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Hypothetical reconstruction of marine shell bead necklace from the Onavas Valley Archaeological Project
Photo courtesy of Emiliano Gallaga Murrieta

General Meeting: March 21, 2005
PRESIDENT’S MESSAGE

THE HISTORIC PRESERVATION ACT

For March, I want to follow up on my January discussion of the activities and programs of the State Historic Preservation Office (SHPO) with a summary of its Arizona Site Steward Program. Operating the Program is an important function of SHPO, which relies on volunteers to go into the countryside to check on the status of potentially endangered prehistoric and historic archaeological ruins and paleontological sites. This field check, or monitoring, occurs on sites across Arizona. At this time, there are no paleontological sites being monitored.

The Program, founded in 1986, is primarily sponsored and funded by the federal land managing agencies (BLM, USFS, NPS), as well as SHPO, Luke AFB, the Arizona State Land Department, City of Phoenix, and others. The Arizona State Museum, the cities of Tempe and Prescott Valley, Pima County and Maricopa County parks, and a number of private organizations are all involved. No tribal governments are currently associated with the Program.

At present, Arizona is divided into 26 Site Steward regions, in which about 780 Steward volunteers provide monitoring services.

Volunteers are trained and certified by the SHPO and the Arizona Archaeological Council. Initial training consists primarily of 10 hours of classroom instruction and field work. Training sessions include instruction about relevant antiquities and historic preservation laws; site, feature, and artifact identification; and map reading. A Steward volunteer’s primary responsibility is to inspect sites for active vandalism and other disturbances and report evidence of these to the appropriate land-managing agency.

Last year the Stewards made about 13,000 site visits (some sites were visited more than once), and accrued approximately 25,000 volunteer hours in the search for incidents of vandalism and other site disturbances. About 2,000 archaeological sites are being monitored at the present time; only about 1 percent of these are historic sites. Most of this effort is on public lands.

The Site Steward Program has a number of laudable goals it seeks to achieve. For example, one of the aims of the Program is to preserve Arizona’s prehistoric, historic, and paleontological resources for the purposes of conservation, scientific study, and interpretation. Arguably, the most important of its several goals is to increase awareness of the value of cultural and paleontological resources and to alert the public to the continued high level of damage done every year to these resources by artifact hunters and other vandals. Related to this goal is the intent to discourage site vandalism and the sale and trade of illegal antiquities.

To further the goals and objectives of the Site Steward Program, the SHPO publishes an informative newsletter, Arizona Watch, four times a year. Resource Protection Specialist Mary Estes manages the Steward Program for the SHPO. She can provide you with a copy of the newsletter, if you are interested in the Program. Also, Mary is always looking for volunteers, especially those who can work in the more remote areas of the state. If you have the ability, time, and motivation to assist in this indispensable volunteer activity, please contact Mary in Phoenix at 602/542-7143. The contribution you make will be gratefully appre-
Despite the impressive amount of archaeological research conducted in Sonora in the last decades, some areas are still unknown. The Middle Yaqui River region is one of these. Traditionally, this region has been identified as part of the Rio Sonora archaeological tradition which embraces the sierra region from almost the international border to northern Sinaloa. Those limits were defined by Monroe Amsden in the north in 1928 and Richard Pailes in the south in the 1970s. However, no archaeological research has taken place in the middle of this region to verify this cultural model until now.

This talk presents new data from the Onavas Valley Archaeological Project (OVAP), conducted in the Middle Yaqui River Valley in southern Sonora in the summer of 2004. At the end of the 2004 season, more than 60 km² were covered by full systematic pedestrian survey, yielding 122 new archaeological sites, and the collection of 10,734 ceramic sherds, 2,357 pieces of lithic, and 1,158 pieces of marine shell. Architectonically, the area had the Rio Sonora archaeological tradition features but also non-Rio Sonora features like stone altars and small platforms. Material analysis shows that the Onavas area had interactions with the Chihuahuan and the Trincheras cultural areas, and possibly with the American Southwest and northern Mesoamerica. The OVAP will provide basic data to solidify our understanding of an archaeologically poorly researched area, examine its role in interactions with the neighboring archaeological areas, and increase our knowledge of the Rio Sonora archaeological tradition.

