Sacramento Archeological Society, Inc.
Newsletter

www.sacarcheology.org. May/June – **2026**

UPCOMING EVENTS CALENDAR

May 2026

May 2, 2026 – Saturday 2:00 – 3:30 PM PT - **SAS Webinar** Scholar Presentation: Zoom: **Daniel Goring,** UC Davis PhD Student, "Neanderthal Extinction impacted by paleoclimate?"

June 2026

June 6, 2026 - Saturday 2:00 – 4:30 PM PT - **SAS Webinar** Scholar Presentations: Zoom **Hayley Kievman**, PhD Student at University of Utah, "Analysis of teeth from CA Ohlone burials" and **Madison McCartin**, PhD Student at UC Davis, "From Iberia to the Eastern Steppe: Human and Neanderthal Subsistence Strategies at the Edges of Eurasia"

See announcements: https://sacarcheology.org/announcements/ for **webinar access information** and calendar: https://sacarcheology.org/archaeology-activities/calendar-of-events/ for the complete **set of events** in our website: www.sacarcheology.org.

The seminars will start at 2:00 PM PT generally on the first Saturday of the month and formally conclude at about 3:30 PM. All presentations are provided via Zoom. Some will be held in Davis, CA at Pena Archaeology Facility (607 Pena Dr. Suite 600. Friends are welcome and also invited to join our organization. There is no participation fee. All are invited to attend the webinar before 2:00 PM PT, 1:45 for chat time.

UPCOMING EVENTS

SAS Webinar

Saturday, May 2, 2026

2:00 – 3:30 PM PT

Scholar Seminar

"Middle to Upper Paleolithic transition"

by

Daniel Goring, PhD Student at University of California Davis

Abstract: The Middle to Upper Paleolithic transition (50-40 ka.) is a critical period for understanding human climate change adaptation. This transitional period includes the disappearance of Neanderthals and the appearance of *Homo sapiens* in northern Eurasia. While previous climatic studies rely on broad proxies like marine isotope stages, pollen, and speleothems, these lack the resolution and site specificity needed to understand local conditions where these human transitions took place. Analysis of faunal enamel addresses this gap by enabling long-term and seasonal climatic reconstruction at the site level. This method is applied at Trou al'Wesse in Belgium – key for understanding Neanderthal extinction and human expansion into northern Europe – and at Tolbor-16 and -17, Mongolia, which document early *Homo sapiens* movement into northern Asia. Analysis at these sites provides the local climatic context of extinction and/or migration.

About the speaker: **Daniel Goring** is a PhD student at University of California in Anthropology-Evolutionary Wing. He received a scholarship in 2025 from Sacramento Archeological Society to fund travel to Europe for obtaining samples, training in phosphate extraction for $\delta^{18}O$ analysis, and to examine stratigraphy at Trou al'Wesse and Tolbor-16 and -17. Daniel's talk will discuss the results of his research.

SAS Webinar

Saturday, June 6, 2026

2:00 – 4:30 PM PT

Scholar Seminar

"Ohlone Lifeways 10,500 Years Ago" by

Hayley Kievman, PhD student at University of Utah

and

"From Iberia to the Eastern Steppe: Human and Neanderthal Subsistence Strategies at the Edges of Eurasia" by

Madison McCartin, PhD student at University of California Davis

Abstract: The Muwekma Ohlone Tribe of the San Francisco Bay Area gave permission to Dr. Alexandra M. Greenwald, Department of Anthropology, University of Utah to do archaeometric (C14/AMS) dating analysis on their recovered remains at CA-SCL-1070/H, a 10,500 years old site located on Walsh Avenue, Santa Clara. This research became the dissertation topic for Dr. Greenwald's graduate student, **Hayley Kievman**. In this talk Hayley will report on the results of stable isotope, radiocarbon, proteomic, and ancient DNA analysis performed on these skeletal elements. Since the goal of the analysis was to learn more about the ancestor's lifeways at this ancestral site, she will discuss her results highlighting diet and human adaptation to past climate conditions by these Ohlone ancestors.

