Sacramento Archeological Society, Inc.
Newsletter

www.sacarcheology.org. November/December – **2025**

UPCOMING EVENTS CALENDAR

November 2025
November 1, 2025 – Saturday, 2:00 – 3:30 PM PT – **SAS Webinar Melissa Darby,** Historian and anthropologist, Anthropology Department at Portland State, "Culprits behind Plate of Brass: Dare Stones" Zoom
November 1, 2025 – Saturday, 11:30 – 1:30 PM PT – **SAS Board Meeting** Zoom
December 2025
December 6, 2025, Saturday, 1:00 – 6:00+ PM PT **– SAS Annual Meeting and Webinar Christyann Darwent**, UCD Professor "Inuit History in Northern Greenland: Fragility and Resilience" at Pena Archaeology Facility (607 Pena Dr. Suite 600; Davis, CA) and via Zoom

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 calendar for 2026 is in process. Jornada and Paquimé tours are being offered:
April 7-14, 2026 **Jornada Tour** (New Mexico) and April 15-18, 2026 **Paquimé Tour** (Mexico)

The Jornada Mogollon tour features

- **White Sands** exhibits, laboratory and dune field
- **Jornada Mogollon culture:** Creekside Village site
- **Petroglyphs:** Hueco Tanks, Alamo Mountain, Three Rivers, Willow Springs
- **Pueblos**: Gran Quivira, Abó, Quarai, Tenabo, Twin Serpents (time allowing), Pilabó
- **Museums**: El Paso Archaeological Museum, Geronimo Springs Museum, NM Museum of Space History
- **Frontier Fort**: Fort Craig

The Paquimé Tour features Mogollon culture through visits to Paquimé aka Casa Grandes, Trincheras sites, Cueva de la Olla and other cliff dwelling sites in the Sierra Madre

Tours are being organized by Jornada Research Institute, Tour Leader – David Greenwald, archaeologist and Fiesta tours International, Cathy and Marshall Giesy
The spaces are limited. For more information and reservations contact Jan Johansen at janjohansen@sbcglobal.net

UPCOMING EVENTS

SAS Webinar

Saturday, November 1, 2025

2:00 – 3:30 PM PT

"Culprits behind Plate of Brass: Dare Stones"

By

Melissa Darby MA

Senior Archaeologist/Historian

Lower Columbia Research & Archaeology LLC

Via Zoom

Abstract: In 1937, two Elizabethan artifacts came to light that created headline news across the United States and each of the alleged artifacts addressed a different long-standing Elizabethan mystery. The first artifact to come to light that year was the Drake Plate of Brass, inscribed in crude block letters of old English text and found on a hillside overlooking San Francisco Bay. A few months later a stone slab was allegedly found along the Chowan River in North Carolina. The similarly inscribed stone seemed to describe the fate of the 117 settlers of the Lost Colony of Roanoke. This presentation will demonstrate that historian Herbert E. Bolton was the ringleader of the Plate of Brass hoax, and assisted other historians, George Hammond and Haywood Pearce Jr., with the planning and implementation of the Dare Stone fraud. An underlying motive of these men was the desire to uplift a White and English national identity for America. However, one of Bolton's motives for the Plate of Brass hoax, and perhaps his main motive, was his desire to shut down the theory that Drake landed further north on either the Oregon or Washington coasts. The paradigm is shifting, and a consensus is building among academics that Drake actually landed on the Oregon coast.

About the Speaker: Melissa Darby is an award-winning historian and anthropologist, and affiliated research faculty in the Anthropology Department at Portland State University. She is principal investigator and sole proprietor of Lower Columbia Research & Archaeology. Darby has worked for over forty years in the Northwest and is a noted authority on the ethnohistory of the Native people of the lower Columbia River region. Her research on Native American cultures of the area includes important works on settlement patterns, plankhouse architecture, and plant foods used by the indigenous people of the region. She has contributed substantially to our understanding of the Native peoples and the world they inhabited prior to European colonization.

Zoom information is available on our web site at https://sacarcheology.org/announcements/.
You are invited to attend the webinar before 2:00 PM (1:45 PM) for chat time. There is no participation fee.

