EXCAVATIONS AT CHIPPOKES PLANTATION STATE PARK:

THE JAMES RIVER BLUFF SITE (44SY0162), SURRY COUNTY, VIRGINIA:

A MIDDLE WOODLAND RIVERINE ENCAMPMENT

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Abstract

Excavations at the James River Bluff Site (44SY0162) at Chippokes Plantation State Park in Surry County, Virginia, produced an assemblage of lithic and ceramic artifacts dating to the Middle Woodland period. Lithics were primarily produced from quartzite from river cobble beds but with a minority of quartz and jasper. Ceramics were dominated by Prince George pebble tempered wares with a minority of Mockley shell tempered pottery. Both were utilized during Middle Woodland times with Mockley Ware (300–900 AD) following the popularity of Prince George Ware (500 BC–AD 300). The James River Bluff site will be tested in order to determine dimensions, integrity, and function in addition to time of occupation.

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INTRODUCTION

hippokes Plantation State Park is located on the J south bank of the James River in Surry County, Virginia. The Plantation is among the oldest working farms in the nation. Captain William Powell received a land grant for 550 acres along Chippokes Creek in 1619. In 1646, the plantation expanded to 1,403 acres. The centerpiece for the state park is the brick Italianate plantation house built in 1854 and open to the public. The National Park Service placed the plantation on the National Register of Historic Places in 1969 and the General Assembly created the state park in 1977 when it voted to create a foundation to establish, administer, and maintain the model farm. Chippokes Plantation retains an extensive array of original plantation outbuildings, slave quarters, and farm buildings. Its 28 recorded archaeological resources include a Native American Late Archaic camp, Woodland Period encampments, early 17th century dwelling sites, second half 17th century colonial farm steads, second quarter 18th century domestic structures, and 19th / 20th century farm related sites. This extensive array of archaeological resources provides both opportunities and challenges for management. Extensive interpretation is a component of park management including house tours, a Farm and Forestry Museum, and a visitor center as well as offering research opportunities of diachronic change through time. Management also retains a strong preservation element; with regard to sites, park officials have avoided adversely impacting them with projects, have protected them from natural erosion, and policed them

for illegal metal detecting and/or artifact collection.

In the spring of 2007, the Department of Historic Resources (DHR) approached the superintendent of Chippokes with the concept of pursuing an archaeological program at the park. As the park personnel were in tune with historic interpretation and had been involved with a DHR inventory survey in the 1980s, they enthusiastically supported archaeological testing of a site. In consultation with E. Randolph Turner, then DHR's Tidewater Regional Preservation Office Director, the work would focus on site 44SY0162, now referred to as the James River Bluff Site, a ceramic bearing site eroding into the river.

As DHR arranged for the excavations, it was recognized that the main body of the crew would be volunteers, either members of the Archeological Society of Virginia or participants in the federally-sponsored Passport in Time (PIT) program. The 44SY0162 testing was geared to satisfy the requirements of the Archeological Society of Virginia (ASV)/Council of Virginia Archaeologists (CoVA)/DHR Certification Program, which trains avocational archaeologists to understand, support, and implement archaeology in working with professionals. Passport in Time, a national program sponsored by the United States Department of Agriculture-Forest Service (USDA-FS), involves the public in aiding archaeological efforts on public lands. Embraced by the Bureau of Land Management and National Park Service, PIT is now partners in Virginia with DHR and the Department of Conservation and Recreation.



Fig. 1. Location of James River Bluff Site (44SY1062), Surry County, Virginia.

4 Chippokes Plantation State Park: The James River Bluff Site (44SY0162)



Location of site 44SY0162.

THE SITE

The James River Bluff Site is found in Chippokes Plantation State Park on the south bank of the James River (Figs. 1 and 2). The site is located on an eroded promontory about 30' above the river and is flanked to the east by a marsh associated with Chippokes Creek (Fig. 3). To the



Fig. 3. View of the James River from site 44SY1062, looking northeast.

west, the level landform gives way to a lesser unnamed drain which defined site boundaries. Overall, the site measures 200-feet N-S by 150-feet E-W along the river as determined by an STP (Shovel Test Pit) regime and follows the level landform. The James River Bluff site is on level terrain of 0-6 % slope. Soils are of the Uchee loamy fine sand, which is well drained but prone to erosion. At the time of site testing, vegetation was meadow-like for most of the site tending to an oak/pine forest at the margins. Fauna is typical of coastal plain region with white-tailed deer, turkey, small mammals and birds, fish, particularly anadromous species, of importance.

DHR recorded the site in 1986 during a DHR survey of Chippokes Plantation State Park. While not comprehensive, the survey recorded more than 40 sites in areas of high visibility

and/or probability for occupation. A DHR surveyor noted 44SY0162 was an area prone to prehistoric occupation and examined it along the eroding bluff. From this disturbed context, DHR recovered nine pot sherds, ten flakes, and one biface along 150 feet of the bluff river edge. The site was listed as a contributing site to the Chippokes Historic District. No further work was carried out on the site until October of 2007 when the DHR/ASV/DCR/USDA-FS field school convened.

Site predictions pointed to an anticipated Middle Woodland occupation, most likely characterized by Mockley Ware (ca. AD 300-AD 900). DHR based this prediction on the presence of numerous sites of this period in the environs and in topographically similar landscapes with the most notable being the Maycock's Point site (44PG0040) ca. 20 miles upriver. While the James River Bluff site was not likely of the same magnitude of aggregation (permanently occupied base camp) (Barber 2016), the site was predicted to be a supporting exploitive camp during that time period. The hypothesis was close but not entirely supported.

RESEARCH **D**ESIGN

With little known concerning the site or its relation to the region, the research design called for determining basic data:

- 1. Time period of occupation;
- 2. Site boundaries;
- 3. Site function; and
- 4. Site integrity.

With the field school lasting less than a week, the work was geared to determine site boundaries during Days 1 through 3 through a Shovel Test Pit (STP) regime and to gain more refined data using formal 5-foot units



on Days 4 through 6. The STPs were placed at 25-foot intervals across the site on a measured grid system with a permanent benchmark at the edge of the wooded area (Figs. 4 and 5). STPs were 1-foot square and excavated into sterile subsoil with fill sifted through ¹/₄-inch mesh. Artifacts were bagged according to soil stratigraphy but usually in two levels, an upper level organic A-horizon interfacing with the tan/yellow B-horizon subsoil. As time ran out in 2007, with some units not excavated to subsoil, work resumed the following year with a similar field school.



Fig. 4. (iop left): James River Bluff Site (44SY0162): Laying the grid. Figs. 5 a, b, c (counter clockwise, top right): James River Bluff Site (44SY0162): Setting up transit and beginning excavations.

TESTING RESULTS

SHOVEL TEST PIT REGIME: RESULTS

A total of thirty-two one-foot square Shovel Test Pits (STPs) were excavated over the high bluff above the James River earlier designated 44SY0162 by the Virginia Department of Historic Resources (Fig. 6). With the distribution of positive and negative STPs coupled with the associated landforms, the site was determined to be 200 feet (NS) by 150 feet (EW) (Table 1). The highest distribution of artifacts was within 50 feet of the bluff edge and broadening slightly along the eastern edge drop off to Chippokes Creek. While no artifacts were noted on the beach below the site, it is likely that much of the site has eroded away over the last 2,000 years.

In all, 291 artifacts were recovered during the STP regime. Debitage included 227 pieces and accounted for 78.01% of the total (Table 1, Fig. 7). The vast majority of the debitage was quartzite (N=183 or 80.62% of the debitage) followed by quartz (N=40 or 17.62%), and jasper (N=4 or 1.76%). Stone tool manufacture from local riverine deposits of quartzite cobbles is clearly one site function. Forty pottery sherds, a mix of shell and pebble/sand tempered, were also recovered. This indicates that the site was more than a lithic reduction station with other functions. The 27 pieces of fire-cracked rock also point to some longevity of occupation where hearths were utilized.

As the STPs were completed, the artifacts were examined and quantified in order to determine areas of highest frequency and, hence, areas of highest prehistoric activity. Three areas were selected for further testing based on artifact density: N75W158 (eastern unit), N100W140 (central unit), and (N106.7W83.5 (western unit). All were in close proximity to the bluff edge.

