

Middle Woodland Period in Central Maryland: A Fresh Look at Old Questions

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Presented in the following pages is a comprehensive summary of the current state of knowledge on the Middle Woodland time period in the Middle Atlantic culture area, with a specific focus on Central Maryland. From the review of 130 sources, and a detailed annotation of 45 of those, several research topics came to the fore. The paper presented below has been structured to demonstrate how scholars have framed research into the Middle Woodland period prior to this project, and will discuss what archaeologists over the past 50 years have come to learn about these topics including;

- Chronology;
- Settlement Patterns and Subsistence;
- Trade and Exchange Networks;
- Popes Creek Phase & Popes Creek Pottery;
- Selby Bay Phase & Mockley Pottery; and
- Shell Middens and Other Features (pits).

The paper concludes with an exploration of what we have learned, and where research should move from this point. The author offers a set of new and improved research questions, and outlines methods by which archaeologists might engage these issues in the future. The paper lays the foundation and framework for the field research that will be undertaken by the *Lost Towns Project* over the next several years.

This project began in 2008, when the *Lost Towns Project* of Anne Arundel County, the archaeological research arm of the Anne Arundel County Trust for Preservation, Inc., received the first of a multi-year grant from the Maryland Historical Trust to study this unique transitional period of prehistory. The project has been designed to enhance the scholarly inquiry and understanding of the period in this region and to make a case for its value to Maryland's prehistoric heritage. During this first year, the team has synthesized the somewhat scattered knowledge of the period into a "one-stop shop" of available Middle Woodland information with a focus on the Central Maryland region. Such a resource will provide researchers with a solid base of

information that can be used to facilitate their own projects and to begin to formulate—and perhaps even answer, a set of broad research questions.

In order to compile this list, a literature review was conducted at the Maryland Historical Trust library in Crownsville, Maryland and in the *Lost Towns Project* files, stored in the Anne Arundel County Planning & Zoning office in Annapolis, Maryland. One hundred and thirty sources were gathered to create an ultimate list, and 45 of these were annotated. The reasons for this are twofold. First, the focus of the project geographically was limited to Central Maryland. While excellent sources on the period have been written from the perspective of sites excavated outside the area, the team has attempted to focus the research geographically, delving as deeply as possible into the world of the Upper Chesapeake. And second, while many sources did not contain enough information relevant to the Middle Woodland or were too broad to warrant an annotation, they were kept on the ultimate list because they can provide a researcher with a point of reference. Inclusion on the list will allow researchers to quickly access these sources on their own.

It is striking that the majority of these assembled sources were written before 1989. Nearly 75% of the bibliographic list and 60% of those chosen for annotations are at least 20 years old; in fact, less than ten relevant sources were identified that have been published in the 21st century. A number of broad, regional overviews were funded in the 1970s and 1980s by the Maryland Historical Trust or the Maryland Geological Survey, like Laurie Steponaitis' 1978 *An Archaeological Survey of the South River Drainage Basin*, Jeffrey C. Wanser's 1982 *A Survey of Artifact Collections from Central Southern Maryland*, and Maureen Kavanagh's 1982 *Archaeological Resources of the Monocacy River Region*, but this type of study was, for the most part, not funded after the mid-1980s. Many available sources written since then are more narrowly focused journal articles, books, or academically funded graduate dissertations or theses.

Cultural resource management companies have gathered a tremendous amount of primary source information in the last 20 years. However, in the busy world of for-profit archaeology, time constraints only permit this information to be recorded in technical reports or presented as site-specific papers at regional conferences. Little synthesis has been undertaken, and professionals have little time or funding to put their own sites into

context with the growing hoard of temporally-similar sites. As we continue our multi-year Middle Woodland project, we plan to assemble the relevant information from these segmented sources, and this data will eventually be presented within an interactive GIS database. In this way, we hope to facilitate broad-based research questions along the same lines as were asked by archaeologists decades earlier.

These 45 annotations provide a wide-ranging overview of the major topics discussed in the literature and give the reader a sense for how the subject of the Middle Woodland period has been treated over the years. These sources came from regional studies, books, journal articles, monographs, and reports, and include many standards in the field that formed the basis for much subsequent work. Broad themes such as chronology, resource procurement, settlement patterns, and trade are prevalent, as are more narrowly-focused topics such as ceramic and lithic technology, types of features and pits, and results from radiocarbon dating analyses. These subjects were used as keywords to guide the researcher through the assembled information, and also provide the framework for this overview.