A Native of Mexico, Emiliano Gallaga Murrieta is a doctoral candidate in the Department of Anthropology at the University of Arizona. His doctoral research focuses on the prehistory of the Middle Yaqui river region in Sonora, Mexico. In addition to his work in northern Mexico, Mr. Gallaga has participated in numerous field projects in southern Arizona including work at the Marana Platform Mound, where he was a teaching assistant at the recent University of Arizona field school, and at Tumamoc Hill. Mr. Gallaga also recently participated in the re-analyses of burial materials from...
ARIZONA ARCHAEOLOGY AWARENESS MONTH 2005 LECTURES

(This program is co-presented by the Arizona Archaeological and the Historical Society and Arizona State Museum)

March 1: "Digging Up Historic Tucson," Jim Ayres. Nanini Branch Library, 7300 N. Shannon Road. 7 p.m.

March 2: "Intentional or Accident: Fire Studies at Chevelon Pueblo," A.J. Vonarx. Wilmot Branch Library, 530 N. Wilmot Road. 7 p.m.

March 8: "Archaeology of the Tucson Presidio," Homer Thiel. Woods Branch Library, 3455 N. First Avenue. 7 p.m.

March 9: "Old and New Perspectives on the Salado Phenomenon," Patrick Lyons and Jeff Dean. Woods Branch Library, 3455 N. First Avenue. 7 p.m.

March 15: "Early Spanish Trails," John Madsen. Wilmot Branch Library, 530 N. Wilmot Road. 7 p.m.

March 16: "The Marana Mound Project: Behind the Scenes Lab Tour and Research Update," Paul and Suzy Fish. Arizona State Museum, south building. 6:30 p.m.


Two-Month AAHS Lecture Preview

April 18, 2005: Christopher I. Roos
Ecological Studies in the Prehistoric Grand Canyon Area (tentative)

May 16, 2005: Matt Hill
Recent Excavations at the Mobak Site. A Formative Period Village in Southwestern Arizona

GLYPHS
Submission of information and articles to be included in Glyphs must be received by the 10th of each month for the next month’s issue. Write to me, Lynne Attardi, c/o AAHS, ASM, University of Arizona, Tucson, AZ 85737, or e-mail me at <LTAGlyphs@aol.com>.

AAHS WEBSITE
Glyphs is posted each month and can be found on the ASM/AAHS website at: <http://www.statemuseum.arizona.edu/aahs/aahs.shtml> and, also, it can be found at: <http://www.swanet.org/zarchives/aahs/>.
Archaeologically speaking, the Apache have become victims of their own meticulous nature. Even when compared with other hunting cultures, their signature is faint. They lived on the move with an extremely light hand on the landscape, leaving barely a trace to be scrutinized later. Their material culture is by and large perishable thus not conducive to preservation. In addition, traditional Apache sensibilities reinforced the passive destruction of personal items with the death of the individual. The phrase “let it go back” is often invoked to express this nuance. Combine this behavior with the desire not to be observed, and you have the makings of archaeological ghosts. From a paleontological perspective, as a matter of preservation and recovery rates, it is no wonder that there is little evidence of their passing. They disappear from the record before they even come into focus.

Over the centuries, there were multiple advances of Apaches into the southwest. The latest, after 1720, was caused by waves of gun-laden Comanche moving south on horseback out of Wyoming, followed later by Mountain Utes spilling onto the Plains. In an attempt to dislodge the loose Spanish hegemony to the south, the French supplied these Shoshone speakers with unlimited guns and powder. Unfortunately for the Apache, Imperial Spanish policy forbade the allocation of firearms to Indians. So despite the Apache’s established commercial hold on the central and southern plains, in two generations most were violently rolled back into west Texas, New Mexico, and left in isolated pockets on the plains.

