



Phase II and Phase III Archaeological Database and Inventory

Site Number: 18FR682

Site Name: Fort Detrick #5

Prehistoric

Other name(s)

Historic

Unknown

Brief Description:

19th-early 20th century lime kiln

Site Location and Environmental Data:

Maryland Archaeological Research Unit No. 17

SCS soil & sediment code

Latitude 39.4426

Longitude -77.4588

Physiographic province Lancaster/Frederick Lowl

Terrestrial site

Underwater site

Elevation 113 m

Site slope

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) Unnamed tributary of Carro

- | Saltwater | | Freshwater | |
|---|--|--|--------------------------------|
| Ocean <input type="checkbox"/> | Estuary/tidal river <input type="checkbox"/> | Stream/river <input checked="" type="checkbox"/> | Swamp <input type="checkbox"/> |
| Tidewater/marsh <input type="checkbox"/> | Lake or pond <input type="checkbox"/> | Spring <input type="checkbox"/> | |
| Minimum distance to water is <input type="text"/> 0 m | | | |

Temporal & Ethnic Contextual Data:

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

- Contact period site
- ca. 1820 - 1860 Y
- ca. 1630 - 1675 Y
- ca. 1675 - 1720 Y
- ca. 1720 - 1780 Y
- ca. 1780 - 1820
- Unknown historic context
- Unknown context

Ethnic Associations (historic only)

- Native American
- African American
- Anglo-American
- Hispanic
- Asian American
- Unknown
- Other

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
- Black/metalsmith
- Furnace/forge
- Other lime kiln
- 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

Historic context samples

Soil samples taken

Flotation samples taken

Other samples taken



Phase II and Phase III Archaeological Database and Inventory

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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

Earthenware		Ironstone	43	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	34	Eng Dry-bodied	<input type="checkbox"/>
Buckley	<input type="checkbox"/>	North Devon	<input type="checkbox"/>	Porcelain	14	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	13	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

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

Dated features present at site

Historic Artifacts		Tobacco related	
Pottery (all)	110	Activity item(s)	116
Glass (all)	615	Human remain(s)	<input type="checkbox"/>
Architectural	44	Faunal material	<input checked="" type="checkbox"/>
Furniture	4	Misc. kitchen	89
Arms	4	Floral material	<input type="checkbox"/>
Clothing	<input type="checkbox"/>	Misc.	30
Personal items	3	Other	<input type="checkbox"/>

Historic Features

Const feature	<input checked="" 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 checked="" type="checkbox"/>
Cellar hole/cellar	<input type="checkbox"/>	Trash pit/dump	<input checked="" type="checkbox"/>	Railroad bed	<input type="checkbox"/>	lime kiln	
Hearth/chimney	<input checked="" 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 checked="" 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



Phase II and Phase III Archaeological Database and Inventory

Site Number: 18FR682

Site Name: Fort Detrick #5

Prehistoric

Other name(s)

Historic

Brief

Description:

19th-early 20th century lime kiln

Unknown

External Samples/Data:

Collection curated at MAC

Additional raw data may be available online

Summary Description:

Site 18FR682 is an apparent 19th century periodic lime kiln on the Fort Detrick property near Shookstown, Frederick County, Maryland. The vicinity of the Fort Detrick Lime Kiln is characterized by gently sloping non-agricultural fields and woods. A wooded ridge that contains numerous limestone outcrops lies perpendicular to the northern boundary fence in the vicinity of the kiln. These outcrops bear evidence of historic quarrying activity. The kiln itself lies on a wooded hillock overlooking a tributary stream to Carroll Creek. What little soil exists at the site (limestone bedrock is encountered at very shallow depths) is an Athol gravelly loam.

The lime kiln is a dry wall, random-laid rectangular stone structure that measured about 6 X 6 m. It is bermed into a hillside and is approximately 2.9 m high. The main elevation faces northeast and is defined by a small door opening at its base. The east and west side walls and rear (south) elevation are incorporated into the sloping terrain. The door opening, or keyhole access, located at the base of the north elevation measures 0.5 m wide near the base and 2.9 m wide at the top. A flat stone lintel defines the opening. Two iron hinge pins survive and mark the east side of the door opening. The interior of the structure was infilled with dirt. Retaining walls and supporting road remnants are associated with the kiln. The design of the structure reflects its function in the local production of lime. It is an example of the small-scale agricultural kilns that were common features of Frederick County farmsteads during the 19th century due to the abundance of natural outcrops of limestone. A local market for lime developed during the early 19th century as farmers learned of the soil enrichment qualities of lime. Lime from such small periodic kilns was also used locally for building cements, plastering, and whitewash. Later in the 19th century, such periodically utilized kilns were abandoned as commercial liming operations came online and began constructing larger kilns, commonly referred to as perpetual or "vertical" kilns.

The site was identified during pedestrian reconnaissance, part of a 1993 Phase I survey of Fort Detrick. The survey was designed to address the Department of Defense's responsibilities under Section 106 and 110 of the National Historic Preservation Act of 1966 as amended. Such an archeological survey was recommended by Army Regulation 420-40, in order to support the development and application of a cultural resource program at the Fort Detrick facility. A survey was also recommended in the Fort Detrick Cultural Resources Management Plan. The Phase I work consisted of pedestrian reconnaissance and two 50 cm X 50 cm test units excavated within the site area to test for evidence of associated features. No cultural materials were collected from the subsurface tests, but a controlled surface collection was conducted.

