Recent Research in the Middle Cumberland River Valley: Introduction to a Special Volume

Aaron Deter-Wolf and Tanya M Peres
RECENT RESEARCH IN THE MIDDLE CUMBERLAND RIVER VALLEY
Introduction to a Special Volume

Aaron Deter-Wolf and Tanya M. Peres

The Cumberland River flows 688 miles (1,107 km) westward from its headwaters in Letcher County, Kentucky through southern Kentucky and northern Middle Tennessee before emptying into the Ohio River near Paducah, Kentucky. Since the late seventeenth century, the Cumberland River has served as a vital resource and transportation corridor for European and Euro-American settlement, development, and commerce in Tennessee and the surrounding region (Brent and DuVall 2001). However, the history of human activity along the Cumberland River begins long before European exploration west of the Appalachians, or proto-historic settlement of the region by the Shawnee, Cherokee, Creek, and Chickasaw. Consistent human occupation and reuse of natural levees and adjacent terrace landforms since the late Pleistocene has resulted in the formation of numerous deeply-buried, stratified, multicomponent archaeological sites. The density of prehistoric settlement along the Cumberland River and its tributaries is particularly notable within the Middle Cumberland River valley in Tennessee, where archaeological evidence has revealed that initial human occupations occurred by at least 12,100 cal BP (Deter-Wolf et al. 2011a).

With such a rich and ancient history, one would think a published synthesis of archaeology along the Cumberland River would have occurred years ago. Unfortunately, primary data and site information are found mainly within the “grey literature” -- technical reports, state site files, and field notes -- and no synthesis, or attempt at a synthesis, exists. We offer this special guest-edited volume of Tennessee Archaeology as an effort to highlight the distinct archaeological record of the Middle Cumberland River valley and encourage future scholarship. In this Introduction we offer a description and definition of the Middle Cumberland River valley, a brief overview of the history of archaeology in the region, and highlight the current state of archaeological research and resource management addressed by the contributors to this volume.

The Middle Cumberland River Valley Defined

From a physiographic perspective, the Middle Cumberland River valley stretches roughly from the confluence of the Cumberland River with the Obey River at Celina (Cumberland River Mile [RM] 381) downstream past Ashland City to the mouth of the Harpeth River (RM 153). Within this region the Cumberland River is fed by major tributaries including the Obey, Caney Fork, Stones, and Harpeth Rivers, as well as numerous higher order streams. The watershed of the Middle Cumberland River valley drains the northern portion of the Central Basin and the northeastern portion of the adjacent Eastern Highland Rim physiographic provinces of Tennessee (Figure 1).

The Central Basin physiographic province consists of an elliptical depression extending across the central portion of Tennessee, which formed as a result of accelerated weathering of a
Paleozoic anticlinal structure known as the Nashville Dome (Floyd 1990). The portion of the Central Basin along the Cumberland River drainage is characterized by gently rolling to hilly terrain. In the area immediately adjacent to the Nashville Dome, undisturbed and extremely dense limestone of the Lower Mississippian epoch Fort Payne Formation (ca. 360–345 MYA) prevented substantial erosion, resulting in the formation of the Eastern and Western Highland Rim physiographic provinces. These areas are characterized by rolling, dissected terrain situated around 300 feet higher in elevation than the Central Basin. The intersection between these provinces is marked by numerous finger-like protrusions where the Central Basin province extends along major river and stream channels into the surrounding Highland Rim.

**Overview of Previous Archaeological Research in the Region**

Wampler 2007), and from academic investigations (e.g., Anderson et al. 2010; Berryman 1981; Beahm et al. 2010; Morse 1967; O’Brien 1977; Worne 2011). However, while the Tennessee Division of Archaeology site file database includes entries for more than 3,100 prehistoric sites within the Middle Cumberland River valley as of June 25, 2012, the site file database indicates less than 10 percent (approximately 260) of these resources have been subjected to formal investigations beyond intensive surface collection and/or shovel testing.