As the profiles from the STPs and Test Units were evaluated, it became apparent that the site had been plowed in historic times and that the vast majority of the cultural material was of a disturbed, plow zone nature. However, there remained a transition zone in several STPs at the interface of plow zone and subsoil that contained artifacts. Three areas of high concentration of artifacts were isolated and became the focus of more intense testing. In an examination of the STP assemblage, the site appeared to be more-or-less a single component occupation, which would enhance our overall ability to add to the understanding of the Middle Woodland period.



Fig. 6. James River Bluff Site (44SY0162): STP and 5' Test Unit Placement (A=N106.7W83.5, B=N100W140, C=N75W158).



Fig. 7. James River Bluff Site (44SY0162): Example of recovered debitage.

TEST UNIT EXCAVATIONS: RESULTS

Three 5 foot test units were selected for excavation based on artifact type and density of the STPs: N106.7W83.5 (A), N100W140 (B), and N75W158 (C). Each was excavated in three levels (Fig. 8):

Level 1 – AO Horizon, duff, dark brown loam

Level 2 – A Horizon, light brown loam

- Level 3 Transition zone, light brown with mottled yellow clay
- Level 4 B Horizon, yellow clay subsoil (not excavated).

Artifacts were bagged according to unit and level. Vertical control was maintained using a transit and established permanent benchmark. Formal tools and noteworthy artifacts were assigned numbers when identified (Table 2).

Unit N75W158 was the easternmost 5-foot square excavated and was ca. 35 feet south of the bluff edge



Fig. 8. James River Bluff Site (44SY0162): 5.0' unit profile.

and 65 feet east of the road down to the river. Quartzite flakeage was numerous throughout with 794 pieces of waste debris collected (Table 3). This represents 47.04% of that recovered from the three units. Fifty-nine potsherds were recovered with a nearly even number of shell-tempered (n=29) and pebble-tempered (n=30) (Table 4). Fifty fire-cracked rocks were collected from the unit (Table 5). The most impressive aspect of the unit was the stone tool reduction area noted by the artifacts recovered. The "chipping cluster" contained hammerstones, large primary flakes, a tested quartz cobble, broken bifaces, an early stage biface, and two drill tips (Table 6).

The 5-foot unit N100W140 was placed in proximity to the bluff edge in the central area of the site. Of the overall debitage recovered from the units, 236 (13.98%) of the 1,688 total was from N100W140. Fire-cracked rocks were also low in number at 25 (15.06%) of the 166 total. Shell-tempered ceramics dominated the unit with 17 (70.83%) of the 24 sherds recovered. It would appear that this unit was located outside the site's major activity areas.

Unit N106.7W83.5, the westernmost unit, was placed directly adjacent to the bluff edge. Placement was chosen due to a relatively high number of quartzite flakeage recovered from nearby STPs as well as a number of pot sherds eroding down the bank. As for quartzite reduction debris, 802 (47.39%) of 1,688 from the three squares were recovered from this unit. This unit was noteworthy for the recovery of two Late Woodland projectile points. The first was a small quartz triangular Hamilton point with a hinge fracture due to impact. The second was a small argillite isosceles triangular point typed as Clarksville. It was also the most productive for ceramics with 153 (64.83%)of the sherds recovered from the unit excavations. Of note, 133 (86.93%) of the 153 temper identified sherds were Prince George series. It is also the unit of highest number of Fire Cracked Rock (FCR) with 91 (54.82%) of the 166 recovered. By and large, the western unit, closest to the bluff edge was the most active for lithic reduction, ceramic use, and hearth construction.

LITHICS

The total number of lithic artifacts recovered in the unit excavations rested at 1,709. Of this total, the vast majority (N=1,688; 98.77%) were stone tool production waste. Twenty-one (1.23%) were stone tools (Table 1). This in and of itself points to one of the primary site functions being flake stone tool manufacture. The local availability of quartzite river cobbles and the high-level bluff above the river underscored this function.

Of the 21 stone tools recovered, nine (42.86%) were chipped stone projectile points or fragments. Hunting as subsistence maintenance was also a site function with the ceramics, discussed later, as the food preparation mode. Other stone tools recovered included four (19.05%) hammerstones (also indicative of knapping), four (19.05%) bifaces (mostly non-descript), three (14.29%) drill bits, and one (4.76%) cutting tool or knife. With the exception of the four sandstone hammerstones, the majority of the stone tools were manufactured from quartzite. Exceptions were one quartz and one oolitic quartzite Lamoka projectile point, one quartz Hamilton projectile, one argillite Clarksville projectile point, and one quartz biface. The remaining tools were made of local quartzites. Of the projectile points, chronology ranged from Late Archaic (2 Lamoka), Middle Woodland (3 medium to large triangles), and Late Woodland (1 Clarksville and 1 Hamilton) (Fig. 9). One of the Late Archaic points was manufactured from quartz with the second of oolitic quartzite. Quartz is available in cobble form in the James while oolitic quartzite finds it source on the east side of the Blue Ridge near Fredericksburg (DHR n.d.). The shallow side-notched Lamoka points date in the range of 2500 – 1500 BC. While stone tool production on-site was one function, the site was most likely that of an ephemeral encampment involved with seasonal hunting, fishing, and gathering.



Fig. 9. James River Bluff Site (44SY0162): Projectile points and biface (top row: Clarksville; middle row: Yadkin, untyped, Yadkin; bottom row: biface, Lamoka, Lamoka.)

The Middle Woodland occupation is much more substantial, when viewed with the recovered ceramics, and was a more permanent occupation but still associated with seasonally available resources with hunting of importance. It was during this period that most of the tool production took place. Triangle projectile points made their first appearance on the Virginia coastal plain at ca. AD 200-300 (Carole L. Nash, personal communication) based on Geier's (1983) work at Skiffes Creek. Two of the three triangular points from Chippokes are relatively large, thin and well made with a flattened biconvex cross-section and fit well into the Yadkin typology (equivalent of the Levanna point to the north). As with Coe's (1964:45) description, the points "appear to have been made by pressure flaking. The flake scars were small, narrow, and well controlled. The edges are even and symmetrical." Although flake curvature is not present, points this thin are usually the result of core and flake reduction. The Yadkin points have been dated to AD 300-1300 in Virginia (DHR n.d.). Stewart (1992) indicates that triangular points are consistently associated with Prince George ceramics and may date as early as AD 330 (McLearan and Mouer 1989). The third point is a medium triangle with a thicker cross section and is difficult to type due to a knapping flaw resulting in a hump on one face. The appearance of triangular projectile points is often equated with the advent of the bow and arrow. While not the topic of discussion here, such an innovation, replacing the atlatl, would have had far-reaching effects in hunting success, environmental exploitation systems, social status, and hunting strategies.

Two projectile points, the Clarksville and the Hamilton, date to the Late Woodland period. Clarksville is dated to AD 1400–1700 while Hamilton, like Caraway points, is more problematic but most likely dates in the range of AD 1200–1700 (Barber 2019). During Late Woodland times, limited seasonal forays took place away from the major horticultural villages and/or towns with small camps, such as 44SY0162, established in the hinterlands. The interpretation is that, at European Contact, the Chippokes area formed a buffer zone between the Quiyoughcohanocks to the west and the Warraskoyacks to the east (Laird and Devlin 2008:12). If this extended back in time into the prehistoric Late Woodland period, one would expect only short-term ephemeral sites within the buffer zone.

In all 1,688 pieces of debitage were recovered (Table 2). As the soil was sifted through ¼-inch mesh hardware cloth, no attempt was made to recover small retouch tertiary flakes. Not surprisingly, the predominant lithic used at the site was quartzite, a stone found in the form of river cobbles at a distance upstream. All tolled, quartzite was comprised of 1,361 pieces of debitage, 80.63% of the sample. This was followed by quartz, also available in river cobble form with 240 (14.22%) pieces, jasper with 67 (3.97%), and another category of chert, chalcedony, and basalt with 20 (1.18%) pieces.

In this analysis, nodule fragments, chunks, and primary flakes are equated with hard hammer primary reduction. This first stage of lithic reduction is involved in general shaping of the tool. Secondary reduction is a more refining thinning stage usually associated with soft hammer (antler, wood, or bone) reductions. This carries the tool to the final edge straightening and pressure flaking producing tertiary flakes. Looking at the overall assemblage for quartzite debitage, the breakdown is as follows: nodules (N=10; 0.73%), chunks (N=30; 2.20%), primary flakes (N=294; 21.60%), and secondary flakes (N=1,027; 75.46%). If one considers hard hammer reduction versus soft hammer thinning, the percentages are roughly 25% to 75% or a 1:3 ratio. The presence of cortex is relatively low and found only 68

of the primary flakes and 16 of the secondary flakes for a total of 84 flakes or 5.00% of the total. This low frequency argues for cobble testing and trimming off site with final shaping (primary flakes) and thinning



Fig. 11. James River Bluff Site (44SY0162): Artifacts from Chipping Cluster.



