ARCHAEOLOGY SOUTHWEST *magazine*

CONTINUE ON TO THE NEXT PAGE FOR YOUR FREE PDF

Archaeology Southwest (formerly the Center for Desert Archaeology) is a private 501 (c) (3) nonprofit organization that explores and protects the places of our past across the American Southwest and Mexican Northwest. We have developed an integrated, conservation-based approach known as Preservation Archaeology.

Although Preservation Archaeology begins with the active protection of archaeological sites, it doesn't end there. We utilize holistic, low-impact investigation methods in order to pursue big-picture questions about what life was like long ago. As a part of our mission to help foster advocacy and appreciation for the special places of our past, we share our discoveries with the public. This free back issue of *Archaeology Southwest Magazine* is one of many ways we connect people with the Southwest's rich past. **Enjoy!**

Not yet a member? Join today!

Membership to Archaeology Southwest includes:

- A **Subscription** to our esteemed, quarterly *Archaeology Southwest Magazine*
- **Updates** from *This Month at Archaeology Southwest*, our monthly e-newsletter
- **25% off purchases** of in-print, in-stock publications through our bookstore
- **Discounted registration fees** for Hands-On Archaeology classes and workshops
- **Free pdf downloads** of *Archaeology Southwest Magazine*, including our current and most recent issues
- Access to our on-site **research library**
- **Invitations** to our annual members' meeting, as well as other special events and lectures

Join us at archaeologysouthwest.org/how-to-help

In the meantime, stay informed at our regularly updated Facebook page!

300 N Ash Alley, Tucson AZ, 85701 • (520) 882-6946 • info@archaeologysouthwest.org • www.archaeologysouthwest.org

Archaeology Southwest™

Volume 23, Number 4 | Center for Desert Archaeology | Fall 2009

Hohokam Heritage: The Casa Grande Community

William H. Doelle, Center for Desert Archaeology

MONUMENTAL ARCHITECTURE in the Hohokam era consisted mostly of oval ballcourts between about A.D. 800 and 1100 and rectangular platform mounds between the 1100s and about 1400. Ballcourts were dug into the ground, whereas platform mounds rose a single story above the ground and provided a base for higher buildings. Casa Grande Ruins National Monument contains both a ballcourt and platform mounds. It also features the pinnacle of Hohokam architectural achievements, a four-story structure built of adobe, for which the site is named.

The attention paid to the Casa Grande as a building is certainly merited, but this issue of *Archaeology Southwest* considers this special place in a larger context. To accomplish this task, we have brought together authors who worked in the Casa Grande community or nearby along the Gila River.

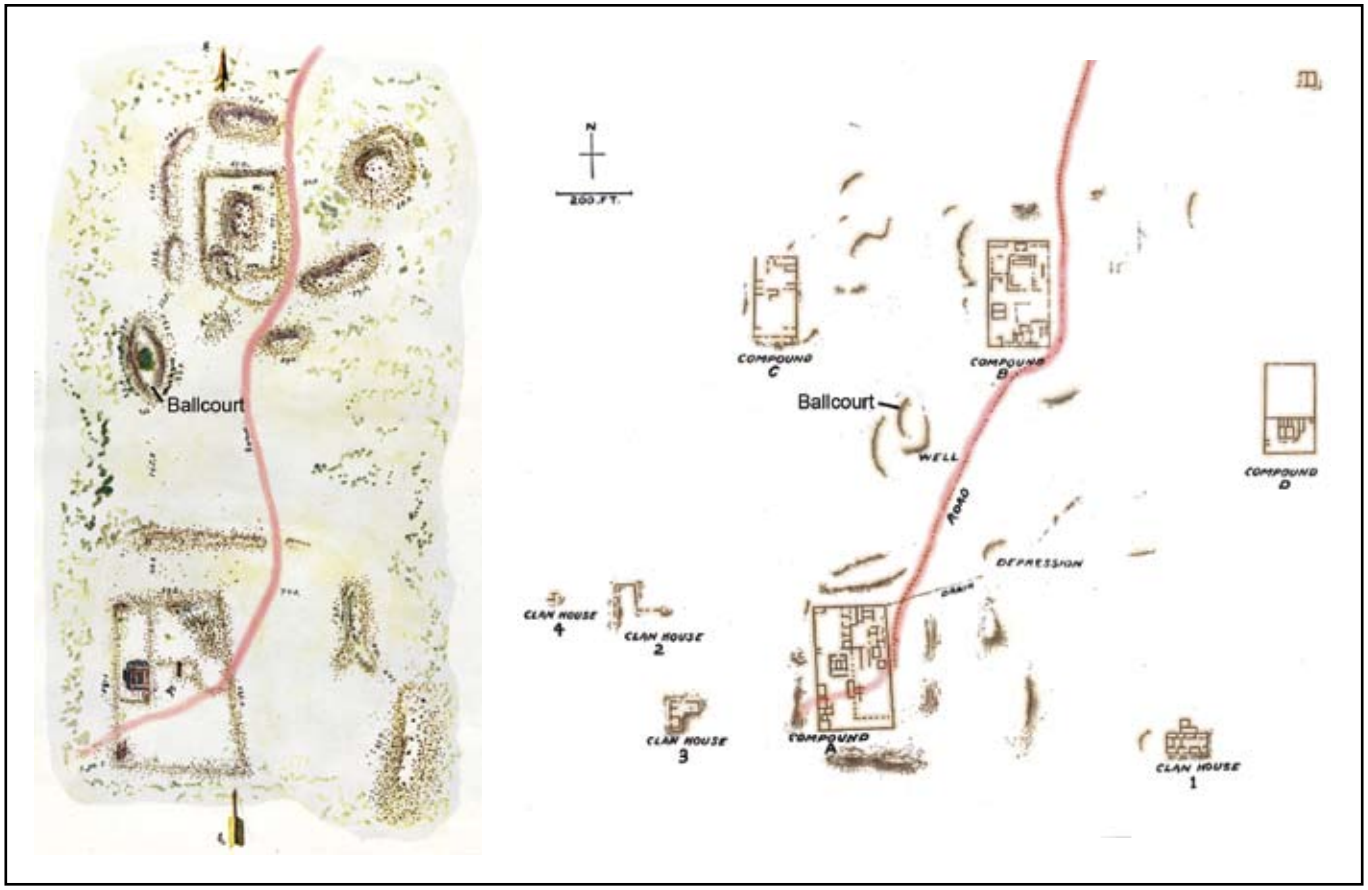
Henry D. Wallace

Aerial view of the Great House, a four-story adobe structure constructed in the late 1300s that was the impetus for the nation's first federal archaeological preserve. It is now the centerpiece of Casa Grande Ruins National Monument, located in Coolidge, Arizona. The three-story Southwest Building is in the foreground.

The Casa Grande is exceptional for its high degree of preservation. This results from the massive investment by its original builders and the active protection measures that began in the late 1800s and are ongoing. Notably, the Casa Grande was this nation's first archaeological preserve—due to an executive order by President Benjamin Harrison in 1892 to set aside 480 acres. Today, Casa Grande Ruins National Monument is the only unit of our National Park Service whose mission is to preserve and interpret the ancient Hohokam culture. This issue of *Archaeology Southwest* provides a broader context in support of the current efforts to expand this unique national monument.

In 1892, the population of Arizona (then only a territory) was a mere 60,000 people. Today, more than six million people live in the state. Most of that growth has occurred within the former range of the Hohokam culture, with both positive and negative consequences. First, where growth has been subject to environmental regulations—meaning that archaeological investigations were conducted before bulldozers hit the ground—the increase in knowledge about the

Archaeology Southwest is a Quarterly Publication of the Center for Desert Archaeology



Left: Watercolor map by anthropologist Adolph Bandelier of the central area of Casa Grande Ruins shows Compound B at the top, Compound A at the bottom, and the ballcourt between them. Right: Map of Casa Grande Ruins prepared by archaeologist Jesse Walter Fewkes after his 1906–1907 excavations conducted for the Smithsonian Institution. This map is more accurate and covers more area than Bandelier's. The central place of the ballcourt is evident in both maps. The stage road has been highlighted on both maps.

Hohokam culture has been breathtaking. Second, the rate of growth has been so fast that everywhere the loss of important places has outpaced the gain of new knowledge. The destruction of the former places of the Hohokam culture has been relentless.

As knowledge about the Hohokam increases, the value of these ancient places becomes more evident. Preserving Casa Grande Ruins and its diverse cultural values brings benefits to science, to the nation, to the state of Arizona, to local communities, and, most importantly, to the Native American nations who are descended from this Hohokam heritage. The ongoing loss of Hohokam archaeological sites brings an urgency to the current expansion effort, because the opportunities to preserve the remnants of the Hohokam culture are fading rapidly.

Today's Southwesterners are insulated from the harshness of the desert. Our national and global economy cushions us from "making a living locally." The Hohokam occupants of the landscape that we dominate today did live locally, for the most part. They made big labor investments in canals and fields, in domestic and sacred architecture, and in crafts ranging from pottery to cotton textiles. In addition, they maintained social relationships at both a local and regional level. While they faced many challenges, they met them quite successfully for nearly a millennium.

Previous issues of *Archaeology Southwest* have highlighted the dramatic advances in knowledge about the Hohokam world. Excavations allow archaeologists to "see" households in the patterns of two to six houses that open onto a common courtyard space. That such households endured for many generations indicates a developed concept of property among the Hohokam. As the Hohokam culture emerged in the 700s, the households of increasingly sedentary settlements were arranged around central plazas. Cemeteries were most often located near those plazas, as were special large houses, probably the homes of lineage leaders. Late in the eighth century, ballcourts became an essential element of every village. By the tenth century, villages were often regularly spaced along irrigation canals. While typical villages had 300 to 400 residents, some may have been home to 1,000.

