Phase II and Phase III Archaeological Database and Inventory

MARYLAND HISTORICAL TRUST

Site Number: 18AN1554 **Site Name:** Bacon Ridge Site 3

Other name(s)

Prehistoric ☑ Historic ☐ Unknown ☐

Brief Description: Late Archaic or Early Woodland short-term camp

Site Location and Environmental Data:

Latitude 39.0179 Longitude -76.6239

Elevation m Site slope 20-40%

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

Maryland Archaeological Research Unit No. 7 SCS soil & sediment code AsF

Physiographic province Western Shore Coastal Terrestrial site ☑ Underwater site ☐

Ethnobotany profile available ☐ Maritime site ☐

Topography

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

Ownership

Private	☐
Federal	☐
State of MD	☐
Regional/ county/city	☑
Unknown	☐

Nearest Surface Water

Name (if any) Bacon Ridge Creek

Saltwater		Freshwater	
Ocean	☐	Stream/river	☑
Estuary/tidal river	☐	Swamp	☐
Tidewater/marsh	☐	Lake or pond	☐
		Spring	☐

Minimum distance to water is 91 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	Y	ca. 1675 - 1720	☐	ca. 1900 - 1930	☐
MIddle archaic	☐	Mid. woodland	☐	ca. 1720 - 1780	☐	Post 1930	☐
Late archaic	Y	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	☐	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?

Domestic	☐	Furnace/forge	☐	**Military**	☐	Post-in-ground	☐
Homestead	☐	Other	☐	Battlefield	☐	Frame-built	☐
Farmstead	☐	**Transportation**	☐	Fortification	☐	Masonry	☐
Mansion	☐	Canal-related	☐	Encampment	☐	Other structure	☐
Plantation	☐	Road/railroad	☐	**Townsite**	☐	**Slave related**	☐
Row/townhome	☐	Wharf/landing	☐	**Religious**	☐	**Non-domestic agri**	☐
Cellar	☐	Maritime-related	☐	Church/mtg house	☐	**Recreational**	☐
Privy	☐	Bridge	☐	Ch support bldg	☐	**Midden/dump**	☐
Industrial	☐	Ford	☐	**Burial area**	☐	**Artifact scatter**	☐
Mining-related	☐	**Educational**	☐	Cemetery	☐	**Spring or well**	☐
Quarry-related	☐	**Commercial**	☐	Sepulchre	☐	**Unknown**	☐
Mill	☐	Trading post	☐	Isolated burial	☐	**Other context**	☐
Black/metalsmith	☐	Store	☐	**Bldg or foundation**	☐		
		Tavern/inn	☐	Possible Structure	☐		

Interpretive Sampling Data:

Prehistoric context samples		Soil samples taken	N
Flotation samples taken	N	Other samples taken	

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

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Diagnostic Artifact Data:

Projectile Point Types

Clovis	0	Koens-Crispin	0
Hardaway-Dalton	0	Perkiomen	0
Palmer	0	Susquehana	0
Kirk (notch)	0	Vernon	0
Kirk (stem)	0	Piscataway	0
Le Croy	0	Calvert	0
Morrow Mntn	0	Selby Bay	0
Guilford	0	Jacks Rf (notch)	0
Brewerton	0	Jacks Rf (pent)	0
Otter Creek	0	Madison/Potomac	0
		Levanna	0

All quantities exact or estimated minimal counts

Prehistoric Sherd Types

Marcey Creek	0	Popes Creek	0	Shepard	0	Keyser	0
Dames Qtr	0	Coulbourn	0	Townsend	0	Yeocomico	0
Selden Island	0	Watson	0	Minguannan	0	Monongahela	0
Accokeek	0	Mockley	0	Sullivan Cove	0	Susquehannock	0
Wolfe Neck	0	Clemson Island	0	Shenks Ferry	0		
Vinette	0	Page	0	Moyaone	0		
				Potomac Crk	0		

Historic Sherd Types

Earthenware

Astbury	0	Ironstone	0	Staffordshire	0	**Stoneware**	
Borderware	0	Jackfield	0	Tin Glazed	0	English Brown	0
Buckley	0	Mn Mottled	0	Whiteware	0	Eng Dry-bodied	0
Creamware	0	North Devon	0	**Porcelain**	0	Nottingham	0
		Pearlware	0			Rhenish	0
						Wt Salt-glazed	0

