

## CULTURAL RESOURCES SURVEY: THE MARANA COTTON GIN

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“Cultural resources” include prehistoric or historical archaeological sites and objects, historically or architecturally significant structures or buildings, historical landscapes, and traditional cultural places. Under federal and Arizona guidelines a cultural resource is an archaeological or historical site of definable area where people left artifacts, constructions, excavations, or deposits 50 or more years ago. Whereas many archaeological sites are hundreds or thousands of years old, under these guidelines a cultural resource can be as young as 50 years old.

Most archaeological sites are identified as a result of a “cultural resources survey,” which is basically an inspection of a piece of land to see whether ancient cultural materials are present and, if so, whether they may be significant. Archaeologists usually perform such a survey by walking parallel courses spaced several meters apart across a property, looking for archaeological materials and potentially historical structures. During the inspection they plot on maps the locations of any artifacts and cultural features they find. If the plotting shows concentrations of artifacts or archaeological features, these concentrations are identified as archaeological sites. An archaeologist may recommend that a discovered site be studied in detail, including through scientific excavation, or recorded in detail before impacts occur, or that it be preserved in place for future scientific research and education.

In 2004, the Marana Interchange Limited Liability Company (LLC) contracted Old Pueblo Archaeology Center to perform a cultural resources survey of a property near the Interstate 10 Marana exit in Pima County to determine whether any

cultural resources might be affected by redevelopment of the parcel. One cultural resource identified during the survey was the Anderson Clayton Marana Gin, which was constructed in 1951. Old Pueblo reported this cotton gin site to the Arizona State Museum, University of Arizona (ASM), whereupon ASM designated it site AZ AA:12:970(ASM).



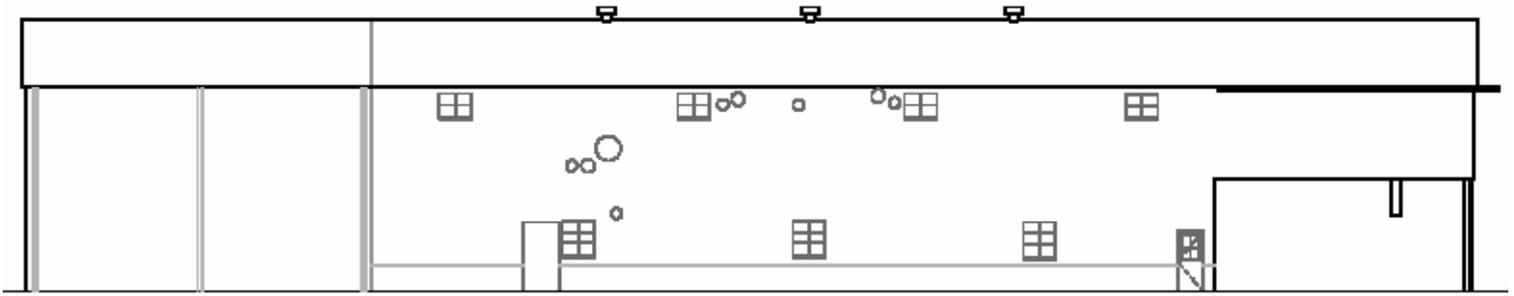
*Anderson Clayton Marana Gin (Harris Sobin photo, 2004)*

The Marana Gin site appeared to be eligible for the National Register of Historic Places because it was associated with cotton production in the Southwest, an event that made a significant contribution to the broad patterns of our nation’s history; and because the site was likely to yield information important in history. Therefore, Old Pueblo recommended

that the gin buildings and structures be documented in accordance with the Arizona State Historic Preservation Act guidelines to make a full historical record for the site, as a means of mitigating impacts that might befall the site as the property was redeveloped.

After Marana Interchange LLC agreed to fund the recommended documentation of the Marana Gin complex, Old Pueblo subcontracted a Tucson historic architect, Harris Sobin, to perform the study. A condensed version of Mr. Sobin’s architectural study is the feature article in this issue of *Old Pueblo Archaeology*. In adapting the architecture study to our bulletin we have omitted Mr. Sobin’s reference citations (except for interviews he cites) and have omitted his Historic Property Inventory Forms that were Appendix C in his original report. Still, this is a much longer article than we normally publish in this bulletin, so we have assigned this issue of *Old Pueblo Archaeology* two bulletin numbers.





*Anderson Clayton Marana Gin Building, west elevation, looking east*

## Marana Gin Buildings Historic Architecture

**Harris Sobin, AIA, Architect**

Tucson, Arizona

In 2004 the complex of buildings in Marana, Arizona generally known as the Anderson Clayton Cotton Gin was identified by Old Pueblo Archaeology Center as a historical site. Old Pueblo also recorded the complex as cultural resource AZ AA:12:970(ASM) at the Arizona State Museum, University of Arizona. The site was located adjacent to what originally was the heart of the urbanized section of the community of Marana, but that central section of the town was torn down starting in 1961 as part of the construction of Interstate 10 and the associated Marana interchange. This cotton gin operated from the time of its construction, in 1951, until it ceased operations in December 2003. According to interviews with Tom Edge (see below), its closure occurred because the basic plant was outdated, making it unable to compete efficiently with newer plants processing cotton up to five times more rapidly. The Anderson Clayton Marana Gin was demolished in 2005 to make way for redevelopment of the property on which it had stood for more than half a century.

### Methodology

In October 2004 Architect Harris Sobin, author of this report and principal of the Office of Harris Sobin, AIA, and Jeffrey Barr, architect and historic architecture consultant, visited the disused Anderson Clayton cotton gin complex at 11820 W. Trico-Marana Road, in Marana, to photograph and measure those structures that make up the complex: the gin building (with adjacent ancillary structures), the adjacent warehouse, and a nearby office/weigh station. Measured drawings were made and photographs both in black and white and color were taken, both according to state documentation standards. The author made additional visits to the gin site for additional photography and observation in December 2004 and January 2005.

For historic context and background, the author conducted interviews with a wide range of individuals connected with the field of cotton ginning both in Arizona and in Marana. These included Howard Bowen, of the Phoenix office of the Lummus Corporation, world's premier makers of cotton gin equip-



*Photo mosaic of Anderson Clayton Marana Gin Building, west elevation, looking east (Harris Sobin photo, Jan. 2005)*



*General view of gin complex, looking northeast  
(Harris Sobin photo, Dec. 5, 2004)*

ment; Tom Edge, the Arizona superintendent for Anderson Clayton & Co., original owners of the Marana Gin; Butch Gladden, manager of the Trico Gin in Marana; Ray Bomesberger, a former employee at the Marana Gin; Dave Porter, Capital Engineering Co., Phoenix, makers of the cyclone air cleaners formerly installed at the Marana site; Ed Hughes, U.S. Ginning Laboratory, Mesilla Park, New Mexico; and Sylvia Ross, geologist for Tucson's Engineering and Environmental Consultants, Inc., which gave its permission to use its photographs of the Marana Gin cyclones taken at a time when those pieces of equipment were still in place at the gin.

To experience actual gin operation during the "ginning season," the author visited Marana's other (still functional) cotton gin, the Trico Gin on Silverbell Road in the Avra Valley, where he was able to make a complete tour of the entire facility while gin operations were under way through the courtesy of the gin manager, Butch Gladden. Mr. Gladden also provided valuable information on gin operations in general, as well as information specifically related to the operations of the Marana Gin.

The author researched additional material at the Main Library of the University of Arizona, obtaining useful information on Marana history, on the careers of Will and Monroe Clayton, as well as on the Lummus Corporation, makers of the original gin machinery at the Marana Gin; including obtaining copies of a number of that company's advertisements in trade publications of the 1951-1952 period.

### **Historic Significance Criteria and Assessment**

Historical sites, such as the Anderson Clayton Marana Gin, are considered significant if they are eligible for listing in the National Register of Historic Places. To be listed in the National Register, a historic property normally must be at least 50 years

old and must be significant according to the following definition:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important in prehistory or history.

When this recording project was done the site of the Anderson Clayton Marana Gin was well preserved. It met the age criterion of 50 years, was associated with events that have made a significant contribution to the broad patterns of our history (e.g., cotton farming in Marana and its region), was associated with the lives of persons significant in our past (e.g., William Clayton and Monroe Anderson), and embodied the distinctive characteristics of a type, period or method of construction (e.g., prefabricated industrial metal buildings in the post-World War II period), so the author considered it eligible for listing in the National Register of Historic Places under criteria A, B, and C above.

### **Marana Cotton Farming**

Cotton farming in Marana dates to World War I. During this period a substantial increase occurred in the need for cotton tire cord, airplane fabric, uniforms, and other critical war-related cotton products, while at the same time, overseas importation was greatly reduced or eliminated. In response to this situation, Edwin Post, from Michigan, bought land along the Santa Cruz River, just west of the Marana Gin site, with plans to develop an irrigation company and induce farmers from elsewhere to move to the area to take advantage of the boom and grow cotton, with Post selling them both land and water. A tent settlement grew up adjacent to Post's water pumping stations, called Postvale, along the Santa Cruz. Eventually Postvale became a part of Marana. By 1919, cotton prices reached new highs, and new lands



*Farmers involved in the Edwin Post Irrigation Project (Town of Marana photo courtesy of Ora Mae Harn)*

devoted to cotton production were developed at Postvale, with dozens of farmers attracted to the area.

By 1920, however, cotton prices had dropped sharply; many farmers could not pay their land loans and went broke along with developer Post. After being taken over by Pacific Finance Company, Postvale Farms failed in 1932. The receiver of Post's mortgaged lands negotiated exchanges with local small farmers for land in other areas, consolidating a large holding known as Cortaro Farms, with 10,000 people living there by 1936.

Cotton soon became a valuable crop again, and by the late 1930s may well have been not only grown but also processed locally. Available evidence suggests that a new cotton gin was already in operation on Sandario Road by 1938, located just south of Interstate 10's Marana exit. Two of its most prominent structures, the adobe gin offices and storage building, were still standing when this study was done in 2005, but like the Anderson Clayton Marana Gin they too since have been demolished.

### **Anderson Clayton & Company**

Anderson Clayton & Co. was cofounded in Oklahoma City August 1, 1904, by two native Mississippians, William L Clayton and his brother-in-law, Monroe Anderson, and later joined by Clayton's brother, Monroe. Following Monroe's move to Houston in 1907, the company moved its headquarters there in 1916. Will Clayton had important prior experience in the field, having served as assistant general manager of American Cotton Company's New York office. Anderson's contributions to the company were his banking connections and understanding of finance.

In time, the company became the world's largest cotton merchandiser, opening offices in France, England, Germany and Japan. Clayton also became a formidable voice in politics, as an expert in foreign trade and an advocate of reciprocal trade agreements. He went to Washington in 1940, becoming an Assistant Secretary of Commerce, and, in 1944, Assistant

Secretary of State for Economic Affairs. After World War II, Clayton was instrumental in developing the 1948 European Recovery Program, known as the Marshall Plan. During the time that Clayton was away in Washington, the company started to invest in large cotton farms, gins, and cottonseed oil mills, both in the U.S. and abroad.