Instead, much of our knowledge regarding the archaeological character of the Middle Cumberland is the result of investigations conducted by Middle Tennessee’s avocational archaeological community, including notable efforts by 2012 Society of American Archaeology Crabtree Award recipient John T. Dowd. Data from surveys and excavations during the 1970s through early 1990s and continuing monitoring by members of that community have been published in various forums (e.g. Dowd 1972, 1989, 2008; Lindstrom 1979; Parker 1974) and contributed to the permanent site file record at the TDOA. This information provides essential baseline data on which our understanding of the archaeological character of this region is built.

Within the archaeological literature the term “Middle Cumberland” is used to identify a discrete regional late prehistoric culture (i.e., Middle Cumberland Mississippian) defined in part by distinctive mortuary practices, artistic styles, and ceramic typologies. The density and unique archaeological character of these Mississippian occupations along the Cumberland River in Middle Tennessee has been recognized since at least the nineteenth century. Antiquarian scholars include John Haywood (1823), Joseph Jones (1876), William E. Myer (1928), and Gates P. Thruston (1890). These gentlemen, along with Frederic W. Putnam (1878) and other representatives of Harvard’s Peabody Museum of Archaeology and Ethnology (Moore and Smith 2009), were drawn to the earthworks, graves, and relics of the area’s late prehistoric inhabitants and performed some of the earliest archaeological investigations in the region.

Modern efforts to identify the boundaries of the Middle Cumberland Mississippian culture initially proposed an area that included the Cumberland River watershed from the confluence of the Cumberland and the Caney Fork (RM 309) downstream to the mouth of the Cumberland at the Ohio River (Ferguson 1972). The culture boundary has since been refined both as a result of archaeological excavations (e.g., Moore 2005; Moore and Smith 2001; Moore et al. 2006; Smith and Moore 1994) and reanalysis of older collections and data (Moore and Smith 2009; Smith 1992; Smith and Miller 2009), and now encompasses the area from the Caney Fork to the confluence of the Cumberland and the Red River at Clarksville (RM 125) (see discussion in Moore et al. 2006).

While late prehistoric sites attracted some of the earliest scholarly interest in ancient habitation of the Middle Cumberland River valley, Mississippian occupations only scratch the surface of the area’s archaeological record. Of around 1,700 sites in the region that have produced temporally diagnostic materials, just 20 percent include Mississippian artifacts. Nine percent of temporally-assigned sites include Paleoindian or transitional Paleoindian diagnostics, 46 percent include Woodland materials, and 74 percent have produced artifacts
diagnostic of the Archaic period.¹ These earlier cultural periods in the Middle Cumberland River valley, and particularly the Archaic, also witnessed the fluorescence of distinctive regional cultural phenomena including a variant of the Benton mortuary tradition (Deter-Wolf 2004), and the creation of extensive shell middens/mounds (Peres and Deter-Wolf 2012).

The archaeological density of the Middle Cumberland River valley can be explained in part by the ample resources of the region. These include easy access to potable, navigable, and mineral-rich water; high concentrations and varied species of flora and fauna; fertile soils along river floodplains; longer growing seasons and temperate winters resulting from temperature modulations of the Central Basin; access to transportation and trade routes including the overland Natchez Trace and the Cumberland River; and the ready availability of high-quality lithic material found eroding from the nearby physiographic boundary and along the gravel bars of numerous rivers and streams. Cultural factors that may have contributed to migrations of people in and out of the area for millennia are currently under study. A combination of both environmental and cultural factors likely attracted the earliest settlers of the Middle Cumberland River valley during the late Pleistocene.

Modern Impacts to the Archaeology of the Middle Cumberland River

Over the last century, the majority of the Cumberland River bankline in the immediate vicinity of downtown Nashville has been covered beneath stone riprap that protects archaeological deposits and generally prevents site erosion. However, the riverbanks both east and west of Nashville have been largely unimproved except according to the efforts of individual landowners. These outlying areas have suffered slow destruction since the creation of Cheatham Lake, Old Hickory Lake, and Lake Barkley as a result of varying water levels, boat wakes, and dam outfall.

In addition to impacts from erosion, the numerous easily-identifiable and readily-accessible prehistoric site deposits along the Middle Cumberland River and its tributaries have for years attracted detrimental attention from the public. Middle Tennessee has a strong tradition of avocational archaeologists helping to promote site preservation and public understanding of Tennessee’s archaeological past. Unfortunately, public interest in the prehistoric archaeology of the region has not been entirely benevolent. For much of the last century prehistoric sites, and particularly those with visible riverbank profiles, have attracted the attentions of professional looters and unscrupulous collectors focused on identifying prehistoric graves in order to obtain the finely crafted mortuary offerings those burials sometimes include (Moore 1989).