However, centuries before European expansion set these events in motion, there was an earlier migration of Apache speakers. The first wave of Apaches into Arizona saw the arrival of the ancestors of the Tonto Apache. The Tonto are known unto themselves as the Dilzhe’e, (an old contraction for going hunting). The Dilzhe’e probably came into Arizona from Purgatoire River Country in Colorado during or immediately after the great disruption of the Thirteenth Century.

Hopi Elders have told me that they immediately recognized these Apaches as a People culturally distinct from their Athabaskan cousins, the Navajo. This first contact happened when Hopi were still living around Homol’ovi, near present day Winslow. The Hopi and Dilzhe’e have had peaceful economic and personal relations since those days; yet, during the same time period, the opposite relationship evolved amongst the Hopi and Navajo. In the early years, the Hopi would see the Apache only at a distance, hugging the juniper tree line in their distinctive boots and carrying their telltale lances (Ron Humeyestewa, Gilbert Naseyouma and others, personal communications, 1993-1995).

In the centuries following, the Dilzhe’e regularly came to the Mesas with deer meat, buckskins, sheets of nadah (dried agave), and salt from the Verde Valley to trade for corn, woven cotton, and specialty items. Hopi merchants made the
NOMINATIONS FOR CUMMINGS AND STONER AWARDS ARE NOW BEING ACCEPTED BY AAHS

Once again, the AAHS Awards Committee is accepting nominations for the Byron S. Cummings and Victor R. Stoner awards.

The Cummings award is given for outstanding research and contributions to knowledge in Southwestern archaeology, anthropology, ethnology, or history.

The Stoner award celebrates the promotion of historic awareness and is awarded to someone who brings Southwestern anthropology, archaeology, ethnology, or history to the public over an extended period of time.

The awards, which are given annually, are presented in August at the Pecos Conference. Please contact Gayle Hartmann with your nominations (phone) 520/325-6974 or (email) <gayleh@theriver.com>. (Also, a list of previous awardees can be obtained from Gayle.)
Cavate dwellings are clusters of artificial cave-like rooms carved into vertical cliff faces of soft rock formations. The term cavate was coined in the late 19th century by John Wesley Powell to distinguish them from structures built within natural caves. Cavates are found in many parts of the world, but in the American Southwest most examples occur on the Pajarito Plateau of northern New Mexico and in the Verde Valley of central Arizona.

The largest group of cavates in the Verde Valley is the Mindeleff Cavate Site (NA 1511), just south of Camp Verde. The site includes more than 89 dwelling units made up of more than 343 rooms. At this site, a soft layer of sandstone is sandwiched between harder sandstone layers. This allowed extensive tunneling into the soft layer and the construction of fairly large room clusters. Mindeleff recorded the site in 1896, describing five groups of interconnected cavate rooms in detail, and producing a ground plan showing over one hundred cavate dwellings.

The site occupies the confluence of two small but deeply cut drainages that enter the Verde River at the central part of the site. The arroyos divide the sandstone cliffs into three general sections. The central section is defined by the two arroyos and is recessed, facing the Verde from behind the northern and southern arms. These arms are narrow and curved, facing the central section of the site on one side and overlooking the Verde River on the other (Figure 1). Most of the cavate groups are at about the same elevation accessible from paths and ledges running along the cliffs, but there are two tiers of cavate groups at short segments of each portion of the site. The upper tier of cavates is not directly accessible from the lower tier without a ladder.

Some of the best-preserved cavate dwellings are entered through well-made doorways in the cliff-face that open into small round rooms resembling vestibules. The largest of these is 1.6 m in diameter. Erosion of the cliff-face and rockfalls have destroyed some vestibules, and many dwellings probably never had one. Although masonry walls are quite rare at this site, a few examples remain where natural openings in the cliff-face were partially enclosed, and where doorways between rooms were filled in.

Some doorways in the cliff-face open directly into fairly large rectangular or oval shaped rooms that appear to have been “living areas,” complete with hearths, raised benches, wall niches, floor cysts, and a variety of other architectural amenities sculpted into the soft rock. These main rooms vary in area but average 15 square meters and have a mean ceiling height of 1.8 meters. Some of the largest rooms have clay ridges on the floors with holes in the walls above, suggesting that parts of the rooms could have been separated by blankets hung over poles to define different activity areas.