The Grewe site, located just east of Casa Grande Ruins, was one of those exceptionally large places. Today the "boundary" between the older Grewe and the younger Casa Grande archaeological sites is impossible

to discern. The gradual westward drift of the Grewe community over time was probably almost imperceptible in the past. But at some point, probably before 1100, there was very likely a break in the traditions of this community. The ballcourt at the center of the Casa Grande community may have been an important reference to that past (pages 12–13), but it was soon flanked by dramatic new architectural traditions of adobe compounds and platform mounds on both its north and south sides. Even if the original motivations for building and maintaining ballcourts had faded, the monumental ballcourt at the center of this great community very likely connected residents and especially the local leaders to a powerful past.

The transition just described for a single settlement is only one example of the larger-scale transition from pre-Classic to Classic period times in the Hohokam world (i.e., from roughly 1050 to 1200). As archaeologists examine larger landscapes, they are finding that the organization of entire irrigation communities changed during this transition. The full story is still only poorly understood, but it is preserved within the monument and its proposed expansion. Nearby Adamsville, too, has both a ballcourt and platform mound, as does the Poston Butte–Escalante community on the north side of the Gila River. These general similarities almost certainly mask local differences between these communities and the ways they changed between pre-Classic and Classic period times. Preserving archaeological diversity is an important reason for including Adamsville within an expanded Casa Grande Ruins National Monument. It also justifies inclusion of the Poston Butte–Escalante community in a further expansion.

This issue reviews the historical background as well as a broader archaeological context for thinking about the expansion of Casa Grande Ruins National Monument. The mission of the monument is to preserve and interpret Hohokam culture. It is important to also consider the cultural context of the term Hohokam. Archaeologists use this term in very specific ways to describe the material goods (such as pottery, houses, ceremonial architecture, and irrigation canals) that are visible on today's landscape and can be dated to specific time periods. Around 1450, that recognizable material pattern no longer existed, and archaeologists say that the Hohokam culture came to an end. It is here that it is very important to bring in another term and concept—the word Huhugam that is used by today's O'odham speakers of southern Arizona and northern Sonora. This term refers to both ancient and

The Meaning of Huhugam

Barnaby V. Lewis, Gila River Indian Community

Barnaby Lewis, Tribal Historic Preservation Officer, GRIC.

The O'odham of central and southern Arizona are represented by four federally recognized tribal governments: the Gila River Indian Community, the Salt River Pima–Maricopa Indian Community, the Ak-Chin Indian Community, and the Tohono O'odham Nation. O'odham of the Tohono O'odham Nation also occupy lands at San Lucy in Gila Bend, at Florence Village, east of Florence, and at the San Xavier District Community in Tucson.

The O'odham have a familial relationship of shared cultural identity that can be traced historically and prehistorically to the Huhugam, who inhabited central and southern Arizona, as well as the northern region of present-day Mexico.

The translations of the term "Huhugam" by ethnographers and archaeologists who spoke with O'odham informants in the early 1900s are incorrect. The limited knowledge of the English language on the part of the informants and the context of the conversations are likely causes.

Huhugam does not literally mean "the things that are all used up." Huhugam specifically applies to past human life and not objects. In the most common translation, "that which has perished," the term "that" incorrectly implies reference to an object. Present-day O'odham would say "those who have perished."

Furthermore, Huhugam is not the same as the archaeological term Hohokam, which is limited by time periods. And the archaeological term does not acknowledge ancient ancestors nor living O'odham who will become ancestors today or tomorrow.

In the O'odham traditional view, Huhugam refers to O'odham ancestors, identifying a person from whom an individual is a lineal descendant. The O'odham family tree is inclusive of all O'odham. This has been related not by one particular person but has as its basis the creation story that places the existence of life on earth from time immemorial.

The O'odham are primarily an oral-history society. O'odham origins and history are recorded through oration and are passed from one generation to the next by practice of traditional protocols to memorialize significant events in the passage of time. O'odham oral traditions identify Huhugam as the ancestral relatives of the present-day O'odham, and that knowledge lies at the core of O'odham cultural identity.

very recent ancestors of the O'odham of today. We are privileged that Barnaby Lewis, the Tribal Historic Preservation Officer of the Gila River Indian Community, can offer his perspective on the term Huhugam with us (page 3).

Like the Hohokam, this issue places strong emphasis on the irrigation systems of the Gila River. Kyle Woodson, an archaeologist from the Gila River Indian Community, has recently completed a doctoral dissertation at Arizona State University on the canals of the Gila River. He shares his work through an important map as well as his article describing a major shift in settlement distribution between pre-Classic and Classic period times. David Gregory provides a description of the Casa Grande irrigation community and the places that were part of it. It is important to keep in mind how past irrigation systems worked. The total volume of water in the river was constrained by rainfall/snowfall, but there is a critical human element—what are your upstream neighbors doing? If they divert significant portions of the river's flow into canals that water their fields, then your crops and your livelihood may well be placed at risk.

Courtesy of Casa Grande Ruins National Monument

Frank Pinkley (second from left) and Jesse Walter Fewkes (center) during Fewkes's 1906–1907 excavations at Casa Grande.

There is a long history of documents and archaeological work pertaining to the Casa Grande. Father Eusebio Kino first described this impressive building in 1694 on one of his several visits to the area. By the late 1800s, it was becoming increasingly apparent that the absence of a roof and the actions of treasure seekers were taking a serious toll on this structure. Early preservation proponents described the Casa Grande as "one of the most interesting monuments of antiquity in the world." Eventually, this led Congress to establish the Casa Grande Ruins as the nation's first federal archaeological preserve, as described by Tobi Taylor.

It was Frank Pinkley who was the greatest champion of preservation of this place. He was the site's initial resident caretaker. In 1905, he proposed expansion of the Casa Grande preserve, including the site of Adamsville (part of the current expansion proposal) and the areas of Escalante and Poston Butte (areas that merit strong consideration for future expansion). Pinkley was the resident caretaker when archaeologist Jesse Walter Fewkes of the Smithsonian Institution conducted the major excavations at the Casa Grande in 1906–1907 (see photo). During the 1920s, Pinkley was also involved in promoting tourism at the Casa Grande through the performance of special "historical" pageants, as recounted in an article by Tobi Taylor.

One of the areas excavated by Fewkes was called Clan House 1. Jeffery Clark provides a description of the unique architecture and offers an interpretation based on new research in the region. A major source of information on the Casa Grande has been detailed recording of the interior walls of the Great House by Lynette Shenk and David Wilcox; Wilcox shares that work with us. Another important recent advance came from excavations at the adjacent Grewe site. Doug Craig describes how the ballcourts at Grewe may relate to those of the Casa Grande.

Henry Wallace offers an overview of other multistory architecture known from the Hohokam world. Although the sample is small, he suggests that there may have been other examples that were destroyed before they could be recognized.

The north side of the Gila River contained a smaller canal and settlement system. Work at the Escalante Ruin group was conducted by David Doyel in 1973 and is recounted in his article. The nearby ballcourt village of Poston Butte is discussed by William Doelle.

The importance of the National Park Service efforts to keep the Casa Grande standing are underscored in the article by Rebecca Carr, currently stationed at Casa Grande Ruins, in her history of the protective canopy that has become a historic structure in its own right.

Throughout this issue, we display photographs of those who worked along the Middle Gila in the distant past or worked there more recently and are authors in this issue. In Back Sight, we pay tribute to John Andresen, an archaeologist at Casa Grande Ruins National Monument from the late 1970s through the early 1990s, who was also an early example of a preservation archaeologist.

The Nation's First Federally Protected Archaeological Site

Tobi Lopez Taylor, Center for Desert Archaeology

MANY ARCHAEOLOGISTS consider Theodore Roosevelt the nation's first preservation-minded president, since he authorized the Antiquities Act of 1906. However, more than ten years earlier, the all-but-forgotten Benjamin Harrison—who served one undistinguished term as president and was known as "the White House iceberg" for his lack of charisma—set aside thirteen million acres as the nation's first forest reserve and also signed an executive order preserving the Casa Grande Ruins and the 480 acres that surrounded it.

Although visitors to the site had raised concerns about its condition as early as the 1860s, little progress was made until 1889, when some prominent Bostonians, including philanthropist Mary Hemenway and poet Oliver Wendell Holmes, contacted Massachusetts senator George Frisbie Hoar. They asked that "the ancient and celebrated ruin of Casa Grande, an ancient temple…of the greatest ethnological and scientific interest…be protected by proper legislation from destruction or injury." Hoar took up their cause, and later that year, Congress allocated $2,000 to "repair and protect" the site.

Between 1889 and 1892, the federal government dispatched a number of researchers to assess the site's condition, including Victor and Cosmos Mindeleff of the Smithsonian's Bureau of American Ethnology. During those years, some preliminary preservation work was initiated. Reverend Isaac Whittemore, a resident of nearby Florence, was tapped to be the site's custodian for several years. Unfortunately, because neither Whittemore nor his successor, H. B. Mayo, lived on-site, the Casa Grande remained vulnerable to vandalism and pothunting.

Library of Congress

President Benjamin Harrison.

