

LEARNING THROUGH ARCHAEOLOGY: ETOWAH INDIAN MOUNDS

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Etowah, c. A.D. 1325-1375, © 2004 by Steven Patricia; courtesy of the Art Institute of Chicago.

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Georgia's archaeological landscape includes numerous sites with artificial earthen mounds. Created by diverse Native American cultures, mainly between 500 B.C. – A.D. 1550, these remarkable monuments are vivid reminders of ancient societies that once flourished in every corner of our state.

In an effort to learn about—as well as to learn from—the people who once occupied these mound sites, archaeologists study the artifacts excavated from these sites. Many of the mound sites were constructed during the prehistoric period, a time for which there is no written record to consult. A number of the mound sites recorded around the state were inhabited, however, during the historic period, a time for which there are written records. Accounts from early explorers provide glimpses into the lives of the Native Americans who inhabited these sites long ago, including their physical characteristics, clothing, religious ceremonies, diet, hunting techniques, games, and warfare.



One such site is Etowah Indian Mounds State Historic Site, in Bartow County near Cartersville, Georgia. Today, Etowah's majestic monumental mounds—including one of the largest ever constructed in North America—remind us of the complex society created by the Native Americans that once occupied this land. Etowah's two open plazas (similar to public squares), six mounds, and the impressive ceremonial objects tell us a story of this ancient society.



Archaeological investigations at Etowah began under Cyrus Thomas of the Smithsonian Institution in 1884. Later excavations revealed evidence of distinctions based on social class, burial practices, everyday lifeways, and mound construction techniques. In 1964, the Secretary of the Interior named Etowah Mounds a National Historic Landmark. National Historic Landmarks are nationally significant historic places based on their exceptional value or quality in illustrating or interpreting the heritage of the United States. Fewer than 2,500 historic places bear this national distinction. At the present time, only 48 historic places in Georgia have been designated National Historic Landmarks. Although archaeology began at Etowah many years ago, archaeologists continue to investigate portions of the site, as much remains to be learned.

MOUND A – SYMBOL OF A CHIEFDOM

Etowah was a Native American chiefdom. Chiefdoms consisted of a highly structured social order and permanent political officers. Kinship rules guided social ranking, and political officers re-

ceived the right to rule by virtue of birth. As both a political and religious leader, a chief ruled until his death. From his temple and home atop Mound A, the chief could rule his people and perform religious ceremonies.

Georgia's chiefdom societies emerged around A.D. 1000 toward the end of the Woodland Period (1000 B.C. to A.D. 900) and marked the onset of the Mississippian Period (A.D. 900 to 1541). Early Spanish explorers, including Hernando de Soto, who visited Etowah around A.D. 1540, described a complex system of paramount chiefdoms where individual chiefs and their supporters formed strong connections with other groups and fought wars to establish their regional political dominance.

Mound A, a temple mound, stands about 65 feet high. A broad ramp projects from its eastern side, and a smaller terrace is attached to the south. Native Americans most likely began construction of this mound in the early years of Etowah's occupation, about A.D. 1000. Around A.D. 1300, Etowah rose to prominence, reaching its peak about A.D. 1325. Considerable mound construction occurred during these years. The inhabitants also built a staircase for Mound A by packing clay between logs. This staircase was approximately 22 feet wide.



MOUND B AND STRUCTURE 3

Archaeological excavations show that Mound B's first two construction phases took place during Etowah's Late Etowah Period (A.D. 1100 to 1200). This construction resulted in a small platform

mound about one half of its final size. After a short period when the site was abandoned, construction continued on Mound B from A.D. 1250 to 1325. Mound building increased the footprint of the mound to the north, and structures were built on the top of the mound known as the summit.