The following pages will outline the current state of knowledge for these and more topics related to the Middle Woodland time period, and it is hoped that this will lend insights into the scholarly inquiry of this time period for any archaeologist or researcher during their own investigative process.

Chronology

While the time range for the Middle Woodland is somewhat debatable, it is dated most broadly from 500 B.C. – A.D. 1000, but more often is ended by ca. A.D. 900. Most scholars believe it spans two cultural phases, most often called the Popes Creek phase (ca. 500 B.C. – A.D. 200) and the Mockley phase (ca. A.D. 200 – 900) in Central Maryland and the Upper Chesapeake (Egloff and Potter 1982; Wanser 1982; Read 1990 shifts these dates within a century). This division is called Middle Woodland I and II elsewhere (Gardner 1982). These date ranges were ascertained largely by radiocarbon dating that has taken place at individual sites excavated in the region. This topic will be explored more fully later in this narrative.

The two phases are most easily divided archaeologically by a dramatic change in pottery types. Popes Creek ware is tempered with sand or crushed quartz and most often net-impressed, while Mockley ware is shell-tempered and has a variety of surface treatments. Early scholars attempting to define the Middle Woodland period gave a date range of A.D. 900-1200 and referred to Popes Creek an Early Woodland ware (see Stephenson et al. 1963), but this range has been dramatically shifted in the intervening decades.

Some authors, however, ascribe only the one phase, occurring ca. 0 – A.D. 1000 (often ca. A.D. 200 – 900) to the Middle Woodland, eliminating Popes Creek-type wares entirely from their discussion of the period (Cresthull 1974; Gleach 1988; Steponaitis 1986). On the Eastern Shore, Lowery (1992) divides this later part of the period into two diagnostic complexes: the Carey complex (2000 – 1400 B.P./0 – 600 A.D.), defined by increased oyster use, Fox Creek points, and shell-tempered ceramics, and the Webb complex (1400 – 1000 B.P./A.D. 600 - 1000), defined by Jack’s Reef pentagonal points and increased sedentism along with incipient ranked societies. Custer and Doms (1984) argue that the definition of the Webb complex (which they define as ca. A.D. 500 – 900) should be changed to include changed to include Mockley ware based on their analysis of surface-recovered finds from the Oxford site (18TA3).

In Anne Arundel County, Henry Wright (1973) defined four phases and date ranges to the Middle Woodland. He saw the Accokeek phase ranging from 100 B.C. – A.D. 100, an “undefined” phase (later called Smallwood) ranging from A.D. 100 – 300, the Selby Bay phase from A.D. 300 – 700, and finally the Sullivan Cove phase from A.D. 700 – 1100. He also defined the Little Round Bay phase from A.D. 1100 – 1300 as a Late Woodland cultural manifestation in Anne Arundel County. The term “Selby Bay phase” would later become prolific in the literature to describe the Middle Woodland II on the western shore of the Bay, but most of Wright’s other nomenclature was infrequently used. One exception to this is in Steponaitis’ (1978) discussion of sites on the South River in Anne Arundel County when she refers to a Smallwood phase (300 B.C. – A.D. 200), that she relates to Popes Creek, and a Selby Bay phase (A.D. 200 – A.D. 750).

Settlement Patterns and Subsistence

The Middle Woodland period was, by all accounts, a transitional period in Middle Atlantic prehistory and many authors have attempted to describe the dynamic settlement patterns that took place during this time. While McLearen (1992:41) sees distinct similarities in material culture recovered from the Coastal Plain of Virginia resulting in what he terms “a pan-Chesapeake phenomenon,” Blanton (1992:65) noted a “somewhat bewildering number of local cultural expressions” that are manifested in archaeological collections recovered from across the state of Virginia. He concedes that these various expressions could be due in part to inconsistent levels of data collection undertaken across the physiographic provinces. Blanton goes on to state that while he sees no abrupt changes occurring during the period, the most common trends noted in Middle Woodland settlement systems include increasing sedentism, steady population growth, and broad-based economies formed by more clearly defined group territories. Stewart (1992:7-8, 15) puts forth the notions that increased population levels and access to reliable food sources are the primary factors in accepting a more sedentary way of life. In the Middle Woodland, this was enabled by full integration of ceramic cooking vessels, which lead to improved nutrition and thereby population growth.

