This document contains information on Native American burials. Images considered to be culturally insensitive, including images and drawings of burials, Ancestors, funerary objects, and other NAGPRA material have been redacted.

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THE ARCHAEOLOGY OF THE LAKE SPRINGS SHELL MIDDEN (9CB22), CLARK HILL RESERVOIR, COLUMBIA COUNTY, GEORGIA

HEATHER JEAN HOWDESHELL

Athens

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By

HEATHER JEAN HOWDESHELL

Approved:

_____ (signature) _____
Date

Dr. Mark Williams
Major Professor

Approved:

_____ (signature) _____
Date

Dr. Steve Kowalewski
Reader

Approved:

_____ _____
Date

Dr. Jere Morehead
Associate Provost and Director, Honors Program

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ABSTRACT

In 1951, Joseph Caldwell excavated the Lake Springs site (9Cb22) as the waters of the Clark Hill Reservoir on the Savannah River rose around him. While more than 10,000 artifacts had been recovered by him before the site was flooded, the collection was then lost for most of the last 50 years. In September 2001, the 23 boxes of artifacts from the site were discovered unlabeled at the Southeast Archeological Center of the U.S. National Park Service in Tallahassee, and were transferred to the University of Georgia Laboratory of Archaeology in Athens. Caldwell never published a site report for Lake Springs, thus the overall objective of my project was to produce a final report using his field notes, illustrations, and the recently discovered artifacts. The majority of ceramics are Stallings Island Fiber Tempered bowls of plain and drag-and-jab varieties, suggesting a Late Archaic occupation. However, a limited number of Cartersville Check Stamped, Savannah Complicated Stamped, and Deptford Complicated Stamped sherds define several later occupations of the site. Lithics collected include a small number of Morrow Mountain, Stanley, and Guilford projectile points from the Middle Archaic (Caldwell's "Old Quartz Culture"), while the majority of the lithic collection consists of Savannah River points and soapstone heating slabs and bowls from the Late Archaic period. The site's major importance lies in its transition from prepottery midden to midden including fiber-tempered pottery.

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SITE AND COLLECTION BACKGROUND

The Lake Springs site (9Cb22) was located along the western bank of the Savannah River approximately 20 miles north of Augusta, Georgia in Columbia County. The site, primarily composed of a Late Archaic shell midden, was located on an area of the floodplain of the river that Georgia Power intended to flood during the construction of the Clark Hill dam. Between 1948 and 1951, Joseph R. Caldwell and Carl F. Miller directed a campaign to survey and excavate a few sites that would be destroyed by the resultant flooding. More than 230 sites were documented (Elliott 1995), and Caldwell and Miller excavated portions of several sites with cultural significance, including the Lake Springs site.

The first tests pits, one 5'x5' in size and one 10'x10' in size, were dug by Carl Miller during 1948, and the artifacts recovered (mainly projectile points, fiber-tempered Stallings Island pottery, and bone) are currently housed at the Smithsonian Institution in Washington, D.C., in addition to Miller's field notes from the Clark Hill Reservoir project. Therefore, a significant portion of this project consisted of travel to the Smithsonian Institution to examine the artifacts from Miller's collection and the field notes accompanying them in an attempt to draw a new site map, including both Miller's and Caldwell's excavations.

Not until 1951 did major excavations begin under the direction of Caldwell. According to Elliott's conjecture, Caldwell's excavations probably unearthed more than twenty times the number of artifacts recovered by Miller (Elliott 1995). With the waters of the reservoir rising around him, Caldwell excavated more than 1600 square yards to depths of up to 4 feet. The artifacts were placed in shoeboxes according to provenience

but without a site number. Almost half the collection was washed and sorted into categories of "pottery," "rocks," and "bone." This collection was probably housed at the University of Georgia for a short time, but was sent to the Southeastern Archaeological Center (SEAC), then at the Ocmulgee National Monument in Macon, Georgia, by the late 1950s. When Tallahassee became the new SEAC center in 1970, the artifacts were transferred there, the shoeboxes packed into larger boxes, and the collection was essentially forgotten.

In September 2001, Dr. Mark Williams arranged for a collection of almost 220 large boxes that were stored at SEAC labeled as Jim Woodruff Dam, from Seminole County, Georgia, to be transferred to the University of Georgia Laboratory of Archaeology in Athens for re-boxing and curation. As re-boxing began, it became clear that many of the artifacts that were assumed to have been from the Jim Woodruff Dam were not from this area at all. Careful examination showed that many were from the Clark Hill Reservoir, Lake Hartwell, and many other locations both within and outside of Georgia. Since none of the shoeboxes from the Lake Springs site were labeled with either the institutional site number (sites 90 and 91- Miller's temporary site numbers), the Smithsonian site number (9Cu61) or the official Georgia site number (9Cb22), the collections were not immediately recognized as such. The boxes were regrouped according to the provenience style, with boxes with polar coordinates separated from those with letter-number combinations, such as Lake Springs. It soon became clear that the lost Lake Springs collection had been rediscovered.

The remainder of this paper will present an analysis of the artifacts found in Caldwell's excavations, and a limited comparison to artifacts from other Late Archaic sites in the Middle Savannah River Valley, including the famous Stallings Island site

(9Cb1). Also, the data from Carl Miller's excavations of two test units at Lake Springs will be compared to Caldwell's excavations (Miller 1949). The report will be divided into chapters examining the lithics, ceramics, animal bone, and miscellaneous oddities from Caldwell's excavations separately. It then will briefly summarize the artifacts recovered from Miller's excavations.

Figure 1. Excavations at Lake Springs.

Figure 2. Excavation of the "Subsite."

Figure 3. Aerial Photograph of the Lake Clark Hill Survey Area; Lake Springs Is Located at the Small Blue Circle at the Top of the Photograph

Figure 4. Photograph of Excavation During Flooding at Lake Springs

Figure 5. Photograph of Block A during Excavations at Lake Springs:
The Lake Clark Hill is in the Background

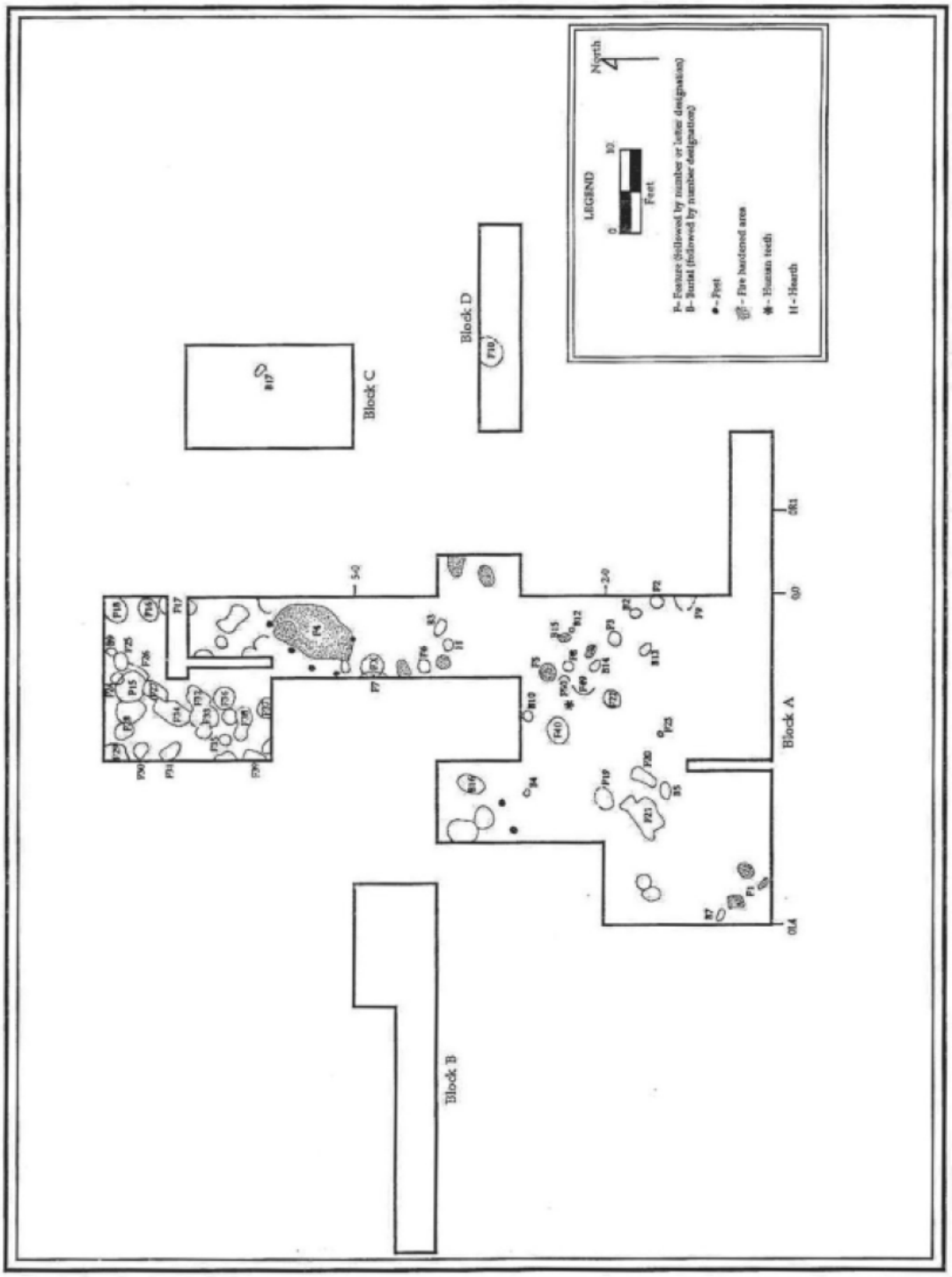

Figure 6. Caldwell's Excavation.
From: (Elliott 1995:65)

Methods

Because Caldwell had very little time to complete his excavations, the methods used to excavate the site were somewhat irregular. Screens were not used to separate artifacts from the dirt, which may affect the species and counts of animal bone. Also, because time was short, excavations were selectively chosen according to areas likely to have the most artifacts. Therefore, some squares were dug only to 18 inches or 24 inches, while others were dug to the subsite level. This may skew comparisons of artifacts between levels. To simplify this, whenever possible, the artifacts of each level were translated into percentages of the total number of lithic, ceramic, or bone artifacts in that level.

Also due to my time limitations, artifacts (with the exception of unmodified bone, unmodified rock, daub, pigments, and soil samples) were only counted, not weighed. Pieces less than ½ inch were not counted, as most of them would have certainly ended up in the unidentified categories.

Finally, to facilitate data entry and analysis, I assigned each provenience of both Caldwell and Miller's excavations a lot number. The lot numbers (in the catalogs of Appendices A and B) were added so that data could be organized and matched to its provenience easily. The first 197 lots were recorded in the original survey of the collection. The 44 lots were proveniences either found hidden within other bags or identified as Lake Springs artifacts later in the analysis process. Miller's catalog has 11 lots, numbered similarly to Caldwell's catalog.

EXCAVATIONS

Carl F. Miller began his archaeological survey in the area soon to be the Clark Hill Reservoir in early 1948. During his survey, he came across a collection of shells partially above ground, approximately 1.5 miles upstream from the construction site of Clark Hill dam itself (Miller 1949). From his first estimate, this was the major excavable site in the affected area of the Savannah River basin, due not only to its collection of artifacts from the Late Archaic period, but also to its minimal plow zone, which had only damaged the first 12 inches of stratigraphy. He described the site as a "fairly large site with a deep midden of shells and other occupational refuse" (Miller 1949). Preliminary testing showed two occupations, one with Late Archaic diagnostic artifacts, including soapstone heating slabs and Savannah River projectile points, and another containing Stallings Island pottery in addition to the previous diagnostic artifacts.

Therefore, in May 1948, Miller excavated two test pits on the site. The first, Pit A, was placed near the southern edge of the site and was ten feet square. The second pit, Pit B, was five feet square and was placed 70 feet north of Pit A (Miller 1949). Field notes and artifacts from this excavation are currently located at Smithsonian Museum Collections in Suitland, Maryland. Both pits were excavated by layers of 6 inches, Pit A to a depth of 4 feet 11inches, and Pit B to a depth of 2 feet 11 inches. Because Miller's field notes and site maps are located at the Smithsonian, and no grid of the site was placed in Lake Springs article in *American Antiquity*, we are not certain of the location of Miller's test pits in relation to the pits later excavated by Caldwell (Miller 1949).

Miller's field notes at the Smithsonian include only two pages in a field notebook, giving only the vague location of the site.

In Pit A, a number of fired areas and one "fire-basin" were found, but according to Miller, no permanent structures were evident, either as house floors or post molds. However, one burial was found in Pit B below the midden, but no depth was recorded. The burial was a that of a 50-60 year old male, lying in the flexed position on its left side, and placed in a "round" grave (Miller 1949).

With Miller's recommendation, and with a provision for additional funds by Congress after the dam had been completed, a more thorough excavation of the midden was undertaken by Joseph Caldwell in August of 1951, just before flooding. Because the funds were not immediately available from Congress, Arthur Kelley transferred $500.00 from University of Georgia funds to cover initial field and labor expenses. However, when half of the excavations had been completed, Congress finally did make the money available to complete the project (Caldwell unpublished field notes at the Georgia Laboratory of Archaeology).

Caldwell began excavations with six field technicians: Gordon Dent, William F. Harris, Ernest W. Morris, Robert Moye, Robert Pollard, and Charlie Williams. In addition to these people, Caldwell also employed Robert Shepard, who may have been in a leadership position in the excavations because he earned $0.15 more per hour than the other six field hands(from $0.85 to $1.00). The first week of pay for the field technicians began September 16, 1951. Per diem expenses began on September 17 and Caldwell's salary began on September 10. Harris, Morris, Moye, and Williams remained on the payroll until November 10. Shepard was paid until December 22, most likely for laboratory analysis consisting of rough sorts and counts of artifacts (Caldwell

unpublished field notes, Georgia Site Files). After excavations at Lake Springs were stopped because of rising water, Caldwell and two unnamed laborers proceeded to Price's Island, where they excavated for three days before it, too, was flooded (Caldwell, field notes at University of Georgia).

Caldwell's excavations consisted of four blocks, designated A through D, totaling 300.7 square yards. Block A was an irregular shaped excavation totaling 224.7 square yards. Block B was a linear trench to the west of Block A, covering 34.4 square yards. Block C was a rectangular block of 27.3 square yards, to the east of the northern-most portion of Block A, and named by Caldwell in his site grid "Charlie's Trench," probably indicating it was overseen by Charlie Williams. Block D was another linear trench to the east of Block A, totaling 14.32 square yards and called "Moye's Pit," and probably overseen and excavated by Robert Moye.

While most of the site was excavated in arbitrary 6 inch levels, occasionally Caldwell could excavate in 3 inch or 9 inch levels. He also sometimes separated portions of a unit by the notations, "A," "B," or "C." While no definitive data has been found yet to clarify what these letters denote, it is my belief that these letters refer to a separation of the natural strata when two or more natural strata were visible in the same arbitrary excavation level.

The grid system used by Caldwell began at a point 0-0 (unlocated on the site) and ran north using the numbers 1-0, 2-0, 3-0, etc. in ten foot intervals. It is also my belief that the southeastern corner of the square was the coordinate each square was numbered by, according to some of Caldwell's field notes (Caldwell, unpublished field notes, Georgia Site Files). To the east, numbers were assigned "R" values (an abbreviation for "Right") to denote their distance from the North-South baseline. So, the number 3R5

would be 30 feet north of the original point and 50 feet east of it. To the west, values were assigned "L" coordinates (an abbreviation for "Left") similar to the "R" coordinates to the East (see figure 6). Why Caldwell chose to use Right and Left instead of East and West is curious, but since his field journal is not available, there is no evidence explaining this decision.

The four blocks of Caldwell's excavations were all dug to varying depths, generally stopping when they reached what was thought to be sterile soil. The plow zone of the site was approximately 12 inches thick, and the undisturbed portion of the site was as deep as 40 inches in some places. In Block A, some portions were dug to 40 inches depth. Block B was excavated to only 18 inches, while Block C was excavated to 40 inches. Block D was excavated to 24 inches. However, it was in Block A that Caldwell decided to dig an additional 36 inches depth near the end of the project and discovered the "Old Quartz Culture," a Middle Archaic component labeled as "subsite" on all bags recorded. Nine units of the "subsite" were dug, all in block A, and all on the original North-South axis, including 1-0, 2-0, and 3-0.

Almost all artifacts and field diagrams from Caldwell's collection are now located at the University of Georgia Laboratory of Archaeology. However, all the burials were sent to the Smithsonian Institution in the 1950's, where they eventually received some examination by Kristin J. Wilson of the University of South Carolina as part of her master's thesis (Wilson 1997). There are 242 separate proveniences located at the University of Georgia, as well as Caldwell's correspondence with the Smithsonian and other University of Georgia faculty concerning the project (namely A.R. Kelly).

FEATURES AND BURIALS

Most of the information about the features and burials mentioned in this section were derived from Daniel Elliott's *Clark Hill River Basin Survey* (Elliott 1995: 64-72). Only in cases where additional information was made available from the analysis of the Lake Spring artifacts will the original report of features and burials by Elliott be deviated from. Some features may have been unidentified because they were not labeled with site number- if the artifacts were diagnostic of the Late Archaic period or did not fit Caldwell's field note descriptions of the artifacts recovered, the features were not included in Caldwell's Lake Springs collection.

Features. During Carl Miller's excavations, located one fire basin feature in Pit A (10 feet by 10 feet). He also reported several small fired areas in pits A and B, but did not give them feature numbers. Caldwell described 51 features and postmolds (labeled A through E). Some of these features were labeled by letter, but we are not sure how they are different from the numbered features and will be listed at the end of the feature section.

Feature 1 was a fired area located at the base of the shell heap and the top of the sand layer. It was located in the southern portion of Square 0L3. No other information was found concerning this feature.

Feature 2 was an intrusive flat-bottomed pit that originated in the top of the shell zone. It was described by Caldwell as a refuse or storage pit which was filled with

humus and then a fire was built in it. It was located in the southeastern quadrant of Square 1-0, adjacent to the profile of the trench. Feature 2 contained 1 unidentified sand-tempered rim sherd, 451.6 grams of unmodified bone, 97.8 grams of unmodified rock, and 45.6 grams of fire-cracked rock.

Feature 3 was a fire pit containing fire-cracked rocks and charcoal. Feature 3 was in the north-central part of Square 1-0. It contained 6 broken projectile points, all of metavolcanic material, as well as 11 flakes of the same metavolcanic rock. It also included 261 grams of fire-cracked rock from the hearth.

Feature 4 was a fired area with post holes associated with it, located in the center of Square 5-0, and filling most of the square, and most likely a structure of approximately 7 feet by 9 feet.

Feature 5 was a large fired area in the northwestern portion of Square 2-0, adjacent to the profile.

Feature 6 was a pit in the southwestern quadrant of Square 4-0.

Feature 7 was a pit partially located on the western profile of Square 4-0, but probably continued in unexcavated Square 4L1.

Feature 8 was a circular pit that contained six complete soapstone perforated cooking slabs. It was in the center of the western half of Square 2-0, approximately 1 foot from the western boundary of the square. It also contained bone and nut fragments. The pit was 8 inches deep.

Feature 9 was a pit located directly on the southeastern corner of Square 1-0 and continuing into the northeastern corner of 0-0. It contained 68.8 grams of modified bone and less than 2.3 grams of daub.

Feature 10 was a circular pit that contained shell in the center and fired areas of clay and sand on each side. Feature 10 was the only feature in Block D, and was in the northeastern corner of Square 3R3. This feature was full of argillite workshop materials, 18 Savannah River point performs and 13 Savannah River metavolcanic points, as well as 2 metavolcanic flakes, 1 quartz drill and a metavolcanic drill. It also included 250 pieces of argillite debitage and seven pieces of quartz, as of yet unlocated in Caldwell's collection. It also yielded one-third bucket of other rocks (bucket size not specified).

Features 11 through 14 are unidentified. No information was found concerning these numbered features, nor were any artifacts recovered in Caldwell's collections and they are unlocated.

Feature 15 was a concentration of stones, a probable hearth, with simple stamped pottery and cord marked pottery and traces of charred wood within it. This feature was within 1 inch of the top of the black layer and was overlain by 15 to 18 inches of light brown silt in the eastern edge of Square 7L1.

Feature 16 was a circular pit with a cluster of tumbled rocks along one edge and fired red sand on the opposite side. The pit was 7 inches deep and had a flat bottom. Feature 16 appeared as dark brown spots in underlying light tan sand 3 inches below the bottom of black layer in the southeastern corner of Square 7-0. On the unit walls, however, it appeared that these pits originated 3 feet higher. It contained two Stallings Island Plain sherds and one Stallings Island Stab-and-Drag sherd, as well as 19 flakes of varying materials, and moderate amounts of unmodified rock, fire-cracked rock, and unmodified bone.

Feature 17 was a circular to oval pit and appeared as dark brown spots in underlying light tan sand 3 inches below the bottom of black layer. Feature 17 was adjacent to and directly south of Feature 16 in the southeastern quadrant of Square 7-0. It contained one chert Savannah River point 4 quartz and 1 metavolcanic flake, and slightly more than 100 grams of unmodified bone.

Feature 18 was a circular basin-shaped pit 8 inches deep, and also appeared as dark brown spots in underlying light tan sand 3 inches below the bottom of black layer. A large stone mortar illustrated in the field notes was contained in the feature fill. It was located in the northeastern quadrant of Square 7-0, and may have continued into the adjacent but unexcavated squares of 7R1 and 8-0.

Feature 19 was a circular or oval large pit that appeared in the light brown sand 3 to 8 inches below the bottom of the shell midden. It was located on the dividing line between squares 1L2 and 2L2, in the center of the line separating the two squares.

Feature 20 was a subrectangular pit that appeared in the light brown sand 3 to 8 inches below the bottom of the shell midden. It was located on the eastern side of Square 1L1, with its easternmost edge approximately 1 foot from the side of the square. It contained 11 metavolcanic flakes, slightly more than 2 grams of the pigment limonite, and 87.4 grams of bone.

Feature 21 was an irregular shaped area of distinct brown soil, possibly a stump. It was located in the northwestern quadrant of square 1L1, and was 1 foot 8 inches deep at its deepest point. The feature appeared in the light brown sand 3 to 8 inches below the bottom of the shell midden. It contained 5 metavolcanic points-1 Savannah River point and the other 4 unidentified points, and a Savannah River perform in addition to

12 flakes. It contained large amounts of unmodified rock (844.1 g), fire-cracked rock (580.8 g), and unmodified bone (780.7 g).

Feature 22 was a circular pit containing some shells but little other material. This feature originated in the brown sand zone below the shell midden between squares 1L2 and 2L2, on the eastern portion of the divider between these two squares.

Feature 23 was a circular pit, 4 inches deep, containing a deposit of hackberries. It was located at the base of the brown sand zone below the shell midden in the western-central area of Square 1L1. Several large rocks, including a mortar fragment, were excavated from near Feature 23, but were not saved.

Feature 24 consisted of rocks and a fired area in the northern edges of Square 7-0 and Square 7L1.

Feature 25 was a pit in the northwestern quadrant of Square 7-0. It contained 1 Stallings Island Plain sherd, 2 Savannah River points, 39 flakes and quartz shatters, as well as unmodified rock, fire-cracked rock, unmodified bone, and daub. It also contained 2 soapstone vessel fragments, a bone awl, and two unidentified bone tools, one of them incised.

Feature 26 consisted of bone points in a cluster of rocks in the western edge of square 7-0. It also contained 13 Stallings Island sherds of varying decorations, 1 metavolcanic Morrow Mountain-style point, 2 quartz Savannah River points, and a broken chert point as well as 30 flakes. Small amounts of unmodified rock, fire-cracked rock, and bone were in Feature 26. While Caldwell records these bone points, they have not been located in his collections.