Anderson died in 1939; Will Clayton in 1966. Today, Anderson, Clayton no longer exists as a major corporation, having been caught by the late 1990s frenzy of mergers and acquisitions, though some former subsidiaries continued such as Anderson Clayton Foods.

When the Marana Gin was constructed in 1951, the contract for supplying ginning equipment for the facility by Lummus Cotton Gin Company of Columbus, Georgia, was made with a subsidiary of Anderson Clayton & Co., known at the time as Western Cotton Products Co., located in Phoenix. Queensland Cotton Holdings Limited, an Australian company formed in 1989, which provides a broad range of services to the cotton industry, acquired Anderson Clayton & Co. in 1997, making Queensland the largest cotton ginning company in the world (Warren Williams interviews and other sources).

### **Description of the Property**

#### **Site**

The property on which the Anderson Clayton Marana Gin was built today encompasses 39.09 acres, is essentially flat and is devoid of vegetation. The property is situated at the northwestern corner of Sandario Road and Trico-Marana Road in Marana, Arizona. Along its south side (which is bounded by Trico-Marana Road) is a concrete irrigation channel known as Lateral 8½, which is part of the Cortaro Farms Canal system that was constructed beginning around 1938. At about the midpoint of this southern property boundary a concrete bridge spanning the ca-



nal provided the sole access point to the property from Trico-Marana Road. Three buildings, each of which housed one of the integral functions of the original Anderson Clayton Marana Gin operation, were located on this triangular site at the time of this architecture study.

**Cotton Gin Building**

The largest of the three buildings on the site was the already-disused Marana cotton gin located near the easternmost portion of the site. In overall shape it was a long, narrow, asymmetrically gabled rectangle oriented north-south. Overall measurements of the building were 167.42 ft long; 46.5 ft wide (area at survey: 8,717 sq ft); 31.0 ft high at the ridge line; 23.8 ft high at its western eaves; and 16.0 ft at its eastern eaves.

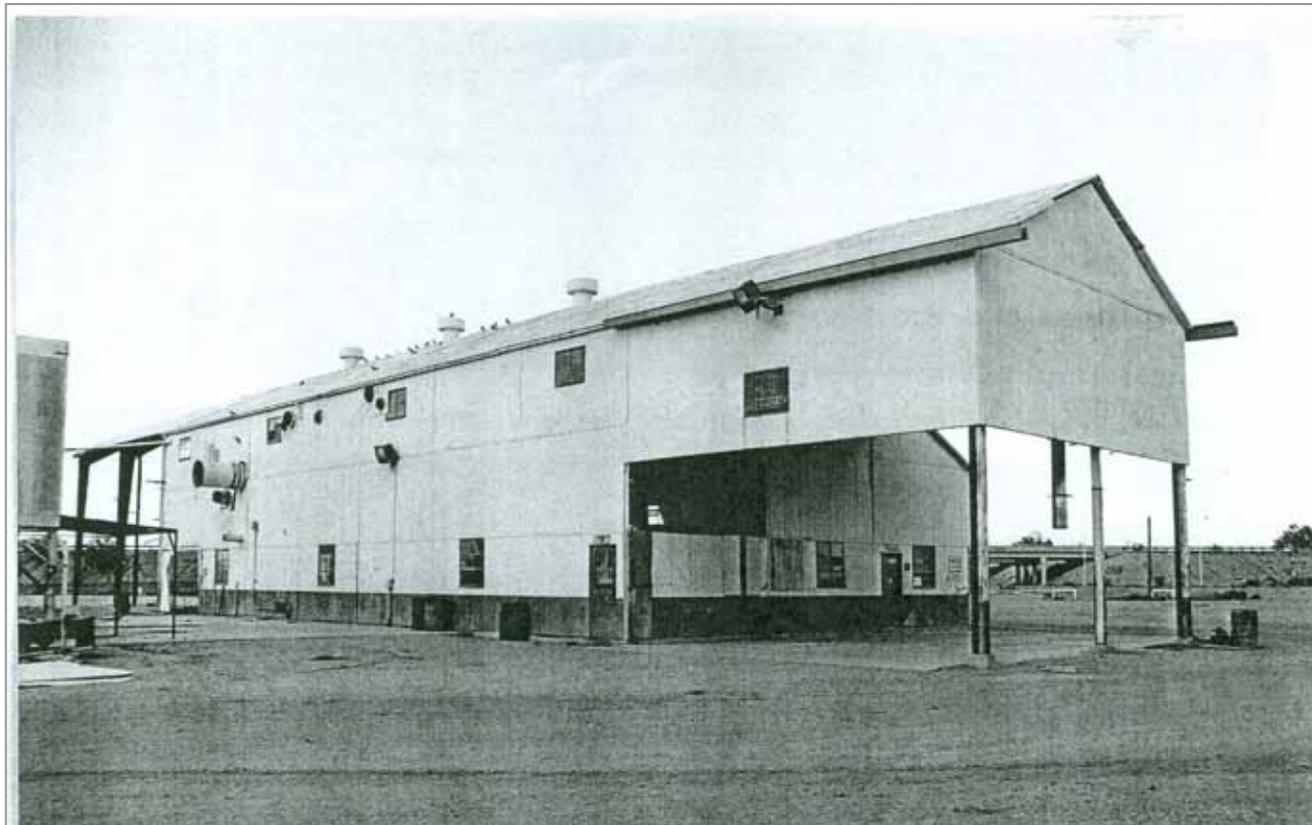
According to the Lummus Co. original gin plans, the original core of the building was constructed in 1951 using Fink-type steel roof trusses, supported by steel I-beam columns. Roof and wall secondary members – the purlins (metal beam-like framing components to which the roof was attached) and girts (the upright metal framing components for the wall

panels) utilized steel T or angle sections. Wall and roof sheathing employed 4 ft by 8 ft corrugated steel panels. The only apparent display of distinctive aesthetics was a 36-inch high painted green decorative banding applied to the base of all exterior walls of the building. A matching painted banding, 33 inches high, was utilized on the adjacent warehouse building, which helped visually unify these two large-scale components of the gin complex. Windows were steel-framed. High windows consisted of four-lite operating sections that pivoted about a central horizontal axis. Lower windows each had a similar four-lite operating section at the top, plus a two-lite fixed section below.

A comparison of the Lummus Co. 1951 plans, which show the original gin equipment layout, with the gin building floor plan (see pages 13 and 14) suggests that the basic shape and configuration of the building, both in plan and cross-section, were dictated by the basic shape and dimensions of the gin machinery. The Lummus plans illustrate, for example, the way in which the smaller, eastern side of the original building was planned to accommodate the plant’s fans and burners, which needed less horizontal space, while its longer western side pro-



Site map of area overlaid on 2003 aerial photo



*Anderson Clayton Marana Gin Building, west and south elevations, looking northeast (Harris Sobin photo, Oct. 23, 2004)*

vided for the more linear configuration of the cotton ginning process machinery itself. In addition, the transverse section of the gin building (see pp. 13-14 drawings) illustrates another difference between the eastern and western sides of the building, that is, the use of “low-bay” structural bays on the eastern side of the building, which was the side intended for housing equipment of modest height. This is in contrast with the “high-bay” structural bays on the west side of the building, which were intended to house combinations of equipment of much greater height.

It is therefore clear that the starting point for designing the structure of the building had to have been the gin equipment layout. The building fabricator, Capitol Steel, of Oklahoma City, effectively “clothed” Lummus’s densely-packed, complex mass of machinery. Both gin equipment and pre-cut building components arrived together on flat cars at Marana’s railroad siding, with steel erectors and gin equipment installers working closely to knit the entire assemblage of gin equipment and building together (Bowen interviews).

Several later modifications were made to the original core of the gin building. At the northeast corner of the core building, an addition was constructed ca. 1959-1960 in order to house a new Moss Lint Cleaner (Bowen interviews). One more addition to

the core, constructed in 1998 by Arizona Building Systems of Phoenix, took the form of an extension of the north end of the original gin. This increased space was needed when the smaller original up-packing baling press was replaced by a much larger down-packing “Bespress” baling press (Tom Edge interview). This expansion was built using standard methods used in modern pre-engineered buildings, including clear-span welded steel rigid frames or bents, large-scale steel decking for walls and roofing, and steel Z-sections for both roof purlins and wall girts. A pioneer in this field, Butler Manufacturing Company, starting in 1939, successfully carried out research on the application of rigid-frame techniques to pre-engineered buildings. According to the company history on the Butler Manufacturing Company website, by 1940 Butler was ready to market a complete line of rigid-frame buildings, which provided more usable interior space, used less steel, and could be fabricated and erected faster with fewer people than the traditional framing techniques exemplified by the 1951 core of this gin building.

The progressive changes in the building footprint described above are diagrammed in a construction sequence diagram (Figure 1) based on aerial photos taken in 1960, 1972, 1988, 1998, and 2000.



*Cyclone air cleaners at east elevation of Gin Building  
(January 28, 2004, photo courtesy of  
Engineering and Environmental Consultants, Inc.)*



*Cyclone air cleaners at west elevation of Gin Building  
(January 28, 2004, photo courtesy of  
Engineering and Environmental Consultants, Inc.)*

### Warehouse Building

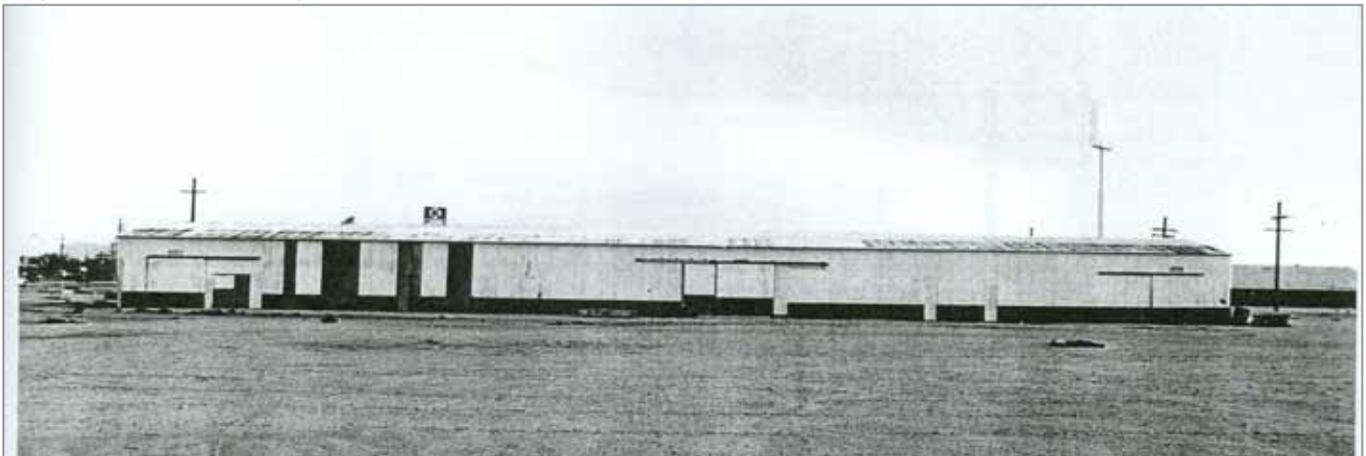
A second building on the site, constructed in 1951 at the same time as the gin building, was the long and narrow warehouse, which was similar in materials and construction to the larger building. The warehouse originally provided storage for cotton seed, but more recently served as a warehouse for storing bale-bagging and ties (Bowen interviews).

