

DATING THE PREHISTORIC DAVIS SITE (44LA46) IN LANCASTER COUNTY, VIRGINIA

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Abstract

The Davis Site (44LA46) is a multicomponent (colonial and prehistoric) site located on the Eastern Branch of the Corrotoman River in Lancaster County, Virginia. Plow zone surface collections included numerous Native American pottery sherds and projectile points. The goal of the study was to date the site's prehistoric occupation using the typological approach with the pottery sherds and projectile points. The pottery wares present included Mockley, Townsend, and Potomac Creek, with Mockley Ware being the most common. The pottery sherds indicate a maximum range of occupation from the Middle Woodland period to the historic period with a weighted mean age of Late Woodland I. Thirteen types of projectile points were found, with the Calvert type being the most common. The projectile points indicate a maximum range of occupation from the Early Archaic period to the historic period with a weighted mean age of Late Archaic. Historic evidence suggests the Native Americans had abandoned the site before settlement by the English colonists. Thus, the site was probably intermittently occupied from the Early Archaic period to the Protohistoric period.

The Davis Site experienced two periods of occupation, first by Native Americans and then by English colonists. Previous work at the site focused on the historic occupation. Based on historic records and clay tobacco pipe artifacts, the colonial occupation of the site had a maximum range of 1650–1718 with a mean date of 1684 and a most likely range of 1669–1703 (Key and Jones 2000; Key et al. 2000). The two goals of this study were to describe the Native American pottery and projectile points from the Davis Site and date the prehistoric occupation using pottery and projectile point typologies.

Prehistoric Native Americans in the Northern Neck

The following summary is largely synthesized from the reviews by Potter (1993), Wittkowski et al. (1993), and Dent (1995). The first phase of occupation by Native Americans in Virginia is termed the Paleoindian period (12,000 – 8000 B.C.). Little is known of the Paleoindian period in the Tidewater region as most sites from this time are now underwater (Barber and Barfield 1989; Carter 1964). This is the result of warmer temperatures, retreating glaciers, and rising sea levels during the following Archaic period (8000 – 1000 B.C.). Native Americans during these times were mobile, wide-ranging hunter-foragers. Paleoindian fluted points (e.g., Johnson 1989; Reinhart 1989) were replaced by Archaic points that were smaller and bifurcate, side-notched, or

stemmed to facilitate hafting. This change in point shape reflected a change in hunting from the strategies of the Paleoindians who exploited larger game animals, especially bison, to the Archaic Indians who exploited smaller game animals, especially deer (Egloff and McAvoy 1990). In addition, the points changed from more narrow-bladed to more broad-bladed (Coe 1964).

By 6500 B.C. the environment had warmed to the point that the spruce-dominated forests of the Early Archaic period (8000–6000 B.C.) began to approach more modern vegetation communities with the establishment of oak- and hemlock-dominated forests in the Middle Archaic (6000–3000 B.C.) (Custer 1990). During the Early and Middle Archaic, Native Americans lived very mobile (semi-nomadic) lives as generalized hunters and gatherers in the boreal forests (Custer 1990; Parker 1990). During the Late Archaic (3000–1000 B.C.), the Chesapeake ecosystem of today became established with its abundant estuarine resources of migratory waterfowl, oysters, blue crabs, and anadromous fishes.

The appearance of pottery and agriculture marks the beginning of the Woodland period (1000 B.C. – A.D. 1600) in Virginia (Egloff 1991; Hodges 1991; Schmitt 1952). The transition from the Archaic to the Woodland period is characterized by a continued increase in population, sedentism, larger settlements especially in riverine/estuarine areas, exploitation of estuarine shellfish resources, and use of local lithic materials (Barber 1991;

Gardner 1982; Hantman and Klein 1992; Hodges 1991; Klein and Klatka 1991; Mouer 1991a, 1991b; Parker 1990; Turner 1976; Waselkov 1982). Like the Late Archaic economy, Early Woodland (1000–300 B.C.) peoples relied on hunting, fishing, and gathering wild plant foods, but notably rudimentary horticulture was also practiced (Hodges 1991). Early Woodland pottery was diverse in its manufacturing techniques and tempers. Early Woodland points were smaller and more foliate than their predecessors (McLearen 1991; Mouer 1991a).

The increasing importance of agriculture and large-scale exploitation of oysters in the Middle Woodland period (300 B.C. – A.D. 900) resulted in a further increase in population, a decrease in smaller seasonal sites, and an increase in larger estuarine sedentary sites (Blanton 1992; McLearen 1992; Potter 1982; Stewart 1992; Waselkov 1982). In general, quartz- and sand-tempered, net-impressed ceramics identify the early Middle Woodland period (300 B.C. – A.D. 200). During the late Middle Woodland period (A.D. 200–900), the main pottery type was coarse shell-tempered with cordmarked or net-impressed surfaces (Stephenson et al. 1963; Stewart 1992; Turner 1992).

The next phase, Late Woodland (A.D. 900–1500), is marked by the rapid spread of agriculture with the introduction of tropically derived cultigens (i.e., maize, beans, and squash). This led to even more dramatic population increases and essentially completely sedentary lifestyles as larger villages developed along the estuaries (Geier 1992; Potter 1982; Turner 1992). During Late Woodland I period (A.D. 900–1300), the dominant pottery was shell-tempered with fabric-impressed exterior surfaces (Egloff and Potter 1982; Griffith 1980; Turner 1992). In the Late Woodland, the dominant points were large and triangular.

During the Late Woodland II period (A.D. 1300–1500), complex social structures developed with the establishment of chiefdoms. The dominant points were smaller but still triangular (Stephenson et al. 1963). The small size and triangular shape are indicative of the adoption of the bow and arrow as the primary weapon system.

The Woodland period was followed by the Protohistoric and historic periods (A.D. 1500–1650s). The historic period involved a cultural change for Native Americans (Fausz 1985, 1987; Feest 1978; McCartney 1985) that was on par with the environmental changes of the Paleoindian/Archaic transition. Beginning around A.D. 1500 various contagious diseases were introduced by the first European explorers which drastically reduced

Native American populations even before establishment of the English colony in Jamestown (Dobyns 1983; Ramenofsky 1987). For a thorough description of Native American lifestyles at the time of contact, see the reviews by McCary (1957), Haynie (1959), Clayton (1973), Feest (1978), Rountree (1989), and Egloff and Woodward (1992).

History of Contact Between Native Americans and English Colonists in the Northern Neck

In the late 1500s and early 1600s as the Powhatan Chiefdom expanded toward the Rappahannock River, some Native Americans escaped to the Northern Neck on the north side of the Rappahannock River (Potter 1976a, 1982; Speck 1925; Strachey 1953; Turner 1976). With more Native Americans living on the south shore of the lower Northern Neck, it became the most densely populated part of Tidewater Virginia (Turner 1976, 1982). After the English colonists settled in Jamestown in 1608, they began to fan out in the 1640s looking for new land. Before then the Northern Neck was still Native American territory, practically outside the jurisdiction of Virginia (Harrison 1964). This colonial expansion by the English put significant pressure on the colonial government to open up the Northern Neck for settlement (Billings et al. 1986; Wheeler 1972). What followed was a rapid displacement of Native Americans by English settlers. The Native American communities in Tidewater Virginia tended to decline rapidly following contact with English settlers due to forced and/or voluntary displacement to the west, as well as death from disease, warfare, and malnutrition from loss of habitat (Beale 1967; Dobyns 1966, 1983; Fausz 1985, 1987; Harrison 1964; Hodges 1993; Jennings 1975; McCartney 1985; Ramenofsky 1987).

There are few historical records regarding the Native Americans in the Northern Neck until the General Assembly of the Virginia burgesses at Jamestown passed two acts (1641 and 1642) restricting settlement in that area in order to save it for the Native Americans (Warner 1965). Beale (1967) argued that the 1642 act, prohibiting settlement north of the Rappahannock River, was enacted because of the instability of the Northern Neck due to the presence of Native Americans there. Encroachment on their lands by English colonists led Native Americans to retaliate in the uprising of 1644. It is not known whether the Northern Neck tribes participated, but they probably did not (Rountree 1989; Warner 1965; Wheeler 1972).

Although permission had not yet been given for the colonists to settle in the Northern Neck, an act passed by the General Assembly of 1645 confirmed their presence and ordered the colonists to raise funds for war with the Native Americans (Hening 1809–1823). It was not until 1648, though, that Northumberland County was established officially by the assembly (Hening 1809–1823). In the meantime, a treaty made with the Powhatans in 1646 gave all the land between the York and James rivers to the English and reserved the land north of the York River for the Native Americans (Harrison 1964; Wheeler 1972). The colonists were forbidden to settle there for the time being. The treaty was an integral part of Governor Berkeley's newly formulated Indian Policy to reduce conflict with the Native Americans (Billings et al. 1986). But within the same act, confirmation was given to all previous claims to lands north of the York River, and patentees of those claims were assured that the three-year requirement for seating and planting would not begin until permission to settle was given by the assembly (Rountree 1989).

This ban was officially repealed in 1649 when the land north of the Rappahannock was opened to patenting (Hening 1809–1823; McCartney 1985; Nugent 1983). The lifting of the ban on Northern Neck settlement was likely precipitated by increasing demand for more land for settlers (Horn 1994; McCartney 1993; Stanard 1902). After 1649, the patenting of land was swift and settlement followed, though somewhat more slowly, possibly because of the continued presence of Native Americans in the Northern Neck (Wheeler 1972). There were still conflicts between English colonists and Native Americans as evidenced by several shooting incidents at this time (Wheeler 1972).

It was inevitable that the increasing numbers of English would lead to land conflicts. To solve this problem, a 1652 act passed by the assembly required that land be set aside for the Native Americans, with 50 acres to be allocated to each bowman (Billings 1975). In the lower Northern Neck, 4,400 acres between Dividing Creek and Indian Creek were surveyed for a reservation for Native Americans in Northumberland and Lancaster counties (Potter 1976b). In addition, Lancaster County's problems with Native Americans were lessened by a 1653 treaty with the Rappahannock tribe (Wheeler 1972). Nevertheless, in 1654 there were still Native American troubles in Lancaster County as the assembly ordered a militia to be formed for defense of settlers in the county (Beale 1967; Haynie 1959). In response to this in 1655 or 1656, the Chicacoans and Wicocomocos were combined and moved to a reservation between

Dividing Creek and Fleet's Bay (Feest 1978; Holland 1988; Potter 1982, 1993). Soon after, the remnants of the Lower Cuttatawomen, which had moved by 1649 to a temporary site between the Great Wicomico River and Ingram Bay, joined them at the reservation (Holland 1988; Potter 1993). In 1655 there were only about 352 Native Americans living on this reservation (Potter 1976b).

