



# **Sacramento Archeological Society, Inc. Newsletter**

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September/October - 2018

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## **UPCOMING EVENTS**

**September 8, 2018 – 3:00 – 7:00 pm. SAS Social, Dan and Victoria Foster's home**

**September 29, 2018 – 12:00 – 3:00 pm Board Meeting at Peake's home**

**October 20, 2018 – Saturday: Viewing California's Past through Seeds and Science, "Archaeobotany- as applied to California" – by Eric Wohlgemuth, Principal Investigator and Chief Archaeobotanist, Far Western Anthropological Research Group, Inc. and "Warrior Women of Central California" by Al Schwatala at Maidu Museum and Historical Site, 1970 Johnson Ranch Drive, Roseville, California 95661**

**October 20, 2018 – Board Meeting**

**November 3-4, 2018 – Bishop Tablelands Rock Art Tour RESCHEDULED FROM OCTOBER 6-7**

### ***SAS Potluck Social***

**Saturday, September 8, 2018**

**3:00 – 7:00 p.m. at**

**Dan & Victoria Foster's**

**11177 Walmort Rd, Wilton CA 95628**

Dan and Victoria Foster are graciously hosting a new member Society Social on **Saturday, September 8** at their farm. The social will start at 3:00 pm with a potluck dinner around 5:00 pm. At this informal event we will have time to get to know each other especially new members and of course talk about archaeology.

Please bring a dish to share and any beverages you might wish. There is a barbecue and swimming pool - bring your swim suit.

For additional information and/or directions please call Dan at 916-261-4075.

### ***Board Meeting***

**Saturday, September 29, 2018**

**12:00 – 3:00 p.m. at**

**Roger and Lydia Peake's**

**2951 Redwood Ave. West Sacramento, CA 95691**

The meeting is open to all members. Bring lunch items to share.

# *Bishop Volcanic Tableland Rock Art Tour*

November 3-4, 2018

Join us in our exploration of petroglyphs on the Volcanic Tablelands near Bishop, California. Early native peoples carved designs into the face of rocks, cliffs and caves on volcanic tuff faces. They scraped away the dark colored surface layer (patina) to create various figures and shapes. The petroglyphs in this area likely are from 1,000 to 10,000 years old.

The tour will highlight one day of easy to access petroglyphs on a 45 mile loop north of Bishop and the Piute Shoshone Museum in Bishop and a second day hike to remote petroglyph sites or independent visits to Laws Railway Museum in Laws (10:00 am – 4:00 pm) or Ancient Bristlecone Pine Forest .



## **Itinerary:**

**Friday, November 2**

Arrive in Bishop

**Saturday, November 3**

9:00 Meet  
9:30 Chidago Canyon  
10:00 Red Canyon  
11:30 Chalfant  
1:00 Fish Slough  
2:00 Pleasant Valley  
3:00 Piute Shoshone Museum  
5:00 Happy Hour

**Sunday, November 4**

9:00 Meet for remote petroglyph site hike (option)



## **Tour Details**

**This is a Members only event and attendance is limited.** Reservations are accepted on a first come basis. A non- refundable reservation fee of \$10 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. Several lodging opportunities are available in Bishop. The following moderately priced motels have been identified:

- Vagabond Inn Bishop
- Comfort Inn
- Super 8

Lodging may be required for three days: November 2, 3, and 4. Friday, November 2 and Monday, November 5 are assumed to be travel days but departure on Sunday is an option. 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.

The sites on the first day are easily accessed from the car. To access petroglyphs on the second day hiking up a ridge and along and over some boulders is required.

To make reservations contact Jan Johansen [janjohansen@sbcglobal.net](mailto:janjohansen@sbcglobal.net) Also, send the registration fee of \$10 per person to Sacramento Archeological Society, Inc. at P.O Box 163287, Sacramento, CA 95816-9287.

## *Viewing California's Past through Seeds and Science*

**Saturday, October 20, 2018**

Lectures 1:00 p.m. – 3:00 p.m.

at **Maidu Museum & Historical Site**

1970 Johnson Ranch Drive, Roseville, California 95661

### **OPEN TO THE PUBLIC**

Join us to celebrate International Archaeology Day. We have teamed with **Maidu Museum & Historical Site** to increase the public's awareness of archaeology. **Maidu Museum & Historical Site** will offer hands on archaeological experience for children and family tours of their historical site. **Sacramento Archeological Society** will feature lectures on how plants can be used to investigate California prehistory and how skeletons can shed light on the participation of women in California warfare.