Feature 27 was also a pit in the eastern edge of Square 7L1. It contained 2 Stallings Island plain sherds, 30 flakes, and a small amount of unmodified rock.

Feature 28 consisted of two overlapping pits 3 feet below the top of the tan sand layer. The two overlapping pits were located in the northern and northeastern quadrant of Square 7L1. It contained 4 Stallings Island plain, 4 stab-and-drag, and 1 unidentified sherd, 3 Savannah River points, and 3 broken points in addition to 11 flakes and more than 800 grams of unmodified rock.

Feature 29 was an irregular shaped pit located 2 feet, 5 inches below the top of the tan sand in the northwestern corner of Square 7L1. Both features had vertical sides and flat bottoms.

Feature 30 was an oval pit 2 feet below the top of the tan sand in the western profile of Square 7L1, approximately 1 foot south of Feature 29. It had vertical sides and a flat bottom. An upright flat stone was located in a higher area between Feature 30 and 31 that seemed to be enclosed in a shallower pit. Feature 30 contained 7 Stallings Island sherds of varying decorations, 1 metavolcanic Savannah River point, 6 flakes, and more than 300 grams each of rock, fire-cracked rock, and unmodified bone.

Feature 31 was a subrectangular pit 2 feet below the top of the tan sand in the southwestern quadrant of Square 7L1. It had vertical sides and a flat bottom. However, it was labeled by Caldwell “Pit 2, Sq. 3L2” on the bag. It contained 9 Stallings Island sherds of varying decorations, 6 PPKs (3 Savannah River and 3 unidentified broken), 7 flakes, and 7 bone tools. Four of these bone tools are unidentified, 2 are abraders, and 1 is possibly a "fid" a tool used in netmaking to separate cords of the net.

Feature 32 was a subrectangular pit 2 feet, 6 inches below the top of the tan sand in the northeastern quadrant of Square 6L1. It had vertical sides and a rounded bottom. It had 2 Stallings Island Plain and 4 stab-and-drag sherds, 1 UID quartz point, 14 flakes, and unmodified rock and bone. This feature overlapped with Feature 33 and 34.

Feature 33 was two overlapping oval pits 2 feet below the top of the tan sand and adjacent to Feature 32 in the northeastern quadrant of Square 6L1. It had vertical sides and a flat bottom. It contained 1 Stallings Island Plain and 2 stab-and-drag sherds, 6 Savannah River and 1 unidentified point, 24 flakes, 1 soapstone vessel fragment, and 6 bone tools, including 2 awls and 4 unidentified tools. It also contained unmodified rock (177.4 g) and unmodified bone (339.4 g) including 3 charred pieces of bone.

Feature 34 was an irregular shaped pit 6 inches below the top of the tan sand in the southern half of Square 7L1 and continuing slightly into the northern edge of Square 6L1. It had sloping sides and a flat bottom. It contained 1 Stallings Island stab-and-drag sherd and 7 flakes.

Feature 35 was a circular pit 3 inches below the top of the tan sand in the northwestern quadrant of Square 6L1. It had sloping sides and a flat bottom.

Feature 36 was a circular pit 2 feet 6 inches below the top of the tan sand approximately 2 feet from the eastern edge of square 6L1. It had sloping sides and a rounded bottom. It contained 5 Stallings Island stab-and-drag sherds, 1 Savannah River point, 2 flake points, moderate amounts of unmodified rock and bone, and 2 unidentified bone tools.

Feature 37 was an oval pit that began 4 inches above the sand went 3 inches below the sand in the southeastern quadrant of Square 6L1, and the edge continuing into Square 5L1. It had burned areas on the sides and flattened bottom. It contained rocks, as well as 2 unidentified sand-tempered sherds, 13 flakes, minimal amounts of unmodified rock, bone, and shell, 1 bone awl, and 1 unidentified bone tool.

Feature 38 was an irregular shaped pit (probably two or more overlapping pits) that originated 2 feet 6 inches below the top of the tan sand in the south-central area of Square 6L1. It had vertical sides and a flat bottom.

Feature 39 was an irregular shaped pit on the western edge of Square 6L1, and probably continuing through the profile into the eastern edge of Square 6L2. It contained 2 flakes, 1 quartz shatter, and 2 cores, as well as small amounts of rock, bone, and shell.

Feature 40 was a circular pit 2 feet 2 inches in diameter, 9 inches deep, with a flat bottom. The pit starts 2 feet 10 inches below the top of the shell layer in the northeastern portion of the center of Square 2L1. The feature appeared in the sand layer at the base of the shell. It contained 4 sand-tempered unidentified sherds, 1 Stallings Island plain sherd, 1 quartz biface and 3 flakes, small amounts of rock, but 244.0 grams of bone, and two unidentified bone tools, one of them incised.

Features 41 through 48 are unidentified. No other information was found concerning these features and no artifacts were found in Caldwell's collection, and no map location was recorded. Several pit features were given letter designations and these may be those.

Feature 49 was a large circular or oval pit on the easternmost edge of Square 2L1. The pit continued into the excavation wall and a portion of it was unexcavated. No artifacts from this feature were located in Caldwell's collection.

Feature 50 was a prepottery pit containing much charcoal and bones. The pit originated in the shell midden and extended 20 inches below the bottom of the shell.

A feature labeled "F-X" appeared in light sand below the shell in the northeastern quadrant of square 4-0 adjacent to the western wall. It consisted of fired

red clay and black ash inside. No other information was found concerning this feature. It contained 2 Stallings Island plain sherds, 1 unidentified quartz point, 1 biface and 3 flakes, unmodified rock, fire-cracked rock, and unmodified bone. It also contained 5 bone tools, including 1 awl, 1 pendant, 1 "fid" for netmaking, and 2 unidentified tools.

Pit M was located in Square 6L1 between Features 36 and 38. It was 2 feet in diameter, but no notes were taken about this feature by Caldwell. In Pit M, 2 Savannah River projectile points, 1 Stallings Island stab-and-drag, 1 unidentified Stallings Island rim, and 5 debitage artifacts (2 quartz shatter, 2 metavolcanic flakes, and 1 quartz flake) were identified.

In Square 6-0, 7 postmolds, three labeled A, B, and C and the others unlabeled, were drawn by Caldwell in his field notes, yet no artifacts were found. These features were 3 ½ feet below the top of the block. A was in the southwestern quadrant of the square, B was in the southeastern quadrant 7 inches deep on its western side and continuing to a depth of 1 foot 11 inches on its eastern side and C was 4 inches deep.

Pit W was located in the western edge of Square 3L2. It was a 6 inch deep flat pit containing 7 Stallings Island Plain sherds, 144 grams of unmodified bone, 303 grams of unmodified rock, 13 quartz flakes, 1 metavolcanic flake, and 1 metavolcanic scraper.

Pit Y was located on the eastern edge of Square 3L2, and began at the base of the shell layer. It is approximately 18 inches deep. No artifacts were found from this pit.

Pit Z was a rounded pit beginning at 6 inches below the bottom of shell in Square 3L2, adjacent to the southern edge of Pit W. It contained 1 metavolcanic biface, 55.6 grams of unmodified rock, 81.9 grams of unmodified bone, and 5.2 grams of daub.

Pit L was located on the western edge of square 6L1, and “all features in this square were at the level of or slightly below the top of virgin tan sand” (Caldwell unpublished field notes, 1951). It contained 1 Stallings Island stab-and-drag rim, 1 quartz flake, 1 quartz shatter, 59.5 grams of unmodified rock, ad 65.8 grams of bone.

Human Burials. Eighteen human burials (representing 19 total individuals) were excavated at Lake Springs. Eighteen were excavated by Caldwell and one by Miller. Frank Roberts and Caldwell arranged for seventeen burials to be shipped to Washington for analysis by Marshall T. Newman (Caldwell 1951). The skeletal material from the Lake Springs was not examined during the present study, but Elliot found copies of the skeletal catalogue sheets at the SCIAA, site files in Columbia, South Carolina. The sample includes five males, one possible male, three females, and four children (Wilson 1997).

Sketches of individual burials are included in Caldwell's field notes. Several burials were photographed and are on file at UGA, but the photographs were unlabeled as to which burial they correspond with. At least one of the burials post-dates the Stallings Island occupation, as evidenced by the Mississippian period Savannah Complicated Stamped pottery found in the fill. Since there is no shell in the fill of some burials, they may predate the shell midden. The burial goods present include several Late Archaic diagnostic artifacts including atlatl weights, large stemmed projectile points, red ochre, and decorated bone tools. This section was also derived from Elliott’s report on the Clark Hill Reservoir (Elliott 1995).

The first burial excavated on the site by Miller was a flexed individual in a round pit, but no location was listed. There were no associated grave goods, and the

burial was considered to pre-date the overlying shell midden. It was briefly described in Miller (1949). The burial contained one individual identified as an old male, 50 to 60 years of age, with pronounced arthritis.

Caldwell's Burial 1, actually the second burial found at the site, was a scatter of disturbed bones in the top 6 inch layer that included an atlatl weight fragment, but no location was listed. This burial probable dates to the latest period of Late Archaic occupation at Lake Springs. No skeletal analysis was conducted on this individual.

Burial 2 contained a large portion of a soapstone atlatl weight, suggesting a Late Archaic age. This burial was in the top of the shell layer in the northeastern quadrant of Square 1-0 and is approximately 2 feet from the eastern wall. It appeared to have been broken up by trampling. The individual was identified as a female more than 25 years of age.

Burial 3 contained a disturbed human burial (flexed) found in the 12 to 18 inch level in the northern edged of Square 3-0. No grave goods were reported. The individual was identified as an infant less than 1.5 years of age.

Burial 4 was a bundle burial the northeastern quadrant of Square 2L2. It was located on the northern edge of the square adjacent to Square 3L2. Field records note that it contained beads (disc shaped and larger types) and a bear canine pendant. A small box of uncatalogued grave goods from this burial was located at the Smithsonian Institution Museum Collections and included more than 100 small cylindrical and spherical marine shell beads and four carnivore canine teeth. The box was labeled "Lake Springs Burial 4 Necklace Sq3R3 18-24 inches. This suggests that the burial was found in the 18 to 24 inch level. The individual was identified as an infant less than 1.5 years of age.

Burial 5 was a semi-flexed interment located immediately below the top of the shell midden in the center of Square 1L2. Two bone awls and a broken inverted Savannah Complicated Stamped pottery vessel were recovered from near the skull region. The type of pottery vessel, however, was not recorded. Traces of a shallow pit 6 to 8 inches deep were observed. The individual was identified as an old adult female.

Burial 7 was located in the top of the shell layer on the western wall of Square 0L3. It is approximately 4 feet from the northwestern corner of the square. It was partially cut away by the excavators and included a skull and long bone. No grave goods were reported. No skeletal analysis was conducted on this individual.

Burial 8 was tightly flexed in an oval-shaped pit in an unrecorded location. It contained many shell beads on and under the lower trunk, especially in the pelvis area. The beads are housed at UGA, but were unwashed and are still located in a large bag of dirt which contains one of the only soil samples from the site and could not be properly analyzed at this time. The main shell body was only 6 inches thick above this burial. Between the shell body and the top of skull was a layer of dark brown stained soil 6 inches thick. The top of the skull was 3 feet 2 inches below ground surface. The individual was identified as an old adult male.

Burial 9, a small semi-flexed interment, appears to have been laid in the side of an earlier pit after it was partly filled. It was located on the northern wall of Square 7-0, approximately 4 feet from the northwestern corner of the square. The skeleton rested on a slight ledge approximately halfway down in the pit. No grave goods were reported. The individual was identified as a newborn infant.

Burial 10, a tightly flexed or bundle double burial in a subcircular pit, located on the northern edge of Square 2L1. It contained several dozen small shell beads. One

individual was identified as a female more than 25 years of age, while the other was a male less than 25 years of age.

Burial 12 was a bundle burial (child) located 5 inches above the sub site layer suggesting a Late Archaic age. It was located in Square 2-0, slightly southeast of the square's center. No grave goods were reported. This individual was identified as a child between 4 and 5 years of age.

Burial 13, consisting of long bones and a skull, had traces of red ochre above the skull at two locations. This burial was located on the "sub site layer," slightly west of the center of Square 1-0. The red ochre was traceable 6 inches above the sub site layer. A Late Archaic age was inferred. No skeletal analysis was conducted on this individual.

Burial 14 was a semi-flexed interment that contained a large contracting stemmed quartz Late Archaic projectile point near the body. This burial was intrusive into the sub site layer, located in the extreme southwestern corner of Square 2-0. This individual was identified as a young adult male greater than 25 years of age.

Burial 15 contained an atlatl weight and human bone fragments 6 inches below the base of Burial 12 on the sub site layer in the center of Square 2-0. It was intrusive from above. A Late Archaic age was inferred. No skeletal analysis was conducted on this individual.

Burial 16 was a semi-flexed individual in an oval pit slightly east of the center of Square 3L2. It was described as "Late" because of Caldwell's observation of "some later pottery." The top of the burial was about 2 inches below the top of the shell heap. This burial probably dates to the Woodland or Mississippian Period. This individual was identified as a possible male of young adult age.

Burial 17 was a tightly flexed individual buried in a semi-seated position. This is the only burial in Block C, and was less than one foot from the southern edge of Square 6R3. No grave goods were reported. This individual was identified as an old adult male with numerous pathologies.

CERAMICS

Of 1696 pottery sherds recovered in Caldwell's excavation, 88.7 percent are Stallings Island styles of ceramics from the Late Archaic period (Appendices F &G). 1398 of the sherds are body sherds, and 298 are rim sherds. Ceramic types identified include Stallings Island Plain, Stallings Island Incised, Stallings Island Stab-and-Drag, Stallings Island Simple Stamped, Stallings Island Zone Punctated and Incised, Thom's Creek Plain, Thom's Creek Punctated, Thom's Creek Incised, and Thom's Creek Stab-and-Drag. Small amounts (<15 sherds per type) of Deptford Fabric Marked, Deptford Simple Stamped, Savannah Complicated Stamped, and Cartersville Check sherds were found. Sand tempered sherds (Thom's Creek, Deptford, Savannah, and Cartersville) account for 11.3 percent of the collection. With the exception of 12 fiber tempered sherds all found in the same square of the subsite and 2 sherds in the 30-36inches level, fiber tempered pottery was found primarily in the top five 6 inch levels.

In this section, pottery will be discussed according to the six inch levels, primarily those dug by Caldwell. In the calculation of pottery sherds by levels, only proveniences dug in six inch levels were considered. 1312 sherds were included in these six inch levels, or 79.4 percent of the total ceramic collection. Ceramics from Square 0-0 at the depth 3-9 inches were not considered because this is the only square not dug in levels of 0-6 inches, 6-12 inches, etc. and would confuse the results. Also, no ceramics from features, burials, or proveniences at unlabeled depths were used in this analysis.

Due to time constraints, Caldwell did not dig the same number of squares at each level. While he dug every square to the 0-6 inch level, as time passed, he dug fewer squares of each depth, culminating with the digging of only one square at the 36-40 inch

depth. However, when he discovered the subsite, a total of nine squares were excavated to this level. Therefore, it is difficult to compare counts of sherds between levels. To simplify, most figures comparing depths use percentages of each type of pottery in relation to the total number of sherds found at that level.

Level 1: 0-6 Inches

In Level 1, 616 sherds were recovered. 61.0 percent of these sherds were Stallings Island fiber-tempered varieties. Another 3.0 percent were Thom's Creek sherds from the very Early Woodland period. However, this level has the more visible components than any other depth. Deptford, Cartersville, Savannah, and Lamar varieties were observed in small numbers (< 10 sherds each). More sherds were recovered at the 0-6 inch level than any other level. Of the Stallings Island sherds, 43.9 percent are plain, 2.6 percent are unidentified, and 53.5 percent are decorated types. The most common decorative type for Stallings Island pottery is the stab-and-drag pattern created by punctuating the clay with cane from an angle, which accounts for 25.3 percent of the ceramics at this level.

Level 2: 6-12 Inches

Level 2 had a total of 434 sherds. Of these 434 sherds, 91.7 percent are Stallings Island styles, 2.5 percent are Thom's Creek styles, and 5.7 percent are unidentified sand or grit tempered ceramics, presumably from the Woodland and Mississippian periods, and one Mississippian Savannah Complicated Stamped sherd. Of the 398 Stallings Island sherds, 45.2 percent are plain, 3.5 percent are unidentified, and 51.3 percent are decorated styles (see Figures 7 and 8). Of these Stallings Island decorated styles, stab-

and-drag is the most common, composing 26.5 percent of all sherds at this level, and 28.8 percent of the Stallings Island pottery at this level. As expected, Level 2 had fewer sand-tempered ceramics than Level 1, probably representing the first unplowed level of the site.

Level 3: 12-18 Inches

Level 3 contained a total of 156 body sherds and 27 rim sherds for a total of 183 sherds. Of these, 96.2 percent are Stallings Island sherds, 2.7 percent are Thom's Creek sherds, and 12 percent are unidentified sand or grit tempered sherds, almost all plain. 60.2 percent of the Stallings Islands sherds at this level are plain, 35.8 percent are decorated vessel types, and 4 percent are unidentified (see Figures 7 and 8). Of the decorated vessel types, 66.7 percent are stab-and-drag, 17.5 percent are incised, and 11.1 percent are punctuated.

Level 4: 18-24 Inches

Level 4 shows a sharp decrease in the number of sherds recovered, probably due to the smaller number of proveniences dug at this level, a 482 percent decrease from the 12-18 inch level. However, this may also be due to the later age of this level, possibly representing a transition from a group less dependent on pottery. At this level, Stallings Island Plain and stab-and-drag sherds continue to dominate the pottery assortment, with an near equal amount of each, but less of all other Stallings Island decorative types (see Figure 7).

While sand tempered sherds continue to appear in this level, the number of sand tempered sherds grows increasingly smaller, suggesting that this level is almost

completely within the Late Archaic component. Other notable changes in this level include the decrease in rims, composing only 13.2 percent of the pottery from Level 4, and the absence of any Thom's Creek wares.

Level 5: 24-30 Inches

In Level 5, 26 sherds were recovered, with only 1 sand tempered sherd and the rest from the fiber-tempered Stallings Island styles. 48 percent of the Stallings Island styles were plain, with another 28 percent unidentifiable. Therefore, it is clear in this level that most pottery is probably plain wares from some the earliest pottery making at the site.

Level 6: 30-36 Inches

In Level 6, only 6 sherds were found, making the collection too small to make any solid statistical assumptions. 5 of the 6 sherds in this level were stab-and-drag, and the other sherd was plain.

Level 7: 36-40 Inches

No pottery was found at this level.

Level 8: Subsite

While 8 sherds were found at this level, they likely were moved there by tree roots, rodent burrowing, or some other purpose, since all other aspects of this level suggest it was a Middle Archaic occupation.

Depth	SI	SI	SI	SI	SI	SI	SI	TC	TC	TC	TC	ST	ST	D	D	Sav	Totals
	PL	Punc	Inc	Punc/Inc	SS	S&D	UID	PL	Punc	Inc	S&D	UID	PL	FM	SS	CS	
0-6	236	7	14	1	10	155	14	8	1	1	6	45	13	1	1	1	514
6-12	180	2	10	1	3	115	14	1	0	0	4	22	0	0	0	1	353
12-18	88	7	10	0	2	35	7	0	0	0	2	5	0	0	0	0	156
18-24	14	1	2	0	1	10	2	0	0	0	0	4	0	0	0	0	34
24-30	11	1	1	0	1	7	0	0	0	0	0	1	0	0	0	0	22
30-36	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Subsite	3	5	0	0	0	4	0	0	0	0	0	0	0	0	0	0	12
Totals	532	23	37	2	17	327	37	9	1	1	12	77	13	1	1	2	1092

Figure 7. Counts of Body Sherds by Depth and Pottery Type

Depth	SI	SI	SI	SI	SI	SI	TC	TC	TC	ST	Totals
	Pl	Punc	Inc	SS	SI S&D	UID	Pl	Punc	S&D	UID	
0-6	52	5	3	3	30	1	0	0	0	8	102
6-12	37	1	1	0	33	0	1	1	4	3	81
12-18	18	0	1	0	7	0	1	0	0	0	27
18-24	1	0	0	0	3	0	0	0	0	0	4
24-30	1	0	1	1	2	0	0	0	0	0	5
30-36	0	0	0	0	1	0	0	0	0	0	1
Subsite	0	0	0	0	0	0	0	0	0	0	0
Totals	109	6	6	4	76	1	2	1	4	11	220

Figure 8. Counts of Rim Sherds by Depth and Pottery Type

Abbreviations:

SI- Stallings Island **ST- Sand Tempered** **Sav- Savannah**
TC-Thom's Creek **D- Deptford**

PL- Plain **Punc- Puntated** **Inc- Incised**
SS- Simple Stamp **S&D- Stab-and-Drag** **UID- Unidentified**
RF- Red Filmed **CS- Complicated Stamped**

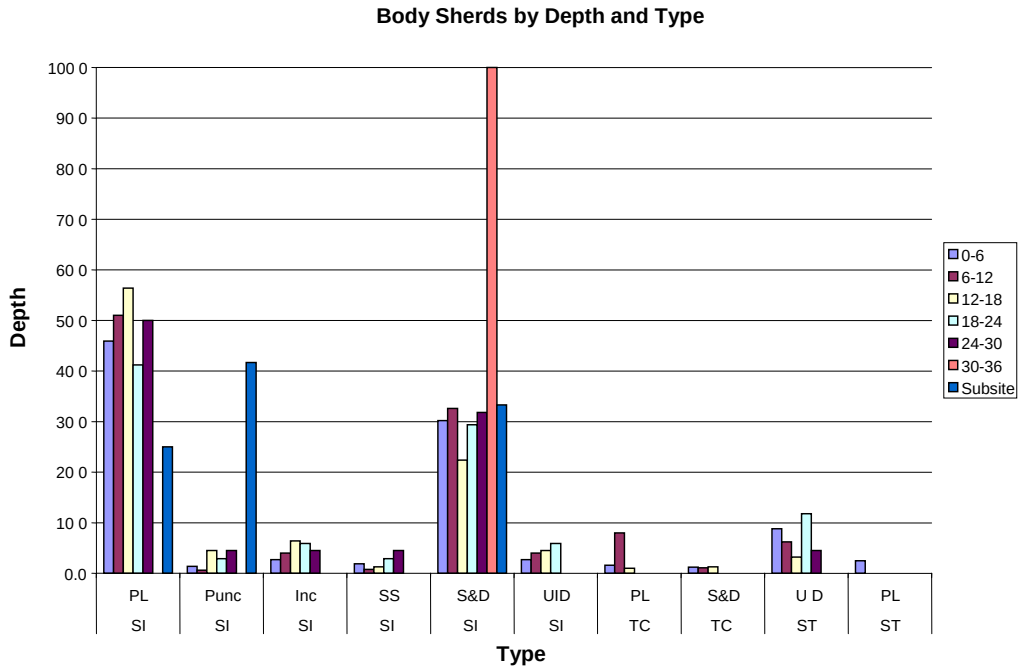

Figure 9. Percentage of Body Sherds by Depth and Type

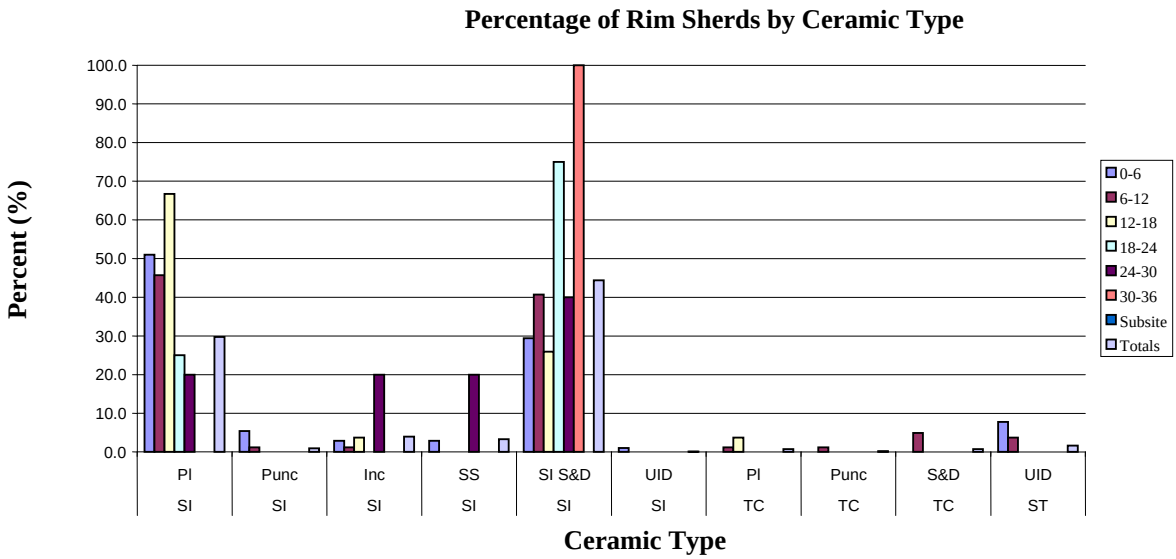

Figure 10. Percentage of Rim Sherds by Depth andType

LITHICS

Caldwell's excavations recovered 587 Projectile Point/Knives (PPKs) and 773 other modified lithics. Of these 1360 lithic artifacts, 486 (35.7 percent) are quartz, 131 (9.6 percent) are chert, and 742 (54.6 percent) are of metavolcanic rock, mostly argillite. 57 percent of the PPKs can be identified as Savannah River Stemmed projectile points (335 PPKs), and another 24.5 percent are unidentified or broken (144 PPKs).