Thus by 1656, the interaction between the English and Native Americans in the lower Northern Neck essentially ended (Potter 1993). The Chicacoans and Lower Cuttatawomen were subsumed by the Wicocomocos (Potter 1982, 1993). By 1696, the Wicocomocos sold the last of their land and became tenants living on English plantations (Beverly 1968). By 1705, only three warriors were left from these three tribes (Beverly 1968).

Further up the Rappahannock River were the Morattico who were strong in 1608 but after 1612 lost strength. By the time settlers came, they would move rather than contest territory (Warner 1965). The Morattico had left the area by 1652 as their vacated land was patented to colonists that same year (Horn 1994; Potter 1993; Warner 1965). In 1662 by an act of the assembly, the Morattico were moved to a reservation up the Rappahannock near Morattico Creek in Richmond County (Feest 1978; Horn 1994; Potter 1993; Warner 1965). The Morattico land near Morattico Creek was soon encroached upon by settlers, and the tribe moved further to the north and west in Richmond County in 1672 (Potter 1993; Warner 1965). The Morattico were not mentioned in historical accounts after this, probably indicating their disintegration (Feest 1978).

As for the Native American population of Lancaster County in general during this time, there is only circumstantial evidence that by the 1660s most of them had either died, were living on the designated land, or had moved further westward. A census taken in 1669 revealed that no Native Americans then lived in Lancaster County (McCartney 1985; Wheeler 1972). This is supported by the lack of references to them in the Lancaster court records by this time (Fleet 1988). In all of the lower Northern Neck, by 1675, there were probably only a few Native Americans left on the plantations as semi-slaves (Dalton 1974), and in a few small tribal units near Tappahannock (Warner 1965). By 1700, most Native Americans had retreated west of the Blue Ridge (Haynie 1959), and there may have been as few as 612 in the entire Chesapeake area (Emerson 1988). Those who remained were acculturated into English

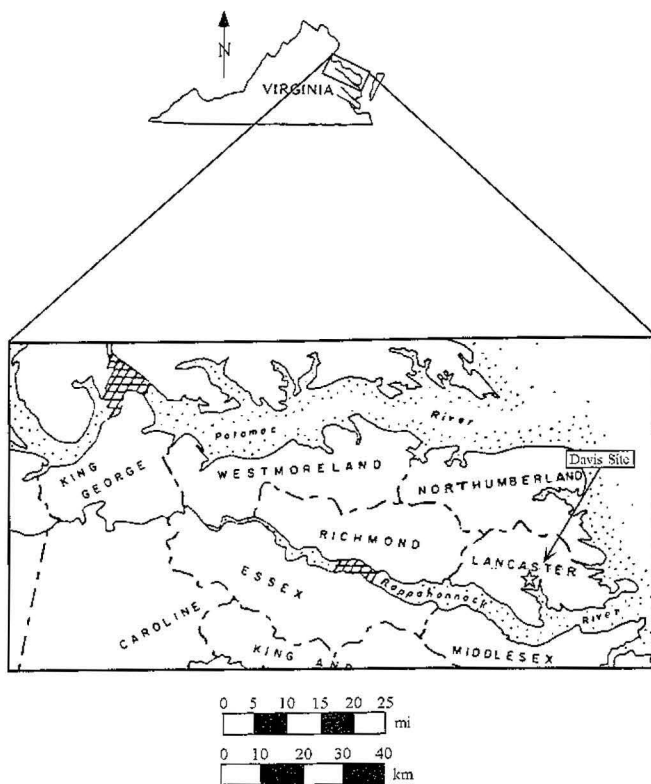


Figure 1. Map of Northern Neck showing the location of Davis Site. Cross hatched areas indicate freshwater/saltwater transition zone. Modified from Egloff and Potter (1982:Figure 1).

colonial society as slaves, servants, indentured servants, or freemen (Hodges 1993; Potter 1976b).

When war erupted again in the Northern Neck in 1675 (Warner 1965), it was restricted to the headwaters of the Rappahannock far to the west in Stafford County near Port Royal (Billings et al. 1986; McLearen et al. 1995; Warner 1965). From the Chesapeake Bay to the fall line, the Native American villages had been replaced by 1676 by scattered communities of settlers (Billings et al. 1986). Attacks by Native American in 1676 were restricted to the fall line, indicating the Native Americans had moved well west of Lancaster County (Billings et al. 1986; Warner 1965). After Bacon's Rebellion, the Native Americans were forced into another treaty in 1680, extending English control further west to the headwaters of the Rappahannock River (McLearen et al. 1995). Thus, by this date, the Native Americans had been effectively removed from the Northern Neck.

Were Native Americans living specifically at the Davis Site in Lancaster County at the time of settlement by English colonists? The Davis Site was settled by colonists at the earliest in 1650, but probably not until 1669

(Key et al. 2000). There are numerous arguments against overlap between Native Americans and colonists at the Davis Site. The general historical evidence given above suggests that this part of Lancaster County was devoid of Native Americans by the time it was occupied by colonial settlers. By 1649, the remnants of the Lower Cuttatawomen tribe, which had occupied the area surrounding the Davis Site, had moved to a reservation between the Great Wicomico River and Ingram Bay (Holland 1988). The fact that the Davis Site was patented by an Englishman in 1650 is good indication that it had been abandoned by the Native Americans by that time (Key et al. 2000). Gleach's (1997:Figure 9) map showing the areas of English settlement in 1652 indicates the Davis Site was well within this area by this time. No Native American tribal land was indicated at the Davis Site in a 1654 survey (Warner 1965) indicating it had been abandoned previously. There is no mention of the Lower Cuttatawomen tribe in colonial records after 1656 (Feest 1978), indicating the Davis Site probably had been abandoned by then. A census taken in 1669 revealed that no Native Americans lived in Lancaster county at that time (McCartney 1985; Wheeler 1972). The prehistoric Davis Site was probably only seasonally occupied by a family-sized group of Native Americans and the site would have been quickly abandoned if colonial settlers had moved into the area. There undoubtedly were sites in the immediate area occupied by Native Americans in the early 1600s as evidenced by Smith's 1612 map, but the Davis Site was probably a smaller, seasonal site.

Study Site

The Virginia Department of Historic Resources number for the Davis Site is 44LA46. The site is in the Northern Neck of Virginia (Figure 1) in the Outer Coastal Plain physiographic province (Wentworth 1930). The Northern Neck is a 225-km-long, 32-km-wide peninsula in northern Virginia bounded by the Potomac River to the north, the Chesapeake Bay to the east, and the Rappahannock River to the south (Beale 1967; Newton and Siudyla 1979). The Northern Neck is deeply dissected by extensive navigable estuaries which frequently penetrate the peninsula along its length (Beale 1967).

One of these estuaries is the Corrotoman River. The north shore of the Eastern Branch of the Corrotoman River is located 65 m southeast of the site (Figure 2). The estuary is still quite navigable at this site (Dickson 1992) and was in the past, as evidenced by the presence of a steam boat landing in the 1800s. The river here is

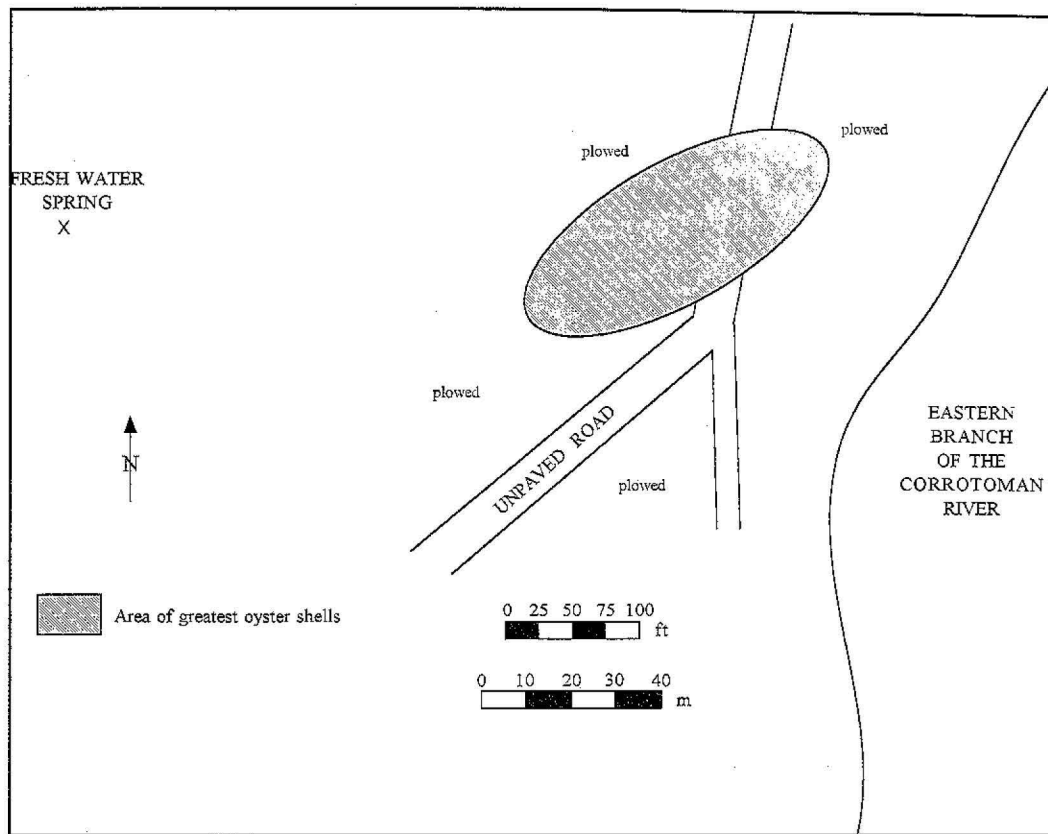


Figure 2. Sketch map of Davis Site showing the location of fresh water spring and the Eastern Branch of Corrotoman River.

estuarine and has a mean tidal range of roughly 0.6 m (Wentworth 1930).

