Chapter 6 UNDERWATER INVESTIGATIONS AT 9EB513 by Christopher Amer and David G. Anderson

THE REMBERT MOUND GROUP

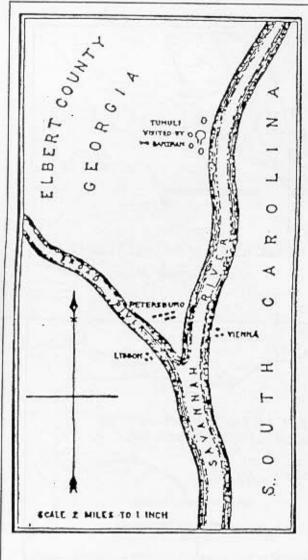
The Rembert Mound Group was a cluster of five mounds located along the Savannah River in Elbert County, Georgia, just above the confluence of the Broad River. Occupied from about A.D. 1100 to 1450, Rembert was one of the largest Mississippian mound groups in the Savannah River Valley, with only the Mason's Plantation group below Augusta comparable in size.

Limited archeological investigations were conducted at Rembert in the 1880s and again in the 1940s before the site was inundated by the waters of Clark Hill Lake in 1952. As noted in the historical overview, Rembert was first described by the naturalist William Bartram in May of 1776 and was revisited and described on three separate occasions in the 19th century by George White (1849:229-230), Charles C. Jones (1878:284-285) (Figure 11), and John Rogan (Thomas 1894:315-317). These early accounts are important since the site had been largely destroyed by flooding and agricultural practices by the early 20th century. Rogan's 1886 investigations, conducted under the auspices of the Mound Division of the Bureau of Ethnology, included archeological testing of the two largest surviving mounds. While providing some indication of the stratigraphy in these mounds, this work is of greater value for its description about the number and size of the mounds present (Figure 12; Appendix IV).

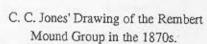
In 1948 limited test excavations were undertaken at Rembert by Caldwell and Miller as part of the River Basin Survey salvage investigations associated with the construction of Clark Hill Lake (Caldwell 1953). Unfortunately, by this time the large mound had been almost completely reduced, and no trace of the smaller mounds could be found (Figure 12). During a three-week field program at the site, eleven test pits were opened—two pits in and three near the surviving remnant of the large mound and six others scattered over the surrounding area in presumed village deposits.

Much of the primary mound base was found to be intact, resting on an artifact-rich premound midden (Caldwell 1953:312). The mound fill sloped downward toward the center of the mound, suggesting that it may have been built in a slight depression or that the earliest structures may have been earth-embanked. Traces of the mound edge were found in the units opened to the north of the mound remnant, supporting early accounts that its original size was about 45 meters in diameter. Artifacts were also found in four of the six test pits opened to the south of the mound, suggesting a large associated village area. Fired-clay wall plaster was found in some units, indicating wattle and daub structures were present. Unfortunately, in spite of the preservation encountered in both the mound and village area and the fact that additional excavations were recommended, no further work was conducted at the site.

The materials collected during the 1948 testing were reexamined by David J. Hally in the early 1980s to form the basis for a late prehistoric Mississippian archeological culture in the upper Savannah-the Rembert phase, dated to around A.D. 1350 to 1450 (Anderson et al. 1986:41-42; Rudolph and Hally 1985:453-459). Ceramics were dominated by plain and complicated stamping, the latter characterized by filfot cross, concentric circle, and figure 8 and figure 9 motifs. Bold incising, a hallmark of the Late Lamar phase, was rare. Folded rims with notches, cane punctations, and finger pinching were fairly common, while unfolded rims were characterized by cane punctations, rosettes, or canepunctated nodes. The Rembert assemblage is



C. C. Jones' Locality Map Showing the Now Submerged Rembert Mounds and the Town of Petersburg.



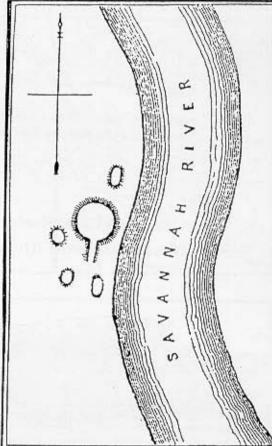


Figure 11 — The Rembert Mound Group as recorded by C.C. Jones (1878:283-284).

