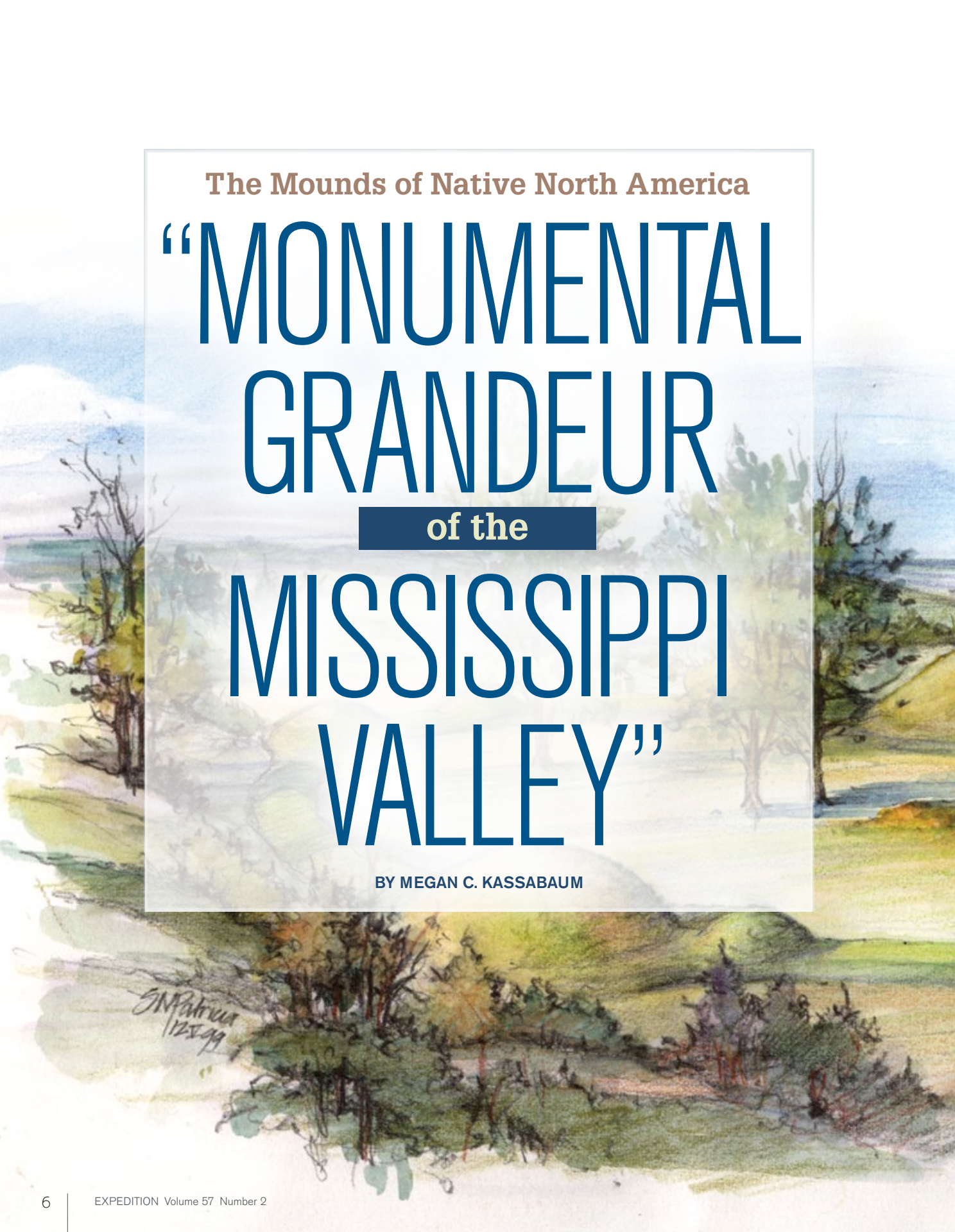
