



GLYPHS

The Monthly Newsletter of the
Arizona Archaeological and Historical Society
An Affiliate of the Arizona State Museum, University of Arizona
Founded in 1916

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Allen Denoyer demonstrating flintknapping at Casa Grande Ruins.

Next General Meeting: June 18, 2012
7:30 p.m., Duval Auditorium, University Medical Center
www.az-arch-and-hist.org

PRESIDENT'S MESSAGE



This month I would like to use this space to congratulate the four newly elected members of the AAHS Board of Directors: Ken Fleshman, Mary Prasciunas, Suzanne Crawford, and Patrick Lyons.

Ken is an avocational archaeologist and a retired Public Health Officer. Mary is a Senior Project Manager and Principal Investigator at Westland Resources, Inc., with a research interest in Paleoindian archaeology and the peopling of the Americas. Suzanne is a criminal defense lawyer with a background in archaeology and journalism. Patrick, who will be the Arizona State Museum representative to the Board, is Head of Collections at the museum and also its acting Associate Director.

In addition to these four new members, let me also congratulate two continuing Board members who have been elected to offices on the Board. Jesse Ballenger will serve as the new AAHS President. He is a Senior Project Director at Statistical Research, Inc., and his research interests focus on hunter-gatherer societies in Arizona and Montana. Donna

Yoder, a retired faculty member at Pima Community College and a dedicated rock art enthusiast, will be taking over as Recording Secretary. The other officers on the Board were re-elected to their current positions: Katherine Cerino as Vice President for Activities, Mike Diehl as Vice President for Membership, George Harding as Treasurer, and Jon Boyd as Communications Officer. The new Board begins its duties on July 1.

My sincere thanks to all the newly elected and reelected Board members and officers for their willingness to serve, and a special thanks to outgoing Board members Bill Gillespie and Judith Billings for their service. I am also ending my term on the Board. It has been a pleasure to work with such a dedicated group of people, and I want to thank everyone for the help they have given me over the past year as I have tried (sometimes struggled) to properly fill the role of President. I am confident that, as long as fine people continue to volunteer their time, talents, and energy to service on the Board and its committees, the future of AAHS is bright.

— Scott O'Mack, President

GLYPHS: Information and articles to be included in *Glyphs* must be received by the 10th of each month for inclusion in the next month's issue. Contact me, Emilee Mead, at emilee@desert.com or 520.881.2244 (phone), 520.909.3662 (cell), 520.881.0325 (FAX).

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.

- June 18, 2012: Allen Denoyer, *Prehistoric Technology*
- July 16, 2012: Art Rohn, *The Neglected Stage of Puebloan Culture History*
- Aug. 20, 2012: No lecture, Pecos Conference
- Sept. 17, 2012: Patricia A. Gilman, *What is the Meaning of Mimbres Art?*
- Oct. 15, 2012: Paul Reed, *Chacoan Immigration and Influence in the Middle San Juan*
- Nov. 19, 2012: Joshua D. Reuther and Ben Potter, *Upward Sun River Site: Climate Change, Geoarchaeology, and Human Land Use in Ice Age Alaska*

FIELD TRIPS FOR 2012–2013 VOLUNTEERS NEEDED

The field trip committee for next season will be forming shortly. If you are willing to plan a field trip for next year, we need you to volunteer. It is really not an onerous task, and with enough volunteers, each person will only be responsible for one to two trips per year. Field trips are an important part of our Society, both for the enjoyment of current members and bringing in new members. The committee meets once and plans out the program for the year and assigns responsibilities. We try and do a combination of overnight trips, in-town half-day trips, and museum-based outings. If you are willing to help out, or if you have suggestions for trip you would like to participate in, please send an email to Katherine Cerino, Vice President for Activities, at kcerino@gmail.com.

ARIZONA STATE MUSEUM FREE ADMISSION FOR MILITARY PERSONNEL

Arizona State Museum is proud to continue its participation in Blue Star Museums, an annual, nationwide program through which museums across the country and American territories offer free admission to active duty military personnel and their families from Memorial Day through Labor Day, May 28–September 3, 2012.

