National Park Service

National Park Service
U.S. Department of the Interior

Casa Grande Ruins

National Monument
Arizona

Wayside Signs at Casa Grande Ruins National Monument

Wayside Signs - Trail Route and Topic Index

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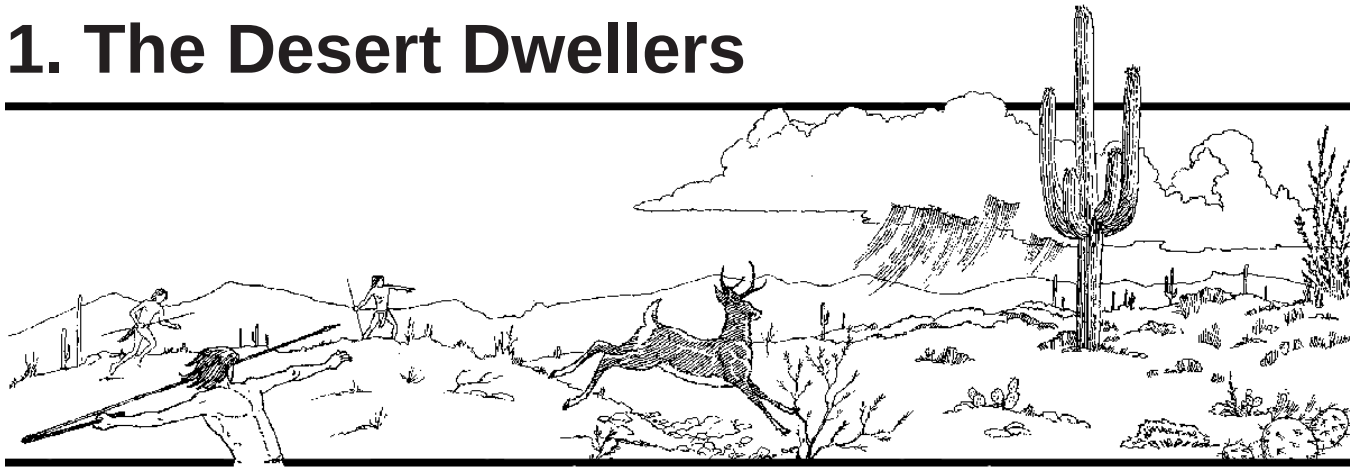
1. The Desert Dwellers



Imagine: this desert is your home. You know when the seasons change, how the plants grow, where the animals hide. You know the gentle rains of the cool months, and you know the hot months, too, when temperatures soar and dust storms obscure the horizon. Weeks pass without any rain, and when at last it comes, it is with violent thunderstorms. The summer months are not easy, but this is your home.

The Sonoran Desert is a harsh land. Annual rainfall averages only 8 inches and temperatures can reach 120 degrees. For people living in the Stone Age, survival in this desert presented daily challenges. Their simple technology lacked metal tools and wheeled vehicles, and they had no horses or other beasts of burden.

Yet for many centuries, wandering groups of Native Americans hunted wild animals and gathered the fruits of the desert, following the changing seasons. They survived and even thrived under conditions we consider difficult, at best. What were their secrets? Adaptability, hard work and human ingenuity: the essentials of life.

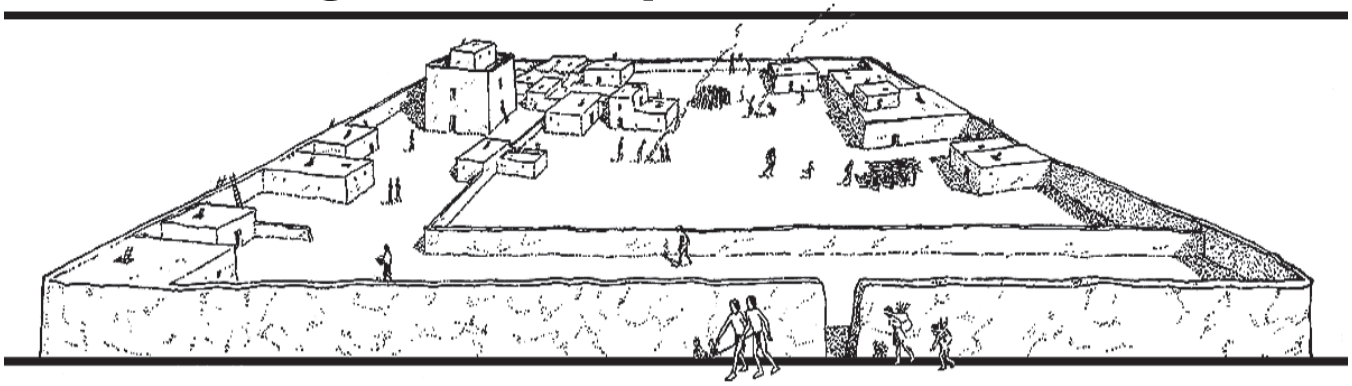
2. Agriculture and Irrigation

Shortly after the time of Christ, a group of desert dwellers developed a new way of life in this area. Influenced by the great Mexican civilizations to the south, these people became the first farmers in the American Southwest. Archeologists call them the 'Hohokam' (HO-ho-kam).

