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## **An Archeological Reconnaissance of the Chesnee By-Pass Route, Cherokee and Spartanburg Counties, South Carolina**

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AN ARCHEOLOGICAL RECONNAISSANCE OF THE CHESNEY  
BY-PASS ROUTE, CHEROKEE AND SPARTANBURG COUNTIES,  
SOUTH CAROLINA

*by*

*John Cable  
James L. Michie*

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Prepared by the  
INSTITUTE OF ARCHEOLOGY AND ANTHROPOLOGY  
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## INTRODUCTION

On June 20th and 21st, 1977, James Michie and John Cable of the highway archeology staff of the Institute of Archeology and Anthropology carried out an archeological reconnaissance along the proposed Chesnee by-pass route on U.S. Highway 221, just east of Chesnee, S.C. (Fig. 1). The survey area consisted of a strip of land approximately 2.75 miles in length and 150 ft. wide. Artifactual material collected on survey was analyzed by James L. Michie during the week of June 28th, 1977. This preliminary investigation of the proposed route was funded by the 1977 highway budget under contracted agreement with the South Carolina Highway Department in compliance with NEPA (1969) and Executive Order 11593.

This initial reconnaissance, under the guidelines of the general highway archeology research design (Goodyear 1975) was conducted to provide a minimum accountability of the archeological resources within a proposed zone of impact. Following the reconnaissance stage of research a tentative evaluation of the scientific significance of the findings is performed and recommendations for further mitigation are proposed. The following report will record the results of the above reconnaissance, evaluate the significance of those archeological resources located during the survey, and consider strategies for further investigation of these resources.

The report is organized into four major headings: environment, methodology, site description, and significance and recommendations. Each of these will be discussed, in turn, below.

