



glyphs

The Monthly Newsletter of the
Arizona Archaeological and Historical Society

Vol. 70, No. 5

November 2019



Winter solstice shadow effect on Panel 39, Horseshoe Mesa, Wupatki National Monument.

Next General Meeting:
November 18, 2019; 7:30 p.m.
Duval Auditorium
Banner-University Medical Center
1501 N. Campbell Ave.
Tucson, Arizona
www.az-arch-and-hist.org

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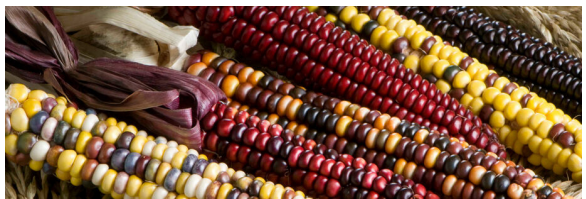
President's Message

by John D. Hall

Thanksgiving is my favorite holiday! This time of year, southern Arizona has cool weather, and the beginning of the 'holiday season' is marked. Thanksgiving traditionally is a time for family to gather, be thankful of what you have, and eat! My extended family is spread across the country, so getting together can be a significant event. If only a few family members can make the trip, we make an extra effort to invite our friends for the celebrated Thanksgiving Day dinner! Rarely do my wife and I cook large or extravagant meals, but for Thanksgiving, we go all out (maybe less so these days).

The process of cooking a large meal and serving friends and family (i.e., the community) has its roots far back in human history. It is, in fact, perhaps the oldest tradition. As a necessity for life, food is inextricably linked with culture. A culture's cuisine, with distinctive ingredients and preparation methods, is passed down through generations. We all recognize different types of cuisine, whether it's associated with a specific culture, a geographic region, or a style of cooking. Food is one of the strongest methods of maintaining a connection to one's culture. Personally, I am among the 'lives to eat' crowd, and I have always been fascinated with the power food has in a culture's identity. For me, nothing is better than traditional cuisine. I can almost feel the history and nuances of a culture being absorbed with every calorie of a traditional meal.

The U.S. is fortunate to have such a rich and diverse assortment of cultures and ethnicities. This diverse cultural background brings with it a correspondingly plentiful availability of traditional cuisines. Most people think about the incredible array of food choices in New York or San Francisco, but Tucson is now internationally recognized as a hub of traditional cuisine!



In 2015, Tucson became the first City of Gastronomy designated in the U.S. by the United Nations Education, Science and Culture Organization (UNESCO), part of the UNESCO Creative Cities Network (UCCN). Several factors played into Tucson's designation as a City of Gastronomy. One of the major factors stems from Tucson's rich history.

As many of you know, recent archaeological excavations along the Santa Cruz River near Tucson have uncovered evidence of irrigation agriculture as far back as 4,000 years, demonstrating the longest agricultural history of any U.S. city. Several domesticated varieties of bean, squash, and maize were brought to the region from Mesoamerica four millennia ago. Even before that, many native Sonoran Desert plants were encouraged and cultivated, such as amaranth, goosefoot, grasses, mesquite, agave, wolfberry, and cactus, to name just a few.

With the arrival of the Spanish in the late 1600s, a new wave of Old World crops was introduced to the Tucson area, including a wide variety of herbs, vegetables, legumes, orchard fruit and nuts, and livestock. Many more fruits and vegetables were added to Tucson's agricultural suite by Euroamerican immigrants arriving in the mid- to late 1800s. According to the City of Tucson's UNESCO webpage,

Tucson's cuisine blends the influences of Native American, northern Mexican or Sonoran, Mission-era Mediterranean, and American Ranch-Style Cowboy food traditions, among others... In addition to wild desert edibles, Tucson's heritage foods include crops cultivated in ancient times and historically, fermented foods, roasted and baked foods, meats, and cheeses distinctive to the desert borderlands region. These heritage foods are representative of many living traditions that thrive today, and are a source of identity and cultural vitality for the people who live here.

