



Sacramento Archeological Society, Inc. Newsletter

www.sacarcheology.org.

Mar/Apr - 2020

UPCOMING EVENTS

Note that the February 29th SAS Scholar Symposium was rescheduled to April 11, 2020

March 28, 2020, Saturday, 1:00 - 4:30 p.m. – **SAS Scholar Symposium (2)** “Field excavation at Scladina, Belgium” by **Sarah Foley**, “Ethnographic/ethno historical analysis of social identities of women in Sonoma County between 1900 and 1945” by **Bee Thao** and “Historic Native American village excavation in Northern Sierras” by **Jonathan Garcia** at Sylvan Oaks Library, 6700 Auburn Boulevard, Citrus Heights, CA 95621

April 11, 2020, Saturday, 1:00 - 5:00 p.m. – **SAS Scholar Symposium (3)** “Glass bead analysis to ascertain interaction between settlers, mission inhabitants and native groups during 18th century” by **Danielle Dadiago**, “Analysis of residence during the early period (ca. 5000-2500 BP) in lower Sacramento Valley and San Joaquin Delta” by **Candice Ralson**, and “Aidonia excavation in Nemea, Greece and artifact scanning” by **David Cook** at Walnut Grove Library, 14177 Market St, Walnut Grove, CA 95690 Sacramento, CA 95835

April 30, 2020 – Scholarship Applications due

See calendar in www.sachaeology.org for complete set of events.

Annual Scholar Symposium (2)

By
2019 Scholarship Recipients

Saturday March 28, 2020

1:00 – 4:30 p.m.

at

Sylvan Oaks Library
6700 Auburn Boulevard
Citrus Heights, CA 95621

Three scholarship recipients from 2019 will present on their research and excavation experience.
Program

1:00 – Set up

1:15 - **“Field excavation at Scladina, Belgium”** by **Sarah Foley**

2:15 - **“Ethnographic/ethno historical analysis of social identities of women in Sonoma County between 1900 and 1945”** by **Bee Thao**

3:15 - **“Historic Native American village excavation in Northern Sierras”** by **Jonathan Garcia**

4:00 – 4:30 - Clean up

Sarah Foley

Sarah graduated from University of California, Davis in 2019. She is preparing for graduate school by attending a field school at Scladina, Belgium and volunteering with excavations at Régismont-le-Haute, France. The scholarship offset expenses for the field school.

Jonathan Garcia

Jonathan graduated from Sonoma State University in 2019. He used the scholarship to attend a Chico Archaeological Field School. This field school involved the excavation of a historic Native American village in the Northern Sierras in California.

Bee Thao

Bee is a master's student at Sonoma State University. She has had several years of professional experience in cultural resource management with exposure to Asian American archaeological cultural materials and sites. In 2019 she conducted an ethnographic/ethno historical research project on how Chinese, Japanese and Filipina women in Sonoma County created and maintained multiple social and cultural identities between 1900 and 1945. She used the scholarship to offset expenses associated with oral history interviews of Asian American woman.

Annual Scholar Symposium (3)

By

2019 Scholarship Recipients

Rescheduled from Saturday February 29, 2020

Saturday, April 11, 2020

1:00 – 5:00 p.m.

at

Walnut Grove Library,
14177 Market St,
Walnut Grove, CA 95690

Three scholarship recipients from 2019 will present on their research experiences.

Program

1:00 – **Setup**

1:15 - “**Analysis of residence during the early period (ca. 5000-2500 BP) in lower Sacramento Valley and San Joaquin Delta**” by **Candice Ralson**

2:15 - “**Aidonia excavation in Nemea, Greece and artifact scanning**” by **David Cook**

3:15 - “**Glass bead analysis to ascertain interaction between settlers, mission inhabitants and native groups during 18th century**” by **Danielle Dadiego**

4:30 – 5:00 – Clean up

David Cook

David is a sophomore at University of California, Berkeley. He used the scholarship to attend a field school at Aidonia in Nemea, Greece and make 3D scans of artifacts.

