



## Southwest Florida Archaeological Society (SWFAS)

### OUR 46th YEAR

### March 2026 Newsletter

<https://swflarchaeology.org/>

#### **PRESIDENT'S CORNER** By *John F. Furey M.A., RPA*, [jffurey@charter.net](mailto:jffurey@charter.net)



#### *March is Archaeology Month*

Just a reminder, the exhibition of the Marco Cat has been extended until the end of 2026, but the associated masks will return to the Smithsonian next month. If you wish to see them again, plan a visit to the Marco Island Historical Museum soon.

March is also a celebration of Saint Patrick's Day on the 17<sup>th</sup>, and SWFAS has a great presentation on Ireland scheduled for the 18th. Please plan to join us at the IMAG and 'Slainte'.

The Seminole Tribune is a free monthly on-line newspaper by the Seminole Tribe of Florida and has information on upcoming celebrations, arts and entertainment, the Hard Rock entertainment schedule, and relevant local news. It has information on reenactment battles, handicraft sales, and information on the various celebrations at the reservations that are open to the public. The spring Seminole rodeo is a highly popular old-time rodeo here in Florida. See <https://seminoletribune.org>.

When Ft. Myers was a 'Cow Town', learn about the cattle history of SW Florida at the 2026 Annual Cracker Dinner on March 21, 2026. See below.

#### **RECENT RESEARCH**

##### ***ARCHAEOPTERYX, A NEW FLYING DINOSAUR***

The Chicago Field Museum has recently acquired a new finely preserved fossil of a small dinosaur with feathers that could fly. There have been many recent studies on the evolution of dinosaurs to birds and the excellent preservation in the fine shale of this new fossil adds a special new insight into early bird flight: archaeopteryx had tertials. Tertials are the feathers that extend from the elbow to the bird's body and are essential to produce enough lift to fly. Archaeopteryx is not the first dinosaur to have feathers or the first dinosaur to have wings but is believed to be the earliest known dinosaur to fly. By modern standards it was a poor flyer. Source: *Science News* at <https://www.sciencenews.org/article/archaeopteryx-fossil-bird-flight>

##### ***DNA FINDS STRANGE NEW LINEAGE ON THE LAND BRIDGE BETWEEN THE AMERICAS***

Researchers are still charting how the human populations spread across the Americas after first arriving in North America. Groups continually split off on their own but new DNA evidence in the high plateaus of present-day Bogota, Colombia, has identified a new lineage that was unknown and not linked to any other one currently in South America was identified. Archaeologists say that they existed 4,000 years ago but appear to have disappeared. They faded away but it is unknown if they mixed with a larger group or were pushed out entirely. Source: *Science News Today* at <https://www.sciencenewstoday.org/lost-ancestors-of-the-americas-ancient-dna-reveals-a-forgotten-human-lineage-in-colombia>

#### **HISTORICAL NOTE: WHEN FT. MYERS WAS A 'COW-TOWN'**

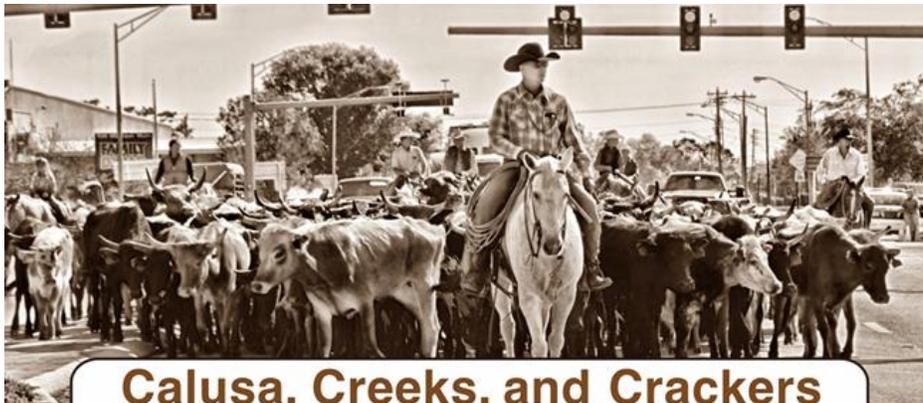
From its very early days, Fort Myers was a "Cow-Town" where cattle were allowed to roam freely and often damaged local property. Early attempts to curb free range cattle were stymied by cattle barons who were able to sway the vote. The first 'anti-cattle-roaming' ordinance was passed by the Fort Myers town council on 25 September 1886 under mayor Peter Knight. It was repealed two weeks later.