Beyond just the historical influences of domestic plants and animals, Tucson has a thriving multi-cultural community. A prime example of this community is the annual Tucson Meet Yourself festival, whose mission is to "research, document, interpret and present the living traditional arts and expressions of everyday life of

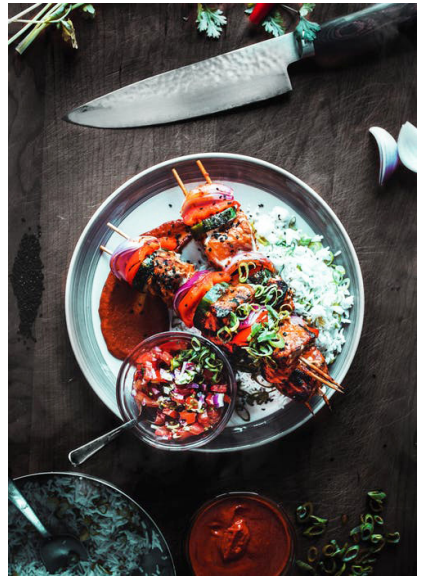
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the folk and ethnic communities of the multi-national Arizona-Sonora region.” Dozens of other food festivals, fairs, and tastings happen every year in the Tucson area.

Cuisine Challenge!

For those of you in Tucson, or anywhere, I challenge you to grab some friends and/or family and find a locally owned and operated restaurant, café, food truck, brewery, bakery, festival, farmer’s market, winery, delicatessen, ethnic grocery store, roadside table, tearoom, carnicería, fishmonger, bodega, or patisserie. The challenge is to try something that is unfamiliar or out of your comfort zone. Once you have this experience, write me back and let me know where you were, what you tried, and how it felt. Did you meet someone new from your community? Did this experience introduce you to a new custom or cuisine? Was the cuisine something you did not expect or knew existed? Did you learn something new about a culture?



Please let me know what you think! My email address is John.Hall@terracon.com. Once I hear back from you, I will publish the results in a future issue of *Glyphs*.

To learn more about Tucson as a UNESCO City of Gastronomy, follow this link: <https://tucson.cityofgastronomy.org/about>. To learn more about Tucson Meet Yourself, follow this link: <https://www.tucsonmeetyourself.org/>.

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

AAHS Lecture Series

All meetings are held at the Duval Auditorium, University Medical Center
Third Monday of the month, 7:30–9:00 p.m.

- Dec. 2019: Holiday Party (no lecture)
- Jan. 20, 2020: Ron Parker, *Chasing Centuries: The Search for Ancient Agave Cultivars across the Desert Southwest*
- Feb. 17, 2020: Steve Lekson, *Studying Southwestern Archaeology*
- Mar. 16, 2020: Kelsey Hanson, *Title TBD*
- Apr. 20, 2020: Harry Winters, *O'odham Place Names Based on Rocks and Minerals*
- May 18, 2020: Don Liponi, *La Rumorosa Rock Art along the Border*



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.*

Chihuahua Adventure: Paquimé, Cueva de la Olla, and More November 1–4, 2019

TRIP FULL – WAITING LIST ONLY

Paquimé, previously known as Casas Grandes, was one of the largest and most influential communities in the ancient U.S. Southwest and northwestern Mexico, and it is a UNESCO World Heritage Site. Excavations by the Amerind Foundation and Mexico's Instituto Nacional de Antropología e Historia have revealed a thriving community with many multi-storied roomblocks, ballcourts, ritual mounds, and enormous amount of exotic goods, such as macaw parrots, copper, and marine shell. We will visit Paquimé and its world-class museum. The trip will be led by archaeologist/ethnobotanist Paul Minnis.

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Paquimé was more than a large community. It was the center of a large network of hundreds of outlying towns and hamlets, and we



will visit several of these sites.

Cueva de la Olla (Cave Valley) is a famous ruin in the mountains just west of the Casas Grandes region. If we have sufficient time, we will also visit other sites not open to the public.

A trip to this region is not complete without a visit to Mata Ortiz, a

town of 400 potters who started their tradition by imitating ancient pottery. Their artistic talents have now extended far beyond imitation.

