

ARCHAIC PERIOD TRIANGULAR POINTS FROM PIG POINT, ANNE ARUNDEL COUNTY, MARYLAND

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ABSTRACT

Recent excavations at the Pig Point site (18AN50) in southern Anne Arundel County, Maryland have encountered deeply stratified cultural deposits ranging from the Late Woodland to the Early Archaic. Prominent among a number of initial findings is the stratigraphic placement of the constricted stem Piscataway Point, as well as the clearly established presence of pre-ceramic triangular points. This paper describes the relative and absolute chronology of the Pig Point site and discusses the implications of Archaic period triangular bifacial points on the Western Shore of the Chesapeake Bay.

INTRODUCTION

The Pig Point site is situated on a pronounced bluff overlooking the Patuxent River in southern Anne Arundel County, Maryland (Figure 1). The site is adjacent to numerous freshwater springs and is located in an area with easy access to both an enormous, freshwater tidal marsh and to interior hardwood forests. Such ready access to ecological diversity is also evident on a larger scale. In an approximate 15 mile radius from the site's location occurs the geographic fall line separating the Piedmont and Coastal Plain, the abundant resources of the Chesapeake Bay, and the freshwater/saltwater interface of the Patuxent River.

Included as part of the large, previously recorded surface site 18AN50, the area under discussion had not previously been subject to any formal archaeological testing. In the spring of 2009 Anne Arundel County's *Lost Towns Project* began limited excavations with the kind permission of the owners William and Lisa Brown. The Pig Point investigation was initiated as part of a multi-year study of the Middle Woodland period funded by the Maryland Historical Trust (see Sperling 2008; Luckenbach 2010a), which will continue through 2011. During the first field season 26 five-by-five-foot test units were dug in two spatially separate excavation blocks.

Despite their on-going nature, the excavations at Pig Point (18AN50) have already clearly demonstrated a number of findings with great significance to Chesapeake prehistory.

In the large "Upper Block" of test squares at the site, the outlines and partial outlines of oval "wigwam" or "yeehawkawn" structures (see Hancock and Rountree 2004) were discovered superimposed on one another in different strata reaching a depth of over four feet. Through a combination of natural stratigraphy, ceramic seriation, and C-14 dating, these structures can be confidently assigned to a broad temporal span ranging from the Late Woodland back to at least the Late Archaic, if not earlier (Sharpe and Luckenbach 2010). They therefore represent not only the first habitation structures delineated in Tidewater Maryland, but the oldest structures yet reported from the Chesapeake region.

After preliminary analysis, these habitations appear to be oval structures roughly 16 feet by 12 feet (Figure 2), which conforms to the average size of those found in Virginia and rarely (three examples) in Maryland (see Dent 1995:252-253). So far C-14 dates ranging from A.D. 230 - A.D. 1540 can be directly

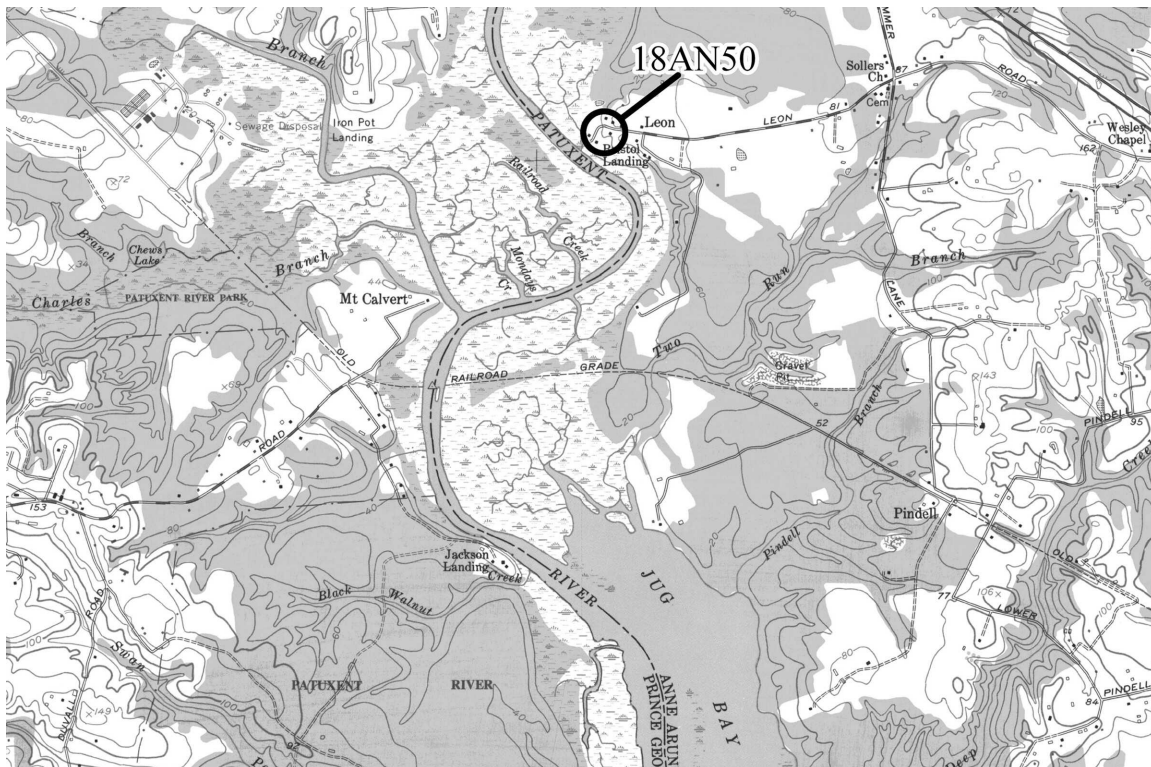


Figure 1. Pig Point site location map.

associated with these buildings, but partial patterns were still being detected deep in what are clearly pre-ceramic levels.

