

# Old Pueblo Archaeology

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## Arts and Culture of the Prehistoric Hohokam Indians

# The Ancient Use of Seashells in Arizona and Beyond

by Arthur W. Vokes

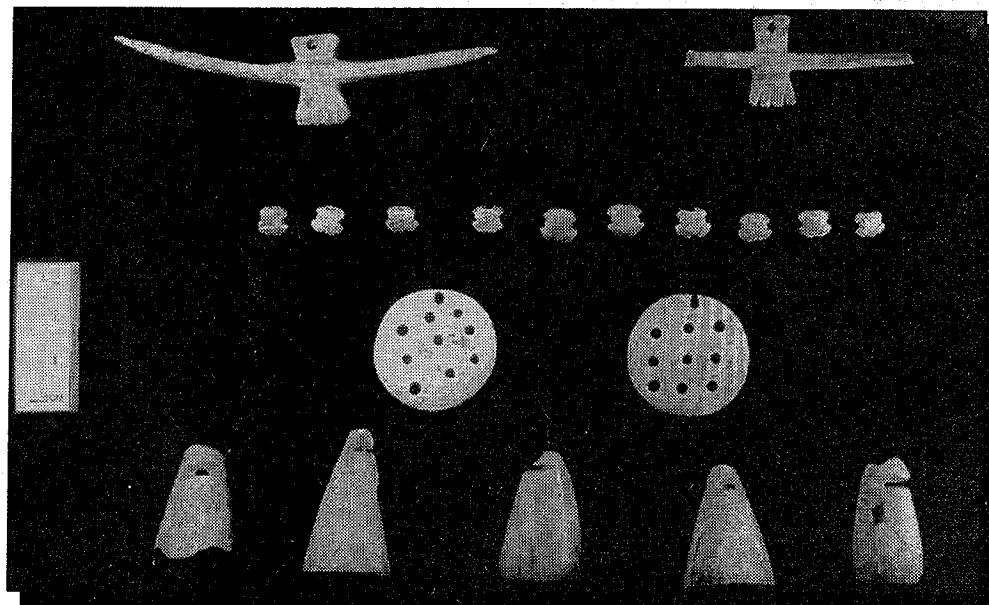
Arizona State Museum, University of Arizona

The use of clam and snail shells as a medium for the manufacture of jewelry and other decorative items has a long tradition within the southwestern United States and northwestern Mexico. The Hohokam Indians who occupied the desert regions of southern Arizona were pre-eminent in their role in the exchange systems that involved the manufacture and use of shell ornaments.

**Precursors to the Hohokam Shell-working Tradition.** Until the recent excavations of sites in the Santa Cruz River floodplain, the shell assemblage associated with the Pre-Hohokam populations was sparsely represented and poorly understood. The Early Agricultural period assemblages from the Santa Cruz Bend, Los Pozos, and Stone Pipe sites, which date between 1200 B.C. and A.D. 150 (dates cited here refer to periods recognized in and near Tucson), have greatly expanded the available sample and have changed our understanding of the region's shell use prior to the Hohokam dramatically.

The early shell material is largely dominated by mollusks obtained from the Gulf of California, but California coast shell resources are also well represented.

The early assemblages are composed predominantly of various bead and pendant forms. The most common style of bead is the whole shell form where the top of the spire was ground or bro-



**Hohokam artifacts made from seashells** occur in various sizes and shapes. This photo shows 2 pendants resembling stylized flying birds, a series of frog pendant-beads, and 2 geometric disk pendants all made from sea clams, plus 5 *Conus* snail shell tinklers. Photo by Arthur W. Vokes.

ken away. Also present are cut bead styles. Most of these are disk beads but a number of "rectangular" beads are also present. Most of the cut beads were made from shells that have a nacreous (iridescent) interior layer, such as abalone.

The rectangular -- or square -- variants are largely restricted

to this Early Agricultural period. At the Coffee Camp site north of Tucson in the Santa Cruz Flats region, a single deposit with 885 rectangular beads was recovered.

The second most common shell artifacts in the Early Agricultural assemblage are various forms of pendants. The only whole shell one is made from a limpet shell. Pendants similar to it were reported from sites in the desert of southeastern California and at Ventana Cave. More common are geometric pendants, many of which are rectangular and made from nacreous shell.

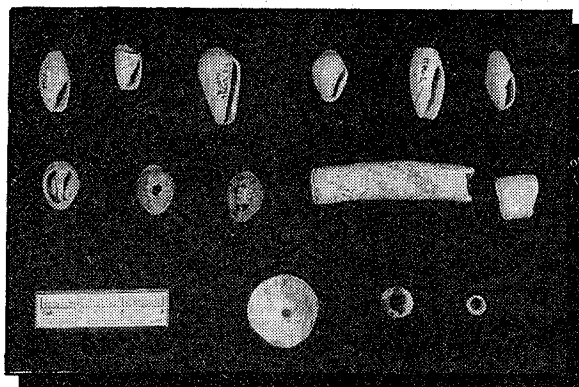
A prominent feature of these assemblages is the virtual absence of bracelets. Only one bracelet-like artifact was recovered during the recent excavations, and there is some question as to

*Continued on page 2.*

**Visit the Ventana Cave site on October 23!  
Historic Tucson cemeteries tour November 27!  
Other Activities, Too -- See page 9!**



## The Ancient Use of Seashells in Arizona and Beyond (continued from page 1)



Some pre-Hohokam shell bead forms from Early Agricultural period sites in the Tucson area. Photo by Arthur W. Vokes.

whether it was really a bracelet. It is very small and would have only fit over the wrist of an infant or very young child. It is possible instead that this band was another form of pendant. The absence of bracelets from these assemblages was not expected at the outset of the excavations because previous reports had implied that bracelets were recovered from Late Archaic deposits. Subsequent review of these occurrences suggests that most are of questionable association.

