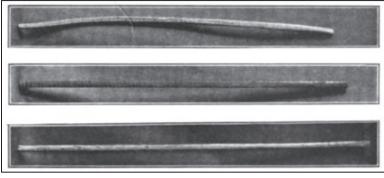


Vol. 70, No. 10

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Calendar sticks from Casa Blanca (top), Gila Crossing (center), and Blackwater (bottom). [From: Smithsonian Institution, 1908, Twenty-Sixth Annual Report of the Bureau of American Ethnology, 1904-1905. U.S. Government Printing Office, Washington, D.C., p. 105]

All AAHS lectures and field trips are postponed until further notice. Thank you for your patience!

Next General Meeting: April 20, 2020; 7:00 p.m. Environmental and Natural Resources 2 Building, Room S107 1064 E. Lowell Street Tucson, Arizona www.az-arch-and-hist.org

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President's Message

by John D. Hall

Recently I have been thinking about how history has multiple and complex layers. We tend to think about history as a linear path we all take. And certainly this is true because I have tried to stop or reverse time, and it doesn't seem to work! But history can have many meanings, particularly when you consider context and perspective. Layers of history can also be literal, such as the stratigraphy of an archaeological site. Layers of history also bring to mind cultural landscapes, places, and what have been termed in archaeological literature as persistent places.

The term persistent place implies a single location that has been continually occupied for a long period of time (Binford 1982). However, Schlanger (1992:92) defines a persistent place as, "a place that is used repeatedly during the long-term occupation of a region." This important distinction encompasses many uses of a place, whether it be for long-term residence, a temporary encampment, or occasional and repeated visitation of a place to acquire resources (Heilen 2005). Persistent places also exist as an important location within an overall cultural landscape. The function of persistent places can also change over time, such as a residential area that later becomes a temporary camp where abandoned tools or facilities are reused or recycled. Over time, the way people use a landscape can change, but a persistent place continues to be used, sometimes for different purposes or by different people. Persistent places function not just as a location that is useful, or for what it can provide, but persistent places exist because people know about them and pass this knowledge on to others. People recognize the importance of a persistent place, how to get to them, and how this place relates to others on the landscape (Heilen 2005).

The concept of time depth is also important, as a persistent place must be in use for an extended period of time. An interesting experience concerning time depth and persistent places happened to me at Canyon de Chelly National Monument in northeastern Arizona.



Canyon de Chelly, a persistent place on a significant cultural landscape. (Photograph by the National Park Foundation [NPS 2020].)

Back in the late 1990s, a friend and I were on a guided tour of Canyon de Chelly. My friend was driving his truck through the canyon bottom and with us was a local Navajo guide. We spent several hours driving through the canyon and stopping at various locations. The stops included views of Archaic petroglyphs, a Puebloan cliff dwelling, and contemporary Navajo gardens, hogans, and sheep corrals.

One interesting observation was that the Archaic petroglyphs were located high above the canyon bottom, much higher than anyone could reach. Our Navajo guide pointed out how the canyon must have eroded a significant amount to leave the petroglyphs so high on the cliff face. Our guide also explained how the Ancestral Puebloan people must have pondered these ancient petroglyphs and how the Navajo view the petroglyphs and cliff dwellings now. Clearly, the canyon is a persistent place. The historical and spiritual significant of Canyon de Chelly to the Navajo people is demonstrated by the collective memory and knowledge of this important place (NPS 2020).

As the three of us contemplated our journey, I had a sudden realization of the time depth associated with these different cultural

(continued on page 4)

phenomena. Assuming the Archaic petroglyphs were made about 1,000 BC and the Puebloan cliff dwellings were constructed about AD 1000, the time between the creation of the petroglyphs and the building of the cliff dwellings was twice as long as the time between the building of the cliff dwellings and now! If, for example, we were to have found a Paleoindian projectile point, the depth of time between the Paleoindian point and the Archaic petroglyphs would be 10-fold! The depth of time I encountered in Canyon de Chelly opened my mind to different and more complex perspectives of history. How did different people use this place over the many millennia, and did people's perception of Canyon de Chelly change over time?

As archaeologists, we categorize objects and locations based on observable traits. This piece of pottery looks like this one, or this pithouse is constructed exactly like that one, and so on. In our quest to define time and culture, we sometimes forget how vast and complicated history can be and how easy it is to overlook this vastness. I was reminded of this at the most recent Southwest Symposium conference.

