

Current Research in Tennessee Archaeology

30th Annual Meeting

January 26-27, 2018

Sponsored by
Tennessee Division of Archaeology
and
Middle Tennessee State University

Montgomery Bell State Park Conference Center
Burns, Tennessee



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Organizers:

Michael C. Moore State Archaeologist and Director, Tennessee Division of Archaeology

Kevin E. Smith Professor of Anthropology, Department of Sociology and Anthropology, Middle Tennessee State University

An electronic version of the meeting program may be found online:

http://www.tn.gov/environment/program-areas/ arch-archaeology/ current-research-in-tennessee-archaeology--crita-.html



DAILY SCHEDULE

Friday, January 26

1:30	Tennessee Archaeological Advisory Council meeting
3:00	Tennessee Council for Professional Archaeology annual business meeting
Satur	day, January 27
8:20	Welcome and Opening Remarks
8:30	The MTSU Rogan Family Project: History, Architecture, and Archaeology of Early Irish-Tennesseans in Sumner County – Kevin E. Smith
8:45	An Assessment of the American Civil War (1861-1865) Period Archaeological Deposits at the Buchanan House Site in Bells Bend, Nashville, Tennessee – Kathryn F. Moore, Derek T. Anderson, David G. Anderson, LinnAnn Welch, and D. Shane Miller
9:00	Preliminary Interpretations from MTSU's 2017 Excavations at Castalian Springs in Sumner County, Tennessee – Paul N. Eubanks, Kevin E. Smith, and Shonda L. Clanton
9:15	Late Pleistocene and Early Holocene Lithic Flake Debris

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 Analysis at Rock Creek Mortar Shelter (40Pt209) –
 Lauren Woelkers and Jay D. Franklin
- 9:30 An Update on Crystalline Artifact Research in the Middle Cumberland Region of Tennessee Michael C. Moore, Kevin E. Smith, Aaron Deter-Wolf, Emily L. Beahm, and Sierra M. Bow
- 9:45 **Tennessee Cave and Rock Art Research 2017** Jan Simek, Alan Cressler, Stephen Alvarez, Jason Reynolds, and Chris Kerr

10:00-10:15 BREAK

- 10:15 Tree Removal at Pinson Mounds, Preserving the Integrity of the Earthworks and Improving the Visitor Experience William L. Lawrence
- 10:30 Mississippian Human Effigy Bottles and the Evolution of Belief Robert V. Sharp
- 10:45 Dental Micro-Wear Texture Analysis of Archaeological Dogs from the Tennessee River Valley Meagan Dennison and Larisa DeSantis

11:00	The Late Woodland Occupation at the Yearwood Site (40LN16) – Brian M. Butler
11:15	The Search for Additional Archaeological Traces of the Federal Defensive Lines Associated with the Battle of Franklin South of the Carter House, Franklin, Tennessee - Jared Barrett
11:30	Beans (<i>Phaseolus vulgaris</i>): An Indicator of Stress, Conflict, and Migration in Southeastern Mississippia Communities – Timothy Baumann, Gary Crites, Valerie Altizer, and Chris Lassen
	11:45–1:15 LUNCH
1:15	Archaeology Exhibits at the New Tennessee State Museum – Nick Fielder and Debbie Shaw
1:30	Tennessee's Archaeological Site File: Past, Present and Future - Paige Silcox
1:45	Large-Scale Geophysical Surveys in the Tennessee River Valley – Sarah Lowry and Shawn Patch
2:00	The Cemeteries of Fort Campbell: An Examination of Rural Burial Practices in the Southern United States in the 19th and 20th Centuries – Hillary Burt
2:15	History Needs Archaeology: A Tale from Fort Morrow (40PK586) in Polk County, Tennessee – Paul G. Avery
	2:30-2:45 BREAK
2:45	Drought, Disruption, and Deities: Late Prehistoric Environmental Change in Tennessee – Dorian J. Burnette, David H. Dye, and Arleen A. Hill
3:00	Archaeological Investigations at the Moss-Wright site, 40SU20/40SU61 – J. Scott Jones
3:15	Reconsidering the Spanish Routes (Hernando De Soto 1538-1542; Juan Pardo 1566-68), Fort Placements, and Native American Networks in lieu of a Northwest Trajectory across the Southern Appalachians – Nathan Shreve, Kathryn Sampeck, Jay Franklin, John Worth, and Eileen Ernenwein
3:30	Data Recovery Investigations at a Multicomponent Prehistoric Site in Sevier County – Jason Ross and Andrew Bradbury
3:45	The Bosley Cemetery Removal Project at the Dominican Campus of St. Cecilia Congregation in Nashville, Tennessee – Jared Barrett