The smaller 10 foot by 10 foot “Lower Block” encountered dark, rich midden surfaces, with abundant hearths, pits, and other camp site features, and is being interpreted as a generalized work area (Figure 3). Not surprisingly, this area contains prolific remains of aquatic resources, most notably large numbers of freshwater mussels and fish, plus beaver, muskrat, otter, duck, etc. (Cox *et al.* 2010). The Lower Block has not only produced an extremely deep stratigraphic profile (in excess of seven feet with sterile levels not yet encountered), but also demonstrated remarkable preservation characteristics. Numerous features were found which contained carbonized floral remains, bone tools, and abundant faunal materials, as well as evidence of ceramic production and other enigmatic, ephemeral camp site activities (see Sperling and Luckenbach 2010; Cox *et al.* 2010).

Given the thick, rich midden which has accumulated at this site, it is clear that local resources – primarily based on a tidal freshwater marsh environment – were abundant enough to support a multi-band base camp with more than the customary degree of sedentism. The extensive flotation samples taken from the Lower Block have produced carbonized corn remains from 12th and 13th century contexts and, hopefully, should provide interesting information on the precise seasonality involved in the site’s occupation through time.

As is predictable for a multi-band base camp, Pig Point seems to have also been a locus of trade. In addition to the predictable regional artifact categories, occasional exotic finds have been made at the site such as a rolled copper bead, a stone platform pipe, marginella beads, New York green jasper, a jasper prismatic blade, and a Flint Ridge chalcedony Hopewell Point (see Figure 4). There have also been a number of ceramics sherds recovered which represent wares clearly exotic to the locale (see Luckenbach 2010b).

The Woodland period levels in both excavation blocks show ceramic sequences whose types seriate in a predictable fashion. Stratified layers of Late Woodland Townsend series pottery, Middle Woodland

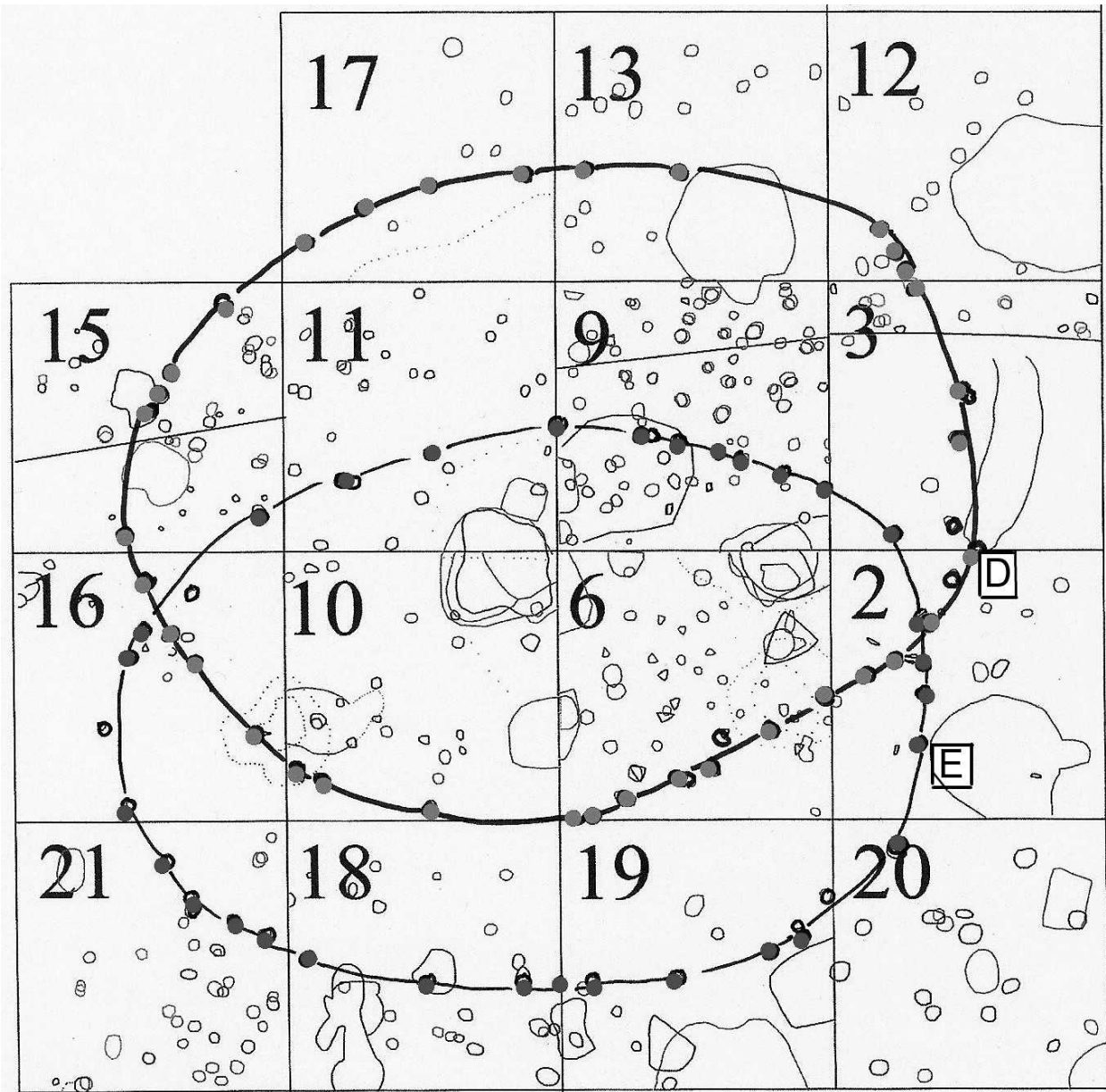


Figure 2. Conjectural wigwam structure outlines from the Upper Excavation Block.