PPKs	MM-Q	MM-Ch	MM-Meta	SR-Q	SR-Ch	SR-Meta	Other-Q	Other-Meta	UID-Q	UID-Ch	UID-Meta	"Blank"	Totals
0-6	3	0	1	38	13	38	4	1	21	5	6	4	134
6-12	1	0	0	14	12	30	3	0	7	1	8	6	82
12-18	3	1	0	9	4	30	0	3	9	0	12	16	87
18-24	2	0	0	1	0	6	1	1	1	0	3	3	18
24-30	2	0	0	1	4	5	0	0	0	0	1	3	16
30-36	4	0	0	2	4	11	1	1	1	0	4	6	34
36-40	0	0	0	3	0	1	0	0	0	0	0	0	4
Subsite	0	0	0	0	0	0	0	0	1	0	0	0	1
Totals	15	1	1	68	37	121	9	6	40	6	34	38	376

Figure 11. Number of PPKs by Material and Depth, and Type

Depth	Bif	Bif	Bif	Drill	Drill	Drill	Fl	Fl	Fl	Sh	Core	Core	Core	Scr	Scr	Scr	Totals
	Q	Ch	Meta	Q	Ch	Meta	Q	Ch	Meta	Quartz	Q	Ch	Meta	Q	Ch	Meta	
0-6	2	1	3	1	0	1	14	15	9	5	3	1	3	12	0	1	71
6-12	0	0	1	0	0	0	6	10	13	2	7	0	0	3	0	0	42
12-18	0	1	0	0	1	2	5	4	21	3	2	0	0	1	0	5	45
18-24	0	0	1	0	0	0	3	0	16	0	0	0	1	0	0	1	22
24-30	0	0	0	0	0	0	0	0	20	1	0	0	1	0	0	0	22
30-36	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	3
36-40	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Subsite	0	0	0	0	0	0	22	0	1	0	5	0	0	0	0	0	28
Totals	2	2	5	1	1	3	51	29	82	11	18	1	5	16	0	7	227

Figure 12. Number of Tool Types by Material, Depth and Type

Abbreviations:

MM- Morrow Mountain
SR- Savannah River
UID- Unidentified
Q- Quartz
Ch- Chert
Meta- Metavolcanic
Bif- Biface
Fl- Flake
Sh- Shatter
Scr- Scraper

Level 1: 0-6 Inches

The first level of Caldwell's excavations contains 134 PPKs. Of these, almost 2/3 can be identified as Savannah River stemmed projectile points. Interestingly, exactly the same number of quartz and metavolcanic PPKs were recorded (38 each), and another 13 Savannah River stemmed PPKs (9.7 percent) were made of Coastal Plain tan chert (see Figure 11). Only one other point style was recorded, the Morrow Mountain point. Four of these points were analyzed from the 0-6 inch level, three made of "cold-cream" quartz (Scott Jones, personal communication), and one made from metavolcanic material. Also, four Savannah River performs, referred to as "blanks" because they are unfinished slabs in the vague shape of a Savannah River point, were found at this level. "Blanks" represent only 3.0 percent of the PPKs analyzed at this level, yet from the 12-18 inch to the 30-36 inch levels, these blanks make up a significantly larger portion of the artifacts (>16.7 percent). This may be simply because the fewer artifacts that were recovered in lower levels skew the artifact counts, or it may suggest more exploitation of metavolcanic stone and finishing of projectile points.

Of the other flaked stone analyzed, 53.5 percent were debitage flakes from tool manufacture. According to Scott Jones, at many of the larger flakes have use-wear on the edges, implying use as cutting tools. Also, a moderate number of unifacial scrapers were found (15), which equals 18.3 percent of the total flaked stone artifacts analyzed at this level. This is a higher percentage of scrapers than are found at only other level.

Level 2: 6-12 Inches

Level 2 contains 82 PPKs, with similar percentages of Savannah River stemmed points and Morrow Mountain points as Level 1. Curiously, the percentage of PPKs made

from metavolcanic material seems to increase by 6.0 percent, however, and the number made from quartz decreases by 6.0 percent (see Figure 15). Also, the percentage of Savannah River preforms more than doubles from the amount found in Level 1, so more of the PPKs are unfinished at this level.

According to Figure 15, percentage of PPK material by depth, an interesting trend arises, with an increased use of metavolcanic materials relative to depth below the surface, until Level 4, 18-24 inches. In Level 2, 6-12 inches, more than 50.0 percent of the PPKs are of metavolcanic materials. In Level 3, 12-18 inches, this rises to more than 70.0 percent of PPKs. Level 4, 18-24 inches, contains more than 70.0 percent metavolcanic PPKs. At this point, the use of metavolcanic material takes a slight drop from 72.0 percent to 58.0 percent at Level 5, 24-30 inches, yet rebounds at the 30-36 inch level to 62.0 percent. Also, from Levels 1 to 5, quartz use decreases steadily, but increases from Levels 5 to 8. Chert remains sporadic, never making up more than 25.0 percent of the PPKs in a level, with the exception of Level 4, 18-24 inches, yet chert is present at each level to the depth 30-36 inches.

Corresponding to the higher number of metavolcanic PPKs, a higher number of metavolcanic debitage flakes are documented, jumping from 12.7 percent of the chipped stone tools in Level 1 to 30.1 percent of chipped stone tools in Level 2. Only 42 chipped stone artifacts were found in Level 2, with flakes, cores, and quartz shatter making up the majority of the lithics. Again, the trend of decreasing quartz and increasing use of metavolcanic stone is evident in Figure 16, which shows the percentage of lithic materials found at each level.

Level 3: 12-18 Inches

In Level 3, an interesting trend arises. Even though fewer squares of this level were dug than Levels 1 and 2, a higher number of PPKs were found in this level than in Level 2. 87 PPKs were found in Level 3, again more than 1/3 of them Savannah River stemmed points of metavolcanic material. The number of Morrow Mountain points increased slightly from three in Level 1 and one and Level 2, to four in Level 3(see Figure 11). Also, the number and percentage of Savannah River preforms almost triples between Levels 2 and 3.

The number of flaked stone tools found in Level 3 also increases. Figure 14 again shows a rise in the percentage of flakes found, which corresponds to the higher number of PPKs found, and an increase in the number and percentage of drills likely used to perforate soapstone slabs. The trend of less quartz and chert and more metavolcanic material continues in Level 3. Oddly, the number and percentage of quartz cores increases, which suggests that quartz is still being used regularly, although the debitage of these exhausted cores is not evident at this level.

Level 4: 18-24 Inches

Level 4 contained only 18 PPKs. This is likely because of a significant drop in the number of squares dug at this level, but again just over 1/3 of the PPKs are Savannah River stemmed points. Another two points are quartz Morrow Mountain points, but almost half the points in this level are broken or unidentifiable. The percentage of Savannah River preforms is almost identical to the 12-18 inch level. More than 2/3 of the PPK materials are metavolcanic, and slightly more than 25.0 percent are quartz- no chert points were identified.

There is also a significant drop in the number of other flaked stone artifacts found in Level 4. Only 22 artifacts were identified, 86.3 percent of them debitage flakes. No chert artifacts were found, and more than 85.0 percent of the artifacts were metavolcanic materials.

Level 5: 24-30 Inches

Only 16 PPKs were found at this level, yet more than 62.0 percent of these PPKs were Savannah River stemmed points. Interestingly, while no chert points were found in Level Four, Savannah River stemmed points made of chert compose 25.0 percent of the PPKs in Level 5 (see Figure 13). Also, the decline in the number of quartz points continues, a trend which is similarly followed by the other chipped stone lithic artifacts.

Flaked stone artifacts in Level 5 are all primarily waste of point making. Twenty of the 22 artifacts are metavolcanic debitage flakes, while the other two, a shatter of quartz and an exhausted quartz core also suggest tool-making. No chert flakes were found to imply that chert points found at this level were made in situ.

Level 6: 30-36 Inches

While the number of squares dug at this level decreases, the number of PPKs found in these squares unexpectedly more than doubles from the numbers in Level 5. As with most levels of the site, the percentage of Savannah River stemmed points remains at approximately 1/3 of the points recorded. The number of chert Savannah River stemmed points decreases to less than 12.0 percent of the PPKs and quartz points continue to decrease in use. The number of Morrow Mountain points found are about 12.0 percent of

the total PPKs, which seems to remain constant throughout Levels 4, 5, and 6, and nearly all of these Morrow Mountain points have been made of quartz.

The number of chipped stone artifacts continues to dwindle, and only three are recorded in this level, all of which are debitage from tool making. Curiously, while flakes are the primary artifacts, PPKs are the only tools found. The absence of drills may correspond to the less use of soapstone slabs (see Figure 17), since is may be that drilling holes in soapstone way the major use of drills in this period, and only three soapstone slabs were found.

Level 7: 36-40 Inches

Only four PPKs were found at this level, all of them Savannah River points. While the percentage of quartz points had been steadily dropping up to this point, three of the four points found are quartz, and the other metavolcanic. It should be noted that only one square was dug at this level, which may explain the low artifact counts, and that there is only one other chipped stone artifact in Level 7, a metavolcanic flake. Low artifact counts in this level probably reflect that only one square was dug, rather than a decline in stone tool usage. No soapstone slabs or vessels were found in this level.

Level 8: Subsite

This level begin approximately 3 feet below Level 7, and according to Caldwell (1953) makes up the "Old Quartz Culture" component of the site, later renamed Morrow Mountain (Coe 1964). All artifacts of this level except one are quartz, and consist of 28 flaked stone artifacts. One unidentified broken quartz PPK was found at this level, and 22 quartz flakes and five cores were found in Caldwell's collection received from

Tallahassee. Already located in the UGA Laboratory of Archaeology were 14 other quartz artifacts, documented separately because they were delineated from the main collection. These artifacts included nine scrapers and four unidentified bifaces.

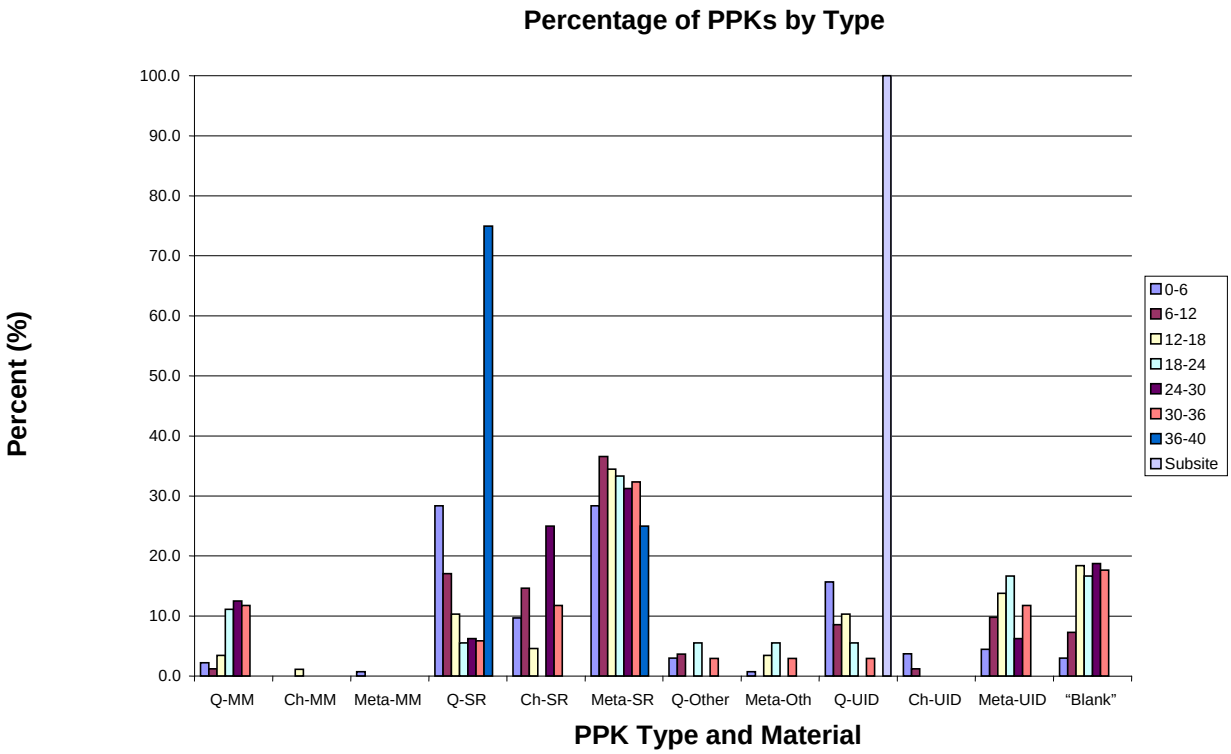

Figure 13. Percentage of PPK Materials and Type by Depth

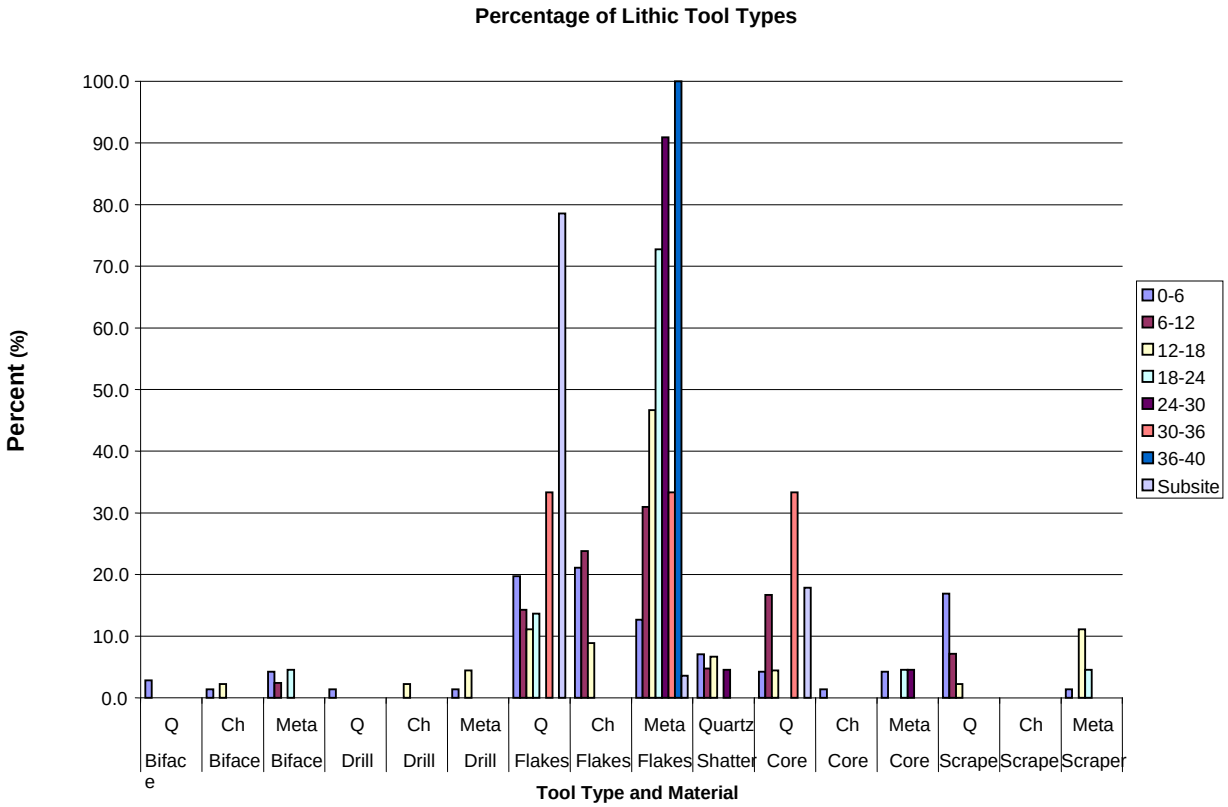

Figure 14. Percentage of Tool Types by Material and Depth

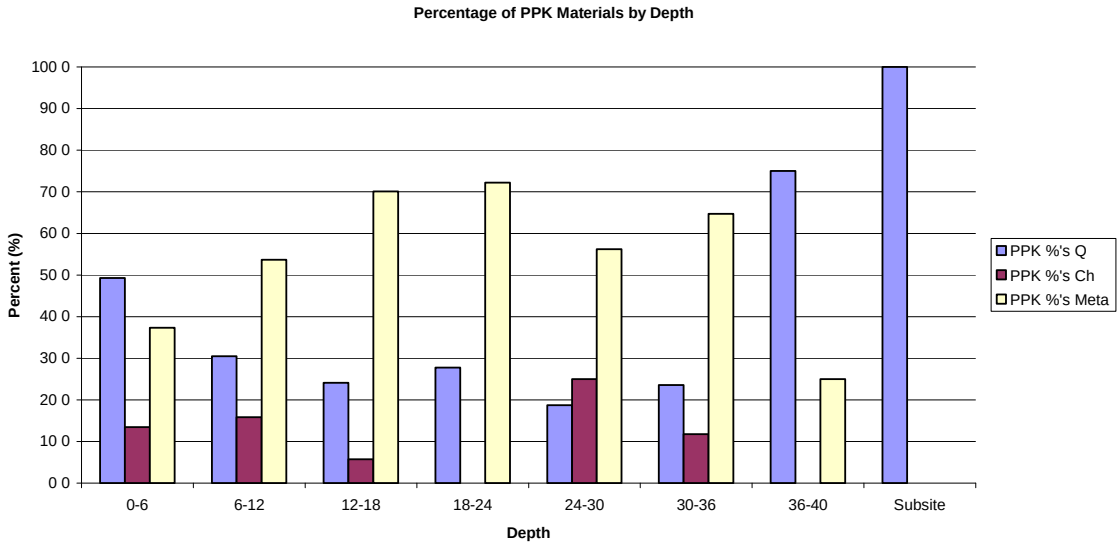

Figure 15. Percentage of PPKs by Material and Depth

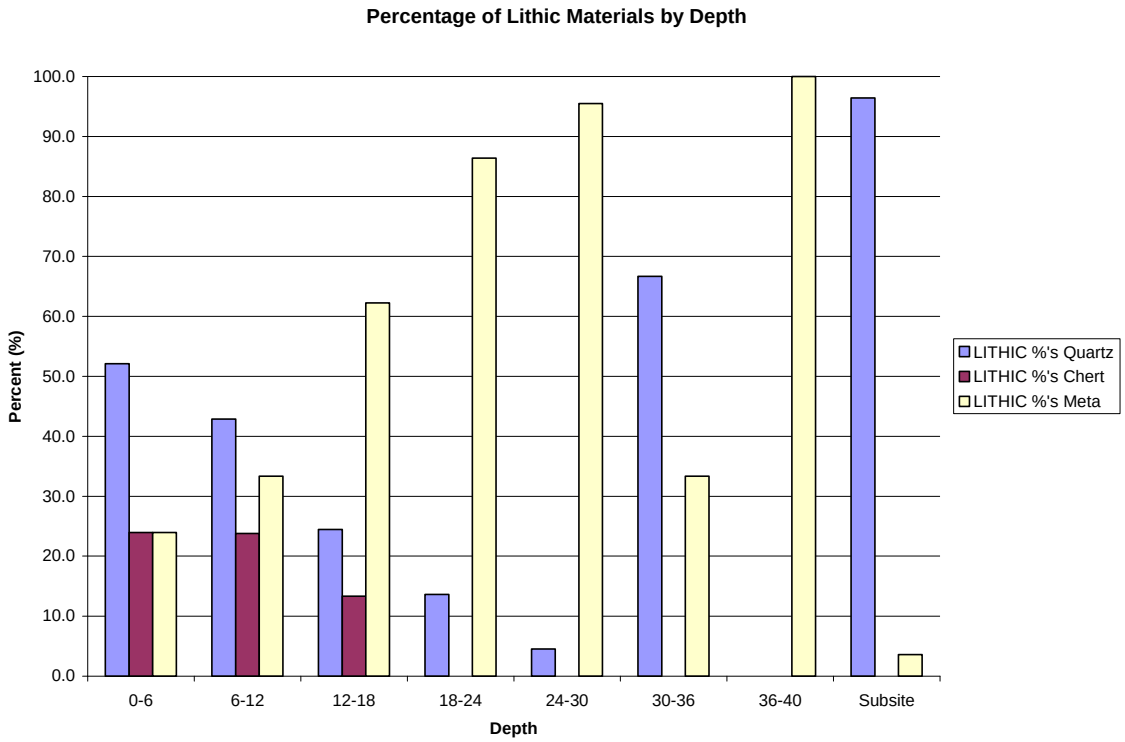

Figure 16. Percentage of Lithics by Material and Depth

Soapstone

At Level 1, 0-6 inches, 20 perforated soapstone heating slabs and eight soapstone vessel fragments were documented. Even though more squares of Level 1 were excavated, less soapstone heating slabs were found in this level than in Level 2 (6-12 inches) and Level 3 (12-18 inches) (see Figure 17). However, more soapstone vessel fragments were found here than in any other level. This probably evidences a phasing out of the soapstone heating slab technology during the later phases of the site.

Perforated Soapstone Heating Slabs increased at Level 2, 6-12 inches, with a total of 33. Also, the proportion of soapstone slabs to pottery is higher at this level than in Level 1. The number of soapstone vessel fragments decreases from eight in Level 1 to

five in Level 2, but this may be due to fewer squares being excavated at this level rather than a decrease in the use of soapstone vessels between Levels 1 and 2.

Soapstone slab use continues to increase in Level 3, 12-18 inches, with 36 heating slabs found. However, the trend of decreasing soapstone vessel fragments continues with only three fragments recovered, so the use of soapstone slabs and soapstone vessels is inversely related.

Only seven soapstone slabs were noted, and three soapstone vessel fragments in Level 4, 18-24 inches. The drop in slabs corresponds with a similar drop in the amount of pottery at this level, so this may be because of the small number of squares dug at this level.

Soapstone slabs in Level 5, 24-30 inches, seem to continue in the same usage as with the Level 4, but soapstone vessel fragments cease to exist as this level. Curiously, while soapstone slabs increase at this level (see Figure 17), the amount of documented pottery decreases (see Figures 7 and 8), suggesting that pottery and soapstone slab usage are inversely related.

In Level 6, 30-36 inches, only three soapstone slabs and no vessels were found, either indicating that fewer squares were dug here or that soapstone use is declining across the site in this period. Since only two squares were dug at this level there is insufficient evidence to make any conjectures about soapstone usage at this level.

