CURRENT RESEARCH IN TENNESSEE ARCHAEOLOGY

26th ANNUAL MEETING

Friday, January 24 and Saturday, January 25, 2014

Ed Jones Auditorium, Ellington Agricultural Center
Nashville, Tennessee

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

Sponsored by
Tennessee Division of Archaeology
and
Middle Tennessee State University

Funding for the Friday reception is provided by the Tennessee Council for Professional Archaeology
with logistical support from Dr. Tanya Peres and the Middle Tennessee Anthropology Society

An electronic version of the 2014 CRITA program is posted on the
Tennessee Archaeology Network website:
http://capone.mtsu.edu/kesmith/TNARCH/
### DAILY SCHEDULE

#### FRIDAY, JANUARY 24

1:30  Tennessee Archaeological Advisory Council meeting  
3:00  Tennessee Council for Professional Archaeology business meeting  
4:30  TCPA Reception, Ed Jones Auditorium  

#### SATURDAY, JANUARY 25

8:25  Welcome and Opening Remarks  
8:30  African Americans and the Archaeology of Middle Tennessee, 1820-1950.  
     Kevin E. Smith, Michael C. Moore, and Stephen T. Rogers  
8:45  Revisiting Widows Creek: Integrating Multiple Curated Datasets from a Shell Midden Site in the Middle Tennessee Valley.  
     Howard J. Cyr, Kandace D. Hollenbach, Stephen B. Carmody, Keith J. Little, and Hunter B. Johnson  
9:00  Sourcing the Sacred: A Chert Source Analysis of Mississippian Sword-Form Bifaces from Tennessee.  
     Ryan Parish  
     Christina Bolte  
9:30  Welcome to the Jungle: Application of LiDAR Imagery for Archaeological Survey of Dense Vegetation/Low Visibility Areas at Reelfoot Lake, Obion and Lake Counties, Tennessee.  
     William L. Lawrence  
     Jan Simek, Alan Cressler, Sierra Bow, Joseph Douglas, Thomas Loring, and Teri Stephens

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<tr>
<th>Time</th>
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<th>Authors</th>
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<tr>
<td>10:30</td>
<td>Portable X-Ray Fluorescence Analysis (pXRF) of Mississippian Stone Statuary.</td>
<td>Sierra M. Bow and Jan F. Simek</td>
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<td>10:45</td>
<td>An Update on Crystal Artifacts and Production in the Middle Cumberland Region.</td>
<td>Michael C. Moore, Kevin E. Smith, Aaron Deter-Wolf, and Emily L. Beahm</td>
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<td>11:00</td>
<td>GIS Analysis and Spatial Patterning of Bedrock Mortar Holes on the Upper Cumberland Plateau of Tennessee.</td>
<td>Lucinda Langston</td>
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<td>11:15</td>
<td>Emergence: The Genesis, Spread, and Deposition of Engraved “Rattlesnake” or Herpetomorphic Marine Shell Gorgets in the Southeast.</td>
<td>Mark M. Crawford</td>
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<td>11:30</td>
<td>Cooter-Style Hunchbacks in the Lower Mississippi Valley.</td>
<td>David H. Dye</td>
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<td>11:45</td>
<td>The Archaeology of Ancient Native American Tattooing in Tennessee and the Southeast.</td>
<td>Aaron Deter-Wolf</td>
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#### 10:00–10:30  POSTER SESSION

#### Noon–1:30  LUNCH

1:35  The Citico Site (40HA65) in Regional Context.  
     Lynne P. Sullivan
1:45  The Perry/Harbison/Neal House, not Reynold's Station! Archaeological Testing at Site 40KN275, Knox County, Tennessee.
Paul G. Avery

2:00  Multi-Staged Research at the Denmark Site (40MD85).
Scott P. Hadley, Jr.

2:15  Archaeological Testing at Rock Creek Mortar Shelter (40PT209), Pickett State Forest.
Jay Franklin, Cayla Cannon, and Travis Bow

2:30  Scraping the Surface: Bone and Shell Modification at the Spirit Hill Site.
Andrew Gillreath-Brown

3:00  Cazuelas and Contact: An Introduction to an Important Seventeenth Century Qualla Town on the Nolichucky River.
Nate Shreve

POSTER SESSION

Aerial LiDAR of the Hiwassee Island Site (40MG31).
Michaelyn Harle and Patricia Hamlett

Archaeological Testing at Glass Mounds (40WM3), Williamson County, Tennessee.
Aaron Deter-Wolf

