The Hohokam is the prehistoric culture that occupied the Salt River Valley and the surrounding area between AD 100 and 1450. They were farmers, utilizing the water from the Salt, Gila, and other rivers to irrigate the corn, beans, squash, cotton and tobacco that they grew. Picking and gathering edible plants as well as hunting big horned sheep and deer in the surrounding desert hills rounded out their diet. These hills that encircle the Salt River Valley contain an abundance of cultural materials that tell stories about the Hohokam occupation. The White Tank Mountains are a part of this chain of desert hills. They are located about 25 miles to the west of downtown Phoenix.

The first appearance on a map for the White Tank Mountains was in 1865 because it had become an important water stop for the stagecoach horses. The name of the White Tank Mountains was given to this range because there were many bleached out granite tinajas, or water catchments, commonly known as “tanks.”

In 1963 Maricopa County acquired the land that makes up the north end of the White Tank Mountains from the Bureau of Land Management and opened up the White Tank Mountain Regional Park to the public. The Park is currently the largest and most

Also in this issue:
- The White Tank Mountains Continue to ‘Call Me’ by Shelley Rasmussen
- “But What Does it MEAN?” by Anne Q. Stoll
- White Tank Mountains Petroglyph Tours
- Joseph Joaquin, Jr., Receives National Award
- Other Upcoming Activities

1 Issue no. 1 for the 2012 membership year. Due to production difficulties this issue was not actually published until 2014.
primitive park in the Maricopa County Park System with 29,572 acres, and elevation ranging from 1,370 to 4,087 feet.

A survey of the archaeological resources was done by the Arizona State Museum in 1963 for five of the new Maricopa County Parks. In the White Tank Mountain survey 11 sites were identified along the eastern front of the range, many of them associated with the deep canyons that contain water sources. These sites range from ½-acre sherd scatters to 1-, 5-, 10-, 25-, and 75-acre habitation sites. The largest is a pit house village near the mouth of Waterfall Canyon. There are also agricultural features such as terracing and check dams. The ages of the artifacts place the occupation from AD 500 to 900 in the Waterfall and southern canyons. In Mesquite and Ford Canyons the dates are a little later ranging from AD 900 to 1100. The movement to the north may have resulted from a reduction in water availability at the tinajas, forcing people to move closer to deep springs in the north canyons.

There is a casual mention in the 1963 survey report of petroglyphs associated with the archaeological sites but no details are given. The survey report also states that during the historic period (no dates were
included) the Western Yavapai controlled the area of the White Tank Mountains. There is one petroglyph boulder that was identified by a Yavapai archaeologist as being an historic Yavapai petroglyph panel.

In 2003 the Agua Fria Chapter of the Arizona Archaeological Society (AAS) took on the project of recording the rock art in the Waterfall Canyon. This project took five seasons to complete with hundreds of volunteer hours. Everything with cultural identity was recorded including the petroglyphs, grinding features, rock alignments, artifacts, and even the graffiti. The total number of boulders with petroglyphs was 340 and the elements that were recorded, complete with photos, pertinent information, and drawings, totaled 897. There were 46 archaeological features and 14 vandalism sites.

This AAS project was undertaken primarily for the benefit of the Park management in order to better protect the rock art that was being loved to death by the public. The volunteers were well trained avocational rock art enthusiasts as well as being so dedicated that sweltering heat and the cold rainy days did not deter them from their jobs. The information gathered further enhanced the original 1963 survey by adding Universal Transverse Mercator (UTM) coordinates for which recording equipment was not available in 1963.

Because of the many hundreds of volunteer hours from AAS and the Arizona Site Stewards, the White Tank Mountain Regional Park was awarded a sizable grant from the Heritage Fund (part of Arizona’s state lottery revenues) in order to improve the barrier-free trail that accommodates wheelchairs, baby strollers and limited-ability hikers for access to view the petroglyphs at Petroglyph Plaza. The grant money also paid for barriers and interpretive signs that were installed in the summer of 2006 at the main concentrations of petroglyphs. Not only are the barriers there to help protect the rock art but they also help to define locations of the easy-to-miss boulders. The interpretive signs answer a lot of questions concerning the “prehistoric history” and the petroglyphs.

The petroglyphs in the Park have been found to be mostly Hohokam but some are from the Archaic culture that predates the Hohokam.

The Archaic culture people were nomads of the

![The frog-like petroglyph to the right in this photo has been interpreted by a Yavapai archaeologist as a symbol of the Yavapai Frog Clan; and the glyph that resembles a string of beads was said to symbolize ‘families following other families through time’ or ‘one reincarnation after another.’ The latter glyph is similar to a Hohokam symbol called a “pipette” but is less weathered than other Hohokam pipettes in the Park, suggesting this one is more recent. Photo by Shelley Rasmussen](image)

![Boulder along the Waterfall Canyon Trail; petroglyph in center of photo is a more typical Hohokam pipette. Photo by Allen Dart](image)

![In photo at right, the petroglyphs with roughly parallel, squiggly lines and the one that looks like a hand-held mirror with a gridiron on its back are designs typical of the pre-Hohokam, Western Archaic rock art tradition, which dates from several thousand years ago to 2000 BC or later. In contrast, some rock art researchers believe that the spiral and crescent glyphs near the bottom center of this boulder may depict an AD 1054 supernova next to the moon, as was described in historic Chinese records. Photo by Allen Dart](image)
desert who roamed to wherever plant resources were in season or animals were abundant prior to AD 100. They left little evidence of their presence except for an abundance of petroglyphs. The Archaic rock art is a different style than that of the Hohokam. Its petroglyphs tend to be more abstract whereas the rock art of the Hohokam appears to be more representational with images of mammals, reptiles, and anthropomorphs (life forms). The rock art of the Archaic culture is also more difficult to see because of the repatination process, where the desert varnish (the dark, weathered rock surface) has more time to regrow over the petroglyphs.

