The Cumberland Palisaded Village Site:

A (Very) Preliminary Report

by

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In 1983 the Maryland Historical Trust undertook a major salvage excavation on the banks of the lower Patuxent River, 7 miles from its mouth. The excavation was under day-to-day direction of Dennis Pogue and myself with M. Christopher Williams as field assistant. Wayne Clark provided valuable assistance. The site was excavated with the labor of students and over 200 volunteers. In subsequent years, some of the same volunteers have been faithfully processing the 100 odd boxes of samples and artifacts. A great deal of material still awaits processing and analysis, but because it has been three years since it was excavated, Dennis Pogue somehow convinced me that I ought to give an overview of the fieldwork and what we can say so far.

The site was discovered with students from the St. Mary's City Commission field school in June of 1982, during a routine pre-construction reconnaissance of the Larry Cumberland property, an agricultural field on a about 20 feet terrace above the Patuxent River. It is situated at the end of the field on the north side of Cove. The field drains south and east into the marsh. The cove, which now has a beach closing off the mouth, may have been open at some point in time prehistorically, however the exact evolution of the cove must await analysis of planned core samples from the marsh.

The extensive, excellent agricultural soils in the area are Mattapex Silt Loam that are underlain with sand, clay and gravel of pleistocene origin. These in turn overlie a limestone formation outcropping from the base of the bluff at water level. This erosion resistant calcareous deposit is of Miocene age and is exposed below the site for some 400 meters along the shoreline.

The routine preconstruction reconnaissance of the field was performed by a semi-controlled collection technique we call RACY or Rapid Assessment Controlled Surface Collection. The technique involves laying down a grid-as-you-go in 20 x 20 meter cells revealed several concentrations of shell and an isolated 18th century site at the north east end of the field. The aboriginal artifacts were concentrated at the south west end of the field but they were also lightly scattered across the field. The RACY map showed that the heaviest aboriginal concentration was in the same area as the proposed Cumberland housesite.
In order to check for extant subsurface features we excavated thirty shovel test pits in two N - S and E - W transects. Twenty nine of these turned up absolutely no subsurface features. In one, however, we just barely caught the edge of a subsurface feature. If that STP had been an inch to the east we would have missed what turned out to be a narrow, linear palisade trench. By excavating informal trenches we were able to trace the arc of the palisade for some 76 meters (250 feet). This was the first palisaded village found in tidewater Maryland in 50 years and only the second discovered to my knowledge.

Armed with this field information and an uncorrected C14 date of AD 1575 ± 65 years we set plans for a full scale excavation the following summer of 1983. We felt that there was the possibility that this was one of the villages noted in 1608 by Capt. John Smith, in particular, Opament. The landowner agreed to delay construction of his house until the site was salvaged. Because of the highly significant nature of the site, and that total destruction was expected in the center of the site, a fairly elaborate research strategy was developed.

The multi-phase strategy included twice plowing, gridding and intensively collecting 276 - 4 x 4 meter squares covering about 4,416 square meters (just over one acre). The site was then plowed again. At each 4 meter grid point a soil sample was also taken from plowzone for eventual analysis.

We felt that the plowzone might hold important artifact distributional data that could reveal the internal organization of the village. To increase the size of the plowzone sample, we excavated 42 - 2 x 2 meter units selected at random producing a 3% sample over the test area. Within the construction area the sample was increased to 5%. Although greatly increasing the plowzone artifact sample, the test units actually produced little evidence of subsurface features. The volunteers faithfully excavated many a dry hole. We also excavated discretionary units at the north and south ends of the site following the palisade. In total we excavated 84 - 2 x 2 meter units. We would have excavated a larger sample but, as it was, this represented a tremendous effort. In all, 124 cubic meters were excavated and screened by hand.

By the time the test units in the impact areas were excavated, a bombed-out appearance was produced. A Gradall with
toothless ditch cleaning bucket and a very experienced operator
was then used to strip an area of approximately 900 sq. meters
across the middle of the site. The approximate 230 cubic meters
of plowzone were hauled off the site.

RESULTS

Palisade Trench

The palisade trench was a semi-continuous trench up to 30 cm
wide and about 50 cm deep below existing grade. The fill, was
generally a brown or dark brown loam mixed with varying
percentages of lighter mottling. There was a percentage of
oyster shell and the Miocene limestone brought up from the cliff.
We hypothesize that it was used to chink the posts in place.
Periodically, there was evidence in the trench of post molds
which varied from about 10 to 20 cm (about 6") in diameter.
This being the case, this was a massively built structure which
needed the deep trench. Robert Beverley's description of
palisade fences 10-12 feet high seems very appropriate for the
evidence.

There were three apparent entrances in the palisade that
were screened with interior extensions of the palisade. Along
the east side was a line of individual post holes on the inside
of the palisade trench associated with an entrance. A possible
interpretation is that there was a raised platform above the
entrance or, alternatively, perhaps a double wall. There is no
evidence that this is a rebuilding of the palisade.

The palisade was traced noncontinuously in 1983 for a 96
meters (315 feet) in an arc. The direction of the palisade
trench perpendicular to the bluff edge does not suggest that the
palisade began to curve back around. Either it has been
very extensively eroded or in fact the palisade was never more
than an arc. The rate of erosion along most of the Patuxent
based on the DNR erosion maps indicate a slight rate of erosion
and the limestone would have reduced even that. The limestone
outcrop and bluff may have had some defensive value and I believe
the palisade was never more than an arc, open to the river. The
view from the site is over 3 miles down river and 12 miles up
river. So that attackers would be quite visible and vulnerable.
Borrow Ditch

Within the palisade trench and closely paralleling it was a series of ditches. The extent of this feature was unexpected and undetected until the site was stripped with the Gradall. Some 44 linear meters of ditch was uncovered. There are gaps in the ditch at the entrances of the double wall section, and periodically throughout. The fill of the ditch was fairly consistent as demonstrated in this sample section Feature 249F. On top was a stratum of shell, limestone, artifacts and charcoal. Below that was a stratum of dark loam fill with much less shell and artifacts. The ditch varied in depth up to about 0.6 cm below the surface.

The ditch held most of the artifacts recovered in situ from the site. Habitation debris was apparently placed in the ditch. Virtually all feature, post hole and ditch fill was water screened through window screen and 20% flotation and 20% shell samples were taken. This huge volume of samples awaits analysis.

The slope of the site and probably 300 years of cultivation suggests that the ground surface has been deflated significantly from sheet erosion and that both the palisade trench and borrow ditch were significantly deeper when constructed.

The palisade and the ditch are not unique in Chesapeake sites. A continuous palisade trench, as opposed to individual palisade post holes, were found at the Potomac Creek Site, a proto-historic period site on the upper tidal Potomac. A ditch was also found at some sites including the DeShazo Site (Potter 1982: 62) along the Rappahannock in Virginia, at the Potomac Creek site and at the Accokeek Site. At the Accokeek Site the ditch, referred to as refuse pits by Stephenson and Furgurson (1963), was associated with the second to the last palisade lines.

It is hard to imagine a defensive or storage function for the interior ditch. The ditch is more likely a borrow pit. At Accokeek Stephenson & Furgurson suggested that the fill was piled against the inside of the palisade for support. A variation on this theory would be the construction of a raised platform to achieve additional palisade support but also a height advantage for interior defenders. In colonial forts this was a firing platform.

Another possibility is that the palisade was daubed. By having brush or waddle essentially woven between the posts the
The sequence of ditch construction might be that palisade is greatly strengthened and the clay daub would adhere by weapons. Then the topsoil washed or was placed back in the ditch. The ditch stratigraphy tends to support this hypothesis as does the presence of a small but widespread amount of daub. While there is no ethnographic evidence for daubed palisades to my knowledge, there are other archaeological examples for prehistoric daubed palisades in the east. Whatever its function, I would also suggest that the interior ditch palisade is a late manifestation. At Accokeek, a site dated by Potter at AD 1550, the ditch is associated with the last palisades. The Potomac Creek site is proto-historic.

In the interior of the palisade a disappointingly small number, about 20, non-patterned postholes were found. Any house post holes that might have been present were apparently shallow and have been lost to plowing and erosion. This limits the analysis of the spatial arrangement of the site. However, the plowzone collections help somewhat.

Lithics

The 32 projectile points from the surface collections and the 84 test units cover a wide chronological range - from Early Archaic through Late Woodland. However, 56% of the points are triangular points with Potomac type points predominating. The distribution of the points shows an amazing relationship with the interior of the palisade. In addition over 94% of these points are quartz or chert and jasper. The non-triangular points shows a more diverse selection of raw materials.

In an attempt to identify activity areas the distribution of worked quartz shows concentrations inside and outside of the palisade. Worked jasper and chert follow a very similar pattern. While some of the distribution is probably attributable to the light earlier occupations the distributions do suggest activity areas, or houses inside and outside the palisade. The distribution shows an absence in the north part of the palisade. There is a consistent lack of all artifacts types in this area.
suggesting a plaza. In addition, the only hearth found was located in the north portion of the palisade. Beverly (___ : 177) writes describing palisades "Within this enclosure they likewise take care to have a supply of water, and to make a place for a fire, which they frequently dance round with great solemnity."