Mockley and Pope's Creek wares, Early Woodland Accokeek, and pre-ceramic remains (including steatite bowl fragments) have been encountered in a sequence which conforms to existing local chronological paradigms.

The Lower Block also produced a remarkable assemblage of projectile points with highly important regional implications. They include a tightly seriated group of 21 "Piscataway" or "Tear Drop" points, 14 stemmed points of a variety of styles from Early and Middle Woodland strata, and a notable component of 22 of triangular points (Luckenbach 2010a; Grow and Sharpe 2010).

It is the context of these triangular points which is of greatest import to Chesapeake archaeology in that their stratigraphic position clearly indicates that they were a prevalent point type in the Late Archaic period. This paper will describe the stratigraphy and chronology of the Pig Point site and will discuss the regional implications of the results obtained for Piscataway and triangular points.



Figure 3. View of the Lower Excavation Block stratigraphy.

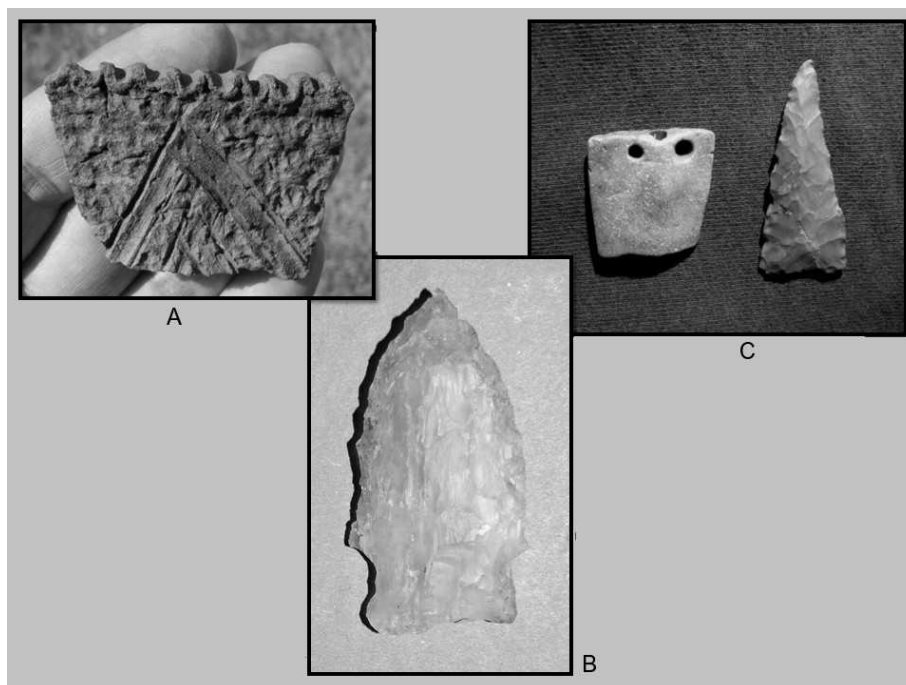


Figure 4. Examples of exotic finds from Pig Point.

LOWER BLOCK CHRONOLOGY

The Lower Block consisted of four 5x5 foot test units. This ten foot block was located 65 feet southeast from the larger Upper Block and at a significantly lower elevation (Figure 5). This topographic location would have been well sheltered from the prevailing winds coming out of the northwest. The combination of aeolian redeposition of the basically sandy soils from the top of the bluff and simple downhill erosion seems to have combined to produce a significant soil column with over seven feet of cultural strata.



Figure 5. Site map showing the position of the Upper and Lower Excavation blocks.

The Lower Block was excavated using natural stratigraphy (see Figure 3), which consisted of three disturbed layers (Strata 1 - 3) containing a mixture of historic and prehistoric artifacts, and eleven layers of intact prehistoric cultural deposits (Strata A - K). As mentioned, excavations were suspended after the removal of Stratum K at a depth of over seven feet below ground surface. At that point, no sterile layers have been encountered yet.

The prehistoric cultural levels began when a very dark, charcoal rich midden was encountered which was initially called Feature 11 Stratum A. This level contained numerous sherds of Townsend series ceramics (including a notable component of the Rappahannock Incised type) and ultimately produced two conventional C-14 dates from the late 13th and early 14th Centuries, A.D. It is assumed that any later Woodland levels (present in the Upper Block) were somehow truncated from the Lower Block during the maintenance of the adjacent colonial ferry road. Apparently, this road was ultimately responsible for the mixed contexts encountered in the uppermost Strata 1 - 3.

Below this initial midden layer were a series of natural strata which could be assigned a relative chronology based on the ceramic types encountered. Townsend ceramics were followed by Mockley, Pope's Creek, and Accokeek wares. Steatite sherds were found just before the pre-ceramic levels were reached. As stated, this sequence is in good conformance with the expected regional chronology.

A relative chronology of the major ceramic types encountered in the Lower Block has been depicted in a seriation graph shown in Figure 6. In this case the seriation represents the percentage of each ceramic type (by weight) present in each individual stratum. This graph clearly demonstrates that Strata A & B constitute Late Woodland occupations; C & D, Middle Woodland; and E & F, Early Woodland. Although Accokeek Ware constitutes 100% of the ceramics in Stratum F, in this case the sample consists of only 11 sherds, meaning that F might be better characterized as Transitional / Early Woodland. Below this the five strata labeled G through K represent totally pre-ceramic occupation levels.