Archaeologists discovered the remains of a structure along Mound B's western edge and named it Structure 3. This structure appears to be a series of rebuilt circular buildings, approximately 42 feet in diameter. The circular ring of posts and changes in soil texture and color led archaeologists to conclude that the building's central portion served as a hearth (floor of a fire pit), and had no roof. A six-inch wide trench extended from the central hearth westward out of the structure entrance. This trench most likely drained off liquids used to extinguish the hearth fire. Other evidence suggests an open-walled, shed-like structure. A defensive wall known as a palisade surrounded Structure 3 and the surrounding area.

Structure 3 probably served as an area for special functions associated with a restricted, and probably elite, segment of Etowah's society. It appears that this structure was burned and rebuilt with each period of new construction at Mound B. During the height of Etowah's occupation, about A.D. 1325 to 1375, a terrace was built over Structure 3 and a new rectangular building (Structure 4) was constructed on this terrace. Archaeologists believe Structure 4 served Etowah's population in the same manner as Structure 3.

MOUND C – CEREMONIAL MORTUARY

Much of Etowah's fame derives from impressive Native American art objects recovered from Mound C burials during archaeological excavations. The large quantity of ceremonial goods reveals how village residents participated heavily in the exchange of exotic materials from distant regions. These materials include Tennessee chert (flint), Gulf Coast shells, and copper from the Great Lakes area.

Etowah's residents built Mound C in seven stages from A.D. 1250 to 1375. The mound eventually grew to a height of 19 feet. Each stage consisted of a layer of fill where its summit, flanks (extensions on the side of mounds), and bases were used as burial grounds. Archaeologists found evidence of structures built on

ETOWAH'S MOUND C WAS COMPLETELY EXCAVATED IN 1961 AND LATER RE-CONSTRUCTED.



the summit of several stages. At times, a palisade surrounded Mound C, and it once had a ramp projecting from its eastern flank.

Archaeologists began excavating Mound C as early as 1884. Many excavations have taken place since that time. In 1961, archaeologists recorded at least seven buildings dating from A.D. 1000 to 1100 beneath Mound C. Structure 3 consisted of a prepared clay floor covered with red ochre. Ochre is an impure iron ore used as pigment to color other materials. The large buildings under Mound C are believed to have served a public function. Mound C was completely excavated in 1961; therefore, the mound you see at the site today is a reconstruction.

THE PLAZA - CEREMONIES AND GAMES

The most recent archaeological work at Etowah indicates that one large plaza existed to the east of Mound A. Smaller plazas may have been present beside other mounds at various times. The plaza served the community as a gathering place for ceremonies, storytelling, trade, and greeting visitors. This public area also served as a place to play games, such as chunky and the Native American ball game from which lacrosse originated.

Native Americans of the Southeast placed great importance on the game of "chungke" or chunky. Played by the warriors with beautifully symmetrical disk-shaped stones, chunky served as a general amusement, a test of stamina, and a game of chance. Most often played with only two players per side, each player carried a pole or spear from 8 to 15 feet in length. As the chunky stone rolled, contestants threw spears toward the stone. When the stone stopped rolling, the contestant with the spear closest to the stone was the winner. Communities considered their

chunky stones prized possessions. Awarded the strictest care, they were often passed down from generation to generation.

THE DEFENSIVE DITCH/BORROW PIT

The Etowah River formed the southern border of the village. A series of borrow pits connected by a large ditch, once 9 to 10 feet deep, surrounded the remainder of the site. A borrow pit is an area that has been excavated so that the fill dirt can be used in another area. Originally, the ditch enclosed some 56 acres, before portions were filled during the nineteenth century for agricultural purposes. Using handmade stone tools, the native peoples dug soil, forming the borrow pits and ditch, and carried it in baskets to build six earthen mounds. Mound building occurred at the site for more than 500 years, with renewal of the mounds and new mound building occurring at various times.