POSTERS

- Late Mississippian Period Settlement Patterns at Ames Plantation – Christopher French
- Spatial Analysis of Unit 6 at the Chucalissa site (40SY1): Evaluating the Late Mississippian Period Main Residential Area – Thomas Gates
- The Obion Site: New Insights from the Reevaluation of Old Museum Collections Andrew Mickelson
- Archaeological Survey of Tennessee's Rosenwald Schools
 Ben C. Nance and Sarah Levithol Eckhardt
- Smoke Signals: Residue and Typological Analysis of Pipes from Enslaved African Americans in Western Tennessee – Claire Norton, Kimberly Kasper, Jamie Evans, and Katherine Cynakr
- A Preliminary Analysis of Childhood Growth and Health at the Logan Site (40DV8) – Monica M. Warner and Scott C. Meeks
- The Role of Magnetic Susceptibility in Multi-Method Geophysical Survey: Recent Results from the Johnston Site, Tennessee – Hayley Wynn, Cala Castleberry and Alice Wright

ABSTRACTS OF PRESENTATIONS AND POSTERS

Paul G. Avery (Cultural Resource Analysts, Inc.)

History Needs Archaeology: A Tale from Fort Morrow (40PK586) in Polk County, Tennessee

During the removal of the Cherokee from the Southeast in the late 1830s, a series of small forts and stockades were established to house them as they were gathered. One of these was located in southeastern Tennessee in what is now Polk County. Known as Fort Morrow (40PK586), it was abandoned and sold in 1838 after the so-called Cherokee War ended. As part of a recent survey for TDOT, the history of the site was examined. Little is known about Fort Morrow historically or archaeologically. It presents an

excellent example of how archaeology should be used to inform history.

Jared Barrett (TRC Environmental Corporation)

The Bosley Cemetery Removal project at The Dominican Campus of St. Cecilia Congregation in Nashville, Tennessee

In August 2016, during the construction of Siena Hall at Aquinas College on The Dominican Campus in Nashville, construction crews accidently uncovered the remains of the Bosley Cemetery. Archaeologist Jared Barrett with TRC Environmental Corporation was contacted to assist the St. Cecilia Congregation with the delineation and removal of the Bosley Cemetery at The Dominican Campus in Nashville, Tennessee. The cemetery was in use from the 1820s through the 1870s, with most burials taking place in mid-19th century. The presentation will give a brief history of the cemetery and overview of the work. This will include its initial discovery, mapping and delineation of the graves, unique history, and their removal.

Jared Barrett (TRC Environmental Corporation)

The Search for Additional Archaeological Traces of the Federal Defensive Lines Associated with the Battle of Franklin South of the Carter House, Franklin, Tennessee

In 2017, TRC conducted a search for subsurface remains of Federal defensive lines associated with the Battle of Franklin. The work focused on two properties collectively called the Lovell Tracts located south of the Carter House on the west side of Columbia Pike, the center point of the Confederate attack. The 2017 work drew on previous excavations carried out by TRC in 2009, 2014, and 2015. As with our previous work, we consulted sources included maps, primary and secondary documentation, and the expertise of local scholars. In the field, methods included backhoe stripping, and hand excavation. This paper reviews the consulted evidence and effectiveness of the methods applied during field work. Also discussed will be the discovery and excavation of an intact section of a Federal defensive ditch line with numerous clusters of in situ dropped and fired ammunition and other Civil War period artifacts.

Timothy Baumann, Gary Crites, Valerie Altizer, and **Chris Lassen** (McClung Museum, University of Tennessee)

Beans (Phaseolus vulgaris): An Indicator of Stress, Conflict, and Migration in Southeastern Mississippian Communities

Arriving in the 14th century, the common bean (Phaseolus vulgaris) was the last domesticated crop to be introduced into the prehistoric Southeast. The arrival of beans into the south can be linked to a prolonged drought in the midcontinent from AD 1250 to 1350. This rainfall shortage reduced the maize yield and was a prime factor for Mississippian sociopolitical tension, which was manifested by the construction of palisades around towns. After 1350, the major Mississippian sites in the lower Ohio and middle Mississippi river valleys were abandoned, with many of their occupants moving south and bringing their beans with them.

