



Sacramento Archeological Society, Inc. Newsletter

www.sacarcheology.org

January/February - 2018

Happy New Year 2018

UPCOMING EVENTS

January 6, 2018, Saturday, 1:00-4:00 p.m. – SAS Scholar Symposium (1) “Northern Israel Excavation” by Karlene Shippelhouse and “Central and Eastern Sierra Nevada Excavations and Survey” by Lucia Diaz at Carmichael Library, 5605 Marconi St. Carmichael, CA 95608

February 10, 2018, Saturday, 3:00-6:30 p.m. – SAS Scholar Symposium (2) “Serbian Excavation – Fire Feature” by Giulia Gallo, “Middle to Upper Paleolithic Transition in Europe” by Patricia McNeill, and “Middle and Later Stone Age Lithics of South Africa” by Sara Watson and, “FROM FEATURES TO FIGURES: Statistical Analysis of selected California Native American Baskets by Rosemary Brother at Yolo County Library, Arthur F. Turner Branch 1212 Merkley Avenue, West Sacramento, CA 95691

March 24, 2018, Saturday, 1:00-5:00 p.m. – Archeological Symposium “New Evidence - *Homo sapiens* in North America at least 15,800 years ago” by Jon Erlandson, PhD, Pat O’ Grady, PhD, and Mike Collins, PhD at UCD Extension, 2901 K Street, Sacramento, CA 95816

April 21, 2018, 12:00 – 5:00 p.m. – Ancient Pottery - “Palatine East Pottery Project by Jennifer Black” and New Mexico Pottery and Tour Briefing at Carolyn and Gordon McGregor’s home

April 30, 2018 – Scholarship Applications due

May 7- 18, 2018 - Ancient Pueblos and Rock Art of New Mexico Tour

Annual Scholar Symposium (1)

By

Scholarship Recipients

Saturday, January 6, 2018

1:00 – 4:00 p.m.

at

Carmichael Library

5605 Marconi St.

Carmichael, CA 95608

In 2017 Sacramento Archeological Society awarded eight scholarships to support archeological/anthropological education. Two of these individuals **Kevin Smith** and **Erika Ebel** presented at the annual meeting in December 2017 and two others **Karlene Shippelhouse** and **Lucia Diaz** will be presenting at the Scholar Symposium on **Saturday, January 6, 2018** on their experiences made possible by the scholarships. Three others: **Giulia Gallo**, **Patricia McNeill**, and **Sara Watson** will present on **Saturday, February 10, 2018** and the last one **Jennifer Black** on **Saturday, April 21, 2018**. **Note the different locations for the events.**

Program

1:00 Meet, greet and set up

1:30 **Karlene Shippelhoute**, “Northern Israel Excavation”

2:30 Break

2:45 **Lucia Diaz**, “Central and Eastern Sierra Nevada Excavations and Survey”

3:45 Close and clean up

Karlene Shippelhoute

Karlene graduated from University of California Berkeley in 2016 with a double major in Anthropology and Near Eastern Studies. She began 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 last summer she used 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.

Lucia Diaz

Lucia is an undergraduate student 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 supported her attendance at the UC Davis Field School in the Sierra Nevada Mountains. The director of the field school conducted the research project to understand the distribution and economic exploitation of acorns in historic societies.

Annual Scholar Symposium (2)

By

Scholars

Saturday, February 10, 2018

3:00 – 6:30 p.m.

at

Yolo County Library, Arthur F. Turner Branch

1212 Merkley Avenue,

West Sacramento, CA 95691

Program

3:00 Meet, greet and set up

3:30 **Sara Watson** “Middle and Later Stone Age Lithics of South Africa”

4:15 **Patricia McNeill**, “Middle to Upper Paleolithic Transition in Europe”

5:00 **Giulia Gallo**, “Serbian Excavation—Fire Feature”

5:45 **Rosemary Brother**, “FROM FEATURES TO FIGURES: Statistical Analysis of Selected California Native American Baskets

6:00 Close and clean up

Sara Watson

Sara is a second-year graduate student at University of California Davis. She received a BA from University of Texas in 2016. This last summer she participated in the excavation and analysis a very unique site in South Africa, Knysna Eastern Heads Cave 1 (KEH-1). In addition Sara planned 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 “type” assemblages for the Later Stone Age of South Africa. The SAS scholarship supported her collection of data at the Field Museum.