Other Artifact & Feature Types:

Prehistoric Artifacts

Flaked stone	145	Other fired clay	0
Ground stone	3	Human remain(s)	☐
Stone bowls	0	Modified faunal	37
Fire-cracked rock	14	Unmod faunal	0
Other lithics (all)	0	Oyster shell	☐
Ceramics (all)	0	Floral material	☑
Rimsherds	0	Uncommon Obj.	0
		Other ☐	

Prehistoric Features

Mound(s)	0	Storage/trash pit	☐
Midden	☐	Burial(s)	☐
Shell midden	☐	Ossuary	☐
Postholes/molds	☐	Unknown	☐
House pattern(s)	☐	Other	☐
Palisade(s)	☐		
Hearth(s)	☐		
Lithic reduc area	☑		

Lithic Material

Fer quartzite	☐	Sil sandstone	☐		
Jasper	☑	Chalcedony	☐	European flint	☐
Chert	☐	Ironstone	☑	Basalt	☐
Rhyolite	☑	Argilite	☐	Unknown	☐
Quartz	☑	Steatite	☐	Other	☑
Quartzite	☑	Sandstone	☑	Gabbro	

☐ **Dated features present at site**

Historic Artifacts

Pottery (all)	0	Tobacco related	0
Glass (all)	0	Activity item(s)	0
Architectural	0	Human remain(s)	☐
Furniture	0	Faunal material	☐
Arms	0	Misc. kitchen	0
Clothing	0	Floral material	☐
Personal items	0	Misc.	0
		Other ☐	

Historic Features

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

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: 0	+/-	years BP	Reliability	**Sample 8:**	+/-	years BP	Reliability	**Sample 9:**	+/-	years BP	Reliability

☐ **Additional radiocarbon results available**

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MARYLAND HISTORICAL TRUST

Site Number: 18AN1554 **Site Name:** Bacon Ridge Site 3 Prehistoric ☑

Other name(s) Historic ☐

Brief Description: Late Archaic or Early Woodland short-term camp Unknown ☐

External Samples/Data: Collection curated at Anne Arundel County Planning & Zoning

☐ Additional raw data may be available online

Summary Description:

18AN1554, known as Bacon Ridge Site 3, is a prehistoric site believed to represent a Late Archaic short-term campsite, potentially with activity areas or perhaps multiple occupations. The site is on a wide and flat south-facing terrain at a confluence of Bacon Ridge Creek and one of its tributaries, which presented high potential for prehistoric occupation. It is located approximately 200ft south of Area 7a and contains several areas of gentle topographic relief which may have provided easy access to the marsh below.

The site was initially identified in October 2014 during a targeted Phase I survey of the Bacon Ridge Natural Area in Crownsville, Maryland as part of the Generals Highway Corridor Project funded by the State Highway Administration through a Federal Transportation Enhancement Program (TEP) grant. The Historic General's Highway Corridor study is a multi-year investigation designed to identify, locate, record, assess, study and share with the public the range of archaeological and cultural resources within a one-mile buffer of General's Highway (Route 178.) The Maryland State Highway Administration and Anne Arundel County are partnering to conduct this work.

Anne Arundel County's landscape would have been virtually unrecognizable at the time of its only stratigraphically intact Paleoindian site (Higgins Site: 18AN489) during the Late Pleistocene-Early Holocene transition. The Chesapeake Bay had not been formed at this point, and in its place was an extension of the Susquehanna River (typically referred to as the Ancestral Susquehanna River). The climate was generally cool and wet, enabling spruce-pine forests to dominate the area. These conditions were, however, in slow transition by the end of the Late Pleistocene as the Wisconsin Glacier continued to recede northwards, a process that began around 15,000 years ago. Prior to its recession, the
maximum glacial extent circa 19,000 years ago had reduced the level of the Atlantic Ocean by at least 83 meters (Dent 1995:73). Because of this, it is hypothesized that during the Paleoindian period, the Atlantic coastline from North Carolina to Delaware was extended 44km - 148 km (24-80 nautical miles) further east from its current location.

