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Old Pueblo Archaeology

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The "Arts and Culture of the Prehistoric Hohokam Indians" Series Continues:

Hohokam Rock Art: Depicting Life and the Heavens

by Todd W. Bostwick
Phoenix City Archaeologist

Full moon over petroglyphs in Arizona's South Mountains
Human figures hold hands in these glyphs. Photo by Todd Bostwick.

From as early as A.D. 1, the verdant Sonoran Desert was occupied by a group of pottery-making farmers called the Hohokam. Previous *Old Pueblo Archaeology* issues have discussed how these people developed irrigation systems that allowed them to farm thousands of acres of land.

The Hohokam built earth and brush pithouses and later, adobe houses, as well as public structures such as platform mounds and ballcourts interpreted as places of ritual activity. They created a rich inventory of figurative and abstract art in their painted red-on-buff pottery designs, textiles, and carved shell and stone jewelry.

But another well known Hohokam art form is rock art, which they pecked, scratched and painted in similar images on rock outcrops and boulders near their villages and in isolated locations in the desert mountains.

Ancient images placed on stone are called *rock art* by archaeologists. Hohokam rock art consists primarily of *petroglyphs*, which were made by pecking the surface of a rock and creating a design by exposing the lighter colored rock underneath. Occasionally the Hohokam painted designs, called *pictographs,* on rocks. Archaeologists use the terms *elements* or *motifs* for individual designs. Elements grouped together on the same rock face are called *panels*.

Southwestern rock art expert Polly Schaafsma has defined Hohokam rock art as the *Gila style*. This style has a general consistency in design elements, but variability in quality of execution. It ranges from delicate, detailed images to crude, amorphous ones. Rock art elements occur

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Paleoindian Spear Point Recovered at Sabino Canyon Ruin

It was a hot and dirty day for 20 Oklahoma Boy Scouts who were participating in Old Pueblo Archaeology Center's archaeological field school at Tucson's Sabino Canyon Ruin on May 25. But it was also a day of discovery.

After spending much of their morning sitting through a lesson on what archaeologists do and about the Sabino Canyon Ruin's significance, Scouts Robbie Hauser, Thomas Chambon, Cory Daniels, and James Snyder were assigned by Old Pueblo's Dr. Eric Kaldahl to start digging in a portion of the ruin where some 900- to 1000-year-old Hohokam Rincon phase houses were being uncovered. As the day wore on and the troop had spent several hours excavating they were getting pooped from the digging and the heat. It was then that Robbie found one of the oldest artifacts ever recovered at a Tucson-area site.

While Robbie was sifting another bucket of topsoil that his 4-Scout crew had excavated he found a smooth, nearly flat, very finely flaked stone object about 1 inch wide and 1¼ inch long in the sifting screen. Figuring it was something he should show to one of the ar-

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INSIDE:
Upcoming archaeology activities for volunteers!
See pages 8-10

Hohokam Rock Art: Ancient Images Left in Stone (continued from page 1)

Hohokam rock art anthropomorphs. A petroglyph panel in the South Mountains, left photo, shows a hollow-bodied human-like figure holding a cane and possibly carrying a backpack burden. Separate panels in the Coronado National Forest near Catalina include a line of connected stick-figures in the center photo and, at right, a single figure with fingers and toes, a stippled body, and a possible phallus. The panel in the center photo has been defaced by a fired bullet. Photos by Todd Bostwick (left) and Allen Dart.

alone, together in apparently haphazard arrangements, and in deliberate compositions.

Hohokam rock art is present in nearly every mountain range in central and southern Arizona. Large collections of it have been recorded in the South Mountains, Superstition Mountains, Estrella Mountains, and Santan Mountains in the Salt River Valley; at Painted Rocks along the Gila River in western Arizona; and in the Picacho Mountains, Tucson Mountains, and Santa Rita Mountains in southern Arizona.

Catalina-area quadrupeds and human-like figures. This bullet-damaged petroglyph panel in the Coronado National Forest near Catalina may depict both sexes of deer and a Hohokam hunter. Photo by Allen Dart.

Hohokam Rock Art Designs. Most Hohokam rock art sites contain images of life-forms, artifacts, and geometric elements. Representational rock art designs are very common, and many of these figures represent animals that currently inhabit the Sonoran Desert. Some animal images, however, are unidentifiable. Geometric elements range from simple designs to complex patterns.

The Hohokam depicted numerous anthropomorphs, or human-like figures, in their rock art. These usually are stick-figures that have their arms and legs bent, with the arms frequently raised. The heads of the figures are hollow or solidly pecked, the latter of which occasionally have hollow eyes.

Some of the stick-figure humans have circular midbodies and look like they have a phallus. Occasionally, humans have solid or outlined full figures with toes and fingers.

Headdresses are common, especially curved lines that appear to be feathers, but halos or semicircles also occur.

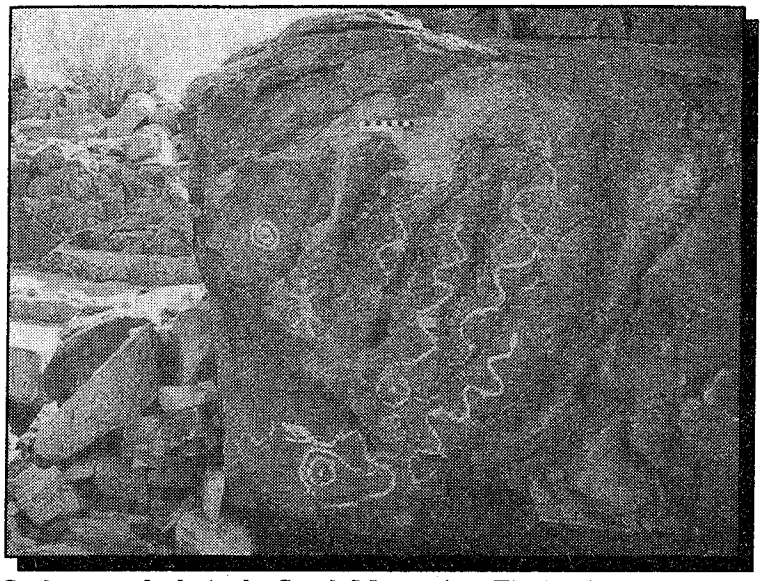
Some anthropomorphs appear to be wearing masks. Individuals sometimes carry objects in their hand such as staffs, canes, flutes, rakes, and bow and arrows. Human-like figures appear by themselves and with other elements, and some of them are engaged in activities such as running, dancing, flute playing, or the hunting of animals.