Bioarchaeological Investigations at Fernvale, A Middle Tennessee Archaic Site.
Shannon C. Hodge and Tiffany B. Saul

Compositional Analysis of Glass Trade Beads from the Interior Southeast.
Jessica Dalton-Carriger and Elliot H. Blair

Construction of the Middle Woodland Earthen Enclosure at Old Stone Fort, Manchester, Tennessee.
Sarah C. Sherwood and Stephen J. Yerka

Data Collection Before Reburial.
Tiffany B. Saul and Tanya M. Peres

Elemental Characterization of Metal Beads from the David Davis Farm Site, Hamilton County, Tennessee.
Sarah Blankenship, Bruce Kaiser, and Michael C. Moore

Fort Campbell Cultural Resources Program.
Allisa J. McMasters

Interpreting Activity Areas and Cumberland Lithic Technology at the Phil Stratton Site, Kentucky.
Judith A. Melton and Jesse W. Tune

Mississippian Monumentality: Lessons from Mound A, Shiloh.
David G. Anderson, John E. Cornelison, Jr., Sarah C. Sherwood, and Thaddeus G. Bissett

Paleoindian Studies in Tennessee.
Mark R. Norton and John B. Broster

PIDBA (Paleoindian Database of the Americas): Site and Artifact Distributions in Late Pleistocene North America.
David G. Anderson, Stephen J. Yerka, Thaddeus G. Bissett, David Echeverry, D. Shane Miller, Douglas A. Sain, Ashley M. Smallwood, and David K. Thulman

Rural Life on the Southern Cumberland Plateau in the 19th and Early 20th Centuries: Archaeological Testing of 40FR607 and 40FR608.
Richard M. Niquette, Jane Millar, and Sarah C. Sherwood
POSTER ABSTRACTS

Anderson, David G. (University of Tennessee, Knoxville), Stephen J. Yerka (University of Tennessee, Knoxville), Thaddeus G. Bissett (University of Tennessee, Knoxville), David Echeverry (University of Tennessee, Knoxville), D. Shane Miller (University of Arizona), Douglas A. Sain (University of Tennessee, Knoxville), Ashley M. Smallwood (University of West Georgia), and David K. Thulman (George Washington University)

PIDBA (PALEOINDIAN DATABASE OF THE AMERICAS): SITE AND ARTIFACT DISTRIBUTIONS IN LATE PLEISTOCENE NORTH AMERICA. The compilation and dissemination of primary data from multiple sources and across large areas in electronic form is one of the major challenges facing the archaeological profession in the twenty-first century. The Paleoindian Database of the Americas (PIDBA), available on-line at http://pidba.utk.edu compiles information from multiple sources to assist archaeologists in their research. PIDBA contains locational data, attribute, and image data on over 30,000 projectile points, blades, blade cores, and other artifact categories, together with distribution maps, radiocarbon dates, links to other online sources, and bibliographic references. Zooarchaeological and bioarchaeological categories are currently under development. PIDBA highlights an important and positive aspect of Paleoindian archaeology, namely the sharing of primary data.

Anderson, David G. (University of Tennessee, Knoxville), John E. Cornelison, Jr. (Southeast Archeological Center, National Park Service), Sarah C. Sherwood (Sewanee: University of the South), and Thaddeus G. Bissett (University of Tennessee, Knoxville)

MISSISSIPPIAN MONUMENTALITY: LESSONS FROM MOUND A, SHILOH. Research at Shiloh has helped advance our understanding how Mississippian monuments were constructed in the past and how they should be documented in the present. The involvement of specialists from multiple disciplines, most importantly geoarchaeology, is critical to their adequate excavation and interpretation. With 36 radiocarbon and 17 TL dates, Mound A is one of the most intensively dated earthen mounds in eastern North America. A Bayesian analysis of the AMS dates indicates when individual construction episodes occurred, and how reliable the various dating efforts proved. Mound construction and excavation are both far more complicated activities than traditionally assumed. All those interested in the final monograph may find a pdf copy at http://goo.gl/3dgNK7. The main mound profile image in large scale is available at http://goo.gl/fWdZww.

Bissett, Thaddeus G. (see Anderson, David G.)