The Native Americans in the Northern Neck were from the Eastern Algonquian linguistic group (Cissna 1986; Emerson 1988; McLearn and Egghart 1995; Potter 1993; Rountree 1989). Based on Smith's 1612 map (Figure 3), the Davis Site was situated between the larger Powhatan chiefdom to the south and the Maryland chiefdoms to the north (Dent 1995; Feest 1978; Gleach 1997; Potter 1993). This area was on the fringe of the Powhatan chiefdom and was probably influenced, but not dominated, by it (Dent 1995; Potter 1993; Rountree 1989; Turner 1976, 1982). As indicated on Smith's 1612 map (see Figure 3), the Cuttatawomen and Moraughtacund groups occupied the area currently known as Lancaster County. Smith's map shows another Cuttatawomen group much further up the Rappahannock River, so Feest (1978) distinguished the downstream Cuttatawomen as Cuttatawomen I and the upstream Cuttatawomen as Cuttatawomen II. Potter (1993) distinguished them by using "Upper" and "Lower" modifiers, and that is the

terminology used in this study. The Lower Cuttatawomen and Moraughtacund were eventually Anglicized to Corrotoman and Morattico, respectively (Rountree 1989). Smith's map had two basic symbols for Native American settlements (see Figure 3). "King's howses" were larger villages where a district chief, or "werowance" lived (Potter and Waselkov 1994). Smaller hamlets were where commoners lived (McLearn and Egghart 1995).

When discussing the locations of the various Native American villages and hamlets, it must be kept in mind that they undoubtedly moved over time due to soil, firewood, and oyster exhaustion, weed and pest encroachment, and social tension, especially warfare (Potter 1993). The Lower Cuttatawomen chief's house was probably located near the current town of Irvington (Barbour 1971; Haile 1996). Based on previous interpretations of Smith's 1612 map (Figures 4–6), the Davis Site was located approximately 8 km from the Lower Cuttatawomen chief's house and 21 km from the Moraughtacund chiefs' house. Based on these relative



Figure 3. John Smith's 1612 map showing Native American sites in the Corrotoman River region. Houses indicate locations of district chiefs' villages. Circles with central dots indicate smaller hamlets. Modified from Smith (1986a:Pages 140-141).

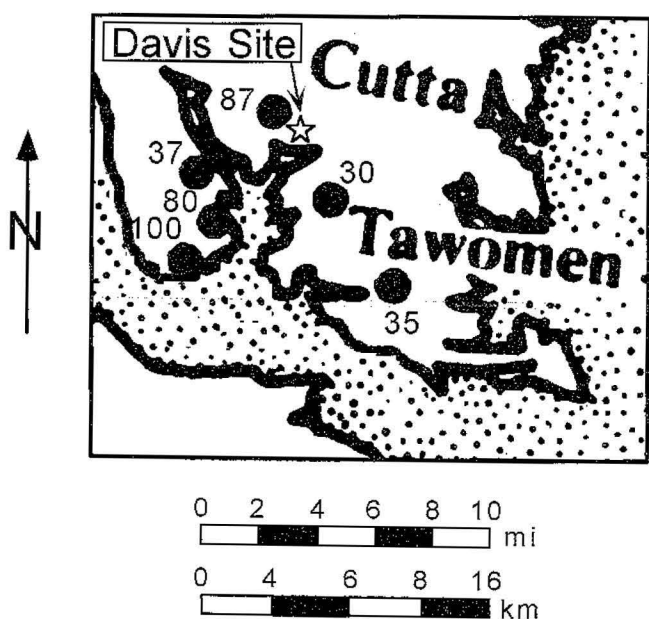


Figure 4. Feest's (1978) interpretation of John Smith's 1612 map showing positions of Native American sites relative to the Davis Site (35 - Lower Cuttatawomen village; 30 - Chesakawon hamlet; 37 - Kapawnich hamlet; 80 - Nepawtacum hamlet; 87 - Ottachugh hamlet; 100 - Pawcocomocac hamlet). (Modified from Feest 1978:Figure 2.)

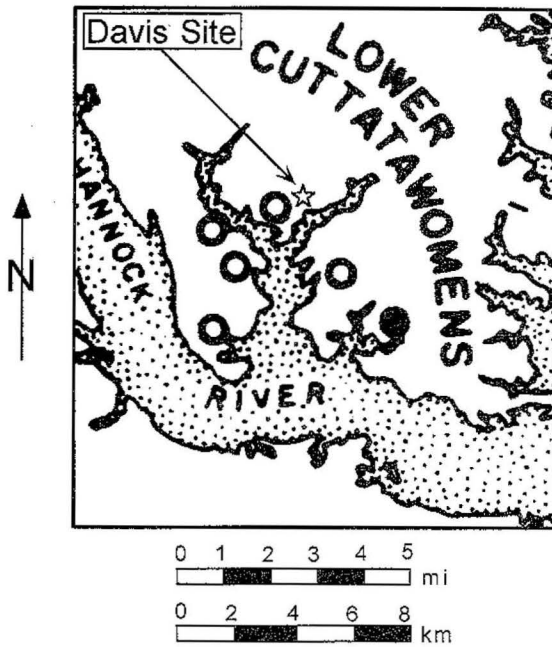
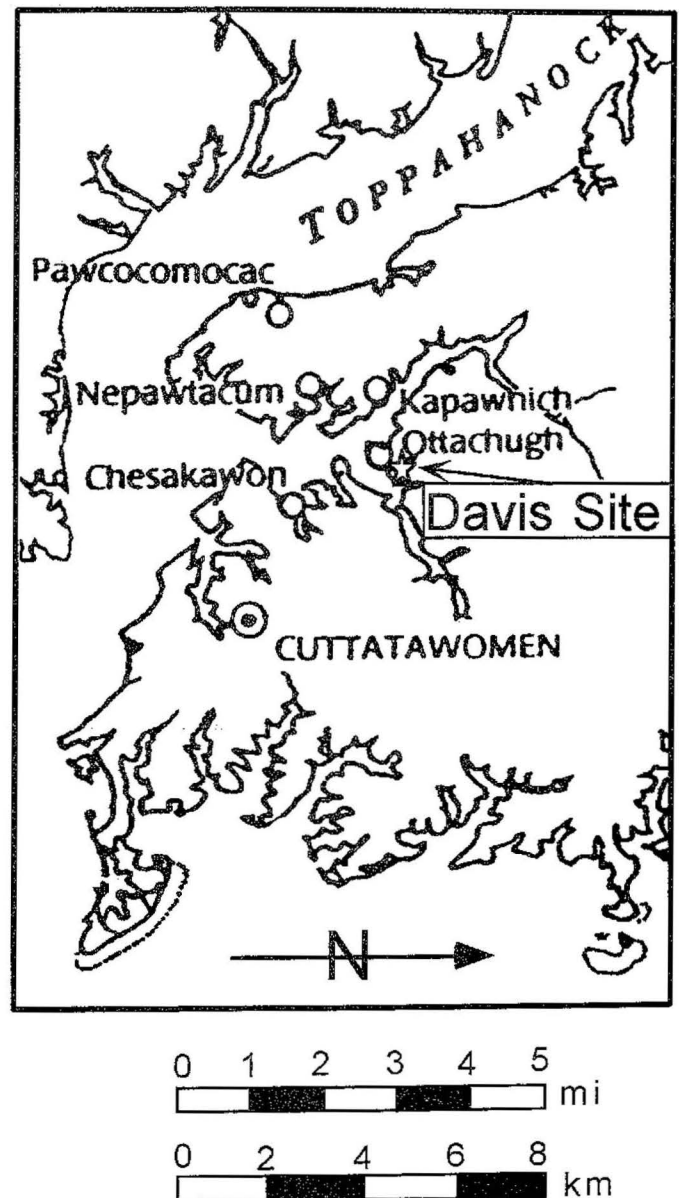


Figure 5. Potter's (1993) interpretation of John Smith's 1612 map showing positions of Native American sites relative to the Davis Site. Solid circle indicates location of district chief's village. Open circles indicate smaller hamlets. Modified from Potter (1993:Figure 1).

Figure 6. Haile's (1996) interpretation of John Smith's 1612 map showing positions of Native American sites relative to the Davis Site. Circle with central dot indicates location of district chief's village. Open circles indicate smaller hamlets. Modified from Haile (1996).



distances, the Davis Site was probably located in the Lower Cuttatawomen district. Most previous workers have also suggested that this part of Lancaster County was in the Lower Cuttatawomen district (Feest 1978; Gleach 1997; Goodwin 1980; Haile 1996; Haynie 1959; Potter 1976b, 1993; Rountree 1989; Smith 1986a; Stinely 1986; Strachey 1953), although Warner (1965) felt it was in Moraughtacund territory.

Based on previous interpretations of Smith's 1612 map (see Figures 4–6), the Davis Site was located approximately 0.8 km northeast of the Ottachugh hamlet and 2.8 km north of the Chesakawon hamlet. Barbour (1971) and Potter (1993) argued that the prehistoric and early historic Indian Town Site (44LA80) was probably the site of the Chesakawon hamlet. The Virginia Department of Historic Resources' archeological site files were searched for possible candidates for the Ottachugh hamlet. Six possible sites were found (44LA12, 44LA48, 44LA53, 44LA54, 44LA134, and 44LA136), with 44LA53 and 44LA136 being the most likely. All of these sites were historic except for 44LA48. This site, called the Williams-Cox Farm Site, probably is not the site of the Ottachugh hamlet as it is too far to the northeast and too small. The Williams-Cox Farm Site may simply be another peripheral site like the Davis Site. The actual site of the Ottachugh hamlet has either not been found or has eroded away.

The shoreline near the Davis Site consists of a veneer of sand overlying impermeable, pre-Holocene, clay-rich sediments (Rosen 1980). This type of shoreline has the highest erosion rates in the Chesapeake Bay region with rates up to 1.1 m/year (Rosen 1980). The distance to navigable water has undoubtedly changed since the site was last occupied some 300 years ago. Soil erosion due to agricultural practices causes siltation, whereas waves, tides, storm surges, groundwater flow, and relative sea level rise cause erosion (Rosen 1980).