Danielle Dadiego

Danielle is a PhD candidate at University of California, Santa Cruz. She used this scholarship to conduct archaeometric analyses of glass beads and lead shot for her dissertation research. Her dissertation research explores the question: What was the nature of economic interactions between Spanish settlers, mission inhabitants, and interior native groups with British and French alliances during the eighteenth-century? Her methods combine archival research, traditional artifact analysis and chemical composition and isotopic analyses of glass beads and lead shot using Laser Ablation-Inductivity Coupled Plasma-Mass Spectrometry, Isotopic and chemical composition studies.

Candice Ralson

Candice is a PhD candidate at University of California, Davis. She used the scholarship to fund stable carbon, nitrogen and oxygen analysis of 30 human bone samples. This analysis, along with others such as strontium and sulfur of human bone and teeth will be used to complete her dissertation research which aims to investigate post-marital residence and sexual division of labor for Early Period (ca. 5000-2500 BP) populations from the lower Sacramento Valley and San Joaquin Delta. Her samples come from archaeological sites CA-SAC-107 (the Windmill Mound) and CA-SJO-68 (the Blossom Mound). With stable oxygen analysis of human bone apatite results she can estimate where a person lived approximately 5-15 years prior to death.

OTHER EVENTS

Four Corners Archaeological Tour

August 31 – September 11, 2020

Join us for an archaeological exploration in the four corners area. We will view pueblo ruins and rock art in Arizona, Colorado and Utah. Guides will lead us to sites and provide insight into the history and culture of the area. These include Dave Dove for Mitchell Springs, Dr. Bruce Bradley for Wallace Ruins, a ranger for Hovenweep National Monument, Navajo for Monument Valley and more.



Wolfman panel - Comb Ridge

http://hikingwalking.com/index.php/destinations/ut/ut_se/bluff/wolfman_panel/wolfman_panel_detail

<https://www.blm.gov/visit/lowry-ruins-national-historic-landmark>



Lowery Pueblo



Canyon de Chelly

<https://www.nps.gov/cach/index.htm>

<https://www.nps.gov/nava/planyourvisit/guidedtours.htm>



Navajo National Monument - Betatakin

The following is a tentative schedule of events. The schedule will be fine tuned after a pre-tour by SAS members in May, 2020. Additional site details and lodging recommendations will be provided to attendees.

SAS Four Corners Tour Tentative Schedule 2020

Day	Activity	Lodging
Day 1 – 8/31/20 M	Arrive Winslow, AZ Homolovi State Park – Visitor center and Homolovi II ruins.	Winslow, AZ – 1 night
Day 2 – 9/1/20 T	Rock Art Ranch –Guided Tour in Chevelon Canyon \$35/person	Holbrook, AZ - 2 nights
Day 3 – 9/2/20, W	Petrified Forest, AZ Rainbow Forest Museum Agate House – 2 mi hike or Martha’s Butte - 2.2 mi hike Newspaper Rock – view rock art from above Puerco Pueblo - .3 mi loop hike Visitor Center	Holbrook -same
Day 4 – 9/3/20, Th	Hubble Trading Post Canyon de Chelly, AZ White House Trail – 2½ mi hike 10 Rim overlook drive	Cortez, CO - 3 nights Canyon of the Ancients Guest Ranch
Day 5– 9/4/20, F	Canyon of the Ancients Guided Tour \$70/person Yucca House National Monument	Cortez – same
Day 6 – 9/5/20, Sa	Mitchell Springs Ruins guided by Dave Dove Wallace Ruins guided by Dr. Bruce Bradley	Cortez – same
Day 7 – 9/6/20, Su	Lowry Pueblo Hovenweep National Monument Petroglyph Panel ranger tour@ Square Tower Group loop trail, 1.5 miles (2 hr) Horseshoe and Hackberry Units (option)	Bluff, UT -2 nights
Day 8 – 9/7/20, M	Comb Ridge – Butler Wash Kachina Panel – 1.5 mi Wolfman Panel – 1.5 mi Sand Island - .2 mi Procession Panel – 2.8 mi (option)	Buff same
Day 9 – 9/8/20, T	Comb Ridge – additional ruins Big crane (option)	Blanding, UT – 2 nights
Day 10 – 9/9/20, W	Edge of the Cedars Museum Cedar Mesa (TBD)	Blanding same
Day 11 – 9/10/20, Th	Monument Valley Backcountry Tour – 4 hr ~\$90/person 17 mi driving loop Wildcat Trail – 4 mi (option)	Kayenta, AZ – 1 night
Day 12 – 9/11/20, F	Navajo National Monument Betatakin – 3- 5 mile guided hike	TBD