A small number of anthropomorphs in the South Mountains near Phoenix have distinctive hourglass-shaped bodies that are rare elsewhere. Similar anthropomorphs were painted on Hohokam red-on-buff ceramics from about A.D. 750-1150.

Human hands and feet as individual elements are not common in Hohokam rock art. However, feet have been recorded on Tempe Butte in the Salt River Valley, in the White Tank Mountains, in the Picacho Mountains, and elsewhere.

Animal figures, or *zoomorphs*, at Hohokam rock art sites consist of various quadrupeds including mountain sheep, deer, dogs or coyotes, and possibly antelope and mountain lions. Quadrupeds often have heads that are V-shaped with pointed noses and prominent ears, but they are also shown in a wide range of forms.

Some deer have delicately rendered antlers with multiple tines. Mountain sheep often are stick figures with short tails but some have fully pecked D-shaped bodies



Snake petroglyphs in the South Mountains. The heads may not look realistic but the triangular ends on these squiggly-line rock art elements suggest these motifs represent rattlesnakes. Photo by Todd Bostwick.

Large water bird, lightening design, and anthropomorphs. These are in Hieroglyphic Canyon, in the South Mountains. Photo by Todd Bostwick.

and others have extended, hollow bellies as though pregnant. Some of the mountain sheep petroglyphs in the South Mountains have rectangular torsos segmented into three or four sections.

Some animal designs appear to be composite creatures; for example, quadrupeds with bird-like heads occur in the South Mountains. Quadrupeds occasionally have oversized antlers and horns, or horns that are reversed.

Other Hohokam rock art life-forms include snakes, turtles, and insects. Snakes are depicted both coiled and extended. Some spirals appear to be coiled snakes. A large snake image in the South Mountains has two horns and a long fang. Two Gila monster petroglyphs have also been identified in the South Mountains.

Lizards occur frequently, often with full bodies, and some figures appear to be combined lizards and anthropomorphs. Sometimes it is difficult to determine if these figures are stick-men or short-tailed lizards.

Bird designs occur at some Hohokam rock art sites, but with the exception of the South Mountains where a variety of bird images have been recorded, they are generally rare. This scarcity of rock art bird designs is intriguing considering that birds were painted in profuse numbers on Hohokam red-on-buff pottery from A.D. 750 to 1150.

Many of the bird images in the South Mountains have long legs, curved necks, and triangular-shaped tail feathers. These appear to be water birds such as herons, egrets, and cranes.

Other bird designs include thunderbirds and birds that appear to be singing because there are lines or scrolls coming out of their beaks. Quail, common designs on Hohokam red-on-buff pottery, are very rare in Hohokam rock art images, if not absent.

Hohokam abstract and geometric designs are diverse and include curvilinear and rectilinear elements by themselves or incorporated into complex patterns that may represent textile or pottery designs. The Hohokam seemingly were fascinated with the circle and its variations: concentric circles, circle/dots, bull's eyes, circle chains, barbells, sun disks, spirals and scrolls. Meandering lines also are frequent, sometimes appended to or extending off of both geometric and human figures.

One distinctive Hohokam geometric design is a bilaterally symmetrical lobed figure called a pipette. This enigmatic image has been found in the Tucson and Phoenix regions, as well as elsewhere in southern Arizona and northern Mexico. Pipettes often occur near water sources, and some have dots or circles pecked between the lobes giving them a face-like appearance that resembles the Mesoamerican rain deity Tlaloc.

However, considerable variation exists in the depiction of pipettes and many do not appear as faces. Rock art researcher Ken Hedges has argued that the Hohokam pipette image represents an entoptic form, or phosphene, produced as a geometric design by the optic nerves during a trance, especially during ritual performances. The South Mountains contain the largest number of pipette designs, more than 30, of all recorded Hohokam rock art sites.

Most Hohokam rock art was pecked with cobble hammerstones, both by direct

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A Hohokam deity? This example of the Hohokam "pipette" design is on a boulder along the Gila River north of Gila Bend. Photo by Allen Dart.

Hohokam Rock Art: Ancient Images Left in Stone (continued from page 3)

and indirect percussion. Stone chisels have been found at rock art sites in the Picacho Mountains. Scratched designs also have been recorded, mostly rectilinear elements such as grids, diamonds, straight and wavy lines, chevrons, zigzags, triangles, and squares.

Rock art panels were sometimes repecked, and previous elements were either disregarded or incorporated into the new panel. Some panels have elements that were completely repecked sometime after they were originally created.

Hohokam painted rock art is relatively rare, which may be a result of weathering and erosion of the pigments. At Ventana Cave, about 80 miles west of Tucson, pictographs consist of black, white and red anthropomorphs, possibly with headdresses, as well as geometric designs such as joined triangles. A red, white and black human-like figure there is over three meters in height. A cave in the Tucson Mountains contains black images of mountain sheep, deer, and possibly antelope.

Interpreting Hohokam Rock Art. There are no direct ethnographic interpretations of historical O'odham (Pima and Papago) rock art to provide analogies for interpreting prehistoric Hohokam petroglyphs. Therefore, the meaning of Hohokam rock art remains elusive. However, several possible interpretations have been proposed. These include mnemonic or memory devices, decorative art, directional signs or trail maps, territorial markers, clan symbols, and activity scenes. Examples of scenes include possible curing ceremonies, births, hunting activities, and celestial events.

Single geometric designs, or small sets of them, are often found along trails in the South Mountains, suggesting trail or territorial markers. A large rock art panel in the Picacho Mountains appears to be a relatively accurate map of the ridge on which it is located. Another large panel originally from the Coyote Mountains southwest of Tucson, now on display at the Kitt Peak National Observatory, apparently depicts clusters of Hohokam houses arranged around common courtyard areas.

In addition, circular designs found at petroglyph sites along trails in northern Mexico and southern Arizona have been interpreted as marine shell that was imported by the Hohokam for use as jewelry.

