



**JOINT 2025 ANNUAL MEETING OF
THE LOUISIANA ARCHAEOLOGICAL SOCIETY (LAS) AND
THE MISSISSIPPI ARCHAEOLOGICAL ASSOCIATION
(MAA)**

February 21-23, 2025

Vidalia, Louisiana

Program

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THE LOUISIANA ARCHAEOLOGICAL
SOCIETY (LAS)**

&

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ASSOCIATION (MAA)**

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LAS Web Site

<https://www.laarchaeologicalsociety.org/>

LAS Officers

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All officers can be contacted through the LAS website

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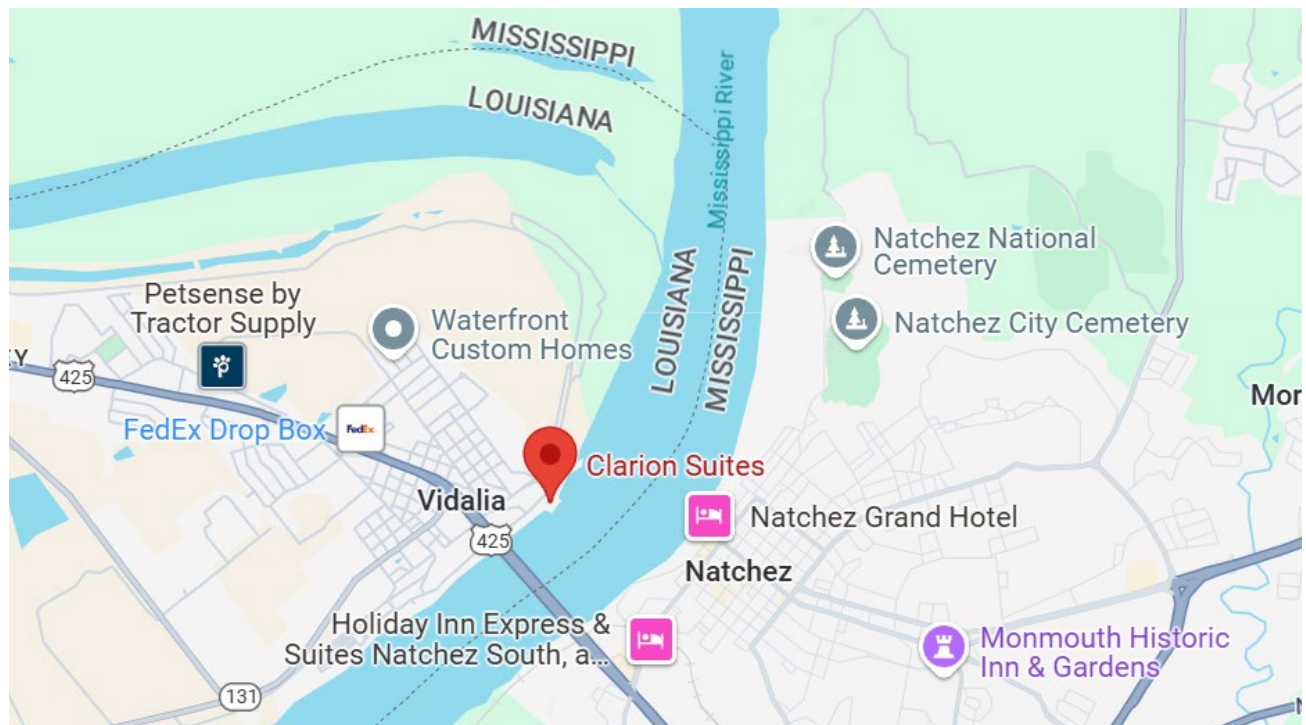
Welcome to the Joint Annual Meeting of the MAA and LAS

The 2025 Joint LAS/MAA Meeting will be held February 21–23, 2025, at the Clarion Suites at 100 Front Street, Vidalia, Louisiana. The conference will begin with open registration on Friday, February 21, followed by a welcome reception and social gathering at the hotel bar. That evening, the LAS Executive Committee Meeting will take place prior to the social hour and will be open to LAS and MAA officers.

Open registration will continue Saturday morning, February 22, and will remain open until noon. The silent auction will also begin that morning, with winners able to redeem their items that evening. The main event will feature paper presentations from 8:30 a.m. to 5:00 p.m., with a morning break, a catered lunch, and an afternoon break. Throughout the day, six excellent poster presentations will be on display in the ballroom.

The day will conclude with a catered banquet, drinks, and a keynote address from Dr. Megan Crandal Kassabaum, whom we are fortunate to have as our speaker. The fun will continue into Sunday, February 23, with a guided tour led by Dr. Vin Steponaitis of three Plaquemine mound sites and the Grand Village of the Natchez Indians.

This joint LAS/MAA meeting will be packed with engaging and informative presentations, offering an opportunity to learn, network, and enjoy the company of friends and colleagues alike.