The Late Pre-Hispanic Era in the San Pedro Valley

December 7, 2019

We will be visiting several sites in the northern (lower) San Pedro Valley between the Gila confluence at Winkelman and Benson, Arizona (where Interstate 10 crosses the river), which date between 700 and 1700 CE. The focus will be on the late pre-Hispanic period (1200-1450 CE). During this interval, small groups of Kayenta from northeastern Arizona immigrated to the area and lived alongside local groups who built several platform mound villages. The multi-generational interaction between this immigrant minority and the local majority is key to understanding the Salado Phenomenon. Tour leader, Jeff Clark, of Archaeology Southwest, will make the case that what archaeologists call the “Salado” was an inclusive ideology, expressed on polychrome ceramics, which arose to alleviate ethnic tensions and to facilitate cooperation and trade in this multi-cultural setting.

This is an all-day tour (8–9 hours), most of it on good dirt roads and with limited facilities (bathroom breaks in Mammoth and Benson). Minimal hiking is involved, but dense stands of cholla are present at some sites. The tour is limited to 15 people, and we will car pool in

a minimum number of vehicles. To sign up for the tour email Chris Sugnet at sugnetc@yahoo.com.

Suggested reading include Archaeology Southwest Magazine issues: “Preservation Archaeology in the San Pedro Valley” (17[3], Summer 2003); “One Valley Many Histories” (18[1], Winter 2004); “A Complicated Pattern” (26[3–4], Fall 2012); and “Before the Great Departure (27[3], Summer 2013).

University Indian Ruins

January 18, 2020; 10:00 am–12:00 pm

The University Indian Ruin Archaeological Research District is located in the eastern Tucson Basin at the confluence of the Tanque Verde and Pantano Washes where their combined flow forms the Rillito River. The 13-acre district is an archaeological preserve owned by the University of Arizona (UA) School of Anthropology. It includes



a central portion of a large Hohokam Classic period village and an adjacent complex of archaeological research facilities constructed in the 1930s. The archaeological site was occupied primarily between AD 1150 and 1450. It was one of the largest settlements in the Tucson Basin during that interval, containing a large and a small platform mound as public architecture and a range of other adobe buildings. The presence of the only platform mounds in the eastern Tucson Basin indicates University Indian Ruin served as a focal point for regional civic and ceremonial activities and the leaders of these events.

Our tour leaders, archaeologists Suzy Fish, Paul Fish, Mark Elson, and Maren Hopkins, are analyzing the results from 2010–2013 UA Anthropology field schools at University Indian Ruin. These field schools built on the work of earlier investigations by Byron Cummings, Emil Haury, and Julian Hayden. The tour is limited to 20 people. To register, email Katherine Cerino at kcerino@gmail.com.

November 18: Topic of the General Meeting

Seasons of the Sun: Experimental Timelapse Photographic Documentation of Archaeoastronomical Sites in Wupatki National Monument

*David E. Purcell
Museum of Northern Arizona*

Previous documentation of petroglyph panels with apparent archaeoastronomical associations at Horseshoe Mesa (WS834) in Wupatki National Monument, Arizona, raised questions about recording methodologies. The solar effects had been documented only on solstices and equinoxes, using tightly cropped still photographs, “freezing” a moving event, and removing the interaction from the context of the panel. The current project sought to test the validity of this common approach by recording the daily sun and shadow interactions on petroglyph Panels 39 and 50 at Horseshoe Mesa using timelapse cameras. Daily recording for an entire year has apparently not been attempted previously in archaeoastronomical studies. Doing so would potentially confirm solstice and equinox interactions by demonstrating the interactions are unique to those days or peak in intensity on those days, identify other possible commemorations such as cross-quarters days, and provide an expanded field of view of the known interactions. This experiment also evaluated the feasibility



Timelapse photography of the winter solstice at Panel 50, Horseshoe Mesa, Wupatki National Monument.

of daily timelapse photography of rock art sites, tested low cost equipment, and evaluated the role weather might play in interactive solar displays.

Data for seven specific research goals were collected. We conclude that Panel 39 does mark the solstices and not the equinoxes as previously documented, and it does not provide any additional archaeoastronomical activity; it may, however, indicate whole seasons rather than specific dates. Panel 50 exhibits five solar interactions, two of which are coincidental to the placement of the petroglyphs, and three interactions of which are intentional petroglyph associations with natural shadow and sun phenomena.

