



Phase II and Phase III Archaeological Database and Inventory

Site Number: 18AN284

Site Name: Smithsonian Pier

Prehistoric

Other name(s) Wright # R/F-2, Java

Historic

Unknown

Brief Description: Middle to Late Woodland shell midden

Site Location and Environmental Data:

Latitude 38.8886 Longitude -76.5329
Elevation m Site slope 0

Maryland Archaeological Research Unit No. 7

SCS soil & sediment code 33) Cm

Physiographic province Western Shore Coastal

Terrestrial site Underwater site

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

Ownership

Private
Federal
State of MD
Regional/county/city
Unknown

Nearest Surface Water

Name (if any) Rhode River
Saltwater **Freshwater**
Ocean Stream/river
Estuary/tidal river Swamp
Tidewater/marsh Lake or pond
Spring
Minimum distance to water is 0 m

Temporal & Ethnic Contextual Data:

Paleoindian site Woodland site
Archaic site MD Adena
Early archaic Early woodland
Middle archaic Mid. woodland
Late archaic Late woodland
Unknown prehistoric context

Contact period site ca. 1820 - 1860
ca. 1630 - 1675 ca. 1860 - 1900
ca. 1675 - 1720 ca. 1900 - 1930
ca. 1720 - 1780 Post 1930
ca. 1780 - 1820
Unknown historic 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 Misc. ceremonial
Village Rock art
Hamlet Shell midden
Base camp STU/lithic scatter
Rockshelter/cave Quarry/extraction
Earthen mound Fish weir
Cairn Production area
Burial area Unknown
Other context

Historic

Urban/Rural? Rural

Domestic

Homestead
Farmstead
Mansion
Plantation
Row/townhome
Cellar
Privy

Industrial

Mining-related
Quarry-related
Mill
Black/metalsmith

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
Flotation samples taken Other samples taken Pollen, oyster shells

Historic context samples Soil samples taken
Flotation samples taken Other samples taken



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Diagnostic Artifact Data:

Projectile Point Types		Koens-Crispin	
Clovis	<input type="checkbox"/>	Perkiomen	<input type="checkbox"/>
Hardaway-Dalton	<input type="checkbox"/>	Susquehana	<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	4	Shepard	<input type="checkbox"/>	Keyser	<input type="checkbox"/>
Dames Qtr	<input type="checkbox"/>	Coulbourn	<input type="checkbox"/>	Townsend	145	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	872	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	2	Staffordshire	<input type="checkbox"/>	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	1	Eng Dry-bodied	<input type="checkbox"/>
Buckley	<input type="checkbox"/>	North Devon	<input type="checkbox"/>	Porcelain		Nottingham	<input type="checkbox"/>
Creamware	<input type="checkbox"/>	Pearlware	1		<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	325	Human remain(s)	<input type="checkbox"/>
Ground stone	10	Modified faunal	26
Stone bowls	<input type="checkbox"/>	Unmod faunal	2995
Fire-cracked rock	205	Oyster shell	<input checked="" type="checkbox"/>
Other lithics (all)	267	Floral material	<input checked="" type="checkbox"/>
Ceramics (all)	1950	Uncommon Obj.	3
Rimsherds	<input type="checkbox"/>	Other	<input type="checkbox"/>

Prehistoric Features

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

Lithic Material

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

Dated features present at site

Middle Woodland - Late Woodland shell midden

Historic Artifacts		Tobacco related	
Pottery (all)	4	Activity item(s)	<input type="checkbox"/>
Glass (all)	<input type="checkbox"/>	Human remain(s)	<input type="checkbox"/>
Architectural	16	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.	4
Personal items	1	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: +/- years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

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



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External Samples/Data:

Collection curated at Smithsonian Environmental Research Center

Additional raw data may be available online

Summary Description:

The Smithsonian Pier Site (18AN284) is a Middle to Late Woodland shell midden located south of Edgewater in Anne Arundel County, Maryland. The site is situated on a broad low terrace along the shore, and near the mouth, of the Rhode River. The Rhode River is a tributary of the nearby Chesapeake Bay. Embayed Creeks are situated to the north and south. The water is brackish and there are no fresh water sources nearby, except seasonal or intermittent streams in shallow ravines to the north and south of the site. Although cleared and under cultivation in the middle of the 17th century and later, two phases of secondary forest growth now cover most of the surrounding landscape. Larger tulip poplar and sweet gum trees cover most of the area, with smaller locust, sweet gum, oak, elm, and tulip poplar in the western portions of the site area. Ground cover is heavy throughout, consisting of honey suckle, wild grape, poison ivy, greenbriers, and other low shrubs and climbing vines. The Rhode River would have provided a wide range of food resources, including fish, shellfish, waterfowl, leafy plants, tubers, and terrestrial and marine mammals and reptiles. The nearby Chesapeake Bay and its tributaries would also have served as a natural corridor for transportation, communication, and trade. Soils at the site are well-drained loamy soils with fine sand of the Marr-Westphalia-Sassafras association, subject to severe erosion, particularly on slopes. These well drained soils would have been attractive to both prehistoric and historic peoples.

The site was first identified in 1967, by Henry T. Wright of the University of Michigan. At the request of the Smithsonian Institution, Wright conducted a survey of two land tracts that the Smithsonian had recently acquired and on which they would be developing what was then called the Chesapeake Bay Center for Field Biology. The survey would document sites on the properties, which might otherwise be unwittingly damaged by future development of the Center.

Wright's 1967 work consisted primarily of a walkover survey of the two tracts. Visibility was poor, as much of the formerly plowed landscape was overgrown and treefalls, animal burrows, and other opportunistic subsurface exposures were rare. Nonetheless, two concentrations of shell were noted along a terrace near the mouth of the Rhode River. These two shell heaps were designated the Smithsonian Pier Site (18AN284) and Smithsonian Pier West (18AN285). Future researchers would eventually determine that these two sites were really one very large midden and subsequent practice has been to consider the entire midden 18AN284. That practice is followed here.

In December of 1967, Wright recovered surface materials, performed soil boring sampling, and excavated a single 1.524 X 1.524 m (5 X 5 ft) test unit was excavated in the western portion of the midden. Excavation proceeded in natural levels and all soils were screened through hardware cloth, with the exception of a 30.5 cm (1 ft) column which was to be removed in its entirety. Frozen soil ultimately presented this sample from being removed.

Prehistoric artifacts recovered during the 1967 walk-over survey and test unit excavation from 18AN284 include 1 biface tip, 1 core, 2 flakes, 7 pieces of shatter, 3 pieces of ground hematite, 265 other lithics (including 1 hammerstone, 1 abrader, and 263 pebbles), 91 possible fire-cracked rock fragments, 21 shell-tempered sherds, a shell-tempered pipe stem, 5 other pieces of burned clay, 40 animal bone fragments, and a snail shell. The evidence suggested that the shell midden may represent an intact Selby Bay occupation. In addition to the prehistoric remains, a few historic objects were encountered on the surface and in the uppermost strata of the test unit. The historic assemblage included a brick fragment, a piece of oyster shell mortar, a hand-wrought nail, 2 ironstone sherds, and a piece of coal.

The next documented archeological work at the site did not occur until December of 1989. The work was conducted as part of a Phase I reconnaissance of the 55 acre parcel of Smithsonian land which was going to be developed with the construction of a new educational facility and the "Java History Trail". The Smithsonian property was now known as the Smithsonian Environmental Research Center, a name which it still retains. The reconnaissance survey was completed in compliance with Section 106 of the National Historic Preservation Act of 1966 (as amended) and the federal government's Advisory Council on Historic Preservation's Regulations (36CFR800). Although the 3 meter (10 ft) wide trail was designed to traverse a small section of the Research Center's lands, the entire 55 acre parcel was surveyed for archeological sites which may be impacted by the trail as well as sites within its viewing distance which could be incorporated into the public history interpretive program at the Center.

The Phase I work consisted of a pedestrian survey of the entire project area and the excavation of 347 shovel test pits (STPs) placed at 20 m intervals across all portions of the property, except in low-lying areas containing wet soils, along marsh edges, and on slopes greater than 20 degrees. If artifacts were found in one of the shovel tests, but no in adjoining STPs, the grid was reduced to 10 meter intervals from the STP containing the artifacts. If no cultural material was found, the grid was again reduced to 5 meter intervals and finally to 2.5 m intervals. If no additional material was found, then the artifact(s) from the original STP were considered an isolated find. STPs measured approximately 50 cm in diameter and extended through plowzone and at least 10 cm into the B Horizon. All soils were screened. In all, 21.6 acres were shovel tested in this manner.