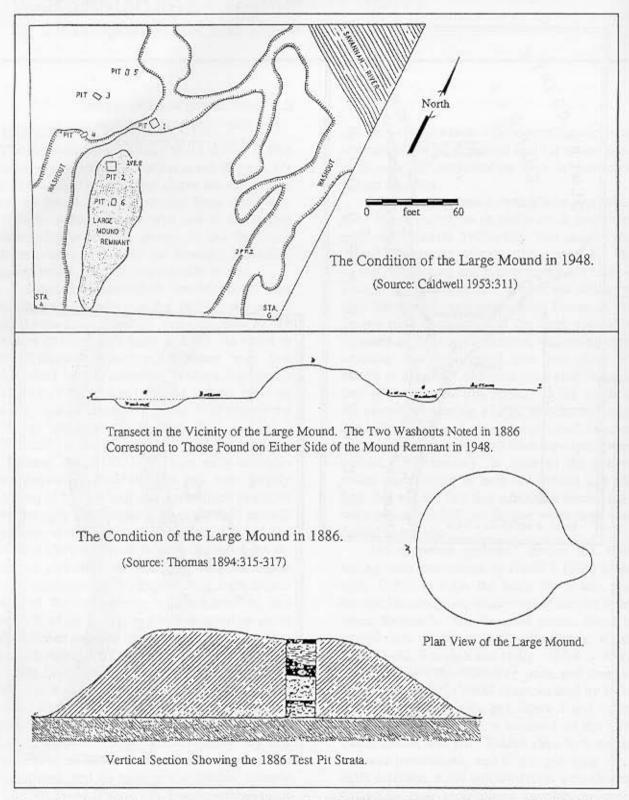


Figure 12 — The vicinity of the large mound at the Rembert site (9EB1) as documented by Thomas (1894:315-317) and Caldwell (1953:311).

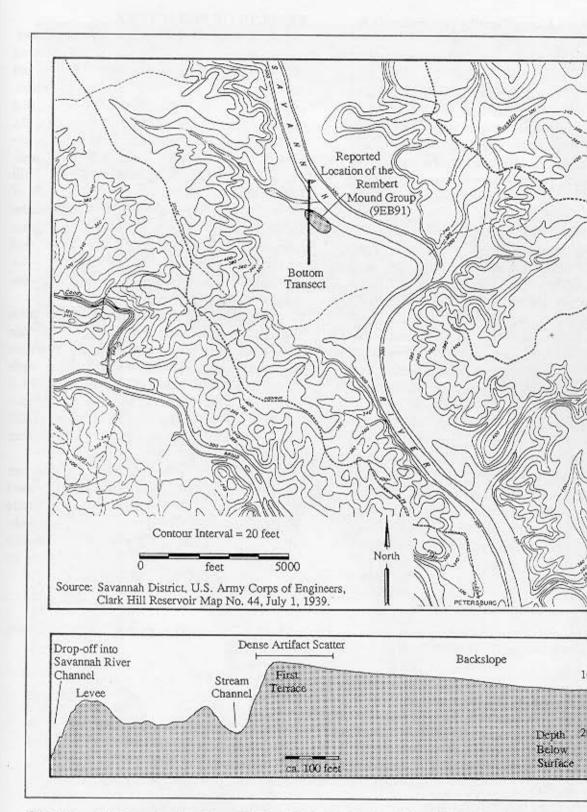


Figure 13 — The Savannah River Channel in the vicinity of the Rembert Mounds (9EB91) prior to inundation and the results of a north-south bottom profile over their presumed location (bottom).

similar to Early Lamar Duvall phase materials in the Oconee River Valley (Smith 1981) and to Hollywood/Irene I materials observed along the lower Savannah.

Based on Caldwell's collections, Mississippian occupation at Rembert was thought, prior to the 1990 fieldwork, to have begun sometime in the 11th or early 12th century and continued until sometime in the 15th century. Present in the 1948 excavation sample were sherds with ladderbased diamond motifs that are either Woodstock or early Etowah Complicated Stamped (Caldwell 1953:317, Plate 56:p; Rudolph and Hally 1985: 453). More traditional Etowah two-bar nested diamond motifs were also present. Hally has suggested that the initial occupation assemblage is equivalent to the Etowah II phase in the Allatoona Reservoir, which has been dated to around A.D. 1050 to 1150 (Caldwell 1957; Rudolph and Hally 1985:456). A succeeding Beaverdam phase occupation was also indicated by the presence of several Savannah Complicated Stamped, Check Stamped, and corncob impressed sherds.

Unfortunately, as is the case with Mason's Plantation—the other large multi-mound group in the valley—our knowledge of Rembert is extremely limited. For this reason, the underwater archeological investigations conducted at the suspected location of the site in the summer of 1990 are important because they indicate it may be possible to obtain appreciably more information about Rembert in the future.

RESULTS OF FIELDWORK

Archeological work in the reservoir was conducted over three days (August 27-29) and centered on attempts to locate the remains of the mound and village complex downstream from the Russell Dam. In 1948, Caldwell and Miller identified the remains of the mound, placing them near the confluence of the Savannah River and an unnamed creek (near what is now Morrah's Landing). Subsequently, the formation of Clark Hill Lake inundated the site. During the drought of 1988, the lake level dropped enough (greater than 3 meters, or 10 feet) to expose the terrace on which the site is located. During this period of low water, artifacts were collected from the site by local amateurs (Fred Pless, personal communication 1990).

Search for the mound remains centered on the terrace on the south side of the creek. Prior to the underwater team's arrival, David Anderson and Fred Pless located this terrace using a depth finder and found it to be in approximately 3 meters (10 feet) of water (Figure 13). On August 27, Judy Wood of the Savannah District COE joined the project team and used a side-scan sonar to aid in the search.