Tour Details

This is a Members only event and attendance is limited. Reservations are accepted on a first come basis. This event is expected to fill up fast. Make your reservation now. A non-refundable reservation fee of \$50 per person is required with the reservation.

Participants are responsible for making their own lodging reservations, arranging their own transportation to and on the tour, and paying for their food, fees and incidentals.

The itinerary is subject to change at the discretion of Sacramento Archeological Society, Inc., but participants will be notified of significant changes in advance. All participants are required to sign a Hold Harmless Agreement prior to the tour.

To make reservations contact Jan Johansen janjohansen@sbcglobal.net Also, send the registration fee of \$50 per person to Sacramento Archeological Society, Inc. at P.O Box 163287, Sacramento, CA 95816-9287 or use our web site <https://sacarcheology.org/society-membership/sas-donations-and-membership-payment/>.

Archaeological Conservancy Tour

The Archaeological Conservancy offers a variety of tours. The upcoming tour to Guatemala Highlands and Copán is scheduled for March 12 – 22, 2020. For more information contact tours.tac@gmail.com or by phone at (505) 266-1540.

Friends of Sierra Rock Art Events

Friends of Sierra Rock Art (FSRA) published their outing schedule for 2020. For information contact Karen Ostergard at cody17k@sbbmail.com.

MEMBER'S CORNER

New Members

Welcome John Foggitt from England as a new member. He will be joining the SAS Four Corner Tour

Renewal of Annual Memberships

All memberships are renewable on **January 1** annually except for those who join recently (after September of the previous year). Please support the society by promptly paying your **2020** dues. **Remember your dues make scholarships possible.** We keep overhead low so that the funds can be used to support students. You may now use our web site <http://sacarcheology.org/society-membership/> to renew and make payment using a **credit card or Paypal**.

The annual dues are:

Student/Limited Member	\$15
Individual Membership	\$30
Family Membership	\$40
Sponsor	\$100 - 499 (individual)
	\$500 - 999 (business)
Patron	\$1000

Alternatively, please make out your check to “**Sacramento Archeological Society, Inc.**” and mail it to:

Sacramento Archeological Society, Inc.

P.O. Box 163287

Sacramento, CA 95816-9287

Thank you in advance for your prompt payment. We really appreciate your support.

Annual Dues for 2020

Name(s): _____ Email: _____ Phone: _____

_____ Email: _____ Phone: _____

Address: _____

Student/Limited Member	\$15	_____	\$ _____
Individual Membership	\$30	_____	\$ _____
Family Membership	\$40	_____	\$ _____
Sponsor	\$100	_____	\$ _____
Scholarship Donation		_____	\$ _____

Total enclosed \$ _____

ARCHAEOLOGICAL REFERENCES



The Dirt – A podcast for all ages and backgrounds about archaeology, anthropology, and our shared human story <http://thedirtpod.com>

Recent Articles

"Missing Maya Capital Unearthed in Mexico"

"An expanse of ruined pyramids, palaces and plazas in southern Mexico has been identified as the 'lost capital' of an influential Maya kingdom called White Dog.

