



# GLYPHS

The Monthly Newsletter of the  
Arizona Archaeological and Historical Society  
An Affiliate of the Arizona State Museum, University of Arizona  
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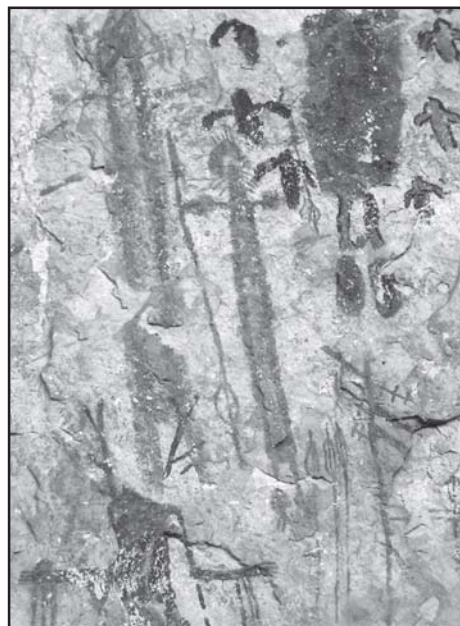
## HIGHLIGHTS OF THIS ISSUE

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*Magnificent polychromatic Pecos River Style figures line the walls of Halo Shelter. These complex rock art panels communicate mythological events and detail prescriptions for rituals conducted by hunter-gatherers living in the region 4,000 years ago.*

Next General Meeting: January 19, 2009

<http://www.statemuseum.arizona.edu/aahs/aahs.shtml>

## PRESIDENT'S MESSAGE

## Looking Back, Looking Forward

The advent of a new year is a time to appreciate what we have and to look forward to new things. In this message, I would like to recall a few successes of 2008 and highlight some future directions.

In 2008, we offered many excellent lectures and field trips and, importantly, enhanced the diversity of those offerings. To use the most recent lectures as examples, topics over the past three months have included Hohokam connections to Meso-America (Stephanie Whittlesey), Coronado's route (Gayle and Bill Hartmann), and a seventeenth century example of Hopi clowning (Anton Daughters). This range of subjects reflects our desire to include topics relating to both the prehistory and history of the American southwest and of northern Mexico.

Over the same period, field trips have been equally diverse, focusing on Cerro Prieto, a terraced Hohokam village (Matt Pailles), San Xavier Mission (Bunny Fontana), and Coronado's route through the Rio Sonora Valley (the Hartmanns). All three field trips were well attended, highly informative, and very much enjoyed by participants.

We made a number of positive changes to our Scholarship and Grants program during the last year. Funding for the program was increased significantly by making bet-

ter use of our small endowment established for this purpose and by innovative improvements to our December raffle/auction. Taken together, these changes allowed us to increase the maximum dollar award for research grants to \$1,000, making them more attractive and useful to researchers.

Our book sales were highly productive in raising funds to support the Library at ASM. In particular, the sale held in the Spring of 2008 produced record revenues, more than double any previous sale. Funds raised by AAHS are now a very important component of the Library's budget, particularly in the current difficult economic times.

Our journal, *Kiva*, has continued to publish important papers of interest to our readers. This past year the book review section has blossomed and has attracted a significant number of excellent reviews.

Looking ahead, we want to continue this momentum. A new emphasis this year is to offer lectures by scholars from outside the Tucson area at our General Meetings. The first three lectures in 2009 will do exactly that, beginning with the January lecture by Carolyn Boyd discussing the rock art of the Lower Pecos.

Steve Lekson, editor of *Kiva*, is hard at work organizing some special issues to celebrate *Kiva's* 75th year of publication. Our 75th volume

year begins with the Fall 2009 issue, which we plan to commemorate in a number of ways.

Also in 2009, we will be developing a new website for AAHS that we believe will be much more useful and interesting to members and prospective members. As an adjunct to this, we will also be developing new administrative systems to improve our work in areas such as the processing of new and renewing memberships.