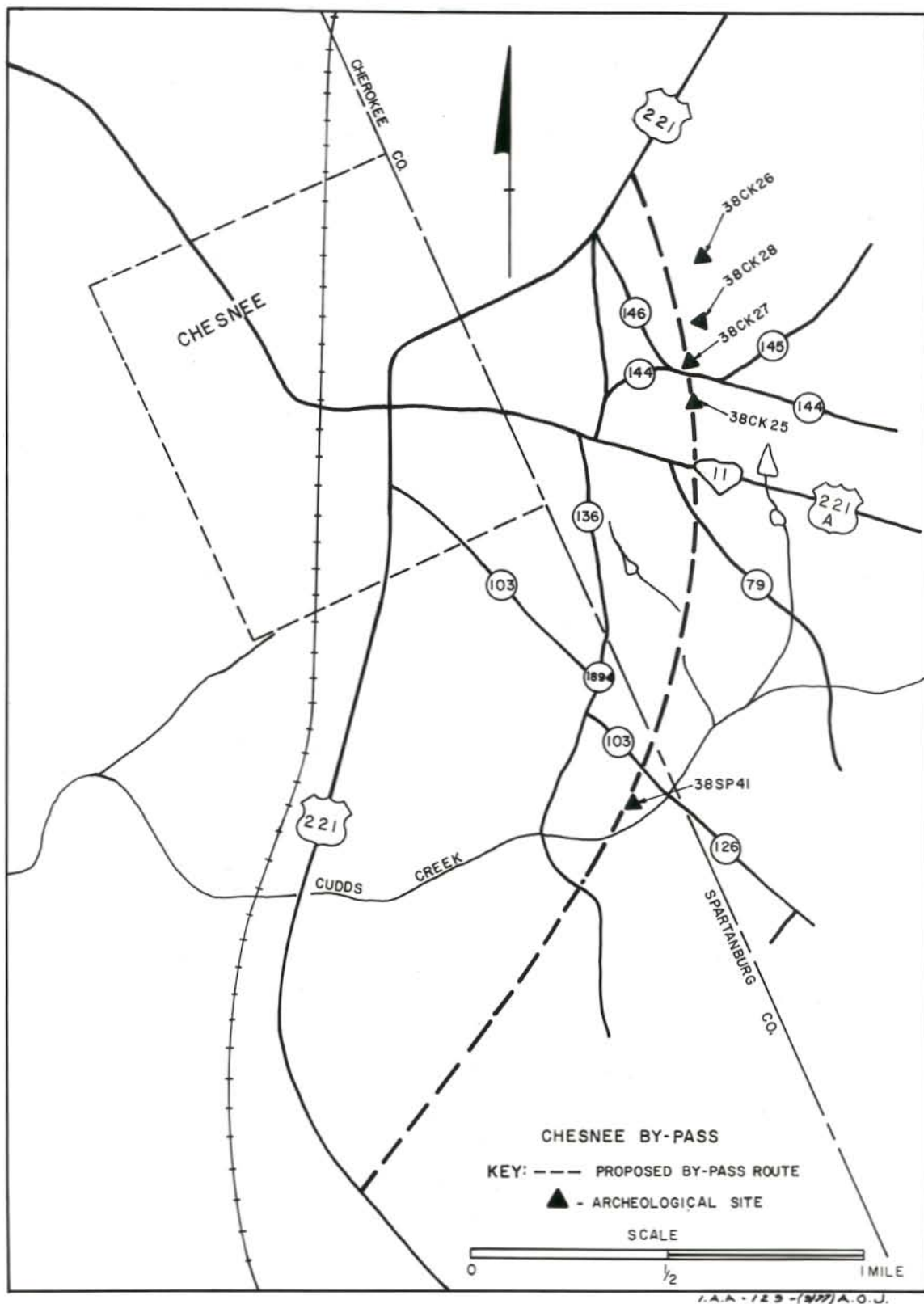


FIGURE 1. Highway Corridor.

## ENVIRONMENT

The Chesnee by-pass route on U.S. 221 is located within the southern Piedmont physiographic province (Fig. 1). Trimble (1974) describes this province as a dissected plateau situated between the Blue Ridge Mountains and the Atlantic Coastal Plain. The major source of variation in this environment derives from the floodplain and terrace habitats associated with large rivers and their tributaries. House (cf. House and Ballenger 1976; Goodyear, Ackerly and House n.d.) utilized this criterion to divide the Piedmont into two distinctive environmental zones: the inter-riverine zone and the riverine zone. In contrast to the typically riverine bottomland habitats that characterize the areas adjacent to large rivers (high ranked rivers), the inter-riverine zone comprises the upland hilly areas between the major drainages. This zone is characterized by an extensive system of ridges that are dissected by deep ravines and small streams.

Another source of variation in Piedmont environments concerns the great change in elevation that occurs as the hills of the Piedmont grade into the Coastal Plain on the east and the Blue Ridge Mountains to the west. Land elevation ranges from about 200-500 feet on the eastern side of the Piedmont near the Coastal Plain to around 700-1500 feet as the Piedmont approaches the Blue Ridge Mountains. The lower elevations of the Piedmont are characterized by broad interfluves with large proportions of land in gentle slopes. By contrast, the higher elevations are typified by greater relief with narrower, more abrupt interfluves or ridges (Trimble 1974). These topographical differences create different sets of conditions for animal and human population mobility which should generate variability in the subsistence-settlement systems of prehistoric groups in the Piedmont.

The survey area is situated in the higher elevations of the Piedmont (800-950 feet above sea level) approximately midway between the Pacolet and Broad Rivers on a watershed divide. As such, the conditions stipulated by House (House and Ballenger 1976) for the Piedmont inter-riverine zone are met by the survey area. In addition, the topography is characterized by rolling hills of high relief and agrees with Trimble's (1974) description of higher elevations in the Piedmont.

Because of the relatively small amount of agricultural activity in the higher elevations of the Piedmont prior to 1860 the natural vegetation in this region is better preserved than in other portions of the Piedmont. Trimble (1974) reports that as late as 1858 the upland areas of the Piedmont adjacent to the Blue Ridge Mountains were virtually untouched by cultivation. From 1860 to 1920, however, the rapid expansion of cotton cultivation in the area greatly increased erosional rates. During this period, the Piedmont experienced heavy deposition of modern sediments over the dark, organic bottomland soils in the stream valleys which, in turn, produced greater pressures on upland areas to furnish agricultural land. The steeper slopes in the uplands underwent heavy

cutting, while the more gentle hills were less affected. The environs of Chesnee exhibit evidence of heavy gully washing in areas of steep relief, but the effects of erosion are by no means a homogeneously distributed phenomenon. Examination of plowed fields in more gently sloped areas, such as the plowed field that harbors 38CK27 and 38CK28, reveals that many ridge tops still retain a relatively thick (20 to 25 cm.) brown, sandy loam topsoil over the residually formed mantle of saprolite. It is highly probable that sites found in such locations are well preserved and would provide an excellent source of data for studying intrasite structure.