In prehistoric times, as today, irrigation was the key to successful agriculture in the desert. Using stone-age tools and the strength of their backs, the Hohokam dug hundreds of miles of canals across the desert, cultivating corn, beans, squash, cotton tobacco and other crops. For over ten centuries, this successful agricultural system allowed the Hohokam to build a civilization covering thousands of square miles.

As they learned to farm, the Hohokam began to build permanent villages. Over the centuries, both their building and farming techniques steadily improved. Although these ancient desert farmers left no written records, the evidence of their lives is around us everywhere. As you follow the sidewalk to your left, you will be walking into the remains of a Hohokam compound that was built and used during the 1200s and 1300s.

3. Building the Compound

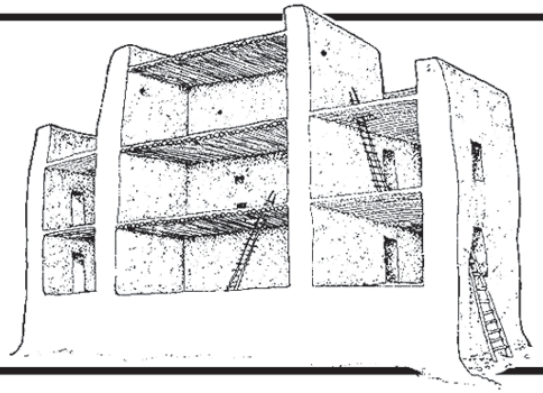


When the Hohokam constructed permanent dwellings, the desert presented them with another problem: a limited range of building materials. No building stone occurs within a reasonable distance, and there are few large trees. But a few feet below the ground, the Hohokam discovered an abundance of suitable material: a layer of concrete-like hardpan known as caliche (cuh-LEE-chee).

The Hohokam mixed ground-up caliche with water to produce a sticky mud that was used as a multi-purpose construction material. Hohokam buliders became proficient in the use of caliche mud for building walls, sealing roofs, and plastering floors and walls. Most of the buildings in this compound are made of caliche.

A 7-foot high wall once enclosed this compound. Like most Hohokam compounds, this one contained houses, like the one you are looking at, as well as work areas, courtyards and storage rooms. This compound is unusual, however, because it is about four times larger than an average compound, and it contains an unusual building: the Casa Grande.

4. Construction of the Casa Grande

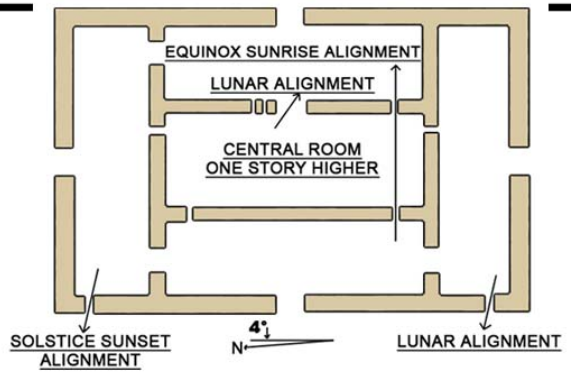


The Casa Grande is the tallest and most massive Hohokam building known, standing 35 feet tall and containing nearly 3,000 tons of caliche. Caliche mud was piled up in layers about two feet high; bricks or blocks were not used. Notice the horizontal cracks about two feet apart across the surface of the outside walls. These cracks are seams between layers of caliche.

While most buildings had floor and roof supports made from local desert trees, the Casa Grande once contained hundreds of imported beams—pine, fir and juniper obtained from mountains over fifty miles away. Floor supports spanned the width of each room; saguaro ribs were laid perpendicular to those; reeds were set on this framework; and a coating of caliche completed the floor. Notice the horizontal groove part way up the inside of the wall—this groove is where the floor once joined the wall. The smoothly plastered inside walls are a further indication that much time, work and care went into the construction of the Casa Grande

Built in the early 1300s, the Casa Grande Was a special structure. Why did the Hohokam work so hard to make this one-of-a-kind building? As you walk to the next exhibit on the west side of the building, take a closer look at the Casa Grande and consider how it was used.