In the following Early Ceramic period, between ca. A.D. 150 and 650, the Early Agricultural period pattern is reversed, with a sharp increase in *Glycymeris* clamshell bracelets. In the collections from the Stone Pipe and Square Hearth sites, bracelets represent nearly 55 percent of the total shell assemblage, a ratio that compares favorably to that reported for later Hohokam assemblages. All of the bracelets are plain forms and many have had the beak of the clamshell (the protuberance next to the hinge area) completely ground away leaving a continuous, even band. The significance of this is unclear but could reflect cultural ties with northern Mexico. This is a feature on bracelets reported from the Río

Altár area of Sonora and the Río Balsas region of the states of Guerrero and Michoacán in western Mexico.

Other types of artifacts present in the assemblage include whole shell beads and cut geometric pendants, which may reflect a continuation of earlier traditions. However, the frequency of beads in these assemblages is markedly reduced.

**Hohokam Shell.** The dominance of *Glycymeris* bracelets in shell artifact assemblages continued unabated into the Hohokam era. During the Pioneer and early Colonial periods of ca. A.D. 650-950 it was not unusual for these bands to represent as much as 60 to 80 percent of the recovered finished artifacts. The great majority of the bracelets are plain, unembellished forms. However, efforts to decorate the bands began relatively early.

By the end of the Pioneer period, some bands exhibited shallow notches that were cut into the lower margin of the nonhinge portion of the shell. These appear to be efforts to replicate the nat-

ural crenulations that exist along this portion of the clamshell's margin, but which are eradicated during the grinding of the band. Archaeologist Emil Haury referred to this decoration as marginal nicking.

Over time, some of these notches became more exaggerated and eventually were cut into both sides of the band in an alternating pattern, which gives the impression of a moving snake's body. This was often elaborated on with the addition the snake's head and a tail replete with rattles. The more elaborate examples have multiple snakes

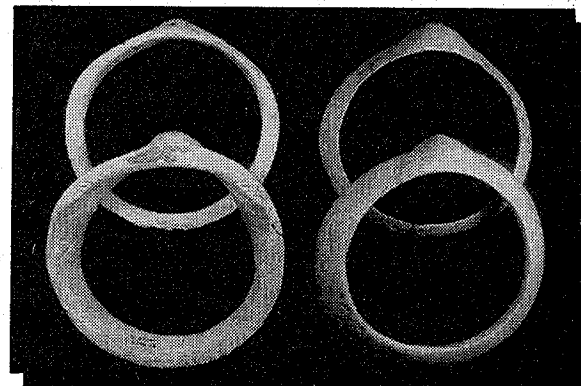
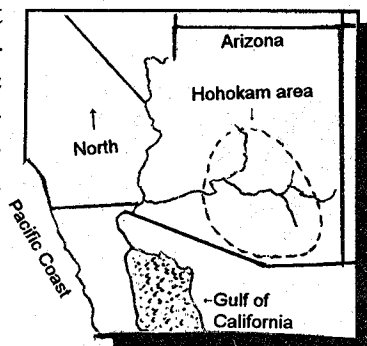
intertwined with a bird grasping the snake's head in its beak or talons.

Another style of bracelet decoration is the carving of the shell's umbo (the shield-like knob near the shell's hinge; plural is "umbones") into the image of a frog or toad. These are often very realistic representations with the eyes, backbone and feet well defined. In some instances, these images are combined.

These motifs are generally found in Hohokam shell of the Colonial and Sedentary periods between 750 and 950, with the full relief carving becoming rare by the end of the Sedentary period. During the decline in carving there was a corresponding increase in the use of incising as a decorative technique. Most common are various designs structured around a zigzag motif and nested sets of chevrons. Wesley Jernigan, in his book *Jewelry of the Prehistoric Southwest*, argues quite convincingly that many of these designs are abstractions of the snake's body motif.

**Those Bountiful Beads.** Next to bracelets, the most common artifact in most shell assemblages is the bead, in various types. In terms of absolute numbers, some collections have more beads than any other form.

There are essentially two types of beads in these assemblages: those made with minimal modification of the shell valve and bead forms that involve the

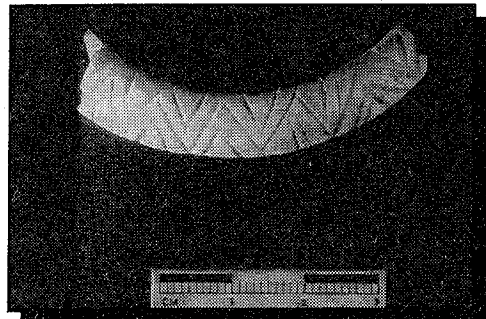


Hohokam shell bracelets are mostly plain bands cut out of the margin areas of the very thick *Glycymeris* clamshells from the Gulf of California. Photo by Arthur W. Vokes.



reduction of the shell to such an extent that it was essentially only incidental that the medium was shell. (The valve referred to here is one of the parts making up the shell of a mollusk. Clamshells normally have two valves that fit together so clams are considered "bivalve" mollusks, whereas snails only have one and so are called "univalve.") Examples of minimally modified valves are whole shell beads of a variety of styles, and cylindrical beads made from *Olivella* snail valves.

Whole shell beads are generally simple univalves that were perforated either by grinding away the apex of the spire or creating a hole through the back of the shell. The only bivalve that was used to make whole shell beads was *Glycymeris*. Only the small, juvenile clam shells were usually selected, then perforated by grinding away the shell's



Hohokam shell bracelet band fragment incised with alternating nested chevrons. Photo by Arthur W. Vokes.

beak. They are almost exclusive to the Classic period (ca. 1100-1450).

Cylindrical beads made from *Olivella* shells are very similar to the whole shell beads but were ground at both ends so that what remains is a barrel-like bead. This form also is largely restricted to the latter part of the Hohokam era, originally becoming popular during the later half of the Sedentary period and very common in the Classic period.