The site is located on a relatively level bluff 9 m above the estuary. This bluff has been interpreted as being a low flat Coastal Plain marine terrace that formed when sea level was higher than today (Mixon 1985). The elevation of the site places it on the Chowan Terrace, which is 9–14 m above sea level in this area (Elder et al. 1963; Wentworth 1930). The soil developed on the site is the Sassafras loamy fine sand. It typically has a 23 cm thick A horizon, a 40–60 cm grayish to yellowish brown surface horizon and occurs on terraces in this area with a 2–6% slope (Elder et al. 1963; Markewich et al. 1987). The site is located in actively cultivated farm fields and is dissected by an unpaved road (see Figure 2). When freshly plowed, the site is identifiable

primarily by its abundant oyster shells and secondarily by the soil's dark organic discoloration (see Figure 2). Using the spatial distribution of oyster shells to define the extent of the site, it covers roughly 2,250 m². Based on Waselkov's (1980) classification, the Davis Site is a Class 5 site (i.e., an Intermediate Shell Midden Site). The site has been plowed to a fairly uniform depth of 20 cm.

Oysters are ubiquitous on prehistoric sites in the Chesapeake. Native Americans were observed by the early colonists to eat oysters (Percy 1967; Smith 1986b; Strachey 1953). Beale (1967) indicated that was true for the Northern Neck as well. The Davis Site may have been an extractive site (as evidenced by the numerous oyster shells) as well as a living site (as evidenced by the numerous flakes indicating tool manipulation). Holmes et al.'s (1891) survey of Northern Neck oyster shell middens suggested that all these sites were occupied by historic Virginia Algonquians, but subsequent archeological research has shown the sites were not all contemporaneous, with some of the lower Potomac River valley middens representing intermittent native occupations from at least the Late Archaic to historic periods (Potter 1993). The Davis Site was probably one of these smaller, intermittently occupied sites.

In the Outer Coastal Plain in general and the Northern Neck in particular, the locations for late prehistoric Native American encampments were chosen by the following criteria: (1) proximity to a smaller estuary with quiet navigable water for transportation; (2) nearness to freshwater springs for drinking water; (3) location on a topographically high, well-drained, southern facing neckland overlooking the estuary; (4) nearness to oyster bars and marshland for subsistence resources; and (5) proximity to sufficient land with highly productive soils for slash-and-burn subsistence cultivation (Beale 1967; Holmes et al. 1891; Klein 1995; McLearen et al. 1995; Potter 1982, 1993; Turner 1976; Wittkofski et al. 1993).

The Davis Site meets all these criteria. It is currently 65 m from the navigable Eastern Branch of the Corrotoman River and is bounded by navigable, smaller estuaries to the southwest and northeast (see Figure 2). A productive spring is located 115 m from the site (see Figure 2). The spring is the surface reflection of the water table of the Northern Neck's aquifer (Newton and Siudyla 1979) and is currently used for domestic water consumption by two adjacent residences. The site has a south facing orientation with an elevation of 9 m, providing it with good drainage and air circulation, as well as views up and down the Corrotoman River and all the

way to the southern shore of the Rappahannock River. At the time of Native American occupation, the Davis Site was probably close to oyster bars as they are common today in the Corrotoman River and were very common in the past (Holmes et al. 1891). The Davis Site is in the Sassafras loamy fine sand soil type, which is one of the most productive in the area (Elder et al. 1963). This is one of the soil types most suited to late prehistoric agriculture (Turner 1976) since it is moderately deep, well-drained, nearly level, easily worked, and has a moderately high capacity to hold water (Elder et al. 1963).

Materials and Methods

Most of the archeological sites around the Chesapeake Bay have been altered by farming, but despite this, some useful information is still preserved (Riordan 1988). At some Virginia sites, it has been shown that plowing destroys all stratigraphic information in at least the upper 20 cm (Winfree 1967). Artifact recovery rates in surface plow zones may be as low as 0.1% of the total plow zone artifact population (Riordan 1988) and generally are less than 10% with large artifacts being disproportionately represented (Lewarch and O'Brien 1981). The benefits of plowing and disking are that they provide a large, freshly exposed area for collecting with high visibility (Riordan 1988). Despite the loss of stratigraphy, the low artifact recovery rate, and the fragmented artifacts, plow zone collections are still important for prehistoric Chesapeake archeology.

All the artifacts in this study are from random, unprovenanced plow zone surface collections made from 1969 to 1996. No systematic excavation has been done as the stratigraphy of the site has been compromised by plowing and erosion. The site has been and is currently plowed two or three times each year depending on the number of crops. The suite of artifacts may be biased toward stratigraphically higher (i.e., younger) material if the plowing is only bringing up shallow material. If this is the case then the estimated dates for the site from the archeological artifacts are younger with the actual dates being older. This does not appear to be the case as older Native American artifacts are mixed throughout the surface material with the colonial artifacts, suggesting the surface samples are a mix of all stratigraphic levels.

For the pottery sherds, up to six characters were scored or measured on each specimen. The dimensions of the sherds were measured with vernier calipers to the nearest 1 mm. The rim, wall, and base thicknesses were measured when available with vernier calipers to the

nearest 0.05 mm. The temper and surface treatment were qualitatively described. The pottery wares were mainly distinguished by their temper and were identified by comparison to the well-illustrated pottery from the Chicacoan sites in the Northern Neck (Potter 1982), the Accokeek Creek Site on the Potomac River in Maryland (Stephenson et al. 1963), and the Patuxent River sites in Maryland (Steponaitis 1980). These references were augmented by review articles by Evans (1955) and Egloff and Potter (1982). Pottery was identified only to the ware level, not the type level, for two reasons: (1) the goal of the project was to determine the age of the Davis Site, not the geographic range of the various pottery types; (2) the surface characteristics were often difficult to determine as the sherds were highly weathered and fragmented from the plowed nature of the site. As the various types of each ware have the same general age, this did not impact on the goal of the project.

For the projectile points, up to 11 characters were scored, measured, or calculated on each specimen. Total length, width, and thickness were measured with vernier calipers to the nearest 0.05 mm. If a specimen was not complete, the measured character was estimated and noted as such. From these measurements, the (length \times thickness)/width ratio was calculated (*sensu* Hranicky 1994). The weight was determined to the nearest 0.01 g. Color was determined using the Munsell (1994) color notation. Basic lithology was determined qualitatively. Shapes of the blade (plan view and cross section), stem, and base were qualitatively described (*sensu* Hranicky 1986, 1991, 1994). The points were distinguished mainly by the shape of the blade, stem, and base and were identified by comparison with the well-illustrated points from the Chicacoan sites in the Northern Neck (Potter 1982), the Accokeek Creek Site on the Potomac River in Maryland (Stephenson et al. 1963), and the Patuxent River sites in Maryland (Steponaitis 1980). These references were augmented by Hranicky's (1991, 1994) typologies.

Results

Found in the surficial plow zone were 337 pottery sherds, 281 flint debitage flakes, 139 quartz flakes, 51 projectile points, two celts (ungrooved ground stone axes), and two quartzite hammerstones (fist-sized oblong cobbles with edge wear indicative of battering). Only the pottery sherds and projectile points will be discussed in this paper as they are the most useful for dating prehistoric sites. Some of the flint flakes were undoubtedly European in origin and historic in age. For example, at the St. Mary's City Site, gray to dark brown to black flint was found, mostly as debitage (Miller 1983). As a few

gunflints of this color were found as well, the dark flint was interpreted as being European in origin (Miller 1983). Potter (1993) suggested the English flint came to America as ship ballast. The flint at the Davis Site was generally either dark gray or yellowish orange. No points were made from the dark gray flint, but the only gunflint was. The dark gray flint was thus attributed to the historic colonial occupation (Key et al. 2000) and not included in this study. Most of the flint points were made of a yellowish orange chert, called jasper by Potter (1993). The presence of the yellowish orange chert flakes and the quartz flakes indicates that projectile points were worked on site.

Pottery

The largest sherd was 180 mm long and 60 mm wide, but most (94%) were less than 50 mm long and 40 mm wide. There were three different pottery wares found at the Davis Site. The oldest of the three types was Mockley ware (Figure 7.1 and Table 1), and it was represented by 41% of the total number of sherds. This type is characterized by its crushed oyster shell temper with lesser amounts of quartz sand particles (Dent 1995; Egloff and Potter 1982; Potter 1982, 1993; Stephenson et al. 1963). Of the three pottery types, Mockley had the thickest walls and the largest sherds (see Table 1). This pottery type is indicative of the late Middle Woodland period (Blanton 1992; Dent 1995; Egloff and Potter 1982; Potter 1982, 1993; Stephenson et al. 1963).

The second type of pottery found was Townsend ware (see Figure 7.2 and Table 1), which was represented by 24% of the total number of sherds. The Townsend ware is characterized by leached shell temper with minor amounts of quartz sand particles (Dent 1995; Egloff and Potter 1982; Griffith 1980; Potter 1982, 1993; Stephenson et al. 1963). The sherds have distinctive shallow holes where the shell fragments were leached out (see Figure 7.2). This pottery type is indicative of the Late Woodland I to historic periods (Dent 1995; Egloff and Potter 1982; Griffith 1980; Potter 1982, 1993; Stephenson et al. 1963). Townsend ware reached its popularity peak early in the Late Woodland period, although it was still manufactured up until the beginning of the historic period (Griffith 1980).

The third type of pottery found was Potomac Creek ware (see Figure 7.3 and Table 1) which was represented by 35% of the total number of sherds. This type of pottery is characterized by angular crushed quartz and coarse quartz sand temper (Dent 1995; Egloff and Potter 1982; Griffith 1980; Potter 1982, 1993; Stephenson et al. 1963). This pottery type is indicative of the Late Woodland II

to historic periods (Dent 1995; Egloff and Potter 1982; Griffith 1980; Potter 1982; Stephenson et al. 1963). Potomac Creek ware reached its popularity peak late in the Late Woodland period as the popularity of Townsend ware began to wane, although it was still manufactured through the Protohistoric period up through the beginning of the historic period (Griffith 1980; Potter 1982).

Egloff and Potter (1982) as well as Cissna (1986) argued that Potomac Creek ware was restricted to the Inner Coastal Plain of the Potomac River and to a lesser extent to the upper reaches of the Rappahannock River. Schmitt (1965) suggested that it has an even more restricted distribution that does not range south of the Rappahannock. Potter (1982) suggested that Potomac Creek ware does extend down to the lower Rappahannock, but it is not as common there. The Davis Site is definitely out of the more restricted ranges for the ware. It may be that the pottery attributed to this ware was incorrectly identified as the authors are by no means artifact experts. It could be Moyaone (Stephenson et al. 1963) or Currioman (Waselkov 1982) as both were sand tempered. Even if this was the case, it does not change the Late Woodland date for these 118 sherds of pottery.