Fig. 10. James River Bluff Site (44SY0162): Feature 1: Chipping Cluster.



(secondary flakes) on-site. The general "flatness" of the flake assemblage also suggests that preform blanks were trimmed elsewhere and preform blanks were transported back to the site (Michael Johnson 2008, personal communication). Pecora (2001:173-176) describes this as a "lithic transport juncture" where a certain stage of reduction is reached and the lithic transport elsewhere for later reduction when needed. He points to the work of Binford (1979) with the Nunamuit Eskimo where the lithic material was reduced for easy transport but not to the point that would limit possible reduction outcomes. This is what is seen at the James River Bluff site where the cobbles were shaped elsewhere and transported to the site for later reduction into specific needed tool types, from the level of the general to the reduced level of specific.

Distribution of debitage is uneven across the site with 794 (47.04%) pieces of debitage from the Eastern Unit, 92 (5.45%) from the central unit, and 802 (47.51%) from the Western Unit. This is indicative of differing activity areas over time. The Eastern Unit (N75W158) proved to be one area heavily involved in lithic reduction. Beyond the high number of waste material recovered, a roughly 3-foot cluster near the center of the unit produced three sandstone hammerstones, one broken sandstone hammerstone, three very large quartzite primary flakes (core), two late-stage quartzite bifaces likely broken in production, and one early stage quartzite biface fragment (Figs. 10 and 11). This cluster of artifacts represents a knapping station with portions of the tool kit, production units, and waste debris.

CERAMICS

The 44SY0162 excavations produced 253 potsherds with 181 being identified by both temper and surface treatment. Sherds smaller than 12.5 mm in length were not included in the study and a number of sherds had eroded surfaces that could not be related to surface treatment. Of the 181 sherds, 39 (21.55%) were shell tempered with 21 cord-marked and 18 net impressed. The remaining 142 (78.45%) sherds were rolled pebble and sand tempered with 49 cord marked and 93 net impressed. It would appear that net impressed was the preferred surface treatment seen on 111 (60.77%). If one includes the eroded surface and the other category sherds in the final tally, 72 (28.46%) of the assemblage was shell-tempered with 181 (71.54%) pebble and sand tempered.

The sand and pebble-tempered Prince George Ware made up ca. 75% of the sherds recovered (Fig.



Fig. 12. James River Bluff Site (44SY0162): Prince George Series Sherds.



Fig. 13. Distribution of Prince George Ware (Egloff and Potter 1982:103)

12). First identified by Evans (1955), it is a ceramic with large amounts of large sized (2–5 cm) pebble inclusions. As noted above, surface treatments are usually net impressed with a roughly 1/3 cord marked. The sherds are also prone to contain sand and have a tan color. Prince George Ware is a Middle Woodland I pottery dating to 500-550 BC–AD 300 (DHR 2020, Egloff and Potter 1982). Distribution is limited to the coastal plain of the James and York Rivers (Fig. 13). Its distribution does not cross the fall line to the west. Hence, it can be seen as a fairly local ware with a circumscribed territory.

The shell tempered ceramics fall into the Mockley Ware series and are a common type on the James River coastal plain and northward into Maryland (Fig. 14). Mockley Ware is shell tempered, usually net or cord impressed with smoothed interior (Egloff and Potter

1982). It was first identified by Evans (1955) as part of the Chickahominy Series as Potts Net Impressed and Roughened and Chickahominy Cord Marked (Egloff and Potter 1982). The term "Mockley" was first used by Stephenson et al. (1963) at the Accokeek Creek site. At 44SY0162, the ceramics are of a medium-fine clay, not particularly well fired and friable, with crushed shell inclusions marked by flat to angular cavities in the sherds due to leaching. Three rim sherds were recovered: one net impress straight rim; one smoothed surface, straight with finger pinching on lip rim; and one cord marked, slightly excurvate, slightly expanded rim. Due to the large amount of shell leaching and relatively poor firing of the assemblage, it can be determined to be of the early Middle Woodland (Egloff, personal communication). As the dates for Mockley are in the range of ca. AD 300-AD 900, the examples from 44SY0162 probably date ca. AD 300-AD 500. The James River Bluff sherds compare favorably with those recovered from the same time period at the Great Neck site (44VB0007) in Virginia Beach with the exception of more sand in the mix at Great Neck (Egloff 2019, Hodges 1998). Based on the recovered ceramic assemblage, the major occupation at 44SY0162 was from 550 BC to AD 500.

SETTLEMENT PATTERNING

As Stewart (1992:2) has reported, the Middle Woodland Period has been divided into two basic phases for the coastal plain: "one associated to Popes Creek and related ceramics and dating from the first half of the period 500 BC to AD 200 (often referred to as Middle Woodland I), and one dating after AD 200 and linked with Mockley and Mockley-like ceramics (Middle Woodland II) (Gardner 1982, Gleach 1988, McLearan and Mouer 1989, Opperman 1980, and Stewart 1987). The end of Middle Woodland II is usually seen as AD 800-900 (Egloff and Potter 1982). Along the James and York River drainages, Middle Woodland I begins at 550 BC and extends until AD 300 with Middle Woodland II beginning at AD 300 and extending until AD 900. While Pope's Creek ceramics do not come into play at the James River Bluff site, its occupation can be seen as the beginning of Middle Woodland I at AD 550, making the transition into Middle Woodland II, and ending at ca. AD 500. The Prince George ware marked the Middle Woodland I occupation and is often interpreted as representing the resident population when the influx of Algonkian shell tempered Mockley ware appeared. As pointed to by Gallivan (2011:289), Dent (1995:235)



Fig. 14. James River Bluff Site (44SY0162): Mockley Series Sherds.

referred to this period as one of "technological homogenization" with Mockley, first competing with local wares, and then overwhelming them. Although there is some debate as to whether the local populations adopted the ware or did Mockley come with migrating population, there is agreement that Mockley dominated with local wares falling into disuse. Although the transition is made, the hallmarks of Middle Woodland II have yet to develop and, initially at least, little is seen to have changed except replacement grog in ceramics, from pebble to crushed shell. In a localized context, this may mark the date where the extensive utilization of shellfish and anadromous fish runs overwhelmed the local need for isolated hunting encampments. By the same token, 44SY0162 could be interpreted as a foraging encampment associated with larger aggregation sites along the James such as Maycock's Point (44PG0040) upstream (Barber 2005) and the Great Neck site (44VB0007) downstream near the mouth of the James (Hodges 1998). Custer (1986:166) alludes to this settlement pattern developing during the Early Woodland in the estuarine environments of the Chesapeake Bay and continuing through the end of the Middle Woodland. The change in temper from pebble and sand to shell may be seen as a more concentrated focus on the riverine and estuarian environments. Shell tempering might be a symbolic change in recognition of the importance of such locales.

What is seen at 44SY0162 is a basic Archaic-like, hunter and gatherer life style. The social organization likely remained at the band level with normal population aggregations at 25 to 50 people. A seasonal round would have been followed, exploiting local resources as they became available. While there may have been some storage of foods against the biotic ebb of winter, there is no evidence of it at the site. 44SY0162 is situated in an ecotone with access to a variety of resources. The elevated site is found next to a marsh, which could provide duck potato and tuckahoe, tubers that could be eaten with traces identified in the Middle Woodland II component at Maycock's Point (Barber 2005). Adjacent to the river, fish, shellfish, turtles, and, most importantly anadromous fish, would have been available and were identified later in the Middle Woodland (Barber 2005). Finally, land access would have made the terrestrial flora and fauna available including white-tailed deer, turkey, and nut and seed crops. Although these procurement activities probably took place at 44SY0162 at some level, the artifact make-up at the site only document the activities of stone tool reduction, some processing with drills, hunting, and limited food processing with ceramics and FCR. While some associated evidence would have been perishable, the stone tool assemblage suggests a limited range of activities.

