# CURRENT RESEARCH IN TENNESSEE ARCHAEOLOGY

### 21st ANNUAL MEETING

Friday, January 30 and Saturday, January 31, 2009

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 the Tennessee Division of Archaeology and Middle Tennessee State University

A copy of the 2009 CRITA program is posted on the Tennessee Archaeology Network website: http://www.mtsu.edu/~kesmith/TNARCH/index.html

### FRIDAY, JANUARY 30

2:00	Governor's Archaeological Advisory Council meeting.
3:30	Tennessee Council for Professional Archaeology business meeting.

5:00 TCPA Reception, Ed Jones Auditorium

### **SATURDAY, JANUARY 31**

### 8:25 Welcome and Opening Remarks

### 8:30 The Sinclair Site: A Clovis Quarry on the Buffalo River in Wayne County, Tennessee.

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

### 8:45 Landscape Archaeology at the Tipton-Haynes Historic Site.

Daniel Brock (University of Tennessee, Knoxville)

### 9:00 Results of the Condition Assessment Project at Big South Fork National River and Recreation Area.

Lacey S. Fleming, Jennifer M. Clinton (Middle Tennessee State University), and Tom Des Jean (Big South Fork NRRA, National Park Service)

## 9:15 The Spirit Hill Site: Preliminary Results of Data Recovery Excavations at a Large Late Woodland/Mississippian Village and Cemetery Complex in Northeastern Alabama.

Kelly S. Hockersmith and William F. Stanyard (TRC, Inc.)

### 9:30 Mortuary Archaeology at the Eastman Rockshelter (40SL34).

Valerie Kauffeld and Jay D. Franklin (East Tennessee State University)

### 9:45 The Great Serpent Cult in the Midsouth.

David H. Dye (*University of Memphis*)

#### BREAK 10:00-10:15

### 10:15 Archaeological Research on the Southern Cumberland Plateau: Rock Art, Regional Surveys and Radiocarbon Dates.

Sarah Č. Sherwood (University of the South), Nicholas P. Herrmann (Mississippi State University), Matthew Gage, Jan Simek, Sarah A. Blankenship, Kandace D. Hollenbach, Scott Meeks, Stephen J. Yerka (University of Tennessee, Knoxville), and Alan Cressler (US Geological Survey)

### 10:30 Recent Archaeological Surveys of Civil War Activity near Franklin, Williamson County, Tennessee.

Larry McKee (TRC, Inc.)

### 10:45 Luminescence Dating and the Pogue Creek Archaeological Survey.

Sierra M. Bow and Jay D. Franklin (East Tennessee State University)

### 11:00 Protohistoric Cherokee Plant Use in the Southern Appalachians.

Kandace D. Hollenbach (Archaeological Research Laboratory, UT-K)

### 11:15 Preliminary Results from the Excavation of a Rural Brick Clamp in Fort Campbell, Kentucky-Tennessee.

Teresa L. Brown (Fort Campbell Military Installation, Colorado State University)

### 11:30 The Roots-n-Shoots of the Tennessee Division of Archaeology.

Mack S. Prichard (Tennessee Department of Environment and Conservation)

#### 11:45 TCPA Awards Presentation

#### LUNCH 12:00-1:15

### 1:15 Prehistoric Rock Art Research in Tennessee—2008.

Jan F. Simek (University of Tennessee, Knoxville), Joseph Douglas (Volunteer State Community College), Sarah C. Sherwood (University of the South), Sarah A. Blankenship (University of Tennessee, Knoxville), Randy Boedy (US Forest Service), Erik Kreusch (Great Smoky Mountains, National Park Service), Tom Des Jean (Big South Fork NRRA, National Park Service), and Alan Cressler (US Geological Survey)

### 1:30 Recent Archaeological Land Acquisitions by the Tennessee Department of Environment and Conservation.

William L. Lawrence (Tennessee State Parks)

### 1:45 Nondestructive Chert Sourcing Using Infrared Spectroscopy.

David H. Dye and George H. Swihart (University of Memphis)

### 2:00 The Analysis of Pollen and Charcoal from Rock Shelter Sites in the Tennessee Region of the Upper Cumberland Plateau.