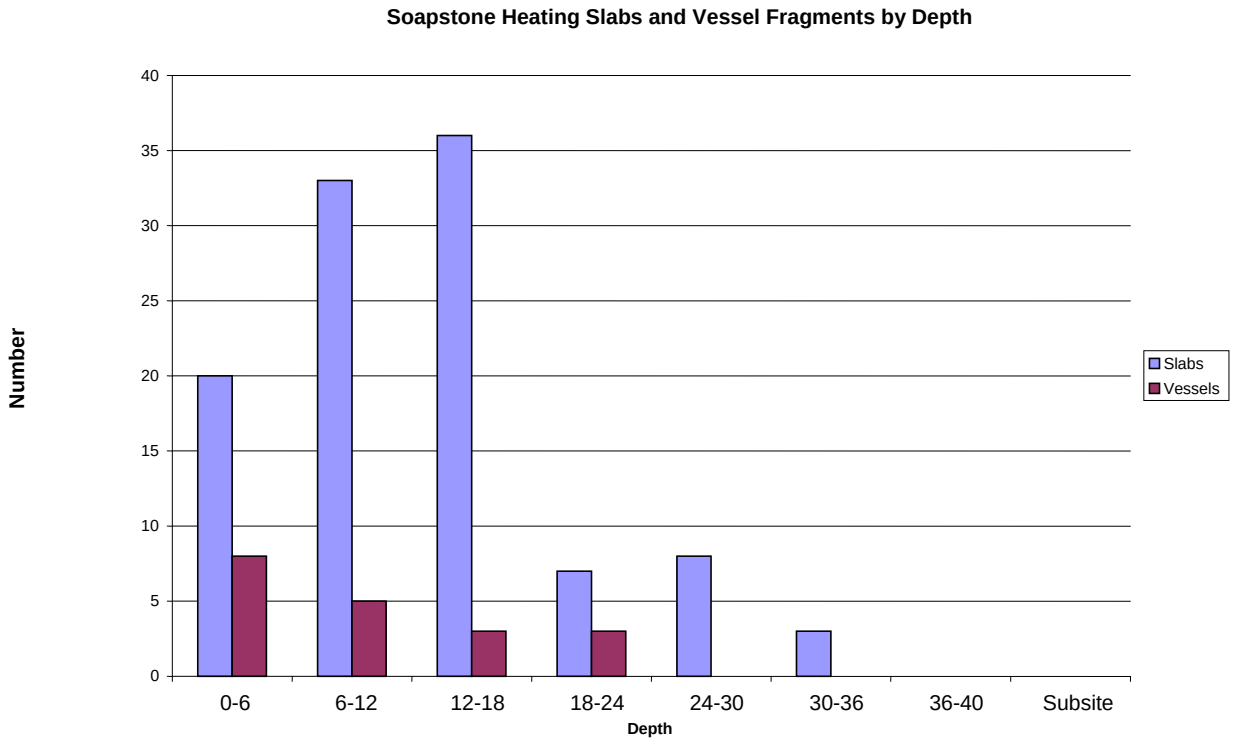

Figure 17. Number of Soapstone Heating Slabs and Vessel Fragments by Depth

Lake Springs data may help answer questions about the use of stone tools through the Middle and Late Archaic periods. Namely, the tools found confirm the habitation of the site before the use of pottery in the Late Archaic, as well as intermittent occupation throughout the Middle Archaic and the transition between Middle and Late Archaic. If Caldwell had suggested this 50 years ago immediately his excavations were completed, it would have been a major contribution to the knowledge about the Middle and Late Archaic periods. Today, it is not so much of a new contribution, because of numerous other studies of the Late Archaic by Sassaman, Elliott, and others, but can instead be added to a theoretical knowledge database of the Middle and Late Archaic periods.

By far, the largest number of projectile points belonged to the Savannah River style of the Late Archaic, and more than 50 percent of these points were made of metavolcanic materials from an unknown quarry, most likely within a short distance of

the site. Of 310 identified Savannah River points, 169 were made of a similar metavolcanic material, 44 of chert (with representations of both tan Coastal Plain chert, gray Ridge and Valley chert, and an unidentified bright orange chert), and 97 of quartz (almost all “cold cream quartz”), likely from a quarry near the site (Jones, personal communication). Also, there was a large number of Savannah River perform "blanks," pieces of metavolcanic material crudely shaped like a Savannah River point, apparently never completed. A second explanation for these "blanks" may be that they were points on which the craftsman made mistakes, and were therefore never completed, yet most of the points seem to have no visible mistake scars (Scott Jones, personal communication). Also located stratigraphically contemporary to the majority of Savannah River points were 44 unidentified metavolcanic points (most of them broken). According to Sassaman, metavolcanic lithic materials were used most intensively during the Late Archaic period in the Savannah River Valley, leading to the conclusion that most of these points also belonged to the Savannah River occupation at Lake Springs (Sassaman 1989).

Also found in the main excavations of Lake Springs (the primarily Late Archaic component) was a variety of other stone tools and debitage, including drills, unifacial and bifacial cutting tools, debitage flakes, and exhausted cores. Even in the Late Archaic occupation, where the majority of projectile points are made from metavolcanic materials, most of the scrapers, drills, and cores were quartz. This is probably because the metavolcanic materials, while easy to make, lost an edge quickly. Quartz is much harder and better suited for cutting and drilling other stones (such as soapstone) or for cutting meat and organic materials, because the crystalline structure is much sharper than metavolcanic stone.

From Caldwell's short report presented to the University of Georgia Anthropology Club meeting in 1951 (Caldwell 1951), we know he believed his most exciting find from the Lake Springs site was the discovery of the Middle Archaic occupation far below the Late Archaic midden (Appendix R). It is from these artifacts that he coined the term "Old Quartz Culture" to describe the heavy reliance on quartz he observed from the small artifacts found at this level, which was later renamed Morrow Mountain (Coe 1964). Unfortunately, the Middle Archaic deposits were discovered a mere two days before the site was scheduled to flood. Fortunately for Lake Springs, a drought that summer allowed an extra week of excavation before the water table rose too high for further excavation (Caldwell 1951).

From the interest Caldwell paid to the Middle Archaic component of Lake Springs, I originally thought that more Middle Archaic lithics would be found in the collection than the number actually identified. In total, only 23 identifiable Morrow Mountain points were found in the main portion of the site. However, the only tools from the main site excavations that could be attributed to the Morrow Mountain culture were projectile points, whereas in Caldwell's subsite excavations, all projectile points, debitage, or other tools were easily identifiable as Middle Archaic by associated artifacts.

MISCELLANEOUS ARTIFACTS

This chapter will summarize all other artifacts from the site. As with the lithics and ceramics chapters, each section will be subdivided into the 6 inch levels dug by Caldwell when appropriate. As discussed earlier, because fewer squares were excavated at each descending level, it is not possible to compare the sum totals of levels. For example, since 38 squares were dug at Level 1 (0-6 inches), it would be impossible to compare the total amount of bone in Level One with the total amount of bone within Level 2 (6-12 inches), where only 36 squares were excavated. Totals may only be compared within the level, for example comparing the amount of fire-cracked rock to the amount of unmodified rock in Level 3.

Unmodified Bone

Because of its location in a shell midden, Lake Springs has more than 76 kilograms of animal bone, marine shell, and turtle shell. However, it is important to reiterate that no screens were used at Lake Springs, and therefore the faunal remains are undoubtedly not representative of all the faunal remains that had been located in the site, especially fish bones and small rodent bones. Dr. Barnet Pavao-Zuckerman identified as small sample of bones from Squares 7-0 and 1L4, and noted that the majority of the collection consists of deer, box turtle, terrapin, rabbit, opossum, and beaver bones.

As the site is composed of a shell heap, it would have been very difficult for Caldwell to save all the freshwater shell excavated from Lake Springs. However, it seems small sample amounts of shell were included in some of the collections of faunal remains, although only 466.3 grams were saved from the site. Almost all of the

identifiable shell is freshwater mussel shell (Caldwell 1951). The shell midden was also a key factor in faunal preservation. The high ph of shell preserved the animal bones a minimum of 3,000 years, much longer in some cases.

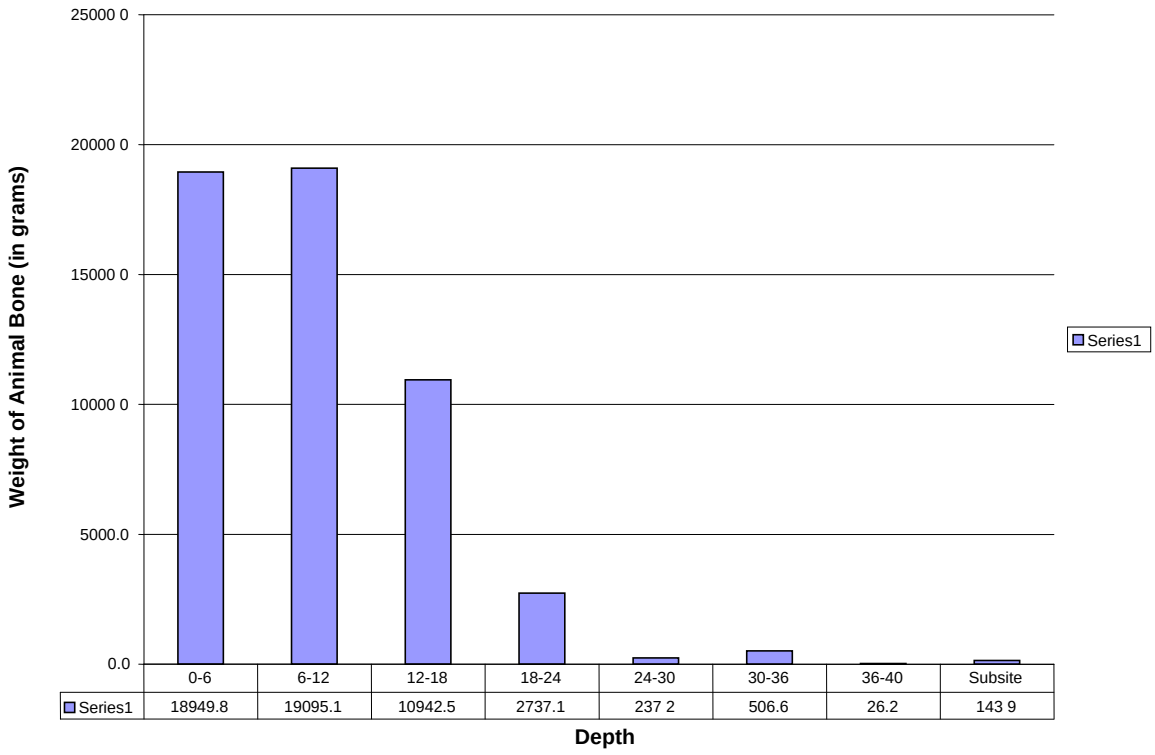

Figure 18. Amount of Unmodified Bone (in grams) by Depth

Bone Tools and Other Rare Artifacts

Lake Springs had an unusually large number of presumed bone tools. 299 bone tools were found in Caldwell's collections. According to Figure 19, 68.8 percent of the tools were unidentified, mainly because they were broken. Also included in this unidentified category are two possible bone fids, tools used to separate strands of cord during net making, and two small bone spatulas. The most interesting was the small collection of incised bone tools. These included two incised pendants likely used as

decoration and two incised but broken tools, both unidentifiable. Figure 19 shows each type of tool identified and the percent of the collection it comprised. Because most of the bone tools at Lake Springs were recovered in features or burials, Figure 19 shows all tools, regardless of depth or feature.

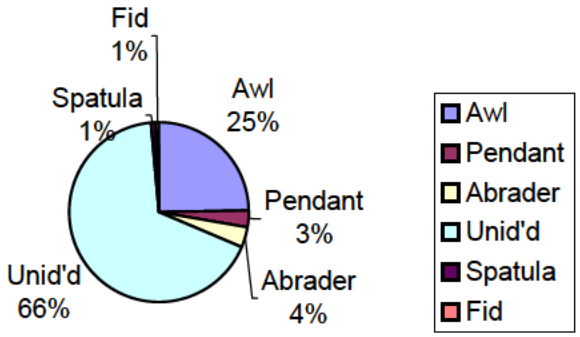

Figure 19. Percent of Bone Tool Types at Lake Springs.

Figure 20. Two incised bone pendants found in lots 147 and 112.

Atlatl Weights

A small number of atlatl weights were found at Lake Springs, almost all of them polished. Of the nine, one was an undrilled large weight made of soapstone. Seven of the eight remaining atlatls were polished and made of a metavolcanic material.

Two polished stones generally resembling the chunkey stones, presumably used in Mississippian games were recovered from the site. They are probably not hammer stones because they had been polished and ground into their shape and had no scars from repeated hammering. Four hammer stones were found, and were qualitatively different both in the type of stone, size, and shape, from these possible gaming stones. Both these

"game stones" were found in the deeper strata of the site, one found at 12-18 inches depth and the other at the 6-12 inch depth, so it seems unlikely that they were from a later occupation. (Appendix A).

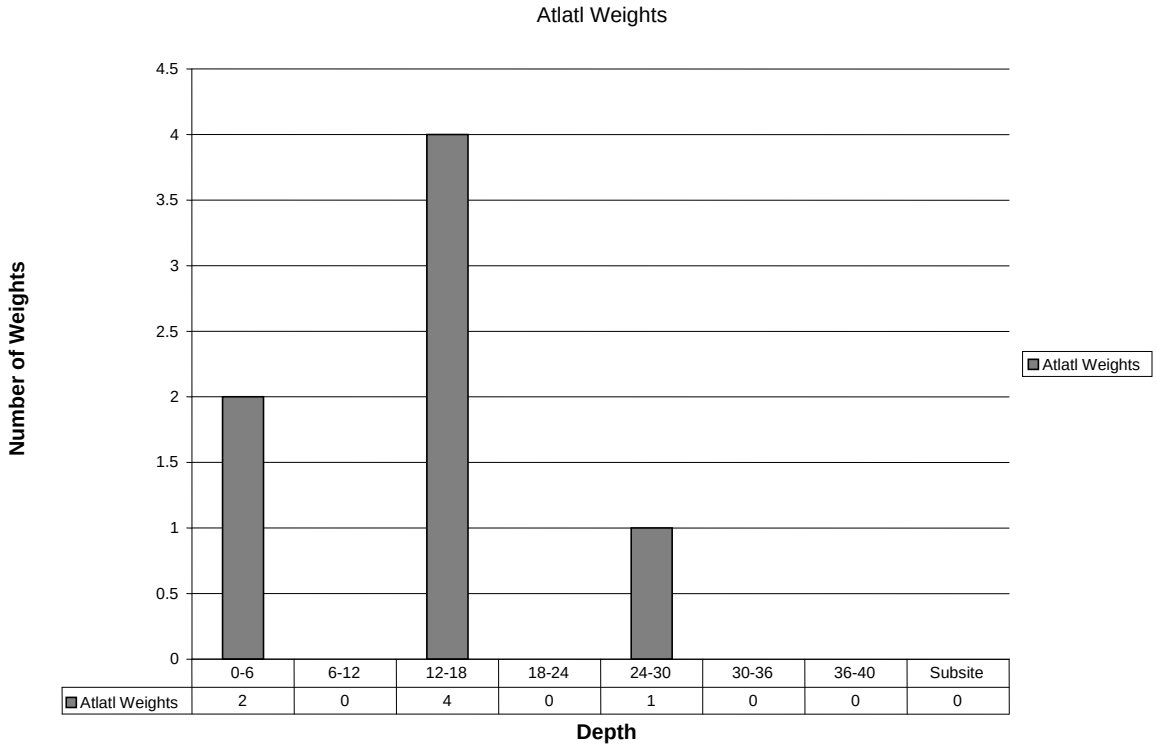

Figure 21. Number of Atlatl Weights by Depth

Red ochre, limonite and kaolin pigments were found at the site in very small amounts (see Figure 22). Most of these pigments were found in features, but 3.6 grams of red ochre were identified from the subsite.

Shell	Daub	Charcoal	Limonite	Red Ochre
466.3	634.6	15.4	16.3	6.4

Figure 22. Total Weight of Shell, Daub, Charcoal, Limonite, and Red Ochre located at Lake Springs (In Grams)

Fire-Cracked Rock, Daub, and Soil Samples

Fire-cracked rock was found in eight separate proveniences, totaling 4119.2 grams. In most cases, these proveniences were identified as features, such as hearths or fire pits. To differentiate between fire-cracked and unmodified rock, any quartz with a pinkish tint and a broken appearance were classified as fire-cracked, according to personal communication with Scott Jones. All other rock without flaking or polishing was called unmodified. Features tend to have more fire-cracked and unmodified rock than any other proveniences. Only 20.1 percent of all proveniences contained unmodified rock, but 72.0 percent of features contain unmodified rock.

A total of 634.6 grams of daub was documented, and in 78.0 percent of the proveniences with daub there was less than 25.0 grams of daub. Daub was defined as any piece of fired clay, and most pieces were very small with no cane impressions. These pieces may have been from houses or from incidentally fire clay.

Three soil samples weighing more than 300 grams each were taken by Caldwell, and were unanalyzed. Two are from the Late Archaic strata of the site and one was taken at the subsite level.

MILLER'S EXCAVATIONS

On March 15, 2002, I traveled to the Smithsonian Institution in Washington, D.C., to examine the artifacts recovered in Carl F. Miller's test excavations at Lake Springs. At the Smithsonian Museum Collections, Miller's collection was divided into 53 catalog entries, with each type of artifact (point, flake, pottery, etc) entered as a separate catalog number. For the sake of analysis, I chose to combine data from the same depth, since depth and test pit were the only provenience information available. This data summary gave me 17 lot numbers, 10 from Pit A, one from Pit B, three from surface collections, and three from unidentified proveniences (see Appendix D). To facilitate discussion of these artifacts, this chapter will be sub-divided into ceramics, lithics, bone tools, and miscellaneous sections.

Miller excavated the first 17 inches of Pit A as one strata, yet from 17-59 inches, he used arbitrary 6 inch strata to delineate layers. In Test Pit B, no depth information in available, and all artifacts from this pit were grouped under one catalog number simply labeled "Pit B," and giving no information of the depth or if the pit was even excavated in more than one layer. Therefore, while the data from Pit B will be presented, I will focus most discussion on Pit A.

Ceramics

From Miller's excavations, 188 pottery sherds were recovered (see Appendices H and I), 168 were from Pit A (see Figure 23), and 20 from Pit B. The pottery styles found include Stallings Island Plain, Punctated, Simple Stamp, and Stab-and-Drag, Thom's Creek plain, Refuge Simple Stamp, Deptford Red-Filmed, Cartersville Check, Irene

Plain, Irene Incised, Savannah Burnished Plain, Savannah Shell Scraped, and Lamar Complicated Stamped. Almost all sand or grit tempered styles (all pottery types described except Stallings Island fiber-tempered) are found mainly in the upper strata, the deepest was a sand-tempered Savannah Burnished Plain sherd in the 29-35 inch strata.

Depths	SI	SI	SI	SI	SI	SI	TC	R	D	C	I	I	SV	SV	LA	ST	Totals
	PL	Punc	Inc	SS	S&D	UID	PL	SS	RF	Ch	PL	Inc	BP	ShScr	CS	UID	
0	67	2	1	0	3	2	0	0	0	0	0	0	1	0	0	6	82
0-17	5	0	1	0	4	0	1	1	1	1	1	0	0	0	0	2	17
17-23	2	0	2	1	11	0	0	0	0	1	0	1	2	2	1	2	25
23-29	27	0	0	1	3	3	0	0	0	0	0	0	2	0	0	5	41
29-35	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
35-59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	102	2	4	2	21	5	1	1	1	2	1	1	6	2	1	16	168

Figure 23. Ceramics from Miller's Test Pit A by Depth and Type.

SI	SI	SI	Totals
PL	Punc	S&D	
7	2	11	20

Figure 24. Ceramics from Miller's Test Pit B by Type (No Depth Available).

Key: **SI- Stallings Island** **I- Irene**
TC- Thom's Creek **SV- Savannah**
R- Refuge **LA- Lamar**
D- Deptford
C- Cartersville

PL-Plain **Punc- Punctate** **Inc-Incised**
SS-Simple Stamp **S&D- Stab-and-Drag** **UID- Unidentified**
RF-Red Filmed **BP- Burnished Plain** **ShScr-Shell Scraped**
CS-Complicated Stamped

Lithics

In Miller's excavations, 110 Projectile Point Knives (PPK's) were recovered (see Appendix K). Of these 110 PPK's, 58 are from Pit A, five from Pit B, and the rest are from surface collection. Point types documented include: Morrow Mountain, Savannah River stemmed, Guilford, Stanley, and one possible Kirk Notched (see Appendix K).

35 of the 58 PPK's in Pit A were identified as Savannah River points, and an additional 13 PPK's from this pit were Savannah River preforms (also known as "Blanks" because of their unfinished nature). Five Morrow Mountain points were identified, all made of quartz.

Other chipped stone artifacts from Pit A number 442. 97 percent of these artifacts are flakes, 400 of them metavolcanic. 94.6 percent of the artifacts are from the 35-59 inch level, and may represent a knapping workshop if the artifacts logged as this provenience are indeed correct. This corroborates the finding from Caldwell's excavations that at the deeper Late Archaic strata, metavolcanic material is much more commonly used than quartz or chert (see Figure 12).

The number of chipped stone artifacts in Pit A, however, may not be accurate due to Miller's Catalog Lot Number 8, which contained 418 lithic artifacts, nearly all metavolcanic flakes. Listed as catalog number 475923, "Fgts. And Shop Waste," this numbers more than all flakes found in Caldwell's excavations, and while the flakes do exist (I counted them myself), I suspect that these may not have been correctly labeled. Evidence does suggest this provenience may in fact be from Lake Springs, such as the metavolcanic Savannah River stemmed point found, and a fragment of soapstone, so it will be included with caution.

Only six soapstone perforated heating slabs were found in Miller's test pits (see Appendix O). Only one soapstone vessel fragment was recorded, and its provenience information is missing. Four of the soapstone slabs were found in surface collections, with the other slabs in the 29-35 inch and 35-59 inch levels of Pit A.

Two atlatl weights were found in Pit A, 29-35 inches, and grooved axe was found on the surface and pictured in Miller's article in *American Antiquity* (1949). Curiously,

another possible polished gaming stone was identified in Pit A at the 35-59 inch level similar to the two found in Caldwell excavations.

Bone Tools

The number of worked bone pieces in Miller's test pits is quite high in comparison to proveniences in Caldwell's excavations (see Appendix Q). A total of 127 bone tools were located in Miller's collections, 100 of them in Pit A (see Figure 25).

Depth	Awl	Pendant	Abrader	Antler tine	Rodent-gnawed	UID	Totals
0-17	0	0	0	0	0	0	0
17-23	8	1	1	4	1	12	27
23-29	11	0	0	10	1	17	39
29-35	4	1	0	4	0	4	13
35-59	4	0	0	3	0	14	21
Totals	27	2	1	21	2	47	100

Figure 25. Bone Tools in Pit A by Depth and Type

While 47 percent of these are unidentified or broken, it is mentionable that 39 percent of these artifacts are located in the 23-29 inch level, including almost half of the antler tines and awls. Neither of the pendants was incised as were the pendants uncovered in Caldwell's excavations.

CHONOLOGICAL DISCUSSION

In Dan Elliott's report on the Bobby Jones Expressway Extension Corridor (1994), he proposed a revised phase sequence for the Late Middle and Late Archaic Periods of the central Savannah River valley (Elliott 1994:370-372). The following chapter will discuss Elliott's Late Archaic phase sequence and how it relates to Lake Springs.

The Paris Island phase, from 2500 to 2200 B.C., was a prepottery phase, characterized by high amounts of quartz, metavolcanic and chert for tool production, no pottery, the use of soapstone perforated heating slabs, and the use of atlatl weights. The main diagnostic artifact was the Paris Island stemmed point type (ibid: 370-371).