Although no Paleoindian sites are represented within the corridor, contemporaneous cultures represented at regional sites have been interpreted as highly mobile small groups of hunter-gatherers based on their tool-kit and low visibility of archaeological material. The Paleoindian tool kit consists of an array of standardized tool forms including fluted projectile points of the Clovis, Mid-Paleo, and Dalton types, along with scrapers, burins, gravers, knives, and perforators. It is generally accepted that these early cultures favored high quality cryptocrystalline materials for tool manufacture; although see Lowery 2002 for discussion of Paleoindian use to noncryptocrystalline tool manufacture). Abiding by the regional paradigm, the Paleoindian occupation at the Higgins Site was an expedient stop to process game in what was likely a seasonal migration across the region.

During the subsequent 7,000 year expanse of the Archaic period, the environment continued to fluctuate in response to the massive amounts of glacial melt-water reentering the sea from the receding Wisconsin glacier. At the outset, the Early Archaic witnessed moist conditions paired with climatic warming, but as temperatures continued to rise throughout the Middle Archaic sub-period, the climate gradually became drier. As a result, the environment became exponentially more seasonal, fostering the northern expansion of deciduous vegetation as well as temperate faunal species.

Of these two sub periods, only the Early Archaic is represented at the seven Archaic Period sites within the one-mile Generals Highway project boundary, and even these sites are uncommon as there are only two from which Early Archaic diagnostic artifacts were recovered. These sites are Obrecht's (18AN113) and Cranberry Swamp (18AN129). The infrequency of these sites may be explained by what some researchers have concluded was an Early Archaic preference for Piedmont locations, although if coastal areas were preferred, the rising sea levels throughout the period would have inundated most evidence. Furthermore, the mobile nature of these early small hunter-forager groups indicates that sites would be rather ephemeral and, hence, infrequently identified. The corridor's Early Archaic components support this hypothesis, as they are only represented at sites by diagnostics from unclear contexts (for 18AN113 see Maryland Historical Trust Digital Library Database [MHTDLD] 2008a; for 18AN129 see Hoffman 1993). Interestingly, both sites are located in close proximity to the Severn River, belying the suggested piedmont preference.

Around 5,000 years ago, at the initiation of the Late Archaic, the warming trend of the preceding two sub-periods ceased and the climate revolved back into the cool and moist conditions which are relatively similar to the present day. By this time, deciduous forests had almost completely displaced their coniferous predecessors and the rising sea levels had finally encroached into the Chesapeake Bay area of the Ancestral Susquehanna River, turning it into a restricted estuary within which estuarine species were being established. As a result of the rising water levels, many interior and transitional landscapes that surrounded the estuarine system became wetlands, which are present throughout the project area in the form of swamps, marshes, and occasionally bogs. Interestingly, a large percentage of the corridor's prehistoric sites are located in close vicinity to these areas (see below).
As the region's carrying capacity increased with the stabilization and flourishing of temperate resources, both floral and faunal, food resource predictability also rose. This, in turn, likely encouraged more frequent visits from the migrating hunter-foragers of the time. The three sites within the corridor with Late Archaic components (Cranberry Swamp: 18AN129; DCC-2: 18AN408; and Manganello Site: 18AN784) reflect the resulting increase in settlement complexity with the increased availability of resources in that they all are of different site types and are widely dispersed through the corridor. The variety alone implies that groups were using the area more diversely than previous periods, but the increased size of the sites also indicates that populations were growing. Furthermore, the presence of steatite (a non-local lithic type) at two of the sites (Cranberry Swamp and DCC-2) highlights what researchers suggest is the development of widened social networks, through which the exchange of goods and ideas likely took place.

At the end of the Late Archaic, circa 3,000 years ago, the Chesapeake Bay was essentially fully formed. With the completion of this process came the expansion of valuable estuarine species (crab, anadromous fish, oyster, etc.) that had slowly begun moving into the developing Bay throughout the Archaic period. The area's transition towards environmental consistency, in conjunction with the development of bountiful resources, had induced local groups to not only stay longer—becoming increasingly more sedentary—but also to develop a more maritime-focused life way. The widespread appearance of these cultural transitions marks the end of the Archaic period.