Chase Beck, Jay D. Franklin, and Michael S. Zavada (East Tennessee State University)

### 2:15 New Perspectives on Late Woodland Architecture and Settlement in Eastern Tennessee: Evidence from the DeArmond Site (40RE12).

Lynne P. Sullivan (Frank H. McClung Museum) and Shannon D. Koerner (University of Tennessee, Knoxville)

#### BREAK 2:30-2:45

### 2:45 Results from Geomagnetic Archaeological Survey at UTK's Experimental Agricultural Farm.

Stephen J. Yerka (Archaeological Research Laboratory, UT-K), Nicholas P. Herrmann (Mississippi State University), and Michael G. Angst (Archaeological Research Laboratory, UT-K)

#### 3:00 New Finds of Old Bones at the Coats-Hines Site (40WM31).

Jesse W. Tune (American University) and Aaron Deter-Wolf (Tennessee Division of Archaeology)

### 3:15 Faunal Analysis of Linville Cave (40sl24), Sullivan County, Tennessee.

Megan Dennison and Jay D. Franklin (East Tennessee State University)

### 3:30 New Perspectives on Digital Mapping in Archaeology: A Case Study from the Moss-Wright Park Site, Sumner County.

Daniel J. Martinez (Middle Tennessee State University)

### 3:45 Quantitative and Geologic Descriptions of Four Dover Chert Quarries in Stewart County, Tennessee.

Ryan Parish (Murray State University)

#### ABSTRACTS OF PRESENTATIONS

Angst, Michael G. (see Yerka, Stephen J.)

Beck, Chase, Jay D. Franklin, and Michael S. Zavada (East Tennessee State University)

THE ANALYSIS OF POLLEN AND CHARCOAL FROM ROCK SHELTER SITES IN THE TENNESSEE REGION OF THE UPPER CUMBERLAND PLATEAU. Sediment samples were collected from three rock shelter sites and one natural lake on the Upper Cumberland Plateau. Samples were processed to quantitatively and qualitatively evaluate pollen and charcoal abundance. The analysis was to determine when prehistoric Native Americans began controlled burns to enhance resources acquisition. Samples are also analyzed for the presence of pollen to determine vegetation changes that may accompany the use of controlled burns and to determine the onset of horticulture. The Upper Cumberland Plateau is often considered a marginal area used only seasonally by Native Americans, however, management practices may have been highly refined to maximize resources acquisition.

Blankenship, Sarah A. (see Sherwood, Sarah C.)

Blankenship, Sarah A. (see Simek, Jan F.)

**Boedy, Randy** (see Simek, Jan F.)

Bow, Sierra M. and Jay D. Franklin (East Tennessee State University)

LUMINESCENCE DATING AND THE POGUE CREEK ARCHAEOLOGICAL SURVEY. The major focus of our research is aimed at properly defining the prehistoric culture history of the Upper Cumberland Plateau. In this presentation, we discuss and evaluate a new and comprehensive methodology for building a regional culture chronology. The key to our research is the inclusion of a luminescence dating program of archaeological sites on the Upper Cumberland Plateau. We highlight recent excavation and survey data to evaluate our approach and use the excavation data to evaluate our survey data from Pogue Creek State Natural Area. We conclude that this approach is applicable for both scholars and cultural resource managers and is especially useful for obtaining meaningful historical and chronological information from survey level projects.

**Brock, Daniel** (University of Tennessee, Knoxville)

LANDSCAPE ARCHAEOLOGY AT THE TIPTON-HAYNES HISTORIC SITE. The Tipton-Haynes State-Owned Historic Site in Johnson City, Tennessee is a late eighteenth through twentieth-century Upland South farmstead. Historically, the site was the home and farm of three prominent Tennesseans and is also well known for the "Battle of the Lost State of Franklin." Recent investigations at the site have focused on the use of multiple techniques for understanding the changing historic landscape as part of the Tipton-Haynes Landscape Archaeology Project. This includes the incorporation of historical background research, architectural survey, geophysical survey, dendrochronology, and archaeology to supply a rich cultural historical context to understanding one of Tennessee's most historic sites. This presentation provides an overview of the project and the results of using multiple investigatory methods.