Dorian J. Burnette, David H. Dye, and **Arleen A. Hill** (University of Memphis)

Drought, Disruption, and Deities: Late Prehistoric Environmental Change in Tennessee

In the fourteenth and fifteenth centuries devastating and profound environmental changes disrupted and impacted everyday life in numerous Mississippian communities in Tennessee, resulting in demographic, economic, political, ritual, and social responses. While central Tennessee witnessed novel ritual innovations and population displacements, eastern (Upper Tennessee Valley) and western (Lower Mississippi Valley) Tennessee maintained population growth and ritual conservancy. Changes in ritual practice, due in part from population influx from Tennessee's interior, are evident in the archaeological record. In this paper we conjoin environmental impacts, ritual practice, and cultural resiliency to assess the nature of human practice and social transformations in Tennessee during the Middle and Late Mississippian periods.

Hillary Burt (Fort Campbell Cultural Resources Office)

The Cemeteries of Fort Campbell: An Examination of Rural Burial Practices in the Southern United States in the 19th and 20th Centuries

Spanning the borders of Tennessee and Kentucky, Fort Campbell was established in 1941. As it is federal land, all historic properties on the installation must be managed

and protected. The majority of Fort Campbell is undeveloped and utilized for army training. Leaving thousands of prehistoric archaeological sites, and the vestiges of the historic communities, including 127 cemeteries. Fort Campbell is an interesting case study to examine the burial practices of the historic populations in the south before WWII. The cemeteries were analyzed by type and ethnicity to better understand how historic inhabitants buried their dead. The cemeteries were then dated to see how burial trends related to the historic record. Despite economic booms and recessions, several wars, and vast social changes, lifeways for the rural tobacco farmer on Fort Campbell were relatively consistent through time. The white population's burial practices begin with the focus on the rural family farm in the early 19th century. White community burials become more popular after the collapse of the tobacco plantation system, when farm size decreases and community size and importance increase. On the other hand, the black population's burial practices begin with the focus on freedmen's communities. Black family farms and burials become more common in the 20th century when more African Americans became landowners. These defined burial trends are noticeable because of the removal of the historic inhabitants form the area in 1941, preserving the historic communities and cemeteries for future study to better understand the historic populations of Fort Campbell.

Brian M. Butler (Southern Illinois University Carbondale)

The Late Woodland Occupation at the Yearwood Site (40LN16)

Although the Middle Woodland component of this site has received considerable attention, the Late Woodland Mason phase occupation, a highly unusual one, has not. The Mason phase component was summarized in a short piece in a SEAC Bulletin in 1980 but like other components at the site, the occupation was never fully described. This presentation revisits the Late Woodland component in light of new botanical data, a new carbon date, and comparative data from other sites not available when the Mason phase component was first noted in print.

Meagan Dennison (University of Tennessee, Knoxville) and **Larisa DeSantis** (Vanderbilt University)

Dental Micro-Wear Texture Analysis of Archaeological Dogs from the Tennessee River Valley Dental micro-wear texture analysis (DMTA) is a technique used to explore past dietary behaviors of mammals. Confocal light microscopy and scale-sensitive fractal analysis characterize a tooth's surface topography revealing the textural properties of food consumed, including the hardness and variability of textural properties in an individual's diet. Prior work has demonstrated the ability to differentiate between canids that are highly opportunistic and actively scavenge from individuals that engage in less bone processing. DMTA conducted on nearly 40 indigenous dogs from Middle Archaic through Historic Cherokee contexts in East and West Tennessee reflect variability of dietary behaviors in different cultural settings.

Paul N. Eubanks, Kevin E. Smith, and **Shonda L. Clanton** (Middle Tennessee State University)

Preliminary Interpretations from MTSU's 2017 Excavations at Castalian Springs in Sumner County, Tennessee

North-central Tennessee is home to one of the largest concentrations of mineral springs in the Southeastern United States. For a variety of reasons, many of these springs were important places on the landscape during both the historic and prehistoric periods. In the summer of 2017, Middle Tennessee State University hosted an archaeological field school at the mineral springs located to the south of the Castalian Springs mound site. In this paper, we provide a brief overview of our work and present some of our findings regarding the importance and use of these springs during the late prehistoric occupation at Castalian Springs.