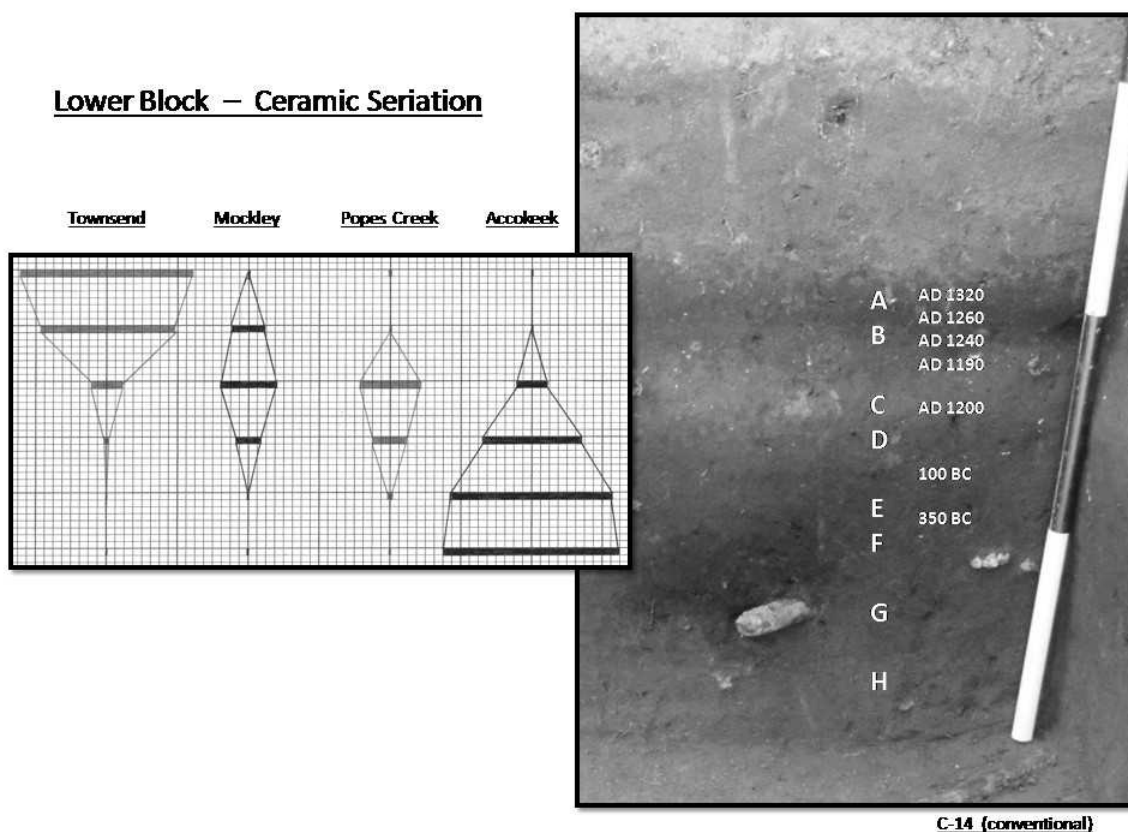


Figure 6. Lower Block ceramic seriation and conventional C-14 dates.

A total of seven carbon-14 dates were obtained from the Lower Block in an attempt to assign an absolute chronology to the stratigraphic sequence. Two conventional C-14 dates were obtained from Stratum A (1320 and 1260 A.D.) and two from Stratum B (1240 and 1190 A.D.) which seem to represent a particularly tight and valid grouping. Stratum C produced a single C-14 date (1200 A.D.) that in fact seems slightly younger than would be predicted by a couple of centuries. This is perhaps due to the fact that this sample was generated from the entirety of Stratum C instead of from a single charcoal accumulation. Feature 19 (originating in Stratum D) produced a date of 100 B.C., while Feature 31 (originating in Stratum E) was dated at 350 B.C. Feature 31 contained both Accokeek and Pope's Creek Wares. Below these layers leaching of the sandy soils meant that insufficient charcoal was present to obtain radiocarbon estimates.

PROJECTILE POINTS FROM PIG POINT

In addition to three antler projectile points, the four squares of the Lower Block produced a total of 57 chipped stone bifaces from undisturbed contexts which were capable of being assigned to traditional point “types.” This number is notably higher than the 23 points recovered from the undisturbed portions of 22 squares excavated in the Upper Block. Since the Upper Block seems to have been largely used as a habitation area and the Lower Block a work area, this large discrepancy appears to be readily attributable to differences in intra-site utilization. The high concentration of projectile points from the well delineated layers of the Lower Block lent itself to the careful stratigraphic analysis of these stone tools which ultimately yielded interesting and surprising results.

The Lower Block produced a total of 21 “tear drop” shaped projectile points (Figure 7) assigned to the Piscataway type first defined by Stephenson and Ferguson (1963:193-196) from the Accokeek Creek site. As can be seen in Figure 8, when placed in their relative stratigraphic context, these points self seriate quite nicely. The “battleship curve” depicting the rise and fall of their popularity over time begins deep in the pre-ceramic (Stratum I), peaks in what is assumed to be the pre-ceramic Late Archaic period (Stratum G), and does not terminate until the Transitional (Stratum F) and Early Woodland (Stratum E) when they are clearly going out of fashion. Since the exact chronological placement of Piscataway points has been the subject of considerable debate (see Dent 1995:180), this tight context is a highly significant result. While Pig Point would appear to lend fairly conclusive evidence to the position that Piscataway points continue into early ceramic layers, it does the opposite for those advocating placement as late as the Middle Woodland.