Some of the Hohokam rock art may have been created by religious specialists, or shamans, who recorded their dreams during encounters with their animal spirit helpers. A portion of that rock art also may portray mythological stories.

There is extensive ethnographic evidence of shamans among the historical O'odham-speaking peoples of southern Arizona, who obtained their powers through dreams in which supernatural animals provided them with power

Circle designs and a possible lizard (top photo) in a panel near Catalina, Coronado National Forest.
Elaborate concentric circles (center) in South Mountains.
Quadruped, footprint, and sun disk (bottom) near Catalina, Coronado National Forest; the circles and rays were pecked around a natural protuberance in the rock.
Center photo by Peter Krocek, courtesy of Todd Bostwick. Top and bottom photos by Allen Dart.

songs. O'odham oral legends are full of accounts of shamans and their deeds. Several Hohokam burials at large villages have been interpreted as shamans because of the presence of fetishes and other special objects such as quartz crystals placed with the body.

Furthermore, some Hohokam rock art scenes appear to be narrative (to tell a story) and are similar to shamanic art recorded around the world. For example, some of the panels in the South Mountains have human figures attempting to subdue animals and birds, including composite creatures, that are much larger than the anthropomorphs. In some cases, the anthropomorphs have wavy lines extending out of their hands, feet or heads that connect with the nearby animal images, suggesting energy or other powerful forces.

Spirals and concentric circles, which in shaman art typically represent portals into the other world, are frequently associated with human figure designs in Hohokam rock art compositions. To Pueblo Indians, the spiral represented wind, water and the journey in search of the center of the world.

Research has suggested that certain Hohokam rock art sites were used for marking the movement of the sun and moon. On hilltop locations in the South Mountains and to the north in the Phoenix Mountains there are rock art panels that have light and shadow interactions during the winter and summer solstices. Sun

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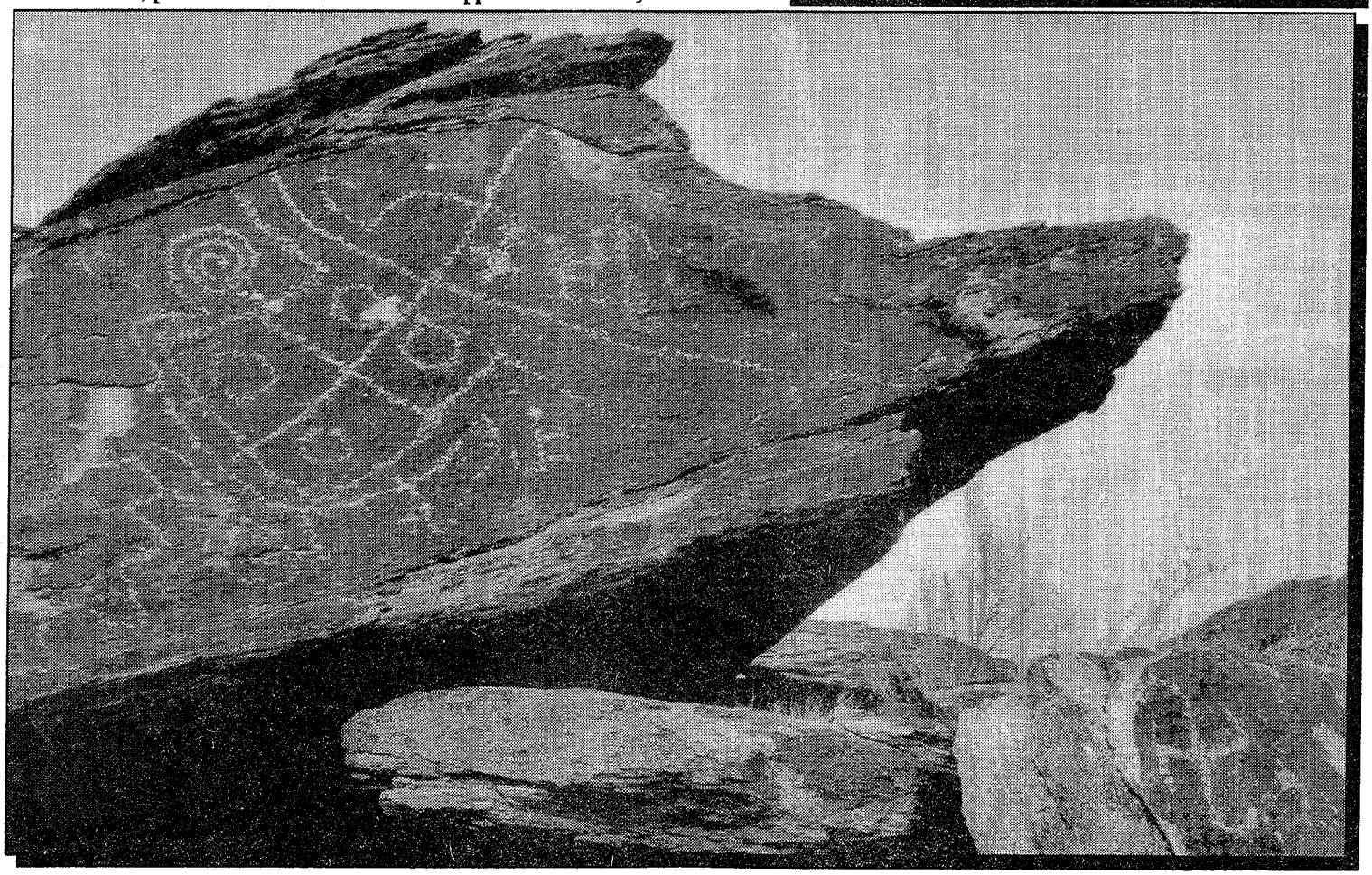
Ancient neighborhood map? A giant petroglyph panel on display at the Kitt Peak observatory southwest of Tucson contains the motifs shown at right, apparently representing the outlines of four Hohokam pithouses facing into a common area, plus two other house outlines at upper left. Photo by Allen Dart.



Ancient calendrics? This South Mountains rock art panel aligns with the summer solstice sunrise when viewed from a cleared area in front of the panel. Native Americans used swastika-like designs (see lower boulder's petroglyph) before Europeans arrived in the Americas. Photo by Peter Krocek, courtesy of Todd Bostwick.