The Mill Branch phase, from 2200-1850 B.C., was characterized by a heavy use of metavolcanic stone in lithic tool manufacture and an extremely limited use of Stallings Island plain pottery. Soapstone heating slabs were still used for cooking and boiling water and atlatl weights were still manufactured and used. Red ochre and limonite were used as pigments, and many stone drills are found (likely related to the use of perforated soapstone slabs (ibid: 371). Elliott suggested in this report that Lake Springs and Stallings Island may have occupations during the Mill Branch Phase.

The Lovers Lane Phase, from 1850 B.C. to 1350 B.C., included an increased use of quartz and chert rather than metavolcanic stone, use of Stallings Island plain and decorated fiber tempered pottery and Thom's Creek grit tempered pottery, and less soapstone slab use. Less red ochre and limonite were used in pigments, and atlatls were no longer manufactured. Stone drill use seems to decrease in relation to the decreased

use of soapstone slabs. Fish and shellfish are exploited heavily to meet the growing population, especially in the Savannah River floodplain (ibid: 371-372).

The Dickens complex, from 1350-900 B.C., has the following diagnostic characteristics: increasing diversity and evolution of ceramic technology (more vessel types and differently decorated wares), “increased manufacture and use of soapstone bowls, [and] a decline in the importance of the Central Savannah River Area as a political center.” Sites for this period tend to be located in floodplain, with increasing use of shellfish and fish for growing populations (ibid: 372).

In addition to the subsite cultural layer, called Old Quartz by Caldwell (1953) and renamed Morrow Mountain by Coe (1964), I believe Lake Springs has components of the Paris Island, Mill Branch, and Lovers Lane phases, and a possible minor occupation during the Dickens Complex.

No Paris Island stemmed points were identified from the Lake Springs site, which seems to be the only diagnostic factor of the Paris Island phase not also present in subsequent phases. While Lake Springs seems to have "intensive use of soapstone perforated slabs (Elliott 1994: 372)” and "manufacture and use of atlatl weights (ibid: 372),” only a minimal number of squares were dug at levels where this phase may have been visible, the 30-36 inch and 36-40 inch levels. Therefore, no definitive evidence of a Paris Island occupation is evident and I believe it probably does not exist at Lake Springs.

Elliott suggested that he believe Lake Springs may have been occupied during the Mill Branch phase (ibid: 371), and I believe him to be correct. I believe this may have been the largest occupation of the site, due to the several factors.

First, extremely high percentages of metavolcanic stone were found in the 30-36 inch, 24-30 inch, and 18-24 inch levels of the site (see Figures 13 and 14). In both PPKs

and other flaked stone artifacts, metavolcanic materials were the material of choice for the 24-30 inch and 18-24 inch levels. Interestingly, in the 30-36 inch and 36-40 inch levels, quartz is much more common than metavolcanic stone (see Figures 15 and 16), which may suggest these layers could belong to earlier phases, though no diagnostic factors regarding commonly used lithic materials were given for the Phinizy Swamp complex of the Paris Island phase.

Second, there is a high number of perforated soapstone slabs in every level from the 30-36 inch to the 6-12 inch level. Because of the low number of squares dug at the 30-36 inch and 36-40 inch levels, no clear conclusions can be made about the use of soapstone heating slabs, except that they were present in the 30-36 inch level. Since only one square was dug at 36-40 inches, we do not have enough evidence to make educated conjectures, except to say it perhaps represents a Mill Branch or older occupation.

Third, several burials and features contain red ochre and limonite, which is a diagnostic factor of the Mill Branch phase that is believed to have ended by the beginning of the Lovers Lane phase. Also, seven Atlatl weights were found at the site, six of the seven were polished stone, and the other an unfinished large soapstone weight.

Stallings Island pottery is evident in every level of Lake Springs to varying degrees, but interestingly, no levels have only plain fiber-tempered wares. Oddly, the deepest sherds recorded are Stallings Island stab-and-drag, while at every level more than 40 percent of the recorded pottery is plain. Only in the 24-30 inch level did Stallings Island plain comprise more than 50 percent of the pottery, although in the last 4 layers a high percentage of the fiber-tempered sherds are unidentified due to the disintegration of the finish or decoration.

Finally, the diagnostic artifact is the Savannah River stemmed point, 335 of which have been recorded from Lake Springs (see Appendix J). Because of the prevalence of these points in every layer excavated at Lake Springs except the subsite, I believe this was the largest Late Archaic phase at Lake Springs.

The Lovers Lane phase follows the Mill Branch phase, and may have been the second largest phase at Lake Springs for two reasons. First, the high percentage of decorated pottery, a factor thought not to be associated with Mill Branch phase suggests a strong Lovers Lane phase occupation. The appearance of Thom's Creek wares in the 0-6 inch, 6-12 inch, and 12-18 inch levels of the site (see Figures 7 and 8) also supports the possibility of a Lovers Lane Phase occupation. Second, the increased use of quartz and decline of metavolcanic levels beginning in the 24-30 inch level and continuing to the 0-6 inch level fits Elliott's characteristic of "a shift from metavolcanics to quartz coupled with increased use of coastal plain chert (Elliott 1994: 371)." Decreases in the number of perforated soapstone slabs are noted in the 0-6 inch level, with a sharp decline from the number of soapstone slabs found at the 6-12 inch level fit criteria 4: "A decrease in the use of perforated soapstone slabs (ibid: 372)."

While 26 soapstone bowl fragments were found at Lake Springs, but soapstone vessel fragments are the only diagnostic artifact listed by Elliott for this phase. Since most artifacts of Lake Springs (Stallings Island ceramics, Savannah River stemmed projectile points, and soapstone heating slabs) are associated with or overlap with earlier phases, I believe there is not currently enough data to believe a Dickens Complex existed.

Even though I have tried to sort the artifacts and data from Lake Springs into the proposed phase sequence from Elliott (1994), many artifacts and levels seem to conflict with the proposed characteristics of the Mill Branch and Lovers Lane phases, or may

suggest a transitional phase between Mill Branch and Lovers Lane. Specifically, there are no levels at Lake Springs with only Stallings Island Plain pottery, and no levels of the site which contain no Stallings Island pottery.

The Stallings Island Stab-and-Drag pottery found at each level should rule out a Mill Branch phase occupation, but all other artifacts and characteristics, including the high amounts of metavolcanic stone use, atlatl weights, and the extremely high number of soapstone slabs suggest a Mill Branch phase occupation. This may mean that Stallings Island Stab-and-Drag pottery was used also during the Mill Branch period, that the use of metavolcanic stone and soapstone slabs continued much later at Lake Springs that at other Stallings Island period sites, or that there may be a transitional phase between Mill Branch and Lovers Lane where decorated Stallings Island pottery is used extensively at the same time as soapstone slabs are still used for cooking.

The other possibility at Lake Springs may be extreme bioturbation, which may have skewed the evidence. Examples of this may include the Stallings Island pottery found in the subsite, and the Morrow Mountain points found on the surface. While bioturbation may play a role in the archaeological record of Lake Springs, I have no reason to believe that it would play more of a role at Lake Springs than any other Late Archaic site in the Savannah River floodplain.

Lake Springs meets most of the phase characteristics of the Lovers Lane phase, including Thom's Creek pottery in addition to the Stallings Island pottery, and the increasing use of shellfish as a food source. However, it seems the Savannah River stemmed points continue to be made during this phase at Lake Springs, since they are found as nearly 50.0 percent of the PPKs in all levels except the subsite (see Figure 13).

The Savannah River stemmed points seem to have been used throughout the Late Archaic period at Lake Springs, including the possible Dickens Complex.

A possible Dickens Complex phase at Lake Springs could be identified with the soapstone vessel fragments, but may also include the use of quartz to account for almost 50.0 percent of tools while using almost equal amounts of metavolcanic and chert for PPKs and other flaked stone tools (see Figures 14 and 15). At Lake Springs, this phase might still include the extensive use of Stallings Island pottery, with an increase in Incised and Simple Stamped decorations as evidenced in the 0-6 and 6-12 inch levels of excavation (see Figures 9 and 10), though Stallings Island Plain and Stab-and-Drag are still the dominant ceramic styles.

It also may be possible that instead of interpreting the soapstone vessel fragments of Lake Springs as a Dickens Complex phase, soapstone vessels may have been manufactured during the end of the Lovers Lane phase at Lake Springs.

While many things may explain the differences between Lake Springs and Elliott's sequence for the Late Archaic, it is clear the data collected at Lake Springs does not clearly match the phase characteristics. These may be the result of bioturbation or data misinterpretation of Lake Springs, but it may also be that Lake Springs represents a transitional period between the Mill Branch and Lovers Lane phases, when Stallings Island pottery and soapstone heating slabs were used simultaneously.

SITE SUMMARY

Ceramics at Lake Springs become common beginning at the 30-36 inch level and increase in both the number of sherds found and the number of design styles according to their depth (i.e., age). While most sherds found in the 30-36 inch, 24-30 inch, and 18-24 inch levels tend to be either Stallings Island Plain or Stab-and-Drag, the increasing diversity of decorations, including incised, simple stamped, and zone punctuated and incised sherds increased in the more recent levels.

Diagnostic ceramic styles support seven different phases of occupation at Lake Springs which contained pottery (i.e., not including the prepottery Late Archaic or Middle Archaic phases). The most visible phases are the Mill Branch and Lovers Lane phases (represented by Stallings Island Plain and decorated pottery), and through small amounts of Thom's Creek, Deptford, Cartersville, Savannah, and Lamar wares are recorded.

Several conclusions can be made from lithics at the Lake Springs site. The varying use of materials according to depth suggests a use of quartz during the prepottery portion of the Late Archaic (see figures 15 and 16), which at Lake Springs is probably Levels 6 and 7 (30-36 inches and 36-40 inches, respectively). Yet at Level 5 (24-30 inches), metavolcanic materials become extremely popular, making up almost 80 percent of all tools, and the use of quartz tools becomes almost nonexistent. Over time, and recorded in Levels 1 to 4 (0-24 inches), quartz slowly regains popularity, eventually equaling the number of tools made from metavolcanic sources. With the exception of Level 4 (18-24 inches) Savannah River points made of chert represents approximately 10.0 percent of the PPKs in every level.

The high number of metavolcanic flakes through all levels, except the subsite, suggests that most metavolcanic tools were made locally, contrasting with a quite low number of chert flakes in proportion to the number of chert Savannah River points found. Throughout the site, there are 1.9 metavolcanic flakes for each metavolcanic Savannah River PPK. There are 1.72 quartz flakes for each quartz Savannah River PPK. However, there are only 1.35 chert flakes for each chert Savannah River PPK (see Appendices J and L). This may imply that chert Savannah River points were not made or reworked in the same area of the site as metavolcanic ones, if they were made at Lake Springs at all.

The use of perforated soapstone heating slabs from Level 6 (30-36 inches) to Level 2 (6-12 inches), with a most extensive use in Levels 2 and 3, roughly inversely correlates to the increasing use of pottery (see Figures 13, 14, and 17). Soapstone vessels may have been most commonly used later in the Late Archaic period than soapstone heating slabs, since the vessel fragments appear for the first time at Level Four (18-24 inches). Also, the recovery of Stallings Island pottery and perforated soapstone heating slabs in six consecutive levels is evidence that the two were used simultaneously for an extended period, and likely served different technological purposes, yet could only be proven with chemical residue analysis.

Using Elliott's sequence of the Late Archaic period (1994), I believe Lake Springs was occupied during the three latter phases of the Late Archaic, as well as intermittently during the Early and Middle Woodland periods and the Middle and Late Mississippian periods.

A near-absence of ceramics at Lake Springs in the 30-36 inch and 36-40 inch levels where little Savannah River Late Archaic material exists is evidence that Lake Springs was occupied both before and after the introduction of pottery. Its close proximity to the

Stalling Island (9Cb1), Mill Branch (9Wr4), Lovers Lane (9Ri16), and other important Late Archaic sites suggests that it may have been occupied during the first introductions of pottery to the Savannah River peoples. As suggested by Sassaman (1990), the Savannah River floodplain may have contained one of the most highly organized societies in the Southeast during this period. Lake Springs and other sites in the Savannah River valley are solid evidence for the first pottery in eastern North America.

Faunal remains from Lake Springs suggest that deer and shellfish were the main sources of protein, with supplementary rabbit, terrapin, turtle, birds, and possibly small rodents and fish whose bones would have been lost without the use of screens. These faunal remains seem typical to those found at the nearby Stallings Island site (Weinand and Reitz 1992), but it is impossible to be sure until a thorough faunal analysis is completed on the collection. Because the dirt was not screened, we cannot be sure that fish bones were not present. Logically, it would seem fish would be a key source of protein at a site located on the Savannah River, so the possibility of fish bones not being recovered from the dirt cannot be disregarded.

The relatively high number of burials may indicate a site that was occupied for a fairly long time. At least one of the burials predates the ceramics, and one more burials is likely from the Mississippian period. An assortment of elaborate trade and luxury items such as polished atlatl weights, incised bone tools and pendants, polished possible gaming stones, and pigments may represent high status burials as well as a partial winter occupation, since most labor-intensive items were probably made in the winter.

Today, the report of the findings at Lake Springs is neither shocking nor ground-breaking, because its data is similar to other sites excavated in the 51 years since the excavations there. Had it been published 51 years ago by Caldwell, the Lake Springs

Late Archaic component might have become one of the type sites that other Late Archaic sites are compared to. Immeasurable changes have taken place in the last half century, both in the methods of excavation and curation, and in what we know about the Late Archaic period. Belatedly this Lake Springs report affirms and supports the new information we have about the Late Archaic, answering many questions as to the fate of the artifacts of a type site of the Savannah River valley. Yet it raises more questions that it answers, such as what might be typical of a transition between the Mill Branch and Lovers Lane phases of the Late Archaic, how many micro-variations of the Savannah River stemmed point may be noted over time, and numerous others.

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Appendix A

Photographs, Tables, and Figures from Caldwell's Excavations

Bone tools from Caldwell's excavations.

An unidentified feature containing rocks

A Whole Vessel found at Lake Springs: Likely a Burial Because it was not in Caldwell's Lake Springs Collections held at the University of Georgia

An Unidentified Archaeologist Cleaning the Profile of a Lake Springs Trench

An Unidentified Archaeologist at Lake Spring

Appendix B

Photographs, Tables, and Figures from Miller's Excavations

Appendix C

Artifact Catalog from Caldwell's Excavations

Lot Number	Feature	Square Coordinate	Horizon	Depth	Additional Bag Notes
1		0-0		3-9	
2		0-0	B	3-9	
3		0-0	A-B	0-3	A through Top 3" of B
4		0L1		0-6	Bone
5		0L1		6-12	Bone
6		0L1	A		
7		0L1	A-B	6-12	
8		0L1	B	0-6	
9		0L2		0-6	
10		0L2	B	0-6	
11		0L2		6-12	
12		0L2	B	6-12	At Top of B
13		0L2		12-18	Bone
14		0L3		0-6	
15		0L3		6-12	
16		0L3			
17		0L3		6-18	Bone (Mixed)
18		0L3			At Top of B
19		0L4		0-6	
20		0L4	B	0-6	
21		0L5			Bone
22		0L5		0-6	
23		0L5		6-12	
24		0L5		12-18	
25		0L5		18-24	
26		0L5		12-28	Ceramics
27		0L6		0-6	
28		0L6		6-12	
29		0L6	A		
30		0R1	B	0-2	
31		0R1	B	3-15	
32		0R1	B		
33		0R1	A		
34		0R2		None	
35		0.5L4	A		
36		0.5L5	A		
37		0.5L5		0-6	
38		1-0	A		
39		1-0	A	0-6	
40		1-0	Top		
41		1-0		6-12	
42		1-0		12-18	
43		1-0			Last Layer Below Shell
44		1-0			12" Below Bone and Shell Layer
45		1-0		Subsite	

46		1L1		0-6	
47		1L1		12-36	
48		1L1		18-21	
49		1L2		0-6	
50		1L2		6-12	
51		1L2		12-18	
52		1L3		0-6	
53		1L3		6-12	
54		1L3			Last Layer Before Prepottery
55		1L3		Subsite	Prepottery
56		1L3		Subsite	Prepottery, Layer in Corner
57		1L4		0-6	
58		1L4		6-12	
59		1L4		12-15	
60		1L4		15-18	
61		1L4		silt	
62		1L4	A		
63		2-0		0-6	
64		2-0		6-12	
65		2-0		18-24	
66		2-0		Subsite	
67		2-0	A		
68		2-0	B	0-6	
69		2-0	B	6-12	
70		2-0	B	12-18	
71		1-0 & 2-0 & 3-0		Subsite	
72		2L1		0-6	
73		2L1		6-12	Bone
74		2L1		6-24	Ceramics, Lithics
75		2L1		12-18	
76		2L1		Subsite	Rocks
77		2L1	A	A-6	Silt
78		2L2		0-6	
79		2L2		6-12	
80		2L2		24-30	
81		2L2	B		At Top of B
82		2L3		0-6	
83		2L3		12-18	
84		2L3		18+	6" Deeper than Dark Sand below Shell
85		2L3	A		
86		2L4		0-6	
87		2L4		6-12	
88		2L4		12-18	
89		2L4		18-24	
90		2L4		18+	Brown Silt
91		2L4		18+	Silt
92		2L4	A		
93		3-0		0-6	

94		3-0		6-12	
95		3-0		12-18	
96		3-0		Subsite	
97	Pit Z	3L2			
98	Pit W	3L2			
99		3R3		0-6	
100		3R3		6-12	
101		3R3		12-18	
102		3R3		18-24	
103		3R4		6-12	
104		3R4	A		
105		3R4	B	6-12	
106		3R5		0-6	
107		3R5		6-12	
108		3R5	A		
109		3R5	B	12-18	
110		4-0		0-6	
111		4-0		6-12	
112		4-0		12-18	
113		4-0		18-24	
114		4-0		Subsite	
115		4-0	B	0-6	
116		4-0	B	6-12	
117		4-0	B	12-18	
118		4-0	B	18-24	
119		4-0	B	24-30	
120		4L3-4		6-12	
121		4L4		0-6	
122		4L4		6-12	
123	Pit 4	4L4			
124		4L5		0-6	
125		4L5		6-12	
126		4L5		12-18	Shell Layer
127		4L6		0-6	
128		4L6		6-12	
129		4L6	A		
130		4L6	B	0-6	
131		4L7		0-12	Brown Sand
132		5-0		0-6	
133		5-0		6-12	
134		5-0	B	0-6	
135		5-0	B	6-12	
136		5-0	B	12-18	
137		5R3-6R3		0-6	
138		5R3-6R3		6-12	
139		5R3-6R3		12-16	
140		5R3-6R3		16-20	
141		5R3-6R3		20-24	
142		5R3-6R3		24-30	

143		5R3-6R3		24-33	Mixed Bone
144		5R3-6R3		33-40	
145		6-0	A		3' Below Block?
146		6-0	B		
147		6-0	B	12-18	
148		6-0	C		
149		6L1		0-6	
150		6L1		6-12	
151		6L1		12-18	
152		6L1		18-21	
153		6L1		30-36	
154		6L1		18-36	Mixed Bone
155		5R3-6R3		30-36	Mixed with Upper Shell Layer ?
156		7-0		0-6	
157		7-0		6-12	
158		7-0		12-18	
159		7-0		18-24	
160		7-0		24-36	
161		7-0		36-40	
162		7-0			Silt
163		7L1		0-6	
164		7L1		12-18	
165		7L1			Miscellaneous, Below Hearth
166		7-0 & 8-0			Wall Between 7-0 and 8-0
167		8-0			
168	F2				
169	F3				
170	F8				
171	F9				
172	F10				
173	F16		A		
174	F16				
175	F17				
176	F20				
177	F21				
178	F25				
179	F26				
180	F27				
181	F28				
182	F30				
183	F31				"Pit 2, Sq. 3L2"
184	F32				
185	F33				
186	F34				
187	F36				
188	F37				
189	F39				
190	F40				
191	FX				

192	B3				
193	B5				
194	B8				
195	B10				
196	B15				
197	B16				
198		0L2	At Top B		
199		0L2	At Top B	0-6	
200	Pit W	3L2			
201	Pit Z	3L2			
202		0L3		12-18	
203		1L2		18-24	
204		2L2		12-18	
205		1L3	A		
206		2L3		6-12	
207		3L3-4		0-6	
208		6L1		24-30	
209		7L1		6-12	
210	Pit M	6L1			
211	Pit L	6L1			
212		7L1			Base
213		7L1		24-30	
214		7L1		18-24	
215		1-0	B	6-12	
216		5R3-6R3			Silt
217		5R3-6R3			Sand and Base of Prepottery Layer
218		2L1			Silt
219		1L1		21-24	
220		1L1		6-12	
221		2L1		18-24	
222		1L1		18-24	
223		1L1		24-36	
224		1L1		12-18	
225		0L1	B		Top
226		0-0	A		
227		0-0	B	0-12	
228		3R4		12-18	
229		0L6		0-6	
230		4L6		12-18	Shell Layer
231	Post L	5-0	C		
232	Post L	5-0	I		
233		4-0			Side Sloping Toward Face of Shell
234		7L1			Associated w/ Stallings Fire Pit
235		0L4		12-18	
236		0L4	At Top B		
237	F50				

238		7-0/8-0			
239		5-0	A		
240		2-0		Subsite	
241		3R5		12-18	
242		3R4		18-24	

Appendix D

Catalog of Artifacts from Miller's Excavations

Lot Number	Provenience	USNM Catalog Numbers	Depths	Notes
1	Surface collections	475891-475903	0	
2	Surface?	475904	0	
3	Pit A	475905-475908	0-6	
4	Pit A	475909	0-17	
5	Pit A	475910-475912	17-23	
6	Pit A	475914-475919	23-29	
7	Pit A	475920-475922	29-35	
8	Pit A	475923-475925	35-59	
9	Pit B	475926-475933	?	
10	Surface	475935	0	Photo in American Antiquity
11	Pit A	475936-475938	17-23	Photo in American Antiquity
12	Pit A	475939-475942	23-29	Photo in American Antiquity
13	Pit A	475943-475948	29-35	Photo in American Antiquity
14	?	475902	?	Not Listed in NMNH Catalog
15	Pit A	475913	?	Not Listed in NMNH Catalog
16	?	475931	?	Not Listed in NMNH Catalog
17	?	475932	?	Not Listed in NMNH Catalog

Appendix E

Preliminary Report By Joseph Caldwell On The Lake Springs Site

Preliminary Report: Lake Springs Shell Heap, Columbia County, Georgia

These few pages are an informal report on archaeological explorations at Lake Springs from August through October 1951. The site is now covered by the waters of the Clark Hill Dam and we cannot expect to do any more work there, at least for the next few hundred years. This investigation was a cooperative undertaking of the Smithsonian Institution, National Park Service, and the Corps of Engineers, one of many such which have been carried out in the impoundment areas behind the great power and flood control dams.

The Corps of Engineers assisted and facilitated our work in every possible way and I wish especially to thank Mr. F.W. Facey, Jr., Area Engineer, Mr. Fred Marane, Assistant Resident Engineer, and Messrs. C.A. Sanders and Albert Webb pf the Clark Hill Project office.

The recent excavations at Lake Springs might be described as a series of improbable events leading to a happy conclusion. That we were able to work there was surprising enough, but the nature of some of the discoveries exceeded all expectations.

The site was a shell heap situated in the junction of the little Lake Springs Creek and the Savannah River. It was completely covered by recent silts and would never have been discovered had not the sharp eyes of my colleague, Mr. Carl F. Miller, detected stray bits of fresh water mussel shells brought to the surface by ploughing. In 1948 Mr. Miller dug two very productive test pits showing the depths. And sequence of the shell heap strata (*American Antiquity*, Vol XV, No. 1, 1949). His preliminary exploration demonstrated that the main deposit belonged to the "Archaic" Stalling's Island culture of the Savannah River. Like the Stalling's site itself, Lake Springs contained earlier levels

without pottery, and later superimposed deposits in which were crude earthenware fragments tempered with fiber and often decorated with incised and punctuated designs.