In the region, diagnostic projectile points for the Early and Middle Archaic include, in generally sequential order: Palmer, Kirk, bifurcates, Stanley, Morrow Mountain, Guilford, Otter Creek, Halifax, and Brewerton types. A great variety of projectile points appear within the Late Archaic, some of which include Bare Island, Fishtail, Vernon-type points as well as many broad blade (Susquehanna, Lehigh/Koens-Crispin, and Savannah River) and narrow blade (Clagett, Lamoka, Poplar Island, and Piscataway) points. Additional lithic technologies that appear during this time include ground axes, adzes, gouges, and spear-thrower (atlatl) weights.

Phase II and Phase III Archaeological Database and Inventory

MARYLAND HISTORICAL TRUST

Site Number: 18AN1554 **Site Name:** Bacon Ridge Site 3 Prehistoric ☑

Other name(s) Historic ☐

Brief Description: Late Archaic or Early Woodland short-term camp Unknown ☐

The stabilization of the climate appears to have marked the start of many socioeconomic shifts. Whereas the Archaic sub-periods are generally differentiated by ecological changes, those of the Woodland Period are separated by regional shifts in technology, namely ceramics, in addition to the evolution of varying stages of larger communal and hierarchical social structures. Within one mile of Generals highway there are eight Woodland period sites. One of the major subsistence developments in the Generals Highway area is the transition towards a riverine focused life-way, which is evidenced in the higher number of shell middens that appear throughout the period. Shell middens, which are concentrations of refuse left from processing oyster shells, account for/are represented at five of the eight Woodland sites in the corridor. At the same time, new food caching techniques appear (e.g. underground storage), which further displays the more efficient exploitation of resources in centralized areas by increasingly sedentary groups. With this evidence, it has been deduced that earlier Woodland populations had a “fusion-fission” settlement system that initially revolved around seasonal social organizations at habitation (macro-group) and temporary camp sites (micro-group), and which later developed to center around a primary macro group base camp. As maintenance and control of subsistence and technology methods became more efficient (and necessary) throughout the period, seasonal base camps became more permanent settlements. The increasing sedentism enabled population growth and consequently, organized tribal and later chiefdom societies.

The adoption of ceramic technology is essentially the primary marker for the start of the Woodland period. The first ceramic tradition that appears in this area’s Early Woodland subperiod is the Marcey Creek series. These ceramics were tempered with crushed steatite and closely resemble, in shape, the carved steatite bowls that appeared sporadically in the region during the Late Archaic. As ceramic technology continued to develop further during the Early Woodland, local resources were used experimentally to temper the clay. In this part of Maryland this experimentation is seen most commonly with the Accokeek and Popes Creek series, which were tempered with sand or crushed rock.

The dramatic decrease in the variety of ceramic vessel types during the Middle Woodland signals a homogenization of ceramic technology had become homogenized. During this period, the brief continuation of the Popes Creek series is quickly replaced by the Mockley series, which is tempered with crushed oyster shell. The widespread adoption of the Mockley series is not only seen locally, but regionally, which further supports that vast intraregional exchange networks had developed by this time.

The Late Woodland period witnesses the abandonment of the unified Mockley ceramic tradition for a greater array of ceramic diversity. Differing from the ceramic diversity present during the Early Woodland, by the end of the Late Woodland the distribution of particular vessel attributes (e.g. shape, size, and decoration) is seen restricted to core areas, which suggests an increase in group territoriality. When coupled with early European descriptions of Mid-Atlantic chiefdom hostility, the development of such ceramic boundaries probably evidences the initial emergence of political structures.

In the project area, Late Woodland ceramic types include Townsend, Potomac Creek, and Moyaone series. The former is shell tempered, Potomac Creek series is crushed quartz tempered, and the latter is tempered with fine sand. In regards to non-ceramic Woodland Period technologies, a variety of decorative items began to appear throughout the region during this period, including pendants, stone gorgets, carved pipes, and beads of stone, shell, and bone. Diagnostic projectile points include Calvert,
Meadowood, and Rossville-type points, in addition to the continuation of many Late Archaic points for the Early Woodland; Fox Creek/ Selby Bay, and Jacks Reef for the Middle Woodland; and triangular shaped points (Levanna and Madison) for the Late Woodland.

The work conducted during the first year of the project primarily consisted of Phase I archaeological field surveys and intensive historic research on the corridor as a whole, as well as individual cultural or landscape features that played an important role in shaping the corridor as it exists today.