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

**Brown, Teresa L.** (Fort Campbell Military Installation, Colorado State University)

**PRELIMINARY RESULTS FROM THE EXCAVATION OF A RURAL BRICK CLAMP IN FORT CAMPBELL, KENTUCKY-TENNESSEE.** In the fall of 2008, the Fort Campbell Cultural Resources Office conducted excavations of a rural brick clamp located near the extinct community of Jordan Springs. Historic brick clamps or kilns are an unusual feature in the archaeological record because few kilns have been discovered or excavated. This paper will discuss the excavations of the Jordan Springs brick clamp, and compare the site to similar brick clamps previously investigated in Kentucky and Tennessee.

Clinton, Jennifer M. (see Fleming, Lacey S.)

**Cressler. Alan** (see Sherwood, Sarah C.)

Cressler, Alan (see Simek, Jan F.)

### **Dennison, Megan and Jay D. Franklin** (East Tennessee State University)

FAUNAL ANALYSIS OF LINVILLE CAVE (40SL24), SULLIVAN COUNTY, TENNESSEE. Linville Cave is located in upper East Tennessee and is commonly referred to as Appalachian Caverns. Excavations in 1991 revealed deposits indicative of the Woodland period. A previous paper by Franklin and Dean revealed that the site was used as an intermittent hunting camp by prehistoric Native Americans during the late Middle Woodland. A preliminary faunal analysis was conducted by the late Paul Parmalee; however, no quantitative analysis was conducted. The purpose of this paper is to present a quantitative analysis of the faunal assemblage of the Linville Cave Site in an effort to reinforce conclusions drawn by Franklin and Dean that the site was used for butchering and cooking of game animals.

**Des Jean, Tom** (see Fleming, Lacey S.)

Des Jean, Tom (see Simek, Jan F.)

**Deter-Wolf, Aaron** (see Tune, Jesse W.)

**Douglas, Joseph** (see Simek, Jan F.)

**Dye, David H.** (University of Memphis)

THE GREAT SERPENT CULT IN THE MIDSOUTH. An early manifestation of the Great Serpent Cult in the Midsouth is materialized in the thirteenth century in the form of a unique set of ceramic vessels and other ritual items. Although the Great Serpent Cult has iconographic roots in the Middle Woodland Period in the Midwest, it spread into the Midsouth in the mid to late thirteenth century. The Mississippian expression of the Great Serpent is clearly seen in the American Bottom area in the tenth century and by the thirteenth century figural statuary emerges at Cahokia that may have resulted in Great Serpent ceramic forms found in the Midsouth.

Dye, David H. and George H. Swihart (University of Memphis)

NONDESTRUCTIVE CHERT SOURCING USING INFRARED SPECTROSCOPY. Chert samples from geological outcrops and archaeological contexts in the Midsouth have been examined through infrared spectroscopy. A principle objective of the project is to investigate whether nondestructive infrared analysis can provide a chemical signature for bedrock sources of chert artifacts. The technique utilizes a Bio-Rad Digilab FTS-40 Infrared Spectroscope and microscope attachment to reflect the infrared beam off a chert specimen. The preliminary investigation indicates that the spectral signal for silica, the main chemical constituent in chert, may provide a useful chemical fingerprint. Examples based on several cherts, including Buffalo River, Burlington, Dover, and Horse Creek, are discussed.

**Fleming, Lacey S., Jennifer M. Clinton** (Middle Tennessee State University), **and Tom Des Jean** (Big South Fork National River and Recreation Area, National Park Service)

**RESULTS OF THE CONDITION ASSESSMENT PROJECT AT BIG SOUTH FORK NATIONAL RIVER AND RECREATION AREA.** The Big South Fork National River and Recreation Area (NRRA) was Created by Congress in 1974 and was authorized to include 125,000 acres of the Upper Cumberland Plateau in Tennessee and Kentucky. This area boasts an exceptional number of well-preserved prehistoric and historic archaeological sites. Currently there are over 1,400 known archaeological sites here, with a vast majority of these sites located along the precipitous cliff lines common to the sandstone of this elevated, erodible tableland. Since the fall of 2005, resource management personnel, park rangers, and university contractors and cooperators have been engaged in relocating and documenting the condition of the previously recorded archaeological sites. This project, known as the archaeological site condition assessment project (CAP), has provided an abundance of information concerning archaeological sites within the Big South Fork NRRA.