Mr. Miller's test pits might well have been all that could ever be done at this important site for Congress did not provide additional funds for excavation until after construction of the dam began to block the Savannah and raise it above the surface of the site. Another improbable event, however, was this year's long period of dry weather which kept the river below the site for several weeks.

Mr. Francis Guscio of the Atlanta Office of the Corps of Engineers went to some trouble to keep us informed of the best time to get back to Lake Springs. When the time came, and Federal money was still not available, A.R. Kelly transferred $500.00 of University of Georgia funds and the Smithsonian, through the good offices of Mr. Graf, was able to provide a small amount for minor expenses and the support of an archeologist without pay. When the digging was half completed, Congress finally appropriated a limited sum to continue the work.

Chronology of the Stalling's Island Period

Since Mr. Miller worked at Lake Springs there has been a considerable development of the method of dating by Radioactive Carbon 14 (Radiocarbon Dates, J.R. Arnold and W.F. Libby, Institute for Nuclear Studies, University of Chicago, 1950), and at this juncture it may be helpful for the writer to state his opinion concerning the dates which may be expected from Lake Springs when carbon samples shall have been analysed.

The prepottery levels at Lake Springs and Stalling's Island who a remarkable similarity in artifactual content with the Green River shell heaps in Kentucky to which

they are apparently related. Radiocarbon dates from the Indian Knoll and Annis mounds of Kentucky average somewhat more than 5,000 years, or about 3,000 B.C. The Lake Springs prepottery deposits, when date by this means, should show a comparable antiquity.

Superposition of relatively thinner pottery bearing layers at Lake Springs and Stalling's Island suggests that earthenware appeared at a considerably later time, apparently with little change in the rest of the material culture inventory. We might guess that the advent of pottery occurred between three and four thousand years ago, between 2,000 and 1,000 B.C.

The Stalling's Island Culture at Lake Springs

The Lake Springs, Stalling's Island and other sites of this manifestation on the Savannah River were refuse accumulations resulting from long continued occupation. At Lake Springs the shell heap reached a maximum thickness of 3 ½ feet and was approximately 130 by 90 feet in extent. Scattered throughout the shell were broken animal bones, chiefly deer, but including many smaller mammals, terrapins, turtles, and several varieties of birds and fish. At various levels in the shell were small hearths and fired areas, and in two loci we found clear evidence of postholes indicating that some type of semi-permanent shelters had been used. Among the deposits were hundreds of small tools and weapons of bone and stone and occasional finely made pieces doubtless worn as ornaments. Most of the stone artifacts were large stemmed projectile points, and numerous chips of aplite, flint, and quartz attested that most of these had probably been made on the spot.

The thickness of the shell heap and the nature of the refuse suggests that the Stalling's Island people were sedentary food gatherers subsisting mainly on shellfish, fish, and the products of the chase. There was also evidence of the use of nuts and berries. Probably, like many another primitive people, they cheerfully ate whatever cam to hand. It is doubtful at present if they practiced any form of agriculture.

Early Roundheads

In the course of the excavations we encountered the remains of 17 human burials, somewhat less than half of which were measurable adults. The ancient inhabitants of Lake Springs did not mind burying their dead in the refuse deposits on the surface of which they made their homes. We have already mention the improbable events which conspired to enable us to work at the shell heap in the first place, but as the small crew continued excavating in the shell more surprises were in store. In the small sample of burials there were some round as well as long headed individuals. Wile the occasional presence of brachycephalic skulls at southern archaic sites has been noted from tine to time, their numbers were not considered significant in a population regarded as basically doichocephalic. Hooten pointed out in 1931 that the Stallings Island skeletons were round headed, but his remark apparently attracted little notice (See Claflin, William H., The Stalling's Island Mound, Columbia County, Georgia. Papers of the Peabody Museum of American Archeology and Ethnology, Harvard University, Vol. 14, No. 1, Cambridge).

Length-breadth indices of adult skulls of the Prepottery Stalling's Island period at Lake Springs. Not quite all have been restored at present.

Burial 8	.71
Burial 10	.74

Burial 12	.82
Burial 14	.72
Burial 17	.73
Miller's Burial	.81

The limited series of Lake Springs skull can be used for little more than to help formulate a problem. Taken in conjunction with the Stalling's Island evidence, it seems probable that an early round headed group must have appeared somewhere in the extreme Southeastern United States prior to the development of pottery in this area, perhaps about 4,000 years ago.[1]

Old Quartz Culture

The final surprise at Lake Springs came with the discovery of a cultural stratum deep below the site just a few days before the final rising of the river. Deep soundings had been attempted twice before, but these efforts had been negated by the caving of the waterlogged sand which underlay the site. On this particular day, with the river lower than usual, we had cut down into the sand beside a deep burial in order to extricate the bone. While standing in the cut, for some inexplicable reason it occurred to me to trowel out a small hole in the bottom. Thinking how fine it would be to find something deep below the supposedly virgin sand, I scarcely noticed when the point of the trowel struck a rock. The hold was barely large enough for my arm, but reaching down, I pulled out a broken river pebble, then another, and another. Realization was gradually dawning that these pebbles must have been broken by the hand of man, but had hardly alleviated my consternation when the fourth stretch in the hole produced a nicely chipped white quartz ovate scraper. We may conclude from these events that the wish is father to the though and grandfather to the discovery.

The rest of the day was spent digging the remainder of a ten foot square down to the lower stratum, and by evening we had five quartz artifacts, all ovate scrapers of fragments, and one reworked point of scraper of light blue flint. The next four days were devoted to exposing and photographing the deep level in four adjacent ten foot square, virtually completing our excavations in the lower layer. On the following Monday, wooden shoring was obtained through the kindness of the Corps of Engineers and we attempted to excavate a five foot square below the deep stratum. We reached only an additional three feet when the supersaturated sand caved in, carrying our construction with it. We were still not in the mood to desist from our efforts, but the river was now on the rise again and even the upper floors of the trenches began to be covered with water. The sides of several trenches then began collapsing, and we regretfully terminated the excavation.

The quartz artifact bearing layer was nearly four feet below the base of the prepottery Stalling's culture zone, separated from the latter by a deposit of what appeared to be pure river sand. This intervening sand showed no wash line, or any evidence that is was not deposited in a single operation by the river. This might have happened in a few hours and does not of itself imply any great age for the cultural zone lying below. The reason for considering it to be much older than the Stalling's Island culture is the enormous typological difference between the artifacts of the respective layers. Nearly all the artifacts from the lower zone were ovate and pointed ovate scrapers, nearly all stemless. On the other hand, the chipped stone assemblage in the Stalling's levels comprised mostly of stemmed points. The lower zone materials were almost all of

[1] It should be stated that I have not been able to examine the latest literature on the subject of early roundheads, which should have the attention of a specialist in physical anthropology.

quartz, whereas aplite, a kind of endurated claystone, was the prevalent chipped stone material I the shell heap above. The quartz scrapers also had a definite tendency to be smaller, and it sis believed that other differences between the two horizons will appear when the materials have been studied.

In view of the circumstance that the artifact assemblage of the Stalling's Island culture seems to show little change for a period of perhaps 1,500 or 2,000 years, we may suspect that the typological difference between Stalling's prepottery and the deeper levels would take at least 1,000 years to be formed. A conservative date for the lowest level would then be about 6,000 years ago, or 4,000 B.C. It may, however, be much older.

The quartz bearing layer appeared as a band of slightly darker sand two to four inches think containing many broken water worn pebble, quartz chips, and tiny inclusions of charred wood or other organic remains. Bone and shell fragments were rare and I am not certain the few specimens we possess might have intruded from the higher levels. Whether the charred wood fragments will provide satisfactory radiocarbon samples I do not know, for the material has been saturated by ground and river water time and again. In one place we found a small concentration of cracked and broken pebbles resembling the hearths of later peoples and beside it was a small area of charred wood. Such features, together with the innumerable quartz chips indicate that the stratum represents an occupational layer in site and not redeposited.

Altogether we have about 40 artifacts, nearly all of quartz. Their closest resemblance is to the Flowery Branch culture which was recognized last year in the upper Chattahoochee drainage near Buford, Georgia. We had supposed that Flowery Branch was the oldest archeological manifestations in that area, but until the work at Lake Springs, had no means of dating it. It is of interest to state that about 20 Flowery Branch

sites were found near Buford, and many others have subsequently been recognized in the Cartersville and Athens areas and in the Carolina Piedmont. This is also a scraper culture with artifacts nearly all of quartz and with many typological similarities to the finds in the lower levels of Lake Springs. To account for the probable thousands of Flowery Branch sites in Georgia and South Carolina, we must allow either a very large population, or a very long time span, or both.

Joseph R. Caldwell

Archeologist

Smithsonian Institution

Appendix F

Ceramics By Lot Number from Caldwell's Excavations

ABBREVIATIONS:

SI PL- Stallings Island Plain
SI Punc- Stallings Island Punctated
SI Inc- Stallings Island Incised
SI Punc/Inc- Stallings Island Punctated and Incised
SI SS- Stallings Island Simple Stamp
SI S&D- Stallings Island Stab-and-Drag (Drag-and-Jab)
SI UID- Stallings Island Unidentified

TC PL- Thom's Creek Plain
TC Punc- Thom's Creek Punctated
TC Inc- Thom's Creek Incised
TC S&D- Thom's Creek Stab-and-Drag (Drag-and-Jab)
TC UID- Thom's Creek Unidentified

ST UID- Sand/Grit Tempered Unidentified
ST PL- Sand/Grit Tempered Plain

D FM- Deptford Fabric Marked
D SS- Deptford Simple Stamp

SAV BP- Savannah Burnished Plain
SAV CS- Savannah Complicated Stamped

LA- Lamar Complicated Stamped

Body Sherds- p. 97, Rim sherds- p. 105

Lot	SI PL	SI Pu	SI In	SI Pu/In	SI SS	SI SD	SI UID	TC PL	TC Punc	TC Inc	TC S&D	ST UID	ST PL	D FM	D SS	Sav/Ir CS	TOTAL
	PL	Punc	Inc	Punc/Inc	SS	S&D	UID	PL	Punc	Inc	S&D	UID	PL	FM	SS	CS	
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	3	0	0	0	0	1	0	0	0	0	1	1	0	0	0	3	9
3	19	0	0	0	0	7	1	0	0	0	2	6	0	0	0	6	41
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	37	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	41
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	23	0	0	0	0	4	0	2	0	1	2	1	0	1	1	0	35
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
19	5	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	8
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
23	5	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	7
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
34	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	3	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	6
37	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	10	0	1	0	0	3	0	1	0	0	2	4	13	0	0	1	35
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41		0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	3
42	6	0	1	0	1	1	0	0	0	0	0	2	0	0	0	0	11
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	3	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	7
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	8	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	12
50	10	0	0	0	0	3	0	0	0	0	0	7	0	0	0	0	20
51	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
52	24	0	0	0	1	2	0	0	0	0	0	3	0	0	0	0	30
53	42	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	46
54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
58	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
59	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
60	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
61	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
68	10	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	14
69	9	1	1	0	0	0	3	1	0	0	0	2	0	0	0	0	17
70	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73	5	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6
74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
78	3	0	0	0	0	1	4	0	0	0	0	4	0	0	0	0	12
79	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5
87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
89	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	8	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	13
100	3	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	7
101	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
105	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
106	2	3	0	0	0	0	1	0	0	0	0	6	0	0	0	0	12
107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	3	8	2	0	0	0	0	0	0	0	0	3	0	0	0	0	16
109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	7	0	2	0	1	34	0	1	0	0	0	1	0	0	0	0	46
116	18	0	0	0	1	34	3	0	0	0	4	1	0	0	0	0	61
117	19	4	0	0	0	11	7	0	0	0	2	1	0	0	0	0	44
118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
119	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
121	3	0	0	0	0	22	0	3	0	0	0	7	0	0	0	0	35
122	12	1	0	0	0	12	1	0	0	0	0	3	0	0	0	0	29
123	0	0	0	0	1	1	0	0	0	0	0	6	0	0	0	0	8
124	2	0	0	0	0	2	0	0	0	0	1	2	0	0	0	0	7
125	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6

126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	12	0	1	0	0	8	0	0	0	0	1	0	0	0	0	0	22
128	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
129	1	0	1	0	0	0	0	0	0	1	1	3	0	0	0	0	7
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
132	16	0	5	1	4	34	2	0	0	0	0	8	0	0	0	0	70
133	19	0	5	0	0	37	2	0	0	0	0	1	0	0	0	1	65
134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	3	1	0	0	1	7	0	0	0	0	0	0	0	0	0	0	12
137	17	1	0	0	0	5	2	0	0	0	0	0	0	0	0	0	25
138	9	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	12
139	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
140	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
141	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	6	0	2	0	0	4	0	0	0	0	0	0	0	0	0	0	12
146	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
149	21	0	4	0	2	18	4	0	0	0	0	1	0	0	0	0	50
150	7	0	3	0	1	13	0	0	0	0	0	0	0	0	0	0	24
151	25	0	9	0	0	7	0	0	0	0	0	0	0	0	0	0	41
152	40	1	7	0	0	9	0	0	0	0	0	0	0	0	0	0	57
153	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
156	2	0	1	0	0	1	0	0	0	0	0	2	0	0	0	0	6
157	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4

158	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5
159	0	0	2	0	0	5	0	0	0	0	0	1	0	0	0	0	8
160	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5
161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
164	13	1	0	0	0	4	0	0	0	0	0	2	0	0	0	0	20
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	6	0	1	0	0	12	0	2	0	0	0	3	0	0	0	0	24
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
178	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
179	1	0	2	0	1	5	3	0	0	0	0	0	0	0	0	0	12
180	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
181	4	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	8
182	0	0	1	0	0	3	1	0	0	0	0	0	0	0	0	0	5
183	1	2	1	0	0	4	0	0	0	0	0	0	0	0	0	0	8
184	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
185	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
186	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
187	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
188	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

190	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
191	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
197	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
198	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
199	3	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0	7
200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
201	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
203	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
204	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
206	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
207	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3
208	9	0	1	0	1	5	0	0	0	0	0	0	0	0	0	0	16
209	11	0	1	0	0	5	1	0	0	0	0	4	0	0	0	0	22
210	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
212	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
213	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	3
214	2	0	0	0	1	5	2	0	0	0	0	2	0	0	0	0	12
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
216	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
217	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
218	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
219	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
221	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

222	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	5	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	9
226	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
227	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
228	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
229	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
231	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
233	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3
234	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
236	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
237	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
239	1	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	5
240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
241	3	5	0	0	0	4	0	0	0	0	0	0	0	0	0	0	12
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	662	38	56	2	19	407	47	15	1	2	16	107	13	1	1	11	1398

Rim Sherds

Lot	SI	SI	SI	SI	SI	SI	SI	TC	TC	TC	TC	ST	Totals
	PL	Punc	Inc	Punc/Inc	S&D	SS	UID	PL	Punc	Inc	S&D	UID	
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	4	0	0	0	1	0	0	0	0	0	1	0	6
3	1	0	0	0	0	0	0	1	0	0	0	1	3
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	1	0	0	0	0	0	0	0	0	0	0	0	1
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	4	1	0	0	0	0	0	0	0	0	0	0	5
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0
15	2	0	0	0	0	0	0	0	0	0	0	0	2
16	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0
19	1	1	0	0	1	0	0	0	0	0	0	0	3
20	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	1	0	0	0	0	0	0	0	1
24	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0
26	1	0	0	0	0	0	0	0	0	0	0	0	1
27	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	1	0	0	0	0	1
31	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	1	0	0	0	0	1
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	2	0	0	0	0	0	0	0	0	0	0	0	2
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	5	0	0	0	1	0	0	0	0	0	0	0	6

43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
46	1	0	0	0	0	0	0	0	0	0	0	3	4
47	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0
49	2	0	1	0	0	0	0	0	0	0	0	0	3
50	2	0	0	0	0	0	0	0	0	0	0	0	2
51	2	0	0	0	0	0	0	0	0	0	0	0	2
52	9	0	0	0	1	0	0	0	0	0	0	0	10
53	2	0	0	0	3	0	0	0	0	0	0	0	5
54	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
56	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	0	0	0	0	0	0	0
58	2	0	0	0	0	0	0	0	0	0	0	0	2
59	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0
61	1	0	0	0	0	0	0	0	0	0	0	0	1
62	0	0	0	0	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0	0	0	0	0
67	0	0	0	0	1	0	0	0	0	0	0	0	1
68	4	0	0	0	0	0	0	0	0	0	0	0	4
69	5	0	0	0	0	0	0	0	0	0	0	0	5
70	0	0	0	0	0	0	0	0	0	0	0	0	0
71	0	0	0	0	0	0	0	0	0	0	0	0	0
72	0	0	0	0	0	0	0	0	0	0	0	0	0
73	1	0	0	0	0	0	0	0	0	0	0	0	1
74	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
76	0	0	0	0	0	0	0	0	0	0	0	0	0
77	1	0	0	0	0	0	0	0	0	0	0	0	1
78	2	0	0	0	0	0	0	0	0	0	0	2	4
79	1	0	0	0	0	0	0	0	0	0	0	0	1
80	0	0	0	0	0	0	0	0	0	0	0	0	0
81	0	0	0	0	0	0	0	0	0	0	0	0	0
82	0	0	0	0	0	0	0	0	0	0	0	0	0
83	0	0	0	0	0	0	0	0	0	0	0	0	0
84	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
86	0	0	0	0	0	0	0	0	0	0	0	0	0
87	0	0	0	0	0	0	0	0	0	0	0	0	0
88	0	0	0	0	0	0	0	0	0	0	0	0	0
89	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	0	0	0	0	0

92	0	0	1	0	0	0	0	0	0	0	0	0	1
93	0	0	0	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0	0
99	1	0	0	0	0	0	0	0	0	0	0	0	1
100	1	0	0	0	1	0	0	0	0	0	0	0	2
101	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0
104	1	0	0	0	0	0	0	0	0	0	0	0	1
105	0	0	0	0	0	0	0	0	0	0	0	0	0
106	0	1	0	0	0	0	0	0	0	0	0	0	1
107	0	0	0	0	0	0	0	0	0	0	0	0	0
108	6	1	0	0	0	0	0	0	0	0	0	0	7
109	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0
111	0	0	0	0	0	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0	0	0	0	0	0
113	0	0	0	0	0	0	0	0	0	0	0	0	0
114	0	0	0	0	0	0	0	0	0	0	0	0	0
115	3	0	0	0	10	0	0	0	0	0	0	1	14
116	3	0	0	0	4	0	0	0	0	0	4	0	11
117	0	0	0	0	0	0	0	0	0	0	0	0	0
118	0	0	0	0	0	0	0	0	0	0	0	0	0
119	1	0	0	0	0	0	0	0	0	0	0	0	1
120	0	0	0	0	1	0	0	0	0	0	0	0	1
121	2	0	0	0	0	0	0	0	0	0	0	0	2
122	3	0	0	0	4	0	0	0	0	0	0	1	8
123	2	0	0	0	0	0	0	0	0	0	0	1	3
124	0	0	0	0	0	0	0	0	0	0	0	0	0
125	2	0	0	0	0	0	0	0	0	0	0	0	2
126	0	0	0	0	0	0	0	0	0	0	0	0	0
127	3	0	1	0	0	0	0	0	0	0	0	0	4
128	1	0	0	0	1	0	0	0	0	0	0	0	2
129	2	0	0	0	0	0	0	0	0	0	1	0	3
130	0	0	0	0	0	0	0	0	0	0	0	0	0
131	0	0	0	0	0	0	0	0	0	0	0	0	0
132	1	1	0	0	7	3	0	0	0	0	0	1	13
133	4	0	0	0	11	0	0	0	1	0	0	0	16
134	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0
136	1	0	0	0	2	0	0	0	0	0	0	0	3
137	9	1	0	0	2	0	1	0	0	0	0	0	13
138	5	0	0	0	0	0	0	0	0	0	0	0	5
139	5	0	0	0	0	0	0	0	2	0	0	0	7
140	3	0	0	0	0	0	0	0	0	0	0	0	3

141	0	0	0	0	0	0	0	0	0	0	0	0	0
142	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	2	0	0	0	0	0	0	0	2
146	0	0	0	0	0	0	0	0	0	0	0	0	0
147	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	0	0	0	0	0	0	0
149	7	0	1	0	6	0	0	0	0	0	0	0	14
150	0	1	1	0	4	0	0	0	0	0	0	1	7
151	6	0	1	0	3	0	0	0	0	0	0	0	10
152	7	0	0	0	0	0	0	0	0	0	0	0	7
153	0	0	0	0	1	0	0	0	0	0	0	0	1
154	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0
156	0	0	0	0	1	0	0	0	0	0	0	1	2
157	1	0	0	0	1	0	0	1	0	0	0	0	3
158	0	0	0	0	1	0	0	1	0	0	0	0	2
159	0	0	0	0	2	0	0	0	0	0	0	0	2
160	0	0	0	0	4	0	0	0	0	0	0	0	4
161	0	0	0	0	1	0	0	0	0	0	0	0	1
162	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0
164	1	0	0	0	0	0	0	0	0	0	0	0	1
165	0	0	0	0	0	0	0	0	0	0	0	0	0
166	3	0	0	0	1	0	1	0	0	0	0	1	6
167	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	1	1
169	0	0	0	0	0	0	0	0	0	0	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0
173	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0
176	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0
178	0	0	0	0	0	0	0	0	0	0	0	0	0
179	0	0	0	0	1	0	0	0	0	0	0	0	1
180	0	0	0	0	0	0	0	0	0	0	0	0	0
181	0	0	0	0	1	0	0	0	0	0	0	0	1
182	0	0	0	0	2	0	0	0	0	0	0	0	2
183	0	0	0	0	1	0	0	0	0	0	0	0	1
184	1	0	0	0	1	0	0	0	0	0	0	0	2
185	0	0	0	0	0	0	0	0	0	0	0	0	0
186	0	0	0	0	0	0	0	0	0	0	0	0	0
187	0	0	0	0	0	0	0	0	0	0	0	0	0
188	0	0	0	0	0	0	0	0	0	0	0	0	0
189	0	0	0	0	0	0	0	0	0	0	0	0	0

190	1	0	0	0	0	0	0	0	0	0	0	0	1
191	0	0	0	0	0	0	0	0	0	0	0	0	0
192	0	0	0	0	0	0	0	0	0	0	0	0	0
193	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0
196	0	0	0	0	0	0	0	0	0	0	0	0	0
197	0	0	0	0	0	0	0	0	0	0	0	0	0
198	0	0	0	0	0	0	0	0	0	0	0	0	0
199	1	0	0	0	0	0	0	0	0	0	0	0	1
200	0	0	0	0	0	0	0	0	0	0	0	0	0
201	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0	0	0	0	0	0	0	0
203	0	0	0	0	0	0	0	0	0	0	0	0	0
204	3	0	0	0	0	0	0	0	0	0	0	0	3
205	0	0	0	0	0	0	0	0	0	0	0	0	0
206	0	0	0	0	0	0	0	0	0	0	0	0	0
207	0	0	0	0	2	0	0	0	0	0	0	0	2
208	0	0	1	0	0	1	0	0	0	0	0	0	2
209	1	0	0	0	2	0	0	0	0	0	0	1	4
210	0	0	0	0	0	0	1	0	0	0	0	0	1
211	0	0	0	0	1	0	0	0	0	0	0	0	1
212	0	0	0	0	1	0	0	0	0	0	0	0	1
213	0	0	0	0	2	0	0	0	0	0	0	0	2
214	1	0	0	0	0	0	0	0	0	0	0	0	1
215	0	0	0	0	0	0	0	0	0	0	0	0	0
216	0	0	0	0	0	0	0	0	0	0	0	0	0
217	0	0	0	0	0	0	0	0	0	0	0	0	0
218	0	0	0	0	0	0	0	0	0	0	0	0	0
219	0	0	0	0	0	0	0	0	0	0	0	0	0
220	1	0	0	0	0	0	0	0	0	0	0	0	1
221	0	0	0	0	1	0	0	0	0	0	0	0	1
222	0	0	0	0	0	0	0	0	0	0	0	0	0
223	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0
226	0	0	0	0	0	0	0	0	0	0	0	1	1
227	0	0	0	0	0	0	0	0	0	0	0	0	0
228	0	0	0	0	0	0	0	0	0	0	0	0	0
229	0	0	0	0	0	0	0	0	0	0	0	0	0
230	0	0	0	0	0	0	0	0	0	0	0	0	0
231	0	0	0	0	0	0	0	0	0	0	0	0	0
232	0	0	0	0	0	0	0	0	0	0	0	0	0
233	0	0	0	0	2	0	0	0	0	0	0	0	2
234	0	1	0	0	0	0	0	0	0	0	0	0	1
235	0	0	0	0	0	0	0	0	0	0	0	0	0
236	0	0	0	0	0	0	0	0	0	0	0	0	0
237	0	0	0	0	0	0	0	0	0	0	0	0	0
238	0	0	0	0	0	0	0	0	0	0	0	0	0