It was not until September 4, 1908, 24 years later, that a lasting cattle ordinance was finally passed and enacted to keep cattle out of the town limits. A pen was built on the outskirts of town to hold cattle that were loose, and their owners had to pay a fine to get their cattle back. Loose milk cows were initially exempted from this ordinance but on February 9, 1909, they too were included, and Ft. Myers was no longer a 'milk cow town'. A serious problem with loose hogs running amok and destroying gardens and yards remained. The owners of the hogs, much like the earlier cattle owners, refused to vote to curb them. Eventually, Mayor Lilly ordered Marshall Sanchez to shoot any wandering pigs on sight, which finally got the pigs penned in. Now Ft. Myers was also no longer a 'hog town'! (*Editor*).

**2026 ANNUAL CRACKER DINNER – SW FLORIDA HISTORICAL SOCIETY FUNDRAISER**

*Calusa, Creeks, and Crackers: 500 Years of Cattle History in South Florida*

The time depth and historical importance of cattle here in Southwest Florida to both the Native Americans and early EuroAmerican settlers will be highlighted by two keynote speakers at the Annual Cracker Dinner on March 21, 2026 -- Clint Raulerson, Manager of Cattle Operations for the Seminole Tribe and Theresa Schober, archaeologist and former Museum Manager at the Immokalee Pioneer Museum at Roberts Ranch. Raulerson and Schober helped develop the Immokalee Cattle Drive and Jamboree through the Collier County Museum system. Enjoy an engaging, history filled evening and support the Southwest Florida Historical Society; plan to attend.



**Calusa, Creeks, and Crackers**  
*500 years of cattle history in south Florida*  
**2026 ANNUAL CRACKER DINNER FUNDRAISER**  
 Presented by The Southwest Florida Historical Society

About the program

From Ponce de Leon's 1521 expedition to today's working ranches, Florida's cattle story spans five centuries. Open range, unclaimed herds, and a rough frontier shaped cow-hunters, cow towns, and cattle barons - a true 'Wild West' chapter of our state.

Join fifth-generation cattleman Clint Raulerson and archaeologist Theresa Schober for a poetically historical evening tracing the industry from its earliest days to the cowboy legacy still alive in south Florida.

**Saturday, March 21, 2026**  
**BBQ dinner 5:30-7:00 p.m.**  
**Program 7:00 p.m.**  
**Silent Auction & 50/50 Raffle**  
 Marion Hall, St. Cecilia Catholic Community  
 5632 Sunrise Drive, Fort Myers, FL 33919

**Clint Raulerson** is a former PRCA bullfighter, poet and author of "Cowboy Legacy - A Lifetime in the Saddle." Currently he is the General Manager of Cattle Operations for the Seminole Tribe of Florida.  
**Theresa Schober** is an archaeologist and former Museum Manager at the Immokalee Pioneer Museum at Roberts Ranch. She co-founded the Immokalee Cattle Drive and Jamboree through the Collier County Museum system.



Seating is Limited  
 Tickets - \$40 / person

Tickets may be purchased online at  
[swflhistoricalsociety.org](http://swflhistoricalsociety.org)  
 Information & assistance: 239-939-4044



Proceeds support the mission of the Southwest Florida Historical Society  
 a 501(c)(3) nonprofit - EIN: 59-2469602  
 Since 1963, promoting public interest in – and appreciation of– the history of Southwest Florida.  
*Photo by Don Columbus used with permission*

## SWFAS DUES REMINDER 2026



SWFAS dues for 2026 are due. Thanks to everyone that has already renewed their 2026 tax deductible membership. Your support of archaeology, history, preservation, and education in Southwest Florida is critical. Our sole source of income is your dues and your gifts. SWFAS is a 501(c)(3) registered non-profit organization. Donations and gifts to SWFAS in December are tax deductible and benefit us both. Thanks to everyone that has already renewed their 2026 tax deductible membership. If you have not done so, we have two ways, you can renew online with a credit card at <https://swflarchaeology.org>. On the Home page, go to “Select Member Level” and then “Add to Cart.” Or send a check to: Charlie Strader, SWFAS Treasurer, 27655 Kent Road, Bonita Springs, FL 34135. If you have question re membership status, you may call/text Charlie at 239-992-6133.

