

Woodland Pottery Studies in Bibb, County Alabama

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Woodland pottery research in parts of central Alabama is limited in terms of vessel form and function. During the Phase III excavations at Sandy Pasture (Site 1BB227) in 2009, site stripping revealed a large feature containing 4 vessels that were able to be partially reconstructed. This mitigation involved the complete removal of Site 1BB227 for the widening of US Highway 82 in Bibb County, Alabama. The site is located in the Middle Cahaba River drainage in north-central Alabama. Site 1BB227 yielded a plethora of prehistoric artifacts with a recovery of 33,813 artifacts. Early, Middle, and Late Archaic components, and several features were identified with a Late-Middle Woodland Montevallo Phase component. Using data from Site 1BB227, this paper will look at previous Woodland ceramic research in the area and examine the form of the recovered vessels with an emphasis on their function.

While using a back-hoe during the last day of excavations at Site 1BB227, the crew discovered a feature containing numerous pottery sherds. This was designated Feature 136 which was 122 cm long and 116 cm wide, and it extended to at least 70 cm. The dimensions and depth are not exact due to the slight disturbance by the back-hoe. The south half of the feature was excavated first and the sherds were left pedestaled until it was completely exposed. In addition to the sherds, a large amount of scattered sandstone, quartz cobble fragments, and debitage were recovered from the feature. The base of the feature was lined with sandstone and most, if not all of the pottery, was found above the sandstone layer. Charcoal and soil samples were taken from the south half of the feature.

With further analysis, Feature 136 yielded a total of 290 sherds. Fourteen different vessels were discovered from the pottery that came out of the feature, four of which were able to be partially reconstructed to the point where vessel form could be deduced with some certainty. Each pottery sherd was carefully sorted into similar lots based on temper, clay, and color in order to type it. Once the pottery was divided into similar types, vessel reconstruction began. Calipers were used to measure the thickness of the sherds and a contour gauge was used to find the curvature.

Vessel 1 contains 13 total sherds which were able to be reconstructed into two separate mended pieces. The first is made up of seven mended pieces and the second is made up of five. Thickness ranges from 4.0-5.7 mm, and the rim is slightly flaring. There is spotty sooting on both the interior and exterior of this vessel, as well as some post-fracture interior erosion. There are also smoothing marks present on the exterior of this piece. The entire vessel's estimated orifice diameter is 16 cm, with a maximum interior diameter of 18.5 cm.

Vessel 2 contains 48 sherds mended into one piece that forms the upper portion of the pot, and has a slightly flaring rim. The interior color becomes darker around 9 cm from the lip, and there is significant fire clouding as well as light sooting. The estimated orifice diameter is 28 cm and the thickness of the vessel is almost uniform, around 4.2 mm, except for a 1 mm increase at the shoulder.

Vessel 3 contains 66 pieces mended together and is the most complete of the four partially reconstructed vessels, about 80%. The vessel is conical-shaped with a slightly flaring rim, and has some exterior sooting as well as irregular fire clouding. There are also scratch marks on the interior surface that strongly resemble use-wear. The estimated orifice diameter is 26 cm and the maximum thickness is 8.7 mm.

Vessel 4 is made up of 23 sherds mended together, 5 are rim pieces and 18 are body and base pieces. This vessel is conical shaped with a slightly flaring rim identical to vessel 3, only smaller in size. There is light sooting on the interior and on a very small portion of the exterior. The estimated orifice diameter is 14 cm and the thickness ranges from 4.1-10.6 mm. The next 10 vessels described are made up of one or only a few pieces and could not be analyzed as in depth as vessels 1-4.

Vessels 5 through 9 are made up of only a few sherds each, and are all classified as Montevallo Plain. There is evidence of fire clouding on the exterior, erosion along the breaks, and wear that may have been post-fracture. Vessel 9 has light sooting on both the interior and exterior. There is a slight flair on the rim pieces that is identical to the flared rims on vessels 1 through 4.