The first talk of the symposium was about the cultural continuum between the Huhugam people (referred to archaeologically as the Hohokam) and the Akimel O'odham, who live along the Gila River (Loendorf et al. 2020). Traditional cultural knowledge is often a missing but vital piece of understanding history and archaeology. In the archaeological literature, there is a tendency to view the Hohokam society as becoming increasingly complex from the pre-Classic to the Classic period. At the end of the Classic period, around AD 1450, the Hohokam culture 'collapses,' representing the end of the Hohokam culture and the abandonment of the Salt-Gila River valley of southern Arizona. However, recent studies on the Gila River Indian Community and elsewhere show, instead, a cultural continuity on the landscape. The settlement and subsistence patterns identified archaeologically during the pre-Classic are similar to that of the contemporary Akimel O'odham. This suggests the Classic period phenomenon was a cultural anomaly and that the Akimel O'odham way of life endured along the Gila River after the Classic period and into the present.

Time depth, persistent places, and shifting settlement systems are big issues in archaeology, but they can be difficult to define. Using traditional knowledge is an important step in unraveling some of the information that cannot be perceived by looking simply at the material culture left behind in the archaeological record.

Binford, Lewis R.

1982 The Archaeology of Place. Journal of Anthropological Archaeology 1:5-31.

Heilen, Michael P.

2005 An Archaeological Theory of Landscapes. Unpublished Ph.D. dissertation, Department of Anthropology, University of Arizona, Tucson.

Loendorf, Chris, Barnaby V. Lewis, and M. Kyle Woodsoon

2020 Recoupling Past and Present: Akimel O'Odham Traditional Cultural Knowledge Regarding the Hohokam. Paper presented at the 17th Biennial Southwest Symposium Conference, Tempe, Arizona.

National Park Service [NPS]

2020 National Park Foundation, Canyon de Chelly National Monument. Electronic document, https://www.nationalparks.org/explore-parks/canyon-dechelly-national-monument, accessed February 2020.

Schlanger, Sarah H.

1992 Recognizing Persistent Places in Anasazi Settlement Systems. In *Space, Time, and Archaeological Landscapes*, edited by J. Rossignol and L. Wandsnider, pp. 91–112. Plenum Press, New York.

AAHS Lecture Series

All meetings are held in Room S107, Environment and Natural Resources Building, University of Arizona, 1064 E. Lowell Street Third Monday of the month, 7:00 p.m.

Apr. 20, 2020: Harry Winters, Casa Blanca Calendar Stick Record

May 18, 2020: Don Liponi, The Prehistoric Rock Art of the Kumeyaay

and Cahuilla Native American Shamans in the Southern

California Deserts

June 15, 2020: Steve James, Chicken Bones on Pueblo Grande

April 20: Topic of the General Meeting

Casa Blanca Calendar Stick Record

Harry Winters

Abstract and Speaker Bio are unavailable at this time for Mr. Winters' talk. Plase check the website for updates.

SEEKING AAHS FIELD TRIP COMMITTEE MEMBERS

AAHS is looking for a few good people who would be willing to serve on our 2020–2021 Field Trip Committee. Membership involves working with the Committee, which reports to the Vice President for Activities and the Field Trip Coordinator. The Field Trip Committee convenes each spring to brainstorm ideas and compose a schedule. These trips are extremely popular and can be weekend, full-day or half-day trips.

Once the schedule is determined, Committee members are responsible for identifying the appropriate expert and planning and coordinating two field trips each year for our members. You do not need to live in Tucson to be part of the Committee, as trips occur all over the state. We would particularly welcome members from Phoenix, Flagstaff, the Verde Valley, or the Yuma area. If you have questions or are willing to serve, please contact Katherine Cerino, the present Field Trip Coordinator, at kcerino@gmail.com or 520.907.0884. Being on the Committee is an opportunity to actively participate in AAHS, to get to know field trip leaders and AAHS members in a small group, and to have fun visiting sites that are often off the radar of all but a few archaeologists.

BOOK SALE COORDINATOR NEEDED!

For many years, AAHS has held a biannual sale of donated, used books to support the Arizona State Museum (ASM) Library. One sale is in the fall, and the other, in the spring, coincides with the Tucson Festival of Books. AAHS is looking for a volunteer who is willing to coordinate these two sales. A group of dedicated volunteers prices the books, and a cadre of folks volunteer to staff the book sales.

The book sales are quite fun and represent the only funding for the ASM Library acquisitions fund. AAHS needs a person who is willing to work with library staff, ASM facilities staff, and volunteers to advertise, staff, and oversee the sales. Katherine Cerino has filled the role of Booksale Coordinator for many years and will be glad to share her intimate knowledge of the process. If you are interested in taking on this role, please contact AAHS President, John Hall, at John.Hall@terracon.com, or you can contact Katherine Cerino at kcerino@gmail.com.

NEW AAHS LOGO T-SHIRTS!

