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SUBSURFACE TESTS OF 38GR30 and 38GR66,
TWO SITES ON THE REEDY RIVER,
GREENVILLE COUNTY, SOUTH CAROLINA

by

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Prepared by the
INSTITUTE OF ARCHEOLOGY AND ANTHROPOLOGY
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INTRODUCTION

On June 2 and June 3, 1977, the Institute of Archeology and Anthropology, at the request of the South Carolina Highway Department, conducted an exploratory investigation of two previously recorded sites, 38GR30 and 38GR66. These sites were located directly within the right-of-way zone of a proposed bridge and highway construction on State Highway 20. 38GR30 and 38GR66 are situated on the west and east banks of the Reedy River, respectively, in the extreme eastern portion of Greenville County, South Carolina (Figs. 1 and 2). One of the sites, 38GR30, had been previously collected and the consequent archeological data were incorporated into the Laurens-Anderson survey report, (Goodyear, Ackerly and House n.d.). The chief importance of these sites, as noted by Goodyear, Ackerly and House, relates to their location within the riverine zone of the Piedmont (see House and Ballenger 1976). Since little is known of the adaptive strategies of prehistoric groups in this zone, investigation into the nature of these two sites furnishes an initial base for generating sets of expectations for future research projects in this environment.

In keeping with the long-term research goals of the Highway Program, as outlined by Goodyear (1975), a strategy of subsurface testing was employed to explore the composition of these sites and to assess the impact that further construction would have upon them. It was felt that subsurface testing would contribute to building a body of empirical knowledge about riverine Piedmont sites in the following ways:

1) It would augment information gained through a previous surface collection (Goodyear, Ackerly and House n.d.).
2) It would be an aid in understanding the stratigraphic structure of riverine Piedmont sites. From this information proximate expectations about the depth and nature of riverine sites could be inferred from stratigraphic descriptions of 38GR30 and 38GR66.
3) Excavation might uncover evidence of cultural features such as hearths or habitation structures that would contribute to our understanding of variability in site function in the Piedmont.

Because of time constraints a relatively simple subsurface testing procedure was implemented. Probabilistic sampling designs were not considered for initial probing of the sites. Instead, test pits were placed at points on the surfaces of the sites that appeared amenable to yielding information concerning the intensity of occupation at the sites and the associated stratigraphy. Two test pits were excavated into 38GR30 and one test pit and a stratigraphic trench were excavated into 38GR66 (Figs. 2 and 3). In the areas tested only sparse cultural material was recovered. Artifactual remains were exclusively restricted to the thin (approximately 5 to 6 inches below surface) plow zone. The floors of the excavated pits were scraped to check for evidence of
FIGURE 1
architectural features or other cultural features but none were found. Thus, on the basis of this limited information, it appeared that occupation of the portions of the sites within the impact zone was not intense and that the cost of mitigating these sites would be too high when compared to the assessment of the quality and amount of information potentially available. Accordingly, it was decided that clearance for construction should be given without further investigation.
FIGURE 3. A Transverse Section Through Proposed Highway and Bridge Construction.
ENVIRONMENT

38GR30 and 38GR66 are situated well within the Piedmont physiographic province of South Carolina (Fig. 1). Geomorphologically, the Piedmont was formed as a consequence of tectonic uplifting occurring over a broad expanse of formerly low relief peneplain. The resultant topography comprises an upland area of rolling hills dissected by an intricate drainage system generally running from the northwest to the southeast.

The sites are situated adjacent to each other on the edge of the first terrace just above the banks of the Reedy River, a rank 3 drainage (Strahler 1964; Weide and Weide 1973). The terrace on both sides of the river has been recently plowed and the area of 38GR66 has also been altered by land control terracing activity. In addition, both sites have been altered by previous highway construction.