Hohokam Rock Art: Ancient Images Left in Stone (continued from page 5)

Roster of Hohokam Rock Art Images

Life Forms	Geometric Designs
coyote or dog	asterisk
deer	barbell
dragon fly (?)	bull's eye
horned lizard	chevron
humans	circle
- stick figure	circle chain
expanded midbody	circle cluster
- full figure	circles with spokes
hourglass body	concentric circles
- lizard body	cross
insects	curvilinear abstract
lizard	diamond
mountain lion	dint pattern
mountain sheep	dot
snake	figure-8
thunderbirds	grid
turtle	maze
unidentified birds	meandering lines
water birds	outlined cross
	pipette
Artifacts	scroll
backpack	spiral
ball	square
bow and arrow	sun disk
flute	swastika/whorl
headdress	triangles
rake	wavy lines
spear	"x"
staff/cane	zigzag

disk images occur at many Hohokam rock art sites; some of these images in the South Mountains align with the location of the solstice sunrise on the eastern horizon.

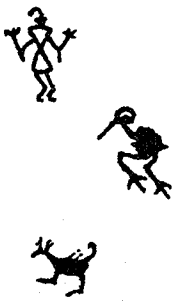
A cluster of 13 circles with central dots on an upright border in the Phoenix Mountains may represent the moon in its 13-month annual cycle. The Pueblo Moon Clan, now extinct, used a circle with a dot as their clan symbol.

Hohokam rock art probably had multiple meanings, and served both private and public functions. Rock art is present at habitation sites, near agricultural fields, in natural resource areas, and associated with water sources, especially springs. Some rock art sites are situated in steep and narrow canyons, along trails, next to rockshelters and in flat, elevated areas with outstanding views of the sky and surrounding terrain.

These associations suggest some Hohokam rock art sites served as signaling devices, while other rock art may have told ancient stories. We will never know exactly what was being communicated with this prehistoric art, but its beauty and mystery provoke a sense of awe that contributes to its importance today.

Rock Art Preservation. The Hohokam created a legacy of ancient art on stone outcrops scattered throughout southern Arizona. Many of these outcrops are located in desert foothills where new construction is occurring. Unfortunately, this rock art is disappearing at a rapid rate through development and vandalism. The documentation and preservation of Hohokam and other rock art before it is destroyed by urban sprawl has become a pressing issue.

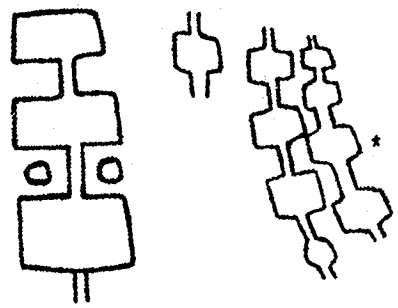
Rock art sites can be saved through



Box Canyon: Hourglass anthropomorph, bird, quadruped

36th Street: Bird

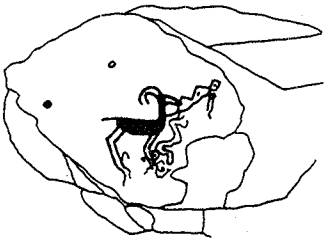
Box Canyon: Water bird



Chandler Blvd./32nd Street: pipette
20th Street: 3 pipettes

Hieroglyphic Canyon: Textile pattern

32nd Street: Deer



Telegraph Pass: Mountain sheep

Possible birth scene. This petroglyph along the Gila River north of Gila Bend appears to show a mother with her newborn child and its umbilical cord (right) and placenta (left). Photo by Allen Dart.

public education and proactive management programs. A national organization, the American Rock Art Research Association (ARARA), is dedicated to the promotion and protection of America's rock art. The preservation of Hohokam rock art will allow its continued analysis, which will likely provide additional insights into ancient life in the Sonoran Desert.

Rock Art Resources. In the Tucson area you can visit petroglyphs on your own in Saguaro National Park West. Or, you can book an archaeologist-guided tour to other rock art sites with the Center for Desert Archaeology (520-885-6283) or Desert Paths Tours (520-327-7235).

Just north of Phoenix the Deer Valley Rock Art Center (602-582-8007) west of Interstate 17 on Deer Valley Road features a petroglyph museum and self-guided trail.

Elsewhere in Arizona, you can go on rock art site field trips offered by the Tucson-based Arizona Archaeological and Historical Society (AAHS; 520-325-8401), and the many local chapters of the Phoenix-based Arizona Archaeological Society (AAS; 480-830-6055). The AAS also offers field schools to train interested persons in rock art recording techniques.

The City of Phoenix's Pueblo Grande Museum also offers hikes and van trips to rock art sites in Arizona and the Southwest (602-495-0901).

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Readings on Hohokam Rock Art

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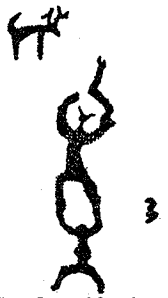
Hieroglyphic Canyon: Singing bird

36th Street: Quadruped with bird head

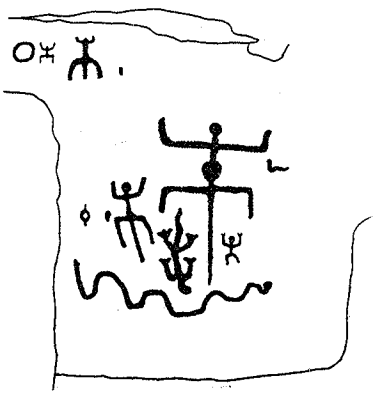
Box Canyon: Hourglass anthropomorph, birds, quadruped

Goodman Canyon: Shaman scene?



