

**PREHISTORIC ARCHAEOLOGICAL RESOURCES OF THE PROPOSED
ROUTE 13 CORRIDOR: AN OVERVIEW**

Jay F. Custer
Center for Archaeological research
Department of Anthropology
University of Delaware

The purpose of this overview is to briefly describe the types of prehistoric archaeological resources which have been identified within, and which are expected to be within, the two proposed Route 13 corridor alignments. Expected site locations are based on probability distributions which were developed during the initial planning study (Custer, Jehle, Klatka, and Eveleigh 1984) and tested in later studies (Custer and Bachman 1985; Custer, Bachman, and Grettler 1986). All known sites and projected probability zones are noted on the attached maps and listed in the Appendix to this report.

In general, this overview will first describe the environmental setting of the study area as it relates to the regional prehistoric archaeology. Then, each of the major archaeological time periods will be reviewed and relevant sites within the project area will be discussed. Finally, potentially significant sites, and ~~classes~~ classes of sites, which are likely to be eligible for listing on the National Register of Historic Places will be noted.

ENVIRONMENTAL SETTING

In order to understand the regional prehistory of the study area, it is first necessary to consider the local environmental settings. The proposed alignments are located in Delaware's Coastal Plain and for the study of the prehistoric resources of the region, a number of varied environmental zones are recognized in the Coastal Plain. Each of these zones is described below and the descriptions are derived from the work of Custer(1984a).

High Coastal Plain - Located between the Fall Line and the Smyrna River (Data Links A1 - A4, B1 - B8, C1 - C5, X1, and X2), the High Coastal Plain is characterized by a rolling topography and elevation differences which can range up to 16 meters (50 feet) from the headlands bordering high order streams and adjacent floodplain marshes. These differences are sufficient to cause varied distributions of plant and animal species (Braun 1967:246-247). Watercourses are deeply incised. Most streams are not completely tidal and the freshwater/saltwater mix allows for a wide range of resources. Soils include a variety of well-drained and poorly drained settings that are distributed in a mosaic pattern across the region.

Low Coastal Plain - The Low Coastal Plain includes most of Kent County (Data Links A5 - A9.1, B9 - B19, C6 - C11, X3, and X4) and is underlain by the sands of the Columbia formation which have been extensively reworked to a flat and relatively featureless landscape. Elevation differences range up to 13 meters (30 feet) and these small differences are moderated by long and gradual

slopes. River systems are tidal through most of their middle and lower reaches with extensive marshes found along the Delaware Bay. These riverine systems would combine a wide variety of environmental settings and resources and are especially attractive human habitation areas. Much of the area is well-drained; however, there are some extensive areas of poor drainage.

Within the High and Low Coastal Plain there are a number of smaller environmental zones. These additional sources of environmental variability are generally distributed in broad belts parallel to the Delaware River and Bay shore. Each is described below.

Mid-Peninsular Drainage Divide - Representing the "spine" of the Delmarva Peninsula, this area is defined by the stretch of low, rolling topography that separates the headwaters of streams that drain into the Delaware Bay from streams that drain into the Chesapeake Bay. Elevation differences are slight and flowing surface water is restricted to the low order headwaters of the larger streams and rivers. Additional water sources of this zone include a number of swamps that have formed in areas of poorly drained soils surrounded by sand ridges. Bay/basin features, known locally as "whale-wallows", represent another water source in this area. Geomorphological evidence indicates that they were formed during the Pleistocene and many seem to have held water, at least seasonally, ever since (Rasmussen 1958:82). The combination of headwater drainages, swampy areas, and bay/basin features with interspersed well-drained areas creates a mosaic of

edaphic settings and this mosaic provides a wide range of resources which could be used by hunters and gatherers.

Mid-Drainage - The Mid-Drainage zone is located to the east of the Mid-Peninsular Drainage Divide zones. The modern tidal limit along the drainages marks the center of this zone, and the major drainages and their tributaries are fresh throughout the inland portion of the zone. Some tidal marshes and poorly drained floodplains are found along the major drainages. Well-drained soils are found on upper terraces of the drainages and on isolated headlands between the major drainages and their tributaries. The extensive combination of brackish and freshwater resources makes this area one of the richest in Delaware for prehistoric hunters and gatherers.