Below the terrace, the floodplain supports a lush bottomland vegetation marked by a preponderance of sweet gum and white oak (Fig. 3). In higher, more xeric locations away from the river, plant communities are currently dominated by *Pinus*. A swamp pond located just north of the sites and adjacent to the main channel of the Reedy River is an ephemeral feature and was probably formed during historic times (Fig. 2).
RESEARCH OBJECTIVES

House and Ballenger (1976) divide the South Carolina Piedmont into two major environmental zones: 1) the inter-riverine zone and 2) the riverine zone. House's behavioral model (House and Ballenger 1976) predicts that these two different environments should exhibit two separate classes of adaptive strategy that should be expressed differentially in the archaeological record. Goodyear, Ackerly and House (n.d.) characterize the ecological and archeological differences in the two zones as follows:

1.) The inter-riverine zone is composed of the upland areas between the major river courses (i.e. the Broad, Saluda, Reedy Rivers, etc.). These areas are heavily dissected by permanent and intermittent streams. Aboriginally, this type of environment is thought to have contained high densities of oak, hickory and white-tailed deer on a seasonal basis. The structure of this resource base provided an opportunity to exploit the inter-riverine Piedmont in the fall and early winter when acorns and hickory nuts ripened and deer populations aggregated to feed on the nuts. Accordingly, the model predicts a human subsistence-settlement system for the inter-riverine zone involving temporary or seasonal dispersion of human population into small procurement stations, hunting camps and extraction loci.

2.) The riverine zone comprises the land immediately surrounding the major Piedmont drainages that originate high in the Blue Ridge Mountains. Riparian habitats in the Piedmont support lush and diverse bottomland flora and fauna and contain large tracts of alluvial floodplain. It is argued that the riverine zone would have provided a more optimal location for more sedentary human occupation than the inter-riverine zone. This argument is based on the observation that riverine habitats are centrally located to a number of highly predictable and diverse wild food resources (cf. Jochim 1976) and large tracts of alluvium amenable to agriculture and horticulture. Accordingly, the model predicts that sites in the riverine zone should be larger, denser and more numerous than sites in the inter-riverine zone. In addition, many of these sites should contain evidence of permanent or semi-permanent habitation structures and other types of cultural features suggesting permanent habitation, such as storage pits or hearths.

Although the immediate environment can be characterized as riparian, the Reedy River is by no means a major drainage. At the present time this river is not much larger than a creek. Consequently, the area cannot be said to fit the classic description of the riverine Piedmont zone as outlined above. However, this environment exhibits several characteristics in common with this zone:

1) Large proportion of floodplain (within a kilometer catchment radius of the sites, floodplain comprises approximately 30% of the total land area).
2) A riverine fauna (i.e. fish).
3) A diverse bottomland vegetation.
Therefore, it appears prudent to state that the environment surrounding 38GR30 and 38GR66 marginally conforms to the ecological conditions stipulated by Goodyear, Ackerly and House (n.d.) for the riverine Piedmont. These similarities to the classic riverine zone situation suggest that the general parameters of adaptive strategy described for the riverine Piedmont above should be in operation in intermediate areas like the Reedy River as well.

Given our current understanding of prehistoric subsistence-settlement systems in the Piedmont it follows that sites such as these can be assigned the highest probability of yielding evidence relating to more permanent human occupation. Archeological correlates for more sedentary or permanent occupation would provisionally include such phenomena as extensive and dense artifactual concentrations or the remains of architectural features such as house structures, processing structures or storage facilities. The investigation of 38GR30 and 38GR66 was conducted in a manner so as to assess the likelihood of the presence of such correlates.
METHODOLOGY

As discussed previously, time constraints prohibited the use of a probabilistic sampling design for locating and determining excavation units. Several test pits were intuitively placed at positions on the surfaces of the sites that we considered likely to yield information concerning the intensity of occupation and the associated stratigraphy. Admittedly, a strategy involving so little exposed horizontal area has a low probability of revealing architectural features. However, the intent of the investigation was merely to probe the sites for an estimate of their potential for yielding data pertinent to semi-sedentary or sedentary occupation to contrast against the less permanent extraction camps characteristic of the inter-riverine zone (cf. House and Ballenger 1976; Wogaman 1977; Goodyear, Ackerly and House n.d.).

Three test pits and one stratigraphic trench were dug during the investigation. The locations and soil profiles of these units are illustrated in Figures 2, 3, 4 and 5 of this report. Pits were laid out without consistent orientation and excavated with shovels and trowels. Soil removed from the pits was sifted through a 1/4" mechanical screen.