Blair, Elliot H. (see Dalton-Carriger, Jessica)

Blankenship, Sarah (University of Tennessee, Knoxville), Bruce Kaiser (Bruker Elemental), and Michael C. Moore (Tennessee Division of Archaeology)

ELEMENTAL CHARACTERIZATION OF METAL BEADS FROM THE DAVID DAVIS FARM SITE, HAMILTON COUNTY, TENNESSEE. A 2007 burial removal project at the David Davis Farm (40HA301), a late Mississippian and protohistoric site in southern Hamilton County, Tennessee, yielded 189 individuals with roughly 550 associated funerary objects. Among these were six individuals interred with evidence of either direct or indirect Spanish contact in the form of metal artifacts. Burial 92 was that of an adolescent interred with two metal beads in addition to a partial shell-tempered vessel and one small discoidal. The elemental characterization of these beads by means of x-ray fluorescence (XRF) determined that these items were manufactured from a silver-plated, lead-bismuth binary alloy.

Broster, John B. (see Norton, Mark R.)

Cornelison, John E., Jr. (see Anderson, David G.)

Dalton-Carriger, Jessica (University of Tennessee, Knoxville), and Elliot H. Blair (University of California, Berkeley)

COMPOSITIONAL ANALYSIS OF GLASS TRADE BEADS FROM THE INTERIOR SOUTHEAST. Glass trade beads are one of the most abundant European trade items found at Native American sites throughout the interior Southeast and have been utilized extensively as chronological markers based on stylistic criteria. However, most beads recovered from archaeological sites are of simple construction and are generally considered to be
temporally non-diagnostic. Here we utilize elemental data of such non-diagnostic beads to present a compositional sequence of glass bead manufacture that further refines the chronology of seventeenth- and eighteenth-century sites in the East Tennessee Valley and sheds light on European/Native American contact and trade during the protohistoric period.

Deter-Wolf, Aaron (Tennessee Division of Archaeology)
ARCHAEOLOGICAL TESTING AT GLASS MOUNDS (40WM3), WILLIAMSON COUNTY. In March, 2013, the Tennessee Division of Archaeology directed archaeological testing at the Glass Mounds (40WM3), a Woodland site situated along the West Harpeth River west of Franklin, TN. The site has been heavily impacted during the historic period as a result of excavations by antiquarian scholars, phosphate mining, and suburban development. Of four earthen mounds recorded at the site in 1875, only two remain today. The purpose of the 2013 excavations was to assess the archaeological integrity of the two extant mounds and evaluate their eligibility for nomination to the National Register of Historic Places. This poster presents a summary of the excavation project.

Echeverry, David (see Anderson, David G.)

Harle, Michaelyn and Patricia Hamlett (Tennessee Valley Authority)
AERIAL LIDAR OF THE HIWASSEE ISLAND SITE (40MG31). Hiwassee Island (40MG31), owned by the Tennessee Valley Authority (TVA), contains one of the most important Late Woodland and Mississippian village complexes in the southern Appalachian region. Although the site has experienced antiquarian-style excavations, large-scale WPA era excavations, and illegal looting, the island retains intact archeological deposits. However, the extent of these deposits is unknown. This poster discusses the results of a TVA pilot program that examined the effectiveness of Light Detection And Ranging (LiDAR) for identifying and evaluating elevation sensitive archaeological deposits at Hiwassee Island and the utility of LiDAR as a cultural resource management tool.

Hamlett, Patricia (see Harle, Michaelyn)

Hodge, Shannon C. (Middle Tennessee State University) and Tiffany B. Saul (University of Tennessee, Knoxville)
BIOARCHAEOLOGICAL INVESTIGATIONS AT FERNVALE, A MIDDLE TENNESSEE ARCHAIC SITE. The multicomponent Fernvale site (40WM51), in Williamson County, Tennessee, yielded a small human skeletal sample of 32 individuals from an Archaic Period cemetery. A full bioarchaeological assessment of the remains was conducted according to standards for data collection set out by Buikstra and Ubelaker, supplemented by a narrative approach to recording paleopathological information. Our analysis identified three notable, yet contradictory, features of this sample: 1) extreme asymmetrical dental wear and robust cranial muscle markings, 2) strongly-developed lower extremities and degenerative joint disease of the spine, and 3) trophy-taking in two adult individuals. The great degree of dental wear and robust lower bodies are atypical of Archaic populations within the Mid-South, and suggest the Fernvale people may have engaged in a lifestyle or occupation not shared by contemporaneous regional populations. However, the practice of trophy-taking places the Fernvale people squarely within a cultural tradition found throughout the Mid-South during the Archaic period. We conclude that the Fernvale people were participating in cultural practices typical of a broader cultural tradition, while tailoring their lifestyle and economy to the narrower ecological niche in which they had settled, and that both of these decision-sets impacted their health and welfare as viewed from the perspective of the human skeleton. This dual-scale adaptation signals the diversity of Archaic period social systems, and echoes an emerging consensus among archaeologists regarding the complexity of Archaic societies.