It should be noted that the locations of these environmental zones have not remained constant since the end of the Pleistocene because some areas have been subjected to extensive landscape modification. The most important factor in this landscape modification is post-Pleistocene sea level rise. Kraft et al. (1976) note that sea level has been rising along the Atlantic Coast for the past 12,000 years and this sea level rise has transformed the Delaware River of 10,000 B.C. into the current drowned estuary. Many old land surfaces have become submerged and the configuration of the Delaware River and Delaware Bay have changed dramatically. In terms of the study area, these effects would be most prevalent in the eastern half of the Mid-Drainage zone.

REGIONAL PREHISTORY AND ARCHAEOLOGICAL SITES

This summary of the regional prehistory is abstracted from Custer (1984a). The prehistoric archaeological record of the Delaware Coastal Plain can be divided into four large blocks of time: The Paleo-Indian Period (ca 12,000 B.C. - 6500 B.C.), the Archaic Period (6500 B.C. - 3000 B.C.), the Woodland I Period (3000 B.C. - A.D. 1000), and the Woodland II Period (A.D. 1000 - A. D. 1650). A fifth time period, the Contact Period may also be considered and spans from A.D. 1600 to A.D. 1750, the approximate date of the final Indian habitation of Delaware in anything resembling their pre-European Contact form. Each of these periods is described below.

Paleo-Indian Period (12,000 B.C. - 6500 B.C.) - The Paleo-Indian Period encompasses the time period of the final retreat of Pleistocene glacial conditions from Eastern North America and establishment of more modern Holocene environments. The distinctive feature of the Paleo-Indian Period is an adaptation to the cold, and alternately wet and dry, conditions at the end of the Pleistocene and the beginning of the Holocene. This adaptation was primarily based on hunting and gathering with hunting providing a large portion of the diet. Hunted animals may have included now-extinct megafauna and moose. A mosaic of deciduous, boreal, and grassland environments would have provided a large number of productive habitats for these game animals in central Delaware and watering areas would have been particularly good hunting settings.

Tool kits of the people who lived at this time were oriented

toward the procurement and processing of hunted animal resources. A preference for high quality lithic materials is noted in the stone tool kits and careful resharpening and maintenance of tools is common. A mobile lifestyle moving among the game attractive environments is hypothesized with the social organizations being based upon single and multiple family bands. Throughout the 5500 year time span of the period, the basic adaptation remains relatively constant with some modifications being seen as Holocene environments appear at the end of the Paleo-Indian Period.

Numerous Paleo-Indian sites are noted for the Delaware Coastal Plain. Most of the sites are associated with poorly drained swampy areas and include the Hughes Paleo-Indian complex near Felton (Custer 1984a:58-59). No Paleo-Indian sites have been discovered in the proposed alignments; however, several late Paleo-Indian (notched point) sites were discovered during the planning survey of the Kent County portions of the study area (Custer, Bachman, and Grettler 1986). These sites are located in the Mid-Peninsular Drainage Divide zone and appear to be similar to the Hughes Early Man Complex. For the most part, these sites are thought to represent intensively utilized procurement camps and small base camps. Additional similar sites will probably be encountered within the Railroad Alternative Alignments (specifically in Data Links A5 - A9 and B15) where it traverses the Mid-Peninsular Drainage Divide, and all would be eligible for listing on the National Register of Historic Places (Custer 1983:38-47). It is also highly likely that these sites will be associated with buried Pleistocene/early Holocene river

edge swamp deposits similar to the Dill Farm site (Custer and Griffith 1984). These kinds of sites provide valuable paleoenvironmental data and would probably also need to be investigated in future data recovery projects.