TP-1(38GR30): This pit, located approximately in the middle of the surface artifact scatter, was laid out as a 30"X 60" rectangle. Visibility of the scatter was high due to recent plowing activity that covered nearly the entire expanse of the site. The soil was extremely compacted and difficult to dig. The plow zone extended to a depth of 5 1/2" below the present surface and consisted of a fine, brown sandy clay. Although this level produced the highest density of artifactual material of all of the pits dug, artifact yield was relatively low in terms of our expectations for a base camp site. Cultural material from the zone consisted of a small assortment of quartz and chert debitage, one piece of mica and three sherds (see typology charts in the next section). The bottom of the plow zone was scraped for indications of features, however, none were delineated. Below this zone, an extremely resilient level of red colluvial clay was encountered. Except for brown streaked areas attributable to plow furrowing, this level appeared to be relatively homogeneous in color and devoid of staining or other disturbances that might evince cultural features. Approximately 1" of this clay was trowelled. It was found to be devoid of cultural material. (Fig. 4). At this point excavation ceased and the pit was backfilled.

TP-2(38GR30): This rectangular pit measured 24"X 36". It was placed just inside the woods near the river and adjacent to the plowed field. (Fig. 3). Again, the ground was compacted, dry and difficult to dig. Humus composed the initial 2" of deposition. The first level was taken down to 6" below the surface. The soil, a brown, sandy colluvial clay, had undergone a high degree of root disturbance. Cultural material was sparse, consisting of only two sherds. The bottom of this level was scraped
FIGURE 4. Representative Profiles of Investigated Areas.
with a trowel to check for cultural features and none were found. The next excavation level included the area between 6" and 10" below the surface. The sifted soil yielded no artifactual material. The final 2" to 2 1/2" of soil in this level appeared to be grading into a more reddish tint with a high clay content (Fig. 4). Artifactual material was not encountered in this level. Consequently, excavation was discontinued at this point and the pit backfilled.

TP-1(38GR66): Most of the area of 38GR66 has been extremely disturbed by historic erosion control terracing. The surface of the site is presently pasture and therefore possesses a lower degree of visibility than 38GR30. For this reason, it was decided to locate TP-1 below the terrace at the edge of the woods (Fig. 3). Although this area was less disturbed it was also some distance from the major artifact scatter of the site which was located on the terraced field above. The test pit was cut into a relatively flat area approximately 10" above the floodplain.

The pit was laid out in the form of a 30"X 60" rectangle. The plow zone (Fig. 4) consisted of a fine, brown sandy clay and extended to a depth of 5 1/2" below surface. This circumstance is consistent with the stratigraphic situation of TP-1(38GR30). The only cultural material recovered from this level was a piece of utilized quartz crystal. The bottom of the plow zone was scraped to a depth of 6" to check for evidence of cultural features. This extended the excavation into the top of a layer of compacted, red colluvial clay containing numerous stream pebbles. No cultural features were detected. An area 12"X 30" at the eastern end of the pit was taken down to a level 13" below the surface (Fig. 4). This revealed a continuance of the sterile clay banks; the only change being a gradual increase in the density of stream rolled pebbles with depth. The soil from this extension was devoid of evidence for cultural activity. The excavation was discontinued and backfilled.

Stratigraphic Trench (38GR66): A stratigraphic test trench was sunk into the alluvium of the floodplain. The trench was excavated as a 16" square and extended to a depth of 21 1/2" below the surface. The initial 16" of soil from the trench (Fig. 5) consisted of a series of cross-bedded red and brown clay laminations indicative of seasonal flooding and subsequent deposition of mud and silt on the floodplain. The final 5 1/2" of soil from the pit show more definite, thicker layers of brown and red river deposited clays suggestive of floods of a larger magnitude. These findings demonstrate that the depositional record of the floodplain presents a complex picture of events. In contrast to the rather shallow deposits away from the river, cultural material in the floodplain may be buried beneath a substantial amount of over-burden.
FIGURE 5. An Indication of River Deposited Clays in the Floodplain of the Reedy River.
Artifactual data recovered by excavation are recorded according to the format and typologies developed by House for lithics (House and Ballenger 1976) and ceramics (Goodyear, Ackerly and House n.d.) (Tables 1 and 2).

