Hohokam and History at the Community of Civano in Tucson, Arizona

by Allen Dart and Jeffrey T. Jones, Old Pueblo Archaeology Center

OPEN1 and OPEN-OUT
Bring Kids to Archaeology
and Archaeology to Kids

Old Pueblo Archaeology Center has launched its Old Pueblo Educational Neighborhood program -- abbreviated OPEN -- to encourage children, parents, teachers, and others to learn about archaeology directly from archaeologists. The OPEN program has two basic components. "OPEN1" provides opportunities for children and adults to learn about archaeology by excavating a mock archaeological site and in related indoor learning activities. "OPEN-OUT" is an outreach program in which archaeologists visit preschools through high schools to give presentations and lead students in hands-on archaeology learning activities.

The OPEN1 Dig. In February 1997 Old Pueblo Archaeology Center constructed a full-size model of a small archaeological site behind the corporation's office at 1000 E. Fort Lowell Road in Tucson. The site is now the focus of low-cost opportunities for children and adults to learn about archaeology through a structured, hands-on program that includes archaeological excavation.

The make-believe archaeological site, "OPEN1," includes replicas of two

Some 15 years ago a number of forward-thinking individuals, believing that the desert offered untapped opportunities for sustainable living, including the use of solar energy, gave birth to the "Solar Village" concept in Tucson. The "Community of Civano" is now being developed as Tucson's first planned solar village. It will be the first large-scale residential community in the country to push down the path toward sustainability, and the first public/private partnership -- with the City of Tucson and the Case Enterprises company -- to do so. Civano will eventually contain 2,600 residential units of 11 different types, 110 acres of commercial and industrial space, civic, recreational, and community education and cultural facilities, and approximately 400 acres of open space -- all on 1,145 acres in the southeastern portion of the City of Tucson, just southeast of Irvington and Houghton roads.

Who lived in the Community of Civano area and took advantage of the desert's solar energy in ancient times there before the modern Solar Village concept was born? Old Pueblo Archaeology Center recently conducted studies for the Community of Civano project to find out. During these studies Old Pueblo's archaeologists recovered cultural information from 10 places with-

Ancestral Puebloan (1st-13th century)
 Applied and collected in the field
 Collected in the field

Continued on page 2
in the Community of Civano project area where ancient Hohokam Indians and at least one early twentieth century family had lived in bygone days.

Take a little mental trip back in time with us and pretend you were the people who lived in the Community of Civano project area some seven to thirteen centuries ago. That was apparently the earliest time of human occupation in this

A.D. 650 and 1450 you were a member of a culture that Arizona’s Tohono O’odham and Pima Indians named the “Hohokam,” meaning ‘those who have gone’ or literally ‘those who are all used up.’ Most of you Hohokam lived in dispersed communities of up to 500 people. You lived in houses that were built partly underground in shallow, flat-bottomed pits. The walls and roofs of your homes were made of wooden poles covered with woven mats or piled-up brush, and plastered over with mud on the outside.

As a Hohokam, your primary occupation was farming, and you were pretty good at it. You had developed quite a range of cultivated plants that were well adapted to the southern Arizona desert: corn and agaves were your primary crops but you also grew squashes, several kinds of beans, chile peppers, cotton, and tobacco. You grew them in a variety of lowland and upland desert locations, using clever techniques that even the farmers of the twentieth century would never equal.

It was probably you Hohokam women who ground up your corn to make the first tortillas, and who added some chiles to spice them up. Southwestern cuisine goes back a lot more years than many people imagine!

Some of you Hohokam families dug canals so you could water your fields with the waters of the Santa Cruz River and the Rillito and Tanque Verde creeks. However, most of your fields were located on the lower mountain foothills. These were the areas where mountain washes dumped their water onto the edge of the desert floor after every rainstorm. In these locations, every time it rained, you and your family members ran out to divert the water that was coming down those washes. With sticks, stone hoes, and your hands, you dug ditches and built temporary dams, embankments, and low brush dikes to channel the rainwater out onto your fields. It was hard work!