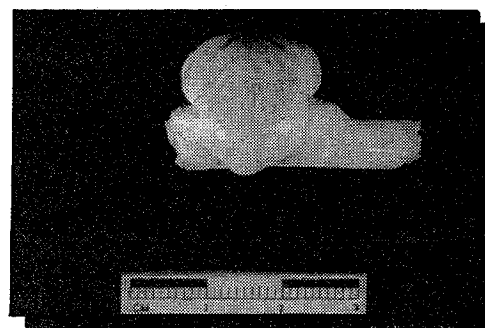
Cut shell beads are common to all periods of the prehistoric era. The primary form is the disk bead made from white marine shell, but other forms are present and some beads are carved from relatively colorful pink and purple

*Spondylus* and *Chama* shell. Other types of cut beads are bilobate (somewhat figure-8-shaped) ones and irregular bead-pendants. The latter were almost always carved from the hinge of a *Chama* or *Spondylus* valve so the carver could take advantage of the natural thickness of the shell and the somewhat distorted shape of the hinge area. Both forms are found throughout the Hohokam sequence but are far less common than the disk beads.

*Pendants as Pelicans Perhaps?* In contrast to the beads, most forms of whole shell pendants were made from bivalves like *Glycymeris* or various scallops and cockles, although examples of univalves such as *Turritella* were also employed. A related form is the shell tinkler, which was usually made from a cone shell. Tinklers have a hole cut or drilled through the lower, outer lip of the shell and the entire shell's spire was removed. Tinklers were worn in sets around the ankles, or lined the edges of clothes so that they rattled with movement. They first appeared in the Hohokam region during the Sedentary period but were more common in the following Classic period, and are often recovered in association with the late Hohokam platform mound sites.

One area where the Hohokam excelled in their creative efforts with shell is in the arena of cut shell pendants, particularly with respect to various life forms. These people were acutely aware of the animals that lived around them, and undoubtedly incorporated them into their oral traditions. Among the earliest forms are depictions of birds, various quadrupeds including coyotes and dogs, and -- as one might expect -- snakes. Later on, the emphasis shifted to lizards and to frogs or toads (or both).

There are two broad traditions of bird imagery among the Hohokam. One is where the animal is shown in flat, two-dimensional format but with a relatively life-like pose, while the other is an increasingly abstract representation of the bird in flight. The more life-like forms are generally representations of



A Hohokam decorated shell bracelet fragment with the umbo of the shell carved into the shape of a frog. Photo by Arthur W. Vokes

water birds, as indicated by long legs and a beak. Some of the birds are shown pecking at snakes or fish held in their talons.

Another style of bird image was carved from broken *Glycymeris* bracelets. In this type the bird is shown in an extended pose with the beak-head, torso and legs forming an arc that reflects the curve of the bracelet's band. The bird has a long beak attached to a relatively small head that is at the end of an extended neck. The wings are pulled tight to the body with the feathers indicated by short incised grooves. The long legs and feet extend directly behind the body. Haury referred to these as representing pelicans. However, others have suggested that they represent herons, which migrate through the region seasonally. These effigies occur in the Colonial and Sedentary periods but are virtually unknown from Classic period contexts.

Abstract representations of birds in flight are found in all periods of the Hohokam occupation. In some cases these images would be difficult to recognize as birds were it not for their use in contemporary ceramic decorations. The head and tail ends of these abstract representations are essentially a simple hourglass form with the wings extending out to the sides from a constricted center. No effort was made to show details such as feathers, beaks, or feet.

A less stylized version of the flying bird occurred in the Colonial through



Classic periods. It also has the wings extending to the side, but some level of detail is provided to the head and tail, although this is still rather minimal. The head and beak are often shown turned to the side so as to be seen in profile. The lengths of the extended wings can be very exaggerated. A set of these recently recovered from the Tonto Basin have wingspans exceeding 9 cm, although they were only 2 cm in height.

The canine-like animal effigy form is another style of pendant that the Hohokam would occasionally carve. These are long-tailed animals with relatively slender bodies, and heads with ears and a long, toothed snout. The animal is typically shown in a running stance, with the front and back sets of legs shown extended.

In some instances, most notably the cache from the Citrus site illustrated in *Salvage Archaeology in Painted Rocks Reservoir, Western Arizona* by William Wasley and Alfred Johnson, the animal has a more static stance and the nose is squared off. Haury suggested these representations were images of a Mesoamerican earth deity called a *cipactli*, which is supposed to be derived from a crocodile. There are some similarities between the more static representations and some of the images from Mesoamerica. However, the running figures show little resemblance to these images, and appear to be coyotes or dogs.

Pendants of frogs/toads and lizards are largely restricted to the Classic per-

iod. In the Preclassic, frogs or toads were depicted on the umbones of bracelets and were generally not carved as pendants. The few pendants reported in the literature are usually reworked bracelet fragments that do not incorporate the entire valve. This changed in the Classic period, when artists used the natural shape of the *Glycymeris* shell to create remarkably life-like images of these less than beautiful animals. In addition, very abstract representations were also made, some of which only show part of the body and no detailed features.

Lizard effigy pendants exhibit a similar temporal pattern, although there are some representations known from Sedentary period contexts. The earlier images tend to be fairly life-like, with the more stylized representations associated with the Classic period. More abstract representations tend to simplify the legs into short, geometric-shaped projections, and exaggerate the body and tail. Some show the body as very bulbous, while others have the torso elongated and very narrow. In the former specimens, the tail tends to be a long spike-like projection, while in the latter cases it is short and triangular. Examples of the long body form are known to reach lengths of greater than 10 cm.

Pendants carved into the various geometric shapes occur throughout the Hohokam occupation and, as discussed earlier, are also found from deposits that predate the ceramic era. Often the divisions between the different shapes are ambiguous with the various forms blending into each other. Perhaps the most common are simple, flat, circular and rectangular shaped pendants. In some instances, the center of the disk was cut out to produce a washer shape or the perimeter was notched to produce a sunburst effect. In others these embellishments were combined. The rectangular and square -- or diamond --

pendants are generally left solid.