**Eric Wohlgemuth**, Principal Investigator and Chief Archaeobotanist Far Western Anthropological Research Group, Inc. will introduce Archaeobotany, a study of ancient plant remains. By studying this material we can find out how people used plants in the past: for food, fuel, medicine, ritual purposes or for building. We can also use plant remains to reconstruct past vegetation and the ways humans integrated with their environment

**Al Schwatala** will present recent research conducted with Marin Pilloud of the Department of Anthropology at the University of Nevada, Reno on the active participation of women in combat in California. By studying ethnographic evidence and sharp force trauma as reflected in skeletons we can ascertain the probable involvement of men and women in conflicts.

### **Program**

10:00 - Tour of Maidu Historical Site by Maidu Museum staff

12:00 - Tour of Maidu Historical Site by Maidu Museum staff

1:00 - "**Archaeobotany – as applied to California**" – by **Eric Wohlgemuth**, Principal Investigator and Chief Archaeobotanist, Far Western Anthropological Research Group, Inc.

2:00 - "**Warrior Women of Central California**" by **Al Schwatala**



Entrance Fee Charged

Questions? Please contact Jan Johansen at [janjohansen@sbcglobal.net](mailto:janjohansen@sbcglobal.net) or Maidu Museum and Historical Site at **916.774.5934**

# *Early Humans in the Americas*

International Conference on Early Humans in the Americas

**January 11 – 12, 2019**

**Borrego Springs, CA**

**Featuring Dr. Steven Holen and Robin Connors, Anza-Borrego State Park Archaeologist**

Presented by the Anza-Borrego Desert State Park  
Archaeology and Paleontology programs.



*Dr. Steven Holen*

The conference will include presentations from international scientists and researchers on the early peopling of the Americas. A poster session will be part of the conference.



*Robin Connors*

If you are interested in attending, please contact Robin Connors at [robin.connors@parks.ca.gov](mailto:robin.connors@parks.ca.gov) to facilitate planning purposes.

**More information with a complete program and registration details will be coming.**

## **PAST ARCHEOLOGICAL ACTIVITIES**

### *Eclectic Archeological Exchange*

On Saturday, August 25<sup>th</sup> four Society members shared their experiences on the tours to New Mexico and South Africa at the residence of Gordon and Carolyn McGregor.

Lydia Peake in her presentation, “**Ancient Pueblos and Rock Art of New Mexico**” added perspective to the Society’s May tour to New Mexico. In addition to showing highlighted photo from the trip she brought in related materials such as an article from *American archaeology*, a quarterly publication of The Archaeological Conservancy on Lindbergh’s photos of Chaco Canyon.

Paul K. Davis in his talk, “**Wild and Wonderful – South African Wild Animals**” shared his annotated photographs on a variety of animal species from South Africa. Dr. Davis identified common and not so familiar animals of South Africa by photo, location and date observed, and classification.

Jan Johansen presented “**Rock Art of South Africa**”. Through photos from the Cederberg, Drakensberg and central Karoo areas of South Africa Jan described how rock art may shed light on how the Bushman or San, hunter- gatherers who created the images saw the world and perceived their place in it.

Tom Johansen in his talk, “South Africa – Witness to Human Evolution” reviewed human evolution from the 7,000,000 year old Chad fossil *Hominid* to more recent South African finds. He reviewed the excavations at Pinnacle Point and shared his perspectives about what characterizes modern humans.



## MEMBER'S CORNER

We want to acknowledge Denise Ruzicka for her 28 days straight work on the Ferguson Fire near Yosemite.

### ARCHAEOLOGICAL REFERENCES

#### "Dig seeks site of first English settlement in the New World

##### Researchers restart their quest for the Lost Colonists' town"

"In 1587, more than 100 men, women and children settled on Roanoke Island in what is now North Carolina. War with Spain prevented speedy resupply of the colony—the first English settlement in the New World, backed by Elizabethan courtier Sir Walter Raleigh. When a rescue mission arrived three years later, the town was abandoned and the colonists had vanished. That settlement, commonly called the Lost Colony has captured the imagination of generations of professional and amateur sleuths. Despite more than a century of digging no trace has been found of the colonists' town —only the remains of a workshop and an earthen fort that may have been built later. Now after a long hiatus, archaeologists plan to resume digging. In September, archaeologist will re-excavate parts of the workshop, seeking clues to its size and precise design. In October, the nearby bluffs that are rapidly eroding will be explored and new dating methods will be applied to sand around a post hole near the shoreline. But geologists think the settlement has vanished. Recent studies suggest that shifting currents and rising waters inundated the site in the past couple of centuries. It was estimated that the island's north end has lost about 750 meters in the past four centuries and that strong currents and hurricanes buried any artifacts." (Andrew Lawler, *Science*, V. 360, 2018-6-8, p. 1056)

