



Sacramento Archeological Society, Inc. Newsletter

www.sacarcheology.org.

January/February - 2025

UPCOMING EVENTS CALENDAR

Please note the following events for the next two months. The January presentation will be in person at Pena Archaeology Facility (607 Pena Dr. Suite 600; Davis, CA) and via Zoom. The February event will be only via Zoom. We encourage in person attendance when possible. Both events will be Saturday afternoons.

January 2025

January 11, 2025 - Saturday 2:00 – 4:15 PM PT- **SAS Meeting: Mike Rondeau**, archaeologist, “California Fluted Points, Fantasies and Fables”, Pena Archaeology Facility (607 Pena Dr. Suite 600; Davis, CA) and via Zoom

February 2025

February 8, 2025 – Saturday 2:00 – 3:30 PM PT - **SAS Webinar: Annabell Garcia** – “Slavia Field School in Poland”, Cal State University San Bernardino; **Morgan Hall** – “Excavation at Kaillachuro, Peru”, UCD; **Erin Mooneyham** – “Blue Oak Ranch Reserve Field School”, UCD

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.

For all SAS Webinars friends are welcome and also invited to join our organization. There is no participation fee.

UPCOMING EVENTS

SAS Webinar

Saturday, January 11, 2025

2:00 – 3:30 PM PT

“California Fluted Points, Fantasies and Fables”

By

Michael F. Rondeau,

Archaeologist, sole proprietor of Rondeau Archeological

at

Pena Archaeology Facility (607 Pena Dr. Suite 600; Davis, CA) and via Zoom

What characterizes fluted points and where are they found in the Far West? The CalFLUTED (California Fluted Lanceolate Uniform Testing and Evaluation Database) project has been an undertaking by Michael F. Rondeau to analyze fluted points in California, Nevada, Oregon, and Utah. His book Fluted Points of the Far West resulting from this project provides first large-scale overview of fluted points in the far western United States detailing their attributes, trends in production, and range of variability. In this talk Mike will discuss the goals, findings and implications of CalFLUTED project and will present basic facts and surprise findings regarding fluted points in California and the Far West. Project findings and resultant data are used to test commonly held fluted point beliefs. Questions will be welcomed.

Michael F. Rondeau is a noted lithics expert specializing in western North American fluted projectile points and their related technology. He has been Research Director of the Archaeological Study Center at the California State University, Sacramento, and an archaeologist for the Office of Historic Preservation, California State Department of Parks and Recreation, and the California State Department of Transportation. He is currently sole proprietor of Rondeau Archeological in Sacramento, specializing in technological lithic analysis and research. Current studies include the California Fluted Lanceolate Uniform Testing and Evaluation Database (CalFLUTED) project. In 2023 he published Fluted Points of the Far West through the University of Utah Press summarizing results of CalFLUTED project.

See announcements: <https://sacarcheology.org/announcements/> for **webinar access information**.

SAS Webinar

Saturday, January 11, 2025

2:00 – 3:30 PM PT

Scholar Presentations

2:00 – 2:30 PM PT – “Slavia Field School in Poland” by **Annabell Garcia**, Cal State University San Bernardino student

Bella will relate her experience at the Mortuary Archaeology Field School in Giecz, Poland.

2:45 – 3:30 PM PT – “Excavation at Kaillachuro, Peru” by **Morgan Hall**, University of California, Davis student

Morgan will summarize the preliminary faunal analysis from the site of Kaillachuro in the Lake Titicaca region of southern Peru. The findings from this field season will build into further dissertation research by her.

3:30 – 4:15 PM PT — “Blue Oak Ranch Reserve Field School, UCD” by **Erin Mooneyham** University of California, Davis student

Erin will discuss the excavation and its finds from the 2024 field school.

The webinar will start at 2:00 PM PT. It is recommended that you join a few minutes prior to 2:00 PM PT.

PAST EVENTS

SAS Webinar “Some Astronomy in Classical Hohokam and Mimbres Locations”

On November 9, 2024 via Zoom Robert Garfinkle, FRAS (Fellow Royal Astronomical Society) updated 15 attendees on astronomical events captured by Hohokam and Mimbres indigenous groups in the Southwest. After reviewing lunar observations such as the major and minor lunar standstills Bob talked about how Hohokam used Casa Grande in present day Arizona to observe the solstices and equinoxes. He then told about the 1054 Supernova Explosion in the Crab nebula and its possible observation by the Mimbres.