The Waterfall Trail is one mile to the waterfall that only runs after a rain. About half way to the waterfall is a concentration of petroglyphs called Petroglyph Plaza that can be viewed from the trail. There are interpretive signs along the Waterfall Trail and the signs at Petroglyph Plaza help to educate the public about the petroglyphs. Some of these signs go into detail about the prehistory of the Park and the local flora and fauna. From Petroglyph Plaza the trail narrows and becomes steeper. There are petroglyphs on both sides of the trail all the way to the waterfall.

Petroglyphs can also be seen on the Black Rock Loop Trail, as well as bedrock grinding features. There are more petroglyphs to observe on the Waddell and Goat Canyon Trails. The Interpretive Ranger for the Park leads petroglyph hikes and will take groups to petroglyph sites that are not open to the public.

There are two little-known archaeoastronomy sites in the Park and perhaps more that are not known. One of these sites, in Waterfall Canyon, is a flat boulder with a snake petroglyph on the side and a petroglyph grid on the top. At about 7:30 a.m. on the morning of the summer solstice a dagger-like ray of light appears on the grid and slowly moves across it. This only happens on the summer solstice.

The second recognized archaeoastronomy site is on the southern edge of the Park. At this site is a free-standing small boulder with a concentric-circle petroglyph. At daybreak on the June 21st solstice, as the sun rises, a notch in a boulder to east of the petroglyph boulder sends a notched shadow that brackets the concentric circles in a perfect alignment. It only happens on the summer solstice. Considering that a number of Hohokam petroglyphs elsewhere also exhibit sunlight and shadow interactions during solstices and equinoxes, these occurrences on the two White Tank glyphs almost certainly cannot be by chance.

Unless you’re looking for solstice interactions on the petroglyphs, the spring may be the favorite time to visit
White Tank Mountains boulder at Petroglyph Plaza exhibiting dagger-like sunlight interaction on at 7:30 a.m. 2003 summer solstice day

Photo by Shelley Rasmussen

Petroglyph on Boulder 2 at the Ramon site in White Tank Mountain Regional Park just after sunrise on the 2004 summer solstice day, when a “notched shadow” bracketed the glyph’s concentric circles

Photo by Shelley Rasmussen
Along the upper Waterfall Canyon trail that leads to waterfalls
Photo by Shelley Rasmussen

Site of one of the Waterfall Canyon waterfalls during early summer when no water was flowing
Photo by Shelley Rasmussen

A relatively large natural bedrock “tank” (tinaja) in a ledge above one of the waterfalls in Waterfall Canyon, viewed in December 2009
Photo by Allen Dart

Petroglyphs and a brittlebush grace boulder outcrops near one of the White Tank Mountain Regional Park picnic areas
Photo by Shelley Rasmussen
the White Tank Mountain Regional Park to view the petroglyphs. There is an added bonus then because of the riot of color that the wild flowers add. Brittlebush, globemallow, lupine, Arizona poppy, and owl clover are abundantly scattered across the desert. The spring is also a good time to watch for deer, javelina, coyotes and foxes. Sometimes there is even a mountain lion sighting and there is always a chance to see Gila monsters and chuckwallas, sunning themselves on the rocks. Needless to say, it's always good to keep your eyes open for a variety of snakes, particularly rattlesnakes.

The Arizona Site Stewards are very important volunteers who spend much of their time monitoring the petroglyph sites on a regular basis. Because the Park is heavily visited by the public, the Site Stewards are there to help answer questions, keep the trails clean and assist with Park projects. There has been a significant reduction in the vandalism incidents since the Site Stewards became involved.

The White Tank Mountain Park is there for the public to enjoy the petroglyphs, the beautiful views and the great hiking, biking and horseback riding trails. There are also picnicking and camping facilities. A stop at the Nature Center is always a good idea. The Park hosts can answer questions and provide maps. There are artifacts on display as well as live snakes in glass cases. Enjoy your visit to the White Tank Mountain Regional Park and allow plenty of time to enjoy all that the Park has to offer.

My connection to the White Tank Mountains began in 1979 when my husband and I moved to Phoenix from Denver, Colorado. I could see the White Tank Mountains from our new home and they were ‘calling me’. I spent many enjoyable hours exploring the ridges and the canyons searching for and discovering an amazing amount of petroglyph sites.

In 1992 I became an Arizona Site Steward and the White Tank Mountain Regional Park supervisor asked me if I would be interested in leading hikes in the Park as a volunteer. I was interested and started leading hikes that I called Nature Hikes and mixed in a little geology, ethnobotany, and archaeology for the public. In the beginning I had 1 or 2 people who came on the hikes. It soon became 30 to 40 people who would show up.

We also had some exciting times with numerous rattlesnake encounters along the trails and one very scary close encounter with a mother javelina and her baby. This of course is always a good time to talk about the animals in the Park and the “do’s and do not’s” with the Park critters.

There was one instance when one of the visitors was so engrossed in taking photos that I and the group left the site without her. Because she was not familiar with the trails, she ended up at the wrong trailhead and had to hitchhike back to our meeting place. This was very embarrassing for me and from then on I started counting people at different stops along the trail.

