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# Recent Investigations at Etowah Field School 2013

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# Recent Investigations at Etowah Field School 2013

**By Adam King**

In the summer 2013, a joint field school with students from the University of South Carolina and Texas State University set out to conduct limited archaeological testing at the famous Mississippian site of Etowah. The National Science Foundation funded this work with approval from Georgia's Department of Natural Resources and the nine federally-recognized Native American groups culturally affiliated with Etowah through the NAGPRA process. It also was done with the participation of staff from the Muscogee (Creek) Nation's Cultural Preservation Office.

Etowah is a large Mississippian period town located in northwestern Georgia that was occupied from AD 1,000 to 1,550 and covered some 22 hectares (Figure 1). During the course of its occupations, at least six mounds were built, a large clay-lined plaza was located east of the largest mound, and the entire site was surrounded by a complex of borrow pits, ditches, and a palisade wall. Etowah has been the focus of archaeological research since the late 1880s, but the lion's share of that work has focused on the mounds and the recovery of human remains (King 2003). We wanted our work to focus away from the mounds and on the history of the site as a community.

The summer's testing actually was a continuation of a project in which I have been involved since 2005 with Kent Reilly of Texas State University, Chet Walker of Archaeo-Geophysical Associates, and the Cultural Preservation Office of the Muscogee (Creek) Nation. We call this the Etowah Archaeo-Geophysical Survey or EAS, and we began it with the expressed purpose of learning as much as we could about Etowah by doing as little invasive archaeology as possible.

Under the auspices of the EAS, we have used several different geophysical prospecting techniques (or remote sensing) at the site, most extensively applying the gradiometer, electrical resistivity, and ground-penetrating radar. Without question, our best results were produced by the fluxgate gradiometer, which measures slight variations in magnetism.

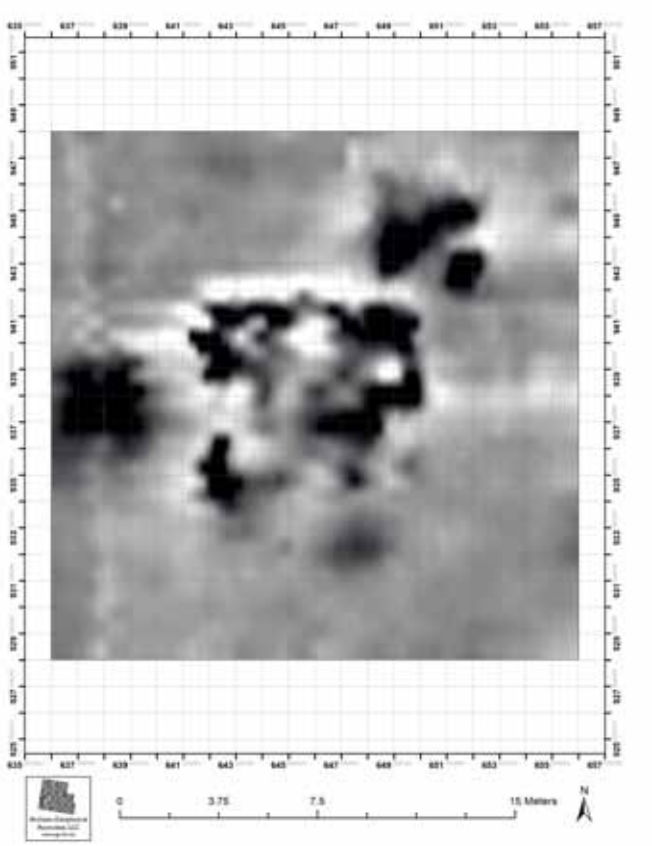

Figure 2: Type I magnetic anomaly, Etowah. (Image by Adam King)

In 2008, Chet Walker of Achaeo-Geophysical Associates, LLC, completed a total survey of the Etowah site, collecting magnetic data at one-meter intervals. That survey revealed 140 magnetic anomalies of the right size and shape to be Mississippian period buildings (Walker 2009). More interestingly, Walker was able to classify those anomalies into categories based on morphology. Type 1 anomalies are comprised of a series of magnetic highs and lows generally conforming to a square or rectangle about six to eight meters across (Figure 2). Type 2 anomalies consist of a continuous magnetic high forming a rectangular to square shape with an area of low magnetism within. Often in the center of that area of magnetic low is a single spike in magnetism (Figure 3).