Earlier studies (Custer et al. 1984:26-31) suggested that the bay/basin features of southern New Castle County may have also been locations of Paleo-Indian sites based on studies of similar features in New Jersey (Bonfiglio and Cresson 1981). However, intensive survey of 148 bay/basin features in the Townsend/Blackbird area (Custer and Bachman 1985) revealed no Paleo-Indian sites. The absence of Paleo-Indian period sites at bay/basin locales may be due to the absence of flowing surface water associated with bay/basin features, or may be due to the absence of an association of high quality lithic sources and bay/basin features.

Archaic Period (6500 B.C. - 3000 B.C.) - The Archaic Period is characterized by a series of adaptations to the newly emerged full Holocene environments. These environments differed from earlier ones and were dominated by mesic forests of oak and hemlock. A reduction in open grasslands in the face of warm and wet conditions caused the extinction of many of the grazing animals hunted during Paleo-Indian times; however, browsing species such as deer flourished. Sea level rise is also associated with the beginning of the Holocene in Delaware. The major effect of the sea level rise would have been to raise the local water table, which helped to create a number of large interior swamps. Adaptations changed from the hunting focus of

the Paleo-Indian to a more generalized foraging pattern in which plant food resources played a more important role. Large swamp settings apparently supported large base camps, but none are known from the study area. A small number of small procurement sites in favorable hunting and gathering locals such as bay/basin features are known from Delaware's Coastal Plain.

Tool kits were more generalized than earlier Paleo-Indian tool kits and showed a wider array of plant processing tools such as grinding stones, mortars, and pestles. A mobile lifestyle was probably common with a wide range of resources and settings utilized on a seasonal basis. A shifting band level organization which saw the waxing and waning of group size in relation to resource availability is evident. Known sites include large base camps such as the Clyde Farm Site in northern Delaware and smaller processing sites located at a variety of locations and environmental settings.

Intensive planning surveys carried out to date have located five Archaic sites associated with bay/basin features (Custer and Bachman 1985). One site (7NC-J-99) is located within the alignment in Data Link B7. For the most part, these sites are small, ephemerally-used procurement/processing sites. However, intensive testing at one of these sites (7NC-H-20) seems to indicate that some small base camps, or staging sites, may also be associated with bay/basin features as evidenced by the presence of relatively dense tool manufacturing debris at 7NC-H-20. It should be noted that 3 Archaic sites associated with stream floodplain sites were also discovered in the northern

study area.

Only 9 Archaic sites were previously recorded for the Delmarva High Coastal Plain; therefore, the 8 Archaic sites discovered in the intensive surveys to date almost double the number of known Archaic sites in the High Coastal Plain. In all of Delaware there are only 40 Archaic sites recorded. Therefore, any Archaic sites discovered within the alignments would be eligible for listing on the National Register of Historic Places as long as they had contextual integrity. Also, preliminary analysis of the bay/basin sediments has shown that they contain abundant pollen (Custer and Bachman 1985) and they would have to be investigated as part of future data recovery projects in order to reconstruct the environmental settings of these sites.

The distribution of Archaic sites in the study area indicates that the beginning of bay/basin utilization seems to occur at the same time as a series of rather dramatic environmental changes. During the period from 8500-6000 BC there is evidence from numerous sites indicating dry climatic conditions (Custer 1984a:47-48; Custer and Griffith 1984). Environments seemed to have changed from a mosaic of grasslands, swamps, boreal forests, and deciduous forests to a closed boreal forest with fewer poorly drained settings. The presence of wind-blown sediments (Foss et al. 1978) and evidence of pronounced changes in stream channel morphology (Custer and Griffith 1984: Fig. 5) also indicate potential dramatic changes in the patterns of surface water availability. The beginnings of bay/basin utilization may be related to these environmental changes. It is possible that changes in stream channel morphology altered the

distribution of swampy settings in the mid-peninsular drainage divide, as evidenced at the Dill Farm site (Custer and Griffith 1984), and caused late Paleo-Indian and Archaic groups to seek out new swampy hunting stations, such as the bay/basin features. Another factor which may have been contributed to a shift to new procurement sites locations, including bay/basins, during the Archaic period is the fact that during late Paleo-Indian and Archaic times the emphasis on high grade cryptocrystalline lithic materials seems to have disappeared (Custer 1984a:59-60). If association of bay/basins and lithic sources was no longer a critical factor in site selection, then the bay/basin sites of the study area may have become a more attractive settlement option. Once these bay/basin procurement sites became part of the settlement pattern in interior areas, their utilization continued into warm-wet climatic conditions of the post-6000 B.C. time period (Custer 1984a:62-64).

