

EXCAVATIONS AT MOUND A, SHILOH NATIONAL MILITARY PARK, TENNESSEE

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Shiloh National Military Park in Hardin County, Tennessee, includes a large and well preserved pre-historic Indian mound and village site within the park's boundary. The site is located in the eastern portion of the park on a high bluff above the west bank of the Tennessee River. The edge of the bluff forms the eastern boundary of the site. Deep ravines cut by tributary branches of the main stream border the site on the north and south. A long, low embankment marking the line of a former palisade which extended across the neck of the bluff is believed to be the western boundary of the site.

The major features of the site are seven large mounds, ranging from 5 to 15 ft in height, and numerous small low mounds from 1 to 2 ft high. Six of the large mounds are rectangular temple mounds. The seventh is a conical burial mound. The small low mounds are generally thought to be house platforms.

The Tennessee River, which forms the eastern boundary of the park, is eroding the prehistoric complex as well as other portions of the park along the river bluff. The mechanisms for potential slope failure are complex, because they are undoubtedly acting in various combinations. The low-lying areas are largely blanketed with alluvium which is nearly impervious and relatively homogeneous. Consequently, during periods of high water little infiltration occurs and a subsequent relatively rapid drawdown does not cause a critical increase in pore water pressure within the bank.

On the other hand, the higher, steeper slopes which front on the river adjacent to the mounds and the cemetery are composed of Eutaw soils. The materials are quite diverse, having impervious clayey layers sandwiched between more pervious granular beds. The permeability of these soils varies widely, both laterally and vertically. Prolonged high river stages followed by rapid drawdown have historically triggered the major slope failures. It has been suggested that variable, but extensive, infiltration into these soils during prolonged high water stages is not relieved during usually short drawdown intervals. Excessive pore water pressures developed during this time may in effect "blow out" the lower portion of the slope. This is followed by sliding and slumping of the steep overhung slopes above (Department of Interior 1976:70).

While one might expect all these mechanisms to work to varying degrees along an "uncontrolled" reach of river with similar physiographic and geologic settings, the operation of multi-purpose dams upstream and downstream undoubtedly enhances the erosive process.

Further, the orientation of the park on the outside and downstream from a rather sharp bend in the river increases the rate of erosion by undercutting. The current is unusually swift because the park is located just 9 mi downstream from the discharge of the Pickwick Dam and powerhouse. It is obvious from aerial photos that the current is capable of rapidly removing material which slumps into the river so that the cycle of slumping and sliding followed by scouring as just described can be repeated again and again. The area of the Indian mounds and the National Cemetery, a length of approximately 3500 ft, has been degraded moderately to severely. This condition of erosion, sloughing, and slumping is continuous and appears to be accelerating (Department of Interior 1976:70-71).

Because Mound A of the mound group is most immediately threatened by this erosion, a team from the National Park Service Southeast Archeological Center conducted testing at Mound A during the summer of 1979. This report summarizes the preliminary findings of this testing.

Previous Archeological Investigations

The earliest documented archeological investigation of the mound and village site was carried out by Colonel Cornelius Cadle of the War Department in 1899. He trenched Mound C, the burial mound, and located three burials accompanied by a human effigy pipe in a log tomb (Cadle 1902).

Clarence B. Moore visited the site in 1915. He was unable to obtain permission to excavate any of the mounds, however.

The bulk of the archeological work was done during late 1933 to early 1934 under the Civil Works Administration. Frank H. H. Roberts of the Smithsonian directed the project. During this investigation Mound C (the burial mound) was sectioned and 30 burials recovered. A series of trenches were dug in the areas surrounding and between the main mounds. These trenches revealed the remains of 30 houses, a temple, and numerous refuse deposits. Two of the platform mounds--Mounds E and F--were also trenched (Stirling 1934; Roberts 1935; Chambers 1936).

In 1975, under contract to the National Park Service, Gerald Smith of Memphis State University carried out a 3 phase investigation involving the Shiloh mounds and village site. First, he analyzed the work done by Roberts in 1933 and 1934. Roberts' field notes are relatively generalized. He started his survey and excavation crew at the same time, and there are no benchmarks which can be located in the field from this excavation. Smith also conducted limited testing to determine the limits of the site and the culture chronology. He conducted six test excavations involving the bastion and embankment area and the areas near Mounds D, F, and G (Smith 1977).