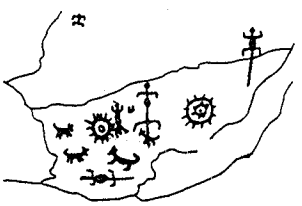
San Juan North: Acrobats & quadruped

Hieroglyphic Canyon: Serpent, maze, anthropomorphs

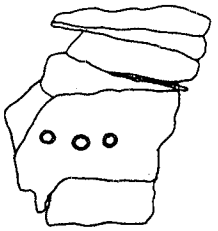


Pima Canyon: Large lizard, other quadrupeds, snake, circles

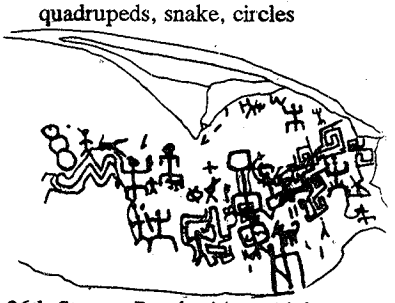
36th Street: Quadruped as reverse mirror image



Pima Canyon: Sun disks, lizards, quadrupeds



32nd Street: Trail marker



36th Street: Panel with multiple pecking episodes

These illustrations of petroglyphs in the South Mountains were provided by Todd Bostwick

Traditional Technology Workshops

Old Pueblo Archaeology Center is developing a fuller program of traditional technology workshops that allow you to get hands-on experience in how to make and use artifacts like prehistoric people did. The purpose of offering these workshops is to help modern people understand ancient lifeways better through the study and practice of original techniques.

NEW!

Southwestern Indian Pottery

Gourd scrapers, mineral paints, and yucca brushes can be used to produce pottery today just as they have for centuries. Instead of modern potters' wheels, molds, and paints, these ancient tools are still used by Native Americans to maintain the "spirit" of the traditional pottery.

Experienced southwestern potter and artisan John Guerin teaches Old Pueblo's pottery workshops to show you how to make traditional Indian pottery the way it has been made here in the Southwest for over two thousand years. Dig your own clay, then hand-make your own pots, seed bowls, canteens, corrugated ware, ladles, and rattles using the coil-and-scrape method. The paddle-and-anvil method will also be demonstrated. All equipment is provided.

Children under 16 may take the pottery class if a parent enrolls with them. Maximum enrollment is 15 persons/class.

The upcoming Level 1 Workshop features six 3-hr in-class sessions plus a 4-hr field trip, for 22 total class hours.

Class includes:

- Southwest history: Anasazi, Mogollon, Hohokam & Pueblo pottery
- Initial steps in forming, shaping & smoothing
- Completing scraping, sanding, polishing, slipping & painting
- Making canteens
- Making corrugated ware
- Making ladles & rattles
- *Plus a field trip to dig clay!*

Dates: Tuesday evenings Oct. 17 & 24, & Nov. 7, 14, 21, & 28, 2000, 6-9 p.m. each night; plus field trip Saturday Oct. 21, 2-6 p.m.

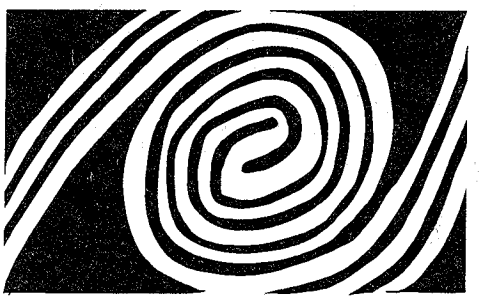
Fee: $69, includes all materials

Arizona Archaeological Society Certification may be available for Old Pueblo's Level 1, 2, and 3 pottery workshops. Levels 2 and 3 (to be offered next spring) are for persons who have taken Level 1 or already know how to make hand-built pottery.

NEW TOO!

The Art of Ancient Jewelry

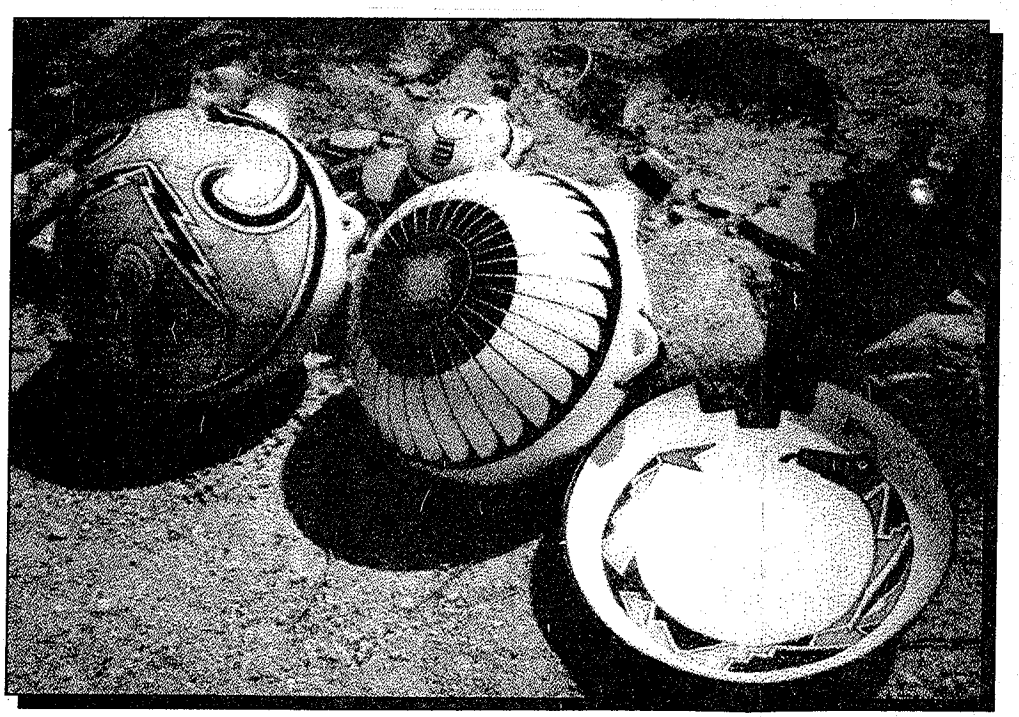
This new class, being taught by Allen Denoyer, will cover how to make fine pendants, beads, earrings, and other jewelry and ornaments by cutting and polishing stones like ancient southwesterners used to do. Stones and tools will be provided.



Dates: Saturdays Oct. 21 & Dec. 10, 2000, 9 a.m.-noon each day

Fee: $25, includes all materials

Cash, checks, Visa, and Mastercard are accepted for all Old Pueblo Archaeology Center programs.



Replicas of Native American pottery made by John Guerin.

The jewelry class is for ages 9 and older. Minimum class size is 6 persons and maximum is 11. Fee is $25 ($20 for Old Pueblo members).