Projectile Points

There were 13 types of projectile points found at the Davis Site (Table 2). The oldest was a single St. Albans or LeCroy Bifurcate point (Figure 8.1 and Table 3). This type is characterized by an isosceles triangular blade shape with two protrusions extending from the blade symmetrically on both sides of the blade, and a notch cut into the middle of the base (Hranicky 1991:34, 51; Stephenson et al. 1963:Plate 26, Figure E; Steponaitis 1980:Plate 1, Figures f-h). It was made of quartz. Regardless of whether it is a St. Albans or LeCroy Bifurcate, they both were from the Early Archaic period (Dent 1995; Egloff and McAvoy 1990; Hranicky 1991).

The next type is Bare Island, represented by four points (Figure 9 and Table 4). This type is characterized by a narrow isosceles triangular blade shape with slightly convex edges, a stem with poorly defined shoulders, and a straight to convex base (Hranicky 1991:12; Stephenson et al. 1963:Plate 23, Figures G-O). Two of the points were made of quartz, one of quartzite, and one of slate. This type corresponds to the Late Archaic period (Dent 1995; Hranicky 1991; Stephenson et al. 1963).

The Claggett type has three representatives from the Davis Site (Figure 10 and Table 5). These points are characterized by a narrow isosceles triangular blade shape with convex edges, a stem with poorly defined shoulders, and a concave base (Hranicky 1991:19;

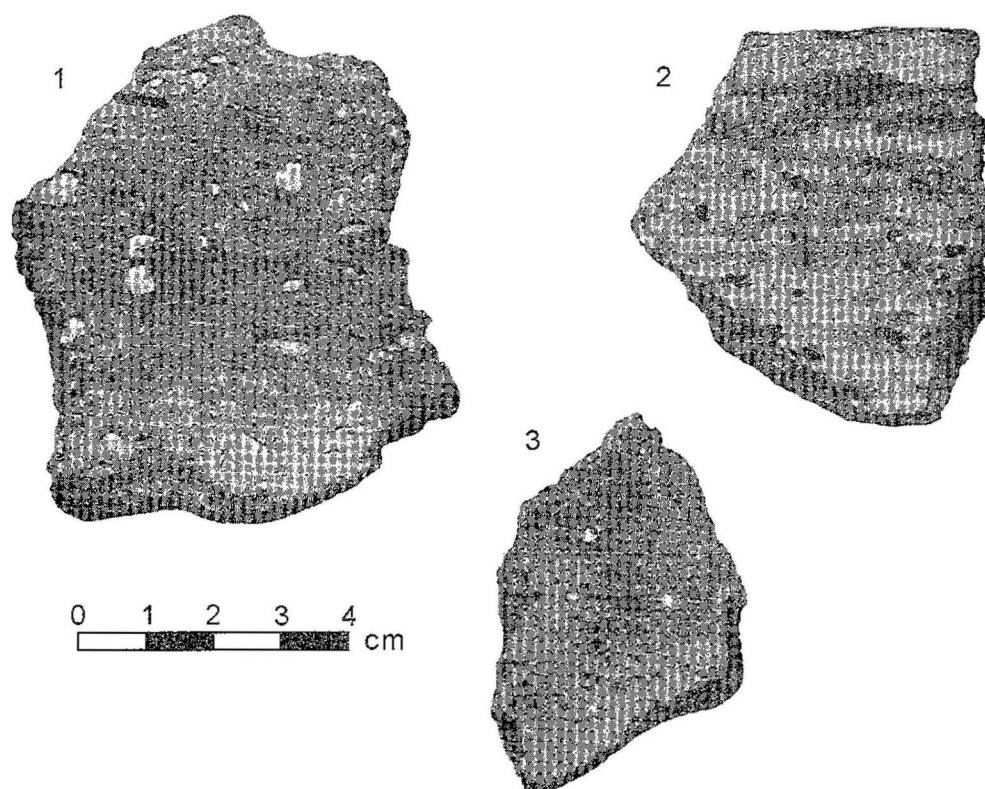


Figure 7. Examples of the three types of Native American pottery found at the Davis Site (1 - Mockley Ware; 2 - Townsend Ware; 3 - Potomac Creek Ware).

	MOCKLEY WARE	TOWNSEND WARE	POTOMAC CREEK WARE
Sherds (n [%])	139 (41)	80 (24)	118 (35)
Sherds over 50 mm long and over 40 mm wide (n [%])	10 (3)	4 (1)	5 (1)
Rim thickness (mm)	6–7	5	5
Wall thickness (mm)	7–10	6–10	6–8
Base thickness (mm)	10–14	12	8
Temper	Mostly clean, white, coarsely crushed, unburned oyster shell; some quartz sand	Mostly crushed, unburned shell that has been leached out, leaving irregular, flat-sided voids; some quartz sand	Mostly angular crushed quartz; some crushed rock fragments and coarse sand
Surface treatment	Mostly plain; some impressed by a net mat	Mostly plain; some impressed by a net mat	Mostly plain; some impressed by a net mat

Table 1. Davis Site (44LA46), pottery summary data.

POINT TYPE	n	%	PERIOD
St. Albans or LeCroy Bifurcate	1	2	Early Archaic
Bare Island	4	8	Late Archaic
Clagett	3	6	Late Archaic
Vernon	5	10	Late Archaic to Early Woodland
Piscataway Stemmed	4	8	Late Archaic to Middle Woodland
Selby Bay Lanceolate	3	6	Late Archaic to Middle Woodland
Calvert	16	31	Early Woodland
Rossville Stemmed	1	2	Middle Woodland
Snyders Dove-Tail Notched	1	2	Middle Woodland
Jack's Reef Pentagonal	1	2	Middle to Late Woodland I
Levanna Triangular	1	2	Middle to Late Woodland II
Madison Triangular	7	14	Late Woodland I and II
Potomac Triangular	4	8	Late Woodland I and II, Protohistoric, and Historic
OLDEST			Early Archaic
WEIGHTED MEAN			Late Archaic
YOUNGEST			Historic

Table 2. Davis Site (44LA46), projectile points summary data.

Stephenson et al. 1963:Plate 24, Figures W–D'). These points were all made of quartz. This type corresponds to the Late Archaic period (Dent 1995; Hranicky 1991; Stephenson et al. 1963).

The next youngest is the Vernon type (Figure 11 and Table 6). Five representatives of this type were found at the Davis Site, characterized by an isosceles triangular blade shape with slightly convex edges, a triangular stem with well-defined shoulders, and a straight or concave base (Stephenson et al. 1963:Plate 24, Figures A–J; Steponaitis 1980:Plate 2, Figures a–f). Three are made of quartz, one of chert, and one of andesite. This type corresponds to the Late Archaic to Early Woodland periods (Stephenson et al. 1963; Steponaitis 1980).

The Piscataway Stemmed type is represented by four points at the Davis Site (Figure 12 and Table 7). This type is characterized by an isosceles triangular blade with straight edges, an oval stem without shoulders, and a rounded base (Hranicky 1991:43; Hranicky 1994:101; Stephenson et al. 1963:Plate 26, Figures X–E'; Steponaitis 1980:Plate 1, Figures q–t). All four points are made of quartz. There are conflicting ages for this type. Steponaitis (1980) and Dent (1995) considered it Late Archaic, but Hranicky (1991, 1994) considered it Middle Woodland. For this paper, it will be considered Late Archaic to Middle Woodland.

The Selby Bay Lanceolate type is represented by three points from the Davis Site (Figure 13 and Table

8). These are characterized by a wide isosceles triangular blade shape with convex edges, a stem with poorly defined shoulders, and a concave base (Hranicky 1991:24, 1994:91; Stephenson et al. 1963:Plate 23, Figures W–Z [as Steubenville Lanceolate]; Steponaitis 1980:Plate 4, Figures d–f). Two of the points were made of rhyolite, and the other point made of andesite. Selby Bay points in the Northern Neck are generally made of rhyolite and less frequently of siltstone, chert, and quartz (Potter 1993). There is disagreement about the age of this type. Hranicky (1991, 1994) suggested it was Late Archaic to Early Woodland, but Steponaitis (1980) and Dent (1995) considered it Middle Woodland. For this paper, it will be considered Late Archaic to Middle Woodland.

Next is the Calvert type (Figure 14 and Table 9), represented by 16 points. This is the most abundant type found at the Davis Site. This type is characterized by an isosceles triangular blade shape with slightly convex edges, a stem with a square outline and well defined shoulders, and a straight base (Hranicky 1991:14; Stephenson et al. 1963:Plate 24, Figures K–V; Steponaitis 1980:Plate 3, Figures m–o). Fourteen of the points were made of quartz, and two were made of chert. This type corresponds to the Early Woodland period (Dent 1995; Hranicky 1991; Stephenson et al. 1963).

Chronologically, the Rossville Stemmed type is next (see Figure 8.2 and Table 3). There is only one repre-

TYPE	FIGURE NO.	L (mm)	W (mm)	T (mm)	(L × T)/W	WEIGHT (g)	MUNSELL COLOR	LITHOLOGY
St. Albans or LeCroy Bifurcate	1	21.85 (24.00)	17.65	5.70	(7.75)	1.82	White (10YR8/1) with pink (10R8/4) tints	Quartz
Rossville Stemmed	2	82.45	47.70	9.90	17.11	31.50	Brown (10YR5/3)	Quartzite
Snyders Dove-Tail Notched	3	30.65	23.60	4.85	6.30	2.91	Yellowish brown (10YR5/6)	Chert
Jack's Reef Pentagonal	4	33.10	23.30	6.35	9.02	4.08	Light gray (10YR7/2)	Quartzite
Levanna Triangular	5	36.45	20.60	5.95	10.53	4.07	Dark yellowish brown (10YR4/4)	Chert

L = Length; W = Width; T = Thickness

Table 3. Davis Site (44LA46), summary data for miscellaneous projectile points. Numbers in parentheses are estimates for complete specimen.