I would like to thank everyone who contributed to the successes discussed above, as well as to the many other things we do at AAHS. And I'd also like to thank all of you in advance who will help offer excellent programs and publications in this new year.

I am looking forward to a productive 2009, and wish each of you a Happy and Healthy New Year.

—Peter Boyle, President

## AAHS LECTURE SERIES

- All meetings are held at the University Medical Center, Duval Auditorium Third Monday of the month, 7:30–9:00 p.m.
- Jan. 19, 2009: Carolyn Boyd, *Drawing from the Past: Interpreting the Rock Art of the Lower Pecos, Texas Archaic*
- Feb. 16, 2009: David Abbott, *On a Foundation of Potsherds: Building a New Model of the Phoenix Basin Hohokam*
- Mar. 16, 2009: Paul Minnis and Michael Whalen, *Paquimé Postscript: New Work Around Casas Grandes*
- Apr. 20, 2009: Carolyn O'Bagy Davis, *Hopi Summer: Letters from First Mesa*



Participants in the AAHS field trip to Cerro Prieto led by Matt Pailles (third from the right) pose inside Hohokam house walls reconstructed by Byron Cummings.

## AAHS HAPPENINGS

### TOPIC OF THE JANUARY 19 GENERAL MEETING

#### Drawing from the Past: Interpreting Rock Art of the Lower Pecos

by Carolyn E. Boyd

Thousands of years ago, bands of hunter-gatherers lived in and traveled through the challenging terrain of what is now southwest Texas and northern Mexico. Today, travelers to the Lower Pecos canyonlands can view large murals that early peoples left behind on the canyon walls and cliff overhangs of this arid region. These magnificent murals date to over 4,000 years and represent some of the most complex and compositionally intricate rock art panels in the world.

Scholars, particularly art historians, have long recognized that art of ancient societies serves as an enduring record of intellectual and spiritual expression. Professional archaeologists have been reluctant to access this same information in prehistoric art. The prevailing attitude has been that research directed toward the interpretation of art cannot be accorded scientific status, and thus, should not be the subject of archaeological study.

Application of scientific rigor in the iconographic analysis of the

Lower Pecos rock art has demonstrated that the imagery is not beyond interpretation. Detailed information is being gleaned from the art regarding the native of the Lower Pecos world, ancient mythologies, and ritual practices. These new insights are greatly enriching our understanding of human prehistory, hunter-gatherer lifeways, and the function and meaning of Lower Pecos rock art.

#### Suggested Reading:

- Boyd, Carolyn E.  
2003 *Rock Art of the Lower Pecos*. Texas A&M University Press, College Station.
- Kirkland, F., and W. W. Newcomb  
1967 *The Rock Art of Texas Indians*. University of Austin Press, Austin.
- Shafer, H. J.  
1986 *Ancient Texans: Rock Art and Lifeways along the Lower Pecos*. Texas Monthly Press, Austin.
- Turpin, S., and J. Zintgraff  
1991 *Pecos River Rock Art: A Photographic Essay*. Sandy McPherson Publishing Company, San Antonio, Texas.

*Speaker Carolyn E. Boyd, Ph.D. is the executive director and a founder of SHUMLA, an archaeological research and educational nonprofit corporation designed to connect people of all ages with the land and their cultural heritage. She serves as Adjunct Professor at Texas State University and as a Research Fellow at the Center for the Arts and Symbolism of the*

*Ancient Americas in San Marcos, Texas, and the Texas Archeological Research Laboratory in Austin. Carolyn received her doctorate in archaeology from Texas A&M University, based on her ground breaking analysis of the 4,000-year-old rock art of the Lower Pecos River region of southwestern Texas and northern Mexico. Her expanded dissertation, Rock Art of the Lower Pecos, was published in 2003 by Texas A&M University Press. She teaches "Field Methods in Rock Art," a three-week field school offered each May through Texas State University, gives numerous lectures around the country, serves on several graduate committees, and continues with her innovative research of the rock art of the Lower Pecos. Carolyn lives with her husband, Dr. Phil Dering, in the canyonlands of west Texas.*