In the vicinity of 18AN284, a total of 45 STPs were excavated along a north/south and east/west gridline. All of the shovel tests revealed that the area had been plowed at one time, but areas were preserved where a 20 cm intact cultural layer existed between the plowzone and subsoil. The STPs also revealed that 18AN284 and 18AN285 were a single shell midden site (as mentioned previously) extending over roughly 1 acre of area. Although heavy concentrations of shell were noted in all of the STPs, only 9 of the shovel tests produced manmade objects. The recovered assemblage included 1 biface fragment, 2 flakes, 1 chunk, 1 abraded stone, 2 sand and quartz-tempered sherds, 1 burnt sand and shell-tempered sherd, 12 shell-tempered sherds, 2 fired clay balls, 3 animal bones and a single pearlware sherd. The presence of rhyolite lithics and lightly shell-tempered pottery, again, suggested a Selby Bay occupation.

Based on the above findings, avoidance of 18AN284 was recommended. If the site could not be avoided during construction of the educational facility and trail, then Phase II testing was recommended to determine the significance and research potential of the site. Such a Phase II project was carried out in January of 1995.

The Phase II work for the construction of the Smithsonian Environmental Research Center education building entailed the excavation of an additional 89 shovel test pits, along with three 2 X 1 m test units through the midden. Shovel testing was undertaken at 10 m intervals across the Area of Potential Effects (APE) for the construction of the education building. All units were laid out in advance with a measuring tape and transit. Each shovel test measured approximately 40 cm in diameter and was excavated stratigraphically at least 10 cm into sterile subsoil. The spoil was screened through hardware mesh, stratigraphy and artifact finds were documented on standardized forms, and STP holes were backfilled. The shovel tests were excavated to better identify the horizontal extent of cultural deposits within the APE and to map artifact densities to inform the placement of the 1 X 2 m units. Shovel tests revealed large quantities of oyster shell, intact in some areas, but few temporally diagnostic artifacts.



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Unknown

The formal excavation units were also excavated stratigraphically and the soil was screened through hardware cloth. Subsoils were excavated only as long as artifacts were recovered: shovel testing having already demonstrated that cultural deposits did not extend into the subsoil. Left-hand oyster valves were retained for quantification and sampling. A minimum of 30 valves was retained for permanent curation. All of the test units were within the shell deposit. Two locations were selected because shovel testing indicated that a quantity of temporally diagnostic prehistoric cultural material might be found at those locations. The third location was chosen to sample the intact portion of the shell midden. Soil color and texture, artifact content, depth of stratum, soil anomalies and features, plan and profile views and other relevant data were recorded on standardized forms.

Stratigraphic excavation of the test units, coupled with the findings from the shovel testing, suggest a large midden that was created primarily during the Selby Bay phase of the Middle Woodland period (AD 200-800). The midden may be one component of a larger site that includes a habitation area west of the midden. Food processing, storage, preparation, and consumption are indicated by Mockley-ware vessels of different sizes, oyster shells, bones of deer, turtle and bird, and possible grinding implements. A small number of exotic lithic materials (10 rhyolite and jasper flakes and 5 fragments of steatite) suggest continued contact with western Maryland, Delaware, and Pennsylvania. The site may have been occupied repeatedly throughout the Late Middle Woodland and into the Late Woodland period. Rappahannock series pottery was recovered from deposits that appear to have been mixed as a result of plowing. Rappahannock sherds occur in association with Mockley sherds. Thus, while at least one area of definitively intact Selby Bay phase deposits survived, the same cannot be said of the Late Woodland Little Round Bay deposits.

The Phase II Assemblage collected in 1995 consisted of 1 biface, 20 flakes, 3 pieces of shatter, 5 steatite fragments, 2 pieces of polished stone, at least 14 pieces of fire-cracked rock, 105 shell-tempered sherds, 193 Mockley sherds, 60 Rappahannock sherds, 138 unidentified sherds, 10 mussel shell fragments, at least 1,867 oyster shells, 2 soft-shell clam fragments, 2 Periwinkle shells, 4 terrestrial snail shells, 17 deer bones, 1 small mammal bone, 11 bird bones, 112 indeterminate mammal bones, 7 animal bones, and 2 pieces of charcoal. In addition to these prehistoric items, a few historic artifacts were recovered including 12 brick fragments, a quartz fragment, a 1944 dime, a wire nail, a whiteware sherd, and 2 pieces of coal. Based on these findings and the fact that the educational center could not be re-designed in such a way that the site would be avoided, Phase III data recovery was recommended.