Nick Fielder and Debbie Shaw (Tennessee State Museum)

Archaeology Exhibits at the New Tennessee State Museum

The new state museum which will open late fall 2018 will feature all new exhibits in the First Peoples gallery. The exhibits will showcase cultural period artifacts and publically owned sites across the state. The staff consulted with Southeastern tribes in the exhibit content.

Christopher French (University of Memphis)

Mississippian Settlement Patterns at Ames Plantation, Fayette County, Tennessee

This research analyzes Late Mississippian period (ca. AD 1400-1550) settlement patterns and land use practices at

Ames Plantation in Southwestern Tennessee utilizing data collected from controlled surface surveys, geophysical surveys, as well as excavations. Previous research at Ames (e.g. Mickelson 2008; Mickelson and Goddard 2011; Guidry 2013) discovered that site 40FY7, is not only a four mound complex, but was a planned Early-Middle Mississippian period (ca. AD 1000-1400) town with a dozen houses built around several plazas, all enclosed within a defensive palisade. This study aimed to better understand Mississippian period land use beyond the Ames Town site (40FY7) by locating farmstead-to-hamlet sized sites. Additionally, this study also analyzes diachronic change in Mississippian settlement patterns. This study located surface exposed artifacts to identify Mississippian period sites warranting more investigation. Geophysical surveys took place to detect subsurface structural features and their areal distribution. Following the geophysical surveys, test excavations were used to ground truth any archaeological signatures in the geophysical surveys. This study benefits in locating additional sites that will lend better insight into Mississippian period settlement patterns in West Tennessee.

Thomas Gates (University of Memphis)

Spatial Analysis of Unit 6 at the Chucalissa site (40SY1): Evaluating the Late Mississippian Period Main Residential Area

The current research project is a spatial analysis of the main residential area (Unit 6) at the Chucalissa site (40SY1), a prehistoric Mississippian site located in Southwest Memphis, Tennessee. Currently, there are over 130,000 recovered artifacts, excluding burials, held in the museum repository from excavations conducted during the early 1940s through the early 1980s. This poster uses earlier maps and recorded artifact proveniences to highlight activity areas and housing structures in Unit 6 using Geographic Information Systems (GIS). Of particular interest is House 10, a large structure located in the southwest corner of Unit 6, which contains specialized artifacts spanning the Boxtown phase (AD 1350-1450) and the Walls phase (AD 1450-1520).

J. Scott Jones (Midsouth Cultural Resource Consultants)

Archaeological Investigations at the Moss-Wright site, 40SU20/40SU61

The Moss-Wright site is a Middle Cumberland Mississippian site located in the Moss-Wright Park, Goodlettsville, Sumner County, Tennessee. Three different episodes of fieldwork have been conducted at Moss-Wright, yet very little has been published. The first episode is of the stone-box cemetery removal conducted in 1977 by the Tennessee Division of Archaeology and subsequently published. A second period of investigations was conducted in 1996 by a local CRM firm that focused upon burial identification within the habitation area. These investigations revealed a large, palisaded Mississippian town. A third period of investigation was conducted by the presenter in the fall of 2017. The focus of this last period of investigation was to determine the existence and extent of any remaining archaeological deposits adjacent the Mississippian town and previously investigated areas. This presentation is primarily concerned with the results of the 2017 investigations and spatial relationship with the previously investigated areas. Initial results indicate that a substantial amount of area with intact archaeological deposits and research potential remain despite the much of the habitation and village area having been previously impacted.

