



Sacramento Archeological Society, Inc. Newsletter

www.sacarcheology.org

July/August - 2017

UPCOMING EVENTS

(SAS-sponsored events highlighted in blue)

September 10, 2017 – Board Meeting at Peake’s home

October 21, 2017 – Saturday – 1:00 p.m. to 4:00 p.m. Archeological Symposium “Archaeology – A Journey of Discovery from Ancient Origins to Recent Past”, at Maidu Museum and Historical Site 1970 Johnson Ranch Drive, Roseville, California 95661

October 2017 – Board Meeting

December 9, 2017 – Scholar Presentations and Annual Board Meeting at Carolyn and Gordon McGregor’s

SCHOLARSHIP AWARDS

2017 Scholars

Sacramento Archeological Society, Inc. is pleased to announce our 2017 scholarship recipients. The candidates were exceptional. Thanks to the SAS members who contributed funds we were able to financially support eight scholars. Presentations by the scholars will be scheduled at the December 9 2017 Annual Meeting and in early 2018 at the Scholar Symposium. A brief synopsis of the recipient’s archaeological projects follows:

Jennifer Black

Jennifer is a graduate student at University of California Berkeley. Her undergraduate degree in 2013 was from University of Wyoming. She has been involved in long-term research of Palatine East Pottery Project (PEPP) in Rome, Italy. Since 2013 she has taken on the responsibility for the study and publication of the family of fine-bodied tablewares manufactured in the Rome region. SAS’s scholarship will provide support for summer of work to finalize documentation on the consumption at Rome of locally-manufactured craft goods for virtually the entire span of the imperial period.

Lucia Diaz

Lucia is a junior at University of California Davis. She has worked on organizing and categorizing artifacts in museums at Santa Rosa Junior College and University California Davis Anthropology Museum. The SAS scholarship will support her attendance at the UC Davis Field School. The director of the field school is conducting the research project to understand the distribution and economic exploitation of acorns in historic societies.

Erika Ebel

Erika is a first year graduate student at University of California Davis. In 2016 she graduated from Humboldt State University. She has a strong background in osteology and zooarchaeology and the application of 3D imaging to natural history and artifact collections. Because of her strong interest in

Alaskan archaeology she is plans to take an advanced field methods course with Adelphi University in the Tanana Valley of Alaska this summer. SAS scholarship will assist in the funding of this experience.

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 seven field seasons in Europe. This summer she has the opportunity to join a collaborative team of researchers from the Max Planck Institute and University of Belgrade to excavate sites identified on the Resava River Valley in Serbia. Of particular importance to her dissertation research is a fire feature identified at Bukovac, a cave site (Doganzic, 2014). The SAS scholarship will support her leadership role on site as a field laboratory manager.

Patricia McNeill

Patricia is graduating from University of California Davis spring 2017 and has been accepted into the PhD Program at University of California Davis. As an undergraduate she has interned in three labs and written two honors theses. This summer she will be participating in a Max Planck Institute for Evolutionary Anthropology's sponsored excavation at Ilsehöhle Ranis, Thüringen (Germany). The cave site is an important data point for the Middle to Upper Paleolithic transition in central Germany and northern Europe. The SAS scholarship will support this experience for Patricia.

Karlene Shippelhoue

Karlene graduated from University of California Berkeley in 2016 with a double major in Anthropology and Near Eastern Studies. She will be beginning her graduate studies in Near Eastern Languages and Cultures Archaeology Program at John Hopkins University this year. Her recent excavation experience (2016) was at Megiddo through Tel-Aviv University. This summer she plans to use her GIS mapping skills in the Jezreel Valley Regional Project (JVRP) to assist in creating a dataset of excavated and unexcavated archaeological sites in the Jezreel Valley in Northern Israel. The SAS Scholarship will support Karlene in this three-week survey.

Kevin Smith

Kevin is a graduate student at University of California Davis in Evolutionary Anthropology. He received his masters in Anthropology at California State University, Los Angeles in 2013 and his BA at Humboldt State University in 2007. Kevin is exceptionally talented in replicating past technologies. His current project focuses on an empirical investigation of the cost and efficiency of mechanically assisted projectiles. SAS is supporting his study of a collection of atlatl and bows in order to produce the most realistic copy of the objects.