Phase III work was carried out in June of 1995 and entailed the excavation of seventeen 2 X 1 m units and two 1 X 1 m units into intact portions of the shell midden. Placements were based on all of the shovel testing and test unit data that had been collected during previous studies. Each unit was excavated stratigraphically at least 10 cm into the B Horizon. Since surviving remnants of the shell midden and the buried A Horizon rarely exceeded 10 cm in depth, researchers did not excavate strata in arbitrary levels. Spoil was screened through hardware cloth for artifacts and the stratigraphy was documented. All oyster shell above 2 cm in length was collected and weighed in the field and a sample of at least 40 upper and lower valves was retained for detailed analysis and permanent curation. All artifacts and non-oyster mollusk shells were collected and bagged by unit. Soil color and texture, artifact content, depth of stratum, soil anomalies and features, plan and profile views were recorded on standardized forms.

Two liter soil flotation samples were collected from each intact stratum for each unit (i.e. for the shell midden and the buried A Horizon). In addition, researchers collected pollen column samples from each of three test units. Samples were collected from below intact shell midden in 2 cm increments through the buried A Horizon to 10 cm into the B Horizon. The three units were selected on the basis of thick, intact shell midden and well-defined A-horizons.

The excavation units revealed a fairly consistent stratigraphy throughout the site. Stratum 1 was a humic layer developed over the past 30 to 50 years (as of 1995) during the establishment of the modern mature forest cover. This layer typically yielded few prehistoric or historic artifacts, and those few probably derived from natural disturbances such as overturning trees and rodent activity. Stratum 2A is a plowzone and, like the humus, appears in all of the units. This stratum probably was created early in the historic occupation of the site (2nd half of the 17th century) and continued to develop into the early 20th century, at which time the land was devoted to pasturage and preserved from the destructive effects of mechanized plowing. Cultural materials recovered from Stratum 2A include Middle Woodland (Pope's Creek and Selby Bay phases) and Late Woodland (Little Round Bay phase) pottery and stone tools, intermixed with some 19th and 20th century artifacts, with Selby Bay phase Mockley pottery dominating the assemblage of temporally diagnostic artifacts.

Stratum 2B is the shell midden, comprised primarily of oyster valves, and varying considerably in its state of preservation, absent in some units and minimally represented in others. Stratum 2B yielded most of the inorganic and organic cultural materials recovered from the site, but did not exhibit any definable cultural features. Wherever identified at the Smithsonian Pier site, the shell midden appears to be intact. Limited disturbances arising from bioturbation and, presumably, the effects of aboriginal scavenging and trampling were observed. Few ceramic mends were identified in individual units, suggesting secondary deposition (discard away from the point of use) rather than primary deposition and activity areas. The clustering of certain classes of artifacts does suggest, however, that the surviving intact deposits represent relatively unmixed trash. The deposits represent well-defined activities occurring elsewhere on the site, albeit probably apart from the shell midden. Most of the surviving shell midden appears to be Selby Bay phase vintage, with the earlier Pope's Creek and later Little Round bay phase materials occurring in the plowzone. The midden might be characterized best as a series of discrete and overlapping piles of oyster shell and other prehistoric debris truncated and smeared largely through plowing and possibly through historic period shell quarrying.

The buried A Horizon (Stratum 2C) underlying the shell midden contains relatively few cultural materials, the temporally diagnostic objects consisting solely of Mockley pottery. Evidence of structures, hearths, and other domestic features predating significant shell midden formation may survive in the surrounding area, however, the sampling design was planned around recovery of representative samples of refuse, not the broad exposure necessary for uncovering postmold patterns or other, less frequently occurring features. Such features may survive beyond the limits of the shell midden. Although several features intruding the A Horizon were noted, all appeared to be products of bioturbation.