SAS Webinar “Archaeological Research on Norse in Greenland”

On December 7, 2024 via Zoom and in person at UC Davis campus, Room 302 Young Hall Dr. Christyann Darwent, Professor of Archaeology, UC Davis reviewed the history of Norse in Greenland, Iceland and North America. Her arctic field research in western Alaska, northwestern Greenland and high arctic islands of Nunavut gave her perspectives on the Norse experience in Greenland. Saga accounts were also sources for the history. Eric the Red and Leif Eriksson were highlighted characters. The last recorded event was a wedding in 1408. In addition to history Christy talked about the brightly colored garments, trade, walrus, and interaction with the Inuit.

MEMBER'S CORNER

Memberships

We thank everyone who has renewed your membership and welcome Rodolfo Leon as a new member.

2025 Board of Directors

During the 2024 Annual Meeting the 2025 Board of Directors were elected. The 2025 Board of Directors:

Candidate	Office	Candidate	Office
Jan Johansen	President	Debra Brinson	Member at Large
Paul K. Davis	Vice-President	Rae Ann Eckstrom	Member at Large
Lynette Blumhardt	Secretary	Kim Frasse	Member at Large
Tori Lyon	Treasurer	Jeremy Johansen	Member at Large
Tom Johansen	Past President	Martie Lewis	Member at Large
		Ruth McElhinney	Member at Large
		Carolyn McGregor	Member at Large
		Lydia Peake	Member at Large
		Roger Peake	Member at Large
		Denise Ruzicka	Member at Large
		Knuti VanHoven	Member at Large

Major Donors

We are pleased to acknowledge our major contributors for 2023/4. These donations support our scholarship program.

Patron (\$1000 or more, listed in alphabetical order)

Paul K. Davis and Knuti VanHoven

Dennis Fenwick and Martha Lewis

Jan and Tom Johansen

Ruth McElhinney

Carolyn and Gordon McGregor

Sponsor (\$100 - \$999)

OSISoft a division of AVEVA

Lynette Blumhardt

Paul K. Davis and Knuti VanHoven

George W. Foxworth

Jeremy Johansen

Tori Lyon

Roger and Lydia Peake

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 **2025** 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:

Sacramento Archeological Society, Inc.
P.O. Box 163287
Sacramento, CA 95816-9287

We really appreciate your support.

Annual Dues for 2025

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

_____ **Email:** _____ **Phone:** _____

Address:

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:

- “Growing up slowed down for early Homo individual – Human children pair fast growth of a large brain with slow body growth. Ancient Homo fossil teeth reveal that *hominin* dental growth rates began to slow before there was a major increase in brain size compared with apes.”
- “Footprint evidence for locomotor diversity and shared habits among early Pleistocene hominins”
- “Extensive pedigrees reveal the social organization of a Neolithic community”
- “The rise and transformation of Bronze Age pastoralist in the Caucasus”
- “A Scottish provenance for the Altar Stone of Stonehenge”
- “Quakes added to Pompeii death toll – Building collapses killed people sheltering from a volcano’s fury”
- “Remote highland city upends ideas of urbanism – Drones and lidar uncover high-altitude Uzbek site, part of the medieval Silk Road trade”
- “No ‘collapse’ for ancient people on Rapa Nui – New genomic archaeological evidence counters influential tale of ecological suicide”

[“Growing up slowed down for early Homo individual – Human children pair fast growth of a large brain with slow body growth. Ancient Homo fossil teeth reveal that *hominin* dental growth rates began to slow before there was a major increase in brain size compared with apes”](#)

“Human life history is characterized by an extended period of immaturity during which there is a disjunction between cerebral and somatic growth rates. This mode of ontogeny is thought to be essential for the acquisition of advanced cognitive capabilities in a socially complex environment while the brain is still growing. Key fossil information about when and how this pattern evolved can be gleaned from the teeth of fossil hominins because dental development informs about the pace of life history. Researchers show that the first evolutionary steps towards an extended growth phase occurred in the genus *Homo* at least 1.77 million years ago, before any substantial increase in brain size. The researchers used synchrotron phase-contrast tomography to track the microstructural development of the dentition of a subadult early Homo individual from Dmanisi, Georgia. The individual died at the age of 11.4 ± 0.6 years, shortly before reaching dental maturity. Tooth growth rates were high, similar to rates in living great apes. However, the Dmanisi individual showed a human-like delayed formation of the posterior relative to the anterior dentition, and a late growth spurt of the dentition as a whole. The unique combination of great-ape-like and human-like features of dental ontogeny suggests that early *Homo* had evolved an extended growth phase before a general slow-down in life history, possibly related to biocultural reproduction rather than brain growth.” (Debbie Guatelli-Steinberg. *Nature*, V635, 2024-11-28 pp. 820-821) See also (Christoph P.E. Zollikofer *et al.* *Nature*, V635, 2024-11-28 pp. 906-911)