#### "Latin America's lost histories revealed

##### Clues to forgotten migrations emerge from today's genomes"

"If you walked the cobblestone streets and bustling markets of 16<sup>th</sup> and 17<sup>th</sup> century Mexico City, you would see people born from all over the world. Historical documents describe this cultural mixture, but now international teams of researchers are enriching our view by analyzing the genome of people today and they can tease apart ancestry and population mixing. Tens of thousands of enslaved and free Africans lived in Mexico during the 16<sup>th</sup> and 17<sup>th</sup> centuries, outnumbering Europeans and today almost all Mexican carry about 4% African ancestry. Upon examination of skeletons for dental and cranial traits bioarchaeologist Cory Ragsdale of Southern Illinois University estimated that 20% to 40% of the people buried in cemeteries in Mexico City between the 16<sup>th</sup> and 18<sup>th</sup> century had some African ancestry.

Juan Esteban Rodríguez, a graduate student in population genetics at National Laboratory of Genomics for Biodiversity in Irapuato, Mexico discovered that about one-third of the people sampled in Guerrero, the Pacific coastal state that lies nearly 2000 kilometers south of the U.S. border had up to 10% Asian ancestry, significantly more than most Mexicans. When he compared their genomes to those of people in Asia today, he found that they were more closely related to populations from the Philippines and Indonesia. Historians who study ship manifests learned that during the 16<sup>th</sup> and 17<sup>th</sup> centuries, Spanish galleons sailed between Manila and the port of Acapulco in Guerrero, carrying goods and people, including enslaved Asians. Although historians know of this transpacific slave trade, the origins of its victims were lost. Once they landed in Mexico, they were all recorded as "*chinos*"—Chinese.

Researchers, led by geneticists Andrés Ruiz-Linares of Fudan University in Shanghai, China and Garrett Hellenthal of University College London, trace a significant portion of Jewish ancestry to

*conversos*, or Jew who converted to Christianity in 1492 when Spain expelled those who refused to do so. *Conversos* were prohibited from migrating to Spanish colonies, though widespread Sephardic ancestry in Latin America implies that migration was much more common than records suggest.” (Lizzie Wade, *Science*, V. 360, 2018-4-13, pp. 137-8)

## “A relic from an early traveler”

“An ostensibly modern human finger bone uncovered in Saudi Arabia in 2016 has been dated to at least 86,000 years old. If the species identification holds up, this would be the oldest directly dated *H. sapiens* outside African or the neighboring eastern Mediterranean. The bone, found at Al Wusta near the former banks of a freshwater lake in Nefud Desert, supports that idea that early modern humans spread into Eurasia in multiple waves, much earlier than the 50,000 to 60,000 years ago that some scientist have suggested. Geological evidence indicates that Al Wusta lay within a well-watered human-friendly area from about 95,000 to 86,000 years ago.

The bone is probably the middle bone from an adult’s middle finger, suspects Groucutt, of the University of Oxford. It is unclear whether the bone came from a man or a woman, or from a right or left hand. It’s definitely human and its date appears unimpeachable. Along with the finger, Al Wusta yielded 380 stone tools and 860 nonhuman animal fossils. The stone tools differ in some ways from those at slightly older sites in Israel. Donald Henry, a paleoanthropologist at the University of Tulsa in Oklahoma, interprets those differences to mean that the people who ended up in Al Wusta took a southern route to Arabia and were culturally distinct from the people who went to Israel.”(*Science*, V. 360, 2018-4-13, p. 135 and Bruce Bower, *Science News*, April 28, 2018 & May 12, 2018, p. 12)

## “Human mutation rate a legacy from our past

[By assessing mutation rates among species, researchers are understanding why they vary”](#)