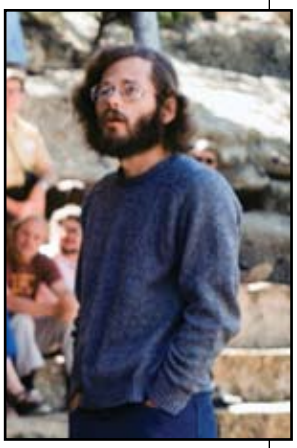
In 1901, a full-time resident custodian, Frank Pinkley, was hired to oversee the site. Pinkley contributed more than anyone to the preservation of what became, under his watch, Casa Grande Ruins National Monument. In 1932, at a cost of about $28,000 and seventy-odd years since visitors to the site had first voiced their concerns about its condition, the 600-year-old ruin was at last protected by a permanent metal roof, the same one that visitors see today.

Interpreting the Casa Grande

David R. Wilcox, Museum of Northern Arizona

IN 1976, Lynette Shenk and I had the opportunity to work inside the Casa Grande for a month, putting up and taking down scaffolding so that we could make detailed elevation drawings of interior wall faces. The building had three stories with five contiguous rooms each, and a fourth story with a single room. The details that we recorded as we observed the calcium carbonate-rich walls became new knowledge.

We found that horizontal arrays of holes indicated the former presence of roof beams on the second-, third-, and fourth-story levels (the first story had been filled with dirt). A pattern of large/small/large/small holes on one side was matched with one of small/large/small/large holes on the other. The builders evidently used ten-foot-long logs that tapered at one end, and placed them so that the large and small ends alternated, to achieve greater uniformity and strength in the roofs. We then noticed intervals that were about three feet long where this pattern did not hold. The length of the roof beams, calculated by adding the depth of opposite beam holes to the width of the room, showed that in those intervals unusually long or short measurements were found. To explain these facts, we posited that there were roof hatchways. Happily, the location of these hatchways was highly patterned: they occurred at one end of the central three room-tiers, and at both ends of the north and south tiers. Thus, the rooms of the Casa Grande were all linked by well-planned access routes.

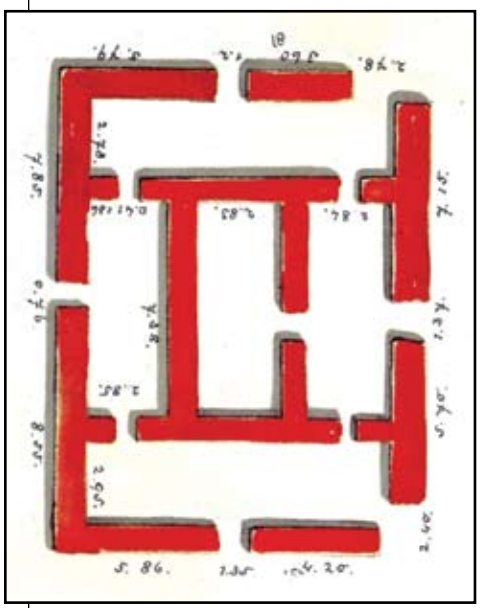


Helga Teiwes

David Wilcox speaking at the Pecos Conference in 1974.

Left: Photograph taken by Cosmos Mindeleff in 1890–1891 that shows the interior of the Great House's south room. Note the horizontal layers of adobe in the wall. Right: Recent photograph of the south room of the Great House, showing the additional stabilization efforts and the loss of a large portion of wall in the area where the woman was standing in the earlier photograph.

Careful measurement also showed that the building was designed and built as a whole. Long cracks in the walls at wall junctions were drying cracks, not abutments. From extant pieces of the Casa Grande's roof beams, we know that white fir and ponderosa pine logs were used. They must have come from at least fifty miles away, in the Santa Catalina Mountains. Associated ceramics and multiple carbon-14 dates from one log indicated a construction date in the first half of the 1300s. Holes through the walls of two third-story rooms and in the central, uppermost room were design features. Studies by astronomer William Hartmann and others suggest that these holes worked well to observe key astronomical events, like solstices. Fire blackening on many interior walls may indicate that the floors once contained hearths. Thus, the Casa Grande probably was a special habitation or religiously charged structure.



In 1883, anthropologist Adolph Bandelier recorded the floor plan and made measurements of the Great House.

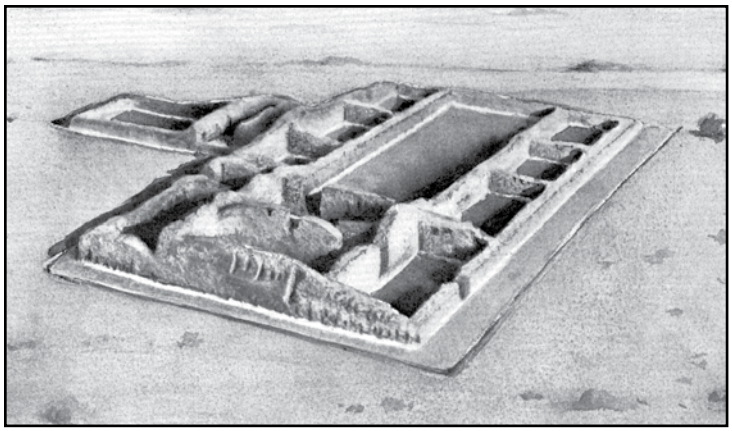
What was the role of the Casa Grande in Hohokam society? More than three decades ago, I suggested that it was a "chief's house." More recently, archaeologist Jason Shapiro used graph theory to argue that its access patterns point toward its being a specialized ceremonial structure. Archaeologist Donald Kayser's earlier idea also could be true: that, as a tower, it could have been designed to help regulate the distribution of irrigation water in the Casa Grande's multisettlement irrigation community (pages 7–8).

In all of these ways, it may have been an essential facility to promote the integration of a regional economy in which the settlements of the Middle Gila River Valley were linked with the larger, contemporaneous sites of the Lower Salt River Valley. I have argued that the large platform mound sites of Pueblo Grande and Mesa Grande shared power in a dualistic political system in which the Casa Grande site was a subordinate center. Archaeologists would like to know if these ideas are true. The scientific challenge they pose is how to test them with new facts.

Clan Houses at Casa Grande Ruins

Jeffery J. Clark, Center for Desert Archaeology

FOUR "CLAN HOUSES" were identified at Casa Grande Ruins by archaeologist Jesse Walter Fewkes in 1906–1907. To Fewkes, these small and compact features appeared to represent a different architectural tradition than the compounds found at the site. When Fewkes excavated the most prominent of these ruins, known as Clan House 1, he found a U-shaped roomblock and small plaza constructed of thick adobe walls. Most rooms in Clan House 1 lacked features except for the large "throne room," situated at the top of the "U." The throne was a centrally placed adobe seat, with a back, that could accommodate one person.



Fewkes prepared this bird's-eye view of Clan House 1 after his excavations. This structure was oriented with its long axis east-west, whereas the large Hohokam compounds at Casa Grande Ruins are oriented north-south. The rooms on the left of this illustration were called "the Annex" by Fewkes.

Fewkes determined that two rooms had been added to the northern wall of Clan House 1. One of the rooms of what Fewkes called "the Annex" was unroofed and contained a painted adobe crypt in which lay the remains of a man and numerous grave offerings. The painted designs on the crypt included a series of red, white, yellow, and black hooked triangles similar to those seen on Tanque Verde Red-on-brown bowls. Fewkes believed that the design represented quail-head feathers. Grave goods included an unusual double-bitted axe and a finely made mortar and pestle stained with green pigment. In the man's left hand were a number of arrowheads, and his right hand held fragments of paint, perhaps from a perishable object, like a wooden staff.

Clan House 1 and three similar buildings at Casa Grande were adobe roomblocks, and may represent a type of architecture that was introduced late in the occupation of the site. Compared to the incrementally built compounds at the site, Clan House 1 was unusual in that it was probably built in one construction episode, except for its annex. The layout of Clan House 1 and perhaps other clan houses resembles a small roomblock, a type of structure that has been associated with Ancestral Puebloan immigrants elsewhere in the southern Southwest. Salado polychromes were by far the most common ceramics recovered. In addition, two sherds of Tucson Polychrome—a pottery type that is rarely found at Casa Grande and is associated with Kayenta immigrants—were found at Clan House 1. These findings raise the question of whether the occupants of the clan houses were latecomers who had a different cultural background than the compound's other inhabitants. This question can be answered only through additional fieldwork or more intensive examination of existing artifact collections.

Casa Grande Irrigation Community

David A. Gregory, Center for Desert Archaeology

DURING THE CLASSIC PERIOD, a number of sites were served by the Casa Grande Canal, whose headgates lay immediately below the North and South Buttes, where the Gila River flows out of constraining bedrock mountains. These sites—known to archaeologists as the Casa Grande irrigation community—consisted of the Casa Grande settlement, four contemporaneous platform mound villages, and a number of smaller sites (see map on pages 10–11).

Between 1300 and 1400, the Casa Grande settlement is estimated to have been home to about 1,500 people, whereas the four platform mound settlements in the Casa Grande irrigation community are thought to have had between 200 and 300 people each.

Marked regularities in the distribution of principal settlements along main canals have been previously recognized for pre-Classic as well as Classic period irrigation communities. This may reflect the distance one is able to

Henry D. Wallace

This well-preserved platform mound at the site of Adamsville is proposed for inclusion in an expanded Casa Grande Ruins National Monument.