“Footprint evidence for locomotor diversity and shared habitats among early Pleistocene hominins”

“For much of the Pliocene and Pleistocene, multiple hominin species coexisted in the same regions of eastern and southern Africa. Due to the limitations of the skeletal fossil record, questions regarding their interspecific interactions remain unanswered. The researchers report the discovery of footprints (~1.5 million years old) from Koobi Fora, Kenya, that provide the first evidence of two different patterns of Pleistocene hominin bipedalism appearing on the same footprint surface. New analyses show that this is observed repeatedly across multiple contemporaneous sites in the eastern Turkana Basin. These data indicate a sympatric relationship between *Homo erectus* and *Parathropus boisei*, suggesting that lake margin habitats were important to both species and highlighting the possible influence of varying levels of coexistence, competition, and niche partitioning in human evolution.” (Kevin G. Hatala *et al.*, *Science*, V386, 2024-11-29 pp. 1004-1010)

“Extensive pedigrees reveal the social organization of a Neolithic community”

“Social anthropology and ethnographic studies have described kinship systems and networks of contact and exchange in extant populations. However, for prehistoric societies, these systems can be studied only indirectly from biological and cultural remains. Stable isotope data, sex and age at death can provide insights into demographic structure of a burial community and identify local versus non-local childhood signatures, archaeological data can reconstruct the biological relationships between individuals, which enables the reconstruction of pedigrees, and combined evidence informs on kinship practices and residence patterns in prehistoric societies. This article reports ancient DNA, strontium isotope and contextual data from more than 100 individuals from the site Gurgy ‘les Noisats’ France, dated to the western European Neolithic around 4850 – 4500 BC. The researchers find that this burial community was genetically connected by two main pedigrees, spanning seven generations, that were patrilineal and patrilineal, with evidence for female exogamy and exchange with genetically close neighboring groups. The microdemographic structure of individuals linked and unlinked to the pedigrees reveals additional information about the social structure, living conditions and site occupation. The absence of half-siblings and the high number of adult full siblings suggest that there were stable health conditions and a supportive social network, facilitating high fertility and low mortality. Age-structure difference and strontium isotope results by generation indicate that the site was used for just a few decades, providing new insights into shifting sedentary farming practices during the European Neolithic.” (Maïté Rivollat, *et al. Nature*, V620, 2024-8-17 pp. 600-606)

“The rise and transformation of Bronze Age pastoralist in the Caucasus”

“The Caucasus and surrounding area, with their rich metal resources, became a crucible of the Bronze Age and the birthplace of the earliest steppe pastoralist societies. Yet, despite this region having a large influence on the subsequent development of Europe and Asia, questions remain regarding its hunter-gatherer past and its formation of expansionist mobile steppe societies. The researchers present new genome-wide data for 131 individuals from 38 archaeological sites spanning 6,000 years. They find a strong genetic differentiation between populations north and south of the Caucasus Mountains during the Mesolithic, with Eastern hunter-gatherer ancestry in the north and a distinct Caucasus hunter-gatherer ancestry with increasing East Anatolian farmer admixture in the south. During the subsequent Eneolithic period, they observe the formation of the characteristic West Eurasian steppe ancestry and heightened interaction between the mountain and steppe regions, facilitated by technological developments of the Maykop cultural complex. By contrast, the peak of pastoralist activities and territorial expansion during the Early and Middle Bronze Age is characterized by long-term genetic stability. The Late Bronze Age marks another period of gene flow from multiple distinct sources that coincides with a decline of steppe culture, followed by a transformation and absorption of the steppe ancestry into highland populations.” (Ayshin Ghalichi, *et al. Nature*, V635, 2024-11-28 pp. 917-925)

“A Scottish provenance for the Altar Stone of Stonehenge”

“Understanding the provenance of megaliths used in the Neolithic stone circle at Stonehenge, southern England, gives insight into the culture and connectivity of prehistoric Britain. The source of the Altar Stone, the central recumbent sandstone megalith, has remained unknown, with recent work discounting an Anglo-Welsh Basin origin. In this article they present the age and chemistry of detrital zircon, apatite and rutile grains from within fragments of the Altar Stone. The detrital zircon load largely comprises Mesoproterozoic and Archaean sources, whereas rutile and apatite are dominated by a mid-Ordovician source. The ages of these grains indicate derivation from an ultimate Laurentian crystalline source region that was overprinted by Grampian (around 460 million years ago) magmatism. Detrital age comparison to sedimentary packages throughout Britain and Ireland reveal a remarkable similarity to the Old Red Sandstone of the Orcadian Basin in northeast Scotland. Such a provenance implies that the Altar Stone, a 6 ton shaped block, was sourced at least 750 km from its current location. The difficulty of long-distance overland transport of such massive cargo from Scotland, navigating topographic barriers, suggests that it was transported by sea. Such routing demonstrates a high level of societal organization with intra-Britain transport during the Neolithic period.” (Anthony J. I. Clarke, *et al. Nature*, V632, 2024-8-15 pp. 570-575)