At a regional and temporal level, the James River Bluff site marks a portion of the settlement pattern for Middle Woodland I, that of a sporadically visited procurement camp. As such, it was one of many either associated with the seasonal round or visited as a "subseasonal rotation between a complex of sites rather than the traditionally viewed seasonal round (Bowden 2001)" as quoted by Carole L. Nash (personal communication). In either case, the site was likely occupied by a low population for a short time period over many years. It may have provided a short stopover on the way from Point A to Point B. In any case, it does not rival the larger aggregation base camps as outlined by Blanton and Pullins (2004), even though it is on the major waterway, or as seen at the later Middle Woodland II semi-sedentary or sedentary at the Maycock's Point site (Barber 1982, McLearen 1992). As with all band level societies, due to group exogamy, it was necessary for the bands to come together for the exchange of mates, material culture, and information. A site which may be approaching this,

44HN203 on the Chickahominy River, was a 60-foot diameter area with a small storage pit, a hearth, and a living floor (Pullins and Schuldenrein 1993).

As presented by Blanton (1992), the regional distribution of Prince George Ware is limited to the James River from the inter-coastal plain to the fall line and north past the York River, almost to the Rappahannock. This distribution, if representative of the polity, is quite limited when compared to the later broad-based distribution of the Middle Woodland Mockley Ware over the entire coastal plain from the North Carolina border to New Jersey. Such a Middle Woodland I territoriality denotes a smaller, less complex network with less mobility and exchange systems. This is reflected in the stone tool technologies with Middle Woodland I using triangular projectile points made of local quartzites with Middle Woodland II incorporating large lanceolate points made of exotic materials such as argillite, rhyolite, and jasper.

One of the cultural hallmarks of Middle Woodland II sites along the James River is the accumulation of substantial shell middens, in the brackish to freshwater areas, made up of freshwater clams Elliptio complanata. This is extremely evident at the Maycock's Point site (44PG40) 25 miles upstream on the James River. In an erosional study, it was determined that seven shell middens dating to the late Middle Woodland were present (Barber and Madden 2006). At least one midden tested in the 1970s was in excess of 6 feet in depth (Barber 2005, Opperman 1992). This shellfish exploitation does not begin until Middle Woodland II. While the distribution of oysters and freshwater clams may have varied due to salinity differences associated with sea level rise, this risk reduction strategy was not a part of the Middle Woodland I system.

During Middle Woodland I times, social complexity seems to be limited as well. While the Maycock's Point Middle Woodland II site has been interpreted as a major, possibly sedentary, base camp with the rise of big men, no such evolution is noted during Middle Woodland I. The presence of Abbott Zone Incised pottery, a Mockley variant, was seen as indicative of feasting events with particular individuals rising to a position of power based on conspicuous consumption (Makin 2019). Mockley Zone Incised ceramics do not appear until the latter portion of Middle Woodland II, and the beginnings of Middle Woodland II was marked by the appearance of Mockley ceramics but little else to portend things to come.

CONCLUSION

The James River Bluff Site was utilized as a temporary encampment from 550 BC to AD 500. The site marks the transition from Middle Woodland I (550 BC to AD 300) to Middle Woodland II (AD 300–AD 900). As such, the localized pebble/sand tempered Prince George ceramics gave way to shell tempered Mockley ware. However, 44SY0162 was abandoned

prior to the true hallmarks of the later Middle Woodland. It is here posited that the amazing cultural events of Middle Woodland II and the Mockley ceramic users never occurred at 44SY0162. These were earlier times with a lower population density, a smaller region and world view, lesser social ambitions, and nary a clue to Abbott Zone Incised ceramics.

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TABLES

Table 1. James River Bluff Site (44SY0162), Surry County, Virginia: Distributionof Artifacts Recovered in STPs by Broad Typology of Material and/orFunction.

STP	Quartzite	Quartz	Ceramic	FCR	Other	Total
N0W50						0
N0W75						0
N0W100	1		2	1		4
N0W125	3					3
N0W150						0
N0W175	15			2		17
N25W50						0
N25W75	1	2				3
N25W100	14	2		1		17
N25W125	4	1				5
N25W150	1					1
N25W175	9		1		1 j	11
N50W50						0
N50W75	1		10	1		12
N50W100	3		3	1		7
N50W125	2					2
N75W25						0
N75W50						0
N75W75						
N75W100	2				1 j	3
N75W125		4	1	5	1 j	11
N75W150	27	3	13	4		47
N75W200	5					5
N100W0						0
N100W25						0
N100W50	10			6	1 h	17
N100W75	37	4	1	3		45
N100W100		1			1 j	2
N100W125	10	5	2			17
N100W150	29	12		3	1 on	45
N100W175	7	6	2			15
N100W200	2					2
Total	183	40	35	27	6	291

j = jasper; h = hammerstone fragment; on = ochre nodule

Transfer Martin 36 AA 10.21 A 20 and and adding historical bilanced	Lathoka quarteric write 35.22 19.01 9.06 excurvate 50.000 proster / Listal end punited, extratistic	Triangle quartzite grey 31.37 23.79 10.70 straight Excurvate biconvex Middle Woodland medium Triangle	Yadkin quartzite brown 50 est 33.93 7.23 incurvate Straight flattened Middle Woodland large riangle, peod craftsmanship peod craftsmanship peod craftsmanship		n/a quartzite grey 35.32+ 18.60 7.62 n/a excurvate, biconvex Base broken off, possibly serrated		n/a sandstone reddened 60.02 38.87 20.32 n/a n/a Broken at mid-point, battered at one end	n/a quartzite grey 108.96 72.11 31.48 Striking n/a n/a With cortex, unused core	n/a quartzite red 17.52 25.42 12.50 n/a n/a n/a Possibly projectile point base	n/a quartzite reddened n/a n/a n/a Tested for quality	n/a quartzite grey 63.66 37.40 12.22 Striking n/a n/a With cortex platform	n/a sandstone white 35.24 26.60 21.06 n/a n/a n/a Remnant, battered at one end, broken at mid-point, exhausted	n/a quartzite grey 52.11 67.01 19.40 Striking n/a n/a With cortex, striking platform, classic primary flake	n/a sandstone brown 73.28 51.79 31.29 n/a n/a River cobble, oval w/ pccked wear on both ends, one face face face face one face face one face face one face face of the face of	n/a quartzite grey 24.33 50.40 15.13 n/a n/a biconvex Early stage biface fragment, broken in manufacture	n/a sandstone white 33.70 36.36 14.63 n/a n/a n/a Two battered ends, soft material, filat river cobble	n/a quartzite red 22.28 9.60 6.04 n/a Tapered biconvex Broken off, twist wear, use wear taper to distal end	n/a quartzite grey 15.41 10.36 6.44 n/a Tapered biconvex Broken off, twist wear, use wear to distal end	n/a quartrite grey 16.54 32.22 7.46 n/a n/a biconvex Broken basal end, late stage or Complete		n/a quartz white 41.27 28.88 17.14 excurvate Excurvate biconvex Poor quality material, no good		Hamilton ouartz white 11.18+ 15.29 4.02 straight Straight flattened Late Woodland triangle, tip
	.68 C	0.70 s	7.23 in		7.62		80.32	il.48 St.	2.50		2.22 St. pli	90.13	9.40 St. pli	1.29	5.13	4.63	6.04	6,44	7.46		7.14 c		1.02 S
	9,61 9	3.79 10	13.93		8.60		18.87 2	2.11 3	5,42 1		7.40 1	26.60 2	1 10.73	51.79 3	60,40 1	1 10.36	9.60	0.36	12.22		1 88.88		5.29
	1 12:32	1.37 2	0 est 3		5.32+ 1		50.02 3	08.96	17.52 2		33.66 3	35.24 2	52.11 6	13.28 5	24.33 5	33.70 3	22.28	15.41	16.54 3		11.27 2		1.18+
	white 3	grey 3	brown 5		grey 3		reddened	grey 1	red	reddened	grey (white	grey 1	brown	grey 2	white	red	grey 1	grey 1		white		white 1
Type	uartzite	uartzite	luartzite		uartzite		andstone	quartzise	quartzise	quartzite	quartzite	andstone	quartzite	andstone	quartzite	andstone	quartzite	quartzite	quartzite		quartz		quartz
	Lamoka	Triangle q	Yadkin		n/a q		n/a s	n/a	n/a	n/a	n/a	n/a s	n/a	n/a s	n/a	n/a s	n/a	n/a	n/a		n/a		Hamilton
T	noj point	voj point	proj point		oroj point Made		tone	primary flake	viface frag	river cobble	primary flake	tone	primary flake	tone	biface	tone	drill bit	drill bit	biface		biface		vroi point
Artifact #	N75W158L1	2	e	N75W158 L2.1	10	N75 W158 L2.2	1	4	5	9	2	8	10	11	12	13	14	15	16	N100W140 L1	-	N106.7W83.5 L2.1	1

Table 2. James River Bluff Site (44SY0162), Surry County, Virginia: Stone Tools by Excavation Unit.