Intensive looting in the Middle Cumberland River valley has historically targeted two site types: cemeteries and shell middens. The interest of looters in these particular sites stems from considerations of convenience and preservation. Diagnostic stone-box graves of the Mississippian period are sometimes identifiable on the ground surface because their distinctive configuration of limestone slabs has been exposed by erosion or cultivation. Although shell middens are not typically visible on ground surface, they are readily identifiable in riverbank profiles, where thick-banded concentrations of freshwater
shell stand out from surrounding alluvial soils. Both shell and limestone have a naturally high pH, which counteracts soil acidity and results in excellent bone and artifact preservation. Looters concentrate on these types of sites because of the increased likelihood of encountering preserved human remains and grave goods.

There are several locations along the Cumberland River watershed in Middle Tennessee where looting of large sites situated on private property has been ongoing for years or even decades. Although inspections of these sites have repeatedly identified evidence of deliberately disturbed human burials, it has proved difficult or impossible to apprehend or dissuade looters from their activity. Over the last decade TDOA archaeologists have also observed a phenomenon in which professional looters lease known prehistoric sites from private landowners in order to mine the deposits for high-quality artifacts. These materials are then sold at regional artifact shows and on the Internet. This artifact mining is legal under current state law, which on private property protects only those archaeological remains directly associated with human burials (Moore 1989, 1998), and then only when deliberate burial disturbance can be documented.

Our own ongoing research interests along the Middle Cumberland River coalesced following catastrophic flooding that occurred over the weekend of May 1, 2010. Beginning that morning, heavy storms deposited an average of 15 inches of rain on Middle Tennessee and southern Kentucky. Water levels rose rapidly along the Cumberland River and its tributaries in the vicinity of Nashville, and by the evening of May 1 evacuations were underway in some neighborhoods. On May 3, the Cumberland River crested at 52 feet, 12 feet above flood stage and its highest level recorded since 1937 (Tennessean.com 2010). Throughout the greater Nashville area floodwaters inundated the hundred-year floodplain and impacted or destroyed more than 9,000 homes and businesses.

After floodwaters abated and the Cumberland River returned to its summer pool elevation, the co-editors conducted damage inspections of several large, deeply-stratified prehistoric sites in the vicinity of Nashville in order to assess flood damage. Those inspections identified significant riverbank erosion, and determined that substantial archaeological deposits had been displaced or destroyed as a result of the flood and subsequent looting of newly-uncovered site deposits. The scope of damage documented during these site inspections prompted us, along with Dr. Shannon Hodge of Middle Tennessee State University (MTSU), to apply for Rapid Research Response funding from the National Science Foundation in order to assess both natural and anthropogenic site disturbances caused by the flood. That grant was awarded in June 2010, and over the following 10 months we performed a shoreline assessment of 128 prehistoric site locations with the aid of students from MTSU and community volunteers (Figure 2) (Deter-Wolf et al. 2011b).

While conducting background research for that project we were struck both by the number of archaeological resources and the steady output of high-quality recent archaeological work which has been conducted within the Middle Cumberland River valley. With this in mind, we approached the editors of *Tennessee Archaeology* and proposed a guest-edited volume devoted to
archaeological research in the Middle Cumberland River valley. We are pleased and honored that they accepted our proposal, and that we are able to present the following articles on the unique archaeological history of the region.

**Overview of Contributions to the Special Volume**

Much of the recent archaeological work performed within the Middle Cumberland River valley has been the result of Cultural Resources Management investigations related to federal permitting, human remains concerns, and as due diligence ahead of development projects. This volume begins with the article “A Flood of Looters: Endangered Mississippian Resources along the Middle Cumberland River,” in which Danny Gregory discusses the results of a Section 110 survey performed on behalf of the U.S. Army Corps of Engineers following the May 2010 flood. This article examines the effects of the historic flood and looting on three Mississippian sites in Cheatham and Stewart Counties. Remote sensing performed in conjunction with the project reveals that, despite ongoing issues of erosion and looting, the intact archaeological resources of the Middle Cumberland River valley remain an important resource for understanding human occupations in Middle Tennessee and the Southeast.