## SWFAS PRESENTATION SCHEDULE 2026

*Note that all SWFAS presentations are free to the public*

*Also note that newsletters will be distributed each month except June - September*

**MARCH 18, 2026, 7:00 PM, FT. MYERS, IMAG MUSEUM**

**Alf Monaghan, Lecturer**

**Topic: Ireland: A Sacred Island Before Christianity**

**APRIL 15, 2026, 7:00 PM, BONITA SPRINGS, BONITA SPRINGS FIRE STATION 24**

**Dr. Harry Maisch IV, Instructor, Florida Gulf Coast University**

**Topic: Fossil Shark Tooth Identification and Preservation**

**MAY 8, 9, and 10, 2026**

**Florida Anthropological Society ANNUAL Meeting at Punta Gorda**

**JUNE – OCTOBER – SUMMER SABBATICAL**

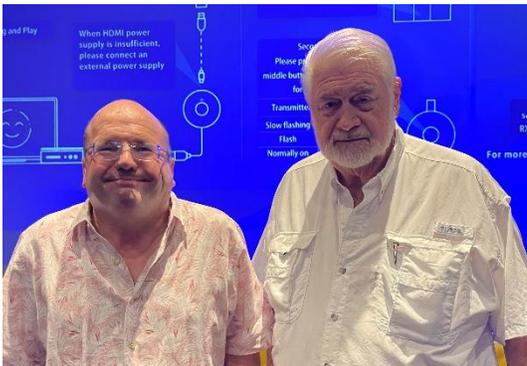
**NOVEMBER 18, 2026, 7:00 PM, BONITA SPRINGS FIRE STATION 24**

**Presentation: TBA**

**DECEMBER 5 OR 12, 2026**

**Field Trip: TBA**

## FEbruary PRESENTATION - *JIM CROW IN FT. MYERS 1885-1930*



Our February speaker, Dr. Jonathan Harrison, provided us with a great historical lesson on the history of the Black experience in Ft. Myers, both before and after the rise of the KKK. Relations before the KKK in Ft. Myers were peaceful and had been enforced by the Union Army's control of Ft. Myers when the surrounding area and the city was only reachable by boat. It wasn't until after the end of the Civil War and the removal of the army that relations deteriorated. The arrival of a large experienced workforce of Black laborers to build the railroad seemed to tip the scales. It was the very arrival of the railroad that brought an influx of new people from parts of the segregated South that changed that dynamic. Ft. Myers became a KKK bastion and a segregated society. The historical implications of those times can still be seen in the social geography of today.

### **EDITOR'S NOTE**

The video, “With a Made-Up Mind: The History of the Black Vote in Southwest Florida,” available on WGPU-PBS at <https://video.wgcu.org/show/made-mind-history-black-vote-southwest-florida/> was produced by Jarrett Eady, a former President of the Fort Myers Black History Society and a former SWFAS speaker.

## **MARCH PRESENTATION: WEDNESDAY, MARCH 18, 2026, 7:00 PM**

**FORT MYERS, IMAG HISTORY & SCIENCE CENTER**

**TOPIC: IRELAND: A SACRED ISLAND BEFORE CHRISTIANITY by ALF MONAGHAN, LECTURER**



Join us at the IMAG for a free presentation by lecturer Alf Monaghan. Forget the myth of Ireland as a lonely island in the wild Atlantic Ocean. During the Neolithic and Bronze Ages, the Atlantic was a highway - linking the island to Iberia, the Mediterranean and the Near East. From time immemorial, mariners have moved goods, skills, stories; stone monuments, metalwork, religious beliefs and ritual across this sea road. This lecture traces archaeological finds, seafaring routes, and cultural ties that reveal a shared Atlantic heritage. The result is a portrait of Ireland that is far from remote, with an ancient spiritual heritage, rooted in pre-Christian beliefs, which later blended with Christianity.

Alf is an Irish native and is a graduate of University College, Dublin School of Business and spent most of his life working on trade and economic development abroad. He spent a decade working for Enterprise Ireland - the Irish State Economic Development Agency - developing Irish exports in the manufacturing and internationally traded service sectors. He has been an advisor to governments, development agencies and business in the Middle East, South, and West Africa and spent 10 years in the Middle East in Syria, Turkey, Lebanon, Jordan, and Egypt. It was here that he developed his interest in the trade links and religious influences between the Near East and Ireland. Alf and his wife Mary divide their time between Ireland and Southwest Florida.

### ***DIRECTIONS TO THE IMAG***



The IMAG is at **2000 Cranford Ave, Fort Myers, FL 33916**. Take the 75 fwy toward Ft. Myers, then take the FL-82 exit, EXIT 138, toward ML King Jr Blvd/Ft Myers/Immokalee. Turn west onto FL-82/State Road 82. Continue to follow FL-82. Go 3.60 miles, then turn left onto Cranford Ave. Go 0.09 miles, and the IMAG is on the right.