Blanton (1992) goes on to discuss two possible models for settlement-subsistence patterns in the Middle Woodland: logistical or fusion-fission. The logistical model suggests the presence of a few moderate to large base camps surrounded by more numerous and widespread short-term occupation procurement camps. The fusion-fission model is highlighted by a number of “macro-social unit” base camps that were located near rich resources and were occupied annually by members of different groups (1992:68-72). He concludes by noting that the period is notable for increased settlement in lower-lying areas near wetlands, broad relationships reflected in long-distance exchange, and the probable transformation from band to tribal level organization (1992:88-89). It seems clear that in either system, the major force driving populations to migrate is the desire and need to procure resources.

Gilsen (1979:18) presented “models for exploitation” for Calvert County, Maryland during the Woodland period based on ethnographic studies of the contact-period Oregon Coast peoples. A summer-fall-early winter (S-F-W) settlement pattern for

this system was noted, where populations would be settled in a primary village located near a major ecotonal complex that would be occupied for most of the year. This would provide the population with reliable, easily obtained food resources, like shellfish, deer, and waterfowl on a year-round basis. In Calvert County, this type of subsistence could probably be found along the Patuxent River south of Hunting Creek or along the Chesapeake Bay. In the late winter-spring-early summer (W-S-S) pattern, the population would disperse somewhat and focus on the predictable anadromous fish runs that occur further upstream, north of Hunting Creek. This type of seasonal subsistence and migration system promotes increasing levels of population where shellfish are the primary resource that can be easily extracted and utilized throughout the year.

Gardner (1982) further refined this general model, and noted changing settlement patterns within the Middle Woodland period. The Middle Woodland I saw net-impressed, Popes Creek-like pottery becoming widespread across the region, attributed to a growing trade and interaction network. Sedentism, which began to take root in the Early Woodland, increased during the Middle Woodland I, as did population growth, which may have led to centralized authority and the development of ranked societies. This ranking is most clearly evidenced by the preferential burial practices of the western Virginia Stone Mound Burial Mound complex and the Adena-related complexes of the Delmarva Peninsula, demonstrating that only select members of the societies were interred in such a manner. During the Middle Woodland II and the sudden expansion of shell-tempered pottery in the Coastal Plain, a more dispersed settlement system prevailed. This is possibly due to a loss of the ranked societal system, evidenced by the lack of ornate burial mounds and an increased number of shell middens with Mockley components. Gardner sees these changes “tied together in the ecology, the limitations of the techno-economic base, population growth, geographic over-extension, [and] the failure of the previously evolved structures to satisfy the needs of the population or effectively to keep the system operative” (1982:67). This led to a society more in line with the “loosely or non-aligned systems prevailing during the Early Woodland” (1982:81).

Other scholars have noted a division between the earlier and later Middle Woodland. Wanser (1982) studied artifact collections from the lower Potomac drainage

of southern Maryland, and noted a predominant Popes Creek occupation in the St. Clement-Breton Bay area, along with an associated concentration of points in nearby Zekiah Swamp. More Selby Bay phase artifacts were recovered from sites closer to the Potomac, suggesting a shift in base camps downriver from the earlier phase. Considerably fewer Selby Bay points than Popes Creek phase were found in the study area, but they were again concentrated in the uplands or the Zekiah Swamp area. A societal or environmental change in available or desired resources was most likely the cause of these shifting subsistence patterns.

Lowery (1992) also saw changes in site distribution throughout the Middle Woodland during his study of sites on the Delmarva Peninsula in lower Talbot County, Maryland, although he divides the period into the Carey complex (ca. 0 – A.D. 600) and the Webb complex (ca. A.D. 600 – 1000). An unequal number of sites were identified (15 Carey and six Webb), leading him to conclude that social complexity must have changed through the period. During times of high complexity, like in the Webb complex, this hinterland area of Talbot County is less populated. However, when complexity declines, as in the earlier Middle Woodland Carey complex, the hinterlands are more aggressively populated. Environmental factors that thereby caused shifts in available resources affected this waxing and waning of populations, and therefore, social complexity “seems to be dependent on times of aggregation and dispersal” (1992:33).

Lowery is not the only one to discuss the notion of environmental factors affecting populations. Anderson (2001) noted that the lack of rapid or extreme fluctuations in climate during the Middle Woodland could have been a stabilizing force that led to the development of agriculture, which was increasingly utilized by the end of the period. Along these lines, McNett and Gardner (1975:31) noted that some horticulture could have been taking place along the Potomac River during the Middle Woodland II. They base this upon the presence of fewer and smaller oyster middens that contained a greater percentage of dark organic soil, relative to those seen during the earlier Popes Creek phase. This indicates to them a decreased dietary reliance on shellfish and an increased reliance on plants.