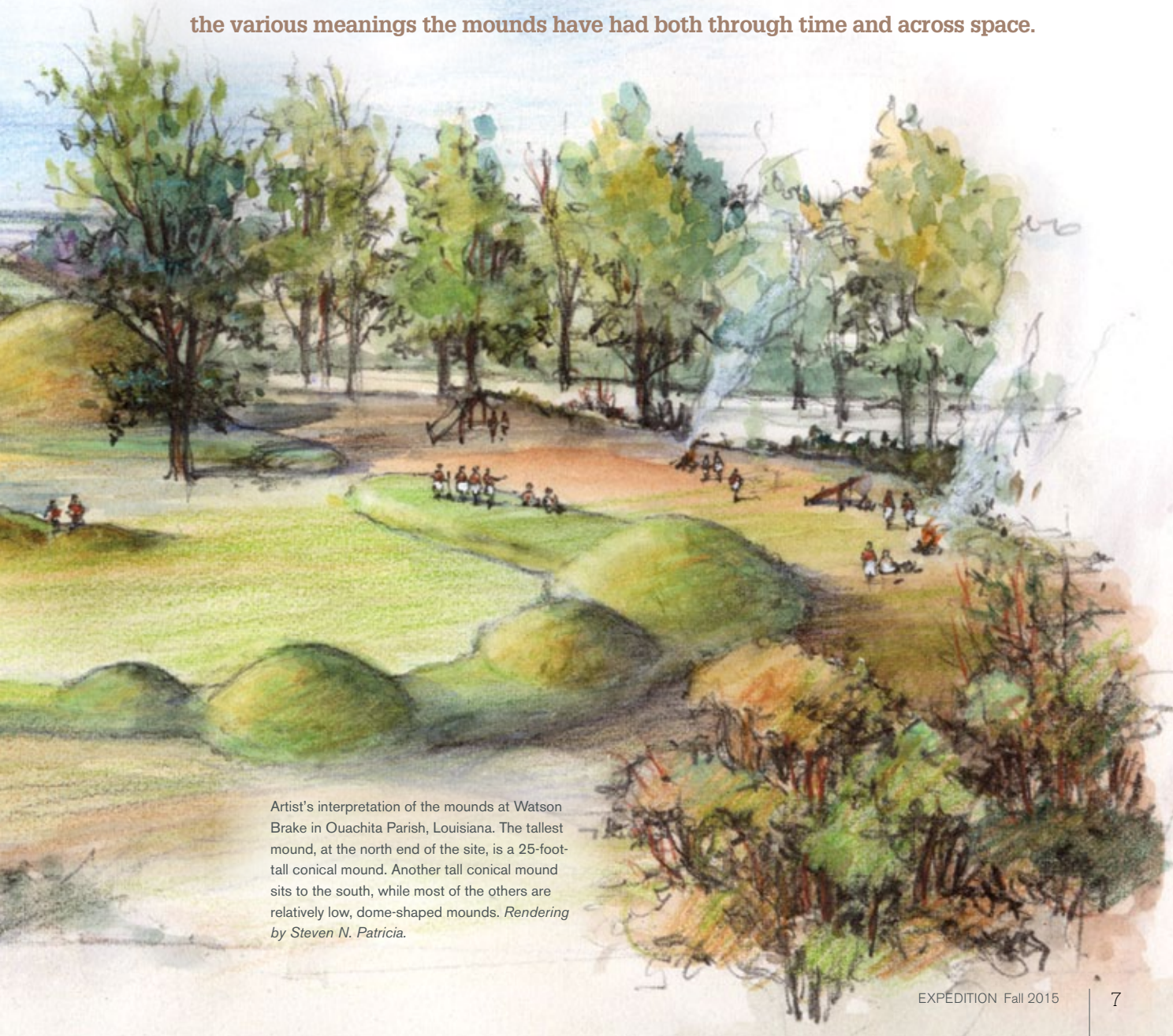
The Mounds of Native North America