Ceramics

Among the thousands of sherds, there is a diversity of ceramic types represented at the site. However most types are represented in very low quantities. Based on the surface collections the vast majority, some 70% are plain, shell-tempered Yeocomico Plain as defined by Steve Potter (1982 : 376). It's closely related to Sullivan Cove Plain and Rappahannock Plain. This type has a very smooth surface, thin wall (5/8 mm) thickness and compact fine crushed shell tempering. Rims are either straight or excurvate with lips commonly rounded or tapered. Decorations, when present, consist of horizontal to vertical lines of cord impressions often smoothed over below the rim on the exterior. These large portions of vessels were found in the borrow ditch, one of which is now on exhibit. In the sample ditch section that I analyzed, Feature 249F, there were 109 sherds of which 95.4% is Yeocomico and Rappahannock and 4.6% is Potomac Creek. Both types date to the 16th and 17th centuries. The distribution of Yeocomico Plain is very similar to the quartz. Other types present on the site in low quantity are earlier woodland types such as this. Mockley represents 5% of the total from the surface collections, and there are isolated sherds of Accokeek and Popes Creek.

Faunal Materials

There was a disappointing lack of animal bone from the site. The exceptions rather than the rule were this complete Eastern box turtle carapace, perhaps a cup, and this large deer antler fragment both found in the borrow ditch. Unfortunately, the
majority of the bone is like these small bone fragments from the sample feature 249F. This bone at the top may be a bone shuttle, awl or point.

The vast majority of the faunal material is oyster shell. Dr. Henry Miller of the St. Mary's City Commission did a preliminary analysis of the shell from feature 249F. He was able to make the following observations: that the shells reflected the selection of medium sized oysters 3-4 years old with very few small oysters and a slight tendency to the large oysters. The height to length ratio shows that the oysters were selected from firm sand bottoms with small amount of silt mixture. The presence of radial ridges and pinkish coloration indicates that the shells came from near-shore clear water.

Seasonality can be estimated using growth lines on the hinge and they indicate at least fall and spring collection. Much more can and needs to be done with oysters. With the large sample of the shell from all the features, the distribution of shell indicates that the oyster shell is distributed along the bluff with a major concentration outside of the palisade. The plaza area shows up clearly. The oyster processing areas and much of the activity was focused on the marsh and cove.

Conclusions

Currently we have no evidence, such as European trade material, that would collaborate that this was a village mapped by Capt. John Smith in 1608, however, it could have been. The predominate period of occupation is suggested as proto-historic, presumably by the Patuxent Indians. The palisade provided protection from its hostile neighbors probably particularly from the Susquehannah from the north. The village is probably representative of a petty chiefdom village that seems to have been occupied at least during the Fall and Spring. The density of artifacts suggests it was more than a protective retreat. Some of the internal patterning has been suggested by plowzone artifacts however, a great deal awaits analysis. If the plowzone sampling procedure had not been performed all of this information
The complex was initially utilized by the Archaeological Tidewater Administration to conduct a detailed study of estuarine ceramics of the lower Potomac while the lower salinity portions of the river were utilized by the estuarine adapted cultures of the Potomac Creek complex while the lower salinity portions of the river were utilized by the estuarine adapted cultures of the Potomac Creek complex (Clark 1976; 1980).

Testing and refinement of this general model was not possible until the Maryland Historical Trust received a grant from the Tidewater Administration to fund a detailed study of amateur collections from the coastal Potomac drainage (Steponaitis 1980). This study confirmed the general ceramic distribution trend noted by Clark (1976) but also discovered a larger percentage of Potomac ceramics on lower Potomac sites than noted. Also, the relative technique of one manufacturer, who inferred the distinction of the Potomac Creek ceramics as a separate tradition, with pottery of the lower Chesapeake complex, was found to be common throughout the study. This model concluded that the lower Chenico Creek area was occupied by a ceramics that had been postulated by Clark (1980).

Two Tidewater Administration grants funded a comprehensive survey by Steponaitis of the field in the lower Potomac. Upon completion, this study will provide the final component necessary to test the postulated shifts in estuarine traditions (Steponaitis et al.). At the same time, Jeffrey Warr's study follows a continuation of the general ceramic manufacture in the estuarine portion of the lower Potomac, while in the riverine portion of Boliah Swamp on the Wicomico River, Potomac Creek ceramics become prevalent (Coulter 1982). This information suggests exclusive use of the estuarine lower Wicomico by the Townsend complex groups and possible influence of the riverine Potomac Swamp on these cultures.

Concurrent with these investigations in Maryland, Steve Gordon and Gregory Gaglione (1980) were conducting similar field work in the lower Potomac, Virginia, and the studies are consistent with the model by linking the lower Chesapeake region to the Potomac region. The Potomac Creek ceramics of this complex are newly defined as Wicomico ware which received six radiocarbon dates placing this ware between 1500 to 1690 A.D.

While these studies have been most useful to this discussion, the primary conclusion of the studies is to refine the model by linking the lower Chesapeake to the Potomac region (Clark 1976).
which attempted to trace the development of the ranked society of the Powhatan chiefdom. Steve Potter's (1982) analysis attempted to define archeologically identifiable attributes of the petty chiefdoms in the Northern Neck of Virginia. Based on an analysis of the rich historical accounts of 17th century Virginia Indians, Potter developed an archeologically testable model which postulated the nature of werowance villages, commoner villages, spatial and subsistence aspects, and sociopolitical aspects of the petty chiefdoms in his study area (1982). He worked closely with Gregory Waselkov who was examining the evolution of maritime adaptation and the formative processes of shell middens in the Chesapeake (1982). These separate approaches to the evolution of ranked societies and maritime adaptation resulted in a number of archeological models which have only been partially tested based on the Virginia data.

While these earlier studies have made significant progress toward model development, testing of the models has continued to be hampered by the lack of proto-historic sites with the demonstrated ability to yield structure and community pattern data. The rediscovery and testing of the Cumberland Palisaded Village site has altered this situation by providing such a site. While the location of the Cumberland site shell midden was first reported by Richard Stearns in the 1930's, the nature of the shell midden remained unknown until 1982. In response to the proposed construction of a house in the middle of the site, Mike Smolek of the Southern Maryland Regional Center conducted test excavations in 1982 which not only defined the extent of the palisade line, but which also obtained shell from a feature within the palisade line that yielded a radiocarbon date of $1575 \pm 65$ A.D. (UGa-4571). This date corroborates the dates for Yeocomico ware defined by Potter (1982) since Yeocomico ware was found in the feature from which the shell sample was derived.

As the first palisaded village site found in Maryland's Tidewater since the 1930's, the site offers an excellent opportunity to test the models developed over the past ten years. Because the center portion of the site will be destroyed by house construction, the portion of the site to be destroyed can be stripped of the plowzone after this upper soil layer has been systematically sampled. The resultant data will not only enable the testing of previously developed models, but will also aid in determining the surface and soil chemical characteristics of similar sites in the Tidewater Chesapeake.

There follows a review of the work conducted at the site to date which will help document the research potential of the deposits.
FIGURE 2: General Site Location of 18 CV 171. (U.S.G.S. 7.5' Quadrangle-Solomon's Island 1974)
Site Summary

The Cumberland Palisaded Village site (18 Cv 171) was discovered by Richard Stearns during his boat survey of the Patuxent River. Stearns attempted to locate the 17 Indian villages reported by John Smith. The location of the site was marked on Stearns's field maps and transferred to the state archeology maps, but the site was not assigned a state site number or discussed by Stearns in his publications (1943, 1961, 1965).

When the Maryland Historical Trust learned of plans for the construction of a single family home on the site, Michael Smolek of the Southern Maryland Regional Center visited the site in the spring of 1982. He found a dense oyster shell midden extending over a 80 meter by 50 meter area. The midden surface yielded ceramics and several Late Archaic period Holmes-type projectile points. The site's location on a 40 foot bluff adjacent to the Patuxent River provided an excellent view of the river for several kilometers to the north and south (Figure 2). The presence of fossil limestone concretions along the base of the cliff were thought to have retarded the rate of headland erosion and thus to have preserved the Late Archaic period occupation from the normal fate of erosional loss due to sea level rise.

Because this site was viewed as containing information on the poorly understood maritime aspects of the Late Archaic period settlement-subsistence patterns, additional work was conducted. With the assistance of members of the 1982 St. Mary's City Commission fieldschool, Smolek returned to the site and completed a rapid assessment control surface collection of the site. This collection method entailed collecting the artifacts from the surface of the site within standard 20 meter squares (Figure 3). The different density of shell and artifacts was then plotted. The resultant contour frequency map of the artifact distributions revealed that the peak concentration of prehistoric artifacts occurred within the shell midden area and extended beyond the midden for a distance of 50 meters to the north. The recovery of some Yeocomico Plain sherds during the collection, combined with the possible presence of a buried shell layer or features, led Smolek to return to the site again for additional testing.

A series of shovel test pits were excavated at the coordinates of the 20 meter control surface grid (Figure 3). The test pits revealed an absence of sub-plowzone strata except for the southern 15 meters of the site, where a 20 cm thick layer of in situ shell was found. The subsoil consisted of a sterile clayey silt layer. In the center of the artifact cluster and at the northern edge of the major shell cluster, one shovel test pit exposed the edge of a shell filled sub-surface feature. When the shovel test pit was expanded, a linear shell and brown earth filled stain was revealed (cover page). A few more test pits revealed that this feature continued for some distance (Figure 4).
FIGURE 3: Location of 1982 Control Surface Grid.
FIGURE 4: Site Plan of the Cumberland Village Site Showing Excavated Test Squares.
With growing excitement, representatives from the Maryland Historical Trust, St. Mary's City Commission and the Southern Maryland Regional Center returned to the site and excavated a series of trenches to trace the extent of the linear feature. The 15 trenches revealed a semi-circular trench whose river side had most likely been lost to shoreline erosion (Figure 4). Projections of this trench into the unexcavated portion of the arch suggest a palisade size of 53 by 53 meters. This size compares closely to the 44 by 47 meter size of a known palisade at the Brown Johnson site in Virginia (MacCord 1971).