Figure 7. Piscataway points.

An interesting side-light is the presence of tiny, circular unifacial tools (Figure 9) whose popularity seems to almost exactly correspond to that of the Piscataway points (Figure 10). Although their function is unknown, these objects are quite consistent in manufacture and are uniformly made of white quartz. These micro-disk tools are amazingly small, averaging under .5 inch in diameter. Whatever their purpose, they are clearly associated with the Piscataway occupation of the site.

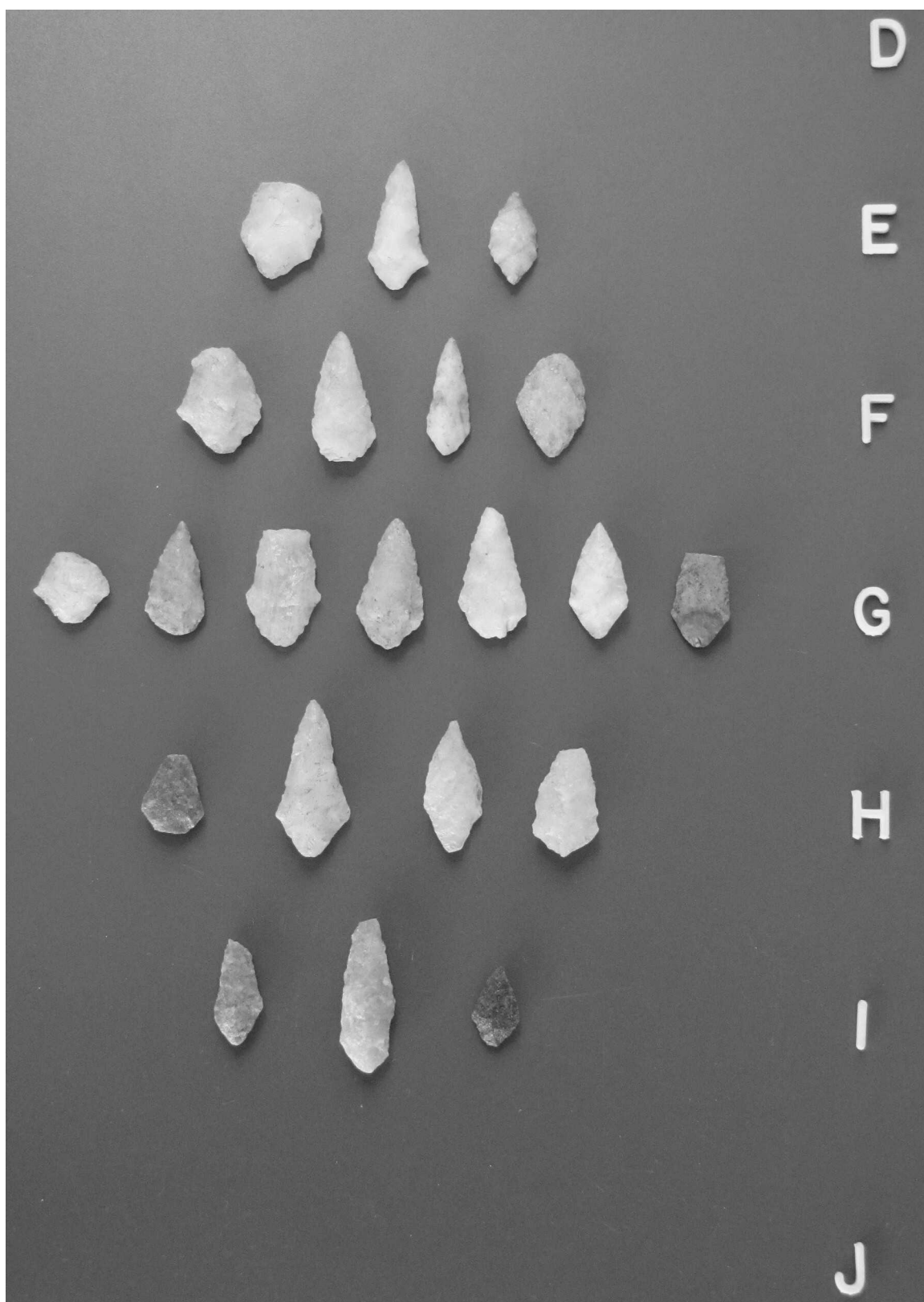


Figure 8. Piscataway point stratigraphic distribution.



Figure 9. Unifacial Micro-disks.

A mirror image of the Piscataway point distribution is presented by the recovery of 14 stemmed projectile points of various styles. When seriated, their popularity begins with the first ceramic layer Stratum F, peaks in the Early and Middle Woodland, and is clearly in decline by the Late Woodland Stratum A (Figure 11). A variety of traditional types are represented, including Orient Fishtails, Calverts, Lagoons, and Vernons, all of which are normally assigned Woodland or Transitional dates. In many ways this grouping corresponds to what Kinsey (1972:440) called “generalized side-notched points” of the Woodland period. As will be seen, at Pig Point these stemmed varieties clearly seem to occupy a gap in the bi-modal popularity of triangular points.