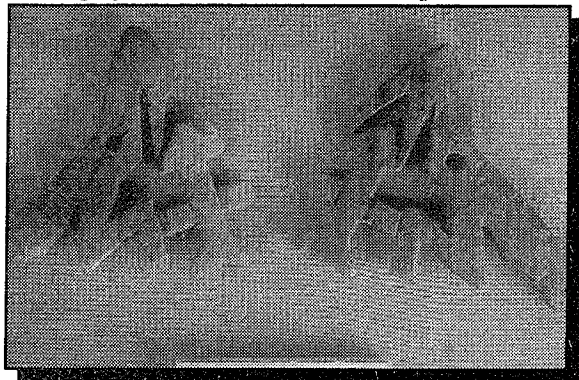
#### *Other Forms Etched in Memory.*

The categories of bracelets, beads and pendants discussed so far account for the vast majority of artifact forms made by the Hohokam. However they do not incorporate all forms. During the late Colonial and early Sedentary periods the Hohokam developed the technique of etching shell, and would also incorporate shell tablets into mosaic images that included other materials such as turquoise and argillite.

Among the truly remarkable achievements of the Hohokam was their discovery of how to etch shell. They were evidently the first people in the world who used this technique. Beginning in the late Colonial period and lasting late into the Sedentary period -- roughly A.D. 900-1100 -- these people produced some excellent examples of etched shell. Most of these pieces employed the large *Laevicardium* clam valves.

Generally the etched designs are geometric in nature with scrolls, diamonds, and serrated lines being common motifs. One remarkable exception was recovered from Snaketown during the 1934-1935 excavations. This is a complete valve with a large horned lizard incised over the exterior surface. Another unusual specimen was found near the small town of Rillito at the northern foot of the Tucson Mountains. This specimen is etched with an intricate rectilinear scroll motif and is painted with green and red pigments.

The Hohokam etching technique involved creating a design painted in a "resist" -- a substance that resisted the action of acid -- over the surface of the shell. The valve was then placed into a weak acid bath, probably a vinegar, possibly derived from fermentation of syrup made from saguaro cactus fruits. After a while, it was removed from the solution, and the areas not coated with the resist would have been reduced so that the design stands out from the surface. The resist would then be scrubbed off and the design painted if so desired.



**Pelicans and Pisces?** Some Hohokam pottery contains stylized fish designs much like the abstract fish being eaten by the birds in this pair of Hohokam carved shell pendants. Photo by Arthur W. Vokes.



The Hohokam etching process has been identified through finds of sea-shells that were prepared with the resist but never actually etched. It has been suggested that the knowledge of the process was restricted to a select few, and that when these individuals died, the technology passed with them. The function of these shells is uncertain, but it is reasonable to assume that these unusual specimens were highly prized.

The incorporation of shell into mosaics of turquoise and other stone may have begun as early as the Colonial period, and was certainly being done by the Sedentary period. During the following Classic period it was relatively widespread. Evidence from Snaketown in the form of tesserae (small, individual mosaic tiles) indicate the early designs were quite complex. Unfortunately, no intact specimens have been recovered.

In the Classic period a mosaic-like overlay technique was used to embellish some bracelets and, more commonly, pendants, some of them quite large and complex. Often, shell provided a backing for the overlay as well as sometimes being employed in the tile pavement itself. An excellent example is a turquoise mosaic frog that is part of the Norton Allen artifact collection recently donated to the Arizona State Museum.

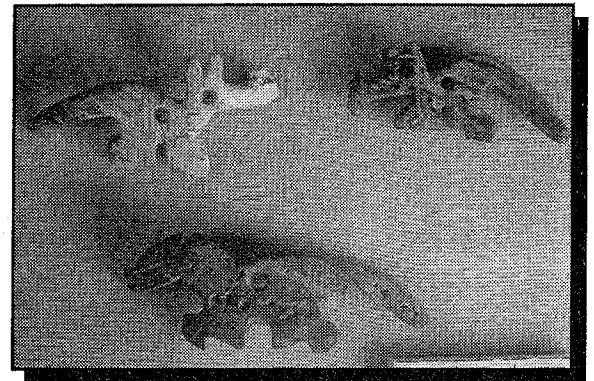
**Southwestern Shell Shipments.** The desert regions of the southwestern United States may seem like an unlikely region for the development of an extensive shell ornament industry, but it is in this area that the Hohokam developed one of the more complex shell traditions known for the prehistoric era. These people are credited with the creation of carved effigies, ornate bracelets, and the first use of etching technology in human history. By its very presence, marine shell is exotic to the region, but the seashell sources were within direct access for some and available through trade for others.

The Gulf of California -- approximately 440 km (273 miles) southwest of

the Tucson Basin -- is the nearest source of marine shell, while the more distant California coastline, with its resources, is not beyond the reach of these industrious people. Historically, there are reports of Tohono O'odham traveling to the northern reaches of the Gulf to obtain salt and other products of the sea. Hohokam ceramics have been recovered from coastal sites in the regions around Puerto Peñasco in Sonora, and near Los Angeles.

Archaeologists working in the U.S. Southwest benefit from a natural division of oceanic environments that occurs off the western coast of the Baja peninsula. In the area of Magdalena Bay, two currents, one representing the warm waters of the Panamic province and the other the colder waters of the Californian province, converge and then turn out to sea. The differences in these biotic environments have resulted in the occurrence of many species of mollusks in only one zone, or having a limited distribution and frequency in one zone relative to the other. While both biotic communities contributed in some degree to the shell material employed by the Hohokam, the species and genera that are most commonly encountered in Hohokam assemblages were obtained from the Gulf of California, a northern finger of the tropical Panamic province. The one exception is the abalone shell, which is from a mollusk that lives only in the coastal waters off California.

In the early period of archaeological exploration in the American Southwest, archaeologists were quick to recognize the importance of shell in the exchange systems that linked the prehistoric inhabitants. About a century ago, Jesse Walter Fewkes, while writing on the pueblos of the Colorado Plateau, commented on the presence of shell and noted that it was not as prevalent as he had seen in an archaeological site along the lower Gila River, which he suggested may have been a source for the



**Hohokam pendants sometimes represent quadrupeds.** The top two pendants here are the Mesoamerican-inspired *cipactli* forms. The bottom one is more like a coyote or domestic dog. Photo by Arthur W. Vokes.