“Quakes added to Pompeii death toll – Building collapses killed people sheltering from a volcano’s fury”

“In A.D. 79, a massive volcano in southern Italy explosively awoke, leading to one of the ancient world’s deadliest natural disasters. Ash and gas from the eruption killed at least 1,500 people in the city of Pompeii. Now, an analysis suggests that powerful earthquakes concurrent with the eruption may have been yet another killer, researchers report July 17 in *Frontiers in Earth Science*. In the most recent analysis, volcanologist Domenico Sparice of the Istituto Nazionale di Geofisica e Vulcanologia in Naples and colleagues studied a collapsed building in Pompeii as well as the skeletons of two people found within the rubble. The individuals had injuries similar to those caused by collapsing building during modern earthquakes, the team reported. The evidence suggests that the men took shelter from and survived the initial hot rain of gas and ash, which lasted about 18 hours. Then powerful quakes toppled the house’s partition walls, crushing the men after the ash fall had dwindled. Those killer earthquakes may have been the result of the collapse of the volcano’s central crater, the team says, which heralded the onset of the volcano’s final deadliest phase. Pyroclastic currents of hot gas, ash, and molten rock then wept across the region, burying Pompeii beneath a 3-meter-thick layer of sediment.” (*sciencenews.org*, 2024-8-24 p. 15) See also “First DNA from Pompeii body cast illuminates who victims were” (*Mariana Lenharo, Nature*, V635, 2024-1-21 p. 534)

“Remote highland city upends ideas of urbanism – Drones and lidar uncover high-altitude Uzbek city, part of the medieval Silk Road trade”

“More than 1000 years ago along the fabled Silk Road, caravans funneled silk and cotton west to Europe while wool, glass, gold, and silver traveled east to China. Oasis cities in Central Asia formed important nodes along these routes, which were actually a network of trading paths. Now, the surprising discovery of traces of major medieval city at an altitude of more than 2000 meters in Uzbekistan shows the network extended far into rugged mountainous areas it was assumed to bypass.” (Andrew Lawler, *Science*, V386, 2024-10-25 pp. 362-363) See also “Surprising high-altitude Silk Road city revealed”, (Zachary W. Silvia, *Nature*, V 634, 2024-10-31 pp. 1056-58) and “Large-scale medieval urbanism traced by UAV-lidar in highland Central Asia) (Michael D. Frachetti *et al.*, *Nature*, V634, 2024-10-31 pp. 1118-1124)

“No ‘collapse’ for ancient people on Rapa Nui – New genomic, archaeological evidence counters influential tale of ecological suicide”

“When European explorers first reached Rapa Nui, a remote island in the South Pacific Ocean, in the 1700s, they encountered a small community of about 3000 people living among giant stone statues and stone platforms. Anthropologists later concluded that ancient, much larger populations on what Europeans called Easter Island had built the statues, called *mo’ai*,

and had used up the island's resources to do so, resorting to violence and cannibalism before Europeans arrival. Now the first study of the genomes of ancient Rapanui published in *Nature*, (J. Victor Moreno-Mayar *et al.* *Nature*, V633, 2024-9-12 pp. 389-397) shows such a population collapse never happened. The island was never heavily populated. The evidence for this conclusion came from an analysis of 15 individuals labeled as Rapanui and collected by European ethnologist in the 1870s and 1930s. In late 2019 the team sampled four teeth and a bit of the DNA-rich petrous bone -part of the skull right behind the ear- of 11 individuals. The analysis of the DNA confirmed that the individuals were most closely related to modern-day Rapanui. The only ancient bottleneck found was likely due to the founding event of the island before 1300. In addition the team found that Native American DNA comprised up to 12% of the ancient people's genomes. That finding supports earlier hints that Polynesian Rapanui mixed with Native Americans from South America some 600 to 800 years ago (~1250 – 1430 CE), perhaps by making round-trip voyages to the South American coast." (Rodribo Pérez Ortega, *Science*, V385, 2024-09-13, pp. 1146-1147)

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