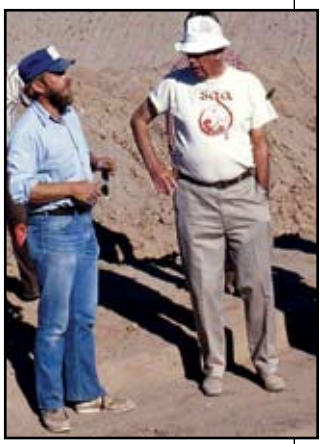
walk to fields, tend them, and return to the settlement in a single day. Regular spacing may also relate to the necessary distribution of labor for routine maintenance of main canals.

The Casa Grande Canal was the longest main canal in the Hohokam area. In addition, in terms of main canal length and the number of principal settlements, the Casa Grande system was one of, if not the, most complex in the entire Hohokam area. And the Casa Grande settlement may have exercised control over three other irrigation communities: the Blackwater, Chee Nee, and Escalante.

The Blackwater community was served by the Blackwater Canal, whose headgates appear to have been located at or immediately upstream from the base of Cholla Mountain, and just northeast of Casa Grande itself. This main canal was unusual in the Hohokam area because water could be diverted from either side of the canal. The Blackwater community itself is also somewhat unusual, as there are no known platform mounds or ballcourts in the community's two principal settlements. Directly across the river from the Blackwater community, and similar to it in many ways, was the Chee Nee community. Headgates for the Chee Nee Canal were located in the same general area but on the opposite side of the river, at or slightly upriver from the base of Cholla Mountain. This main canal served two principal settlements, Cholla Butte and Chee Nee. Like the Blackwater community, platform mounds and ballcourts were not present between 1300 and 1400 at Chee Nee.

The Escalante community had only one principal settlement, the Escalante Ruin, excavated in 1973 (pages 14–15). The position of the Poston Canal headgates indicates that this canal would have been competing with the Casa Grande system for water, especially in times of low flow. One possibility is that the Casa Grande community could have asserted its water rights by overwhelming force, ultimately resulting in the demise of the Escalante community. Another hypothesis is that the Escalante community was actually part of the Casa Grande system, and was engaged in relationships similar to those among the five principal settlements of the larger system.

Unfortunately, Pueblo Pinal, Florence Pueblo, Pueblo Bisnaga, and numerous smaller sites along the Casa Grande Canal have been largely destroyed, primarily through cultivation and the growth of modern communities. We owe much of our knowledge of these sites to Frank Midvale, an avocational archaeologist who traveled throughout southern and central Arizona, making maps and taking notes prior to and during the process of their destruction.



David Gregory (left) talks with Emil Haury during a 1980 excavation project just north of the Gila River.

Aside from Casa Grande, Adamsville is the best-preserved site in the former irrigation community (see photo above). Because the platform mound and associated compound wall, the ballcourt, portions of other compounds, and several trash mounds are still extant, the site has tremendous research potential. It is the only site where the nature of relationships among settlements along the Casa Grande Canal can be explored, and it is one of only a few remaining sites in the Phoenix Basin where the relationship between platform mounds and ballcourts can still be investigated.

Hohokam Canal Systems along the Middle Gila River

Kyle Woodson, Gila River Indian Community

THE GREWE–CASA GRANDE canal system is the farthest upstream Hohokam canal system along the Middle Gila River. We have learned a great deal about this and other systems in recent years through a study conducted by the Gila River Indian Community, as part of the Bureau of Reclamation-funded Pima–Maricopa Irrigation Project. An important contribution of this study is a comprehensive map of the middle Gila canal systems (see map on pages 10–11).

Kyle Woodson

Photograph of relict segment of Canal Casa Grande, located north of Pueblo Bisnaga, facing east. The men are standing on the crests of canal embankments and are about fifty-six feet apart.

The first canals were built at least 1,500 years ago, during early pre-Classic times, and served the villages at Grewe and Snaketown. Over the ensuing two centuries, nine canal systems came into operation. These early systems were not built to their greatest extents until the 800s. Two additional systems were built in the middle of the pre-Classic, and the remaining two systems may not have been built until the late pre-Classic. All thirteen systems were in operation during the Classic period. Some systems were linked, or consolidated, with other systems, evidently during the late pre-Classic and Classic periods.

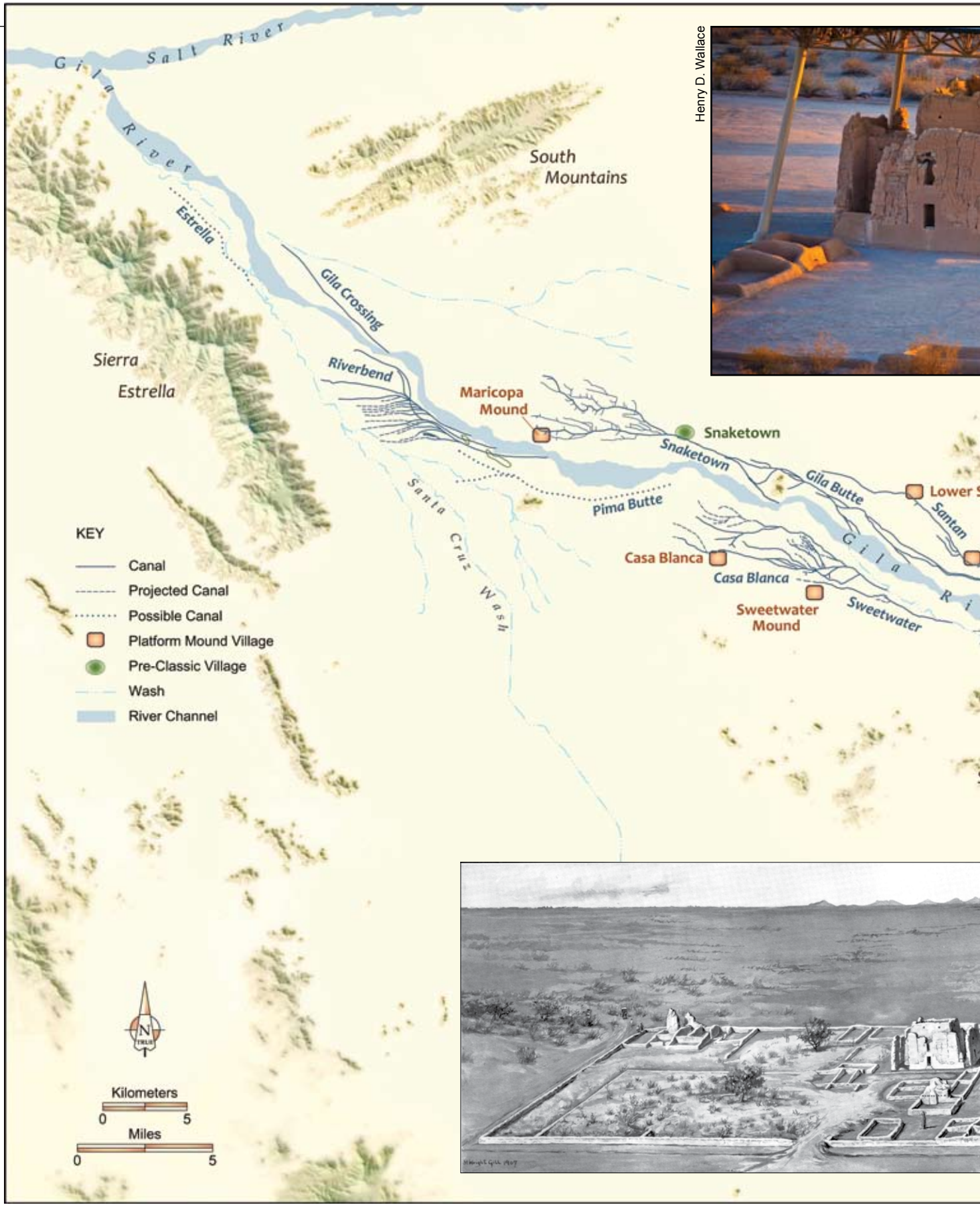
The Grewe–Casa Grande system, in its inferred Classic period configuration, had the largest and longest main canal, which ran for more than twenty miles. The main canal split into at least two branches (Casa Grande and Pinkley canals) and possibly a third branch (Boundey Canal).

The canal's command area (field areas that were irrigated at least once) was the largest of the thirteen systems—estimated between about 6,000 and 9,000 acres. The system probably began as two separate, shorter systems: one built early in the pre-Classic, serving Grewe, and the second built upstream in the middle of the pre-Classic. The two systems probably were consolidated into one longer system in the eleventh century.

The Grewe–Casa Grande system held a clear advantage in having the farthest upstream heading, giving it the most reliable water supply of the Gila systems. This heading became even more important in the pre-Classic to Classic period transition, when changing river conditions and high demand for water presented a significant challenge for irrigators to maintain a reliable water supply. Researchers have shown that the river downcut and widened, and was marked by below-average streamflow during this time. Water scarcity also became a serious concern for downstream systems. Nearly all the main canals below Grewe–Casa Grande decreased in capacity during this transition. The vulnerability of these systems exerted pressure on farmers to link with another system higher upstream. Even with such linkages, the farmers along the downstream systems may have had problems with crop failure and would have needed to find food elsewhere.

Finally, water-scarcity conditions probably "pushed" people to move upstream, or elsewhere. My dissertation research indicates that there were major population declines along the downstream systems. Along the Snaketown canal system, the population may have declined by as much as forty percent between the pre-Classic and the Classic periods. The Santan system also witnessed declines. The best place to move was the Grewe–Casa Grande system, because it had the most reliable water supply and the largest command area. All of these conditions contributed to the rise of Casa Grande and its associated villages in the Classic period.