Pueblo Indians' material.

During his work at the Casa Grande Ruin in Arizona, Fewkes went so far as to suggest that most of the shell at that center was obtained from the Gulf of California. However, he did not attempt to discuss mechanisms by which this material was brought into the region, aside from a vague reference to direct acquisition and extensive trade with other tribes.

It was not until the late 1930s that a serious attempt was made to identify the trade routes along which shell material was moving from the Coast into the interior regions. Donald Brand, who had spent considerable time in Sonora as a cultural geographer, postulated the presence of several "primary, secondary, and minor trade routes" that originated from the Gulf of California.

The major route he proposed was across northern Sonora, following along the Río Magdalena and then turning north along the Santa Cruz and San Pedro rivers, which it followed until reaching the core region of the Salt and Gila basins. Secondary routes ran along the Colorado and Gila rivers, with a minor route across the deserts of the Papaguería in southwestern Arizona.

Given the information at hand, and the logical assumption that trade routes would follow the river systems, the postulated routes were quite reasonable, but as we have since come to under-



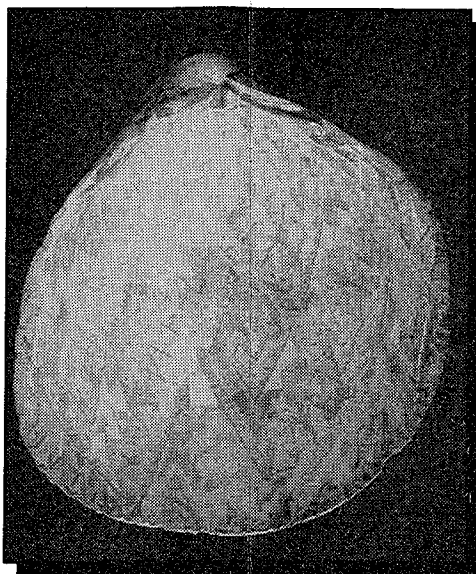
stand, not entirely correct. During the 1950s and early 1960s, reports on regional archaeological surveys and limited excavations reported the presence of considerable quantities of shell material on sites in the deepest parts of the central Papaguerian desert and along the southern edge of the Gila River valley.

However, it was not until 1972, when archaeologist Julian Hayden reassessed the evidence of shell manufacturing sites and rock art in the region, that a formal route was proposed. Based in part on his work in the Sierra Pinate, he proposed that the route originated near Puerto Peñasco and ran along the Río Sonoyta for a distance before striking out across the desert, following the Growler Valley and ultimately ending up in the Gila Bend area where there are several large settlements with extensive amounts of shell manufacturing debris associated with them.

In recent years the National Park Service has conducted several cultural resource surveys of Organ Pipe National Monument, and the Department of Defense has funded a series of large surveys on the Barry M. Goldwater Range and Cabeza Prieta National Wildlife Refuge. These have confirmed Hayden's proposed route and have expanded the route to include a number of the north-south valleys in the area, thus forming a trade corridor that passed to the west of Sells, Arizona, and extended northward through the Santa Rosa Valley.

The western boundary of this trade corridor appears to have been the Granite Mountains that form the western edge of the Growler Valley. While the details are sketchy, there is some evidence to suggest that the exchange routes may have shifted from the eastern portion of the corridor to the west over time. It will take excavation at some of the ancient settlements in the region to establish a tighter chronology of events.

During this same period of research it has become clear that Brand's



**One of the finest examples of Hohokam etched shell known** was painted with red and in turquoise-colored pigments after the design was etched. This clamshell specimen was discovered near Rillito, Arizona. Photo by Arthur W. Vokes

primary route along the Río Magdalena and Santa Cruz River is not as significant as previously thought.

Reviewing the assemblages from Preclassic period sites along the middle and upper Santa Cruz, archaeologist Doug Craig showed that there is some trade taking place, but it is relatively minor by comparison to the Papaguerian systems. However, assessments of sites along the foothills of the Coyote Mountains, north of Sasabe, indicate that during the late Sedentary and early Classic periods, settlements along a route that extends up the Altár-Avra valleys became much more active. This coincides with changes in the nature of sites in the Papagueria and Gila Bend regions, which seem to indicate a shift in the dynamics of the exchange systems.

Most of the settlements in the central Papagueria that date to the Pre-Classic tend to be small, ephemeral campsites reflecting a transitory occupation of the region. In the archaeological record, these tend to be described as small artifact scatters, often lacking decorated ceramics and ground stone

that might mark a more prolonged occupation.

The settlements that were involved in the shell trade often have unfinished blanks of bracelets and related debris. Dating of these sites is often tenuous, based largely on the few decorated ceramics and the characteristics of the associated plainware.

In the late Sedentary and into the Classic period, a set of much larger sites appears in the archaeological record. These settlements are found along the Quijotoa Valley, in the Organ Pipe National Monument, and in the Growler Valley. Several appear to contain reservoirs or have other water control features associated with them, and there is some evidence indicating these people were growing crops in the nearby floodplains.

Who these people were, and the reason for the shift is regional settlement system is unclear at present. Changes that were taking place along the Gila to the north may have served as a catalyst. In the late Sedentary, large sites such as Gatlin, in the Gila Bend area, and Snaketown were abandoned. There is evidence indicating that people related to the Patayan culture of the lower Gila and Colorado rivers were moving up the Gila, and occupied the Gila Bend area at this time.

**A Tribute to the Shell Carvers.** While the tradition of shell work in the Southwest certainly extended beyond the Hohokam, it is equally clear that these desert dwellers played a central role in the shell trade, and in the manufacture of seashell ornaments. They employed seashell for making personal adornments as well as for a commodity for exchange with groups further in to the interior.

The Hohokam were masters of carving shell into a variety of forms, and like the painters and sculptors of today, there is a wide range of expression to be found within the assemblages recovered from their settlements.