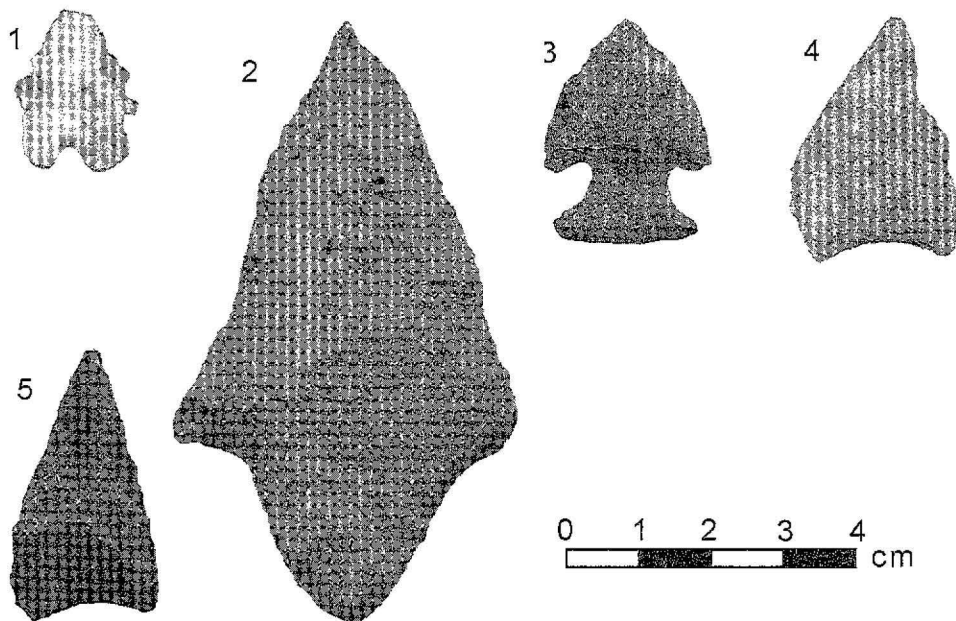


Figure 8. Miscellaneous projectile point types found at the Davis Site (1 - St. Albans or LeCroy Bifurcate; 2 - Rossville Stemmed; 3 - Snyders Dove-Tail Notched; 4 - Jack's Reef Pentagonal; 5 - Levanna Triangular).

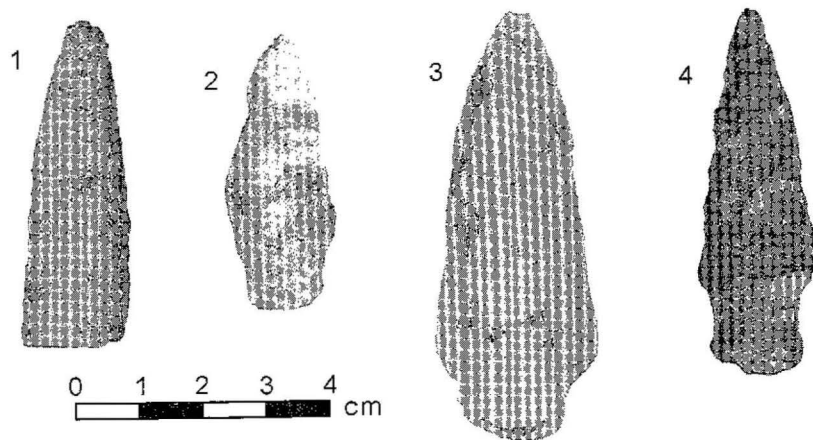


Figure 9. Bare Island type projectile points found at the Davis Site.

FIGURE NO.	L (mm)	W (mm)	T (mm)	(L × T)/W	WEIGHT (g)	MUNSELL COLOR	LITHOLOGY
9.1	50.55 (65.00)	18.45	19.15	(52.47)	10.49	Red (2.5YR5/6)	Quartzite
9.2	43.90	18.30	11.50	27.58	7.68	White (10YR8/1) with very pale brown (10YR8/4) tints	Quartz
9.3	66.35	24.10	11.65	32.07	18.57	Gray (10YR6/1) with pale brown (10YR6/3) tints	Quartz
9.4	57.90	21.85	11.70	31.00	13.36	Greenish black (10Y2.5/1) and bluish black (10B2.5/1)	Slate
MEAN	58.29	20.68	13.50	35.78	12.53		

L = Length; W = Width; T = Thickness

Table 4. Davis Site (44LA46), summary data for Bare Island type projectile points. Numbers in parentheses are estimates for complete specimen.

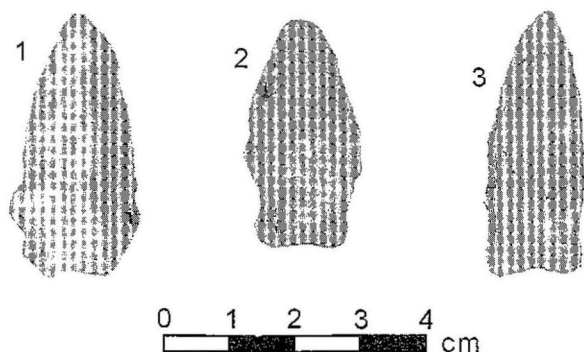


Figure 10. Claggett type projectile points found at the Davis Site.

FIGURE NO.	L (mm)	W (mm)	T (mm)	(L × T)/W	WEIGHT (g)	MUNSELL COLOR	LITHOLOGY
10.1	40.65	19.65	10.90	22.55	8.01	White (10YR8/1) with very pale brown (10YR8/4) to yellow (10YR8/5) tints	Quartz
10.2	34.15	16.80	9.50	19.31	5.70	Very pale brown (10YR7/3)	Quartz
10.3	40.35	17.60	9.50	21.78	6.63	White (10YR8/1) with very pale brown (10YR8/3) tints	Quartz
MEAN	38.38	18.02	9.97	21.21	6.78		

L = Length; W = Width; T = Thickness

Table 5. Davis Site (44LA46), summary data for Claggett type projectile points.

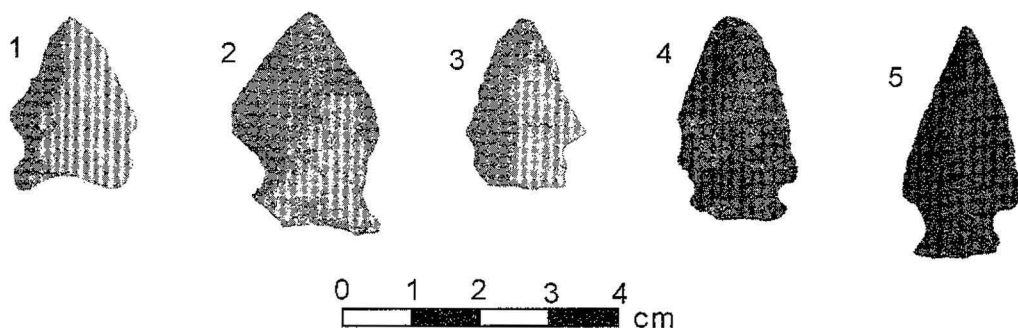


Figure 11. Vernon type projectile points found at the Davis Site.

FIGURE NO.	L (mm)	W (mm)	T (mm)	(L × T)/W	WEIGHT (g)	MUNSELL COLOR	LITHOLOGY
11.1	25.55	18.15	8.30	11.68	3.74	White (10YR8/1)	Quartz
11.2	32.15	20.55	9.75	15.25	5.98	White (10YR8/1) with very pale brown (10YR8/3) tints	Quartz
11.3	20.05	16.80	11.80	14.08	2.64	White (10YR8/1)	Quartz
11.4	30.30 (32.70)	12.30	7.25	(19.27)	3.40	Mottled very dark gray (2.5Y3/1) and light brownish gray (2/5Y6/2) to pale yellow (2.5Y8/2)	Andesite
11.5	34.30	16.95	5.50	11.13	2.92	Brown (7.5YR4/4)	Chert
MEAN	28.95	16.95	8.52	14.28	3.74		

L = Length; W = Width; T = Thickness

Table 6. Davis Site (44LA46), summary data for Vernon type projectile points. Numbers in parentheses are estimates for complete specimen.

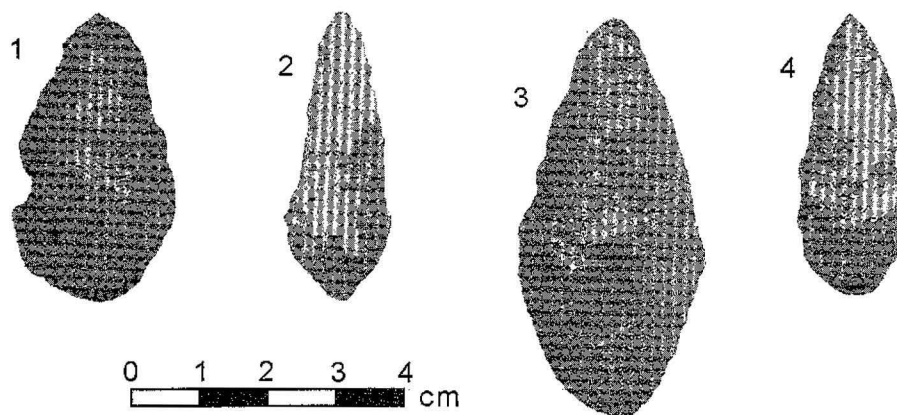


Figure 12. Piscataway Stemmed type projectile points found at the Davis Site.

FIGURE NO.	L (mm)	W (mm)	T (mm)	(L × T)/W	WEIGHT (g)	MUNSELL COLOR	LITHOLOGY
12.1	41.15	24.35	10.85	18.34	10.23	White (10YR8/1) with very pale brown (10YR8/2 to 8/3) tints	Quartz
12.2	42.20	15.55	9.20	24.97	4.76	White (10YR8/1)	Quartz
12.3	58.30	26.60	10.95	24.00	16.64	White (10YR8/1) with very pale brown (10YR8/3 to 8/4) and yellow (10YR8/6) tints	Quartz
12.4	40.25	15.60	7.50	19.35	4.90	Very pale brown (10YR8/2)	Quartz
MEAN	45.48	20.53	9.63	21.67	9.13		

L = Length; W = Width; T = Thickness

Table 7. Davis Site (44LA46), summary data for Piscataway Stemmed type projectile points.