Table 2. Continued

		ost					
broken off - hinge fracture	Isosceles triangle, extensive resharpening, broken base	Middle Woodland, thin, aln Eared	Small fragment only		Tip broken off, base and notches Ground	Tear-drop shaped, poor material, wear on one edge	Twist wear, secondary flake flake curvature remains
	biconvex	flattened	n/a		biconvex	bicnvex	Plano- convex
	Excurvate	Straight	n/a		Excurvate	Excurvate	n/a
	n/a	straight	n/a		excurvate	excurvate	n/a
	7.12	5.60	3.48		12.34	12.64	3.96
	23,26	26.26	8.59		19.20	37.00	21.62
	24.12	31.64	10.74+		32.86	59.77	26.17
	grey	brown	grey		white	ycllow	grey
	argillite	quartzite	quartzite	đ	quartz	quartzite	quartzile
	Clarksvil 1	Yadkin	n/a		Lamoka	n/a	n/a
	proj point	proj point	proj pt tip		proj point	knife	flake drill
	2	9	4	N106.7W83.5 L2.2	-	2	ę.

Provenience/Type	Quartzite	Quartz	Jasper	Other	Total
N/5W158L1					
Chunk	2	1	0		15
Drimory flate	3	4	0	2	13
Secondary flake	121	<u> </u>	14	3	42
Secondary make	131	19	14	4	-225>
					~223>
N75W158 L 2.1					
Nodule fragment	9		1		10
Chunk	10	7			17
Primary flake	47	5	2		54
Secondary flake	294	23	18	5	340
					<421>
N75W158 L 2.2					
Nodule fragment					
Chunk	4	6	1	2	13
Primary flake	24	3	1		28
Secondary flake	88	12	5	2	107
					<148>
N100W140 L 1					
Nodule fragment					
Chunk	1	3	1		5
Primary flake	8	6	1		14
Secondary flake	24	9	1		34
	21	,	1		<53>
N100W140 L 2.1					
Nodule fragment		1			1
Chunk	1	3			4
Primary flake	10				10
Secondary flake	9	11			20
					<35>
N100W140 L 3.1	1				
Nodule tragment	I				1
Chunk	1				
Primary flake					
Secondary flake	2				2

Table 3. James River Bluff Site (44SY0162), Surry County, Virginia: Debitage per5.0' Unit by Material and Type.

Table 3 continued

					<4>
N106.7W83.5 L 1					
Nodule fragment					
Chunk	3	1			4
Primary flake	47	11			58
Secondary flake	109	13	4		126
					<188>
N106.7W83.5					
L 2.1					
Nodule fragment		1			1
Chunk	8	8			16
Primary flake	85	25	1		111
Secondary flake	242	30	5	2	279
					<407>
N106.7W83.5					
L 2.1 Anomaly					
Nodule fragment					
Chunk		1			1
Primary flake	2				2
Secondary flake	8	1			9
					<12>
N106.7W83.3					
L 2.2					
Nodule fragment		3			3
Chunk		1	1		2
Primary flake	27	10			37
Secondary flake	97	9	4	1	111
					<153>
N106.7W83.5					
L 3.1					
Nodule fragment					
Chunk		1			1
Primary flake	7	3			10
Secondary flake	23	7		1	31
					<42>
Total	1361	240	67	20	1688
	80.63%	14.22%	3.97%	1.18%	100.00%

Provenience	Shell Tempered	Pebble Tempered	Total
N75W158 L1	3	3	6
N75W158 L 2	23	19	42
N75W158 L3	4	7	11
Total	30	29	59
N100W140 L1	10	5	15
N100W140 L2	6	2	8
N100W140 L3	1		1
Total	17	7	24
N106.7W83.5 L1	2	20	22
N106.7W83.5 L2	5	80	85
N106.7W83.5 L3	13	33	46
Total	20	133	153
Overall Total	67	169	236
	(28.39%)	(71.61%)	(100.00)

Table 4. James River Bluff Site (44SY0162), Surry County, Virginia: Distribution of Ceramics by Unit and Level.

Table 5. James River Bluff Site (44SY0162), Surry County, Virginia: Distribution ofFire-Cracked Rock by Unit and Level.

Provenience	FCR #	% Per Unit	Total Per Unit
N75W158 L1	49	98	
N75W158 L 2	1	2	
N75W158 L3	0		50
N100W140 L1	12	48	
N100W140 L2	11	44	
N100W140 L3	2	8	25
N106.7W83.5 L1	12	13.19	
N106.7W83.5 L2	31	34.07	
N106.7W83.5 L3	48	52.74	91

Table 6. James River Bluff Site (44SY0162), Surry County, Virginia: Stone ToolsRecorded per Unit Excavation (F = identified in Field; L = identified in
Lab).

N75W158 L 1

- Artifact #1 (F) Projectile point, poor quality quartzite with cemented crystals visible, Lamoka (Late Archaic), single side-notch with second side irregular straight edge, base slightly excurvate, distal end blunted, exhausted, robust biconvex cross-section; 35.22 mm L, 19.61 mm W, 9.68 mm T.
- Artifact # 2 (F) Projectile point, grey quartzite, medium Woodland triangle, thick and humped, slightly excurvate blade, straight base, irregular biconvex cross-section; 31.37 mm L, 23.79 mm W at base, 10.70 mm T.
- Artifact # 3 (F) Projectile point, grayish brown quartzite, Yadkin (Middle Woodland) large triangle, good craftsmanship, very thin, tip broken off, slightly incurvate thinned base, flattened biconvex cross-section; estimated 50 mm L, 33.93 mm W at base, 7.23 mm T.

N75W158 L 2.1

Artifact # 10 (L) – 1 grey quartzite projectile point blade with base broken off, slightly serrated, blunt tip, possibly shouldered, biconvex cross-section; 35.32 mm L, 18.60 mm W, 7.62 mm T.

N75W158 L 2.2

- Artifact # 1 (F) 1 sandstone hammerstone, broken at mid-point, battered at one end, reddened, oblong; 60.02 mm L, 38.87 mm W, 20.32 mm T.
- Artifact # 4 (F) 1 large grey quartzite primary flake with striking platform with cortex, became unused core; 108.96 mm L, 72.11 mm, 31.48 mm T.
- Artifact # 5 1 red quartzite biface fragment, probably broken in production, possibly proj. pt. base; 17.52 mm L, 25.42 mm W, 12.50 mm T.
- Artifact # 6 Broken reddened quartz river cobble, tested for quality.
- Artifact #7 (F) 1 large grey quartzite primary flake with striking platform with cortex; 63.66 mm L, 37.40 mm, 12.22 mm T.
- Artifact # 8 (F) 1 sandstone hammerstone remnant, battered at one end, broken at mid-point and longitudinally, beat; 35.24 mm L, 26.60 mm W, 21.06 mm T.
- Artifact # 9 (F) 1 fine-grained quartzite secondary flake
- Artifact # 10 (F) 1 large grey quartzite primary flake with one face cortex, striking platform intact, classic; 52.11 mm L, 67.01 mm W, 19.40 mm T.
- Artifact # 11 (F) 1 sandstone hammerstone, river cobble, oval with pecked wear at both ends and on both faces, one face cracked from use, one side flaked off; 73.28 mm L, 51.79 mm W, 31.29 mm T.
- Artifact # 12 (F) 1 grey quartzite early-stage biface fragment; 24.33 mm L, 50.40 mm W, 15.13 mm T.
- Artifact # 13 (F) 1 small sandstone hammerstone with 2 battered ends, soft material, flat river cobble; 33.70 mm L, 36.36 mm W, 14.63 mm T.
- Artifact # 14 (L) 1 red quartzite drill tip, broken off, twist wear, use wear taper to distal end; 22.28 mm L, 9.60 mm W, 6.04 mm T, 3.35 mm L of taper.

- Artifact # 15 (L) 1 grey quartzite drill tip, broken off, twist wear, use wear taper to distal end; 15.41 mm L, 10.36 mm W, 3.88 mm T, 6.44 mm L of taper.
- Artifact # 16 (L) 1 grey quartzite biface, broken basal end, late stage or complete; 16.54 mm L, 32.22 mm W, 7.46 mm T.