In September and October of 2014, archaeologists under contract with Anne Arundel County conducted a targeted Phase I cultural resources survey of the Bacon Ridge Natural Area in Crownsville, Maryland as part of the Generals Highway Corridor Project funded by the State Highway Administration through a federal Transportation Enhancement Program (TEP) grant. Project Archaeologists Mandy Melton and Stacy Poulos were responsible for identifying high-potential areas for testing and supervising all field work, as well as site analysis and report writing; the historic sites found during the course of the survey are discussed separately. Melton and Poulos were assisted in the field by county contractors Stephanie Sperling and Shawn Sharpe, along with several field technicians contracted through URS. Additional support from volunteers was also utilized in the field, notably Penny Goldstein, as well as for the construction of this report.

The Bacon Ridge Natural Area contains 630 acres of land owned by Anne Arundel County stretching approximately two and a half miles along Bacon Ridge Creek and its associated tributaries. All of the property within the natural area is protected through a Conservation Easement that restricts access for passive recreational uses. With the realization that this land has gone largely untouched since most of it was acquired in the twentieth century, the original scope of work (which was confined to a small parcel in the northern half of the park) was extended to include the entire Natural Area. The boundaries are defined to the north by a driveway that parallels Wilderness Ridge Trail road, to the south by Chesterfield road, to the east by I-97, and to the west by Saint Stephens Church Road. There are two previously recorded archaeological sites within the survey boundaries, both of which are historic and are discussed by Poulos, below. Seven new sites were identified in the course of this Phase I survey: four prehistoric sites and three historic sites. The prehistoric sites included three probable short-term resource procurement sites (18AN1552, 18AN1554, and 18AN1555) and one lithic scatter (18AN1553).

In order to manage the large size of the survey area, high-probability areas were identified and targeted through an intensive review of historic and topographic maps in lieu of a traditional full-coverage survey. This review revealed that a bulk of the project area’s gross acreage consisted of steep, undulating ridges, greatly reducing the amount of land that could be reasonably subjected to subsurface testing. Originally, a walkover survey was planned through the parts of the Bacon Ridge Natural Area that would not be subjected to shovel test pit (STP) survey, but access limitations were encountered due to the number of private properties that surround the natural area. The number of access points was initially limited to two—one at each end of survey area—with a third added in the final two weeks of the survey allowing more convenient entry to the central part of the survey area. Cumulatively, 303 shovel test pits (STPs) were excavated during the Bacon Ridge survey at 25-ft intervals.

Area 7b (the location of 18AN1554) was chosen for subsurface testing for its wide and flat south-facing terrain at a confluence of Bacon Ridge Creek and one of its tributaries, which presented high potential for prehistoric occupation. It is located approximately 200ft south of Area 7a and contains several areas of gentle topographic relief which may have provided easy access to the marsh below. Subsurface testing in this area involved 29 regular interval STPs across the landform and ten radial STPs in the southwest portion of the survey area. Due to the irregular shape of the survey area, the grid was established using a baseline oriented 20 degrees west of magnetic north (9 degrees west of true north). Soil stratigraphy throughout Area 7b displayed three strata and was generally homogenous, although some variations were noticed near dramatic shifts in topography. Strat 1 was a dark yellowish brown (10YR4/6) silty loam with an average depth of 0.4ft bgs. Strat 2 was a brownish yellow (10YR6/8) sandy loam that usually ended at 1.0ft bgs. Subsoil was then identified in Strat 3,

which was a yellowish brown (10YR5/6) sandy clay.