GENERAL SCHEDULE OF EVENTS

Friday, 21 February 2025

- 3:30 – 6:30 p.m. Early Registration inside the Clarion Lobby
- 6:30 – 7:30 p.m. LAS Executive Committee Meeting in the Small Meeting Room
- 7:00 – 8:30 p.m. Welcome gathering in the Clarion Hotel Bar

Saturday, 22 February 2025

- 8:00 a.m. – 12:00 p.m. Registration in the Clarion Lobby
- 8:30 a.m. – 5:00 p.m. Silent auction, book sales, and poster session in the Ballroom
- 8:30 a.m. – 10:00 a.m. Presentations in the Ballroom (coffee station provided)
- 10:00 a.m. – 10:20 a.m. Break
- 10:20 a.m. – 11:40 a.m. Presentations in the Ballroom
- 11:40 p.m. – 1:00 p.m. Lunch catered in the Ballroom (included in registration fees)
- 1:00 p.m. – 2:40 p.m. Presentations in the Ballroom
- 2:40 p.m. – 3:00 p.m. Break
- 3:00 p.m. – 5:00 p.m. Presentations in the Ballroom
- 5:00 p.m. – 5:30 p.m. LAS Business Meeting in the Ballroom (immediately following the talks)
- 5:30 p.m. – 6:00 p.m. MAA Business Meeting in the Ballroom
- 7:00 p.m. – 9:00 p.m. Banquet and Keynote Speaker in the Ballroom (included in registration fees)

Sunday, 23 February 2025

- 8:30 a.m. – ~12:30 p.m. Tour of Plaquemine sites in Mississippi

LAS SILENT AUCTION AND BOOK SALES

The LAS will hold its annual Silent Auction at the meeting in Vidalia. The auction raises money for the Society's activities and over the years has raised several thousand dollars. Materials, including books, manuscripts, and objects related to Louisiana archaeology, the archaeology of surrounding states, and Louisiana anthropology, geography, and geology are welcome. If you have something to donate for the Auction, you can send it to Chip McGimsey, La. Division of Archaeology, P.O. Box 44247, Baton Rouge, LA, 70802, or bring it to the meeting. The LAS appreciates your support.

KEYNOTE ADDRESS

Dr. Megan Crandal Kassabaum

Associate Professor and Graduate Chair, Department of Anthropology | Weingarten Associate Curator for North America, Penn Museum | University of Pennsylvania

On Elevated Ground: Interpreting 7,500 Years of Platform Use in the Lower Mississippi Valley

While platform mounds are most commonly associated with Mississippian sites, the architectural form has an exceptionally long history in the Lower Mississippi Valley. In this talk, I first review the evidence for the construction and use of pre-Mississippian platform mounds in the region and consider how this long history should influence our archaeological interpretations. I then focus on recent excavations at Feltus and Smith Creek, two nearby Coles Creek platform mound sites, to further challenge the Mississippian-centric perspective on platform mounds that has long dominated the archaeological literature. I end with a brief consideration of how these interpretations align with contemporary Indigenous perspectives on mound construction as a cultural practice.

TOUR ON SUNDAY, 23 FEBRUARY 2025

Tour (2/23/2025): Plaquemine Mounds and Grand Village

Where to Meet: Clarion Hotel Lobby at 8:30 am

Return Time: 11:30/12:00pm

Join us for a tour on Sunday, February 23, of four Plaquemine sites, guided by Vin Steponaitis, Ph.D. The tour group departs from the Clarion Hotel in Vidalia at 8:45 am. Visits to Anna, Foster, and Emerald mound sites make up the first stretch of the trip, followed by a tour of the Grand Village of the Natchez Indians until noon. The tour is open to 2025 LAS/MAA Annual Meeting attendees. Please email Nikki Mattson at nikki@thearchcons.org if you plan to attend the tour so we can estimate a head count. We hope to see you there!

SCHEDULE OF PAPER PRESENTATIONS

Saturday, 22 February 2025

Clarion Ballroom, Vidalia, LA

Saturday Morning

- 8:30 a.m. Samuel M. Huey, Ryan Seidemann, and Christine Halling — Pending Catastrophe Facing Sites Located in the Morganza Spillway
- 8:50 a.m. Olivia Baumgartel and T.R. Kidder—Radiocarbon Revelations: New Radiocarbon Data from the Cedarland and Claiborne sites
- 9:10 a.m. Emily K. Dale and Paul D. Jackson — Deconstructing the Wilderness Plantation: Examining the Construction Phases of a Historic Plantation in East Baton Rouge Parish
- 9:30 a.m. Karla Oesch — Sunken treasure: a collection recovered from a safe in Lake Pontchartrain
- 9:50 a.m. Simon P. Sherman III, PhD — Reassessing Lithic Diversity at Poverty Point (16WC5): Insights into Multi-Layered siliceous material resources
- 10:10 a.m. **Break**
- 10:20 a.m. Ryan Seidemann, Christine Halling, and Samuel M. Huey — Heritage Protection in Forgotten Spaces: the Morganza Spillway Cemeteries
- 10:40 a.m. Bryan S. Haley, Douglas C. Wells, Lindsey Howell Franklin, Robert F. Westrick, Walter Hano, Richard A. Weinstein, Stuart G. Nolan, Sherry Pinell— Probing, Augering, and Offshore Remote-Sensing Investigations at Two Prehistoric Shell Middens (16SMY17 and 16SMY95), St. Mary Parish, Louisiana
- 11:00 a.m. Grant Snitker, Claudine Gravel-Miguel, Katherine Peck, Jonathan Paige, Miguel Martinez, Alex Fetterhoff, and Matthew Helmer— The Kisatchie National Forest Lidar Project: machine learning and remote sensing applications for forest-wide cultural resource management and research
- 11:20 a.m. Tom Fields — Union Museum and the Fields Site on Middlefork Bayou, Union Parish, Louisiana
- 11:40 a.m. – 1:00 p.m. **Catered Lunch with an update on the Evans Point Study from James Green and John Guy**