5. A Prehistoric Observatory?



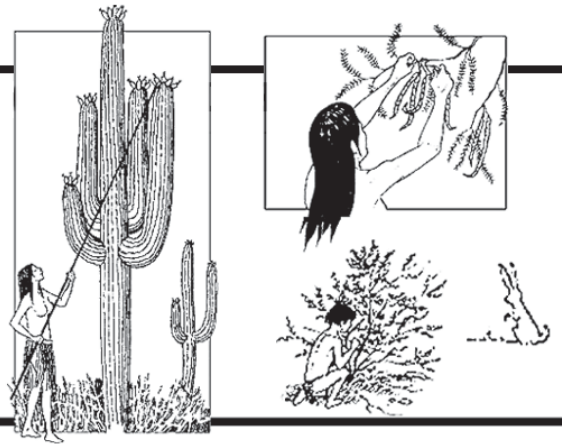
This is the best preserved side of the Casa Grande. Imagine what is would have looked like when this community was thriving in the 1300s.

Why did the Hohokam build this unique structure? Was it a center of government, religion, trade, education? We may never know. But certain features of the Casa Grande give us clues about its use.

Notice the small circular window in the upper left portion of the west wall. This opening aligns with the setting sun on the summer solstice (June 21), the longest day of the year. The square hole in the upper right wall aligns once every 18 1/2 years with the setting moon at an extreme point in its cycle. Other window and doorways in the upper part of the building also align with the sun or moon at significant times of the year.

It appears that the Hohokam devised a calendar system based on the motions of the sun and moon, and incorporated that knowledge into their architecture. Like England's Stonehenge, the Casa Grande may have served as an astronomical observatory and calendar. Why would the Hohokam fashion such an elaborate calendar? To what use would they have put this information?

6. Food from the Desert

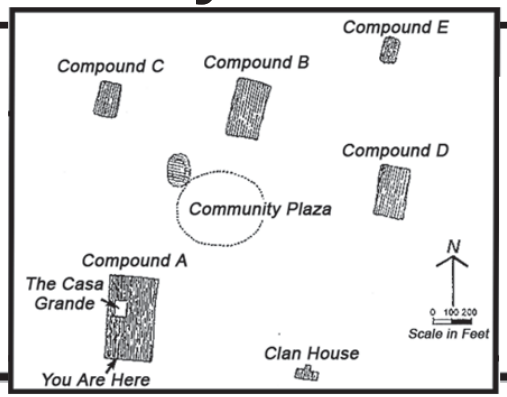


Although their fields produced much food, the Hohokam supplemented their diet with wild animals and native plants. In years of crop failure, the Hohokam depended heavily on foods they could hunt, fish or gather.

Mesquite, paloverde and ironwood trees all produce edible seeds that were important for both the Hohokam and more recent desert people. Cactus, fruit, agave and grasses were used extensively. Jackrabbits, quail and a variety of other animals added protein to their diet, and the Gila River and irrigation canals were a source of fish and shellfish. The common creosote bush, with its resinous and fragrant leaves, was used medicinally to treat respiratory ailments and preserve good health.

The face of the desert has changed since the time of the Hohokam. Modern agricultural irrigation has resulted in a dramatic drop in the ground water table—from about 12 feet below the surface in 1930 to over 100 feet below the surface today. This accounts for the many dead mesquite trees in the park. Natural resources available to the Hohokam (plant and animal alike) no longer thrive under our changed conditions.