The long-distance migration of populations has also been put forth as a possibility for the diverse settlement patterns noted between the Middle Woodland I and II. By

undertaking linguistic analyses, Luckenbach et al. (1987) conclude that radiating Proto-Algonquian groups that originated in the Great Lakes first migrated to the Northeast and then expanded southward during the Middle Woodland period. The ca. A.D. 200 development of the distinctive phases of the Fox Creek, Cony and Selby Bay complexes are evidence of the evolution and growth of this adaptive radiation southward (1987:21). Fidel (1990) sees largely the same thing occurring, although he postulates two waves of Proto-Algonquian expansion from a homeland north of Ontario, the first occurring between ca. 600-200 B.C. and the second ca. A.D. 600. The expansive trade networks in place during the Middle Woodland further the notion of “extensive social interactions of a widely dispersed, yet initially homogenous Algonquian linguistic community” (1990:220).

Steponaitis (1986) also noted a significant shift in settlement organization along the Patuxent River that occurred during the later Middle Woodland time period (ca. A.D. 200-1000). She concluded that interior and coastal zones were used increasingly for specific and differing purposes during this time, and a far greater emphasis was placed on estuarine habitation. A population increase is likely not the cause of this shift in settlement and resource use, nor is a brief period of dryer climatic conditions that occurred from about A.D. 400-500. Rather, the increased alliance and exchange networks that were likely in place by this time (marked most prominently by the strong preference for rhyolite and other exotic lithic materials) “created social demands that led to the intensification of production” (1986:284). This would result in the gradual settling down of local populations who needed to procure and process materials beyond the needs of their own people, thereby creating larger storage facilities that also required semi-permanent maintenance.

Trade/Exchange

It is generally agreed upon that expansive trade and exchange patterns were in place by the Middle Woodland period. While most settlement was focused on the highly productive estuarine environments, widespread resource procurement sites were used to supplement what could not be locally obtained. Stewart (1992) suggests that territoriality is the driving force behind the spatial distribution of sites in the region and that

maintaining a territory requires a great deal of communication with regional networks. This is reflected in both the broad-based and focused systems of exchange noted throughout the Mid-Atlantic during the period, which saw an initial reduction of lithics traded through broad-based networks, ca. 400 B.C. – A.D. 200, and a later reversal of this trend and apparent increase in territory size (Stewart 1989).

The fluctuating concentrations of rhyolite, argillite, and other exotic lithics, like green jasper and mica recovered from Middle Woodland sites on the Coastal Plain most plainly demonstrate these trading patterns. Rather than utilize locally-available lithic materials, the Coastal Plain people of the period showed a strong preference for rhyolite, a material obtained during long-distance quarrying trips to the Blue Ridge and Monocacy Valley. Their presence in those regions is marked by the Mockley ceramics they left behind at rhyolite processing stations (Curry and Kavanagh 1991).

Some scholars believe that by this time societies had become ranked and that the redistributive system of exchange was predicated upon participation in vast exchange networks (Handsman and McNett 1974). As Steponaitis (1986) states, there were certainly alliance networks in place that required Coastal Plain peoples to produce a surplus. Galke (2000) speculated that the intensive oyster harvesting that occurred on Middle Woodland sites near the confluence of the Patuxent River and the Chesapeake Bay could have been a part of this exchange system. She postulates that the oyster surplus generated at these sites could have been used for trade with Piedmont peoples also involved in this vast network.

This may also be seen in the “predominance of cache blades, as well as in the storage of local seasonal foodstuffs” seen on Coastal Plain sites (Curry and Kavanagh 1991:21). A cache of rhyolite blades discovered in 1992 by a Carroll County family constructing a driveway could be a remnant of this vast trade network (Curry et. al 1992). A total of 16 whole and partial blades were discovered in a cache that was most likely intact until it was disturbed by the construction. The authors concede that “the reason for this cache being located where it is defies ready explanation” (1992:34), but that they were probably left here after quarrying in the Catoctin Mountain range during the Middle Woodland period.

