An Early Ceramic Period Pit Feature at the Swan Lake Site (16BO11), Bossier Parish, Lousiana

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INTRODUCTION

A pit feature containing Cbcbucte-like pottery, a Gary point, and faunal remains recently was investigated at the Swan Lake Site (16BO11) located near Willow Chute Bayou in the Red River floodplain of eastern Bossier Parish (Figure 1). Three charcoal samples from the pit yielded radiocarbon ages of 2020+/-60 B.P., 1830+/-70 B.P., and 1690+/-80 B.P. making this the earliest well-dated context in northwestem Louisiana containing ceramics.

The most conspicuous feature at the site is a mound, now approximately 2.5 m high and about 25 m in diameter. Clarence Webb first recorded the site, but only made a short description:

"Solitary mound on e-east shore of Swan Lake, which is an old Red River channel. Is circular in shape, approx. 8-10 ft. high, 60 ft. at the base and 20 ft. on summit."

1994 INVESTIGATIONS

Grasses now cover the site surface and no prehistoric artifacts are visible. During the spring of 1994 Louis Baker (Louisiana Archaeological Society) and I excavated 11 auger tests in the southern portion of the site north of the mound. For the most part, the results were not particularly exciting. We recovered a combined total of four undecorated sherds and one flake, mostly within the upper 20 to 30 cm of deposit overlying an argillic soil horizon. However, one auger test differed substantially. This test, located approximately 75 m north of the mound, was excavated to two m below the surface without encountering the argillic horizon. Dark brown loam extended to 1.6 m below the surface at which point a fine sand was encountered. A
Figure 1. Location of the Swan Lake Site (16C)11).

Sherd was recovered between 1.25 m and 1.35 m below the surface and numerous lumps of fired clay and charcoal were recovered at approximately 1.4 m.

We opened up five contiguous 1x1 m units and determined that a pit was present with dimensions of approximately 1.5 m by 1 m. Because of its large size and our wish to obtain a vertical profile view of the feature, we excavated fill from only the southern half.

Sherds and flakes were recovered down to approximately 1.3 m below the surface, at which point most of the fill consisted of chunks of poorly fired clay up to 3 cm in diameter. The chunks continued to the base of the pit which was encountered between 1.5 and 1.6 m below the surface (Figure 2). Small fragments of charcoal were scattered throughout the lower portions of the pit fill. In the lowest 30 cm several 3 - 5 cm chunks were recovered and retained for radiocarbon analysis. Also present in the fill were small fragments of animal bone. Unfortunately, most of the specimens were too small and soft to retrieve during the excavations. Soil samples were taken from each 10 cm excavation level for flotation analysis, but only small fragments of charred bone were recovered with fish and turtle being the only identifiable animals represented.
Figure 2. Profile of the Pit Feature at the Swan Lake Site.

The feature appears to have served as a large roasting pit. Burning in situ was indicated by the clay lumps and by reddening of the deposits surrounding the lowest 30 cm of the pit. Following its final use, the pit was filled with sediments that contained habitation debris.

DESCRIPTION OF THE POTTERY

The pottery recovered from the pit feature differs substantially from that recovered at other sites along Willow Chute Bayou. The paste is soft and crumbles easily. Chunks of clay or grog are numerous and often large. The paste of most sherds is laminated and many specimens have split through the middle (separating the surfaces). Edges of sherds have a ragged appearance suggesting that vessels were not constructed by building coils. The clay appears to be relatively fine-textured although a few specimens have a silty or fine sandy feel. Sherd thickness ranges from 7 to 9 mm.

Surfaces are smoothed but are finely crackled or crazed on many specimens. On a few sherds interior surfaces are very well smoothed but none are polished. Surfaces also are uneven and it appears that thinning vessel walls was carried out by pinching or padding rather than scraping (finishing marks indicative of scraping are absent).
It is not possible to ascertain much about vessel size and shape. Three relatively large rim sherds suggest that vessel sides slant inward near the lip and a large bowl may be represented. Except for a single sherd recovered between 1.0 and 1.1 m below the surface that has one incised line, decorations are absent.

In many respects the sherds are similar to Tchefuncte pottery from the lower Mississippi Valley and Gulf Coast, particularly in apparent construction technique. However, abundant clay and grog inclusions contrast with the generally untempered Tchefuncte pottery; similarities to early Baytown Plain varieties (e.g., var. Marks-ville; Phillips 1970:50-51) also are apparent.

