

Archaeology at Ft. George G. Meade



Archaeology

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What is Archaeology?

ARCHAEOLOGY: the study of the human past through the examination of material remains that people have left behind:



Artifacts: Human-made objects that are portable, like ceramic shards and stone tools.

Ecofacts: Natural items that have been moved or used by humans, like peach pits and corn cobs.

Features: Human-made changes to a site that are not portable, such as foundations, pits, and wells (above).

What is Archaeology?

Archaeologists tell time by looking at soil layers:

Most recent layer

Oldest layer

Soil layers represent different time periods of occupation. Unless a site has been disturbed, the occupation gets older as depth increases.



Context is the relationship between soil layers, artifacts and features. Archaeologists need context to understand what happened at a site. When a site is disturbed by plowing, landscaping, or development, context is lost.

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What is Archaeology?

Artifacts are kept separately based upon what soil layer or feature they came from:



Nails and oyster shells



Stone tools



Natural soil:
no artifacts

When archaeologists dig deep enough, they stop finding artifacts because they hit natural soil that predates human occupation.

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What is Archaeology?

Archaeologists must document everything they find because once a site is excavated it no longer exists.



Mapping: Archaeologists make drawings of soil layers and features.



Photography: Pictures are taken as excavations progress.



Field notes: Excavators write down what they find and where they find it.

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Why do Archaeology at Ft. Meade?

Various laws protect archaeological
resources on Federal land:



Aerial view of Ft. George G. Meade.

- National Historic Preservation Act (NHPA)
- Archaeological Resources Protection Act (ARPA)
- National Environmental Policy Act (NEPA)
- Native American Graves Protection and Repatriation Act (NAGPRA)
- Antiquities Act

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Why do Archaeology at Ft. Meade?

The main law invoked is the 1966 National Historic Preservation Act (NHPA) which created the National Register of Historic Places. NHPA criteria are used to determine a site's significance.



An archaeological site can be listed to the National Register if it is at least 50 years old, it has integrity of location, setting, etc., and it is important to American History either because:

- A) It is associated with a significant event,
- B) It is associated with the life of a significant person,
- C) It embodies a particular style, period, or method of construction, or
- D) It can yield information important to history or prehistory.

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Why do Archaeology at Ft. Meade?

Federal agencies are tasked with:



- IDENTIFYING archaeological sites on their land
- DETERMINING SIGNIFICANCE for those sites; are they eligible for nomination to the National Register of Historic Places?
- PROTECTING significant sites by avoiding development or recovering data

PHASE I = IDENTIFYING SITES

Archaeologists may find sites by:



Non-natural vegetation is a good sign of human occupation. For example, daffodils may line old roads or house foundations.

- Looking at historic maps
- Interviewing locals about where sites might be
- Searching for artifacts in plowed fields
- Looking for non-natural vegetation
- Digging shovel test pits (STPs) on a grid to look for artifacts; these are small holes (about 1ft. across) that sample the soil

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Ft. Meade Projects

PHASE I = IDENTIFYING SITES



40 Archaeological sites have been identified by Phase I projects at Ft. Meade:

- 18 Prehistoric Sites
- 19 Historic Sites
- 3 Prehistoric/Historic Sites

Each site has been assigned a 3-part number based on the State (18th in the U.S. alphabetically), County (AN is for Anne Arundel County), and sequence in which the site was identified. For example, these 19th-century ruins are located at 18AN932; the 932th archaeological site to be identified in Anne Arundel County, Maryland.

PHASE II = DETERMINING SIGNIFICANCE

Once a site has been found, archaeologists:



Phase II test units at Ft. Meade's site 18AN982 exposed a stone foundation.

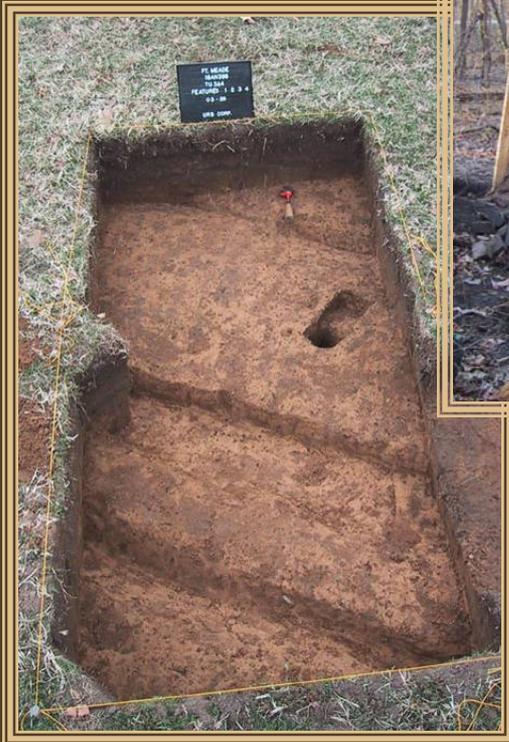
- Excavate test units around the site
- Look for intact features such as foundations, soil stains from posts, pits, wells, privies, and hearths.
- Look for signs of disturbance in the soil that would hurt its context
- Compare the site to other archaeological sites discovered
- Consider whether the site is eligible for the National Register of Historic Places

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Ft. Meade Projects

PHASE II = DETERMINING SIGNIFICANCE



The units above show plow scars that cut into the soil at 18AN398. Above right, excavators sift soil for artifacts at 18AN982.