Twelve STPs provided a total of 41 artifacts, which appeared in three separate loci (Locus A, B, and C). Locus A held the highest quantity of artifacts (88%) and Locus B held the second (10%). Locus C, on the other hand, contained just one isolated artifact. Of note, 49% of the artifacts recovered during the survey were from Strat 2 or Strat 3, and were generally within STPs set back from the edge of the ridge. Alternatively, the STPs containing artifacts from Strat 1 or indeterminate strata were almost exclusively in STPs near the ridge and tip of the landform, which display evidence of erosion. Nine positive STPs concentrated around the southern tip of the landform make up Locus A. This area's assemblage includes 36 artifacts, 21 of which were recovered from uncertain stratigraphic contexts. The artifacts without stratigraphic association include 16 pieces of quartz debitage (w=0.897oz), one piece of rhyolite debitage (w=0.100oz), one piece of shatter from an unidentifiable lithic material (w=0.020oz), one broken pebble of an unidentifiable lithic material (w=0.380oz), and two quartz conglomerate fire cracked rocks (w=1.906oz). Artifacts found in Strat 2 include five pieces of quartzite debitage (w=0.053oz), five pieces of quartz debitage (w=0.114oz), one quartz core (w=0.678oz), two pieces of rhyolite debitage (w=0.067oz), and one fishtail-type projectile point (w=0.104oz). Only one artifact, a piece of quartzite debitage (w=0.008oz), was recorded from Strat 3 of Locus A but was likely the result of bioturbation.

Locus B ran along the northeast extent of the survey grid and contains two STPs. The artifact assemblage from this locus consists of a quartz core (w=0.062oz), two gabbro fragments (w=0.011oz), and one piece of rhyolite debitage (w=0.014oz). All of these artifacts were recovered from Strat 2. Locus C contained an isolated positive STP located 100' east of Locus A (STP 274). This STP contained a possible quartz core (w=0.464oz) in Strat 2.

In conclusion, the Phase I/II recovery of a fishtail-type point permits a temporal designation of the Bacon Ridge Site 3 as Late Archaic or Early Woodland. Based on the amount of lithic debitage and presence of FCR, it is tentatively interpreted as a short-term camp site. The site may have experienced multiple occupations/visitations, as evidenced through the diverse lithic assemblage and distance between Locus A and Locus B. Alternatively, considering quartz lithics were recovered from all three loci, it can be argued that the site may have been a basecamp with various activity areas. All artifacts were processed and analyzed at the Anne Arundel County Archaeological Laboratory at Historic London Town and Gardens in Edgewater, Maryland in compliance with the MHT guidelines. The final catalog, records, field notes and curated artifacts are also stored at this facility.

In September of 2015 the Bacon Ridge Site 3 (18AN1554) was revisited for supplementary Phase II testing. The purpose of the limited Phase II was to determine whether the site retained integrity and if it held the potential to further contribute to the dearth of data for Anne Arundel County's inland prehistoric landscape.

The Phase II excavations involved 25 close-interval shovel test pits (STPs) and three 5x5' foot excavation units (EUs). Due to time constraints, only the southern portion of the site (Loci A and C from Phase I survey) underwent testing (Figure 1-4). STPs were positioned at 25' intervals across untested areas of the site using the previously established site grid. This technique served to better define the site boundaries and to direct placement of the subsequent test units.

The three units were positioned in distinct areas of high artifact concentrations in an attempt to identify whether the artifact distributions from the STP data represented activity areas. All artifacts were processed and analyzed at the Anne Arundel County Archaeological Laboratory at Historic London Town and Gardens in Edgewater, Maryland in compliance with the MHT guidelines. The final catalog, records, field notes and curated artifacts are stored at this facility.

Seventeen of the 25 close-interval STPs contained cultural artifacts. In total, 64 artifacts were recovered (w= 6.214oz), nearly all of which were lithics with the exception of eight pieces of charcoal (w=0.024oz).
Of the total lithics recovered from the STPs, debitage was most frequently encountered and consisted of quartz (n=29; w= 1.334oz), quartzite (n=17; w=0.302oz), rhyolite (n=6; w=0.086oz), and siltstone (n=1; w=0.033oz). Interestingly, the one piece of siltstone shatter had the remnants of a small fossil on it (STP 319). Debitage types consisted of tertiary and secondary flakes as well as shatter. Two broken cobbles were also recovered from STPs 308 and 320 (w=4.372oz), both of which appeared slightly thermally altered. Lastly, one basal end of a contracting stem quartzite projectile point was recovered from STP 304. The Phase II STP data contributes to the earlier Phase I survey and provides a clearer picture of site boundaries and lithic material distribution. As for the site boundaries, the Phase II STP data exhibits a potential connection between Loci A and C and also assisted in refining the boundaries around these concentrations.

