



# **Sacramento Archeological Society, Inc.**

## **Newsletter**

[www.sacarcheology.org](http://www.sacarcheology.org)

July/August - 2013

### **Mark Your Calendars**

August 3, 2013, Saturday – Sierra Rock Art Tour **CANCELLED AT THIS TIME - TO BE RESCHEDULED**

October 19, 2013, Saturday – 1:00 to 5:00 p.m. Speaker's Forum, Maidu Center

December 7, 2013, Saturday – Annual Meeting

Winter Scholar's forum – January or February 2014

Spring tour 2014 – Flagstaff/Sedona – March or April 2014

## **SCHOLARSHIPS**

Sacramento Archeological Society, Inc. is pleased to announce our 2013 scholarship recipients. The interest was extremely high and the candidates were exceptional. Nearly thirty applications were received. Thanks to several SAS members who contributed extra funds we were able to provide financial support to six scholars. A presentation by them will be scheduled for early 2014.

Heather Benham is a senior at California State University, Sacramento majoring in anthropology. She hopes to work for a cultural resource management firm and become a professor of anthropology. She has been volunteering in the Archaeological Curation Facility at Sacramento State University working with the extensive collections. This summer she will attend the 76 Draw Site field school near Deming, New Mexico. She will be participating in an excavation that includes a dense artifact scatter dating to 1130 – 1450 BP, which represents the Casas Grandes Medio period. The SAS scholarship will be applied to the cost of this field school.

Cassandra Brainard is senior at California State University, Sacramento majoring in anthropology/archeology. She hopes to work for a CRM firm or in the Forestry service as an archaeologist. She has been volunteering in the Archaeological Curation Facility at Sacramento State University and gaining experience with curation of prehistoric archaeological remains. The SAS scholarship will be applied to a field school directed by Professor Leland Bement in the panhandle of Oklahoma. The objective of the excavation is to unearth a paleo-indian bison kill site.

Antonietta Catanzariti is a graduate student at University of California, Berkeley majoring in Near Eastern Art and Archaeology. Her goal is to obtain a university or college teaching position and conduct her own archeological project in the Middle East. She has been participating in archaeological excavations since 2003 in Italy, Syria, Lebanon and Jordan. Since 2009, she has been a member of the excavation team of Kamid el-Loz in Lebanon. There, she has been unearthing and studying the ceramic vessels from the Middle Bronze Age and have also collaborated in the publication of an article on the ceramics found on the site. This scholarship will help fund her participation in the Tell Nader excavation and reach the site of Kamid el-Loz to collect from the storage room of the excavation house several ceramic samples to be examined in the United States using a portable XRF device.

Kyle Lee-Crossett is a graduating senior at Stanford University majoring in Archaeology. He is interested in collections management, public archaeology, museums, and cultural heritage. Kyle has been collections assistant and public outreach volunteer at the Market Street Chinatown Archaeology Project where he catalogued and analyzed historic artifacts and produced educational programs. The scholarship will be directed toward his participation in the Catalhoyuk Research Project in Turkey.

Kyle Steven Rabellino is a senior at Sonoma State University. He is interested in working for a non-profit or governmental agency as a staff archaeologist while teaching anthropology/archaeology part time at a community college. He has worked for the Anthropological Studies Center and the U.S. Forest Service and volunteered for California State Parks and the Society for California Archaeology as an archaeological technician. He has also conducted archaeological field work at the Fairfield Osborn Preserve. The SAS scholarship will be applied to the sourcing of a sample of obsidian from the Fairfield Osborn Preserve, located in southeastern Sonoma County for his senior thesis.

Allison Wolfe is a junior at University of California, Berkeley. She is interested in a career in zooarchaeology. She has worked in Patrick V. Kirth's Oceanic Archaeology lab doing faunal analysis for sites in Polynesia. She will be attending a Zooarchaeology and Field Ecology Field School at Eagle Lake, CA this summer. The SAS scholarship will support her attendance at this field school.

## UPCOMING EVENTS

### IN CELEBRATION OF CALIFORNIA ARCHAEOLOGY MONTH

### "THE WORLD OF ARCHAEOLOGICAL DISCOVERY"

#### Lectures by Distinguished Archaeologists

Saturday, October 19, 2013

1:00 -5:00 p.m.