Notable among this varied Woodland stemmed group is a side-notched point from Stratum B made of Flint Ridge Chalcedony from Ohio (see Figure 4). This heavily resharpened point is clearly within the range of what can be called a “Hopewell Point” (Darrin Lowery, personal communication, 2009; Robert Converse, personal communication, 2009). The presence of Hopewell, Snyder, and Adena Stemmed points – in very small, but consistent numbers – is a phenomenon not yet widely recognized in Maryland archaeology, despite the well-known presence of Late Adena mortuary practices.

The remaining 22 bifacial projectile points from the Lower Block are all triangular points, and it is their stratigraphic distribution which is the most surprising. When seriated, these triangles show a bimodal distribution over the stratigraphic column (Figure 12). In conformance with local paradigms, one “battleship curve” centers on the Late Woodland Strata A and B. The second shows an even larger group of triangular points co-occurring with (and slightly later than) Piscataway points. In the first half of this sequence these triangles are originating from definite pre-ceramic layers (Strata G, H, and I), and then continue through the Early Woodland (Strata E and F). The single triangular points recovered from the Middle Woodland Strata C and D may represent continued minor use in the Middle Woodland or, given their small number, may simply be out of context.

Since researchers in the Chesapeake Region generally consider the triangular point to be exclusively a Late Woodland phenomenon (see Dent 1995:245-247), their stratigraphic position at the Pig Point Site has significant implications.

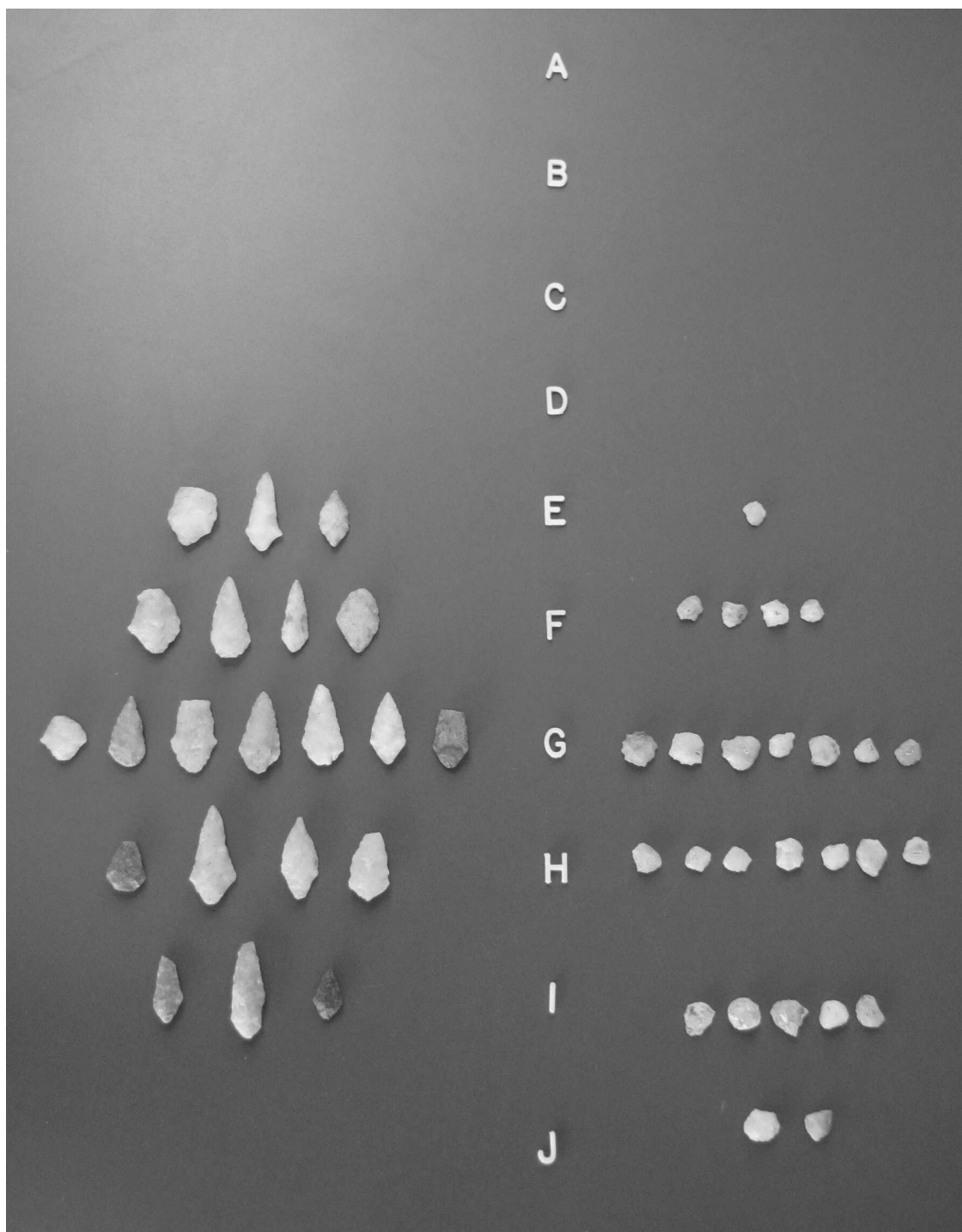


Figure 10. Unifacial Micro-disk stratigraphic distribution.

ARCHAIC TRIANGLES IN THE NORTHEAST

The presence of triangular points dating to the Archaic period has been recognized for a half century in New England (Robbins 1960; Fowler 1963; Ritchie 1969). Called Squibnocket points, they are described as a small triangle with convex sides and concave bases, which are common from southern New England to Long Island. They have been C-14 dated at 2190 B.C. ± 100 (Ritchie 1971:127).

