



Sacramento Archeological Society, Inc. Newsletter

www.sacarcheology.org.

November/December - 2021

UPCOMING EVENTS

November 2021

November 13, 2021- Saturday, 2:00 p.m. PDT - **SAS Webinar** “*Rondelles – Artistic Objects from the Upper Paleolithic Magdalenian Culture*” by Marlena Billings, UC Davis Anthropology Student

December 2021

December 11, 2021, Saturday, 2:00 p.m. PDT - **SAS Annual Meeting and SAS Webinar** “*An Indigenous Archaeology of Pawneeland: Oral Traditions, Archaeology, and Euro-American Accounts of Pawnees in the Central Plains*” by Carlton Shield Chief Gover, citizen of Pawnee Nation of Oklahoma and PhD candidate, University of Colorado

See announcements: <https://sacarcheology.org/announcements/> for **webinar access information** and calendar: <https://sacarcheology.org/archaeology-activities/calendar-of-events/> for the complete set of events in our website: www.sacarcheology.org.

SAS Webinar

Saturday, November 13, 2021

2:00 p.m.

"Rondelles – Artistic Objects from the Upper Paleolithic Magdalenian Culture"

by

Marlena Billings, UC Davis Anthropology Student

Rondelles are circular discs made from various materials (the most common being bone and stone) with a central hole. They have been found in sites from the Upper Paleolithic Magdalenian culture (ca. 15-13,000 BP). Many have figurative engravings on their surfaces. They are considered to be artistic objects but their use and technical stages of operation (chaîne opératoire) are a subject of research and speculation. Marlena will describe these objects, discuss when and where they were found and offer comments on her experimental reproduction of these disks as well as her observations on the original artifacts.

Marlena is a student in the Department of Anthropology at UC Davis majoring in anthropology. She has been working on an experimental archaeological project with the Center of

Experimental Archaeology at UC Davis where she has been experimentally reproducing rondelle disks to understand their production and wear patterns. SAS supported her research of rondelles in France this past summer.

Friends are welcome and also invited to join our organization. There is no participation fee to attend our virtual event.

You may join early at 1:30 pm PST and enjoy a social half hour. See announcements: <https://sacarcheology.org/announcements/> for **webinar access information**

Sacramento Archeological Society, Inc.'s Annual Meeting Webinar

Featuring

“An Indigenous Archaeology of Pawneeland: Oral Traditions, Archaeology, and Euro-American Accounts of Pawnees in the Central Plains”

by

Carlton Shield Chief Gover, member of Pawnee Nation and PhD candidate, University of Colorado

Saturday, December 11, 2021
1:30 p.m. – 4:30 p.m.

At our annual meeting in addition to a review of the year, a peek into 2022 and our election of officers for 2022 we are pleased to have a presentation on the Pawnees.

Annual Meeting Program

The schedule for the event is as follows:

1:30 – Meet and Greet

2:00 ***“Pawneeland – Archaeology and Euro-American Account of Pawnees”*** by **Carlton Shield Chief Gover**

3:15 - SAS Annual Meeting with election of officers for 2022

When people think of Plains Nations, the Lakota, Comanche, Arapaho, and Apache usually come to mind. However, rarely does the public realize that the Pawnee have a deep relationship to the Central Great Plains and Western plains that spans over hundreds, if not thousands, of years. The Pawnee have oral traditions that date back to the Ice Age which potentially describes the Ice-Free Corridor, names for Colorado Front Range locations that hold sacred significance, and hunting campsites along the Western extents of the Platte and Republican Rivers. This presentation will cover the recorded oral traditions which tie the Pawnee to the land from Colorado to Nebraska, the archaeological evidence for the extent of Pawneeland in the West, and the Euro-American accounts of Pawnees west of their core homeland in Central Nebraska and Kansas.

