EVALUATION AND INTERPRETATION OF THE CULTURAL RESOURCES

The Effect of Change on the Prehistoric Data Base

Probability of Pseudo-sites

A total of 11 occupational sites was found within the boundaries of the proposed National Park Monument. However, at least six of the sites are currently regarded as spurious occupations: 38RD190, 38RD178, 38RD177, 38RD176, 38RD175 and 38RD173.

The Sandbar site, 38RD190, is situated on an alluvially deposited sandbar in a meandering river system given easily to rapid change. For this reason the site is potentially redeposited, and any consideration for cultural deposition would be tenuous. The remaining sites are all located on the New Road and within areas that have been maintained and filled with imported soils. These soils, as previously mentioned, were obtained from the upland area at the proposed Developmental Zone III. However, additional soils were also obtained from areas contiguous with the road, and it is therefore difficult to ascertain the origin of the lithic materials. Although inspection was given to the small borrow pits, we could find no evidence of a site. But, then, this also held true in other areas that yielded sites of unquestionable cultural deposition.

Because the lithic materials were discovered in a roadbed composed of imported soils, and because occupational debris could not be found in the adjoining borrow pits, these five sites have been eliminated from further evaluation and cultural interpretations.

Questions of Stratigraphy

The remaining sites were all discovered on surface soils, and there was no indication of buried sites on either the upland terraces or within the bottomland. The elevated uplands would not necessarily be expected to produce stratigraphic sites resulting from alluvial deposition, but successive inundations of the floodplain would normally generate stratification.

Deposition within the floodplain appears to be highly variable and related to the immediate channel of the Congaree River. During flood stage the greatest amount of velocity, erosion, and deposition occurs within the river channel, and as the river rises and flows over its banks, the heavier sediment particles quickly precipitate. With increasing distance from the river, finer sediments begin to precipitate and eventually trees deflect the current and reduce flow to a minimum.
After the flood waters have traversed several miles of swamp, the flow is negligible and the majority of sediments has been deposited on the levees.

In its present location the Congaree River would have little depositional effect on areas located any distance from the channel. Such a model would explain shallow sites, but it would be too presumptuous to assume a stable river channel during the prehistoric period. Demonstrated by the mosaic of filled and partially filled oxbow lakes which exemplify the swamp, the Congaree has meandered across the valley creating new soils and new floral environments. During such movements the Congaree continues to build levees, and following the river's departure, those levees remain as slightly elevated areas adjoining the depressions of oxbow lakes. These elevated areas were occupied by indigenous Americans. The absence of alluvial stratification during human occupation would suggest: 1) that settlement occurred after the formation of an oxbow lake, and 2) that the river had made a significant shift away from the immediate area. If this is true, then it would further suggest that sites were situated on the north edge of an old meander, thereby providing the distance necessary for the reduction of water currents and non-deposition of suspended silts and clays.

Relict Levees and Associated Archeological Sites

In a dynamic system of meandering river channels, few land forms remain unchanged for any extended period of time. After the formation of levees and oxbows, the river departs and begins scouring through other deposits and formations. During this process of change and predictable loop development, the river is constantly destroying the topography and associated archeological sites.

Although sites can be destroyed through any manner of dissection involving creeks, swales, sloughs, and flood induced channels, two models of major attrition are suggested: 1) primary attrition, and 2) secondary attrition. The model of primary attrition (Fig. 46) involves a developing youthful meander and contiguous levees which form along the concave banks. As the meander evolves towards maturity the concave bank is continuously eroded and the river pushes inland destroying any archeological sites. The latter model (Fig. 46) involves a fully developed oxbow with associated, but inactive levees on which human occupation has occurred. Being severed from an active river channel the levees received little or no deposition and remained virtually unchanged. However, with the formation of a later meander in the immediate vicinity there is a high probability that it will dissect and erode the filled or partially filled oxbow, adjacent land forms, and subsequently the archeological record.

The examples depicted in Figure 47 illustrate singular situations, but with large and extensive river valleys, dissection is compounded, and few land forms remain unchanged. As a result of extensive meandering through time, former levees have little opportunity to remain intact,
Figure 46: Secondary attrition of Archeological Sites through meander development.
Figure 47: Hypothetical model of Dynamic River Systems Change.
(Lobeck 1938: 214-230; Foster 1971: 192-196) and those that survive are probably few in number. These specific land forms are herein referred to as relict levees.

Unfortunately, outside of considerable expense, there are obvious difficulties in determining relative ages and relative occurrences of the relict formations. However, by knowing these data, predictions could be formulated concerning potential site locations. Such data could eventually lead to relative ratios concerning the number of relict levees and the number of archeological sites, data which would be beneficial in determining the degree of utilization and occupation in the unstable environment of river swamps.

Given the geologic knowledge of river systems it would appear that relict levees do not occur frequently. The archeological data retrieved from the reconnaissance survey also indicate that habitation sites are limited in number. The infrequent number of sites is not necessarily reflective of uncommon utilization, but rather it may reflect the incessant meandering of river channels in the Congaree River.