20 Archaeological sites at Ft. Meade had a Phase II study, but only one of these was found to be eligible for the National Register of Historic Places.

Here are some reasons why sites were not eligible:

- They had been disturbed by trenches used for WWI training
- They had too few artifacts or no features
- They had lost all context to plowing
- They had been disturbed by construction before NHPA took effect in 1966
- Many other sites of a similar time period or use have already been studied in Maryland

PHASE III = DATA RECOVERY

If a development project threatens a significant site:



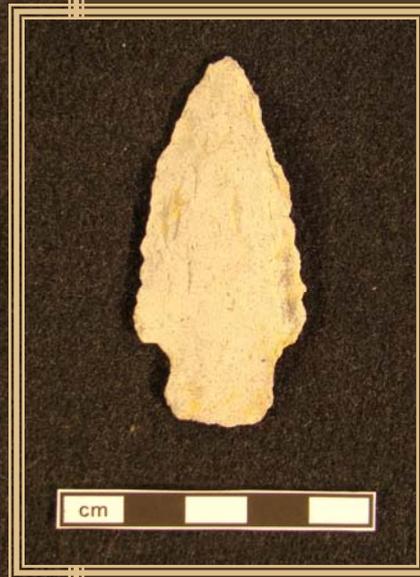
Phase III excavations remove plowed soil to expose features. The holes above are excavated features, while the dark stains in the soil are unexcavated features. Site 18CV83, Calvert County, Maryland.

- Archaeologists encourage changes to the development project to avoid the site.
- If the development cannot be changed, archaeologists conduct large-scale excavations to recover data.
- Techniques vary by site, but most projects include plow zone testing, mechanical stripping to expose features, and feature excavation.
- Each site is mapped and thoroughly analyzed.

PHASE III = DATA RECOVERY

No Phase III data recoveries have been done at Ft. Meade:

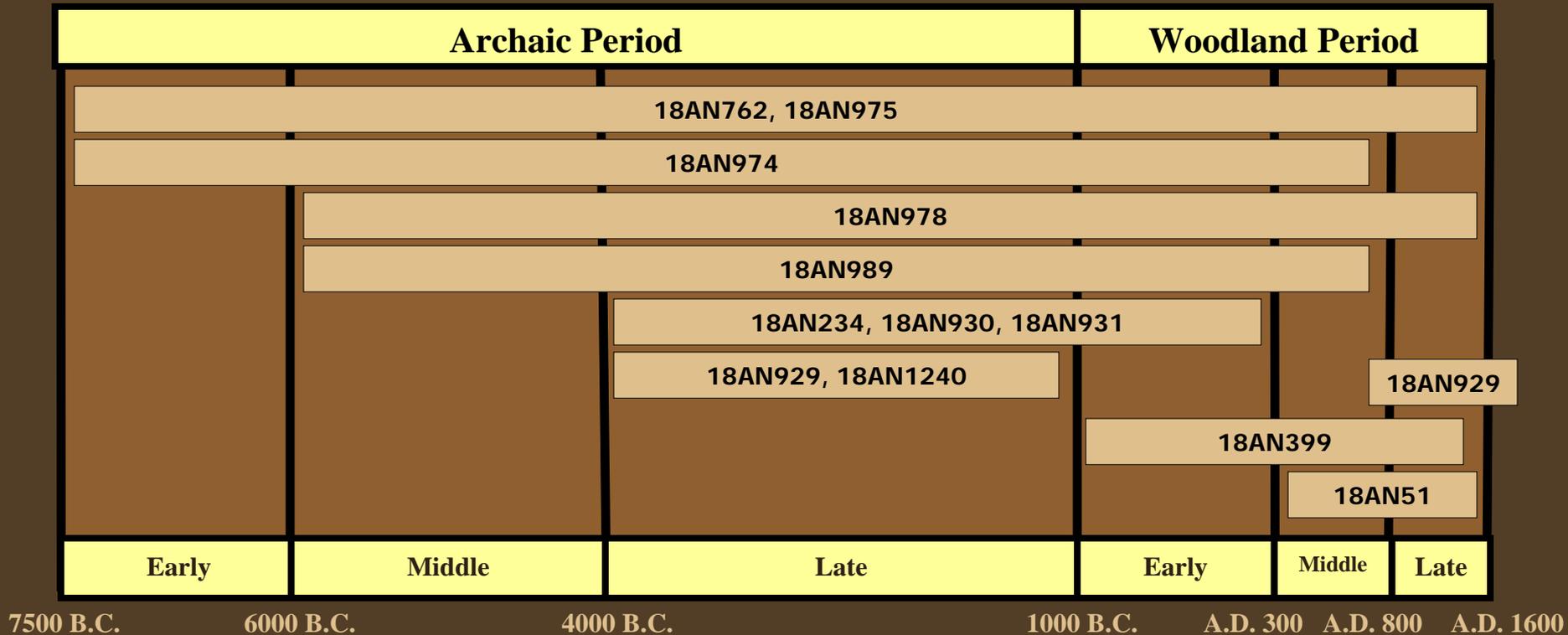
- The only site significant enough to require a Phase III data recovery, 18AN1240, is not threatened by development at this time.