Sara Watson

Sara is a first-year graduate student at University of California Davis. She received a BA from University of Texas in 2016. This summer she will be participating in the excavation and analysis a very unique site in South Africa, Knysa Eastern Heads Cave 1 (KEH-1). In addition Sara plans to collect data on another similarly-aged assemblage curated in the Field Museum in Chicago: Nelson Bay Cave (South Africa). The lithic assemblages from this site serve as the "type" assemblages for the Later Stone Age of South Africa. The SAS scholarship will support this study.

UPCOMING TOURS

Ancient Pueblo and Rock Art Tour

SAS continues to plan an Ancient Pueblo and Rock Art Tour for the New Mexico area in **May 2018**. Chaco Canyon is one of the planned destinations on the tour. The following summarizes recent Chaco Canyon research

The article, “Seeing Chaco in a New Light” (Bower, Bruce, *Science News*, 2017-05-27, pp. 16-21) offers another insight into early American society. Chaco was excavated in the 1890s and 1920s. The finds were packed away in boxes and drawers at museums in New York City, Chicago and Washington D.C. From 2005 to 2011 Kerriann Marden, now a forensic anthropologist at Eastern New Mexico University in Portales studied the bones from one site in particular, Pueblo Bonito. Dr. Marden painstakingly reunited long-dead Chaco individuals’ skulls with arms, legs with feet and so on. “As skeletons assumed their former shapes, a couple of peculiar things stood out. First, many individuals bore signs of disease, including tuberculosis and syphilis. That seemed peculiar for people who were buried in a great house typically thought to have been reserved primarily for society’s upper crust, not for the ill. Second, bodies had been manipulated in usual ways...Comparisons of restored skeletons with field notes and photographs from original excavations indicated, for instance, that one woman was originally found with a fetus’s fragile remains in her pelvic cavity and her own bones below the knees missing. Her body lay across a room from several intact bodies.”

“Many individuals buried in one of Pueblo Bonito’s oldest rooms, known to researchers as Room 33, shared maternal ancestry. Plog and colleagues—led by Penn State archaeologist Douglas Kennett—(*SN Online*: 2/21/17) extracted mitochondrial DNA, which is typically passed from mother to child, from skeletons of nine of 14 individuals interred in Room 33. Marden’s reassembly project was crucial to identifying individuals whose DNA was analyzed... Nuclear DNA recovered from six Room 33 skeletons identified two as mother and daughter and two others as a grandmother and grandson. Members of this Pueblo Bonito group were similar enough to signal shared kinship with a female line. Radiocarbon dating conducted by Plog’s group gives a rough timeline for Room 33 burials. The first two men, buried beneath the chamber’s wooden floor, were placed there as early as 800. Construction of the wooden floor occurred by about 900. Additional burial took place intermittently up to 1130.” Plog regards the extravagantly buried man surrounded by thousands of offerings, including turquoise and shell beads and pendants as an early leader from a prominent Chaco family dynasty. Based on the exceptional treatment given to all deceased individual place in the special room in Chaco’s first and largest great house, Plog suspects these folks belonged to a maternal line in which leadership was handed down from the ninth to the 12th century. At that point, researchers suspect, many Chaco residents and possibly members of nearby communities moved to a settlement 50 kilometers north of Chaco Canyon. One conclusion from the investigations was that members of a single maternal lined wield power in Chaco society from the start through at least 330 years and perhaps 10 generations.

Chemical analyses of teeth from 61 individuals interred in two sections of the great house indicate that most of these people grew up in the Chaco canyon or nearby areas to the south. Archaeologist T. Douglas Price of the University of Wisconsin—Madison, Plog and colleagues made a case for local origins of Chaco society (*Journal of Archaeological Science: Reports*, 2/2017). Ratios of certain forms of chemical elements—strontium, oxygen and lead—suggest that 58 of the 61 people buried in Pueblo Bonito had grown up eating plants and animals and drinking water from the Chaco Canyon area.

“Chaco society’s puzzles go beyond who was in charge and where meals came from. One of the ancient population’s most vexing oddities concerns feet. Six-toed individuals appear to have held

special status at Pueblo Bonito, says archaeologist Patricia Crown of the University of New Mexico in Albuquerque. 'Having six toes brought social honor in Chaco society,' Crown holds. A review of Pueblo Bonito skeletons and artifacts conducted by Crown and her colleagues (*American Antiquity*, July/2016) identified three six-toed individuals among the burials. Foot prints and handprints sporting six digits also appear on several plastered walls at Pueblo Bonito. Of the 13 ancient sandals recovered at Pueblo Bonito, seven include woven extensions on the outer border for a sixth toe."