These hikes lasted for six years until 1998, when I was hired by the Maricopa County Parks and Recreation Department to become an official Interpretive Ranger. I continued leading hikes in the White Tank Mountain Regional Park and also led hikes at the Cave Creek Regional Park, Spur Cross Conservation Area, and Estrella Mountain Park. My main job as an Interpretive Ranger was teaching desert-related classes at the Desert Outdoor Center at Lake Pleasant. After working for Maricopa County for 16 years I retired in March 2014.

I still monitor sites in the White Tank Mountain Regional Park as a Site Steward. This Park has been my home away from home all these years and has been a tremendous learning experience.

The White Tank Mountains continue to ‘call me.’
White Tank Mountains Regional Park is located at 20304 W. White Tank Mountain Road in Waddell, Arizona.

For more information about the Park call 623-935-2505 or visit whitetankpark@mail.maricopa.gov

The Maricopa County Parks & Recreation Department’s official logo for White Tank Mountains Regional Park (below) is the lowermost petroglyph in the photo at right.
White Tank Mountains Regional Park looking east from the Waterfall Trail, July 24, 2014
Photo by Shelley Rasmussen

Sunset over White Tank Mountains Regional Park, December 5, 2009
Photo by Allen Dart
“But What Does it MEAN?”
Conversations with a Martian on Meaning in Rock Art

Anne Q. Stoll

Don’t you wish you had a dollar for every time someone asked this question? “But what does the rock art MEAN?” I certainly do. I’ve gotten better at biting my tongue and smiling before giving the expected answer, “Who knows?” In my crabber moods, I suspect the questioner just wants to hear me admit universal ignorance by saying it. But really, it’s just that the answer is complicated and it takes some time to unravel. We do have a few feeble tools to pick away at meaning in rock art, but the process takes some explanation and we will never, ever get a full translation. Such is the thrill of anthropology.

Rock art is communicative. Rock art is not aimless doodling. There is meaning packed into the images, into why a given shape or color was used, why it was placed where it is on a wall, what it represents, etc. But when we are looking at, for example, the ancient San pictographs of Zimbabwe, we are forced to concede that we are generally locked out from the meaning because we are members of a different time and culture. The significance of the art is imparted by the creating culture for an audience of that same culture. Even if you could talk with someone who was willing and able to tell you what a given rock art panel means – even if you have a dozen such people or a hundred – how many of the layers of meaning in the art are you really reaching?

Just for the mental exercise, let’s take an image from our own culture and see how far we can get.

So what does this common sign mean? We all know, right? But how are we to explain it to our Martian girlfriend? Context helps, perhaps. Let’s say we were out hiking in a National Park and found this nailed to a post. Our clever Martian has never seen such a sign in a building or in the parking lot at the shopping mall, so she deduces it has something to do with the outdoors where we found it. So far so good.

Now we break the image up into its black and red components. The black triangle looks vaguely familiar – a tent, you say. But it doesn’t look like any tent our modern Martian has ever seen. No, it’s the old way that tents used to look. OK, so why put a red line across an image of an old tent? The line means forbidden, not allowed.

The Martian looks at you in complete bewilderment. “Old tents are not allowed? Why would anyone make and post such a sign? Why would you need or want such a thing?” she asks.

Now think of all the cultural levels your explanation must cover to answer our Martian’s question. What is camping, anyway? Who does this? Why use an old tent to depict it? Why is camping OK over there and not here? Who decides these things? What happens if you ignore this sign? Would all Earthlings understand this rock art? If not, is it because this is “esoteric” knowledge for only the privileged few? Does it reflect ritual behavior involving tents? Are tents permitted for some and not for others? The questions go on and on. Our Martian shakes her head. Earthlings are SO weird! I can only smile and agree.
White Tank Mountains Petroglyph Tours, Archaeology, and History

White Tank Mountain Regional Park Activities
The Park offers regularly scheduled archaeology hikes about six to eight times a year on the Black Rock and Waterfall trails, provides presentations about archaeology and history at the Park Nature Center, and has staff members coming up with new talks and hikes. Park volunteers usually are along the Waterfall Trail during busy times, and there are interpretive signs along the trail. The Park’s upcoming events include:

“History of the White Tanks”: Saturday October 18, 2014, 1-2 p.m.: Bootleggers, bank robbers, and horse thieves? They were all here in the White Tanks at one time or another. Join local historian Karen Krause for her presentation on the fascinating history of the White Tank Mountains, which were "on the map" before Phoenix even existed. This program will be presented in the Nature Center classroom.

“Black Rock Archaeology Walk”: Saturday October 25, 2014, 8-10 a.m.: Park volunteer Joe Weber leads this easy 1½-mile trail hike to ancient petroglyphs starting from Park Area 4. Joe will discuss early native peoples of the area and some possible meanings behind the ancient rock art symbols they left behind. No dogs, please.

Both activities above are covered in the $6 per vehicle park entry fee. White Tank Mountain Regional Park is located at 20304 W. White Tank Mountain Rd., Waddell, Arizona. For more information call 623-935-2505, email whitetankpark@mail.maricopa.gov, or visit http://www.maricopa.gov/parks/white_tank/.

Recreation Centers of Sun City West’s White Tank Mountains Petroglyphs guided tour
Saturday February 21, 2015, 10 a.m. to 3:30 p.m.: Archaeologist Allen Dart leads this tour to hundreds of ancient petroglyphs in the Park during a 2.5-mile morning hike and another 2.5-mile afternoon hike, with a stop in between for lunch at a Park picnic ramada. Some bush-whacking and boulder-hopping required. Bring your own picnic lunch and water, wear comfortable hiking shoes. The $35 fee payable to Recreation Centers of Sun City West includes park entry fee. Register for the tour online at www.rcscw.com (click on the EXPLORE tab in left-hand column). For more information about registration contact Tamra Stark at 623-544-6194 or tamra.stark@rcscw.com.