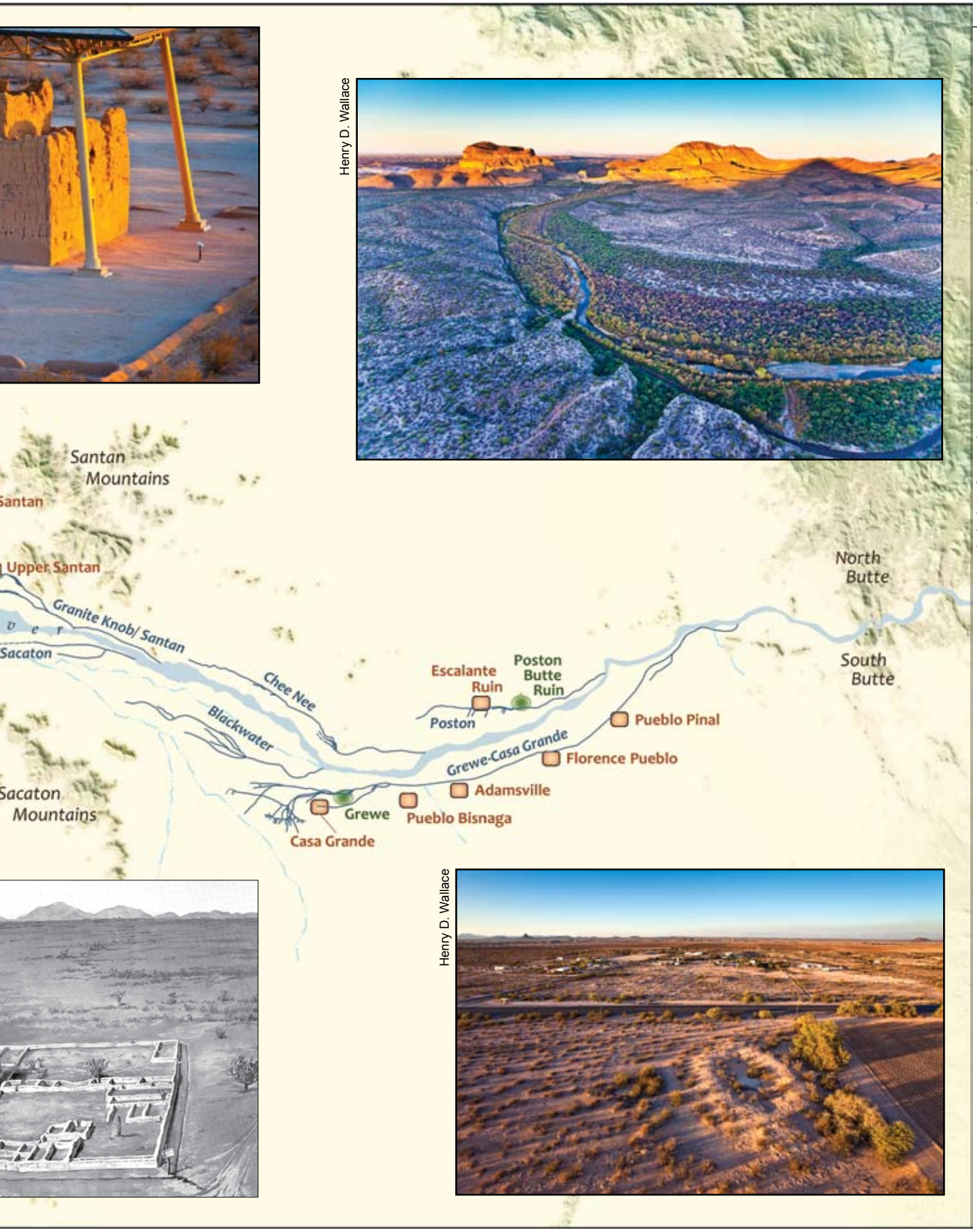
Kyle Woodson stands beside a cross-section of a Hohokam canal.



Henry D. Wallace

Prehistoric Hohokam canal systems in the Middle Gila Valley. This map integrates information from previous archaeological projects, examinations of aerial ph other systems. Photographs clockwise from top: (1) recent aerial view at sunset looking southeast at the Casa Grande Ruins Great House; (2) view from the east view north of the Adamsville ballcourt; (4) bird's-eye view looking west of Compound A prepared by Jesse Walter Fewkes after his 1906–1907 excavations.

Henry D. Wallace



Henry D. Wallace

Canal locations courtesy of Kyle Woodson, Gila River Indian Community. Cartography by Lynn Simon, Brian Lewis, and Catherine Gilman

otographs, and data on more than 200 excavated canal segments. There is now solid documentation for thirteen canal systems and inferential support for two side of North Butte (right) and South Butte (left) at sunrise showing water in the Gila River; Hohokam canals tapped the Gila River below the buttes; (3)

The Casa Grande Ballcourt

Douglas B. Craig, Northland Research, Inc.

ALONG THE NORTHERN EDGE of the central plaza at Casa Grande Ruins, about halfway between Compounds A and B, is an elongated oval feature with earthen embankments on both sides and a depression in the middle. For much of the late 1800s and early 1900s, archaeologists debated this feature's intended use.

In December 1918, just a few months after Casa Grande Ruins was proclaimed a National Monument, Superintendent Frank Pinkley excavated several test pits in the so-called "elliptical mound" and discovered a well-preserved, slightly sloping plastered floor with a stone marker in the center. Pinkley concluded that the feature was most likely a facility used for public gatherings and ceremonies.

Further support for this idea was provided by excavations carried out in 1934–1935 at the site of Snaketown, located about twenty-five miles from Casa Grande. Under the direction of Emil Haury, who was then employed by the Gila Pueblo Foundation, two large elliptical earthen "bowls" were excavated at Snaketown. Both turned out to have floors nearly identical to the one found at Casa Grande; they also had central marker stones. Drawing on parallels between these features and Mayan ballcourts, Haury proposed that the "bowls" found at Snaketown, Casa Grande, and many other Hohokam sites were ballcourts where a version of the Mesoamerican ballgame was played.

More than 230 ballcourts have been recorded across the Southwest, with the densest concentration found in irrigation communities along the Middle Gila and Lower Salt rivers, the heartland of the Hohokam. The largest ballcourts, including one of those from Snaketown, had playing surfaces that were roughly two-thirds the size of a modern football field and earthen embankments about eight to ten feet higher than the playing surface. Archaeologists estimate that 500 spectators could have been accommodated on top of these embankments. Some smaller courts, such as the one at Casa Grande, were less than half this size and presumably capable of accommodating far fewer people.

The first wave of ballcourt construction across southern and central Arizona occurred at about 800, coinciding with the emergence of a regional ceremonial and exchange system. Ballcourts from this time period have been reported at sites in the Phoenix Basin, Tucson Basin, San Pedro Valley, lower Verde Valley, and Gila Bend and Globe areas. Many of these early ballcourts are quite large, like the one at Snaketown, but both large and small ballcourts were built from the very start. No large ballcourts, however, are known to have been built after the mid-tenth century, and by the end of the eleventh century, ballcourt construction had come to a halt and the regional ballcourt system appears to have collapsed.

Henry D. Wallace

View to the southeast showing the ballcourt at Casa Grande Ruins.

Unfortunately, little direct evidence exists to date the Casa Grande ballcourt. Indirect evidence suggests that the ballcourt was constructed by the first half of the eleventh century, coinciding with the emergence of Casa Grande as a major population center.

Why would a ballcourt have been built at Casa Grande at a time when the ballcourt system appears to have been on the verge of collapse? To answer this question it is necessary to consider the relationship between Casa Grande and the nearby Grewe site, considered by many to be the ancestral village to Casa Grande. Large-scale excavations were conducted at Grewe in the early 1930s and again in the mid-1990s, resulting in the dis-

covery of hundreds of houses and other features dating from 500 to 1100. Among the features discovered was a ballcourt that was quite similar in appearance and age to the large one at Snaketown, making it one of the largest and earliest ballcourts in the Hohokam region. Two other ballcourts have also been identified at Grewe. Both appear to have been built after the large ballcourt, but before the one at Casa Grande. This suggests that there was sequencing to ballcourt construction in the Casa Grande–Grewe site complex.

Archaeologists Julian Hayden (left) and Douglas Craig at the Grewe site in the mid-1990s. Hayden had excavated at the site in 1930.

Ballcourt events brought together large groups of people and helped promote a sense of shared identity. Ritual feasting appears to have taken place adjacent to the large ballcourt at Grewe, based on the presence of two dozen earth ovens (hornos). Many craft items, including both utilitarian and luxury items, were "bought and sold" at trade fairs held in conjunction with ballcourt events. At Grewe, the wealthiest households lived near the large ballcourt and controlled access to the communal cooking area. However, once the fortunes of these households started to decline, both the ballcourt and the communal cooking area were abandoned. The seat of power within the village then moved, as indicated by the construction of new ballcourts in other areas. From such a perspective, even if it was used for only a short time, the Casa Grande ballcourt would have been a visible reminder of the shift in power from Grewe to Casa Grande that took place near the end of the eleventh century.

Hohokam Multistory Architecture

Henry D. Wallace, Desert Archaeology, Inc.

