



Sacramento Archeological Society, Inc. Newsletter

www.sacarcheology.org

July/August - 2018

UPCOMING EVENTS

July 14, 2018 1:00 pm – Board meeting at Roger and Lydia Peake's home

August 25, 2018, Saturday, 12:00 – 5:00 pm – Eclectic Archeological Exchange, "Ancient Pueblos and Rock Art of New Mexico in Perspective" by Lydia Peake and "South Africa – Animals, Human Origins and Rock Art" by Paul K. Davis, Tom Johansen and Jan Johansen at McGregor's home

September 8, 2018 – SAS Social

October 6-7, 2018 – Mammoth area rock art tour

SCHOLARS ANNOUNCED

2018 Scholars

Sacramento Archeological Society, Inc. is pleased to announce our 2018 scholarship recipients. The candidates were exceptional. Thanks to the SAS members who contributed funds we were able to financially support nine scholars. Presentations by the scholars will be scheduled at the December 2018 Annual Meeting and in early 2018 at the Scholar Symposiums. A brief synopsis of the recipient's archaeological projects follows:

Aaron Brown

Aaron is a graduate student University of California Berkeley. He received his BA in Classics at Florida State University in 2013 and MA in Classical Archaeology from University of California, Berkeley in 2015. Aaron is specializing in the study of ancient pottery. He completed his PhD qualifying exams in February 2018. This summer Aaron will be the senior participant in the Pompeii Artifact Life History Project (PALHIP). This year will begin PALHIP's focus on the detailed characterization of the portable artifacts recovered in eight modest residents in block Regio I Insula 11. The SAS scholarship will support Aaron's participation in this project.

Gloria Howat Brown

Gloria is a graduate student at California State University, Sacramento. She received her BA in Anthropology at California State University, Sacramento in 2015. She is passionate about ethnobotany. Her thesis topic is "Starch grain analysis of ground stone on the central coast of California". She has been interning in the Far Western Archaeobotany Laboratory. To continue her analysis of plant material with Far Western while she is an archaeology technician with the Plumas National Forest this summer she needs her own microscope. The SAS scholarship will assist in the purchase of this device.

Ryan Gallagher

Ryan is a senior at University of California Davis majoring in Biological Anthropology. He has been selected to participate in the excavation of a rich Middle Paleolithic archaeological layer on the terrace

of Trou al'Wesse Cave in Belgium. The excavation project has yielded crucial data to understand the survival of Neandertal in Europe. At the excavation Ryan will be able to participate in the zooarchaeological study with Dr. John R. Stewart (University of Bournemouth), a specialist of Northern Refugia. SAS scholarship will support his participation in this project.

Giulia Gallo

Giulia is a graduate student at University of California Davis in the evolutionary anthropology program. She graduated from New York University in 2014 and has excavated and worked in an archaeology lab for eight field seasons in Europe. Giulia's project aims at investigating the role of bone material for hominin subsistence. This summer she has the opportunity to be a laboratory manager organizing excavated material from Bukovac, a Paleolithic cave site in Serbia (Doganzic, 2014). In particular she will collect data to reconstruct temperature thresholds of combustion features and describe the role of bone as a fuel. The SAS scholarship will support her research.

Corey Johnson

Corey is a graduate student at University of California Davis in the evolutionary anthropology program. He received a BA in Anthropology from University of Montana in 2016. His dissertation intends to provide an in-depth comparison of the technological strategies of several Lower Pleistocene sites from the Nihewan paleolake base. This summer he will spend four weeks collecting data from stone artifacts from the Nihewan site of Feiliang (1.2 Ma) curated at the Hebei Provincial Institute of Cultural Relics in Shijiazhuang, China. A qualitative and quantitative analysis of the data will be conducted to support a reconstruction of the core and flake reduction sequences utilized by early hominins at Feiliang. The SAS scholarship will support this research.