# "MONUMENTAL GRANDEUR of the MISSISSIPPI VALLEY"

BY MEGAN C. KASSABAUM



**Earthen mounds have been constructed in the eastern United States for well over 5,000 years. From early beginnings in the Lower Mississippi Valley through the ongoing mound building ceremonies of the Eastern Band of Cherokee Indians, mounds have always played important roles in the ritual, social, and political lives of Native American groups. They vary widely in terms of form and function and many archaeologists have dedicated their careers to understanding the various meanings the mounds have had both through time and across space.**



Artist's interpretation of the mounds at Watson Brake in Ouachita Parish, Louisiana. The tallest mound, at the north end of the site, is a 25-foot-tall conical mound. Another tall conical mound sits to the south, while most of the others are relatively low, dome-shaped mounds. *Rendering by Steven N. Patricia.*

The Mississippi River forms the 4th largest watershed in the world, running over 2,300 miles from Minnesota to Louisiana. When the river became known to Europeans in 1541, it had already been a center of Native American resource procurement, trade, communication, and travel for over 12,000 years. Due to its natural abundance, the Mississippi Valley was able to support large prehistoric populations and, beginning in the Middle Archaic period (6000–2000 BCE), these groups signaled the river's importance by building earthen monuments throughout the region. Between this beginning and the point of European contact, tens of thousands of mounds in various shapes and sizes were constructed in the Mississippi Valley. Understanding the origins, functions, and meanings of these mounds has been a goal of American archaeology since its inception. This article introduces a variety of mound-building cultures by looking at sites throughout the valley.


Map of Mississippi River Valley (LEFT) and timeline showing location and chronology of sites.

*ca.* 3500 BCE
**Watson Brake, LA**

5000 BCE | 4000 BCE | 3000 BCE

- 6000–2000 BCE: Middle Archaic
- 2000–800 BCE: Late Archaic
- 800 BCE–1 CE: Early Woodland
- 1–500 CE: Middle Woodland
- 500–1000 CE: Late Woodland
- 1000–1500 CE: Mississippi
- 1500–2000+ CE: Historic

2560 BCE
**Great Pyramid at Giza**

RENDERINGS BY STEVEN N. PATRICIA

## The Earliest Mounds

One of the earliest, confidently dated mound sites is Watson Brake in northeast Louisiana (*ca.* 3500 BCE). It consists of 11 mounds connected by a causeway and built around a central open space. At least 15 additional mound sites have been dated to the Middle Archaic period, showing that significant amounts of monumental construction took place in the Lower Mississippi Valley over 1,000 years before the construction of the Great Pyramid at Giza. Though much about these mounds remains a mystery, excavations at Watson Brake and other Middle Archaic sites have shown that they were constructed by populations who lived in small, mobile bands and relied on hunting, gathering, and fishing to feed themselves; in other words, Middle Archaic earthworks were built without the intensive agriculture, permanent settlements, and strong political leadership that characterize many other monumental societies.

Just 50 miles northeast of Watson Brake, the Late Archaic (2000–800 BCE) site of Poverty Point contains one of the most dramatic prehistoric landscapes in the United States. The site, named after a local plantation, consists of one large mound, at least four smaller associated mounds, and six concentric earthen ridges surrounding a central open area. Though the large mound had long been known, the true extent of Poverty Point was first recognized when an aerial photograph revealed the incredible ridge structure defining the central plaza. Excavations in these ridges have revealed intact house floors, food remains, and innumerable small, baked clay objects likely used as boiling stones during the cooking process. The large mound just to the west of the ridges is the second largest earthen construction in the Americas. It stands over 21 meters (70 feet) tall and contains approximately 238,000 cubic meters of dirt. Recent excavations have shown that it was built quickly, likely in a matter of months, around 1300 BCE. This rapid construc-