Another clever strategy you Hohokam farmers used was to concentrate and conserve the rainwater that fell on the foothills, and on the terraces overlooking the Santa Cruz River. In these areas you gathered up the cobbles that had been naturally strewn across the desert, and laid out some of those stones in lines across the little desert rivulets to form check-dams. These little dams trapped just enough rainwater runoff to allow your seeds to sprout and grow. You also gathered up desert cobbles into low, circular piles on the low foothills and on the river terraces. You planted agaves and occasionally the seeds of corn, cotton, and other plants in and next to these rock piles because they held enough moisture in the soil to nourish an agave and one or two other cultivated plants.

Our Sonoran Desert environment provided you with even more wild foods than you were able to grow in your fields. Its bounty included saguaro cactus fruits, flower buds and tender young pads of cholla cactus, and many kinds of edible seeds: seeds of mesquite, palo verde, and acacia trees; seeds of amaranth, goosefoot, pigweed, tansy mustard, and wild buckwheat plants; and seeds of little barley and several other wild grass species.

Modern-day generations have come to appreciate you Hohokam for the beautiful arts and crafts you manufactured.
Artifacts at six prehistoric sites on the Community of Civano property were associated with clusters of fire-cracked rocks like this one found at site AZ BB 13:349. Photo by Jeff Jones.

Your pottery was made from clays that turned shades of brown and black when you fired it, and you painted striking red geometric designs on many of your pottery vessels.

You Hohokam artists carved seashells from the Gulf of California to make beautiful bracelets, rings, and other shell jewelry. You made finely polished ax heads and carved intricate designs into stone to make decorative bowls and paint palettes.

Perhaps most importantly to the generations who would succeed you in the Community of Civano it was you Hohokam, according to the Pima and Tohono O’odham Indians who succeeded you, who coined the name ‘Civano.’ This term is derived from the word ‘sivañ,’ which means ‘chief of a great house’ in Pima and Tohono O’odham oral histories. The Sivañ were said by these tribes to be the ancient chiefs who constructed the great Hohokam adobe house that is now preserved in the Casa Grande Ruins National Monument near Coolidge, Arizona. They also built several other great houses along the Gila and Salt rivers.

Archaeologists adopted the name Civano from the Pima and Tohono O’odham to identify the final era of Hohokam occupation in southern Arizona. During the so-called “Civano phase” between A.D. 1300 and 1450 you Hohokam developed elaborate social, artistic, and economic systems. Their sophistication is evidenced by the magnificent Casa Grande ruins and similar structures, by strikingly beautiful pottery that was colored red, black, and white, and by fine artistry in stone, ocean shells, and clothing made from cotton and agave fibers. Some of your Hohokam Civano phase villages covered more than a square mile and included earthen pyramids and plazas that were used as gathering places for the community.

Prehistoric Archaeological Sites at Civano. The modern Civano community is more than a mile from the nearest areas where you Hohokam tilled the soil extensively, and since your villages were close to your fields you didn’t establish any actual communities at Civano. But you did visit, and you left behind evidence of what you were doing here.

Excavation of the rock concentrations at site 349 and other prehistoric sites on the Community of Civano property revealed the stones were associated with shallow fire pits. Photo by Jeff Jones.
Archaeologists from Pima Community College did a complete archaeological survey of the Community of Civano property 10 years ago. At that time they identified ten archaeological sites in the area where construction of the modern Solar Village will begin. The 10 sites were designated AZ BB:13:340 through AZ BB:13:349 by the Arizona State Museum, University of Arizona.

In March and April 1997 Old Pueblo Archaeology Center conducted research at all 10 of the sites to help Community of Civano developer Case Enterprises learn exactly what they contained, and to recover and interpret the cultural information that they held.

Old Pueblo made a detailed map and collected artifacts at each site, and conducted excavations in the more substantial ones to learn what was below the ground there. Our study was conducted by archaeologists Jeffrey Jones, Victoria Evans, Austin Lenhart, and Robin Rutherford, under the direction of Allen Dart, the principal investigator.