Franklin, Jay D. (see Beck, Chase)

Franklin, Jay D. (see Bow, Sierra M.)

Franklin, Jay D. (see Dennison, Megan)

Franklin, Jay D. (see Kauffeld, Valerie)

Gage, Matthew (see Sherwood, Sarah C.)

Herrmann, Nicholas P. (see Sherwood, Sarah C.)

Herrmann, Nicholas P. (see Yerka, Stephen J.)

### Hockersmith, Kelly S. and William F. Stanyard (TRC, Inc.)

THE SPIRIT HILL SITE: PRELIMINARY RESULTS OF DATA RECOVERY EXCAVATIONS AT A LARGE LATE WOODLAND/MISSISSIPPIAN VILLAGE AND CEMETERY COMPLEX IN NORTHEASTERN ALABAMA. In May 2008, TRC completed data recovery excavations at the Spirit Hill site (1JA642) along the Tennessee River in northeastern Alabama. In addition to being a focal point of mortuary activity during the Late Woodland and Mississippian periods, long-term or permanent settlements had been established during that time. This presentation discusses the preliminary results of our investigations, with a particular emphasis on Late Woodland and Mississippian material culture, site structure, and mortuary behavior.

#### Hollenbach, Kandace D.

### PROTOHISTORIC CHEROKEE PLANT USE IN THE SOUTHERN APPALACHIANS.

Recent analyses of plant remains from protohistoric Cherokee contexts at the Townsend site in eastern Tennessee and Smokemont in western North Carolina add to our current understanding of Cherokee foodways, based largely on the traditional triad of corn, beans, and squash. Perhaps most interesting is the lack of definitive evidence for peaches at the Townsend site. These Old World fruits quickly spread through the Southeast, similar to glass trade beads. Although glass beads were recovered in quantity at Townsend, peaches are notably scarce here, despite their recovery from other sites in the region, like Smokemont, Coweeta Creek, and the Tellico sites.

Hollenbach, Kandace D. (see Sherwood, Sarah C.)

#### **Kauffeld, Valerie and Jay D. Franklin** (East Tennessee State University)

MORTUARY ARCHAEOLOGY AT THE EASTMAN ROCKSHELTER (40SL34). In this paper, we present the analysis of human skeletal remains uncovered in the Eastman Rockshelter (40SL34). S. D. Dean conducted the excavations in 1981. The excavations revealed a deeply stratified site with intact prehistoric deposits ranging over several thousand years. We believe the burials date to the Middle Woodland and therefore report on those deposits with particular emphasis on the burials. Our focus is on the age and sex structure of the individuals. We also highlight traumas and pathologies that may shed light on social and subsistence behaviors.

**Koerner, Shannon D.** (see Sullivan, Lynn P.)

**Kreusch, Erik** (see Simek, Jan F.)

### **Lawrence, William L.** (Tennessee State Parks)

**RECENT ARCHAEOLOGICAL LAND ACQUISITIONS BY THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION.** In the early 1970s the Tennessee Department of Conservation purchased a number of significant archaeological sites in an effort to preserve at least a portion of the states rapidly disappearing cultural resources. These sites include Mound Bottom, Pinson Mounds, Link Farm, Sellars Farm, and Old Stone Fort. Unfortunately, no additional properties were acquired during the remaining years of the 20th century. The last five years have seen a renewed interest in the preservation of archaeological resources by the Tennessee Department of Environment and Conservation. Recent acquisitions include the Johnson site; large additional tracts at Mound Bottom, Link Farm, and Pinson; Devilstep Hollow (11th unnamed cave); and a recently discovered rock art site on the Cumberland Plateau.

McKee, Larry (TRC, Inc.)