## UPCOMING AAHS FIELD TRIPS

*AAHS membership is required to participate in field trips. Prospective members may attend one AAHS field trip prior to joining.*

### January 31, 2009

#### San Pedro Valley Ghost Towns

We will visit the old mining town of Charleston along the San Pedro River with historical archaeologist, Jennifer Levstik, who has been involved in documenting the site. Charleston was founded in 1879 as part of the southern Arizona mining boom. We will also visit the nearby site of Fairbank and view some petroglyphs along the river.

Access to Charleston involves crossing the shallow but cold San Pedro River so bring a towel or plastic bags to cover shoes while wading. We will carpool from Houghton and I-10, leaving at 8:30 a.m. The tour is limited to 20 people. To sign up, contact Katherine Cerino at <kcerino@gmail.com>.

### February 13, 2009

#### The Sun-Struck Site and Other South Mountain Glyphs

This tour will be lead by Wes Holden, who, with his wife Suzi, has been studying the Sun-Struck petroglyph site in the Pima Canyon area of South Mountain Park for the last several years. We will first go to their home to view a presentation and time-lapse movies of the site; we will then proceed to the site. After this, we will hike 2-3 miles to view other petroglyphs. This will be a full-day field trip. Please wear hiking boots, and bring lunch and water. A camera with good optical zoom and binoculars will enhance the experience. Parking is very limited; we will carpool from the Marana exit of Interstate 10 by 8:30 a.m.

*This tour is limited to 10 people due to site access issues. Sign-ups will be taken in the order received. To reserve your space, contact Katherine Cerino at <kcerino@gmail.com>.*

## An Imperiled Ground Figure

by Rick and Sandy Martynec  
AAHS Members

During a survey along the southern edge of Las Playas in Cabeza Prieta National Wildlife Refuge in November 2002, the authors, along with Arizona Site Stewards, Rich and Linda Davis, discovered an intaglio-type ground figure. This intaglio is within 10 m of the international border fence between Arizona and Mexico, and is even closer than the currently used border road that parallels the border fence.

On April 12, 2005, the authors, Curt McCasland and Dave Seigel from CPNWR, Peter Steere and Joe Joaquin from the Tohono O'odham Nation Cultural Affairs Office, and Tohono and Hia Ced O'odham tribal members visited the intaglio and several other nearby sites. During this visit, we were informed by tribal members that the intaglio should be treated as a sacred site.

As of February 2008, the intaglio had not been disturbed. However, construction efforts by Homeland Security may change this situation and, in fact, the intaglio was missed by the archaeological field crew sent to survey for the on-going border road widening project. The Las Playas intaglio, its natural and cultural setting, and its future protection are discussed here.

The intaglio is on a desert pavement covered flat just above the southern edge of a large playa. The flat is nearly devoid of vegetation, except a

few hardy creosotebushes growing in the lower, better-watered areas. There are no natural resources near the intaglio today.

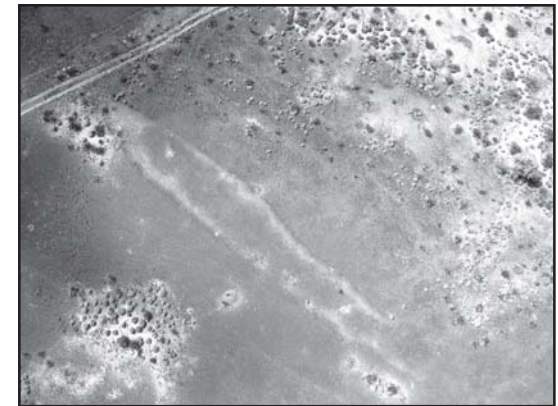
The Las Playas intaglio was recorded during the course of the Las Playas Project as a feature at the Las Playas Intaglio site, AZ Y:15:26 (ASM). It may not, however, be related to any of the other features or artifacts at this site due to the distance between them. Artifact concentrations are located 55 m west and 70 m southwest of the intaglio, and a trail system (the only trails near the intaglio) and two rock features are located south and south-southwest; all are in Sonora, Mexico.

