



Phase II and Phase III Archaeological Database and Inventory

Site Number: 18KE128

Site Name: KCARP PL-22

Prehistoric

Other name(s)

Historic

Brief Description:

Late Archaic & Middle Woodland short-term camps; Intact Early Woodland shell midden

Unknown

Site Location and Environmental Data:

Maryland Archaeological Research Unit No. 5

SCS soil & sediment code MtC2

Latitude 39.2711

Longitude -76.2053

Physiographic province Eastern Shore Coastal P

Terrestrial site

Underwater site

Elevation m

Site slope 6-10%

Ethnobotany profile available

Maritime site

Site setting

-Site Setting restricted

-Lat/Long accurate to within 1 sq. mile, user may need to make slight adjustments in mapping to account for sites near state/county lines or streams

Topography

- Floodplain
- Hilltop/bluff
- Interior flat
- Upland flat
- Ridgetop
- Terrace
- Low terrace
- High terrace
- Rockshelter/cave
- Hillslope
- Unknown
- Other

Ownership

- Private
- Federal
- State of MD
- Regional/county/city
- Unknown

Nearest Surface Water

Name (if any) Stavley Pond

Saltwater

Ocean

Estuary/tidal river

Tidewater/marsh

Freshwater

Stream/river

Swamp

Lake or pond

Spring

Minimum distance to water is 13 m

Temporal & Ethnic Contextual Data:

Paleoindian site

Woodland site

Contact period site

ca. 1820 - 1860

Archaic site

MD Adena

ca. 1630 - 1675

ca. 1860 - 1900

Early archaic

Early woodland

ca. 1675 - 1720

ca. 1900 - 1930

Middle archaic

Mid. woodland

ca. 1720 - 1780

Post 1930

Late archaic

Late woodland

ca. 1780 - 1820

Unknown historic context

Unknown prehistoric context

Unknown context

Ethnic Associations (historic only)

Native American

Asian American

African American

Unknown

Anglo-American

Other

Hispanic

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

- Multi-component
- Village
- Hamlet
- Base camp
- Rockshelter/cave
- Earthen mound
- Cairn
- Burial area
- Misc. ceremonial
- Rock art
- Shell midden
- STU/lithic scatter
- Quarry/extraction
- Fish weir
- Production area
- Unknown
- Other context

Historic

Urban/Rural?

Domestic

- Homestead
- Farmstead
- Mansion
- Plantation
- Row/townhome
- Cellar
- Privy

Industrial

- Mining-related
- Quarry-related
- Mill
- Black/metalsmith
- Furnace/forge
- Other

Furnace/forge

Other

Transportation

- Canal-related
- Road/railroad
- Wharf/landing
- Maritime-related
- Bridge
- Ford

Educational

Commercial

- Trading post
- Store
- Tavern/inn

Military

Battlefield

Fortification

Encampment

Townsite

Religious

- Church/mtg house
- Ch support bldg

Burial area

Cemetery

Sepulchre

Isolated burial

Bldg or foundation

Possible Structure

Post-in-ground

Frame-built

Masonry

Other structure

Slave related

Non-domestic agri

Recreational

Midden/dump

Artifact scatter

Spring or well

Unknown

Other context

Interpretive Sampling Data:

Prehistoric context samples

Soil samples taken N

Flotation samples taken Y

Other samples taken

Historic context samples

Soil samples taken

Flotation samples taken

Other samples taken



Phase II and Phase III Archaeological Database and Inventory

Site Number: 18KE128

Site Name: KCARP PL-22

Prehistoric

Other name(s)

Historic

Unknown

Brief Description:

Late Archaic & Middle Woodland short-term camps; Intact Early Woodland shell midden

Diagnostic Artifact Data:

Projectile Point Types		Koens-Crispin	
Clovis	<input type="checkbox"/>	Perkiomen	<input type="checkbox"/>
Hardaway-Dalton	<input type="checkbox"/>	Susquehanna	<input type="checkbox"/>
Palmer	<input type="checkbox"/>	Vernon	<input type="checkbox"/>
Kirk (notch)	<input type="checkbox"/>	Piscataway	<input type="checkbox"/>
Kirk (stem)	<input type="checkbox"/>	Calvert	<input type="checkbox"/>
Le Croy	<input type="checkbox"/>	Selby Bay	<input type="checkbox"/>
Morrow Mntn	<input type="checkbox"/>	Jacks Rf (notch)	<input type="checkbox"/>
Guilford	<input type="checkbox"/>	Jacks Rf (pent)	<input type="checkbox"/>
Brewerton	<input type="checkbox"/>	Madison/Potomac	<input type="checkbox"/>
Otter Creek	<input type="checkbox"/>	Levanna	<input type="checkbox"/>

Prehistoric Sherd Types

Marcey Creek	<input type="checkbox"/>	Popes Creek	<input type="checkbox"/>	Shepard	<input type="checkbox"/>	Keyser	<input type="checkbox"/>
Dames Qtr	<input type="checkbox"/>	Coulbourn	<input type="checkbox"/>	Townsend	<input type="checkbox"/>	Yeocomico	<input type="checkbox"/>
Selden Island	<input type="checkbox"/>	Watson	<input type="checkbox"/>	Minguannan	<input type="checkbox"/>	Monongahela	<input type="checkbox"/>
Accokeek	<input type="checkbox"/>	Mockley	<input type="checkbox"/>	Sullivan Cove	<input type="checkbox"/>	Susquehannock	<input type="checkbox"/>
Wolfe Neck	<input type="checkbox"/>	Clemson Island	<input type="checkbox"/>	Shenks Ferry	<input type="checkbox"/>		
Vinette	<input type="checkbox"/>	Page	<input type="checkbox"/>	Moyaone	<input type="checkbox"/>		
				Potomac Crk	<input type="checkbox"/>		

Historic Sherd Types

Earthenware		Ironstone		Staffordshire		Stoneware	
Astbury	<input type="checkbox"/>	Jackfield	<input type="checkbox"/>	Tin Glazed	<input type="checkbox"/>	English Brown	<input type="checkbox"/>
Borderware	<input type="checkbox"/>	Mn Mottled	<input type="checkbox"/>	Whiteware	<input type="checkbox"/>	Eng Dry-bodied	<input type="checkbox"/>
Buckley	<input type="checkbox"/>	North Devon	<input type="checkbox"/>	Porcelain	<input type="checkbox"/>	Nottingham	<input type="checkbox"/>
Creamware	<input type="checkbox"/>	Pearlware	<input type="checkbox"/>			Rhenish	<input type="checkbox"/>
						Wt Salt-glazed	<input type="checkbox"/>

All quantities exact or estimated minimal counts

Other Artifact & Feature Types:

Prehistoric Artifacts		Other fired clay	
Flaked stone	615	Human remain(s)	<input type="checkbox"/>
Ground stone	<input type="checkbox"/>	Modified faunal	10
Stone bowls	<input type="checkbox"/>	Unmod faunal	986
Fire-cracked rock	113	Oyster shell	<input checked="" type="checkbox"/>
Other lithics (all)	11	Floral material	<input type="checkbox"/>
Ceramics (all)	34	Uncommon Obj.	<input type="checkbox"/>
Rimsherds	<input type="checkbox"/>	Other	<input type="checkbox"/>

Prehistoric Features

Mound(s)	<input type="checkbox"/>	Storage/trash pit	<input type="checkbox"/>
Midden	<input type="checkbox"/>	Burial(s)	<input type="checkbox"/>
Shell midden	<input checked="" type="checkbox"/>	Ossuary	<input type="checkbox"/>
Postholes/molds	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
House pattern(s)	<input type="checkbox"/>	Other	<input type="checkbox"/>
Palisade(s)	<input type="checkbox"/>		
Hearth(s)	<input type="checkbox"/>		
Lithic reduc area	<input type="checkbox"/>		