AAHS HAPPENINGS

TOPIC OF THE JUNE 18 GENERAL MEETING

*Hands-on Prehistory**by Allen Denoyer*

Experimental archaeology provides a wealth of information that helps archaeologists reconstruct the past. Information gained from experimental studies is often crucial for understanding prehistoric technologies, especially those technologies no longer practiced by living people.

In addition to providing information useful to archaeologists for an academic understanding of the past, experimental archaeology provides a way for the public to experience prehistoric technologies first-hand. This first-hand experience makes archaeology much more relevant to non-archaeologists, and it gives the public a better understanding of, and respect for, artifacts and archaeological sites.

In this presentation I will discuss some of the ways experimental archaeology can help in the understanding of prehistory. I will describe several projects in which I have collaborated with other researchers to provide the experimental data necessary for answering research questions about prehistoric technology. Many of these projects have involved the production of flaked and ground stone tools using only those tool types

used prehistorically. For example, projects have involved manufacturing bifaces and projectile points to specific shapes and sizes using various reduction strategies that allow comparison of flake breakage between different tool and raw material types. One of the projects looked at the difference in penetration depth between arrows using stone points as opposed to simply sharpened wooden arrow shafts. This experiment was filmed for the popular "Myth Busters" television show. I will also have examples of artifacts I have replicated for people to examine and handle.

Suggested Reading:

Primitive Technology: A Book of Earth Skills, 1999, Gibbs Smith Publisher. This is a compilation of articles from the *Bulletin of Primitive Technology*, a journal that promotes the practice and teaching of primitive technology. <www.primitive.org/contact-us-2/>.

Old Tools New Eyes: A Primal Primer of Flintknapping, 2nd edition; an instructional flintknapping guide by Bob Patten, Stone Dagger Publications. A great how-to book on flintknapping.

Speaker Allen Denoyer has been a field archaeologist for more than 20 years, working in the Southwest, Plains, and Rocky Mountain areas. Allen is an experienced flintknapper and

primitive technology instructor. He has worked on many experimental archaeology projects over the years, for both academic and public outreach purposes. His diverse experimental projects have ranged from reconstructing prehistoric pithouses, to replicating flaked and ground stone technologies, to conducting living history demonstrations for the public.

2012 PECOS CONFERENCE REGISTRATION IS OPEN!

The 2012 Pecos Conference of Southwestern Archaeology will be held at Pecos National Historical Park, Pecos, New Mexico, August 9-12. Join us for the 85th anniversary! Early registration is now open. Registration forms, a preliminary schedule, conference location, accommodations, and other information about the conference are available online at www.swanet.org/2012_pecos_conference/index.html.

Each August, archaeologists gather under open skies. They set up a large tent for shade, and spend three or more days together discussing recent research and the problems of the field and challenges of the profession. In recent years, Native Americans, avocational archaeologists, the general public, and media organizations have come to speak with the archaeologists. These individuals and groups play an increasingly important role, as participants and as audience, helping professional archaeologists celebrate archaeological research and to mark cultural continuity.

First inspired and organized by A. V. Kidder in 1927, the Pecos Conference has no formal organization or permanent leadership. Somehow, professional archaeologists find ways to organize themselves to meet at a new conference location each summer, mostly because they understand the problems of working in isolation in the field and the importance of direct face time with colleagues. The conference is open to all who are interested.

The 2012 Pecos Conference is sponsored by Pecos National Historical Park, Friends of Pecos NHP, Museum of Indian Arts and Culture, School for Advanced Research, New Mexico State Historic Preservation Office, and the Western National Parks Association.

The website is updated frequently; please make sure to check periodically for new information.