Saturday Afternoon

- 1:00 p.m. Robert F. Westrick and Charles E. Pearson — El Nuevo Constante Shipwreck – Forty-Five Years Later in Retrospect and the Search for the Corazón de Jesús y Santa Bárbara
- 1:20 p.m. James Fogleman – Tchefuncte, the Ugly Duckling Culture of the Lower Mississippi Valley and Surrounding Areas as Seen from Upper Atchafalaya Basin
- 1:40 p.m. Church, Jason – Novel Approaches to Archeological Interpretation Using 3D Modeling
- 2:00 p.m. Erlend Johnson, Matt Helmer, Mark Rees, and John Mayer— New Insights on Iatt Lake Bluff (16GR591): Preliminary Report on the 2024 Excavations in the Catahoula District of Kisatchie National Forest, Louisiana
- 2:20 p.m. Christopher Wilson— The Growing Importance of Drone Surveys
- 2:40 p.m. **Break**
- 3:00 p.m. Michael Carpenter — Don't Just Write It Off: Research Potentials at the Kindle Site (22GR986).
- 3:20 p.m. Tony Boudreaux and Vin Steponaitis — Investigating the Early Eighteenth-Century Cultural Landscape of the Grand Village of the Natchez Indians
- 3:40 p.m. Allison Belcher – Climate Change and Its Impacts on Archaeological Sites in Louisiana
- 4:00 p.m. Julian Blaine – Shells on the Shore – Middens and prehistoric lifeways around Lake Maurepas
- 4:20 p.m. Tristram R. Kidder, Anthony Ortmann, and Ilaria Patania – Open An Update on Investigations of Mound C at Poverty Point
- 4:40 p.m. Jeffrey T. Lewis, JR – Settlement Patterns in the Pine Hills of Mississippi
- 5:00 p.m. LAS Business Meeting in the Ballroom (immediately following the talks)
- 5:30 p.m. MAA Business Meeting in the Ballroom

Saturday Evening

- 7:00 p.m. Banquet and Keynote Address in the Ballroom (included in registration fees)

POSTER SESSION

Saturday, 22 February 2015

Outside of Clarion Ballroom

Saturday

8:30 a.m. – 5:00 p.m.

Carr, Cody, Dienes, Audrey, Pratt, Gregory, and Stephenson, Bailey – Einscan Pro HD 3D Laser Scanner vs Scaniverse: A Comparison of New Technologies

Church, Gloria – Analyzing the Proximity of Early Caddoan Archaeological Sites to the Red River

Elton, Brileigh and Long, Kelly– Working the Graveyard Shift: An Attempt to Relocate the Bayou Desiard Cemetery

Greenlee, Diana M., Sherwood, Sarah C., and Dalan, Rinita A. – Re-investigating Deposits in Ridge 2 Northwest at Poverty Point World Heritage Site

Hale, E., Watts, J., Tuccillo, A., and Lovelace, V. – Practical and Ethical Concerns of Archaeological 3D Imaging

Mills, Conan – Using Small Uncrewed Aircraft Systems (sUAS) for Conservation of Mound A at Poverty Point World Heritage Site, Initial Results

Robicheaux, Ian — Remote Sensing Applications in Identifying High Probability Archaeological Locales on the South Central Louisiana Coastline

Strader, Catherine Taunton– Royalty in Bondage: Preserving the Legacy of Prince Abd al-Rahman Ibrahima and the Archaeology of Foster's Fields.

Strader, Catherine Taunton– Reviving Rivercane: Ecology, Culture, and Archaeology

Treloar, Steve – Curating 50 Years of Archaeology at the Kisatchie National Forest

Torrens, Shannon – Taking Shape: Exploring the Zoomorphic Beads of Poverty Point

PAPER AND POSTER ABSTRACTS

(Alphabetical by Last Name)

Baumgartel, Olivia Baumgartel and Kidder, Tristram R.—*Radiocarbon Revelations: New Radiocarbon Data from the Cedarland and Claiborne sites*

The Cedarland and Claiborne sites at the confluence of the Pearl River and Mississippi River in Southwest Mississippi have been placed together temporally based on five radiocarbon dates obtained in the 1960's and 1970's. This paper details new radiocarbon dates sampled from collections, challenging previous assumptions of the connection between Cedarland and Claiborne, and their connection with the Poverty Point site. These results show Cedarland pre-dates Claiborne by approximately 500 years while Claiborne is the same age as Poverty Point. By reassessing the temporal status of these sites, we offer fresh insights that prompt new interpretations of other Late Archaic sites in the region and throughout the Southeast.

Belcher, Allison – *Climate Change and Its Impacts on Archaeological Sites in Louisiana*

Until the 21st century, the relationship between climate change and its effects on archaeological sites remained relatively underexplored. However, the topic has since become a focal point for researchers as the impacts — both positive and negative — are becoming increasingly apparent. Shifts in temperature, precipitation patterns, extreme weather events, and other environmental changes are now unmistakable. While these changes affect the natural and material world, they also pose significant risks to cultural heritage. Louisiana, a region prone to extreme climatic events, offers an ideal setting for such an investigation. The state has long experienced coastal erosion, severe weather events, and rising temperatures, all of which are projected to intensify over the next century. This study seeks to examine how Louisiana's cultural sites, particularly those located along the coast and near inland waterways, may be affected by a rapidly changing climate.

Blaine, Julian – *Shells on the Shore – Middens and Prehistoric Lifeways around Lake Maurepas*

Shell middens are a ubiquitous feature in the prehistoric archaeology of Louisiana. In December 2024, archaeologists with ELOS Environmental, LLC conducted a Phase I terrestrial cultural resource survey along the northwestern shore of Lake Maurepas between the mouths of the Amite and Tickfaw Rivers. During the course of this investigation, two new middens were discovered, and an already established midden was found to be much larger than originally thought. While seemingly unextraordinary, these findings have the potential to add to our understanding of the past in the Lake Maurepas area. In this spirit, this presentation will examine these middens in the context of other prehistoric sites around the Lake Maurepas area as well as explore the possibilities and obstacles in investigating their relationship to prehistoric settlement and subsistence patterns around Lake Maurepas.