Lithic Material

Jasper	<input checked="" type="checkbox"/>	Chalcedony	<input type="checkbox"/>	European flint	<input type="checkbox"/>
Chert	<input checked="" type="checkbox"/>	Ironstone	<input checked="" type="checkbox"/>	Basalt	<input type="checkbox"/>
Rhyolite	<input checked="" type="checkbox"/>	Argilite	<input checked="" type="checkbox"/>	Unknown	<input type="checkbox"/>
Quartz	<input checked="" type="checkbox"/>	Steatite	<input type="checkbox"/>	Other	<input type="checkbox"/>
Quartzite	<input checked="" type="checkbox"/>	Sandstone	<input type="checkbox"/>		

Dated features present at site

Historic Artifacts		Tobacco related	
Pottery (all)	<input type="checkbox"/>	Activity item(s)	<input type="checkbox"/>
Glass (all)	<input type="checkbox"/>	Human remain(s)	<input type="checkbox"/>
Architectural	<input type="checkbox"/>	Faunal material	<input type="checkbox"/>
Furniture	<input type="checkbox"/>	Misc. kitchen	<input type="checkbox"/>
Arms	<input type="checkbox"/>	Floral material	<input type="checkbox"/>
Clothing	<input type="checkbox"/>	Misc.	<input type="checkbox"/>
Personal items	<input type="checkbox"/>	Other	<input type="checkbox"/>

Historic Features

Const feature	<input type="checkbox"/>	Privy/outhouse	<input type="checkbox"/>	Depression/mound	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
Foundation	<input type="checkbox"/>	Well/cistern	<input type="checkbox"/>	Burial(s)	<input type="checkbox"/>	Other	<input type="checkbox"/>
Cellar hole/cellar	<input type="checkbox"/>	Trash pit/dump	<input type="checkbox"/>	Railroad bed	<input type="checkbox"/>		
Hearth/chimney	<input type="checkbox"/>	Sheet midden	<input type="checkbox"/>	Earthworks	<input type="checkbox"/>		
Postholes/molds	<input type="checkbox"/>	Planting feature	<input type="checkbox"/>	Mill raceway	<input type="checkbox"/>		
Paling ditch/fence	<input type="checkbox"/>	Road/walkway	<input type="checkbox"/>	Wheel pit	<input type="checkbox"/>		

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: 3095 +/- 80 years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

SI-3245: Oyster shell sample collected in 1974 from an unknwn location at the site.

Low

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

Additional radiocarbon results available



Phase II and Phase III Archaeological Database and Inventory

Site Number: 18KE128

Site Name: KCARP PL-22

Prehistoric

Other name(s)

Historic

Brief

Description:

Late Archaic & Middle Woodland short-term camps; Intact Early Woodland shell midden

Unknown

External Samples/Data:

Collection curated at

Additional raw data may be available online

Summary Description:

KCARP PL-22 (18KE128) is a multicomponent site with an intact Early Woodland period shell midden and Late Archaic and Middle Woodland short-term camp occupations. The site is located in an agricultural field on Fairlee Neck in Kent County, Maryland. It overlooks the confluence of a small unnamed stream and the Chesapeake Bay on one side and an embayed lagoon on another. A series of low knolls interrupt the generally flat surface of the site. Although oyster shell covers an area of about 2.5 acres, the main concentration of the site was found on one knoll at the highest elevation point in the field, and measures approximately 350 m long by 9 m wide.

The Kent County Archaeological Research Project (KCARP) involved a systematic regional surface survey, artifact collection, and analysis along the western shore of Kent County. The overall aim of the study was to assess the development of the interrelated changes in the prehistoric environment and resource utilization during the past 7,000-8,000 years along portions of the eastern shore of the Chesapeake Bay. Of particular interest was the nature and processes involved in the development of the oyster base subsistence system. Specific goals of the survey were to identify previously unidentified cultural resources within the study area and ultimately to determine if any of those resources were eligible for listing on the National Register of Historic Places. Funding was in part provided by the Maryland Historical Trust and three seasons of work were conducted in 1972/73, 1974, and 1976. The study area consisted of 191 km² of western Kent County, including 93 km of shoreline. It was bounded on the north by the Sassafras River, on the east by the Morgan and Woodland Creeks, on the south by a divide separating the Chesapeake Bay and the Chester River, and on the west by the Chesapeake Bay. The study period ranged from the establishment of the Bay (and the drowning of the ancestral Susquehanna River) to the contact period (ca. AD 1600).