About the speaker: **Hayley Kievman** is a fourth year PhD student at University of Utah who was honored with a scholarship from Sacramento Archeological Society in 2024. She received her M.S. Anthropology at University of Utah and B.A. Anthropology at Penn State. As an undergraduate and post-baccalaureate researcher at Penn State she contributed to the Human Environment Dynamics lab's work on anthropogenic fire activity through the creation of sophisticated database and presented her research on the ecology of Cayman Island fishers facing climate change at a national level conference. In the first two years in the University of Utah Hayley formulated a Master's project examining shellfish remains from an archaeological site in Northwest California to address mussel harvesting strategies in light of Late Holocene climatic fluctuations. Her findings suggest ancient implementation of sustainable harvesting practices still employed by descendant communities today in the region. She has published journal articles, performed extensive research and has sizable field experience. She is an on-call archaeologist with Far Western Anthropological Research Group, Davis, CA.

Abstract: The Middle-Upper Paleolithic transition marks an important shift in hominin biology and culture. The causal forces behind this transition are debated and plausible hypotheses include the influence of climate change, demographic pressure or competition between Neanderthals and humans. Madison's dissertation focuses on hominin subsistence practices at geographic margins of Eurasia. In this presentation she will discuss her analysis of animal remains in Spain, Belgium, and Mongolia to ascertain the hunting preferences of hominins and postulate possible differences in subsistence strategies between *Homo sapiens* and Neanderthals, which may have led to Neanderthals' demise.

About the speaker: **Madison McCartin** is a third year PhD student at University of California Davis who was honored with a scholarship from Sacramento Archeological Society in 2025. She received a B.A with highest honor in Anthropology *magna cum laude* from New York University, and a M.Sc. in Archaeological Sciences from Institute for Archaeological Sciences at the Eberhard-Karls University of Tübingen. Her research interests include the Middle and Upper Paleolithic, hominin subsistence, paleoecology, zooarchaeology, faunal analysis, taphonomy, experimental archaeology, paleoproteomics, ZooMS, stable isotope analysis, personal ornamentation, osseous technology, bone fracture mechanics, 3D scanning and morphometrics. Her archaeological excavations include over 70 weeks in Germany, Spain, Belgium, Mongolia, the United Kingdom, Armenia and South Africa. She has extensive experience analyzing faunal remains from Paleolithic sites in Germany. She has published five articles and given numerous presentations.

Madison McCartin @ excavation site

PAST EVENTS

SAS Webinar

- "Medieval Puberty in Szekleer Transylvania" by **Bella Garcia**, Graduate student at University of Dundee

- "Oral History Data Storytelling at an Archaeological Field School" by **Janel Pleskac**, Graduate student at Sonoma State University

- "Archaeology Field School – Ireland" by **David Nelson**, student at Las Positas College

On Saturday, March 7, 2026 to an audience of SAS members and friends on Zoom three 2024 scholarship recipients talked about their experiences at field schools.

Bella Garcia attended the Juvenile Osteology Research Laboratory Workshop in Romania. She reported on a case study of two skeletons from a cemetery at Papdomb in Transylvania. The bone analysis determined that G-846 was a 15-16 year old male and G-855 was probably a female. Both were in later stages of puberty when they died.

Janel Pleskac attended the "Castles in Communities Project", Irish Archaeology Field School at Ballintober Castle, Ireland. She focused on the cultural heritage of Roscommon County by gathering cultural narratives (music). Her goal was to better understand the community and emphasize the value of oral history.

David Nelson also attended the "Castles in Communities Project", Irish Archaeology Field School at Ballintober Castle, Ireland. In a training setting he participated in the excavation of Ballintober Castle. He was excited to find a pet bull horn and a horse or deer tooth during his digging. He plans to attend the field school next year.

SAS Tour - Combined Jornada Region Tour and Paquimé, Mata Ortiz and area surrounding Casas Grandes, Chihuahua, Mexico

Between April 7 and 14 eleven SAS members including two from Arizona and two from Colorado participated in an archaeological tour in New Mexico and between April 15 and 19 ten SAS members (two from Arizona and four from Colorado) toured Chihuahua, Mexico featuring Paquimé and its culture. This tour was provided jointly by Jornada Research Institute and Fiesta Tours International.