Naomi L. Martisius

Naomi is a graduate student at University of California Davis in the evolutionary anthropology program. She received her MA in Anthropology at California State University, Davis in 2014 and BS in Anthropology at University of California, Davis in 2011. For her dissertation research she has been investigating the first known bone tools made by Neandertals. To learn how to analyze these bone tools, those made by Neandertals and comparable ones made by early modern human in Europe, Naomi spent time studying in France where she learned traditional methods for studying bone tool manufacturing and use. From this background she expanded an innovative methodology to explore how bone is modified during use. She uses a confocal microscope to take 3D surface scans. Naomi will present this work at the Association of Archaeological Wear and Residue Analysts (AWRANA) in France this summer. The SAS scholarship will assist her attendance at this meeting.

Ryan Poska

Ryan is a graduate student at Sonoma State University. He received his BA at University of California, Berkeley in 2013. His thesis research is associated with Cache Creek Watershed. He proposes to test for Native American presence on historic-era Euro-American ranches through XRF sourcing and obsidian hydration. He plans to excavate two or three units at CA-COL-270/H, a multi-component site at the Bureau of Land Management's Bear Creek Ranch. Excavation will reveal if the lithic scatter is contemporaneous with the occupation of the ranch through XRF sourcing and obsidian hydration analysis and stratigraphic analysis of the position of Euro-American materials in profile with obsidian artifacts. SAS is supporting the testing of samples.

Kevin Smith

Kevin is a graduate student at University of California Davis in Evolutionary Anthropology. He received his MA in Anthropology at California State University, Los Angeles in 2013 and his BA at Humboldt State University in 2007. Kevin's dissertation applies non-destructive analysis to Paleo-coastal stemmed points, crescents, cores and debitage from SRI-512 on Santa Rosa Island, California.

These data will be compared to lithic artifacts from the Gault Archaeological Site in Texas and surface finds from Tulare Lake, CA. SAS is supporting travel associated with this study.

Sara Watson

Sara is a second-year graduate student at University of California Davis in Evolutionary Anthropology. She received a BA from University of Texas in 2016. Her project aims to define the archaeological material associated with the so-called Early Later Stone Age in Africa and document the transition period for evolution of our species. Sara started her data collection by studying the assemblage of Montagu Cave in South Africa. Then she reviewed the assemblage of Nelson Bay Cave also from South Africa. Next she will study the process of transition by observing diachronic changes in lithic technology, more specifically in raw material procurement strategies. To this end she has been preparing experiments on heat treatment of various raw materials used in the production of Stone Age and Paleolithic artifact including silcrete from South Africa and mud stone from Mongolia. To further this research Sara has been invited by a worldwide specialist, Dr. Patrick Schmidt in Tübingen, Germany to learn his experimental protocols and analytical methods related to the heat treatment of silicate rocks. The SAS scholarship will support this study.

UPCOMING EVENTS

Board Meeting

Saturday, July 14, 2018

1:00 – 3:00 p.m. at

Roger and Lydia Peake's

2951 Redwood Ave. West Sacramento, CA 95691

The focus of this board meeting will be events for the rest of 2018 and next year. The meeting is open to all members.

Eclectic Archeological Exchange

Saturday, August 25, 2018

12:00 – 5:00 p.m. at

Carolyn & Gordon McGregor's

1334 Mission Ave. Carmichael, CA 95608

“Ancient Pueblos and Rock Art of New Mexico in Perspective” by Lydia Peake and **“South Africa – Origins, Animals and Rock Art”** by Tom Johansen, Paul K. Davis, and Jan Johansen

The Eclectic Archeological Exchange has been instituted to tap into the archaeological/anthropological adventures and insights of the Society's members. This event will feature four Society members offering perspective on Native Americans in New Mexico region and South Africa.

In May twenty-nine Society members enjoyed a tour of northern New Mexico with a focus on anthropology and archaeology past and present. See article below. Lydia Peake will put the tour in perspective by weaving a story around the ruins and reconstructions of pit houses, kivas, multi-story, multi-room pueblos and post contact churches. She will offer a timeline of events associated with the places visited. Also key to the story of this land of enchantment will be rock art. Don't miss this step into life in the not-so recent past in the Southwest.

Last November six Society members and four individuals from the Renaissance Society journeyed to South Africa. The focus of the trip was archaeology—origins of man and rock art. Three of the travelers will review aspects of the trip. Paul K. Davis will share information on animals in the region. His scholarly presentation will focus on present day animals that everyone wants to see in the wild. Many of these animals played a significant role in the culture of the area. Dr. Davis will identify common and not so familiar animals of South Africa.