When sections of the trench were cleaned for photography, a series of solid soil areas were noted spaced between areas of compact oyster shell and limestone fragments (Figure 5 and 6). When one of the sections of the palisade line was excavated, the solid soil areas were found to extend to the bottom of the trench. The section of the trench excavated was 45 cm in depth, although this depth may vary across the site. The solid soil areas are interpreted as representing the remains of posts which were held in place by oyster and limestone chinking.

In test pit 12, a circular, shell filled pit was discovered which is located within the palisade ditch (Figure 4 and 6). Excavations of the top ten centimeters of this feature yielded pottery of the Yeocomico and Rappahannock Fabric Impressed types. Shell from the same feature received a radiocarbon date (uncorrected) of 1575 ± 65 years. As the shell feature falls within the palisade ditch and Yeocomico ware was found in the feature and on the surface of the site, this date appears to be reasonable for the palisade ditch.

Upon completion of the test trenching, the test excavations were backfilled and discussions begun with the site owner, Mr. Lawrence Cumberland. Mr. Cumberland realized the importance of the discovery and agreed to modify his plans in regard to alterations to the site. He postponed house construction until December of 1983. The postponement was agreed upon to allow time for the Maryland Historical Trust to raise funds to excavate that portion of the site which will be destroyed by construction of a single family house. This house will destroy the entire eastern portion of the area inside the palisade ditch. Because this portion of the site will be destroyed, the Trust has been presented with the opportunity to explore a large portion of the subsoil of the site once the plowzone has been systematically sampled.

The use of machinery to remove the plowzone of such an important site would not be considered if we were not faced with the future destruction of a portion of the site. However, these events can be viewed as the first opportunity in Chesapeake archeology to develop a comprehensive, multi-stage sampling design which will include the identification and mapping of a sufficient area of a palisaded village site to enable the testing of a series of hypotheses about petty chiefdoms which were developed.
FIGURE 5: Plan Views of Sections of Palisade Ditch.

1. GREYISH-BROWN LOAM, 10% LIGHT BROWN LOAM MOTTLE, OYSTER SHELL PROFUSE. (PALISADE)
2. LIGHT GREY-BROWN LOAM, 30% GREY-BROWN LOAM MOTTLE, 20% STRONG BROWN CLAY (DISPLACED DEEP SUBSOIL- BURIAL?)
3. LIGHT BROWN CLAY LOAM, 30% GREY-BROWN LOAM MOTTLE (SUBSOIL)

1. SUBSOIL
2. DARK GRAYISH BROWN W/20% MOTTLING W/SUBSOIL
3. SUGGESTION OF POST MOLDS
   DARK GREYISH BROWN MOLDS .4-.5" dia.
TEST PIT 4
.6 FT. BELOW SUBSOIL

KEY
1 POST MOLD
2 LIMESTONE COBBLE
3 OYSTER SHELL

SEC. A - A'

0 1 2 FEET

1 FEET

TEST PIT 12

1 SUBSOIL
2 FEATURE (BURNED/UNBURFED SHELL)
3 POSSIBLE POST HOLE

FIGURE 6: Profiles of Feature and Palisade Trench.
by Steve Potter (1982), Randy Turner (1976), and Wayne Clark (1976). The sampling strategies proposed to provide the test data will be reviewed below.

**Sampling Procedures**

Rather standard methodologies have been developed over the past ten years in Maryland to sample both the plowzone and sub-plowzone spatial associations of artifacts and features. However, all of these procedures have never been applied to a palisaded village site to answer problems of regional importance. Excavation of the Cumberland Village site will employ the full range of sampling techniques currently available to obtain statistically valid data to test a range of hypotheses. Because archeologists in the region have had to depend on the results of palisaded village excavations conducted in the 1930's, archeologists working in Maryland's Tidewater region do not have even one example of the house pattern in use during any period of Maryland prehistory, let alone the potential of obtaining a community pattern. Moreover, flotation and wet screening techniques, so standard and important for subsistence studies, have not been conducted at any of the excavated palisaded villages in the Coastal Plain. A program of soil sampling and shell analysis of these types of sites has never been conducted, nor have controlled surface collections and test pitting followed by extensive exposure of the sub-surface features been attempted. In short, the proposed sampling program to be developed at the Cumberland site will provide unique insights and previously unavailable data for Maryland archeology. The site data can provide the first test case for interpreting regional patterns of settlement, subsistence and sociopolitical development as predicted on the basis of ethnohistoric and ethnographic sources.

**Control Surface Collection** The distribution of artifacts in the plowzone of the multi-time period Cumberland site represents a large part of the spatial data on activity areas at the site. The shovel test pitting program in 1982 revealed that, except for intrusive features, the artifacts from the site are confined to the plowzone. Various studies have demonstrated that although plowing redistributes artifacts, this redistribution follows a normal pattern with the original source of the artifacts representing the center of the original artifact distribution. While a single controlled surface collection from a site obtains approximately a one percent sample of the artifacts in the plowzone, this sample will be sufficient to define site limits and to interpret the nature and location of activity areas.

At the Cumberland site, the controlled surface collection will be conducted after the field has been plowed and repeatedly rained upon to wash and expose the artifacts. A ten meter grid will be established across the entire western half of the field.
Previous surface survey has revealed that this area contains the primary evidence of prehistoric occupation. Within the area of the palisade and the dense shell midden, the site will be collected within five meter squares while the rest of the area will be collected within ten meter squares. A total of 175 five meter squares will be collected in this manner. The limits of the shell distribution will be noted. Finally, as time and field conditions permit, the adjacent fields surrounding the small coves will be collected using the rapid assessment controlled surface collection method. This method employs a floating grid of 20 meter squares and will provide essential spatial data on possible individual house sites which may represent outlying houses associated with the palisaded village site. All of the surface data will be plotted using the Symap computer program with hand plotted distribution maps made during the survey to aid in site interpretation while the fieldwork is in progress.

**Stratified systematic unaligned test square excavations** The controlled surface collection will provide one statistical sample of data from the palisade and shell midden areas. However, an eleven (11%) sample of two meter test squares will be excavated within the area of the palisade line, to (1) determine what percent of the plowzone data is represented in the control surface collection (2) to obtain a more statistically valid sample of artifacts from the plowzone, and (3) to obtain a statistically valid sample of subsurface feature data.

To determine what sample size constitutes a statistically valid sample, for interpreting subsurface features a number of different sampling procedures were experimentally applied to data secured from the previously excavated Brown Johnson site in Bland County, Virginia (MacCord 1971). The Brown Johnson site consisted of a 44 by 47 meter semi-circular palisade village which was completely exposed by removal of the plowzone with heavy machinery. The palisade enclosed thirteen circular house structures, six storage structures, four fire pits, fourteen burials, seventeen hearths, thirty storage pits and five undefined features. The site is approximately the same size as the Cumberland site which is a projected 53 by 53 meters in area. However, the Cumberland site is predicted to have long houses, not circular houses as were found at the Brown Johnson site. However, since the Brown Johnson site is the only site of similar size which has been completely excavated, it serves as an excellent test case.

Operating on the assumption that the Cumberland site may be expected to show an internal layout of features similar to the Brown Johnson site, a number of sampling procedures were tested by overlaying a grid of 2 by 2 meter sample units oriented on a north-south axis and covering a rectangular area 30 by 30 meters over the entire palisaded portion of the Brown Johnson site. Ten percent samples of the total sampling unit population were then generated using simple random sampling, stratified random sampling, systematic geometric sampling, systematic interval sampling,
stratified systematic unaligned sampling and hierarchical sampling procedures (Redman 1974). Each sampling procedure was then plotted on maps of the Brown Johnson site. Percentage of the total target population of structures, features and postmolds which had been exposed by each sampling procedure were then calculated. From these tests, it was determined that a stratified, systematic, unaligned sample produced the best estimates of total population characteristics. In addition, this sampling procedure has the advantage of allowing expansion of the total sampling population if necessary, and of providing maximum dispersal combined with randomization so that all areas are adequately tested in case our assumptions of interior layout are incorrect. Figure 7 depicts the application of an eleven percent stratified, systematic unaligned sample to the Cumberland site.

This is the test excavation program proposed for the Cumberland site. A total of 102 2 meter x 2 meter test squares will be excavated with the material dry screened through standard size wire mesh screens. All shell and other objects captured in the screen will be washed in the river to aid in the recovery of artifacts. Volume estimates of the shell will be recorded for each square. Soil samples will be taken from the plowzone and subsoil of each square and phosphate, calcium, and pH readings obtained for each sample. This data will be used to plot chemical soil values and determine differences between the plow-disturbed and the undisturbed chemical distributions. Sub-surface features will be mapped and excavated. Standard state forms will be completed for each excavation square.

Extensive subsoil exposure The controlled surface collection, test pitting, and soil sampling procedures will provide three interdependent sources of statistical data to interpret the community settlement pattern of this significant village site. However, the sampling program will provide insufficient data about the sub-surface features to determine such factors as house size, house type, and overall community pattern. The latter data can only be obtained through removal of the plowzone from a cross section of the site and the subsequent mapping and excavations of the exposed features.

Following completion of the sampling investigations, the portion of the site to be destroyed by house construction will be stripped of the plowzone. The subsoil will be flat shovelled to remove plow scars and to locate post holes, features and the palisade ditch. The area to be stripped extends 20 meters east-west by 32 meters north-south beginning at the location of Test Pit 12 and extending to the location between Test Pits 7 and 8 (Figure 7). All exposed features will be mapped/photographed, and excavated. Standard volume samples from features will be floated to recover material such as seeds and nuts with the remainder of the feature fill wet screened.
FIGURE 7: Placement of Stratified, Systematic, Unaligned Sampling Units (11%).
The exposure of this southeast quarter of the palisade area should give an adequate areal coverage of the site which can be used to interpret the relationship between the features and the surface collection, and the soil sample and test square samples. Excavations of a smaller sample of site 44 VB 7 in Virginia Beach yielded the palisade line and portions of two long houses (Egloff 1982: Per. Com.). The larger area proposed for excavations at the Cumberland site should expose at least portions of three long houses, if the two sites are comparable. The excavations will also reveal the center portions of the site which may contain a central plaza devoid of features.