We know in the archaeological record of northwestern Georgia that there were two basic forms of architecture built during the Mississippian period (Hally and Langford 1988). Between AD 1,000 and 1,200, the most common form of building is called the wall-trench building (Figure 4). These were made by excavating trenches, setting prefabricated walls made of skinny poles in those trenches, and bending and tying those poles at the top

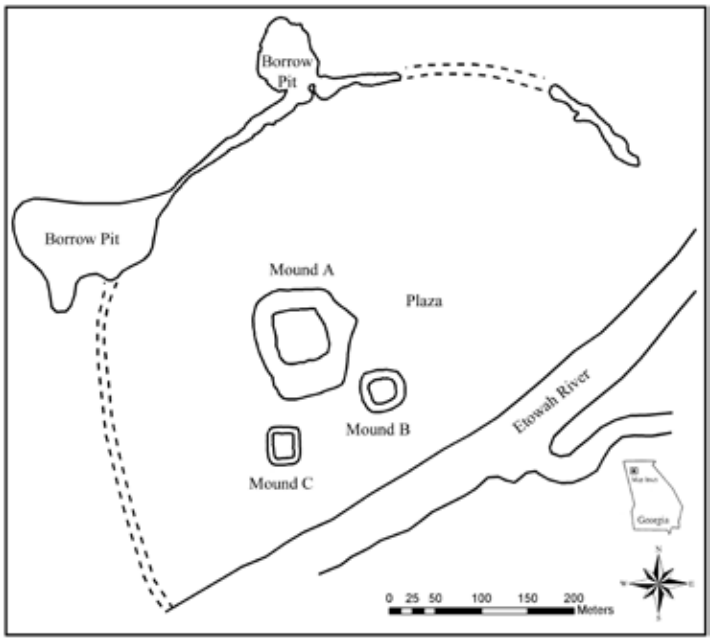


Figure 1: Plan map of the Etowah site (9Br1). (Map by Adam King)

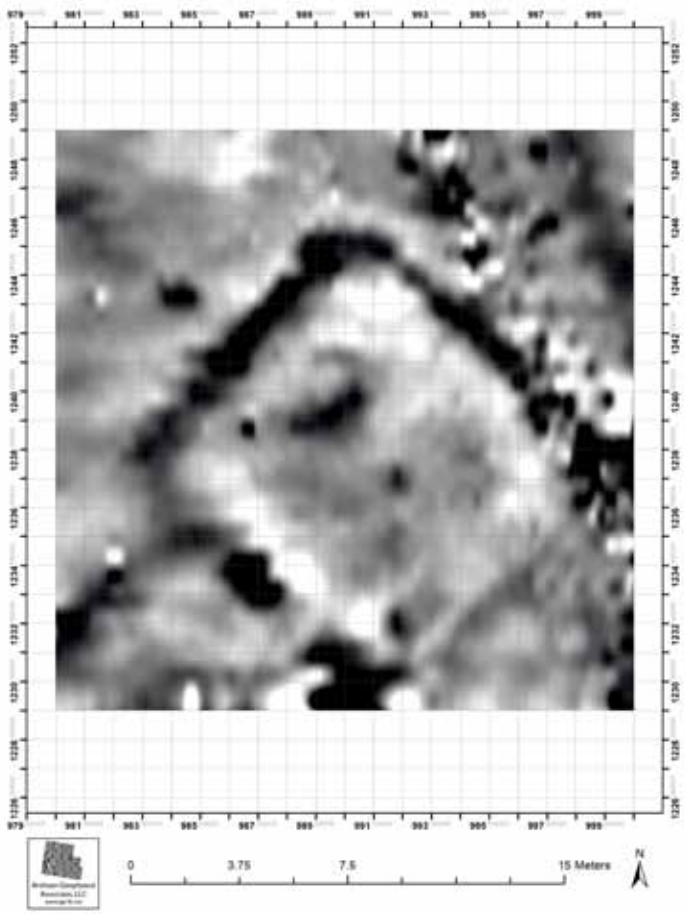


Figure 3: Type 2 magnetic anomaly, Etowah. (Image by Adam King)

to cover the structure. Thatch is added to the roof, but no clay plaster or daub is added to the walls, and no interior support posts are needed to hold up the roof. After AD 1,200, single-set post buildings become the dominant architectural form (Figure 5). These are constructed by placing individual posts in individual holes, creating a pole framework. Using four or six interior support posts, a roof framework is built of poles that are covered with thatch. The exterior walls, interior partitions, and smoke holes of these buildings are packed with red clay plaster or daub.