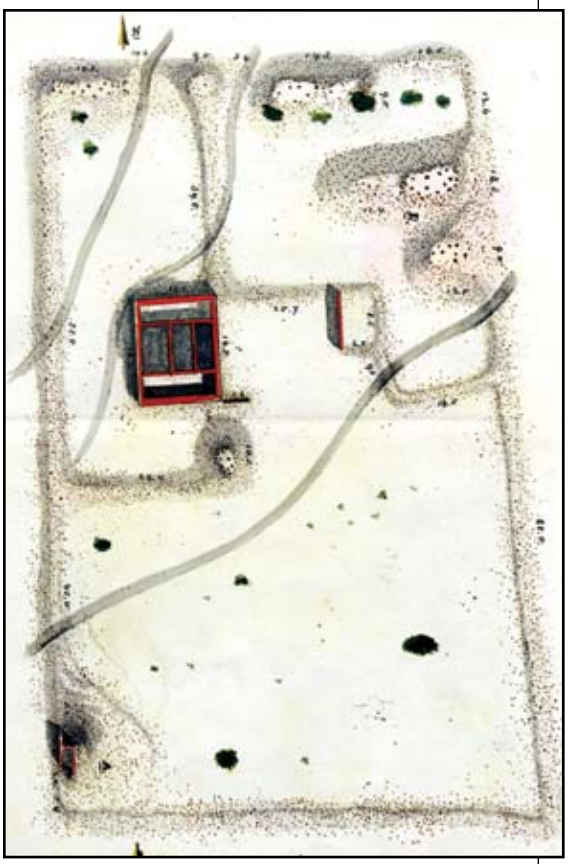
THERE IS LITTLE QUESTION that multistory buildings played a special role in Hohokam society. They were costly to build, and their extraordinary size and prominence underscore their public function. The Casa Grande is the best-preserved example of this type of architecture in the Gila and Salt River valleys. In this article, I also discuss other examples of architecture with two or more *habitable* stories. I do not include the relatively well-documented platform mounds, which have a filled lower room, a mound cell, or mound with a single-story structure on top. As will be seen, in some cases, two or more stories were built atop a rubble-filled first-story room.

We currently have evidence that true multistory Hohokam architecture was definitely present at two and probably three sites (Casa Grande, Pueblo Grande, and La Cuidad), and perhaps occurred at Adamsville and Tempe Ruins. However, I believe it is likely that structures such as these were built at a number of the region's largest sites between the late 1300s and early 1400s.

Here are the cases we know about. First, the most obvious and best-preserved examples are three structures in Compound A at Casa Grande, excavated by archaeologist Jesse Walter Fewkes in 1906–1907. These are the four-story Great House, the three-story Southwest Building, and the two-story Font's Room. The Great House and Southwest Building both had their first stories filled in (page 14).

The second example is a towerlike building at Pueblo Grande, in Phoenix, which was partially excavated by anthropologist Frank Cushing in 1887. This building's first story had been filled in, and there were probably two stories built above that first level.

The third structure is a poorly documented tower in Compound B at La Ciudad, also in Phoenix. Its preserved portion had walls fifteen feet high, and it was situated in a compound with many rooms.

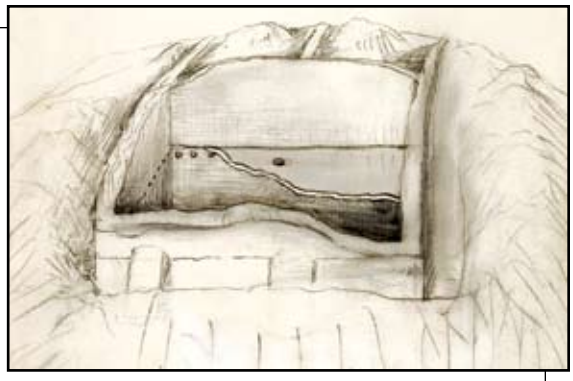


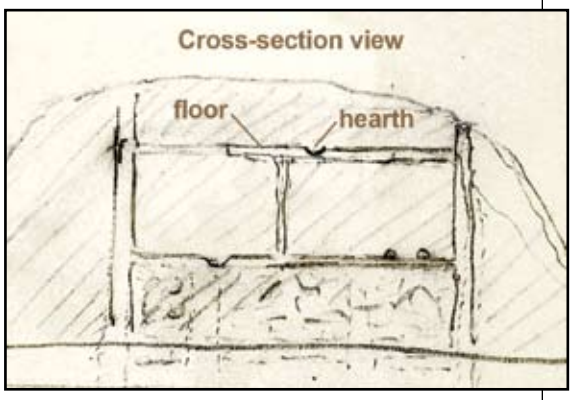
Adolph Bandelier's watercolor of Compound A from 1883 shows standing walls that were visible to him in red. The right-hand single wall is the two-story Font's Room, the structure at the middle left is the four-story Great House, and the building at the lower left is the three-story Southwest Building. Compound A is the largest single grouping of multistory structures known in the Hohokam region.

The fourth example, at Adamsville, near the Casa Grande Ruins, was referred to by Fewkes as a clan house. Although this structure may have had multiple stories, the available documentation is inconclusive.

The fifth example is known mainly from Hiram C. Hodge's sketchy description of the largest mound and compound in the very large Tempe Ruins. He stated that the mound rose "thirty feet above the surrounding plain," atop which were extant walls ten feet high and six feet thick. It seems likely that at least some of the rooms atop the mound may have had multiple stories.

These definite and possible cases of multistory buildings are all from relatively large Classic period villages along the Salt and Gila rivers. However, due to the fragile nature of adobe and extensive early destruction of Hohokam sites, the five cases reviewed here likely underestimates the number of these special Hohokam structures.





Two drawings by anthropologist Frank Cushing of his 1887 partial excavation of the Pueblo Grande tower. Top: The small dark circle is a hearth in the partially preserved third-story floor (Braun Research Library, Autry National Center of the American West, Los Angeles; MS.6.HAE.3.28AA). Bottom: This cross-section illustrates how the first floor of this structure is an earthen platform mound with at least two stories rising above it (MS.6.HAE.3.28Z).

Excavations in the Escalante Community

David E. Doyel, Luke Air Force Base, Barry M. Goldwater Range

THE ESCALANTE COMMUNITY figures prominently in the history of Hohokam archaeology. Members of Father Eusebio Kino's expeditions in the 1690s visited the ruins, as reported by Juan Bautista de Escalante, for whom the site is named. Early-twentieth-century archaeologists Jesse Walter Fewkes, of the Smithsonian Institution, and Harold Gladwin, of the Gila Pueblo Foundation, recorded Escalante Ruin. Decades later, the excavations I directed there, for the Arizona State Museum in 1973, played a prominent role in more-recent interpretations of Hohokam prehistory.

The crew photo from the Escalante Ruin excavations in 1973; David Doyel is in the back row, far right. Most of the field crew were Akimel O'odham from the nearby Gila River Indian Community. Several had excavated with Emil Haury at Snaketown in 1964–1965.

Our excavation project was to precede development of a large open-pit copper mine by Conoco. The fieldwork focused on the Escalante platform mound and several nearby adobe compounds. We sought to understand the history of the community and how the settlements were organized, both individually and as a community. While the platform mound was only partially excavated, the compound associated with it was fully excavated.

The area was occupied by the 1100s, perhaps by families associated with the ballcourt village at Poston Butte just upriver (page 16). Excavations further revealed a succession of settlements from throughout the Classic period (1200–1450). Three early Classic period (1200–1300) settlements were found to contain structures and yard areas enclosed by solid-adobe compound walls. These sites varied greatly in architectural style, indicating that their inhabitants required time to learn how to successfully use the new adobe construction medium. Escalante Ruin proper was the sole late Classic period (1300–1450) village in the community, and the only one with a platform enclosed by a compound.

Our excavations at Escalante provided important new insights into the structure of Hohokam villages. The

Henry D. Wallace

Recent view looking east of the Escalante Ruin compound and platform mound. The arrangement of rooms around courtyard spaces is still visible in this photograph, despite years of weathering since the 1973 excavations. Poston Butte is visible in the background.

early Classic period sites were organized by walled courtyards and enclosing walls. The later Escalante Ruin was a preplanned, patterned village with walled plazas and room spaces of differing functions distributed throughout the village, including on top of the platform.

Previously, archaeologists had attributed the presence of platforms in Classic period sites to a postulated invasion of Salado groups from the northeast, referring to these features as "house mounds." It is now apparent that the mounds were actually artificial platforms initially constructed for special purposes, including ceremonies. Excavations at Escalante demonstrated that the technology and style of construction of these mounds was within the Hohokam tradition. Furthermore, the early Classic period edifices were constructed as temple platforms within the greater Mesoamerican tradition, and only later did they have room features constructed atop them. The late occupation at Escalante was residential, and the mound was likely occupied by the community leaders.

The history of the Escalante community helped me to conceptualize the dynamics of the early Classic period. There was no ballcourt present, indicating a late founding date, after this feature had become less popular among the Hohokam. In addition, the platform/temple had been constructed on new ground unsullied by earlier occupations, a pattern found at many sites. For this local area, consider the spatial separations between Poston Butte and Escalante, and Grewe and Casa Grande as examples of this pattern repeated across the region; there are exceptions, but those are explainable. My thinking has been that this separation between ancestral sites and the Classic period communities that followed was due to a failure of the old ideology and a desire to create a fresh start in new places.