SAS Annual Meeting and Webinar

Saturday, December 6, 2025

1:00 – 6:00+ PM PT

"Inuit History in Northern Greenland: Fragility and Resilience"

by

Christyann Darwent, Professor of Archaeology, UC Davis

at

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

The Annual Meeting will be conducted in person at the U.C. Davis Pena Archaeology Facility (607 Pena Dr. Suite 600; Davis, CA), and broadcasted via Zoom starting at 2:00 PM PT with a presentation by Christyann Darwent, UCD Professor, and formally conclude after the SAS Annual Meeting. After which all attendees are invited to attend a dinner to socialize at Symposium Restaurant, Davis at 6:00 PM. The group will enjoy the Family Dinner at $27. 95 per person. The restaurant will offer vegetarian dishes as part of the Family Dinner.

The schedule for the event is as follows:
1:00 – Set up, meet and greet (If you are unable to attend in person, you may join the webinar starting as early as 1:45 PM.)
2:00 – Featured talk "*Inuit History in Northern Greenland: Fragility and Resilience"* by Christyann Darwent
3:30 – SAS Annual Meeting
6:00 – Socialize at Symposium Restaurant

Title: "*Inuit History in Northern Greenland: Fragility and Resilience"* by Christyann Darwent

Abstract: Human history of the North American Arctic has been a cycle of expansions and contractions, of mobility and migration, and of fragility and resilience. Archaeology brings a long-term perspective to the relationship between humans and the arctic environment. More recently, however, the face of archaeological research and knowledge production has undergone rapid change, particularly in the past decade. Just as geneticists and isotopic chemists have discovered the wealth of information locked in the archaeological record of the arctic, these formerly frozen sites are rapidly melting or eroding into the sea. In addition, Inuit scholars and communities are redefining their relationship with archaeology and archaeologists. Based on the author's own field work, this talk focuses on the historical ecology of Smith Sound at the northern edge of what is now Canada and Greenland. New questions and new methods have enhanced our understanding of a place that exemplifies both isolation and long-distance social bonds, precariousness and resilience.

About the Speaker: Dr. Christyann Darwent is a professor of Anthropology at UC Davis. She is originally from Calgary where she completed her undergraduate degree in archaeology and undertook her first of several field seasons in the Canadian High Arctic 30 years ago. After receiving her MA at Simon Fraser University in Vancouver and a PhD from the University of Missouri, she started her career at UC Davis in 2001. Since then, she has conducted NSF-sponsored archaeological excavations in Kotzebue Sound, Alaska and Inglefield Land, NW Greenland. For the past decade her lab has also been conducting archaeological research near the Native village of Shaktoolik in Norton Sound, Alaska. In addition to studies of past subsistence practices and social organization among Inuit, Inughuit, Inupiaq, and Yup'ik occupants of the Arctic over the past 1000 years, she has published on the history of Inuit sled dogs using ancient and modern DNA.

PAST EVENTS

SAS Webinar "The Middle Stone Age from Varsche Rivier 003, South Africa: environmental variation, innovation, and behavioral diversity"

On Saturday, September 13, 2025 to an audience of 16 SAS members and guests at the Pena Facility in Davis, Teresa Steele, Professor Dept. of Anthropology – UC Davis began by providing background information on the Middle Stone Age in South Africa. It was an important period in history (~315,000 to ~45,000 years ago) because humans evolved and innovation appeared, though sporadically. To assess the level of innovation in the arid Succulent Karoo Teresa and her research team have been excavating at Varsche Rivier 003, site in Knersvlakte, S. Namaqualand, a region of hilly terrain covered with quartz gravel in the north-west corner of the Western Cape Province of South Africa. Results so far indicate that this area was isolated from about 92,000 to 80,000 years ago but adaptations and innovations distinct from sites only 100 kilometer south were identified. Follow on excavations will focus on the collapsed section and return to the shelter which houses later Stone Age material.

Rescheduled SAS Webinar Paleontology Museum Tour in Fremont "Artifactor Scanning System"

On Saturday, September 27, 2025 to an audience of 22 (including individuals in person at the Children's Natural History Museum (4074 Eggers Drive, Fremont, CA) and those remote via Zoom) Tara Johnson demonstrated the Artifactor Scan System. She first explained the engineering aspects of the system. The scanning platform was created by Tara Johnson and manufactured at Maker Nexus in Sunnyvale, CA. She then took a fossil and using the Widar software (subscription required) scanned the item for 3-5 minutes. The system constructed a model of the fossil after 15-20 minutes processing time. The Artifactor Scan System is still a prototype, but has great promise as a tool for archaeologists.