Analysis and Report Preparation

So little is known about the settlement patterns, diet, artifact assemblages and activity areas of palisaded villages in the Chesapeake Bay region that the multi-stage sampling program will be certain to provide new insights into all of these aspects of Indian lifeways. During and following the fieldwork phase of the project, the artifacts and soil samples will be cleaned and cataloged using standard Maryland Historical Trust procedures. Distributional analysis of soil chemicals and artifact patterns will be computerized to allow for ready data manipulation and interpretation. This distributional data will be compared to the feature data to determine the value of the various plowzone sampling techniques in providing data for research questions. The data will also help determine the value of such sampling techniques in understanding how different portions of the site were used. The result of the analysis will be presented in a final report which will represent a major contribution to Maryland’s archeological literature. The data will also be used to plan a reconstructed village to be developed at the proposed Jefferson Patterson Park and Museum in Calvert County.

A number of questions about Indian society will be addressed during the analysis of the excavated data. Recent research by a number of scholars has used historic data about the Indians of the Chesapeake to construct models on Indian lifeways. These various models have already been discussed in this proposal. The analysis will attempt to provide answers to the many questions which have been raised by the research of Clark (1976), Potter (1982), Turner (1976), and Waselkov (1982).

Structure Analysis The remains of Indian houses, storehouses, palisade walls and other structures can be detected archeologically through the discovery and excavation of soil stains which mark the location of the long rotted posts. At the Cumberland Village site, past excavations have already demonstrated that the palisade line and storage pits can be readily identified. The high clay content in the soil of the site makes this a rare and important site for detecting such tell-tale stains in the earth. Many sites in the Tidewater have sandy soils which are not conducive for
stain preservation. This explains, in part, why archeologists in Maryland have failed to uncover even one example of an Indian house remains.

Because of the clayey nature of the soil at the Cumberland site and the large area proposed to be excavated, the site has a great potential for yielding this long sought after house pattern data. Steve Potter's review of historic documents identified different types of structures used by the Indians. His study showed that the types of structures present in a village depend on whether the village was occupied by commoners or by the chief or werowance of a petty chiefdom (Potter 1982). According to Potter (1982: 56)

...the most basic distinction to be drawn concerning Virginia Algonquian villages related to whether or not a werowance, or district chief, resided in the village. If he did, then such a village would consist of werowance's longhouse, the werowance's storehouses, the mortuary temple, perhaps a separate council house which may have served as quarters and a place of entertainment for visiting personages, and the houses and associated structures of the commoners.

The commoner village by contract would lack

...all of the foregoing except the commoner's residence, the functionally specific structures such as household storage units, sweathouses and menstrual huts, which were common to all places of settlement (Potter 1982: 56).

Information on the dimensions, shape and internal composition of these different structures is derived primarily from the historical observations of early colonists. Both the commoner and the werowance houses were rectangular in shape with rounded ends, but the werowance long houses were longer and had internal partitions. Whether or not such differences could be recognized archeologically is a question which remains to be tested. However, the historical data on the attributes of various structures provides an independent source of information about the types of structural remains which may be encountered. At the Virginia Beach site excavations in Virginia, the long house remains found during excavations had rounded ends. This discovery suggests that the historical descriptions of houses may indeed provide a realistic assessment of the type of structures which may be encountered at the Cumberland village site.

Community Analysis The structural analysis will focus on interpreting the different type of structural remains which are uncovered during the archeological investigations. Analysis of the community pattern will study how these structures are distributed within the palisaded village and attempt to determine whether the village represents a werowance village or a commoner

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village. Previous excavations of palisaded villages have been unsuccessful in addressing these types of questions because of the inability of the excavators to identify specific structural remains.

The mere presence of a palisade around the Cumberland Village site would initially suggest that this was a werowance village which was palisaded to provide protection of the storehouses, mortuary temple, and werowance house. But Steve Potter's analysis of the distribution of excavated palisaded villages in the Virginia tidewater indicates that palisaded villages occur on the edge of the buffer zone between adjacent petty chiefdoms or in petty chiefdoms surrounded by hostile Indian cultures.

The Cumberland site is located at the southern edge of the historic Pawtuxunt petty chiefdom, in the general area of the village site identified by John Smith as Opament. Moreover, the site is strategically situated to provide a ten mile view upriver and a two mile view down river. This site would have been in an ideal location to spot any water base traffic long before that traffic arrived at the site. As no petty chiefdoms existed to the south of the village at the time of contact, we can only infer that the palisading of the village was either to protect against attack from the petty chiefdom directly across the river (Figure 1: Acquintanacsuck) or to protect from water base attack by the Susquehannock or Piscataway Indians. The latter hypothesis is inferred since several historic references suggest that the three petty chiefdoms on the Patuxent joined together in common defense against perceived invaders. Based on this analysis, the Cumberland Village site is inferred to be a commoner village located on the edge of the Pawtuxunt petty chiefdom.

The community pattern analysis will not only address this largely political question, but will also carefully examine the distribution of structural remains, storage features, and artifact patterns to determine what type of activities were conducted in different parts of the site. The sampling strategy is limited primarily to within the palisade area to derive a better picture of village life. By studying the distribution of artifacts from the plowzone, different activities within the area of the houses, within the probably central plaza and directly outside the palisade will be examined. Differences in the types of artifacts will also be analyzed to determine possible relationships between the different households within the palisaded village. This will be the first time that such a variety of data will be available for intra-site analysis. The data will also provide insights as to the value of surface artifact distributions and soil chemical distributions in predicting the location of different types of features which survive below the plowzone.
Subsistence Analysis As a vital part of the community and structural analysis, the food remains and artifact types recovered will be studied and compared. The different types of tools found across the site will provide some insights into the type of subsistence activities which took place at the site. For example, roasting pits may reveal that the oysters collected at the site were dried. Various scraping tools will suggest that hide preparation, wood and bone working and other processing of plant and animal remains occurred.

The surface of the Cumberland site is littered with oyster shell. Oyster shell have been found in the one feature dating to 1575 A.D., as well as in the palisade line ditch. Other sites and archeological assemblages dated to this period have yielded abundant evidence of oyster exploitation. The historic observations of early travellers revealed that in the spring, the local Indians depended heavily on oyster gathering. Excavations at the Cumberland site will obtain a representative sample of the oyster remains which will be analyzed using the latest techniques developed by Dr. Bret Kent (n.d.). The analysis will record attributes which will enable the archeologists to tell what time of year the oysters were collected, how the oysters were collected, and what the effects of the collection was on the oyster populations.

Since flotation and wet screening of the features will be conducted, a variety of plant and small animal remains are expected. A sample of these remains from significant features will be selected for detailed analysis. Such analysis will hopefully reveal the variety of domesticated plants which are predicted (corn, bean, squash), as well as wild plant foods which were also reported by early explorers to have been harvested. This analysis will not only help clarify the Indian diet, but will also help interpret whether the site was occupied year-round or on a seasonal basis.

The bones from the site will also be sampled to determine dietary information and insights into the seasons of occupation at the site. The bones will also be examined to determine possible hunting practices and butchering techniques. Finally, bone tools will be examined. This data will be compared to Waselkov's and Potter's excellent analysis of subsistence data from the lower Potomac River valley to determine how the Cumberland data fits the previously developed models of maritime adaptation.

Typological Analysis The final type of analysis proposed will be the division of various classes of artifacts into types. The site has already produced three types of Indian pottery dating to the Middle and Late Woodland periods (Mockley, Rappahannock, and Wicomico Wares). A variety of projectile points types have also been found dating back to at least 3000 B.C. While the long period of use of this site as a location for prehistoric habitation will complicate the assignment of the artifacts in the plowzone to any one particular time period,
excavated from features (such as storage pits) will be of greater value for such structural analysis. The purpose of the typological analysis will be to define the range of artifacts which can be clearly associated with the Late Woodland period palisaded village occupation at the site. This data is desperately needed to provide for an expanded definition of the Sullivan Cove phase occupation at the site. The typological analysis will also attempt to define the functional use of the stone tools discovered to aid in the intra-site interpretation of the site.

Administration

The archeological investigations will be administered by the Maryland Historical Trust under the direction of Wayne E. Clark, the State Administrator of Archeology. Dr. Charles McNett, Chairman of the Department of Anthropology at American University, will serve as principal investigator for the American University 1983 fieldschool. The fieldschool is scheduled to be held at the site between June 14 and July 16, 1983, with from eight to ten students anticipated. Funding is being requested to cover the per diem and housing cost of the students as well as to pay for a project archeologist. The project archeologist would be responsible for the daily supervision of the fieldwork, the cleaning and cataloging of the artifacts, and the completion of the analysis and report preparation. The St. Mary's City Commission Archeological Fieldschool will also participate in the excavations under the direction of Mike Smolek, the Southern Maryland Regional Center archeologist. Mike will direct an average of four students at the site and provide overall site guidance during all phases of excavation and report preparation. Finally, volunteers from the Archeological Society of Maryland will be sought to assist in the excavations, cleaning, and cataloging of the artifacts from the site. The work will be conducted during the weekends to insure an adequate volunteer response.