Although much of the land around Chesnee has undergone a great deal of clearing and plowing over the past century, several relict stands of oak-hickory hardwood forest can still be observed. The largest percentage of forested area today, however, represents oak-pine regrowth associations as described by Oosting (1942) and Shelford (1963) for the Piedmont.

## METHODOLOGY

The general reconnaissance survey was accomplished by first locating points along the proposed by-pass route that intersect existing mapped roads and then surveying the lines between these points. In areas of low ground visibility a subsurface testing procedure was employed which entailed sinking shovel holes into landforms that were considered to possess a high probability for site location. Sites, when discovered, were located on maps, recorded, and a small collection of artifactual material was made from the surface.

Ground visibility was good in the northern half of the survey area (predominantly located in Cherokee County) because of the large proportion of freshly plowed fields. All five of the recorded sites were from this portion of the survey area. This segment of the proposed route is located at one end of a system of drainages ultimately linked to the Broad River. By contrast, the southern portion of survey area (wholly situated in Spartanburg County) is located at the headwaters of a drainage system linked to the Pacolet River and encompasses an area of considerably more extreme relief. Site visibility in this end of the proposed route was extremely poor due to the high density of oak-pine regrowth over old fields. Subsurface observation in this area failed to produce any sites. Based on the negative results of the subsurface investigation, it seems quite likely that the uneven pattern of site distribution, as described above, is an accurate reflection of the archeological record.



## *SITE DESCRIPTIONS*

Five prehistoric archeological sites were discovered near or within the immediate impact zone of the proposed Chesnee by-pass. These sites would appear to be significant in terms of contemporary archeological theory, however, their specific geological settings, paired with common agricultural practices have destroyed the integrity of most of these sites, making determinations of intrasite patterning impossible. Two sites, 38CK27 and 38CK28, however do appear to possess valuable information in terms of intrasite patterning. These sites and their settings will be discussed below.

The vicinity of Chesnee is underlain by decomposing crystalline structures. The crystalline structures are igneous and metamorphic rocks that were formed during the uplifting of the Appalachian Mountains (Foster 1971). Since their formation, the stone has suffered severe weathering, and the resultant material is clay. The depth of the clay varies from several inches to several feet, depending on the amount of exposure, but for the most part, the clay is quite shallow. This process of soil formation is slow and millions of years have passed in the formation of a few inches of clay. Therefore, given estimates of man's antiquity in the Southeast of not more than 12,000 years (Willey 1966), the aboriginal material was deposited in most cases on what is essentially the present clay surface.

The shallow condition of most ridgetop Piedmont sites is compounded by certain agricultural practices. In addition to the obvious effect of land clearing and plowing on the distribution of material culture, the common practice of terracing fields in the Chesnee area further disrupts the structure of archeological sites (cf. House and Ballenger 1976: 15-17). Terracing is usually accomplished by cutting narrow trenches at consistent elevations around the slopes of ridges and these terraces are situated at varying intervals on the slopes. The soil pulled loose in the trenches is placed on the downslope, and following several periods of erosion, the trenches fill with slope wash. Material culture on terraced fields is redistributed by slope wash and erosion, thereby creating numerous problems in performing intrasite analysis of material culture.

Although the general geological conditions in the Piedmont and disturbance by cultivation in the Chesnee area do not facilitate the understanding of past human activities, the study of material culture in plow zones is not without value. In situations where the ground surface is relatively flat, cultivation will only minimally disrupt patterns of behavioral activities. One can therefore expect to find reflections of and to test models of human behavior in plowed fields if proper methods, such as quantitative sampling of surface collections and controlled excavations of plow zones, are employed. Obviously, it would be unrealistic to expect cultural material to remain in its original position while undergoing land clearing and plowing, but the patterns of human activities, although diffuse and exaggerated, are still present; and

at times the information they contain can be retrieved. However, when extensive alteration has occurred, whether by natural or human agents, behavioral patterns become too diffuse to be interpreted as culturally meaningful. This is most often the case in areas of great topographic relief such as those present around Chesnee. Therefore, the archeological significance of most of the sites recorded during this survey is minimal, and recommendations for future work will be made for only two of the sites in the impact zone.