Joseph Joaquin, Jr., Receives National Award for Cultural Preservation Work
Sells- Joseph Joaquin Jr. sat in the Tohono O’odham Legislative Council Chamber looking a little stunned, and short of words. But that didn’t last long.

During a session of the Legislative Council Aug. 8, he was presented a national Public Service Award from the Society for American Archaeology, and his decades-long work to protect and preserve the Tohono O’odham Nation’s cultural resources was acknowledged by tribal leaders and his peers. The award was presented to

Editor’s Note: Joe Joaquin, Jr. served on Old Pueblo Archaeology Center’s Board of Directors from 2001-2005. A Cultural Affairs Specialist with the Tohono O’odham Nation’s Cultural Affairs Program, Joe formerly served on the Nation’s Legislative Council and chaired its Cultural Preservation Committee. We were delighted to learn that he received this prestigious award.

CONGRATULATIONS JOE!
Old Pueblo Archaeology Center thanks Stanley Throssel for giving permission to reproduce the accompanying story and photo from The Runner, Stanley Publishing Company, Sells, Arizona.
Joaquin by the Society’s President Jeffrey H. Altschul.

Lorraine Eiler was also on hand and was acknowledged for her reception of a similar Public Service Award. She traveled to Austin, TX in April to receive her award at the Society’s annual conference.

Joaquin, who is recovering from a stroke suffered in February, told those gathered in the council chambers for the award presentation, “I didn’t think this was going to be a big thing,” noting that the president of the national society was on hand to make the presentation.

Joaquin works for the Nation’s Cultural Preservation Program, and part of his duties have him traveling across the country working to retrieve the burial remains and funerary objects of ancestors of the Tohono O’odham.

Through this work he has befriended members from many other Indian tribes who do work similar to his, and archaeology professionals who are affiliated with museums and repositories where ancestral remains are held.

He told a story at the ceremony that showed that his work for the most part is inglorious. “I went to Austin, Texas to pick up two cremations, to bring them back,” he said. His return trip funneled him through Phoenix and down to Chui Chu Village on the northern edge of the Nation, where he thought transportation would be waiting.

“No one came to pick me up, me and my two friends,” he said, so he made his way back to Casa Grande and took a bus to Tucson.

Though for the most part his work retrieving ancestral remains and personally transporting them back to the Nation, or arranging for their transport, is a one-man job, Joaquin said he likes what he does. “I enjoy this work because it’s a challenge to me,” he said.

The passage in 1990 of the federal Native American Graves Protection and Repatriation Act has given Joaquin and other Native Americans in his field a process they can use to claim and return ancestral remains to their homelands, and to keep them on tribal lands.

“We can now say, ‘You can’t take this—no—it belongs to our Nation,’” he said, noting that decades ago that wasn’t the case. “They (archaeologists) never had a process, they just came and took it,” he said.

Joaquin acknowledged his peers from other tribes who attended the ceremony. “To the people from the other tribes that are here, we share a lot of this work.”

And his concern about previous generations of Tohono O’odham extends far beyond his work. Said Joaquin, “I always try to stress to young people, to my grandson, what it means to be O’odham, what it means to take care of your ancestors.”

According to the Society, the “Public Service Award . . . recognizes important contributions to the protection and preservation of cultural resources. It is presented . . . to those who have taken a lead or made a major contribution to preserving the past. Ms. Eiler and Mr. Joaquin are the first representatives of a tribal government to receive the Public Service Award.”

The Nation’s leaders and other tribal elected officials offered congratulations to Joaquin.

In addition, Pima County Board of Supervisor’s Chair Sharon Bronson through a personal representative thanked Joaquin for providing guidance to Pima County in its development of the Sonoran Desert Conservation Plan, and for advising and working with the county’s staff to protect Tohono O’odham ancestral sites in Pima County.
Other Upcoming Activities

LOOKING AHEAD: “Fundraising Raffle of a 2014 Jeep Cherokee” by Tucson’s Jim Click Automotive Team. Friday October 24, 2014, is the deadline to purchase tickets for the November 13 “Fundraising Raffle of a 2014 Jeep Cherokee” by Tucson’s Jim Click Automotive Team to benefit Old Pueblo Archaeology Center and other charities. Old Pueblo gets to keep 100% of the proceeds from all raffle tickets that we sell!

The Jim Click Automotive Team is presenting a new 2014 Jeep Cherokee to be used as the featured prize in a raffle to raise one million dollars for Tucson-area nonprofit organizations. With your $25 contribution (or 5 raffle tickets for $100) you could win the 2014 Jeep Cherokee. The best part is that 100% of your contribution will support Tucson charities, including Old Pueblo Archaeology Center, which gets to keep all the proceeds from the tickets that Old Pueblo sells.

Your donation to purchase one or more raffle tickets will help Old Pueblo Archaeology Center provide more archaeology and culture education programs for children who would not be able to afford our programs without your help.

A maximum of 50,000 tickets will be sold. To be entered in the drawing tickets must be received by Old Pueblo by October 24 so that we can turn them in to the Jim Click Automotive Team’s raffle coordinator by October 31. The drawing will be held on November 13.