Funding is being sought from the Baltimore Gas and Electric Corporation to pay for the basic operation cost and project archeologist's salary during the fieldwork phase of the project. We anticipate matching this money with funding provided by the National Park Service to pay for the analysis and report writing phases of the project. This is planned to be a high profile excavation with extensive public involvement and support. Press coverage of the excavations will be encouraged. The contributions of the Baltimore Gas and Electric Company will be acknowledged during any such coverage and in the publications resulting from the excavations. Copies of the press coverage and excavation report will be forwarded to Baltimore Gas and Electric. Finally, the data derived from the excavations is anticipated to form the basis for reconstructing a palisaded Indian village at the proposed Jefferson Patterson Historic Park and Museum. The
role of the Baltimore Gas and Electric Company's contributions to this reconstruction will be acknowledged on signs at the site and in the interpretive material.

Conclusion

The proposed archeological investigations at the Cumberland Palisaded village site will potentially be one of the most rewarding and informative excavations to take place in Maryland in the next decade. The excavations are essential since a portion of this unique site will be destroyed by house construction and will thus be lost forever. This represents our last and only opportunity to conduct archeological investigations prior to site destruction. The Maryland Historical Trust has designed a multi-stage sampling program which will provide exciting new data on the composition of this, the first palisaded village site discovered in Maryland's tidewater since the 1930's. But, the Trust must raise matching funding in order to conduct the necessary excavations. The excavations will involve a number of organizations to insure that costs are kept to a minimum. A grant from the Baltimore Gas and Electric Company is essential to the success of the investigations and will be gratefully acknowledged in all publications and news releases relating to the discoveries which will be made. This is a unique opportunity for the Baltimore Gas and Electric Company to provide to the citizens of Calvert County and to the State of Maryland an opportunity to participate in the discovery of important answers to a number of questions about Maryland's earliest inhabitants. We have so much to learn from the excavation of this important site. Excavation of the site will result not only in new insights into the largely forgotten and poorly understood way of life of the peoples John Smith first encountered during his exploration, but also in a deeper appreciation by all of Maryland's citizens in the roots of their state's historical heritage.
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CUMBERLAND PALISADED VILLAGE SITE
CALVERT COUNTY, MARYLAND

ABSTRACT

During a routine reconnaissance survey of Preston-on-Patuxent, Calvert County, a palisaded village site was discovered. Controlled surface collection, shovel-test pits and preliminary test excavations culminated in the discovery of a palisade trench some meters (feet) extending in an arc from bluff to bluff on a promontory above the Patuxent River. Portions of a large shell-filled feature was revealed and shell-tempered Rappahannock series ceramics were recovered from the top of it.

ENVIRONMENTAL SETTING

The Cumberland Palisaded Village Site (18 CV 111) is situated in an agricultural field on a level terrace above the Patuxent River about miles above the mouth of the river (Figure ). The site is situated between Helen Creek and St. Leonard Creek on the north side of the 'confluence' of Turner Cove and the Patuxent River. Located at an elevation of about 20 feet above mean sea level, the agricultural field drains southward into Turner Cove and several wide, shallow drainage gulleys have developed (Figure ). The palisaded village is situated on the promontory formed by one of these drainage gulleys to the east and the Patuxent River to the east and Turner Cove to the south.

The soils of the agricultural field are some of the best in the county for agriculture. The soils are underlain with sands and gravels which promote good drainage. These sands and gravels are Pli-Pleistocene deposits below this formation and from the base of the bluff just below at water level is an erosion resistant limestone. This calcareous deposit is the Drum Point Member of the Choptank Formation of Miocene age. This outcrop is exposed for some meters (feet) and extends from the mouth of Turner Cove for a short distance northward along the Patuxent shore (Figure ).

Currently, Turner Cove is a freshwater generally a freshwater marsh with a sand beach closing off the mouth and restricting tidal flow. This wide beach forms a crescent shaped beach from limestone bluff to limestone bluff some meters (feet) in length. The Cove was no doubt an open cove at some point in time prehistorically, however an exact date that the sand spit closed the mouth of the cove is not available at this time. However, this closure may be a fairly recent development prehistorically and may have been an open cove when the Cumberland Palisaded Village was occupied.

FIELDWORK

In response to a request by the Maryland Historical Trust to make an examination of a proposed house location on Preston-on-Patuxent, the Trust held a historic easement, the author made a cursory examination of the project area and portions of adjacent fields. A number of shell and artifact concentrations were discovered and sites were defined in the circa acre field owned by the Cumberland family and in an adjacent field. These historic and prehistoric sites were later redefined and modified after better information was available when the author returned to the area to conduct...
The results of the RACY of the field showed that the historic artifacts were associated with shell scatters in the eastern section of the field. The two sites were desigated 18 CV and 18 CV. The northernmost of the sites consists of a dense concentration of brick and mostly 18th century artifacts whereas the southern site, which has less brick and appears to more of a 19th century site. The eastern edge of the field is demarcated by the gravel road leading to the main house, Preston-on-Patuxent however, the sites may have extended under the road. In the field across the road two additional sites were noted, but were not systematically collected. The cursory examination given to these sites seems to indicated an 18th century occupation. The density of artifacts seemed to diminish toward the gravel road, suggesting that the sites on the east and west sides of the road are different occupations, however additional research is needed to verify this. In the meantime, the sites on the west side of the road were assigned site numbers 18 CV and 18 CV.

Significantly, the RACY maps show a precipitous drop-off in historic artifacts as the southern western end of the field is approached, that is the area where the Cumberland Palisaded Village is located. Just as important is the marked increase in prehistoric artifact densities in this end of the field.

In the northwestern part of the field there are several shell concentrations, which are not really reflected in increased artifact densities. For example the heavy concentration of shell at Transect 25, Distance 40-60, is does not show a significant increase in artifact density, but rather there is the suggestion of just the opposite. The artifacts seem to be more densely distributed around the shell concentration rather than in the shell concentration. This may be no more than a function of a limited collection, but just as well might be an indication of functional area segregation on this Late Archaic site.
<table>
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<th>Transect number</th>
<th>Distance</th>
<th>FX Depth</th>
<th>PZ</th>
<th>Artifacts</th>
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<td>120</td>
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<td>Orange subsoil</td>
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<td>140</td>
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<td>Orange/yellowish subsoil</td>
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<td>1-brick frag.</td>
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<td>105</td>
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Armed with the RACY maps of the artifact distributions in the southwestern part of the field and having the proposed house site staked out on the ground, two transects lines of shovel-test pits were selected to best sample the area of greatest impact. A north-south transect along the Transect 36 line was excavated at 5 meter intervals from the STP's distance to the edges of the fields. An east-west line of STP's was also excavated along the Distance 140 line at the Transect 2 through (Figure ). The fill of the STP's was not screened, however it was carefully troweled through as it was back-filled in the STP. The STP's were of sufficient size to determine if subsurface features were present. The depth of PZ was measured and any other observations were made about the stratigraphy, etc. (Figure )/relvant

No significant stratigraphic differences were noted and only in one STP was a subsurface feature detected. At the base of STP a large shell was noted at the base of PZ in the side of the STP. Since most of the shell actually in PZ were fairly broken due to long term plowing, it was decided to expand this STP. It was initially expanded to reveal a narrow, linear feature with shell and limestone fragments protruding from it.

It is frightening to reveal that of the total of STP's excavated on the site, only one came down on a feature, and then it did not actually hit the feature but rather caught the edge of a shell. If the archaeologist had not been particularly alert or if the STP had been dug an inch eastward the palisade would not have been discovered, the site been determined to have no extant subsurface features and the construction of the house at this location would not have been questioned.
Assessment

Rapid/Controlled Surface Collection (RACY) of the field (Smolek and Clark 1982, Clark and Smolek 1981).

Rapid Assessment Controlled Surface Collection is, as the name implies, an expedient method of obtaining better control over the location of artifacts collected or noted. The authors have used this technique quite successfully for the last four years and several major projects.

The technique very basically lays down a grid as the field is collected. At the Preston-on-Patuxent example the northeast corner of the field was selected as the starting point. Four surveyors (field school students from the 1982 St. Mary's Field School) were spaced five meters apart and walked southward with the direction of the knee-high corn rows. Twenty-four inch surveyors flags were placed at the starting point and where the fourth surveyor started. The surveyors began walking noting and counting brick fragments, flakes, fire-cracked rocks. All other artifacts—ceramics, glass, nails, etc. and lithic tools and bifacially flaked—were collected. After the surveyors had walked 20 meters, as determined by a surveyors measuring wheel, the recorder (a fifth person) recorded what each person had collected, or noted. The surveyors were assigned transects numbers 1 through 4. All the artifacts from this 20 x 20 meter collection unit were bagged together and the bags labeled Transects 1-4, 0-20 meters. The surveyors then proceeded to the next collection unit (Transect 194, 20-40 meters). Shell concentrations were noted, according to relative density, square and transects numbers.

When the end of the field was reached, the distance that each transect ended is noted by the recorder so that the edge of the field can be mapped later. The crew then moves across the field and spaces itself at five meter intervals (Transects 5 through 8) and returns parallel to the first set of transects. Distance is reversed as the survey team heads back to the 0 line. At Preston-on-Patuxent, therefore, the 0 line is the north edge of the field and the transects are number 1 through stating from the east edge of the field.