N100W140 L 1 (11/01/08)

Artifact # 1 (L) – 1 white quartz biface, poor quality material (crystallized) with no good edges, tear-drop shaped, thick biconvex cross-section: 41.27 mm L, 28.88 mm W, 17.14 mm T.

N106.7W83.5 L 2 (11/01/2007)

- Artifact # 1 (F) small quartz triangle projectile point indicative of Late Woodland (small Hamilton), tip broken off hinge fracture from impact (shaft retrieval), too small for resharpening, straight-edged blade, straight base, flattened biconvex cross -section (no flake curvature; 11.18 mm L, 15.29 mm W, 4.02 mm T.
- Artifact # 2 (F) small isosceles argillite triangle projectile point, Late Woodland Clarksville, extensively resharpened, base broken off, slightly humped, series of retouch pressure flakes on one edge/same side (differential patina); 24.12 mm L, 23.26 mm W, 7.12 mm T.
- Artifact # 3 (F) medium sized brown quartzite projectile point, Yadkin (Middle Woodland), straight blade edges, straight base, very thin, almost eared, flattened biconvex crosssection; 31.64 mm L, 26.26 mm W, 5.60 mm T.
- Artifact # 4 (L) 1 grey quartzite projectile point tip, small fragment; 10.74 mm L, 8.59 mm W, 3.48 mm T.

N106.7W83.5 L 3 (11/01/2008)

- Artifact # 1 (F) 1 white quartz side-notched projectile point Brewerton, excurvate base, excurvate blade, tip broken off, base and notches ground; 32.86 mm L, 19.20 mm W, 12.34 mm T.
- Artifact # 2 (F) 1 yellow quartzite knife, bifacially flaked, cutting wear on one edge only, poor material, teardrop shaped,; 59.77 mm L, 37.00 mm W, 12.64 mm T.

Artifact #3(F) - 1 quartz primary flake (added to total)

Artifact # 4 (L) – 1 grey quartzite secondary flake, utilized flake drill, twist wear, plano-convex in cross-section, base wider than bit on one side, flake curvature remains with reverse side flat; 26.17 mm L, 21.62 mm W, 3.96 mm T, ca. 14 mm L of wear.

APPENDICES

Appendix 1: Artifacts Recovered (aN = total number of artifacts	ed per STP ; qN = number of quartzite artifact	s)
N0W50 zero		
N0W75 l quartzite flake l FCR	aN=2 qN=1	N25W175 1 qua 2 qua
N0W100 1 quartzite flake 1 FCR 2 sherds	aN=4 qN=1	2 qua 6 qua 1 jasj 1 she
N0W125 3 quartzite flakes	aN=3 $qN=3$	N50W50 zero
NOW ISU zero		N50W75
N0W175 3 quartzite chunks 11 quartzite flakes 1 quartzite biface frag 2 FCR	aN=17 qN= 14	1 qua 10 sh 1 FC
N25W50 zero		N50W100 3 qua 1 FC
N25W75 1 quartzite flake 1 crystal quartz shatter 1 white quartz shatter	aN= 3 qN= 1	3 she
N25W100 14 quartzite flakes 2 quartz flakes	aN=17 qN= 14	1 qua 1 qua
1 FCR		N50W150
N25W125 4 quartzite flakes 1 quartz flake	aN=5 qN= 4	6 qua 2 qua 2 she
N25W150 l quartzite flake	aN= 1 qN= 1	N50W175 1 qua 2 qua 1 jasj 1 FC
		N75W25 zero
		N75W50
		zero
		N75W75

W175 1 quartzite core 2 quartzite shatter 6 quartzite flakes 1 jasper biface frag 1 sherd	aN=11 q N=8
W50 zero	
W75 1 quartzite flake 10 sherds 1 FCR	aN=12 qN= 1
W100 3 quartzite flakes 1 FCR 3 sherds	aN=7 qN= 3
W125 1 quartz flake 1 quartz biface	aN=2 qN=0
W150 6 quartzite flakes 2 quartz flakes 2 sherds	aN=10 qN=6
W175 1 quartzite flake 2 quartz flakes 1 jasper flake 1 FCR	aN=5 qN= 1
W25 zero	
W50	

Flakes FCR Sherd

N75W100	aN=3 qN= 1		
1 quartzite flake	-	4 quartz flakes	
1 quartz flake		3 FCR	
1 jasper flake		1 sherd	
N75W125	aN=11 qN=0	N100W100	aN=2 qN=0
2 quartz cores	-	1 quartz flake	•
2 quartz flakes		1 jasper flake	
1 jasper flake		5 1	
5 FCR		N100W125	aN=18 qN=10
1 sherd		5 quartzite shatter	•
		5 quartzite flakes	
N75W150	aN=47 qN= 27	2 quartz shatter	
27 quartzite flakes		3 quartz flakes	
3 quartz flakes		l quartz core	
4 FCR		2 sherds	
9 sherds			
4 sherlets		N100W150	aN=45 gN= 29
		29 quartzite flakes	•
N75W175	aN=146 qN= 127	7 quartz shatter	
1 quartzite shatter	*	5 quartz flakes	
126 quartzite flakes		3 FCR	
1 quartzite projectile po	int (LA)	1 ochre nodule	
2 quartz flakes			
1 broken hammerstone		N100W175	aN=15 gN=7
7 FCR		7 quartzite flakes	•
8 sherds		1 quartz shatter	
		5 quartz flakes	
N75W200	aN=5 qN=5	2 sherdlets	
5 quartzite flakes	•		
1		N100W200	aN=2 qN=2
N100W0		2 quartzite flakes	•
zero			
N100W25			
zero			
N100W50	aN=17 qN= 10		
10 quartzite flakes	•		
6 FCR			
1 hammerstone frag			
N100W75	aN45 q=N= 37		
1 quartzite shatter			
36 quartzite flakes			

Appendix 2: Artifacts per 5-Foot Unit Chippokes James River Bluff Site (44SY0162), Surry County, Virginia

F = field identified; L = laboratory identified

Lab Designation N75W158 = EU1 N100W140 = EU2 N106.7W83.5 = EU3

N100W140 L 1

Artifact # 1 (L) – 1 white quartz biface, poor quality material (crystallized) with no good edges, tear-drop shaped, thick biconvex cross-section: 41.27 mm L, 28.88 mm W, 17.14 mm T.

N106.7W83.5 L 1

Artifact # 10 (L) – 1 grey quartzite projectile point blade with base broken off, slightly serrated, blunt tip, possibly shouldered, biconvex cross-section; 35.32 mm L, 18.60 mm W, 7.62 mm T.

N106.7W83.5 L 2

- Artifact # 1 (F) small quartz triangle projectile point indicative of Late Woodland (small Hamilton or Caraway), tip broken off – hinge fracture from impact (shaft retrieval), too small for resharpening, straight-edged blade, straight base, flattened biconvex crosssection (no flake curvature; 11.18 mm L, 15.29 mm W, 4.02 mm T.
- Artifact # 2 (F) small isosceles argillite triangle projectile point, Late Woodland Clarksville, extensively resharpened, base broken off, slightly humped, series of retouch pressure flakes on one edge/same side (differential patina); 24.12 mm L, 23.26 mm W, 7.12 mm T.
- Artifact # 3 (F) medium sized brown quartzite projectile point, Yadkin (Middle Woodland), straight blade edges, straight base, very thin, almost eared, flattened biconvex crosssection; 31.64 mm L, 26.26 mm W, 5.60 mm T.
- Artifact # 4 (L) 1 grey quartzite projectile point tip, small fragment; 10.74 mm L, 8.59 mm W, 3.48 mm T.

N106.7W83.5 L 3

- Artifact # 1 (F) 1 white quartz side-notched projectile point Lamoka, excurvate base, excurvate blade, tip broken off at plane, base and notches ground; 32.86 mm L, 19.20 mm W, 12.34 mm T.
- Artifact # 2 (F) 1 yellow quartzite knife, bifacially flaked, cutting wear on one edge only, poor material, teardrop shaped,; 59.77 mm L, 37.00 mm W, 12.64 mm T.

Artifact #3(F) - 1 quartz primary flake (added to total)

Artifact # 4 (L) – 1 grey quartzite secondary flake, utilized flake drill, twist wear, plano-convex in cross-section, base wider than bit on one side, flake curvature remains with reverse side flat; 26.17 mm L, 21.62 mm W, 3.96 mm T, ca. 14 mm L of wear.