Carlton Shield Chief Gover is a citizen of the Pawnee Nation of Oklahoma. Carlton received his B.S. in Anthropology from Radford University, his M.A. in Anthropology from the University of Wyoming, and he is currently a Ph.D. student in Anthropology at the University of Colorado Boulder. He has done archaeological fieldwork in Virginia, Wyoming, Colorado, Nebraska, and across Ukraine. Carlton's research is primarily focused on answering qualitative questions using quantitative methods through an Indigenous and Collaborative Anthropological approach. Using Indigenous oral traditions from the Pawnee, Arikara, and Wichita, he uses the radiocarbon record from the Central Plains to date events distinguished in oral traditions and identifies periods of ethnogenesis and migrations. Carlton is also a passionate Science Communicator and believes Archaeology needs to do more public outreach. He is the host for the A Life In Ruins Podcast and the Museum Unlocked Podcast. He has appeared on several archaeology-based YouTube channels to promote Indigenous Archaeology and public outreach. He also produces video content on the A Life In Ruins YouTube channel.

At the SAS Annual Meeting President, Tom Johansen will review SAS events for 2021, highlight expectations for 2022, and conduct an election of officers. In 2021 monthly webinars continued from 2020 and will be offered in 2022. Hopefully we will be able to have more face to face activities in 2022. We hosted two archaeological tours: Lovelock Cave and Four Corners Tour. In 2021 scholarships were awarded to seven scholars. In 2022 we will be hearing about their research and field schools.

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PAST EVENTS

SAS Webinar - "The Archaeologist and the Queen of Sheba"

On Saturday, October 9, 2021 Lynette Blumhardt, SAS member gave a presentation on the Queen of Sheba. She explored the possible existence of the Queen of Sheba and related the escapades of "archaeologist" Wendell Phillips to find proof that the queen really existed. The biblical Queen of Sheba could have existed in Ethiopia, Aksum or Yemen. Ethiopia claims that she was their ruler and that she brought the Arc of the Covenant to Ethiopia which is at the Church of Lady Mary of Zion in Axum, Tigray. The ancient empire of Aksum is another possible location for the Queen of Sheba. It was a trading power during the first to fourth century AD. Finally Yemen could have been the home for the queen. Wendell Phillips was directed to Yemen where he attempted to find artifacts that would prove the queen's existence. He failed to find any conclusive evidence but he did perform excavations in modern day Yemen at Temma, another ancient trading center and Mareb, the ancient capital of Sheba. All in all the Queen of Sheba's existence is not proven but her dream lives on.

Four Corners Archaeological Tour

September 13, 2021 through September 24th a group of seven to ten members of Sacramento Archeological Society, Inc. explored the Four Corners area of the Southwest. Additional members were scheduled to attend but many cancelled due to COVID-19 concerns. The tour involved camping, guest ranch and motel lodging as well as a taco dinner at the Canyon of the Ancients Guest Ranch and sometimes spontaneous group dinners. The initial group dinner was at the famous La Posada Harvey House in Winslow.

The tour started in Arizona at Homolovi State Park. We visited the Homolovi I and II ruins on our own and were honored to be guided by Chad Meunier, Park Manager to Homolovi IV, a set of ruins and petroglyphs on and around a small butte that is only open for special tours. In the afternoon Gwen Setalla, park ranger and Hopi potter delighted us with a talk on her native pottery making process. We were shown her sample clays, tempers, yucca brushes, paint and many finished products.

The visit to Chevelon Canyon was a multi-faceted experience. The ranch housing archaic to relatively modern artifacts was introduced by the owner, Brantley Baird. His granddaughter, Tori was the tour guide for visits to a Homolovi type Hopi archaeological site on their property, a ceremonial Navajo site with Hopi ruins and Chevelon Canyon with its ~3000 petroglyphs.

Petrified Forest National Park was the next destination. The group enjoyed a walk to Agate House and Long Logs. SAS member and geologist, Ric Frasse added perspective to this landscape, as well as Blue Mesa and the subsequent Colorado plateau formations seen on the rest of the tour. Puerco Pueblo ruins and petroglyphs were archaeological highlights.