Jan Johansen will present “Rock Painting and Engravings of South Africa. She structured the trip to South Africa to visit the richest areas of rock paintings: Cederberg and Drakensberg and also engravings from the karoo. Archaeologists suspect that during the late Middle Stone Age, about 60,000 years ago artists were painting images on the walls of their domestic campsites. As difficult as rock art painting is to date, in the Drakensberg paintings have been dated from as recent as 200 to 300 years ago to as old as 4000 years ago. Through photos and stories Jan will address how rock art may shed light on how the hunter- gatherers who created the images saw the world and perceived their place in it.

Tom Johansen will reflect on “Human Origins”. South Africa escaped the glaciers from the last ice age and so was a biologically rich coastal zone. Was this unique place the home of modern humans? After returning from archeological sites such as Pinnacle Point, Sterkfontein and Wonderwerk Cave and museums including Iziko South African Museum in Cape Town, Blombos Museum of Archaeology in Stilbaai, Centre for Coastal Paleoscience at Nelson Mandela Metropolitan University (to name a few), he found that he had many more questions than before the visits. Dr. Johansen will share his perspectives about what he has discovered concerning the origins of modern humans.

Program

12:00 – 1:00 Meet, greet and eat

1:00 – 1:45 “Ancient Pueblos and Rock Art of New Mexico in Perspective” Lydia Peake

1:45 – 2:30 “South African Animals”, Paul K. Davis

2:30 – 2:45 Break

2:45 – 3:30 “South African Rock Art”, Jan Johansen

3:30 – 4:15 “South African Origins”, Tom Johansen

Carolyn McGregor will cater the event with a delicious picnic lunch of oven-fried chicken, potato salad, fruit and green salads, and strawberry short cake dessert. Please confirm your attendance with Carolyn by contacting her at sabrina53@earthlink.net

PAST ARCHEOLOGICAL ACTIVITIES

Ancient Pueblos and Rock Art of New Mexico Tour

The Ancient Pueblos and Rock Art of New Mexico Tour from Monday, **May 7, 2018** through Friday, **May 18, 2018** was the major Society tour for the year. Twenty-nine members participated. The tour started in Albuquerque with a side trip to Acoma Sky City, the oldest continuously inhabited community in North America. In Albuquerque the group visited three rock art sites in Petroglyph National Monument and the Maxwell Museum of Anthropology. We were fortunate to visit the archives of the Maxwell Museum where pottery abounded. Lunch was enjoyed at Church Street Café in Old Town Albuquerque.



Group at Acoma Sky City*

*Photos provided by Jan Johansen



Rinconada Canyon Rock Art – animal, bird



Boca Negra Rock Art -two birds +, macaw and cage)





Piedras Marcadas Canyon Rock Art

From Albuquerque the group went to the Gallina region and enjoyed tours of Nogales Cliff House Trail, Huerfano Mesa and Rattlesnake Ridge. Three archaeologists from the U.S. Forest Service led the groups to the sites and painted a picture of life in the area from approximately 1050 to 1300 BP.



Nogales Pueblo Ruins



Huerfano Mesa



Rattlesnake Tower

Chaco Canyon was the next destination. The highlighted tour was conducted by an archaeologist from San Juan County Research Center and Library at Salmon Ruins,. The one-day tour consisted of a van ride from Bloomfield to Chaco Canyon, lunch and a guided walk through Hungo Pavi, Chetro Ketl and Pueblo Bonito. Some of the group returned for a second day of touring to visit other ruins. Others visited self-selected sites in the four corners area. Chaco Canyon outliers: Salmon, Aztec, Dein and Chimney Rock were the focus of the next days. The guided tours for Aztec Ruins National Monument,

Dein and Chimney Rock were outstanding. We saw several reconstructed and unexcavated rooms and



kivas.



Pueblo Hungo Pavi



Pueblo Chetro Kelt



Pueblo Bonito





Salmon Ruins



Aztec kiva and wall



Chimney Rock



Chimney Rock Great Kiva and group at top

On an unscheduled day some participants visited Durango; others viewed rock art in Crow Canyon near Bloomfield and most enjoyed the introduction to Ute culture at the Southern Ute Cultural Center and Museum in Ignacio CO. Enroute to Santa Fe some stopped at Ghost Ranch to view artifacts from Gallina excavations and others visited El Santuario de Chimayó for a change in pace.