Vessel 10 has four sherds that mend into three pieces and is tempered with coarse sub-angular sand, thus designated as O'Neal Plain. It is weathered and ranges from 5.8 to 6.7 mm in thickness. Vessel 11 is 8.9 mm thick and tempered with finely crushed limestone and traces of sand, therefore designated as Mulberry Creek Plain. Vessel 12 is tempered with finely crushed limestone. Vessel 13 is 6.3 mm thick and is a medium sand-tempered Cartersville Check Stamped sherd. Vessel 14 is a 6 mm thick Kellog Fabric Marked sherd. The remaining pottery recovered from Feature 136 was classified as sherdlets due to their size measuring less than half an inch.

Vessels 1 through 4 date to the Late-Middle Woodland time period because they are characteristic of Montevallo Plain pottery. Montevallo components should have a pottery assemblage that is dominated by Montevallo Plain (Meredith 2008). Montevallo phase sites are clustered in the Middle Cahaba River drainage in Bibb and Shelby counties, and along the

Cahaba River (Meredith 2008). Montevallo phase pottery is distinguishable by numerous factors such as temper, surface treatment, and color. What makes the temper discernable is the use of crushed or coarse-grained siliceous rock such as quartz, quartzite, and in some instances chert. The use of crushed stone for tempering is common in the Southeast during the Woodland time period (Meredith 2008). Montevallo phase surface treatments include undecorated, check stamped, cord marked, rocker stamped, and incised (Meredith 2008). The color of Montevallo phase pottery varies, ranging from buff to orange-brown, to dark gray-brown. The color is usually uniform throughout the sherd, though surface weathering can influence the color (Meredith 2008).

There are also a few sand-tempered sherds that came from the feature pit, such as O'Neal Plain, Cartersville Check Stamped, and Kellog Fabric Marked. They generally date to the Woodland time period; however, this temper might be an important time distinction, and suggests that they are slightly older than those tempered with crushed stone. There were also two sherds tempered with finely crushed limestone, which are prevalent in much of the Tennessee River drainage (Knight 1990:54). This suggests that a few sherds found in the feature pit could have come from a different area and time period. To date, there has only been one feature containing Montevallo pottery that has been dated- the Old Eighty Site (1Sh493) in Shelby County (Meredith 2008). Accompanied with the Montevallo pottery was an O'Neal Plain sherd and two Mulberry Creek sherds. It gave a radiocarbon time range between A.D. 250 and A.D. 700 (Meredith 2008). Unfortunately, samples from Feature 136 have been sent for radiocarbon analysis, but were not available in time to include in this paper.

Vessel Form

Even though the base of both vessel 1 and vessel 2 are missing, the form of all four vessels is generally similar. Vessels 3 and 4 are both conical-shaped jars, and vessels 1 and 2 appear to be as well. Three partially reconstructed Montevallo phase vessels found in Shelby County, Alabama indicate other vessel forms. One was a simple, slightly elongated bowl with a direct rim. The other was a tapering vessel with a slight shoulder and gently flaring rim, with an unknown base (Meredith 2008). There have also been several Montevallo Plain potsherds found with podal supports.

One Montevallo series vessel from Ebenezer Swamp (1Sh422) in Shelby County, Alabama, has a slightly flaring rim similar to vessels 1 through 4, and the shape of the vessel curves down in the same manner; however, the base is missing so it could have had a different shape. Conical-shaped pottery vessels, like vessels 1 through 4, dating to the Woodland time period have been seen in other areas. During the 2006 excavation of Catoma Creek, Site 1Mt209, in Montgomery, Alabama by the University of Alabama, a Calloway Plain vessel was recovered that has an identical rim and form to the four vessels from Feature 136 (Shelby 2007). The base is missing, so there is no way to be sure what shape it had. A Cobbs Swamp Check Stamped vessel that also had a similar form was recovered from Catoma Creek. Though, this vessel had podal supports. Woodland pottery from North Carolina during both the Haw River and Dan River Phases (which temporally overlap) contain numerous conical-shaped jars that were both undecorated and decorated (Davis and Ward 1999). Both storage and cooking jars from these sites had constricted necks and slightly flaring rims similar to vessels 3 and 4. There was a somewhat similar conical form from a site in Randolph county, Alabama from the Rother L. Harris reservoir area (Knight 1977). This particular vessel type was an undecorated, fairly large, deep jar with a conical base, but the rim was direct instead of flared (Knight 1977).

Nevertheless, it is clear that the form of the vessels from Feature 136 is a long lived regional Woodland trend.