Steatite bowl fragments (left) and a Savannah River type projectile point (right) help date 18AN1240 to the Late Archaic period; 4000 B.C. to 1000 B.C.

PREHISTORY in North America is defined as the period before European contact and settlement.

Ft. Meade's prehistoric sites date to eras that archaeologists call the Archaic and Woodland Periods:



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Ft. Meade Sites

Early-Middle Archaic culture:

- People lived in small, mobile groups
- People gathered food from plants and hunted wild game
- Ground stone tools for plant processing were first used
- The use of specialized bone tools developed
- Plants and animals consumed became more diverse over time



7500 B.C.

6000 B.C.

4000 B.C.



Artist's depiction of a hunter using an atlatl, or spear thrower.



Stone tools such as these were used to process plants. From left to right: mortar and pestle; chopper; nutting stone.

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Ft. Meade Sites

Early-Middle Archaic sites at Ft. Meade date from 7500 B.C. to 4000 B.C.



18AN762: This Kanawha type projectile point dates from 6300-6000 B.C. It was probably discarded when its tip broke off thousands of years ago.



18AN975: An assortment of stone tools (above) and a feature composed of fire-cracked rock (below) were found at this site which has Early-Archaic and Middle-Archaic components.

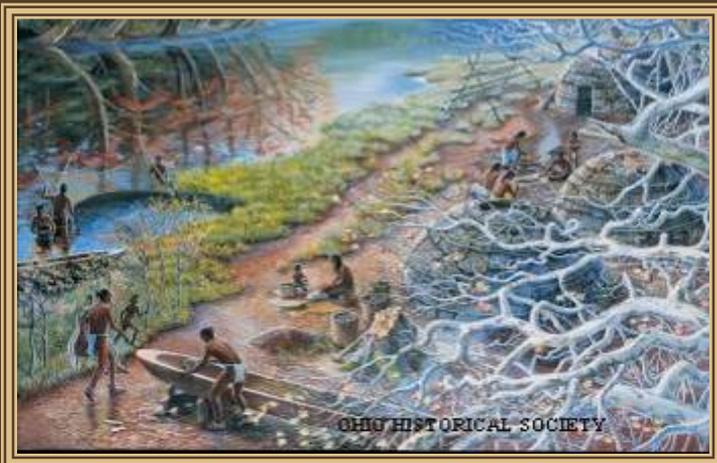
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Ft. Meade Sites

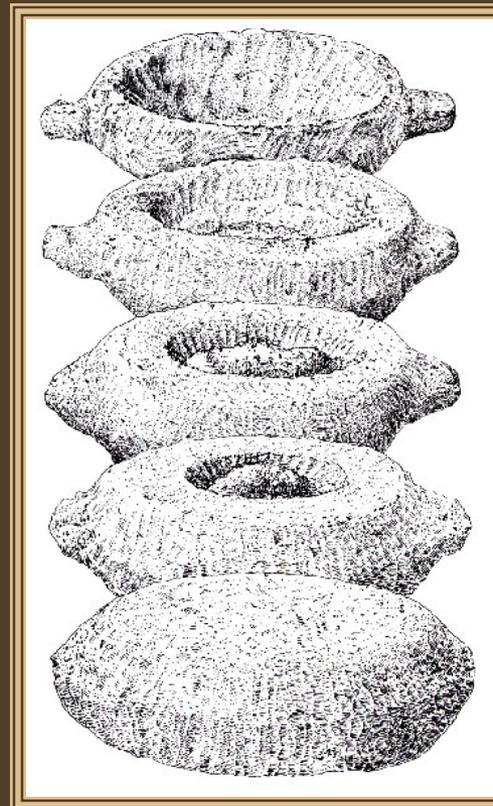
Late Archaic culture:

- Groups settled in seasonal camps and moved around less often
- People increasingly relied on rivers and streams for fish and shellfish
- Populations rose, and culture increasingly differed by region
- Trade networks were established to exchange specialized resources
- Steatite (soapstone) bowls came into use



4000 B.C.

1000 B.C.



Left: Artist's depiction of the Late Archaic period showing canoe-making and fishing in a seasonal village.

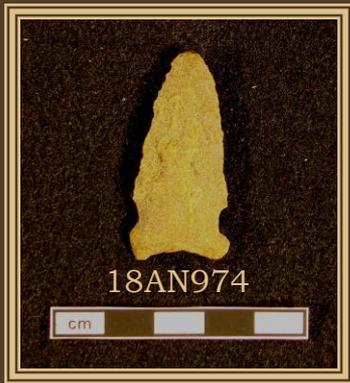
Right: The manufacture of a steatite bowl, showing the progression from a rounded rock to a bowl with lug handles.

