



# Phase II and Phase III Archaeological Database and Inventory

Site Number: 18WA498

Site Name: Bowles Mill

Prehistoric

Other name(s)

Historic

Unknown

Brief Description:

19th century grist mill

## Site Location and Environmental Data:

Maryland Archaeological Research Unit No. 20

SCS soil & sediment code

Latitude 39.7057

Longitude -78.1566

Physiographic province Ridge and Valley

Terrestrial site

Underwater site

Elevation m Site slope 3%

Ethnobotany profile available  Maritime site

### Nearest Surface Water

Name (if any) Great Tonoloway Creek

#### Saltwater

Ocean

Estuary/tidal river

Tidewater/marsh

Spring

Minimum distance to water is 0 m

#### Freshwater

Stream/river

Swamp

Lake or pond

Spring

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

## Temporal & Ethnic Contextual Data:

Paleoindian site

Archaic site

Early archaic

Middle archaic

Late archaic

Unknown prehistoric context

Woodland site

MD Adena

Early woodland

Mid. woodland

Late woodland

Unknown historic 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 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? Rural

#### Domestic

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

#### Industrial

- Mining-related
- Quarry-related
- Mill  grist 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

dam cribbing

## Interpretive Sampling Data:

### Prehistoric context samples

Soil samples taken

Flotation samples taken

Other samples taken

### Historic context samples

Soil samples taken N

Flotation samples taken Y

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	<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

<b>Earthenware</b>		Ironstone	<input type="checkbox"/>	Staffordshire	<input type="checkbox"/>	<b>Stoneware</b>	
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"/>	<b>Porcelain</b>	<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	<input type="checkbox"/>	Human remain(s)	<input type="checkbox"/>
Ground stone	<input type="checkbox"/>	Modified faunal	<input type="checkbox"/>
Stone bowls	<input type="checkbox"/>	Unmod faunal	<input type="checkbox"/>
Fire-cracked rock	<input type="checkbox"/>	Oyster shell	<input type="checkbox"/>
Other lithics (all)	<input type="checkbox"/>	Floral material	<input type="checkbox"/>
Ceramics (all)	<input type="checkbox"/>	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 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

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

Dated features present at site

Historic Artifacts		Tobacco related	
Pottery (all)	2	Activity item(s)	27
Glass (all)	199	Human remain(s)	<input type="checkbox"/>
Architectural	335	Faunal material	<input type="checkbox"/>
Furniture	<input type="checkbox"/>	Misc. kitchen	<input type="checkbox"/>
Arms	<input type="checkbox"/>	Floral material	<input type="checkbox"/>
Clothing	1	Misc.	29
Personal items	<input type="checkbox"/>	Other	<input type="checkbox"/>

### Historic Features

Privy/outhouse	<input type="checkbox"/>	Depression/mound	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
Const feature	<input type="checkbox"/>	Burial(s)	<input type="checkbox"/>	Other	<input type="checkbox"/>
Foundation	<input checked="" type="checkbox"/>	Trash pit/dump	<input type="checkbox"/>	Railroad bed	<input type="checkbox"/>
Cellar hole/cellar	<input type="checkbox"/>	Sheet midden	<input type="checkbox"/>	Earthworks	<input checked="" type="checkbox"/>
Hearth/chimney	<input type="checkbox"/>	Planting feature	<input type="checkbox"/>	Mill raceway	<input checked="" type="checkbox"/>
Postholes/molds	<input type="checkbox"/>	Road/walkway	<input type="checkbox"/>	Wheel pit	<input checked="" type="checkbox"/>
Paling ditch/fence	<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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19th century grist mill

Unknown

## External Samples/Data:

Collection curated at MAC

Additional raw data may be available online

## Summary Description:

The Bowles Mill site (18WA498) is located in western Washington County, near the town of Hancock, Maryland. It is the apparent remains of a 19th century gristmill, originally located along the Old National Road. The Maryland State Highway Administration proposed widening and repair of the I-70 bridge over a local creek which powered the mill. The highway work included the construction of new piers for the bridge span, retaining walls, and two stormwater management ponds.

Phase I survey was conducted in July of 2002. Standard Phase I approaches (shovel testing and controlled surface collecting) are entirely inappropriate for the project area. Slopes are generally steep. Overburden from previous highway construction is deep. And the soils contain large, numerous stones that would thwart the completion of shovel tests. In this case, Phase I work began with extensive archival work, which indicated a low probability of encountering intact prehistoric deposits in the project area. The probability of encountering historic period resources, was quite high. Field visits revealed the presence of submerged timbers in the creek and wall remnants within the highway project right-of-way.