### **ARTICLES - *Preview***

#### **8 ARCHAEOLOGICAL SITES THAT PREDATE CLOVIS**

Some archaeologists are finally coming to the realization that Clovis was not the first culture to arrive in North America only 13,500 years ago. The evidence keeps piling up of a much earlier entry from Siberia over the land bridge known as Beringia or via a coastal water route. One Archaeologist feels that a 130,000 timeline is not unrealistic. One early site is even in Florida, the Page-Ladson Site near Tallahassee. Over time, I believe that we will continue to discover many earlier sites that will have much earlier dates. See below.

#### **WE'VE ALL HEARD OF STONEHENGE IN ENGLAND BUT WHAT IS A WOODHENGE?**

The recent discovery of a 98.5-foot diameter woodhenge in Aars, Denmark has been dated to 2000 B.C.E. and shares the same traits as the Wiltshire woodhenge located two miles Northeast of Stonehenge. It joins other European woodhenges found in the Netherlands, Wales, Germany, and England. In North America the site of Cahokia in East St. Louis had five woodhenges. See below.

#### **ANCIENT CAVE DISCOVERY REVEALS THAT THE SAHARA WAS GREEN**

A cave in Southern Morocco provides proof that the Sahara was once a fertile region teeming with life. Many fossil finds throughout the Sahara have given us clues to its past climate, but most were unable to be dated. Between 8,700 and 4,300 years ago higher rainfall created conditions for human settlements and animal herding. Even today there is a large area in Western Morocco that is a major farming region. Stalagmite analysis revealed the above dates. See below.

## ARTICLES

### 8 ANCIENT ARCHAEOLOGICAL SITES THAT PRE-DATE THE CLOVIS PEOPLE

By: Claire Cock-Starkey

February 10, 2025

From Mental Floss at <https://www.mentalfloss.com/science/archaeology/pre-clovis-people-archaeological-sites>



NPS/Public Domain

For many years, archaeologists believed the first human culture in the Americas were the Clovis people, thought to have arrived in Alaska after crossing a land bridge—known as Beringia—from Siberia 13,500 years ago. The Clovis were named after the place in New Mexico where, in 1929, an amateur archaeologist named James Ridgely Whiteman first found their distinctive stone points. Then other prehistoric sites with similar stone and bone tools were discovered, suggesting that the Clovis people were the first humans to disperse across the Americas. The evidence gave rise to a consensus known as the Clovis First theory. More recently,

discoveries from archaeological sites predating the Clovis culture have challenged the Clovis First theory and posed new questions about how, when, and by whom the Americas were first peopled. Here are eight of the most intriguing pieces of pre-Clovis evidence.

One of the first sites to undermine the Clovis-First theory was a rock shelter, known as Meadowcroft, found deep in the forest in western Pennsylvania. Archaeological remains suggested that the naturally occurring rock overhang had offered a place of refuge for thousands of years. In the mid-1970s, as archaeologist James Adovasio and his team worked through the many layers of sediment, they became more and more convinced they had found evidence of pre-Clovis settlement. They uncovered a stone point more than 12,000 years old and unlike anything made by the Clovis people, hinting that an earlier culture who had the ability to fashion tools had lived there. Below this find, in deeper layers of soil, researchers found the remains of a fire pit and a stone tool later dated to 16,000 years ago, making it the oldest tool yet discovered in North America. The evidence at Meadowcroft, showing human habitation as long as 19,000 years ago, seemed to repudiate the Clovis-First theory and sparked intense controversy. Other scientists sought further signs of pre-Clovis activity across the Americas.

Another intriguing site was discovered in the 1970s in Monte Verde, Chile. The exceptionally well-preserved site held remains of wooden huts, rope, and stone tools dated to around 14,500 years ago. The early date and location in southern South America suggested that the settlers may have crossed Beringia and then traveled south by boat along the Pacific coast to avoid the huge inland glaciers that stood at that time. More recent excavations at the site have yielded butchered animal bones, a campfire, and further stone stools dating from 14,500 and 19,000 years ago, offering strong (if not irrefutable) evidence of pre-Clovis settlement in the Americas.