The rules of the raffle require that Old Pueblo account for all tickets issued to us and that we return all unsold tickets, therefore payment in advance is required in order to obtain tickets. The ticket price is $25 apiece or five tickets for $100. Tickets may be purchased by check sent to our PO Box 40577 address listed on page 40, by calling Al Dart at 520-603-6181 to provide your Visa, MasterCard, Discover, or Diners Club credit card payment information, or through the PayPal portal on Old Pueblo’s www.oldpueblo.org home page. Once you have provided payment, Old Pueblo will enter your ticket(s) into the drawing for you and will mail you the correspondingly numbered ticket stub(s) with a letter acknowledging your contribution.

For tickets or more information contact Old Pueblo at 520-798-1201 or info@oldpueblo.org. For more information about the Jim Click Automotive Team’s 2014 Jeep Cherokee raffle visit the Raffle Facebook page at https://www.facebook.com/JeepCherokeeRaffle.

Mondays September 8- November 17, 2014

“Prehistory of the Southwest” class with archaeologist Allen Dart at Old Pueblo Archaeology Center, 2201 W. 44th Street, Tucson (at Tucson Unified School District’s Ajo Service Center, just west of La Cholla Blvd., ½-mile north of John F. Kennedy Park)

6:30 to 8:30 p.m. each Monday September 8 through November 17, 2014 (except no class on Veterans Day November 10). Fee $50 ($40 for Old Pueblo Archaeology Center and Pueblo Grande Museum Auxiliary members), not counting cost of the recommended text or of optional Arizona Archaeological Society membership. Minimum enrollment 8, maximum 32.

Kiet Siel Pueblo, one of the sites discussed in the “Prehistory of the Southwest” class (Photo by Jeffrey S. Dean)
"Prehistory of the Southwest" is an introductory course in the study of the American Southwest, developed by the Arizona Archaeological Society to provide a basic overview of this region’s archaeology and cultures. The ten class sessions will cover cultural sequences, dating systems, subsistence strategies, development of urbanization, abandonments of different areas at different times, and the general characteristics of major cultural groups that have lived in the Southwest over the past 13,000-plus years. Besides offering an up-to-date synthesis of southwestern prehistory for anyone interested in the archaeology of the Southwest, the class can be used as prerequisite for all other courses offered to members of the Arizona Archaeological Society (AAS) enrolled in or interested in enrolling in the AAS Certification Program. Instructor Allen Dart is a registered professional archaeologist employed by the U.S. Department of Agriculture and is volunteer executive director of Old Pueblo Archaeology Center.

Reservations required, registration deadline Wednesday September 4: 520-798-1201 or info@oldpueblo.org to register or for more information.

Thursday September 18, 2014
Old Pueblo Archaeology Center’s “Third Thursday Food for Thought” dinner featuring the presentation “Chiricahua Apaches in Myth and History” with Cochise College-Douglas History and Anthropology Instructor Rebecca Orozco at Karichimaka Mexican Restaurant, 5252 S. Mission Rd.

6 to 8:30 p.m. Free (Order your own dinner off the restaurant’s menu)

As the last Native American group to reach a peace accord with the U.S. government, the Chiricahua Apache were often featured in the press. Famous warriors Geronimo and Naiche were photographed many times. Their story has been the basis of numerous feature films. The story of their conflict first with the Spaniards and Mexicans who claimed their homeland, and later with the Americans expanding into the region in a policy of Manifest Destiny, has become a mix of history and heresy. The full story never will be completely known. This presentation contains a collection of historic photos from the end of an era – the late 1800s – that tell the story of the clash of the people trying save their lifeway and homeland and the people who believed the land was empty and open for settlement.

Those wishing to attend must call 520-798-1201 and must have their reservations confirmed before 5 p.m. Wednesday September 17 because the fire-safety ordinance limits attendance. There is no entry fee but guests are asked to purchase their own dinners so that the restaurant won’t charge Old Pueblo for their seats, and donations will be requested to benefit Old Pueblo’s educational efforts.

Monday September 22, 2014
Old Pueblo Archaeology Center’s “Autumnal Equinox Tour of Los Morteros and Picture Rocks Petroglyphs Archaeological Sites” with archaeologist Allen Dart, departing from northeast corner of Silverbell Road & Linda Vista Blvd. in Marana, Arizona

8 a.m. to noon. $20 ($16 for Old Pueblo Archaeology Center and Pueblo Grande Museum Auxiliary members)

To celebrate the autumnal equinox, archaeologist Allen Dart (Old Pueblo Archaeology Center’s executive director) leads this tour to Los Morteros, an ancient village site that includes a Hohokam ball-court and bedrock mortars, and to Picture Rocks, where ancient petroglyphs include a solstice and equinox marker, dancing human-like figures, whimsical animals, and other rock symbols made by Hohokam Indians between A.D. 650 and 1450.

LIMITED TO 32 PEOPLE. RESERVATIONS REQUIRED by 5 p.m. Friday September 19: 520-798-1201 or info@oldpueblo.org.
Thursday-Monday September 25-29, 2014

“Chaco Canyon, Aztec, and Salmon Great Pueblos and Other Archaeological Sites” Old Pueblo Archaeology Center educational tour with archaeologist Marc Severson. Drive your own vehicle and meet tour in Gallup, NM, on Thursday; actual touring begins Friday and continues through Sunday, with optional (extra-cost) Monday visit to sites on the Zuni Indian Reservation.

Fee for Friday-Sunday touring: $195 ($175 for Old Pueblo Archaeology Center and Pueblo Grande Museum Auxiliary members); fee for individual days including optional Monday trip to Zuni area: $70 per day ($60/day for Old Pueblo and PGMA members). Participants are responsible for their own transportation, meals, and lodging. Tour leader will stay at Red Lion Hotels in Gallup and Farmington. Hotels, camping, and other accommodations for those who wish to arrange their own lodging are available in and near Gallup and Farmington; camping spaces in the Chaco Canyon campground are limited so reservations there are highly recommended.