The Archaic sites associated with stream settings seem to be similar in size and artifact composition to others described for the Delmarva Coastal Plain (Wise 1983; Kavanagh 1979; Custer and Galasso 1983; Galasso 1983) and are primarily small procurement sites. These sites probably represent hunting and procurement sites which support other base camp sites. Some of the larger basecamp sites have been tentatively identified elsewhere in Delaware (Custer 1984a:69-72); however, none were identified in the study area. It may be possible that there are no large Archaic base camps in the Coastal Plain areas away from the large interior swamps. Some of the Archaic sites found in intensive

surveys may be small base camps rather than procurement sites and the present survey methods were unable to distinguish the differences between the two site types. Both Wise (1983) and Galasso (1983) have suggested that the Delaware Coastal Plain Archaic settlement pattern is characterized by small habitation and procurement sites and Kraft and Mounier (1982) note similar patterns in the New Jersey Coastal Plain. The data on Archaic sites from the Route 13 project areas seem to support this model.

Woodland I Period (3000 B.C. - A.D. 1000) - The Woodland I Period can be correlated with a dramatic change in local climates and environments that seems to be part of events occurring throughout the Middle Atlantic region. A period of pronounced warm and dry conditions sets in and lasts from ca. 3000 B.C. to 1000 B.C. (Custer 1984b). Mesic forests were replaced by xeric forests of oak and hickory and grasslands again became common. Some interior streams dried up; however, the overall effect of the environmental change is an alteration of the environment, not a degradation. Continued sea level rise and a reduction in its rate also made many areas of the Delaware River and Bay shore the sites of large brackish water marshes which are especially high in productivity. The major changes in environment and resource distributions caused a radical shift in adaptations for prehistoric groups. Important areas for settlements included the major river floodplains and estuarine swamp areas. Large base camps with fairly large numbers of people are evident in many settings in the Delaware Coastal Plain, such as the Barker's Landing, Coverdale, Hell Island, and Robbins Farm sites. These

sites seem to have supported many more people than earlier base camp sites and may have been occupied for several seasons of the year. The overall tendency is toward a relatively more sedentary lifestyle.

The tool kits of the Woodland I Period show some minor variations as well as some major additions from previous Archaic tool kits. Plant processing tools become increasingly common and seem to indicate an intensive harvesting of wild plant foods that may have approached the efficiency of agriculture by the end of the Woodland I Period. Chipped stone tools changed little from the preceding Archaic Period; however, broad-blade, knife-like processing tools became more prevalent. The addition of stone, and then ceramic, containers is also seen. These items allowed the more efficient cooking of certain types of food and may also have functioned for storage of certain surplus plant foods. Storage pits and semi-subterranean houses are also known for the Delaware Coastal Plain during this period from the numerous sites.

Social organizations also seem to have undergone radical changes during this period. With the onset of relatively sedentary lifestyles and intensified food production, which might have produced occasional surpluses, incipient ranked societies began to develop as indicated by the presence of extensive trade and exchange in lithic materials for tools, as well as for non-utilitarian artifacts, and caching of special artifact forms. The data from cemeteries of the Delmarva Adena Complex (ca. 500 B.C. to A.D. 0), such as the Frederica Site and the St. Jones Site (Thomas 1976), indicate that certain individuals had special

status in these societies and the existence of a ranked social organization is hypothesized. Similar data from the Island Field Site show that these organizations lasted up until A.D. 1000, although they may not have always been present throughout all of the Woodland I Period. By the end of the Woodland I Period a relatively sedentary lifestyle is evident in Delaware's Coastal Plain. It should also be noted that the greatest number of archaeological sites in the project areas date to the Woodland I Period and the Mid-Drainage zone is the focus of most of the important sites of this period.