South Africa Tour

Several members from Sacramento Archeological Society, Inc. and Renaissance Society at CSUS are planning to go on a trip to South Africa in November. Archaeological exploration is a focus of the trip. One scheduled event on this adventure is the "Point of Human Origins Tour" at Pinnacle Point on November 3rd. If you are interested in more information on this South African trip, please contact Jan Johansen at janjohansen@sbcglobal.net.

MEMBER'S CORNER

Members

We welcome William Johnson and Rosemary Bjorkman as new members of Sacramento Archeological Society, Inc. We look forward to seeing you at our events. We also thank supporting members for your renewals. Your support allows us to award scholarships.

On June 10 Jan Johansen was honored for exemplary service to Sacramento Archeological Society, Inc. by Lydia and Roger Peake. In the past twenty years that she has been a member of the Society she has served as Vice President, President, Treasurer, Director/Member at Large, Manager of Scholarship Program, tour planner and newsletter editor. The honor recognizes her never-ending efforts to benefit the Society and its membership.



Photo by Diane Sangster

PAST ARCHAEOLOGICAL ACTIVITIES

Eclectic Archeological Exchange

On Saturday, June 10, 2017 after a lovely lunch catered by Carolyn McGregor Tom and Jan Johansen took us vicariously to Australia. Jan in her presentation "Australian Dream Time Rock Art" showed pictures of Australian rock art from ten sites in five different areas that her family had visited in a recent trip. She also relayed myths associated with the dreamtime inspired art. Tom focused on early *Homo Sapien* presence in Africa. He relayed information about the main early Home Sapien archaeological site visited at Mungo Lake. At this site Mungo Lady (dated to 40,000 BP) and Mungo Man (dated to 34,000 BP) were excavated.

We wish to thank Carolyn and Gordon McGregor for hosting the splendid event.

Vasco Caves Rock Art Day Tour

On Monday, May 8 twenty SAS members were led on a fabulous private visit to Vasco Caves Rock Art by five East Bay Regional Park District Program Staff. They saw the Indian rock art, raptors, tiger salamanders and tadpole red-legged frogs in vernal pools, and cupules in rock shelters. The weather was splendid, not too hot and not windy. In addition to the opportunity to enjoy the beautiful scenery, it was a very informative tour. Bev Ortiz presented Native American and post contact information on the area. Kevin Dixon informed the group of the geology. The spherical concretions were particularly interesting.

We thank Naturalists Kate Collins, Virginia Delgado, Eddie Willis, Kevin Dixon and Bev Ortiz for taking time from their busy schedules to lead the tour.



Attendees

Kevin Dixon

Tour guides

Bev Ortiz

Kate Collins addressing group



ARCHAEOLOGICAL REFERENCES

“Unearthing Democracy’s Roots”

In some ancient Mesoamerican societies, rulers shared power and ordinary people had a voice

“Thanks, in part to work led by Fargher’s mentor Richard Blanton, an anthropologist at Purdue University in West Lafayette, Indiana, Tlaxcallan is one of several pre-modern societies around the world that archaeologists believe were organized collectively, where rulers shared power and commoners had a say in the government that presided over their lives. These societies were not necessarily full democracies in which citizens cast votes but they were radically different from the autocratic, inherited rule found—or assumed—in most early societies... Tlaxcallan with its political initiation rite to bring people from all classes into the governing council, had a collective government...Tlaxcallan was home to several different ethnic groups, many of whom were refugees fleeing Mexcia domination...They were absorbed by Tlaxaellan on the condition that they defend the state,” says Aurelio López Corral, the archaeologist who leads Mexico’s National Institute of Anthropology and History’s work at the site. The best warriors, no matter their ethnicity, were eligible to join the senate—if they could endure the initiation.” (Wade, Lizzie, *Science*, V. 355, 2017-3-17, pp. 1114-1118)

“Relics of the first Americans?”