Patricia McNeill

Patricia graduated from University of California Davis spring 2017 and is now into the PhD Program at University of California Davis. As an undergraduate she has interned in three labs and written two honors theses. Last summer she participated 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 supported her field work.

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. This summer she had 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 Rivery 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 supported her leadership role on site as a field laboratory manager.

Rosemary Brother

Rosemary is a third-year graduate student at Sacramento State and a member of Sacramento Archeological Society, Inc. She has two undergraduate degrees: a Bachelor of Fine Arts and a Bachelor of Arts in anthropology both from University of Nevada Reno. She started her graduate education in 2014 and hopes to graduate in 2018. She is working towards finishing her master's thesis: FROM FEATURES TO FIGURES: Statistical Analysis of selected California Native American Baskets. She began collecting data last spring, visiting basketry collections at U.C. Davis, University of Nevada Reno and Sacramento State University, as well as two small private collections. She has analyzed 132 baskets for 104 attributes in each one. She is questioning how her results will compare with the informed but arbitrary ethnic designations being made by well-respected experts, and to see if the data indicated any new directions for future research. Her process is to examine each basket using a trinocular stereo microscope with a 10 mega pixel digital camera at 100 times magnification. Each photo is then compared to a plant samples in her basketry plants botanical collection and to photos of previously identified materials in baskets. She will be delivering this presentation at SAA in March 2018

"New Evidence—Home sapiens in North America at least 15,800 years ago"

By

Jon Erlandson, PhD University of Oregon

Pat O'Grady, PhD, University of Oregon

Mike Collins, PhD - Texas State University and director of Gault School of Archeological
Research (GSAR)

Saturday, March 24, 2018

1:00 – 5:00 p.m.

at

UCD Extension

2901 K Street

Sacramento, CA 95816

In a Symposium on **Saturday, March 24, 2018** three renowned archaeologist will share latest discoveries which push back the probable dates for the peopling of North America to at least 15,800 years ago and support the coastal theory of migration (via “Kelp Highway Hypothesis).

Dr. Jon Erlandson, archaeologist and professor at University of Oregon who has been recently excavating on the Channel Islands will discuss human evolution and theories relative to peopling of the Americas (Kelp Highway Hypothesis). For more information on the latest migration theories see “Finding the first Americans”, by Todd J. Braji, Tom D. Dillehay, Jon M. Erlandson, Richard G. Klein, & Torben C. Rick, *Science*, V. 358, 2017-11-3, pp. 592-594.

In 2016 **Dr. Pat O’Grady**, archaeologist at University of Oregon introduced a group from SAS to the Rimrock Draw site in Oregon where evidence of humane presence older than 15,000 years has been found. At this symposium he will present the results of his excavations. For more information, see <http://www.sci-news.com/archaeology/science-stone-flake-tool-oregon-02577.html>)

We are honored to have **Dr. Michael B. Collins**, archaeologist and Research Associate Professor at Texas State University speak at this symposium. In 2015 he led an SAS archaeological tour of Texas. We visited many sites including the Gault site and saw older than Clovis artifacts found at the Gault site. These lithics were found in a layer under a Clovis assemblage and date between ~13.2 and 15.5 thousand years ago.

Save this date.

Dr. Jon Erlandson has been a professor at UO since 1990. An archaeologist who has done fieldwork in California, Oregon, Alaska, and Iceland, Erlandson has written or edited 16 books and published over 200 scholarly articles. Research and teaching interests include the development of maritime societies, historical ecology in coastal environments, human evolution and migrations, the peopling of the Americas, the history of seafaring, traditional technologies, dating methods in archaeology, geoarchaeology, cultural resource management, and collaborative research with indigenous communities. Since 2005, Erlandson has directed the Museum of Natural and Cultural History and the Oregon State Museum of Anthropology at the UO. He is also a co-editor of the *Journal of Island and Coastal Archaeology*.