Nine of the archaeological sites in the Civano project area are prehistoric and are believed to have been used by the Hohokam some time between A.D. 650 and 1450. All nine of the prehistoric sites contained only a few scattered artifacts of flaked stone and pottery. However, at sites 340, 341, 342, 344, 348, and 349 there were also one or two clusters of fire-cracked rocks present. The before-and-after-excavation photos of the rock cluster at site 349 show that at some of these sites the stones were associated with buried fire pits. Rocks evidently were dropped into the fires to keep the pits heated long enough to serve as outdoor ovens for roasting cholla cactus buds or other foods gathered from the desert.

Unfortunately, no artifacts known to date to specific prehistoric eras were recovered, and none of the roasting pits were datable by radiocarbon or other absolute chronological methods.

Sites 343, 345, and 346 were simply scatters of chipped stone artifacts, without pottery. All of their artifacts were mapped and collected. Excavations were done at sites 343 and 345, the two that yielded the largest numbers of artifacts, to determine whether there were any buried artifacts or other features present, but none were found.

The prehistoric archaeological sites at Civano are pretty widely scattered, out in the flats where the creosote bushes and cholla cacti have thrived for centuries. Studies of similar archaeological sites in comparable locations around the Tucson Basin have shown that the Hohokam used these sites to gather and process many of their wild plant foods they gathered from the desert. The prehistoric roasting pits were used to bake the buds of the cholla cactus flowers that appear around May of every year, and the mesquite bean pods of early summer, as well as for roasting an occasional jackrabbit or other small critter that could be hunted down in the desert.

**Historic Period Occupation at Civano.** The tenth archaeological site identified at the Community of Civano, site 347, was an early twentieth century habitation site. Located on a bluff overlooking the Pantano Wash, it contained remnants of a cobble-filled mud foundation (see page 1 photo) that had supported a wooden structure roofed with corrugated sheet iron.

The house measured 9 by 13 feet inside and had a 24-inch wide doorway in its north wall. The floor was simply packed earth. When this structure was excavated by Old Pueblo, pieces of window glass, burned copper wires, and fragments of two light bulbs were found on the floor. These finds and their locations suggest the house had a window in its west wall and was supplied with electricity, probably from a generator. It didn’t have a fireplace but we did find pieces of stove pipe, indicating it had been heated with a freestanding stove.

Not counting nails and other construction materials, nearly 100 historical artifacts were found at site 347. They represented activities ranging from food preparation and household maintenance to leisure time recreation. Parts from a 1920s touring car, tobacco and makeup tins, a purse frame and clasp, a porcelain doll’s head, a glass marble, and a toy clothes-pressing iron suggest that a family with at least one little girl had lived there. The styles of artifacts and manufacture dates found on some of them indicate that site 347 was occupied between about 1932 and 1935. These dates suggest that the house at this site was occupied by the family of W. L. Cochrane, who leased the property from the State of Arizona from 1927 to 1941, or by a family associated with Cochrane.

The information in this article was presented to about 350 people present at the Community of Civano’s Pioneer Celebration on May 17, 1997. Afterward, Mercy and Jesus Burrell, who have lived adjacent to the Community of Civano property for many years, informed us that they were pretty sure one of the occupants of the house was their friend Mary Barreda, who is now over 60 years old. We hope to interview Mary soon to find out whether she was the little girl who lived at site 347 and, if so, when and why her family lived there.

**Kudos to Case Enterprises**, which arranged for Old Pueblo Archaeology Center to excavate all cultural features found at the archaeological sites on the Community of Civano property, collect representative samples of artifacts from all 10 of the sites, publish a full report on the archaeological study and curate the artifact collections at the Arizona State Museum when our work is finished. Archaeologists are always delighted to work with organizations like Case who treat archaeological sites with the respect they deserve, and who take steps to let the public know about those sites.
Excavations at OPEN1
Continued from page 1

ancient Hohokam Indian pit-house ruins and replicas of several kinds of Hohokam outdoor cultural features, including storage pits, a pit-oven, plaster-and tool-making features, and a special artifacts cache pit. Pottery, stone tools, seashell jewelry, and animal bones buried at the site are mostly modern replicas donated by Laurel and Paul Thornburg, Sam Greenleaf, Don Magee, Gail Roper, Alan Ferg, and several archaeologists.