Excavations along the Cumberland River at deeply-buried Paleoindian sites such as Johnson (40DV400) (Barker and Broster 1996) and Widemeier (40DV9) (Broster et al. 2006) have provided important evidence of late Pleistocene human occupation in both Tennessee and the American Southeast. The prospect of
additional unrecorded deposits spanning the terminal Pleistocene-Holocene transition prompted the 2010 commencement of the Cumberland River/Midsouth Paleoindian Project (now the Bells Bend Archaeological Project, http://bellsbend.pidba.org/).

The preliminary field season results are presented here in two articles. In the first of these, “A Preliminary Report on the Sanders #1 Site (40CH193), Cheatham County, Tennessee” Shane Miller, John Broster, Gary Barker, David G. Anderson, and Stephen Carmody describe Paleoindian and Early Archaic materials and a radiocarbon sample recovered from a deeply buried, stratified site in Cheatham County.

As previously discussed, distinctive and readily-visible shell middens along the bank of the Middle Cumberland have long been targeted by looters and collectors. Unfortunately, until recently there have been few professional excavations directed at examining the specific chronology, composition, or cultural significance of shell-bearing sites in the region. This volume of *Tennessee Archaeology* begins to rectify this paucity of data with two articles. In “Zooarchaeological Analysis of a Multicomponent Shell-Bearing Site in Davidson County, Tennessee” Tanya M. Peres, Aaron Deter-Wolf, and Gage A. Myers describe the results of emergency sampling of a large multicomponent site featuring stratified shell midden components from both the Archaic and Mississippian periods, and discuss how these data may contribute to our understanding of the complex social and environmental processes that led to the formation of shell middens/mounds in the region.

During the 2010 field season, the Cumberland River/Midsouth Paleoindian Project conducted excavations at three stratified riverbank sites that span the Early Archaic through Early Woodland, two of which include substantial shell midden components. In “Radiocarbon Dates from Three Sites Along the Middle Cumberland River Near Nashville,” Shane Miller, David G. Anderson, Thaddeus Bissett, and Stephen Carmody discuss 29 AMS radiocarbon determinations from those sites. In addition to contributing a significant new body of radiometric data for the region, this article provides information critical to our emerging understanding of patterns of formation, occupation, and reuse of shell midden sites.

Few single component or short-term use sites have been identified to date along the banks of the Cumberland River in Middle Tennessee. The discovery and excavation of these sites therefore provides a rare opportunity to generate focused, comprehensive data on human occupations in the region. In “The Harpeth Shoals Marina Site (40CH195): A Terminal Archaic Fire-Cracked Rock Complex on the Cumberland River, Cheatham County, Tennessee,” Marc Wampler and Larry McKee discuss data recovery investigations at a Cheatham County site that produced a significant corpus of Late and Terminal Archaic dates. Fire-cracked rock features from the site provide information on processing and cooking techniques, while Chenopodium seeds recovered from a feature at this site offer a possible window into early plant domestication.

The onset of the Mississippian period (ca. AD 1000) saw a dramatic population increase along the Middle Cumberland River, and a corresponding escalation of sites and site types. Over the ensuing 450 years, Mississippian occupations along the Middle Cumberland River ranged from
single farmsteads to cemeteries and multi-mound centers (Moore and Smith 2009; Moore et al. 2006). In 1969, John Dowd and John Broster conducted an excavation of several structures within the Cockrill Bend/Sandbar Village site (40DV36), which they initially identified as a small hamlet or village. The results of their work were published in 1972 in the first and only issue of the *Southeastern Indian Antiquities Journal*. Given the limited distribution and availability of that journal, we are pleased to be able to present a reprint of their report, “Cockrills Bend Site 17c: A Reprint from The SIAS Journal 1972” for a broader audience.