The warehouse building was oriented east-west, had a symmetrical gable roof, and was constructed of steel framing, simple trusses using vertical web elements, corrugated steel roof on steel channel purlins, and steel wall sheathing on steel angle girts. The building was totally closed except for three sets of sliding doors located on the building's north façade. Situated just southeast of the gin building and oriented perpendicular to it, the warehouse was located just north of and parallel to Trico-Marana Road. This warehouse building was 160.67 ft long, 30.17 ft wide (for an area of 4,847.41 sq ft); 14.0 ft high at the ridge line; and 11.0 ft high at both eaves. In common

with the gin building, the warehouse also utilized a 3-ft high painted green decorative banding applied to the base of all its exterior walls (see photo mosaic).

### Weigh Station/ Office Building

The third and smallest building was a weigh station/office building. This building was constructed in 1958 according to Pima County Assessor records, using bearing walls, and interior partitions, of painted 4 x 8 x 16-inch concrete blocks. The building had a gabled wood frame roof. It was located directly west of the gin building and stood just a short distance north of Trico-Marana Road, opposite the approximate center of the site's southern boundary. The building was accessed directly from Trico-Marana Road via the concrete access bridge spanning irrigation Lateral 8½. The weigh station/office measured 20 ft wide, 34 ft long (for an area of 680 sq ft), was 10.5 ft high at its ridge, and 8.3 ft at its eaves. A steel truck scale was originally located on a concrete pad immediately in front of the east elevation of the build-



*Warehouse; north elevation, looking south (Harris Sobin photo, Oct. 23, 2004)*

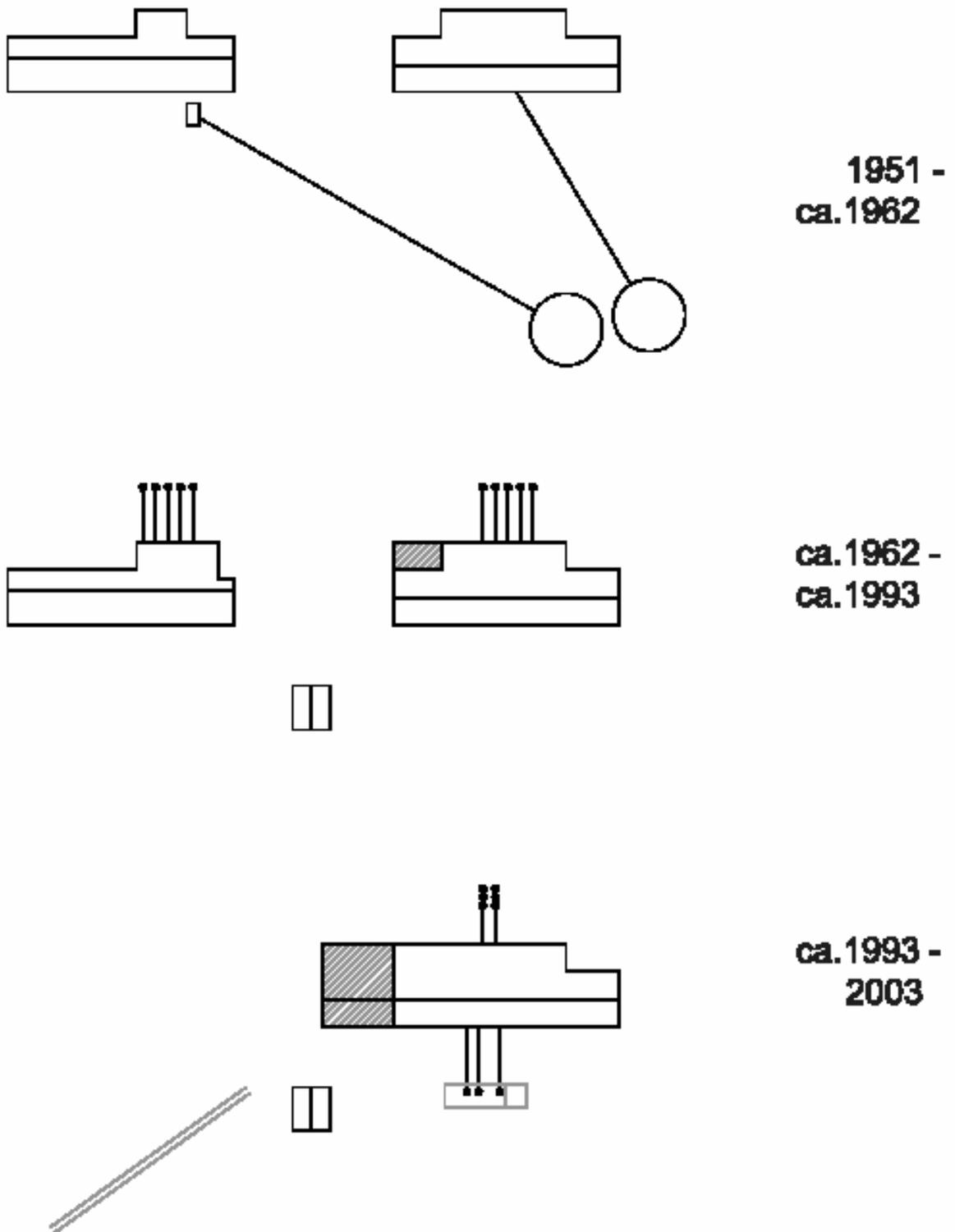


Figure 1 Marana Gin - Construction Sequence Diagram





*Office-Weigh Station; east elevation, looking west  
(Harris Sobin photo, Oct. 23, 2004)*

ing, but was removed when the gin ceased operation in December 2003.

### Functions of a Gin

#### Processing Cotton

The individual steps that make up the ginning process can be briefly described as follows. The first step consists of unloading cotton transported from the field via module trucks and open trailers. At the Marana Gin this was done with a pneumatic system, using two hand-movable, telescoping suction tubes hanging down inside in the open wagon shed at the south end of the gin building. Successive conditioning processes inside the gin building dry the seed cotton, separate and remove fine particles of foreign matter such as leaves, sand and dirt, then “extract” larger pieces of trash (sticks, stems, burs).

All of these trash elements are pneumatically conveyed to the trash storage area, with all conveying air cleaned by cyclones before being released to the environment. A cyclone consists of a cylindrical upper section, a conical lower section, and a smaller center cylinder extending a short distance into the upper section. The trash-laden air enters the upper section tangentially near the top. Centrifugal force caused by the whirling action of the trash and air pushes the trash outward and down through the conical section to a collection point below the cyclone. The clean air moves up through a center vortex and out through the center cylinder.

Cotton is then sent into a distributor, which apportions the appropriate speed and quantity of cotton via a high, horizontal auger to extractor/feeders, which drop the cotton into the individual gin stands, where cotton fibers are separated from the seeds.

Saws grasp the locks of cotton, and draw them through a widely spaced set of huller ribs, which strip off hulls and sticks. Cotton locks are drawn into the roll box, where fibers are separated from the seeds. Seeds then slide to the bottom of the gin stand, and are subsequently removed via an under-floor seed auger to storage.

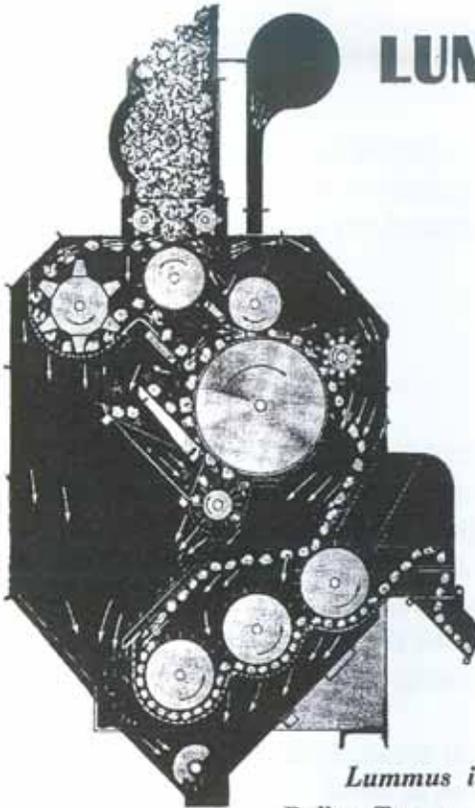
In the gin stands themselves, processed cotton lint is removed from the saws by air blast or rotating brush, and then conveyed to the lint cleaning system for further cleaning and combing. In the next step, a condenser then forms the lint into a batt, to be fed again into a lint cleaner where saws again comb the cotton, removing remaining leaf particles, grass and motes. The cotton then goes into a baling press, compressing the cotton into uniform bales, which weigh typically about 480 lb. each.

#### External Waste Systems

In cotton ginning, what is usually described as “gin waste” or “trash” typically consists of stems, leaves and particulates. Once it began operation, the Marana Gin made use of four different gin waste systems, all external to the gin building itself. These systems are shown in broken lines on the construction sequence diagram (Figure 1) and on the site plan (which is superimposed on the aerial photograph on page 5).

The original trash system consisted of an open and circular incinerator, constructed using fire brick walls on concrete foundation walls, the center of which was located approximately 130 ft west-southwest of the southwest corner of the gin building and connected to it by a material-handling air duct. This incinerator was one of two adjacent units, with the second one originally connected to a second gin building (which was demolished before the gin ceased operation) located directly north of the later gin. Open incineration of this kind, when in use, not only generates a substantial amount of air pollution, but also flying sparks, which presented a fire risk to cotton on-site in open trailers. By the mid-1960s, better disposal technology (e.g., cyclone air cleaners) had been developed, and consequently both these open incinerators had been removed (Bowen interviews). By the time of the 2004 survey only the top surfaces of their original concrete foundation walls remained flush with the natural grade.

By the mid 1950s a rudimentary, but less polluting trash system was installed to trap gin waste, a system Tom Edge refers to as “chicken coops,” using woven wire screen baskets. About 1962, he said, a more efficient system was installed. This time the system was located on the east side of the gin build-



## LUMMUS THERMEX FEEDER

Removes hulls without crushing. Has very efficient After Cleaner. Hot Air Attachment also removes fine trash. Excellent companion for Multi-Jet Gin and Super-Jet Cleaner.