“Despite the billions on Earth today, humans numbered just thousands in the early years of our species. In large populations, natural selection efficiently weeds out deleterious genes, but in smaller groups like those early humans, harmful genes that arise—including those that foster mutations—can survive. Support of this theory comes from data on a range of organisms, which show an inverse relationship between mutation rate and ancient population size. This understanding offers insights into how cancers develop and also has implications for efforts to use DNA to date branches on the tree of life. Mutations occur, for example, when cells copy their DNA incorrectly or fail to repair damage from chemicals or radiation. Some mistakes are good, providing variation that enables organisms to adapt. But some of these genetic mistakes cause the mutation rate to rise, thus fostering more mutations. For a long time biologists assumed mutation rates were identical among all species, and so predictable that they could be used as “molecular clocks”. The primates have mutation rates similar to humans but bacteria, paramecia, yeasts, and nematodes—all of which have much larger populations than humans—have mutation rates orders of magnitude lower.” (Elizabeth Pennisi, *Science*, V. 360, 2018-4-13, p. 143)

## “Ancient Tools found in China”

“Hominins lived in China more than 2 million years ago, according to new evidence that may push back the earliest dates for hominins living outside Africa by 250,000 years. Until now, the oldest known site for hominins outside of Africa was Dmanisi, Georgia, where fossil hominins and stone tools date to 1.85 million years. At Shangchen in north-central China’s windswept Loess Plateau researchers recovered and analyzed 96 stone points, flakes and cores in a gully. The Shangchen sites lack volcanic minerals, which provide the gold standard for radiometric dating methods. Instead they used paleomagnetic dating—which detects known reversal of the Earth’s magnetic field that are

recorded in ancient rock—to date the layers of sediment containing the stone tools. The oldest layers date from 2.1 million years ago“. (*Science*, V. 361, 2018-7-13, p. 113)

## “Stone tool advance reached India early

### Technological revolution didn’t depend on *Homo sapiens*’ arrival”

“Stone-tool makers in what’s now India redesigned their products in a revolutionary way much earlier than once thought. About 7,200 artifacts ranging in age from about 385,000 to 172,000 years ago, found at the southeastern Indian site Attirampakkam document a gradual shift from larger, handheld cutting implements to smaller pieces of sharpened stone, known as Middle Paleolithic tools. That shift mirrors a similar change seen in tools from a variety of hominid populations elsewhere between about 400,000 and 200,000 years ago, including African *Homo sapiens* and European Neandertals. Middle Paleolithic toolmakers followed a set of steps to prepare rocks before pounding off flaked tools. Many researchers had assumed the transition from hand axes to Middle Paleolithic implements didn’t happen until *H. sapiens* traveling from Africa brought the skill to South Asia around 140,000 to 90,000 years ago. But findings suggest that some other hominid population introduced new tool-making approaches to the region long before *H. sapiens* originated in Africa about 300,000 years ago.“. (*Science News*, 2018-3-3, p. 112)

## “Rock art reveals Neandertal smarts

### Hominid’s cave paintings imply capacity of symbolic thinking”

“Neandertals drew on cave walls and made personal ornaments long before encountering *Homo sapiens*, two studies find. Rock art--depicting abstract shapes and hand stencils in three Spanish caves-- dates back to at least 64,800 years ago. If these estimates hold up, the Spanish finds become the world’s oldest known examples of cave art, preceding evidence of humans’ arrival in Europe by at least 20,000 years. Personal ornaments consisting of pigment-stained seashells with artificial holes and seashells containing remnants of pigment mixtures found at a coastal cave in southeastern Spain are older than the cave art, dating to around 120,000 to 115,000 years ago. “. (*Science News*, 2018-3-17, p. 6)

## “How did *Homo sapiens* evolve? Genetic and fossil evidence challenges current models of modern human evolution”

“Over the past 30 years, understanding of *Homo sapiens* evolution has advanced greatly. Most research has supported the theory that modern humans had originated in Africa by about 200,000 years ago, but the latest findings reveal more complexity than anticipated. They confirm interbreeding between *H. sapiens* and other hominin species, provide evidence for *H. sapiens* in Morocco as early as 300,000 years ago and reveal seemingly incremental evolution of *H. sapiens* cranial shape. Although the cumulative evidence still suggests that all modern humans are descended from African *H. sapiens* populations that replaced local populations of archaic humans, models of modern human origins must now include substantial interaction with those populations before they were extinct.“. (Julia Galway-Witham and Chris Stringer, *Science*, V. 360, 2018-6-22, pp. 1296-8)