Based on what we know about the construction methods of each type of building, we have argued that the Type 1 Anomalies represent single-set post buildings (King et. al 2008). The red clay daub collapsed from walls and roofs would create the palimpsest of magnetic highs and lows seen in this type of anomaly. As Figure 3 shows, sometimes it is even possible to see the interior partition walls collapsed in place. Following this, we have also argued that the Type 2 anomalies correspond to wall-trench buildings. Without the daub to create highs and low, the excavated and refilled trenches and central hearths are clearly distinguished from the floor area.

In the summer of 2013, our field school set out to test 10 Type 1 and 10 Type 2 magnetic anomalies to confirm their architectural form and dating. Before testing, Chet Walker recollected selected anomalies using a fluxgate gradiometer at 25-centimeter intervals. Using those data, we positioned one-meter units to capture exterior walls. All soils were screened, artifacts bagged by level, and feature fill processed through flotation in order to collect datable materials.

Between June 24 and August 1, 2013, our combined crew investigated nine Type 1 anomalies and nine Type 2 anomalies as well as some other unique anomalies at the site. In all, a total of 42 one-meter units were completed (Figure 6).

Of nine Type 1 anomalies tested, in all nine cases, masses of burned daub and single-set posts were encountered in test units. Although dating analyses are still underway, we saw no stratigraphic evidence that these buildings are any earlier than AD 1,300. Below is an example from the excavations.

In Grid 16, we placed two one-meter units to overlap what we expected to be the wall of a structure (Figure 7). In the westernmost of the two, we found a daub mass laying horizontally and immediately to the east of three single-set posts (Figure 8). Associated ceramics suggest a date of 1,325 to 1,375.

Turing to the Type 2 anomalies that we expected to represent wall-trench buildings, our results were also quite good. Of the nine anomalies tested, eight of them returned evidence of a wall-trench building. These buildings were generally deeper in the soil profile with fewer associated ceramics, so their dating in our excavations must await a complete pottery analysis from each stratigraphic column.

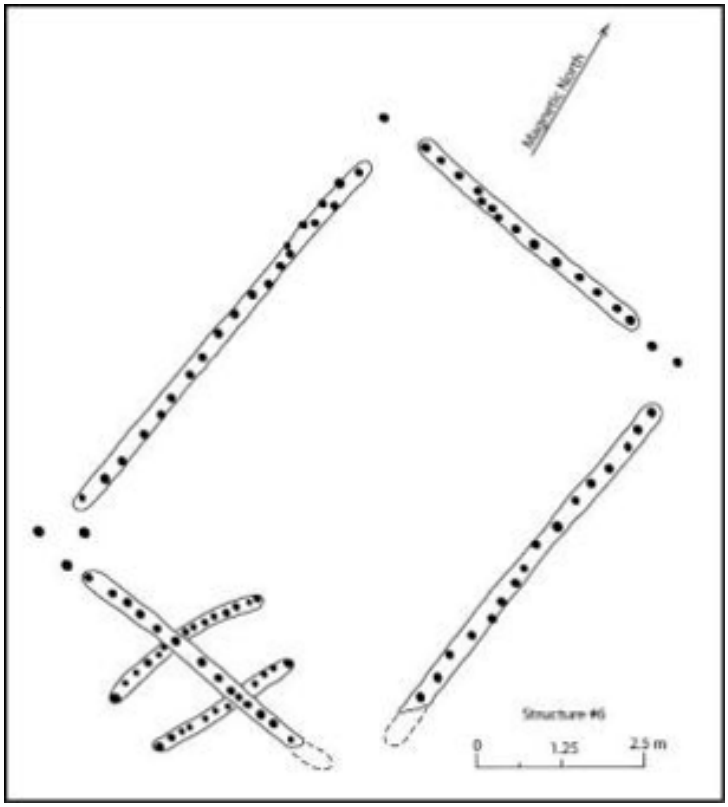


Figure 4: Single-set post building pattern, Etowah. (Image by Adam King)