Four pairs of reciprocal transects were run using the sonar to "see" the bottom of the project area before commencing any visual and tactile searches and in an attempt to identify high probability areas. These runs also served to calibrate the sonar and to familiarize the crew with its

Figure 14 (opposite) — Hafted bifaces and fragments and abrader found at 9EB513 (probable submerged Rembert Mound site) during the 1990 survey project, Clark Hill Lake, Elbert County, Georgia.

Key and Description	Site Number	Catalog Number
a. large metavolcanic biface tip	9EB513	9EB513-1-16
b. quartz Swannanoa Stemmed		
c. siltstone abrader	9EB513	9EB513-1-23
d. quartz small Savannah River Stemmed		
e. metavolcanic Savannah River Stemmed		
f. metavolcanic small Savannah River Stemmed		
g. metavolcanic drill		
h. quartz small Savannah River Stemmed		
i. quartz Savannah River Stemmed		
j. quartz Savannah River Stemmed	9EB513	9EB513-1-13

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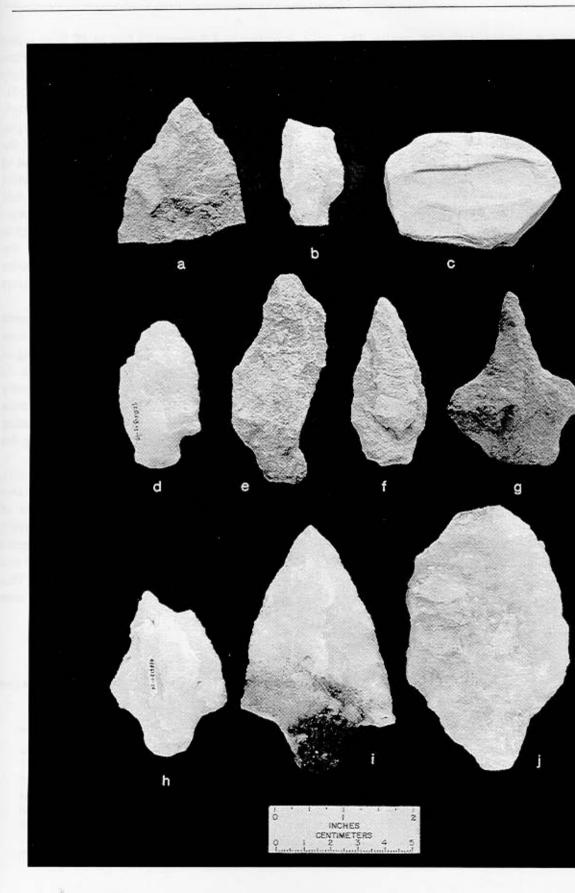
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operation and the interpretation of results. The transect lanes were located according to information interpreted from depth-finder runs over the project area. None of the side-scan sonar transects revealed definite information regarding the location of the site, but they did help to define the terrace, which was the suspected site area.

A systematic search, using both visual and tactile means, was then conducted. A buoy (0 point) was placed at the high point of the 3-meter-deep (10-foot-deep) terrace. This point was located using a depth finder and by finding the point on the terrace that best matched Thomas's 1894 description ("130 feet [39.6 meters] from the Savannah River bank"). This point was at approximately UTM coordinates E353440, N376270 and lies on the 300-foot contour. From this point, three transects were laid out, like spokes from the hub of a wheel, using weighted nylon line along compass bearings for distances of about 150 meters (431 feet). Transect A followed parallel to the creek bed at an azimuth of 264 degrees (magnetic). Transect B followed parallel to the Savannah River channel at an azimuth of 107 degrees (magnetic). Transect C covered the area between the other two.

Two divers then swam along the bottom from point "0" to the end of each line, visually inspecting the bottom in an attempt to locate cultural remains. With one diver on each side of the line, an area about 3.6 meters (12 feet) wide could be covered on a single pass. In all three cases, the divers reported visibility of one meter (3 feet) and a bottom that sloped quickly from 3 meters to 4.5 meters (9 feet to 15 feet) where silt deposits were exceedingly deep. No cultural materials were found. If present, they are likely obscured by appreciable amounts of recent silt.

Dramatic results were found when investigations shifted north to the creek-channel margin. Through free swims, divers visually covered the terrace north of the "0" buoy. Within 50 feet of the "0" point, fire-cracked rock, ceramic sherds, and lithic remains began showing up in the thin (.03 to .05 meter) silt layer on the terrace overlaying the sandy substratum. These continued to the edge of the terrace, where it meets the southern shore of the creek channel, and down the slope to the creek channel, notably in scours around tree roots exposed by erosion.

The sloping upstream sides of the terrace show at least two parallel lines of erosion near the top; the product, no doubt, of the lowering of the water in 1988 during the severe drought. At that time, this area of the terrace was reportedly above water, and a number of artifacts were seen by Fred Pless (personal communication). Similar beach terracing can be currently seen along the present shoreline of the lake.

A strong current (estimated at three knots), encountered during one dive when the dam was generating power, allowed divers a glance of erosion at work. The flow from the dam, which is approximately two miles upstream, intersected the face of the terrace at an oblique angle and was visibly eroding the top of the terrace. This has undoubtedly been occurring since the dam began operating in the 1950s.