The project began in 1972 with archival and environmental research. Fieldwork was conducted in late 1972 and 1973. The archeological investigations included pedestrian survey of several land tracts and controlled surface collection. Artifact clusters were collected in units of 30 m square grid systems. Approximately 7 m distance was maintained between fieldwalkers. A site or artifact cluster was defined as any 30 m² collection unit or group of contiguous units in which each contained a minimum of 40 artifacts. All artifacts were retained during the surface collection except for fire-cracked rock, oyster shells, and unmodified raw material (rocks and pebbles). Limited excavation of shovel tests pits was also done. Additionally, shell samples were collected from cliff exposures of 23 coastal archeological sites and 5 marshes for radiocarbon dating, and from a former sub-estuary for dating and pollen analysis. Archeological investigations were renewed in 1974 and again in 1976. The field seasons consisted of a continuation of the systematic surface survey, and artifact collection and analysis, with the addition of test unit excavations at a few sites. During the test unit excavations, column soil samples were acquired for future microanalysis. Test units were excavated in arbitrary 20 cm levels. An additional 61 radiocarbon samples were collected from 29 different shell sites during the 1974 and 1976 investigations. Results of the C14 dating led the excavators to conclude that oyster resources (*ostrea virginica*) were being exploited as early as 5,700 years ago in the Chesapeake region (roughly the Middle Archaic period).

A total of 87 land tracts were investigated during the three years of survey. The entire shoreline of Kent County was examined on foot and the shorelines of local rivers were examined from a shallow draft boat. The results of the 1970s surveys were provided in several volumes that consisted of computer printouts of individual clusters of artifacts/sites. Only two categories of stone artifacts were recognized, "worns" (tools) and "unworns" (debitage). Standard tool categories and cultural-historical types were not used. No catalogue forms that summarized the available data were provided.

A re-analysis of the prehistoric artifacts recovered during the 1970s surveys and excavations was carried out in 1983 by archeologists from the University of Delaware and funded by a National Park Service Survey and Planning grant from the Maryland Historical Trust. The aim of that re-analysis was to increase the research utility of the collection, which was then on deposit with the Division of Archeology, Maryland Geological Survey. The re-analysis provided more comprehensive descriptions of excavated materials, catalogues of surface collected materials, and in a few cases, listings of types of special interest. Artifacts were recorded as flakes, flake tools, staged bifaces, Late Archaic/Woodland I points (from after ca. 5000 BC-AD 1000), Woodland II points (ca. AD 1000-1600), other points, cores, indeterminate objects, groundstone artifacts and ceramics. Points were not designated to any particular cultural type but to one of the time periods or 'other points' categories as noted above. The re-analysis provided the most updated and more comprehensive data of the entire survey assemblage. It is that data that is given in the table above.

Artifacts were surface collected from site 18KE44 during the 1974 survey, at which time it was designated KCARP PL-22. A total of 455 lithic artifacts were collected from the site's surface. There were 351 pieces of debitage (175 quartz, 3 quartzite, 79 chert, 9 jasper, 6 rhyolite, 11 argillite, 39 ironstone, and 29 other) and 9 cores (4 quartz, 5 chert). There were 14 tools including 11 flake tools (3 quartz, 4 chert, 2 jasper), 1 chert core tool, and 2 chert scrapers. A total of 80 staged bifaces were recorded (44 quartz, 2 quartzite, 27 chert, 1 argillite, and 6 ironstone), as well as 3 Late Archaic/Woodland I stemmed projectile points (2 quartz, 1 chert). Three unidentified groundstone objects were also recorded.