N75W158 L 1 (11/01/07)

3 shell tempered eroded surface sherd

1 pebble tempered cord-marked sherd

1 pebble tempered eroded surface sherd

1 pebble tempered eroded surface sherd

- Artifact #1 (F) Projectile point, poor quality quartzite with cemented crystals visible, Lamoka (Late Archaic), single side-notch with second side irregular straight edge, base slightly excurvate, distal end blunted, exhausted, robust biconvex cross-section; 35.22 mm L, 19.61 mm W, 9.68 mm T.
- Artifact # 2 (F) Projectile point, grey quartzite, medium Woodland triangle, thick and humped, slightly excurvate blade, straight base, irregular biconvex cross-section; 31.37 mm L, 23.79 mm W at base, 10.70 mm T.
- Artifact # 3 (F) Projectile point, grayish brown quartzite, Yadkin (Middle Woodland) large triangle, good craftsmanship, very thin, tip broken off, slightly incurvate thinned base, flattened biconvex cross-section; estimated 50 mm L, 33.93 mm W at base, 7.23 mm T.

3 quartzite chunks

34 quartzite primary flakes 1 quartzite primary flake with cortex 1 quartzite primary flake – proximal 1 quartzite primary flake - distal 2 quartzite secondary flakes with cortex 113 quartzite secondary flakes 16 quartzite secondary flakes - proximal 12 quartzite secondary flakes - medial 32 quartzite secondary flakes - distal 3 red jasper chunks with cortex 2 red jasper chunks 3 yellow jasper chunks 5 red jasper secondary flakes 13 yellow jasper secondary flakes 1 red jasper secondary flake – proximal 1 red jasper secondary flake – medial 1 yellow jasper secondary flake – distal 4 quartz chunks 3 quartz primary flakes 19 quartz secondary flakes 6 quartz secondary flakes – medial 2 quartz secondary flakes – distal 1 ferruginous quartzite primary flake 2 ferruginous quartzite secondary flakes 1 basalt primary flake - proximal 1 grey chert secondary flake 1 sandstone secondary flake with cortex 12 FCR quartz (.35 kg, 12 oz) 37 FCR sandstone (1.6 kg, 3.5 lb)

N75W158 L 2.1 (11/01/07)

Artifact #1 (F) – 1 Mockley fine cord-marked, shell tempered sherd (5 pieces), cord impressions less than 1mm W 6.24 mm T.

Artifact #2 (F) – 1 Prince George net-impressed, crushed quartz-tempered rim sherd; straight rim, net- impressed to rim, tight net, knotted; 9.40 T.

- Artifact #3 (F) 1 shell-tempered, flat sherd with incised parallel lines on exterior, sides form right angle, on side definitely smoothed w/ lines perpendicular, second side possibly broken, well fired.
- Artifact #4 (F) 1 crushed rock/shell tempered, cord marked sherd, thick (2 pieces) 9.40 mm T.

Artifact #5(F) - 1 pebble tempered, knotted net impressed sherd, thick; 8.00mm T.

- Artifact #6 (L) 1 shell tempered, smoothed surface rim sherd, straight with finger pinching, blacked on portion of exterior; 5.4 mm T.
- Artifact #7 (L) 1 shell tempered, cord marked rim sherd, slightly excurvate, surface eroded; 5.37 mm T.
- Artifact #8 1 pebble tempered flattened coil
- Artifact #9(L) 1 large pebble tempered cord marked sherd, thick; 12.88 mm T.
- 9 shell-tempered, cord-marked sherds
- 2 shell-tempered, net-impressed sherds
- 12 shell-tempered, surface eroded sherds
- 5 pebble tempered, cord-marked sherds
- 2 pebble tempered, net-impressed sherds
- 12 pebble tempered , eroded surface sherds
- Artifact # 10 (L) 1 grey quartzite projectile point blade with base broken off, slightly serrated, blunt tip, possibly shouldered, biconvex cross-section; 35.32 mm L, 18.60 mm W, 7.62 mm T.
- 9 quartzite nodule fragments
- 10 quartzite chunks
- 21 quartzite primary flakes with cortex
- 26 quartzite primary flakes
- 1 quartzite primary flake distal
- 234 quartzite secondary flakes
- 60 quartzite secondary flakes proximal
- 64 quartzite secondary flakes medial
- 70 quartzite secondary flakes distal
- 7 quartz chunks
- 1 quartz primary flake with cortex
- 4 quartz primary flakes
- 22 quartz secondary flakes
- 1 quartz secondary flake proximal
- 4 quartz secondary flakes medial
- 4 quartz secondary flake distal
- 1 yellow jasper nodule fragment with cortex
- 1 yellow jasper primary flake proximal
- 1 yellow jasper primary flake distal

10 red jasper secondary flakes
7 yellow jasper secondary flakes
1 red jasper secondary flake - proximal
2 red jasper secondary flake - medial
4 yellow jasper secondary flakes - distal
1 red jasper secondary flake - distal, potlid
1 chalcedony secondary flake
3 grey chert secondary flake
1 white chert secondary flake - cortex, distal
1 sandstone FCR

N75W158 L 2.2 (11/02/07)

4 shell-tempered eroded surface sherds

- 1 pebble tempered cord marked sherd
- 3 pebble tempered cord marked sherds
- 3 pebble tempered eroded surface sherds
- Artifact # 1 (F) 1 sandstone hammerstone, broken at mid-point, battered at one end, reddened, oblong; 60.02 mm L, 38.87 mm W, 20.32 mm T.
- Artifact # 4 (F) 1 large grey quartzite primary flake with striking platform with cortex, became unused core; 108.96 mm L, 72.11 mmW, 31.48 mm T.
- Artifact # 5 1 red quartzite biface fragment, probably broken in production, possibly proj pt base; 17.52 mm L, 25.42 mm W, 12.50 mm T.
- Artifact # 6 Broken reddened quartz river cobble, tested for quality.
- Artifact #7 (F) 1 large grey quartzite primary flake with striking platform with cortex; 63.66 mm L, 37.40 mmW, 12.22 mm T.
- Artifact # 8 (F) 1 sandstone hammerstone remnant, battered at one end, broken at mid-point and longitudinally, beat; 35.24 mm L, 26.60 mm W, 21.06 mm T.
- Artifact # 9 (F) 1 fine-grained quartzite secondary flake

Artifact # 10 (F) – 1 large grey quartzite primary flake with one face cortex, striking platform intact, classic; 52.11 mm L, 67.01 mm W, 19.40 mm T.

Artifact # 11 (F) – 1 sandstone hammerstone, river cobble, oval with pecked wear at both ends and on both faces, one face cracked from use, one side flaked off; 73.28 mm L, 51.79 mm W, 31.29 mm T.

Artifact # 12 (F) – 1 grey quartzite early-stage biface fragment; 24.33 mm L, 50.40 mm W, 15.13 mm T.

Artifact # 13 (F) – 1 small sandstone hammerstone with 2 battered ends, soft material, flat river cobble; 33.70 mm L, 36.36 mm W, 14.63 mm T.

Artifact # 14 (L) – 1 red quartzite drill tip, broken off, twist wear, use wear taper to distal end; 22.28 mm L, 9.60 mm W, 6.04 mm T, 3.35 mm L of taper.

Artifact # 15 (L) – 1 grey quartzite drill tip, broken off, twist wear, use wear taper to distal end; 15.41 mm L, 10.36 mm W, 3.88 mm T, 6.44 mm L of taper.

Artifact # 16 (L) – 1 grey quartzite biface, broken basal end, late stage or complete; 16.54 mm L, 32.22 mm W, 7.46 mm T.