Kaiser, Bruce (see Blankenship, Sarah)

McMasters, Allisa J. (Fort Campbell Cultural Resources Office)
FORT CAMPBELL CULTURAL RESOURCES PROGRAM. The Fort Campbell Cultural Resources Program has been utilizing new resources and techniques to enhance the management and protection of historic resources at the Fort Campbell Military Installation. This poster presentation is designed to highlight public outreach, research and historic preservation efforts in-progress by the Fort Campbell Cultural Resources staff in 2013.
Melton, Judith A. and Jesse W. Tune (Texas A&M University)

**INTERPRETING ACTIVITY AREAS AND CUMBERLAND LITHIC TECHNOLOGY AT THE PHIL STRATTON SITE, KENTUCKY.** The Stratton site, located along the Red River near the Tennessee-Kentucky boarder, may provide a unique opportunity to examine Cumberland lithic technology. Previous researchers have described the site as a single component Cumberland location. Based on an analysis of the lithic artifacts, however, the site was intermittently occupied from the late Pleistocene through the middle Holocene. The distribution of artifacts excavated from the site was analyzed to identify potential activity areas. The results of an artifact refit study further support the identification of separate activity areas, but also indicate post-depositional disturbance has occurred at the site. As a result, distinct Cumberland activity areas are not distinguishable from subsequent Archaic occupations at the Stratton site.

Millar, Jane (see Niquette, Richard M.)

**RURAL LIFE ON THE SOUTHERN CUMBERLAND PLATEAU IN THE 19TH AND EARLY 20TH CENTURIES: ARCHAEOLOGICAL TESTING OF 40FR607 AND 40FR608.** In the summer of 2012, two historic sites, the Cook site (40FR607) and the Cedar Hollow Overlook site (40FR608), underwent test excavations in Franklin County, Tennessee, on landholdings of the University of the South. Based on limited archival material and the artifact assemblages recovered, the two sites represent rural historic homesteads with occupation periods beginning in the late 1800's. These sites appear to be part of a little known community on the outskirts of the University property, perhaps small cabins related to local coal extraction and/or or farmsteads.

Norton, Mark R. and John B. Broster (Tennessee Division of Archaeology)

**PALEOINDIAN STUDIES IN TENNESSEE.** In 1988, the Tennessee Division of Archaeology began a state-wide Paleoindian projectile point and site survey. Metric attributes of over 5,300 Paleoindian projectile points have been recorded in the past 25 years of research. Additionally, over 100 Paleoindian sites have been added to the states archaeological site files. This poster displays some of the highlights of our investigations of Paleoindians in Tennessee.

Sherwood, Sarah C. (Sewanee: The University of the South), and Stephen J. Yerka (University of Tennessee, Knoxville)

**CONSTRUCTION OF THE MIDDLE WOODLAND EARTHEN ENCLOSURE AT OLD STONE FORT, MANCHESTER TENNESSEE.** Old Stone Fort is a 50-acre hilltop enclosure built during the Middle Woodland period. The embankment creating the enclosure is perched on a plateau above the convergence of the Big Duck and Little Duck rivers on the Eastern Highland Rim in Middle Tennessee. Our study is based on previous work and recent geoarchaeological studies on a cross-section of the embankment. These data reveal a relatively complex use of
local rock material. In addition, the soils capped and preserved by the embankment are used to provide new insights into the landscape at the time of construction.

Sherwood, Sarah C. (see Anderson, David G.)
Sherwood, Sarah C. (see Niquette, Richard M.)
Smallwood, Ashley M. (see Anderson, David G.)
Thulman, David K. (see Anderson, David G.)
Tune, Jesse W. (see Melton, Judith A.)
Yerka, Stephen J. (see Anderson, David G.)
Yerka, Stephen J. (see Sherwood, Sarah C.)

ABSTRACTS OF PRESENTATIONS

Avery, Paul G. (Cultural Resource Analysts, Inc.)
THE PERRY/HARBISON/NEAL HOUSE, NOT REYNOLD’S STATION! ARCHAEOLOGICAL TESTING AT SITE 40KN275, KNOX COUNTY, TENNESSEE. In April 2013, Cultural Resource Analysts conducted Phase II archaeological testing at 40KN275 in Knox County, Tennessee. The site was thought to be the location of 18th-century Reynold’s Station, but historical research indicated that the site was actually occupied by a two-story log house built by George Perry around 1800. Perry was the owner of large land holdings, as well as up to 17 slaves. Archaeological testing included shovel testing, test units, and trenches. Features included cellar pits likely associated with slave cabins. Although not the location of Reynold’s Station, 40KN275 is an important site for the history of Knox County.