Subsequent investigations at 40DV36 identified the presence of a small Woodland component and Mississippian occupation spanning the period ca. AD 1100-1450. (Regional Periods II – IV [Moore and Smith 2009]), and the site was listed on the National Register of Historic Places in 1994. In “Changing Interpretations of Sandbar Village (40DV36): Mississippian Hamlet, Village, or Mound Center?” Kevin E. Smith and Michael C. Moore revisit the data from 40DV36 in order to suggest that the site is larger than previously identified, and may have originally been a small mound center.

By the start of the Mississippian period, populations along the Cumberland River and its tributaries had been systematically exploiting riverine species for consumption and construction material for upwards of 4,000 years (Peres and Deter-Wolf 2012). Despite the importance of maize agriculture to late prehistoric populations in the region, the resources of the Cumberland River remained a significant supporting element in the Mississippian diet. In “Skeletal Evidence of Aquatic Activities from a Middle Cumberland Site in Davidson County, Tennessee,” Courtney Cox examines remains from the West site (40DV12), a late Regional III/early Regional IV period cemetery (Moore and Smith 2009) situated along the lower terraces of the Cumberland River. Her analysis of skeletal pathologies suggests Mississippian populations supplemented their agricultural subsistence base with riverine resources procured from the Cumberland’s main channel.

The “Mississippianization” of the Middle Cumberland River seems to have been launched from the western portion of the Central Basin, likely originating at the site of Mound Bottom along the Harpeth River in Cheatham County (Moore and Smith 2009). In the eastern portion of the Central Basin, resident populations outside of the direct control or influence of Mound Bottom began to coalesce into local chiefdoms. In “Mississippian Ceramics and Settlement Complexity: Insights from the Beasley Mounds (40SM43), Smith County, Tennessee,” Emily Beahm and Kevin E. Smith present the results of a small-scale mapping and excavation project in early 2008. Findings from that project suggest that by AD 1280, the residents of Beasley Mounds were more closely affiliated culturally with inhabitants of the Upper Cumberland and East Tennessee than to their nearer neighbors to the west.

The distinctive Dover chert obtained from quarries near the Cumberland River in Stewart County, Tennessee, was prized by Mississippian populations throughout the region and used in the manufacture of oversized and eccentric lithic artifacts. Although the quarry site is located outside the boundaries of the Middle Cumberland, Dover chert was traded upstream and appears at Mississippian sites throughout the region. This volume concludes with the article “Discovery and Early
Investigations of the Dover Quarries by Parmenio E. Cox and Warren K. Moorehead, 1926-1932," by Kevin E. Smith. In this article, Smith discusses early efforts to identify and describe the source for Dover material.

We thank Mike Moore and Kevin Smith for the opportunity to edit this special volume of *Tennessee Archaeology* and for their assistance and guidance during the process. In addition, we thank the authors who contributed their research to this effort and the peer reviewers who provided a service essential to the completion of the project. Finally, we thank the Tennessee Division of Archaeology and the MTSU Department of Sociology and Anthropology for their research support.

**Notes**

1 The TDOA state site files are a dynamic database which is updated on a daily basis. Consequently, the data regarding site quantities and temporal affiliations which we include here represent the character of the overall site file record as of late June, 2012. We encourage future researchers to consult the site files directly regarding site locations, temporal affiliations, and level of investigation, rather than relying on earlier published data.

**References**

Allen, Dan S.


Anderson, David G., D. Shane Miller, Tom Pertierra, Derek Anderson, Thad Bissett, Stephen Carmody, Tracy

Hadlett, Erik N. Johanson, Ashley M. Smallwood, and Sarah Walters


Barker, Gary


Barker, Gary and John B. Broster

1996 The Johnson Site (40Dv400): A Dated Paleoindian and Early Archaic Occupation in Tennessee’s Central Basin. *Journal of Alabama Archaeology*
Beahm, Emily L., Kevin E. Smith, and Erik S. Porth

Bentz, Charles, Jr.

Berryman, Hugh E.
1981 The Averbuch Skeletal Series. A Study of Biological and Social Stress at a Late Mississippian Period Site from Middle Tennessee. PhD dissertation, Department of Anthropology, University of Tennessee, Knoxville.