Crow Canyon Rock Art

The final area of exploration was Santa Fe. Here we first enjoyed tours of the Center of New Mexico Archaeology and the Museum of Indian Arts and Culture. We were introduced to the center's archives - baskets and ceramic, new techniques for radio carbon dating requiring very small samples, archeomagnetic dating techniques, and their native American education program. We were delighted to gain insight into educational materials such as atlatls and bows, basketry, pottery, and bones. The Museum of Indian Arts and Culture featured "Pottery Gallery" - Native American pots from many pueblos, "Stepping out" - the evolution of saddles, "Lifeway of Southern Athabaskans", and "Here Now and Always" - Native Americans in New Mexico.



Center of New Mexico Archaeology

Additional visits to Bandelier National Monument, Pecos National Park, and Pueblos San Marcos introduced more reconstructed and unexcavated rooms, kivas, and churches. Bandelier offered viewing of houses and kivas on the canyon floor and rooms in caves accessed by ladders. Pecos ruins from AD 1000 and the Spanish mission church ruins illustrate an area of historical significance over a long period of time. Pueblo San Marcos is the largest unreconstructed pueblo ruins in the U.S. with 1500 to 3000 adobe rooms.



Bandelier ruins





Bandelier cave and rock art



Pecos Mission Church and kiva



Pueblo San Marcos

Rock art was highlighted at Mesa Prieta. Here on a three-square mile mesa extending twelve miles in a northeasterly direction over 100,000 rock art images are estimated to exist. The rock images represent three distinct time periods: Archaic, Pueblo IV and Historic.



Mesa Prieta rock art

The tour concluded on a high note with dinner at Mine Shaft in Madrid. Madrid, a sleepy, touristy town on The Turquoise Trail offered a fitting end to the pueblo and rock art journey. The boom of coal mining ended and it became a ghost town by the 1950's only to be reenergized by an array of artists, crafts people and renegades.

ARCHAEOLOGICAL REFERENCES

"Drilling threatens ancient Chaco landscape

[Lidar technology reveals ceremonial roads on land up for oil and gas development"](#)

"The area around Chaco Canyon in the middle of the San Juan Basin of present day New Mexico is one of the nation's most productive oil and gas basins. BLM predicts that more than 4000 new wells will be developed in the area in the coming years. As companies scrape well pads and create access road from the high desert scrub, archaeologists fear they will erase ancient roads before they have been fully studied or even detected. In a recent pilot study by Anna Sofaer, an archaeo-astronomer who heads the nonprofit Solstice Project in Santa Fe collaborated with Richard Friedman and Robert Weiner, who specialize in lidar, a technology that uses laser pulses from an airplane to reveal fine features on the landscape. Their analysis of three small areas near the park detected previously undocumented road segments and suggested that hundreds, perhaps thousands, of ancient roadways traverse the San Juan Basin. In March BLM planned to offer 26 parcels for lease to oil and gas companies. One grazes the periphery of the periphery of a 16-kilometer-wide temporary buffer around the park; another parcel lies near a site along the Great North Road. After a Navajo group and environmental groups protested the leases, Secretary of the Interior Ryan Zinke suspended the sale but the fight is not over." (April Reese, *Science*, V. 360, 2018-5-18, pp. 693-694)

"Searching for a Stone Age Odysseus"

[Modern humans and even Neandertals may have plied the Mediterranean long ago](#)

"In 2008 and 2009 Thomas Strasser of Providence College in Rhode Island co-lead a Greek-U.S. team with archaeologist Curtis Runnels of Boston University and discovered hundreds of stone tools near the southern coastal village of Plakias. The picks, cleavers, scrapers, and bifaces were so plentiful that a one-off accidental stranding seems unlikely, Strasser says. The tools also offered a clue to the identity

of the early seafarers: The artifacts resemble Acheulean tools developed more than a million years ago by *H. erectus* and used until about 130,000 years ago by Neandertals as well. Strasser argued that the tools may represent a sea-borne migration of Neandertals from the Near East to Europe. The team used a variety of techniques to date the soil around the tools to at least 130,000 years old.” (Andrew Lawler, *Science*, V. 360, 2018-4-27, pp. 362-363)

“Siberian sculpture is among the oldest monumental art?”