Maidu Museum

1970 Johnson Ranch Drive

Roseville, California 95661

The tentative list of speakers is as follows:

- **Holley Moyes, UC Merced** -- Las Cuevas Archaeological Complex in Belize: Maya Cave and Surface Studies in the Shadow of Caracol
- **Jeffery Rosenthal, Far Western** -- Landscape Evolution and Chronology Building in California.
- **Georgia Fox, CSU Chico** -- The Betty's Hope Plantation project: Insights into Archaeology and Conservation.
- **Al Striplen, Ohlone** -- Discovery and Preserving Heritage Traditions.
- **Eric Bartelink, CSU Chico** -- Applied Bioarchaeology: Health, Paleodietary Reconstruction and Identification.

Put this event on your calendar. More details will be provided in the next newsletter.

# PAST ARCHAEOLOGICAL ACTIVITIES

## ECLECTIC ARCHEOLOGICAL EXCHANGE

On June 15<sup>th</sup> three members of Sacramento Archeological Society exchanged archeological/anthropological information from their travel experiences. John Foster who was planning to talk about the reintroduction of California condors to the mountains of northern Baja California will present at a later time.

- Lydia Peake - **Yaxchilan** in Chiapas state in southern Mexico. Yaxchilan's dynasty originated in the 4th century, but the city seen today is largely the creation of two eighth century kings that dominate its Classic period history: Itzamnaaj B'alam and Bird Jaguar IV. Yaxchilan vigorously pursued monolithic stela-carving but its particular specialty was carved stone lintels. Lydia highlighted carving illustrating female blood-letting, a gruesome mysterious topic. *Classic Maya tour with the Archaeological Conservancy in February, 2011.*
- Roger Peake - **French-Indian War** in North America. Roger discussed the conflict in the geo-political context of the times and related it as a precursor to the American Revolution. The turbulent decade of the 1760s saw the end of the French-Indian War (1763) and numerous conflicts (uprisings, rebellions and riots) which would culminate in 1776 with the American Revolution. Roger highlighted information about Fort Stanwix, Fort Necessity and Fort Niagara. *The tour, also sponsored by the Archaeological Conservancy, occurred in September, 2012.*
- Jan Johansen – **Northern Norway Rock Art**. Jan discussed and illustrated Old Stone Age to Early Metal Age Rock Art in central and northern Norway as viewed during a recent trip, June 2013. The rock art from 15 sites consists of carvings/pecking and a few paintings made between ca 6500 to 2000 years ago. The large concentration of rock art at Alta was an amazing illustration of the hunting-fishing economy. *Hans Christian Soborg, Curator of the Alta Museum led the tour of the Alta sites.*

## ARCHAEOLOGICAL REFERENCES

### ”Modern Humans' First European Tour”

“Our species trekked to England's southern coast 41,000 to 44,000 years ago-about 6000 years earlier than expected, according to new dates for a partial jawbone and teeth described in two reports in *Nature*. Researchers have long suspected that our ancestors migrated to Europe from Africa by about 42,000 years ago, based Aurignacian tools thought to be crafted only by *Homo sapiens*. But the oldest modern human fossils in Europe, from Oase, Romania, are about 40,000 years old. Now, scientists have concluded that two molars from southern Italy dating to 43,000 to 45,000 years ago belonged to modern humans, making them the oldest known modern humans in Europe. They also now think that transitional tools, once attributed to Neanderthals, were made by modern humans instead, according to the report by Stefano Benazzi of the University of Vienna and colleagues. Using a refined carbon dating technique called ultrafiltration to redate animal bones associated with the jaw in England, and a separate technique to date shell beads in Italy, the Oxford Radiocarbon Accelerator Unit put modern humans in Italy and England earlier than those in Romania and at the same time as Neanderthals. ‘Modern humans got a lot further faster than we thought,’ says coauthor Chris Stringer of the Natural History Museum in London.”  
- Science, 2011-11-04, p. 576

## “Toba Timing”

Toba in Sumatra is thought to have been the largest volcanic eruption in the past tens of millions of years--larger than the main eruption at Yellowstone--and it formed a huge lake about 30 km wide and 100 km long. Signals of the eruption are thought to be preserved in both Greenland and Antarctic ice cores. The event has been proposed to have led to a **population bottleneck in early *Homo sapiens* that is recorded in our genetic history**. The exact age of the eruption, however, has been uncertain, complicating efforts at global correlation of climatic and environmental events. Storey *et al.* have now obtained a precise  $40\text{Ar}/39\text{Ar}$  radiometric age on crystals from Toba deposits in Malaysia. The age, supported by astronomical calibrations, is  **$73.88 \pm 0.32$  thousand years ago**, close to the presumed age of about 74 ka. The date helps calibrate the signals and thus correlates the age of ice cores in separate hemispheres, and the eruption timing just precedes an abrupt cooling of about 10 degrees C. recorded in the Greenland ice.” BH, Science, 2012-11-30, p 1128, (*Proc. Natl. Acad. Sci. U.S.A.* 10.1073/pnas.1208178109 (2012))