The Jornada Mogollon tour featured

- Site visit to Creekside Village site (Jornada Mogollon culture canals, pit houses and kiva) and a lecture by David Greenwald, archaeologist/primary investigator

- Viewing of Petroglyphs and cultural aspects at Hueco Tanks, Alamo Mountain, Three Rivers, and Willow Springs
- Exploring White Sands dune field and enjoying exhibits
- Visiting Pueblos and Mission Churches at Quarai and Abó
- Exploring Museums: El Paso Archaeological Museum, Geronimo Springs Museum, NM Museum of Space History
- Reviewing Fort Craig Frontier Fort through stories from the cemetery excavation by David Greenwald

Creek side excavation of pit house

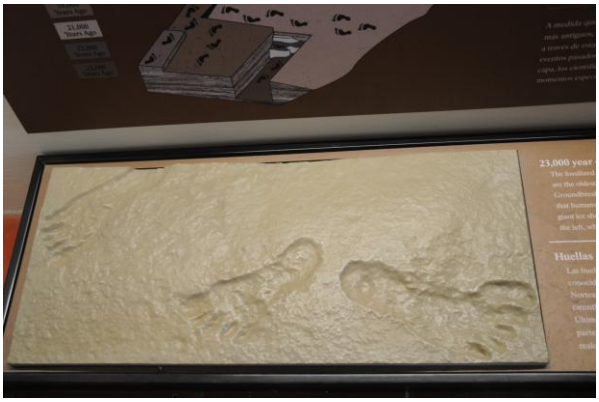
Creek side kiva

Huaco Tanks mask

Alamo Mountain with rock art

Three Rivers Long Necked Cat

Willow Springs Panel



Replica of White Sands 23,000 Years old footprint

White Sands Cottonwood

Quarai Church and Pueblos

Abó Ruins

Fort Craig Ramparts

Mogollon pots at Geronimo Springs Museum

The Mexico portion of the tour offered

- On-site tour of Paquimé conducted by archaeologist, Paul Minnis
- Exploration of Cueva de la Olla, Windows Cave, and Coral Cave
- Visits to site #242 and site #202 contemporary with Paquimé and Convento and Hacienda de San Diego sites
- Visits with and demonstrations by potters at Mata Ortiz
- Viewing of rock art site near river

Paquimé

Paquimé Macaw Pens

Cueva de la Olla

Coral Cave

Site 242 Ball Court

Convento Site searching for sherds

SAS Webinar "Use of Culturally Modified Trees to Study Basque Sheepherder Movement and Carving Habits" by Kiana Hugins, Graduate Student at Chico State University

On Saturday, April 4 to a Zoom audience of SAS members and friends Kiana reviewed her Master's thesis on the use of culturally modified trees to study Basque Sheepherder Movement and Carving Habits. She used geospatial data from 55 site records in Lassen National Forest and applied GIS-based methods such as least-cost path to deduce sheepherders' movement and carving habits. The result was a division of carvings into two groups: group 1 with 218 trees and 298 carvings and group 2 with 149 trees and 181 carvings. Group 1 was more strongly northwest facing, with less variable slope and lower path cost. The largest topic of carvings was text with date and name being the largest images. The earliest date was 1898 and 1975 was the latest. The dates 1920 and 1960 were the most common. Twenty names were repeated. Of the 84 images humanoids were the most popular. The second most common was hearts and hands. There were 25 self-portraits, 5 women and 10 erotic images. In conclusion herders seemed to know which destinations of aspen groves provided the best conditions for them to process their daily lives while working. She conducted this research to enrich California's archaeological narratives about placemaking, land use and immigrant histories.

MEMBER'S CORNER

Major Donors

We are pleased to acknowledge our major contributors for 2025/2026. These donations support our scholarship program.