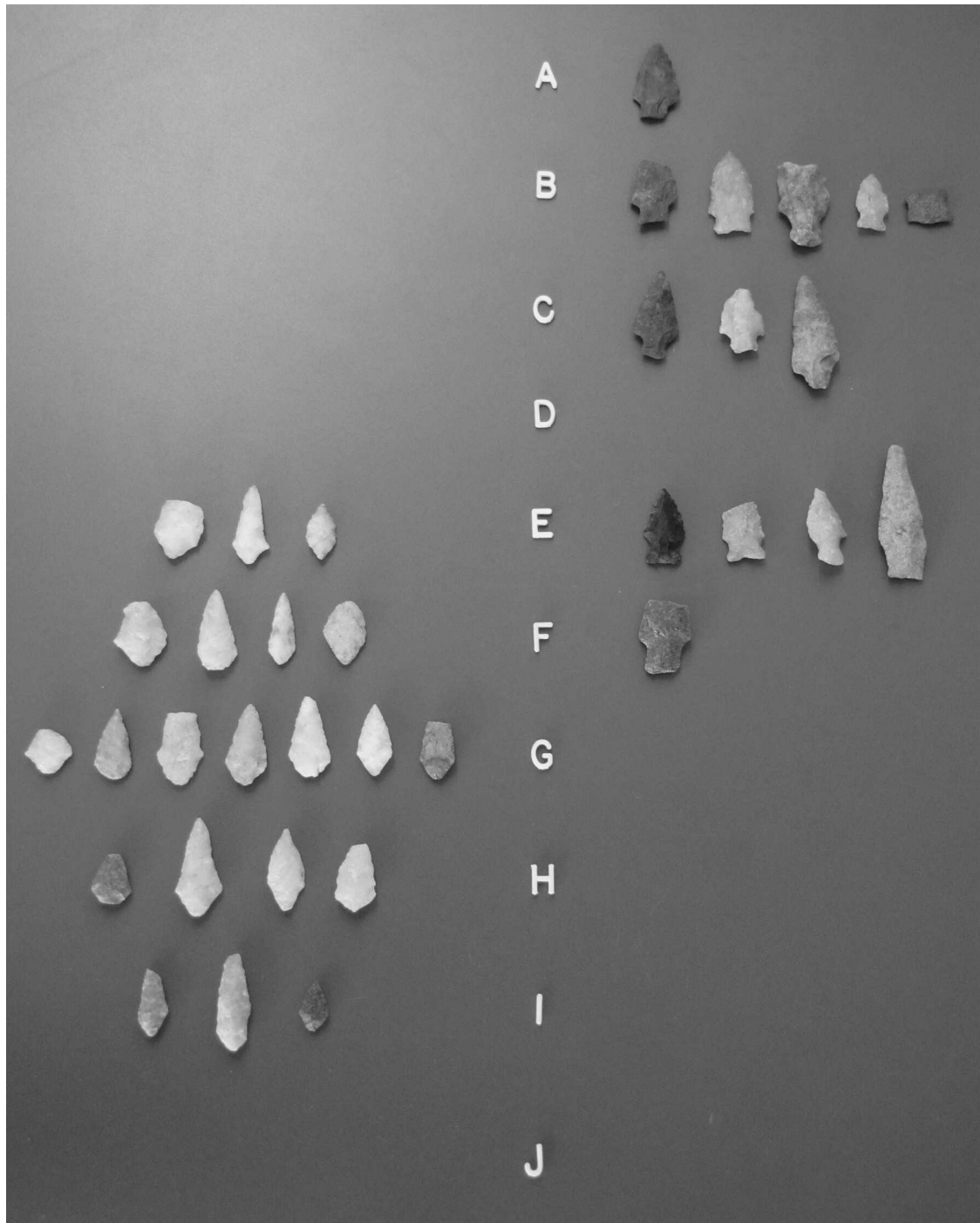


Figure 11. Stemmed point stratigraphic distribution.

The known distribution of Archaic Period triangles was soon extended to Eastern New York and the Hudson Valley through the delineation of a type known as the Beekman Triangle. This point is described as being convex or straight sided with concave or straight bases (Funk 1965). The Beekman Triangle is reportedly distinctive in that, unlike the Squibnocket Point, a majority display basal grinding. Funk (1966) and Ritchie (1969:244), however, both admit to a considerable overlap in morphology and temporal and cultural provenience. In fact Johnson *et al.* (1984:98-99), consider the overlap so great that they group them together under the generalized name “Small Triangle.”