All of the Traditional Technology workshops are held at Old Pueblo Archaeology Center, located at 1000 E. Fort Lowell Road in Tucson (at the intersection of Park Avenue). Registration deadline is 24 hours before the class starts.
To register call (520) 798-1201.
Advance fee payment is required.

Fees will be refunded for missed sessions only if Old Pueblo Archaeology Center is given at least 24 hours advance notice of absence. Fees for reservations made less than two days before a class date are nonrefundable.

and Other Coming Attractions

Program dates & times are subject to change. Call Old Pueblo Archaeology Center at (520) 798-1201 for latest information & for reservations.

CONTINUING TRADITIONAL TECHNOLOGY CLASSES

Arrowhead Making and Flintknapping

Archaeologist Allen Denoyer will offer the ever-popular "Arrowhead Making and Flintknapping" workshop on Saturday September 23, Sunday November 5, and Saturday December 9. Class time is from 9 a.m. to noon on each date.

As he teaches you how to make an arrowhead out of obsidian and other stone just like prehistoric Arizonans did, Allen helps you understand more about prehistoric people by studying how they made and used their artifacts.

All equipment is provided, and pre-registration is required. Participation is limited to 11 persons ages 9 and older. Cost for the class is $25 per person.

Making and Using Atlatls (Spearthrowers) & Spears

Allen Denoyer also will offer the exciting "Making & Using Atlatls & Spears" workshop on Saturday, November 4 from 9 a.m. to noon. In this workshop, he teaches how to fashion traditional atlatls and wooden spears like those utilized by ancient peoples worldwide, using natural Sonoran Desert woods and leather materials. He will show how to straighten the spear by heat-curing over an open fire, and talk about how prehistoric people's lifeways are better understood by experiencing their technologies.

Participants need to bring your own pocketknife to carve the wood, but all other equipment is provided. Participation is limited to 11 persons ages 9 and older.

Cost is $40 per person, and pre-registration is required.

Members of Old Pueblo Archaeology Center's *Archaeology Opportunities* program are entitled to a 20% discount on all of Old Pueblo's program fees and publications.

SEPTEMBER 16 & 30 DIGS AT SABINO CANYON RUIN

Old Pueblo Archaeology Center offers hands-on training in archaeological excavation at the Sabino Canyon Ruin. Between A.D. 1000 and 1350 the ruin was a vibrant village of the Hohokam Indians, ancestors of the modern Pima and Tohono O'odham peoples. Excavations have recovered pottery, stone, bone, and seashell artifacts, and have revealed prehistoric "pit houses," apartment-like housing compounds with adobe and rock walls, ancient canals, and dog burials.

The activity on September 16 begins with an orientation to show participants how to recognize artifacts and to provide information about the site's ancient residents and about archaeological methods. Most of the day will then be spent excavating under the supervision of an archaeologist. During the final two hours registrants will get to clean and label recovered artifacts.

On September 30 participants begin excavating at 7 a.m., and during the last two hours of the session can participate in a discussion and question-answer period.

Program times are 7 a.m. to 3:30 p.m. Persons enrolling for two days of the field school may continue volunteering in the excavations for one year. Dig sessions are offered two Saturdays a month. Minimum age to participate is 12 years old.

The Sabino Canyon Ruin excavations are on private property in northeastern Tucson, about a mile away from the Sabino Canyon Visitor Center. Directions to the ruin are provided upon pre-registration. Cost for a single session is $35 per person. The two-day program costs $50 and includes a one-year membership with Old Pueblo that allows the registrant to continue participating in the Sabino Canyon Ruin excavations as a volunteer for a year following the two-day program. Cash, checks, Visa and Mastercard are accepted.

For Sabino Canyon Ruin dig reservations call Old Pueblo Archaeology Center at 520-798-1201 at least two days ahead of the session.

Volunteers Needed for Final Two Digs at Fort Huachuca

Volunteers can assist in test excavations at the historical "Heritage Park" archaeological site at Fort Huachuca on two Saturdays, September 9 and 23, from 8 a.m. to 2 p.m. on each date. This excavation is resulting in finds of bottles and other glass artifacts, ceramics, military hardware and other metal objects, animal bone and other food remains discarded in a dump site near where enlisted men and Apache Scouts lived in the 19th century.

The dig is sponsored by the U.S. Army under a contract issued to Old Pueblo Archaeology Center through Tucson's Engineering and Environmental Consultants, Inc. The September 23 dig is the last day of excavations on Old Pueblo's Fort Huachuca project.

Meet at the Fort Huachuca Archeology Laboratory and Curation Facility. To get there from Sierra Vista, enter Fort Huachuca through the main gate, turn right on Brainard Road, then turn right again onto Machol Avenue and follow the signs to the lab. The activity is free and open to the public. For information and reservations call Old Pueblo Archaeology Center at (520) 798-1201 and ask for Eric Kaldahl.

Old Pueblo Archaeology Center Raffle Set for March 2001

Old Pueblo Archaeology Center's third fundraising raffle to support archaeology education will be held next March 31. The 2001 raffle will feature a southwestern quilt wall hanging as a grand prize. Another featured prize will be a gift certificate worth $500 from the Southwestern Mission Research Center for two people to go along on the SMRC's guided tour of Spanish Colonial missions in Sonora, Mexico, next year. SMRC's Sonoran Missions tour is internationally renowned as one of the most educational (and entertaining!) history tours offered in the Arizona-Sonora borderlands.

Tickets will be mailed with the *Old Pueblo Archaeology* December issue. Watch for them!

Supporters of Old Pueblo Archaeology Center, June 1-August 31

Volunteers: We can never thank Carol Richardson, Bess Puryear, & Ceil McPherson enough for mailing the *Old Pueblo Archaeology* bulletins -- they have continued to do it ever since we started publishing!

The following people very generously donated a total of 185.25 in-office hours + 260.5 field hours of their volunteer labor and sweat to help with lab and office work and with the excavations at the Yuma Wash and Sabino Canyon Ruin sites: Jeannette Berry, Peggy Bommersbach, Rebecca Bommersbach, Teddie Burch, José Camacho, John Curry, Allen Dart, Jane Delaney, Allen Denoyer, Ken Fite, Lisa Ford, Myrna Gary, Sam Greenleaf, Jeff Jones, Jackie Kinman, Doug Lindsay, Mary Lu Moore, Margaret Nagore, Amelia Natoli, Bud Pettit, Darla Pettit, Linda Small, Steve Stacey, Homer Thiel, Gaylen Tinsley, Jase Tinsley, Kirsten Tobin, Tom Todd, Jim Treat, Jim Trimbell, Diane Tyink, & Terry Wyman.