Many of the dwellings have a raised “alcove” on one side of the main room, most often opposite the entryway. These...
rooms are almost always rectangular and average 3.2 square meters in area. The ceilings of the alcoves approximate those of the main rooms, although their floors are raised 20-60 cm; a convenient height to sit on. The open access and the presence of similar wall niches suggest the alcove was an extension of the main room. It may have provided a comfortable place to work in the winter when the main floor could have been drafty. It’s also the place I’d have chosen to sleep, if I lived in a cavate lodge.

The remaining rooms in each dwelling are generally small and round in plan with few wall or floor features. Most are less than 6 square meters in area with ceiling heights below 1.2 meters. They were most likely used for storage or as more private sleeping quarters. These small rooms are generally accessible from the main room through doorways or low tunnels and overall make up almost 60 percent of the rooms at the site.

The site is well known locally, and pothunting was a popular weekend activity by the turn of the 19th century. Years of visitation have left practically no portable artifacts and little of the original masonry. In spite of this, the cavate architecture is generally well-preserved, with many intact walls, ceilings, doorways, and other architectural features that give a unique glimpse of a large prehistoric village.
This month’s Cornerstone is guest written by Jeff Harrison, UA News Services.

ASM STUDENT FEATURE

Jae Anderson says working at the Arizona State Museum has given him a greater awareness of the importance of museums in interpreting American Indian cultures.

Anderson, a Navajo from Tuba City, Arizona, is studying mathematics and computer science at the University of Arizona. But this past summer, he worked as an intern on a critically important project — testing museum artifacts for hazardous materials.

For more than a century, the Arizona State Museum has collected thousands of artifacts representing the native cultures of Arizona. Preserving some of the more perishable materials in the collections meant using pesticides and other hazardous materials that still lurk in the residue of those chemical treatments.

Museum conservator Nancy Odegaard began to focus on anthropological materials and the possible health hazards they pose, not just for ASM staff, but other museum workers as well. That also now includes scores of Indian tribes around the country who are the recipients of museum materials being returned under the Native American Graves Protection and Repatriation Act, or NAGPRA.

ASM has especially taken the lead in providing information to American Indian communities about the health issues associated with repatriated tribal materials. Odegaard and her staff of students, volunteers, and interns researched the kinds of pesticides ASM used on its 111-year-old collections, tracking chemical trade names, and when they were used, and compiling safety regulations.

Anderson had been shopping around for an internship to expand his college experience at the UA. Through the UA materials science and engineering department, he landed a position working in Odegaard’s laboratory in the ASM’s original building on the historic UA west campus. Anderson spent much of his summer there calibrating the X-ray equipment used to detect hazardous substances. He specifically worked on testing samples for arsenic.

“The basics of my research was calibrating the XRF machine, a device normally used in industry. It’s a hand-held device that kind of looks like a space gun. They wanted to adapt the instrument to the museum setting to look at artifacts to determine if any kind of toxic elements (like arsenic, mercury, lead) that artifacts might have been exposed to,” Anderson said.

“His work was both important and timely,” said Odegaard. “We have been exploring the use of a portable XRF unit for the detection of pesticide residues and pigment compositions for a few years now. Some of our previous studies indicated that various substrate materials (textile, paper, leather, feather) could affect the readings. Jae helped us to identify and quantify this problem a little better. He developed a methodology for verifying the performance of the XRF analytical equipment on a number of culturally significant substrates. His work is part of a larger study here at the Arizona State Museum and of the international research community studying the pesticide residue issue.”

There is also the possibility that Anderson may get his research published at some point in the future, along with UA chemistry department lecturer David Smith.

The ASM internship also helped Anderson better understand the mission of museums that preserve and display Indian cultures. “Working with Nancy, I gained a lot of knowledge about what goes on behind the scenes of a museum,” he said.