## A Goodbye to Sara P. Chavarria . . . and a Welcome to Eric Kaldahl!

Old Pueblo Archaeology Center's original Educational Project Director, Sara Chavarria, was recently awarded her Ph.D. degree by the University of Arizona and will be leaving for a new home in France with her husband, Wim Van Leeuwen, this month. Sara is a highly competent archaeology educator who is well liked by all who get to know her. Old Pueblo will miss Sara but wishes her well in her "new digs."

To fill the substantial void that we knew would occur when Sara leaves, Old Pueblo Archaeology Center hired archaeologist Eric J. Kaldahl in April to gradually take over as Educational Project Director. Sara began orienting Eric to the Sabino Canyon Ruin program right away and he has directed several excavation sessions there since then.

Eric has participated in a number of archaeological excavations and surveys for archaeological sites in the southwestern U.S. and also has research interests in Central Plains archaeology.

He has extensive experience in teaching public archaeology programs, chipped stone artifact analysis, Quaternary paleoecology, and quantitative methods. He has been an adjunct faculty member at the University of Arizona, Pima Community College, and the University of Nebraska-Lincoln, and has instructed archaeological education workshops for students, teachers, naturalists, and archaeologists. He has worked for the National Park Service at historical sites in the Midwest and for the University of Nebraska-Lincoln's Division of Archeological Research, and has already headed up several cultural resources testing and survey programs for Old Pueblo Archaeology Center.

Old Pueblo Archaeology Center welcomes Eric and invites our readers to peruse the following summary

### A Heartfelt Thanks to the BEST Volunteers!

Well -- I am off to France! I will miss everyone at Old Pueblo and wish to extend my home to you in France. Working at Old Pueblo was a wonderful experience I will always treasure. The best part of working there was the opportunity to meet so many dedicated people interested in reaching out to the public and unselfishly participating in our archaeology education programs.

I would especially like to thank all of the Sabino Canyon Ruin volunteers for making working at this site a professional and enjoyable experience for myself as well as the number of students we taught together.

Special thanks must go to Jim Trimbell, Gail Roper, Tom Todd, Steve Stacey, Joan Clark, Deva Abela, Sam Greenleaf, Jim Volkman, Werner Zimmt, and Ivan & Della Curnutte, many of whom have been working with me from the first day of excavation at the site. Knowing I had such a reliable crew ensured the success of this program. To the many other wonderful volunteers, your contributions go equally acknowledged and appreciated.

Merci beaucoup et bon chance.

Au revoir Al, Darla, Jeff, Eric  
et toute mes aims.

Love,  
*Don*



P.S. (Look for the next newsletter to get my new e-mail address.)

ry that he has written to tell you what's in store for our education programs.

## Old Pueblo Archaeology Center Education Program Report

To all the members I haven't met yet, *Hello there!* Stop by the Center sometime, I'd like to meet you! I'm very happy to have joined Old Pueblo as the Educational Program Director and Sabino Canyon Ruin Project Director. All the members, volunteers, staff, and board members I've met have made me feel very welcome here.

I was excited to become a part of this organization because of my own commitment to education and outreach in archaeology. Part of my charge has been to develop new programming ideas and explore ways of implementing those ideas. I'd like to take some time and share with you where our educational programs are today.

**Our Existing Programs:** Public excavations will continue at the Sabino Canyon Ruin through June 2000. In the coming year, we will start wrapping

things up -- closing older excavation areas, developing an interpretive trail through the site, writing reports of our activities, and selecting our last areas for investigation. Our season of site tours will begin again this October.

OPEN1 is getting a major face lift. Robin Rutherford and volunteers are going to refinish the excavation's floor, replacing the two big pithouses with some smaller ones and raising the base level of excavation. OPEN1 will also be getting a roof with help from some of our community sponsors.

Al Dart's once again an Arizona Humanities Council lecturer, watch for his presentations coming soon to a neighborhood near you!

And Allen Denoyer is continuing his popular flintknapping classes in the coming year, and is expanding his lessons to include atlatl-making and spear-throwing lessons. Heads up

everyone (and keep your pet mammoths at home)!

**Future Programs:** This fall we'll be offering a 16-hour workshop for area teachers, focusing on archaeological lessons for the classroom. Thanks to Pima Community College, this course is available for 1 credit hour, allowing interested educators to earn professional development credit through their school districts. We also are offering this classroom-material workshop in conjunction with the Sabino Canyon Ruin workshop -- giving teachers 2 hours of increment credit and Tucson Unified School District (TUSD) teachers a chance to earn hours for the *DESERT Project*: a National Science Foundation sponsored TUSD program in science education.

In collaboration with Tohono Chul Park, we are working on an elementary



school outreach program called Past Lifeways that will combine Tohono Chul's successful ethnobotany outreach program with a Hohokam lifeways program developed by Old Pueblo.

In partnership with Pima Community College's (PCC's) Community Campus, we are offering a series of lectures, site tours, and excavation opportunities to Tucson's retirement communities. We are already scheduled to visit three communities after January 1, 2000. Al Dart and I are both going to be integrated into the PCC's public lecture series in Green Valley and Tucson starting later this fall.

And finally, AmericaQuest is coming to our virtual town this spring. What's that, you ask? Those internet surfers among you might remember MayaQuest and other similar programs offered through Classroom Connect, a web-based interdisciplinary educational provider. This spring Classroom Connect will focus on the American Southwest, with archaeology an important part of their AmericaQuest visit. They will be working with Old Pueblo among others, through physical visits and virtual reality, to teach students about our region's prehistory in on-line classrooms across the nation.

I hope that you are as excited as I am about the expanding and growing

programs of Old Pueblo. I'd love to hear more from our members and volunteers about programs you'd like to see offered through the Center. Give me a call or come by and visit!

### Calling All Volunteers Who like Dirt or Kids (or Both)!!!

In late October Old Pueblo Archaeology Center will offer a workshop for volunteers to learn about the new layout of OPEN1, Old Pueblo's full scale model of an ancient home site, and about procedures and instruction materials used in our education program there.

OPEN1 is a mock archaeological dig site behind Old Pueblo Archaeology's office. Old Pueblo's volunteers have constructed pithouses and outdoor cultural features, and have buried prehistoric artifacts there for children and their families to learn about the lifestyle of the Hohokam people through the science of archaeological excavation.