Cash Donors/Grantors in this period: Joan Clark, Allen Dart, Jackie Kinman, and The Stocker Foundation.

Noncash Donors: Our thanks again to Steve Stacey for donating yet another batch of new and reconditioned computer equipment, and to Doug Lindsay and Peggy Bommersbach for providing photos of archaeological and traditional cultural features to Old Pueblo.

New & Renewing Members: Joan Clark, Coya Coleman, Valerie Conforti, Robin Ford, Taylor Genovese, Bill Hohmann, Jackie Kinman, Norma Martinez, Donald Reser, Jean Rhoades, Nancy Jane Rose, Jim Streeter, Barbara & Tessa Tigges, Tom Todd, and Brid Williams.

We sincerely thank all of these faithful volunteers and contributors, and offer our apology to anyone we failed to acknowledge.

Other Upcoming Classes & Presentations

Sep 12 Tues.	6:30-8 pm	"Archaeology as an Interest and Career" free slide show sponsored by Arizona Humanities Council and Santa Cruz Valley Chapter of the Arizona Archaeological Society. Villages Recreation Center, 400 W. San Ignacio, Green Valley. Nancy Hough, 578-9053.
Oct 19, Oct 26, Nov 2, Nov 9 Thursdays	10-11:30	"The Story of Archaeology: History of World Archaeology" by Eric Kaldahl at the OASIS Center, Robinson's-May department store at El Con Mall, 3435 E. Broadway, Tucson. $58/person. Register with Pima Community College Community Education program -- course #SW290. (520) 206-6468. For details call Eric at Old Pueblo Archaeology, 798-1201.
Nov 9 Thurs.	12:30 pm	"Arts and Culture of the Prehistoric Hohokam Indians" free slide show by archaeologist Allen Dart for Sun Cities Historical Society at The Lakes Club, 10484 Thunderbird Blvd., Sun City. Ms. Bebe Lovitt, 623-974-3568 H. Sponsored by Arizona Humanities Council.
Dec 27 Wed.-Sat.	1-4 pm	"Native Peoples of the Southwest" course by Marc Severson at Old Pueblo Archaeology Center. $39. Register with Pima Community College Community Education program -- course #SW110. (520) 206-6468. For details call Marc at (520) 296-1573 or 400-9168.

Upcoming "Archaeology for All!" OPEN1 Sessions at Old Pueblo Archaeology Center

Volunteer helpers welcome!

Sep 21 Thurs.	10-noon	2-hour program for 25-32 grade 3 kids from Dietz School. Danielle Keller, teacher.
Oct 3 Tues.	8:30-12:30	4-hour program for 25-32 grade 4 kids from Drexel School. John Benavidez, teacher.
Oct 5 Thurs.	8:30-12:30	4-hour program for 25-32 grade 4 kids from Drexel School. Judy Nelson, teacher.
Oct 10 Tues.	8:30-12:30	4-hour program for 25-32 grade 4 kids from Drexel School. Christina Jeter, teacher.
Oct 27 Fri.	9-1:30	4-hour program for 25-32 grade 4 kids from Ochoa School. Heidi Giedraitis, teacher.
Nov 4 Sat.	9-11 am	*Open enrollment for kids (and adults!) 8 and older.* $12 per person. Register through Pima Community College's Community Education program -- course #SW901, "Archaeological Mock Excavation"-- (520) 206-6468. For program details call Allen Dart or Eric Kaldahl at Old Pueblo Archaeology Center, (520) 798-1201.
	1-3 pm	2-hour program for 6-10 kids with tour group scheduled by Metropolitan Tucson Convention & Visitors Bureau. Arlene Laguna, coordinator.
Nov 17 Fri.	9:30-2	4-hour program for 25-32 grade 4 kids from Wheeler School. Karen McCarthy-Lee, teacher.

Calling All Teachers: Take Advantage of Children's Program Grant from the Stocker Foundation

One of Old Pueblo Archaeology Center's most successful science-of-discovery classes is *OPEN1* -- the *Old Pueblo Educational Neighborhood Site 1* program. Designed for students in grades 3-5, this innovative elementary science package normally begins with an orientation by one of our Center's educators at the participating classroom, then brings kids outside to a mock archaeological site where they learn about methods of scientific study and ancient Southwestern cultures.

In August 2000 the Stocker Foundation of Lorain, Ohio, awarded Old Pueblo a $5,000 grant to allow students from underserved elementary schools that could not otherwise afford the cost of outside educational field trips to experience the enriching OPEN1 outdoor learning method. The Stocker Foundation grant will allow Old Pueblo to waive our registration fees for the sponsored classrooms, including the costs associated with our educators' salaries, program supplies, and program evaluation and follow-up.

The Stocker Foundation has provided assistance for several other outstanding cultural education programs in Arizona including the Arizona State Museum's *Paths of Life* exhibit and book.

The Stocker grant to Old Pueblo is on top of the $6,000 matching grant that the Arizona Humanities Council provided for the OPEN1 children's program with a match from Old Pueblo and our donors (see June *Old Pueblo Archaeology*). Together these grants will allow Old Pueblo to provide scholarships for nearly 50 classrooms to learn about archaeology by participating in the OPEN1 program.

So teachers: call us today at 798-1201 to set up programs for your classes!

Paleoindian Spearpoint
(continued from page 1)

archaeologists, he set the cream-colored stone aside and continued running his fingers through the gravel in the screen, looking for more artifacts. As he was about to finish up, archaeologist Allen Dart checked to see what he was finding and noticed the single stone object in Robbie's empty bucket. Dart reached down, picked it up for a closer look, then said, "Whoa, where did this come from?!"

What Robbie had picked out of the screen was an ancient spearpoint fragment that was older than the other artifacts the boys had been finding -- in fact, thousands of years older than any other artifact yet known from the Sabino Canyon Ruin. It was the base of a "Paleoindian" spearpoint that may be 10,000 or more years old.