38CK26 The Rubble Site. The Rubble site is located several hundred yards south of Highway #221, and about six hundred feet east of County Road #146. The site, which is represented by a small scatter of quartz flakes and a single projectile point, is situated on the edge of a soybean field and adjacent to a forest of mixed hardwoods and conifers (Fig. 1). The shallow nature of the site, evidenced by the occurrence of residual clay and fragments of decomposing stone, in addition to marginal terracing, provides a poor archeological base with which to work. In addition, the site is located several hundred feet east of the proposed highway, and therefore it would not be impacted by construction.

The site, identified by the presence of flakes, is on the crest of the ridge. The flakes are confined to a relatively small area approximately 75 feet long and 30 feet wide. The scatter is oval and its longitudinal axis is parallel to the forest. The slopes of the ridge are devoid of material.

As the ridge slopes to the east it begins to fall off sharply to moist ground. The presence of a spring head is suggested in the valley bottom by pools of water that may result from subsurface seepage. This drainage flows south for a short distance where it turns east and eventually enters Big Horse Creek. The stream, however, is not well defined and probably only flows during periods of rainfall.

A total of five cultural items was found during surface collecting, and those items resulted from a relatively intense inspection. A few other items were seen, but were not collected.

#### Artifact Assemblage

Lithic Debitage :	Flakes	4 quartz
Projectile Points:	Caraway	1 quartz

The Caraway point was probably manufactured during the proto-historic period of the eighteenth century (Coe 1964: 49). These projectile points are associated with the bow and arrow, a late ceramic tradition, and probably cultures involved in agriculture or horticulture.

The quartz flakes are difficult to assign to any cultural period, however, their presence indicates an activity oriented towards the manufacture and resharpening of tools.

38CK28 The Cherry Tree Site. The Cherry Tree site is located near the intersection of County Roads #144 and #145, about one half mile east of the town of Chesnee (Fig. 1). The site is on a moderate slope that falls from east to west, and its geological setting is typical of the region. Generally, the site is composed of cobble-sized rubble and residual clay, blended with small amounts of sand and pebbles.

The presence of residual clay and decomposing rubble indicates a shallow site, and extensive terracing has created a horizontal displacement of material culture. But while these conditions exist, the site is large, covering an oval area approximately 250 feet by 300 feet.

The site is represented by a relatively large scatter of quartz flakes and projectile points, with a small amount of pottery. Although quartz is dominant, small quantities of silicified slate and exotic cherts were found. The site was not intensely collected, but samples of the material were removed while determining the size and extent of the site.

#### Artifact Assemblage

Lithic Debitage:	Flakes	4 Quartz, 1 Slate, 1 Exotic (Ridge and Valley chert)
Projectile Points		1 Guilford, 6 Unidentified
Ceramics		1 Mississippian, 2 Unidentified

The artifact assemblage indicates sporadic human occupation occurring over a period of several thousand years. The Guilford point (Coe 1964: 43-44) dates to about 4,000 B.C., and the remaining bifaces, which are shattered and broken, are also suggestive of the Middle Archaic period. The cross-sections of some points also suggest Guilford, while others may be Morrow Mountain (Coe 1964: 37-39). These latter points dating about 4,500 B.C., are common to the Piedmont. The remaining points are too fragmentary to identify, and therefore their temporal significance is unknown. The only identifiable pot sherd is associated with the Mississippian period and dates to about A.D. 1,000.

Because of the abundance of other lithic materials, such as quartz, slate, and exotic chert, in addition to the unidentifiable biface fragments and pottery sherds, one could argue for other cultural components. The Early Archaic traditions are well represented in the Piedmont, and the later horizons of the Middle and Late Archaic occur with equal frequency. Ceramic traditions are also represented, extending back to the birth of Christ and terminating with White colonization. But without diagnostic temporal indicators, the site's total range of occupation cannot be assessed. Presently, it would be safe to assert human occupation during the Middle Archaic and again during the Woodland and Mississippian periods.