Figure 15 (opposite) — Stallings pottery and worked soapstone found at 9EB513 (probable submerged Rembert Mound site) during the 1990 survey project, Clark Hill Lake, Elbert County, Georgia.

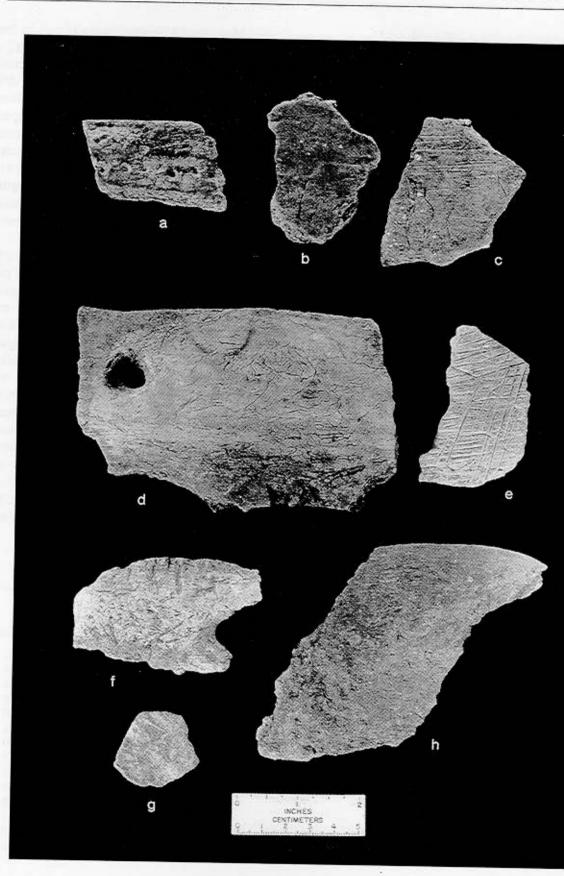
Ke	y and Description	Site Number	C	atalog Number
a.	Stallings Shell Punctate	9EB513 .		9EB513-1-34
	Stallings Simple Stamped			
	Stallings Fine Parallel Incised			
	Stallings Plain			
	Stallings Fine Cross Incised			
	perforated and notched soapstone fragment			
	soapstone slab fragment			
h.	soapstone bowl rim	. 9EB513 .		9EB513-1-22

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THE 1990 ARTIFACT ASSEMBLAGE

A total of 138 prehistoric artifacts were collected at 9EB513 by the SCIAA dive team in 1990. (They are listed by catalog number in Appendix II.) The material recovered from the lake bottom was not a complete collection of everything observed, but was limited to large, unusual, or potentially diagnostic artifacts. Appreciable quantities of pottery, debitage, and cracked rock were left where they were found if, on inspection, they appeared to be non-diagnostic.

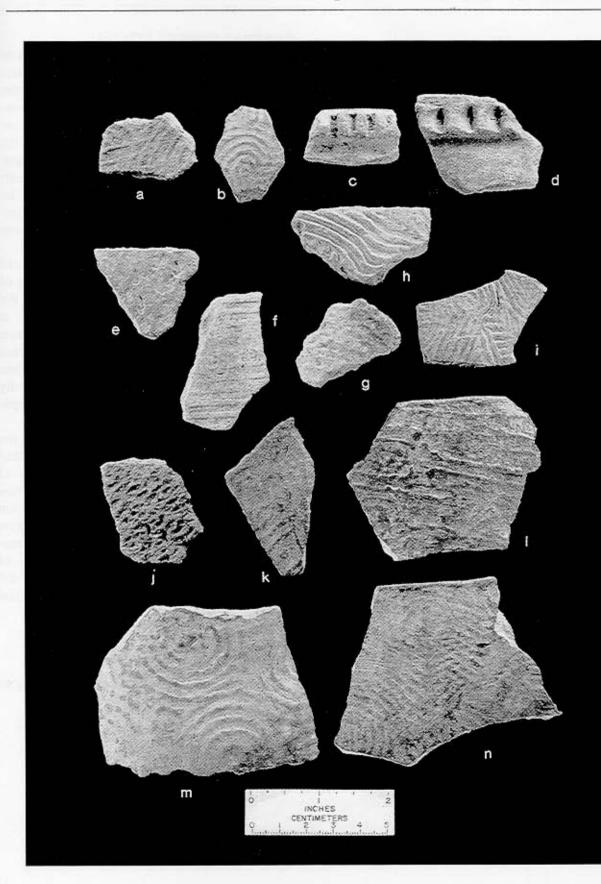
Only minimal evidence for pre-Mississippian components was found during earlier research at the Rembert site. During the 1948 testing program, Caldwell (1953:317–318) found a possible Late Woodland/initial Mississippian Woodstock Diamond Complicated Stamped sherd, a few probable Early/Middle Woodland Cartersville check and simple stamped sherds, and some unidentified cord marked sherds. He also found a single "large coarsely flaked stemmed point of weathered chert [resembling] examples from Stalling's Island" (Caldwell 1953:318). This may be a Late Archaic Savannah River Stemmed point.