Popes Creek Phase and Popes Creek Pottery

The Popes Creek phase occurred in the earlier portion of the Middle Woodland period, and is typified by the pottery of the same name. The ware type is sand-tempered and net-impressed, with a thick body (6 to 18mm). Decoration is rarely seen and the vessels are always coil-constructed (Egloff and Potter 1982). Projectile points associated with the phase on the Western Shore of the Chesapeake Bay include Rossville and Adena points (Wanser 1982). The type site (18CH74) is located at the confluence of Popes Creek and the Potomac River in Charles County, Maryland and was first noted by Elmer Reynolds in 1881. The site was striking for its enormous shell heaps, at least 20 ft in some places, that were actively being mined for lime-production and ballast. Reynolds surface collected artifacts and assembled more of a collection based on what was given to him by the workers. In the early 20th century, William Henry Holmes reanalyzed the Reynolds assemblage and did further collecting of his own. Decades later, McNett and Gardner (1975) again studied the Holmes and Reynolds collections and concluded that the Popes Creek people, who lived in the region from 500 B.C. to 1 B.C., were essentially a riverine culture who utilized the wide-ranging “edge” environments spread over a relatively small geographic area. They subsume that the Popes Creek site, with its massive shell middens, was the base camp for these peoples, and was occupied by at least a small portion of the population year-round. In the spring, some parties would move upriver, near the falls, to catch anadromous fish and forage in the Piedmont. Summer would bring a move to Accokeek and Piscataway Creeks for harvesting mussels and hunting in nearby swamps, and in the fall and winter, the bulk of the population would head back to Popes Creek to harvest oysters and hunt deer and waterfowl.

An analysis of radiocarbon dates on Popes Creek phase sites undertaken by Curry and Kavanagh (1993) put forth the possibility of a geographic center of the ware type on the Potomac River that took time to regionally diffuse. Samples from the Potomac and Patuxent drainages yielded a date range between 800 – 100 B.C. (later recalibrated to 500 – 50 B.C.; see Curry and Kavanagh 1994), while those from the James River in Virginia and the Severn River in Maryland yielded a range of 0 – 500 A.D. This chronologic and geographic division in the date range is notable, and the authors suggest that some later sherds called “Popes Creek” actually are transitional types. They conclude by

encouraging researchers to examine the earlier relationships between Popes Creek and Accokeek ceramics and later Popes Creek and Mockley relationship.

Another theory for changing pottery types is a possible influx of Algonquian-speaking populations in this region from a homeland in the Great Lakes. Based on glottochronological analysis, Luckenbach et al. (1987) discuss an Algonquian “population radiation” and linguistic divergence that occurred between 900 B.C. and 500 A.D. The archaeological evidence suggests that the expansion of the Meadowood/Middlesex Adena phase groups (based in the Northeast), which began ca. 800 B.C., led to the establishment of the fully entrenched riverine and estuarine populations in this region ca. 700 B.C. (1987:20). The development by A.D. 200 of the distinctive phases of the Fox Creek, Cony and Selby Bay complexes are evidence of the evolution and eventual growth of this wave of migration (1987:21).

The chronologic relationship between Popes Creek ware and Accokeek ware (now generally regarded as an Early Woodland type) has not always been clear. Stephenson (1959) postulated that Popes Creek was earlier than Accokeek because the latter pottery is “thinner, harder, and generally better made” (1959:23) than the former, based on his analysis of the excavations at the Accokeek Creek site (18PR8). However, this timeline was “based upon a *relative*, rather than on an *absolute* chronology” (1959:16; emphasis in original), as stratigraphic excavations did not take place and no samples were analyzed for radiocarbon dates.

As recently as 1985, however, Melburn Thurman postulated that Accokeek and Popes Creek wares minimally represent a continuum, but were likely used and manufactured contemporaneously. Considering the more dispersed range of Accokeek, the author theorizes that Popes Creek could have represented a storage type pottery utilized mainly at riverine sites. Alternatively, they may have been made by two separate groups of people: the more mobile Accokeek people and the more sedentary Popes Creek people. Later, in a critical response to this article, R. Michael Stewart stated “Thurman’s Popes Creek and Accokeek ceramic continuum flies in the face of just about everything that has been published on the pottery of the coastal areas of Maryland and Virginia where these types are the most well represented” (1987:113). In order to further this point, Stewart provides a long table containing radiocarbon dates for Accokeek, Popes

Creek, and related ceramics from the region (1987:114-116) and goes on to assert that Popes Creek more often will overlap with Mockley net-impressed wares.

Elsewhere around the Chesapeake Bay, the Popes Creek phase manifests itself as the “Smallwood” phase along the Western Shore of the Bay (Steponaitis 1978; Wright 1973), and Coulbourn wares in Delaware (Wise 1975), where an untempered, net-impressed ceramic closely resembling Popes Creek was identified in Kent County. The Smallwood phase, dating roughly from 300 B.C. – A.D. 200, was noted on the South River in Anne Arundel County, and was typified by net-impressed, quartz-tempered vessels and Rossville points (Steponaitis 1978). Steponaitis (1983) noted that the Smallwood phase is virtually non-existent on the Patuxent River, and only noted eight Popes Creek sites during her Phase I walkover reconnaissance of agricultural fields in Calvert County, Maryland.