Brent, Joseph E. and Glyn D. DuVall

Broster, John B. and Gary Barker

Broster, John B., David P. Johnson, and Mark R. Norton

Broster, John B., Mark. R. Norton, Bobby Hulan, and Ellis Durham


Cridlebaugh, Patricia A.
1983 Penitentiary Branch: A Late Archaic Cumberland River Shell Midden in Middle Tennessee. Report of Investigations No. 4. Tennessee Department of Conservation, Division of Archaeology, Nashville.

Deter-Wolf, Aaron
2004 The Ensworth School Site (40DV184): A Middle Archaic Benton Occupation Along the Harpeth River Drainage in Middle Tennessee. Tennessee Archaeology 1(1) pp. 18–35.

Deter-Wolf, Aaron, Jesse W. Tune, and John B. Broster

Deter-Wolf, Aaron, Tanya M. Peres, and Shannon C. Hodge
2011b Emergency Shoreline Assessment and Sampling of Archaeological Sites along the Cumberland River in Middle Tennessee. Survey report submitted to the US Army Corps of Engineers, Nashville District. ARPA Permit DACW62-4-10-0437.

Dillehay, Tom D., Nancy O'Malley, and Thomas Gatus (editors)
1984 Prehistory of the Middle Cumberland River Valley: The Hurricane Branch Site, Jackson County, Tennessee. Occasional Papers in Anthropology No. 4. Department of Anthropology, University of Kentucky, Lexington.
Dowd, John T.

Ferguson, Robert B. (editor)
1972 *The Middle Cumberland Culture*. Publications in Anthropology No. 3. Vanderbilt University, Nashville.

Floyd, Robert J.

Gregory, Danny, David Price, Sarah Lowery, Matthew Spice, Lauren Souther, Amy Irons, and Hugh Matternes

Haywood, John
1823 *The Natural and Aboriginal History of Tennessee*. George Wilson, Nashville.

Jolley, Robert L.

Jones, Joseph

Law, Zada

Lindstrom, Bruce

McNutt, Charles H. and Lisa C. Lumb
1987 *Three Archeological Sites near Hartsville: Smith and Trousdale Counties, Tennessee*. Occasional Papers 14, Memphis State University, Department of Anthropology, Memphis; and Publications in Anthropology 48. Tennessee Valley Authority, Norris.

McNutt, Charles H. and Guy G. Weaver

Moore, Michael C.
2005 *The Brentwood Library Site: A Mississippian Town on the Little Harpeth

Moore, Michael C. and Emanuel Breitburg (editors)

Moore, Michael C. and Kevin E. Smith

Moore, Michael C., Emanuel Breitburg, John T. Dowd, C. Paris Sripling, and John B. Broster

Moore, Michael C., Emanuel Breitburg, Kevin E. Smith, and Mary Beth Trubitt

Morse, Dan F.

Myer, William E.

Norton, Mark A. and John B. Broster


O’Brien, Michael
1977 Intrasite Variability in a Middle Mississippian Community. Ph.D. Dissertation, Department of Anthropology, University of Texas, Austin. University Microfilms, Ann Arbor.

Parker, Malcom

Peres, Tanya M. and Aaron Deter-Wolf
2012 Embedded: 4,000 Years of Shell Symbolism in the Southeast. Paper presented at the 77th Society for American Archaeology meeting in Memphis, Tennessee.

Putnam, Fredric W.

Smith, Kevin E.
1992 The Middle Cumberland Region:
Mississippian Archaeology in North Central Tennessee. Ph.D. Dissertation, Department of Anthropology, Vanderbilt University, Nashville.


Wampler, Marc 2007 Data Recovery at 40CH195, the Harpeth Shoals Marina Site, Cheatham County, Tennessee. TRC, Inc. Report submitted to Progress Capital, Ashland City, TN and US Army Corps of Engineers Nashville District.

Worne, Heather 2011 Conflicting Spaces: Bioarchaeological and Geophysical Perspectives on Warfare in the Middle Cumberland Region of Tennessee. PhD Dissertation, Department of Anthropology, Binghamton University, State University of New York.

Aaron Deter-Wolf Tennessee Division of Archaeology 1216 Foster Ave., Cole Building #3 Nashville Tennessee 37243

Tanya M. Peres Department of Sociology and Anthropology Middle Tennessee State University Murfreesboro, Tennessee 37132