An oyster shell sample was collected from the site in 1974 for radiocarbon dating. The resulting date was 3095 +/- 80 BP (SI-3245), calibrated to 1523-1124 BC to 2-sigma using Intcal09. This date would seem to indicate a Late Archaic occupation at the site. However, the general validity of the samples was questioned during the 1983 re-analysis. It was recognized that when diagnostics were identified with a shell midden, they appeared to be in the surface collection from around the midden and not in the midden itself (as is the case here), and when diagnostic artifacts were present within a midden, the diagnostics did not fit with the radiocarbon date. The results of the radiocarbon dating led researchers to conclude that there are severe problems with Upper Chesapeake shell dates. Furthermore, these kinds of shell dates should not be used to argue for the existence of Middle Archaic shellfish utilization as some archeologists have.

In 1989, the property owner had tentative plans to construct a house on a portion of the site. At that time, data recovery excavations were conducted by the University of Delaware Center for Archaeological Research. A transect of 20 shovel test pits was excavated across the knoll on which the house was to be constructed. In all but one of these tests, a plowzone containing oyster shells and a few artifacts, mainly flakes, overlay red sandy clay with dense pebble and gravel inclusions. However, the test excavated at the highest elevation point of the site (where the house was to be constructed) contained a dense concentration of abundant oyster shells within a dark, almost black, organic-rich soil below the 30 cm plowzone. This soil/shell horizon, which was less than 10 cm thick, closely resembled intact and undisturbed midden deposits at nearby site 18KE17, and was thought to be of similar origin.

Two 1 m² test units were excavated adjacent to the shell-filled shovel test and also exposed the shell midden deposits. Additional 1x1 m units were then excavated to determine the extent of the intact midden deposits and sample their contents. One 50 cm block from each unit was retained as a flotation sample. All soils were screened through ¼" mesh and oyster shell samples were taken from all midden excavation units. All units revealed a similar profile to



Phase II and Phase III Archaeological Database and Inventory

Site Number: 18KE128

Site Name: KCARP PL-22

Prehistoric

Other name(s)

Historic

Brief

Description:

Late Archaic & Middle Woodland short-term camps; Intact Early Woodland shell midden

Unknown

that seen in the initial shovel test with very little variation in midden thickness or depth. Based on the excavations, the intact midden deposits had an oval shape measuring 9 m long and 4 m wide and covered an area of approximately 30 square meters. In all, 16 square meters of the midden were excavated. It was thought that the midden may have been especially thick in this location on the knoll and that this portion of the larger midden survived erosion and disturbance by plowing.

A total of 315 lithic and ceramic artifacts were recovered from the site. There were 94 pieces of debitage (12 quartz, 2 quartzite, 59 chert, 17 jasper, 3 ironstone, 1 other), 32 flake tools and utilized flakes (3 quartz, 1 quartzite, 28 chert), 1 chert Early Archaic Amos point, 1 quartz Pequea (Middle Archaic-Middle Woodland) point, 5 bifaces (4 chert, 1 ironstone), 16 cores (9 quartz, 2 quartzite, 2 chert, 3 jasper), and 11 miscellaneous objects (10 quartz, 1 quartzite). There were also 8 other lithic artifacts (7 hammerstones and 1 abrader) and 113 pieces of fire-cracked rock. The Amos point, which was recovered from the plowzone, likely relates to an Early Archaic short-term camp that predates the midden. The Pequea point was found within the midden itself. Although the date range for Pequea points is large (ca. 5500 BC-AD 800) they are more common components of assemblages dating to the earlier periods. However, these points also occur in Early and Middle Woodland contexts. Numerous diagnostic ceramic sherds were found in both plowzone and midden contexts. Of the 34 sherds recovered, 33 were Wolfe Neck (Early Woodland) sherds. The remaining sherd was an example of shell and crushed clay-tempered Wilgus ware (early Middle Woodland), which was found in the plowzone and likely post-dates the intact midden. The Wolfe Neck sherds were almost equally distributed within the midden itself (n=17) and the plowzone above the midden (n=16). Fragments of at least four separate vessels were present, all of which had S-twist cordage impressions. Based on the find of the point in association with Early Woodland ceramics, it was suggested that the most likely age range for the intact midden at 18KE128 is 700-400 BC (Early Woodland).