Dr. Pat O’Grady is a staff archaeologist at the University of Oregon Museum of Natural and Cultural History. He was an archaeologist for the Oregon Department of Transportation from 2002–2005, and has also worked for the Burns District Bureau of Land Management. He has served on fourteen University of Oregon field schools since 1994, first as a student, then as assistant, supervisor, and instructor. His field school operations are currently focused on Clovis sites in southeastern Oregon, including Sheep Mountain and Sage Hen Gap. Primary research interests include hunter-gatherer subsistence practices, late Pleistocene – early Holocene cultural transitions in the Great Basin of western North America, zooarchaeology, mobility patterns, and remote sensing applications, particularly ground penetrating radar.

Dr. Michael B. Collins is a Research Associate Professor at Texas State University in San Marcos. He specialized in the study of lithic technology and worked with prehistoric collections from North, Central, and South America, as well as the Near East and southwestern Europe. He collaborated on the lithics research for the pre-Clovis site of Monte Verde, Chile. Dr. Collins is currently active in research on the earliest part of the American archaeological record and published *Clovis Blade Technology* (UT Press) and *Clovis Stone Tool Technology* (in press).

Ancient Pueblos and Rock Art of New Mexico Tour

The Sacramento Archeological Society, Inc. is pleased to sponsor a spring 2018 trip to the Southwest (New Mexico and Colorado) to explore native American pueblo culture and rock art. From Monday, **May 7, 2018 through Friday, May 18, 2018** we will tour the area around Albuquerque and Santa Fe.

- The trip will feature pueblos, kivas and pit houses from the 600's BPE to present. We will explore ancient Chacoan culture (1000 to 1300 BPE) including guided tours to **Chaco Canyon** and outliers such as **Salmon, Aztec, and Chimney Rock**. We will also explore non Chacoan contemporary culture of the nearby **Gallina, Bandelier, Galisteo Basin, San Marcos and Pecos**.
- More recent culture will be explored through visits to **Acoma Pueblo – Sun City and Taos Pueblo**.
- Current state of archaeology in New Mexico will also be discussed by archeologists through visits to **Maxwell Museum of Archaeology** in Albuquerque and **Center of New Mexico Archaeology** in Santa Fe.
- Multiple museums will offer information on the history of the area and provide excellent examples of various types of pottery produced in the area over time.
- We will be able to observe the varied landscape of the region as we drive through it and optionally visit the bad lands of **Bisti Wilderness**.
- Last but not least we will view rock art in **Chaco Canyon, Petroglyph National Monument** in Albuquerque and **Petroglyph Pláticas** at Mesa Prieta.

We are pleased to have archaeologists and area specialists leading the tours.

2018 Tour Details

Attendees must be members of Sacramento Archeological Society, Inc. Reservations are accepted on a first come basis. A non-refundable reservation fee of \$50 is required with the reservation. Tour cost includes a tax-deductible contribution to Sacramento Archeological Society of \$50 per person and shared costs for up-front admission/tour fees, snacks, beverages, etc. Shared costs are estimated to be approximately \$30 per person and are due 30 days prior to the tour. 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. Medium priced (<~\$100/ night double occupancy) lodging suggestions will be provided to confirmed attendees.

The itinerary is subject to change at the discretion of Sacramento Archeological Society, Inc., but participants will be notified of significant changes in advance. Weather conditions may impact the itinerary. To access to some sites car pooling will be required. Some sites require a short hike over rough terrain. This activity will be an option as you are able. Be advised that the elevation of many of the sites is greater than 6000'. Outside of Albuquerque which is about 5300' above sea level, most of Northern New Mexico where we will be going is over 7,000' and Nogales Cliff Dwelling is at 8225'. (Chaco is about 6,000', Santa Fe 7,000'). Take this into account in your planning. All participants are required to sign a Hold Harmless Agreement prior to the tour.

The tour is fully booked. To be placed on the wait list notify **Diane Sangster** at diane08@comcast.net

PAST ARCHEOLOGICAL ACTIVITIES

Sacramento Archeological Society, Inc.'s Annual Meeting

After conducting business at our annual meeting on Saturday, December 9th we were honored to have presentations concerning:

- Atlatls and bows from **Kevin Smith**, a graduate student at University of California Davis in Evolutionary Anthropology
- Alaskan excavation in Tanana Valley and survey of the shoreline near Barrow, Alaska by **Erika Ebel**, a first year graduate student at University of California Davis.
- A perspective current research on peopling of North America by **Dennis Fenwick**, an SAS member.