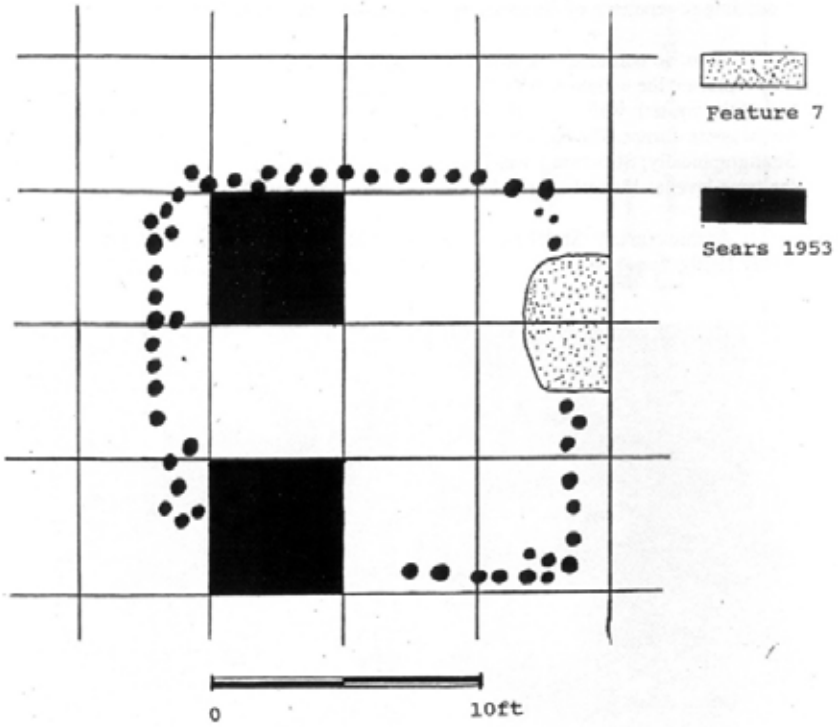


Figure 5: Wall-trench building pattern, Etowah. (Image by Adam King)

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Below again is an example.

In Grid 7, a one-meter unit was placed so that the anomaly extended diagonally across it from southwest to northeast (Figure 9). Upon excavation, the crew uncovered a nicely defined wall-trench that extended through the unit exactly where the gradiometer predicted it should be (Figure 10). At the base of the trench, individual post holes were visible and excavated separately.

We tested some other interesting anomalies, and there is much more to do, but for now we learned something very important. We can see different kinds of buildings that generally date to different time periods using only the gradiometer. Because the gradiometer gives us continuous data over large areas, it gives us a view of Etowah's communities only rivaled by WPA-style mass labor large-scale excavations—the kind of thing we cannot afford to do today nor would we necessarily want to do because of the destructive nature of excavation.

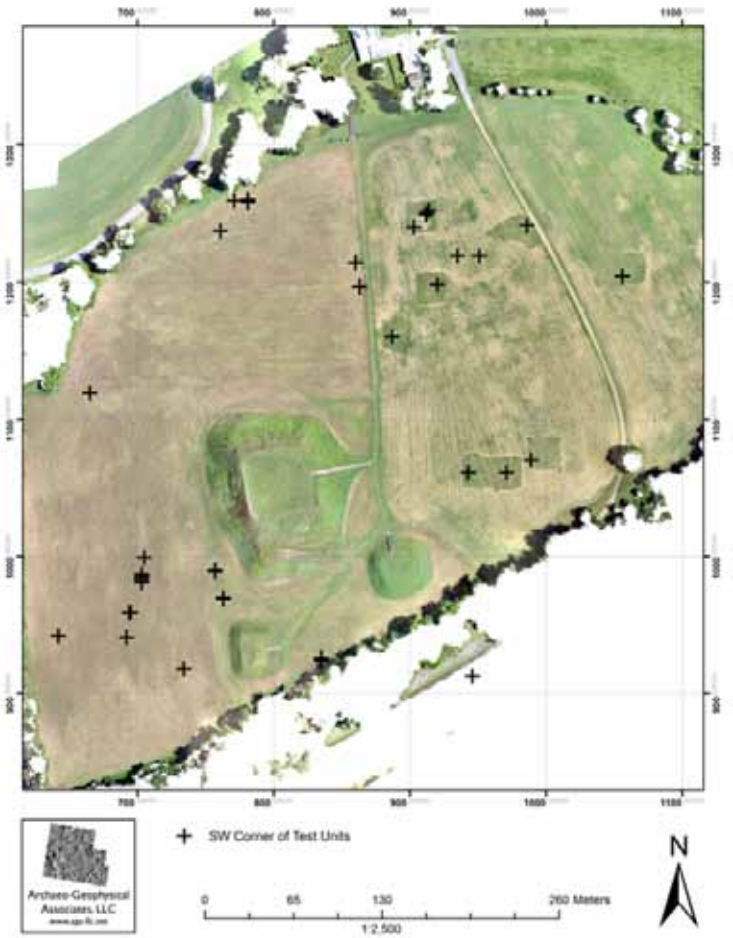


Figure 6: Aerial photo of Etowah showing the location of summer 2013 test units. (Image by Adam King)