4 quartzite chunks with cortex

2 quartzite primary flakes with cortex 22 quartzite primary flakes 2 quartzite primary flakes - proximal 1 quartzite primary flake – distal 68 quartzite secondary flakes 2 quartzite secondary flakes with cortex 18 quartzite secondary flakes - proximal 12 quartzite secondary flakes - medial 37 quartzite secondary flakes – distal 6 quartz chunks 3 quartz primary flakes 12 quartz secondary flakes 1 quartz secondary flake - medial 2 quartz secondary flakes – distal 1 red jasper chunk 1 yellow jasper primary flake 4 yellow jasper secondary flakes 1 red jasper secondary flake 1 vellow secondary flake - proximal 1 yellow secondary flake - medial 1 yellow secondary flake – distal 2 grey chert chunks 2 grey chert secondary flakes 1 grey chert secondary flake – distal

N100W140 L 1 (11/01/08)

shell tempered cord marked sherd
 shell tempered net impressed sherds
 shell tempered eroded surface sherds

1 shell tempered fired coil

2 pebble tempered cord marked sherds

3 pebble tempered eroded surface sherds

Artifact # 1 (L) – 1 white quartz biface, poor quality material (crystallized) with no good edges, tear-drop shaped, thick biconvex cross-section: 41.27 mm L, 28.88 mm W, 17.14 mm T.
1 quartzite chunk
2 quartzite primary flakes with cortex
5 quartzite primary flakes
1 quartzite primary flake – proximal
1 quartzite primary flake – distal
21 secondary flakes
3 secondary flakes - proximal
6 secondary flakes - medial

- 9 secondary flakes distal
- 3 quartz chunks

quartz primary flake with cortex
 quartz secondary flakes
 quartz secondary flake - proximal
 quartz secondary flake - medial
 quartz secondary flakes - distal
 quartz primary flakes
 red jasper chunk
 yellow jasper secondary flake
 sandstone FCR (4 oz, 100 g)

N100W140 L 2 (11/02/07)

shell tempered net impressed
 shell tempered eroded surface
 shell pebble tempered eroded surface
 pebbled tempered eroded surface

quartzite chunk
 quartzite primary flakes with cortex
 quartzite primary flakes
 quartzite primary flakes – proximal
 quartzite secondary flakes
 quartzite secondary flakes - proximal
 quartzite secondary flakes - medial
 quartzite secondary flakes – distal
 quartz chunks
 quartz chunks
 quartz secondary flakes
 quartz secondary flakes
 quartz secondary flakes
 quartz secondary flakes
 quartz secondary flake
 quartz secondary flake
 quartz secondary flake – proximal
 quartz secondary flake - distal
 sandstone FCR (6 oz, 200 g)

N100W140 L 3.1 (11/03/07)

1 shell tempered cord marked sherd

1 quartzite nodule fragment 1 quartzite primary flake 2 quartzite secondary flakes – proximal 2 quartzite secondary flakes - medial 2 sandstone FCR (2.5 oz, 25 g)

N106.7W83.5 L 1 (10/31/07)

shell tempered cord marked sherd
 shell tempered eroded surface sherd
 shell grit/pebble tempered sherd
 pebble tempered cord marked sherds

11 pebble tempered net impressed sherds 2 pebble tempered eroded surface sherds

3 quartzite chunks 9 quartzite primary flakes with cortex 34 quartzite primary flakes 4 quartzite primary flakes – proximal 3 quartzite secondary flakes with cortex 87 quartzite secondary flakes 19 quartzite secondary flakes – proximal 14 quartzite secondary flakes – medial 19 quartzite secondary flakes – distal 1 quartz chunk 10 quartz primary flakes 1 quartz primary flake – proximal 11 quartz secondary flakes 2 quartz secondary flakes – proximal 3 quartz secondary flakes – distal 1 red jasper secondary flake 1 yellow jasper secondary flake 2 yellow jasper secondary flakes - proximal 2 yellow jasper secondary flakes – distal 12 sandstone FCR (6 oz, 200 g)

N106.7W83.5 L 2 (11/01/2007)

- 3 shell tempered cord marked sherds (eroded holes)
 2 shell tempered net impressed sherds (eroded holes)
 1 shell / grit/pebble tempered cord marked sherd
 16 pebble tempered cord marked sherds
 42 pebble tempered net impressed sherds
 2 pebble tempered plain surface sherds
 7 pebble tempered eroded surface sherds
- Artifact # 1 (F) small quartz triangle projectile point indicative of Late Woodland (small Hamilton), tip broken off hinge fracture from impact (shaft retrieval), too small for resharpening, straight-edged blade, straight base, flattened biconvex cross -section (no flake curvature; 11.18 mm L, 15.29 mm W, 4.02 mm T.
- Artifact # 2 (F) small isosceles argillite triangle projectile point, Late Woodland Clarksville, extensively resharpened, base broken off, slightly humped, series of retouch pressure flakes on one edge/same side (differential patina); 24.12 mm L, 23.26 mm W, 7.12 mm T.
- Artifact # 3 (F) medium sized brown quartzite projectile point, Yadkin (Middle Woodland), straight blade edges, straight base, very thin, almost eared, flattened biconvex crosssection; 31.64 mm L, 26.26 mm W, 5.60 mm T.
- Artifact # 4 (L) 1 grey quartzite projectile point tip, small fragment; 10.74 mm L, 8.59 mm W, 3.48 mm T.

8 quartzite chunks 22 quartzite primary flakes with cortex 59 quartzite primary flakes 4 quartzite primary flakes - proximal 2 quartzite primary flakes – medial 2 quartzite primary flakes – distal 9 quartzite secondary flakes with cortex 188 quartzite secondary flakes 45 quartzite secondary flakes - proximal 21 quartzite secondary flakes - medial 31 quartzite secondary flakes – distal 1 quartz cobble fragment 8 quartz chunks 4 quartz primary flakes with cortex 21 quartz primary flakes 29 quartz secondary flakes 1 quartz secondary flake - proximal 5 quartz secondary flakes - medial 3 quartz secondary flakes – distal 1 red jasper primary flake 1 yellow jasper secondary flake 2 red jasper secondary flake 2 yellow jasper secondary flake – proximal 1 grey chert secondary flake 1 chalcedony secondary flake 31 sandstone FCR (2 lb 6 oz, 1.075 kg)

N106.7W83.5 L2 Anomaly A

12 pebble tempered net impressed sherds1 pebble tempered cord marked

quartzite primary flake with cortex
 quartzite primary flake
 quartzite primary flake – distal
 quartzite secondary flakes
 quartzite secondary flake - proximal
 quartzite secondary flake - medial
 quartzite secondary flake – distal
 quartzite secondary flake – distal
 quartz chunk
 quartz secondary flake

N106.7W83.5 L 3 (11/01/2008)

- 21 pebble tempered net impressed sherds 10 pebble tempered cord marked sherds
- 2 pebble tempered eroded surface sherds

10 shell tempered net impressed sherds

2 shell tempered cord marked sherds

1 shell tempered eroded surface sherd

- Artifact # 1 (F) 1 white quartz side-notched projectile point Brewerton, excurvate base, excurvate blade, tip broken off, base and notches ground; 32.86 mm L, 19.20 mm W, 12.34 mm T.
- Artifact # 2 (F) 1 yellow quartzite knife, bifacially flaked, cutting wear on one edge only, poor material, teardrop shaped,; 59.77 mm L, 37.00 mm W, 12.64 mm T.

Artifact #3(F) - 1 quartz primary flake (added to total)

Artifact # 4 (L) – 1 grey quartzite secondary flake, utilized flake drill, twist wear, plano-convex in cross-section, base wider than bit on one side, flake curvature remains with reverse side flat; 26.17 mm L, 21.62 mm W, 3.96 mm T, ca. 14 mm L of wear.

1 quartzite primary flake - river worn

9 quartzite primary flakes with cortex

17 quartzite primary flakes

1 quartzite primary flake - medial

- 82 quartzite secondary flakes
- 15 quartzite secondary flakes proximal
- 16 quartzite secondary flakes medial
- 26 quartzite secondary flakes distal
- 3 quartz pebble fragments
- 1 quartz chunk
- 10 quartz primary flakes
- 9 quartz secondary flakes
- 4 quartz secondary flakes distal
- 1 yellow jasper chunk
- 4 yellow jasper secondary flakes proximal
- 1 black chert secondary flake
- 48 sandstone FCR (8 lb 8 oz, 3800 g)

N106.7W83.5 L4 (11/3/2008)

3 pebble tempered net impressed sherds1 pebble tempered cord marked1 shell tempered cord marked sherd

5 quartzite primary flakes with cortex 2 quartzite primary flakes 1 quartzite primary flake – medial 18 quartzite secondary flakes 5 quartzite secondary flakes - proximal 2 quartzite secondary flakes - medial 10 quartzite secondary flakes – distal 1 quartz chunk with cortex 1 quartz chunk 3 quartz primary flakes
6 quartz secondary flakes
1 quartz secondary flake - proximal
1 quartz secondary flake - medial
1 chalcedony secondary flake

EXCAVATIONS AT JAMES RIVER BLUFF SITE, CHIPPOKES STATE PARK SURRY COUNTY, VIRGINIA



DHRTECHNICAL REPORT NO. 7

VIRGINIA DEPARTMENT OF HISTORIC RESOURCES 2801 KENSGINGTON AVENUE RICHMOND, VA. 23221

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