The archaeological sites in Chaco Canyon are some of the most famous, yet enigmatic, sites in the Southwest. A World Heritage Site, Chaco attracts thousands of visitors each year, yet most people see only sand, mud, rock walls, and a treeless desolate landscape. Old Pueblo's tour will take you beyond the simple brochures and photo-ops to explore the multiple contexts of the people who created these magnificent structures. We not only examine sites within Chaco Canyon, but also outlier sites north and south of the canyon proper. The tour is guided by Marc Severson, who has worked as a professional archaeologist and educator since 1972 and is a 20-year-veteran leader of southwestern tours for Pima Community College and Old Pueblo. Tentative itinerary:

Thursday: Travel day to meet at Red Lion Hotel, Gallup, NM, check in with Marc or in the Red Lion lobby by 7 p.m. Mountain Daylight Time and stay overnight in Gallup. Friday: Drive from Gallup to Chaco Canyon to tour Great House sites on its north side. Afterward drive to Farmington, NM, to stay overnight. Saturday: Tour Aztec Ruins in morning, Salmon Ruins in afternoon. Stay in Farmington overnight. Sunday: Drive from Farmington to Chaco Canyon to tour “Small House sites” and Casa Rinconada Great Kiva on its south side. If time permits on the way back to Gallup we will visit the Pueblo Pintado Chacoan Outlier archaeological site. Stay overnight in Gallup. Monday option: Drive from Gallup to Zuni Pueblo to visit Our Lady of Guadalupe historic mission church built in 1629; its interior walls feature murals illustrating traditional Zuni ceremonial life (the life's work of Alex Seowtewa and his sons). Also we will visit the Village of the Great Kivas Chacoan Outlier site, the Zuni Eagle Rehabilitation center, and the home of the Lalios to see their native pottery and jewelry.

Deadline for the required reservations is Friday September 12: 520-798-1201 or info@oldpueblo.org.

Thursday October 2, 2014

"Set in Stone but Not in Meaning: Southwestern Indian Rock Art" free presentation by archaeologist Allen Dart at Buckeye Valley Museum, 116 E. Highway 85, Buckeye, Arizona; cosponsored by Arizona Humanities*

6-7 p.m. Free

Native Americans in the Southwest developed sophisticated skills in astronomy and predicting the seasons, centuries before Old World peoples first entered the region. In this presentation archaeologist Allen Dart discusses the petroglyphs at Picture Rocks, the architecture of the "Great House" at Arizona's Casa Grande Ruins, and other archaeological evidence of ancient southwestern astronomy and calendrical reckoning; and interprets how these discoveries may have related to ancient Native American rituals. Funding
for program provided by Arizona Humanities.

* This is not an Old Pueblo Archaeology Center-sponsored event. No reservations needed. For meeting details contact Jana White in Buckeye at 623-349-6321 or jwhite@buckeyeaz.gov; for information about the presentation subject matter contact Allen Dart at Tucson telephone 520-798-1201 or adart@oldpueblo.org.

Friday October 3, 2014
“Antiquity of Irrigation in the Southwest” adult education class with archaeologist Allen Dart, RPA, for OLLI-UA Green Valley members at First American Title, 101 S. La Canada Dr. #24 (in Green Valley Mall), Green Valley, Arizona*
3:30 to 5 p.m. Open only to Osher Lifelong Learning Inst. (OLLI) members who reside in Green Valley; OLLI-UA Green Valley membership fee of $95 for Fall session or $130 for entire year covers this course. Preliterate cultures in the American Southwest took advantage of southern Arizona’s long growing season and tackled its challenge of limited precipitation by developing the most extensive irrigation works in all of North America. Agriculture was introduced into southern Arizona more than 4,000 years ago, and irrigation systems were developed here by at least 3,500 years before present – several hundred years before irrigation was established in ancient Mexico. This study session provides an overview of ancient Native American irrigation systems identified by archaeologists in the southern Southwest and discusses their implications for understanding social complexity.

* This is not an Old Pueblo Archaeology Center-sponsored event. To join Green Valley OLLI visit www.lli.arizona.edu/olll to download a registration and payment form or pay and register online; for information about this course contact Paula Kulina at 602-317-1488 or garlina@cox.net, or Allen Dart at 520-798-1201 or adart@oldpueblo.org.

Sundays October 12-November 23, 2014
“Traditional Pottery Making Workshop” with Andy Ward at Old Pueblo Archaeology Center, 2201 W. 44th Street, just west of La Cholla Blvd., ½-mile north of John F. Kennedy Park, Tucson.
2 to 5 p.m. each Sunday. Fee $79 ($63.20 for Old Pueblo Archaeology Center and Pueblo Grande Museum Auxiliary members) includes all materials except clay, which participants will collect during class field trip.

A series of seven pottery-making class sessions will be offered by artist Andy Ward on seven Sunday afternoons October 12 through November 23, 2014, including a clay-gathering field trip on October 19. The class is designed to help modern people understand how ancient Native Americans made and used pottery, and is not intended to train students how to make artwork for sale. The Level 1 class demonstrates traditional hand-building pottery techniques using gourd scrapers, mineral paints, and yucca brushes instead of modern potters’ wheels and paint. The course introduces some history of southwestern Ancestral and Modern Pueblo, Mogollon, and Hohokam pottery-making, includes a Hohokam canals in the Salt River Valley, Arizona 1929 map by Omar Turney

Hohokam canals in the Salt River Valley, Arizona 1929 map by Omar Turney

Pots made by students in Old Pueblo Archaeology Center’s April-May 2014 pottery making class
Photo by Andy Ward
field trip in which participants dig their own clay, and demonstrates initial steps in forming, shaping and smoothing, and completion of bowls and jars of both smooth and corrugated pottery, by scraping, polishing, slipping and painting. The paddle-and-anvil hand-building method is also demonstrated.

