

## **Reassessing Site Location Methodology in the Black Warrior River Valley**

Several archaeological sites have been discovered within the Black Warrior River Valley in west-central Alabama. Some of the sites have been discovered by shovel testing and riverbank surveys, while most were found by surface collecting. Based on the number of sites and different techniques used, it is apparent that sites can be found by each of these methods. However, a problem that arises are sites being found only by surface collecting certain areas, can give a skewed view of the people who lived there. This paper will show that there is a justification for changing the methodology and employing shovel testing, riverbank surveys, and geoprobing within the Black Warrior River Valley due to deeply buried sites that are being missed by surface collection alone.

By examining past surveys in this area, a picture is drawn of the differing techniques and methodologies that have been employed over the years in the Black Warrior River Valley. Here are a few examples of surveys completed in recent years.

In 1999, a survey of Late Woodland and Mississippian settlements in the Black Warrior River Valley was conducted by the University of Alabama. The goals of the survey were to identify and record sites within the Black Warrior River Valley to see if characteristics and relationships of settlements could eventually be proposed. A survey area of 3 square kilometers (two 3-mile wide transects) was surface collected and only included areas of cultivated fields. One transect was placed along the Hale/Tuscaloosa county line while the other was placed three miles to the north and intersected Hill's Gin Landing, Poellnitz, and Foster's Landing. Twenty unrecorded and twelve previously recorded sites were found. Based on the artifact recovery, the majority of the sites were Late Woodland or Late Woodland/Mississippian. Only conducting surface collections of

plowed fields gives a biased view of the recorded sites within the Black Warrior River Valley.

In 2000, the second field season of the Black Warrior River Valley survey was performed by The University of Alabama. A total of 2.62 square kilometers were surveyed. Of this, 2.59 square kilometers was surface collected and 0.3 square kilometers was shovel tested. Thirty-five shovel tests were conducted and dug at 25-meter intervals. No cultural material was collected in these tests. A total of 46 archaeological sites were newly recorded, with four previously recorded sites being revisited. Most of these sites were Late Woodland but there were also some Mississippian sites.

In 2001, the third field season of the Black Warrior River Valley survey was conducted. A total of 1.3 square kilometers were surveyed with 1.1 square kilometers being surface collected and 0.19 square kilometers shovel tested. In areas that were wooded or pastureland, which made it impossible to surface collect artifacts, shovel tests were placed 25 meters apart. A total of 41 new sites were recorded and four previously recorded sites were revisited. More surface collecting and a very minimal amount of shovel testing were conducted.

In 2002, the fourth and final season of the Black Warrior River Valley survey was completed. This seasons plan was to focus on three known sites with high artifact recovery and conduct subsurface excavations of them. The Fitts Site (1TU876) employed the use of surface collecting, excavated units, and stripped trenches. This excavation yielded large numbers of both features and artifacts. Based on the ceramic analysis, the site dates to the late Moundville III phase while the features date to the

Mississippian time period. The P.J. site is located close to the Fitts site. The types of survey used included surface collection, excavated units, and a road grader which was used to remove the plowzone from two trenches. Based on the three features found, a beaded pottery rim, and grog-tempered sherds the site was either reoccupied after the West Jefferson phase in the Moundville II or III phases, or the occupation was continuous from the West Jefferson through Moundville II or III. The Gilliam site field methods included surface collection and unit excavations. A total of thirty-one 1 by 2 units were dug forming two trenches with soil from the plowzone that was not screened. Six features were found that dated to the Moundville I and /or early Moundville II phase in the Mississippi period chronology, as well as the Late Woodland period West Jefferson phase. The radiocarbon date from the Gilliam indicates a Moundville II phase site.

In 2001 and 2002, the Hull Lake Survey and Testing Project (also known as the Black Warrior Archaeological Research Project) was completed by Panamerican Consultants (PCI) with the help of The University of Alabama Department of Anthropology and the Alabama Historical Commission. These sites were originally recorded by John Walthall and Ben Colbentz in 1977 and were reinvestigated by the University of Alabama in 2000. Three sites (1TU330, 1TU331, and 1TU338) were excavated. Shovel test transects were employed across the three sites first and then, based on the artifact recovery across the sites, 1-x-1 and 2-x-2 units were excavated. By shovel testing, it was concluded that sites 1TU330 and 1TU331 represented one locus and not two separate sites as originally thought. It was initially believed that the two sites were separate based on the fact that only surface inspections of the site were conducted in 2000. This was also the case for sites 1TU336, 1TU337, and 1TU338. Based on the

surface and subsurface testing, the sites were believed to be associated and, based on PCI's excavations, considered one site (1TU338) rather than individual sites. It was concluded that sites 1TU330/1TU331 and 1TU338 were of the Late Woodland West Jefferson Phase.

In 2008, the Office of Archaeological Research (OAR) conducted a Phase I pipeline survey through the Black Warrior River Valley. The survey went through the Hull Lake area and a few shovel tests were conducted with no artifacts found. This survey also ran along the same terrace as the Kraut Place site (1TU1058), but no shovel tests were performed.