“My preconceptions were that museums were just holding artifacts. I didn’t understand excavations and why they were pulling these articles out, when normally, as a Native American, we just leave things be. I didn’t know that a lot of artifacts couldn’t be returned because
they are contaminated with pesticides that museums applied for years to help conserve them.

"Working here actually gave me a lot of insight as to how it is getting artifacts returned back to native tribes for repatriation. It gave me a whole different experience and a whole new option as far as me being able to apply my skills as a math major in a museum setting."

UPCOMING EVENTS AT ASM

Friday and Saturday, March 11-12, 2005, 10-4 p.m. both days

VERY NEARLY ANNUAL

DISCOUNT BENEFIT BOOKSALE

Save 40-70% on remainders and first-quality books: visual arts, humanities, poetry, ethnology, southwest studies, world archaeology, anthropology, cooking, lifestyle, architecture, children's books, and much more. Museum members admitted one hour early on Friday for the best selection!

Saturday, March 12, 2005, 9 a.m.-12 p.m.

CARE OF NAVAJO TEXTILES

ASM's leading conservation team presents a workshop on the general care of textiles with specific guidance on display techniques, storage, cleaning, and pest control. Lectures, hands-on demonstrations, and a special "conservators" tour of the exhibition Navajo Weaving at Arizona State Museum. Call 520/626-2973 or email <asmedu@email.arizona.edu> to pre-register. ($30, $25 ASM/GFR members). The workshop is sponsored by the Foundation for the American Institute for the Conservation of Artistic and Historic Works.

Saturday, March 12, 2005, 1-4 p.m. (free)

CULTURE CRAFT SATURDAY: WEAVING WITH WORDS/FIBERS IN ARCHAEOLOGY!

Enjoy a weaving demonstration by Navajo weaver Marilou Schultz, and indulge in some creative expression with Navajo poet Sherwin Bitsui. Use words, agave fibers, cordage, and natural pigments to express your emotions. Join us for cake and the sheep naming celebration! Also shop for children's books and more at our Discount Benefit Booksale.

For more information, contact:
Darlene F. Lizarraga, marketing coordinator, Arizona State Museum, University of Arizona, P.O. Box 210026, Tucson, AZ 85721-0026, phone: 520/626-8381; fax: 520/621-2976,

The Tucson Presidio Trust for Historic Preservation is presenting a TUCSON PRESIDIO HISTORY FAIR, March 13, 11 a.m. to 5 p.m. at La Casa Cordova and the Tucson Museum of Art, 140 N. Main Avenue, Tucson. Activities include:
* Demonstrations of adobe brick making, soap making, candle making, spinning, and weaving;
* Historic portrayals of Presidio-era Tucsonans;
* Samples of authentic foods of the era including pozole and biscochuelos;
* Presentations by historians and archaeologists about the original Presidio and plans for Presidio reconstruction.

There is no admission charge and plenty of free parking nearby. For more information, call 520/325-6974.

OLD PUEBLO ARCHAEOLOGY CENTER archaeologists Dr. Courtney Rose, Jennifer DeJongh, and others, offer a free presentation on how archaeology is done and on results of recent excavations at the Yuma Wash Hohokam Indian ruin on March 6. Call 520/798-1201 for reservations no later than March 4. Also, volunteer-assisted archaeological excavations at the Yuma Wash ruin will be in progress March 10-13, and again March 19-23. For more information, contact Dr. Courtney Rose at 520/798-1201 or <crose@oldpueblo.org>. 
### Membership/Subscription Information

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

Memberships and subscriptions run for one year beginning July 1 and ending June 30. Membership provides one volume (four numbered issues) of *Kiva*, the Journal of Southwestern Anthropology and History; 12 issues of the monthly newsletter *Glyphs*; member rates for Society field trips and other activities.

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

- Robby Heckman, VP Membership
  Arizona Archaeological and Historical Society
  Arizona State Museum, University of Arizona
  Tucson AZ 85721 USA

Subscriptions to *Kiva* for libraries and other institutions are now being handled by AltaMira Press. To obtain information on an institutional subscription to the journal, contact the publisher at <www.altamirapress.com> or 800/273-2223.

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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.