Boudreaux, Tony and Steponaitis, Vin – *Investigating the Early Eighteenth-Century Cultural Landscape of the Grand Village of the Natchez Indians*

A robust, eighteenth-century documentary record and significant archaeological research at the Fatherland Site (22AD501), the location of the Grand Village of the Natchez Indians during the early eighteenth century, has made it one of the best-known archaeological sites in Mississippi. The recent analysis of eighteenth-century French maps and other historic documents indicates there still is much about Fatherland's history that we do not know, including the existence of multiple, previously undocumented mounds. In this paper, we discuss the results of documentary research and fieldwork

that confirm the existence of two “new” mounds at the Fatherland site and of efforts to reconstruct the battlefield from the 1730 attack and siege that forced the Natchez to abandon the Grand Village.

Carpenter, Michael – *Don’t Just Write It Off: Research Potentials at the Kindle Site (22GR986)*

The inevitable march of time makes the archaeologist working under Sections 106 and 110 of the National Historic Preservation Act (NHPA) now, as of 2025, consider archaeological sites nine years younger than the law itself. But what is the research potential of Mid-Twentieth-Century archeological sites? There is research potential of these sites, but it requires examination of the particular dynamics of the period of interest. Though earlier than the NHPA, archaeological sites dating to the 1930s and 1940s often are written off as lacking research potential. The 1930s and 1940s was dynamic time America, with many farms both large and small having failed. To halt this and also to improve the lives of suffering Americans, the New Deal policies of the Roosevelt administration pushed for direct and indirect aid to the American Farmer. One agency created to help was the Farm Security Administration or the FSA. The FSA backed loans for tenant farmers to purchase their own farms and loans both owners and tenants of small for making improvements on these farms. These programs came with education for these new farm owners, which taught modern-and-scientific farming and management skills. These programs helped numerous tenant farmers throughout Mississippi and the south and had a high success rate with borrowers repaying these loans decades early. These programs can be seen at 22GR986, which consists of the farm of George and Freddie Mae Kindle. The Kindles, who were recipients of one of these loans, purchased an 80-acre farm in Granada County, Mississippi. The potential avenues for archaeological research on Depression and World War II area archaeological sites can be seen at their farm 22GR986.

Carr, Cody, Dienes, Audrey, Pratt, Gregory, and Stephenson, Bailey – *Einscan Pro HD 3D Laser Scanner vs Scaniverse: A Comparison of New Technologies*

This poster compares the effectiveness of the Einscan Pro HD 3D Light Scanner, a professional grade scanner, to the Scaniverse iPhone application, a portable scanning application. We chose four artifacts of varying colors and materials in order to fully explore the capabilities of each scanning method. These four artifacts were a bronze bracelet, a carved bone figurine, a Calene ware bowl, and a plaster cast. The Einscan scanner uses a non-contact structured light scanning technique to create a model of an object, while Scaniverse uses light detection and ranging to scan and create a model of an object. Furthermore, Scaniverse has two methods of scanning objects: Mesh and Splat. Mesh uses traditional LiDAR to create a triangular mesh of the object, while Splat uses Gaussian processing to create data points that form the model. Through our testing, we found that the Einscan Pro HD 3D Scanner created great three-dimensional models, but it did not always perform as well as the Scaniverse application in recreating intricate textures. Within Scaniverse, we found that Splat made more successful models of objects with curved edges, like the figurine and the cast, and Mesh created more successful models of objects with hard edges, like the bracelet and the bowl.

Church, Gloria – *Analyzing the Proximity of Early Caddoan Archaeological Sites to the Red River*

Archaeologists have long highlighted the significance of the Red River in referencing the location of early Caddoan archaeological sites. Although the river is frequently mentioned in Caddo archaeological reports, the actual importance of its proximity to site placement has been unclear. This study examines major early Caddoan sites across the region to assess their average distance from the Red River. Using QGIS, a cumulative cost-analysis function was employed to calculate the walking distance from each site to the river. The results provide an

estimate of how far these sites are, on average, from the Red River, offering new insights into site location preferences in relation to this geographic feature

Church, Jason – *Novel Approaches to Archeological Interpretation Using 3D Modeling*

One of the challenges in presenting archeological artifacts is conveying the object as a whole so that the average museum viewer can understand the shard or fragment's context. The museum standard of today is to make a close replication of the whole object that incorporates the found shard. Many times, the museum viewer is confused as to which piece is the artifact and which piece is the replica. Without the replicated whole, most viewers cannot envision what the small fragment was out of context. This novel approach utilizes a 3D model of the object. This model can either be made in the 3D software or from scanning a similar historical object such as a vessel. The whole vessel is then 3D printed in a contrasting color from the artifact (such as white or clear plastic). The archeological object is then incorporated into the newly printed "ghost vessel". This approach allows the viewer a clear view of the archeological fragment as well as the interpretation of the whole vessel. The presentation outlines work currently being done at NCPTT and will showcase examples of 3D modeled works.

Dale, Emily K. and Jackson, Paul D. – *Deconstructing the Wilderness Plantation: Examining the Construction Phases of a Historic Plantation in East Baton Rouge Parish*

Last year, TerraX conducted a Phase III archaeological mitigation at a plantation home dating from the early to late nineteenth century in the backcountry north of Baton Rouge, Louisiana. Initial research indicated that the existing mansion, built during or just after the Civil War, was constructed on the site of a smaller, earlier home. During the excavation, we documented several construction phases of the residence, including the footprint of a house from the 1820s and a detached kitchen. Additionally, our investigations revealed a collection of nearly 3,000 largely unused English and French gunflints. This paper will discuss the excavations and provide interpretations of the site.