Fossilized human feces preserved in the arid environment of Paisley Caves in Oregon provide direct evidence for the oldest known human presence in North America. The coprolites, dating to around 14,000 years ago, give us insight into the diet of pre-Clovis people. They ate large megafauna such as mammoths, in common with other Ice Age populations, but the Paisley Caves poop also reveals diets rich in seeds, rodents, and insects, suggesting a more varied menu than had been previously supposed. Coprolites were not the only pre-Clovis artifacts found at Paisley Caves: A small section of bulrush fiber has also been uncovered, which researchers think may have been part of floor matting or a basket, lending yet another glimpse into the lives of these early cultures.

In the late 1970s, Washington State University archaeologist Carl Gustafson discovered a remarkable mastodon bone at the Manis fossil site in Sequim, Washington. The bone had been pierced by a human-made projectile point (also made from mastodon bone) that was still lodged inside. It indicated that humans had purposefully

hunted megafauna, and initial radiocarbon dating put the bone's age at 14,000 years old. But, because the Clovis-First theory was so entrenched, Gustafson's colleagues were skeptical.

In 2011, researchers at Texas A&M University subjected the bone to a series of new tests to determine its true age. The results confirmed it was 13,800 years old—predating the first Clovis objects' appearance by several centuries. The fact that the point was made from mastodon bone showed that these early hunters used previous kills to make new tools—a finding that offers a clue in the mystery surrounding megafaunal extinctions. Mammoths, mastodons, and saber-toothed cats all went abruptly extinct in North America around 12,700 years ago, and researchers have speculated that the sophisticated hunting techniques of the Clovis people contributed to it. This older culture implies that hunting may have been going on a lot longer than we knew.

#### *Tool Workshop // Debra L. Friedkin Site at Buttermilk Creek, Texas*

The Debra L. Friedkin Site displays evidence of repeated human habitation, ranging from the most recent (about 1800 years ago) to the most ancient (up to 15,500 years ago). Archaeologists working at the site have found numerous distinctive Clovis points—the finely worked fluted stone and bone points used to hunt megafauna—as well as tools in the layers below. This pre-Clovis layer of sediment revealed a tool-making site with thousands of chips of worked stone, plus many finished objects such as scrapers and blades, indicating that people pre-dating the Clovis had the skills to fashion sophisticated implements.

#### *Stone Knife and Butchered Bones // Page-Ladson Site, Florida*

The Page-Ladson archaeological site, a deep sinkhole under 30 feet of water in the Aucilla River near Tallahassee, provided the first evidence of pre-Clovis peoples in Florida. Scientists in the 1980s found mastodon bones and tools, but it was unclear whether the items had been carried there by currents, leaving their provenance open to question. Then, in the mid-2010s, archaeologist Jessi Halligan undertook 126 dives into the pitch-black sinkhole to search for artifacts. She found mastodon bones showing human-made butchering cuts and a stone knife, both dating to 14,500 years ago and, more importantly, still resting in an undisturbed matrix in the sinkhole. They seemed to prove that pre-Clovis people had occupied the site. Along with the megafaunal remains, possible canine bones brought up from the depths hint that dogs might have been companions to the early hunters, or at least competed with them for the meat. What is now a sinkhole may have been, in pre-Clovis times, a watering hole that would have attracted animals and made an excellent hunting ground for humans.

#### *Mammoth Bones with Cut Marks // Schaefer and Hebior Kill Sites, Wisconsin*

In the 1990s, archaeologists began excavating the Schaefer farm after a worker driving a bulldozer had run into a giant mammoth bone. A neighbor, John Hebior, mentioned that he had discovered similar bones on his property. Eventually, both farms yielded mammoth bones with v-shaped score marks, indicating the the properties may have been kill sites where humans had hunted and then processed the animals. Hebior's bones comprised a skeleton that was 85 percent complete (and it's now in the Milwaukee Public Museum). Archaeologists working on the remains dated them to around 14,500 years old, indicating pre-Clovis occupation of the sites. Researchers had long characterized the Clovis people as hunters of large game, so it was a surprise to discover a culture also hunting mammoths 1500 years earlier.

#### *Footprints // White Sands National Park, New Mexico*

A team of international researchers made headlines around the world in 2021 when they dated a series of footprints found preserved in an alkali flat in White Sands National Park as 21,000 to 23,000 years old. If their age was correct, the fossil footprints would refute the Clovis-First theory once and for all, so other archaeologists were wary. One source of controversy was that the footprints' age was determined by an analysis of seeds from aquatic plants found in the imprints. Because aquatic plants absorb dissolved carbon from bedrock rather than carbon from the air, this method can skew results too early. Researchers from the U.S. Geological Survey decided to reanalyze the date of the footprints, but this time, studied pollen from fir, pine, and spruce trees. Their findings, published in the journal *Science* in 2023, confirmed the dates suggested by the

aquatic plants, providing convincing evidence that people were walking across the flats of Whites Sands National Park some 7000 years earlier than the first evidence of Clovis people.