Methodology

Archeological testing at Mound A was conducted to determine the internal composition of the mound as well as the possible existence of a ramp on the south face. A 1 m square test pit was placed to the west and south on the mound top. However, this first test square yielded historic intrusive material down to a depth of 1 m when the test was abandoned.

A second 1 m square test was then excavated several meters east of the first test. This square yielded only one historic artifact and showed no other evidence of disturbance. It was excavated to a depth of 6.8 m until sterile soil was encountered.

A third test pit 1 by 1/2 m was sunk to a depth of 1.4 m into the south face of the mound in an effort to locate a ramp leading into the central area of the plaza. No evidence for such a ramp was discovered. However, the stratigraphy from this pit corresponded to a section from the second test, suggesting that the mound is essentially undisturbed.

Artifact Analysis

Just over 1,000 artifacts were excavated from Test 2. The majority were ceramic, lithic, and shell; small amounts of bone and daub were recovered. No features of any kind were discovered.

Ceramics - Two ceramic types dominate the ceramic assemblage: Neeley's Ferry Plain (which is Mississippian Plain var Neeley's Ferry in Phillips' taxonomy); and Mulberry Creek Cordmarked. Neeley's Ferry Plain is shell-tempered, while Mulberry Creek Cordmarked is grit-tempered. Minority wares include Baytown Plain, Kimmiswick Fabric Impressed, Bell Plain, Moundville Incised, Wheeler Check Stamped, and O'Byam Incised (Phillips 1970). No complete or partial vessels were recovered. The vast majority of the sherds are only thumbnail size, so no reconstructions were possible. Only 11 of 343 sherds were rim sherds.

An interpretation of the ceramics recovered at Mound A is somewhat difficult to make. The 1934 excavations and Smith's 1976 test excavations recovered the same types of ceramics. What has been retained in the 1934 collection probably represents a selective sample of some sort. Gerald Smith's ceramic material has good stratigraphic control, but none of it is from a mound excavation.

In general, the ceramics from the Mound A excavation show no particular trends through time. Mulberry Creek Cordmarked and Neeley's Ferry Plain are certainly indicative of two major ceramic complexes; a Mississippian and Woodland complex. However, the percentages of ceramic types seem to fluctuate randomly through time or at least throughout the levels of the excavation. The ceramic data indicate that rather than being constructed in various stages through time, the mound was probably constructed with a relatively short period of time. The sherds were present in the fill or midden used to construct the mound. No ceramics were excavated in levels 14 through 20 which correspond roughly to the bottom one third of the mound. Other cultural debris was present in these levels, however. Therefore, it appears probable that at least two different areas provided dirt or fill for the mound. The specific source areas for the mound fill are presently unknown, although the river floodplain is a likely source based on the types of shells excavated in the mound.

Sherds were also found to a depth of over 2 m below the base level of the mound. Percentages of the two major ceramic types (Neeley's Ferry Plain and Mulberry Creek Cordmarked) indicate a general decrease of Mulberry Creek Cordmarked through time as Neeley's Ferry Plain increases. Thus, it seems likely that Mound A was constructed over an area which contains evidence of occupation through time at this spot.

Lithics - With the exception of one projectile point, all of the lithic material recovered from Mound A is temporally non-diagnostic. Over half of the lithic material consists of unmodified rocks and pebbles which probably occurred naturally in the fill. Approximately 1/4 of the lithics consists of unworked flakes and debitage. The remaining 1/4 of the lithic material was modified. This 1/4 included worked flakes, a unifacial scraper, a core, a chopper, and a small typical Mississippian projectile point with a broken distal tip.

Bone - Only 42 fragments of bone were found. None were human and none showed evidence of modification or utilization. Only 11 fragments could be identified with any certainty, and these fragments were all deer bone.