Thirteen flakes, all with cortex and all of the same material type, were encountered within a single 50x50 cm block in the midden. The flakes formed a distinct cluster in an otherwise widely distributed pattern of flakes and flake tools. Six of the flakes were triangular in shape and had been retouched on 3 sides. The remaining flakes showed no sign of retouch. It was suggested that the retouched flakes may have been used in compound tools or possibly as components of a fish spear. The find of multiple bifaces at the site, many with cortex, suggested that projectile point production took place at the site. It was further suggested that the co-occurrence of oyster shell and fire-cracked rock indicated that roasting on stone-lined hearths or rock platforms, or stone boiling, were the methods used for oyster processing and cooking.

Soil samples from eight 50x50 cm excavation units located in various sections of the excavated midden were subjected to flotation analysis. Seeds, shells, and other ecofacts were identified in the light and heavy fraction samples. A total of 262 identifiable charred seeds were present including 224 sumac (*Rhus* sp.), 26 Amaranth, and 12 *Cenopodium* seeds. The small seeds from the Amaranth and *Cenopodium* were available in late summer and early fall and were probably crushed to form a flour used for thickening soups, stews, and gruels; however, these plants also had medicinal uses. The relatively large number of sumac seeds was interesting because they do not commonly appear in assemblages from other sites on the Delmarva Peninsula. Sumac berries can be boiled to make tea or in more concentrated forms can be used medicinally. The berries are available in the late summer and early fall. A very small number of hickory nut and acorn shell fragments were also found indicating that these nut foods, available mainly in the fall, were eaten by the site's occupants.

Faunal remains were also recovered from the flotation samples. Included were numerous small unidentifiable charred and uncharred bone fragments, fish scales, soft shell crab and razor crab fragments, and barnacles. The barnacles were probably not food remains but were attached to the oyster shells. Therefore, they were not included in the totals in the table above. Numerous land snail species were also identified in the faunal assemblage. The various species suggested that at the time the midden was formed, the environment was a wooded setting interspersed with open, grassy, dry soil settings. Oyster shell samples from 19 sections of the midden were analyzed. Each sample contained 50 shells. Results of the analysis revealed that 95% of the oysters were harvested from shallow, but not intertidal, water with a low salinity level, and rested on hard mud with gravels and some sand. Given the local conditions, the oysters were most likely harvested close to the site in prehistoric times. Less than 5% of the shell showed signs of burning, intimating that they were probably steamed or baked. This is consistent with presence of fire-cracked in the midden. Analysis of the growth data showed that the oysters were harvested primarily during late August/early September. As no totals for any of the faunal remains except for the oyster shell (n=950) were provided in the text, minimum estimates included in the table above were 986 unmodified faunal items and 10 modified faunal items (comprised of the charred bone fragments).

Several historic artifacts were recovered from the samples but were determined to be intrusive field scatter.

KCARP PL-22 (18KE128) is a multicomponent site with an intact Early Woodland period shell midden and possible Late Archaic and Middle Woodland short-term camp occupations. Food procurement and processing, of both marine and terrestrial sources, as well as lithic tool production were activities conducted at the site. The most intensive period of occupation appears to have been sometime between 700 BC and 400 BC, and during the late summer and early fall rather than the winter months. This suggests a divergence from the observed pattern which showed that shell midden sites on the Delmarva Peninsula were commonly occupied during the winter months. The vast shell accumulations at the site were thought to have resulted from many repeated short-term occupations. Excavations at 18KE128 provided a glimpse into the prehistoric use of the site but also provided a basis for comparison with other contemporaneous nearby sites. Recent aerial photos do not show a house constructed at the mapped site location.

External Reference Codes (Library ID Numbers):

00005907, 00005909, 00005911, 00005936, MDARC33