Selby Bay Phase and Mockley Pottery

The Selby Bay phase, also called the Middle Woodland II, is typified by a predominance of lanceolate and stemmed points and large blanks and knives made of exotic lithic materials, two-holed elliptical gorgets, and shell-tempered pottery (Mayr 1972). This pottery, most often called Mockley, has been recovered from sites ranging throughout the entire Middle Atlantic culture area. Thurman (1985) dubbed the geographic spread of the ware as an “oikoumene,” referring to the Greek word for the known, inhabited world in reference to the wide-spread use of Mockley, which has been recovered from New York to North Carolina. Mockley ware is named for Mockley Point, located at the northern tip of the Accokeek Creek site (18PR8) in Prince George’s County, Maryland. The Mockley ceramics recovered from the site were tempered with unburned, crushed shell, and surface treatments included cord-marking, net-impressions, and fabric-impressions. The vessels varied in size, ranging from a capacity of two to three quarts to over four gallons (Stephenson 1959). According to Egloff and Potter (1982), the ware represents part of the 1,500 year Chichominy Series shell-tempering tradition that continued into the Late Woodland. They note that cord-marking decreases and net-impression increases over time, and that a small percentage of known vessels are decorated on the exterior around the rim.

Egloff and Potter (1982) do not define fabric-impressed sherds as Mockley ware, instead calling any ceramics with this surface treatment “Townsend,” a Late Woodland type. However, one of the few 21st century articles annotated for this study clearly demonstrated that Mockley pottery could be fabric impressed. Robinson and Bulhack (2006) beach collected at two Middle Woodland period sites on the Chesapeake Bay at Point Lookout State Park in St. Mary’s County, Maryland and recovered over 3,300 shell-tempered Mockley sherds. Of these, several were found to be fabric-impressed, and three varieties of fabric structure were noted: Interlaced Unequal Elements, Twined Fabric, and Accessory Stitches in Fabric. The earliest recorded radiocarbon date from a Mockley sherd in Maryland was also obtained from a cord-marked sherd recovered from one of these sites, at 2030 ± 40 B.P., or 155 B.C. - A.D. 65.

Frederic Gleach (1988) studied 21 radiocarbon dates from 13 Maryland and Virginia sites in an effort to answer the question do separate types of Mockley need to be recognized based on where they fall in the broad A.D. 200 – 900 time span? He concluded that there are two distinct types of Mockley. The first appears ca. A.D. 200-250 and is gone from Delaware by about A.D. 350 and disappears from the James River area of Virginia by about A.D. 450 – 500. Wise (1975) obtained dates in this earlier time for her shell-tempered Coulbourn wares from Delaware. A radiocarbon date of A.D. 200 ± 90 (I-6060) was obtained for a net-impressed sherd at the Carey Farm site in Kent County. A similar sherd, recovered from a pit at the Hughes-Willis site, also in Kent County, was dated to A.D. 300 ± 110 (I-5817). Gleach (1988) sees a hiatus in the ware after this point, until ca. A.D. 750 – 800, when a Mockley/Townsend hybrid (referred to in this study as “Clagget”) comes to dominate, until about A.D. 1000. The Luce Creek site (18AN143) in Anne Arundel County, Maryland was the only site studied that produced a radiocarbon date in the “gap” at A.D. 580 ± 120 , but Gleach states that this falls in a time of “atmospheric fluctuations” in ¹⁴C levels, where it is not possible to obtain an accurate age estimate (1988:94).

Interestingly, a second unexpected radiocarbon date was recovered from further excavations conducted at the Luce Creek site in the early 1990s. Hettie Ballweber (1994) obtained a date of 210 ± 80 B.C. from a charcoal sample in later Middle Woodland complex, placing it nearly 400 years earlier than the established start of the Selby Bay

phase. Ballweber has no clear explanation for this ^{14}C date range, but does put forth that an identical date was obtained from charcoal recovered from the Burall site, located in the Piedmont province of Frederick County. Mockley net-impressed ceramic sherds and many side-notched rhyolite points, similar to those seen at Luce Creek, were recovered from Burall, interpreted as a rhyolite processing station with semi-sedentary habitation. She tentatively suggests a connection based on the similar point styles, but states that more research must be done to make any firm conclusions.