38CK27 The Old Horse Site. The Old Horse site is located between County Roads #145 and #146, and it lies adjacent to the north edge of

County Road #144. The site is a relatively flat area, about 225 feet by 60 feet. It is presently cultivated in soybeans. The soil is composed mainly of residual clay and the occasional occurrence of decomposing rubble. Sand is also present within the clay.

The site's east and west borders are flat and the soil conditions remain the same. The north perimeter borders a steep slope that falls to the edge of a spring head that forms a small intermittent stream. At the beginning of the slope the soil texture changes to pure residual clay with a significantly increased amount of rubble. The slopes are highly terraced and void of material culture.

The site is characterized by a scatter of quartz flakes, projectile points, unifacial tools, and unidentifiable bifaces. There is no indication of pottery, and for the most part the site appears to represent an Early Archaic component. The site was sampled by obtaining a small percentage of the total artifact assemblage through surface collecting. Although many additional artifacts and flakes were seen, they were allowed to remain at the site for future research and possible mitigation.

#### Artifact Assemblage - Surface Collection

Lithic Debitage:	Flakes	7 Quartz
Projectile Points:		2 Palmers, 1 Dalton
		1 Unidentified (all quartz)
Chunk		1 Quartz
Unifaces:	Large	1 Quartz side scraper
Unifaces:	Small	2 Quartz side scrapers
Unifaces:	Bipolar	1 Coastal Plain chert

The artifact assemblage from the site suggests an Early Archaic occupation. The Dalton point occurs early in the Southeast, as demonstrated by several radiocarbon dates. The Stanfield-Worley Bluff Shelter in Alabama has produced two dates: 9,640 $\pm$  400 B.P. and 8,920 $\pm$  400 B.P. The Modoc Rock Shelter in southern Illinois has produced a date of 9,872 $\pm$ 392 years B.P. for the deepest level containing Dalton points and several corner-notched points, and Coe (1964: 64-67) has found Dalton points occurring in the lowest levels of the Hardaway site in North Carolina. The Dalton, at the Hardaway site, underlies the other Archaic components, and based on analogies with other sites and their radiocarbon dates, Coe feels that the point should date "roughly between 6,000 and 8,000 years B.C." (Coe 1964: 67). In view of these dates, the Dalton is quite early and there is every indication that it should date prior to the seventh millennium B.C.

The Palmer point is also present, and like the Dalton it too is an Early Archaic point. Coe (1964) has found the point at the Hardaway site slightly above the Dalton. Coe has suggested "an antiquity of nearly 8,000 years" (1964: 67). Palmers have also been found in other stratified sites and Coe's assumptions were confirmed. The lower levels of the St. Alban's site in West Virginia have yielded a radiocarbon date of 6,980 $\pm$ 160 B.C. for several varieties of corner-notched points similar to Palmer. The Rose Island site in Tennessee has also yielded early dates for the Palmer-like points occurring in the lower

levels, and the radiocarbon dates of 7,160±145 and 7,433±140 B.C. seem to parallel the dates provided by the St. Alban's site and those suggested by the Hardaway site. The Palmer points are early and they should date prior to 8,500 years ago.

Several unifacial tools from the Old Horse site exhibit retouch along the lateral edges, and the bipolar chert also shows retouch resulting from utilization. Unifacial tools may belong to any number of cultural sequences, and as sensitive temporal indicators they are insufficient. However, the bipolar tool is extremely patinated and this argues for antiquity.

The unifacial tools, the projectile points, and the relative smallness of the site suggest an Early Archaic occupation. If this is true, then the site is unique because it is a rare occasion when one discovers a small site suggestive of this antiquity. Also, the site is situated on a relatively flat area and it does not contain a great deal of rubble and residual clay which is common to the other sites within the proposed highway corridor. These qualities prompted an intra-site investigation, conducted on June 25, 1977, by John Cable and James L. Michie. The investigation included the excavation of a small unit within the center of the site.