In the summers of 2009 and 2010, PCI conducted their annual archaeology camp (Archeo Camp) for grades 4-9 at the Kraut Place (which would later be known as Site 1TU1058). The Kraut Place is located west of Highway 69 at the end of Upper Hull Road. PCI was given permission from the landowners to survey and excavate the farmland. During this camp, PCI archaeologists taught the children about Archaeology which they experienced first hand by actually helping in excavation and lab practices. Based on the close proximity of the Black Warrior River and the known sites within the surrounding area, there was a good possibility that this area would turn out to be a site.

The project area is located along the floodplain and consists of approximately 2 acres of grassy pasture that is surrounded by a thin strip (10 to 15 meters) of hardwoods. This grassy area was at one time used for cattle and livestock but now lays dormant. The river bluff edge of the Black Warrior River makes up the northern portion of the site. The bluff is steep and in a constant state of erosion and is approximately 20 to 25 feet

above the river. A house and pool are also located in the northeastern portion of the area. Beyond the project area to the south, there are several cultivated fields.

Since the area was covered by recently cut grasses no surface collection could be conducted. It was discerned that the best way to test this area was by shovel testing. A total of 35 shovel tests were conducted across the site in a 15-meter grid. Out of these tests, 20 were positive and 15 were negative. Almost all of the shovel tests extended to approximately around 1-meter deep. Based on the positive shovel tests, isolated pockets of artifacts were showing up across the site. Because of this, and the overall artifact recovery, three 1 meter by 2 meter (1-x-2) units were placed in the high probability areas in the summer of 2009.

Unit 1 was situated in the north-central portion of Site 1TU1058 and just south of the wooded bluff edge. This unit was excavated in 10-cm levels and extended to 150 cm below datum, and contained seven soil strata. Unit 1's recovery began in Level 5 (the first four levels were sterile). The unit had the best artifact recovery out of the three units with an overall recovery of 2,227 artifacts. Out of these artifacts, 655 pieces were pottery and 1,490 were debitage (the remaining 82 artifacts consisted of sandstone, cobbles/fragments, charcoal, and worked stone). There were no features, stains, or deep disturbances observed in this unit. There was however a heavy layer of daub and charcoal found.

Unit 2 was in the central portion of the project area 20 meters southwest of Unit 1 in a small depression. The unit placement was based on a nearby positive shovel test. Unit 2 was excavated in 10-cm levels, extended to 110 cm below datum, and had four strata. The recovery for this unit began in Level 2 with a modern brass shotgun shell

head which was collected and the unit was then sterile until Level 6. The total artifact recovery was very low with only nine artifacts recovered. Of these nine artifacts, eight were pottery. There were no features, stains, or deep disturbances observed in this unit. Based on the paucity artifacts recovered and the appearance of subsoil, this unit was terminated.

Unit 3 was situated in the far western portion of the site, in the middle of a very slight rise. The unit was excavated in 10-cm levels, extended to 60 cm below datum, and contained three soil strata. The deposits in this unit were much shallower than the previous two and the strata did not correspond to the soils on the rest of the site. Artifact recovery was somewhat low with 411 total artifacts found. Of these artifacts, 153 were attributed to pottery and 181 were debitage. The remaining 77 were worked stone, sandstone, charcoal, cobbles/fragments, and fired clay. The substratum was encountered in a relatively shallow level and the unit was terminated.

Unit 4 was located in the north central portion of Site 1TU1058 and was five meters south of Unit 1. Based on Unit 1's high artifact recovery Unit 4 was placed here. This unit was excavated in 10-cm levels and went down to 140 cmbd (13 levels) and had six strata. Levels one through four was sterile. The artifact recovery for the rest of the unit was high with 1,074 total artifacts being found. These artifacts consisted of 532 pottery pieces and 402 pieces of debitage. The remaining 140 artifacts were worked stone, sandstone, charcoal, a good portion of fired clay, and cobbles/fragments. Also found within Unit 4 was a heavy layer of daub and charcoal. The unit was terminated once subsoil was reached.

Based on the 2009 summer excavations, it was thought prudent to continue excavations during the 2010 Archeo Camp. More shovel testing and units were planned at the site to get a better understanding of who once occupied the area. Based on the previous summer's artifact recovery, Units 5, 6, and 7 were placed along and in the wooded bluff edge to the north.

Unit 5 was a 2-x-3 m unit situated within the wooded bluff edge and 15 meters to the east of Unit 4. This unit was placed here because of the high artifact recoveries from Units 1 and 4. Unit 5 was excavated in 10-cm levels and extended to 140 cmbd, 13 levels, and had six strata. After Level 10, it was decided to take a 1 meter by 1 meter (1-x-1m) window out of the northwestern half of the unit to get a better idea of the stratigraphy and to see if artifacts were still occurring (artifacts were not found past Level 9). Levels 11, 12, and 13 of the 1-x-1 unit had no recovery from them and the unit was terminated. Artifacts from unit 5 totaled 552 artifacts. Pottery made up 295 pieces while debitage made up 216 pieces. The remaining 41 artifacts consisted of worked stone, sandstone, one nutshell, charcoal, fired clay, cobbles/fragments.