SAS Webinar "100,000 years of human evolution in Southern Africa"

On Saturday, October 11, 2025 a group of 22 SAS members and friends via Zoom listened to Brenna M. Henn, Associate Director for Human Genomics, Associate Professor @ UC Davis and Gillian Meeks, PhD student @ UC Davis talk about human evolution in Africa.

Dr. Henn explored models of human population in Africa. Did a single ancestral human population expand in Africa or were there multiple populations? Dr. Henn suggested that a weakly structured stem of at least two branches of humans deeply diverged but migrated over +500,000 years ago. This theory contrasted with a lack of migration between the ancestors of *Homo sapiens*. The lack of differentiation between the humans implies that stem 1 and stem 2 would be morphologically similar. Khoe-san of South Africa remains the first population to diverge at about 120 – 135 kya and became isolated. Western African has a second pulse of "stem" ancestry at about 20,000 years ago. This signal may explain the ghost population observed in several prior publications. The present day population structure dates back to MIS 5. Prior to ~120,000 years ago the human population tree is highly reticulated and covariate of migration and divergence.

Killian Meeks focused on the legacy of European Colonialism by looking at the gene flow in South Africa. She found a strong genetic residue from the colonization.

SAS Mariposa Archaeological Field Trip

October 17-19, 2025

Eleven SAS members participated in the Mariposa Archaeological Field Trip. It began in Mariposa with a visit to the old courthouse. Court is still conducted in second story of the old building. Next the group visited the location of Southern Sierra Miwok Village. They were honored to have Ron Good, an elder of the Mono tribe speak about the area. They explored several granite outcropping containing pounding rocks that were used in the processing of acorns. Four participants hiked through brush and over boulders along a stream to arrive at a cabin that was used by the occupant of the property until it was abandoned and is now in disrepair.

The highlight of next day was a guided tour of the Mariposa Museum. The gold rush was the main feature of this museum. The past came alive through the demonstration of the stamp mill and panning for gold. Finding gold specks was a highlight for several of the members. Visiting the cemetery and old downtown capped the mining experience in Mariposa. Two of the attendees visited Wassama Round House State Park and observed the Miwok round house and mortars.

The next day the group traveled to another mining town, Coulterville. In route they stopped at Bear Valley, overlooked tailings of the Pine Tree Mine and stopped by the Merced River overlooking the Bagby ghost town. Coulterville's history as a mining town was brought to life through a guided tour of the Coulterville museum and a self-guided tour of the downtown and Chinatown. A few of the group ended the tour in Hornitos and viewed the ruins of Ghirardelli's plant dating back to the 1860's.

We thank Denise Ruzicka for organizing the amazing tour.

MEMBER'S CORNER

Election of 2026 Board of Directors

During the Annual Meeting the 2026 Board of Directors will be elected. The following slate of officers is proposed but additional members may still be nominated. We invite members to become involved. Serving on the Board of Directors is a way to influence the content and timing of events. Join us for the annual meeting and consider participation on the Board.

The slate of the board is:

Candidate	Office	Candidate	Office
Paul K. Davis	**President**	Kim Frasse	**Member at Large**
Jan Johansen	**Vice-President/Past President**	Jeremy Johansen	**Member at Large**
Lynette Blumhardt	**Secretary**	Martie Lewis	**Member at Large**
Tori Lyon	**Treasurer**	Ruth McElhinney	**Member at Large**
Tom Johansen	**Past President**	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**
			Member at Large
		Write in	**Member at Large**

Major Donors

We are pleased to acknowledge our major contributors for 2024/2025. 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)
OSISoft a division of AVEVA
Lynette Blumhardt
Larry Boerio
George W. Foxworth
Jeremy Johansen
Tori Lyon
Roger and Lydia Peake
Teresa Steele

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:

Sacramento Archeological Society, Inc.
P.O. Box 163287
Sacramento, CA 95816-9287
We really appreciate your support.

Annual Dues for 2026

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

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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:

- "Bones beneath the runway"
- "Columbian mammoth mitogenomes from Mexico uncover the species' complex evolutionary history"
- "Major expansion in the human niche preceded out of Africa dispersal"
- "Denisovan, Neanderthals gave Indigenous American key mucus gene"
- "The proteome of the late Middle Pleistocene Harbin individual"
- "The phylogenetic position of the Yunxian cranium elucidates the origin of *Homo longi* and the Denisovans"
- "Mystery food in Neanderthal diet might be maggots
- "300,000-year-old wooden tools from Gantangquing, southwest China"
- "Ancient DNA reveals a two-clanned matrilineal community in Neolithic China"
- "Whole-genome ancestry of an Old Kingdom Egyptian"
- "Ancient DNA reveals the prehistory of the Uralic and Yeniseian peoples"
- "Social inequality in ancient Central Europe"
- "Did Great Britain's economy shrug off the end of Roman rule?"