Elton, Brileigh and Long, Kelly– *Working the Graveyard Shift: An Attempt to Relocate the Bayou Desiard Cemetery*

Our poster discusses our ongoing attempt to relocate the Bayou Desiard Cemetery in Monroe, Louisiana, after its headstones were displaced by development and the boundary of the cemetery was not documented. We explain how our archival research, oral histories, as well as the employment of human remains detection dogs, have provided us with a new proposal for where the cemetery might be. We discuss our future plans for ground-truthing this theory with GPR imaging, as well as goals and hopes for the preservation of the headstones and cemetery, once located.

Fields, Tom – *Union Museum and the Fields Site on Middlefork Bayou, Union Parish, Louisiana*

The Union Museum of History and Art is a small-town Museum, publicly funded and with a unique format. Traveling exhibits and historical events are displayed six to eight times a year while an archeological exhibit remains year-round. The museum also houses the Archeological Research Center tasked with uncovering the first people of Union Parish. Union Parish is located in the hills of Central Louisiana. Numerous bayous cross the area and feed the Ouachita River. The area is ripe for hunter/gatherer communities with trade opportunities. Several reports have identified the area as lightly researched. The Darbonne Diggers explored one site on the Middlefork of Bayou D'arBonne. Forty STUs were dug and eight 1X1 meter units were excavated. After 9 half day digs, cleaning, sorting, storing and databasing it was identified that the team had uncovered 3072 plain sherds, 217 incised sherds, 31 projectile points, 848 chips, 52 bone fragments, and 1 bead. Carbon 14 tests were conducted

from two excavations and corroborates with located pottery. One site is 500 years BP and contained the Maddox engraved shards while the second site is 800 years old and accompanies Mazique Incised and Coles Creek Incised sherds. The last day of the dig uncovered two Dalton Points. The Diggers will be back on site for three weeks in April and then two weeks at two other sites in May.

Fogleman, James – *Tchefuncte, the Ugly Duckling Culture of the Lower Mississippi Valley and Surrounding Areas as Seen from Upper Atchafalaya Basin*

Tchefuncte is generally seen as a bland place holder between Poverty Point and Marksville. In the upper reaches of the Atchafalaya Basin, Poverty Point is a minor component and Marksville, despite the great names sake's mounds, leaves a surprisingly small archaeological footprint. Tchefuncte more than takes up the slack. It has some of the largest sites along with the greatest diversity of artifacts and exotics. Overall, it appears to be late archaic with a large side of ceramics. The sites have a high correlation between certain geological formations, especially Teche- Mississippi crevasses.

Greenlee, Diana M., Sherwood, Sarah C., and Dalan, Rinita A. – *Re-investigating Deposits in Ridge 2 Northwest at Poverty Point World Heritage Site*

In 2021, we re-opened two 2 x 2 m excavation units originally dug in 1991. The goal was to apply new methods to better understand the unusual stratigraphy observed in the original excavations. Our minimally invasive approach used a combination of photogrammetry, in situ and laboratory magnetic susceptibility, and sediment micromorphology. The new data provide insight into the origin and deposition of strata associated with ridge construction and use that included a maintained earthen floor built on a prepared surface. The last activities, mostly involving fish processing and cooking, were preserved under a subsequent distinct fill.

Haley, Bryan S., Wells, Douglas C., Franklin, Lindsey Howell, Westrick, Robert F., Hano, Walter, Weinstein, Richard A., Nolan, Stuart G., and Pinell, Sherry – *Probing, Augering, and Offshore Remote-Sensing Investigations at Two Prehistoric Shell Middens (16SMY17 and 16SMY95), St. Mary Parish, Louisiana*

In 2023 and 2024, archaeologists from Coastal Environments, Inc., and Louisiana State University, along with members of the Chitimacha Tribe of Louisiana, conducted terrestrial and underwater investigations at sites 16SMY17 and 16SMY95 to identify potentially intact midden remains that will be protected by the placement of a living-shoreline barrier within the adjacent, shallow water of East Cote Blanche Bay. Using funds provided to the Chitimacha Tribe by the National Oceanic and Atmospheric Administration (NOAA), the research included terrestrial and offshore probing, terrestrial augering, and offshore side-scan, magnetometer, ground-penetrating radar (GPR), and sub-bottom profiler surveys. The side-scan and magnetometer surveys utilized an autonomous survey vessel (ASV), while the sub-bottom survey employed a typical profiler and standard survey boat. The GPR survey was unique as it entailed placement of the GPR unit within a small dinghy that was propelled by a trolling motor. Using all techniques, areas of subsided and potentially intact midden were recognized offshore, along with disturbances from past oil and gas activities.