The artifacts in the concentrations, trail system, and rock features include sherds from Patayan wares, plain wares, a Sacaton Red-on-buff vessel (one sherd), flaked stone, bone, shell, two manos, a slab metate and fragments of several other ground stone implements. Patayan pottery types noted are Colorado buff, Colorado beige, Palomas buff, and Black Mesa buff. Among the flaked stone inventory are debitage of basalt, obsidian, granodiorite, and quartz, old basalt flakes and a biface with weathered and patinated flake scars, an obsidian San Pedro type projectile point, and a rhyolite scraper. Shell artifacts are tiny pieces of *Glycymeris* and *Cardium* and segments of bracelets broken during manufacture.

The Las Playas intaglio is 83 m long, with a maximum width of 15 m; it is oriented slightly east of north. It was constructed by scraping aside the darkened pebbles and gravels in the desert pavement to expose the lighter colored sediment below. The pebbles and gravels formed ridges that are still prominent today as a dark outline. The ridges are noticeable because the pebbles are clustered more closely together. The pebbles between

and in the ridges are patinated as dark as the surrounding desert pavement. None of the disturbed pebbles and gravels exhibit caliche or ground varnish, and most are slightly embedded in the underlying sediment. Several faint, trail-like features are located near the center of the figure; these can best be viewed in late afternoon when the sun is low. Unmodified, head-size basalt rocks were noted at various locations in and adjacent to the intaglio. Caliche is visible on an exposed surface of only one of these seemingly associated rocks, and it was found among the six rocks clustered 30 m north of the southern edge of the intaglio; this rock had certainly been moved recently.

More than 50 fist-size and six head-sized basalt rocks were placed in a 1.5-m-diameter area immediately north of the southern edge; many of these rocks exhibit caliche on their exposed surfaces. The only artifact observed on the intaglio is a Patayan ware sherd found in an outlined por-



View of the Las Playas intaglio, taken with a balloon by Statistical Research, Inc.

tion of the figure midway up the western edge.

Most of the characteristics of the Las Playas intaglio are similar to those found farther west, along the Colorado River and in Sierra Pinacate. According to Julian Hayden's criteria regarding varnish, shell caliche, and ground patina, the Las Playas intaglio dates to San Dieguito I times, 9000-6000 B.C. Archaeological evidence at the site neither supports nor refutes this assignment.

On February 23, 2005, members of the Ajo Region of the Arizona Site Stewards moved large rocks onto the flat south and southeast of the intaglio to discourage use of the area as a turnaround for vehicles. It is highly unlikely, however, that the rocks will be effective deterrents to careless crews constructing the vehicle barrier fence and widening the border road. We hope the archaeological survey and monitoring crew will be able to protect this valuable and sacred cultural resource.

## THE CORNERSTONE

## Isotopes in Livestock Teeth Shed New Light on Ranching Practices at Spanish Missions

by *Barnet Pavao-Zuckerman and Deanna Grimstead*  
University of Arizona

Domesticated livestock, including cattle, sheep, goats, pigs, and chickens, were introduced to southwestern North America in the late seventeenth century by Spanish missionaries. Historical and archaeological evidence indicates that Native American reactions to these introduced animals were mixed.