*ca.* 1300 BCE
**Poverty Point, Mound A, LA**

1100–1200 CE
**Cahokia, Monks Mound, IL**

250–400 CE
**Newark, OH**

2001 CE **ECBI restart mound building at Kituwah, NC**

1000 BCE

1 CE

1000 CE

700–1000 CE
**Effigy Mounds, IA**

*ca.* 900 CE
**Feltus and Smith Creek, MS**

1492 CE
**Arrival of Europeans**

# MONTROVILLE W. DICKESON

Studying the builders of earthen mounds quickly became a focus of early American archaeologists, including members of the scientific community thriving in Philadelphia in the mid-1800s. One such person was Dr. Montroville W. Dickeson, a physician with the Academy of Natural Sciences who took a particular interest in the mounds of the American South. Dickeson took detailed notes on his excavations, published several articles, and collected huge amounts of material from the mounds. Much of this collection—both artifacts and documents—is now part of the Penn Museum's holdings. After his fieldwork, Dickeson put substantial effort into popularizing American archaeology, and the title of this article comes from one of his public lectures. During his lectures, an incredible hand-painted panorama scrolled behind him, revealing scenes of his explorations and excavations in Mississippi Valley mounds. Today, we have identified many of these sites, making the collection housed at Penn an essential resource for the scholars excavating at these locations.

ABOVE: Image of the Late Woodland era Feltus mounds in Jefferson County, Mississippi as sketched by Dickeson and painted by John J. Egan *ca.* 1850. This is one of the 25 panels that make up the "Panorama of the Monumental Grandeur of the Mississippi Valley," which accompanied Dickeson's public lectures. Vincas Steponaitis, John O'Hear, and Megan Kassabaum have been actively excavating at Feltus since 2006. *By John J. Egan, American (born Ireland), active mid-19th century; "Ferguson Group: The Landing of Gen. Jackson," scene 18 from the Panorama of the Monumental Grandeur of the Mississippi Valley,* ca.*1850; distemper on cotton muslin; Saint Louis Art Museum, Eliza McMillan Trust 34:1953.*

LEFT: Artifacts from the Penn Museum collection were recovered from the Late Woodland Feltus mounds by Dickeson in 1846. The object on the left is a boatstone effigy believed to depict the underwater panther, a mythical being that was thought to inhabit the underworld. The object on the right is a stone pipe depicting a human figure holding a pot. UPM objects #14328, 14716.

Many beads, such as those shown to the right, were carved and drilled without benefit of metal tools, likely utilizing only sandstone and water in the grinding process. These owl effigy beads (BELOW) from Poverty Point are made of red jasper, likely procured from eastern Mississippi. The largest measures less than 3 cm in height. *Photos by Jenny Ellerbe.*

tion would have required a huge number of people putting forth a massive amount of communal labor.

The clues to answering questions about the function of Poverty Point within Late Archaic society reside in the site's material culture. The collections from Poverty Point contain some of the most exquisitely made stone artifacts in America. Not only does the skill necessary to create such objects suggest the presence of specialized artisans, but the raw materials also indicate extensive long-distance trade. The Poverty Point exchange network extended from the Great Lakes to the Gulf Coast along the Mississippi River and its major tributaries and focused on high-quality stone material. Poverty Point is thus interpreted as a trade and craft production center. While a number of artisans may have lived there permanently, perhaps on the ridges, the surrounding population would have gathered periodically at Poverty Point to take part in trade and mound construction while also conducting necessary social activities such as arranging marriages, reinforcing kin ties, and forging alliances. Over time, these gatherings would imbue the place with great social power making the occasional pilgrimage back even more important.