Andrew Mickelson (University of Memphis)

The Obion Site: New Insights from the Reevaluation of Old Museum Collections

The Obion site, an Early-Middle Mississippian site located in northwestern Tennessee, has long been known to archaeologists as a large mound complex. However, the recent rediscovery of artifacts and notes from extensive surface collections conducted at Obion in the 1970s, indicates that Obion also had a considerable residential component. The new collections allow for a reassessment of the architectural layout of Obion at both the site scale and in broader regional context

Kathryn F. Moore (Mississippi State University), **Derek T. Anderson** (Mississippi State University), **David G. Anderson** (University of Tennessee), **LinnAnn Welch** (Nashville Parks and Recreation), and **D. Shane Miller** (Mississippi State University)

An Assessment of the American Civil War (1861-1865) Period Archaeological Deposits at the Buchanan House Site in Bells Bend, Nashville, Tennessee The research goal of this project was to assess the historic and architectural significance of the Buchanan House in Bells Bend, Nashville, Tennessee, and the associated American Civil War period archaeological deposits at the site to guide future preservation efforts at the Bells Bend Outdoor Center. Evidence from historic document research and archaeological survey indicates that the residents of the Buchanan House ran a farming operation in the area for nearly a century and a half, with the Civil War having little impact on them, offering a unique perspective on the resistance and resilience of civilians during the Civil War.

William L. Lawrence (Tennessee Division of Archaeology)

Tree Removal at Pinson Mounds, Preserving the Integrity of the Earthworks and Improving the Visitor Experience

Pinson Mounds in southern Madison County Tennessee is the largest middle woodland ceremonial and mound center in the southeastern United States. Sauls Mound, at 72 feet in height, is among the largest mounds north of Mexico. In recent years the mounds had become overgrown with vegetation to the point that some were barely visible during the summer season. Mature trees on the mounds pose a threat to the integrity of the mounds as winds storms have the potential to uproot trees and cause significant damage to the mounds. A tornado in the summer of 1989 uprooted several large trees on Ozier mound causing damage to the earthwork. During the Summer and early Fall of 2017 Tennessee State Parks provided funding to remove mature trees and undergrowth from seven mounds at Pinson in cooperation with the Division of Archaeology. The removal of the trees and vegetation in addition to preventing future damage from storms, has greatly improved the park visitor experience as the mounds are now visible and the size and nature of the earthworks can be fully appreciated.

Sarah Lowry and **Shawn Patch** (New South Associates, Inc.)

Large-Scale Geophysical Surveys in the Tennessee River Valley

This paper compares the large-scale geophysical surveys collected at the Cox Mound (1JA76), Hiwassee Island (40MG31), the Bell Site (40RE1), Ledford Island (40BY13), and Long Island (40RE17). The results from this work represent a series of projects where ground penetrating radar (GPR) and magnetic gradiometer data collection

were done on Mississippian village sites owned by the Tennessee Valley Authority (TVA) that had been excavated in some capacity during the early twentieth century. Present-day geophysical data collected at these sites and the early 20th century archaeological notes and reports were used to build a comparative data set of South Appalachian Mississippian sites where a specific interpretations about community layout and land use could be made, including village size, occupation density, and architectural variation.

Michael C. Moore (Tennessee Division of Archaeology), Kevin E. Smith (Middle Tennessee State University), Aaron Deter-Wolf (Tennessee Division of Archaeology), Emily L. Beahm (Arkansas Archeological Survey), and Sierra M. Bow (University of Tennessee, Knoxville)

An Update on Crystalline Artifact Research in the Middle Cumberland Region of Tennessee

This paper presents new and revised information on our crystalline artifact research project initially discussed at the 2014 SAA meeting. At that time, our modest assemblage of worked and raw crystal items from four Mississippian sites was assessed as calcite through visual and pXRF techniques. Subsequent FORS (Fiber Optic Reflectance Spectroscopy) analysis employed since 2016 determined these specimens are, in fact, fluorite. Also, our modest sample of six worked crystal artifacts known in 2014 has increased by 50% through the recent recovery of two earplugs and one bead from three Mississippian period sites. FORS analysis determined these three artifacts are fluorite as well.

Ben C. Nance and **Sarah Levithol Eckhardt** (Tennessee Division of Archaeology)

Archaeological Survey of Tennessee's Rosenwald Schools

The Tennessee Division of Archaeology completed field work for an archaeological site survey of Tennessee's Rosenwald Schools in 2017. These schools for African-American students were built between 1912 and 1932 and partly funded by the Julius Rosenwald Fund. This program helped construct 354 schools, 9 teachers' homes, and 10 industrial shops in Tennessee. Researchers were able to locate most of these sites, assess their archaeological integrity, and add them to the statewide archaeological database maintained by the Division of Archaeology. This poster will present the distribution of sites across

Tennessee and will describe the research process used in locating and recording the sites. It will include a discussion of current site conditions and photos of standing schools, ruins, outbuildings, and surface artifacts.