These remains were in the vicinity of a grist mill identified on an 1878 map as that of S. Bowles. The mill clearly is that owned and operated by a Samuel Bowles and his heirs, likely the same owned by his father James H. Bowles, and possibly owned by earlier millers (one William Yates the Younger) and documented on an 1808 map. The mill can be dated archivally with a fair degree of confidence to the period 1830-1890; it is unlikely to have operated after 1890 since it doesn't appear in the county's tax assessments for 1896-1910. It may pre-date 1830, but since the mill doesn't appear among the list of mills in a 1783 tax assessment, it likely was less than 40 years old when James H. Bowles purchased the land and mill seat. Land patent data suggest at least an intention of erecting a mill at this location as early as 1763. The 1880 census industrial schedule return for Samuel Bowles reported up to five men working at the mill at one time, with a monthly average of two. The mill conducted custom milling, suggesting a status similar to that of 'country mill,' the term employed by census marshals in 1850 to describe the Bowles Mill and 7 others in the area. It operated with a single turbine, 4 ft in diameter with a 6 ft fall, spinning at 50 revolutions per minute and generating 15 horsepower. These are the only technical data available for the mill, and given the history of turbines in American grain milling – it appears unlikely that the power system was in place for the full life of the mill. The turbine was likely a recent installation. A more detailed account of the historical context surrounding the mill and a full chain-of-title relating to the mill property can be found in the full site report.

Aside from the extensive archival research and field visits to the site, little additional work was conducted at the Phase I level at 18WA498. During the field visits, careful mapping of the visible ruins on the north bank of the creek and within the creek bed was conducted with tapes. Some scraping of recent detritus and humus was necessary in some cases to expose masonry on land. No excavations occurred within the water, but samples were taken with the aid of a hacksaw and axe from each of eight timbers and two planks for species identification. The wood assemblage revealed the predominance of oak and pine species in its construction. White Oak accounted for 50% of the analyzed specimens; yellow, or hard pine for 40%, and "coniferous taxa" for 10%. Though the site would not be impacted by construction of the widened I-70 bridge, it was located within the project's defined right-of-way. Thus it was recommended and then subjected to Phase II testing.

Phase II testing at the Bowles Mill site employed a series of nine 0.6096 to 0.762 meter (2 to 2.5 ft) wide trenches, 1.524 to 3.048 meters (5 to 10 ft) long, excavated stratigraphically, with all soils screened through hardware mesh. Several features that help in defining the layout of the site were recorded including the remains of the cribwork and a small portion of the earthen work dam that impounded and channeled the water to the mill, the apparent headrace at the upstream portion of the mill complex, exposed foundations of the main mill building and a possible ell on its downstream side, the location of the probable wheelpit, and the location of the probable tailrace. The miller's house was located nearby (known as the Julia B. Lynn site – 18WA499) and continued to stand until modern times. However, by the time of the Phase I/II work it had been razed and was not examined further. There was also widespread evidence that the mill complex had been extensively cannibalized for building stone, and probably for its timber framing.

Consistent with findings at other mill sites, few non-architectural artifacts were encountered on the site's surface or in the excavation units. Artifacts recovered during the Phase II work include 27 activity items (5 pieces of non-electrical wire, 4 wire staples, 1 hafted tool, 16 pieces of barbed wire, and a slate pencil), 335 architectural artifacts (1 handmade brick, at least 94 brick pieces, 5 fragments of mortar, 141 window glass pieces, 38 machine cut nails, 1 wire nail, 53 unidentified nails, and 2 spikes), 1 piece of clothing (a metal button), 60 kitchen-related items (1 sherd of white-bodied earthenware, 1 piece of redware, & 58 bottle glass fragments), and 29 miscellaneous objects (16 unidentified pieces of metal, 1 piece of plastic, 9 fragments of coal, 2 cinders, and 1 unidentified object).

Following Phase II work at Site 18WA498, avoidance of the site was recommended as the highway construction would not impinge upon the site (despite being within the proposed highway expansion right-of-way). Many of the components of the site appear to be somewhat intact (enough to permit a basic reconstruction of the mill's probable layout) and may still have potential to answer research questions related to 19th century mill technologies. To date, no projects have been oriented towards answering such questions by examining the deposits at 18WA498 further.

## External Reference Codes (Library ID Numbers):

97001482