Selby Bay (also called Fox Creek) knives and lanceolate and stemmed points dominate the tool assemblages on later Middle Woodland period sites (Bastian 1974; Wanser 1982). Cresthull (1974) proposed a projectile point chronology for the period that begins with the Middle Woodland Fox Creek stemmed spearpoints, followed by terminal Middle Woodland arrowheads (Jack's Reef corner-notched, followed by an unnamed lanceolate, of which Jack's Reef pentagonal is a variety), and ends with the Late Woodland Levanna triangular arrowheads.

Another type of projectile point appears on numerous Selby Bay phase sites. Each author who discusses it gives it little credence, but when looked at as a whole, it bears mentioning. Undiagnostic stemmed rhyolite points have been found in context with Middle Woodland artifacts on the Luce Creek site in Anne Arundel County and the Burall site in Frederick County (Ballweber 1994), at the Smithsonian Pier site in Anne Arundel County (Gibb and Hines 1997), at the Clipper Mill Road Rockshelter in Baltimore County (Israel 1998), and is mentioned in McNett and Gardner's unfinished document, *Archaeology of the Lower and Middle Potomac* (1975) when they note that "crudely side-notched rhyolite points" are typical of the phase. Archaeologist should bear in mind the prevalence of this type of tool on later Middle Woodland sites and regard it as a possible diagnostic artifact.

As noted above, the preference for rhyolite and other exotic lithics is a defining marker of Coastal Plain people of the Selby Bay phase. At the Ruf site (18AN65), which is the Selby Bay type site (interestingly, located on the Patuxent River, and nowhere near Selby Bay itself, which is located on the lower South River), about 91% of the lithics were exotic, and do not occur naturally in Anne Arundel County (Mayr 1972). At the Dorr site (18AN19), a large multi-component base camp on the Patuxent River with the

heaviest site use in the Middle Woodland, over 50% of the lithic material was rhyolite (Woodward 1969).

Several other articles related to excavated Selby Bay phase components were annotated for the present study as a way to get a sense of the types of site-specific information available. A number of Phase I surveys were conducted on the Naval Air Station, Patuxent River (NASPAX), located at the confluence of the Patuxent River and the Chesapeake Bay in St. Mary's County (Galke 2000). Several temporary resource procurement camp sites were identified along three drainages on NASPAX, where Native Americans were harvesting oysters and/or quarrying quartz and quartzite cobbles at natural outcroppings. Gibb and Hines (1997) detail the results of Phase II and III excavations undertaken at site 18AN284/285, an oyster processing site on the Rhode River in Anne Arundel County. The hundreds of Mockley pottery sherds recovered indicated the site was most heavily utilized during the Selby Bay phase of the Middle Woodland time period, and after intensive macrobotanical, microbotanical, and faunal analyses, the authors concluded that oyster collection and harvesting happened at the site at the near exclusion of all other activities. In Baltimore County, a rockshelter and temporary camp site (18BA32) was excavated, demonstrating migration by hunters exploiting the rich resources of the area during the Late Archaic, Middle Woodland, and Late Woodland time periods (Israel 1998). And finally, analysis of the faunal assemblages from the Addington site (44VB9), a small seasonal village with heaviest site occupation around A.D. 300, provides an excellent overview of the types of game that might have been caught and eaten at a warm-weather Middle Woodland camp on the Chesapeake Bay (Whyte 1988).

Shell Middens and Other Features

Shell middens are the most prolific feature excavated on Coastal Plain sites from both the Middle Woodland I and II. Many early excavations conducted on the Western shore of the Chesapeake Bay focused almost exclusively on the middens at the expense of all other parts of the site. Twelve of the 14 sites identified by Steponaitis (1978) during her walkover survey of the South River of Anne Arundel County were shell middens, and Henry Wright recorded and excavated dozens of middens along the

county's waterways in the 1950s and 1960s. These types of sites are easily recognized on the landscape and often contain some sort of diagnostic materials, which is probably why they appeal to archaeologists. However, middens are representative of only one type of activity, and archaeologists should be cautioned against attempting to make sweeping conclusions based on their contents.

Unfortunately, features other than shell middens are ephemeral, difficult to find or identify, and often require labor-intensive shovel test surveys and test unit excavation. The Door site (18AN19) in Anne Arundel County represents a large camp site along the Patuxent River that was most heavily used during the Middle Woodland period. Several features have been identified and excavated on this site that are more indicative of the lifeways of the populations that inhabited the region, including hearths, storage pits, and post molds, although most of these excavations took place 30-40 years ago and there was little documentation (Woodward 1969; Croney et al. 1976).