In some cases, Native peoples initially rejected livestock. Large livestock, particularly cattle, have the potential to radically alter landscapes, and it appears that Native peoples quickly understood that risk. In the arid Southwest, introduced water-intensive livestock represented a threat to drinking water. Native peoples often complained about the animals muddying and fouling the water in riparian zones. However, historical documents indicate livestock flourished at most missions by the mid-eighteenth century. Recent archaeological research suggests cattle ranching became the dominant economic activity of missionized Native American groups by the turn of the nineteenth century, but much of the details of ranching practices in the region are not yet known. In particular, it is not known how herds were managed on the landscape, or whether missions were involved in trading or selling livestock with other

missions, presidios, secular ranches, or mining communities.

These issues are important in understanding the experiences of Native Americans under missionization, the role of missions in regional economies, and the impact of early ranching on southwestern landscapes. Traditional historical narratives portray missions as backwater frontier isolates disconnected from the rest of the colonial system. However, recent research in other regions of North America indicate that Native American labor at Spanish colonial missions was critical to the success and support of broader colonial programs.

Traditional zooarchaeological analyses yield critical data, including species, skeletal element representation, age/sex profiles, and butchering practices, but cannot address more specific questions regarding husbandry practices, such as foddering or grazing regimes, landscape use, or the movement of livestock through trade networks. Isotopic analyses of zooarchaeological bone and teeth can provide information about the diet and movement of animals in the past, particularly when used in concert with traditional zooarchaeological data, observation of modern ranching practices,

and documentary descriptions of historic landscapes and ranching practices. However, until the current research project, isotopic techniques were untested in mission-period livestock remains in the Sonoran Desert environment.

The data, while inconclusive in some respects, support the hypothesis that livestock ranching in the mission period focused on less labor-intensive strategies such as free-ranging, rather than labor-intensive foddering practices. Coupled with ethnohistoric data, it appears that missions used water management technologies to bring water to free-ranging cattle. While free-ranging livestock may have required less time and labor input on the part of missionized Native Americans than foddered livestock, maintenance of water storage and diversion systems would have been a significant labor sink. However, the presence of wa-

ter-diversion features in the region prior to the arrival of Europeans, and perhaps as early as 1500 B.C., may suggest that indigenous knowledge shaped water management strategies in the colonial period.

This research project, funded by the University of Arizona Vice President for Research's Faculty Small Grants Program, raises several important future avenues of inquiry that will help elucidate livestock ranching practices in the historic period. Funding will be sought to pursue these avenues, with particular emphasis on subjecting the archaeological samples to isotopic analyses.

*The Cornerstone is presented by:*  
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## UPCOMING ARIZONA STATE MUSEUM EVENTS

### Southwest Indian Art Fair

February 21, 2009; 10:00 a.m.–5:00 p.m.

February 22, 2009; 10:00 a.m.–4:00 p.m.

Southern Arizona's premier Indian art show and market! Meet 200 renowned Native artists. Shop for top-quality artwork, including pottery, Hopi kachina dolls, paintings, jewelry, baskets, rugs, blankets, and much more. Artist demonstrations, Native foods, music, and dance performances round out the two-day celebration.

### Walking in Her Footsteps: Evolutionary Milestones of Our Early Upright Ancestors

March 5, 12, 19, 26, 2009; 6:30–8:00 p.m.

In honor of ASM's connection to the blockbuster exhibit *Lucy's Legacy: The Hidden Treasures of Ethiopia* currently touring the United States and presently at the Pa-

cific Science Center in Seattle, Arizona State Museum presents an overview of six million years of human history in this series of lectures and presentations. Featuring and focusing on "Lucy," the world famous bipedal hominid, ASM and UA experts will discuss a range of topics relevant to the evolution of our species. [Individual lectures: \$25, non-members, \$20, ASM members; entire series: \$90, non-members, \$70 ASM members]