This find upended previous assumptions about the timeline of the arrival of the first people in the Americas—and suggests there may be many more discoveries to come.

## ***ARCHAEOLOGISTS IN DENMARK JUST FOUND A 4,000-YEAR-OLD RITUAL SITE THAT WAS LIKE THE WOODEN VERSION OF STONEHENGE***

*By Austin Harvey*

*March 1, 2025*

*From All That's Interesting at <https://allthatsinteresting.com/denmark-woodhenge>*



*Vesthimmerlands Museum*

Archaeologists in Denmark have uncovered the remains of a 4,000-year-old circular site that shares some key similarities with England's famous Stonehenge. The discovery came when workers were preparing for construction of a residential area and stumbled upon the remnants of this Neolithic structure. Experts believe it dates to around 2000 B.C.E., and it resembles similar circular structures from this era whose remains have been found in the Netherlands, Wales, Germany, and other European countries.

In fact, there have been dozens of henges found across the continent, and this is the second such woodhenge to be found in the area. Perhaps the most famous was found in Salisbury, England, just two miles northeast of Stonehenge itself. The prevalence of these structures, experts say, indicates a shared system of beliefs across Neolithic European cultures. The discovery of the Danish Woodhenge serves as further proof of how widespread these beliefs truly were.

In January, experts were excavating the site of a future housing estate in Aars, North Jutland when they came across a circle that once held roughly 45 wooden posts. The circle had a diameter of around 98.5 feet and was likely constructed sometime between 2600 and 1600 B.C.E. "It is an extraordinary find," Sidsel Wåhlin, a curator at the Vesthimmerlands Museum, told *The Guardian*. Wåhlin said she initially thought the marks in the ground were nothing more than a line of post holes — until further investigation revealed they formed a circle. "I was like: 'Oh my God, a timber circle, there is just no other explanation,'" she added.

As with Stonehenge and perhaps all of Europe's various henges that have been found, Woodhenge is believed to have once been an important ritual site. "They are ritual centers and sites that are connected with the worship of the sun and the agricultural ritual practices of the time," Wåhlin said. "In order to decide to make such a specific monument you have to understand what it means and how to plan it." Moreover, though, the Danish Woodhenge hints at a larger, shared belief system prevalent across Neolithic Europe, as the site seems to have a similar axis as the English Stonehenge and Woodhenge. "It shows us that they are sharing the same worldviews on large-scale areas on how to be farmers, how society connects with the supernatural," Wåhlin said. "Building monuments on this scale, you need to understand why and how. If a British person from the time would have come to the site they would have known what they are doing in there." Though the purpose of these structures ultimately remains shrouded in mystery, burials at Stonehenge suggest it may have been a place to honor the dead, while an altar found there hints at the site's possible religious purposes. Likewise, Denmark's Woodhenge may have served as a place of worship, especially that of the Sun.

But now, experts hope that further research will help unlock the reason why this site was built — and more. Now knowing that this is a ritual site, Wåhlin and excavation leader Andreas Bo Nielsen expressed excitement at excavating further. In the surrounding region, they have examined other significant Neolithic sites, including

one filled with burial mounds as well as several other settlements from this same period. Their hope is that excavating the Woodhenge site will unearth “burial goods” that shed more light on the people that built it, believed to belong to the Bell Beaker culture. “The excavation is a meticulous process, and we are thrilled by the discovery. We look forward to beginning the actual excavation of the site,” Nielsen said in a translated press release from the museum. “The timber circle is a window into the past, giving us a glimpse into our ancestors’ ceremonial and ritual activities.” “The timber circle provides us with valuable insights into rituals and social structures from the late Stone Age/earliest Bronze Age,” Wählin said. “It is a testament to Denmark’s rich archaeological heritage and the close connections of the Himmerland people with other regions and peoples of Europe.”