## Woodland Mound-Building Cultures

This type of large-scale communal aggregation and trade does not appear again in North American prehistory until around 1 CE, with the Middle Woodland (1–400 CE) Hopewell Interaction Sphere. The exchange network associated with this cultural fluorescence spanned over 2,000 miles and supplied the raw material for some of the most spectacular artifacts in North American prehistory. Though the small mounds at Hopewell sites are visually similar to the dome-shaped mounds found at earlier sites, they were used differently. The most striking Hopewell artifacts are found with burials placed inside mounds.

Aerial photograph taken in 1938 of Poverty Point in West Carroll Parish, Louisiana. The six concentric earthen ridges surrounding the central open space are difficult to see from the ground, but stand out clearly from the air. The outer ridge is three-quarters of a mile in diameter and the site overall covers more than 500 acres. *Image courtesy of P2 Energy Solutions/Tobin Aerial Archive.*

Artifacts associated with the Hopewell Interaction Sphere, from the top, include drilled sharks' teeth, a Prairie Chicken Effigy pipe, and a copper cutout. *Courtesy of the National Park Service.*

Within these burials, some interments were much richer than others, perhaps indicating that certain individuals had special roles within society or earned differential status during their lifetimes.

Around 500 CE, the trade interactions and elaborate burial activity that characterized Hopewell society ceased. This change was associated with shifts in population size, technological innovations such as the bow and arrow, the increasing importance of agricultural subsistence, and changes in intergroup relationships. However, what precisely happened and why is still being debated. For many years, the subsequent Late Woodland period was dismissed as a "slightly murky interval" between great cultural fluorescences. Yet, incredible mound-building cultures flourished during this interval in both the Upper and Lower Mississippi Valleys.

The region that now encompasses southern Wisconsin and the surrounding area was home to a population that built large numbers of mounds during the Late Woodland period. While dome-shaped mounds continued to be constructed, effigy mounds built in a variety of animal shapes became common. An estimated 20,000 mounds were built between 600 and 1200 CE, about 4,000 of which still exist today. Most importantly, Effigy Mounds National Monument in Iowa preserves 206 of these mounds in a few clusters, representing the largest group of mounds in one location in North America. The particular shapes chosen for effigy mounds suggest a continuing deep relationship with the animal and spirit worlds. It is likely that the mounds, which are often arranged in clusters emphasizing a certain animal, represented clan totems and might have been built to honor that creature and lay claim to particular territory. Though not as elaborate as Hopewell artifacts, pottery, stone tools, and food remains found alongside the mounds indicate that people congregated near them periodically. As before, these communal events would have provided the opportunity to bury their dead, celebrate kinship bonds, and establish relationships with members of other groups.

## The Transition to Flat-Topped Mounds

While effigy mounds were being built in the Upper Mississippi Valley, another new form of monumental construction was becoming popular in the Late Woodland cultures of the Lower Valley. Around 700 CE, emphasis

ABOVE: Aerial and ground level images of the Marching Bear Mound Group at Effigy Mounds National Monument, which consists of ten bear effigies, three bird effigies (two are not visible in the aerial photograph), and two linear mounds built along a ridge overlooking the Mississippi River. *Images courtesy of the National Park Service, Effigy Mounds National Monument staff photo.*

LEFT: Artist's interpretation of life at Cahokia, *ca.* 1150–1200 CE. View is looking northeast across the central precinct. *Image courtesy of Cahokia Mounds State Historic Site, rendering by William R. Iseminger.*

shifted from the construction of relatively small, dome-shaped mounds used for burial of the dead, to larger, flat-topped mounds primarily used as foundations of structures. These platform mounds were often carefully laid out in rectangular groups with central open plazas between them. While this shift in mound form and arrangement broadly takes place alongside parallel shifts to subsistence based largely on corn agriculture and governance by hierarchical political systems, the relationship among these transformations remains unclear. My current research at the Smith Creek site in Wilkinson County, Mississippi, seeks to explore these questions by examining some of the earliest mound-and-plaza centers in the Mississippi Valley. Though many late prehistoric platform mounds sites have been excavated, I focus here on a single example that epitomizes the trend towards larger and more complex sites.