Beahm, Emily L. (see Moore, Michael C.)

Bolte, Christina (East Tennessee State University)
COMPARATIVE ANALYSIS AND LUMINESCENCE DATING OF CERAMICS FROM THE AUSTIN SPRINGS AND FORD SITES LOCATED IN WASHINGTON COUNTY, TENNESSEE. The Ford site (40WG106) and the Austin Springs site (40WG140) are located within approximately 1 km of each other on adjacent bends of the Watauga River in Washington County, Tennessee. Both sites appear to have a significant prehistoric component and luminescence dates indicate contemporaneity of Qualla, Pisgah, Dallas and Burke ceramics in the region during the late 15th and early 16th centuries. These findings also appear to correspond with historical Cherokee accounts of their presence in the region during this time. This paper discusses the seriation of the ceramic assemblages and the luminescence dates returned in an effort to better understand the timing of the early Cherokee presence in the region.

Bow, Sierra M. and Jan F. Simek (University of Tennessee, Knoxville)
PORTABLE X-RAY FLUORESCENCE ANALYSIS (PXRF) OF MISSISSIPPIAN STONE STATUARY. A number of stone statues have been discovered in Mississippian contexts throughout the Southeast, and these have attracted the attention of the public, antiquarians, and archaeologists since the nineteenth century. Much research has been devoted to recording and describing cultural attributes, but little has been devoted to the composition of the figurines themselves or the paint often applied to the faces. This in part is due to the destructive nature of many chemical analysis techniques. In this paper we use non-destructive Portable X-Ray Fluorescence to explore the material properties of the statues and the chemical composition of the pigments applied to them.

Bow, Sierra M. (see Simek, Jan F.)
Bow, Travis  
(see Franklin, Jay)

Cannon, Cayla  
(see Franklin, Jay)

Carmody, Stephen B.  
(see Cyr, Howard J.)

Crawford, Mark M. (Middle Tennessee State University)
EMERGENCE: THE GENESIS, SPREAD, AND DEPOSITION OF ENGRAVED “RATTLESNAKE” OR HERPETOMORPHIC MARINE SHELL GORGETS IN THE SOUTHEAST. Little is known about engraved herpetomorphic shell gorgets spatially and temporally. In addition, scant information exists about the mortuary traditions and items associated with these gorgets. For my research, I compiled a corpus of images of over 300 herpetomorphic gorgets, divided the design into ten fields, and analyzed them in regard to the “filler” designs contained therein, as suggested by Jon Muller (1966). I conducted a detailed analysis of these ‘fillers’ with the goal of identifying potential patterns of use in time and space. Results suggest that ‘fillers’ had core areas of use and deposition geographically and may serve as diagnostic markers temporally. In this paper, I argue that merging the spatial patterning of common filler combinations with the chronological information of sites helps to refine our understanding of iconographic variations temporally and spatially. Thus, I propose a model for the change this gorget genre exhibits over time and space based on my findings. Additionally, I discuss the people and the patterns in mortuary furniture that are associated with these herpetomorphic gorgets.

Cressler, Alan  
(see Simek, Jan)

Cyr, Howard J. (University of Tennessee, Knoxville), Kandace D. Hollenbach (University of Tennessee, Knoxville), Stephen B. Carmody (University of Tennessee, Knoxville), Keith J. Little (Tennessee Valley Archaeological Research), and Hunter B. Johnson (Tennessee Valley Archaeological Research)
REVISITING WIDOWS CREEK: INTEGRATING MULTIPLE CURATED DATASETS FROM A SHELL MIDDEN SITE IN THE MIDDLE TENNESSEE VALLEY. Originally excavated in 1972, Widows Creek (1JA305) is a multi-component site located on the Tennessee River in Jackson County, Alabama, with cultural deposits spanning the Middle Archaic (ca. 8,000 BP) through the Mississippian (ca. 800 BP) periods. A recent study of sediment samples curated during the initial excavation was carried out to better understand changes in the cultural and natural stratigraphy and the potential influence of one upon the other. A comparative analysis of microartifact, sedimentologic, geochemical, and macrobotanical characteristics has yielded new information concerning changes in the nature, timing, and intensity of human habitation at Widows Creek, as well as the influence of changing environmental conditions on site occupation and the effects of site formation processes on stratigraphic characteristics. In addition to demonstrating the importance of multi-disciplinary research to the answering of archaeological questions, this study highlights the usefulness of analyzing curated samples collected from previously excavated sites.