The 1990 data appreciably expand our understanding about the duration of occupation at the site. A number of Late Archaic artifacts were found in 1990, including three Savannah River Stemmed projectile points (Figure 14:e, i, j), two of quartz and one of metavolcanic material; a possible Savannah River Stemmed metavolcanic biface tip (Figure 14:a); a metavolcanic drill (Figure 14:g); ten sherds of Stallings fibertempered pottery, with plain, simple stamped, fine parallel and cross incised, and shell punctated finishes (Figure 15:a-e); a perforated soapstone slab fragment (Figure 15:f); a piece of worked soapstone from a probable slab (Figure 15:g); and a large soapstone bowl rim fragment (Figure 15:h). A major Late Archaic component appears to be present.

A number of probable Woodland period artifacts were also found at 9EB513, including one metavolcanic and two quartz Small Savannah River stemmed points (Figure 14:d, f, h); one quartz Swannanoa Stemmed point (Figure 14:b); three Dunlap (?) fabric impressed sherds (Figure 16:j); five probable Cartersville sherds, including three check stamped (Figure 16:e, f, g), one simple stamped, and one plain tetrapod fragment; three probable Swift Creek complicated stamped and four combination check stamped/complicated stamped sherds (e.g., Figure 16:h, i); and seven unidentified complicated stamped sherds that may be either later Woodland or Mississippian in age (e.g., Figure 16:k, l). The projectile points are probably terminal Late Archaic or Early

Figure 16 (opposite) — Woodland and Mississippian pottery and worked soapstone found at 9EB513 (probable submerged Rembert Mound site) during the 1990 survey project, Clark Hill Lake, Elbert County, Georgia.

Key and Description	Site Number	Catalog Number
a. Etowah (?) nested diamonds	. 9EB513	9EB513-1-50
b. Savannah (?) nested "p's"		
c. notched applique rim strip	. 9EB513	9EB513-1-58
d. fingerpinched applique rim strip	. 9EB513	9EB513-1-59
e. Cartersville checked stamp	. 9EB513	9EB513-1-40
f. Cartersville checked stamp	. 9EB513	9EB513-1-51
g. Cartersville checked stamp		9EB513-1-40
h. Swift Creek (?) complicated stamped		
i. B-Complex Swift Creek (?) complicated stamped		9EB513-1-44
j. Dunlap (?) fabric impressed		9EB513-1-38
k. unknown complicated stamped	. 9EB513	9EB513-1-42
I. unknown complicated stamped		9EB513-1-41
m. Savannah complicated stamped	. 9EB513	9EB513-1-55
n. Savannah complicated stamped		



Woodland in age, while the ceramics span the Early through Late Woodland periods.

Mississippian period sherds that were recovered included two Etowah Complicated Stamped with nested diamond motifs (Figure 16:a); five Savannah Complicated Stamped with bull's-eye, spiral, and nested "p" motifs (e.g., Figure 16:b, m, n); and two sherds with appliqued rim strips, one finger pinched, the other notched (Figure 16:c, d). The Etowah and Savannah sherds suggest a Beaverdam phase component, while the rim strips indicate a later Middle Mississippian, Rembert phase occupation. No evidence for Late Mississippian occupation was documented.

A range of other artifacts was collected that indicates the diversity of the site assemblage, including five metavolcanic flakes; 14 quartz shatter fragments, two with possible marginal wear retouch and two with intentional marginal bifacial retouch; two crude quartz cores, one unifacial and one bifacial; 14 fire-cracked rock fragments, five of quartz and nine of metavolcanic material; a siltstone faceted abrader (Figure 14:c); a quartz pebble flaker (Figure 17:d); three quartz hammerstones (Figure 17:a, b, g); two metavolcanic hammerstones (Figure 17:c, f), one of which was fire crazed; a metavolcanic slab with a grinding depression (Figure 17:e); a metavolcanic pitted slab (Figure 17:h); and six fired clay fragments from possible hearth features. The diversity of recovered artifact forms plus the evidence for hearths indicate that appreciable and extended use of the site took place during multiple occupations.

GENERAL OBSERVATIONS

No direct evidence for the survival of mounds or mound remnants was detected at any of the underwater locations examined in 1990, but the area of fire-cracked rock and the artifact concentration (recorded as site 9EB513) closely corresponds to previously reported locations of the Rembert Mound and village complex. A number of small depressions observed in the lake bottom in the vicinity of 9EB513 may represent the remains of the washouts in and around the primary mound documented by previous researchers (Figure 12; Appendix IV).