Hale, E., Watts, J., Tuccillo, A., and Lovelace, V. – *Practical and Ethical Concerns of Archaeological 3D Imaging*

(Abbreviated) This poster will give an overview of the emerging method of photogrammetry as it relates to the field of archaeology. While practical benefits of three-dimensional scanning will be covered, the focus will be on ethical concerns around three-dimensional scanning. The main ethical considerations presented by this poster will be centered around cultural sensitivity and remaining respectful of the

communities whose ancestral artifacts and sites are being studied. The introduction will provide a definition of photogrammetry and will discuss the applications of the application in archaeology. It will briefly outline the rest of the content of the poster, including the positive aspects and ethical concerns involved in both creating the scan and making it available to researchers and/or the public. The next sections will focus on the several reasons this application has grown in popularity over the past decade. It will be discussed that this is mainly due to 3D scanning providing the visualization of a site or artifact in a portable and noninvasive manner. Scanning can be used to preserve the integrity of features that exist on a constantly transforming landscape or preservation of a perishable artifact. Experimental archaeologists can also use these scans to reconstruct and reverse engineering the site or artifact scanned. Following this, the poster will highlight a variety of ethical considerations that must be considered when creating these models. Specifically, how creating and potentially disseminating these models can affect the agency of these artifacts. The idea that not just individual artifacts but even potentially entire sites can be digitized, uploaded, and disseminated across the internet raises questions about who should be able to view, publish and create these images. These issues can be especially challenging when scanning objects that may have important cultural context or sensitive topics. When scans and 3D models of objects are easily available online it becomes difficult to retain ownership and control of the objects.

Huey, Samuel M., Seidemann, Ryan, and Halling, Christine – *Pending Catastrophe Facing Sites Located in the Morganza Spillway*

The Morganza Spillway was constructed in 1954 by the U.S. Army Corps of Engineers as part of the Mississippi River and Tributaries Project. It was designed to divert excess floodwaters from the Mississippi River into the Atchafalaya Basin to help prevent catastrophic flooding in Baton Rouge, New Orleans, and other areas downstream. It was first opened in 1973 and has only been operated twice in its history, once in 1973 and again in 2011. The Morganza Spillway, located near Morganza, helps ensure that the Mississippi River maintains its current channel, which is essential for commerce and trade. However, the combination of silt deposition in the Mississippi River channel and increased precipitation due to climate change has set the stage for an unparalleled disaster. When opened to offer protection to population dense areas coastal communities and archaeological sites located within the Atchafalaya Basin, as well as coastal zones impacting sites located in Pointe Coupee, St. Landry Parish, St. Martin Parish, Iberia Parish, St. Mary Parish, Assumption Parish, and Terrebonne Parish will be severely impacted if not scored from the surface.

Johnson, Erlend, Helmer, Matt, Rees, Mark, and Mayer, John – *New Insights on Iatt Lake Bluff (16GR591): Preliminary Report on the 2024 Excavations in the Catahoula District of Kisatchie National Forest, Louisiana*

Iatt Lake Bluff is one of the largest and most significant precolonial sites in the Catahoula District of Kisatchie National Forest (KNF). Since its recording in 1995, the site has stood out for its unusually high density of indigenous pottery and cultural features. The site has also been subjected to illegal digging. Excavations in 2024 by UL Lafayette, Jena Band of Choctaw Indians, and KNF Heritage Program recorded 55 features, including post molds, pits, and hearths. Diagnostic artifacts indicate a major Coles Creek habitation, with later and earlier activity dating from the Paleoindian period. While analysis is ongoing, this presentation highlights preliminary findings and interpretations.

Kidder, Tristram R., Ortmann, Anthony, and Patania, Ilaria – *An Update on Investigations of Mound C at Poverty Point*

We know very little about Mound C at Poverty Point. In this paper we use various analyses to investigate Mound C with a focus on understanding the pace of construction and possible ways it was used. Mound C is composed of two sections, built in horizontal stages, often brightly colored and made up of multiple sediment types. Our investigations use micromorphological and microartifact analyses to analyze the construction history. We argue that the microstratigraphic features on the two portions suggest the mound was built rapidly as parallel ridges. No evidence of occupation surfaces is visible at micro- or macro- analytic scales, and in most instances, the various stages have very few artifacts of any sort, even down to the microscopic scale. The exception to this is the mound cap, which contains many artifacts with considerable functional and raw material diversity. Whatever the use of Mound C, it was not residential, but in many ways, it parallels the ridges in form, construction methods, and tempo.

Lewis, Jeffrey T. JR – *Settlement Patterns in the Pine Hills of Mississippi*

This paper examines the changes in settlement patterns of ancestral Native Americans from the Late Archaic (5800 – 3200 B.P.) to Late Woodland Period (1500 – 1000 B.P.). During the transitions from the Archaic to Woodland Periods and the beginning transition into the Mississippian social phenomenon, there were dramatic changes in subsistence practices, social organization, social hierarchy, production, and exchange strategies. Throughout Eastern North America, these changes in lifeways impacted the location of settlements, camps, and other occupational areas on the landscape. Additionally, archaeologists routinely note that the desired location for new settlements pays tribute to ancestral communities and landscapes. Examining the variety of impacts on settlement patterns, these investigations seek to understand the changes among ancestral Indigenous communities within the Pine Hills of Mississippi.

Mills, Conan – *Using Small Uncrewed Aircraft Systems (sUAS) for Conservation of Mound A at Poverty Point World Heritage Site, Initial Results*

Over the last ten years, Small Uncrewed Aircraft Systems (sUAS) have been used in archaeology to create orthomosaics, and three-dimensional models for site recording, and analysis of landscapes. Poverty Point World Heritage Site in Louisiana, a UNESCO World Heritage Site, was built over 3,000 years ago near Bayou Macon in West Carroll Parish. Mound A, a monumental earthen structure, is a significant archaeological landmark that is not immune to erosion and degradation. In the past, site staff needed to make repairs to Mound A, using sterile dirt, to correct the effects of erosion. This research leverages sUAS photogrammetry to generate high-resolution digital elevation models, three-dimensional models, and orthomosaics of the mound, providing detailed topographic data for informed conservation efforts. By analyzing these models, using tools within geographic information systems, areas of erosion, vegetation growth, and human impact can be identified, enabling targeted interventions to mitigate damage. Regular monitoring using sUAS photogrammetry allows for the tracking of changes over time, facilitating timely responses to potential threats. The research presented here is the initial results of a long-term study to identify changes to Mound A highlighting areas that may be in danger because of environmental damage. This non-invasive approach provides a powerful tool for preserving Poverty Point for future generations while minimizing disturbance to the archaeological record.