Completely accessible. Easy to operate and maintain. Permanently lubricated.

*Write for Bulletin No. 618*

# LUMMUS COTTON GIN CO.

*Lummus is doing more to put gins on a better paying basis.*

Dallas, Texas

Columbus, Georgia,

Memphis, Tennessee

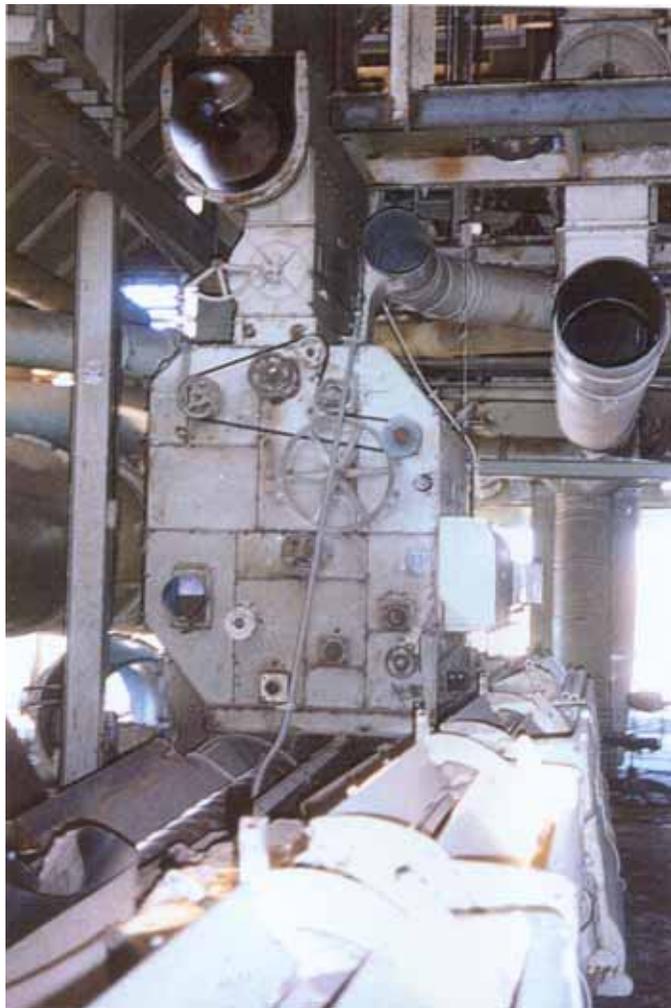
*Lummus Cotton Gin Co. illustrated advertising for Lummus Extractor-Feeder unit  
(from The Cotton Gin and Old Mill Press, Dallas, 1949-1951)*

ing, made up of a bank of five 60-inch diameter cyclone air cleaners. The intake sides of the cyclones were connected via round ducts to those components of the process within the gin building that produced dust particles and other, larger-size contaminants. Pollutants were removed from the air by these cyclones prior to the release of output air into the environment. This system was removed by the gin operators prior to the 2004 architectural survey.

Under pressure from new Arizona Department of Environmental Quality air pollution regulations, a fourth and more efficient high velocity trash system was installed by the early 1990s adjacent to both the east and west sides of the gin building (see photos of cyclone air cleaners at east and west elevations of Gin Building). The location of the cyclone banks on the east side changed from a linear row of units parallel to the building, to a double row of units perpendicular to the building. At the time of survey, all that remained of either system was a four-bay steel frame on the west side of the gin building, which originally supported a bank of eight 36- to 40-inch-diameter cyclone air cleaners, originally connected via round ducts to components of the process

in or near the west side of the building. Solid waste collected by these west side cyclones was transferred via inclined augers or air lines to a pair of final cyclone collectors mounted on the top of an adjacent and enclosed two-bay trash house just west of the main cyclone frame, to be loaded onto trucks parked within the enclosure. All that remained of this system was the four-bay cyclone frames and the two-bay framed trash house; both west side and east side cyclones had been removed by the gin operators prior to the start of the 2004 building survey.

Visible on the accompanying photos and drawings are the large number of circular openings on both the east and west elevations of the gin building, many with lengths of round ductwork protruding. These are evidence of the typical method used in most cotton gins for transporting seed cotton and the by-products of the ginning process such as cotton seeds and "trash" (e.g., stems, leaves, etc.) through the different phases of the process, that is, via pneumatic conveying, which uses air pressure in (typically) round ducts. In most cotton gins, 10 to 20 different fan and motor systems are used to move seed cotton, trash, lint and seed using this method



*Lummus Extractor-Feeder Unit (center left) in place above one of five gin stand units.(lower right), inside gin building (Harris Sobin photo, Jan. 28, 2005)*

from point to point inside the gin building. This transport mechanism was also utilized in transporting material from the gin building outward to a number of separate structures housing subsidiary but closely related functions of the cotton gin located just outside the perimeter of the gin building.

### External Seed Handling and Storage Systems

Among the outputs of cotton gins are seed cotton, motes (an inferior grade of cotton), gin trash, as discussed above, plus cotton seeds. Typically, 60 percent of cottonseed is processed into oil, meal, and hulls; 38 percent is fed to livestock, with the remaining 2 percent used for planting. For every bale of cotton ginned, about 800 pounds of seed is produced, which must be placed in either a temporary or long-term storage facility.

As originally constructed, the Marana gin used its fully-enclosed warehouse building (see below) for long-term seed storage. Around 1970, located just

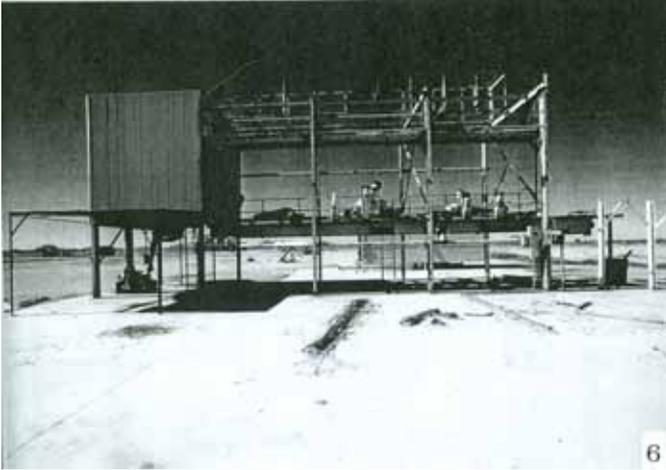
west of the gin building, the facility constructed a 90-ton steel overhead storage house (“seed bunker”) for short-term seed storage, fed by an air conveyer pipe from the gin building (aerial photos, 1972 and 1980). The floor surfaces of this structure were sloped so as to empty by gravity when the slide gate was opened (Bowen interviews).

In the early 1990s, an infective toxic substance, aflatoxin, produced by certain fungi, began to appear in cotton seeds. To obtain needed certification from them, the Environmental Protection Agency required testing of samples from minimum 100 ton seed piles. The seed bunkers, typically less than 100-tons in capacity, therefore became obsolete. At that point, circa 1995, the gin elected to use an alternative device for short-term storage, located northwest of the gin building (Edge interviews; aerial photos, 1998 and 2000). This seed handling system utilized a bank of long spouts, suspended from a high catwalk. Under each spout, seeds formed 100-ton conical piles on the asphalt floor surface, greatly facilitating access for taking test samples.

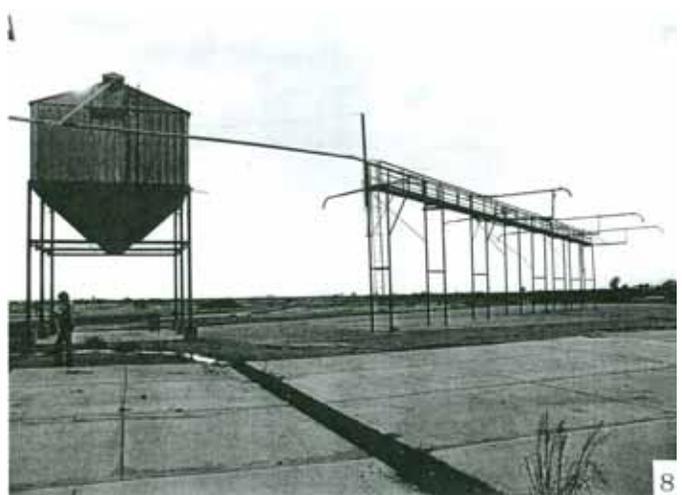
### Chain of Title

The Period of Historic Significance for the Marana Gin was from 1950 to 1955. This corresponds to the period during which the gin was designed and built, as well as the beginning of a succeeding period during which process and plant modifications were made in response to evolving environmental air quality and public health requirements. During all of this time, it operated as the local cotton gin that area farmers depended on, starting in 1951 and continuing for a period of 52 years until it was closed down in December 2003 (Edge interviews). The 39.09-acre gin complex site represents a small portion of the properties deeded by the United States to the Southern Pacific Railroad in 1916, following which recorded conveyances suggest the land was used for cotton farming until the early 1950s, when the gin was constructed.

The period of World War I marks the beginning of a great increase in the importance of cotton as a regional cash crop. The 1920-1951 chain of title for the property, which is part of the east half of the northeast quarter of Section 21 of Township 11 South, Range 11 East, Gila and Salt River Base Line and Meridian, Marana, Pima County, Arizona) shows that title went from John Nelson, who had purchased the property in 1920, to Clayton Anderson Co. in 1926. In 1928, it went from Clayton Anderson Co. to Gila River Ginning Co. Thereafter, title was transferred successively from Gila River Ginning Co. to Western Ginning Co. (1929); then from Western



*Gin Building, accessory structures (cyclone frames), looking west (Harris Sobin photo, Oct. 23, 2004)*



*Gin Building, accessory structures (left: seed house; right: seed handling system), looking west (Harris Sobin photo, Oct. 23, 2004)*

Cotton Products to Western Cotton Oil (1930); then back to Western Cotton Products (1938); to Pima Mercantile (1942); and to Western Cotton Oil (1950). The property was then conveyed from The Board of Regents of the University and State Colleges of Arizona in 1950 to Western Cottonoil Company.

In July 1951, ownership of the gin property, identified on the deed as Parcel No. 2, was transferred from Western Cottonoil to Anderson Clayton & Company under the name of Western Cotton Services Corporation, Attention Anderson Clayton Corporation. The latter corporation owned the property until it was acquired in 2004 by Marana Interchange, L.L.C.

This chain of title thus places the property in the historic context of cotton farming in Marana that began in World War I; demonstrates that William Clayton and Monroe Anderson were already investing in Arizona cotton properties as early as 1926; and hints that ginning operations (as evidenced by cotton oil production) were being conducted in the vicinity as early as 1926 or 1928.