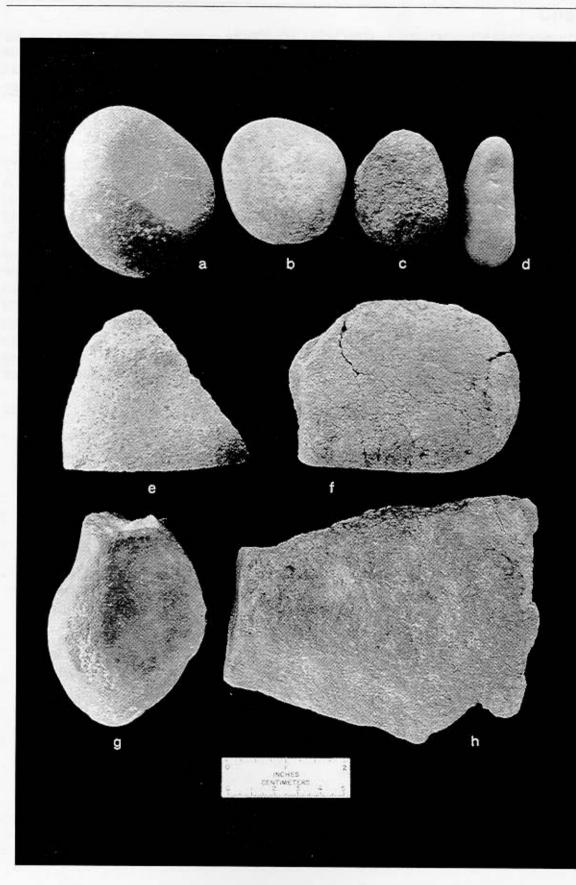
The prehistoric artifact assemblage recovered from 9EB513 in 1990 documents the presence of components dating from the Late Archaic to the Middle Mississippian periods. Previous work at the Rembert site revealed only limited evidence for pre-Mississippian components. If the terrace is indeed the location of the mound group, then the site appears to have been occupied repeatedly for centuries prior to the Mississippian occupation for which it is primarily known.

The influence of water erosion caused by the normal operation of the Russell Dam at 9EB513 cannot be underestimated. Direct evidence of erosion was observed by the SCIAA divers when they were working on the project. Stumps down the creek and river bank from the terrace show scouring around the exposed roots. Their presence is a further indication of the effects of erosion. The presence of artifacts in the exposed root scours suggests they were likely deposited down this slope by the process of erosion.

Figure 17 (opposite) — Hammerstones and slab tools found at 9EB513 (probable submerged Rembert Mound site) during the 1990 survey project, Clark Hill Lake, Elbert County, Georgia.

Ke	y and Description	Site Number	Catalog Number
a.	quartz hammerstone	9EB513	9EB513-1-16
	quartz hammerstone		
c.	metavolcanic hammerstone	9EB513	9EB513-1-23
d.	quartz pebble flaker/hammerstone	9EB513	9EB513-1-18
	metavolcanic slab with grinding depression		
	metavolcanic fire crazed hammerstone with grinding depression		
	quartz hammerstone		
	metavolcanic fire clouded pitted slab		

Chapter 6 - Underwater Investigations a



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Upper Savannah River Survey

While the large mound once present on the Rembert site appears to have been eroded by natural forces to the point where it is virtually undetectable in the absence of exploratory excavation, the presence of a dense artifact scatter in a relatively concentrated area suggests that significant information about past use of the site can be gathered through a program of field data recovery. Such a program is described in Chapter 7, Conclusions and Recommendations.

Chapter 7 CONCLUSIONS AND RECOMMENDATIONS by David G. Anderson and Christopher Amer

TECHNICAL OBSERVATIONS

A total of 722 prehistoric and 246 historic artifacts were found on 48 sites in the project area. This indicates fairly appreciable prehistoric use of the ridge crests and slopes adjacent to the main channel of the Savannah River, and at least some historic period use of the more level upland areas. Temporally diagnostic prehistoric artifacts, typically projectile points, however, were comparatively rare. Given the extent of relic collecting that has occurred along the shoreline since the lake was built, the moderate numbers that were found are somewhat surprising.

Recovered diagnostic projectile points included:

- Early Archaic Palmer Corner Notched (N= 1), found in a disturbed borrow area in the center of the upland tract and donated to the survey by Mr. Charles Echols (Figure 7:q);
- Middle Archaic Morrow Mountain I and II forms (N=7), found at 9EB198, 9EB488, 9EB490, 9EB492, 9EB508, and 9EB512 (2);
- Terminal Middle Archaic Guilford Lanceolate points (N=2), found at sites 9EB485 and 9EB491;
- Late Archaic Savannah River Stemmed (N= 4), found at sites 9EB483 and 9EB513 (3);
- Terminal Late Archaic Small Savannah River (N=4), found at sites 9EB199 and 9EB513 (3);
- ► Late Archaic/Early Woodland Swannanoa Stemmed (N=7), found at sites 9EB480 (2), 9EB483, 9EB484, 9EB494, 9EB512, and 9EB513);
- Later Woodland Yadkin Stemmed (N=6), found at sites 9EB491, 9EB494 (2), 9EB497, 9EB512, and 9EB516; and

 One possible Late Woodland Vincent form, found at 9EB502.

No evidence for Paleoindian occupation was found in the survey area.

Diagnostic prehistoric ceramics were found at only two sites, 9EB512 and 9EB513, near and at the probable location of the Rembert Mound group. Most of the prehistoric ceramics came from 9EB513 and dated from the Late Archaic, Woodland, and Mississippian periods. Only two sherds came from 9EB512, and these may be Mississippian in age. One possible gunflint was also found at 9EB512, and may reflect early historic use of this area.