The procedure took about six hours with a crew of five surveyors that were acquainted with the procedure process. The field covers some acres.
PROPOSAL FOR
INTENSIVE ARCHEOLOGICAL INVESTIGATIONS OF THE
CUMBERLAND PALISADED VILLAGE SITE
CALVERT COUNTY, MARYLAND
February 1983

Submitted to: Baltimore Gas and Electric Company
Baltimore, Maryland

Prepared by: Wayne E. Clark and Richard Hughes
Maryland Historical Trust
Annapolis, Maryland
Project Summary

A multi-stage archeological sampling program is proposed at the Cumberland Palisaded Village site which overlooks the Patuxent River in Calvert County, Maryland. By conducting controlled surface collections, systematic soil sampling, stratified unaligned random sample test excavations and extensive subsoil exposure of the center section of the site, the sampling program will provide invaluable data for evaluating the spatial, temporal, functional, subsistence, settlement, and sociopolitical aspects of palisaded villages of the late prehistoric period (1500-1608 A.D.). The subsistence, settlement, and chronological data derived from the excavations will be used to test existing models of Indian lifeways derived from ethnohistorical sources. These models have attempted to explain the development and evolution of petty chiefdoms in the tidewater Chesapeake (Clark 1976; Turner 1976; Potter 1982). Since the site is also a shell midden dating back to possibly 3000 B.C., the excavations will utilize previously developed models and sampling techniques to interpret prehistoric procurement methods, food preparation methods, storage methods, seasonality, scheduling, and settlement aspects associated with the processing of estuarine resources (Waselkov 1982; Kent n.d.). A grant of $11,000.00 is requested from the Baltimore Gas and Electric Company to pay for the cost of the background research and fieldwork phases of these significant excavations. The cost of the artifact analysis and report preparation will be paid for by the Maryland Historical Trust which will use the $11,000.00 contribution of Baltimore Gas and Electric as a match for obtaining federal funds.
The fife river is called Pawtuxunt... Upon this river dwell the people called Acquintanancksuak, Pawtuxunt, and Mattapanient. Two hundred men was the greatest strength that could be there perceived. But they inhabit togeather, and not so dispersed as the rest. These of all others we found most civill to give entertainment (Smith 1966: 24).

INTRODUCTION

When first discovered by John Smith, the estimated Indian population of 665 people living in seventeen villages along the tidal Patuxent River were under the control of three petty chiefdoms, the Acquintanancksuak, Pawtuxunt, and Mattapanient (Figure 1). These petty chiefdoms are not as fully understood as similar groups to the west and south, but sufficient similarities exist to estimate the probably sociopolitical organization of the three petty chiefdoms. Each petty chiefdom was ruled by a werowance or wizoe, who had power of life and death over the commoners. They exacted tribute from the commoners to sustain their families, lesser werowances and priests. Despite the apparent absence of a central authority or tayac to rule over the three petty chiefdoms, the Patuxent River chiefdoms managed during the historic period to maintain their political autonomy from the more powerful Powhatan and Conoy chiefdoms to the south and west and the warlike Susquehannock tribes to the north.

With the founding of the Virginia colony, the Patuxent Indians became actively involved in the fur trade. They established friendly relations with the Maryland colonists who settled on the Potomac River in 1634. Within forty years of the founding of the Maryland colony, however, reference to these Indians in the historic record disappears.

Various attempts in the 20th century to locate the villages reported by John Smith have failed due to poorly developed typologies and theoretical orientations and a lack of funding resources. The question of the rise and demise of these petty chiefdoms remained unasked until this decade, when researchers once again began to search for the origins of ranked societies and the development of adaptation to the rich estuarine resources of the Chesapeake Bay (Clark 1976; Turner 1976; Steponaitis 1980; Potter 1982; Waselkov 1982; Wanser 1982).

Researchers at the Maryland Historical Trust and the American University have long been interested in locating and interpreting the archeological sites along the Patuxent River. In 1974, Barbara McMillian of American University conducted a reexamination of the artifact collections housed at the Smithsonian Institution which were gathered from along the Patuxent River by Richard Stearns during the 1930's through the 1950's. Like Stearns, her efforts at interpreting this collection failed due to poorly developed typologies and a lack of model development (McMillian 1974; Stearns 1943, 1951, 1965).

Refinement in regional ceramic typologies by 1976 enabled the author of this proposal to complete a spatial analysis of the
FIGURE 1: The Patuxent River Section of Capt. John Smith's Map.
would have been lost to construction. According to historical references, the palisaded villages sometimes were occupied by priests and chiefs, while other houses were located outside of the palisade. The cluster of artifacts outside of the palisade may represent such houses or that the site was first occupied as a farming hamlet and later a palisade was built on it.

The lack of storage features suggests that any storage was done above ground, probably in the storehouses mentioned in ethnographic references. The location of the site is both strategic and defendable, yet provided excellent land in the area for agrarian pursuits. The proximity to the Patuxent estuarine provided rich marine resources.

A great more can and needs to be done in the analysis, however, I hope this short description has provided a general overview of this important site.
The Cumberland Palisaded Village Site:
A (Very) Preliminary Report

by

Michael A. Smolek
Deputy Director
J. Patterson Park & Museum

Delivered to:
1986
Annual meeting of the
Archaeological Society of Maryland
J. Patterson Park & Museum
St. Leonard, Maryland

Not for quotation without written permission of the author
In 1983 the Maryland Historical Trust undertook a major salvage excavation on the banks of the lower Patuxent River, 7 miles from its mouth. The excavation was the under day-to-day direction of Dennis Pogue and myself with M. Christopher Williams as field assistant. Wayne Clark provided valuable directional assistance. The site was excavated with the labor of students and over 200 volunteers. In subsequent years, some of the same volunteers have been faithfully processing the 100 odd boxes of samples and artifacts. A great deal of material still awaits processing and analysis, but because it has been three years since it was excavated, Dennis Pogue somehow convinced me that I ought to give an overview of the fieldwork and what we can say so far.

The site was discovered with students from the St. Mary's City Commission field school in June of 1982, during a routine pre-construction, reconnoissance of the Larry Cumberland property. The field is located on a about 20 foot terrace above the Patuxent River. It is situated at the end of the field on the north side of Cove. The field drains south and east into the marsh. The cove, which now has a beach closing off the mouth, may have been open at some point in time prehistorically, however the exact evolution of the cove must await analysis of planned core samples from the marsh.

The extensive, excellent agricultural soils in the area are Mattapex Silt Loam that are underlain with sand, clay and gravel of plio-pleistocene origin. These in turn overlie a limestone formation outcropping from the base of the bluff at water level. This erosion resistant calcareous deposit is of Miocene age and is exposed below the site for some 400 meters along the shoreline.

The routine preconstruction reconnaissance of the field was performed by a semi-controlled collection technique we call RACY or Rapid Assessment Controlled Surface Collection. The technique which involves laying down a grid-as-you-go in 20 x 20 meter cells revealed several concentrations of shell and an isolated 18th century site at the north east end of the field. The aboriginal artifacts were concentrated at the south west end of the field but they were also lightly scattered across the field. The RACY map showed that the heaviest aboriginal concentration was in the same area as the proposed Cumberland housesite.
In order to check for extant subsurface features we excavated thirty shovel test pits in two N-S and E-W transects. Twenty-nine of these turned up absolutely no subsurface features. In one, however, we just barely caught the edge of a subsurface feature. If that STP had been an inch to the east we would have missed what turned out to be a narrow, linear palisade trench. By excavating informal trenches we were able to trace the arc of the palisade for some 76 meters (250 feet). This was the first palisaded village found in tidewater Maryland in 50 years and only the second discovered to my knowledge.

Armed with this field information and an uncorrected C14 date of AD 1575 ±65 years plans were made for a full scale excavation the following summer of 1983. We felt that there was the possibility that this was one of the villages noted in 1608 by Capt. John Smith, in particular, Opament. The landowner agreed to delay construction of his house until the site was salvaged. Because of the highly significant nature of the site, and that total destruction was expected in the center of the site, a fairly elaborate research strategy was developed.

The multi-phase strategy included twice plowing, gridding and intensively collecting 276 - 4 x 4 meter squares covering about 4,416 square meters (just over one acre). The site was then plowed again. At each 4 meter grid point a soil sample was also taken from plowzone for eventual analysis.

We felt that the plowzone might hold important artifact distributional data that could reveal the internal organization and activity areas, etc. of the village. To increase the size of the plowzone sample, we excavated 42 - 2 x 2 meter units selected at random producing a 3% sample over the test area. Within the construction area the sample was increased to 5%. Although greatly increasing the plowzone artifact sample, the test units actually produced little evidence of subsurface features. The volunteers faithfully excavated many a dry hole. We also excavated discretionary units at the north and south ends of the site following the palisade. In total we excavated 84-2 x 2 meter units. We would have excavated a larger sample but, as it was, this represented a tremendous effort. In all, 84 cubic meters were excavated and screened by hand.

By the time the test units in the impact areas were excavated, a bombed-out appearance was produced. A Gradall with...
toothless ditch cleaning bucket and a very experienced operator was then used to strip an area of approximately 900 sq. meters across the middle of the site. The approximate 230 cubic meters of plowzone were hauled off the site.

RESULTS

Palisade Trench

The palisade trench was a semi-continuous trench up to 30 cm wide and about 350 cm deep below existing grade. The fill was generally a brown or dark brown loam mixed with varying percentages of lighter mottling. There was a percentage of oyster shell and the Miocene limestone brought up from the cliff. We hypothesize that it was used to chink the posts in place. Periodically, there was evidence in the trench of post molds which varied from about 10 to 20 cm in diameter. This being the case, this was a massively built structure which needed the deep trench. Robert Beverley's description of palisade fences 10 - 12 feet high seems very appropriate for the evidence.

There were three apparent entrances in the palisade that were screened with interior extensions of the palisade. Along the east side was a line of individual post holes on the inside of the palisade trench associated with an entrance. A possible interpretation is that there was a raised platform above the entrance or, alternatively, perhaps a double wall. There is no evidence that this is a rebuilding of the palisade.