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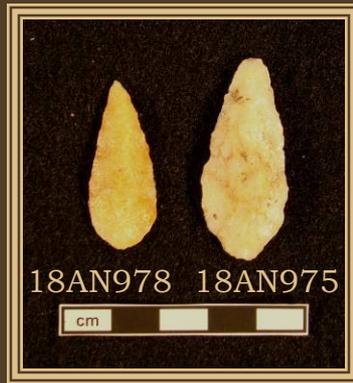
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Ft. Meade Sites

Diagnostic points and steatite bowl fragments indicate that at least 9 prehistoric sites at Ft. Meade were occupied during the Late Archaic Period; 4000-1000 B.C.



Otter Creek Point
4600-3000 B.C.



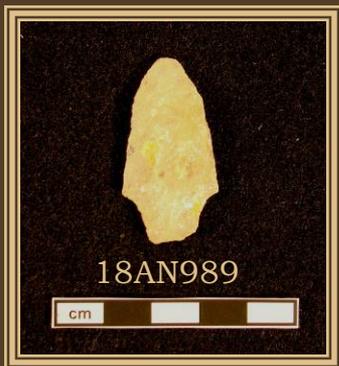
Piscataway Points
4000-3000 B.C.



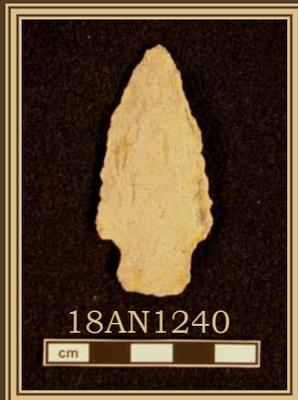
Vernon/Halifax Point
3000-2200 B.C.



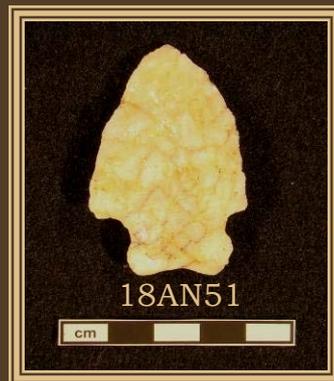
Brewerton Points
3000-2200 B.C.



Bare Island Point
2200-1900 B.C.



Savannah River
1900-1700 B.C.



Broadspear Point
1700-1500 B.C.



Orient Fishtail Points
1500-750 B.C.



Steatite Bowls
1500-1000 B.C.

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Ft. Meade Sites

Early-Middle Woodland characteristics:

- Domesticated plants became a major food source, indicating the rise of agriculture
- Ceramics first appeared
- Society became more stratified into higher and lower status individuals
- Populations became more settled; forming villages and moving infrequently

Woodland Period

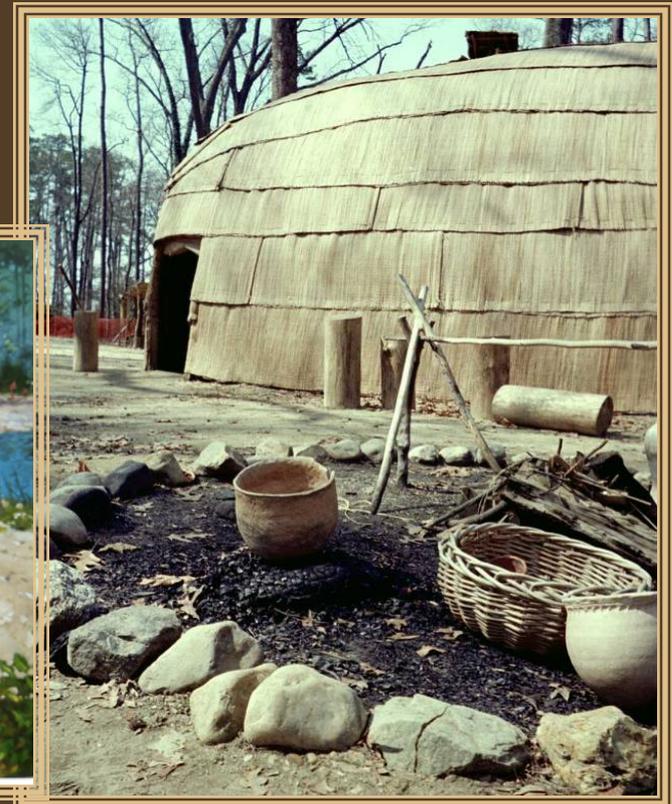
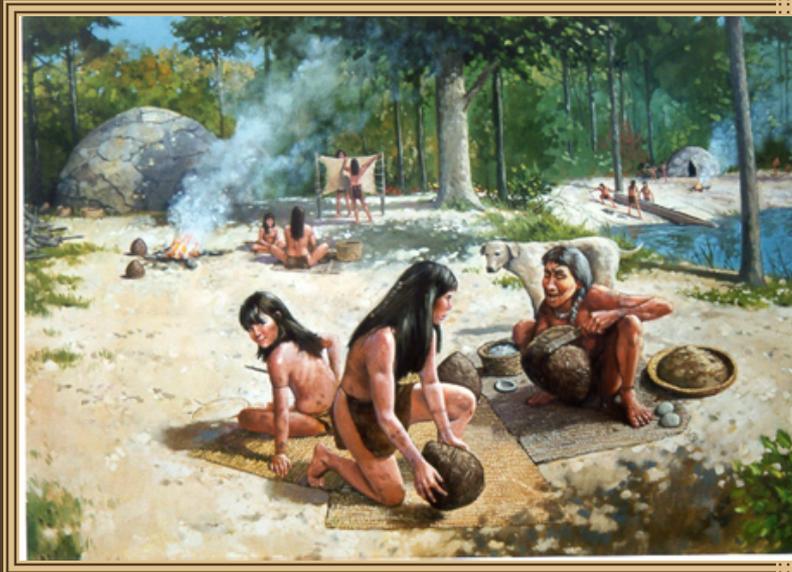
Early