## ***ANCIENT CAVE DISCOVERY REVEALS THAT 8,000 YEARS AGO, THE SAHARA WAS GREEN***

*By University of Oxford*

*March 10, 2025*

*From SciTechDaily at <https://scitechdaily.com/ancient-cave-discovery-reveals-that-8000-years-ago-the-sahara-was-green/>*



*Credit: Ben Lovett*

Analysis of stalagmite samples from caves in southern Morocco has revealed new details about past rainfall patterns in the Sahara Desert. Researchers from the University of Oxford and the Institut National des Sciences de l’Archéologie et du Patrimoine found that rainfall increased between 8,700 and 4,300 years ago, significantly influencing ancient herding societies. Their findings are published in *Earth and Planetary Science Letters*.

Stalagmites—rock formations that grow upward from cave floors—serve as valuable records of past climate conditions. Their formation requires rainwater to percolate through soil and drip onto the cave floor, meaning their presence indicates historical rainfall. The discovery of stalagmites near the edge of the world’s largest hot desert provided researchers with an opportunity to reconstruct past precipitation trends. By analyzing trace amounts of uranium and thorium in the stalagmites, the researchers were able to determine when these formations grew, which in turn pinpointed periods of increased rainfall. Their findings confirm that the Sahara experienced wetter conditions during the African Humid Period, between 8,700 and 4,300 years ago.

“It is fabulous to see this research published after years of careful study. It was exciting to find and explore caves in southern Morocco during my fieldwork in 2010. And it is very rewarding that our measurements and interpretations fit so well with archaeological and environmental records from the wider region,” says Dr. Julia Barrott, study co-author, Impact and Learning Officer and Research Fellow at the Stockholm Environment Institute, Oxford.

### *Climatic Impact on Early Societies*

This time period coincides with a rise in the number of Neolithic archaeological sites in the region south of the Atlas Mountains, which then plummeted when arid conditions resumed. The research team believes that this highlights the importance of a favorable climate on these early pastoralist societies, which relied on rainfall for their livestock. But the impact was not just local; the South-of-Atlas region is significant because the land slopes southwards into the heart of the Sahara. As a result, enhanced rainfall during this period refilled major aquifers and increased river flow in the desert. This would have made it easier for populations to travel into this inhospitable environment to connect with other groups and exchange both goods and knowledge.

The research team also analyzed the amounts of different oxygen isotopes contained within the calcium carbonate stalagmite to investigate the mechanism which supplied the rainfall. They believe that additional rainfall came from tropical plumes, huge bands of clouds in the upper atmosphere, which can transport moisture

from the tropics into the subtropics. This is the first study to show the influence of tropical plumes on this region in the past.

At the same time, there is evidence from other sites that the West African Monsoon encroached into the Sahara from the south, and that combined with tropical plume rainfall to the north, this suggests that the desert narrowed significantly in this period. This improved habitability north and south of the central Sahara, increased recharge to rivers, and a narrower desert may have encouraged movement by people across the Sahara, during a key period in the development of land use and animal production.

#### *Contributions to Climate Research*

This new record on the northern edge of the Sahara adds vital information for understanding how climate has changed in this region during human habitation. These stalagmites add to information from other climate archives, such as Atlantic ocean cores, to understand variations in the Saharan environment. The ocean cores are located too far away to identify regional changes with precision. Contrastingly, this stalagmite record is ideally located for this task. “It has been exciting experiencing how much we can learn from small pieces of limescale that form underground. I worked on the most recent 1000 years of this palaeoclimate record during my master’s project, and now I am working to better quantify the exact levels of increased rainfall during my PhD project,” says Sam Hollowood, study co-author and DPhil student at Oxford’s Department of Earth Sciences.

The evidence of tropical plume rainfall provided by this study is also important for researchers trying to understand how rainfall patterns will change in the South-of-Atlas region in the future. Because tropical plumes brought rainfall to the area in the past, it opens up the possibility that they could do so in the future. The research team is keen to investigate this further by developing more quantitative reconstructions of rainfall amounts in the past.

*Note: For References, please go to url above.*

## **SWFAS OFFICERS AND BOARD OF DIRECTORS FOR 2026**

### **Officers**

President: John Furey  
First Vice-President: *open*  
Second Vice-President: *open*  
Treasurer: Charlie Strader  
Secretary: Susan Harrington  
Editor: John Furey  
Craighead Lab Director: Susan Harrington

### **Directors**

First of 3-year term:  
*open*  
Second of 3-year term  
Dr. Tiffany Bannworth  
Amanda Townsend  
Third of 3-year term:  
Theresa Schober (Chapter Rep.)  
Mary Southall