The OPEN1 site has suffered heavy wear and tear since 1997 so it will be getting a face lift as soon as the monsoon season is over, sometime in mid-September. If you would like to help us recreate new pithouses and outdoor cultural features please leave a message with Allen Dart.

We are also in need of volunteers

somewhat experienced in excavation procedures to help us teach hands-on archaeology techniques to small groups of children age 8-12. Most classes are on weekday mornings and last 2 hours. If you would like to help please call Robin Rutherford at 299-7888 or Al Dart at 798-1201.

### Calling All Sabino Canyon Ruin Crew Chief Volunteers!!!

On November 13, from 9 a.m.-1 p.m. at Old Pueblo Archaeology Center, Eric Kaldahl will be offering a workshop for those Sabino Canyon Ruin volunteers who serve as crew chiefs, and for other current volunteers who would like to learn to become volunteer crew chiefs.

The first portion of the workshop will discuss the experiences of our volunteers and share some ideas about the program. The second portion will address the educational and supervisory roles of crew chiefs, the maintenance of site records, and the interpretation and documentation of observations. The final portion will discuss the Sabino Canyon Ruin research design and our action plan for 1999-2000.

Please call Old Pueblo at 798-1201 to sign up for the workshop, and feel free to bring a lunch! See you there!

### Supporters of Old Pueblo Archaeology Center: \*\*\*\* May 25-August 27 \*\*\*\*

**Cash Donors/Grantors:** James A. Britton, Robin J. Coon, Allen Dart, Sally S. Drachman, George J. Gumerman III, Karen Huselid, Miles Prescott, Jean N. Reid, & Thomas N. Sickels. Many others made donations during Old Pueblo's public presentations and tours, or bought raffle tickets.

**Donors of Goods and Services:** In addition to maintaining Old Pueblo's web site, Steve Stacey donated a new computer system to us, including a scanner and printer! Moran, Quick & Yeanoplos, P.L.L.C., gave Old Pueblo a substantial discount in fee for preparing our IRS 990 form for 1998. WestLand Resources, Inc., provided a site plan for Old Pueblo Archaeology Center to submit with our City of Tucson building permit application for the new OPEN1 ramada. Maridith Schuetz-Miller donated a bundle of archaeological field and laboratory research equipment items.

Karen Bright, T. A. Caid Designs, Allen Denoyer, T. J. Marsh, Mosaic Eclectic Interiors, Metro Restaurants (McMahon's Prime Steakhouse, Metropolitan Grill, Firecracker, City Grill, Keaton's Arizona Grill, and Bob's), Gail Roper, Silverbell Trading, and Helen Unruh donated gifts for Old Pueblo Archaeology Center to raffle or auction during our January 2000 fundraising events.

**Volunteers:** Our thanks again to Carol Richardson, Bess Puryear, and Ceil McPherson for mailing the June bulletin, and to Karen Bright, Carole Collins, JoAnn Cowgill, Cynthia Cobb, John Davis-Arizona Lithographers, Alene Goodman, Virginia Howard, Linda Pumphrey-Mountain Mist, Gail Roper, Betty Ryan, Phyllis Sirrine, Suzy Weaver, and Nora Wilson and others for working on quilts to be auctioned at Old Pueblo's January art auction. In addition to the unlogged hours those folks spent, another 270.45 recorded volunteer hours were donated to Old Pueblo by Peggy Bommersbach, Rebecca Bommersbach, Isobel Broome, Ashley Butz, JoAnn Cowgill, Kerin Gordon, Alex Kurota, Michelle Kurota, Doug Lindsay, Ester Matlock, Mary Lu Moore, Bridget Nash, Scot Palazzo, Jeremy Pine, Gail Roper, John Rutherford, Robin Rutherford, Linda Marie Small, Steve Stacey, and Jim Trimbell.

Thanks a lot, folks!

Our apologies to anyone we may have overlooked in these acknowledgments.

**New & Renewing Members:** Barbara P. Barna, Rosemary L. Bergeron, Michele & Gene Brumblay, Joan N. Clark, Valerie & Bob Conforti, Robin J. Coon & Jackie Deets, Carolyn & John Davis, Kerin Gordon, Christian Gonzales, Theresa M. Hagan, Harvey E. Hastrup, Anne C. Hickman, Cleta Hutchison, Jackie Kinman, Todd Mailloux, Rose Manchon, Joan Matlock, Lydia R. & F. Robert Paulsen, Joseph Payne, Jean Rhoades, Gail L. & Danny Roper, William A. "Scotty" Scott, Thomas N. Sickels, James R. Streeter, Jim Walker, Michael & Corey Woodson, and Ron, Skye, & Rachel Zack.

### Old Pueblo Archaeology Center's Board of Directors

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## Old Pueblo Archaeology Center's Coming Events

- September 23, 25, & 30  
& October 7 & 9

### *Project Archaeology workshop*

#### at Old Pueblo Archaeology Center

Thursdays 4:15-6:15 p.m.; Saturdays 8 a.m.-12:30 p.m. \$70 fee (\$56 for Old Pueblo members). Optional hands-on excavation days for 1 extra credit hour on Oct. 16 & Nov. 6, 8-4:30, \$50 extra (includes *Archaeology Opportunities* membership). Call Eric Kaldahl for reservations: 798-1201.

- October 30, November 20, & December 18 -- OPEN1 mock archaeological dig & Native American crafts programs at Old Pueblo Archaeology Center. All are on Saturdays 9-11 a.m. \$8 per session (\$6 for *Archaeology Opportunities* members & their kids). Call Allen Dart or Robin Rutherford for reservations: 798-1201.

### November 27 Tucson Historic Tour: Evergreen & Holy Hope Cemeteries

For Old Pueblo Archaeology Center's 2nd annual "Saturday of Thanksgiving weekend" tour our guide will be professional historian Fred McAninch, curator of Arizona Historical Society's Sosa-Carrillo-Fremont House Museum.