Mayan inscriptions from AD 628 in AD 869 mention Sak Tz'i', or White Dog, a royal centre allied with some of the most powerful Maya kingdoms of the time. But the location of Sak Tz'i'. had long eluded scholars. Then, a man contacted archaeologists about what he'd see on his land on the outskirts of the town of Lacanjá Tzeltal in Mexico.

Preliminary excavations by Charles Golden, who is based at Brandeis University in Waltham, Massachusetts, and his colleagues revealed tiered pyramids, a ball court and dozens of other structures, spread across some 25 hectares. That makes Lacanjá Tzeltal, as Golden's team calls the site, bigger and more densely built than other renowned Maya settlements, such as Bonampak also in southern Mexico.

The White Dog was long lived construction at Lacanjá Tzeltal started no later than 450 BC, and a privately owned carving refers to a Sak Tz'i' nobleman in AD 869 decades after other royal courts in the region had collapsed."(*Nature*, V 577, 2020-1-9, p, 149)

"Change in climate withered an empire"

"From roughly 912 to 609 BCE the Neo-Assyrian Empire rose as one of the most powerful superpowers of its time, dominating much of the Near East. Sinha *et al.* propose that mega-droughts played an important role in the rapid decline in the empire's power, from its height around 670 BCE to collapse only six decades later. Precisely dated cave deposits from northern Iraq preserved a record of precipitation and effective moisture over a 4000-year period that includes the span of the Neo-Assyrian Empire. This record demonstrates that the rise of the empire occurred during a roughly 200-year interval of abundant rainfall. Subsequently, severe mega-droughts characterized by the climate across the empire, likely contributing to the empire's rapid decline."(*Science*, 2019-11-15, V 366, p. 835)

"Africans, too, carry Neanderthal genetic legacy

Ancient Europeans took Neanderthal DNA back to Africa"

"A new study reported in *Cell* overturns the notion that Africans do not have Neanderthal ancestry. Princeton University evolutionary biologist, Joshua Akey compared the genome of a Neanderthal from Russia's Altai region in Siberia, sequenced in 2013, to 2504 modern genomes uploaded to the 1000 Genomes Project, a catalog of genomes from around the world that includes five African subpopulations. The researchers then calculated the probability that each stretch of DNA was inherited from a Neanderthal ancestor. The researchers found that African individuals on average had significantly more Neanderthal DNA than previously thought—about 17 megabases (MB) worth or 0.3% of their genome. They also found signs that a handful of Neanderthal genes may have been selected for after they entered Africans' genome, including genes that boost immune function and protect against ultraviolet radiation.

The best fit model for where Africans got all this Neanderthal DNA suggests about half of it came when Europeans—who had Neanderthal DNA from previous matings—migrated back to Africa in the past 20,000 years. The model suggests the rest of the DNA shared by Africans

and the Altai Neanderthal might not be Neanderthal at all: Instead, it may be DNA from early modern humans that was simply retained in both Africans and Eurasians—and was picked up by Neanderthals, perhaps when moderns made a failed migration from Africa to the Middle East more than 100,000 years ago.” (Michael Price, *Science*, 2020-1-31, V 367 p. 497)

“Ancient West African foragers in the context of Africa population history”

“Our knowledge of ancient human population structure in sub-Saharan Africa, particularly prior to the advent of food production, remains limited. This article reports on a genome-wide DNA data from four children—two of whom were buried approximately 8,000 years ago and two 3,000 years ago—from Shum Lake (Cameroon), one of the earliest known archaeological sites within the probable homeland of the Bantu language group. One individual carried the deeply divergent Y chromosome haplogroup A00, which today is found almost exclusively in the same region. However, the genome-wide ancestry profiles of all four individuals are most similar to those of present-day hunter gathers from western Central Africa, which implies that populations in western Cameroon today—as well as speakers of Bantu languages from across the continent—are not descended substantially from the population represented by these four people. They infer an Africa-wide phylogeny that features widespread admixtures and three prominent radiations, including one that gave rise to at least four major lineages. These lineages (1) Central African hunter-gatherer, (2) southern African hunter-gatherer, (3) other modern human populations, and (4) a ‘ghost’ source that contributes minority of ancestry in West Africans probably diversified about 250,000-200,000 BP and are represented in people living today.” (Mark Lipson *et al.*, *Nature*, V. 577, 2020-1-30, pp. 665-669)