Middle

1000 B.C.

A.D. 300 A.D. 800

Artist's depiction of a Woodland village (left) and a museum's recreation of a Woodland village (right).



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Ft. Meade Sites

Artifacts indicate that at least 10 prehistoric sites at Ft. Meade have an Early-Woodland or Middle-Woodland component:



Marcey Creek Ceramics (1000-750 B.C.) are the first prehistoric ceramics to appear. They show the transition from steatite bowls because they used crushed steatite as a temper in the clay.

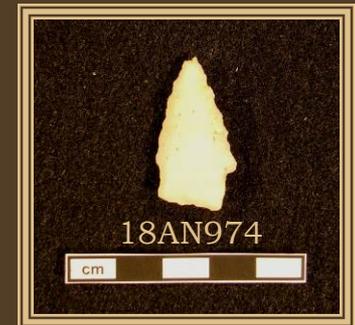
Accokeek Ceramics (750-300 B.C.)

Quartz temper and cord-marked surface treatment.



Wolfe Neck Ceramics (750-400 B.C.)

Coarse quartz temper and net-impressed surface treatment.



Calvert Point
750-300 B.C.

Archaeologists look at temper and surface treatment to identify prehistoric ceramics:

- TEMPER is a material mixed into the clay like sand or quartz.
- SURFACE TREATMENT is any texture or decoration added to the outside of the ceramic vessel.

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Ft. Meade Sites

Late Woodland characteristics:

- People increasingly depended on agriculture, particularly corn (bottom right)
- Groups settled in permanent palisaded villages in floodplains (top right)
- Political complexity increased as chiefdoms were formed
- The bow and arrow first appeared (below), leading to smaller triangular points rather than larger points that were used on throwing spears with atlatls

Woodland Period

Late

A.D. 800

A.D. 1600



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Ft. Meade Sites

Late Woodland sites at Ft. Meade yielded shell-tempered ceramics and triangular points that would have been used with a bow and arrow:



Rappahannock Ceramic A.D. 950-1600

Shell tempered with a fabric-impressed surface treatment.