***Find us on Facebook at Southwest Florida Archaeological Society!***

***Check out our website at <http://swflarchaeology.org/>***

## **SWFAS AND FAS MEMBERSHIP APPLICATIONS**

We encourage those interested in Florida archaeology to become members of The Florida Anthropological Society (FAS) and The Southwest Florida Archaeological Society (SWFAS). Annual dues are due in January and membership applications to both organizations are attached. Membership in the FAS provides you with four annual volumes of *The Florida Anthropologist* and occasional newsletters on anthropological events in Florida in addition to the annual statewide meeting. More information on FAS can be found online at: [www.fasweb.org](http://www.fasweb.org). Membership in SWFAS offers you a local series of talks on archaeological and anthropological subjects that you can attend. The SWFAS monthly newsletter keeps you up to date on local events as well as other important archaeological topics. We urge you to support both with your membership. All of the SWFAS Lecture Series are open to the public at no charge.



# JOIN US!

## The Southwest Florida Archaeological Society

<http://swflarchaeology.org/>

The Southwest Florida Archaeological Society (SWFAS) was founded in 1980 as a not-for profit corporation to provide a meeting place for people interested in the area's past.

Our goals are to:

- Learn more of the area's history
- Create a place for sharing of this information
- Advocate for preservation of cultural resources

Its members include professional and amateur archaeologists and interested members of the general public. Members come from all walks of life and age groups. They share a lively curiosity, a respect for the people who preceded them here, and a feeling of responsibility for the conservation of the places and objects they left behind.

The Society holds monthly meetings between October and April, attracting speakers who are in the forefront of archaeological and historical research. Occasionally members join in trips to historical and archaeological sites.

A monthly newsletter, Facebook page, and website keep members abreast of our events and happenings.

The organization is a chapter of the Florida Anthropological Society, a statewide organization that publishes quarterly newsletters and a journal, *The Florida Anthropologist*, and holds an annual conference.

**I want to help The Southwest Florida Archaeology Society preserve and interpret Florida's heritage!**

Name (please print) \_\_\_\_\_

Address \_\_\_\_\_

City/Town \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

Check One:

Individual (\$20) \_\_\_\_\_ Sustaining Individual (\$50) \_\_\_\_\_ Family (\$35) \_\_\_\_\_

Student (\$5) \_\_\_\_\_ Life (\$500) \_\_\_\_\_

Donation to Support SWFAS Speakers and Programs \_\_\_\_\_

Skills, training, interests: \_\_\_\_\_

I hereby agree to abide by the rules and bylaws of the Southwest Archaeological Society. I further release from any and all liability due to accident and injury to myself, dependents and any property owners cooperating with the society.

Signature: \_\_\_\_\_ Date \_\_\_\_\_

Please make your check out to SWFAS and mail to:

Charlie Strader  
SWFAS Treasurer  
27655 Kent Road  
Bonita Springs, FL 34135

REV. 12052017

# FAS Membership Categories

Membership in the Society is open to all interested individuals who are willing to abide by the Florida Anthropological Society Statement of Ethical Responsibilities, which can be found on our website [fasweb.org](http://fasweb.org). *Membership is for one year.* SELECT LEVEL BELOW.

<input type="checkbox"/> Student*	\$20	<input type="checkbox"/> Institutional	\$50
<input type="checkbox"/> Regular	\$40	<input type="checkbox"/> Sustaining	\$100
<input type="checkbox"/> Family	\$45		

\*Student membership is open to graduate, undergraduate and high school students. A photocopy of your student ID must accompany payment. \*\*Add \$25 for foreign addresses.

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Member Name: \_\_\_\_\_

Email: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_ FAS Chapter: \_\_\_\_\_

**Please choose how you wish to receive the quarterly journal, *The Florida Anthropologist*.**

Digital Only (via a password protected web link) Note: Student members only receive digital access.

Both Digital and Printed

**This is a Gift Membership from:** \_\_\_\_\_

In addition to this Membership, I also wish to make a donation to:

\$ \_\_\_\_\_ Dot Moore/FAS Student Grant Fund      \$ \_\_\_\_\_ Florida Archaeology Month Account

\$ \_\_\_\_\_ Florida Anthropologist Monograph Fund      \$ \_\_\_\_\_ Florida Anthropologist Endowment Fund

**Total Enclosed:** \$ \_\_\_\_\_

I agree to abide by the Code of Ethics of the Florida Anthropological Society.

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Signature

Date

**Send Membership Form and Dues Payment to:**

**Florida Anthropological Society, P O Box 1561 Boynton Beach, FL 33425**

*You can join online or pay Membership dues renewals via PayPal on our website [fasweb.org](http://fasweb.org).*

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