Although contemporary with the ancient Casa Grande community, Escalante had a different history and expressed a different view of Hohokam society. Escalante was a local center, and Casa Grande was a pre-eminent regional center. The compound enclosing the Casa Grande is one of the largest on record, much larger than Escalante. The single platform at Escalante is not even as large as one of the two platforms in Compound B at Casa Grande, nor as large as others in the Casa Grande system, including Adamsville. In fact, Casa Grande is more the exception than the rule, while Escalante reflects the size and structure of many lesser communities distributed through the Hohokam area. Thus, adding the Escalante community to Casa Grande Ruins National Monument in the future would add to both the diversity and representativeness of the nation's first archaeological preserve.

Poston Butte Ruin

William H. Doelle, Center for Desert Archaeology

A MAP made by Frank Midvale, one of the most productive self-trained archaeologists to work in the Hohokam region, brought to my attention the existence of a ballcourt village near Poston Butte. In 1975, while a graduate student at the University of Arizona, I was employed by the Arizona State Museum. I supervised the research related to a large study area where Conoco planned to create extensive tailings piles from an open-pit copper mine that was to be centered where the Escalante Ruin still sits today. I first visited Poston Butte Ruin after a long day of fieldwork in the agricultural rock piles of the Conoco area. In the late afternoon light, the low trash mounds were clearly visible, and the ballcourt stood out despite recent plowing. Fortunately, the site had not undergone the intensive leveling and cultivation that destroyed so many Hohokam villages around Phoenix.

Henry D. Wallace

The oval depression and surrounding embankments of the ballcourt show clearly in this aerial view of the Poston Butte Ruin. The numerous small rises are trash mounds that surround a large, open plaza at the center of the site. The north side irrigation canal ran along the alignment of the current canal at the far left margin of the site.

About five years ago, Tom Wright (now an archaeologist for the Salt River Pima–Maricopa Indian Community) conducted a survey for an access road to a new gravel pit planned in the floodplain of the Gila River. The road skirted the west edge of the Poston Butte Ruin, and Wright made a map of the surface features at the site and began talking about site preservation with the property owners. Over time, the Archaeological Conservancy and the Center for Desert Archaeology joined the effort to develop a preservation strategy for this gem of a ballcourt village.

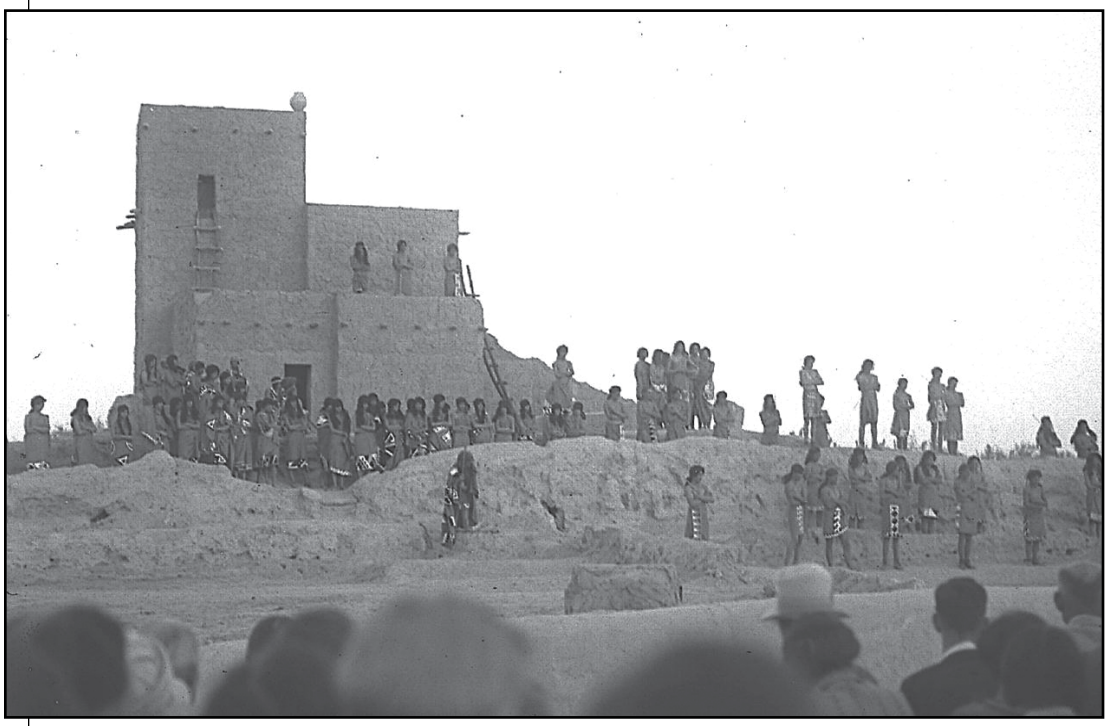
While ballcourts are preserved at both the Casa Grande Ruins National Monument and at the proposed expansion of the monument to Adamsville, the Poston Butte Ruin displays the typical layout of a Hohokam ballcourt village, arrayed around a central plaza, all in a compact area. If there is a future opportunity to bring both the Poston Butte and Escalante sites into Casa Grande Ruins National Monument, they would be very worthy additions.

The Conoco study area was located farther away from the Gila River than the residential settlements of Poston Butte and Escalante. William Doelle's research in 1974–1975 focused on desert resources, such as cholla, saguaro, and mesquite, that could have been the focus of Hohokam activities in this area. Juanita Ahill, a Tohono O'odham woman, demonstrated mesquite processing and gave the novice Doelle an opportunity to heft the twelve-pound pestle she used to turn mesquite pods into a sweet flour.

The Perils of Pageantry at Casa Grande Ruins

Tobi Lopez Taylor, Center for Desert Archaeology

HISTORICAL SPECTACLES—known as pageants—were popular throughout the United States in the early 1900s. This art form often portrayed events in national and local history, as well as innovations in labor, agriculture, and education. Whereas its adherents believed that pageants could encourage a sense of community and heal societal ills, its detractors claimed that pageants often perpetuated ethnic, religious, and gender stereotypes and disseminated inaccurate accounts of history to tout progress and promote tourism.



Courtesy of Casa Grande Ruins National Monument

For the pageants held at Casa Grande Ruins National Monument from 1926 to 1930, a stage and multistory "adobe," made of wood, were constructed in Compound B, 500 yards from the main ruin. This photograph was taken in November 1926 by Edwin F. Carpenter, a young astronomy professor at the University of Arizona.

In the 1920s, Frank Pinkley, then custodian of Casa Grande Ruins National Monument, was devising ways to promote the monument, including inviting school, church, and women's groups to tour the site. During a women's club picnic at Casa Grande Ruins, an annual pageant was proposed. Later, the Arizona Pageantry Association was established to "perpetuate the legends of Arizona and especially the legends of the Indians" so that Arizona could become "the premier tourist center of the world."

The newly formed association went into action, raising money, attracting new members, and soliciting donations and support from prominent Arizonans, such as Governor George W. P. Hunt and Dwight Heard, publisher of the *Arizona Republican* newspaper and founder of the Heard Museum.

Meanwhile, Pinkley and other employees of the National Park Service (NPS) determined that the area of the site known as Compound B would be a good location to mount the first pageant, which was held over a three-day period in November 1926. A stage and a multistory "adobe," made of wood, were constructed. Unfortunately, the 13,000 visitors who attended the production caused damage to the site as they parked cars near Compound C and walked, stood, or sat on Compound B and a nearby mound.

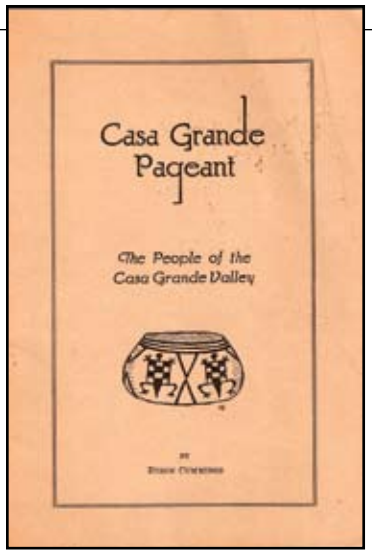
In addition, the play itself, written and directed by NPS employee Garnet Holme and billed as "a spectacular drama of historical events in this state during the Indian, Spanish, and Pioneer days," emphasized the "romance" of Arizona's past at the expense of the facts. As an NPS historian wrote, "Pinkley must have wanted to go into hiding by the end of the affair."

Nevertheless, the 1926 pageant was considered a popular success, and another one was scheduled for November 1927. This time, Pinkley was better prepared: he ensured that policemen handled the parking, a children's nursery was created, and measures were taken to control dust in the compound. Attendance was estimated at "only" 10,000, whereas 16,000 visitors had been expected. Pinkley trenchantly termed the production, written and directed by Conrad Seiler, a "three ring circus."

The next two pageants, in March 1929 and March 1930, were written by anthropologist Byron Cummings, of the University of Arizona. He not only brought in Hopis, Navajos, and Pimas to perform traditional dances but also gave acting roles to his own graduate students,

including Florence Hawley Ellis and Clara Lee Tanner. Cummings's 1929 production included "Cave Men," "Pithouse Men," and "Late Pueblo Men," while his 1930 offering concerned a girl, Tanaloma, "the Bride of the Sun," who is stolen by Clever Hand, a "Young Prince from the Northland," and which also featured Pimas prevailing over a band of murderous Apaches, one of whom spoke lines such as "Me give many skins" and "Heap good, big chief."

Although the 1929 and 1930 pageants were well received, they were not well attended. Like the rest of the country, Arizona's interest in pageants had begun to wane, and the Arizona Pageantry Association canceled the event. Thus ended Pinkley's most unusual, and destructive, effort to publicize Casa Grande Ruins National Monument.