Twenty-five activity items were recovered during the surface collection, including 10 fragments of lamp glass, a piece of non-electrical wire, and 14 pieces of tin can. The only architectural remains encountered were 13 fragments of window glass. There were a total of 131 kitchen-related objects. The kitchen assemblage included 45 ceramics sherds; 2 ironstone, 1 domestic brown stoneware, 6 industrial stoneware, 29 whiteware, and 7 later porcelain types. Sixty-five fragments of kitchen glass were also part of the assemblage, including 5 fragments of table glass, a bottle glass fragment, a piece of depression glass, 13 blown-in-mold bottle shards, and 45 machine-made bottle/container glass fragments. The remaining kitchen objects are a metal screw cap, a rubber nipple, and 19 animal bone fragments. Other items recovered include 2 personal items (perfume bottle shards), 2 arms-related objects (shotgun shells), 1 prehistoric item (quartz block/shatter), and a miscellaneous rubber object. With the exception of several pieces of stoneware, all of the artifacts date from the late 19th & early 20th centuries. These materials appeared to have no relation to the operation of the kiln, and probably were dumped into the kiln as fill after it ceased to operate. This suggested an end date for the operation of the kiln by at least the late 19th century.

The Phase I work suggested that 18FR682 had research potential and might possess the qualities of significance necessary for listing in the National Register of Historic Places. In keeping with the Fort Detrick Cultural Resources Management Plan, the site was recommended for Phase II testing to ensure compliance with Section 110 of the National Historic Preservation Act of 1966. In 1995, Phase II investigations were undertaken at the lime kiln to evaluate the site for inclusion on the NRHP. Sixty-three shovel tests were excavated at 10 m intervals in the kiln area. A single artifact, an unmodified quartz flake, was retained from one shovel test. The shovel tests did not reveal any concentrations of artifacts associated with the kiln operation; nor was there any indication of subsurface features. Six 1 X 1 meter test units were placed to examine the kiln structure, and to look in areas adjacent to the kiln that might contain evidence for associated activities (coal or fuel piles, waster piles). Test units 1 and 2 formed a 1 X 2 m block located between the kiln and the small stream to the north of the kiln. Test unit 3 was placed directly in front of the kiln door to examine the method of construction for the kiln face. Test units 4 and 5 were placed on the top eastern edge of the kiln to expose the inner edge of the kiln, to examine the interior construction, and to explore the fill within the kiln. Test unit 6 was placed south of the kiln on a nearby hill. All of the units documented extensive 20th century modification of the kiln site. Up to 0.61 meters (2 feet) of fill were discovered at the mouth of the kiln and extending north to where an early 20th century road was documented. The interior of the kiln was filled with earth and quartz cobbles. The area behind the kiln also evidenced fill over the original ground surface. The only material identified that likely was associated with the original use of the kiln was the limestone wasters noted in one test unit. Heavy machinery was probably used to place the fill and the historic setting has been extensively altered. Through division of the property and landscape modification, the kiln has become isolated from the historic farm complex that it once served. The kiln no longer retains its historic setting, feeling, or association.

Artifacts recovered during Phase II work include 91 activity items, such as 51 fragments of lamp glass, a piece of non-electrical wire, 4 barbed wire pieces, 32 tin can pieces, a lump of battery carbon, and two pieces of ceramic flower pot. There are thirty-one objects in the architectural assemblage, including a fragment of concrete, 20 window glass fragments, 9 nails (4 machine-cut, 4 wire, and 1 unidentified), and 1 sewer/drain pipe fragment. Four furniture items (3 glass vase fragments and a stove/oven door) were encountered at the site. The Phase II kitchen assemblage includes 65 ceramic sherds; 41 ironstone, 7 later porcelain, 11 industrial stoneware, 5 whiteware, and 1 redware. Also included are 450 glass objects such as 2 jar lids/liners, 24 table glass fragments, 13 bottle fragments, a piece of depression glass, 6 blown-in-mold fragments, and 404 machine-made bottle/container fragments. The remaining kitchen-related items are 3 metal canning jar lids, and 65 animal bone fragments. The only personal item recovered was part of a glass perfume bottle. Two arms-related objects (a shotgun shell and a .22 rimfire cartridge) were excavated. The only other historic/modern items were 3 fragments of stone, 15 metal objects, an unidentified rubber object, a piece of snail shell, 3 rodent bones, and 6 pieces of coal.

Additionally, twelve prehistoric objects were encountered in the test units. Seven are quartz flakes, 2 are quartzite flakes, 1 is a retouched/utilized quartz flake, 1 is a retouched/utilized chert flake, and 1 is a Mid-Late Archaic projectile point (type unspecified).

The Fort Detrick lime kiln has deteriorated severely over time. Its deteriorated state, coupled with the modern disturbance of the 18FR682 deposits, have affected the kiln's design integrity and its ability to provide comprehensive data concerning the 19th century liming industry; there are more intact examples of such kilns in the county. Therefore, its research potential is limited.

MARYLAND
HISTORICAL



TRUST

Phase II and Phase III Archaeological Database and Inventory

Site Number:

Site Name:

Prehistoric

Other name(s)

Historic

Brief
Description:

Unknown

External Reference Codes (Library ID Numbers):