239	1	0	0	0	0	0	0	0	0	0	0	0	1
240	0	0	0	0	0	0	0	0	0	0	0	0	0
241	0	0	0	0	0	0	0	0	0	0	0	0	0
242	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	150	8	7	0	96	4	3	5	3	0	6	16	298

Appendix G

Ceramics From Miller's Excavations By Lot Number

ABBREVIATIONS:

SI PL- Stallings Island Plain
SI Punc- Stallings Island Punctated
SI Inc- Stallings Island Incised
SI Punc/Inc- Stallings Island Punctated and Incised
SI SS- Stallings Island Simple Stamp
SI S&D- Stallings Island Stab-and-Drag (Drag-and-Jab)
SI UID- Stallings Island Unidentified

TC PL- Thom's Creek Plain
TC Punc- Thom's Creek Punctated
TC Inc- Thom's Creek Incised
TC S&D- Thom's Creek Stab-and-Drag (Drag-and-Jab)
TC UID- Thom's Creek Unidentified

ST UID- Sand/Grit Tempered Unidentified
ST PL- Sand/Grit Tempered Plain

D FM- Deptford Fabric Marked
D SS- Deptford Simple Stamp

SAV BP- Savannah Burnished Plain
SAV CS- Savannah Complicated Stamped

LA- Lamar Complicated Stamped

Lot	SI	SI	SI	SI	SI	SI	SI	TC	TC	TC	TC	R	D	C	I	I	SV	SV	ALT	ST	Totals
	PL	Punc	Inc	Punc/Inc	SS	S&D	UID	PL	Punc	Inc	S&D	SS	RF	Ch	PL	Inc	BP	ShScr	SS	UID	
1	67	2	1	0	0	3	2	0	0	0	0	0	0	0	0	0	1	0	0	6	82
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	5	0	1	0	0	4	0	1	0	0	0	1	1	1	1	0	0	0	0	2	17
5	2	0	1	0	0	8	0	0	0	0	0	0	0	1	0	1	2	2	1	2	20
6	27	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	5	37
7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	7	2	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
12	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	109	4	4	0	2	32	5	1	0	0	0	1	1	2	1	1	6	2	1	16	188

Appendix H

Projectile Points By Lot Number From Caldwell's Excavations

ABBREVIATIONS:

PPK- Projectile Point Knife

Q MM- Morrow Mountain (Quartz)
Ch MM- Morrow Mountain (Chert)
Me MM- Morrow Mountain (Metavolcanic)

GUIL- Guilford

Q SR- Savannah River (Quartz)
Ch SR- Savannah River (Chert)
Me SR- Savannah River (Metavolcanic)

Q Brk- Broken PPK (Quartz)
Ch Brk- Broken PPK (Chert)
Me Brk- Broken PPK (Metavolcanic)

Q UID- Unidentified (Quartz)
Ch UID- Unidentified (Chert)
Me UID- Unidentified (Metavolcanic)

"Blank"- Savannah River PPK Preforms (Metavolcanic)

Lot	Q-MM	Ch-MM	Me-MM	GUIL	Q-SR	Ch-SR	Me-SR	Q-Brk	Ch-Brk	Meta-Brk	Q-UID	Ch-UID	Me-UID	"Blank"	Total
1	0	0	0	0	0	0	0	0	0	0	1	0	0	2	3
2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3	0	0	0	1	2	0	1	0	0	1	3	0	0	3	11
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
6	1	0	0	0	3	0	4	0	0	0	2	0	1	0	11
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	9	2	2	0	0	0	6	0	0	0	19
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	5	1	7	0	0	0	3	0	0	0	16
11	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	2	0	0	0	0	0	2	0	4
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2
19	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
23	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2
24	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
25	0	0	0	0	0	0	1	1	0	0	0	0	0	1	3
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	2	0	0	0	2	0	5	0	0	3	0	0	0	0	12

31	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
32	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
33	1	0	0	0	8	0	0	0	0	0	0	0	1	0	10
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	1	0	0	0	3	1	0	0	0	0	5	0	0	0	10
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	5	0	0	0	2	0	2	1	10
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52	0	0	0	0	2	0	3	0	0	0	0	0	0	0	5
53	0	0	0	0	0	0	2	0	0	0	0	0	0	3	5
54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
60	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67	0	0	0	0	2	0	1	0	0	0	3	0	0	0	6
68	0	0	0	0	3	0	1	0	0	0	3	0	0	0	7
69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	0	0	0	0	0	2	0	0	1	0	0	0	0	3
71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
78	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
79	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
80	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
85	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
86	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
89	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
100	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
105	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
106	0	0	0	0	1	1	1	1	0	0	0	0	0	0	4
107	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
108	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	1	1	0	0	4	0	1	0	0	0	2	0	0	0	9
113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	1	3	7	2	0	1	1	4	2	1	22
116	1	0	0	0	0	2	5	1	0	0	1	0	0	1	11
117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
118	2	0	0	0	1	0	1	0	0	1	1	0	1	0	7
119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
122	0	0	0	0	3	1	2	0	0	0	2	0	1	1	10
123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
125	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

127	0	0	0	0	4	0	1	0	0	0	1	1	1	0	8
128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
129	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
133	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
134	1	0	0	0	3	3	4	0	0	0	1	0	0	0	12
135	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
136	2	0	0	0	4	1	2	0	0	1	2	0	3	0	15
137	0	0	0	0	4	0	1	0	0	0	0	0	0	0	5
138	0	0	0	0	3	0	0	0	0	0	1	0	0	0	4
139	0	0	0	0	2	0	4	0	0	0	0	0	0	4	10
140	0	0	0	0	0	0	2	0	0	1	0	0	0	7	10
141	0	0	0	0	0	0	5	0	0	0	0	0	0	6	11
142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
143	0	0	0	0	1	0	0	0	0	0	0	0	0	3	4
144	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2
145	1	0	0	0	0	0	1	0	0	0	0	1	0	1	4
146	0	0	0	0	1	0	1	0	0	2	1	0	0	0	5
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
149	0	0	0	0	2	1	8	0	0	0	0	0	3	1	15
150	0	0	0	0	1	5	4	0	0	0	0	0	7	0	17
151	0	0	0	0	0	1	4	0	0	0	0	0	0	0	5
152	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
153	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
156	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2
157	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
158	0	0	0	0	0	2	0	0	0	0	2	0	0	0	4

159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
161	0	0	0	0	3	0	1	0	0	0	0	0	0	0	4
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	1	0	0	5	0	6
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	1	13	0	0	0	0	0	0	18	32
173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	1	0	0	1	0	0	3	1	6
178	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
179	0	0	1	0	0	2	0	0	0	0	0	1	0	0	4
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
181	0	0	0	0	0	1	2	0	0	0	1	0	2	0	6
182	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
183	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
184	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
185	0	0	0	0	0	2	4	0	0	0	0	0	1	0	7
186	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
187	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
188	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

191	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
197	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
198	0	0	0	0	0	0	1	0	0	0	1	0	0	1	3
199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
201	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	0	0	0	0	0	0	7	0	0	0	0	0	2	7	16
203	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4
204	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
205	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
206	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
207	1	0	0	0	0	1	1	0	0	0	0	0	0	0	3
208	2	0	0	0	1	4	4	0	0	0	0	0	0	3	14
209	0	0	0	0	1	0	2	0	0	0	0	0	0	0	3
210	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
212	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
213	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
214	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
215	0	0	0	0	2	0	3	0	0	0	2	0	0	0	7
216	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2
217	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
218	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
219	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2
220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
221	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
222	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
226	0	0	0	0	2	0	1	0	0	0	0	0	0	1	4
227	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
228	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
229	0	0	0	0	1	0	0	1	0	0	1	0	0	0	3
230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
231	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
232	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
233	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
235	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
236	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
237	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
238	0	0	0	0	0	2	0	0	0	0	0	0	1	0	3
239	0	1	0	0	0	0	0	0	0	0	2	0	1	0	4
240	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
241	0	0	0	0	0	0	5	0	0	0	1	0	0	5	11
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	19	2	2	1	97	48	190	10	0	17	62	10	45	84	587

Appendix I

Projectile Points From Miller's Excavation By Lot Number

ABBREVIATIONS:

PPK- Projectile Point Knife

Q MM- Morrow Mountain (Quartz)
Ch MM- Morrow Mountain (Chert)
Me MM- Morrow Mountain (Metavolcanic)

GUIL- Guilford

Q SR- Savannah River (Quartz)
Ch SR- Savannah River (Chert)
Me SR- Savannah River (Metavolcanic)

Q Brk- Broken PPK (Quartz)
Ch Brk- Broken PPK (Chert)
Me Brk- Broken PPK (Metavolcanic)

Q UID- Unidentified (Quartz)
Ch UID- Unidentified (Chert)
Me UID- Unidentified (Metavolcanic)

"Blank"- Savannah River PPK Preforms (Metavolcanic)

Lot	PPK Q-MM	PPK Ch-MM	PPK Me-MM	PPK Q-SR	PPK Ch-SR	PPK Me-SR	PPK MT	PPK Q-Brk	PPK Ch-Brk	PPK Me-Brk	PPK Q-UID	PPK Ch-UID	PPK Me-UID	PPK "Blank"	
1	3	0	0	4	2	13	1	1	0	0	17	1	4	1	guilford, Kirk notched?
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	3	0	0	0	0	0	1	3	2	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	2	0	0	2	0	9	1	0	0	0	3	2	10	9	
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	0	0	0	0	0	1	0	0	0	1	0	0	5	0	stanley
9	1	0	0	2	0	1	0	0	0	0	0	0	1	0	
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	0	0	0	0	0	1	0	0	0	0	0	0	0	1	
13	0	0	0	0	0	2	0	0	0	0	0	0	0	0	
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Appendix J

Lithics (Excluding PPKs) From Caldwell's Excavation By Lot Number

Q-Quartz
Ch-Chert
Meta-Metavolcanic

Lot	Biface	Biface	Biface	Drill	Drill	Drill	Flakes	Flakes	Flakes	Shatter	Core	Core	Core	Scraper	Scraper	Scraper	TOTALS
	Q	Ch	Meta	Q	Ch	Meta	Q	Ch	Meta	Quartz	Q	Ch	Meta	Q	Ch	Meta	
1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	3
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	5	0	1	2	0	0	0	2	0	0	10
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	3
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
11	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	1	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	5
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	3
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
34	3	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	6
35	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	3
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	4	0	0	0	0	0	8	0	1	0	1	0	0	1	0	0	15
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
52	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67	0	0	0	0	0	0	5	0	0	0	3	0	0	0	0	1	9
68	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2
69	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3
79	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	4
83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	3
87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3	5
89	0	0	1	0	0	0	1	0	6	0	0	0	0	0	0	0	8
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
100	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	1	0	0	0	0	0	13	1	0	0	0	0	2	0	0	17
116	0	0	1	0	0	0	0	7	1	0	1	0	0	0	0	0	10
117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
122	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	3
123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
127	1	0	0	0	0	0	7	0	0	1	1	0	1	0	0	0	11
128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
129	1	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	5
130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
133	0	0	0	0	0	0	2	0	1	0	2	0	0	0	0	0	5
134	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	4
135	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	3
136	0	0	0	0	0	0	2	1	5	0	0	0	0	0	0	0	8
137	0	0	0	0	0	0	2	0	3	0	1	0	0	1	0	0	7
138	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
139	0	0	0	0	0	0	2	0	3	0	0	0	2	1	0	0	8
140	0	0	0	0	0	0	1	0	13	0	1	0	4	1	0	0	20
141	0	0	0	0	0	0	1	0	14	0	0	0	2	0	0	0	17
142	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	0	5
143	0	0	0	0	0	0	1	0	14	0	0	0	3	0	0	0	18
144	0	0	0	0	0	0	3	1	11	0	0	0	0	0	0	0	15
145	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	0	5
146	0	0	0	0	0	0	6	5	7	0	0	0	0	0	0	0	18
147	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
148	0	0	0	0	0	0	1	0	8	0	0	0	0	0	0	0	9
149	0	0	2	0	0	1	0	0	3	1	0	0	0	0	0	1	8
150	0	0	0	0	0	0	0	1	7	1	0	0	0	0	0	0	9
151	0	1	0	0	1	0	1	0	5	2	0	0	0	0	0	0	10
152	0	0	0	1	0	0	4	1	2	0	0	0	0	0	0	0	8
153	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
158	0	0	0	0	0	0	0	2	3	1	0	0	0	0	0	0	6
159	0	0	0	0	0	0	1	0	6	0	0	0	0	0	0	0	7
160	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
161	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1

164	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
169	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	11
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	4
173	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
174	0	0	0	0	0	0	6	2	11	0	0	0	0	0	0	0	19
175	0	0	0	0	0	0	4	0	1	0	0	0	0	0	0	0	5
176	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	11
177	0	0	0	0	0	0	1	0	12	0	0	0	0	0	0	0	13
178	0	0	0	0	0	0	1	8	27	3	0	0	0	0	0	0	39
179	0	0	0	0	0	0	10	7	8	3	0	0	0	0	0	1	29
180	0	0	0	0	0	0	0	1	29	0	0	0	0	0	0	0	30
181	0	0	0	0	0	0	1	1	9	0	0	0	0	0	0	0	11
182	0	0	0	0	0	0	1	0	5	0	0	0	0	0	0	0	6
183	0	0	0	0	0	0	0	2	5	0	0	0	0	0	0	0	7
184	0	0	0	0	0	0	4	0	9	1	0	0	0	0	0	0	14
185	0	0	0	0	0	0	7	2	13	1	1	0	0	0	0	0	24
186	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0	7
187	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
188	0	0	0	0	0	0	2	4	7	0	0	0	0	0	0	0	13
189	0	0	0	0	0	0	0	0	2	1	1	0	1	0	0	0	5
190	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	4
191	0	0	0	0	0	0	10	0	3	0	0	0	0	0	0	0	13
192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

197	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
198	0	0	0	0	0	0	0	0	0	7	1	0	0	2	0	0	10
199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200	0	0	0	0	0	0	11	0	3	0	0	0	0	0	0	1	15
201	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
205	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
206	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	0	0	0	0	0	0	0	0	16	1	0	0	0	0	0	0	17
209	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
210	0	0	0	0	0	0	1	0	2	2	0	0	0	0	0	0	5
211	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
212	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
213	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	1	0	4	0	0	0	1	0	0	0	6
215	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
216	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
217	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
218	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
219	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
221	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
222	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
223	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	1	0	0	0	0	0	1	0	0	0	2	0	0	1	0	0	5
226	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
227	2	0	0	0	0	0	1	0	2	1	0	2	0	1	0	0	9
228	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
229	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1

230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
231	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
232	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
233	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	4	0	9	0	1	0	0	0	0	0	14
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
236	1	0	0	0	0	0	4	0	0	0	3	0	0	0	0	0	8
237	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	0	5
238	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	0	6
239	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
240	0	0	0	0	0	0	22	0	0	0	5	0	0	0	0	0	27
241	0	0	0	0	0	0	1	1	0	0	1	0	0	1	0	0	4
242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	18	2	6	3	1	4	167	65	367	38	39	3	17	33	0	10	773

Appendix K

Lithics (Excluding PPKs) From Miller's Excavation By Lot Number

Q-Quartz
Ch-Chert
Meta-Metavolcanic

Lot	Bifaceee	Bifaceee	Bifaceee	Drillll	Drillll	Drillll	Flakees	Flakees	Flakees	Shatterrr	Coreee	Coreee	Coreee	Scraperrr	Scraperr	Scrap
	Q	Ch	Meta	Q	Ch	Meta	Q	Ch	Meta	Quartz	Q	Ch	Meta	Q	Ch	Meta
1	0	0	0	1	1	2	12	8	30	0	1	0	0	4	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	1	0	0	0	0	0	4	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	1	0	1	0	2	1	0	1	9	0	1	0	2	0	0	
7	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
8	0	0	0	0	0	0	1	14	400	0	0	0	3	0	0	
9	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totallls	1	1	2	1	3	5	13	23	444	0	2	0	5	4	0	

Appendix L

Unmodified Lithic, Fire-Cracked Rock, Unmodified Bone, And Miscellaneous Artifacts From Caldwell's Excavations By Lot

Lot	Unmod Lithic	FC Rock	Unmod Bone	Gnawed bone	Shell	Daub	Charcoal	Limonite	Red Ochre	Mica	Hammer Stone	Atlatl Weight	Miscellaneous
1	0.0	0.0	1758.3	0	34.8	22.2	0.0	0.0	0.0	0.0	0	1	
2	0.0	0.0	28.7	0	33.7	0.0	0.0	0.0	0.0	0.0	0	0	
3	0.0	0.0	557.2	0	65.3	45.9	0.0	0.0	0.0	0.0	0	0	
4	0.0	0.0	2379.6	0	4.9	0.0	10.2	0.0	0.0	0.0	0	0	
5	0.0	0.0	983.6	3	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
6	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
7	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
8	0.0	0.0	94.5	0	0.0	4.0	0.0	0.0	0.0	0.0	0	1	
9	0.0	0.0	3125.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	1	
10	0.0	0.0	0.0	0	0.0	71.0	0.0	0.0	0.0	0.0	0	0	
11	21.4	0.0	427.5	1	0.0	22.1	0.0	0.0	0.0	0.0	0	0	
12	0.0	0.0	80.6	0	2.6	0.0	0.0	0.0	0.0	0.0	0	0	
13	23.6	0.0	355.7	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
14	0.0	0.0	2082.1	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
15	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
16	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
17	0.0	0.0	1609.2	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
18	0.0	0.0	20.3	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
19	0.0	0.0	814.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
20	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
21	0.0	0.0	696.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
22	0.0	0.0	9.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
23	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
24	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
25	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
26	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
27	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
28	0.0	0.0	646.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
29	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
30	0.0	0.0	160.4	0	3.7	0.0	0.0	0.0	0.0	0.0	0	0	

31	0.0	0.0	135.8	0	14.8	0.0	0.0	0.0	0.0	0.0	0	0	
32	0.0	0.0	255.2	0	95.2	39.6	0.0	0.0	0.0	0.0	0	0	
33	44.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
34	0.0	0.0	45.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
35	0.0	0.0	10.3	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
36	0.0	0.0	5.2	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
37	0.0	0.0	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
38	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
39	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
40	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
41	0.0	0.0	676.1	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
42	0.0	0.0	1188.2	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
43	0.0	0.0	156.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
44	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	1	0	
45	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
46	0.0	0.0	195.1	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
47	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
48	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
49	0.0	0.0	0.0	0	0.0	50.1	0.0	0.0	0.0	0.0	0	0	
50	0.0	0.0	1578.5	0	0.0	0.0	0.0	0.0	0.0	0.0	1	0	
51	0.0	0.0	1449.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	1	
52	0.0	0.0	317.8	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
53	0.0	0.0	2600.6	0	0.0	70.3	0.0	0.0	0.0	0.0	0	0	
54	0.0	0.0	871.1	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
55	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
56	0.0	0.0	143.9	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
57	0.0	0.0	424.3	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
58	0.0	0.0	481.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
59	0.0	0.0	583.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
60	0.0	0.0	0.0	0	0.0	23.6	0.0	0.0	0.0	0.0	0	0	
61	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
62	0.0	0.0	72.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	

63	0.0	0.0	1073.1	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
64	0.0	0.0	1463.1	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
65	0.0	0.0	111.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
66	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
67	0.0	0.0	35.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
68	70.3	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
69	0.0	0.0	0.0	0	0.0	19.7	0.0	0.0	0.0	0.0	0	0	
70	0.0	0.0	56.3	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	1 chunkey stone
71	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
72	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
73	119.0	0.0	83.1	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
74	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
75	18.1	0.0	1017.9	0	0.0	24.6	0.0	0.0	0.0	0.0	0	1	
76	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
77	0.0	0.0	407.7	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
78	12.4	0.0	1147.0	0	0.0	20.6	0.8	0.0	0.0	0.0	0	0	
79	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
80	0.0	0.0	250.1	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
81	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
82	0.0	0.0	117.5	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
83	0.0	0.0	48.8	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
84	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
85	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
86	0.0	0.0	338.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
87	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
88	0.0	0.0	86.8	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
89	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
90	0.0	0.0	144.1	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
91	0.0	0.0	449.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
92	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
93	0.0	0.0	1163.2	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
94	0.0	0.0	1805.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	

95	0.0	0.0	658.9	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
96	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
97	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
98	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
99	0.0	0.0	582.1	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
100	136.4	0.0	73.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
101	0.0	0.0	730.8	0	0.0	0.0	0.0	0.0	0.0	0.0	1	0	
102	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
103	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
104	0.0	0.0	10.8	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
105	30.5	0.0	241.7	0	0.0	2.5	0.0	0.0	0.0	0.0	0	0	
106	0.0	0.0	12.5	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
107	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
108	18.0	0.0	34.2	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
109	0.0	0.0	71.9	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
110	0.0	0.0	1641.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
111	0.0	0.0	2962.1	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
112	0.0	0.0	2099.0	0	58.6	0.0	0.0	0.0	0.0	0.0	0	0	
113	0.0	0.0	608.5	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
114	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
115	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	1 polished grinding tool
116	0.0	0.0	8.7	0	0.0	0.0	0.0	9.3	0.0	0.0	0	0	
117	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
118	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
119	0.0	0.0	331.7	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
120	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
121	0.0	0.0	243.9	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
122	105.0	0.0	1691.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
123	355.0	0.0	9.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
124	0.0	0.0	146.5	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
125	0.0	0.0	286.9	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	

126	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
127	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
128	0.0	0.0	0.0	0	0.0	0.0	0.0	4.7	0.0	0.0	0	0	
129	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
130	0.0	0.0	521.3	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
131	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
132	0.0	0.0	365.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
133	0.0	0.0	1071.8	1	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
134	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	1 petrified wood abrader
135	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
136	0.0	0.0	381.7	0	0.0	8.6	0.0	0.0	0.0	0.0	0	0	
137	0.0	0.0	1258.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
138	141.1	0.0	853.5	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	1 mano-metate pair?
139	0.0	0.0	1723.5	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
140	0.0	0.0	2636.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
141	0.0	0.0	950.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
142	0.0	0.0	789.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	1	
143	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
144	0.0	0.0	1004.2	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
145	0.0	0.0	315.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
146	0.0	0.0	487.3	0	0.0	24.5	0.0	0.0	0.0	0.0	0	0	
147	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
148	0.0	0.0	44.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
149	108.6	0.0	71.6	0	0.0	0.0	0.0	0.0	0.0	0.0	1	0	
150	0.0	0.0	427.7	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
151	364.9	0.0	642.8	0	0.7	0.0	0.0	0.0	0.0	0.0	0	0	
152	79.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
153	0.0	0.0	0.0	0	0.0	12.5	0.0	0.0	0.0	0.0	0	0	
154	0.0	0.0	1300.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
155	0.0	0.0	506.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	