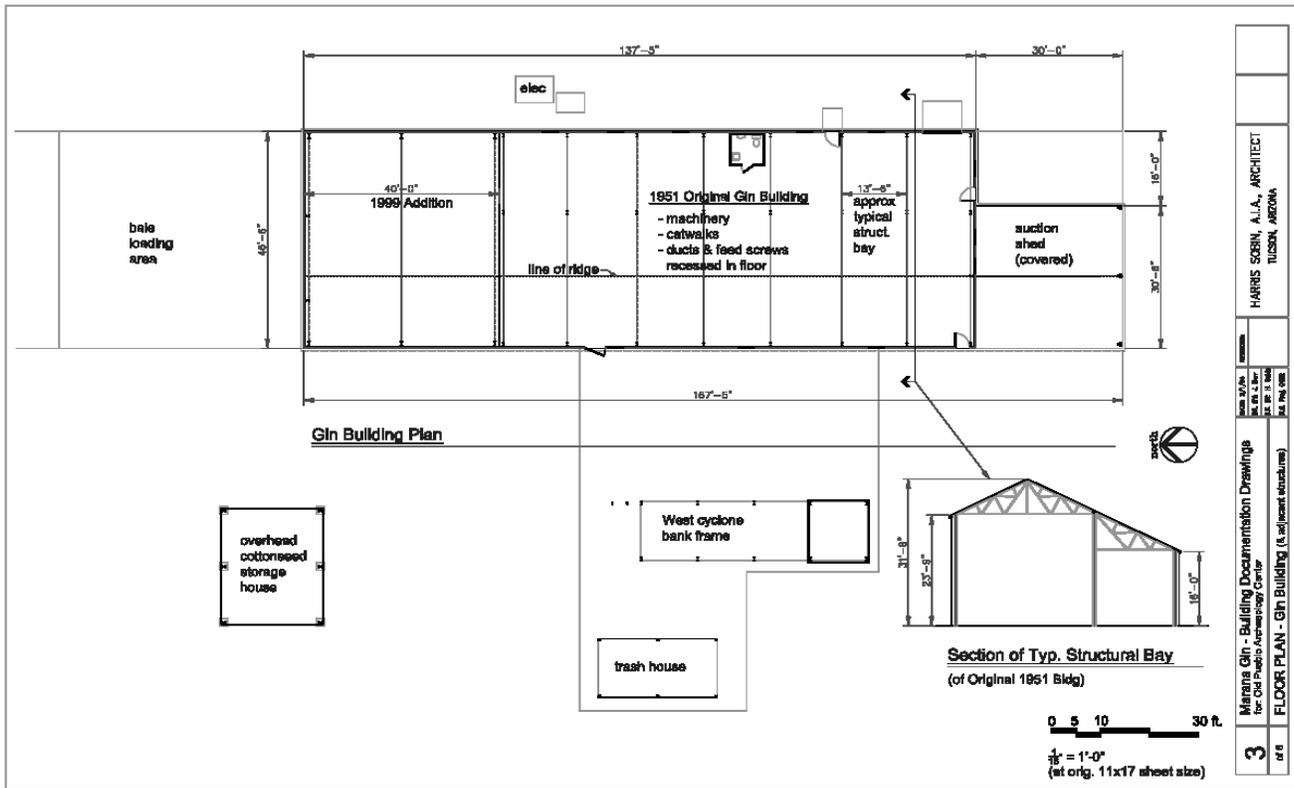
### **Epilog** Allen Dart

Before the Anderson Clayton Marana Gin was demolished, Marana Interchange, L.L.C., the former owner of the gin property before it was recently sold for redevelopment, made arrangements with former Marana Mayor Ora Mae Harn to donate some of the historic Marana Gin equipment to the Town of Marana. As this bulletin article was going to press Mrs. Harn informed Old Pueblo Archaeology Center

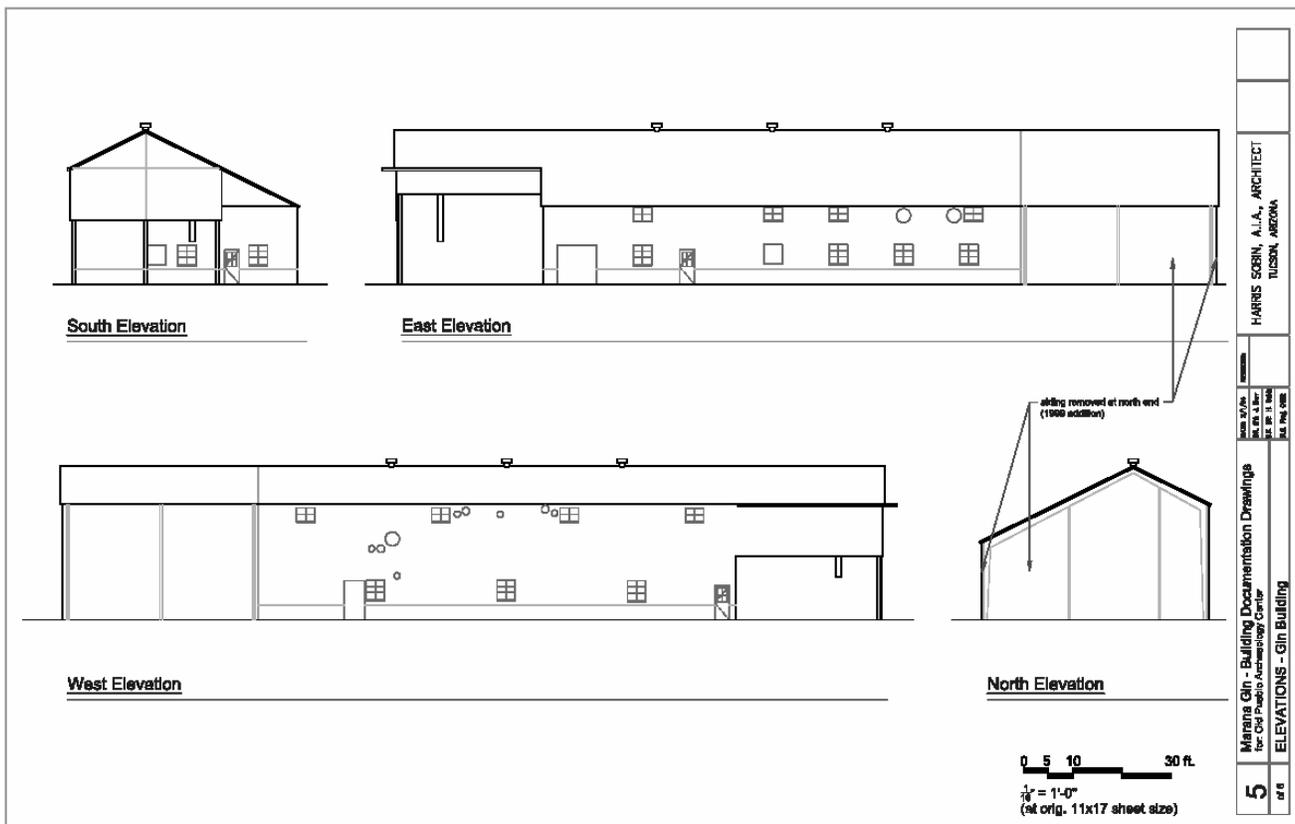
### **Recommendations**

Because it was anticipated at the time of the architecture study that the Marana Gin would soon be demolished, the author recommended that a selection of cotton ginning machinery that was in the gin building be salvaged for use in an interpretative public exhibit or museum on the theme of the area's heritage of cotton farming, because the equipment would be capable of dramatically demonstrating the process of cotton ginning. In addition, it was recommended that several of the signs currently placed on the exterior of the building be saved as potentially valuable and authentic enhancements of a cotton ginning exhibit in a future museum.

that the Town plans to use the salvaged gin equipment, which includes one of the original five extractor/feeder units and the gin stand originally attached to it, in an exhibit in the Marana River Park Heritage Museum that will be constructed by the Town alongside the Santa Cruz River in the near future.



Gin Building Floor Plan and Cross Section



Gin Building Elevations





## Vista del Rio Residents' Association Supports Old Pueblo's Education Programs

Allen Dart

The Vista del Rio archaeological site, a Hohokam Indian village inhabited between A.D. 700 and 1200, once covered over a hundred acres of land overlooking the Tanque Verde Creek in what is now eastern Tucson. As detailed in the March 2007 issue of *Old Pueblo Archaeology*, the City of Tucson established the Vista del Rio Cultural Resource Park at Dos Hombres Road and Desert Arbors Street in 2004 to preserve and interpret the last remaining 3.88 acres of this significant archaeological site. To preserve archaeological features still present, the City limited park development to a shade ramada for picnics and education programs, plus a paved walking trail and several interpretive signs.

The Vista del Rio Residents' Association, a non-profit neighborhood group that includes owners of properties surrounding the park, was instrumental in mustering support to preserve the archaeological features in place and keep most of the park property in its natural state. With assistance of a significant grant from the Tohono O'odham Nation, the Residents' Association embarked on a public education program to make Tucson residents aware of the park's existence and purpose, and to educate the modern population about the rich archaeological heritage of Tucson.

In late 2006 the Residents' Association contracted Old Pueblo Archaeology Center to provide a public interpretive program focused on the Vista del Rio Cultural Resource Park. This program has provided opportunities for children and adults to learn about the Southwest's Native American prehistory and history, and about the Hohokam occupants of Tucson's Vista del Rio Hohokam archaeological site. Highlights of the program have been the "Vista del Rio Archaeology Celebration" programs offered by Old Pueblo Archaeology Center in the park, to educate children about Tucson's ancient residents through fun learning activities. The park celebrations have included demonstrations of traditional Native American pottery, arrowhead, and basket-making crafts, and have allowed children learn about native cultures by making their own hand-built pottery artifacts to take home, grinding corn with ancient metates and manos, using rabbit-

throwing sticks, and playing traditional Native American games.

In July 2008 the Vista del Rio Residents' Association provided Old Pueblo with a grant of \$4,500 to support the continuance of Old Pueblo's



*Vista del Rio Cultural Resource Park  
(Paula Takagi photo, February 2007)*

children's education programs. These programs include the "OPEN" simulated archaeological site-excavation field-trip learning programs; the OPENOUT in-classroom learning programs; and guided tours to archaeological sites in southern Arizona. Preliminary attendance figures for the 2008-2009 school year indicate that with the Residents' Association's support, Old Pueblo directly served 4,327 children in our OPEN, OPENOUT, and site tour programs during this period. Specifically:

- 2,442 children participated in the OPEN2 and OPEN3 simulated archaeological excavation learning program field trips (94 programs for 101 groups from 43 schools or organizations).
- 1,514 were served with our OPENOUT presentations in school groups (41 programs in 41 groups at 25 schools or organizations).
- 371 students went on guided tours to the Picture Rocks petroglyphs and Los Morteros archaeological sites (10 programs in 16 groups at 6 schools or organizations). An additional 100 children are estimated to have



participated in the March 7, 2009, "Vista del Rio Archaeology Celebration" that the Residents' Association sponsored in the cultural resource park in a separate payment arrangement with Old Pueblo.