Archaeological evidence tells us that a wooden palisade, constructed of upright 12-foot high logs set in the ground, was present directly inside the defensive ditch. This palisade had a series of rectangular bastions that added to its defensive capabilities. Bastions are part of the palisade that project out from the main enclosure. Villagers most likely crossed the ditch on land or wooden bridges. The palisade could only be entered through a series of easily defended parallel, offset openings. Archaeologists believe the ditch and palisade wall were not completed until sometime after A.D. 1325, although the site had been occupied at various times since approximately A.D. 1000. Evidence of charred posts found by archaeologists indicate the palisade burned sometime after A.D. 1350. The burning of the palisade could have been the result of an accidental fire, warfare, or site abandonment.

THE VILLAGE

The population at Etowah increased and decreased in size throughout its 550 years of occupation. At times, disease, famine, drought, floods, fires, harsh winters, and seasonal storms drove villagers from their homes in the village. Residents took refuge where shelter could be found. Etowah saw periods of abandonment, often coinciding with one of these natural disasters or during times of regional warfare. Yet, the people returned to this valley because of its ceremonial importance and its status as an ancient capital.

After A.D. 1550, Etowah's residents moved down river toward the Coosa River and Alabama. Some researchers believe the arrival of additional Europeans caused this social disruption. It is well documented that European diseases, such as measles and small pox, decimated many native populations. By the time the Etowah River Valley saw its first European settlers, the local Cherokee Indians attributed the mounds to an ancient people known only through their oral traditions.



(ABOVE) WATTLE & DAUB STRUCTURE UNDER CONSTRUCTION. (BELOW) EXAMPLE OF WATTLE & DAUB CONSTRUCTION.



EXAMPLE OF THATCHED ROOF CONSTRUCTION.

SHELTER

Beginning in April of 2008, Native Americans, Etowah staff, and volunteers constructed a wattle and daub house. The local clay soils formed the basis for the daub. Reminiscent of those that once covered the site between A.D. 1250 and 1325, the house was constructed using upright posts with green cane (wattle) woven between the posts by hand. Volunteers applied daub (Georgia red clay) mixed with grass and water to cover the wattle.

Archaeologists and Native Americans worked together to design Etowah's new wattle and daub structure based on excavations at the site and cultural knowledge. While some of Etowah's structures were round, the majority built during Etowah's most densely populated period were square. This house was designed using the plan of a structure found to the west of Mound B. The posts were placed using exact measurements from that plan.

Native grasses grew quite tall and were often very coarse. A great source for thatch, these grasses were harvested and bound into bundles that were then used as roofing material. A thatched roof served to keep out most rain and snow.

FOODWAYS

A hallmark of the Mississippian Period (A.D. 900 to A.D. 1541), large-scale agriculture allowed for a more sedentary or permanent way of life. This change in lifestyle paved the way for a rapid growth in population in the New World. The population grew so fast that in some cases small villages blossomed into bustling towns. Corn, beans, berries, goosefoot, sunflowers, and other cultivated and collected plants constituted part of the diet of the Native Americans inhabiting the site. Tobacco was also cultivated. The fields were cleared using stone axes, then, planted and cultivated using shell hoes. Corn was a major crop that was harvested fresh to be cooked and eaten, as well as cut from the cob and dried for future use. Corn was also allowed to mature

and dry in the fields. Dried corn kernels were soaked in a lye solution and processed to make hominy, as well as ground into meal to be used for baking bread and other food items.

Corn, beans, and pumpkins were planted together to aid in the growth process. Pumpkins helped control the growth of weeds due to their wide leaves branching over the ground surface. The fruit could be sliced and dried for future use. Gourds provided drinking vessels and storage containers. Cornstalks served as natural trellises for the growth of beans. In turn, because they are a legume, beans added nitrogen to the soil which helped the corn to grow. When gathered and processed in large quantities, acorns of the white oak trees were used in a number of dietary items such as bread and stews.