"Bones beneath the runway

How a military mega project led to Mexico's biggest paleontological discovery-and is reshaping what we know about mammoths"

"The Santa Lucía mammoths were trapped not in tar like the La Brea fauna, but in the shallows of an ancient lake. This lake is now is the location of Mexico City's new Felipe Ángeles International Airport. During the building of the airport 50,000 Pleistocene bones including 500 mammoths, 200 camels, 70 horses, 15 giant ground sloths, as well as the remains of dire wolves, saber-toothed cats, bison, armadillos, birds, fresh water snails and one human skeleton were found. The scale of the discovery rivals California's La Brea Tar Pits." (Rodrigo Pérez Ortega, Science, 2025-08-25 pp. 870-873)

"Columbian mammoth mitogenomes from Mexico uncover the species' complex evolutionary history"

"Paleogenomic studies suggest that *Mammuthus columbi* derives from an ancient hybridization between *Mammuthus primigenius* and *Mammuthus trogontherii*. Although its habitat spanned from North to Central America, available genetic data are limited to temperate regions, leaving gaps in knowledge of the species' demographic history on the continent. In this study the researchers generated 61 capture-enriched *M. Columbia* mitogenomes from the Basin of

Mexico, located near Mexico City. Their analysis revealed that these mitogenomes belonged to a mitochondrial lineage distinct from that of other North American mammoth mitogenomes. These divergent mitogenomes suggest a deep population structure in their ancestors and challenges prior assumptions based on geographically restricted samples. Their finding underscores the importance of wider spatial sampling to reconstruct mammoths' evolutionary history and demonstrates the feasibility of studying mega fauna from tropical latitudes." (Eduardo Arrieta-Donato *et al*, Science, 2025-10-01 pp. 47-52)

"Major expansion in the human niche proceeded out of Africa dispersal"

"All contemporary Eurasians trace most of their ancestry to a small population that dispersed out of Africa about 50,000 years ago (ka). By contrast, fossil evidence attests to earlier migrations out of Africa. These lines of evidence can only be reconciled if early dispersals made little to no genetic contribution to the later, major wave. A key question therefore concerns what factors facilitated the successful later dispersal that led to long-term settlement beyond Africa. In this article the researchers show that a notable expansion in human niche breadth within Africa precedes this later dispersal. The researchers assembled a pan-African data base of chronometrically dated archaeological sites and used species distribution models (SDMs) to quantify changes in the bioclimatic niche over the past 120,000 years. They found that the human niche began to expand substantially from 70 ka and that this expansion was driven by humans increasing their use of diverse habitat types, from forests to arid deserts. Thus, humans dispersing out of Africa after 50ka were equipped with a distinctive ecological flexibility among hominins as they encountered climatically challenging habitats, providing a key mechanism for adaptive success. " (Emily Y. Hallett *et al*, *Nature*, V644, 2025-08-7 pp. 115-121)

"300,000-year-old wooden tools from Gantangquing, southwest China"

"Evidence of Early and Middle Pleistocene wooden implements is exceptionally rare, and existing evidence has been found only in Africa and western Eurasia. The researchers report an assemblage of 35 wooden implements from the site of Gantangquing in southwestern China, which was found associated with stone tools, antler billets (soft hammers), and cut-marked bones and is dated from ~361,000 to ~250,000 years at a 95% confidence interval. The wooden implements include digging sticks and small, complete, hand-held pointed tools. The sophistication of many of these tools offsets the seemingly "primitive" aspects of stone tools assemblages in the East Asian Early Paleolithic. This discovery suggests that wooden implements might have played an import role in hominin survival and adaptation in Middle Pleistocene East Asia." (Jian-Hui Liu *et al*, Science, 2025-07-03 pp. 78-83)

"Denisovans, Neanderthals gave Indigenous Americans key mucus gene

Genetic variant might have given the first Americans a sticky shield against new germs"