Follow AAHS on Facebook at: www.facebook.com/pages/Tucson-AZ/Arizona-Archaeological-and-Historical-Society

A Cautionary Note: Past Restoring, Testing, and the Study of Hohokam Palettes

*by Christina Bisulca, Mike Jacobs, and Nancy Odegaard
Arizona State Museum*

Hohokam palettes are small, rectangular stone slabs, often with incised decorations at the edges. They occur from the Pioneer period through the late pre-Classic, and are often found in mortuary contexts. Palettes were first fully described by Emil Haury from his excavations at Snaketown, and they have been found at numerous sites throughout the Hohokam area. In some cases, mineral powders remain on these palettes. These minerals are usually white, but in more rare cases, are other colors like yellow or red.

Even after decades of examination and analysis, the function of these palettes and associated minerals remains a mystery. Due to their form, these artifacts were first identified as palettes used for pigment processing. However, as noted by

Devin White in his recent reexamination, few actually have remnants of colored pigments or show wear from grinding. In the 1930s and 1940s, Fred Hawley utilized microchemical testing, and he found that the majority of minerals on palettes contain lead. Because lead pigments are not found on other Hohokam artifacts, Hawley proposed that the minerals may be specifically associated with the cremation ritual, possibly as a one-time "pyrotechnic display." Hohokam palettes also bear a striking similarity to South American snuff tablets, suggesting a possible link to drug or tobacco use.

With advances in scientific instrumentation, the mineral remains on palettes can be more fully characterized, even with exceedingly small samples. Personnel at the conservation laboratory at Arizona State Museum (ASM) are currently reinvestigating the chemical identity of these minerals, using improved protocols for microchemical testing developed at ASM. Micro-samples from palettes in ASM's Norton Allen collection were recently analyzed with scanning electron microscopy and Raman spectroscopy at the Smithsonian



Hohokam palette from the Gila Bend region (circa A.D. 950–1050) in the Norton Allen collection (ASM 95-128-43). Photograph by Christina Bisulca.

Institution's Museum Conservation Institute, in collaboration with conservation scientist Dr. Odile Maden. Data interpretation is currently underway.

There are limitations to the interpretation of scientific results, given the collection's life since excavation. As was common at the time of their excavation, most of the finds would have been cleaned and repaired for illustration and photography. In the past, cleaning agents and repair adhesives were seldom documented. This is an inherent source of error that can have significant impact on data interpretation in the determination of the palette's precise function.

As part of this study, palettes previously examined by Hawley from the Hodges site in the ASM collection were reexamined with non-destructive testing. The minerals on these palettes also often contain lead, but are usually yellow in color. After examination, the yellow coloration was determined to likely be due to an early potassium iodine microchemical test used by Hawley. In this test,

bright yellow lead iodide is formed in the presence of nitric acid. This is a common test for lead that has been used since the nineteenth century. However, because it was not yet standard protocol to document materials or discretely remove microsamples for testing, today the altered appearance may be easily misinterpreted as yellow pigment.

Archaeological objects have complex histories including the use during their lifetimes, alteration during burial, and any treatment during and after excavation. The residue on the Hohokam palettes provides another example of why archaeologists should document all interventive activities to finds that involve chemical reagents, cleaning agents, adhesive and consolidants. Even today, excavated palettes may have mineral accretions removed during routine cleaning.

Acknowledgments: This work was funded by a generous donation from Edith Lowell and a 2011 research grant from the Arizona Archaeological and Historical Society.

2012 T-SHIRTS AVAILABLE ONLINE

The new AAHS T-shirts, designed by Janine Hernbrode, featuring Hohokam burden carriers over a petroglyph design from Cerro Prieto, are now available through our online store at www.az-arch-and-hist.org. The T-shirts, which are available in both a traditional cut and a more tailored women's cut, are \$18.00 (including shipping). The system will create an online account for any purchaser for whom AAHS does not already have an email address. If you have difficulty making a purchase from our online store, contact Vice-President for Membership, Mike Diehl at mdiehl@desert.com.

THE CORNERSTONE

Hohokam Inheritance Laws Show in Burial Practices

Today in this country, if a person dies without a will, the person's property is distributed according to the United States Uniform Probate Code (USUPC) — a set of consolidated and revised laws relating to will and intestacy, and the administration and distribution of estates. Difficult to navigate, in almost all situations in which inheritance is a factor, the services of an attorney specializing in USUPC, and versant in the code specific to the decedent's state of residence, are required.