The chosen area was laid out in a two meter square and its contents were removed by shovel-skimming. The soil was sifted through a 1/4 inch mechanical screen and the recovered cultural material was bagged. The excavation indicated a relatively shallow plow zone, with an average depth of about 18-20 centimeters terminating on red, residual clay. The plow zone is actually composed of two distinct zones, representing separate periods of cultivation. The upper zone suggests the employment of modern cultivation implements such as discs and harrows, while the lower zone, which occurs at 12-14 centimeters, seems to indicate the utilization of large, broad bottom plows. These rather wide plow scars that cut across the residual clay probably resulted from the employment of a mule and plow.

The cultural material was found entirely within the plow zone, and the residual clay failed to produce any evidence of occupation. This indicates that the occupation was shallow, and confined to the upper limits of the soil during habitation. Both of the upper and lower zones produced cultural material, but the upper zone seems to have yielded the majority of material. If this is true throughout the site, then the lithic density may be greater in the upper zones. However, earlier cultivation should have thoroughly mixed and distributed the contents of the plow zone, providing a somewhat equal density of material in a vertical position. The excavation of a single unit is too small to determine the vertical patternings of material culture within a plow zone, but it is adequate to determine the depth of a site.

The residual clay beneath the plow zone contains small pebbles and cobble-sized rubble of decomposing stone, but the larger geologic

structures which are frequently seen in road cuts are not present. That the site is situated on a watershed divide, and that it is higher than the other areas may account for an earlier decomposing and subsequent disappearance of folded and faulted stone.

Artifact Assemblage - Test Pit

Lithic Debitage:	Flakes	32 Quartz
Chunks		3 Quartz
Bifaces		1 Quartz, unidentifiable
Historic Items		1 Glass insulator fragment
		1 19th century bottle fragment

The test pit has demonstrated that an impressive number of artifacts occur within the plow zone, and that the site appears to be confined to the plow zone. The proposed excavation of this site will be discussed in another section of this paper.

38CK25 The Clod Site. The Clod site is located between County Roads #145 and #146, several hundred feet south of County Road #144. Adjacent to the site is a large hedgerow composed of bushes and chinaberry trees. The site is situated on a small rise overlooking a dry stream bed that flowed to the southeast. This drainage basin is seen as a dark area flowing through the low area of cultivation.

The site is presently cultivated in soybeans, thus providing a view of soils and material culture. Residual clay and decomposing rubble characterize the site and the sloping sides are terraced. A small scatter of quartz flakes represents the area of occupation, which is oval shaped and 60 feet long by 30 feet wide. Its longitudinal axis is parallel with the old drainage area.

Artifact Assemblage

Bifaces	3 Quartz fragments, unidentified
Biface Blanks	1 Quartz fragment, unidentified
Historic Items	1 Albany slip-glaze (ca. 19th century) fragment

The few quartz flakes seen, which probably represent the rest of the total assemblage, were allowed to remain in the site for future site identification.

38SP41 The Back-Hoe Site. The Back-Hoe site is located near the junction of County Road #103 and Cudd's Creek. It is situated on a relatively high ridge on the northeast side of the creek and south of the road. The ridge appears to have been cultivated in the past, but the majority of the area is highly eroded and covered with spotty areas of vines and weeds.

For the most part, the site is eroded away and bed-rock is exposed. During the period when it was cultivated the site must have had a thicker mantle of soil, however, after construction of the present county road and drainage ditches, washing occurred and progressed into the sloping site thus causing extensive sheet erosion.

Because of the erosive conditions the exact area of occupation is unknown. Most of the archeological materials were found near the crest of the ridge, but other pieces were found on the eroded slopes. The site may have been confined to the ridge's apex, but presently this would be hard to determine.

#### Artifact Assemblage

Lithic Debitage:	Flakes	10 Quartz
Chunks		2 Quartz
Projectile Points		2 Morrow Mountain, quartz
Biface Blanks		1 Quartz, unidentifiable
Unifacial Tools		1 Large scraper

The two projectile points collected from this site provide a temporal indicator. The Morrow Mountain projectile points date to about 4,500 years B.C. (Coe 1964: 121), and the remaining artifacts could easily belong to the same tradition. The Archaic, however, spans a considerable range of time, at least six thousand years, and the remaining artifacts could be associated with other Archaic horizons. The absence of pottery suggests the absence of Woodland or Mississippian occupations, therefore the quartz debitage may not be assigned to these later cultures. The debitage probably represents several Archaic traditions, but based on the identifiable cultural indicators it probably represents a Middle Archaic site.