Vessel Function

The remaining portion of this paper will focus on the evidence for the function of the four vessels. I will use variables outlined by David Hally to infer their function. Soot on the exterior of a vessel is direct evidence that the vessel was positioned over an open fire during use (Hally 1983). The distribution of soot deposits on vessels can also show how they were positioned in relation to the fire during use. Typically, if a vessel is in an upright position and directly in the fire, soot deposits will be heaviest on the upper portion of the vessel and thin out toward the rim and base. In some contexts, soot can occur on the base of the vessel. But not all cooking vessels have sooting. There is spotty sooting on the exterior and interior of vessel 1 as well as vessel 4. Vessel 3 has a very small amount of soot on its upper-middle section. There are no soot deposits present on vessel 2.

Color variation can be attributed to differential exposure to cooking fires. Of course, some discoloration can be caused by “accidents” during firing. Studies have shown that oxidation of carbonaceous materials present in the walls of the vessel will cause certain discolorations (Hally 1983). Some parts of a cooking vessel will oxidize during use, and there will be localized discoloration on at least the exterior surface. The discoloration can range from white through buff to red. Oxidation discoloration can help identify a cooking vessel, but it is probably more valuable for determining the position of a vessel in relation to the fire. If a vessel has a light amount of oxidation accompanied by heavy soot deposits, this suggests that it was positioned a small distance from the fire. If a vessel has brighter colored oxidation zones and less soot, it was probably placed closer to the fire (Hally 1983). Vessels 2 through 4 show

evidence of this kind of discoloration. Vessel 2 has bright tan to orange discoloration distributed on its exterior. Vessel 3 has areas of bright tan discoloration around the mid to lower portion on the exterior. Vessel 4 has a very light amount of tan discoloration on both the upper and lower parts of the exterior surface. Vessel 1 does not show much evidence for oxidation discoloration. It is difficult to pinpoint the position of the vessels in relation to fire since they are not entirely complete. Even so, based on the evidence of discoloration due to both soot and oxidation, it can be inferred that the vessels were likely exposed to fire during use.

Erosion and wear are also good indicators of the life of a vessel and its function. Vessel 1 has distinctive post-fracture interior erosion, which indicates that it was broken before it went into the feature pit. Vessels 2 through 4 do not show distinct erosion. Of the 14 vessels, the majority of the eroded pottery is post-fracture. The interior of vessel 3 has obvious marks that resemble scratches made during use. It does not seem like the marks were made during the manufacturing of the vessel, and they are concentrated around the lower portion. Nor do the marks resemble those made by shovels or any tool used to excavate the pottery.

Based on the evidence provided above, it can be inferred that the pots were likely used for cooking. The function of the vessels recovered from Feature 136 can be suggested as cooking vessels, which is supported by their analysis. Due to the presence of exterior soot, oxidation discoloration, and interior use wear, the vessels were used in cooking or heating substances, one of which involved stirring or scraping material inside them.

The tempering agents of each of the vessels vary only slightly, which indicates that they were not made at the same time. Yet, because of the similarities, it seems that the people that made this pottery had an ideal template for this vessel form. There is no erosion on the bottom or sides of the conical-shaped vessels that would indicate that they sat on stone. Perhaps they

were supported by a wooden stand, but this can only be speculated. There is also a possibility that vessels 1 and 2 had different shaped bases. Even so, due to the data, all four vessels have a similar form and characteristics, so it is likely they all had a similar function.

In conclusion, the vessels that came from Feature 136 are most likely cooking pots based on the evidence of soot, oxidation discoloration, erosion, and wear patterns. Their form is a regional Woodland trend due to the similar forms found in surrounding areas that date to that time period. The feature pit seems to have been used as a cooking pit because the post-fracture erosion patterns on the sherds indicate that they were worn due to repeated use of the feature pit. Even though some of the breaks of the Montevallo plain sherds are significantly eroded, they still mended together, which suggests that they weathered from the feature pit use. Even so, it must be noted that the vessels are not complete, so the feature pit could have had some other purpose. Overall, there is significant evidence from this vessel analysis to say that these were cooking vessels, and the feature pit was possibly used as a cooking pit. Further data collection from features containing Montevallo Phase pottery would be beneficial to this study.

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