The buried items also include unprovenanced collections of authentic Hohokam artifacts loaned by the Arizona State Museum and the Arizona Archaeological and Historical Society and donated by several individuals. (Old Pueblo has not and will not purchase authentic prehistoric artifacts for use in any of its educational programs or displays.)

OPEN1 sessions for individual kids ages 4 and up (adults are welcome too) are offered on Saturdays from September through May and on weekdays during special summer programs. Each 1½-hour session includes at least one indoor learning activity in addition to the time kids are excavating at OPEN1 and doing follow-up artifact washing and discussions. At the end of the dig session the archaeologist helps participants interpret what they have found.

Parents are encouraged to enroll their children in four consecutive 1½-hour sessions (6 hours total) to provide the kids with a different indoor learning activity each session in addition to their excavation time.

Special five-hour OPEN1 sessions for already-organized groups are offered to schools and other organizations. In the five-hour package Old Pueblo provides the group leader with reading materials, videotapes, and simple archaeology learning exercises for the group to go over in their own setting before coming to dig at the OPEN1 site. About a week before the dig day an OPEN1 project archaeologist visits the group to give them the Project Archaeology Intrigue of the Past workbook’s lessons on archaeological context and archaeological site gridding and mapping. Being thus prepared for their excavation experience, the kids come to the OPEN1 site already knowing how to take elevations, map their excavation units, and fill out excavation forms. They typically spend 3 hours excavating and 1 hour in follow-up laboratory processing of their artifacts and interpretation of the artifacts and cultural features they have discovered.

Old Pueblo Archaeology Center wishes to acknowledge the many organizations and individuals that have supported the OPEN1 program and helped us implement it. Major monetary support and services were provided by the Walter & Juliet Absolon Foundation, Innovative Excavating, Inc., and artisans Laurel and Paul Thornburg. The idea for OPEN1 was inspired by a mock archaeological site dig that was a component of the Tucson Unified School District’s Camp Cooper Environmental Learning program until 1993. Former Camp Cooper archaeology program coordinators Carol Ellick and Linda Gregonis lent their expertise and made many helpful suggestions for setting up the site and using it to conduct archaeology learning sessions.

The OPEN-OUT Archaeology Outreach Program. OPEN-OUT is an outreach program in which a professional archaeologist visits and talks to children in schools and preschools. Old Pueblo Archaeology Center has developed individual 45- to 60-minute presentations tailored to specific age groups from as young as four years old to high school seniors.

The in-school archaeology presentation is designed to inform school kids that archaeologists don’t dig for dinosaurs and tell what they really do, how they do it, and what their work has revealed about Arizona’s ancient peoples.

The OPEN-OUT presentations for younger kids offer hands-on or storytelling activities for the kids to experience how prehistoric Native Americans lived and appreciate the arts they created, and to understand that modern Native Americans are not the stereotypical cowboys-and-Indians that kids have seen in the movies.

For information on OPEN1 and OPEN-OUT programs or to make a program reservation call Allen Dart at Old Pueblo Archaeology Center: (520) 798-1201.

1997 OPEN1 SUMMER SESSION DATES & TIMES

Four-day (1½ hours per day) programs will be offered at OPEN1 Mondays through Thursdays on the following dates (special sessions can be scheduled for groups on other days):

June 2-5 July 14-17
June 30-July 3 July 28-31
August 11-14

4-6 year-olds . . . 7:00-8:30 a.m.
7-8 year-olds . . . . 9:00-10:30 a.m.
9 years and up 11:00 a.m.-12:30 p.m.

Registration is ongoing. Enrollment may begin on any date listed. Because different activities are offered every four consecutive Saturdays it is advantageous to enroll for four sessions in a row.

Fee: $30 per person for four 1½-hour sessions, or $9 per individual session. Archaeology Opportunities members and their children are entitled to 20% discount. Adults are welcome to participate in the dig at the regular fee or to watch and help supervise their children for free.