The Woodland I period sites of the study are the largest and most numerous of all time periods. The analysis of site size for the northern portions of the alignments (Custer and Bachman 1985) showed that not only are most of the Woodland I sites larger than sites from other time periods, but several very large Woodland I sites were present. These very large sites are identified here as macroband base camps and are located primarily along the Appoquinimink River, the highest order stream in the northern study area. Similar large sites are noted on the Smyrna, Leipsic, St. Jones, and Murderkill drainages in the southern portion of the study area (Custer and Bachman 1985b). Current models of Woodland I settlement patterns and adaptations (Custer 1982; 1984a:94-98; 1984b; Catlin et al. 1982) all note a shift of large base camp sites to major drainage floodplain and headland settings and a general increase in local population densities in these areas during Woodland I times. The Route 13 survey data support this model. Major use of bay/basin sites during Woodland

I times (Custer and Bachman 1985) support the site models noted above which also describe a widespread, but ephemeral, use of interior areas. Interior Woodland I sites other than those associated with bay/basin features from the Route 13 data also support this model and the distribution of sites in the interior areas is quite similar to that noted for the Upper Chester drainage in Kent and Queen Annes counties, Maryland (Kavanagh 1979).

Non-local lithic materials, such as rhyolite, argillite, steatite, and ironstone, are present at many of the sites recorded in the earlier Route 13 surveys. These non-local materials tend to be found at the larger Woodland I base camp sites. The presence of these "exotic" materials in the study area indicates that local Woodland I groups were participating in trade and exchange networks as noted in several studies (Ward and Doms 1984; Custer 1984c). Participation in trade and exchange networks at the larger Woodland I sites indicates increasing social complexity at these sites.

It would be useful to discuss the site locations and assemblage characteristics at a time level smaller than the period, such as the archaeological complexes which are used to divide the Woodland I period in terms of time and space (Custer 1984a:28-30,78,89). However, there are insufficient data on diagnostic artifacts from the Route 13 survey to develop any counts of sites at the level of the archaeological complex (see Appendix).

Not all classes of Woodland I sites are eligible for the National Register. The larger base camp sites would all be

eligible regardless of whether or not they were plowed. Their large size and high potential for preserved complicated features makes data recovery at these sites an expensive proposition. These sites would be primarily found within the high probability zones of the major drainages. Many of these sites were found in the initial surveys (Custer et al. 1984; Custer and Bachman 1985; Custer, Bachman, and Grettler 1986) and a series of these sites are located within the alignment in Data Link A9 (Griffith and Artusy 1976). Smaller Woodland I procurement sites, if unplowed, are eligible for the National Register and are also numerous in all probability zones.

Woodland II Period (A.D. 1000 - A.D. 1650) - In many areas of the Middle Atlantic, the Woodland II Period is marked by the appearance of agriculture food production systems; however, in the Delaware Coastal Plain there are no clear indications of such a shift. Some of the settlements of the Woodland I Period, especially the large base camps, were also occupied during the Woodland II Period and very few changes in basic lifestyles and overall artifact assemblages are evident. Intensive plant utilization and hunting remained the major subsistence activities up to European Contact. There is some evidence, nonetheless, of an increasing reliance on plant foods and coastal resources throughout the Woodland II Period in the study area, especially in the more southern areas. Social organization changes are evidenced by a collapse of the trade and exchange networks and the absence of elaborate cemeteries.

Woodland II settlement patterns in central Delaware are a topic of some controversy. For many years, numerous authors have suggested that there is a relative absence of Woodland II sites in southern New Castle County and northern Kent County. By the same token, up until 1980 the nature of the northern New Castle Woodland II occupations were also very poorly refined. Nonetheless, the southern New Castle County and northern Kent County area was viewed as a "buffer zone" or "fever belt" (Withoft 1984) separating two distinctive ethnic groups. The original Route 13 planning study analyzed extant artifact collections and noted numerous Woodland II sites in the supposed "buffer zone" making the whole concept somewhat invalid (Custer et al. 1984:220-221). The "discovery" of these sites was due to the fact that previous analyses had not recognized the Woodland II Minguannan ceramics in the collections because the type was not defined in the literature prior to 1981 (Custer 1981).