"Mucus does more than simply rocket out of our noses when we sneeze. The sticky, viscous secretion that coats many organs also forms our innate immune system's first line of defense, helping trap harmful pathogens. This humble stuff varies around the world, and people Indigenous to the Americas often have a specific variant of a key mucus-producing gene known as MUC19. Now, scientist have tracked the winding evolutionary path this variant took from its origins in Denisovans—a mysterious ancient human ancestor—to our close cousins the Neanderthals and finally modern humans." (Michael Price, Science, 2025-08-21 pp. 764-765)

"The proteome of the late Middle Pleistocene Harbin individual"

"Denisovans are a hominin group primarily known through genomes or proteins, but their precise morphological features remain elusive because of the fragmentary nature of the discovered fossils. In this report the researchers report 95 endogenous proteins retrieved from a nearly complete cranium from Harbin, China, dating to at least 146,000 years ago and previously assigned to a new species, *Homo longi*. This individual has three Denisovan-derived amino acid variants and clusters with Denisova 3, suggesting that the Harbin individual belongs to a Denisova population. This study fills the gap between morphological and molecular evidence, enhancing our understanding of Denisovans' spatiotemporal dispersal and evolutionary history." (Quiaomei Fu *et al*, Science, 2025-08-14 pp. 704-707)

"The phylogenetic position of the Yunxian cranium elucidates the origin of Homo longi and the Denisovans"

"Diverse forms of *Homo* coexisted during the Middle Pleistocene. Whether these fossil humans represent different species or clades is debated. The ~1-million-year-old Yunxian 2 fossil from China is important for understanding the cladogenesis of *Homo* and the origin of *Homo sapiens*. In this study, the researchers restored and reconstructed the distorted Yunxian 2 cranium using recently introduced technology. The results show that this cranium displays mosaic primitive and derived features. Morphonmetirc and phylogenetic analyses suggest that it is an early member of the Asian *H. longi* clade, which includes the Denisovans and is the main part of the sister group to the *H. sapiens* clade. Both the H. sapiens and *H. longi* clades have deep roots extending beyond the Middle Pleistocene and probably experienced rapid early diversification. Yunxian 2 may preserve transitional features close to the origins of the two clades." (Xiaobo Fen *et al*, Science, 2025-09-25 pp. 1320-1324)

"Mystery food in Neanderthal diet might be maggots"

"A mysterious chemical signature seen in the remains of Neanderthals might be explained if they often snacked on a special culinary garnish: maggots. That's according to research published on 25 July (*M.M. Beasley et al* Sci Av. 11 eadt7466;2025). The finding adds to the picture that researchers are painting of how our close ancient human relatives provided themselves with nourishment. Scientists have long been perplexed by the fact that the bones of Neanderthals from the late Pleistocene epoch contain a nitrogen isotope at extreme levels. The more meat an animal eats, the more nitrogen-15 it stores, and those at the top of the food chain have the highest amounts. But our guts are not carnivore guts. Our livers can only do so much to process protein. So the level seemed impossibly high. If Neanderthals had enjoyed putrefied meat and maggots, it could be a more viable explanation for the puzzlingly high nitrogen-15 levels." (Jenna Ahart, Nature, V 644, 2025-08-07 pp. 19-20)

"Ancient DNA reveals a two-clanned matrilineal community in Neolithic China"

"Studies of ancient DNA from cemeteries provide valuable insights into early human societies, and have strongly indicated patrilocality. In this article, they analyzed ancient DNA alongside archaeological contexts and multiple stable isotopic data from 60 individuals and 2 separate cemeteries at the Fujia archaeological sites in eastern China, dating between 2750 and 2500 BCE. Their findings suggest the existence of an early-described matrilineal community in the Neolithic period, characterized by high endogamy and a population practicing millet agriculture near the coast. Evidence of intermarriage between individuals in the two cemeteries and the presence of both primary and secondary burials, organized strictly according to maternal clans, underscore a strong sense of social cohesion and identity at Fujia. Bayesian modeling of radio carbon dates indicates that the two cemeteries were used for approximately 250 years, implying a stable matrilineal lineage spanning at least 10 generations. This study contributes to the ongoing debate in anthropology and archaeology, not only suggesting the existence of a matrilineal society in early human history but also revealing a pair of Neolithic cemeteries organized around two matrilineal clans, furthering our understanding of the early evolution of human societies through kinship systems." (Jincheng Wang *et al*, Science, 2025-06-31 pp. 1304-1311)

"Whole-genome ancestry of an Old Kingdom Egyptians"

"Ancient Egyptian society flourished for millennia, reaching its peak during the Dynastic Period (~3150-30 BCE). However, owing to poor DNA preservation, questions about regional interconnectivity over time have not been addressed because whole-genome sequencing has not yet been possible. Here the researchers sequenced a 2x coverage whole genome from an adult male Egyptian excavated at Nuwayrat. Radiocarbon dated to 2855-2570 cal. BCE, he lived a few centuries after Egyptian unification, bridging the Early Dynastic and Old Kingdom periods.