### WORKSHOP: ARCHAEOLOGICAL PROSPECTION TECHNIQUES

The National Park Service's 2009 workshop on archaeological prospection techniques, entitled *Current Archaeological Prospection Advances for Non-Destructive Investigations in the 21st Century*, will be held May 18-22, 2009, at the National Park Service's National Center for Preservation Technology and Training, Natchitoches, Louisiana. Field exercises will take place at the Los Adaes State Historical site, a Spanish presidio and capital of the Spanish province of Texas between 1719 and 1772. Co-sponsors for the workshop include the National Park Service, the U.S. Army Corps of Engineers, Los Adaes State Historic Site, Northwestern State University of Louisiana, and the Louisiana Division of Archaeology. This is the nineteenth year of the workshop dedicated to the use of geophysical, aerial photography, and other remote sensing methods as they apply to the identification, evaluation, conservation, and protection of archaeological resources across the country. The workshop will present lectures on the theory of operation, methodology, processing, and interpretation, with hands-on use of the equipment in the field. Lodging will be at the Ramada Inn. There is a \$475 registration fee.

Application forms are available on the Midwest Archeological Center's website at <<http://www.nps.gov/history/mwac/>>. For further information, please contact Steven L. DeVore, Archeologist, National Park Service, Midwest Archeological Center, Federal Building, Room 474, 100 Centennial Mall North, Lincoln, NE 68508-3873, or 402.437.5392, ext. 141, or <[steve\\_de\\_vore@nps.gov](mailto:steve_de_vore@nps.gov)>.

**ARTICLE SUBMISSIONS FOR GLYPHS:** If you have research or a field project that would be interesting to *Glyphs* readers, please consider contributing an article. Requirements are a maximum of 1,000 words, or 750 words and one illustration, or 500 words and two illustrations. Please send electronic submissions to <[jadams@desert.com](mailto:jadams@desert.com)>, or by mail to Jenny Adams, Desert Archaeology, Inc., 3975 N. Tucson Blvd., Tucson, Arizona 85716.

### AAHS MEMBERSHIP/SUBSCRIPTION APPLICATION

(A membership subscription makes a great gift for your loved ones!)

All members receive discounts on Society field trips and classes.  
Monthly meetings are free and open to the public.

#### Categories of Membership

- \$45 **Kiva** members receive 4 issues of *Kiva*, 12 issues of *Glyphs*, and all current benefits
- \$35 **Glyphs** members receive *Glyphs*
- \$30 **Student Kiva** members receive both *Glyphs* and *Kiva*
- \$15 **Student Glyphs** members receive *Glyphs*
- \$75 **Contributors** receive *Glyphs*, *Kiva*, and all current benefits
- \$100 **Supporters** receive *Glyphs*, *Kiva*, and all current benefits
- \$250 **Sponsors** receive *Glyphs*, *Kiva*, and all current benefits
- \$1,000 **Lifetime** members receive *Glyphs*, *Kiva*, and all current benefits

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- Please do NOT release my name on requests for the AAHS mailing list.

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Visitors are welcome at all of the Society's regular monthly meetings but are encouraged to become members to receive the Society's publications and to participate in its activities at discount rates.

Memberships and subscriptions run for one year beginning on July 1 and ending June 30. Membership provides one volume (four issues) of *Kiva*, the Journal of Southwestern Anthropology and History, and 12 issues of the monthly newsletter *Glyphs*.

For a brochure, information, or membership/subscription application forms, contact:

Doug Gann, VP Membership  
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Libraries and other institutions interested in institutional subscriptions to *Kiva* should contact the publisher, AltaMira Press, at <[www.altamirapress.com](http://www.altamirapress.com)> or 800.273.2223.

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**RETURN SERVICE REQUESTED**

The objectives of the Arizona Archaeological and Historical Society are to encourage scholarly pursuits in areas of history and anthropology of the southwestern United States and northern Mexico; to encourage the preservation of archaeological and historical sites; to encourage the scientific and legal gathering of cultural information and materials; to publish the results of archaeological, historical, and ethnographic investigations; to aid in the functions and programs of the Arizona State Museum, University of Arizona; and to provide educational opportunities through lectures, field trips, and other activities. See inside back cover for information about the Society's programs and membership and subscription requirements.

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