Skeletal remains (bones) of birds, deer, fish, rabbits, squirrels, and turtles have been recovered in excavations at Etowah. These remains lend further evidence to the types of animals used to supplement the diet of the inhabitants of the village. An interesting feature spanning the Etowah River at the site is the fish weir (trap) constructed by the Native Americans centuries ago. Look for the two walls of rocks slanting to the center of the river from the banks. Fish weirs were built where the current was swift and the water shallow. Most fish traps were constructed by piling rocks to form a v-shaped dam across a river, pointing downriver. Cone-shaped fish trap baskets, nets, or cane poles were placed at the point of the "V" so that fish were forced into them by the current and kept from swimming back out. Indians also fished using hooks and spears, but the fish trap was the most efficient

method of fishing. There are remains of 40 fish traps along the 99-mile length of the Etowah River.

NONINVASIVE ARCHAEOLOGY

Given the technology of today, researchers are able to learn a great deal about an archaeological site without having to put a shovel in the ground. Remote sensing techniques, such as Ground Penetrating Radar (GPR), electrical resistivity, magnetometry, infrared photography, and satellite imagery, enable researchers to gather various types of information about what lies beneath the ground without having to "damage" a site in the process. This technology has the capability to depict anomalies



FISH WEIR IN THE ETOWAH RIVER
ADJACENT TO THE SITE.



Electrical resistivity



Fluxgate gradiometer



Ground-penetrating radar



Ground-penetrating radar

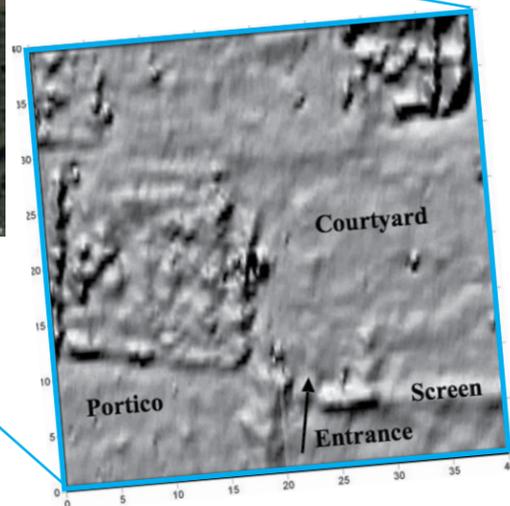
VARIOUS TYPES OF REMOTE SENSING SURVEYS IN ACTION.

(unusual areas) in the ground that may be part of the archaeological site, such as postholes, fire pits, trash pits, and burials.

The most effective remote-sensing method employed at Etowah to date is magnetometry using a Fluxgate Gradiometer System. This system measures the intensity of the magnetic field in buried deposits on archaeological sites and allows the researcher to map patterns of magnetism in the soil. Materials that have been burned or partially burned tend to show up well, as burning alters the magnetic structure of an object. Therefore, hearths as well as burned palisades and structures should leave noticeable details in the data. Remote sensing at Etowah has revealed that the site is much more complex than previously imagined and is allowing researchers to correct previously inaccurate interpretations. For instance, we now know that there were at least four structures atop Mound A rather than just one chiefly residence. To date, nearly 150 structures have been identified as a result of the new data, and there is still much to be learned.



OVERLAY OF THE ETOWAH SITE ONTO GOOGLE™ MAP WITH MAGNETOMETER SURVEY ATOP MOUND A AS AN INSET. Source: AGA-LLC.



QUESTIONS

1. What is a chiefdom? Societies that consisted of a highly structured social order and permanent political officers.
2. What is wattle and daub? How was it used to construct a shelter for early Native American people? A framework of woven sticks and/or cane plastered with clay. Sticks and/or cane were woven by hand between a series of upright posts to form the walls of the structure. This wattle base was then plastered over with clay to produce a water-repellent exterior.
3. What is magnetometry, and how is this technology used in archaeology? A remote sensing method that measures the intensity of the magnetic field in buried deposits on archaeological sites and allows the researcher to map patterns of magnetism in the soil.
4. What is a weir? How was it used to supplement the diet of Native Americans? A fish trap constructed by piling rocks to form a v-shaped dam across a river, pointing downriver. Cone-shaped fish trap baskets, nets, or cane poles were placed at the point of the "V" so that fish were forced into them by the current and kept from swimming back out. Weirs provided a more efficient way to catch fish than fishing with a hook and line. Fish were a major food source of the Native Americans.