RADIOCARBON ANALYSIS OF THE CHARCOAL SAMPLES

Three charcoal samples were submitted to Beta Analytic Inc. for radiocarbon analysis (Table 1). Sample 1 was a large chunk of charcoal from the base of the pit, approximately 1.5 m below the surface. Sample 2 was similar, but recovered in the overlying (1.4 - 1.5 m) level. Sample 3 was from scattered charcoal recovered between 1.2 and 1.4 m below the surface.

A T-test run using the CALIB program of Stuiver and Reimer (1993) indicates that all three samples differ significantly from one another at the 0.95 probability level. Given the absence of distinct strata or lensing, it is difficult to believe that the pit remained open for several hundred years. However, the pit may have been periodically cleaned out and reused over a sufficiently long time span to produce the above results. The Sample 3 age seems least likely to relate to use of the feature given the scattered nature of the charcoal and its location above the area of intensive burning. The average of Samples 1 and 2 was calculated using the CALIB program and the results are included in Table 2.

Table 1. Radiocarbon Calibrations Using Method A of Suiver and Reimer (1993).

<table>
<thead>
<tr>
<th>Site sample</th>
<th>Lab sample</th>
<th>Conventional age</th>
<th>One Sigma Calibration</th>
<th>Two Sigma Calibration</th>
</tr>
</thead>
<tbody>
<tr>
<td>16BO11-1</td>
<td>Beta-73339</td>
<td>1830±70 BP</td>
<td>AD119 - AD319</td>
<td>AD 58 - AD391</td>
</tr>
<tr>
<td>16BO11-2</td>
<td>Beta-73340</td>
<td>2020±60 BP</td>
<td>59BC - AD 67</td>
<td>175BC - AD121</td>
</tr>
<tr>
<td>16BO11-2</td>
<td>Beta-73341</td>
<td>1690±80 BP</td>
<td>AD252 - AD433</td>
<td>AD145 - AD548</td>
</tr>
</tbody>
</table>

DISCUSSION

The fill of the pit above the burned clay layer was relatively homogeneous and lacked lensing or stratification that would be indicative of infilling over an extended period of time. I suspect that, shortly after its last use, the pit was backfilled by the site occupants with deposits containing midden debris. Thus, it is likely that the sherds recovered within the fill either pre-date, or are approximately contemporaneous with, use of the pit. As noted earlier, a few sherds from the site surface are similar to pottery recovered at the Bellevue Mound site (16BO4).

<table>
<thead>
<tr>
<th>Site Sample</th>
<th>One Sigma Calibration</th>
<th>Two Sigma Calibration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Range</td>
<td>Probability</td>
</tr>
<tr>
<td>16BO11-1</td>
<td>AD117 - AD258</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>AD293 - AD321</td>
<td>0.12</td>
</tr>
<tr>
<td>16BO11-2</td>
<td>67BC - AD 72</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>AD 92 - AD117</td>
<td>0.03</td>
</tr>
<tr>
<td>16BO11-3</td>
<td>AD249 - AD438</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>AD194 - AD547</td>
<td>0.98</td>
</tr>
<tr>
<td>Average of Samples 1 and 2</td>
<td>58BC - AD 82</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>AD 89 - AD 99</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>AD115 - AD342</td>
<td>0.44</td>
</tr>
</tbody>
</table>

Located along Bodcau Bayou approximately 15 km to the northeast. The Bellevue sherds are thinner, harder, and have a siltier paste than those from the pit. Unfortunately, there are no radiocarbon determinations from the Bellevue site or other contexts containing this pottery.

The presence of the pit near the mound at Swan Lake raises questions about the temporal affiliation of the mound. The initial assumption that it relates to a Caddoan occupation may be in error. Although Caddoan ceramics are present at the site, none have come from the mound fill. The landowners report that the only artifact that has eroded from the mound is a large stemmed biface of exotic chert, a specimen that resembles those recovered from the Coral Snake Mound (16SA48) in the Sabine River drainage (McClurkan et al. 1966:10; Jensen 1968:80).

The Swan Lake site has the longest span of occupation yet identified in this portion of the Red River floodplain. Although occupations are not stratified by varying depositional strata (a buried soil has been recognized beneath the upper argillic horizon, but contains no evidence of human activity), additional features are likely to be present that should enable us to isolate distinct occupations and address a wide range of research problems.

REFERENCES CITED

Fulton, Robert L. and Clarence H. Webb

Jensen, Harald P.

McClurkan, Burney B., William T. Field, and J. Ned Woodall
Phillips, Phillip

Stuiver, Minze, and Paula R. Reimer

Webb, Clarence H.

n.d. Original unpublished notes concerning archaeological sites in Louisiana. Ms. on file, Northwestern State University, Natchitoches.