## “Sweet Potatoes Get Around”

“Sweet potatoes originated in South and Central America, but some evidence suggests they were found in Polynesia indicative of contact between these human populations during these early times. Roullier *et al.* have used genetic markers in modern and herbarium specimens to infer the movements of this crop across the world. Two distinct gene pools were discovered in the northern and southern regions of the neotropics; in addition, recent interbreeding and movement between these two distinct gene pools could be detected. On the basis of herbarium specimens collected across the globe, there was evidence that the majority of lineages in Polynesia were initially derived from South America during pre-Columbian times. However, modern Oceanic populations appear to be primarily from the northern region population, which suggests a more recent reintroduction; although evidence of mixing with South American populations was also detected.” LMZ, Science, 2013-02-08, p 628, (*Proc. Natl. Acad. Sci. U.S.A.* 110, 10.1073/pnas.1211049110 (2013))

## “Impact and Extinction”

Precise dating of the Chicxulub impact coincides with the mass extinction at the K-Pg boundary 66 million years ago. Alvarez *et al.* based their initial hypothesis on elevated concentrations of iridium and other platinum-group elements and the occurrence of shocked quartz, tektites, and tsunami-like deposits in samples roughly dated to the time of the K-Pg boundary. Detailed sedimentological analysis and stratigraphy, together with accurate geochronological dating, therefore allow the hypothesis to be tested. Rene *et al.* now apply state-of-the-art geochronological dating methods to new data collected from impact deposits and the K-Pg boundary. They resolve the existing uncertainty about the relative timing of the events. Heiko Palike, “Impact and Extinction”, Science, 2013-02-08, pp 655-6.

## “Archaeologist Hammers Away At Modern Behavior”

John Shea, at New York's Stony Brook University, suggests that the earliest modern humans were as smart as we are. They just had different problems to solve. John's cutting edge stone tool studies have helped archaeologists identify how stone points were used, and he has documented the sophisticated tool-making skills of the oldest known *Homo sapiens*. Shea argues that the first *H. sapiens* about 200,000 years ago had cognition fully equal to ours today. Instead of studying how our species gradually acquired "modernity," he urges analyzing our "behavioral variability," or the number of different ways we adapted to changing conditions. Shea concluded that early *H. sapiens* were as cognitively advanced as those today. - Michael Balter, “Archaeologist Hammers Away at Modern Behavior”, Science, 2013-02-08, pp 642-643.

## **“Early Ceremonial Constructions at Ceibal, Guatemala, and Origins of Lowland Maya Civilization”**

“The spread of plaza-pyramid complexes across southern Mesoamerica during the early Middle Preclassic period (1000 to 700 BCI) provides critical information regarding the origins of lowland Maya civilization and the role of the Gulf Coast Olmec. Recent excavations at the Maya site of Ceibal, Guatemala documented the growth of a formal ceremonial space into a plaza-pyramid complex that predated comparable buildings at other lowland Maya sites and major occupations at the Olmec center of La Venta. The development of lowland Maya civilization did not result from one-directional influence from La Venta, but from interregional interactions, involving groups in the southwestern Maya lowland, Chiapas, the Pacific Ocean, and the southern Gulf Coast. – Takeshi Inomata *et al*, “Early Ceremonial Constructions at Ceibal, Guatemala and the Origins of Lowland May Civilization” Science, 2013-04-26, p 467-471.

## **“Feather Before Flight.”**

Its summary states, “Fossil data indicate that feathers and their precursors may have evolved over a much longer span than previously thought.” Julia Clarke, Science, 2013-05-10, pp 690-1

## **“More Genomes From Denisova Cave”**

Recent analysis of samples from the Denisova Cave in Siberia has yielded a nearly complete, high-coverage genome of our closest cousins. “The data suggest inbreeding Neanderthals, a large Denisovan population, and mixing between Denisovans and an even earlier mystery species.” - Elizabeth Pennisi, “More Genomes From Denisova Cave Show Mixing of Early Human Groups”, Science, 2013-05-17, p. 799.

## **“Troubled Waters for Ancient Shipwrecks”**

“As archaeologists find new ways to pull precious data from wrecks, they are squaring off against those salvaging ships for profit.” – Kaj Kupferschmidt, “Troubled Waters for Ancient Shipwrecks”, Science, 2013-05-17, p. 802-807.