The palisade was traced noncontinuously in 1986 for 96 meters (315 feet) in an arc. The direction of the palisade trench perpendicular to the bluff edge does not suggest that the palisade began to curve back around. Either it has been very extensively eroded or in fact the palisade was never more than an arc. The rate of erosion along most of the Patuxent based on the DNR erosion maps indicate a slight rate of erosion and the limestone would have reduced even that. The limestone outcrop and bluff may have had some defensive value and I believe the palisade was never more than an arc, open to the river. The view from the site is over 3 miles down river and 12 miles up river. So that attackers would be quite visible and vulnerable.
Borrow Ditch

Within the palisade trench and closely paralleling it was a series of ditches. The extent of this feature was unexpected and undetected until the site was stripped with the Gradall. Some 44 linear meters of ditch was uncovered. There are gaps in the ditch at the entrances, at the double wall section, and periodically throughout. The fill of the ditch was fairly consistent as demonstrated in this sample section Feature 249F.

On top was a stratum of shell, limestone, artifacts and charcoal. Below that was a stratum of dark loam fill with much less shell and artifacts. The ditch varied in depth up to about 50 cm below the top of Feature 249F.

The ditch held most of the artifacts recovered in situ from the site. Habitation debris was apparently placed in the ditch.

Virtually all feature, post hole and ditch fill was water screened through window screen and 20% flotation and 20% shell samples were taken. This huge volume of samples awaits analysis.

The slope of the site and probably 300 years of cultivation suggests that the ground surface has been deflated significantly from sheet erosion and that both the palisade trench and borrow ditch were significantly deeper when constructed.

The palisade and the ditch are not unique in Chesapeake sites. Continuous palisade trench as opposed to individual palisade post holes were found at the Potomac Creek Site, a proto-historic period site on the upper tidal Potomac. A ditch was also found at some sites including the DeShazo Site (Potter 1982: 62) along the Rappahannock in Virginia, at the Potomac Creek site and at the Accokeek Site. At the Accokeek Site the ditch, referred to as refuse pits by Stephenson and Furgurson (1963), was associated with the second to the last palisade lines.

It is hard to imagine a defensive or storage function for the interior ditch. The ditch is more likely a borrow pit. At Accokeek Stephenson & Furgurson suggested that the fill was piled against the inside of the palisade for support. A variation on this theory would be the construction of a raised platform to achieve additional palisade support but also a height advantage for interior defenders. In colonial forts this was a firing platform.

Another possibility is that the palisade was daubed. By having brush or waddle essentially woven between the posts the
The sequence of ditch construction might be that palisade is greatly strengthened and the clay daub would adhere to the wood. Unusable topsoil was scraped off to get down to the clay, then the topsoil washed or was placed back in the ditch. The ditch stratigraphy tends to support this hypothesis as does the presence of a small but widespread amount of daub on the site.

While there is no ethnographic evidence for daubed palisades to my knowledge, there are other archaeological examples for prehistoric daubed palisades in the east. Whatever its function, I would also suggest that the interior ditch palisade is a late manifestation. At Accokeek, a site dated by Potter at AD 1550, the ditch is associated with the last palisades. The Potomac Creek site is proto-historic.

In the interior of the palisade a disappointingly small number, about 20, non-patterned postholes were found. Any house post holes that might have been present were apparently shallow and have been lost to plowing and erosion. This limits the analysis of the spatial arrangement of the site. However, the plowzone collections help somewhat.

**Lithics**

The 32 projectile points from the surface collections and the 84 test units cover a wide chronological range — from Early Archaic through Late Woodland. However, 56% of the points are triangular points with Potomac type points predominating. The distribution of the points shows an amazing relationship with the interior of the palisade. In addition over 94% of these points are quartz or chert and jasper. The non-triangular points shows a more diverse selection of raw materials.

In an attempt to identify activity areas the distribution of worked quartz shows concentrations inside and outside of the palisade. Worked jasper and chert follow a very similar pattern. While some of the distribution is probably attributable to the light earlier occupations the distributions do suggest activity areas, or houses inside and outside the palisade. The distribution shows an absence in the north part of the palisade. There is a consistent lack of all artifacts types in this area.
suggesting a plaza. In addition, the only hearth found was located in the north portion of the palisade. Beverly (__, : 177) writes describing palisades "Within this enclosure they likewise take care to have a supply of water, and to make a place for a fire, which they frequently dance round with great solemnity."

Ceramics

Among the thousands of sherds, there is a diversity of ceramic types represented at the site. However most types are represented in very low quantities. Based on the surface collections the vast majority, some 70% are plain, shell-tempered Yeocomico Plain as defined by Steve Potter (1982 : 37b). It's closely related to Sullivan Cove Plain and Rappahannock Plain. This type has a very smooth surface, thin wall (5/8 mm) thickness and compact fine crushed shell tempering. Rims are either straight or excurrvate with lips commonly rounded or tapered. Decorations, when present, consist of horizontal to vertical lines of cord impressions often smoothed over below the rim on the exterior. These large portions of vessels were found in the borrow ditch, one of which is now on exhibit. In the sample ditch section that was analyzed, Feature 249F, there were 109 sherds of which 95.4% is Yeocomico and Rappahannock and 4.6% is Potomac Creek. Both types date to the 16th and 17th centuries. The distribution of Yeocomico Plain is very similar to the quartz. Other types present on the site in low quantity are earlier woodland types such as this. Mockley represents 5% of the total from the surface collections, and there are isolated sherds of Accokeek and Popes Creek.

Faunal Materials

There was a disappointing lack of animal bone from the site. The exceptions rather than the rule were this complete Eastern box turtle carapace, perhaps a cup, and this large deer antler fragment both found in the borrow ditch. Unfortunately, the
majority of the bone is like these small bone fragments from the sample feature 249F. This bone at the top may be a bone shuttle, awl or point.

The vast majority of the faunal material is oyster shell. Dr. Henry Miller of the St. Mary’s City Commission did a preliminary analysis of the shell from feature 249F. He was able to make the following observations: that the shells reflected the selection of medium sized oysters 3-4 years old with very few small oysters and a slight tendency to the large oysters. The height to length ratio shows that the oysters were selected from firm sand bottoms with small amount of silt mixture. The presence of radial ridges and pinkish coloration indicates that the shells came from near-shore clear water.

Seasonality can be estimated using growth lines on the hinge and they indicate at least fall and spring collection. Much more can and needs to be done with oysters. With the large sample of the shell from the features. The distribution of shell indicates that the oyster shell is distributed along the bluff with a major concentration outside of the palisade. The plaza area shows up clearly. The oyster processing areas and much of the activity was focused on the marsh and cove.

Conclusions

Currently we have no evidence, such as European trade material that would collaborate that this was a village mapped by Capt. John Smith in 1608, however, it could have been. The predominate period of occupation is suggested as proto-historic, presumably by the Patuxent Indians. The palisade provided protection from its hostile neighbors probably particularly from the Susquehannah from the north. The village is probably representative of a petty chiefdom village that seems to have been occupied at least during the Fall and Spring. The density of artifacts suggests it was more than a protective retreat. Some of the internal patterning has been suggested by plowzone artifacts however, a great deal awaits analysis. If the plowzone sampling procedure had not been performed all of this information
would have been lost to construction. According to Beverley (2),
the palisaded villages sometimes were occupied by priests and
chiefs, while other houses were located outside of the palisade.
The cluster of artifacts outside of the palisade may represent
such houses or that the site was first occupied as a farming
hamlet and later a palisade was built on it.

The lack of storage features suggests that any storage was
done above ground, probably in the storehouses mentioned in
ethnographic references. The location of the site is both
strategic and defendable, yet provided excellent land in the area
for agrarian pursuits. The proximity to the Patuxent estuarine provided rich marine resources.

A great more can and needs to be done in the analysis,
however, I hope this short discription has provided a general
overview of this important site.
April 26, 1982

Mr. Wayne Clark
Maryland Historical Trust
21 State Circle
Annapolis, MD 21401

RE: Preston-on-Patuxent, Easement Amendment

Dear Wayne:

On Friday, April 23, 1982 I made a preliminary archaeological examination of the area of the proposed building site at Preston-on-Patuxent as per the enclosed map. The cursory examination consisted of a random walkover of the cultivated, well-washed field south of the main house, concentrating on the proposed building site. This examination revealed the existence of a shell midden site (Field Site 3) at the building location and, within the field, what appears to be five other distinct site locations (2 aboriginal, 3 historic). In an adjacent field, outside of the easement property, two additional historic (18th century) sites were discovered. In short, the area is rich in archaeological resources.

Field Site 3, in the immediate vicinity of the proposed building location is a scatter of shell of varying concentration. The site was originally noted by Richard Stearns and is shown on a 1949 nautical chart in his collection. The density of shell increases toward the south bank above the small marsh known as Turner Cove. On the surface of the shell midden, lithic debitage, cores and two projectile points were discovered. Since there was no significant quantity of historic materials, the midden is most certainly prehistoric aboriginal. The two projectile points date from the Late Archaic period (1 - Holmes Point ca. 2000 B.C. and 1 - Claggett Point ca. 4600-3000 B.C.). The presence of these relatively early points in a coastal situation is highly significant because sea level rise and erosion have destroyed most of the early coastal sites. The exposures of the erosion resistant Choptank Formation (Drum Cliff Member) at the base of the cliff below the site may partially explain why this early site has survived. The distinct possibility exists that this is a Late Archaic Shell midden making it potentially highly significant since there are only a few known in the entire Chesapeake region.