The remains of a number of historic structures, for the most part old tenant houses, were located in the upland survey tract. Historic settlement in this area may have been facilitated, in part, by the use of wells, although no evidence for these kinds of structures was found.

The large numbers of prehistoric sites found during the shoreline survey indicates that use of the floodplain margin was fairly appreciable, although the low artifact density observed on most sites indicates that this use was likely directed to short-term or special purpose activities. These may have been performed by task groups based elsewhere. What is interesting about many of these shoreline assemblages is that they occurred on sloping terrain in areas that would not typically be examined in much detail during routine cultural resource investigations. Furthermore, the low artifact density observed would make their detection difficult even if intensive systematic shovel testing was used.

The existence of a large Mississippian ceremonial center at the Rembert site 9EB513 (9EB1) may be the source of the people producing some of these sites. That is, it is possible that some of the artifacts may be debris from hunting stations or outlying agricultural fields maintained by the inhabitants of this center. The dispersal of fields makes sense from a risk-minimization strategy, particularly given the vagaries of summer hail and thunderstorms, which are common in the area and can have erratic and quite localized destructive effects. The low incidence of Mississippian diagnostics in the 1990 survey, of course, makes this argument speculative.

Evidence for stone tool working in the form of hammerstones, cores, and debitage (including flakes and shatter fragments) was found at many of the sites. In addition, unmodified but potentially knappable raw material was found at many sites, and source areas (i.e., weathered float and eroding veins) for these materials were noted along the lakeshore and in upland settings. While past collecting activity appears to have significantly depleted the formal chipped stone tool record along the Clark Hill shoreline, the results of the 1990 survey indicate that considerable significant information remains to be gathered.

MANAGEMENT RECOMMENDATIONS

A detailed Management Summary was submitted to the Savannah District COE on February 15, 1991, with the project-specific recommendations presented here. The locations of all 48 sites were mapped on project construction plans, and COE personnel understood that these areas were to be avoided by all project activity, including the staging, movement, or storage of heavy construction materials and machinery. Particular care was to be taken to avoid the two undisturbed sites, 9EB108 and 9EB429, that were immediately adjacent to the construction areas. Of the 48 archeological sites present in and near the project area, one (9EB195) is a historic cemetery that should be avoided, and three (9EB108, 9EB429, and 9EB513) require additional testing to determine whether they are eligible for inclusion on the NRHP. The remaining sites are considered ineligible for inclusion on the NRHP and no further work is recommended at them.

At the two terrestrial sites recommended for testing, 9EB108 and 9EB429, two or more oneby-two-meter test pits should be opened, and the sites mapped. At 9EB513, the submerged site and the possible location of Rembert Mounds, a series of dispersed small tests are proposed to define the extent of the scatter, followed by the excavation of at least two larger units to determine whether stratified deposits are present.

The following recommendations were incorporated into the project *Environmental Impact* Statement by the Savannah District COE:

5.177 - Concern also exists regarding the potential for adverse impacts to occur to cultural resources from the dredging and disposal of the dredged material. Consequently, the Savannah District requested the National Park Service to conduct cultural resources studies of the areas which would be impacted by the dredging. The National Park Service conducted a cultural resources survey of the upland disposal area, dredge discharge pipeline route, portions of the disposal area discharge channel, adjacent upland areas, and the shoreline from the dam to a point approximately two miles downstream. Fortyeight prehistoric and historic archaeological sites were recorded during the survey. Two were recommended for additional testing to determine their eligibility for inclusion in the National Register of Historic Places (9EB429 and 9EB108).

5.178 - Site 9EB429 is located outside the area of potential impact and will not be affected by the proposed project. Site 9EB108, the remains of a late nineteenth/ early twentieth century tenant house, is located adjacent to the dredge discharge pipeline route. [If it cannot be avoided by design change,] this site will be tested to determine its significance and the results coordinated with the Georgia State Historic Preservation Officer (SHPO). If it is determined significant, Savannah District will work with the Georgia SHPO to avoid effects. If, however, avoidance is not possible, a determination of no adverse or adverse effect will be prepared and a data recovery plan executed in accordance with 36 CFR Part 800.

5.179—Divers from the Underwater Antiquities Unit of the South Carolina Institute of Archaeology and Anthropology conducted an underwater examination of site 9EBI. The site is submerged by the waters of J. Strom Thurmond Lake and is located approximately 10,000 feet downstream of Richard B. Russell Dam. The divers found that the site is being affected by currents associated with the operation of Richard B. Russell Dam.

5.180 — The Waterways Experiment Station's TABS II model study results show that the velocities due to operation of the proposed pumped storage units and the dredged channel will not be much different from those now in the vicinity of the site. The vertically averaged velocities presently experienced in this region are from 1 to 2 feet per second (fps). The new vertically averaged velocities are not expected to exceed 2 fps. The existing effects to the site will be addressed as part of the operation and management program of the lakes (U.S. Army Corps of Engineers 1991:195).