Oyster shell analysis (including the identification and quantification of parasites) indicates a stable, mature marine environment. The mesohalic waters discouraged many predators, allowing the oysters to proliferate and provide a reliable source of food for the area's human inhabitants. Despite long-term seasonal occupation, or repeated visits by Selby Bay and Little Round Bay phase peoples, the ages at death for the oysters followed more or less normal distributions, with average ages between five and six years.

Faunal analysis suggests opportunistic hunting and fishing, with deer and turtles being the principal prey, with some indeterminate bird species and black drumfish also exploited. Analysis of the deer elements indicates nearby kills, with the entire carcass returned to the site for butchery. Projectile points and generalized bifaces reflect hunting, but no fishing artifacts (e.g. bone or shell fishing hooks, netsinkers) were recovered. The small, limited tool assemblage and the relative scarcity of bone, suggest limited concern with hunting and fishing and a focus on shellfish and shellfish processing. Significantly, crab remains are virtually absent.



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Floral analysis also revealed little interest on the part of the prehistoric inhabitants in plant gathering or horticulture at the Smithsonian Pier site (see linked Ethnobotanical profile). Although hickory nutshell fragments were recovered through flotation, they were few in number and small in size. Black walnut shells were also present, along with sunflower, goosefoot, bean, and 5 squash rind fragments. The presence of weed pollen points to the periodic occupation of the site. The recovery of maize and legume pollen from the B Horizon, on the other hand, is more difficult to interpret. Did they derive from Middle Woodland or Late Woodland gardening, or are they products of historic farming?

Artifacts recovered from the test units at 18AN284 included 12 stone tools (unidentifiable point and biface fragments), 274 flakes, 1 piece of worked steatite, at least 100 pieces of fire-cracked rock (3.122 kg), 4 Popes Creek sherds, 679 Mockley sherds, 85 Rappahannock sherds, 650 indeterminate shell-tempered sherds, and 944 pieces of animal bone (26 burned or calcined).

Analyses of oyster shell and other faunal materials indicate little cultural or environmental change during the course of the shell midden's formation, although this may be due to the dominance of Selby Bay phase materials strongly biasing the samples and overshadowing the Little Round Bay phase occupation. While it may seem obvious that aborigines visited the Rhode River to harvest oysters, the data suggest that they did so to the near exclusion of all other resources: collecting hickory nuts and walnuts, fishing, and hunting in an irregular, opportunistic manner. They appear to have been wholly uninterested in crabs. The recovery of several small crab claw fragments from the flotation material, and the recovery of delicate terrestrial snail shells from both the dry screens and the fine mesh flotation screens, clearly indicates that the crab exoskeletons should have been preserved in the midden. Hence their absence can probably be attributed to cultural subsistence patterns.

Despite the concentration on oysters, the prehistoric occupants of the Smithsonian Pier site don't appear to have overharvested. Whether this pattern reflects a certain fundamental ethos, or simply population controls exerted elsewhere in the cultural system, remains to be determined. The relative lack of non-human competitors (e.g. black drum and other predatory fish and mollusks), and the uncertain effects of sponges on oyster growth and reproduction, may have permitted fairly intensive harvesting without adversely affecting the oyster population's reproduction or structure.

The ubiquity of pottery and dearth of stone tools, coupled with the relative infrequent occurrence of terrestrial, avian, and Piscean faunal remains, and the lack of significant deposits of charred nuts and seeds, clearly supports the interpretation of the Smithsonian Pier site as an oyster processing site. There is no direct evidence on site of how the inhabitants prepared oysters or what they did with them in terms of preservation and storage. The bivalves may have been shucked with the aid of heat and wooden tools, the meat dried or cooked and stored in pots for transport to inland sites. The site likely represents one special task site within a larger constellation of sites, using without over-exploiting resources in an effort to maintain certain social relations within and between groups.

Construction of the education building and associated infrastructure at the Smithsonian Environmental Research Center began soon after the completion of fieldwork, destroying most of the cultural deposits within the project area. Additional cultural deposits, possibly including aboriginal living sites, may survive outside of the project area (particularly to the south where surface shell points to additional preserved shell midden). Occupation areas may survive on higher ground to the west. Only additional testing will determine the extent and nature of these deposits. Thus, the areas around site 18AN284 may retain research potential, and the site should continue to be considered a significant archeological resource.

External Reference Codes (Library ID Numbers):

00000479, 00000480, 00000600, 00000771, 00005324