**RECENT ARCHAEOLOGICAL SURVEYS OF CIVIL WAR ACTIVITY NEAR FRANKLIN, WILLIAMSON COUNTY, TENNESSEE.** In the past year TRC has conducted investigations of two separate properties Williamson County, both with associations with the Battle of Franklin (November 1864). Both projects were conducted under contract with the City of Franklin Parks Department, as part of their efforts to develop and protect city properties with links to the Civil War. One of these properties, now known as the Eastern Flank Battlefield Park, was crossed in a mass assault by Confederate troops on the fortified Federal line to the east of downtown Franklin. The second property, now known as the Harlinsdale Farm Park, is north of the downtown and was the site of cavalry actions in the days following the battle. This paper reviews the methods and findings from the separate investigations, and discusses our experiences in working with local metal detector enthusiasts during the project.

#### Martinez, Daniel J. (Middle Tennessee State University)

NEW PERSPECTIVES ON DIGITAL MAPPING IN ARCHAEOLOGY: A CASE STUDY FROM THE MOSS-WRIGHT PARK SITE, SUMNER COUNTY. The Moss-Wright Park Site in Sumner County, Tennessee represents a substantial fortified Mississippian town (40SU61) and associated burial mound (40SU20). Recent work has compiled information from field maps and feature data to create a digital representation of the habitation area in hopes of facilitating further analysis of the site. The project is summarized and assessed against similar approaches currently employed in archaeological research, and some highlights of the settlement data itself are presented.

**Meeks, Scott** (see Sherwood, Sarah C.)

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

THE SINCLAIR SITE: A CLOVIS QUARRY ON THE BUFFALO RIVER IN WAYNE COUNTY, TENNESSEE. In September of 2008, Mr. Rex Moore contacted the authors about a Paleoindian site he had located in Wayne County, Tennessee. A visit to the locale revealed a Clovis quarry site situated on a ridge top where high quality Buffalo River chert can be found eroding out of the hillside. Mr. Moore has collected thousands of Clovis age artifacts at this site including: preforms, blade cores, blades, blade tools, and lithic debitage. Mr. Moore has made his extensive collection available for study and the Division has been able to make a sample collection of over 700 artifacts from the site.

#### Parish, Ryan (Murray State University)

QUANTITATIVE AND GEOLOGIC DESCRIPTIONS OF FOUR DOVER CHERT QUARRIES IN STEWART COUNTY, TENNESSEE. The prehistoric quarries located in Stewart County Tennessee have fascinated archaeologists with both their size and the cultural implements produced from the chert that was so extensively procured. Despite this interest very little has been done to survey the size and distribution of the quarry sites. The researcher undertook an examination of the sites as part of a larger chert sourcing project in the area. This presentation describes the survey of four previously recorded prehistoric quarry sites (40Sw64, 40Sw66, 40Sw67, 40Sw80) in Stewart County, which was conducted with an emphasis on mapping individual quarry pits and placing them in their geologic and topographic context.

**Prichard, Mack S.** (Tennessee Department of Environment and Conservation)

THE ROOTS-N-SHOOTS OF THE TENNESSEE DIVISION OF ARCHAEOLOGY. After serving as the first Director of the Division of Archaeology beginning in September of 1971, it seems appropriate to look back at some of our state's pioneer archaeologists (both amateur and professional) whose good work led the way to today's current research. Myer, Cox, Lewis and Kneberg, Tennessee Archaeological Society, Southeastern Indian Antiquities Survey, Middle Cumberland Archaeological Society, and others contributed to eventually create our Division of Archaeology. The story of how the Division of Archaeology began with a shoestring budget, how it got state support, and the ideas and individuals who were behind this effort are worth remembering. The efforts that saved some of Tennessee's finest archaeological parks still continue today with more urgency.

Sherwood, Sarah C. (University of the South), Nicholas Herrmann (Mississippi State University), Matthew Gage, Jan Simek, Sarah A. Blankenship, Kandace Hollenbach, Scott Meeks, Stephen Yerka (University of Tennessee, Knoxville), and Alan Cressler (US Geological Survey)

ARCHAEOLOGICAL RESEARCH ON THE SOUTHERN CUMBERLAND PLATEAU: ROCK ART, REGIONAL SURVEYS AND RADIOCARBON DATES. The Southern

Cumberland Plateau, stretching through the lower half of Tennessee into Northern Alabama, has been largely overlooked in Southeastern Archaeology with only a few exceptions. This paper provides updates on several projects that are underway in this region including a survey of select Bowater land along the eastern Plateau, rock shelter test excavations in Fall Creek Falls State Park, work in the Sequatchie Valley, and rock art survey at the University of the South.