Patron (**$1000** or more, listed in alphabetical order)
Paul K. Davis and Knuti VanHoven
Jan and Tom Johansen
Dennis Fenwick and Martha Lewis
Ruth McElhinney
Carolyn and Gordon McGregor

Sponsor ($100 - $999)
George W. Foxworth
Jeremy Johansen
Teresa Steele

New Members

We welcome Kiera Colorado as a new student member.

Annual Memberships

All memberships are renewable on **January 1** annually except for those who joined recently (after September 1 of the previous year). Please support the society by promptly paying your **2026** dues. Remember your dues help make **scholarships** possible. We keep overhead low so that the funds can be used to support students. You may now use our web site https://sacarcheology.org/society-membership/pay-dues/ to renew and make payment using a credit card or Paypal. Remember a membership benefit is email receipt of archaeological/anthropological articles and notices of related events.

The annual dues are:	
Student/Limited Member	$15
Individual Membership	$30
Family Membership	$40
Sponsor	$100 – 999 (individual)
	$500 – 999 (business)
Patron	$1000

Alternatively, please make out your check to "**Sacramento Archeological Society, Inc**." and mail it to:

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We really appreciate your support.

Annual Dues for 2026

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

Total enclosed $_____

ARCHAEOLOGICAL REFERENCES

Recent Articles

The reviewed article(s) chronologically presented (oldest subject first) are:

- "Various early hominin species lived in Ethiopia"
- "Dogs have deep roots in ice-age Europe" and "Genomic history of early dogs in Europe"
- "How DNA in dirt is shaking up the study of human origins"
- "Ancient Peruvians hauled live parrots over the Andes"
- "An ancient DNA perspective on the Russian conquest of Yakutia"
- "In the teeth of Napoleon's retreat"

"Various early hominin species lived in Ethiopia"

"The Afar-triangle region of northeastern Ethiopia has yielded an abundance of vertebrate fossils, including some of the richest deposits of the early hominins of Africa. The absence of the hominin *Paranthropus*—a distinctive group of species that had extremely powerful jaws and large teeth—was thought to indicate that members of this genus simply were not in the region, despite having been found at sites ranging from South Africa to southern Ethiopia from 2.75 million until 1 million years ago. Now findings reveal that *Paranthropus* was in Afar, too. Alemseged *et al.* describe a partial jaw from the Afar site of Mille-Logya that is clearly attributable to *Paranthropus*. " (Carol V. Ward, *Nature*, V 650, 2026-02-12 pp. 305-307)

"Genomic history of early dogs in Europe" And "Dogs have deep roots in ice-age Europe"

"The earliest morphologically identifiable dogs are from Europe and date to at least 14,000 years ago, although early remains are also found in other regions. The origin of early dogs in Europe and their relationships to other dogs, has remained elusive the absence of genome-wide data. Similarly, although dogs were the only domestic animal to predate agriculture, little is known about how the arrival of Neolithic farmers from Southwest Asia affected the dogs living with European Mesolithic hunter-gatherers. The researchers analyzed 216 canid remains, including 181 from Paleolithic and Mesolithic Europe. They developed a genome-wide capture approach that enriched endogenous DNA by 10-100 fold and could distinguish dog from wolf ancestry for 141 of 216 remains. The oldest dog data that they recovered are from a 14,200-year-old dog from Kesslerloch site in Switzerland and they found that it shares ancestry with later worldwide dogs-inconsistent with the hypothesis that European Upper Paleolithic dogs derived wholly from a separate domestication process. The Kesslerloch dog already displays more affinity to Mesolithic, Neolithic and present-day European dogs than to Asian dogs,

demonstrating that dog genetic diversification had started will before 14,200 years ago. They found a Neolithic influx of Southwest Asian ancestry into Europe, but this seems to have been of smaller magnitude than in humans, suggesting that Mesolithic dogs contributed substantially to Neolithic and ultimately, probably also to modern European dogs." (Anders Bergström *et al*, *Nature,* V 651 2026-03-26 pp. 986-1003, 890-891)

"How DNA in dirt is shaking up the study of human origins

Researchers are pulling clues from genetic material in ace age soils and rewriting chapters of human history"