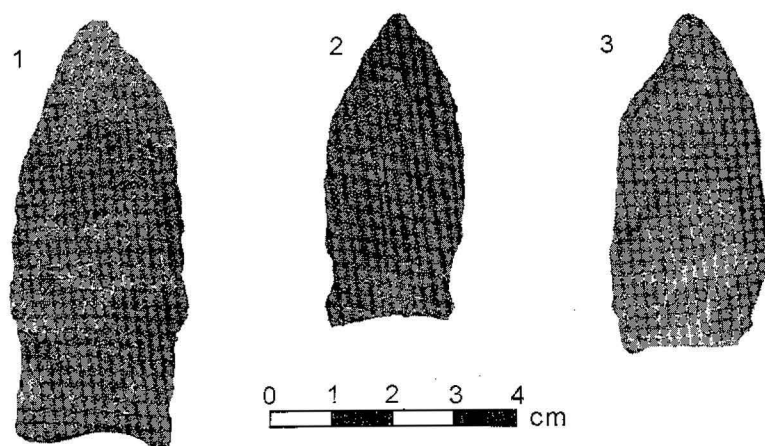


Figure 13. Selby Bay Lanceolate type projectile points found at the Davis Site.

FIGURE No.	L (mm)	W (mm)	T (mm)	(L × T)/W	WEIGHT (g)	MUNSELL COLOR	LITHOLOGY
13.1	69.55	29.85	8.90	20.74	20.15	Greenish black (10Y2.5/1)	Rhyolite
13.2	50.25	22.70	9.90	21.92	13.01	Mottled very dark brown (7.5YR2.5/2) and dark grayish brown (10YR4/2)	Andesite
13.3	54.45 (65.00)	25.30	9.25	(23.76)	14.14	Greenish black (10GY2.5/1)	Rhyolite
MEAN	61.60	25.96	9.35	22.14	15.77		

L = Length; W = Width; T = Thickness

Table 8. Davis Site (44LA46), summary data for Selby Bay Lanceolate type projectile points. Numbers in parentheses are estimates for complete specimen.

representative found at the Davis Site. This type is characterized by an isosceles triangular blade with straight edges, an oval stem with well-defined shoulders, and a rounded base (Hranicky 1991:48; Stephenson et al. 1963:Plate 23, Figures A–F). It is the largest point found: 82 mm in length, 48 mm in width, and 10 mm in thickness. It was made of quartzite. This type corresponds to the Middle Woodland period (Hranicky 1991; Stephenson et al. 1963). This point may be too big to be Rossville Stemmed. If this is the case, it may be a Morrow Mountain Broadspear type (Hranicky 1991:39). If so, it would have an age of Middle Archaic, but as it is only one point, it would not change the general age of the site.

The next type is the Snyders Dove-Tail Notched point (see Figure 8.3 and Table 3). There was only one example found at the Davis Site. This type is characterized by an equilateral triangular blade shape with convex edges, a triangular stem with well-defined shoulders and notches into the blade, and a convex base (Hranicky 1994:106). This point is made of chert. This type corresponds to the Middle Woodland period (Hranicky 1994).

There is one representative of the Jack's Reef Pentagonal type (see Figure 8.4 and Table 3), characterized

by a pentagonal blade shape with straight edges, no stem, and a concave base (Hranicky 1991:30; Hranicky 1994:96; Steponaitis 1980:Plate 4, Figures k–m). It was made of quartzite. This type corresponds to the Middle and Late Woodland I periods (Hranicky 1991, 1994; Steponaitis 1980).

There is one representative of the Levanna Triangular type (see Figure 8.5 and Table 3), characterized by an isosceles triangular blade with straight edges, no stem, and a concave base (Hranicky 1991:35; Hranicky 1994:97–98; Potter 1982:Plate 3, Figures A, C, Plate 5, Figure A, Plate 8, Figure A, Plate 18, Figure A; Steponaitis 1980:Plate 4, Figures n–o). It was made of chert. This type corresponds to the Middle and Late Woodland I and II periods (Hranicky 1991, 1994; Steponaitis 1980).

There are seven representatives of the Madison Triangular type (Figure 15 and Table 10). These are characterized by an isosceles triangular blade shape with straight or convex edges, no stem, and a straight or concave base (Hranicky 1991:37; Hranicky 1994:99; Steponaitis 1980:Plate 4, Figures q–t). Five of these points were made of chert, one of quartz, and one of

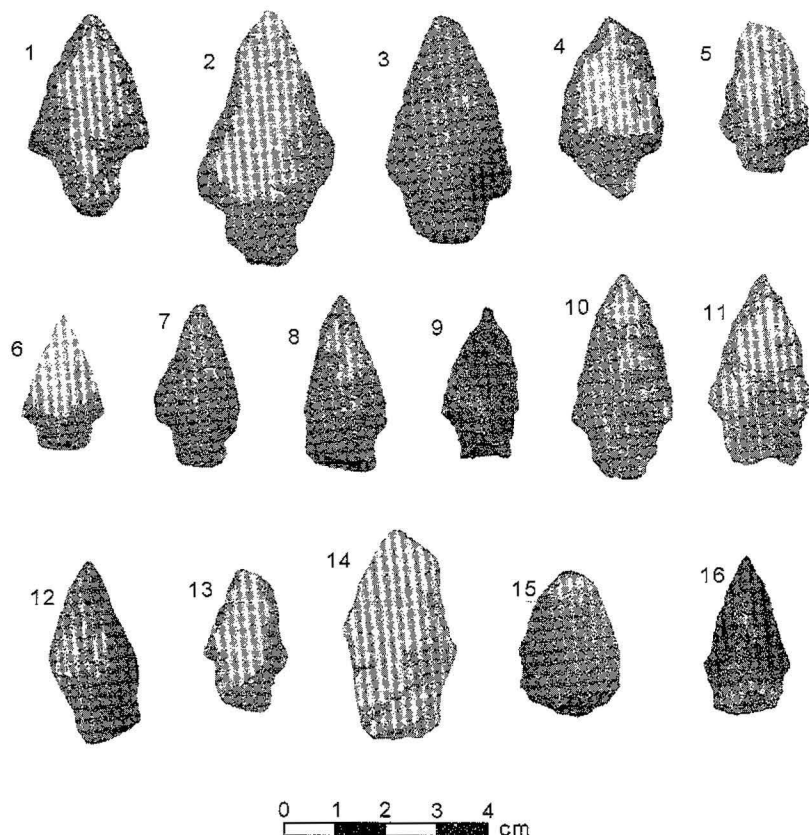


Figure 14. Calvert type projectile points found at the Davis Site.

FIGURE No.	L (mm)	W (mm)	T (mm)	(L × T)/W	WEIGHT (g)	MUNSELL COLOR	LITHOLOGY
14.1	38.65	24.05	9.45	15.19	7.71	White (10YR8/1) with very pale brown (10YR8/2 to 8/3) tints	Quartz
14.2	48.85	26.55	9.15	16.84	10.99	White (10YR8/1)	Quartz
14.3	43.55	24.20	10.40	18.72	9.83	Very pale brown (10YR7/3) to yellow (10YR7/6)	Quartz
14.4	37.40	20.80	10.15	18.25	6.97	White (10YR8/1) with very pale brown (10YR8/2 to 8/3) tints	Quartz
14.5	29.45 (31.50)	19.40	7.00	11.37	3.56	White (10YR8/1) with very pale brown (10YR8/2) tints	Quartz
14.6	23.40	14.95	11.35	17.77	1.96	White (10YR8/1) with very pale brown (10YR8/3) tints	Quartz
14.7	31.70	15.90	10.70	21.33	4.42	Gray (N 6)	Quartz
14.8	32.10	16.60	9.05	17.50	4.48	White (10YR8/1) with very pale brown (10YR8/3) tints	Quartz
14.9	29.65	15.25	9.30	18.08	3.71	Yellowish brown (10YR5/4)	Chert
14.10	39.90	20.15	8.05	15.94	6.71	White (10YR8/1) with very pale brown (10YR8/2) tints	Quartz
14.11	38.30	21.30	10.50	18.88	7.01	White (10YR8/1)	Quartz
14.12	32.70	11.85	11.10	30.63	5.45	White (10YR8/1) with yellow (10YR7/8 to 8/8) tints	Quartz
14.13	27.70 (31.00)	16.45	8.55	16.13	3.91	White (10YR8/1)	Quartz
14.14	41.30	23.00	10.80	19.39	9.28	White (10YR8/1)	Quartz
14.15	27.85	20.20	7.60	10.48	4.45	White (10YR8/1) with very pale brown (10YR8/4) tints	Quartz
14.16	31.10	15.95	8.70	16.96	3.62	Mottled strong brown (7.5YR5/6), pale yellow (2.5 Y 8/4), and black (N 2.5)	Chert
MEAN	34.93	19.16	9.49	17.72	5.88		

L = Length; W = Width; T = Thickness

Table 9. Davis Site (44LA46), summary data for Calvert type projectile points. Numbers in parentheses are estimates for complete specimen.

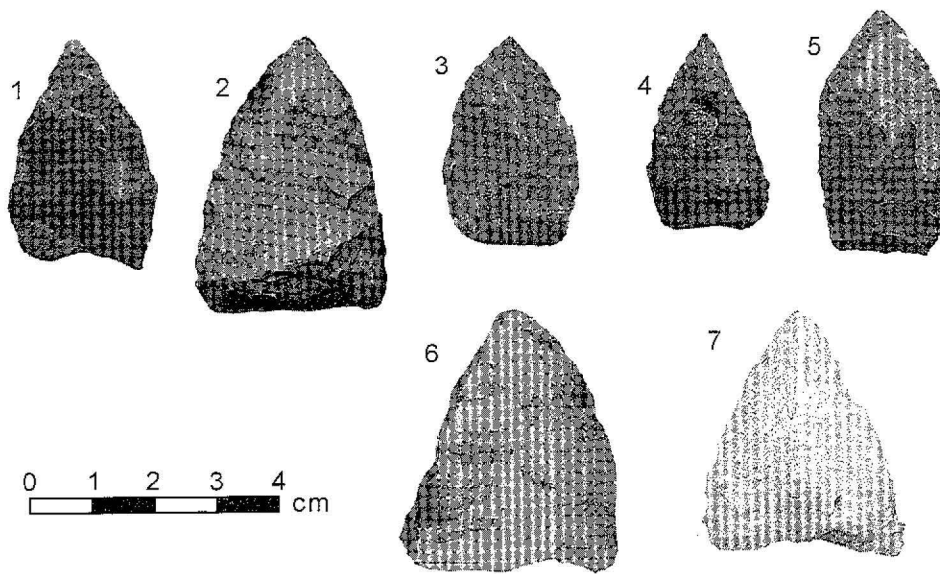


Figure 15. Madison Triangular type projectile points found at the Davis Site.