Deter-Wolf, Aaron (Tennessee Division of Archaeology)
THE ARCHAEOLOGY OF ANCIENT NATIVE AMERICAN TATTOOING IN TENNESSEE AND THE SOUTHEAST. For thousands of years prior to acculturation, Native Americans in Tennessee and throughout the Eastern Woodlands practiced tattooing as a rite of passage and means to construct and reinforce cultural identity. Ethnohistorical sources, ethnographic data, and iconographic analysis reveal that by at least the Mississippian period tattoos were used to record martial honors, demonstrate spiritual and political affiliations and social rank, and as conduits for ensnaring and redirecting supernatural power. Despite the probable antiquity and cultural significance of tattooing in the Southeast, no distinct class of tattoo artifacts has been convincingly identified in prehistoric assemblages from the region. This presentation will discuss recent efforts to identify tattoo artifacts from Tennessee and the Southeast, including ethnohistoric research, experimental archaeology, use-wear analysis, and an assessment of the appropriate archaeological context for successfully identifying the remains of ancient tattooing.

Deter-Wolf, Aaron  
(see Moore, Michael C.)

Douglas, Joseph  
(see Simek, Jan)
Dye, David H. (University of Memphis)

COOTER-STYLE HUNCHBACKS IN THE LOWER MISSISSIPPI VALLEY. A distinctive set of seventeenth-century hunchback effigies is identified within a small subarea of the northern Lower Mississippi Valley. Several key characteristics set these Cooter style vessels apart from other contemporary hunchback or Earth Mother ceramic styles. I argue here that these effigies were not depictions of humans, but rather they are crafted images of other-than-human-persons. Also, these are neither mortuary vessels nor mundane pots - they were crafted as ritual utilitarian wares that served cosmological and ritual functions. An especially important motif is the prominent display of sacred bundles, thus underscoring their function as ritual paraphernalia within local religious cults. Finally, I suggest that these Cooter style bottles provide an important illustration of how religious cults are expressed as material culture across the political and social landscape.

Franklin, Jay (East Tennessee State University), Cayla Cannon (East Tennessee State University), and Travis Bow (Tennessee State Parks)

ARCHAEOLOGICAL TESTING AT ROCK CREEK MORTAR SHELTER (40PT209), PICKETT STATE FOREST. We report on 2013-14 test excavations at Rock Creek Mortar Shelter (40PT209) in Pickett State Forest. The shelter was in pristine condition when we recorded it in 2012. Early test excavations revealed a deeply stratified site with components ranging from the Paleoindian, Early Archaic, Late Archaic, and Woodland. The Paleoindian component may be Clovis in age, and we have not reached bedrock. It provides not only a rare opportunity to examine Paleoindian exploitation in an upland region, it also allows an opportunity to examine a 12-13,000 year prehistoric cultural sequence at one shelter. The site is located at an elevation of 460 meters above sea level and does not lie along a major river valley. Therefore, it represents a significant departure from known stratified Clovis sites in Southeastern North America and is the highest elevation stratified Paleoindian site in the Southeast.

Gillreath-Brown, Andrew (TRC, Inc.)

SCRAPING THE SURFACE: BONE AND SHELL MODIFICATION AT THE SPIRIT HILL SITE. Faunal remains recovered from the Spirit Hill site (1JA642) contained a high quantity of specimens, mostly of local origins. This faunal study focuses on the modified bone and shell assemblage and reveals interesting patterns among tools and adornment of the late Middle Woodland through Mississippian periods. Two hundred and eighty bone specimens were examined from these contexts. Each specimen was examined for possible tool identification, manufacturing marks, and use wear. The purpose of this paper is to provide an overview of bone and shell modification and to reveal patterns, so that these can be compared to other sites. In comparing these patterns, future studies could help to redefine tool types and adornment.