The discovery of Woodland II sites in later surveys (Custer and Bachman 1985; Custer, Bachman, and Grettler 1986) reveals a similar bias in previous studies which caused Woodland II sites to be under-represented in the data base. Most of the Woodland II sites, and all of the sites with Minguannan pottery, were discovered during sub-surface testing of wooded areas dividing plowed fields from bluffs along the major drainages. The sites are small and appear along most of the major stream headlands studied. Furthermore, they are almost all unplowed and would have been, and were, missed in previous studies which focused primarily on surface survey of cultivated fields. Thus, there really is no absence of Woodland II sites in the study area and

there is no need to invent a "buffer zone".

It can be noted that Woodland II sites in the northern portions of the study area are generally smaller than the Woodland II sites found farther south on the Delmarva Peninsula (Custer 1984a:157-171; Custer and Griffith n.d.). However, the Woodland II sites of the study area fall well within the range of site sizes seen among Woodland II sites of the Minguannan and Slaughter Creek Complexes (Custer 1984a:155-157; Stewart et al. n.d.).

The range of Woodland II sites eligible for listing on the National Register would be similar to those of the Woodland I period. The small Minguannan base camp sites would be of special interest and significance and are located in Data Links B3, B8, C4, and C5.

Contact Period (A.D. 1650 - A.D. 1750) - The Contact Period is an enigmatic period of the archaeological record of Delaware which begins with the arrival of the first substantial numbers of Europeans in Delaware. The time period is enigmatic because no Native American archaeological sites that clearly date to this period have yet been discovered in Delaware. A number of sites from the Contact Period are known in surrounding areas, such as southeastern Pennsylvania, nonetheless. It seems clear that Native American groups of Delaware did not participate in much interaction with Europeans and were under the virtual domination of the Susquehannock Indians of southern Lancaster County, Pennsylvania. The Contact Period ends with the virtual extinction of Native American lifeways in the Middle Atlantic

area except for a few remnant groups.

Contact Period sites are not expected for the study area, but if any were found to be present, they would clearly be eligible for listing on the National Register of Historic Places.

MANAGEMENT CONSIDERATIONS

Detailed statements of cultural resource management considerations are provided in a separate overview, but a few comments can be made here. The listing of known sites provided in the Appendix and the other planning studies is not a comprehensive statement of all of the prehistoric sites in the project area alignments and should be viewed as a sample of the sites. For management purposes, it is more useful to use the projected probability zones which are marked on the enclosed maps. The marked probability zones are based on the initial models reported by Custer et al. (1984: Attachment V) and have been adjusted based on field testing (Custer and Bachman 1985; Custer, Bachman, and Grettler 1986). It should be noted that the ~~unadjusted~~ models operated at an accuracy level greater than 90% and with the adjustments they are probably even more accurate.

Table 1 provides an estimate of the percentage of the area of the alignment within each data link that falls within each probability zone. These percentages can be used to estimate the relative amount of data recovery that might be required within any given data link. The high probability zones will not only have more sites, but they are also more likely to have more large sites eligible for listing on the National Register of Historic

TABLE 1: Prehistoric Site Probability Zones and Data Links

Data Link	Probability Zones		
	High	Medium	Low
A1.1	0	0	100
A1	0	8	92
A2	18	69	13
A3	0	14	86
A4	13	39	48
A5	0	0	100
A6	8	25	67
A7	25	13	62
A8	15	47	38
A9	51	21	28
A9.1	100	0	0
B1	0	0	100
B2	0	13	87
B3	0	38	62
B4	31	25	44
B5	17	33	50
B6	0	0	100
B7	0	6	94
B8	6	17	77
B9	14	27	59
B10	35	18	47
B11	100	0	0
B12	100	0	0
B13	18	82	0
B14	100	0	0
B15	0	50	50
B16	100	0	0
B17	83	17	0
B18	83	0	17
B19	7	44	49
C1	0	100	0
C2	0	0	100
C3	7	14	79
C4	0	14	86
C5	0	17	83
C6	10	19	71
C7	25	50	25
C8	0	69	31
C9	18	41	41
C10	27	63	10
C11	100	0	0
X1	6	58	38
X2	13	47	40
X3	13	87	0
X4	25	75	0