Claire Norton (Rhodes College), Kimberly Kasper (Rhodes College), Jamie Evans (Ames Plantation), and Katherine Cynakr (Rhodes College)

Smoke Signals: Residue and Typological Analysis of Pipes from Enslaved African Americans in Western Tennessee

At Ames Plantation in western Tennessee, excavations on the Fanny Dickins' Slave House III site (1841-1853) have yielded a plethora of information about the everyday lives of the inhabiting enslaved populations. However, little is known about the smoking habits of these dynamic individuals. More can be revealed through employing multiple lines of evidence to generate nuanced understandings of choices surrounding the use of specific pipes and the varieties of plants smoked. Conducting typological and documentary analysis on the origins of these pipes, we draw more robust conclusions about how they reflect choices and consumption patterns. We also bring clarity to these inquiries using gas chromatography—mass spectrometry, a method that identifies specific compounds in organic pipe residues. This multi-dimensional analysis seeks to better understand individual agency, the use of traditional ecological knowledge, and the integration of religious and/ or African folk art of these enslaved individuals.

Jason Ross and **Andrew Bradbury** (Cultural Resource Analysts)

Data Recovery Investigations at a Multicomponent Prehistoric Site in Sevier County

Phase III data recovery investigations were conducted at 40SV232 in Sevier County. The site was situated on a low rise overlooking the floodplain of the Little Pigeon River. Based on the recovered diagnostic artifacts and radiocarbon dates, Early Archaic through Mississippian components could be identified at the site. Features at the site were dated to the Late Archaic through Mississippian periods; however, the Late Archaic occupation appears to be the most intensive in the portion of the site excavated. In the paper we provide an overview of the site excavations and a preliminary discussion of the ongoing analysis.

Robert V. Sharp (Independent Researcher)

Mississippian Human Effigy Bottles and the Evolution of Belief

As part of an ongoing study of female and male effigy bottles of the Middle Cumberland Region and the Central and Lower Mississippi Valley, this presentation looks at patterns of development in the creation and use of these vessels across the region that suggest the evolution of beliefs centered on the veneration and invocation of deities, supernatural figures, culture heroes, and other than human personages, prior to the final deposition of these ritual objects in various mortuary contexts.

Nathan Shreve (University of Mississippi), Kathryn Sampeck (Illinois State University), Jay Franklin (East Tennessee State University), John Worth (University of West Florida), and Eileen Ernenwein (East Tennessee State University)

Reconsidering the Spanish Routes (Hernando De Soto 1538-1542; Juan Pardo 1566-68), Fort Placements, and Native American Networks in lieu of a Northwest Trajectory across the Southern Appalachians

Building upon the work of Sampeck et al. (2015), this paper takes an exploratory and collaborative approach to reconsider how Native American networks and Spanish strategies can better define the path of early Spanish explorers across the mountains of east Tennessee, giving important clues for how polity interactions were orientated across a diverse political and linguistic landscape, and why the Juan Pardo expedition may have chosen certain place locations to build the short-lived forts of San Pedro and San Pablo. One consistency found throughout the Spanish accounts is that a significant population of Iroquoian speakers inhabited a region adjacent to the western slopes of the Appalachians, a population whose interactions were oriented toward the Catawba and Siouan speaking populations to the east, centered around Fort San Juan and the Burke archaeological culture. This paper suggests that settlement patterns, historical accounts of the distances traversed as well as the terrain described by the Spanish, and ethnographical accounts indicate this Iroquoian speaking population lay along the upper Nolichucky valley and Watauga basin. Furthermore, we suggest that the intensive interactions between this population with polities to the east are evident in the material cultural found within the upper Nolichucky and Watauga basin, all

of which are highly correlated with the early Spanish accounts.