WEBSITES

Georgia State Parks – Etowah Indian Mounds State Historic Site: <http://gastateparks.org/info/etowah/>
Explore this website to learn more details about the history of Etowah, ongoing projects, and the calendar of events.

Georgia State Parks – Kolomoki Mounds State Historic Park: <http://gastateparks.org/info/kolomoki/>
Visit this website to learn about the history of the mounds at Kolomoki near Blakely, Georgia.

Ocmulgee National Monument (U.S. National Park Service): <http://www.nps.gov/ocmu/>
Explore this website to learn about the history of the mounds at Ocmulgee and the Lamar Mounds and Village near Macon, Georgia.

Society for American Archaeology: www.saa.org

Society for Georgia Archaeology (SGA): www.thesga.org

The Archaeology Channel:
http://www.archaeologychannel.org/content/TR_Group.asp?category=276640&name=Lesson%20Plans

The New Georgia Encyclopedia: <http://www.georgiaencyclopedia.org/>

ACTIVITIES

1. Locate the sites of the Georgia mounds (Etowah, Ocmulgee, Kolomoki) on a map. Why were these locations chosen for mound building, and what were important resources to consider?
2. Construct a timeline of the mounds in Georgia and other southeastern states. What similarities and differences are there among tool technology, pottery style, ceremonial practices, architecture, and foodways?
3. Use the description of Mound B and Structure 3 to draw a map of the site on graph paper. Start with a north arrow and scale to make your drawing accurate. Add other mounds and structures based on the descriptions of Mounds A and C.
4. Design a website highlighting the cultures represented by these mounds. What type of information would you include? How would you interest middle school students in the importance of preserving these archaeological sites?

RESOURCES AND RECOMMENDED READING

Adair, James

1966 *Adair's History of the American Indians*. Edited by Samuel Cole Williams. Johnson City, Tennessee, Watauga Press, 1930. Reprint. Argonaut Press, New York.

Dickens, Roy S., Jr. and James L. McKinley

2003 *Frontiers in the Soil: The Archaeology of Georgia*. Originally published in 1979 by Frontiers Publishing Company. Carl Vinson Institute of Government, University of Georgia, Athens.

Dickens, Roy S., Jr. and James L. McKinley

2003 *A Teaching Handbook for Frontiers in the Soil: The Archaeology of Georgia*.

King, Adam

2003 *Etowah: The Political History of a Chiefdom Capital*. University of Alabama Press, Tuscaloosa.

Milner, George R.

2004 *The Moundbuilders: Ancient Peoples of Eastern North America*. Thames & Hudson Ltd., London.

Waselkov, Gregory A. and Kathryn E. Holland Braund, Editors

1995 *William Bartram on the Southeastern Indians*. University of Nebraska Press, Lincoln.

White, John R.

2005 *Hands on Archaeology: Real Life Activities for Kids*. Prufrock Press, Inc., Waco, Texas.

White, Max E.

2002 *The Archaeology and History of the Native Georgia Tribes*. University Press of Florida, Gainesville.

"Learning with Archaeology: Etowah Indian Mounds" is one of a series of educational packets produced annually by The Society for Georgia Archaeology during Archaeology Month activities in May. The series reflects new themes annually and is distributed free-of-charge, along with an associated poster, to middle/junior high public schools in the state, regional libraries, state parks and historic sites, and other entities. Librarians at schools and regional public libraries are encouraged to catalog these materials so that they may be used in the future by educators and patrons. The 2009 issue represents the 12th in the series. We hope you enjoy it!

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