Speaker David E. Purcell is on the staff of the Archaeology Division of the Museum of Northern Arizona, where he acts as both archaeologist and historian. After beginning his archaeological career in Belize, David has worked throughout the American Southwest, Great Basin, and Plains regions for more than 30 years. He has recently completed a comprehensive archaeological resurvey of Navajo National Monument, prepared an administrative history of Arches National Park, and directed the Wupatki Petroglyph Project, which documented, in detail, 374 petroglyph panels at four sites in Wupatki, with a total of 4,004 individual elements. The subject of his lecture developed from the petroglyph recording project as a separate research project (NPS Research Permit #WUPA-2016-SCI-0005), which was generously supported by the Charles Redd Center for Western Studies at Brigham Young University and the Arizona Archaeological and Historical Society. David lives in Flagstaff and currently serves as the President of the Board of Directors and Treasurer of Southwestern Archaeology, Inc., a 501(c)(3) corporation that oversees the Pecos Conference and Cordell/Powers Prize, and he is a Board Member-at-Large for PaleoCultural Research Group in Arvada, Colorado.

Suggested Readings:

Bernhart, Robert L., and Scott G. Ortman

- 2014 New Evidence of Tewa-style Moiety Organization in the Mesa Verde Region, Colorado. In *Astronomy and Ceremony in the Prehistoric Southwest: Revisited. Collaborations in Cultural Astronomy*, edited by G. E. Munson, T. W. Bostwick, and T. Hull. Anthropological Papers No. 9. Maxwell Museum of Anthropology, University of New Mexico, Albuquerque..

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Johnson, Clay

- 1992 Establishing a Uniform Terminology for Description of Solar Interactions with Rock Art Panels. In *Utah Rock Art*, edited by N. Bowen, pp. 33–45. Utah Rock art Research Association, Salt Lake City.

Malville, J. McKin

- 2008 *A Guide to Prehistoric Astronomy in the Southwest*, revised and updated. Johnson Books, Boulder.

Preston, Robert A., and Ann L. Preston

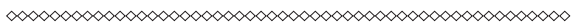
- 1987 Evidence for Calendric Function at 19 Prehistoric Petroglyph Sites in Arizona. In *Astronomy and Ceremony in the Prehistoric Southwest*, edited by J. B. Carlson and W. J. Judge, pp. 191–204. Papers of the Maxwell Museum of Anthropology No. 2. University of New Mexico, Albuquerque.

Purcell, David E. (editor)

- 2018 *Wupatki: New Perspectives on Petroglyphs of the Crack-in-Rock Community*. Plateau 10(1). Museum of Northern Arizona, Flagstaff.

Zoll, Kenneth J.

- 2014 *Heart of the Sky: Ancient Skywatchers or Central Arizona*. VVAC Press, Camp Verde, Arizona.



Old Pueblo Archaeology Educational Programs

Old Pueblo Archaeology Center offers speakers to give presentations on various topics for educators and other adults, as well as for children, upon demand.

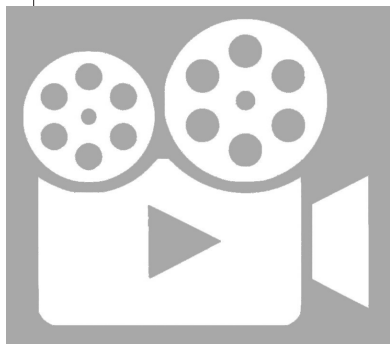
Examples of topics include:

- ♦ Archaeological Excavations on the Eastern Tohono O’odham Reservation
- ♦ Teaching the Fundamentals of Archaeology
- ♦ The Study of Chipped Stone Tools
- ♦ The Study of Prehistoric Ceramics
- ♦ The Peoples of Ancient Arizona

To schedule a speaker on these or other Southwestern archaeology, history, and culture topics your organization might like to hear about, contact Old Pueblo Archaeology Center at 520.798.1201.

ROOTS OF SOUTHWEST ARCHAEOLOGY PROJECT

Look what's here! The Arizona Archaeological and Historical Society Oral History Project, also known as the Roots of Southwest Archaeology Project, has been videoing senior



archaeologists over the last several months, and our first two videos, which are of Paul Fish and Suzy Fish, are live on the AAHS web page (on the drop down menu on our home page or go directly to <https://www.az-arch-and-hist.org/roots-of-sw-archaeology/>). We have videos of Gloria Ferner and Bill Gillespie in the editing process, and they should be available for viewing soon. In these videos, archaeologists

discuss their careers, their contributions to archaeology, and current issues in the field. Most are 30–45 minutes long.