The point is of buff-colored chert or rhyolite that's mottled with a lot of tiny white spots and very few tiny pink inclusions. Along each side of the point there is fine basal grinding wear that extends about 5 cm up each outside edge from the basal "ears," and the bottom of each "ear" looks slightly ground, too.

This page's drawing of the Sabino Canyon Ruin point by Ron Beckwith, and a description, were provided to former Arizona archaeologist Dr. Bruce Huckell, now of the University of New Mexico, for his opinion on its identification. He commented, "With the basal grinding, I would classify the point as Plainview. I was leaning that way from the flake scar pattern, but without the grinding there would still be some other options."

Huckell said the Plainview projectile point type is rather poorly dated but probably generally falls in the age range of about 10,300 to 9,000 years before present. He noted that he has seen a couple of basal fragments of Plainview points in the Tucson Basin and nearby area before, and that if the Sabino Canyon Ruin specimen is a Plainview point it can be linked chronologically with the ancient Volcanic Debris Layer found by Emil Haury and colleagues in their excavations at Ventana Cave, on the Tohono O'odham Reservation in southwestern Arizona.

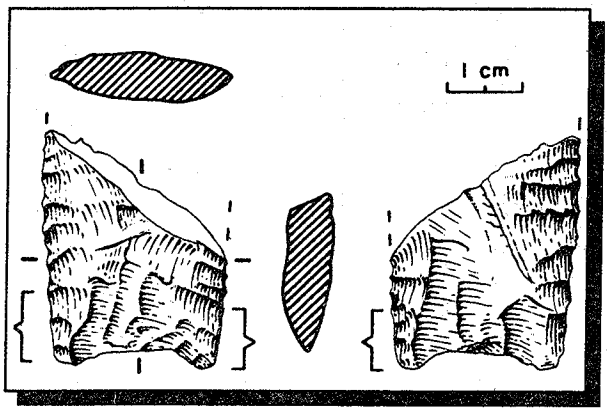
Huckell added that the basalt point from Ventana Cave's Volcanic Debris Layer that Haury described as "Folsomoid" is "morphologically Plainview, but because it's just a trimmed flake we can't use manufacturing technique to confirm that identification. The more recent dates from the Volcanic Debris Layer that Vance Haynes and I got suggest that the bulk of that deposit accumulated between about 10.7 and 8.7 BP [10,700 and 8700 years before present], and perhaps more narrowly to the period between 8.7 and 9.5 BP."

When he was informed that the diagonal break across the blade of the point does not look any more recent than the intentionally flaked surfaces, suggesting that the breakage scar and all of the intentional flake scars are of about the same age, Dr. Huckell observed, "The basal grinding certainly suggests that the point was a finished specimen, and the point looks like it has a use-related break, which might still mean that it hasn't traveled very far from where it was deposited. It would be a little unusual for later folks to pick up point fragments, unless they were planning to rework a fragment into another tool or unless they were the ones who broke what had been a complete point. You may have a situation where a Rincon phase occupation just happens to coincide with a much older Paleoindian camp, because a basal fragment like this is typically what gets tossed after a catastrophic break during use."

He concluded, "It's neat to see another Paleoindian point from the Tucson Basin, even if it is in a later cultural context."

The young discoverers of this rare point are members of Tulsa's Boy Scout Troop 33. At the time of the find they were on a 2-week visit to the Southwest and were spending a day working in the Sabino Canyon Ruin excavations to help them earn Boy Scouting's Archaeology Merit Badge.

Hopefully, their Sabino Canyon Ruin experience will be remembered as one of the highlights in earning that badge.



Paleoindian point from Sabino Canyon Ruin. Braces indicate basal grinding areas. Sketch by Ron Beckwith.

The Old Pueblo Archaeology Center Membership Program

Archaeology Opportunities is a membership program for persons who wish to support Old Pueblo Archaeology Center's education programs, and perhaps even experience for themselves the thrill of discovery by participating in our research.

Members get to participate in archaeological excavation and survey projects and can help study and reconstruct artifacts in the archaeology laboratory. Benefits include:

- Opportunities to participate in Old Pueblo Archaeology Center's Sabino Canyon Ruin excavations up to 10 days per year*, and in Old Pueblo's other archaeological digs, surveys, and research programs.
- Invitations and discounts for field trips and other archaeology events.
- A 20% discount on Old Pueblo Archaeology Center's publications, merchandise, and courses.
- A 1-year subscription to ***Old Pueblo Archaeology***. Each issue contains archaeology news and ample illustrations.

Membership fees support Old Pueblo Archaeology Center's programs.

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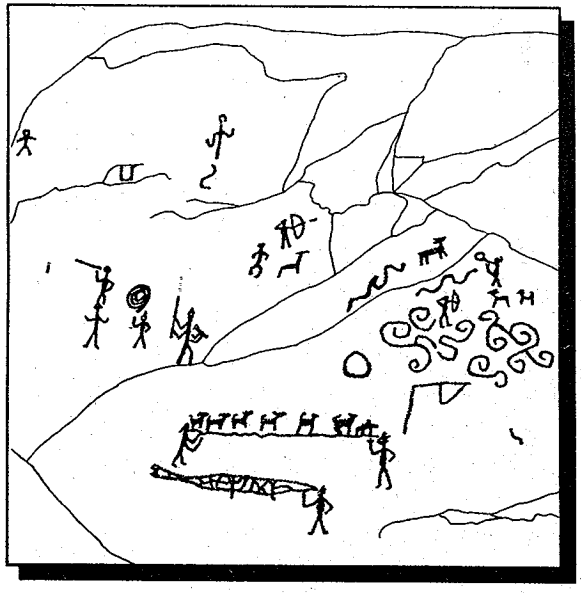
Old Pueblo Archaeology	$10*

* Every membership category includes a 1-year subscription to *Old Pueblo Archaeology*. Each "Friend" membership receives *Old Pueblo Archaeology* & 20% discounts but does not allow participation in the Sabino Canyon Ruin excavations



Ancient activity scenes. Hohokam petroglyph panels in Box Canyon, South Mountains, Arizona. Sketch by Todd Bostwick.

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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).

The Old Pueblo Archaeology Center Home Page (**www.azstarnet.com/nonprofit/oldpueblo**) is posted for free by The Arizona Daily Star newspaper and is maintained by volunteer J. Steven Stacey (e-mail JSStacey@aol.com).

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