In route to Cortez, CO we were delighted to view Canyon De Chelly National Monument from the rims. The monument had recently just partially re-opened. At Cortez we were able to visit six sites with archaeologists leading the tour of three of them.

Kellam Throgmorton, Crow Canyon Supervisory Archaeologist lead us through Haynie Ruins. We visited two great houses, constructed between 1100 and 1150 AD, and observed earlier structures from 750 to 850 AD that were being excavated.

Dave Dove, property owner and archaeologist lead the tour of Mitchell Springs Ruins, an area continuously inhabited from ~650 to 1240 AD that included at least three great houses. One referred in David Dove's report as Pueblo A was probably a feasting location. He is in the process of excavating Great House B. The people of Mitchell Springs farmed using water diverted from nearby Mesa Verde.

Dr. Bruce Bradley and Dr. Cindy Bradley lead the tour of Wallace Ruins. This site which is also under excavation features a great house that is built on top of pit house(s). Several skeletons have been found in the great house suggesting its possible use as a mausoleum. A Navajo Taco dinner with the Bradleys as guests completed a wonderful day time in the Cortez area. (Bruce autographed several copies of Across Atlantic Ice).

We also visited Lowry Pueblo, Sand Canyon and Yucca House ruins in the Cortez area. Lowry Pueblo was particularly interesting because it had been partially reconstructed; whereas, Yucca House is in heavy ruins. Sand Canyon was intriguing because Bruce and Cindy Bradley had been involved in the excavation and shed light on its colored history.

After Cortez, pueblo ruins and rock art (both petroglyphs and pictographs) were highlighted in southeastern Utah. The first of the sites visited was Hovenweep National Monument. We all enjoyed strolling the Rim Trail Loop and Tower Point Loop. In addition after a bumpy ride the hikers walked to Holly Ruins, Horse Tower, Horseshoe House and Hackberry Pueblo. The edges of canyons seem to have been the preferred location for structures.

The next three days were spent accessing more pueblo ruins and rock art by guided hikes. The first day in Comb Ridge/Butler Wash area hikers visited various sites including: Wolfman Panel, Procession Panel and Monarch Cave. On the second day the group took a driving tour to a variety of sites in Montezuma Canyon. On the third day we hiked to House on Fire in Mule Canyon but it really never looked on fire. We also found dinosaur tracks and explored cliff houses at Butler Wash. The short walk into Spirit Cave offered a delightful cliff house under a huge shelf.

Two additional great houses were visited in Bluff and Blanding. It was interesting to view similarities in the cardinal point orientation of these great houses. We were fortunate to see the sun set on Bears Ears on the autumnal equinox from the Edge of the Cedars Great House (Five Kivas).

At Edge of the Cedars Museum we were honored to have Jonathon Till, archaeologist and curator of the museum show us prized artifacts in their collection including pottery, human hair leggings, and yucca sandals – some with designs on the sole.

The last day of the tour was highlighted by a jeep trip, thanks to guides, Luke and his brother-in-law, John, over the very rough road/terrain to River House Ruin and the stunning Kachina rock art panels above the San Juan River. We returned to Sand Island and saw the archaic mammoth petroglyph. The day ended with a drive through Valley of the Gods. Monument Valley was not open.

For photos related to this tour see <https://sacarcheology.org/archaeology-activities/sas-archives/>.

MEMBER'S CORNER

Each year at the annual meeting the board members for the next year are elected. The slate of candidates will be published a week before the annual meeting. If you are interested to become part of this board, please contact janjohansen@sbcglobal.net. We are always looking for new faces on the board.

A group of SAS board members created a PowerPoint commercial for SAS. This will be viewed at the annual meeting.

Renewal of Annual Memberships

All memberships are renewable on **January 1** annually except for those who joined recently (after September 1 of the previous year). Please support the society by promptly paying your **2022** 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 <https://sacarcheology.org/society-membership/pay-dues/> 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 2022

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

_____ Email: _____ Phone: _____

Address: _____

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

Total enclosed

\$ _____

We are pleased to acknowledge our major contributors for 2021. These donations help to support our scholarship program.

