term for petroglyphs and pictograph arts.
Ramada	A shade structure.
Trash Mound	Hill that develops where people regularly dispose of their garbage.