Storage pits have been excavated on many sites throughout the region. A number of pits excavated at the warmer-weather Addington camp site (44VB9) that were most likely used for underground storage were suggestive of winter abandonment of the site (Whyte 1988). Steponaitis (1986) postulated that the predominance of this feature type on Middle Woodland sites is a consequence the participation in vast exchange networks that required people to produce a surplus for trade. These goods, and increasingly larger pits for storage, would require semi-permanent maintenance, resulting in a "decline in residential mobility," or increased sedentism.

Burials, another type of feature, are rarely found on Middle Woodland period sites in the region. Several earlier period Adena-type burials have been excavated on the Delmarva Peninsula, along with a single Western Shore Adena burial on the West River of Anne Arundel County. Similar ornate burials related to the Stone Mound Burial Mound Complex have been identified in Western Virginia dating to the Middle Woodland I. However, few Middle Woodland II graves have been found. A single female burial was found at the Patterson I site (18CV65) at the bottom of a shell-filled pit that dated to 1755 ± 50 B.P. (Reeve et al. 1989), but few other burial references were found in the literature. The exception to this is on Mockley Point at the Accokeek Creek site, where nearly 40 burial shafts were identified, most likely dating to the Middle

Woodland (Stephenson et al. 1963). Skeletal remains were not found in every shaft, leading the authors to believe that either the graves were so old that the human remains had disintegrated, or that the skeletons had been removed by later prehistoric peoples. In either case, the high number of graves in this area, coupled with a relative dearth of domestic features, suggests that this area functioned primarily as a cemetery during the Middle Woodland time period.

Conclusions and Research Questions

While the knowledge base of the Middle Woodland appears to be quite comprehensive, it is essential that twenty-first century archaeologists, researchers, and scholars add to and expand the discussion. It is hoped that this summary and the accompanying annotations will inspire both academics and practicing archaeologists to take a fresh look at old questions and provide an effective launching point for new inquiries.

This study has raised a number of interesting questions that may help guide future researchers or current cultural resource management professionals as they quietly excavate a newly discovered Middle Woodland period site. First, in terms of lithics, the prevalence of “crudely side-notched rhyolite points” noted by archaeologists excavating in the region as early as the 1970s should be addressed. Can this “undiagnostic” point actually be a diagnostic marker of the period? Does this point type manifest itself in other lithic materials? Would this kind of tool be used for different or specific purposes, and from what types of sites are they recovered?

The relationships between different diagnostic projectile point types should also be examined. Do Rossville or Adena points appear on certain types of sites in the Middle Woodland I, and what is the relationship between the larger Selby Bay/Fox Creek knives and the smaller Jack’s Reef pentagonal points? Is this a defining temporal marker or a sign of a changing society?

Related to the later period preference for exotic lithic materials, the spatial distribution of rhyolite/argillite/jasper should be examined, with specific focus on different drainage systems. Could this, in turn, tell us something about settlement patterns?

Regarding the proliferation of ceramics in the region, the early relationships between Accokeek and Popes Creek should be examined, as should the later Popes Creek to Mockley continuum. Do these types of ceramics appear in temporally similar contexts, or have hybrid-type wares been identified? More radiocarbon dating should also be undertaken to determine if, indeed, separate earlier and later types of Mockley need to be recognized, and what subtle differences can be recognized in the absence of datable charcoal or residue.

While the subject of settlement patterns is a favorite among archaeologists, more research should still be done in this area. For example, where are base camps located in relation to the freshwater/saltwater interface present at the time? Does this vary through time based on the growing dependence of agriculture? This type of analysis might be able to be undertaken on shell middens, where a taxonomy of this ubiquitous feature could be developed. A closer analysis of storage pits could possibly produce evidence of carbonized food remains, leading researchers closer to discovering the beginnings of horticulture in the region.

In order to answer many of these broad questions, it will be important to closely examine sites that may seem small and insignificant at the outset, as these may represent single-component sites that could contain intact features. It is from features like these that we will get the most clear and comprehensive radiocarbon dates. A site that is larger in size often represents those that have been reoccupied many times. Gleaning temporally specific data from multi-component sites like these is often muddled and difficult. It will largely be up to contract firms who first discover these small sites to thoroughly scrutinize them before writing them off.

Much of this work will require support from organizations such as the Maryland Historical Trust, who have the ability to provide partial funding of innovative research. There is much to still be understood about the rich prehistory of the region, but further studies will also take the impetus and curiosity of professionals to place their sites into a broader context. As this Middle Woodland project continues into its second year, the next task of collecting and assembling Middle Woodland period data now dispersed throughout the gray literature, and placing these data in a more concrete historic context, will inspire other archaeologists to do the same.

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