Reservations required: 520-798-1201 or info@oldpueblo.org.

Thursday October 16, 2014

Old Pueblo Archaeology Center’s “Third Thursday Food for Thought” dinner featuring the presentation “The Eagle and the Archaeologists: The Lindberghs’ 1929 Southwest Aerial Survey” with historian Erik Berg at a Tucson restaurant to be announced; cosponsored by Arizona Humanities

6 to 8:30 p.m. Free (Order your own dinner off of the restaurant’s menu)

Charles Lindbergh is best known for his famous 1927 flight across the Atlantic Ocean. But few realize that Lindbergh and his wife, Anne, played a brief but important role in archaeology. In 1929 they teamed up with noted archaeologist Alfred Kidder to conduct an unprecedented aerial photographic survey of southwestern prehistoric sites and geologic features including Chaco Canyon, the Grand Canyon, and Canyon de Chelly. Featuring Lindbergh’s historic photographs, this presentation describes this adventurous pioneering collaboration of aviation and archaeology.

Raised in Flagstaff, Arizona, Erik Berg is an award-winning historian and writer with a special interest in the early twentieth century Southwest and the impact of science and technology. In addition to contributing to several books, his work has appeared in the Journal of Arizona History, Arizona Highways, and Sedona Magazine. A past president of the Grand Canyon Historical Society, Berg currently lives in Phoenix.

Guests may select and purchase their own dinners from the restaurant’s menu. There is no entry fee but donations will be requested to benefit Old Pueblo’s educational efforts. Because seating is limited in order for the program to be in compliance with the Fire Code, those wishing to attend must call 520-798-1201 and must have their reservations confirmed before 5 p.m. Wednesday October 15.

Thursday October 23, 2014

"Set in Stone but Not in Meaning: Southwestern Indian Rock Art" free presentation by archaeologist Allen Dart for Verde Valley Chapter, Arizona Archaeological Society, at a location to be announced, Sedona.

7-8 p.m. Free

Native Americans in the Southwest developed sophisticated skills in astronomy and predicting the seasons, centuries before Old World peoples first entered the region. In this presentation archaeologist Allen Dart discusses the petroglyphs at Picture Rocks, the architecture of the "Great House" at Arizona's Casa Grande Ruins, and other archaeological evidence of ancient southwestern astronomy and calendrical reckoning; and interprets how these discoveries may have related to ancient Native American rituals. Funding for program provided by Arizona Humanities.

* This is not an Old Pueblo Archaeology Center-sponsored event. No reservations needed. For meeting details contact Scott Newth in Sedona at 928-274-7773 or rsnewth@msn.com; for information about the presentation subject matter contact Allen Dart at Tucson telephone 520-798-1201 or adart@oldpueblo.org.

Sunday October 26, 2014

"Arts and Culture of Ancient Southern Arizona Hohokam Indians" free presentation by archaeologist Allen Dart for Canoa Anza Days at Historic Canoa Ranch, 5375 S. I-19 Frontage Road, Green Valley, Arizona (along I-19 East Frontage Road between the Continental and Canoa exits); cosponsored by Arizona Humanities.*

11 to 11:30 a.m. flexible start time. Free

The Hohokam Native American culture flourished in southern Arizona from the sixth through fifteenth centuries, and the Akimel O’odham (Pima) and Tohono O’odham (Papago) occupied this region historically. Ancient Hohokam artifacts, architecture, and other...
material culture provide archaeologists with clues for identifying where the Hohokam lived, for interpreting how they adapted to the Sonoran Desert for centuries, and explaining why the Hohokam culture mysteriously disappeared. In this presentation archaeologist Allen Dart illustrates the material culture of the Hohokam and presents possible interpretations about their relationships to the natural world, their time reckoning, religious practices, beliefs, and deities, and possible reasons for the eventual demise of their way of life. Funding for the program is provided by Arizona Humanities.

* This is not an Old Pueblo Archaeology Center-sponsored event. For event details contact Dawn Morley at 520-289-3940 or info@havesomefun.us; for information about the activity subject matter contact Allen Dart at Tucson telephone 520-798-1201 or adart@oldpueblo.org.

Thursday November 13, 2014

“Fundraising Raffle of a 2014 Jeep Cherokee” by Tucson’s Jim Click Automotive Team. Old Pueblo Archaeology Center gets to keep 100% of the proceeds from all raffle tickets that it sells (see page 13).

Thursday November 20, 2014

Old Pueblo Archaeology Center’s “Third Thursday Food for Thought” dinner featuring the presentation “Landscape of the Spirits: Hohokam Rock Art of South Mountain Park” with archaeologist Dr. Todd Bostwick at Dragon’s View Asian Cuisine, 400 N. Bonita Ave., Tucson; cosponsored by Arizona Humanities

6 to 8:30 p.m. Free (Order your own dinner off of the restaurant’s menu)

The South Mountains in Phoenix contain more than 8,000 Hohokam petroglyphs. This program discusses Dr. Bostwick’s long-term study of these ancient glyphs and describes the various types of designs, their general distribution, and their possible meanings. Interpretations of the petroglyphs include the marking of trails, territories, and astronomical events, as well as dream or trance imagery based on O’odham (Pima) oral traditions. Most of the trails currently used by hikers in the South Mountains contain Hohokam rock art, indicating that these trails date back at least 800 years.