Patron (\$1000 or more)

Martie Lewis and Dennis Fenwick

Carolyn and Gordon McGregor

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Sponsor (\$100 - \$999)

Paul K. Davis and Knuti VanHoven

Jeremy Johansen

Jan and Tom Johansen

Ruth McElhinney

Roger and Lydia Peake

ARCHAEOLOGICAL REFERENCES



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

Recent Articles

The reviewed articles are:

- “Arabian camels carved by masters of the stone age”
- “Maya city housed copy of imperial power’s pyramid”
- “Vikings in paradise: Did the Norse settle the Azores?”
- “Evidence of humans in North America during the Last Glacial Maximum”
- “Insights in human history from the first decade of ancient human genomics”
- “Tracing the origins of humans - A century of science has begun to piece together where we came from”
- “Traces of a series of human dispersals through Arabia” and “Multiple hominin dispersals into Southwest Asia over the past 400,000 years”
- “When early Polynesians migrated eastwards” and “Paths and timing of the peopling of Polynesia inferred from genomic networks”
- “Genome of a middle Holocene hunter-gatherer from Wallacea”

[“Arabian Camels Carved by Masters of the Stone Age”](#)

“Stunning reliefs of camels in a rock formation in Saudi Arabia are much older than was first thought; they were carved more than 7,000 years ago, when the climate of the Arabian Peninsula was markedly cooler and wetter than it is today. The life-sized sculptures at the Camel Site in

northern Saudi Arabia were analyzed by Maria Guagnin and her colleagues at the Max Planck Institute for the Science of Human History in Jena, Germany. They used a variety of dating methods, including analysis of surviving tool marks and fallen fragments of the sculptures.” (*Nature*, V 597, 2021-9-30 p. 596)

“Maya City Housed Copy of Imperial Power’s Pyramid”

“The Maya city of Tikal was a political and military center in what is now Guatemala. Around AD 378, it was conquered by Teotihuacan, which was located what is now Mexico and was the largest city in the Americas at the time. Stephen Houston at Brown University in Providence, Rhode Island and his colleagues scanned Tikal with laser-based remote-sensing method that identified patterns in mounds near the city’s center. Excavations reveals a 30%-scale replica of Teotihuacan’s main citadel and its Temple of the Feathered Serpent, including a 12-meter-tall pyramid. Tikal’s knock-off was mostly built in AD 300-550 and was made of clay and adobe – materials native Teotihuacan but foreign to Tidal. A human burial near the citadel does not look like others in Tidal; instead it resembles burials of warriors sacrificed in Teotihuacan.” (*Nature*, V 598, 2021-10-7 p. 10)

“Vikings in paradise: Did the Norse settle the Azores?”

Seafarers may have landed on lush archipelago more than 1000 years ago, sediment cores suggest”

“Biomarkers in lake sediment from the Azores’s Pico Island suggest the presence of livestock as early as 700 CE. Pedro Raposeiro, an ecologist at the University of the Azores, Ponta Delgada, and colleagues collected cores of sediment from five lakebeds around the archipelago to help chart the region’s climate history. In a layer dating to between 700 CE and 850 CE taken from Peixinho Lake on the Azore’s Pico Island, the researchers saw a sudden uptick of an organic compound found in the feces of ruminants such as cows and sheep. They also saw an increase in charcoal and a dip in the abundance of native tree pollens, perhaps pointing to humans cutting down and burning trees to clear space for livestock to graze. The researchers guessed that the ancient mariners were the Norse who were accomplished and adventurous seafarers. Climate models for this time suggest the dominant winds blew from the northeast, so Viking ships sailing southwest from Scandinavia would have fair winds for the Azores. And, as Jeremy Searle and colleagues from Cornell University documented, Azorean house mice share substantial DNA with mice from northern Europe. The rodents could have hitched a ride on the Viking ships; today they are “living artifacts” of a Viking presence.” Michael Price, *Science*, 2021-10-8 V 374 p. 141)