## *EVALUATION OF SIGNIFICANCE AND RECOMMENDATIONS*

None of the sites encountered on the proposed Chesnee by-pass route are adjudged to be suitable for inclusion on the National Register of Historic Places, nor can they be recommended for public display as recreational or educational facilities. However, in the realm of scientific research these sites do possess a significance far beyond their rather prosaic appearance. The evaluation of the scientific significance of archeological sites is not a haphazard procedure, rather it involves the justification of a particular archeological investigation in terms of the delineated problem domains of a general research design (cf. Goodyear 1975; House and Schiffer 1975; Wogaman, House and Goodyear 1976). For this reason not all of the sites found on this survey can be considered appropriate for mitigation proposals. The proposed mitigation concerns only two of the five sites found during the reconnaissance stage of investigation. The actual mitigation, in broad terms, involves obtaining a random sample surface collection from 38CK28 (the Cherry Tree site) and conducting a block excavation and controlled intensive surface collection of 38CK27 (the Old Horse site). Justification for this proposed line of research is discussed below.

Goodyear (1975) has organized the primary research directive of the Highway Archeology Program around the description and explanation of intrasite structure as the product of past human behavioral systems. This orientation derives from a consideration of the basic constraints and limitations placed upon data collection by the nature of the fundamental sampling unit: a non-random transect conforming to the right-of-way zone of proposed road and highway routes. Such units are ill-suited to regional, intersite analysis, however, transects of this sort are capable of yielding reliable information on the level of single site analysis.

In relation to intrasite analysis, Goodyear (1975) has identified four problem domains of research: (1) cultural identification, (2) activity analysis, (3) subsystem reconstruction, and (4) ecological analysis. As mentioned previously, the determination of archeological significance requires justification in terms of the explicit problem domains of an ongoing research design. The justification for further mitigation of 38CK27 and 38CK28, lies in their potential for informing about intrasite structure, primarily in the domain of activity analysis. Activity analysis, in a general sense, deals with the delimitation of the cultural formation processes of the archeological record (cf. Schiffer 1976). This type of analysis requires a methodological procedure capable of separating out of the spatial contexts of an archeological site, discrete clusters of behaviorally related material remains.

When applied to archeological sites in the Piedmont, methodologies organized for this purpose have met with a number of analytical problems. These problems can be seen as the consequence of two main factors:



(1) the currently limited and underdeveloped understanding of the chronological and behavioral relationships of Piedmont prehistory and (2) the physical nature of sites in the Piedmont in general. What little is known about the culture history of the Piedmont derives essentially from Coe's (1964) seriation of the strata from four uncommonly deep sites: Doerschuk, Hardaway, Gaston and Lowder's Ferry. Using Coe's sequence as a basis for making behavioral inferences on the minute level of activity analysis presents a basic problem. Horizon markers or diagnostics in the sequence are limited solely to morphologically defined biface types. Until our understanding of techno-functional relationships allows us to identify full assemblages, as opposed to simply diagnostic projectile point forms, our ability to analyze and distinguish synchronic activity areas is seriously impeded, especially where high artifact densities tend to obscure the boundaries of discrete behaviorally linked clusters.

Although by increasing the number of excavated, deeply stratified sites this problem may come nearer to being resolved, most sites in the Piedmont are naturally shallow and have been subjected to various kinds of perturbation (cf. Wogaman 1977). As a consequence, the major proportion of research dealing with intrasite structure will have to be directed toward the analysis of shallow sites with virtually no preserved vertical stratigraphy.