The ancient inhabitants of the Tucson Basin may have had the most straightforward approach to inheritance law yet — they buried their relatives in and around their homes. No attorneys needed.

Sometime around 1150 CE, the Hohokam began interring their (mostly) cremated dead within and around their homes. Before that time, burial placement was in formal cemeteries located away from residential units.

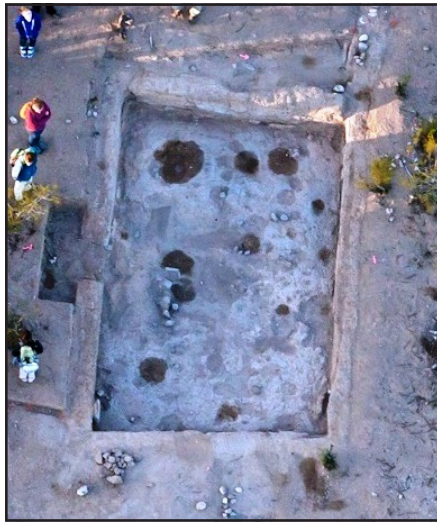
Why the drastic shift?

In a recent article to be published in the *Journal of Arizona Archaeology*, Arizona State Museum (ASM) and University of Arizona (UA) researchers believe the new practice may have served to legitimize a person's right of inheritance within compact Hohokam settlements.

Deceased relatives interred inside rooms, within interior walls, or clustered in or around outside walls of a residence, may have been all the probate code that was needed to claim, legitimize, and perpetuate ownership of structure, land, and resources.

The overly literal and highly symbolic proximity of one's antecedents formed a direct and unquestionable link from one generation to the next, demonstrating and reinforcing clear lines of ownership.

But, just as today, those lines of ownership and rights of inheritance may not have been limited to kin-based relationships. There is evidence of the for-



Adobe room at University Indian Ruin (aerial photograph by Henry D. Wallace).

mation of "corporate groups," whose equally strong bonds were also established and reinforced through burial clusters.

The researchers posit that corporate groups were necessary within the highly organized society in order to solidify lines of power or access to "specialists" whose skills would have been necessary to sustain a clan's way of life and ensure its immediate and future success. Essential societal specialties among the Hohokam might have included irrigation management, hunting skills, ceremonial knowledge, political acuity, ceramic making abilities, etc. Mortuary practices doubling as inheritance law are clearly seen at University Indian Ruin (UIR), a Classic period Hohokam platform mound site in the eastern Tucson Basin, at the confluence of Tanque Verde Wash and the Rillito River. Tree-ring dates, 1371-1375 CE, indicate that UIR was among the last platform mound sites still occupied in the Tucson Basin at the end of the Classic period. It appears that the bulk of the occupation dates to the Late Classic period (1300-1450 CE).

Among the cremations studied, individuals of all ages are found with a variety of decorated and plain ceramics, shell ornaments, bone artifacts, and projectile points. While cremation burials dominate the mortuary program, inhumation burials were also standard practice among the Hohokam of the Classic period, but reserved mainly for high-status individuals. Just as with us today,

this shows a great deal of complexity in the motivations, functions, and behaviors involved in enacting a death ritual, all based on very specific, individual and familial circumstances.

Recent field work by the ASM/UA team is one of four major excavation campaigns that have taken place at University Indian Ruin:

- (1) 1930-1937, under the direction of Dr. Byron Cummings (ASM/UA Department of Archaeology)
- (2) 1938-1939, under the direction of Dr. Emil W. Haury (ASM/UA Department of Anthropology)
- (3) 1940-1941, under the direction of Julian D. Hayden (Civilian Conservation Corps)
- (4) 2010-present, under the direction of Dr. Paul Fish and Dr. Suzanne Fish (ASM/UA School of Anthropology)

The full report will be available at: www.arizonaarchaeologicalcouncil.org/Default.aspx?pageId=1109872.