Kevin in collaboration with Martijn Kuypers, Sacramento State University is in the process of replicating California and Great Basin atlatls and bows using stone age tools. They are carefully recording the time required to create the tools and projectile speed of the tools. From this presentation we learned about this tool technology and that its production is not a simple task.

Erika spend time during the 2017 summer in Alaska attending the Adelphi University field school in the Tanana Valley and then stayed in Alaska to survey a shore line near Barrow, Alaska that is threatened by the Barrow Sea. We heard about processes and the finds from these two archeological projects. It was interesting to hear about the differences in approach between discovery archaeology and salvage archaeology.

We thank Carolyn and Gordon McGregor for opening their home for this event and catering it. Over 20 attended. The food was delicious.

MEMBER'S CORNER

Election of 2018 Board of Directors

During the 2017 Annual Meeting the 2018 Board of Directors were elected.

The 2018 board is:

Candidate	Office	Candidate	Office
Tom Johansen	President	Paul K. Davis	Member at Large
Lydia Peake	Vice-President	Jeremy Johansen	Member at Large
Carolyn McGregor	Secretary	Jan Johansen	Member at Large
Diane Sangster	Treasurer	Ruth McElhinney	Member at Large
John Foster	Past President	Roger Peake	Member at Large
		Knuti VanHoven	Member at Large
		Doug La Rocca	Member at Large

Renewal of Annual Memberships

All memberships are renewable on **January 1** annually except for those who join recently (after September of the previous year). Please support the society by promptly paying your **2018** 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 <http://sacarcheology.org/society-membership/> 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 2018

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

_____ Email: _____ Phone: _____

Address: _____

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

Total enclosed \$_____

Welcome New Members

We welcome the following new members: Anna Sandoval, Osie and Tori Lyon, Rosemary Brother and Sandy Frizzell. We look forward to seeing you at our 2018 events.

ARCHAEOLOGICAL REFERENCES

"A Neolithic expansion, but strong genetic structure, in the independent history of New Guinea"

"New Guinea shows human occupation since ~50 thousand years ago (ka), independent adoption of plant cultivation ~10 ka, and great cultural and linguistic diversity today. The research team performed genome-wide single-nucleotide polymorphism genotyping on 381 individuals from 85 language groups in Papua New Guinea and found a sharp divide originating 10 to 20 ka between lowland and highland groups and a lack of non-New Guinean admixture in the latter. All highlanders share ancestry within the last 10 thousand years, with major population growth in the same period, suggesting population structure was reshaping following the Neolithic lifestyle transition. However, genetic differentiation between groups in Papua New Guinea is much stronger than in comparable regions in Eurasia, demonstrating that such a transition does not necessarily limit the genetic and linguistic diversity of human societies." (Bergström, & al., *Science*, V. 357, 2017-9-13, pp. 1160-1163)

"Neandertal tar-making reconstructed – Bark-burning methods may not have required mastery of fire"

"Using just scraps of wood and hot embers, our evolutionary cousins figured out how to make tar, a revolutionary adhesive that they used to attach stones to handles for making spears, chopping tools and other implements. Tar derived from birch bark dates to at least 200,000 years ago at Neandertal sites. Archaeologist Paul Kozowyk of Leiden University in the Netherlands and colleagues re-created the tar-making methods that Neandertals could have used. Three techniques could have yielded enough adhesive for Neandertals' purposes. The lowest-tech approach consisted of rolling up a piece of birch bark, tying it with wood fiber and covering it in a mound of ashes and embers from a fire. Repeating this technique once or twice would yield the small quantity of tar found in a Neandertal site. Other similar techniques using a pit yielded more tar equal to that unearthed at other sites." (*Science News*, 2017-9-30, p. 13)

"The growth pattern of Neandertals, reconstructed from a juvenile skeleton from El Sidrón (Spain)"