Just off the press, new 100% cotton AAHS Logo T-shirts are available! Regular cut in gray with black logo or beige with brown logo. Also available in a women's cut in red with white logo. Buy them from the AAHS website store (\$18) or at various AAHS events (\$15).



glyphs: Information and articles to be included in *glyphs* must be received by the first of each month for inclusion in the next month's issue. Contact Emilee Mead at emilee@desert.com.

Upcoming AAHS Field Trips

Participation in field trips is limited to members of AAHS. There is generally a 20-person limit on field trips, so sign up early.

Some Petroglyphs of Saguaro West April 4, 2020

TRIP FULL: WAITING LIST ONLY

Join us for an early morning hike to see the rock imagery in King Canyon and Javelina Wash. For the past two years, an AAHS-affiliated group, "The Rock Band," led by Janine Hernbrode, has



^ohoto: Lance K. Trask

been recording the rock imagery in the park. Janine will share the discoveries made by the group. The two sites are very different, and this is a special opportunity to visit Javelina Wash, which is normally off-limits to the public and to explore King Canyon in depth.

The tour will involve about 3 miles of wash walking. Binoculars are essential for King Canyon. To sign up, email Katherine Cerino at kcerino@gmail.com.

Mimbres Valley Sites and Pony Hill Petroglyphs May 24–25, 2020

Join us for a trip to Silver City and the Mimbres Valley led by Mimbres scholar Pat Gilman. We will plan to spend Friday night in Silver City and Saturday night in Deming. For those who are able to arrive in Silver City before 3:30 pm, there is the option of visiting the Mimbres pottery collection (probably the largest on display in the world) at the Western New Mexico University Museum in Silver





City. The Deming Luna Museum is also worth a stop on the way to Silver City to iew their Mimbres pottery. It closes at 4:00 pm.

That evening, we will have a group dinner with some guests from the Grant County Archaeological

Society. Pat will present a short talk on the Mimbres.

On Saturday, we will visit the Mattocks site, one of the dozen or so large Mimbres pueblos in the Mimbres Valley. Pat was the crew chief for excavations at the site in the 1970s and has recently published a book analyzing the site. We will then walk a half mile to see some Apache pictographs, and we will stop at an overlook to view the location of the tragically destroyed Galaz site, one of the two ritual centers in the Mimbres Valley. Then, we will visit Old Town, at the south end of the valley, the second ritual center.

On Sunday, as we head home, we will visit the Pony Hills Petroglyph site, northeast of Deming.

It is about a 3.5-hour drive to Silver City from Tucson. Silver City has some historic hotels and several interesting restaurants. Camping is also available. PLEASE NOTE THERE IS A BLUES FESTIVAL IN SILVERY CITY AT THE TIME OF OUR VISIT. Make your hotel reservations quickly.

Both the Mattocks site and the Western New Mexico University museum have \$5.00 donations. To register for the trip, email Katherine Cerino at kcerino@gmail.com.

Editor's Note:

In the March 2020 issue of *Glyphs*, please note that Jenny Adams and colleagues ("Finding Power in Chaco Canyon: Season Two") would like to add acknowledgments as follows:

We thank the University of Colorado's Center for the Study of Origins for contributing funding to the project and especially Dr. Carol Cleland for her support.

Current Research

Agricultural Adaptations with Socioeconomic Change in the Rio Grande

Kaitlyn Elizabeth Davis

Listudents, directed by University of Colorado Ph.D. candidate Kaitlyn Davis, conducted agricultural surveys and soil collection around Protohistoric and early Colonial Pueblo villages in New Mexico. Their project investigates Puebloan agricultural practices before and after Spanish colonization at four pueblos—two pre-Hispanic (Poshuouingeh and Pueblo Blanco) and two colonial-era (Ku'uyemugeh and San Marcos)—to understand how Puebloan agriculture changed as a result of Spanish colonization.

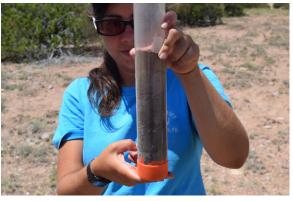
The researchers used environmental data, such as historic precipitation and growing degree day estimates for the study area, to examine ancient fields around each pueblo to estimate possible crop yields for each field type, such as floodplain fields versus upland gravel mulch fields. In October 2019, the crew finished the fieldwork begun in June 2019 to record agricultural features and collect soil samples. The agricultural features found during survey reveal how Pueblo agricultural technology differed before and during colonial times. The researchers also consulted ethnohistoric documents and oral traditions to learn about social and economic constraints under which Puebloan people operated that would influence their agricultural practices.