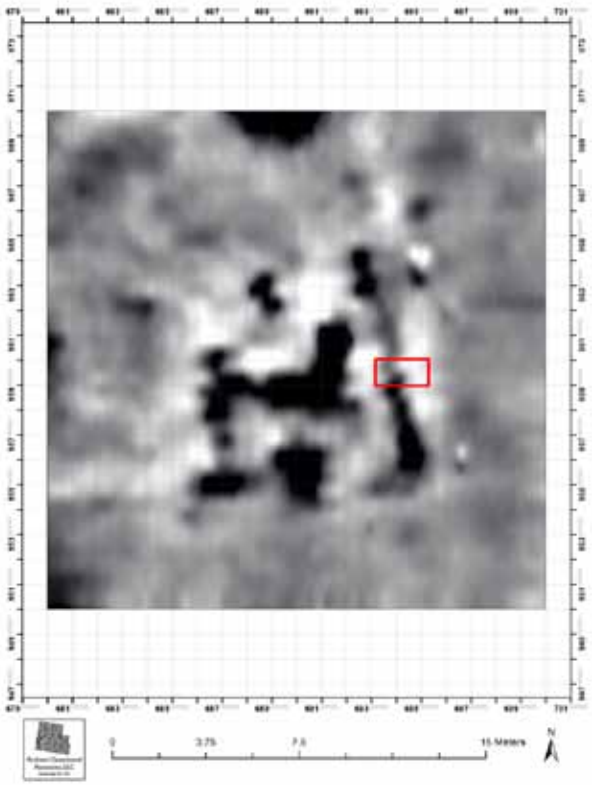

Figure 7: Magnetometer map of structure in Grid 16. (Map by Adam King)

Figure 8: Photograph of architectural features in Grid 16. (Photo by Adam King)

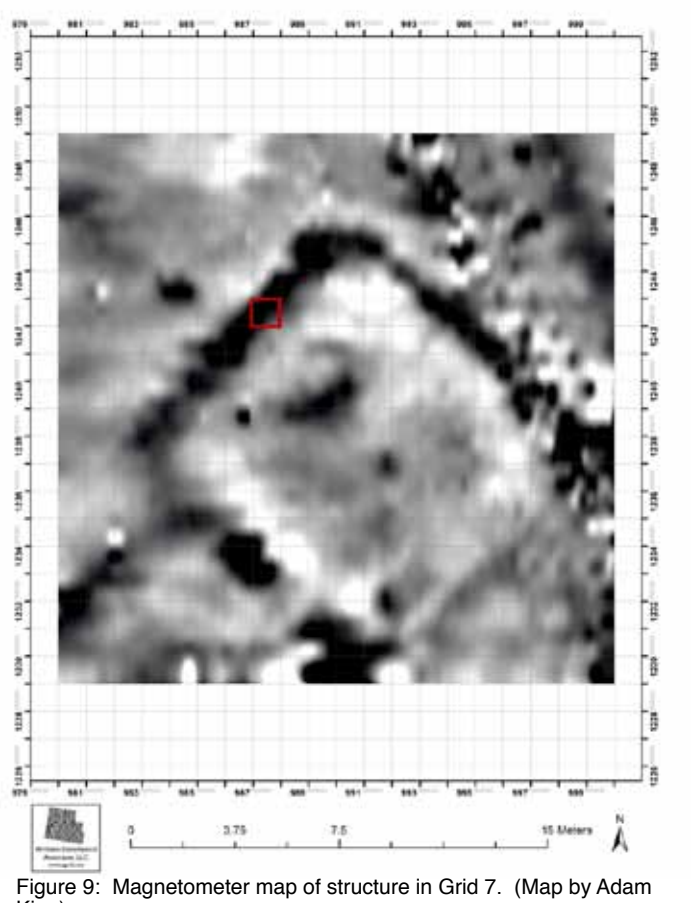

Figure 9: Magnetometer map of structure in Grid 7. (Map by Adam King)

Figure 10: Photograph of architectural features in Grid 7. (Photo by Adam King)