Fall 1997 OPEN1 Saturday Session dates will be announced in the September bulletin.

Old Pueblo Archaeology Center
Board of Directors
Mark Tomás Bahri (Vice President)
JoAnn Cowgill (Vice President)
Carolyn O. Davis (President)
Frances Francisco (Secretary)
Stan Kryszanowski (Vice President)
W. K. Whiteley (Secretary)
Dig in the White Mountains at the Q-Ranch Archaeological Field School

Old Pueblo Archaeology Center will be operating the Arizona Archaeological Society’s summer field school at the mysterious Q-Ranch Pueblo Indian ruin in Arizona’s White Mountains from June 8-21, 1997. Q-Ranch Pueblo was occupied from A.D. 1265 to 1380, after which the pueblo was abandoned, leaving rooms full of whole pottery containers and thousands of other artifacts.

Basic field school tuition starts at $15 per day with discounts offered for weekly enrollments. For college credit or skills certification from the Arizona Archaeological Society students may attend evening class sessions.

Field school accommodations are adjacent to the dig site at the Q-Ranch Lodge and a nearby campground. The lodge offers three meals a day. The campground offers primitive showers and an option for some dinners in the lodge. The field school fees do not cover costs of accommodations or meals.

You must be an Arizona Archaeological Society member to participate. Archaeology Opportunities members receive a 20% discount on tuition and course fees. To register call Old Pueblo Archaeology Center at (520) 798-1201.

Archaeology Opportunities Membership Program

Archaeology Opportunities is Old Pueblo Archaeology Center’s membership program for people who wish to participate in archaeological excavations and other aspects of scientific cultural research, or for those who simply wish to support Old Pueblo’s archaeology education programs. By participating in field research, members not only get to discover ancient artifacts and cultural features, they have opportunities to learn proper archaeological methods including record-keeping and sketching, photography, and mapping, and to participate in postfieldwork analyses, artifact processing and cataloging, and database utilization.

Persons who complete a basic three-day Sabino Canyon Ruin field school program automatically become Archaeology Opportunities members for a full year. A yearly fee option for enrollment and membership renewal is also available as indicated on page 9.

Membership benefits include opportunities to participate in Old Pueblo Archaeology Center’s excavations, field surveys, and other research programs; 20% discounts on Old Pueblo’s publications, other items, and course offerings; subscription to the Old Pueblo Archaeology quarterly bulletin; and invitations and discounts for field trips and other archaeology events. An enrollment form is included in this issue.

Arizona Humanities Council Supports Archaeology Workshops

Archaeology in the Schools is a 2-day workshop offered in two levels and taught by professional archaeologists at Tucson’s Sabino Canyon Ruin, the site of a prehistoric Hohokam Indian village that was inhabited between A.D. 1000 and 1350. With guidance from the archaeologists who teach the workshop, participants learn to identify Pre-Columbian artifacts, architectural features, and other evidence of prehistoric human occupations. They see for themselves how archaeological excavation preserves scientific information about animal bones, plant remains, and the soil associated with buried artifacts so that all recovered information can be studied and interpreted after a dig is done.

The AITS workshops were designed for educators and have been approved for professional growth plans by several Arizona school districts. They are also open to the general public.

The Archaeology in the Schools 1997 summer workshops are partially funded by a grant to Old Pueblo Archaeology Center from the Arizona Humanities Council. AHC’s support helps the people of Arizona benefit from federal funds allocated through the National Endowment for the Humanities. This program is an example of your tax dollars returning to Arizona to benefit you and others in this community.

Thanks to the Arizona Humanities Council grant, the AITS workshop is offered to 30 educators on May 31-June 1, July 26 and 27, and August 9 and 10, 1997, at a fee of only $50 each. The regular fee is $130.

For more information or to make a reservation call (520) 798-1201.