Shell - In addition to the bone and ceramics associated with the mound, several species of mussel shell and snail shell were also recovered. Of the shell found, well over 3/4 were unidentifiable. All of the shell recovered from the mound fill was far too deteriorated to enable identification. Of the shell recovered below the base of the mound, four species and three genera were identified. These included the mussel shells *Elliptio crassidens*, *Elliptio dilatatus*, *Quadrula pustulosa*, and *Obliquaria reflexa*. The genus *Pleurobema* was also identified (Morrison 1942:337-392; Burch 1973; Heard 1979).

Two genera of snail shells were also identified as *Goniobasis* and *Campeloma*, both of which are mud burrowers. All of these organisms are river dwellers and reflect deep water environments--at least water too deep for wading to collect them (Heard 1979).

The heaviest concentration of shells occurred in levels 26 through 31, which extended for a depth of over 1 m below the base level of the mound. These shells are apparently associated with the midden or living surface on which the mound was constructed.

The heavy concentration of shell below the base of the mound may have been gathered as a food source during periods of unusually low water in the river.

The secondary concentration of shell in the upper 1/2 to 2/3 of the mound may indicate that this fill came from the river bed area during a period of low water. It may also have come from an old river channel area of the river floodplain. The fill comprising the bottom 1/3 of the mound contained only three fragments of shell and may, therefore, have been carried in from another area farther away from the river.

Summary and Conclusion

Radiocarbon dates based on charcoal samples collected from 5 different levels of the excavation seem to support these conclusions. The 3 dates obtained for three levels of the mound itself range from 825 to 1090 A.D. (level 11-825 A.D.; level 9-760 A.D.; level 2-1090 A.D.). The dates for the midden on which the mound is constructed ranged from approximately 200 A.D. (level 26) to 735 A.D. (level 23). These dates follow the general trends and conclusions which the artifacts and stratigraphic data suggest. However, because none of the charcoal came from identifiable hearths but was collected throughout the level, it is possible that the burned material dates the midden or fill, which was then brought in to construct the mound.

Based on the 1979 excavation data, it appears that Mound A was constructed during a short period of time rather than over an extended period. It was built on top of an area which had been occupied over a period of time. The fill used to construct the mound was carried in from at least two separate areas, at least one of which was probably located on the river floodplain.

References cited:

- Burch, J. B. 1973. Freshwater unionacean clams (Mollusca: Pelecypoda) of North America. Biota of freshwater ecosystems identification manual No. 11. Water pollution control research series. Environmental Protection Agency, Washington, D.C.
- Cadle, Cornelius. 1902. A remarkable prehistoric ceremonial pipe. In Records of the Past, pp. 218-220.

- Chambers, Moreau B. 1936. The Indian mounds Shiloh National Military Park. Ms on file Southeast Archeological Center, Tallahassee, Florida.
- Department of the Interior, National Park Service. 1976. Draft environmental statement. Proposed general management plan, Shiloh National Military Park, Tennessee. Ms on file Southeast Archeological Center, Tallahassee, Florida.
- Heard, Dr. William H. 1979. Personal communication.
- Morrison, J. P. E. 1942. Preliminary report on mollusks found in the shell mounds of the Pickwick Landing basin in the Tennessee River valley. In An Archaeological Survey of Pickwick Basin in the Adjacent Portions of the States of Alabama, Mississippi, and Tennessee by W. S. Webb and D. L. DeJarnette. Smithsonian Institution, Bureau of American Ethnology, Bulletin 129, pp. 337-392.
- Phillips, Philip. 1970. Archaeological survey in the Lower Yazoo Basin, Mississippi, 1949-1955, part one. Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University. Vol. 60.
- Roberts, Frank H. H., Jr. 1935. Indian mounds on Shiloh battlefield. Explorations and Fieldwork of the Smithsonian Institution in 1934. Publication 3300, pp. 65-68.
- Smith, Gerald P. 1977. Archaeological investigations of the Indian mounds area, Shiloh National Military Park. Ms on file, Southeast Archeological Center, Tallahassee, Florida.
- Stirling, M. W. 1934. Smithsonian archeological projects conducted under the Federal Emergency Relief Administration, 1933-34. Annual Report of the Board of Regents of the Smithsonian Institution Showing the Operations, Expenditures, and Conditions of the Institution for the Year Ending June 30, 1934. Publication 3305, pp. 494-498.