Hadley, Scott P., Jr. (University of Memphis)

MULTI-STAGED RESEARCH AT THE DENMARK SITE (40MD85). A multi-staged research design employed at the Denmark site (40MD85) has provided evidence as to how Middle Mississippian populations were settling in the hinterlands of West Tennessee. Located southwest of Jackson, TN in Madison County, the Denmark site was previously thought to be a vacant mound center. Through site-wide mapping, LIDAR data, extensive magnetometry survey, and targeted excavation, collected data provides evidence for a town-scale settlement at Denmark that was hitherto unknown. Research at Denmark and investigations at the nearby Ames site confirm that Mississippian towns were present in West Tennessee.

Hollenbach, Kandace D. (see Cyr, Howard J.)

Johnson, Hunter B. (see Cyr, Howard J.)

Langston, Lucinda (East Tennessee State University)

GIS ANALYSIS AND SPATIAL PATTERNING OF BEDROCK MORTAR HOLES ON THE UPPER CUMBERLAND PLATEAU OF TENNESSEE. A Geographic Information System (GIS) was developed to analyze the spatial distribution of bedrock mortar hole (BRM) sites on the Upper Cumberland Plateau of Tennessee. A total of 48 BRM sites have been recorded thus far in Fentress and Pickett Counties, Tennessee. From the 48 sites, three different types of bedrock mortar holes have been documented and were used to conduct geospatial and statistical analyses: portable nutting stones, traditional mortar holes, and kettle holes. Spatial analysis revealed that traditional mortar hole sites are more geographically clustered than portable nutting stones. Also, three archaeological hot
spots were identified based on BRM feature density. Finally, spatial analysis revealed that prehistoric peoples situated themselves near vegetation communities which allowed for intensive exploitation of specific resources such as oak and hickory.

**Lawrence, William L.** (Tennessee Division of Archaeology)

**WELCOME TO THE JUNGLE: APPLICATION OF LIDAR IMAGERY FOR ARCHAEOLOGICAL SURVEY OF DENSE VEGETATION/LOW VISIBILITY AREAS AT REELFOOT LAKE, OBION AND LAKE COUNTIES, TENNESSEE.** LiDAR technology has in recent years been used extensively in Mesoamerica and other parts of the world where dense vegetation creates very limited surface visibility to locate cultural features that are not readily discernable to the human eye from the ground. The dense canebrakes at Reelfoot Lake offer similar surface visibility conditions and numerous small earthworks are known to be concealed within the thick vegetation. In the days before GPS technology, myself and other archaeologists often stumbled on these mounds by chance. The location was then marked on a topo map via educated guess and could often never be relocated. Recent acquisition of LiDAR imagery for the Reelfoot Lake area and ground truth visits has resulted in the discovery of numerous small mounds and mound groups. Previously recorded sites that had become “lost” have been revisited and accurately mapped by GPS.

**Little, Keith J.** (see Cyr, Howard J.)

**Loring, Thomas** (see Simek, Jan)

**Moore, Michael C.** (Tennessee Division of Archaeology), **Kevin E. Smith** (Middle Tennessee State University), **Aaron Deter-Wolf** (Tennessee Division of Archaeology), and **Emily L. Beahm** (University of Georgia)

**AN UPDATE ON CRYSTAL ARTIFACTS AND PRODUCTION IN THE MIDDLE CUMBERLAND REGION.** This presentation provides an update on our crystal artifact research initially discussed at this meeting in 2011. Past archaeological work within the Middle Cumberland region has yielded a considerable amount of ceramic, stone, bone, and shell artifacts. However, objects made from mineral resources represent a small percentage of the overall artifact assemblage. Crystal specimens comprise a minute portion of this mineral sample, with just six worked crystalline artifacts documented within the study area. These objects of fluorite and calcite consist of four earplugs, one bird effigy pendant, and one bead from four different Mississippian sites. Fluorite and calcite deposits are known for the study area, yet additional research is needed to determine whether these sources were used to make the Middle Cumberland items. Also, the recent recovery of several unusual earplugs and numerous raw calcite crystals from the Castalian Springs mound complex represents intriguing evidence for crystal production as a site activity.

**Moore, Michael C.** (see Smith, Kevin E.)

**Parish, Ryan** (University of Memphis)

**SOURCING THE SACRED: A CHERT SOURCE ANALYSIS OF MISSISSIPPAN SWORD-FORM BIFACES FROM TENNESSEE.** The study investigates the ‘single-source’ hypothesis which utilizes visual chert type identification to identify Dover chert as the preferred material selected for the manufacture of Mississippian swords. A chert type database consisting of over 2,000 samples selected from 70 deposits is used to characterize both inter- and intra-formational variation and make source assignments. The non-destructive analysis of a sample of 30 Mississippian swords from excavated contexts within Tennessee demonstrates that chert material selection was variable and not concentrated upon material from a single ‘exotic’ source. Resulting discussions contextualize the provenance data within research regarding Mississippian polities. The provenance data has implications for Mississippian socio-political and socio-economic models.