Todd Bostwick has conducted archaeological research in the Southwest for 35 years, was the Phoenix City Archaeologist at Pueblo Grande Museum for 21 years, and is now the Senior Research Archaeologist for PaleoWest Archaeology in Phoenix and Director of Archaeology for the Verde Valley Archaeology Center in Camp Verde. Dr. Bostwick has published numerous articles and books on Southwest history and prehistory and has received several awards, including the Governor’s Award in Public Archaeology in 2005.

Guests may select and purchase their own dinners from the restaurant’s menu. There is no entry fee but donations will be requested to benefit Old Pueblo’s educational efforts. Because seating is limited in order for the program to be in compliance with the Fire Code, those wishing to attend must call 520-798-1201 and must have their reservations confirmed before 5 p.m. Wednesday November 19.

Saturday November 29, 2014

“Rock Art and Archaeology of Ventana Cave” Old Pueblo Archaeology Center carpooling educational tour with archaeologist Allen Dart departing from Pima Community College, 401 N. Bonita Ave., Tucson

6:30 a.m. to 3:30 p.m. Fee $35 ($28 for Old Pueblo Archaeology Center and Pueblo Grande Museum Auxiliary members; no charge for members or employees of the Tohono O’odham Nation)

Old Pueblo Archaeology Center offers this early-morning carpool tour onto the Tohono O’odham Nation to visit the Ventana Cave National Historic Landmark site. During the Arizona State Museum’s 1940s excavations in the cave, led by archaeologists Emil W. Haury and

Ancient pictographs inside Ventana Cave
Julian Hayden, evidence was found for human occupation going back from historic times to around 10,000 years ago. The cave, which actually is a very large rockshelter, also contains pictographs, petroglyphs, and other archaeological features used by Native Americans for thousands of years. Tour leaves Tucson at 6:30 a.m. to ensure the pictographs can be seen in the best morning light. Fees will benefit the Tohono O’odham Hickiwan District’s efforts to develop a caretaker-interpretive center at Ventana Cave, and the nonprofit Old Pueblo Archaeology Center’s education programs.

Reservations required by Wednesday November 26: 520-798-1201 or info@oldpueblo.org.

Thursday December 18, 2014

Old Pueblo Archaeology Center’s “Third Thursday Food for Thought” dinner (guest speaker and Tucson restaurant to be announced)

6 to 8:30 p.m. Free (Order your own dinner off of the restaurant’s menu)

IF YOU WOULD LIKE MORE INFORMATION about any of the upcoming activities listed above please call Old Pueblo Archaeology Center at 520-798-1201 or email us at info@oldpueblo.org.

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### Archaeology Opportunities Membership/Old Pueblo Archaeology Subscription Application Form

**Whichsoever membership level you choose, your membership fee supports Old Pueblo Archaeology Center’s educational programs.**

<table>
<thead>
<tr>
<th>Name (Mr., Ms. Mrs.)</th>
<th>I am submitting the following payment for:</th>
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<td></td>
<td><strong>Archaeology Opportunities</strong> membership $</td>
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<tr>
<td></td>
<td><strong>Old Pueblo Archaeology</strong> subscription only $</td>
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<tr>
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<td>Donation to Old Pueblo Archaeology Center $</td>
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**TOTAL ENCLOSED** $ ___

**Membership categories and rates:**

- **Individual** $40 *Categories and rates shown at left include Old Pueblo Archaeology electronic bulletin annual subscription (4 issues), provide discounts on publications and some activities, and provide opportunities to participate in Old Pueblo Archaeology Center’s member-assisted field research programs such as archaeological excavations and surveys.**
- **Household** $80
- **Sustaining** $100
- **Contributing** $200
- **Supporting** $500
- **Sponsoring** $1,000
- **Corporation** $1,000

- **Friend** $25 Provides 1-year Old Pueblo Archaeology bulletin subscription (4 issues) & discounts on publications & some activities; does not provide participation in member-assisted field research programs.
- **Subscriber** $10 Provides 1-year subscription to the Old Pueblo Archaeology electronic bulletin (4 issues); does not provide discounts or participation in member-assisted field research programs.

**Please complete this section only if paying with credit card:**

**Please charge to my:**
- [ ] Visa
- [ ] MasterCard
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**Name on credit card**

**Account # on front of card**

**Expiration date (Month/Year)** ___ / ___

**Signature**

**Please return this form, with check payable to “OPAC” or with credit card information completed, to the address below:**

**Old Pueblo Archaeology Center**

**PO Box 40577**

**Tucson AZ  85717-0577**

**Questions?** Contact Old Pueblo at 520-798-1201 or info@oldpueblo.org

**Thank you for helping teach and protect the Southwest’s heritage!**
Archaeology Opportunities is a membership program for persons who wish to support Old Pueblo Archaeology Center’s education efforts and perhaps even to experience for themselves the thrill of discovery by participating in research. Membership is also a means of getting discounts on the fees Old Pueblo normally charges for publications, education programs, and tours. Members of Archaeology Opportunities at the Individual membership level and above are allowed to participate in certain of Old Pueblo’s archaeological excavation, survey, and other field research projects, and can assist with studies and reconstruction of pottery and other artifacts in the archaeology laboratory. Membership benefits include a 1-year subscription to the Old Pueblo Archaeology electronic quarterly bulletin, opportunities to participate in Old Pueblo’s member-assisted field research programs, discounts on publications and archaeology-related items, and invitations and discounts for field trips and other events.