During the surveys, the researchers found 69 agricultural features at Poshuouingeh, 33 agricultural features at Pueblo Blanco, 43 agricultural features around Ku'uyemugeh, and 60 agricultural features at San Marcos. These features included cobble-bordered gravel-mulch fields, terraces, barrow pits, and water collection features. They also found datable ceramics and agricultural tools around the features. The artifacts found in fields provide dates for when each field was in use. This allows researchers to assess changes

in the crops planted and field types used between the precolonial and Colonial periods.

The goals for the project for 2020 are to analyze the survey data and the soil samples. Initial comparisons of the features found at pre-colonial versus Colonial sites surveyed revealed that the two precolonial sites had more checkdams, stone tools, and evidence of stonetool manufacture than the Colonial period sites. Further, the two Colonial period sites had more barrow pits





than the two pre-colonial sites. These observations, as well as other potential patterns, will be explored further as data continue to be analyzed.

An analysis of the soil samples from different field types has begun. This will allow a determination of what crops were grown in the features at pre-colonial compared to colonial-era sites.

Funds from the AAHS Research Grant program have been a tremendous help in beginning these soil analyses, particularly the phytolith analyses, which are conducted at the Environmental Archaeology Lab at the University of Texas at Austin. Phytoliths are

(continued on page 12)

essentially "plant fossils," that is, the silicified remains of plant cells that are diagnostic of plant type as well as the part of the plant from which they originated. Comparing phytoliths found in pre-colonial versus colonial-era contexts will provide information about potential changes in crop types, crop ratios, and harvesting/preparation practices among the four sites surveyed.

2020 Arizona Historic Preservation Conference June 16–18, 2020

The 2020 Arizona Historic Preservation Conference will be held at the Doubletree by Hilton Hotel, 2100 S. Priest Street, Tempe, with the theme: *PreserVISION 2020*. The conference boasts two full days of programming geared to professionals in the fields of historic preservation, archaeology, cultural resources management, architecture, and planning. Also welcome are members of the public who are involved in historic preservation and archaeology through volunteer activities and non-profit or state and local board and commission membership. Programming is also designed to attract elected leadership and staff of our 21 Native American tribes who have a special relationship to Arizona's heritage.

In addition, the Governor's Archaeology Advisory Commission will present awards in Public Archaeology to individuals, organizations, projects, and/or programs that have significantly contributed to the protection and preservation of, and education of the public about, Arizona's non-renewable archaeological resources. To nominate a person, team, or organization for an award please visit: azpreservation.org/gaac and complete the nomination form.

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

THE 21ST BIENNIAL MOGOLLON CONFERENCE TUCSON, ARIZONA OCTOBER 23-24, 2020

Please join us for this exciting biennial conference! The conference welcomes papers related to archaeology of the Mogollon Rim in Arizona, to the Mimbres and Eastern Mimbres Regions of New Mexico, and to interactions within and between those areas and with Ancestral Pueblo, Hohokan, western Plains, and northern Mexico.

Advance registration is \$35 for students, \$50 for others. Paper abstracts are due August 1, 2020.

The conference will be held in the Student Union, University of Arizona, approximately 9:00 am to 4:30 pm depending on the number of presentations. We will endeavor to accommodate most, if not all, submissions. For a printable (or e-mailable) Registration Form, payments, other conference-related information, and links to information about Tucson, please see:

Mogollon2020.com

There will be a reception with refreshments on the evening of October 22 and a conference dinner hosted by Archaeology Southwest on the evening of October 23. There is no additional cost to attend the reception or the dinner.

Major sponsors include Archaeology Southwest, Arizona State Museum (our on-campus sponsor), Desert Archaeology, Inc., Logan-Simpson Design, and Westland Resources. Supporting sponsors include Arizona Archaeological and Historical Society (accounting services), Diehl Research, LLC (Allison Diehl), and Tierra Right of Way Services.

Please direct conference inquiries to Mike Diehl (mdiehl@desert. com) and payment inquiries to Karen Schollmeyer, AAHS Treasurer (karen@archaeologysouthwest.org).

Check the website periodically for updates with additional information about partnering hotels and businesses.

Cornerstone

Darlene Lizarraga, Director of Marketing Arizona State Museum

Meet Molly, ASM's new Head Librarian



Molly Stothert-Maurer succeeds Mary Graham in the ASM library as the direct beneficiary of AAHS's semi-annual book sales.

Molly was most recently archivist and history of science curator at University of Arizona Libraries Special Collections, where she worked closely with the collections documenting the Lunar and Planetary Laboratory. Prior to that, she served as archivist at the Perkins School for the Blind in Watertown, Massachusetts. Molly holds a master's degree in Information Resources and Library Science from the University of Arizona and a BFA in studio art from Texas State University.



AAHS Membership Application

Membership is open to anyone 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. If you are joining as a household, please list all members of the household. Monthly meetings are free and open to the public. Society field trips require membership.

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