"The study of ancient DNA from sediments has matured into one of the most exiting tools for studying the past. Interest in soil DNA surged nearly ten years ago, when scientists found that human DNA could also be isolated from ancient sediments. Laboratories that had once focused on extracting genetic material from precious fossils are now turning their attention to dirt. The problem is that ancient human DNA in soil is vanishingly rare compared with the DNA of soil microorganisms and other fauna. To improve their odds of finding human DNA in samples, researchers at the Max Planck Institute for Evolutionary Anthropology developed probes that capture human sequences selectively. At the Trou Al'Wessa cave in Belgium, for instance, sedaDNA (sedimentary ancient DNA) results confirmed a long-held suspicion-based on characteristic stone tools- that Neanderthals had occupied the site.

Some of the DNA appeared in layers without fossils. In a more extensive study of roughly 700 permafrost sediment specimens from Devisova Cave, one sample from a deep layer indicated that Neanderthals had arrived at the site 170,000 years ago - 30,000 years earlier than fossil evidence suggested. And even though no bones have been found so far, sedaDNA places early modern humans in the cave from around 45,000 years ago.

Despite the field's successes, scientists have frustratingly few clues to predict which sediment types are best, meaning that their attempts often come up empty. If researchers systematically collect and report soil characteristics—such as PH, mineral composition and history of disturbance—then the data can be mined for clues about optimal soil characteristics." (Dyani Lewis, *Nature,* V 651 2026-03-26 pp. 868-870)

"Ancient Peruvians hauled live parrots over the Andes"

"More than 800 years ago on Peru's arid coastline, elites in the Ychsma culture signaled their power by wearing headdresses festooned with brilliantly colored feathers. But puzzlingly, these feathers came from parrots native to rainforests hundreds of kilometers away. A study in *Nature Communications* finally reveals how the Ychsma acquired these showy ornaments: from wild parrots that were caught in the Amazon and then transported, live, over the Andes in journeys that likely took weeks to complete. Ancient DNA found in several headdress feathers shows high genetic diversity, usually a sign of wild breeding. Moreover, the feathers' chemical makeup indicates that parrots fed on fertilized maize later in life, suggesting they were kept captive by Ychsma bird handlers. The find highlights pre-Inca Andean societies'' sophisticated trade networks—and their flair for conspicuous consumption." (Christina Larson, *Science*, 2026-03-12 p. 1092)

“An ancient DNA perspective on the Russian conquest of Yakutia”

“Yakut communities from northeastern Siberia inhabit some of the coldest environments on Earth, preserving an extraordinary archaeological record. Their history was profoundly reshaped by the Russian conquest, which intruded cereals, pathogens and Christianity beginning in 1632. However, the biological impact of these transformations remains unknown. The researchers generated extensive ancient DNA data to elucidate contemporary changes in Yakut genomic diversity and oral microbiomes. They found Yakut origins tracing back to local populations that admixed with Trans-Baikal groups migrating as the Great Mongol Empire spread. Despite the Russian conquest, the Yakut gene pool and oral microbiomes appeared largely stable, although smallpox strains distinct from those documented in Europe by approximately 1650 circulated. Marital practices generally maintained low consanguinity, with the exception of one female bearing the latest markers of traditional shamanism, who was the daughter of second-degree relatives.” (Éric Crubézy *et al*, *Nature,* V 650 2026-02-12 pp. 389-398)

“In the teeth of Napoleon’s retreat”

“In the autumn of 1812, Napoleon and his Grande Army of over 500,000 soldiers retreated from Moscow with few supplies and in the face of winters. It is perhaps not surprising that the retreating French would be vulnerable to disease, and the main suspects have long been typhus and trench fever, both documented in historical accounts. Barbieri *et al*. managed to recover and sequence ancient DNA from the teeth of 13 French soldiers who died in Vilnius, Lithuania. However, there was no trace of either disease. Instead, they detected *Salmonella enterica enterica*, which causes paratyphoid fever, and *Borrelia recurrentis*, which causes relapsing fever and is transmitted by lice. One can only imagine the appalling conditions the French suffered during this disastrous campaign.” (Caroline Ash, *Science*, 2026-01-08 p. 144

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