Fred's fascinating tour will include the history of each cemetery and visits to several historic places and monuments within each, including Civil War monuments; the historic Jewish plot that contains some of the oldest graves in Evergreen; and the section of Holy Hope where some of Tucson's original Spanish and Mexican period inhabitants were reburied after archaeologists removed their skeletons from a utility pipeline trench through the original Tucson Presidio cemetery downtown in 1992.

This holiday weekend tour will start at 10 a.m. and last until about noon. To get to the meeting place enter Evergreen Cemetery at the Ft. Lowell Rd. entrance (where Fort Lowell crosses Oracle Rd.). No advance reservations are needed. The tour is free for Old Pueblo Archaeology Center's *Archaeology Opportunities* members, \$10 each for others. Half of the fees will support Old Pueblo's education programs and the remainder will be donated to the Arizona Historical Society for the benefit of the Sosa-Carrillo-Fremont House Museum.

### October 23 Tour to Ventana Cave, Santa Rosa Children's Shrine, & Traditional Meeting House on the Tohono O'odham Reservation

This is rare opportunity to visit Native American cultural sites will be led by experienced tour guide Marc Severson. At Ventana Cave, archaeologists Emil Haury and Julian Hayden conducted excavations that revealed southern Arizona's longest known chronological sequence of prehistoric through historical material culture. The trail up to the cave is pretty steep for about 100 yards so you must be in good physical condition to get to it.

The Santa Rosa Children's Shrine is a historical site where Tohono O'odham oral tradition says children were offered to the waters that rose out of a badger hole and threatened to engulf the world.

The traditional meeting house at Big Fields is one of the few remaining community meeting houses left on the reservation. While driving to visit it you will also see examples of traditional Tohono O'odham houses along the road.

There will also be an opportunity on the tour to stop in at the Wiwpu Du'ag ['Tobacco Mountain'] Trading Post near

the Kitt Peak turnoff.

Provide your own transportation or carpool and bring lunch, water, hat, sturdy hiking shoes, and your fee. Coins or other small offerings for the Children's Shrine are optional, as is extra money to purchase arts and crafts at the trading post. For lunch we'll picnic somewhere along the way. Bring your own lunch and water and remember that no alcoholic beverages are allowed on the reservation.

*Archaeology Opportunities* members can go on this tour free; fee for others is \$30 each. Half of the fees will be donated to the Tohono O'odham districts that maintain the archaeological and historical sites that we will be visiting, the rest will support Old Pueblo's education programs. The tour will start at 8 a.m. at a public parking lot in Tucson. It will probably end around 4 p.m. but may go later.

Reservations are required! Call Old Pueblo Archaeology Center to sign up and to get directions to the meeting place: (520) 798-1201.

Nov. 3 "Arts and Culture of the Prehistoric Hohokam Indians" presentation by Allen Dart at Peoria Public Library, 8401 W. Monroe St., Peoria AZ. 7-9 p.m. For info: Elizabeth Lucas (623) 412-7556.

**Sabino Canyon Ruin Public Tours**  
Oct. 16, Nov. 20, Dec. 18  
on Saturdays 9-11 a.m. \$10 per adult, \$2 kids 12 and under (*Archaeology Opportunities* members free). For reservations call 798-1201.

**Sabino Canyon Ruin two-day field schools & volunteer dig days**  
Sept. 4 & 18 Oct. 2 & 16  
Nov. 6 & 20 Dec. 4 & 18  
All are on Saturdays: 7 a.m.-3:30 p.m. in Sept., 8-4:30 Oct.-Dec. \$50/2-days includes lunch + 1-year *Archaeology Opportunities* membership; \$35/1-day. *Archaeology Opportunities* members can attend free but must bring own lunches. Call 798-1201 for reservations (required for field school students and members).

### ANCIENT TECHNOLOGIES:

#### NEW Atlatl & Spear Making

Sept. 26, Oct. 30, 31, Nov. 14, Dec. 11

This new workshop at Old Pueblo Archaeology Center teaches you how to fashion traditional atlatls and wooden spears like those utilized by ancient peoples worldwide, using natural materials. You need a pocketknife to carve the wood, all other equipment is provided. Saturday or Sunday, 9 a.m.-noon. \$40 per person per day (\$32 for *Archaeology Opportunities* members). Call 798-1201 for reservations.

#### Stone Arrowhead-Making & Flintknapping Workshops

Sept. 25, Nov. 13, or Dec. 12

At Old Pueblo Archaeology Center. Saturdays or Sunday, 9 a.m. to noon. \$25 per person (\$20 for *Archaeology Opportunities* members). Call 798-1201 for reservations.

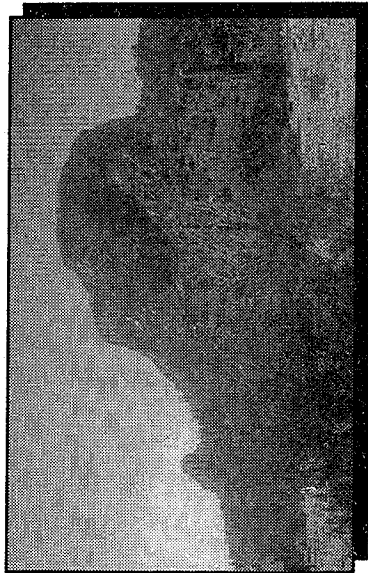
***Don't forget the Year 2000 Raffle!***

Win the Mimbres II or Hopi quilt on Jan. 22!

Tickets are 6 for \$10 or \$2 each!

Call Old Pueblo at 798-1201!

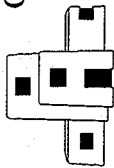




The Ventana Cave archaeological site in the Castle Mountains, Tohono O'odham Indian Reservation, Arizona, viewed from the desert floor east of the cave. See page 9.

### TIME TO RENEW?

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# Old Pueblo Archaeology

Bulletin of Old Pueblo Archaeology Center, Tucson, Arizona

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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 Allen Dart at Old Pueblo's address shown above, or by calling (520) 798-1201, faxing us at (520) 798-1966, or by e-mail (aldart@azstarnet.com).

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