Places. Therefore, the high probability zones are the most sensitive areas for significant prehistoric cultural resources.

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**APPENDIX: KNOWN SITES
SITES, DATA LINKS, TIME PERIODS**

SITE NUMBER	DATA LINK	PALEO INDIAN	ARCHAIC	WOODLAND I	WOODLAND II
7NC-H-48	A2				
3-4-M	A5				
3-4-L	A5			Y	
3-4-K	A5				
3-4-J	A5				
7K-C-160	A8				
7K-C-71	A8				
7K-E-5	A8				
7K-C-57	A8				
7K-C-83	A8				
7K-F-61	A9				
7K-F-58	A9			Y	
7K-F-57	A9			Y	
7K-F-54	A9			Y	
7K-F-44	A9			Y	Y
7K-F-12	A9			Y	
7K-F-46	A9			Y	
7K-F-47	A9			Y	Y
7K-F-55	A9			Y	
7K-E-108	A9			Y	
7K-E-110	A9				
7K-F-48	A9			Y	Y
7K-F-2	A9				
7K-F-50	A9				
7NC-G-97	B2				
7NC-G-13	B3				
7NC-G-21	B4				
7NC-J-49	B6				
7NC-J-50	B6				
7NC-J-97	B7				
7NC-J-93	B7				
7NC-J-96	B7				
7NC-J-94	B7				
7NC-J-95	B7			Y	
7NC-J-92	B7				
7NC-J-110	B7			Y	
7NC-J-101	B7				
7NC-J-100	B7				
7NC-J-99	B7		Y		
3-9-E	B10				
7K-C-6	B10			Y	
7K-D-12	B19				
12-1-T	C4				
12-1-P	C4				
12-1-S	C4				
12-1-U	C4				
12-1-X	C4				
12-1-W	C4				

**APPENDIX: KNOWN SITES (CTD)
SITES, DATA LINKS, TIME PERIODS**

SITE NUMBER	DATA LINK	PALEO INDIAN	ARCHAIC	WOODLAND I	WOODLAND II
3-8-D	C7				Y
3-7-A	C7				
3-9-D	C8				
3-9-B	C8				
3-9-C	C8				
7K-D-8	C10		Y	Y	Y
7K-D-33	C10				
7K-D-69	C10		Y	Y	Y
3-6-B	X3				
7K-C-54	X3			Y	

SITES, DATA LINKS, COMPLEXES

SITE NUMBER	DATA LINK	COMPONENTS
7K-F-58	A9	BARKERS LANDING DELMARVA ADENA
7K-F-54	A9	BARKERS LANDING DELMARVA ADENA CAREY WEBB
7K-F-44	A9	BARKERS LANDING DELMARVA ADENA CAREY
7K-F-12	A9	BARKERS LANDING SLAUGHTER CREEK
7K-F-46	A9	BARKERS LANDING CAREY WEBB
7K-F-47	A9	BARKERS LANDING DELMARVA ADENA WEBB SLAUGHTER CREEK
7K-F-55	A9	BARKERS LANDING DELMARVA ADENA CAREY WEBB
7K-E-108	A9	BARKERS LANDING
7K-F-48	A9	BARKERS LANDING WEBB
7K-C-6	B10	BARKERS LANDING WOLFE NECK WEBB
7K-D-12	B19	BARKERS LANDING
3-8-D	C7	SLAUGHTER CREEK
7K-D-69	C10	BARKERS LANDING SLAUGHTER CREEK
7K-C-54	X3	WEBB