“Cooked starch rhizomes in Africa 170 thousand years ago”

“Plant carbohydrates were undoubtedly consumed in antiquity, yet starchy geophytes were seldom preserved archaeologically. The article reports evidence for geophytes exploitation by early humans from at least 170,000 years ago. Charred rhizomes from Border Cave, South Africa, were identified to the genus *Hypoxis* L. by comparing the morphology and anatomy of ancient and modern rhizomes. *Hypoxis angustifolia* Lam., the likely taxon, proliferates in relatively well-watered areas of sub-Saharan Africa and Yemen, Arabia. In those areas and possibly farther north during moist periods, *Hypoxis* rhizomes would have provided reliable and familiar carbohydrate sources for mobile groups.” (Lyn Wadlery *et al.*, *Science*, V. 367, 2020-1-3, pp. 87-91)

“Age control of first appearance datum for Javanese *Homo erectus* in the Sangiran area”

“The chronology of World Heritage Site of Sangiran in Indonesia is crucial for the understanding of human dispersals and settlements in Asia in the Early Pleistocene (before 780,000 years ago). It has been controversial, however, especially regarding the timing of the earliest hominin migration into the Sangiran region. The authors of the article used a method of combining fission-track and uranium-lead dating and presented key ages to calibrate the lower(older) Sangiran hominin-bearing horizons. They concluded that the first appearance datum of the

Sangiran hominins is most likely ~1.3 million years ago and less than 1.5 million years ago, which is markedly later than the dates that have been widely accepted for the past two decades.” (Shuji Matsu’ura *et al*, *Science*, 2020-1-10, V. 367 pp. 210-214)

“Last appearance of *Homo erectus* at Ngandong, Java, 117,000-108,000 years ago”

“*Homo erectus* is the founding early hominin species of Island Southeast Asia and reached Java (Indonesia) more than 1.5 million years ago. Twelve *H. erectus* calvaria (skull caps) and two tibiae (lower leg bones) were discovered from a bone bed located about 20 m. above the Solo River at Ngandong (Central Java) between 1931 and 1933, and are the youngest, most advanced of of *H. erectus*. Despite the importance of the Ngandong fossils, the relationship between the fossils, terrace fill and ages have been heavily debated. In this article to resolve the age of Ngandong evidence, they used Bayesian modeling of 52 radiometric age estimates to establish the first robust chronology at regional, valley and local scales. They used uranium series dating of speleothems to constrain regional landscapes evolution; luminescence, ⁴⁰argon/³⁹argon and uranium series dating to constrain the sequence of terrace evolution; and applied uranium-series dating to constrain the sequence of terrace evolution; and applied uranium-series and uranium series~electron-spin resonance (US-ESR) dating to non-human fossils to directly date their re-excavation of Ngandong. They showed that at least by 500 thousand years ago (ka) the Solo River was diverted into the Kendeng Hills, and that it formed the Solo terrace sequence between 316 and 31 ka and the Ngandong terrace between about 140 and 92 ka. Non-human fossils recovered during the re-excavation of Ngandong date to between 109 and 106 ka (uranium-series minimum) and 134 and 118 ka (U-ESR), with modeled ages of 117 to 108 thousand years (kyr) for the *H. erectus* bone bed, which accumulated during flood conditions. These results negate the extreme ages that have been proposed for the site and solidify Ngandong as the last known occurrence of this long-lived species.” (Yan Rizal *et al.*, *Nature*, V 5775, 01-1-16, pp, 381-385)