156	35.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
157	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
158	34.0	0.0	18.9	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
159	29.5	0.0	77.9	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
160	0.0	0.0	186.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	1	
161	0.0	0.0	26.2	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
162	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
163	0.0	0.0	12.8	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
164	15.3	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	1 piece of kaolin (2.53g)
165	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
166	36.7	0.0	347.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
167	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
168	97.8	41.5	451.6	0	3.7	0.0	0.0	0.0	0.0	0.0	0	0	
169	0.0	2631.8	0.0	1	4.6	0.0	0.0	0.0	0.0	0.0	0	0	UID lithic meta slab
170	0.0	0.0	320.3	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
171	0.0	0.0	68.8	0	0.0	2.3	0.0	0.0	0.0	0.0	0	0	
172	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
173	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
174	118.5	228.4	189.5	0	9.5	0.0	0.0	0.0	2.8	0.0	0	0	
175	0.0	0.0	102.9	0	8.0	0.0	0.0	0.0	0.0	0.0	0	0	
176	0.0	0.0	87.4	0	0.0	0.0	0.0	2.4	0.0	0.0	0	0	
177	844.1	580.8	780.7	0	0.6	5.5	0.0	0.0	0.0	0.0	0	0	
178	381.4	247.7	97.6	0	0.0	3.6	0.0	0.0	0.0	0.0	0	0	
179	130.3	45.2	98.1	0	0.0	0.0	0.9	0.0	0.0	0.0	0	0	
180	93.3	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
181	873.9	0.0	94.8	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
182	361.4	326.2	304.9	0	0.0	11.7	0.0	0.0	0.0	0.0	0	0	
183	4.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	1 ceramic polishing stone
184	247.5	0.0	489.5	0	9.0	3.4	2.0	0.0	0.0	0.0	0	0	

185	177.4	0.0	339.4	0	9.9	0.0	0.0	0.0	0.0	0.0	0	0	soil sample
186	17.5	0.0	8.7	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
187	103.1	0.0	153.5	0	0.0	0.0	0.6	0.0	0.0	0.0	0	0	
188	18.2	0.0	34.5	0	10.1	0.6	0.0	0.0	0.0	0.0	0	0	soil sample
189	14.7	0.0	67.5	0	28.1	0.0	0.0	0.0	0.0	0.0	0	0	
190	18.8	0.0	244.0	0	1.1	0.0	0.0	0.0	0.0	0.0	0	0	
191	161.4	17.6	342.6	0	0.0	0.0	0.9	0.0	0.0	0.0	0	0	soil sample
192	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
193	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
194	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
195	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
196	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
197	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
198	31.0	0.0	1.8	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
199	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
200	303.9	0.0	144.0	0	12.6	0.0	0.0	0.0	0.0	0.0	0	0	1 Granite slab
201	55.6	0.0	81.9	0	0.0	5.2	0.0	0.0	0.0	0.0	0	0	
202	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
203	0.0	0.0	1403.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
204	14.3	0.0	351.3	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
205	63.4	0.0	1.1	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
206	0.0	0.0	200.9	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
207	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
208	32.3	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
209	0.0	0.0	2.3	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
210	0.0	0.0	301.5	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
211	59.5	0.0	65.8	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
212	0.0	0.0	13.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
213	0.0	0.0	24.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
214	0.0	0.0	125.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
215	11.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
216	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	

217	0.0	0.0	96.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
218	0.0	0.0	14.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
219	0.0	0.0	48.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
220	0.0	0.0	448.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
221	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
222	0.0	0.0	148.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
223	0.0	0.0	50.6	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
224	0.0	0.0	210.5	0	0.0	133.5	0.0	0.0	0.0	0.0	0	1	
225	0.0	0.0	20.1	0	39.2	0.0	0.0	0.0	0.0	0.0	0	0	
226	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
227	14.3	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
228	0.0	0.0	953.6	0	6.1	0.0	0.0	0.0	0.0	0.0	0	0	
229	0.0	0.0	813.7	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
230	0.0	0.0	504.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
231	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
232	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
233	0.0	0.0	35.4	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
234	0.0	0.0	0.0	0	0.0	7.2	0.0	0.0	0.0	0.0	0	0	
235	0.0	0.0	115.7	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
236	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
237	0.0	0.0	90.9	0	8.7	0.0	0.0	0.0	0.0	0.0	0	0	
238	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
239	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	
240	105.5	0.0	0.0	0	0.0	0.0	0.0	0.0	3.6	12.2	0	0	
241	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0	1	
242	0.0	0.0	263.2	0	1.1	0.0	0.0	0.0	0.0	0.0	0	0	
Total	6153.0	4119.2	76089.7	**7**	466.3	634.6	15.4	16.3	6.4	12.2	4	9	

Appendix M

Unmodified Rock, Fire-Cracked Rock, And Other Miscellaneous Artifacts From Miller's Excavations By Lot Number

Lot Number	Atlatl weight	Hammer Stone	Axe	Boiling Stones	Gaming Stone	Petrified Wood
1	0	0	0	2	0	0
2	0	0	0	0	0	0
3	0	0	0	0	0	0
4	0	0	0	0	0	0
5	0	0	0	0	0	3
6	0	0	0	0	0	0
7	0	0	0	0	0	0
8	0	0	0	0	0	0
9	0	0	0	0	0	0
10	0	0	1	0	0	0
11	0	0	0	0	0	0
12	0	0	0	0	0	0
13	2	0	0	0	1	0
14	0	1	0	0	0	0
15	0	0	0	0	0	0
16	0	0	0	0	0	0
17	0	0	0	0	0	0
Totals	2	1	1	2	1	3

Appendix N

Soapstone Heating Slabs And Vessel Fragments From Caldwell's Excavation By Lot Number

Lot	Soapstone	
	Slabs	Vessels Fragments
1	6	1
2	0	0
3	3	0
4	0	0
5	1	0
6	0	0
7	0	0
8	4	1
9	0	0
10	6	0
11	4	0
12	0	0
13	0	0
14	0	0
15	1	0
16	0	0
17	0	0
18	2	0
19	2	0
20	0	0
21	0	0
22	0	0
23	1	0
24	0	0
25	2	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	1	0
32	0	0
33	0	0
34	3	0
35	0	0
36	0	0
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	11	0
43	0	0
44	0	0
45	0	0

46	0	0
47	0	0
48	2	0
49	0	0
50	0	0
51	2	0
52	0	0
53	1	0
54	0	0
55	0	0
56	0	0
57	0	0
58	0	0
59	2	0
60	0	0
61	0	0
62	0	0
63	0	0
64	0	0
65	0	0
66	0	0
67	0	0
68	0	0
69	4	0
70	10	0
71	0	0
72	0	0
73	2	0
74	0	0
75	1	0
76	0	0
77	0	0
78	1	0
79	0	0
80	2	0
81	0	0
82	0	0
83	0	0
84	1	0
85	0	0
86	1	0
87	0	0
88	0	0
89	0	0
90	0	0
91	0	0
92	0	0
93	0	0
94	0	0

95	0	0
96	0	0
97	0	0
98	0	0
99	0	0
100	5	0
101	0	0
102	0	0
103	0	0
104	0	0
105	0	0
106	0	0
107	0	0
108	1	0
109	0	0
110	0	0
111	0	0
112	2	1
113	0	0
114	0	0
115	0	2
116	2	0
117	0	0
118	0	3
119	2	0
120	0	0
121	0	0
122	3	0
123	0	0
124	0	0
125	2	0
126	0	0
127	0	0
128	0	0
129	0	0
130	0	0
131	0	0
132	0	1
133	2	1
134	3	3
135	1	3
136	1	1
137	2	0
138	1	0
139	10	0
140	1	0
141	1	0
142	1	0
143	4	0

144	7	0
145	0	0
146	1	0
147	0	0
148	0	0
149	0	0
150	2	1
151	0	0
152	0	0
153	1	0
154	0	0
155	2	0
156	0	1
157	0	0
158	0	0
159	0	0
160	2	0
161	0	0
162	0	1
163	0	0
164	0	0
165	0	0
166	0	0
167	0	0
168	0	0
169	0	0
170	6	0
171	0	0
172	5	0
173	1	0
174	0	0
175	0	0
176	0	0
177	0	0
178	0	2
179	0	0
180	0	0
181	1	0
182	0	0
183	0	0
184	0	0
185	0	1
186	0	0
187	0	0
188	0	0
189	0	0
190	0	0
191	0	0
192	0	0

193	0	0
194	0	0
195	0	0
196	0	0
197	0	0
198	1	0
199	0	0
200	0	0
201	0	0
202	3	0
203	3	0
204	1	0
205	0	0
206	0	0
207	0	0
208	3	0
209	1	0
210	0	0
211	0	0
212	0	0
213	0	0
214	0	0
215	0	0
216	0	0
217	0	0
218	1	0
219	1	0
220	0	0
221	2	0
222	0	0
223	0	0
224	3	0
225	0	0
226	0	1
227	0	0
228	0	0
229	1	0
230	0	0
231	0	0
232	0	0
233	0	0
234	0	0
235	1	0
236	0	0
237	0	0
238	1	1
239	0	0
240	0	0
241	1	1

242	0	0
Total	171	26

Appendix O

Soapstone Heating Slabs and Vessel Fragments From Miller's Excavations By Lot Number

Lot Number	Slabs	Vessel Fragment
1	4	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	1	0
9	0	0
10	0	0
11	0	0
12	0	0
13	1	0
14	0	0
15	0	0
16	0	1
17	0	0
Totals	6	1

Appendix P

Bone Tools From Caldwell's Excavations By Lot Number

Lot	Worked Bone					Notes
	Awl	Pendant	Abrader	Unid'd	Wked bone totals	
1	0	0	0	0	0	
2	0	0	0	11	11	
3	0	1	1	0	2	
4	0	0	0	0	0	
5	0	0	0	3	3	
6	0	0	0	0	0	
7	0	0	0	0	0	
8	3	0	0	0	3	
9	0	0	0	12	12	
10	0	0	0	0	0	
11	0	0	0	0	0	
12	0	0	0	0	0	
13	1		2	0	3	
14	0	0	0	1	1	
15	0	0	0	1	1	
16	0	0	0	0	0	
17	0	0	0	0	0	
18	0	0	0	0	0	
19	0	0	0	3	3	
20	0	0	0	0	0	
21	0	0	0	0	0	
22	0	0	0	0	0	
23	0	0	0	0	0	
24	0	0	0	2	2	
25	0	0	0	0	0	
26	0	0	0	1	1	
27	0	0	0	0	0	
28	0	0	0	0	0	
29	0	0	0	0	0	
30	0	0	0	0	0	
31	0	0	0	0	0	
32	0	0	0	0	0	
33	0	0	0	0	0	
34	0	0	0	0	0	
35	0	0	0	0	0	
36	0	0	0	0	0	
37	0	0	0	0	0	
38	0	0	0	0	0	
39	0	0	0	2	2	
40	0	0	0	0	0	
41	0	0	0	0	0	
42	0	0	0	10	10	
43	0	0	0	0	0	
44	0	0	0	0	0	

45	0	0	0	0	0	
46	0	0	0	1	1	
47	0	0	0	0	0	
48	0	0	0	0	0	
49	11	0	0	0	11	
50	5	0	0	0	5	
51	7	0	0	0	7	
52	4	1	0	0	5	1 bear claw pendant
53	0	0	0	14	14	
54	0	0	0	0	0	
55	0	0	0	0	0	
56	0	0	0	0	0	
57	0	0	2	1	3	
58	1	0	0	1	2	
59	0	0	0	0	0	
60	0	0	0	0	0	
61	0	0	0	0	0	
62	0	0	0	1	1	
63	0	0	0	0	0	
64	0	0	0	0	0	
65	0	0	0	0	0	
66	0	0	0	0	0	
67	0	0	0	0	0	
68	1	1	0	1	3	
69	1	0	0	0	1	
70	0	0	0	12	12	
71	0	0	0	0	0	
72	0	0	0	0	0	
73	0	0	0	1	1	
74	0	0	0	0	0	
75	0	0	0	0	0	
76	0	0	0	0	0	
77	0	0	0	0	0	
78	0	0	0	0	0	
79	2	0	0	0	2	
80	0	0	0	0	0	
81	0	0	0	0	0	
82	0	0	0	0	0	
83	0	0	0	4	4	
84	0	0	0	0	0	
85	0	0	0	0	0	
86	0	0	0	2	2	
87	0	0	0	0	0	
88	0	0	0	0	0	
89	0	0	0	0	0	
90	0	0	0	0	0	
91	0	0	0	0	0	
92	0	0	0	0	0	

93	0	0	0	0	0	
94	0	0	0	0	0	
95	0	0	0	0	0	
96	0	0	0	0	0	
97	0	0	0	0	0	
98	0	0	0	0	0	
99	0	0	0	1	1	
100	0	0	0	0	0	
101	0	0	0	0	0	
102	0	0	0	0	0	
103	0	0	0	0	0	
104	0	0	0	0	0	
105	0	0	0	1	1	
106	0	0	0	0	0	
107	0	0	0	1	1	
108	0	0	0	0	0	
109	0	0	0	0	0	
110	0	0	0	0	0	
111	0	0	0	17	17	
112	0	0	0	13	13	1incised pendant
113	0	0	0	8	8	
114	0	0	0	0	0	
115	0	0	0	15	15	
116	0	0	0	0	0	
117	0	0	0	0	0	
118	0	0	0	0	0	
119	0	0	2	1	3	
120	3	0	0	2	5	
121	0	0	0	0	0	
122	0	0	0	0	0	
123	0	0	0	0	0	
124	0	0	0	2	2	
125	0	0	0	2	2	
126	0	0	0	0	0	
127	0	2	0	3	5	
128	0	0	0	0	0	
129	0	0	0	0	0	
130	0	0	0	0	0	
131	0	0	0	0	0	
132	0	0	0	0	0	
133	4	0	0	2	6	2 bone spatula
134	0	0	0	0	0	
135	0	0	0	0	0	
136	1	0	0	0	1	
137	0	0	0	1	1	
138	0	0	0	0	0	
139	2	0	0	0	2	
140	1	0	0	1	2	
141	0	0	0	0	0	

142	0	0	0	0	0	
143	0	0	0	0	0	
144	0	0	0	1	1	
145	0	0	0	2	2	
146	0	0	0	0	0	
147	2	1	0	0	3	1 incised pendant
148	0	0	0	0	0	
149	0	0	0	0	0	
150	0	0	0	0	0	
151	0	0	0	2	2	
152	0	0	0	0	0	
153	0	0	0	0	0	
154	0	0	0	0	0	
155	1	0	0	0	1	
156	0	0	0	0	0	
157	0	0	0	0	0	
158	0	0	0	0	0	
159	0	0	0	0	0	
160	0	0	0	0	0	
161	0	0	0	0	0	
162	0	0	0	0	0	
163	0	0	0	0	0	
164	0	0	0	0	0	
165	0	0	0	0	0	
166	0	0	0	0	0	
167	0	0	0	0	0	
168	0	0	0	0	0	
169	1	0	0	0	1	
170	0	0	0	0	0	
171	0	0	0	0	0	
172	0	0	0	0	0	
173	0	0	0	0	0	
174	0	0	0	1	1	
175	1	0	0	0	1	
176	1	0	0	0	1	
177	1	2	0	5	8	
178	1	0	0	2	3	1 UID carved broken
179	0	0	0	0	0	
180	0	0	0	0	0	
181	0	0	0	0	0	
182	0	0	0	0	0	
183	0	0	2	5	7	1 fishnet tool-fid?
184	0	0	0	0	0	
185	2	0	0	4	6	3 charred bone
186	0	0	0	0	0	
187	0	0	0	2	2	
188	1	0	0	1	2	
189	0	0	0	0	0	
190	0	0	0	2	2	1 carved

191	1	1	0	2	4	1 fid
192	0	0	0	0	0	
193	2	0	0	0	2	
194	0	0	0	0	0	
195	0	0	0	0	0	
196	0	0	0	0	0	
197	0	0	0	0	0	
198	0	0	0	0	0	
199	0	0	0	0	0	
200	0	0	0	0	0	
201	0	0	0	0	0	
202	0	0	0	0	0	
203	6	0	0	0	6	
204	0	0	0	0	0	
205	0	0	0	0	0	
206	0	0	0	2	2	
207	5	0	0	0	5	
208	0	0	0	0	0	
209	0	0	0	0	0	
210	0	0	0	0	0	
211	0	0	0	0	0	
212	0	0	0	0	0	
213	0	0	0	0	0	
214	0	0	0	0	0	
215	1	0	0	0	1	
216	0	0	0	0	0	
217	0	0	0	0	0	
218	0	0	0	0	0	
219	0	0	0	0	0	
220	0	0	0	0	0	
221	0	0	0	2	2	
222	0	0	0	0	0	
223	0	0	0	0	0	
224	0	0	0	3	3	
225	0	0	0	0	0	
226	0	0	0	0	0	
227	0	0	0	0	0	
228	0	0	0	0	0	
229	0	0	0	3	3	
230	0	0	0	0	0	
231	0	0	1	0	1	
232	0	0	1	1	2	
233	0	0	0	2	2	
234	0	0	0	0	0	
235	0	0	0	1	1	
236	0	0	0	2	2	
237	1	0	0	0	1	
238	0	0	0	0	0	
239	0	0	0	0	0	

240	0	0	0	0	0	
241	0	0	0	1	1	
242	0	0	0	1	1	
Totals	74	9	11	201	295	

Appendix Q

Bone Tools From Miller's Excavation By Lot Number

Lot number	Worked Bone						
	Awl	Pendant	Abrader	Antler tine	Rodent-gnawed	UID	Wked bone totals
1	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0
5	8	1	1	4	1	11	26
6	1	0	0	0	0	0	1
7	3	1	0	4	0	4	12
8	4	0	0	3	0	14	21
9	0	0	0	1	0	1	2
10	0	0	0	0	0	0	0
11	0	0	0	0	0	1	1
12	10	0	0	10	1	17	38
13	1	0	0	0	0	0	1
14	0	0	0	0	0	0	0
15	0	0	0	23	0	0	23
16	0	0	0	0	0	0	0
17	0	0	0	2	0	0	2
Totals	27	2	1	47	2	48	127

Appendix R

The Discovery of the Old Quartz Culture, Presented at the Meeting of the Anthropology Club, University of Georgia. November 20, 1951

Sometime when traveling by car through Piedmont Georgia and South Carolina you might enjoy a little archaeological surface collecting. Just sop at any likely looking clay hill or plateau overlooking a river or stream and there is an excellent chance that its eroded summit will yield a few quartz flakes and perhaps a nicely chipped quartz artifact or two. If you are lucky, you might pick up a double handful, but whatever you do, be sure to mark the location of the site on the bag or box in which the specimens are kept.

Unlike the coastal plain where prehistoric chipped stone is usually flint or chalcedony, in piedmont Georgia quartz abounds and was made into scrapers, knives, and pints by the former inhabitants of this region. There are literally thousands of chipping places, but until recently we had supposed that all of them were simply were various groups of Indians from early until rather late times had stopped to make a few arrowheads. It is on such a hilltops and exposed uplands that a good supply of quartz is easiest to obtain.

Lately such sides have assumed considerable importance in southeastern archaeology, and tonight I propose to relate some of the details of that discovery. Those who are no primarily interested in archeology may find that their time has not been misspent, for this instance illustrates admirably one of the most common kinds of scientific discover, i.e. the sort which cannot be made until other work has been done, and which then forcibly forces its way to the view of the reluctant scientist. Credit, of course, belongs to all the people who are in one way or another associated with Department of Anthropology at Georgia, a place where ideas flourish like magnolia blossoms and are often cross fertilized.

The circumstances of the discovery are simply this. As our understanding of southern prehistory increased, particularly in Georgia, we became aware that the majority

of the hilltop quartz sites and chipping stations showed flaked tools and points different in form from those we were accustomed to find at excavated archeological sites. And these excavated sites, from which the peculiar quartz tools were absent, now formed a nearly unbroken continuum reaching from historic times back to a period of several thousand years ago. Since the quartz artifacts were different from those in the cultures we knew, we did not believe they could have been contemporary with any of them. If they were not contemporary, then the conclusion was inescapable that they must have been older.

Briefly stated, such reasoning seems simplicity itself. Yet we managed to avoid the conclusion for a long time. The light may have begun to dawn during the reconnaissance of the Allatoona reservoir in 1946, and at Clark Hill in 1948 for in both areas we segregated distinctive quartz bearing sites into a grouping called "prepottery," affirming the belief that they had been utilized sometime prior to the introduction of earthenware.

In the meantime a fine, comprehensive surface collection from the Athens area was presented to the University by Mr. E. B. Mell, and many of the sites represented showed distinctive quartz artifacts like those found at Allatoona and Clark Hill. The work of the DeBaillous, which began in the Athens area about this time also served to delineate the observation that the quartz artifacts must have had a considerable antiquity. Their article on the Curtis site is expected to be published soon. It was becoming apparent that there must have been an exceedingly large population in the Georgia piedmont, probably in rather early times.

In 1950 about 20 representative sites were located in the Buford reservoir on the Chattahoochee near Gainesville. We were particularly fortunate here, for unlike many of

ht Allatoona and Athens localities, they had been occupied only once, and later prehistoric peoples had not stopped by to drop a few of their own artifacts and confuse the issue. It now became possible to define several of the more distinctive artifact types of this early quartz culture with some assurance that they were diagnostic. Mrs. Caldwell's paper on the Buford work is yet unpublished. The Buford sites received the name "Flowery Branch Focus" after the little stream where the type site is located. Recognizing the other areal and perhaps chronological variants of the old quartz sites, we have given the name "Old Quart Culture" to the entire manifestation in the Piedmont.

Most of the quartz tools are small to medium in size and are usually variations of knives or scrapers. In this respect they contrast with the later cultures in which various types of projectile points predominate. There are quartz ovates, often pointed, small side notched beveled blade knives, and occasionally small blunt ended "snub nosed" scrapers. A type of scallop based point is distinctive as well as other small points with poorly defined shoulders and incipient stems. It is yet uncertain whether the people responsible for the Old Quartz culture actually lived on the uplands sites for we have found no grinding stones, mortars, or other such appertainances of camp life.

These sites which are innumerable in the Piedmont may represent a large population of a long time span but probably both. There seems a tendency for them to blanket the uplands overlooking rivers and streams although they may occur in the bottomlands, deeply covered by silt. In contrast the villages of later peoples seem clustered more particularly along the streams and I the bottoms, possibly an indication of a different adaptation to the environment, as is the case in Europe during more ancient times. We do not yet know if the temperature and vegetation cover was the same in early Georgia as it is today.

Early in this fall came the answer to an archeologist's prayer. We had been excavating at Lake Springs, a Stallings Island Period shell heap on the Savannah River, a site soon to go under water with the completion of the Clark Hill Dam. This itself was of respectable antiquity for the oldest levels are believed to cross tie with Kentucky sites which gave radioactive carbon dates of more than 5,000 years ago. We had already made two abortive attempts to go below the deepest levels, but the waterlogged sands below the site caved with each attempt. One day toward the end of the excavations, it became necessary to dig again in the underlying sands to remove a particularly deep burial. Standing there the thought came that it would be mighty fine to find something deeper below the undisturbed sand, so I commenced troweling out a hole just big enough for my arm. Of course it goes without saying that immediately thereafter my trowel struck a broken pebble. Reaching down with my hand I brought up several more, and then a nicely chipped ovate scraper. By the end of a week we had nearly 40 artifacts from the deep level. And that is how we found the Old Quartz Culture below 4 feet of sand and below material dated 5,000 years. What its age may be, we do not know.

This last variety of scientific discovery we may properly characterize as the Cinderella, or wishing will make it so, variety. As Doc says, "The wish is the father to the thought, and the grandfather to the discovery."