“Evidence of humans in North America during the Last Glacial Maximum”

“Researchers present evidence from excavated surfaces in White Sands National Park where multiple in situ human footprints are stratigraphically constrained and bracketed by seed layers that yield calibrated radio carbon ages between ~23 and 21 thousand years ago. These findings confirm the presence of humans in North America during the Last Glacial Maximum, adding evidence to the antiquity of human colonization of the Americas and providing a temporal range

extension for the coexistence of early inhabitants and Pleistocene mega fauna.” Matthew R. Bennett *et al*, *Science*, 2021-9-24 V 373 pp. 1528-1531)

“Insights into human history from the first decade of ancient human genomics”

“As improvements in laboratory and computational protocols allowed for the retrieval and identification of extremely short aDNA fragments and methods for removing modern contaminating DNA, the number of sequenced ancient human genomes has grown exponentially. These ancient genomes allow the researchers to explore the genetic make-up and adaptation of archaic lineages, ancient modern humans and present-day populations, providing a glimpse into the genetic history of humans across the globe over the past millennia. This article discusses archaic and modern human interaction and the diversity of early modern human populations in Africa, Eurasia.” (Yichen Liu *et al*, *Science*, 2021-9-24 V 373 pp. 1479-1484)

“Tracing the origins of humans

A century of science has begun to piece together where we came from”

“Since the discovery of Taung Child in 1924, paleoanthropologists have amassed many thousands of fossils, and the evidence over and over again has pointed to Africa as our place of origin. Genetic studies reinforce that story. African apes are indeed our closest living relative, with chimpanzees more closely related to us than to gorillas. This article traces the hominin discoveries that have led paleoanthropologists to go beyond the multiregional and simple Out of Africa scenarios. Rather than a tree with separate branches or a trellis, human evolution was probably more like a braided stream, Different human populations may have emerged with some floating away and petering out and others connecting to varying degrees. One emerging view suggests that much of early human evolution occurred in Africa, but there was not one place on the continent where *H. sapiens* was born. Starting at least 3,000,000 years ago, modern *H. sapiens* features started to show up in the fossil record. But these features didn’t arise all together. Only through the mating of different population across Africa did the suite of behavioral and biological traits that define us today crystallize”. (Erin Wayman, *Science News*, 2021-9-25 pp. 20-27)

“Traces of a series of human dispersals through Arabia”

“The Arabian Peninsula was a key migratory crossroads when humans and our hominin relatives began to leave Africa. Archaeological evidence and climate reconstructions reveal episodes when early humans inhabited Arabia.’ (See following article). (Robin Dennell, *Nature*, V 597, 2021-9-16 pp. 338-339)

“Multiple hominin dispersals into Southwest Asia over the past 400,000 years”

“Pleistocene hominin dispersal, out of and back into, Africa necessarily involved traversing the diverse and often challenging environments of Southwest Asia. Archaeological and palaeontological records from the Levantine woodland zone document major biological and

cultural shifts, such as alternating occupations by *Homo sapiens* and Neanderthals. However, Later Quaternary cultural, biological and environmental records from the vast arid zone that constitutes most of the Southwest Asia remain scarce, limiting regional-scale insights into changes in hominin demography and behavior. In this report the researchers report a series of dated palaeolake sequences associated with stone tool assemblages and vertebrate fossils, from the Khall Amayshan 4 and Jubba basins in the Nefud Desert. These findings, including the oldest dated hominin occupations in Arabia, reveal at least five hominin expansions into the Arabian interior, coinciding with brief ‘green’ windows of reduced aridity approximately 400, 300, 200, 130-75 and 55 thousand years ago. Each occupation phase is characterized by a distinct form of material culture, indicating colonization by diverse hominin groups, and a lack of long-term Southwest Asian population continuity. Within a general pattern of African and Eurasian hominin groups being separated by Pleistocene Sharo-Arabian aridity, their findings reveal the tempo and character of climatically modulated windows for dispersal and admixture.” (Huw S. Groucutt *et. al. Nature*, V 597, 2021-9-16 pp. 376-380)