"Ontogenetic studies help us understand the processes of evolutionary change. Previous Neandertal studies have focused mainly on dental development and inferred an accelerated pace of general growth. These researchers reported on a juvenile partial skeleton (El Sidrón J1) preserving cranio-dental and postcranial remains. They used dental histology to estimate the age at death to be 7.7 years. Maturation of most elements fell within the expected range of modern humans at that age. The exceptions were the atlas and mid-thoracic vertebrae, which remained at the 5- to 6- year stage of development. Furthermore, endocrinal features suggest that brain growth was not yet completed. The vertebral maturation pattern and extended brain growth most likely reflected Neandertal physiology and ontogenetic energy constraints rather than any fundamental difference in the overall pace of growth in this extinct human." (Rosas, & al., *Science*, V. 357, 2017-9-22, pp. 1282-1286)

"Neandertals gave 'lost' African DNA back to moderns"

"When Neandertals mated with modern humans, they gave back thousands of ancient African gene variants that Eurasians had lost when their ancestors swept out of Africa in small bands, perhaps 60,000 to 80,000 years ago. A team from Vanderbilt University in Nashville found ancient African variants when they analyzed the genomes of more than 20,000 people in the 1000 Genomes Project and

Vanderbilt's BioVU data bank. They noticed that stretches of chromosome inherited from Neandertals also carried ancient alleles or mutations found in all the Africans they studied. The researchers found 47,261 of the single-base changes across the genomes of Europeans and 56,497 in Asians. In Eurasians these alleles are only found next to Neandertal genes, suggesting all this DNA was acquired at the same time, when the ancestors of today's Eurasians mated with Neandertals roughly 50,000 years ago. The explanation is that these alleles represent the ancestral human condition, inherited by both Neandertals and modern humans in Africa from their common ancestor." (Gibbons, Ann, *Science*, V. 358, 2017-10-27, p. 431)

"Southern African ancient genomes estimate modern human divergence to 350,000 to 260,000 years ago"

"Southern Africa is consistently placed as a potential region for the evolution of *Homo sapiens*. Researchers presented genome sequences, up to 13x coverage, from seven ancient individuals from KwaZulu-Natal, South Africa. The remains of three Stone Age hunter-gatherers (about 2000 years old) were genetically similar to current-day southern San groups, and those of four Iron Age farmers (300 to 500 years old) were genetically similar to present-day Bantu-language speakers. They estimated that all modern-day Khoe-San groups have been influenced by 9 to 30% genetic admixture from East African/Eurasian. Using traditional and new approaches, they estimated the first modern human population divergence time to be between 350,000 and 260,000 years ago. This estimate increases the deepest divergence among modern humans, coinciding with anatomical developments of archaic humans into modern humans, as represented in the local fossil record." (Schlebusch, & al., *Science*, V. 358, 2017-11-3, pp. 652-655)

"How Africans evolved a palette of skin tones – Gene variants show that the evolution of skin color was anything but black and white"

"Evolutionary geneticist, Sarah Tishkoff of the University of Pennsylvania discovered a few gene variants responsible for a palette of African skin tones. The researchers used a light meter to measure skin reflectance of 2092 people in Ethiopia, Tanzania, and Botswana. They found the darkest skin in the Nilo-Saharan pastoralist populations of eastern Africa and the lightest skin the San of southern Africa. At the same time, they collected blood samples and sequenced more than 4 million single nucleotide polymorphisms (SNPs). They found four key areas of the genome where specific SNPs correlate with skin color. The first surprise was that SLC24A5 which swept Europe also common in East Africa—found in as many as 1/2 the members of some Ethiopian groups. This variant arose 30,000 years ago and was probably brought to eastern Africa by people migrating from the Middle East. The team also found variants of two neighboring genes, HERC2 and OCA2 which are associated with light skin, eyes and hair in Europeans but arose in Africa; these variants are ancient and common to the light-skinned San people. The team proposed that the variant arose in Africa as early as 1 million years ago and spread later to Europeans and Asians. The most dramatic discovery concerned a gene known as MFSD12. Two mutations that decrease expression of this gene were found in high frequencies in people with the darkest skin. These variants arose about a half-million years ago, suggesting that human ancestors before that time may have had moderately dark skin, rather than the deep black hue created today by these mutations. These same two variants are found in Melanesians, Australian Aborigines, and some Indians. These people may have inherited the variants from ancient migrants from Africa who followed a "southern route" out of East Africa, along the southern coast of India to Melanesia and Australia." (Gibbons, Ann, *Science*, V. 358, 2017-10-13, pp. 157-158)