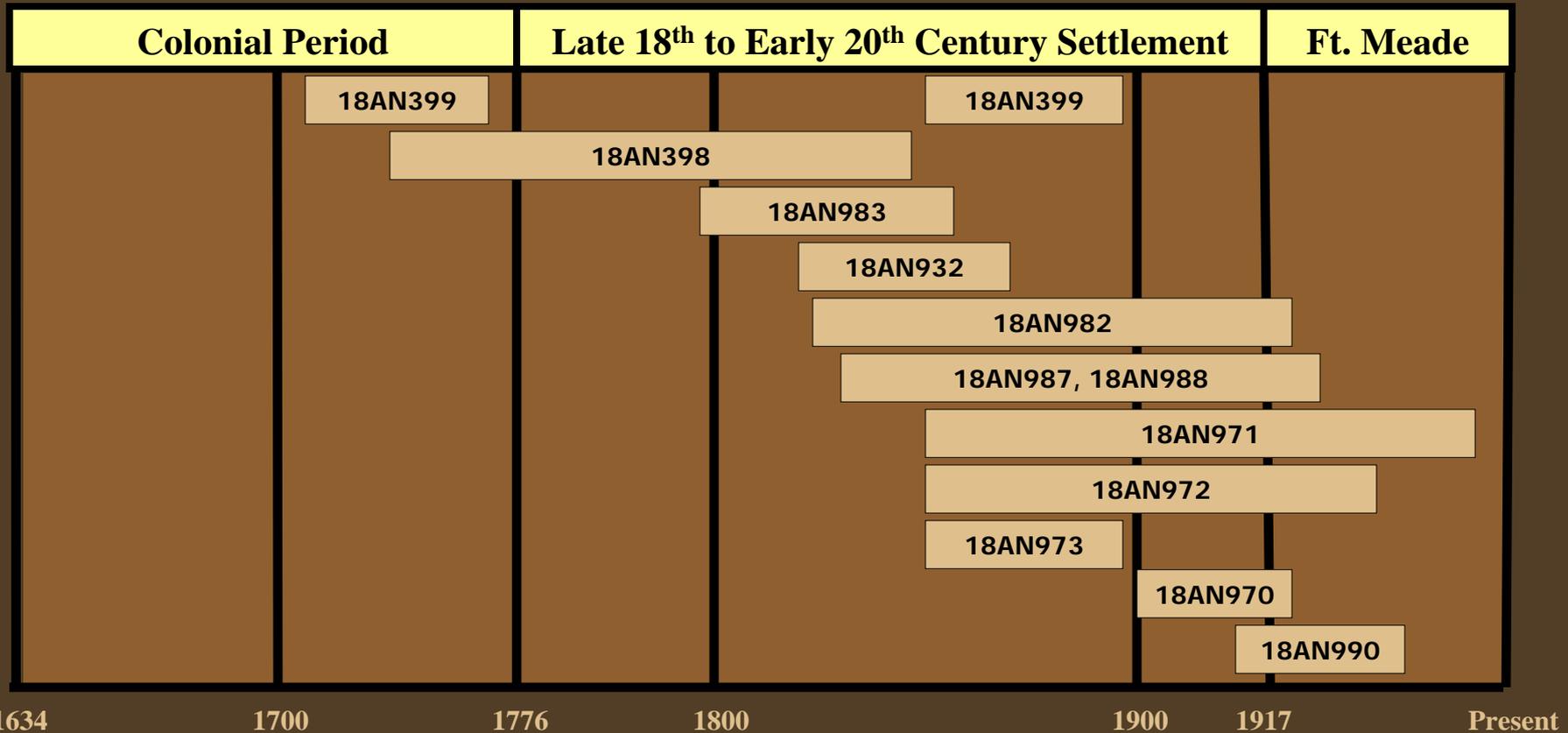
Left Point: Levanna Type, A.D. 800-1250
Middle Points: Madison Type, A.D. 1250-1600
Right Point: Potomac Type, A.D. 1250-1600

Shephard Ware Ceramics 750-300 B.C.

Quartz temper and fabric-impressed surface treatment.

HISTORIC sites in Maryland are sites that date from the Colonial Period to 50 years ago.

Ft. Meade's historic sites date from the 18th century to the 20th century:



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Ft. Meade Sites

Colonial Period characteristics:

- European settlers arrived in Maryland in 1634 and founded an economy based upon tobacco
- Most goods were imported from Europe
- European settlements gradually moved inland from the Chesapeake Bay
- By the 18th century, the economy became dependent upon plantation slavery

Colonial Period

A.D. 1634

A.D. 1776



Photo of a recreated Colonial settlement.

Artist's depiction of tobacco cultivation in 18th-century Virginia. An overseer watches as enslaved women cultivate the soil.



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Ft. Meade Sites

The Colonial Period at Ft. Meade:

Site 18AN399 had a mid-18th-century pit feature full of tobacco pipe fragments, bones and fish scales from animals that people ate, and other household trash.

A spoon bowl, a marble, and ceramics from 18AN399. The spoon and ceramics are from the 18th century feature.



Above is a whole combed slipware dish. A fragment of such a dish was found at 18AN399 (left).



This coin found at 18AN399 has stumped archaeologists. It is still unidentified, but it may date to the 1500s.

Many pipe fragments were found at 18AN399, including a pipe stem with tooth wear at the end (see arrow).

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Ft. Meade Sites

Late 18th- Early 20th Century Settlement characteristics:

- Settlement becomes increasingly dense
- Plantation slavery continues until the Civil War
- Agriculture still dominates the economy
- The Industrial Revolution leads to rapid technological advances

Late 18th to Early 20th Century Settlement

1776

1800

1900

1917



Historic barn in Calvert County Maryland



Historic farmstead in Washington County, Maryland

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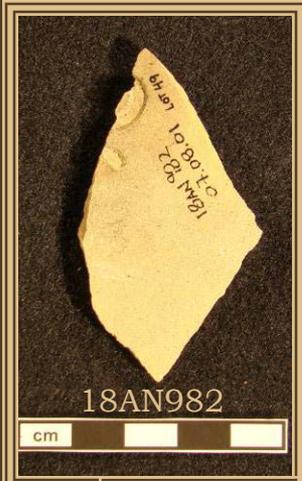
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Ft. Meade Sites

The Late 18th- Early 20th Century at Ft. Meade:

Sites at Ft. Meade from this period include the 19th-century general store and post office for the town of Patuxent Forge (18AN932), a farmstead (18AN983), and several domestic homes (18AN982, 18AN987, 18AN988).