Recent attempts to grapple with the problems of interpreting inter-riverine ridge top sites have incorporated a number of approaches to data collection. The investigation of intrasite structure has been addressed from the perspective of both surface collection and excavation. The more traditional approach to surface collection involved spatially uncontrolled, procedures such as grab samples, limited locus pick-ups and intensive (100%) collections of entire sites (see Goodyear, Ackerly and House n.d.). Such data collection methods are ill-suited to the high degree of spatial control required to discriminate activity clusters. Accordingly, new methods are beginning to be tested. Although 100% controlled surface collections are probably the most accurate in this regard, time constraints make probabilistic samples more feasible. One major example of this data collection technique comes from the Stoddard Site (38LU42 Locus 3) where a systematic unaligned random sampling strategy was used to gather surficial data (Goodyear, Ackerly and House n.d.). Tentative results indicate distinct clusterings of diagnostic bifaces, but the present methodological approaches to analysis are incapable of articulating these diagnostics with the less formal aspects of material culture. Goodyear (1975) has also observed such patterning by using SYMAP to describe clusterings of archeological variables. The major difficulty in utilizing surface data to interpret intrasite structure is that the relationships between it and buried material are not well understood. At this point, excavation appears to represent a more viable starting point for the development of methodologies capable of explaining the internal structure of sites.

Unfortunately, excavated ridge top sites are very rare in the archeological literature. The Windy Ridge site (House and Wogaman n.d.), 38FA118, represents the most recent attempt at a controlled excavation of an inter-riverine

ridge top site with the expressed purpose of studying intrasite structure. A two staged excavation strategy was employed consisting of a systematic unaligned random sample and a block excavation to open up a larger contiguous area. SYMAP's of archeological variables from these excavation units indicate that a number of intrasite patterns are emerging. At this stage in the development of our knowledge about prehistoric behavior in the Piedmont, contiguous block excavation appears to be yielding the most complete information as a data collection method at the single site level. As such, it appears that this procedure represents the logical starting point for the development of methodologies capable of explaining intrasite structure. The excavation of a number of sites in this manner should provide an accurate estimate of the variation extant in the sites of the inter-riverine Piedmont which in turn should open up broader questions of culture change and evolution. 38CK27 is ideally appropriate for this form of research.

38CK27 is an inter-riverine site located at the top of a ridge approximately .25 miles from the mouth of a spring. The impact of erosion on the site appears to be minimal and the relatively flat plane forming the top of the ridge is very conducive to the preservation of the horizontal patterning of the material remains of the site. This situation is in direct contrast to the conditions of the other sites found during survey. With the partial exception of 38CK28, the rest of the sites in the proposed route are located in unfavorable positions on landforms and have undergone considerable destruction due to man-induced and natural processes. In fact, the quality of preservation exhibited at 38CK27 is rare for Piedmont sites in general and these conditions present an ideal opportunity for the study of some aspect of intrasite structure.

To provide information concerning intrasite structure at 38CK27 (the Old Horse site) the following steps will be followed in the field. First, a grid will be laid out over the surface of the site corresponding to the extent of surficial debris scatter. The grid system itself will be composed of  $1\text{ m}^2$  excavation units. Each of these units will be excavated separately and material will be bagged according to the provenience system set up by the grid. The fill from each unit will be sifted through a  $1/4"$  screen. Artifactual material from the surface will be collected separately from that found in the plow zone.

Besides informing on the internal structuring of the site, this procedure will also allow us to test a number of sampling problems regarding the representativeness of surface sample data. Such methodological studies are necessary and invaluable for evaluating the types of inferences that can be made from different forms of data collection. Studies of this sort should ultimately allow us to gain a greater confidence in the quality of information that we can obtain from surface data. In the long run such studies should allow us to by-pass excavation as a mitigation strategy for certain problems where surface data can adequately address research needs.

In addition to the excavation of 38CK27 (the Old Horse site), a more limited data collection strategy is proposed for 38CK28 (the Cherry Tree site). The extreme erosion and terrace plowing that occur at this

site location make excavation level mitigation an ill-advised strategy, but the large concentration of material, including Woodland and Mississippian ceramics, suggests that the site can produce valuable information concerning site function in the Piedmont. The methodology to be used on 38CK28 parallels the stratified unaligned random surface collection strategy deployed at the Stoddard Site (Goodyear, Ackerly and House n.d.). The extremely eroded conditions extant at the other archeological sites found on the survey make them ill-suited for further mitigation.

The entire research project will encompass a period of 8 weeks of field time. Two research assistants and two hourly wage workers will be required to accomplish this phase of mitigation. In addition, a period of from 12 to 16 weeks, depending on the magnitude of data recovered from excavation, will be required after the field stage of research for two research assistants to analyze the material and write up the report.

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