Oesch, Karla – *Sunken Treasure: A Collection Recovered from a Safe in Lake Pontchartrain*

In 2014, a construction company was dredging a section of Lake Pontchartrain when they recovered the remains of a safe and some of its contents. The recovery area is state property, and the material was turned over to the Department of Justice because the safe was thought to have been stolen and discarded. In 2024, the items were transferred to the Division of Archaeology. The artifacts were stored

in a cloth bag and had not been opened in 10 years. On initial inspection, it appeared to be a collection of flatware. The cleaning and restoration process revealed a surprising variety of items that were likely of significance to the owner including over 150 coins, a complete matching flatware set, and a gold watch. The artifacts, while not part of an archaeological site, can provide dates of when the safe was stolen as well as some information about the person or persons who owned the safe.

Robicheaux, Ian – *Remote Sensing Applications in Identifying High Probability Archaeological Locales on the South Central Louisiana Coastline*

Archaeological sites along Louisiana's coastline are threatened by adverse coastal processes, such as erosion and subsidence. The reality that many sites face risk of total loss and destruction creates an adverse circumstance for archaeologists' efforts to protect and interpret the invaluable data within prehistoric coastal sites. Sites along the coast are often difficult to locate and nearly impossible to access. With environmental conditions making site access incredibly difficult, we are required to reevaluate the way we identify areas of high probability before entering the field. Using remote sensing, spatially defining locales where there is a high probability for archaeological sites is possible. Focusing on the areas of Vermilion and Cote Blanche Bay, I have applied the use of LiDAR shaded relief data along with patterns in the geography throughout the area of interest to identify the previously mentioned high probability areas. When considering how to visit and identify new coastal sites, a method to better qualify the search remotely is incredibly useful for shortening the identification process and guiding researchers more directly toward new discoveries.

Seidemann, Ryan, Halling, Christine, and Huey, Samuel M. – *The Morganza Spillway Cemeteries: An Example of Climate Change's Postmortem Casualties and Recommendations for Minimizing Impacts*

The Morganza Spillway, near its namesake town in Louisiana, can divert massive volumes of water into the Atchafalaya Basin. The area where the Spillway is located used to be habitable land. Construction of the spillway required that people leave the area, abandoning both their homes and their ancestors. A superficial examination of the Morganza Spillway's floodway in 2019 revealed that at least 20 cemeteries are threatened that area with the possible opening of the spillway. As part of a pair of presentations, this first one examines the existing sites identified in 2019 with no meaningful technical assistance and the applicable legal framework. The second presentation includes a more GIS-based example of what such a survey and predictive model could look like. Through the cemetery lens, we propose to examine resources that are often overlooked in climate assessments, but are likely to be impacted with increasing frequency in the coming years.

Sherman III, Simon P., PhD – *Reassessing Lithic Diversity at Poverty Point (16WC5): Insights into Multi-Layered Siliceous Material Resources*

During the Late Archaic period (4000–2500 cal yr BP) in the southeastern United States, the Poverty Point culture (PPC) in northeastern Louisiana exhibited an unparalleled use of exotic materials, including cherts, copper, and steatite. The Poverty Point site (16WC5), occupied around 3600-3100 cal yr BP, features massive earthworks and diverse artifacts but lacks burials, making it unique among Late Archaic cultures. The function of the site remains debated, with emerging research on siliceous stone sourcing offering new insights. This study advances chert sourcing methodologies through non-destructive Visible/Near-Infrared Reflectance (VNIR) and Fourier Transform Infrared Spectroscopy (FTIR), analyzing 845 bifaces against an expanded dataset, including Edwards Plateau limestone from west Texas and Missouri samples such as Jefferson City Chert, Robidoux Chert and Quartzite, Reed Springs Chert, Gasconade Chert, Pitkin Chert, Burlington Chert, Silexite, and Aphanitic Rhyolite. Dimensionality

reduction using PCA and LASSO regression refined spectral data, enhancing prediction accuracy and addressing key gaps in artifact classification and raw material origin analysis.

Snitker, Grant, Gravel-Miguel, Claudine, Peck, Katherine, Paige, Jonathan, Martinez, Miguel, Fetterhoff, Alex, and Helmer, Matthew – *The Kisatchie National Forest Lidar Project: Machine Learning and Remote Sensing Applications for Forest-Wide Cultural Resource Management and Research*

The logistics, costs, and capacity needed to complete extensive archaeological pedestrian surveys to inventory cultural resources present significant challenges to public land managers. To address these issues, the USDA Forest Service and DOI Fish and Wildlife Service, in partnership with the New Mexico Consortium's Cultural Resource Sciences program, have led a new initiative to link aerial lidar-derived imagery and deep learning models tailored for cultural resource management on public lands. In concert with traditional archaeological methods, these next-generation tools have the potential to amplify agencies' abilities to efficiently identify above ground archaeological sites/features and monitor their condition over time. In this presentation, we explore the successes and challenges of designing, developing, and deploying lidar and machine learning methods to support cultural resource management priorities on the Kisatchie National Forest. Specifically, we will discuss 1) the logistics of flying and processing forest-wide, high resolution lidar datasets, 2) our approach to machine learning object detection and its implications for inventorying surface archaeological sites, and 3) examples of successfully deployed models for the Kisatchie National Forest. We will outline what has worked best so far, avenues for potential improvement, and new approaches to archaeological data science and synthesis that can benefit heritage programs and academic research alike.