The Cahokia Mounds site, located near the modern city of St. Louis, Missouri, was set amid the largest prehistoric concentration of people and monumental architecture north of Mexico. Though estimates vary greatly, the city of Cahokia and its outlying settlements were likely home to over 20,000 people during the Mississippi period (1000–1500 CE) and would have taken more than a day to traverse on foot. Cahokia itself contained at least 120

## IN THE FIELD:
# SMITH CREEK, MISSISSIPPI

There are many unanswered questions about the origins, functions, and meanings of the earthen mound sites of the Lower Mississippi Valley, and excavations are currently ongoing to increase our understanding of the cultures that built them. This summer kicked off the Smith Creek Archaeological Project, a Penn Museum excavation of a native North American site in Wilkinson County, Mississippi. Before she left for the field, we sat down with **Megan Kassabaum, Ph.D.,** director of the project, to learn more.

**What is the Smith Creek Archaeological Project? Why is this site important?**

I'll be bringing 12 students with me—grad students and undergraduates—mostly from the University of Pennsylvania, but also from the University of North Carolina and the University of Alabama. We are going to excavate both on and around the mounds to try and learn a bit more about how they were used, the types of activities that took place on and around them, and hopefully narrow the range for exactly when the mounds were constructed. In this particular time period [700–1200 CE], it's a much more difficult question to answer [how mounds were used]…because not that many people have excavated these sites. The material culture isn't as dramatic as cultures before and after them, so archaeologists haven't focused on them.

**Why did you choose Smith Creek as the focus of this project?**

I chose this site because I've spent the last nine years excavating at the Feltus mounds [a similarly dated site about 45 miles north of Smith Creek]. It's where I did my dissertation research, and when I was working there with my advisor we decided that it would make sense to increase our sample size.

A couple of summers ago, we had a grant from the Federal Highways Department to do a project called the Mississippi Mound Trail, which was a public archaeology project to create a driving trail, along which we would put what we like to call prehistoric markers—they look just like the historic markers you see along the highways now, but they're for prehistoric monuments instead of historic monuments. Under the auspices of this project, we were able to excavate at Smith Creek for two weeks. It was a fairly short excavation, but it gave me a chance to get my hands dirty there and look at the material. So [the site layout] looks the same, I've heard that the artifacts look the same, now I'm actually going to dig them myself and see if I still agree that there are similarities between this site and Feltus.

**What excites you about this summer's excavation?**

It's exciting to start at a site where in reality we don't know much about it. And put those holes in the ground with only a slight idea of what we might find, and still have the potential to have our minds changed entirely. It could still rewrite our idea of this portion of history.

Photograph of the central precinct of Cahokia. The 100-foot-tall Monk's Mound is visible at the top of the photograph. The twin mounds, which sit at the opposite end of the 45-acre plaza, are both at least 45 feet tall. *Photograph courtesy of Ira Block Photography, Ltd.*

mounds, and nearby sites—now under the cities of St. Louis and East St. Louis—would have contained at least 60 more. The ceremonial core of Cahokia spans about five square miles and the preserved central precinct consists of a typical platform mound-and-plaza layout with 16 mounds surrounding a 46-acre plaza. A wooden palisade wall enclosed this entire space and served to protect the city from outside attacks. This construction is more than two miles long and would have required over 15,000 logs. More mounds, numerous secondary plazas, and other functional and ceremonial features sit outside this central plaza.