Old Pueblo Archaeology Center is pleased to announce that the Vista del Rio Residents' Association has provided us with a second \$4,500 grant this year to help Old Pueblo continue our children's education programs. This contribution covers 45 percent of the cost of programs that Old Pueblo is obligated to provide to the Tucson Unified School District in the coming year in lieu of paying rent on our facility, which is located at the TUSD's Ajo Service Center on W. 44th Street. The Association also has agreed to sponsor its third "Vista del Rio Archaeology Celebration" in the city park on Saturday March 13, 2010. If you want to provide some children with a free, fun learning experience about archaeology and Native American culture, mark that date on you calendar and plan to join Old Pueblo and the Residents' Association in the fun next March.

For more information on the March 2010 program contact Cris Wagner at 520-798-1201 or

[info@oldpueblo.org](mailto:info@oldpueblo.org). If you can match any portion of the Vista del Rio Residents' Association's contribution toward continuing Old Pueblo Archaeology Center's children's education programs please contact Executive Director Allen Dart at 520-798-1201 or [adart@oldpueblo.org](mailto:adart@oldpueblo.org).



*Schoolchildren participating in Old Pueblo's simulated archaeological dig program*

## School Classes May Qualify for Free Field Trips

Cris Wagner

Who doesn't find archaeology mysterious and intriguing? Did you know that in addition to motivating students and fostering a love for learning, archaeology can also be an exciting topic with which to teach a variety of content areas like math, language arts, history, science, social studies, geology, art, and many others? Archaeology nurtures critical thinking and can be an excellent avenue in which to build a concept-based curriculum and facilitate authentic learning experiences, cooperative learning activities, multidisciplinary content, and multiculturalism.

Old Pueblo Archaeology Center, a not-for-profit organization, was founded in 1994 to educate children and adults to understand and appreciate archaeology and other cultures, to foster the preservation of archaeological and historical sites, and to develop a lifelong concern for the importance of nonrenewable resources and traditional cultures.

Our staff of professional archaeologists and educators is proud to announce we are continuing our classroom scholarship program through the coming year. In recent years numerous granting organizations have contributed to Old Pueblo's classroom scholarship funds. In addition, Old Pueblo's supporters have raffled prizes and auctioned

original artwork to raise money for our youth education programs.

School classes may qualify for a field trip to participate in Old Pueblo's "OPEN3" simulated archaeological excavation, a visit from an actual archaeologist to discuss archaeology and the ancient peoples of Arizona, or a guided tour of an archaeological site at little or no cost. Old Pueblo's classroom scholarships program has helped thousands of students in economically disadvantaged schools take advantage of our youth education programs, described below. As you review the enclosed material, you will find that all of our programs integrate well with most any curriculum, directly address the Arizona Department of Education's history and science curriculums, and meet many of the Arizona State standards and AIMS Essentials.

With everything Old Pueblo has to offer, teachers and parents who support school programs may want to become members of Old Pueblo Archaeology Center. A membership entitles an educator or parent to a discount of \$25 toward bringing one class per year to our OPEN3 simulated excavation program.



**OPEN3 (Old Pueblo Educational Neighborhood Site 3) simulated archaeological excavation field trip.** Old Pueblo Archaeology Center's OPEN program allows children and adults to learn about different cultures by participating in the excavation of a full-scale model of an ancient Native American archaeological site. Old Pueblo's OPEN3 simulated archaeological dig site (our third site created over the past 12 years) is an idealized reconstruction of a southern Arizona Hohokam Indian archaeological site that has full-size replicas of prehistoric pit-houses and other cultural features the Hohokam used for daily living, cooking, storing things, and other purposes. It is constructed in the courtyard area beside Old Pueblo's classroom building at the Tucson Unified School District's Ajo Service Center at 2201 W. 44th Street in Tucson, just west of La Cholla Blvd in the foothills of the Tucson Mountains, surrounded by natural parklands (the City of Tucson's 168-acre John F. Kennedy Park and the unspoiled Sonoran Desert vista within Pima County's Tucson Mountain Park).

The OPEN program has been recognized as a superior children's archaeology education program in independent evaluations by both archaeologists and professional educators, and it has received substantial funding from the Arizona Humanities Council, Community Foundation for Southern Arizona, Joseph and Mary Cacioppo Foundation, Jostens Foundation, Long Realty Cares Foundation, Stocker Foundation, Wells Fargo, and other granting organizations. Program participants receive hands-on experience in methods archaeologists use to excavate real archaeological sites and make scientific interpretations about what ancient people ate, how they constructed their houses, how they lived, what they may have believed in, and how they created beauty in their lives.

**OPENOUT Educational Outreach Programs.** Outreach to children and adults is one of Old Pueblo's most important means of fulfilling its mission, as evidenced by the numerous activities conducted under the Old Pueblo Educational Neighborhood Outreach (OPENOUT) program. The OPENOUT children's education program offers 45- to 60-minute presentations by archaeologists at grade schools through high schools. The presentations are designed to give children an idea what archaeologists do, how they do it, and what their work has revealed about ancient peoples.

Old Pueblo offers the following presentations to public and private schools (parentheses after each presentation title are the State of Arizona's educational curriculum topics that the presentations are designed to address):



*Both the OPEN3 and OPENOUT programs include in-classroom learning activities*

#### **Grade School Presentations**

What is an Archaeologist? (Science, Social Studies)  
 Lifestyle of the Hohokam (Social Studies, Art, Language Arts)  
 The Ancient People of Arizona (Social Studies, Art, Language Arts)

#### **Middle School and Junior High School Presentations**

Arts and Culture of Ancient Southern Arizona  
 Hohokam Indians (Social Studies, Art)  
 Ancient Native American Pottery of Southern Arizona (Social Studies, Art)  
 What is an archaeologist? (Science, Social Studies)  
 Archaeology as an Interest and as a Career (Business)  
 The Ancient People of Arizona (Social Studies, Art, Language Arts)

#### **High School Presentations**

What is an Archaeologist? (Science, Social Studies)  
 Methods in Archaeological Discovery (Science)  
 Methods in Dating Ancient Materials (Science)  
 Arts and Culture of Ancient Southern Arizona  
 Hohokam Indians (Social Studies, Art)  
 The Hohokam: Ancient Farmers of the Desert (Social Studies)  
 Archaeology as an Interest and as a Career (Business)  
 Ancient Native American Pottery of Southern Arizona (Social Studies, Art)

**Archaeological Site Tours.** Old Pueblo takes classes and other groups of schoolchildren to visit southern Arizona archaeological sites including the Picture Rocks petroglyphs site, Los Morteros and Vista del Rio Hohokam sites, and the Romero Ruin Hohokam and historic site in Catalina State Park. Objectives of the site tours include interpreting cultural history of the Southwest; explaining basic spatial and temporal



*Kiet Seel ruins in Navajo National Monument, Arizona (J. S. Dean photo)*

concepts; devising and testing research questions and hypotheses; identifying different interpretations possible using archaeological methods vs. oral tradition; and explaining the importance of archaeological site preservation and ethics.

**Hands-on Archaeology and Culture Learning Programs for Middle and High School Students.** In addition to the OPEN3, OPENOUT, and tour programs, Old Pueblo Archaeology Center can

customize a program to fit the special needs of middle and high school students. The custom programs can incorporate elements from any or all of the programs described above and can be taught in one day or over several days. Customized programs can include classroom instruction, ancient crafts, demonstrations of stone tool making, and field trips to various sites. Educators are invited to call Old Pueblo to discuss their particular needs.

### **"Prehistory of the Southwest" – A Course for General Interest or Arizona Archaeological Society Certification**

"Prehistory of the Southwest" is an introductory course in the study of the American Southwest, developed by the Arizona Archaeological Society to provide a basic overview of regional archaeology and cultures. The class includes discussions of cultural sequences, dating methods, subsistence strategies, the development of urbanization, abandonments of different areas at different times, and the general characteristics of cultural groups that have lived in the Southwest over the past 13,000-plus years.

The 20-hour class provides an up-to-date synthesis of regional prehistory for anyone interested in southwestern archaeology, and is the prerequisite for all other courses offered in the Arizona Archaeological Society (AAS) Certification Program.

This fall the AAS Prehistory of the Southwest class will be offered in ten 2-hour sessions at Old Pueblo Archaeology Center (2201 W. 44th St. in Tucson), from 6:30 to 8:30 p.m. on Tuesdays, from **September 29 through December 15, 2009** (except there will be no class sessions on Oct. 20 or Nov. 10). Fee is \$50 (or just \$40 for Old Pueblo Archaeology Center members & Pueblo Grande Museum Auxiliary members. Fee does not include the cost of recommended text (*The Archaeology of Ancient Arizona* by Jefferson Reid and Stephanie Whittlesey) or the cost of Arizona Archaeological Society membership and Certification Program registration.

***The Arizona Archaeological Society (AAS) Certification Program** is designed with the help of professional archaeologists to give training in various aspects of archaeology outside an academic degree program. Because most courses provide field experience in addition to classroom training, students can develop those skills that make them a qualified and valuable member of an archaeological project. The student may elect to join the Certification Program where records will be kept of courses taken, and where certificates will be issued upon successful completion of the course requirements. AAS members who are not seeking certification may take these courses without joining the certification program.*

***To enroll in the Certification Program** an individual must be a member of the Arizona Archaeological Society (AAS), complete the Certification Program Application form, and pay a one-time fee of \$10. When the application is accepted, the Department Recorder will establish a file in the individual's name to maintain a permanent record of qualifications. The applicant will receive a certificate that that the instructor will sign as each course is completed and the individual becomes certified in that aspect of archaeology.*

Preregistration is required; deadline for reservation is September 22. To register contact Old Pueblo Archaeology Center at 520-798-1201 or send email inquiry to [info@oldpueblo.org](mailto:info@oldpueblo.org).



## Picture Rocks Cultural Resources Survey Resumes in November

The Picture Rocks petroglyphs site northwest of Tucson is a spectacular and well-preserved example of an ancient Hohokam Indian rock art site. At least one of the ancient petroglyphs there marks the annual occurrences of the summer solstice and the spring and autumnal equinoxes. Historical southwestern Native American cultures scheduled some of their most important ceremonies in conjunction with the solstices and equinoxes, so the discovery of a petroglyph that marks these solar events at Picture Rocks raises the possibility that this place was a site where ancient Hohokam culture gathered for solstice and equinox-related rituals.

To examine this possibility and to provide education in archaeological research techniques, Old Pueblo Archaeology Center is conducting an educational research project to provide cultural resources survey training to interested volunteers, to utilize the services of these volunteers to conduct an archaeological survey of properties in the immediate area of the Picture Rocks petroglyphs, and to utilize the survey results to assess whether land in the vicinity of these petroglyphs was used for major Hohokam rituals.