FIGURE No.	L (mm)	W (mm)	T (mm)	(L × T)/W	WEIGHT (g)	MUNSELL COLOR	LITHOLOGY
15.1	35.65	24.45	6.45	6.50	4.46	Dark yellowish brown (10YR4/4)	Chert
15.2	43.35	30.50	7.50	10.66	10.06	Gray (2.5Y6/1) and light gray (2.5Y7/2)	Chert
15.3	33.15	22.85	6.30	9.13	4.26	Brown (10YR4/3)	Chert
15.4	31.20	19.65	8.20	13.00	4.35	Light yellowish brown (10YR6/4) to brownish yellow (10YR6/6) and black (2.5Y2.5/1)	Chert
15.5	38.80	21.15	4.90	8.99	4.36	Dark yellowish brown (10YR4/4) to yellowish brown (10YR5/8)	Chert
15.6	42.30	33.60	12.00	15.11	12.46	Very pale brown (10YR7/4)	Quartzite
15.7	38.60	32.70 (35.00)	11.80	(13.00)	12.54	White (10YR8/1) with very pale brown (10YR8/4) to yellow (10YR7/6) tints	Quartz
MEAN	37.58	26.74	8.16	10.91	7.50		

L = Length; W = Width; T = Thickness

Table 10. Davis Site (44LA46), summary data for Madison Triangular type projectile points. Numbers in parentheses are estimates for complete specimen.

quartzite. This type corresponds to the Late Woodland I and II periods (Hranicky 1991, 1994; Steponaitis 1980).

The youngest points found at the Davis Site are of the Potomac Triangular type (Figure 16 and Table 11). There were four of these points found at the Davis Site. This type is characterized by an equilateral triangular blade shape with straight or concave edges, no stem, and a straight or concave base (Hranicky 1991:46; Hranicky 1994:87; Stephenson et al. 1963:Plate 26, Figures L–W). Three of the points were made of quartz and one of quartzite. This type corresponds to the Late Woodland I and II, Protohistoric, and historic periods (Hranicky 1991, 1994).

Projectile Point Lithologies

Changes in the lithology of projectile points is one of the parameters used to distinguish the various prehistoric periods, and the increase in local materials has been interpreted as evidence of increasing sedentism among Native Americans. Paleoindian and Early Archaic groups used mostly high-quality imported chert material, while by the Middle Archaic, more local materials were used along with imported rhyolite (Custer 1990; Gardner 1985, 1989; Geier 1990; Hantman 1990; McLearn 1991). The transition from the Archaic pe-

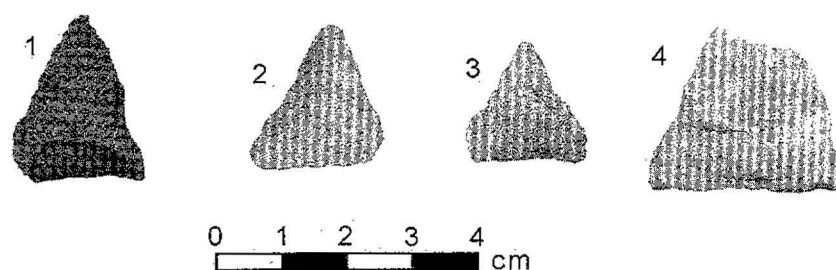


Figure 16. Potomac Triangular type projectile points found at the Davis Site.

FIGURE No.	L (mm)	W (mm)	T (mm)	(L × T)/W	WEIGHT (g)	MUNSELL COLOR	LITHOLOGY
16.1	25.70	20.15	6.65	8.48	2.82	Pale red (10R6/3) to red (10R4/6)	Quartzite
16.2	11.85 (20.50)	24.40	6.50	(5.46)	2.07	White (7.5YR8/1)	Quartz
16.3	16.75 (21.00)	20.05	5.35	(5.61)	1.50	White (10YR8/1)	Quartz
16.4	25.60 (34.00)	30.10	5.60	(6.33)	4.74	White (10YR8/1) with very pale brown (10YR8/3–8/4) and yellow (10YR8/6) tints	Quartz
MEAN	25.30	23.68	6.03	6.47	2.78		

L = Length; W = Width; T = Thickness

Table 11. Davis Site (44LA46), summary data for Potomac Triangular type projectile points. Numbers in parentheses are estimates for complete specimen.

riod to the Woodland period is marked by even greater use of local lithic materials (McLearn 1991; Mouer 1991a). The Middle Woodland points suggest a slight transition from locally obtained quartz to imported rhyolite. In the Late Woodland, most points were made from local quartz cobbles and yellow chert. As presented above, the points from the Davis Site show the same general trend in lithology over time. Unfortunately with so few points in some types (e.g., five types are represented by only one point each), the trend is not robust.

Overall, the most common lithology was quartz (61% of the 51 points), followed by chert (20%), quartzite (10%), rhyolite (4%), andesite (4%), and slate (2%). As the Davis Site is on the Outer Coastal Plain which basically lacks rock outcrops, where did this great variety of lithic material come from? Holmes et al. (1891) noted that the furthest downstream outcrop of rock in the Mid-Atlantic is at the fall line, but various cobbles are found along the estuaries draining the Piedmont and Blue Ridge to the west. It has been hypothesized that many of the points in the Northern Neck were made from quartz and quartzite cobbles found downstream of the fall line along the Potomac (Potter 1993) and Rappahannock rivers (Bushnell 1937). Other lithologies such as chert, rhyolite, andesite, and slate could have been imported from

the Piedmont and Blue Ridge Mountains of the Mid-Atlantic (Dietrich 1970).

Much work has been done on the source of rhyolite in Mid-Atlantic points. It was most likely imported from the Blue Ridge Mountains between Harpers Ferry, West Virginia, and Gettysburg, Pennsylvania (Bushnell 1937; Gardner 1989; Kavanagh 1982; Stewart 1984). Kavanagh (1982) reported that the Blue Ridge Mountains were an important source for rhyolite, quartz, and quartzite. Native American rhyolite quarries were located on the west slope of Catoctin Mountain in Maryland (Kavanagh 1982). Kavanagh (1982) suggested that this material was used in points from the late Paleoindian, Late Archaic, and Middle and Late Woodland and was traded widely in the Mid-Atlantic. During the late Middle Woodland, Native Americans of Tidewater Virginia probably went west of the fall line into the Piedmont and Blue Ridge physiographic provinces to collect rhyolite (Curry and Kavanagh 1991; Potter 1993; Stewart 1989). The extensive distribution of non-Coastal Plain lithologies in points indicates the existence of an established trade network between the Coastal Plain of Maryland and Virginia and the Piedmont and Blue Ridge to the west (Potter 1993; Stewart 1989).

Discussion and Conclusions

The pottery sherds and projectile points were used to date the site. However, these two types of artifacts yield different dates for the range of occupation. The pottery sherds indicate a maximum range of occupation from the Middle Woodland period to the historic period (A.D. 200–1650) with a weighted mean age of Late Woodland I. The projectile points indicate a maximum range of occupation from the Early Archaic period to the historic period (8000 B.C. – A.D. 1650) with a weighted mean age of Late Archaic. The mean ages are based on the relative frequencies of the various types of pottery and projectile points. These results assume there is no bias in the relative frequency of pottery sherds and projectile points due to differential breakage from plowing.

The occupation range indicated by the projectile points represents an older and longer time than that of the pottery sherds. The reason why the pottery suggests young dates compared to the points is because pottery was not made until the Early Woodland period. Therefore, it is impossible to use pottery to date the beginning of a site that was occupied before the Woodland period. However, projectile points were manufactured and used since the Paleoindian period. Taking this into account, the artifacts suggest the site was probably occupied beginning in the Early Archaic period up until the historic period. This does not imply the site was continuously occupied. The Davis Site was probably like many of the smaller, ephemeral, seasonally occupied residential camps specializing in oyster-gathering, and was occasionally utilized by family-sized groups within a convenient canoe ride from their main village (Blanton 1992; Potter 1993). Historic evidence presented above suggests the Native Americans had abandoned the site well before settlement by the English colonists. Thus, the site was probably intermittently occupied from the Early Archaic period to the Protohistoric period.

Why does the location of the Davis Site not coincide with the locations of any of the Native American hamlets at the time of contact as indicated on Smith's 1612 map (see Figures 4–6)? There are three possible explanations

1. The positions of the hamlets on Feest's (1978), Potter's (1993), and Haile's (1996) interpretations of Smith's map may be wrong. If that is the case, then the Davis Site could have been the location of the Ottachugh hamlet as that is the closest hamlet based on the maps.

2. The Davis Site may not have been occupied at the time Smith made his map in 1612.
3. The Davis Site may have been too small to warrant inclusion on the map.

It is most likely that the Davis Site does not correspond to one of the hamlets on Smith's map.

How many Native Americans lived in the area of the Davis Site at the time of contact? The Davis Site is in the middle of the Lower Cuttatawomen district (see Figures 4–6). According to Smith's (1612) estimate of Native American village populations, the Lower Cuttatawomen district had 30 bowmen (Smith 1986a; Strachey 1953). Using the various published bowman:overall population ratios of 1:3 (MacLeod 1928), 1:3.33 (Feest 1978; Mook 1944; Mooney 1907; Smith 1986a; Strachey 1953), 1:4 (Feest 1973), and 1:4.25 (Turner 1976, 1982), the Lower Cuttatawomen district had roughly 90–130 people. Turner (1976, 1982) also estimated the population of the Lower Cuttatawomen district based on the number of villages (i.e., one) and hamlets (i.e., four) and suggested the population was 200–210.

Future Work

In a previous study (Key and Jones 2000), the mineralogy of a clay outcrop at the Davis Site was compared to the mineralogy of the historic period clay tobacco pipes. The goal of that study was to determine the source of the clay used in the pipes. In our final study of the Davis Site, we will compare the mineralogy of the local clay with the prehistoric pottery to determine if the pottery was being made locally. We will also be doing a series of experimental firings of the clay to bracket the firing temperature of the pottery.

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