In the absence of diagnostic lithic artifacts Goodyear, Ackerly and House (n.d.) relied exclusively on ceramic analysis to assign a period of occupation to 38GR30. The typology developed by House places the site into a predominantly Middle to Late Woodland occupational component. The present excavation adds corroborative evidence for this placement. The test pits contained three definite simple stamped Conestee-like sherds (Keel 1976). If this typology holds, this ceramic complex can be temporally placed as contemporary with the Middle Woodland complexes of North Carolina and Tennessee (Conestee) and Georgia (Deptford). The eroded surfaces of the remaining two sherds makes an exact identification impossible, but close inspection allows one to narrow the choices down to either a coarse grit tempered plain ware or Conestee cord marked. (In contrast to House's findings, all but one of the sherds in the collection exhibits a coarse to medium grit temper. The simple stamped example from TP-1 has a fine sand temper.) Ceramic analysis of the test pit artifacts tends to confirm the original dating of the site as representative of the Middle and possibly Late Woodland.

Although the high proportion of decorated sherds from the excavated pits coincides with House's hypothesis correlating habitation with decorated sherds (Goodyear, Ackerly and House n.d.), firm independent evidence of habitation on a permanent or semi-permanent basis was not obtained.

Dating of 38GR66 was prohibited due to the absence of both lithic and ceramic diagnostics.
### TABLE 1

**LITHIC TYPOLOGY**

<table>
<thead>
<tr>
<th>Test Pit and Site Number</th>
<th>Fire Cracked</th>
<th>Chunks</th>
<th>Other Flakes</th>
<th>Thinning Flakes</th>
<th>Flake Tools</th>
<th>Uniface</th>
<th>Flake Cores</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP-1(38GR30)</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>7a</td>
<td>1b</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TP-2(38GR30)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>TP-1(38GR66)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

a - 2 chert flakes (1 Coastal Plain, 1 Ridge and Valley)  
b - Ridge and Valley chert  
c - Quartz crystal, all other material is regular quartz.  
NA - Not applicable

### TABLE 2

**CERAMIC TYPOLOGY**

<table>
<thead>
<tr>
<th>Test Pit and Site Number</th>
<th>Coarse to Medium Grit Temper</th>
<th>Simple Stamped Conestee</th>
</tr>
</thead>
<tbody>
<tr>
<td>TP-1(38GR30)</td>
<td>2a</td>
<td>1</td>
</tr>
<tr>
<td>TP-2(38GR30)</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>TP-1(38GR66)</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

a - Possibly Cord Marked Conestee
SUMMATION

Based on the current understanding of subsistence-settlement systems in the Piedmont, our expectation of evidence for permanent settlement in the riverine zones was not confirmed by our limited test excavations at 38GR30 and 38GR66. The restricted scope of the investigation, however, did not put us in a position to effectively evaluate this broad hypothesis. Although the excavations failed to uncover corroborative evidence for permanent or semi-permanent occupation, these results do not necessarily preclude that such evidence does exist at these sites.

Our main purpose in testing these sites was to evaluate the worth of archeological remains within the right-of-way of the proposed bridge and highway construction. This zone cut through the sites but did not include their entire areas. Based on the limited subsurface testing, nothing in the archeological or stratigraphic records led us to believe that the portions of the sites within the right-of-way contained a higher potential for yielding information related to permanent habitation. The soil covering the sites was very shallow and did not extend down past the plow zone. Archeological material remains were sparse in the test pits and no evidence of habitation structures or other features was obtained. As a consequence, clearance was given to the highway department to begin construction without further archeological investigation.

ACKNOWLEDGMENTS

In the writing and preparation of this report I wish to acknowledge the gratefully heeded input of Al Goodyear, John House and especially Jim Michie. Jim supplied the bulk of the stratigraphic information contained in this report and also was responsible for all of the illustrations incorporated herein. In addition, Jim's unmatched knowledge of South Carolina prehistory has contributed significantly to this and many other Institute of Archeology and Anthropology reports for a number of years.
REFERENCES

Goodyear, Albert C.
1975 A general research design for highway archeology in South Carolina. Institute of Archeology and Anthropology, University of South Carolina, The Notebook VII(1).

Goodyear, Albert C., Neal W. Ackerly and John H. House

House, John H. and David L. Ballenger
1976 An archeological survey of Interstate 77 Route in the South Carolina Piedmont. Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series 104.

Jochim, Michael A.

Keel, Bennie C.

Strahler, A.N.

Weide, David L. and Margaret L. Weide

Wogaman, Ronald W.
1977 An archeological survey and evaluation of the Hodges to Ware Shoals Route (U.S. 25) in Greenwood County, South Carolina. Institute of Archeology and Anthropology, University of South Carolina, Research Manuscript Series 111.