The Savannah District COE informed IASD in early 1992 that no evaluative testing would be done at 9EB108 and 9EB429 because the proposed construction would avoid these sites, and that no evaluative testing would be done at 9EB513 (9EB1) because, as stated above, the "existing effects to the site will be addressed as part of the operation and management program of the lakes" (U.S. Army Corps of Engineers 1991:195). IASD does not have the technical expertise to evaluate the conclusion by the Waterways Experiment Station that the proposed construction would have no additional adverse affect on site 9EB513 (9EB1). We do believe this site is potentially eligible for inclusion on the NRHP, and that it is being actively damaged by existing lake operations. Because of the potential significance of this site, and because the recommended underwater field program is complex, a detailed description of the testing procedures follows. The discussion concludes with recommendations for long-range management of cultural resources in the Clark Hill Reservoir.

Recommended Testing Procedures at 9EB513

The purpose of the proposed testing program is to (1) locate and determine the concentrations and extent of surviving underwater cultural assemblages at the site; (2) evaluate the significance of the assemblages at the site with a view towards NRHP eligibility; (3) determine if information and data important to the understanding of human occupation may be lost by the proposed channelization activities or the routine operation of the Russell Dam; and (4) gain a better understanding of the effects of natural forces on the site.

The Rembert Mound Group, which was occupied from about A.D. 1100 to 1450, was one of the largest Mississippian mound complexes in the Savannah River Valley. Limited archeological investigations were conducted in the 1880s and the 1940s. However, by the time of the latter investigation, much of the site had been destroyed by flooding and agricultural practices. Inundation of the site by the waters of Clark Hill Lake in 1952 effectively isolated the site from further investigations until the 1990 reconnaissance by SCIAA.

Based on the results of the reconnaissance and limited testing at the site in 1990, one of the research questions that needs to be asked is, to what degree can this inundated site contribute to the understanding of social processes in the region? Submerged components of once terrestrial sites have the potential to greatly enhance our understanding of past human activities in a region. But the sites have to be located to be of value in regional research. In the case of Rembert, we know the location of the site both historically and, to a certain degree, at present.

However, during the 1990 exploratory work, even though armed with this information and a working knowledge of the topography of Clark Hill Lake prior to its formation, and using side-scan sonar and a Fathometer with an analog strip recorder, we still could not be certain of the precise location or extent of the site. This data must be recovered to allow us to fully evaluate

the potential of this area to address our research questions.

Gaining an understanding of the natural and man-made forces that have affected the site in the past, are currently affecting it, or have the potential to impact it in the future, can provide a framework to evaluate the site in terms of its potential to answer our research questions. For example: How did river and stream erosion affect the mound group prior to inundation as opposed to the effects of changing river dynamics after the formation of the lake? Did washouts, recorded in the site area by earlier archeologists, as well as other natural and man-made activities effectively jumble and disperse the remains of the site, or is the integrity of assemblages intact both spatially and stratigraphically?

Using as a guide the area already established and tested in 1990, the following tasks should be performed at 9EB513:

- Establish a 200-square-meter area within which the survey will be conducted, and set up a 20-meter grid to guide the archeological testing;
- Map the site area using remote sensing equipment to produce a contour map of the lake bed as it is today;
- Using the 20-meter grid as a guide, excavate approximately 100 underwater "shovel" tests at 20-meter intervals to establish the presence and concentrations of cultural assemblages and the extent of the site; and
- 4. Excavate from two to six 2-by-2-meter test squares in areas with high concentrations of cultural material. Excavate these using either natural or arbitrary levels with horizontal and vertical provenience of materials recorded and cultural features mapped.

All areas investigated should be located using an EDM-type transit, and a survey map should be generated from this data. It is estimated that the work will take a team of six divers 15 field days to complete, after which time a technical report meeting the Secretary of the Interior's standards should be completed. No action has been taken to date on these recommendations with regard to site 9EB513. Construction on the pumped storage project was underway at the time this report was released in late 1994.

Preparation of A Cultural Resources Management Plan for Clark Hill Lake

For the future, beyond the concerns of the present construction project, the discovery of large numbers of archeological sites along the shoreline of Clark Hill Lake indicate an appreciable effort will be needed to inventory and evaluate these resources for NRHP eligibility. This action is part of the cultural resource inventory process mandated by Section 110 of the National Historic Preservation Act, as amended, and Section 14 of the Archaeological Resources Protection Act of 1979, as amended.

To manage and protect these resources and ensure the completion of the required inventory, a comprehensive cultural resources survey of the reservoir shoreline should be completed in conjunction with the development of a cultural resources management plan for the treatment of significant historic and prehistoric properties. Given the large numbers of archeological sites potentially present within the reservoir area, the development of a comprehensive survey and management plan may be more cost effective and less time consuming than conducting projects on an individual basis. This program should include the intensive, fine-grained coverage (i.e. about five-meter transect intervals) of all shoreline areas and subsurface sampling (i.e., shovel testing, limited deep backhoe testing) at larger intervals in overgrown areas. Early maps and surviving courthouse records should also be examined to locate the archeological remains of historic settlements, such as farmsteads, tenant structures and outbuildings, ferries, mills, and roads and road houses that may have been present. For all sites found, the COE will need to see that state archeological site forms are completed and the collections themselves properly curated.