The largest mound at Cahokia, known as Monk's Mound, dominates the central precinct from its position at the north end of the plaza. The 100-foot-tall (over 30m) platform mound is the largest earthen construction in the Americas, consists of four or five separate terraces, and was constructed starting around 1000 CE. In its final stage, the upper terrace would have supported a building that was 100 feet x 50 feet (30 x 15m) in dimension and perhaps as much as 50 feet tall. Monk's Mound covers 14 acres and would have required over 6 million baskets of dirt to be dug using stone hoes, put into baskets, and hauled by hand. In addition to the physical effort invested in this and the other mounds, the wooden features on the site as well as the plaza itself would have been quite laborious creations. Encompassing an area of about 35 football fields, Cahokia's Grand Plaza, which was artificially flattened, represents the largest public space conceived of and executed north of Mexico in prehistoric times. Nearby, Cahokians also constructed a giant solar calendar. Rebuilt at least five times using massive cedar posts, this monument recorded the summer and winter solstices, the equinoxes, and likely also marked important festival dates related to the agricultural cycle.

Thanks to a long history of excavation at Cahokia, we know a great deal about the lives of the people who lived there during the Mississippi period. In addition to mounds that remain conspicuous on the Cahokian landscape today, excavations have uncovered the remains of many houses, neatly arranged in neighborhoods along streets or paths. Cahokia would have been a bustling city where people made and used tools, maintained fields of corn and other crops, exchanged goods and ideas, prepared and consumed food, played games, and conducted important rituals and ceremonies. They would have struggled with many of the same issues that plague our urban environments today—overcrowding, trash accumulation, violence, and crime—but for hundreds of years, they thrived. Their fields provided such an abundance of corn that the surplus fueled their society, providing goods for trade, allowing some Cahokians to dedicate their time to becoming skilled artisans and craft specialists, and

allowing others to rise to positions of leadership. From his residence atop Monk's Mound, Cahokia's chief ruled this incredible city and maintained order and harmony in the world.

## OHIO HOPEWELL

In the Scioto Valley in Ohio, Hopewell burial mounds exist in association with remarkably complex earthworks. These earthen embankments form regular geometric shapes, such as the circles, linear causeways, and famous octagon preserved at the Newark Earthworks in Heath County. The incredible concentration of earthworks in the Scioto Valley suggests that it was a location of great ritual significance to Hopewell people; the elaborate ceremonial objects associated with these sites support this conclusion. Hopewell art indicates a close relationship with the animal world and certain objects included in burials suggest that some individuals were shamans. Shamans in Hopewell society would have been religious leaders charged with mediating relationships between the human, natural, and spirit worlds.

Artist's interpretation of the Newark earthworks in Heath County, Ohio. The longest causeway at Newark stretches over 2.5 miles (4 km), and the connected circle and octagon in the foreground spans over 3,000 feet (over 900 m). *Rendering by Steven N. Patricia.*

### Mound-Building in Modern Times

Excavation of prehistoric mounds helps to deepen our understanding of the Native American worldview and the variety of belief systems that exist in today's tribes. Moreover, mound construction still actively occurs today in some Native communities, such as the Eastern Band of Cherokee Indians (EBCI), who host a yearly mound building ceremony in western North Carolina. The five-foot-tall mound, known as Kituwah, was at one time a prominent landscape feature; the EBCI believe it to be the birthplace of their people. After centuries of disease, warfare, and exploitation brought on by European contact, the site of Kituwah was sold at auction in 1821, and most Cherokee people were forcibly removed from their land along the "Trail of Tears" (the U.S. policy of removing southeastern Native American groups from their homelands to the Oklahoma territory) soon thereafter. Those who escaped removal were left with no legal right to hold property. It was not until 1996 that the ECBI had the opportunity to buy back the land on which Kituwah stood. Now, over 175 years after being forced from their land, Cherokee people undertake a yearly ritual of mound building as a celebration of their shared identity and history.

Mound construction has thus continued, with only minor interruptions, for over 5,000 years in the United States. North American mounds represent some of the earliest monumental constructions in the world, and their size and elaboration rival even the most famous monuments from other regions. Most mounds have been leveled in the name of progress, but the work being done on those that remain is essential for understanding not only the function and meaning of the monuments themselves, but also the nature of the societies who constructed them.

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**FOR FURTHER READING**

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