7. The Casa Grande Community

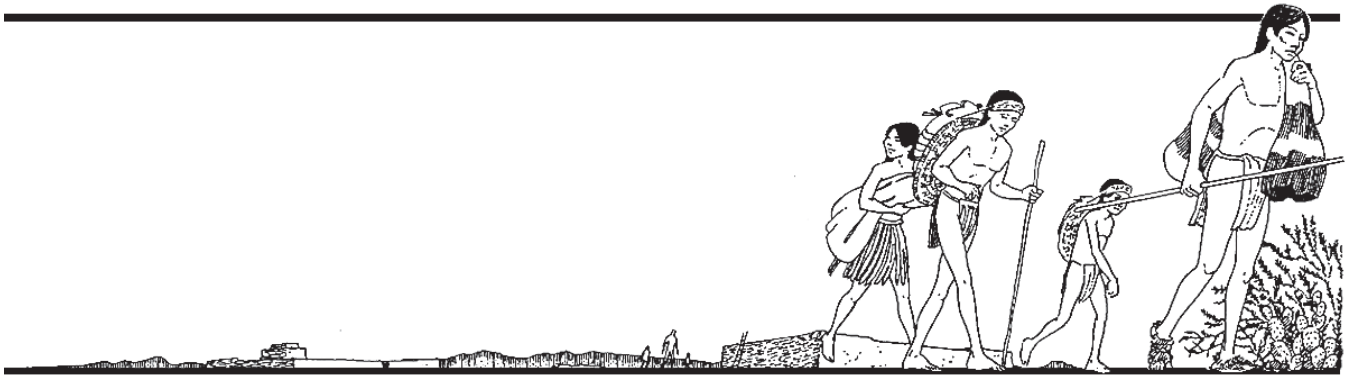


This three-story building is one of the many houses that once stood inside the compound. It was built directly against the compound wall, and was possibly occupied by one large family. By looking to your right, you can see the Casa Grande and many of the other structures within this two-acre compound.

Imagine the scene in the early 1300s. People are working: grinding corn, cooking meals, weaving baskets, making clothing and pottery, and going to and from the fields outside the compound. People are talking, children playing and dogs barking.

But the scene you are imagining would have been only a small part of the Hohokam activity, because this compound is not a whole village. It is more like a neighborhood, a small part of a larger community. Numerous compounds and other buildings once covered nearly a square mile around you. An oval ballcourt, used for community activities, lies in the center of this group of compounds. You may see the ballcourt and another large compound from an observation deck in the picnic area.

8. Abandonment



Within a few generations after the Casa Grande was built, Hohokam society suffered a decline from which it never recovered. Compounds like this one were gradually abandoned in the late 1300s. Community building projects were no longer undertaken, irrigation canals fell into disrepair and trade routes broke down. By the mid-1400s, the Hohokam cultural system had ended. A smaller, scattered population may have continued farming nearby.

We do not know the reasons for this disruption of Hohokam political and economic life. Evidence indicates that, during the 1300s, years of heavy flooding were followed by years of low river flow, a situation which could damage canals and crops, leave canal intake points high and dry and make planning difficult. Other social, political or environmental factors may have been involved.

Regardless of the problems, life was still possible in the desert, but not for so many people as before. In the late 1600s, Spanish explorers in southern Arizona found many small farming villages of the O'odham (Pima and Papago Indians), who may be the descendants of the Hohokam. Archeologist often use information on traditional O'odham practices to help them understand what they find in Hohokam archeological sites.

9. Vandalism and the Road to Protection

In 1694, Father Eusebio Kino, a Jesuit missionary, was the first European to visit and document these ruins. He gave the Casa Grande its name. The building became a famous landmark of the desert, but this early fame proved to be a mixed blessing.

Before federal protection of the Casa Grande, visitors took potsherds, other artifacts and even pieces of the walls as souvenirs. By the late 1800s it was commonplace to scratch names, initials and designs into the fragile, ancient plaster on the interior of the Casa Grande.

In 1889. Congress took action to protect the Casa Grande. Funds were appropriated to clear away debris from inside and around the Casa Grande, repair the badly eroded wall foundations and brace some walls with wooden beams and metal rods. In 1892, the Casa Grande Was designated as a federal preserve and a custodian was hired to safeguard the ruins.

In 1903, a small roof was placed over the Casa Grande. It was replaced in 1932 with the roof you now see. These efforts have proven successful so far; no noticeable deterioration of the Casa Grande has occurred since the first repairs were made in 1891. We ask your cooperation by not climbing on walls and not removing or damaging artifacts or other ancient features.

10. Those Who Are Gone

Take a look across the compound. Image how the Hohokam used ingenuity and hard work to adapt successfully to the desert. Using stone-age technology, they built a civilization that lasted over a thousand years. Their architectural tradition culminated in the construction of the Casa Grande.

The ruins of the Casa Grande remind us of the rise and fall of the first known civilization in Arizona. But many questions remain unanswered. Some of the answers lie buried beneath the ruins of this and other Hohokam settlements, but time is running out.

Throughout Arizona, archeological sites are being destroyed at a rapidly increasing rate by development, vandalism and pothunting. If some of these sites are not preserved for future scientific study, many important chapters of American prehistory will be lost forever.

Casa Grande Ruins National Monument is one of over 380 areas in the National Park system, created to preserve and protect our nation's cultural and natural resources for the benefit of future generations. If you would like to help preserve archeological sites, contact a park ranger for information.