Units 6 and 7 were started for excavations for the Alabama Archaeological Society. Both units were excavated by natural strata rather than 10-cm levels. Since the first stratum in all units contained "no recoveries," this level was removed and not screened. When Stratum II appeared, units 6 and 7 continued to be excavated by natural strata. Unit 6 was located in the wooded bluff edge of the project area and was 27 meters west of Unit 7. This unit was placed here due to a positive shovel test. Unit 6 contained 218 total artifacts with 134 pieces of pottery and 36 pieces of debitage. The excavation was stopped after Stratum III due to inclement weather and time constraints. Unit 7 was

located 2 meters north of Unit 4. Four strata were excavated overall. The unit's artifact recovery consisted of 801 artifacts with 436 pieces of pottery and 301 pieces debitage. The remaining 64 artifacts were worked stone, sandstone, schist, fired clay, charcoal, and cobbles/fragments. The excavation was stopped after Stratum IV due to inclement weather and time restraints.

Since Units 6 and 7 were not completed during this past summer's excavation, sand bags were placed in the four corners of the units and then the units were backfilled. Next summer, we will be able to continue these excavations.

Artifacts are good indicators of time ranges and dates. As mentioned before, some worked stone, and pottery were recovered during the excavations. Four Hamilton projectile points which date to the Late Woodland/Mississippian period were recovered as well as some decorated (pottery types such as Mulberry Creek Cord Marked, small incised sherds, and rims), but mostly plain pottery. Across the whole site, including shovel tests and units, 5,414 artifacts were found. Of the 5,414 artifacts, 2,274 (42%) were pottery (including sherdlets). A very small number of this pottery assemblage was decorated. A breakdown of the overall plain types of pottery found across the site showed that there was more grog tempered pottery (65%) than any other type. Other types included shell (15%), grog/shell (11%), grit/grog (2%), sand/grit (1%), sand (1%), unknown (4%), and decorated (1%). Unknown pieces consisted of sherdlets that were too small to accurately discern which temper was used in the production of it.

The large amount of debitage also helps with the dating of this site. Most of the lithics found were debitage. There were four Hamilton points, some bifaces, a few tools, five distals, and three proximals were also recovered. Out of the 5,414 total artifacts

found, 2,670 (49%) were chert and quartz debitage. Chert debitage made up the majority with 2,500 (94%) pieces to 170 (6%) quartz pieces.

Another valuable resource is radiocarbon dating. Out of the seven units, we were able to send carbon samples from Units 4 and 5 to Beta Analytic, Inc. in Florida for AMS dating. Both units' radiocarbon samples were sent from strata that are thought to be buried midden horizons. Unit 4 was from level 10, strata V/VI and Unit 5 was from stratum V. Unit 4 had a heavy layer of daub and charcoal within this level and the results from the radio carbon dating indicated a date of AD 1240 to 1300. This places it in the Moundville I/II phases. Unit 5's results revealed that the date was between AD 20 to 220. Based on Jenkins and Krause, this puts it in the Miller One phase.

Based on the Hamilton points, the few pieces of decorated pottery, the plain pottery, the large amounts of debitage, and the radiocarbon dating results, it can be discerned that the primary cultural manifestation at Site 1TU1058 seems to be of the Miller I and Moundville I/II phases.

Past and present surveys in the Black Warrior River Valley have been completed by conducting surface collection, shovel testing, excavation units, and riverbank surveys. Based on the recent excavation of Site 1TU1058, it is evident that the site was buried approximately 1 meter deep and would never have been found if not for shovel testing the area. In the past, the practice of surface collecting seemed like a survey of convenience. Several sites have been found by using this method, but how many have been overlooked by not shovel testing. Surface collections do work, but its muddled data. We are not getting the true picture of what is happening in the area. Also, as archaeologists we all worry about money and the time spent on a project. This thought

should not dictate our projects however. Our jobs as archaeologists are to survey an area and try and locate sites as well as interpret. Methods used extensively in cultural resource management projects have demonstrated over and over again the accuracy and usefulness in shovel testing areas. What I am proposing is that to accurately record sites, we need to change our methodology and establish a new way of approaching areas along the Black Warrior River Valley and areas similar to it. Shovel testing should be one of the main survey techniques. To find deeply buried sites, we need to start digging for them. In addition, riverbank surveying and geoprobing should be employed when possible. In conclusion, these surveying techniques will not only help in finding sites, but will perhaps even help us in discovering that these sites within the Black Warrior River Valley are not several small activity areas but larger sites.

### **SEAC 2010 ABSTRACT**

#### **Reassessing Site Location Methodology in the Black Warrior River Valley**

For years, archaeologists have used similar survey techniques to locate sites above rivers. In the summer of 2009, Site 1TU1058 was located along the Black Warrior River by Panamerican Consultants, Inc. This site contained intact deposits nearly 1 meter below the surface. Had the area not been shovel tested, this site would not have been discovered. The purpose of this paper will be to look at past surveys in the area and to explore changing methodology to focus on techniques such as shovel testing, geoprobing, and shoreline surveys.