**Sherwood, Sarah C.** (see Simek, Jan F.)

Simek, Jan F. (University of Tennessee, Knoxville), Joseph Douglas (Volunteer State Community College), Sarah C. Sherwood (University of the South), Sarah A. Blankenship (University of Tennessee, Knoxville), Randy Boedy (US Forest Service), Erik Kreusch (Great Smoky Mountains, National Park Service), Tom Des Jean (Big South Fork NRRA, National Park Service), and Alan Cressler (US Geological Survey)

**PREHISTORIC ROCK ART RESEARCH IN TENNESSEE—2008.** Over the course of 2008, seven new prehistoric rock art sites, two in caves and five in the open, were discovered by the UT Cave Archaeology Research Team working with colleagues from the University of the South, Volunteer State Community College, and the National Park Service. New data were also obtained on several other already-known cave art sites. This paper reports on these discoveries and refers them to known sites in Tennessee. Finally, a rock art site just north of the state line in Kentucky will be discussed as it relates to rock art sites in Tennessee.

Simek, Jan F. (see Sherwood, Sarah C.)

Stanyard, William F. (see Hockersmith, Kelly S.)

**Sullivan, Lynne P.** (Frank H. McClung Museum) **and Shannon D. Koerner** (University of Tennessee, Knoxville)

NEW PERSPECTIVES ON LATE WOODLAND ARCHITECTURE AND SETTLEMENT IN EASTERN TENNESSEE: EVIDENCE FROM THE DEARMOND SITE (40RE12). Evidence of Late Woodland (c. AD 600-900) settlements has been difficult to find in eastern Tennessee. Burial mounds ("Hamilton" mounds) dating to this time period are well known and have been studied for many years. These occur along the upper Tennessee River and its tributaries. The problem faced for decades has been locating contemporary habitation sites, especially those with evidence of structures. Such evidence was in fact found by a WPA-era crew at the DeArmond site (40RE12) in TVA's Watts Barr reservoir area, but never reported.

**Swihart, George H.** (see Dye, David H.)

**Tune, Jesse W.** (American University) and Aaron Deter-Wolf (Tennessee Division of Archaeology)

NEW FINDS OF OLD BONES AT THE COATS-HINES SITE (40WM31). The Coats-Hines

Site was first recorded in 1977 when mastodon remains were identified during construction of a golf

course in Brentwood, TN. In 1994 subdivision construction and excavations by the Tennessee

Division of Archaeology uncovered remains of two additional mastodons and an assortment of other

late Pleistocene animals. The importance of the site was elevated when lithic tools were found in

association with one of the mastodons, which exhibited cut marks from butchering. Over the last 14

years, reconnaissance investigations at the site have continued to produce material. This presentation

will describe the current condition of the site and discuss a May 2008 visit that resulted in the

identification of additional faunal remains.

Yerka, Stephen J. (Archaeological Research Laboratory, UT-K), Nicholas P. Herrmann (Mississippi State University), and Michael G. Angst (Archaeological Research Laboratory, UT-K) RESULTS FROM GEOMAGNETIC ARCHAEOLOGICAL SURVEY AT UTK'S EXPERIMENTAL AGRICULTURAL FARM. A geomagnetic survey of 150,000 m² on the second and third terraces along an inside bend of the Tennessee River was conducted to determine the extent and nature of archaeological deposits at Cherokee Farm (40KN45), Knoxville, Tennessee. The project area was then tested by mechanically stripping the plow-zone over a sample of the site. Results included the discovery of discrete, large Archaic pits, substantial Woodland deposits, Mississippian house structures, a large ring-shaped midden filled feature, historic cellars and cisterns, the base of an historic silo, and other archaeological features. The results of the survey indicate a high potential for

understanding prehistoric settlement and organization in east Tennessee through future research at this site.

Yerka, Stephen (see Sherwood, Sarah C.)

Zavada, M.S. (see Beck, Chase)