Objectives of the survey are to provide training in how to identify, record, and map archaeological sites; to inventory all archaeological sites on properties near the Picture Rocks site; and to assess whether any of the sites that may be discovered represent ritual or communal activities that may have been related to the solstices or equinoxes. A written report that documents project location, survey methods, and survey results, and that assesses the significance of each archaeological/historical site discovered will be provided to the Arizona State Museum and to the owners of the surveyed properties.

The archaeological field school sessions on cultural resources survey techniques will be led by archaeologist Allen Dart, RPA, from 8 a.m. to 3 p.m. on **Sunday November 1, Saturday December 12, Sunday January 10, and Saturday February 6**. Each session is limited to six participants and will feature training in archaeological site identification, recording, and interpretation; use of degree-reading compass and global positioning systems equipment; interpretation of aerial photographs and topographic maps; photography; and other archaeological survey methods. Fee is only \$20 per one-day session thanks to the Joseph and Mary Cacioppo Foundation and an anonymous donor who have provided funding to help offset Old Pueblo's costs of the field training and

research. Advance reservations and Old Pueblo Archaeology Center membership at Individual or higher level are required. Registration is on a first-come basis: 520-798-1201 or [info@oldpueblo.org](mailto:info@oldpueblo.org).



*Part of the area included in Old Pueblo Archaeology Center's Picture Rocks cultural resources survey (Jayma Stembridge photo, March 21, 2009)*



*An unusual pottery jar discovered at Los Morteros archaeological site (Daniel Snyder photo courtesy of Desert Archaeology, Inc.)*



## SOME UPCOMING ACTIVITIES

## THIRD THURSDAY PROGRAMS

**September 17, 2009: Third Thursday Free Presentation: "Mesoamerica and Hohokam Symbolism, Public Architecture, and Ideology"** with archaeologist Dr. Paul R. Fish at Old Pueblo Archaeology Center, 2201 W. 44th Street, Tucson (in Tucson Unified School District's Ajo Service Center, just west of La Cholla Blvd., ½-mile north of John F. Kennedy Park). 7:30 to 9 p.m. Free.

Precursors in ancient western Mexico are known for many of the stylistic and symbolic expressions of the Hohokam. Ballcourts and platform mounds, the forms of monumental architecture used by the Hohokam, are prime examples, as are more ordinary kinds of buildings such as courtyard groups and adobe houses. Similarities in the iconography incorporated into Hohokam pottery, jewelry, and ritual objects suggest that ideologies as well as material styles were shared. This presentation summarizes interaction between the Hohokam and West Mexico during the earlier part of the Hohokam sequence, but it also considers regional variation in these connections during the Classic period, which has received less attention. Late pre-contact public food and alcohol consumption, textile production and style, and evidence for the variable presence of Mexican visitors are discussed. Hohokam archaeological cases raise questions of how related material remains, as well as cultural and symbolic systems are transmitted and assimilated among distant and differing societies.

No reservations needed for September Third Thursday program. 520-798-1201 or [info@oldpueblo.org](mailto:info@oldpueblo.org).

**October 15, 2009: Third Thursday "Food for Thought" dinner and presentation: "Anarchy in Ancient Arizona: Breakdown of Hohokam Society at the End of the Colonial Period"** with archaeologist William L. Deaver, at El Parador Mexican Restaurant, 2744 E. Broadway Blvd. in Tucson.

6 to 8:30 p.m. Starting in October our Third Thursday program will try a dinner presentation format: \$18 per person includes restaurant buffet dinner, coffee, tea or soft drink, tax and gratuity, plus

the presentation; the buffet is per person, one time through, and not all you can eat.

Reservations and \$18 dinner payment are due by 3:00 p.m. Monday October 12. 520-798-1201 or [info@oldpueblo.org](mailto:info@oldpueblo.org).

## TRADITIONAL POTTERY MAKING LEVEL 1 WORKSHOP

A series of 7 pottery-making class sessions will be offered by artist John Guerin from 2 to 5 p.m. on seven Sunday afternoons October 25 through December 13, 2009, except there will be no session on November 29 (Thanksgiving weekend). The November 1 session will be a clay-gathering field trip. The Level 1 class demonstrates pottery making techniques the instructor has learned from modern Native American potters, using gourd scrapers, mineral paints, and yucca brushes instead of modern potters' wheels and paint. The course introduces some history of southwestern Ancestral and Modern Puebloan, Mogollon, and Hohokam pottery-making, includes a field trip in which participants dig their own clay, and demonstrates initial steps in forming, shaping and smoothing, and completion of bowls, jars, canteens, ladles, and rattles of both smooth and corrugated pottery, by scraping, sanding, polishing, slipping and painting.

The paddle-and-anvil handbuilding method is also demonstrated. The class is designed to help modern people understand how prehistoric Native Americans made and used pottery, and is not intended to train students how to make artwork for sale. Arizona Archaeological Society certification may be offered to persons who complete Traditional Pottery Making workshop Levels 1, 2, & 3 (Levels 2 and 3 offered when there is enough demand); certification requirements include 60 hours of instruction and hands-on work.

The workshop sessions will be held at Old Pueblo Archaeology Center, 2201 W. 44th Street at Tucson Unified School District's Ajo Service Center, just west of La Cholla Blvd., ½-mile north of John F. Kennedy Park, Tucson. Fee is \$79, or just \$63.20 for Old Pueblo Archaeology Center and Pueblo Grande Museum Auxiliary members. Fee includes all materials except clay, which participants will collect during a class field trip.

Reservations required: 520-798-1201 or [info@oldpueblo.org](mailto:info@oldpueblo.org).



*Tanque Verde Red-on-brown pottery  
(A. C. MacWilliams photo)*



## ARCHAEOLOGY AND CULTURE TOURS

**Friday November 6, 2009: “Picture Rocks, Los Morteros, and Tortolita Mountains Hohokam Sites”** Old Pueblo Archaeology Center carpooling educational tour with archaeologist Allen Dart, departing from Pima Community College, 401 N. Bonita Ave., Tucson

8 a.m. to 4 p.m. \$35 (\$28 for Old Pueblo Archaeology Center and Pueblo Grande Museum Auxiliary members)

Old Pueblo Archaeology Center’s director, archaeologist Allen Dart, leads tour to the Picture Rocks petroglyphs site, Hohokam Classic period housing compound and agricultural sites in the Tortolita Mountains, and Los Morteros, one of the Tucson Basin’s largest archaeological sites, which includes a Hohokam ballcourt, bedrock mortars, and large trash mounds in the ancient living areas. **REGISTRANTS PROVIDE THEIR OWN TRANSPORTATION** – carpools are encouraged. Bring a lunch and water.

Reservations required: 520-798-1201 or [info@oldpueblo.org](mailto:info@oldpueblo.org).

**Saturday November 14, 2009: “Deer Valley & Spur Cross Ranch Petroglyphs”** guided fundraising tour with Shelley Rasmussen and Allen Dart, starting at Deer Valley Rock Art Center, 3711 W. Deer Valley Road, Phoenix. 10 a.m. to 4:30 p.m. Fee \$35 (\$28 for Old Pueblo Archaeology Center and Pueblo Grande Museum Auxiliary members) includes all park entry fees

Maricopa County Parks Interpretive Ranger Shelly Rasmussen (an archaeological Site Steward) and archaeologist Allen Dart guide this tour to see hundreds of ancient petroglyphs and the rock art museum at Deer Valley Rock Art Center north of Phoenix, and more petroglyphs in Spur Cross Ranch Regional Park near Carefree, Arizona. Deer Valley Rock Art Center features a museum with video, artifacts, interpretive signs, and a gift shop. Along its outdoor, quarter-mile-long rock art trail we’ll view some of the 47-acre preserve’s 1,571 known petroglyphs, which range from 700 to 10,000 years old and represent the Archaic, Hohokam, and Patayan cultures. The Spur Cross Conservation Area intermediate-level hike is about 3 miles roundtrip and takes about 3 hours of hill-climbing to a Hohokam pueblo and two petroglyph sites. Bring your own picnic lunch and water, wear comfortable hiking shoes.

Reservations required: 520-798-1201 or [info@oldpueblo.org](mailto:info@oldpueblo.org).

### Would you like to subscribe to **Old Pueblo Archaeology?**

If this issue came to you compliments of Old Pueblo Archaeology Center or with an address label showing a “Paid through” date that is earlier than September 30, 2009, you will need to subscribe or become an *Archaeology Opportunities* member to receive future issues. See page 23 for subscription and membership information.

**Friday November 20, 2009: “Ventana Cave and Tohono O’odham Nation Archaeology and Culture”** (ST146, CRN 61260) Pima Community College study tour with archaeologist Allen Dart via passenger van departing from Pima Community College, 401 N. Bonita Ave., Tucson. 8 a.m. to 6:30 p.m. \$99 fee.

Old Pueblo Archaeology Center’s director, archaeologist Allen Dart, leads this van tour, which focuses on the Ventana Cave National Historic Landmark archaeological site and rock art, includes visits to nearby villages and the Tohono O’odham Nation government complex in Sells, and opportunity to purchase arts and crafts at the Wiwpu Du`ag Arts Trading Post. Bring your own picnic lunch and water, wear comfortable hiking shoes.

Reservations required: 520-206-6468 (Pima Community College, Tucson)

**Sunday November 22, 2009: "Amerind Foundation and Singing Wind Bookstore Thanksgiving Festival"** tour with Terri Contapay, sponsored by Old Pueblo Archaeology Center, departing from curbside at Tucson International Airport Economy Parking Lot at southeast corner of S. Tucson Boulevard and E. Corona Drive, Tucson. Start your holiday season right with this wonderful Sunday drive to Texas Canyon and a visit to the Amerind Foundation. This anthropological and archaeological museum is located in the remote and beautiful Little Dragoon Mountains of southeastern Arizona. The museum collections are dedicated to the preservation of Native American cultures and histories. Bring a sack lunch and we'll enjoy it under the arms of the spreading oak trees. As we head back to Tucson, we will stop at the popular Singing Wind bookstore for their Thanksgiving Festival. Winn Bundy, Singing Wind's owner, always has a variety of authors on hand to sign copies of books. Besides local authors, this year Elizabeth Lewis and Caleb Bach are featured. We will be entertained with music and offered an array of munchies. Guide Terri



Contapay, a native of Arizona, has a Master's degree in education and has led study tours for years with Pima Community College. Her passion is exploring and learning about Arizona, and she is always excited to share her experiences and knowledge with others. Tour will meet at the TIA Economy Parking Lot entrance on Corona Dr. across from Airport Embassy Suites Hotel. 8:00 a.m. to 5:00 p.m. Fee of \$99 per person includes van transportation; or \$39 if you provide your own transportation and drive in caravan with the Old Pueblo tour van (\$10 discount for Old Pueblo Archaeology Center and Pueblo Grande Museum Auxiliary members). If riding in van, your vehicle can be safely parked at TIA Economy Parking Lot for \$4 per day (not included in tour fee). For tour details contact Terri Contapay in Tucson at 520-798-1201 or [contapayt@cox.net](mailto:contapayt@cox.net). Reservations required: 520-798-1201 or [info@oldpueblo.org](mailto:info@oldpueblo.org).