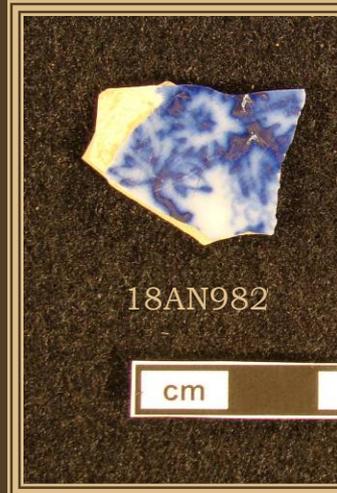
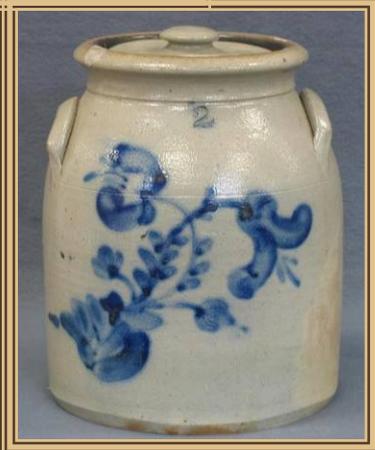
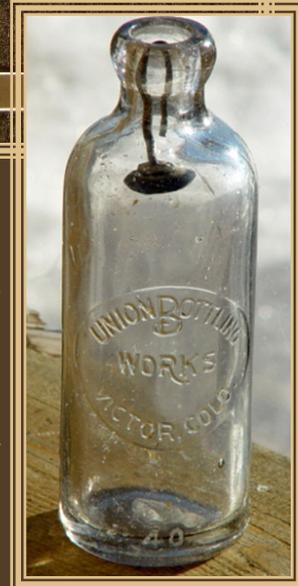
Left: Fragment of a stoneware crock with a stamped “2” for two gallons. Compare to the whole 19th-century 2-gallon crock below.



Below: Flow blue plates with floral pattern; Late 19th- or Early 20th-Century



Right: Hutchinson soda bottle. This type of closure was patented in 1879, but fell out of use by 1915.



Fragments of objects recovered by archaeologists can be compared to existing antiques with known dates.

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Ft. Meade Sites

Ft. George G. Meade characteristics:

- Established as an Army installation in 1917
- Served as a training facility during WWI and WWII, and a prisoner of war camp during WWII
- The area continues to serve as a domestic site for military personnel and families who live there



Spring Formal Dance, Fort George G. Meade, Maryland, 1952



Above: A chow hall at Ft. Meade.

Barracks at Ft. Meade.

Ft. Meade

1917

Present



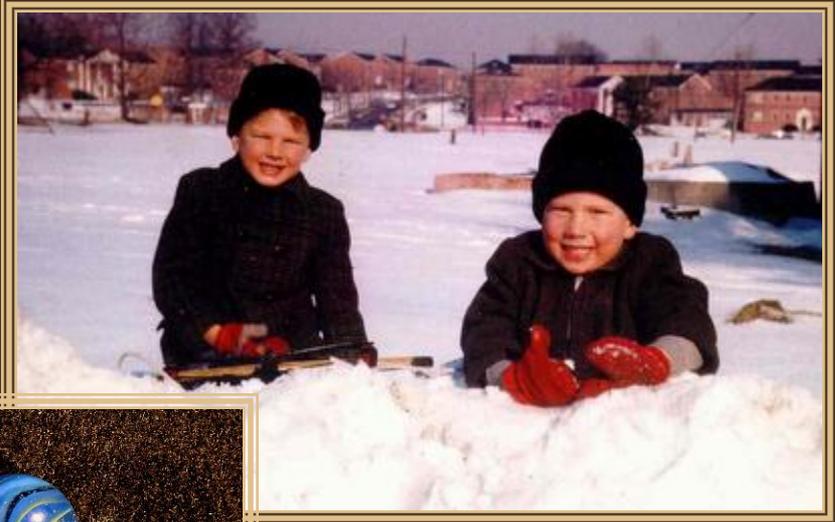
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Ft. Meade Sites

Ft. George G. Meade:

Ft. Meade-era archaeological sites show evidence of military training exercises, like trenches and spent ammunition, as well as the remnants of families who lived there.



Ft. Meade residents Hank and Mark Deren play in the snow c. 1964. Their toys may have included this post-1955 cats-eye marbles from 18AN974 and plastic soldiers such as the example below from 18AN987.

Almost every archaeological site at Ft. Meade yields ammunition such as this Frankford Arsenal 30-06 casing (top) and 30 M-1 Carbine casing (bottom).



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Curation

CURATION Preserves artifacts and field records from Ft. Meade's archaeological projects for future research.