[The 11,600-year-old Shigir Idol offers an enigmatic glimpse of hunter-gatherer’s world view](#)

“In 1894 gold prospectors digging up a peat bog near the Russian city of Yekaterinburg unearthed a carved wooden idol, 5 meters long. It was covered front and back with human faces, hands, zigzag lines and other mysterious details. It had been attributed to farmers but now it is believed to be the handiwork of hunter-gatherers. The first radiocarbon dating of the idol in the 1990s yielded an early date: 9800 years ago. New dates from a core sample yielded similar dates. The date places the statue at a time when forests were spreading across a warmer, postglacial Eurasia. As the landscape changed, art did, too, perhaps as a way to help people cope with the unfamiliar forest environment, says Peter Vang Petersen, an archaeologist at the National Museum of Denmark in Copenhagen. In another bog about 50 kilometers away Mikhail Zhilin of the Russian Academy of Sciences in Moscow excavated hundreds of small bone points and daggers from the same period, along with elk antlers carved with animal faces”. (Andrew Lawler, *Science*, V. 360, 2018-4-27, p. 364)

“New copies of old gene drove brain expansion

[Research shows how genes supercharge neuron formation during human development”](#)

“Three nearly identical genes could help explain how 0.5 liters of gray matter in early human ancestors became the 1.4-liter organ that has made our species so successful and distinctive. The newly identified genes could also help explain how brain development sometimes goes wrong, leading to neurological disorders....Two studies in the 31 May issue of *Cell* trace a series of genetic accidents in recent evolutionary history that have yielded four very closely related NOTCH2NL genes in humans.... By comparing NOTCH2NL related DNA in the genomes of humans and other primates, David Haussler, a bioinformatician at the University of California, Santa Cruz and his team reconstructed the genes’ evolutionary history. They concluded that during DNA replication perhaps 14 million years ago, part of ancestral NOTCH2 gene was copied by mistake. The new “gene” was incomplete and nonfunctional, but about 11 million years later—shortly before human ancestors’ brains began to expand—an additional piece of NOTCH2 got inserted into this copy, making the gene functional. Subsequently, that active NOTCH2NL gene was duplicated twice more, yielding three active NOTCH2NL genes in a row at one end of human chromosome 1 and one inactive copy on the other end.” In a *Cell* paper, Vanderhaeghen and his colleagues describe molecular details of how NOTCH2NL works to boost neuron formation. They found that a NOTCH2NL protein blocks a key step in a signaling pathway that causes stem cells to differentiate and stop dividing. As a result, the cells persist and keep producing progeny, ultimately yielding a larger crop of neurons.” (Elizabeth Pennisi, *Science*, V. 360, 2018-6-1, p. 951)

“Hadza on the Brink

[Farmers, tourist, and cattle threaten some of the world’s last hunter-gatherers, long a magnet for researchers”](#)

“Today of roughly 1000 Hadza living in the dry hills between salty Lake Eyasi and the Rift Valley highlands in Tanzania, only about 100 to 300 still hunt and gather most of their food. Most of the others do forage—but they also buy, trade, or are given food, and sometimes, alcohol and marijuana.

Many live part of the year in larger semi-permanent camps where they depend on income from tourism and occasional jobs on farms or as guards.

Today, at least a dozen research groups from around the world have permits to study the Hadza. Since their hunter-gatherer lifestyle has changed dramatically over the last decades, the value of the data gathered by researchers is in question. Evolutionary anthropologist Colette Berbesque of University of Roehampton in London who has studied the Hadza since 2007 says “They are not pristine hunter-gatherers anymore”. Also some researchers think scientists have asked too much of the Hadza. “A woman said to me, ‘My body is tired’, human behavioral ecologist Alyssa Crittenden of the University of Nevada in Las Vegas who has studied the Hadza since 2004 says. The hunter/gatherer also said, ‘I’m tired giving my hair, my poop, my spit, my urine’”. The question is how to best move forward“. (Ann Gibbons, *Science*, V. 360, 2018-5-18, pp. 700-704)

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