During the Phase II survey, 240 artifacts were recovered from unit excavations. EUs 1 and 2 contained roughly the same amount of artifacts, however the total weight of each unit's assemblage differed tremendously. Unit 3 on the other hand contained significantly fewer artifacts. The fact that artifact quantities in Units 1 and 2 increase significantly with depth suggests that portions of the landform retain buried cultural horizons. The lack of artifacts in EU 3 is likely due to natural downslope erosion of the landform.

EU 1 held a total of 102 artifacts, all of which were lithics, consisting primarily of debitage (78.4%: n=80; w=1.944oz) and FCR (13.7%: n=14; w=7.54oz). One small piece of serpentine and two pieces of what appears to be soft natural ironstone (but may be ocher) were also collected. Notably, Strat 1 contained a quartz expedient scraper and Strat 2 contained one nutting stone and two anvil stones, one of which had been split into two pieces.

A total of 121 artifacts were recovered from EU 2. Nearly all of the artifacts were lithics, with the exception of 21 pieces of charcoal. During excavation of the unit it was noted that a majority of the artifacts were concentrated within the final 0.2ft of Strat 3 and the upper 0.05 - 0.1ft of Strat 4. Notably, one quartz bifacial ear/notch fragment (probably from a projectile point) was recovered in Strat 1, and Strat 3 contained one broken half of a crude rhyolite biface that appears to be a preform or blank. The biface's fracture is a snap break typically resulting from an error in the knapper's percussion technique.

Unit 3 held a total of only 17 artifacts, eight of which were charcoal fragments from Strat 1 (w=0.048oz). The remaining artifacts were all lithics.

Distinct differences are evident between the artifact categories recovered from EUs 1 and 2, noticeably in debitage material types, tool types, and FCR quantities. Furthermore, the array of tool types recovered from each unit potentially indicates different activity areas. Tools from EU 1 consisted of types associated with food/game processing, including nut/plant grinding implements and scrapers. The presence of FCR exclusively in EU 1 may also signal the area's use for food processing activities. Conversely, EU 2 contained bifacial tools and debris associated with tool manufacture and maintenance.

At first glance, the extensive differences between the two areas imply multiple occupations occurring at the site, however, similarities in the behavioral patterns of quartz and quartzite use suggest correlations and may alternatively indicate a single occupation. As seen in Figure 1-18, the amount of quartz represented in both Units 1 and 2 exhibits similarities in use patterns when frequencies of cortex and non-cortex debitage are considered. This trend is

Phase II and Phase III Archaeological Database and Inventory

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Site Number: 18AN1554 **Site Name:** Bacon Ridge Site 3 Prehistoric ☑

Other name(s) Historic ☐

Brief Description: Late Archaic or Early Woodland short-term camp Unknown ☐

somewhat exhibited in the quartzite assemblage, however the absence of quartzite debitage with cortex in Unit 2 suggests that only late stage quartzite tool maintenance was being conducted in that area.

Additionally, while the presence of different quartzite varieties noted above for EUs 1 and 2 may suggest that there was more than one occupation, it could alternatively represent the differential material preferences and/or different methods of lithic processing used to manufacture tools for distinctive activities. For instance, the difference in color may be the result of heat-treatment of the same raw material-the core of the source material may have been used for projectile point manufacture while the thermally altered material may have been better suited for expedient tool manufacture. It may instead show different stages of tool manufacture in that the source material was reduced in one area and utilized in another.

If this is the case, the abundance of quartzite in EU 1, it may indicate that quartzite was utilized primarily for resource processing and various lithic types were utilized and retouched at the site for activities that took place elsewhere. This in turn may suggest that the occupants were resourceful and utilized whatever materials they encountered as opposed to seeking specific materials for formal tools.

Ultimately, with this information it may be inferred that the area surrounding EU 1 was primarily utilized for food processing since it is the only unit from which FCR and food processing tools (nutting stone and anvils, and expedient scraper) were recovered. Unit 2 on the other hand, may represent the location where formal tools were being manufactured and/or maintained or, alternatively, where lithic refuse was discarded. Because both units exhibit high frequencies of quartz debitage with cortex (by weight- 74% in Unit 2 and 72% in Unit 1) it is likely that local quartz was used for expedient purposes by the inhabitants, and may furthermore indicate a single occupation.