**Rogers, Stephen T.** (see Smith, Kevin E.)

**Shreve, Nate** (East Tennessee State University)

**CAZUELAS AND CONTACT: AN INTRODUCTION TO AN IMPORTANT SEVENTEENTH CENTURY QUALLA TOWN ON THE NOLICHUCKY RIVER.** Site 40WG143, the Cane Notch site, is a large protohistoric Cherokee town on the Nolichucky River that has the potential to greatly illuminate our understanding of Cherokee history in upper East Tennessee and perhaps their contact with European explorers. Found eroding from the river bank was a large
array of partial vessels that make up a vast assemblage. The nature of the pottery assemblage gives us a rare opportunity to study form and function of many different types of vessels. At the nearby Plum Grove site, similar pottery types and Spanish contact artifacts were recovered. The Cane Notch site is similar in size and scope to Plum Grove but appears to be later dated with Middle to Late Qualla assemblages in contrast to Plum Grove which revealed a nucleated Pisgah component but a dispersed Qualla assemblage. The Cane Notch assemblage possesses very little Pisgah but a much more robust Middle to Late Qualla component along with some unidentified shell plain. Cane Notch has also yielded a number of intriguing trade items that seem to indicate an important location for possibly both English and Spanish Contact. The site thus provides a unique opportunity to examine perhaps one of the last major towns in the upper valley before European settlers entered the area in large numbers.

Simek, Jan (University of Tennessee, Knoxville), Alan Cressler (National Speleological Society), Sierra M. Bow (University of Tennessee, Knoxville), Joseph Douglas (Volunteer State Community College), Thomas Loring (National Speleological Society), and Teri Stephens (National Speleological Society)

NEW TENNESSEE CAVE AND ROCK ART RESEARCH 2013. In 2013, the University of Tennessee, Knoxville Cave Archaeology Research Team visited a number of new prehistoric cave art and open air rock art sites and continued documentation work in several others that were discovered in recent years. New finds include red-painted pictographs on the southern Cumberland Plateau, pictographs in the Unaka Mountains associated with one of the longest-known Tennessee rock art localities, and a new Mud Glyph cave in the Ridge and Valley of East Tennessee. Using pXRF, we also examined pigment chemistry at several pictograph sites and have new C14 dates from a Middle Tennessee decorated cave.

Simek, Jan F. (see Bow, Sierra M.)

Smith, Kevin E. (Middle Tennessee State University), Michael C. Moore (Tennessee Division of Archaeology), and Stephen T. Rogers (Tennessee Historical Commission)

AFRICAN AMERICANS AND THE ARCHAEOLOGY OF MIDDLE TENNESSEE, 1820-1950. Outside of the contributions of black laborers to the Works Progress Administration era Irene Mounds project (1937-1940) near Savannah, Georgia, very little has been written about the involvement of African Americans on nineteenth and early twentieth century archaeological projects in the South. In the process of researching the 1877-1884 Peabody Museum expeditions to Middle Tennessee, the authors explored the intriguing side story of George and Joe Woods – two local working class African-Americans who were employed as skilled field technicians for the Peabody from 1878 through 1884. That chance discovery evolved into a larger research project examining the identities of laborers on other early archaeological projects in Middle Tennessee. Here we present the results of on-going research that documents not only the significant contributions of African-American labor to these early projects, but has also identified several African-American individuals who may rightfully be termed early archaeological field technicians.

Smith, Kevin E. (see Moore, Michael C.)

Stephens, Teri (see Simek, Jan)

Sullivan, Lynne P. (University of Tennessee, Knoxville)

THE CITICO SITE (40HA65) IN REGIONAL CONTEXT. In 1976, James Hatch published an article in the Tennessee Anthropologist in which he synthesized information about the Citico site, a Mississippian mound center in what is now downtown Chattanooga. Since Hatch’s work, we have learned more about the chronology of sites in the nearby Chickamauga Basin, and can now untangle some of the confusion about the occupational sequence of the Citico site through comparisons with dated sites and artifact assemblages. Variations in Mississippian mortuary practices that Hatch saw as social differentiation are actually changes related to time. This clarification enables placement of Citico into regional patterns of Mississippian and Protohistoric site occupations in Southeast Tennessee.