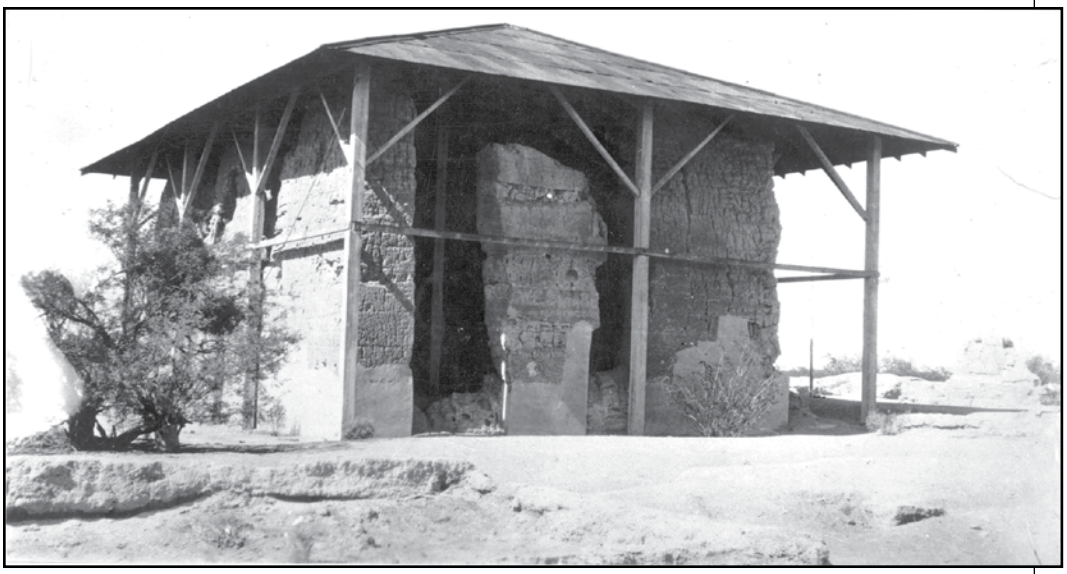
The People of the Casa Grande Valley *was written by Byron Cummings, director of the Arizona State Museum, University of Arizona, for the 1930 pageant at Casa Grande Ruins (courtesy of Alan Ferg).*

Sheltering the Casa Grande

Rebecca Carr, Casa Grande Ruins National Monument

With up to 2,000 people a day visiting the Casa Grande Ruins, the methods required to protect and preserve it have evolved over the past hundred years. Many historic treatments that had limited maintenance cycles have since been removed or replaced. The benefits and drawbacks for some of these treatments are still debated, yet the exceptional condition of the Casa Grande can be attributed, at least in part, to these early preservation methods. One of the most important efforts in the preservation of the Casa Grande has been keeping it covered.

The first shelter for the Casa Grande, designed by S. J. Holsinger and built in 1903, was a corrugated iron hip roof with prominent wooden structural supports and cables to secure it during high winds. It was painted red and closely reflected the scale of the Casa Grande. By 1930, this shelter was in need of replacement. The current design, a culmination of efforts from architects Frederick Law Olmstead Jr. and



The initial enclosure that protected the Great House was constructed in 1903. This photo, taken in 1927 is courtesy of the Casa Grande Ruins National Monument.

Federal Legislation Introduced

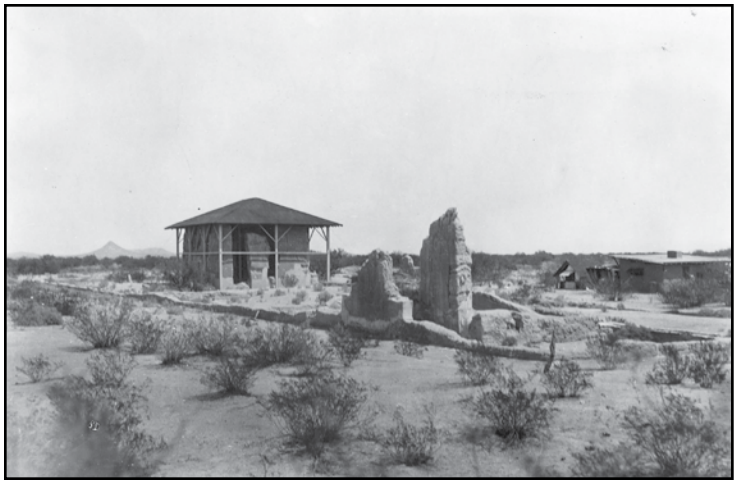
Representative Ann Kirkpatrick has introduced the Casa Grande Ruins National Monument Boundary Modification Act of 2010 (H.R. 5110), a bill designed to add key lands around the existing boundaries to the monument immediately and to initiate a study of additional acreage for possible future expansion. Check the Center for Desert Archaeology website for more information and to track the status of this bill at www.cdarc.org.

Thomas Vint, was erected in 1932. Constructed of steel with concrete-filled pilasters, it was designed to both complement and contrast with the architectural scale and style of the Casa Grande.

From a functional perspective, the empty space between the Casa Grande and the ruins shelter roof allows heat to rise without retaining it inside the earthen building, and lets moisture escape without forming a microclimate that could potentially damage it. The shelter's glass skylights provide ambient lighting for the building, and its louvered ventilator enables it to withstand high winds.

Olmstead and Vint's approach to design has been both praised and criticized. Although the ruins shelter was intended to protect the Casa Grande, it too has become a recognizable icon. Depictions of the Casa Grande and the ruins shelter are found on City of Coolidge signs, websites, street lights, and even on police department badges. Architectural students regularly tour the site to discuss how these two structures complement one another, and in 1995, the ruins shelter itself was determined to be eligible for the National Register of Historic Places.

Henry D. Wallace



Top: The Great House and its now-iconic shelter at sunset. Bottom left: View in 1915 from the southwest corner of Compound A, showing the three-story structure in the foreground, the original protective structure over the Great House, and Frank Pinkley's residence to the right. Bottom right: Rebecca Carr shown while planning recent stabilization efforts at Compound A.

See the Center for Desert Archaeology website for more information: <http://www.cdarc.org>

AT THE CENTER FOR DESERT ARCHAEOLOGY, we envision a society in which the places of the past are valued as the foundations for a vibrant future. As such, it is our mission to preserve the places of our shared past. A private 501(c)(3) organization, the Center is supported through donations, memberships, and grants from individuals, foundations, and corporations. Center members receive an annual subscription to *Archaeology Southwest* and a host of other benefits. For more information or to join, contact Membership Coordinator Kate Sarther Gann at 520.882.6946, ext. 16, or kate@cdarc.org.

Archaeology Southwest (ISSN 1523-0546) is published quarterly by the Center for Desert Archaeology. Subscription inquiries: 520.882.6946.

Center for Desert Archaeology
Archaeology Southwest
300 E. University Blvd., Suite 230
Tucson, AZ 85705

NONPROFIT
ORGANIZATION
U.S. POSTAGE PAID
TUCSON, AZ
Permit No. 878

Back Sight

PRESERVATION ARCHAEOLOGY is the unifying theme of the Center for Desert Archaeology. It derives from the fact that the archaeological record is a nonrenewable resource. Many things degrade or destroy this resource—erosion, chemical weathering and decomposition, the processes of modern development, and archaeological excavations. Preservation archaeology favors low-impact research methods, shares new knowledge from archaeological research with a broad public, and seeks long-term protection of sites for the future.

Through our site-protection program, Center staff members have worked with many partners to promote expansion of Casa Grande Ruins National Monument. The articles in this issue illustrate many of the diverse values of the monument and support the case for the proposed expansion.

As we reviewed previous work at the monument, it was enlightening to re-examine the publications of John Andresen, an archaeologist stationed at the Casa Grande between 1978 and 1992. Andresen clearly invested much of his time off the job conducting archival research at the monument and elsewhere. He wrote a good description of the unpublished results of excavations at Compound F carried out by archaeologist Arthur Woodward and the Van Bergen–Los Angeles Museum Expedition to Arizona in the early 1930s. He also compiled and compared the different statements made by archaeologist Jesse Walter Fewkes about the "murals" (actually just small painted fragments) that were exposed in Clan House 1. And very creatively, he worked with historical linguist David Shaul to integrate linguistic and archaeological evidence of contact between groups living on the Middle Gila and Lower Colorado/Lower Gila groups roughly a thousand years ago. None of Andresen's research required new excavations, yet it was remarkably productive.

John Andresen, who trained as an archaeologist at the University of Arizona, served as park ranger at Casa Grande Ruins National Monument from 1978 to 1992. Andresen's archaeological publications are strong evidence that he was practicing "preservation archaeology" well before the Center for Desert Archaeology was established. This 1982 photograph is courtesy of the National Park Service.

Andresen's work while he was at Casa Grande Ruins National Monument demonstrates that he was a preservation archaeologist long before that term existed. It was a shock to learn recently that Andresen passed away a few years ago. He had moved to a National Park Service position at the Midwest Archeological Center in Nebraska, from which he retired in 2005, and most of us here in the Hohokam region had lost track of him. We acknowledge his important contributions here and want to keep his story connected to the Casa Grande. There is no doubt that he would have been an ardent supporter of expanding the size and the mission of this special place.

back sight (băk sīt) n. **1.** a reading used by surveyors to check the accuracy of their work. **2.** an opportunity to reflect on and evaluate the Center for Desert Archaeology's mission.

William H. Doelle, President & CEO
Center for Desert Archaeology