The videos we have recently made accompany those that AAHS members did some time ago, which include Bunny Fontana and Jim Ayres discussing historical archaeology and Ray Thompson talking about his life. All the present and past videos have benefited from support of the Southwestern Foundation for Education and Historical Preservation under the auspices of Director Diane Bret Harte.

We have been given the interview the School of Anthropology did with Art Jelinek, and Arizona Public Media has given us the Haury interviews, which they curated. We hope to have these edited and available for viewing in the next several months.

All of these interviews require editing, and currently, only Fran Maiuri is doing editing. If you have videoing or editing skills you would like to contribute to this project, please contact Fran (f.maiuri@gmail.com) or Pat Gilman (pgilman@ou.edu).

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 me, Emilee Mead, at emilee@desert.com.

Cornerstone

*Darlene Lizarraga, Director of Marketing
Arizona State Museum*

LOOTING *and* THE LAW

Preventing, Detecting, and Investigating Archaeological Resource Crime

Treasure hunting, tomb raiding, forgeries, and museum heists are the stuff of action movies. In real life, these type of crimes make up the world's third most lucrative trafficking industry behind drugs and weapons. The U.S. Southwest, with its abundant, well-preserved archaeological sites, is a huge draw for criminals who are either working for themselves or for black-market syndicates. The good news is, there are those who work every day to prevent, detect, and investigate crimes against archaeology. Meet John Fryar and Garry Cantley--two feds who have been on the front lines for decades--and hear their stories.

John Fryar is an enrolled member of the Pueblo of Acoma. With over 30 years of federal service, John retired in 2006, having worked for the U.S. Forest Service as a wildland fire fighter, and for the Bureau of Land Management and Indian Affairs as an undercover special agent focusing on the protection of cultural resources. John has been integral to many of the region's high-profile cases and has been recognized with numerous local and national awards.

Garry J. Cantley is Regional Archeologist in the Bureau of Indian Affairs's office in Phoenix. In this position since 1994, Garry's primary interest has been archeological resource crime prevention and the application of the Archaeological Resources Protection Act (ARPA). He is co-author of "Pocket Field Guide: Field Procedures for Violations of the Archaeological Resources Protection Act," co-leader of BIA's National ARPA Training Team, and has served as an instructor for the U.S. Department of Justice.

**Saturday
November 16, 2019
FREE! 2:00 p.m. @ CESL 103**



THE UNIVERSITY OF ARIZONA

**ARIZONA
STATE MUSEUM**

This is a presentation of the
Arnold and Doris Roland Distinguished
Speaker Series, made possible by the
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The Center for English as a Second Language (CESL) is one building east of ASM North • ASM is just inside the UA's Main Gate at Park Ave and University Blvd • 1013 E University Blvd • Free garage parking is available at Euclid Ave and Second St or Tyndall Ave and Fourth St • www.statemuseum.arizona.edu

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.

Membership Categories

- ☐ \$60 **Kiva members** receive four issues of the Society's quarterly journal *Kiva* and 12 issues of *Glyphs*
- ☐ \$45 **Glyphs members** receive *Glyphs*
- ☐ \$35 **Student Kiva members** receive both *Kiva* and *Glyphs*
- ☐ \$100 **Contributing members** receive *Kiva*, *Glyphs*, and all current benefits
- ☐ \$150 **Supporting members** receive *Kiva*, *Glyphs*, and all current benefits
- ☐ \$300 **Sponsoring members** receive *Kiva*, *Glyphs*, and all current benefits
- ☐ \$1,500 **Lifetime members** receive *Kiva*, *Glyphs*, and all current benefits

Note: For memberships outside the U.S., please add \$20. AAHS does not release membership information to other organizations.

I wish to receive *Glyphs* by (circle your choice): Email Mail Both

I am interested in volunteering in AAHS activities: Yes Not at this time

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

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

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A A H S



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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.

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