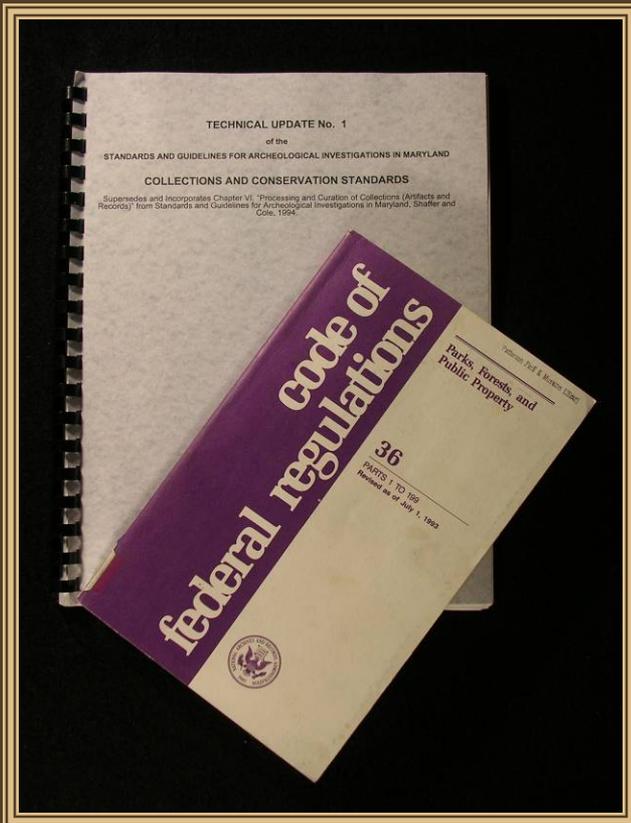
WHY: Archaeological excavations are destructive; once you dig a site, it no longer exists. Only the records and artifacts remain to help researchers understand the cultural history of the site.

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Curation

HOW: Collections from Federal land must be curated according to a law called *36 CFR § 79: Curation of Federally-Owned and Administered Archaeological Collections*. This law requires:



- Professional museum practices and archival curation for artifacts and records
- Periodic inventories
- Security and controlled access to collections to prevent theft or damage
- Public accessibility of collections for research

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Curation



WHERE: Ft. Meade's collections are stored at the Maryland Archaeological Conservation Laboratory (MAC Lab) in St. Leonard, Calvert County, Maryland. The MAC Lab is the primary repository for archaeological collections in Maryland and it meets the standards outlined in *36 CFR § 79*.

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Curation

WHO: The MAC Lab has three departments of professionals who work on collections; Research, Collections, and Conservation.



RESEARCH



COLLECTIONS



CONSERVATION

Archaeology

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Curation

Functions of the MAC Lab's Research Department:



Identifying, cataloging and analyzing artifacts



Maintaining a library full of books on artifacts, history, prehistory, and archaeology



Publishing research online or in journals, books, and newsletters

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Curation

Functions of the MAC Lab's Collections Department:



Creating study cabinets



Repackaging with archival materials as needed



Ensuring that all artifacts are accessible

Archaeology

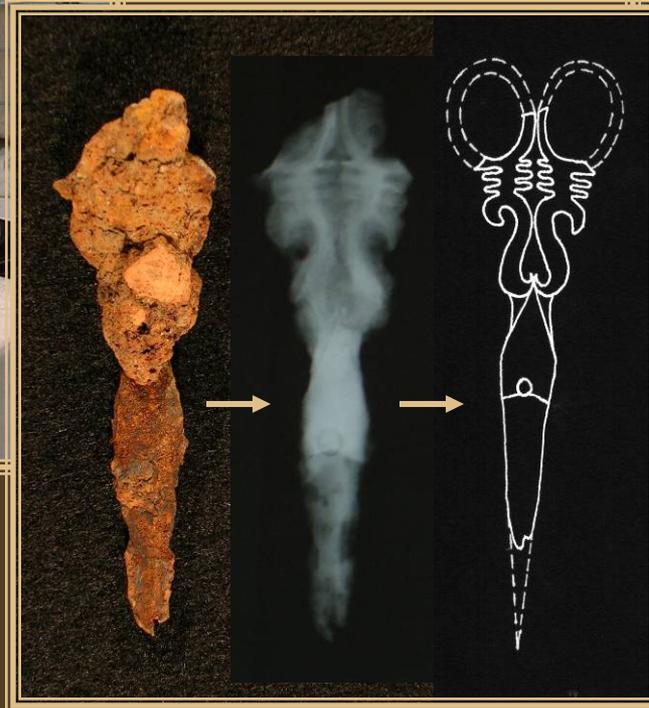
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Curation

Functions of the MAC Lab's Conservation Department:



Examining artifacts for deterioration problems



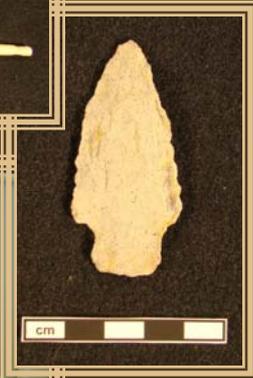
Full treatment of unstable artifacts

X-Radiography to identify and document corroded metals like this pair of 17th-century embroidery scissors

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Conclusion



- Ft. Meade acts as a steward by protecting its archaeological sites and collections
- Archaeological sites at Ft. Meade represent 10,000 years of human history
- One Archaeological site at Ft. Meade is potentially eligible for the National Register of Historic Places; 18AN1240 is a Late Archaic base camp dating to 4,000-1,000 B.C.
- Even though most sites are not eligible, all of Ft. Meade's collections contain information about human culture, and these are protected by long-term curation