The body was interred in a ceramic pot within a rock-cut tomb, potentially contributing to the DNA preservation. Most of his genome is best represented by North African Neolithic ancestry, among available sources at present. Yet approximately 20% of his genetic ancestry can be traced to genomes representing the eastern Fertile Crescent, including Mesopotamia and surrounding regions. This genetic affinity is similar to the ancestry appearing in Anatolia and the Levant during the Neolithic and Bronze Age. Although more genomes are needed to fully understand the genomic diversity of early Egyptians, the results indicate that contacts between Egypt and eastern Fertile Crescent were not limited to objects and imagery (such as domesticated animals and plants, as well as writing systems) but also encompassed human migration" (Adeline Morez Jacobs *et. al.*, Science, 2025-08-21 pp. 714-719)

"Ancient DNA reveals the prehistory of the Uralic and Yeniseian peoples"

"The North Eurasian forest and forest-steppe zones have sustained millennia of sociocultural connections among northern peoples, but much of their history is poorly understood. In particular, genomic formation of populations that speak Uralic and Yeniseian languages today is unknown. In the study, by generating genome-wide data for 180 ancient individuals spanning this region, the researchers show that the Early-to-Mid-Holocene hunter-gatherers harbored a continuous gradient of ancestry from fully European-related in the Baltic, to fully East Asian-related in the Transbaikal. Contemporaneous groups in Northeast Siberia were off-gradient and descended from a population that was the primary source for Native Americans, which then mixed with populations of Inland East Asia and Amur River Basin to produce two populations whose expansion coincides with the collapse of pre-Bronze Age population structure. Ancestry from the first population, Cis-Baikal Late Neolithic-Bronze Age (Cisbaikal_LNBA), is associated with Yeniseian-speaking groups and those that admixed with them, and ancestry from the second, Yakutia Late Neolithic-Bronze Age (Yakutia_LNBA), is associated with migrations of prehistoric Uralic speakers. The researchers show that Yakutia_LNBA first dispersed westwards from the Lena River Basin around 4,000 years ago into the Altai-Sayan region and into West Siberian communities associated with Seima-Turbino metallurgy—a suite of advanced bronze casting techniques that expanded explosively from the Altai. The 16 Seima-Turbino period individuals were diverse in their ancestry, also harboring DNA from Indo-Iranian-associated pastoralists and from a range of hunter-gatherer groups. Thus, both cultural transmission and migration were key to the Seima-Turbino phenomenon, which was involved in the initial spread of early Uralic-speaking communities." (*Nature*, V644, 2025-08-07 pp. 122-132)

"Social inequality in ancient Central Europe"

"Influential models of the rise of social inequality posit that the appearance of advanced agricultural technologies such as the plow led to a rapid and sustained increase in economic inequality, the establishment of private property, and intergenerational transmission of wealth. *Duffy et al*. used mortuary evidence and house size data from more than 100 sites dating from 6000 to 1000 BCE to examine this model in the Carpathian Basin of Central Europe. They found

that inequality varied remarkable little over time, and when it did increase, it was of limited duration. The authors argue that inequality was tempered by leveling mechanisms, including communal projects and community fissioning. By contrast, the rise of inequality in the Near East during the same period was more rapid and enduring." (Mark Aldenderfer, Science, 2025-08-07 p. 610)

"Did Great Britain's economy shrug off the end of Roman rule?

Pollutants in sediment core suggest mining and smelting did not tail off"

"Martin Millet thought the mud of an ancient riverbed in northern England would confirm conventional wisdom that the end of Roman rule in Great Britain brought economic collapse. He expected levels of pollutants in the core sample, taken from the River Ure in Yorkshire, to fall as local mines went quiet. Instead, he was floored to see that iron and lead levels rose steadily for 2 centuries after the Roman Empire collapsed and its legions left Great Britain. "The mining did not tail off—everything if not fall apart," says Millett, an emeritus archaeologist at the University of Cambridge. The finding, reported in *Antiquity*, is new and completely surprising." (Ann Gibbons, Science, 2025-09-11 pp. 1077-1078)

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