Based on this preliminary evaluation it is imperative that a controlled surface collection of the field be conducted to ascertain the extent and nature of the various sites represented. Armed with this surface artifact distributional data and the precise location of the proposed building, limited subsurface testing should be performed. These tests would reveal if sub-plowzone features survive (storage pits, trashpits, hearths, burials, etc.) and allow an assessment of the potential damage to the archaeological resources.
Mr. Wayne Clark
April 26, 1982
Page 2

I will be happy to work with Mr. Cumberland in developing the scope of this additional archaeological research.

Sincerely,

[Signature]

Michael A. Smolek
Director/Regional Archaeologist

ldm

cc: Catherine Adams
Cursory archaeological survey results at Preston-on-Patuxent (Architectural Number CT-64)

Field conditions: plowed and well washed, 90-100% exposure, moist

Surveyors: Michael A. Smolek, Lana Brown Date: 22 April 1982

Field Site 1: Fairly dense scatter of oyster shell about 18 meters in diameter with a quantity of historic (apparently 18th century) materials on the surface. Collected only a small sample of diagnostic sherds (4: 2 earthenware, 2 stoneware). This may be a possible outbuilding location.

Field Site 2: This is a small area with a heavy concentration of shell with an area of darkened earth. Approximately 15 meters in diameter. A small sample of artifacts were collected including 1 pewter button, 1 sherd earthenware, 1 sherd of blue glazed stoneware ?, 1 wrought nail, 1 quartzite secondary flake, 1 quartz cracked rock). This may be an outbuilding dating to the 18th or 19th centuries.

Field Site 3: This is a large shell midden located on the prominence at the south end of the field above Turner Cove. The shell is variable in concentration, but increases in density toward the south end of the site. The site measures approximately 90 meters north-south by about 60 meters east-west. Numerous fire-cracked rock were noted on the surface as were cores, debitage and 2 projectile points. The two points were collected- 1 Holmes point and 1 Claggett point. Not much historic material was present strongly suggesting that the shell is the result of aboriginal occupation. At the bottom of the cliff along the Patuxent shore is an exposure of Drum Cliff Member of the Choptank Formation. This is resistant to erosion and may be the reason that this Late Archaic site survives. This raises the distinct possibility that the shell is associated with the Late Archaic occupation and consequently the site could be very significant.

Field Site 4 and 5: These are two small light scatters of shell north from Site 3 along the bluff edge above the Patuxent. Few artifacts were noted, however they appear to be small aboriginal campsites.

Field Site 6: This is a scatter of shell between Sites 2 and 3. It is rather amorphous with a very light historic artifact content. No diagnostic artifacts were noted or collected.

The following two sites (7 & 8) are not within the easement area, but are most certainly related to sites 1, 2 and 6 since they are directly across the road.

Field Site 7: This is a very dense shell concentration on the top of and south side of a ridge projecting toward the east-west portion of the road (shell drive). A large number of 18th century artifacts were noted on the surface including wine bottle fragments, buckley-like earthenwares, creamware, a wine glass fragment, Chinese porcelain, and bricks. A pewter fragment and the base of an octagonal case bottle were collected. This is an excellent 18th-century site.

Field Site 8: This is a dense scatter of oyster shell and artifacts on the adjacent rise to the east of Field Site 7. The shell concentration becomes more dense toward the south end of the site. No artifacts were collected however, white-salt glazed (molded) stoneware, bottle glass, and porcelain were noted.
Analysis was conducted on June 29, 1983. Purpose of analysis was to conduct attribute analysis on ceramics and points obtained from control surface collection of site. Surface collection was made on 4 meter grid. Only ceramics and points were washed and available for study. These results should be compared to lithic distributions for better definition of possible Selby Bay phase occupation areas.

The ceramic attributes selected were sherd thickness, exterior surface treatment, decorative technique, temper, if shell tempered leaching was noted as indicator of possible subsurface features, color of interior and exterior of sherd.

Results of Attribute analysis

**Accokeek Cord Impressed sherds (Accokeek Phase 800-500 B.C.)**

Only 2 sherds were noted in the surface collection, table 4. They were very fragmentary and were identified as Accokeek based on the presence of crushed quartz and high sand content in bone fired orange colored paste. Suggest very light occupation. The one possible Calvert like point noted may be associated with this occupation and was found in the general area of the sherds.

**Mockley Cord and 'et Impressed sherds (Selby Bay phase, 100-800 A.D.)**

Mockley ware represents only 7 percent of the ceramics collected, indicating that occupation of the site during this phase may have been very limited. However, the distribution of these sherds, figure 1, suggest that three areas of the site were occupied. Attribute analysis of the sherds suggest that both an early and a late Mockley occupation of the site occurred. The early sherds are inferred to be those in thickness around 12 cm which are orange in color and have very large shell temper. Later sherds are 10 cm in thickness, are orange to tan in color, and have smaller shell temper. Decrease in temper size is a good indicator of relative age of ceramics as a general rule. Both Mockley sherd concentrations on the south side of the site correspond to the shell concentration but the absence of shell in the sherds suggest that they are not derived from features and so suggest that Selby Bay phase features have not been plowed but during the past several years. Thus Mockley pits, if present, cannot be located on the basis of the surface collected data.
only three sherds of Rappahannock pottery were found. Two of the sherds fall within the general area of the concentration of Rappahannock Fabric Impressed pottery to the south of the site. Only one sherd has enough area to suggest a possible variety, R-15, in the Griffith classification. R-15 is a complicated incised design motif which would date to the Little Round Bay phase. The Rappahannock incised sherds suggest occupation during the Little Round Bay phase, one sherd has a applied rim, rare for Rappahannock ceramics and suggested of early influence from Potomac Creek potters. May also date to Yeocomico Ware because body appears dense.

Rappahannock Fabric Impressed. Sullivan Cove 7 little Round Bay phase.

The 31 sherds representing 20 percent of the assemblage represents the second largest artifact type found in the surface collection. Plotting of the distribution reveals three major concentrations and scatter in the southeastern portion of the site. The Rappahannock sherds are barely discernible as fabric impressed in most instances, which is attributed in part to the possible smoothing of some of the fabric impressions. Given the overlap of the Rappahannock and the Yeocomico ware distributions, it is apparent that most of the Rappahannock ware was produced at the same time as the yeocomico ware. However, attribute analysis shows clearly that both older and younger forms of Rappahannock ware are represented. The older ware is generally 6.5 to 8 mm in thickness, has a gray interior and an orange to tan exterior, has larger size shell temper than the subsequent yeocomico ware, and has less sand temper as the latter ware. The latter Rappahannock fabric impressed ware has more sand inclusion, smaller shell size, does not have as many gray interiors and was fired at a higher temperation. This latter ware has the same paste and firing characteristics as some of the sherds of yeocomico Ware. The data supports the general thought that the site was first a hamlet or individual family units in the early woodland. The low percentage of Rappahannock Fabric Impressed and Rappahannock incised and the absence of decorated decorations or Sullivan Cove ware suggest that prepalisade occupation was present but not extensive.
The sand temper appears to be both accidental when in the minority and purposeful when in the majority. I think this reflects the individual preferences of the potters and the potters needs to work the clay. Except for those sherds which should be called a new type, Rappahannock plain, the Yeocomico plain sherds have the smallest size temper and least temper of all the shell temper wares at the site. This small size and amount of temper when combined with the presents of sand is a key attribute in identifying this type even from small sherds. The color of the Yeocomico ware varies as well but is more frequently a tan to buff color and ranges on occasion to the brown color.

Many of the sherds studied are classic colono-indian wares derived from the Townsend ceramic tradition as opposed to the Potomac Creek ceramic tradition. The prevalence of these sherds in the surface collection indicates that the largest population at the site during the woodland period appears to be associated with the palisaded village dating to 1575 AD. While the quantity appears small, it is large given the time period of occupation 925+ years.

*Potomac Creek plain, Potomac Creek Complex 1500 AD - 1600*

The 2 sherds of Potomac Creek plain are on first inspection close to the attributes of Yeocomico plain. Indeed, they could have been manufactured by the Yeocomico potters who simply had to include more sand and no shell to produce the two pofts from this sample. The fact that one sherd comes from the cluster of Rappahannock and Yeocomico cluster in the northwest section of the site suggest that this may be the case. The two sherds are not classic Potomac Creek because of the lack of interior smudging and the general lower firing of the sherds compared to the Potomac Creek site. The sherds may have readily been made in the adjacent lower Potomac or at the site and need not necessarily be attributed to 'trade'.

Summary. The major occupation dates to the Yeocomico plain potters associated with the palisade and can be dated to 1575 AD. Given that Steponaitis only found about 15 colono Indian sherds in her collection, this site is amazing. One could not ask for better initial results if one were looking for Opahtitl. This is as close to a single component site as we had hoped given the low density of previous ceramic types. We expected a larger percentage of Rappahannock Fabric Impressed. While this low percentage can be contributed in part to the small size of the sherds and the assignment to questionable sherds to the plain type, based on other attributes as discussed above, still the small sample is encouraging.

Excavations of the features will help clarify the important question of the persistence of Fabric impressed surface treatment during the Sullivan Cove occupation of the site. I am saying that the palisade village is assigned to the Sullivan Cove phase which is probably wrong since no Sullivan pottery was found. Rather, a new phase needs to be defined for this site, perhaps yeocomico after the pottery type. Thus in the Patuxent, we would have the little Round Bay phase (marginally represented at the site), the Sullivan Cove phase (not represented at all) and the yeocomico phase, the
primary late woodland occupation. The projectile points, as few as they are, support this interpretation of the woodland period. No selby bay points are present although they should be found. Lavan points and Jack Reef points associated with the terminal selby bay and Little Round bay phases are absence (jack reef) or represented by only one possible quartz point. The madison points which are associated with the yeconomico ware are made of jasper and may reflect a shift from early use to quartz in the late woodland to a increased use of peble jasper.