Archaeologist Peg Davis uncovered several whole pots and other artifacts in this room at Q-Ranch Pueblo. Photo by Allen Dart.
Back by Popular Demand:  
**Sabino Canyon Summer Program**

This year's Sabino Canyon Ruin kids' summer program includes three days learning archaeological excavation methods from professional archaeologists in shaded areas at the Sabino Canyon Ruin, a 700 to 1000 year old Hobokam Indian village, plus one day cleaning, cataloging, and interpreting the week's finds in Old Pueblo Archaeology Center's Tucson archaeology laboratory. Kids must bring own lunches, but all excavation equipment is provided.

**Dates:** Mon.-Thurs. June 2-5, July 7-10, July 21-24, or August 4-7.

**Times:** 7 a.m.-1:30 p.m. each day.

**Fee:** $169/week. Advance payment is required. Visa and Mastercard are accepted.

**Archaeology Opportunities** members and their children are entitled to 20% discount.

Upon registration Old Pueblo sends an information packet that includes a map and directions where to meet for the Sabino Canyon Ruin excavations, lists of safety precautions and suggested background readings, and release forms that parent must sign for child to participate.

Sabino Canyon Ruin  
Archaeological Site Tours

In addition to taking you through the major portion of the Sabino Canyon Ruin, Old Pueblo Archaeology Center’s archaeologist-guided tours show examples of artifacts recovered from the excavations and provide an archaeological interpretation of life in the Tucson area during the eleventh through fourteenth centuries.

**Sabino Canyon Ruin public tours** will be offered on October 4, November 1, and December 6, 1997, and on January 3, February 8, and March 7, 1998. Each of these Saturday public tours will start at 10 a.m. and last till about noon. A $10 donation (or $2 for kids age 6-12) is requested from each person attending. No donation is needed for kids under age 6, but all children under age 16 must be accompanied by an adult.

**Specially arranged Sabino Canyon Ruin tours** may be arranged by calling Old Pueblo Archaeology Center at least 24 hours before the time one wishes to see the ruin. Fees for specially arranged tours begin at $20 per person. Lower rates are offered to groups of 5 or more.

**Advance reservations are required for all tours!** Phone (520) 798-1201 for reservations and directions.

**CONGRATULATIONS** to **Archaeology Opportunities** Member **ROBIN RUTHERFOORD**!

Since she completed a three-day Sabino Canyon Ruin archaeological field school in 1995 Robin has continued to develop her archaeological expertise by volunteering and taking Old Pueblo Archaeology Center’s and the Center for Desert Archaeology’s courses.

In the past year Old Pueblo has hired Robin for work on archaeology projects and to help develop the OPEN 1 archaeology education program.

This summer Robin plans to serve as a volunteer archaeologist at the Q-Ranch Archaeological Field School that Old Pueblo Archaeology Center will operate for the Arizona Archaeological Society near Young, Arizona.

---

**Archaeology Opportunities**  
**Annual Dues & Processing Fees**

<table>
<thead>
<tr>
<th>Category</th>
<th>Dues</th>
<th>Processing fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>$40</td>
<td>$10</td>
</tr>
<tr>
<td>2-person Household</td>
<td>$80</td>
<td>$10</td>
</tr>
<tr>
<td>General Household</td>
<td>$120</td>
<td>$10</td>
</tr>
<tr>
<td>Contributing</td>
<td>$200</td>
<td>---</td>
</tr>
<tr>
<td>Supporting</td>
<td>$500</td>
<td>---</td>
</tr>
<tr>
<td>Sponsoring</td>
<td>$1,000</td>
<td>---</td>
</tr>
<tr>
<td>Corporation</td>
<td>$1,000</td>
<td>---</td>
</tr>
</tbody>
</table>
This toy flat-iron found at a 1930s archaeological site near Tucson’s Pantano Wash suggests that a little girl once lived there. Story on page 1. Actual-size sketch by Allen Dart.

Subscription/Membership Application

Old Pueblo Archaeology is the quarterly bulletin of Old Pueblo Archaeology Center, a 501(c)(3) nonprofit corporation. Please direct questions, comments, or news items to Editor Lynne Attardi by phone (520-798-1201), fax (798-1966), or at Old Pueblo’s post office box address shown above.