Paige Silcox (Tennessee Division of Archaeology)

Tennessee's Archaeological Site File: Past, Present and Future

One of the primary functions of the Tennessee Division of Archaeology (TDOA) is to maintain the official state Archaeological Site File. As of 2017, Tennessee has 26,312 recorded prehistoric and historic archaeological sites in the Site File database with an extensive archive of detailed site records and archaeological literature maintained by the Site File Curators. Our previous curator presided over the transition of the site file from paper to electronic and we are now tasked with managing the transition into the internet age. This presentation will give a brief overview of the function of the TDOA Site File, discuss recent changes, and outline a few of the exciting new developments that are on the horizon.

Jan Simek (University of Tennessee), Alan Cressler (National Speleological Society), Stephen Alvarez (Ancient Art Archive), Jason Reynolds (South Cumberland State Park), and Chris Kerr (Smokey Mountain Grotto NSS)

Tennessee Cave and Rock Art Research 2017

In 2017, the University of Tennessee, Knoxville, Cave Archaeology Research Team visited a number of new prehistoric cave art and open air rock art sites in Tennessee and continued documentation work in others that were discovered in recent years. Newly-recorded sites include incised petroglyphs in a small but spectacular sandstone shelter on the southern Cumberland Plateau and pictographs on a sandstone wall in the same region. We also visited the first probable prehistoric cave art site from Meigs County. We continued survey at a significant bedrock mortar site in Cumberland County, one of several such sites in the Northern Plateau. The UTK Team also continued work in nearby states, including continued photogrammetric work in 19th Unnamed Cave, Alabama.

Kevin E. Smith (Middle Tennessee State University)

The MTSU Rogan Family Project: History, Architecture, and Archaeology of Early Irish-Tennesseans in Sumner County

Hugh Rogan's immigration story began in 1775 in County Tyrone, Ireland and led him to the farthest western border of the British-American colonies at Bledsoe's Fort in Sumner County. The story of Hugh and his Irish family is told today at both Bledsoe's Fort Historical Park in Tennessee and the Ulster-America Folk Park in Northern Ireland – a story spanning Hugh's participation in the American Revolutionary War, the family's creation of a large plantation, and ultimately the literal return of the plantation house to Ireland. This paper summarizes the archaeology, architecture, and history uncovered during this three-decade project.

Monica M. Warner and **Scott C. Meeks,** Tennessee Valley Archaeological Research (TVAR)

A Preliminary Analysis of Childhood Growth and Health at the Logan Site (40DV8)

Overlooking Vaughns Gap Branch in Davidson County, the Logan site (40DV8) is a late prehistoric Mississippian village containing a large number of stone box graves typical of other Mississippian village and mound sites in the Middle Cumberland region (MCR). Recent investigations by TVAR at the Logan site resulted in the identification and excavation of 189 stone box graves, two primary extended burials, and five secondary burials associated within a discrete cemetery. Using post-cranial metrics, coupled with skeletal pathology data and mortuary context, this poster presents the preliminary analysis of growth and development for a sample of 35 children from the Logan site. The Logan results are compared to other sites in the region to better understand overall community health and environmental adaptation in the MCR during the Late Mississippian.

Lauren Woelkers and **Jay D. Franklin** (East Tennessee State University)

Late Pleistocene and Early Holocene Lithic Flake Debris Analysis at Rock Creek Mortar Shelter (40Pt209)

We analyze lithic flaking debris from transitional late Pleistocene and early Holocene layers at Rock Creek Mortar Shelter, a multicomponent site on the Upper Cumberland Plateau (UCP), Pickett County, Tennessee. Blades, blade-like flakes, and two blade core fragments are among the lithics recovered from these contexts. The site is well-stratified, so we can separate these layers from the Middle and Late Archaic components. We seek to determine if the flake debris analysis reveals significant differences from later Holocene contexts on the UCP. We

will also address if the flake debris analysis indicates blade production on site.

Hayley Wynn, Cala Castleberry, and Alice Wright (Appalachian State University)

The Role of Magnetic Susceptibility in Multi-Method Geophysical Survey: Recent Results from the Johnston Site, Tennessee

Since 2014, the Pinson Environment and Archeology Regional Landscape (PEARL) project has worked to document the sub-surface remains of the Johnston site in west Tennessee in an effort to better understand the organization and evolution of this neighbor and possible precursor of Pinson Mounds. In this poster, we present the results of an extensive magnetic susceptibility survey carried out in 2015 and 2016, which demonstrate the utility of this coarse grained but highly efficient method for collecting geophysical data and guiding excavation strategies.