Byrd, Rachel M., James T. Watson, Suzanne K. Fish, and Paul R. Fish

2012 *Architecture and the Afterlife: A Spatial Analysis of Mortuary Behavior at University Indian Ruin. Journal of Arizona Archaeology* 2(1).

The Cornerstone is presented by:
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OLD PUEBLO ARCHAEOLOGY

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Mimbres Ruins, Rock Art, and Museums of Southern New Mexico

June 15-20, 2012

Join this education tour with archaeologist Allen Dart. Drive your own vehicle and meet the tour in Silver City, New Mexico. Actual touring begins Saturday and continues through Wednesday.

This tour includes Classic Mimbres and Early Mogollon village archaeological sites, spectacular petroglyph and pictograph sites, and a museum with probably the finest Mimbres Puebloan pottery collection in the world—all in southwestern New Mexico's Silver city, Mimbres, Deming, and southern Rio Grande Valley areas. Places we plan to visit include the original Mogollon Village and Harris sites excavated by Emil Haury; sites in Gila Cliff Dwellings National Monument and vicinity; Classic and Postclassic Mimbres sites (Beauregard-Montezuma, Cottonwood, Gattons Park, Lake Roberts Vista, Mattocks, Old Town, and Woodrow); the Frying Pan Canyon and Pony Hills petroglyph sites; and the Western New Mexico University Museum.

As an added bonus, this year we plan to visit two archaeological field school excavations in the Rio Grande area: Arizona State University's dig at the Roadmap Village site and New Mexico State University's project near Cottonwood Springs.

The tour will be based in Silver City Friday through Monday nights, Deming on Tuesday night, and will depart from hotels in those two cities each morning. Hotels, camping, and other accommodations for those who wish to arrange their own lodging and transport are available in and near Silver City.

Reservations required: 520.798.1202 or info@oldpueblo.org. [Fee: \$235 for the full four-day tour (\$210 for Old Pueblo Archaeology Center and Pueblo Grande Museum Auxiliary members), or \$50 per day to attend tour on individual days (\$45/day for Old Pueblo and PGMA members). Participants are responsible for the cost of their own transportation, meals, and lodging.]

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, or by mail to Jenny Adams, Desert Archaeology, Inc., 3975 N. Tucson Blvd., Tucson, Arizona 85716.

AAHS MEMBERSHIP APPLICATION

Membership is open to all persons who are interested in the prehistory and history of Arizona and the Southwest and who support the aims of the Society. Membership runs for a full year from the date of receipt, and covers all individuals living in the same household.

Monthly meetings are free and open to the public. Society field trips require membership. Members may also purchase an annual JSTOR subscription to *Kiva* back issues for \$20 through the AAHS website.

Membership Categories

- ☐ \$50 **Kiva members** receive four issues of the Society's quarterly journal *Kiva* and 12 issues of *Glyphs*
- ☐ \$40 **Glyphs members** receive *Glyphs*
- ☐ \$35 **Student Kiva members** receive both *Kiva* and *Glyphs*
- ☐ \$75 **Contributing members** receive *Kiva*, *Glyphs*, and all current benefits
- ☐ \$120 **Supporting members** receive *Kiva*, *Glyphs*, and all current benefits
- ☐ \$300 **Sponsoring members** receive *Kiva*, *Glyphs*, and all current benefits
- ☐ \$1,000 **Lifetime members** receive *Kiva*, *Glyphs*, and all current benefits

For memberships outside the U.S., please add \$20.

For institutional membership, contact AltaMira Press at <www.altamirapress.com> or 800.273.2223.

You can join online at www.az-arch-and-hist.org, or by completing the form below and mailing it to:

Michael Diehl, VP Membership
Arizona Archaeological and Historical Society
Arizona State Museum, The University of Arizona
Tucson, AZ 85721-0026

Name: _____ Phone: _____

Address: _____

City: _____ State: _____ Zip: _____

E-mail: _____

AAHS does not release membership information to other organizations

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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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