“When early Polynesians migrated eastwards”

“A genome-wide analysis of modern populations in Polynesia suggests the direction and timing of ancient Polynesian migrations. This model bears consistencies and inconsistencies with models based on archaeology and linguistics.” (See following article) (Patrick V. Kirch, *Nature*, V 597, 2021-9-23 pp. 477-8)

“Paths and timing of the peopling of Polynesia inferred from genomic networks”

“Polynesia was settled in a series of extraordinary voyages across an ocean spanning one third of the Earth, but the sequences of islands settled remain unknown and their timings disputed. Currently, several centuries separate the dates suggested by different archaeological surveys. In this article, using genome-wide data from merely 430 modern individuals from 21 key Pacific island populations and novel ancestry-specific computational analyses, the researchers unravel the detailed genetic history of this vast, dispersed island network. Their reconstruction of the branching Polynesian migration sequence reveals a serial founder expansion, characterized by directional loss of variants, that originated in Samoa and spread first through the Cook Islands (Rarotonga), then to the Society (Tōtaiete mā) Islands (11th century), the western Austral (Tuha’a Pae) Islands and Tuāmotu Archipelago (12th century), and finally to widely separated, but genetically connected, megalithic statue-building culture of the Marquesas (Te Henua ‘Enana) Islands in the north, Raivavae in the south, and Easter Island (Rapa Nui), the easternmost of the Polynesian islands, settled in approximately AD 1200 via Mangaeva.” (Alexander G. Ioannidis *et al. Nature*, V 597, 2021-9-23 pp. 522-526)

“Lifetime mobility of an Arctic woolly mammoth”

“Little is known about woolly mammoths (*Mammuthus primigenius*) mobility and range. In this article the researchers present the high temporal resolution sequential analyses of strontium isotope ratios along an entire 1.7-meter-long tusk to reconstruct the movements of an Arctic woolly mammoth that lived 17,100 years ago, during the last ice age. They use an isotope

guided random walk approach to compare the tusk's strontium and oxygen isotope profiles to isotopic maps. Their modeling reveals patterns of movement across a geographically extensive range during the animal's ~28-year life span that varied with life stages. Maintenance of this level of mobility by megafaunal species such as mammoth would have been increasingly difficult as the ice age ended and the environment changed at high latitudes." (Matthew J. Wooller *et al*, *Science*, 2021-8-13 V 373 pp. 806-808)

"Genome of a middle Holocene hunter-gatherer from Wallacea"

"Much remains unknown about the population history of early modern humans in southeast Asia, where the archaeological record is sparse and the tropical climate is inimical to the preservation of ancient human DNA. So far, only two low-coverage pre-Neolithic human genomes have been sequenced from this region. Both are from mainland Hòabìnhian hunter-gatherer sites: Pha Faen in Laos, dated to 7939-7751 calibrated years before present (kyr cal BP; present taken as AD 1950), and Gua Cha in Malaysia (4.4-4.2 kyr cal BP). In this article the researchers report on the first ancient human genome from Wallacea, the oceanic island zone between the Sunda Shelf (comprising mainland Southeast Asia and the continental islands of western Indonesia) and Pleistocene Sahul (Australia-New Guinea). They extracted DNA from the petrous bone of a young female hunter-gatherer buried 7.3-7.2 kyr cal BP at the limestone cave of Leang Panninge in South Sulawesi, Indonesia. Genetic analyses showed that this pre-Neolithic forager, who is associated with the 'Toalean' technocomplex, share most genetic drift and morphological similarities with present-day Papuan and Indigenous Australian groups, yet represents a previously unknown divergent human lineage that branched off around the time of the split between these populations approximately 37 kyr cal BP. They also describe Denisovan and deep Asian-related ancestries in the Leang Panninge genome, and infer their large-scale displacement from the region today." (Selina Carlhoff *et al*. *Nature*, V 596, 2021-8-26 pp. 543-547)

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