In summary, the 2015 Phase I and II excavations at Bacon Ridge Site 3 recovered a total of 345 artifacts. Lithics dominated the assemblage (89%: n=308; w=81 .649oz) and consisted of quartz, quartzite, rhyolite, ironstone, cryptocrystalline Gasper and chert), gabbro, siltstone, sandstone, quartz conglomerate, and serpentine. Non-lithic artifacts consisted solely of charcoal, of which there were 37 pieces (w=0 .166oz). No pottery sherds were recovered during either of the investigations. The quantity of artifacts manufactured from non-local materials including rhyolite and cryptocrystalline types increased significantly during the Phase II investigation. The recovery of a rhyolite preform from EU 2 is interesting considering that the large chunk of material was simply discarded and not re-purposed or kept for future use. The recovery of a very small rhyolite fishtail projectile point (STP 283) in the vicinity of this unit during the Phase I survey further distorts the initial economically-based interpretation that the point was conserved for as long as possible (and only discarded once its use could no longer be maintained) because the acquisition of rhyolite is time and labor intensive. This new finding may suggest
that the group occupying the area had a relatively reliable source or reserve of the material, or that the exotic material was not as highly valued as was previously thought. If this is the case, it would be interesting to investigate whether the fishtail point was manufactured from the other broken half of the preform. Alternatively, it may suggest two temporally distinct occupations and changing attitudes towards rhyolite.

Diagnostic artifacts recovered from the site consist of one rhyolite fishtail point and one quartzite contracting stem point (Piscataway?); both of which are considered Transitional Archaic types. Interestingly, both of these projectile points are very small, which may indicate heavy, long-term use and maintenance. It may alternatively indicate that the source materials for these objects were uncommon and necessitated the production of relatively small tools. Other bifaces included a quartz ear fragment (probably from a projectile point) and a broken rhyolite preform. The presence of a nutting stone and two anvils suggests processing of floral/plant resources and may also indicate a Late Archaic occupation. This is further supported by the absence of ceramic sherds.

Looking back at the conclusions reached during the original Phase I investigation, several readjustments need to be made. First, it was suggested that the area between STPs 285, 286, and 283 was possibly a secondary reduction area. With the Phase II data this possibility is considered invalid as the updated debitage with cortex data depicts a major concentration just south of that area. Second, it was posited that Phase I STPs 283 and 287 identified locations of quartzite and quartz biface maintenance/production respectively. Based on the supplementary data, only STP 313 provided additional evidence of non-cortex quartz debitage around STP 287. However, the recovery of a quartz point fragment from Unit 2 (slightly over 60ft from this area) may contribute to this possibility. Ultimately, while precise evidence for individual point production locations is limited, the cumulative data does support that bifacial reduction was taking place within the general area. Third, as discussed above, the previous assumption that the rhyolite fishtail point was manufactured elsewhere has been suggested to be false considering a rhyolite preform (broken during early-stage reduction) and relatively large quantities of rhyolite debitage was recovered during the Phase II.

Last, it was concluded that the site probably represented a Late Archaic short-term campsite, potentially with activity areas or perhaps multiple occupations. These conclusions are supported by the Phase II data and tentatively provide more evidence of a single occupation for a decent amount of time or perhaps reoccurring short-term occupations by the same group over a span of several years. These tentative conclusions are based largely on the discovery of a heavily worn nutting stone and anvils. Although there is a possibility that the stone was transported during migrations, the extensive and apparent multi-purpose of the object as a (core? heating platform?] and its abandonment prior to complete loss of function (it appears to have been still functional- not discarded) may indicate that the object was stored at the site for future use.

The Bacon Ridge Site 3 appears to have been occupied by prehistoric groups exploring and exploiting the local resources-likely in the midst of dynamic cultural and ecological adaptations to a changing environment affected by the expansion and development of the Chesapeake Bay.
What exactly attracted these groups to the area is still unclear. It is clear, however, that the groups were generally engaged in nut-processing subsistence activities although the abandonment of the nutting stone may indicate a failed endeavor- or a greatly successful one if it was cached for later use. Whether the inhabitants were in the area in search of game also remains unclear, but this question may be answered if additional investigations incorporate use-ware studies and other archaeometric analyses and if more intensive excavations are undertaken within the potential activity areas identified during this survey. Ceramic technology does not appear to have been a significant aspect of these inhabitant's lives, but additional investigations

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