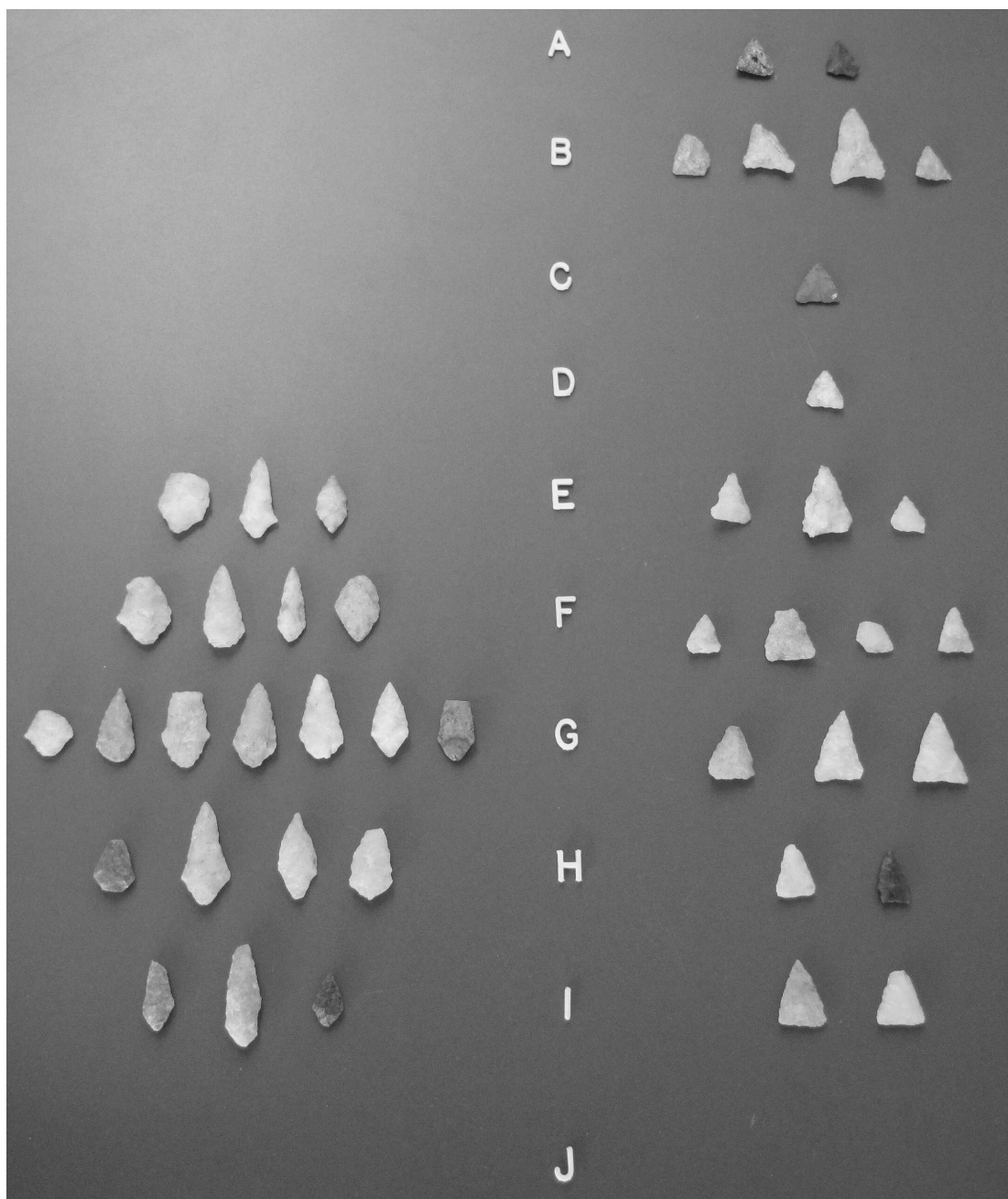


Figure 12. Triangular point stratigraphic distribution.

In areas to the south of New England triangular points continued to be uniformly assigned a chronological placement late in the Woodland. In fact, Kinsey's (1972:439) work in the Upper Delaware states that beyond the "special cases" of New England triangles "and perhaps a few others," triangular points are "generally late forms which persist into the Historic period." Adherence to this "late" paradigm can be seen in numerous subsequent publications, random examples of which might include Wright (1973), Smolek (1980), Steponaitis (1980, 1983), Custer (1984), and Hranicky (1994).

This situation changed dramatically in 1998 with the reporting of Archaic Period triangles from Abbott Farm near Trenton, New Jersey. In an environmental setting notably similar to Pig Point, Stewart (1998) encountered a deeply stratified sequence of triangles that he interpreted as indicating not only Late Archaic placement as in New England, but Middle Archaic as well.

Support for the latter contention could be found in the existence of a type called the Hunter Brook Triangle from the Hudson Valley, which was assigned a Middle Archaic date (Wingerson and Wingerson 1976), and less clearly from the West Water Street site in Pennsylvania (Custer *et al.* 1993; Custer 2001), and the Turkey Swamp site in New Jersey (Cavallo 1981).

Once their existence at Abbott Farm was firmly established in a deep column, Stewart and other researchers began to notice where and when they had possibly been encountered before (see Stewart 1998:8-9 for examples). One of the more cogent discussions of the triangular point situation can be found in Custer (2001:84-88), although the attempt to assert an Early Archaic component seems on less firm ground. An interesting, but mostly futile attempt to distinguish Archaic triangles from Woodland ones is found in the MA thesis of Katz (2000:101), whose careful metric analysis resulted in the conclusion that “no diagnostic traits were identified.”

CONCLUSIONS

Custer (2001:87) notes that as of 2001 Stewart’s sample of Archaic triangular points from Area D at Abbott Farm is currently “the only assemblage from well-defined contexts.” With the discoveries from the first season at Pig Point, it can now be claimed that a second Archaic triangular biface assemblage exists which also has excellent stratigraphic placement.

This excellent context has also clearly shown a direct relationship between these triangles and the Piscataway “leaf-shaped point” which was previously unsuspected. In addition, a relationship can also be shown with the highly distinctive unifacial micro-disks which were recovered from Pig Point in significant numbers. Clearly further research is urgently needed into the functional relationship between these three tool types.

Of even greater significance is the fact that Pig Point extends the known range of these Archaic period triangular bifaces far to the south. Their proven presence on the Western Shore of the Chesapeake Bay is in clear contradiction of the existing paradigm. If nothing else, this should have a direct effect on the countless local compliance investigations which, for decades, have consistently translated the presence of triangular points into Late Woodland components.

How much further the range of Archaic Period triangles needs to be extended is a subject for future research. It may, in fact, ultimately be shown that the phenomenon encompasses most if not all of the Eastern United States.

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