**Saturday December 5, 2009: "White Tank Mountains Petroglyphs of Waterfall Canyon & Mesquite Canyon"** guided fundraising tour with Shelley Rasmussen and Allen Dart, starting at White Tank Mountain Regional Park Visitor Center, 13025 N. White Tank Mountain Road in Waddell. 10 a.m. to 4:30 p.m. Fee \$30 (\$24 for Old Pueblo Archaeology Center and Pueblo Grande Museum Auxiliary members) includes all park entry fees.

Maricopa County Parks Interpretive Ranger Shelly Rasmussen (an archaeological Site Steward) and archaeologist Allen Dart guide this tour to see hundreds of ancient petroglyphs in the 30,000-acre White Tank Mountain Regional Park west of Phoenix. Tour includes a 3-hour walk along the 2.5-mile-roundtrip, fairly flat Black Rock Loop Trail to see and photograph dozens of Archaic and Hohokam petroglyphs; lunch at ramadas with picnic facilities; then afternoon visits to three petroglyph sites with Archaic and Hohokam rock art in a 3-hour, 2.5-mile-roundtrip hike along the Mesquite Canyon trail, which includes some bush-whacking and boulder-hopping. Bring your own picnic lunch and water, wear comfortable hiking shoes. Reservations required: 520-798-1201 or [info@oldpueblo.org](mailto:info@oldpueblo.org).

**Friday December 11, 2009: "Casa Grande Ruins and Middle Gila Valley Archaeology and History"** (ST147, CRN 61261) Pima Community College study tour with archaeologist Allen Dart via passenger van departing from Pima Community College, 401 N. Bonita Ave., Tucson. 8 a.m. to 5 p.m. Fee \$99.

Old Pueblo Archaeology Center's director, archaeologist Allen Dart, leads van tour to Coolidge-Florence area. Tour includes an extended visit to

archaeological features in the Casa Grande Ruins National Monument in Coolidge plus visits to the Grewe site (early Hohokam village), Adamsville Ruin (late Hohokam village with platform mound and ballcourt), historic Adamsville Cemetery and settlements along the Gila River, and Pinal County Historical Society Museum in Florence. Bring your own picnic lunch and water. Reservations required: 520-206-6468 (Pima Community College, Tucson)

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**Old Pueblo Archaeology Center’s “Archaeology Opportunities” Membership and Discounts Program**

*Archaeology Opportunities* is a membership program for persons who wish to support Old Pueblo Archaeology Center’s education efforts and perhaps even to experience for themselves the thrill of discovery by participating in research. Membership is also a means of getting discounts on the fees Old Pueblo normally charges for publications, education programs, and tours. Members of *Archaeology Opportunities* at the “Individual” membership level and above are allowed to participate in certain of Old Pueblo’s archaeological excavation, survey, and other field research projects, and can assist with studies and reconstruction of pottery and other artifacts in the archaeology laboratory.

Membership benefits include a one-year subscription to the **Old Pueblo Archaeology** quarterly bulletin, opportunities to participate in Old Pueblo’s member-assisted field research programs, discounts on publications and archaeology-related items, and invitations and discounts for field trips and other archaeology events.

**Time to renew? Or to give a gift membership to the archaeology fans in your life!**

**The Old Pueblo Archaeology Center Membership Program**

*Archaeology Opportunities* Program Annual Membership & Subscription Rates

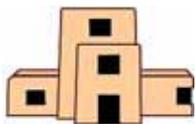
Individual	\$40	Membership categories at left provide annual subscription to the <b>Old Pueblo Archaeology</b> bulletin (4 issues), discounts on publications and classes, and opportunities to participate in Old Pueblo Archaeology Center’s member-assisted field research programs (such as archaeological excavations and surveys) at no additional cost.
Household	\$80	
Sustaining	\$100	
Contributing	\$200	
Supporting	\$500	
Sponsoring	\$1,000	
Corporation	\$1,000	

Friend \$25: Provides 1-year subscription to the **Old Pueblo Archaeology** bulletin (4 issues) and discounts on publications and classes but does not provide free participation in member-assisted field research programs.

Subscriber \$10: Provides 1-year subscription to the **Old Pueblo Archaeology** bulletin (4 issues) but no discounts, and does not provide free participation in member-assisted field research programs.

**Whichever membership level you choose,  
your membership fees support Old Pueblo Archaeology Center’s educational programs.**

# Old Pueblo Archaeology



## Bulletin of Old Pueblo Archaeology Center

Located at 2201 W. 44th Street in the Tucson Unified School District's Ajo Service Center

Mailing Address: PO Box 40577, Tucson AZ 85717-0577

520-798-1201

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**Old Pueblo Archaeology** is the quarterly bulletin of Old Pueblo Archaeology Center, a 501(c)(3) nonprofit corporation.

Questions, comments, and news items can be addressed to editor Douglas B. Craig at [info@oldpueblo.org](mailto:info@oldpueblo.org) or 520-798-1201,  
or by mail to Old Pueblo Archaeology Center, PO Box 40577, Tucson AZ 85717-0577.

For more information about Old Pueblo Archaeology Center please visit our web site: [www.oldpueblo.org](http://www.oldpueblo.org)

Your membership helps support Old Pueblo's children's education programs.

### Old Pueblo Archaeology Center

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# Upcoming Activities of Old Pueblo Archaeology Center & Some Other Organizations\*

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**ONGOING:**  
**Children's OPEN3**  
**simulated archaeological dig**  
**and OPENOUT in-classroom**  
**education programs for children**  
Contact us for details!



## OTHER ACTIVITIES MAY HAVE BEEN ADDED!

For updates and details please contact Old Pueblo:  
Telephone **520-798-1201** Email [info@oldpueblo.org](mailto:info@oldpueblo.org)  
Web site [www.oldpueblo.org](http://www.oldpueblo.org)

\* Asterisks indicate programs sponsored by organizations other than Old Pueblo Archaeology Center.

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September 5, 2009 **Volunteer Spruce-Up Work Party at Old Pueblo Archaeology Center**, 2201 W. 44th Street Tucson, 8 a.m. to noonish. If you can volunteer contact Cris Wagner at 520-798-1201 or [cwagner@oldpueblo.org](mailto:cwagner@oldpueblo.org).

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September 8, 2009 **"Set in Stone but Not in Meaning: Southwestern Indian Rock Art"** free presentation at Glendale Public Library, Glendale, Arizona\*

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September 10, 2009 **"Archaeology and You: Preserving the Past for the Future"** free presentation by Allen Dart for Arizona Archaeological Society Tubac/Santa Cruz Chapter in Tubac, Arizona

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September 17, 2009 **"Third Thursdays" free presentation at Old Pueblo: "Mesoamerica and Hohokam Symbolism, Public Architecture and Ideology"** with Arizona State Museum archaeologist Dr. Paul R. Fish

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Tuesdays September 29 through December 15, 2009 **"Prehistory of the Southwest" class** with archaeologist Allen Dart at Old Pueblo (AAS Certification credit available)

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October 15, 2009 Old Pueblo's **"Third Thursday Food for Thought" dinner & presentation: "Anarchy in Ancient Arizona: Breakdown of Hohokam Society" with William L. Deaver** at El Parador Restaurant, Tucson

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October 18, 2009 **"Set in Stone but Not in Meaning: Southwestern Indian Rock Art"** free presentation by archaeologist Allen Dart at Petroglyph National Monument, Albuquerque, NM

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October 20, 2009 **"Southwestern Rock Calendars and Ancient Time Pieces"** free presentation by Allen Dart for Colorado Archaeological Society, Pikes Peak Chapter at Falcon Police Station, Colorado Springs, Colorado\*

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October 21, 2009 **"Set in Stone but Not in Meaning: Southwestern Indian Rock Art"** free presentation by Allen Dart for Colorado Archaeology Society, Chipeta Chapter at First Methodist Church, Montrose, Colorado\*

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October 22, 2009 **"Archaeology and You: Preserving the Past for the Future"** free presentation by Allen Dart at Edge of the Cedars Museum State Park, 660 West 400 North, Blanding, Utah\*

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October 25 through December 13, 2009 (Sundays) **Traditional Pottery Making Level 1 Workshop** with John Guerin at Old Pueblo

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November 1, 2009 **Old Pueblo Archaeology Center's Cultural Resources Survey Techniques Archaeological Field School Session** (Old Pueblo members only)

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Wednesday November 4, 2009 **"Arts and Culture of Ancient Southern Arizona Hohokam Indians"** free presentation at Arizona Western College, Yuma\*

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November 6, 2009 **"Tucson-Marana Rock Art and Archaeology"** study tour with Allen Dart departing from Pima Community College, Tucson\*

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November 10, 2009 **"Ancient Native American Pottery of Southern Arizona"** free presentation by archaeologist Allen Dart at Copper Queen Library, Bisbee, Arizona\*

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November 14, 2009 **"Deer Valley & Spur Cross Ranch Petroglyphs"** guided tour with Shelley Rasmussen and Allen Dart starting at Deer Valley Rock Art Center, Phoenix

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November 20, 2009 **"Ventana Cave and Tohono O'odham Nation Archaeology and Culture"** study tour with Allen Dart departing from Pima Community College, Tucson\*

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November 22, 2009 **"Amerind Foundation and Singing Wind Bookstore Thanksgiving Festival"** guided tour with Terri Contapay starting at Tucson International Airport Economy Parking Lot on E. Corona Drive, Tucson

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December 5, 2009 **"White Tank Mountains Petroglyphs of Waterfall Canyon & Mesquite Canyon"** guided tour with Shelley Rasmussen and Allen Dart starting at White Tank Mountain Regional Park in Waddell

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December 11, 2009 **"Casa Grande Ruins and Middle Gila Valley Archaeology and History"** study tour with Allen Dart departing from Pima Community College, Tucson\*

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December 12, 2009 **Old Pueblo Archaeology Center's Cultural Resources Survey Techniques Archaeological Field School Session** (Old Pueblo members only)

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January 8, 2010 **"Tucson-Marana Rock Art and Archaeology"** study tour with Allen Dart departing from Pima Community College, Tucson [or possibly different tour – call for update]\*

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January 10, 2010 **Old Pueblo Archaeology Center's Cultural Resources Survey Techniques Archaeological Field School Session** (Old Pueblo members only)

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January 29, 2010 **"Ventana Cave and Tohono O'odham Nation Archaeology and Culture"** study tour with Allen Dart departing from Pima Community College, Tucson.\*

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