Western Stemmed points may be the signature of ancient migrants who spread south along the Pacific coast

“The stone detritus that point makers left behind is now adding to the evidence that Western Stemmed points arrived first (before Clovis). The garbage left behind by the two technologies is radically different. Archaeologists are finding discoidal cores all along the Pacific coast. They also find points with stemmed bases of various styles.” Sites where these have been found include: Ushki Lake (Asia, ~13,000 BP), Haida Gwaii (British Columbia, ~12,700 BP), Paisley Caves (Oregon, ~11,300 BP), Channel Islands (~12,000 BP), Isla Cedros (Mexico, ~12,500), Lower Amazon (Brazil, ~12,000), Paján (Peru, ~12,400), Quebrada Jaguay (Peru, ~12,000 BP), and Monte Verde (Chile, ~14,000 BP). (Wade, Lizzie, *Science*, V. 356, 2017-04-07, pp. 13-14)

“Claim of very early humans in Americas shocks researchers”

Skepticism greets report of smashed mastodon bones

“What broke the 130,000-year old mastodon bone in California? Archaeologist first excavated the Ceruttie Mastodon site near San Diego in 1992, after the construction exposed the bones. More recently, Daniel Fisher, a respected paleontologist at the University of Michigan in Ann Arbor, took a close look at the fractures and found patterns he says are consistent with blows from a rounded stone, which leave a characteristic notch at the point of impact. Other chips of bone show what he calls unmistakable signs of being popped off by the impact. He says humans were probably breaking the bones to reach the marrow or to turn the bone itself into a sharper tool. The nearby stones, hefty and round show wear patterns consistent with being smashed against bone....In experiments, the team used that method to break elephant bones and produced identical fracture patterns....The team relied on a dating technique based on the radioactive decay of uranium in minerals within the bone. Several dating experts said they were sound and found the 130,000 year date trustworthy.” (Wade, Lizzie, *Science*, V. 356, 2017-04-28, p. 361)

“Lucy had taller kin, footprints suggest”

Signs of tallest *Australopithecus afarensis* found in Tanzania

“While excavating small pits in 2015 to evaluate the impact of a proposed Laetoli museum, researchers found comparably ancient hominid footprints about 150 meters from the original discovery of a 3.7-million-year-old hominid found in 1976. Scientists exposed 14 hominid foot-prints, made by two individuals as they walked across wet volcanic ash. More than 500 footprints of ancient horses, rhinos, birds, and other animals dotted the area around the hominid tracks. The latest footprints were probably made by members of *Australopithecus afarensis*. The species best known for Lucy, discovered in Ethiopia in 1974. All but one of the 14 hominid impressions came from the same individual.” (Bower, Bruce, *Science News*, 2017-01-021, p. 8)

“Clovis spear points absorbed shock”

Chipping away part of weapon’s base kept tip from snapping

“Clovis people fashioned stone weapons that slightly crumpled at the base rather than breaking at the tip when thrust into prey, say civil engineer Kaitlyn Thomas of Southern Methodist University in Dallas and colleagues. The Clovis crumple rested on a tool-making technique called fluting, in which a thin groove was chipped off both sides of a stone point’s base. Computer models and pressure testing of replicas of fluted and unfluted Clovis points support the idea that fluted bases worked like shock absorbers, preventing tip breakage. Slight compression and folding of stone at the base of fluted points after an impact did not cause enough damage to prevent the points from being reused.” (Bower, Bruce, *Science News*, 2017-05-13, p. 8)

“Newest member of human family is surprisingly young”

Archaic species may have coexisted with our ancestors

A second chamber of the cave system near Johannesburg, South Africa yielded a nearly complete new cranium plus 131 *Homo naledi* fossils. “The new fossils that date to between 236,000 to 335,000 years ago are reminiscent of much earlier human ancestor such as *H. habilis* living at the same time as modern humans were emerging on African and Neandertals were evolving Europe. The new skull show that the species combines primitive traits such as a small brain, flat mid-face, and curving fingers with more modern-looking features in its teeth, jaw, thumb, wrist, and foot”. (Gibbon, Ann, *Science*, V. 356, 2017-05-12, p. 571)

“Neandertal and Denisovan DNA from Pleistocene sediment”

”Although a rich record of Pleistocene human-associated archaeological assemblages exists, the scarcity of hominin fossils often impedes the understanding of which hominins occupied a site. Using targeted enrichment of mitochondrial DNA, we show that cave sediments represent a rich source of ancient mammalian DNA that often includes traces of hominin DNA, even at sites and in layers where no hominin remains have been discovered. By automation-assisted screening of numerous sediment samples, we detected Neandertal DNA in eight archaeological layers from four caves in Eurasia. In Denisova Cave, we retrieved Denisovan DNA in a Middle Pleistocene layer near the bottom of the stratigraphy. Our work opens the possibility of detecting the presence of hominin groups at sites and in areas where no skeletal remains are found” (Slon et al, *Science*, V. 356, 2017-05-12, p. 605-608)