Strader, Catherine Taunton – *Royalty in Bondage: Preserving the Legacy of Prince Abd al-Rahman Ibrahima and the Archaeology of Foster's Fields.*

This study examines the legacy of Prince Abd al-Rahman Ibrahima, an enslaved West African royal in Washington, Mississippi, and the significance of preserving sites associated with his life. Historical records document Ibrahima's journey from enslavement to his attempted return to West Africa, highlighting the resilience of the African diaspora. Foster's Fields, where Ibrahima was enslaved, likely contains an unmarked cemetery and remnants of enslaved life. Despite years of plowing, erosion, and surface collections, intact deposits may still exist, emphasizing the need for preservation. This study recommends combining historical research with archaeological technologies such as Ground-Penetrating Radar (GPR) and LiDAR to identify and protect these significant sites. These noninvasive methods help mitigate risks from erosion and development while deepening our understanding of the pre-Civil War enslaved experience in Mississippi. This research honors Ibrahima's legacy by integrating historical and technological approaches and contributes to the broader study of African diasporic history and migration.

Strader, Catherine Taunton– *Reviving Rivercane: Ecology, Culture, and Archaeology*

Arundinaria gigantea (rivercane), one of three native U.S. bamboos, thrives in southeastern wetlands, especially the Mississippi River Valley. Once forming vast canebrakes, their habitat declined due to agriculture, overgrazing, and disrupted Indigenous land management practices. Rivercane plays a vital ecological and cultural role by supporting biodiversity, improving soil and water quality, and serving as a critical resource for Indigenous communities. Restoration efforts, led by Indigenous groups and conservation organizations, aim to preserve traditional

knowledge and address understanding gaps in its life cycle. Archaeologists can support these efforts through non-destructive practices, mapping canebrakes, and recognizing rivercane's role in preserving cultural and archaeological sites through erosion control and habitat restoration.

Torrens, Shannon – *Taking Shape: Exploring the Zoomorphic Beads of Poverty Point*

Stone beads from the Poverty Point culture's lapidary industry offer fascinating and rich insights into identity, exchange, and interaction. The Beads, reflecting a variety of shapes and levels of production, have been counted in mass at the large mound centers of Poverty Point and Jaketown, as well as smaller sites like Slate. Effigy beads, depicting locus, owls, and other avian figures, have been found at major and minor Poverty Point sites throughout Louisiana and Mississippi, and even as far away as Florida. The sheer volume of production and diversity of styles suggest that beadmaking occurred rapidly and makers utilized different toolkits to achieve their results. By studying bead production and mapping their distribution across the landscape, we can gain insight into the ways these beads might have been worn, disseminated, and the roles they played during interactions between communities of the Lower Mississippi Valley and Gulf Coast.

Treloar, Steve and Helmer, Matt – *Curating 50 Years of Archaeology at the Kisatchie National Forest*

Archaeological investigations on Kisatchie National Forest are nearing the 50-year mark, and significant efforts have recently begun to curate, catalog, and synthesize one of the largest contiguous artifact collections in the state. Kisatchie's artifact collections have been brought up to modern curation standards through collaborative efforts with Northwestern State University, University of Louisiana Lafayette, and Louisiana Tech students and researchers. The first-ever comprehensive artifact database for KNF was developed, facilitating better management and accessibility of these significant collections. Additionally, points, stone tools, and other lithic materials are being sorted and analyzed for sourcing and distribution studies in collaboration with researchers from UL Lafayette. Technological advancements have also played a key role in synthesizing KNF's vast dataset. The New Mexico Consortium is leveraging AI-driven analysis to examine thousands of archaeological site records and associated artifact descriptions, providing new perspectives on settlement patterns and long-term cultural changes in the region. This poster details the preliminary results and goals of artifact curation and synthesis including management implications, and highlights the importance of ensuring the preservation of Louisiana's rich heritage for future research and public engagement.

Westrick, Robert F. and Pearson, Charles E. – *El Nuevo Constante Shipwreck – Forty-Five Years Later in Retrospect and the Search for the Corazón de Jesús y Santa Bárbara*

In 1979, a shrimper accidentally snagged three large copper disks in his nets. This led to the discovery of a partially buried shipwreck in about 19 feet of water. The state claimed ownership of the wreck, and the Louisiana Department of Culture, Recreation, and Tourism, issued a contract to Coastal Environments, Inc. to conduct professional excavations and historical research on the site. This archaeological project produced a wealth of information about the ship and the events leading to its loss. The site represents one of the most significant historical shipwrecks ever discovered in Louisiana state waters. This paper will focus on the discovery in retrospect, and the search for the Corazón de Jesús y Santa Bárbara, a vessel wrecked during the same storm believed to be located off the coast of Louisiana or southeastern Texas.

Wilson, Christopher – *The Growing Importance of Drone Surveys*

According to Louisiana's Comprehensive Archaeological Plan, archaeological sites have five main threats: coastal subsidence and erosion, rapid urban and industrial development, land leveling, oil and gas development, and natural and man-made disasters. Land loss due to coastal subsidence and erosion is the main threat, for we have lost 2,000 square miles of land since the 1930s and stand to lose another 3,000 over the next 50 years. But what are we to do? Drone surveys may be the answer. They offer the opportunity to scan, photograph, and use remote sensing technologies across vast areas quickly, efficiently, and with minimal costs. Large amounts of data can be collected, processed, and studied in a short amount of time. We have the technology to study the areas with the highest threat level before it is too late. This presentation will present the advantageous use drones can be set toward.

Notes: