

TOWARDS A SYNTHETIC APPROACH TO THE CHESAPEAKE TIDEWATER:
HISTORIC SITE PATTERNING IN TEMPORAL PERSPECTIVE

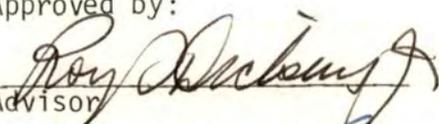
by
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A Dissertation submitted to the faculty of The
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partial fulfillment of the requirements for the
degree of Doctor of Philosophy in the Department
of Anthropology.

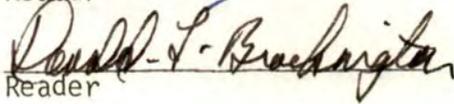
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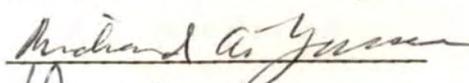
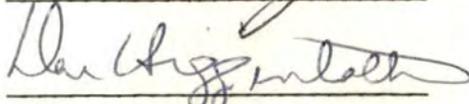
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Preface

This dissertation project began with a fairly straightforward idea, the archaeological investigation of an early to mid-eighteenth-century port on the South River in Anne Arundel County, Maryland. The county had established a several-acre historical site whose central attraction was the restoration of the Londontown Publik House, the only structure that still remained from the heyday of the port. The Londontown Publik House Commission was interested in establishing a research program as part of its mission to restore and interpret the site, and, due to the disappearance of surface indications of the original town, an archaeological component seemed essential. The Commission's first question, simply enough, was whether or not there remained any archaeological contexts from the eighteenth century. I was one of several archaeologists who, in one way or another, expressed interest in helping to answer that question (see Chapter 4).

One can hardly begin to investigate Londontown's history without encountering Carville Earle's (1975) excellent historical geography of All Hallow's Parish, Londontown's immediate hinterland. I was struck by two aspects of the study. First, the complexity of Londontown's relationship to its region was emphatically revealed, in the economic, social, and geographic reasons for its rise and disappearance as a briefly thriving port; clearly, any in-depth research project must deal with Londontown not as an isolated site, but as an integral part of a tidewater system. Second, Earle's study impressed me with the potential value of the archaeological perspective for adding to our understanding of the processes involved in "the evolution of a tidewater settlement system," to quote Earle's (1975) subtitle. Many of his conclusions, especially those based on relationships between sites and site functions, would be quite amenable to archaeological investigation.

Partly because so much of Londontown is now affected by suburban sprawl, my interest for this project shifted from the relationship of Londontown to its hinterland, to the general problem of the development of urban centers in colonial Maryland-- a problem more familiar as the absence of towns in the colonial Chesapeake region. I chose, then, to investigate town sites, in the hope that controlled surface collections would reveal town patterning and, in preliminary fashion, allow interpretations of town functions which could be integrated with models in historical geography.

As discussed in more detail in Chapter 2, the search for sites of colonial Maryland towns is difficult. Many towns that existed legally never actually contained more than a handful of buildings, and some never were begun at all. Other towns whose locations are known are not suitable for surface collection, being now under subdivisions or pasture. Although I was able to inspect several known town sites, in no case was I able to produce a collection representative of the entire town, thus limiting the potential of the present data to reveal urban processes in the middle Chesapeake. The town sites from which I did obtain collections are Londontown, 18An48; Lower Marlboro, 18Cv155; and Doncaster, 18Ta30.

In the process of the field work, however, and also while conducting a survey in informal consultation with the Kent Island Heritage Association, I was able to investigate several sites which were not affiliated with towns. I was also allowed to examine a large collection from a site which had been excavated by members of the Archaeological Society of Delaware (Ludlow 1974), but never analyzed. Collections from these sites augment the data base, but simultaneously further remove it from any claim to representativeness on a regional level. These several collections do, however, represent a range of sites from the coastal Chesapeake region, dating from the late seventeenth to the early twentieth century. They comprise a varied sample with which to explore the

application to coastal Maryland of recent approaches to the study of patterning in the archaeological record (e.g., South 1977). At the same time, the data must be considered in the light of a developing historical archaeology of Maryland, in which theory and synthesis are in barely incipient stages.

The main goal of this dissertation is to draw patterns from among sites in the Maryland tidewater, and to interpret the sites and the patterns in historical and geographical perspective. Chapter 1 will introduce the philosophy and approaches guiding the study. Chapter 2 will explore the background and the methods of this study. Chapters 3 and 4 will discuss the excavations at Bennett's Point and Londontown, respectively. Chapter 5 will report the surveys, including, for the record, those sites that were sought and not found. Inter-site comparisons and patterning will be the subject of Chapter 6, and the final chapter will place the sites in historical perspective, as a step toward synthesis in the historical archaeology of tidewater Maryland.

Chapter 1.

Perspective

The roots of anthropology and archaeology, as of all the modern social sciences, are in the study of history. By the late nineteenth century, the disciplines had begun to distinguish themselves, but anthropology was still in essence geography; National Geographic survives as the epitome of anthropogeography, bringing home the humanity of exotic places. In histories of anthropology, its geographic roots are often no more than mentioned (e.g. Friedl 1976:27), or are personified in Franz Boaz (e.g., M. Harris 1968:263ff.). Some histories of archaeology barely mention anthropology, let alone geography. Daniel's recent Short History (1981) is an example of the latter, and his work reveals not so much the difference in the development of American and European archaeologies as the futility of creating strict boundaries among these disciplines.

Cohn (1980) has noted that in the 1930's, American archaeology and ethnography were united in the concept of culture area, human regions with time depth and characteristic ecologies. The concept of culture area is very much a geographic one, and time depth, quite historical. Scholars such as Darby (1953) have emphasized the ties between history and geography, and numerous writers have discussed the relationship between anthropology and history (Teggart 1919; Thomas 1963; Taylor 1948; Cohn 1980). Geographical models have been applied to archaeology (Clarke 1977; Hodder and Orton 1976). The field of historical archaeology, however, has not demonstrated much awareness of geography, even of the sub-discipline where geography and history merge, known, logically enough, as historical geography.

Smith (1970) discusses definitions of historical geography that he calls "archaic": the history of geography, and the history of development of

knowledge about the earth. Broader views of the field have come forth, including those he calls "portmanteau definitions"-- the operation of the "geographical factor" in history, the evolution of the cultural landscape, the reconstruction of past geographies, or the study of geographical change through time. These might be considered some of the perspectives of historical geography, rather than definitions of the field.

Newcomb (1969), rather than defining the discipline, describes 12 "approaches", six of which are traditional and six "new departures." Among the new departures is one that will sound familiar to anthropological archaeologists, the use of time depth in the testing of theoretical models; the techniques of historical geography are "a means for achieving simplifying generalizations." In similar vein, R. Harris (1967) discussed working themes in the historical geography of Canada. He listed several sub-themes in the occupation of the land, technological change and resource utilization, urbanization, and development of regions. The themes might be summarized as the development of settlement systems and culture areas.

More generally still, the emphasis might be viewed as one of inclusiveness, of exploration of all mutual interests in history and geography. Koroscil (1971:415) suggested that a geographer could look upon "history as a way of thinking about questions in the time dimension," and that historical geography utilized "data that are historical and a method that is geographical" (1971:416). Clark (1960:611) proposed historical geography as a theme for economic history, suggesting that "historical geography has many facets, but it is not a topical specialty like climatology or political geography. Any and all of our specialties can and should be studied historically." The last sentiment should be very familiar to any archaeologist.

The historical geography of the Eastern United States has received a great deal of attention, as summarized in review articles by Merrens (1965), Greven

(1967), Jakle (1971), and Ernst and Merrens (1978). Brook (1976) considered a sequence of spatial systems in American history, while culture areas have been approached from several perspectives (Mitchell 1978; Bridenbaugh 1963; cf. Glassie 1968).*

The application of detailed models to any given region, particularly the upper South or Middle Atlantic, has received little attention, although a thorough study of the settlement of eastern Pennsylvania is available (Lemon 1972). There has been some effort to prepare a model of colonial settlement for general purposes. Based on Bylund's (1960) original description of new settlements in Sweden, generalizing approaches have utilized ecological diffusion theory (Hudson 1969) and mathematical elaboration proceeding from Loschian central place theory (Olsson 1968), as well as Monte Carlo simulation (Morrill 1963). Some results were too general to cause any stir, as Bylund's conclusions that areas with good climate, good soil, and available minerals were usually settled first. On the other hand, mathematical models and theories of central place may have seemed too removed from data, perceived as inapplicable in the Eastern United States where the settlement was, for a long time, neither very centralized nor very hierarchical. The elegant assumptions of some models, such as the featureless plain specified in the original Christaller (1966), have not seemed suited to the Atlantic Coast, where further distortions in the system were caused by non-retail activities, locations of power sources, transport costs, and external factors of migration (Morrill 1963; Cook 1980).

*In this connection, it is intriguing to note that historical archaeologists who attend the Middle Atlantic Archaeological Conference implicitly accept a prehistorian's definition of the region. The question, "What is the Middle Atlantic?" properly should elicit three different responses from a prehistorian, a historical geographer/folklorist, and a historical archaeologist: roughly, "Albemarle Sound to Hudson River," "New York, New Jersey and Pennsylvania," and "huh?", respectively. It would be interesting to compare in detail the prehistoric and historic Middle Atlantic regions, particularly in regard to the epistemology of Indian-European relations.

Whatever the reasons, there seems to have been little attempt to apply such formal models to the settlement of the Eastern United States. Even in the study of urbanism, modeling is rare (discussed below). The general practice has followed Cook's (1980:20) view, that "historians will profit more by approaching geography as a strategy for thinking about problems in spatial terms, rather than by regarding it as a source of preformed models and formulas."

Historical archaeologists have hardly thought of geography at all, still less as a strategy or source of models, since a regional approach is almost entirely absent. Cook (1980:24) mentions as a source of data on communications patterns, "the distribution of artifacts to measure the spread of styles and, implicitly, patterns of contact. Geographers have made extensive studies of the distribution of styles in architecture, furniture, gravestones, and the like, as have folklorists and art historians." His failure to mention archaeologists is almost an indictment of historical archaeology, where the lack of regional syntheses or even compilations is glaring.

Leone (1973) has remarked that "there is a sense of incompleteness in archaeology," a statement that still is true nearly a decade later, and especially so in historical archaeology. South (1977) has, in effect, suggested that the incompleteness is a lack of a quantified, deductive approach. Leone has proposed the need for better understanding of the relationships of technology to culture (1973), of documents to culture (1979, 1980a), of our culture to our understanding of past cultures (1980b). Others have implied that the incompleteness is integral, that historical archaeology is only a supplement to history (Noel Hume 1964; Harrington 1955; Dymond 1974), that its focus should be architectural (Dollar 1968). Fontana (1968) and Adams (1979) argue that a sense of "humanism" will fill the gaps, without offering the slightest suggestion of how to find or create a humanistic archaeology. It is suggested here that the incompleteness is, most visibly, a lack of synthesis.

Two major works of historical archaeology appeared in 1977, books by South and Deetz. Whether or not either intended to, each was read to found a discipline, and each was criticized because it did not. South (1977) explored basic archaeological concepts of tradition and horizon, to establish a replicable method for controlled comparison of certain aspects of sites and assemblages which, in time, should induce consistency in reporting and in delineation of pattern. Deetz (1977), fundamentally, wanted to make concepts and interpretations of historical archaeology available to a non-technical readership, a thoroughly worthwhile goal in these days of dependence on public support.

In Leone's (1979:3) words, "So we have South with a sterile science and many followers, and Deetz with fertile results but no reproduction." Deetz's work does not engender replication, though it may inspire thought, because he does not explain method; South explains only method, leaving others to follow, but none to derive insight. Deetz satisfies a sense of order because he offers something akin to synthesis, drawing conclusions from archaeology with relevance to the processes of culture change in New England society; South does not, because he refrains even from listing his sites in a chronological order, let alone processual interpretation.

The problem is the incompleteness, the gap between South's first careful steps and Deetz's sweeping conclusions. The middle ground is missing, the demonstration of the process of interpretation from data to inference to conclusion: the synthesis of data and model, by comparison and integration of related data into regional or conceptual wholes.

Certainly the regional aspect of synthesis has escaped practitioners. Some have noted the need and potential for a regional, spatial perspective. Deetz expressed (1968) the hope that the increasing number of excavated sites would lead to reconstruction of patterns of settlement and expansion--eventually. Leone (1973) took a very spatial view of Mormon towns, but like much of his

work, it is difficult to relate these insights to the handful of sherds with which most archaeologists have to deal. Most recently, Salwen et al. (1981) have affirmed the usefulness of sites and artifact samples for building spatial and regional models, particularly in reference to questions of trade patterns and ethnicity. These suggestions all point to valuable avenues of synthesis, but the synthetic approach has hardly begun.

This is not, of course, to imply that spatial studies are the only fruitful avenues of research. Advances in the study of social and economic implications of artifact assemblages have been offered in the last decade: particularly in economic status and ethnicity, from ceramics and faunal dietary remains (Otto 1977, 1980; H. Miller 1980; G. Miller 1980). Dethlefsen and Deetz's (1966) pioneering study of gravestones laid a groundwork for time-space systematics that, in part, must have inspired South's (1972) application of the concepts of tradition and horizon to a most useful dating technique. South's (1977) studies of pattern recognition techniques, exploring similar concepts, have instigated both a rival classification scheme for nineteenth-century materials (Sprague 1981), which has not yet been applied to problems beyond data presentation, and a proposal of a third, "Early Fur Trade" pattern (Forsman and Gallo 1979), which needs more consideration of its applicability and its underlying logic of categorization, for instance the inclusion of glass trade beads in a "Clothing" rather than "Activities" (i.e., economic) group.

Klein (1973) attempted to initiate a model-building approach, but due to the overly general nature of the "model" and the lack of data to substantiate its utility, apparently failed to induce other investigators to follow suit. More practically, Deetz (1973) formulated hypotheses about the relationships of behavior to material culture, specifically ceramics, for New England sites. Lees (1979) discussed economic implications of materials from Limerick Plantation within the larger economic patterns of the region and nation, advancing

beyond the single plantation at least in perspective. Cressey et al. (1981) have begun to integrate spatial, socioeconomic, and ethnic data into a city-site model. Each of these approaches holds great potential, but there remains a large gap between theories of wide scope, and applications to more than restricted, usually single-site, bodies of data.

Perhaps the most consistently pursued model that hopes to be generally integrative is the "frontier process" scheme, best characterized by Lewis (1975, 1976, 1980) and recently promoted by Waselkov and Paul (1981). The latter authors note that the interaction of peoples of both sides of a frontier shapes the nature of frontier society, and that models of settlement, to be complete, must take this situation into account. Whether the frontier model is the "right" one, as Waselkov and Paul (1981) almost seem to believe, is less important than would be a demonstration of its encompassing utility. Unfortunately, available data do not support the kind of regional demonstration required (it might be noted in passing that these authors' discussion of "frontier" economics deals almost entirely with acculturation, in their terms). Similarly, another recent frontier model (Ostrogorsky 1982) is defended on historical grounds, and not yet by archaeology. This is only slightly less frustrating than Stone's (1974) repeated assurance that social and economic inferences can be drawn from the assemblages at Fort Michilimackinac, which he never demonstrates.

More than any other investigator, Lewis (1975, 1976, 1978, 1979a, 1979b, 1980) has doggedly produced data to which he can apply his model, a frontier model based on the Equadorian study by Casagrande et al. (1964). At Camden, for instance, he exercised the general model and also provided insight into the development of the town (Lewis 1976). To date, his major attempt to synthesize field data on a regional level has been his dissertation (1975) on the earlier James River settlements. In that work, he derived a number of hypotheses

and archaeological conditions, which he proceeded to test to the extent his data allowed. In the process, he affirmed the utility of the approach in the investigation of general propositions about culture process.

But to some extent Leone's "incompleteness" remains. Lewis (1975) has perhaps tested a general model, which is a valuable endeavor, but what has he revealed about the Jamestown frontier?-- what, that is, that might be useful to a geographer or historian of early Virginia. They already knew it was a frontier, an advance line of colonization. Deetz (1977), by contrast, has offered much that will challenge historians, but in deference to his intended audience did not substantiate his models by rigorous demonstration. The gap between the deductivist model, lacking appreciation of people and their lives, and the particularist reconstruction, lacking applicability beyond the site under investigation, is still acute.

Synthesis is necessary, synthesis both of data and of perspectives. Models are needed that are based on detailed historical and geographical understanding of regional development, and on solid data, reported in detail and interpreted explicitly in multisite, regional summation. Such synthesis can form a basis for systemic generalization or single-site interpretation. To cavil that data are not yet sufficient is unacceptable; that the data are insufficiently published, somewhat less so, but still lame. The problem is to make the attempt.

The following pages will contain just that, an attempt. Historical and geographic studies at the early Chesapeake region will be abstracted and recombined, to provide a perspective within which a number of sites will be discussed and compared. In no sense will this be a definitive history, or even a systematic formulation of a model. Historians at the St. Mary's City Commission, for instance, have explored aspects of society that are quite amenable to archaeological testing; it is necessary now, if only in preliminary fashion, to put some of these studies together in explicitly archaeological perspective.

Note on the analysis

The identification of materials in the following analyses is based on standard sources in use in historical archaeology. Noel Hume's (1969) Guide is the basic compendium of information, and is cited less than it probably should be. Other works, more specialized or updated, are cited as needed. For reasons of time and because the intent of this work is the investigation of general patterns, much detailed analysis has not been performed, and for this reason the study is regarded as preliminary. It is unlikely, however, that more exhaustive identification of specimens will alter the general conclusions.

An attempt "to demonstrate the patterned regularity of the archaeological record as well as the variability," as South (1977:25) has stated his own aims, requires consistency of method and of data categorization. This consistency includes not only typology and reporting of data, but also replicability of interpretation. Pattern recognition studies in historical archaeology include dating methods based on mathematical formulas that abstract index dates from certain types of artifacts, pipestems and ceramics being the most widely used. Although there is some uncertainty as to what exactly constitutes "accuracy" in these formulas, they provide useful means of seriating assemblages and, in most cases, result in median occupation dates that can be employed with some confidence. This analysis employs the formulas throughout, in conjunction with whatever other data are available.

The pipestem formula is a straightforward linear regression, proposed by Binford (1961) and based on data reported and interpreted by J. C. Harrington (1954). As a rule, the bore diameter of white, ball clay pipestems decreased through the colonial period, and Binford's formula translates the mean bore diameter of the pipestem assemblage into a median manufacture date by means of a linear equation in which the date $Y=1931.85-38.26X$, where X is the mean bore

diameter. This standard formula is used in the following analyses, and usually will not be referenced.

The ceramic formula is more complex in both concept and application. Proposed by South (1971, 1977), the method is based on the archaeological horizons represented by fine ceramics in British colonial sites. Especially during the eighteenth century, when technological improvements hastened change in ceramics, the use-frequency of many ceramic wares and types is describable in terms of the unimodal curve on which formal seriation methods are based. Historical and archaeological data provide mean and bracketing manufacture dates for such ceramics. South developed a weighted mean formula that, like the pipestem formula, results in an index value for the median manufacture date of the assemblage. Comparison of the mean ceramic date with the pipestem date and historic median occupation date in each site of his test cases (South 1971, 1977) indicates that the formula is quite useful, particularly in eighteenth-century sites.

South makes the point that there is no substitute for thorough knowledge of the ceramics under analysis, and there can be little argument against such a position. But if the main purpose of the analysis is the investigation of broad patterns, and the need is for a rough seriation of assemblages derived in a consistent manner, it may be that a somewhat less precise date will be acceptable. This project, in part because of a need for convenience of recording data, will employ just such a "rule of thumb" approach.

The data will be presented in the format shown in Table 1a, which will be the key to interpretation of the later data tables. The format was established for convenience of both recording and presentation. Categories A through I, K, P, T, and TT, are generalized categories that include the most common (in the present sample) of South's datable ceramics (1977:210-212). In South's scheme, for instance, Rhenish grey stonewares are distinguished by four types,

Table 1a. Key to data presentation format.

A. delftware	F. Burslem ¹	K. N. Devon grave ²	P. sgraffito	TT. pearlware
B. white saltglaze ¹	G. Nottingham ¹	L. clouded glaze ³	Q. black glazed buff ²	U. black glass
C. Chinese porcelain	H. English brown ¹	M. black glazed red ²	R. miscellaneous	V. window glass
D. trailed yellow	I. Rhenish grey ¹	N. brown glazed red ²	S. no glaze red ²	W. tinted bottle
E. creamware	J. coarse grey ¹	O. black glazed red ¹	T. whiteware/ironstone	X. clear bottle
	Z. delft tile		?. refined earthenware, no glaze	Y. special forms

pipestems (64ths)	4	5	6	7	8	split	bowls
dressed stone				brick			mortar
nails	spikes			scrap iron			animal bone
charcoal/charred wood			coal				

other:

Table 1b. Median dates used in mean ceramic formula.

A. 1750	F. 1738	K. 1713	P. 1680	TT. 1805
B. 1763 ⁴	G. 1733	L. ----	Q. ----	
C. 1730	H. 1733	M. ----	R. ----	
D. 1733	I. 1738	N. ----	S. ----	
E. 1771	J. ----	O. ----	T. 1860	

1. Stoneware.
2. Coarse earthenware.
3. Type name unknown: brown lead glaze with black streaks, buff earthenware body.
4. 1760 for scratch blue.

and white saltglazed stonewares by nine types, here lumped under I and B respectively. Notes were kept on sherds with special attributes, such as dipped white and scratch blue saltglaze, and these specimens are mentioned in the discussion as needed, but are not distinguished in the data tables.

For use with the Southian ceramic formula, these generalized categories require generalized median dates. The dates employed in this analysis are listed in Table 1b. These dates were used consistently in all the assemblages, except in occasional special cases when a modified date is also derived, as detailed in the discussion. There are admitted biases in the method. The Rhenish grey stoneware date, for instance, tends to be a bit late, since several sprig molded sherds assigned earlier dates are caught in the lump; similarly, the date for creamware is a bit early, but since most of the sites in the sample belong entirely to the eighteenth century, the bias may not be too great. Since an approximate sequence and a consistent set of rule-of-thumb dates are the goals of the method, some loss of precision will be accepted. Attempts to assess the extent of the inaccuracies will be included at several points in the discussion, particularly in chapter 6.

As stated in the preface, one goal of this dissertation is the exploration of general patterning, and the method of ceramic dating described above will be considered an experiment in the pursuit of a generalizing perspective.

Chapter 2.

Colonization and society in tidewater Maryland

Environment

The sites discussed in this dissertation are located in the coastal plain of Maryland, on the shores or tributaries of the Chesapeake Bay. Coastal Maryland is divided into two areas, the Eastern Shore, part of the Delmarva Peninsula which separates the Bay from the Atlantic Ocean, and the Western Shore, or mainland shore of the Bay. The surface soils of the coastal plain are underlain by sedimentary deposits that vary in thickness to over a mile, "superimposed upon the eastward continuation of the crystalline rocks of the Piedmont Plateau" (Vokes and Edwards 1974). Originally deposited in a marine or shallow riverine environment, the sediments are characteristically unconsolidated sands and clays with some gravel inclusions.

The Eastern Shore is topographically a low, eroded plain. Its surface is level to gently rolling, with some terracing evident due to glacial meltwater at the ends of the major glaciations. Elevations are generally low, for the most part less than forty feet above sea level in the south and rising very gradually to a high of four hundred feet in the northernmost part, where it merges with the piedmont. The Western Shore is relatively higher and more rugged, merging almost imperceptibly with the piedmont along its western edge. High bluffs form much of the shoreline of the Western Shore, particularly along the middle portions of the Chesapeake Bay, the area presently under study.

Most aspects of the natural biota at the time of European settlement were very similar to modern conditions. Brush (1982) has mapped the natural forest associations of Maryland, based on recent surveys. The coastal plain supports a deciduous forests, dominated by species of oak in varying mixtures. Loblolly pine and sweetbay magnolia are more common in the south than in the north, while the larger floodplains carry river birch and sycamore forests. This pattern is probably generally accurate for the vegetational cover at the beginning of the

historic period, since the major controlling factors of the forest associations are the substrate and available moisture (Brush 1982:24).

Maryland can be divided into faunal regions that correspond closely to the physiographic provinces, but Paradiso (1969:8) finds that the divisions are "not sufficiently differentiated to support widely divergent mammalian populations." The Eastern Shore contains a slightly less diversified mammal community than the other areas, due to the isolating effect of the Chesapeake Bay. In general, the Maryland mammalian fauna are more a northern than a southern assemblage, with only a few southern species such as the eastern harvest mouse, the southeastern shrew, and the eastern spotted skunk, being common to the area.

Paradiso (1969) has presented a list of mammals known to occur in Maryland, with comments on their habitats and known distributions in the state. A few forms, such as the sika deer of the lower Eastern Shore, are known to have been introduced in historic times (Paradiso 1969:168-169). Other mammals have now disappeared from Maryland, including the porcupine, grey wolf, marten, mountain lion, elk, and bison. Marine mammals are occasionally sighted off the coast or in the Chesapeake Bay.

Aquatic fauna native to the Chesapeake are quite diverse, due to the complexity and productivity of the estuarine habitats. Salinity levels in the various bays and tributaries affect the distribution of species. Soft-shell clams, for instance, can tolerate salinities as low as five parts per thousand, while hard-shell clams are not found in salinity less than fifteen parts per thousand (Lippson 1973). A third species of clam is limited to brackish water, and thus tends to be found higher in the drainages than the other varieties. Recent research on the lower Western Shore (Kent 1980) has shown the usefulness of identifying clam habitats for interpretation of colonial procurement techniques. Large numbers of Waterfowl are also attracted to the varied habitats of the Chesapeake Bay (Stewart 1962).

One subtle aspect of the landscape may have significant implications for studies of the colonial Chesapeake. The inundation of the ancestral Susquehanna River Valley, which resulted in the formation of the Chesapeake Bay since the end of the Pleistocene glaciation, has not abated. There is evidence that the water level in the middle reaches of the Bay has actually risen 89 cm. (almost three feet) since the beginning of European settlement (Froemer 1980). This continued water rise may have had some slight effect on salinity gradients, and thus perhaps on habitat areas of such species as the oyster and the shipworm. Earle (1979) has noted the effect of drinking river water in the salt-fresh transition areas, on disease and mortality rates among the early settlers. It is possible that the seasonal changes he describes, however, are as great as or greater than the effect of water rise. Other implications of water levels have to do with channel navigability, and when erosion and the siltation of many channels are added to the picture, it is often difficult to judge whether a small modern channel or inlet may have been navigable in the colonial period.

Settlement

A full consideration of the history and geography of the colonial Chesapeake should begin with the Native American inhabitants, who had a notable influence on the course of colonization. An ethnohistoric and archaeological study of the interactions between the two groups of people has yet to be prepared, although the informative potential of contact period models is evident (cf. Wesler 1977). The primary interest of this discussion, however, will be the colonial period, due largely to the content of the archaeological materials under study.

Tate (1979) has reviewed the recent body of historical studies of the seventeenth-century Chesapeake Bay. He notes that major trends in the last few years have been in the perspectives of economic and social history. Tate mentions the need for synthesis of this information, but also implies the difficulty

of pulling together so diverse a set of works. Interestingly, he also implies the lack of contributions by historical archaeology: he refers to St. Mary's City and Colonial Williamsburg as centers of historical study, but only the latter as the home of "several important projects in historical archaeology," none of which receives a citation.

In fact, although archaeology has not produced a detailed study that merits Tate's discussion, the historians and archaeologists at St. Mary's City have a close and fruitful working relationship. The historians have consciously directed their work toward archaeological needs, with the kinds of generalizing, social and economic studies that lend themselves to the level of analysis with which archaeologists must work. It is to be hoped that extensive archaeological reports will be forthcoming, that will combine detailed archaeological analyses with insights from the historical processes being revealed so meticulously by the historians.

The broad outlines of the settlement of Maryland are well known, and need not be reported in detail here. The first settlement in Maryland was located on Kent Island, established by Virginia trader William Claiborne. The first settlement of Maryland was the occupied Indian village at Yaocomico, renamed St. Mary's City. The former took place by 1631, and the latter in 1634.

Earle (1977) has suggested that the initial settlement and port of an English North American colony was planned carefully, and established as close to the center of the colony's granted coastline as a good harbor could be found. The Kent Island settlement, being a far outpost of Virginia, (see Chapter 5) would not be included in the model, but St. Mary's City fits it fairly well. Lord Baltimore's instructions to his first group of adventurers reveals the reasoning. The colonists were to find "a fitt place in his Lo^{pps} Countrey to sett downe on; wherein their cheife care must be to make choice of a place first that is probable to be healthfull and fruitfull, next that it may be easily

fortified, and thirdly that it may be convenient for trade both wth the English and sauages" (Maryland Historical Society 1889:133). St. Mary's City, on a high neck, with a harbor off the Potomac River, and also with lands already cleared by Indian agriculturalists, was undoubtedly a "fitt place."

Kent Island and St. Mary's City were two of the important nuclei from which settlement radiated in the seventeenth century; they were supplemented at mid-century by centers on and around the Severn and Annessex Rivers (Karinen 1958). Settlers had located up the shores of the Patuxent and Potomac estuaries by 1650 (Karinen 1958). Colonists from Virginia moved into the Severn River drainage beginning in 1649, and the area was granted the status of a county in 1650 (Warfield 1967; Riley 1905; see chapter 5). Surveyors were examining the Patapsco River by 1752, and Baltimore County was established in 1659 (Bump 1908).

Even while the Western Shore settlements were expanding, the Eastern Shore grew. Planters did not leave the confines of Kent Island for some time, although the island became a county by 1640, and there were 55 landholdings by 1658 (Isaac 1957). The mainland Eastern Shore opened to colonists after the treaty with the Susquehannocks in 1652, and the area soon supported a number of planters. The first patent in Talbot County, though perhaps not the first homestead, is dated 1658, and the county was established in 1660 (Karinen 1958; Emory 1950; Clemens 1974). The lower Eastern Shore settlements around Annessex and Manokin began opening up around 1660, and in 1662 there were 50 tithables in that area. The population of the colony increased at an average rate of over 225% per decade between 1640 and 1670 (Karinen 1958), and by the latter year five counties had been "erected" on each side of the Chesapeake Bay (Holland 1949).

Settlement spread quickly, but maintained access to the water ways. In Maryland, "the seventeenth century planters straggled their settlements along the estuaries" (Earle 1975:133). Kelley's (1979) study of Surry County,

Virginia, found a similar pattern. For most of the seventeenth century, colonists on the Surry side of the James took property within 15 miles of the river. The south part of the county, without direct water access to the James River, was not settled until nearly the end of the century, and in effect constituted a frontier area. This "shoreline" pattern need not be interpreted too literally, however, as Leonard Calvert said of St. Mary's City, "we have seated ourselves, wth in one halfe mile of the river" (Carr 1974:125-126). In 1671, however, the proprietary did find it necessary to instruct the Surveyor General to limit the waterline of each property according to its area (Maryland Archives 5:94-95).

The long, narrow band of habitation resulted in a very diffuse settlement pattern. Earle (1975:138) notes that colonists usually left at least a quarter mile between themselves and their neighbors, and that the early planters preferred to locate on small necks of land. The house tended to be in the center of the holding, away from poorly drained areas, to optimize access to all parts of the property. Population, then, was sparse in relation to the area settled. William Castell's description of the Patuxent River in 1644, "the Inhabitants whereof on either side cannot bring into the field above two hundred men" (Garrett 1939:7), is indicative of the situation throughout most of the seventeenth century.

The amount of land given to each planter varied according to his investment in the establishment of the colony (Craven 1970:190-191). The first colonists were granted 2000 acres for every five men whose passage they paid. The property became legally a manor, of which the landowner was lord and proprietor, with rights to hold courts leet and baron. Those colonists following within two years were eligible for 2000 acres for each 10 men transported. Colonists of lesser means received 150 acres for themselves, 150 acres each for wives and servants, and 50 acres per child. The headright system remained in effect for some time, but standard acreage dropped.

A 1649 act of assembly voided the purchase of land from the Indians without a grant of the property from Lord Baltimore (Steiner 1907), which suggests that some settlers were attempting to take advantage of an uncertain recording system. The proprietary was determined to collect its quitrents from all colonists, however, even to demanding back-payment from independent colonists who had been renting from Claiborne on Kent Island (Steiner 1903). Attempts to evade payment were probably endemic. A law of 1639 providing for the recording of grants, titles and conveyances was upped to require such recording in 1663, but full compliance is unlikely for years thereafter (Wyckoff 1937).

Surveys were recorded (when recorded) by the metes and bounds system, and irregularities in both site outline and surveyor skills caused problems. An act of 1699 expressed concern over the state of the land records:

Whereas att the first taking up of Lands in this Province, Necessity Constrained his Lordship to Comissionate such persons to be Surveyors as was but very meanly Skilfull in the Art of Surveying and for the Windings Courses and Turnings of the Sev^rall Rivers Rivetlets Creeks and Coves many times by these Branches folding one in Another were unknown to the Surveyors nor for fear of the Indian Enemy then numerous and Strong dar^tst they freely Stay on Shore to Examine the Windings and Courses afores^d but marking some Trees by the side of such Rivers Creeks &c. did without further Troubles proscribe Certain Bounds and Courses to the Sevrall Tracts by them Surveyed or Intended to be Surveyed and the said Bounds are Generally Expressed in such uncertain terms... (Maryland Archives 22:481).

In spite of such problems, Earle (1975) found that the property lines in his Anne Arundel County study area were fairly stable through time. Early patents were subdivided primarily along the main public roads.

It is interesting to compare manor and grant sizes, above, to the actual sizes of plantations in the seventeenth century. Wyckoff (1937) found that the proportion of small and middle-sized farms increased, perhaps due to speculation by the major land holders, and even more to freed indentured servants who were given only small parcels. From the 1660's to the 1690's, the proportion of middle-sized holding, those from 50 to 249 acres in extent, rose from

54% of the plantations to 75%. In the same years, farms of less than 50 acres rose from 0% (one in the 1670's) to 2% of the plantations. The largest estates, those containing greater than 1049 acres, comprised 3% of the plantations in the 1660's and only 1% thereafter.

The settlement was not only diffuse, it was also materially ephemeral. A letter of Thomas Cornwallis describes his attempt to upgrade the housing standard in 1638: "I am building of A house toe put my head in, of sawn Timber framed A story and a half hygh, with A seller and chimnies of brick toe Encourage others toe follow my Example, for hithertoe wee Live in cottages" (Maryland Historical Society 1889:174). The insubstantial cottage was probably the usual structure built by first homesteaders throughout the colony, and perhaps by many of the less wealthy for much longer.

The decentralized settlement was not easy to govern, and institutions grew up to maintain order, or at least communication. From the lack of surviving proceedings, it appears that the manors rarely actually functioned as units of government (Craven 1970:200). In practice, there was little distinction between the local and the provincial governments during the seventeenth century. The most useful unit was the "hundred". When settlement straggled far enough away from St. Mary's City to cause a problem for quick communication, the outer reaches were formed into a hundred; Kent Island, for instance, was a hundred of St. Mary's before acquiring the status of a county (Craven 1970; cf. Isaac 1957:219).

The hundred had perhaps three primary functions, as the precinct that sent delegates to the assembly, that raised militia units, and that formed the district of tax collection. The hundred actually remained the fiscal unit through the American Revolution (Wilhelm 1885), and the term was not abolished until 1824 (Karinen 1958; cf. Marks 1979:114). "We may regard the hundred of Maryland, then, as that civil division of the province through which the government

receives the services of the freemen... rendered either in labor, in kind, or in council" (Wilhelm 1885:57). It was a unit adapted to dispersed settlement. Officers of the hundred were appointed, and included a constable whose duty it was to keep the records.

Courts, however, were the responsibility of the counties. The first courts were held on plantations, before public facilities were built (Ritchie 1906; Leakin 1906). An act of assembly in 1674 required that each county build a courthouse and a prison within two years, wherever the county officers chose to place it (Maryland Archives 2:413-414). There was also a provincial court, the public buildings for which were in St. Mary's City at first, and then in Annapolis after the latter town became capitol in the last decade of the century (Holland 1949).

By the turn of the eighteenth century settlement was still fairly diffuse, and access to the water routes guided the choice of most sites (Morriss 1914). Augustine Herrman's map of the colony, prepared in 1670 (Browne 1894:135), had depicted little but shoreline settlement. "The exclusively water-associated settlement pattern continued until the 1670-80 decade when movement into the interstream areas began to be noticeable. By 1730 all habitable water front sites were occupied, and only interiors of the counties were unoccupied" (Karinen 1958:172).

Even in the oldest-settled areas, the landscape was uncompromisingly rural. The city of St. Mary's was hardly more than a hamlet (Carr 1974), and the town of Annapolis had barely begun. Besides attempts to centralize marketing, and other concerns about the lack of towns (see below), many colonists worried about the lack of fortifications. In 1671, Lord Baltimore instructed his Surveyor General to "reserve for his Lordship all such places as he shall find to be Convenient for the Building of Fortifications and fortresses for the defence of the Country" (Maryland Archives 5:94-95). In 1696 and 1697, however, the

assembly "Proposed that being the Country is destitute of any Fortification his Majesty be addressed to send in a Frigot to keep cruising here for security thereof" (Maryland Archives 19:451, 458, 512). Requests for patrols by the British Navy were frequent, but response was irregular, often with ships too small to be effective (Middleton 1953).

His Majesty sent instructions to Governor Nathaniel Bacon in 1699, that "You shall Cause a survey to be taken of all the Considerable Landing places and harbours in the said province and with the advice of his Matys Councilll there Erect in any of them such fortifications as shall be necessary for the security and advantage of that province..." (Maryland Archives 22:287). The assembly, upon deliberation of the request, responded that there were too many natural harbours to allow any particular place to centralize loading or passenger traffic, and that the waterways were too open and complex to be fortified effectively, thus saving themselves the trouble of having to do the survey (Maryland Archives 22:287, 295-6, 373, 380). Two decades later, Lieutenant Governor Hart reported, "There are no forts nor places of defence" in the province (Hart 1934).

The predominantly water-associated settlement, and the emphasis on defense of the province through its waterways,* should not obscure the rising importance of land travel. Ferries were common from very early times, both private and, slightly later, publicly supported. At least five acts for the survey and improvement of highways were passed during the seventeenth century, to include "making the heads of Rivers, Creekes, Branches and Swamps passable for horse and ffoote" (Maryland Archives 2:134, 219, 321; 13:486; 22:475). Earle (1975) found that probate inventories reflected the growing orientation to land travel.

*Small fortifications, perhaps no more than temporary palisades, were constructed on the back country frontier, since the assembly made note of the rangers having "Inforted themselves" in 1697 (Maryland Archives 19:531).

By the 1660's saddles and bridles were listed more frequently than were boats, and by the 1680's more planters owned horses than watercraft. Mill dams were used as bridges to cross the South River, while ferries operated in the lower, broader reaches of the estuary.

Population continued to rise, but at ever-slowing rates. In the last three decades of the seventeenth century, population increased at an average of 38% per decade, slowing to 32% for the first half of the eighteenth century and still further to 19.5% in the latter half (Karinen 1958). The spread of settlement, however, was rapid. By 1740 most of the interior areas of the coastal plain were occupied, and colonists had crept up the Monocacy River in the western piedmont; two decades later most of the piedmont was covered by settlement, except for the "Barrens" near the Pennsylvania border (Mitchell and Muller 1979; cf. Porter 1979). On the coastal plain, population peaked at about 1790, after which it remained stable or even dropped slightly before a resurgence in the twentieth century (Mitchell and Muller 1979; Marks 1979).

Papenfuse (1972) found that soil exhaustion was not a major problem until the time of the American Revolution. Land holdings tended to be subdivided until there was the largest possible number of plantations that contained enough acreage to maintain a crop rotation and fallowing system. Younger sons or other persons seeking land then had to emigrate to the western frontiers, particularly the back country of the Piedmont. By the 1770's, however, there was no frontier that contained good tobacco lands, at least none with sufficient access to the markets. It was not until after the Revolution that crowding of planters, leading to soil exhaustion, was felt.

Plantations remained the main settlement type through most of the eighteenth century, but there was a wide variety in plantations, from small farmsteads to large estates (Earle 1975:219). Patterns of ownership fluctuated somewhat with the economy, as large landowners often absorbed smaller holdings during depressions (Earle 1975:108). Larger planters both emphasized tobacco and diversified

their interests through the century, depending on the market (see next section), and the building complexes elaborated as large planters constructed storage facilities, various other outbuildings, and servant and slave quarters (Earle 1975; Middleton 1953).

Many plantations came to look like, and to serve the functions of, small hamlets (Earle 1975:119). Earle's (1975:140-141) description is evocative:

The typical plantation complex was unpretentious and unattractive. Several small, unpainted wooden outbuildings clustered near a modest dwelling house of clapboards or frame. The entire house measured less than two typical living rooms in modern suburban homes. Another residence, or "quarter," housed the several servants or slaves. Tobacco and corn grew on perhaps ten acres of the plantation. The rest of the land was wooded or "old fields" where the livestock ranged freely. Adjacent to the tobacco field stood a narrow, unpainted tobacco house, about forty feet long and holding the tobacco produced by two or three laborers. Nearby, a second tobacco house, "not worth repairs," marked lonely vigil over an unkempt, but recuperating, old field.

This typical plantation belonged to planters of middling wealth, who were by far in the majority. Plantation complexity rose with the wealth of the landowner, and the number of laborers and artisans he supported. A few very wealthy planters would have owned several plantations, each with its own set of buildings, organized by a tenant overseer.

The spatial aspects of Maryland in the post-Revolutionary and nineteenth-century periods are not well studied. The average population increase of Maryland as a whole slipped to less than 10% per decade (Karinen 1958), but, as noted above, little of the growth was felt in the coastal areas. Settlements patterns were aligned largely with road transportation systems, and later with hamlets where roads, rails, and waterways articulated. Urbanism became a dominant force in reshaping society and geography, with Baltimore taking control of manufacturing and commercial activities (Mitchell and Muller 1979). Studies of urban processes in Baltimore (Vill 1979; Beirne 1979) and Annapolis (Marks Ives 1979) point in the direction of fruitful perspectives, but the history of

Maryland in the nineteenth century, particularly in the spatial implications of agricultural and transportation system reforms, has yet to be synthesized.

Tobacco and society

The Chesapeake tidewater has long been recognized as a distinctive region, regardless of the political boundaries between Maryland and Virginia. In part, its coherence stems from its seemingly single-minded emphasis on one cash crop, an emphasis that led Middleton (1953) to coin the term, Tobacco Coast. Land (1967) referred to a "sense of community" in the colonial tidewater, because the large planters shared much the same central concerns as the small, the growth and marketing of the leafy staple. Geographers (Mitchell 1978), folklorists (Glassie 1968), and historians (Bridenbaugh 1963) have recognized the distinctiveness of the region, and have followed the lead of John Hammond who, in 1656, ignored colonial boundaries: "I shall only at present Treat of the elder Sister Virginia, and in speaking of that include both" Chesapeake colonies (in Hall 1910:284).

Earle (1975:14) noted the dictum of Charles Carroll of Maryland, that planters gauged their prosperity by the fluctuations of tobacco prices. The Maryland assembly of 1697 recorded the same judgement. "The trade of this province," said the assembly, "Ebbs & flowes according to the rise or fall of tobacco in the market of England" (Maryland Archives 19:540). After careful study, Earle (1975) generally agreed with that assessment, depending on how exactly the relationship would be specified.

Certainly the great staple of colonial Maryland was the smoker's weed, a fact well known to the colonists as well as to historians. In 1678, Lord Baltimore answered questions of the Committee of Trade and Plantations, saying that "the only considerable Comodity of this Provyunce is Tobacco" (Maryland Archives 5:264). Official pronouncements of the assembly took the same position (Maryland Archives 19:540), and two decades into the eighteenth century,

Lieutenant Governor Hart reported that all other activities were laid aside when the tobacco market prospered (Hart 1934:253). In 1729, Governor Benedict Leonard Calvert wrote, "Tobacco, is our staple, is our All, and Indeed leaves no room for anything Else; It requires the Attendance of all our hands, and Exacts their utmost labour, the whole year round" (Browne 1894:70).

By 1701 the Chesapeake colonies accounted for 25% of all the English trade with the colonies. In mid-century, tobacco production had risen to 80,000 hogsheads, or 72 million pounds, annually (Middleton 1953). By value, Maryland and Virginia provided some 60% of the exports of the 13 colonies to Great Britain, at the time of the American Revolution (Price 1964). Most of that was tobacco.

Tobacco was highly suitable as a cash crop, because its value was so high compared to its bulk (Middleton 1953; Galenson and Menard 1980). But prices at any given time depended far less on the supply in the Chesapeake than on the markets of Europe. Consumption at first was primarily English, but by 1669 more than half of English imports were re-exported. Saleability of tobacco thus depended on remote markets, far beyond any control of the planters (Price 1964; Middleton 1953).

Price (1964) suggested that the tobacco trade could be distinguished by several periods in the colonial era. Until about 1637, the trade was characterized by experimentation in crops, cultivation, and harvesting. The following three decades saw rapid expansion of the trade, and then from 1669 to 1699 growth slowed. A period of stagnation set in for the first quarter of the eighteenth century, and then between 1725 and 1775 the trade expanded once more. Klingamon (1969) suggested a slow-down in the trade during the third quarter of the century, overlooked or ignored by Price. Earle (1975) prefers to interpret a boom-and-burst cycle of fairly regular period, the average cycle about 22 to 23 years before 1750, and substantially shorter thereafter.

Part of the reason for these fluctuations was the recurrent warfare among European powers that characterized this period. Blockades and privateering

made shipping unsafe during wars, even more so than piracy in peace time. Hemphill (1959) studied freight rates as indicators of the hazards of shipping, and thus of the cost of the trade. Based on statistics from Anne Arundel County, his study began with the publication of rates in 1704. Hemphill found that rates were high, and trade low, around 1707, during the War of Spanish Succession. Few ships were loading in the port of Annapolis. In the peace of 1714 to 1739, freight rates were low, but they rose again during the next Anglo-Spanish war between 1739 and 1748. Rates were low again in the early 1750's, but by then other factors were involved in the level of trade, including that ships were anchoring in the freshes rather than the ports to take advantage of the piedmont crops.

Another major effect on the Chesapeake trade was the European market's ability to absorb the crop, which varied. Around the middle of the seventeenth century tobacco production outstripped England's ability to consume. When enforcement of the Navigation Acts restricted outlets, the Chesapeake planters had to deal with a glutted market (Middleton 1953).

The Maryland assembly found market conditions a serious topic for discussion by 1663 (Maryland Archives 3:478ff). In 1664, Maryland received a proposal from Virginia to limit production, in hopes of driving up the price (Maryland Archives 3:503-506). Two years later, the Maryland assembly felt obliged to act. "Forasmuch as Tobacco is the only Comodity by which this province does at present subsist," and since the market was already glutted, the government legislated a year's moratorium on the production of tobacco (Maryland Archives 2:143).

But attempts to control prices by colonial action met with little success, due to the lack of any control over European markets (Galenson and Menard 1980). A large part of the rise of trade after 1730, for instance, was the expansion of the French market (Price 1964), on which no amount of crop quotas could have

had any effect. Planter response, aside from a great deal of frustration, was, in the long run, to diversify their interests-- diversification in crops, in trade, and in investments (Land 1972; Middleton 1953).

There had always been other exports from the Chesapeake Bay, though they were overshadowed by the attention to and value of tobacco. The Bay had been opened to trade and settlement because of its potential for the fur trade. One estimate placed the number of fur traders in the Chesapeake at 100 by the founding of the Maryland colony (Maryland Archives 5:158), though whether most of these traders made their livings by furs is unknown. William Claiborne's settlement on Kent Island exported furs, salt, wood, corn, and some tobacco to Virginia (Isaac 1957), already a varied list for a trading post of the 1630's. A full account of the Chesapeake fur trade has not been prepared, but most scholars agree that volume was very slight by the end of the seventeenth century (Morriss 1914; Middleton 1953). The list of Claiborne's exports, however, amply demonstrates that Maryland colonists would not fail due to lack of furs.

Land (1967) de-emphasizes the role of subsistence farming in the cash-crop tobacco economy. Earle (1975:127, 140) finds a fairly varied list of crops, though, including corn, peas, and beans, as well as widespread livestock. Klingaman (1979) notes that statistics for grain production are difficult to find, since so much of these crops was consumed locally. Vegetable and fruit were also grown by many households, largely for their own, and perhaps neighbors', consumption (Carr and Walsh 1980).

The productive Chesapeake estuaries were also important to subsistence, though whether important in local or intercolonial trade is doubtful. Problems in obtaining salt prevented export of fish in any quantities until the middle eighteenth century (Middleton 1953). Local use of fish, especially for feeding large numbers of slaves, was widespread. Kent (1980) has indicated the importance of oysters, also. Historical and archaeological data suggest that

shallow-water oysters were nearing depletion around St. Mary's City in the early eighteenth century. The introduction of oystering tongs circa 1730 allowed exploitation of deeper-water, channel oysters, visible in St. Mary's middens by 1740.

The Maryland assembly tended to downplay quantities, probably to avoid official interest which might lead to controls or taxes on local activities, but mentioned exports of "porke beife pipe staves timber and such like together with wheat fflour" in 1697, and also local crafts: "necessity hath taught vs to make some course Stockings & Clothings for servants & slaves &c." (Maryland Archives 19:541). Further, Dorchester and Talbot Counties were noted to have good resources for the production of timber, "pitch tarr Rosum & hemp," though little of it was actually exported (Maryland Archives 19:541). Hart, in 1720, provided the very similar list of grain, beef, pork, and lumber, as the exports other than tobacco (Hart 1934:253). By the end of the seventeenth century there was some direct trade from the Chesapeake to Madeira, the Azores, and Lisbon, most characteristically the exchange of grain for wine (Middleton 1953; Hart 1937:253).

This varied "noise" in the tobacco system provided the basis for diversification when the tobacco market was lean. Planters of means turned to money-lending, to the production of various crops and manufactures, and to trade in merchandise, supplies, and slaves (Middleton 1953; Wax 1978; cf. Charles Calvert 1664 in Maryland Historical Society 1889:261). Earle (1975) saw that planters became adapted to the boom and bust cycle, investing in tobacco during times of high prices and in other ventures when the tobacco market was depressed.

In general, occupational specialization increased during the colonial period, also. Many early planters began as servants, and thus had many of the skills necessary to maintain and produce household necessities (Earle and Hoffman 1977). Low population levels would not support craft specialists.

Small populations and little ready cash also discouraged the early emergence of a merchant group. England, and particularly London, was the chief port of the Chesapeake, serving as market and as entrepot for British, continental, and Oriental merchandise (Carr 1974:140; Middleton 1953). The lack of local manufactures resulted in dependence on London for most goods. "The commodities Imported... are all manner of Cloaths & other necessaryes for weareing as also Iron Tooles," reported Lord Baltimore to the Committee of Trade and plantations in 1678 (Maryland Archives 5:266). Most commodities reached planters by direct trade from England to the wharves of the large plantations, but various wooden and earthenwares, molasses and sugar came from New England and other colonies (Maryland Archives 19:149). As Lord Baltimore described them, all of the planters considered themselves to be merchants (Maryland Archives 5:268), but very few had the working capital to maintain a stock of supplies for trade in the seventeenth century (Carr 1974).

Other full-time occupations were as little-represented as merchandising. A survey of 1697, for instance, found only 71 professional seamen in the colony, though the list may refer only to masters (Middleton 1953:266). There was some shipbuilding in the Chesapeake, but for the most part, shipping employed British vessels. According to Hart, in 1720, "The inhabitants are not inclin'd to navigation, but depend on British bottoms, for export and importation of the bulk of their trade" (Hart 1934:253; cf. Middleton 1953:355). At times trade was slow simply due to the difficulty of finding ships, though this situation began to change in mid-eighteenth century, with the rise of the West Indies trade. Ship refitting was more important to colonists. Annapolis was well known for the latter activity in the eighteenth century, although its harbour was too shallow for the largest vessels, and its tidal waters supported the treader worm which shipmasters preferred to avoid by choosing freshwater anchorages where possible (Middleton 1953:237; Hemphill 1959).

The Maryland Assembly discussed non-planter occupations in 1697, including coopers, carpenters, "some few that navigate sloopes and a very small number of other Artificers having relacōn to Tobacco all which excepted (by Estimacōn) make not above the 60th part" of the labor force (Maryland Archives 19:540). In the eighteenth century, the artisan population was on the rise. Earle (1975:80-88) found leatherworkers, woodworkers, millers, taylors, medical specialists, and schoolmasters in All Hallows Parish. Most of these practitioners were scattered among the plantations, and were part of a developing self-sufficiency of the plantation lifestyle.

"Somewhere between the 1720's and 1740's, parish planters silently, and perhaps unconsciously, slipped from an era of parasitism. Dependence on English imports and European markets diminished" (Earle 1975:131). Even the functions of the church remained decentralized, and planter self-sufficiency included the maintenance of their own cemeteries (Maryland Archives 5:132), quite unlike the corporate nature of New England society. This diversification and growing self sufficiency resulted in what Earle (1975:119) called a new settlement institution, the large plantation that was, in effect, a hamlet.

Large fortunes were amassed by investment in trade and shipping, but as Land (1967, 1972) notes, the wealthy planter was actually in the minority. Most planters were quite poor, and the median income of all planters was somewhat less than £100 in the earlier part of the eighteenth century. The value of most small estates consisted of livestock and crops. One planter, in Land's (1972:119) sample, died with an entire estate of "one old unfixt gun". The small planters, as Earle (1975) found, did not profit from diversification, not having the wherewithal to diversify. While the large planter did well in tobacco depressions, investing elsewhere and foreclosing on mortgages, the small planter did best in boom periods and attempted simply to endure the busts. The planters of middle means were perhaps the most stable, riding out the depressions and making up for losses in the boom times.

Aubrey Land (1967, 1972) was one of the forerunners of the recent interest in Chesapeake planters, emphasizing the error in stereotypes of the wealthy tidewater planter. More recent work has refined the understanding of socioeconomic conditions, and their changes through time. Menard et al. (1974:178), for instance, reported that "wealth on Maryland's lower Western Shore became more equitably distributed in the middle two decades of the seventeenth century and less so during the 1660's and 1670's; from the early 1680's to 1705 the distribution revealed no long-term tendency to change." In the eighteenth century, the gap in wealth between the large and small planters tended to narrow in booms, and widen in depressions (Earle 1975).

Carr and Walsh (1980) conducted a study of probate inventories on the lower Western Shore, finding that there was a general rise in material possessions in all socioeconomic levels, particularly around the middle eighteenth century. They distinguished 12 categories of items that were likely to be listed in inventories, ranking them from basic household amenities such as earthenwares, bed and table linens, to items found only among the wealthy, such as wigs, watches, and silver plate. Through the seventeenth century, any given household was likely to contain only two of the 12 items, an average that rose after 1715 to five by the 1770's. The rise was especially visible in the lower classes of households, indicating a general improvement in the material standard of living in the Chesapeake. Before 1715, coarse ceramics and linens were found in no more than a third of the estates, while only 48% of all estates in the seventeenth century listed earthenware (Carr and Walsh 1980:90).

This lack of ceramics in the early periods supports Land's (1972) note that woodenware was more common for table use (cf. Deetz 1977), and Beaudry et al.'s (1979) finding that pewter was more common in wealthy households. By the eighteenth century, improvement in the technology of fine ceramic manufacture brought the prices down, and a jump in the inventories is visible. A price drop in

other commodities is possible, also, and Carr and Walsh (1980) suggest that the rise on home industries freed scarce cash for the purchase of amenities.

Carr and Walsh (1980) also suggest that the rise in the proportion of native-born householders was a factor in material elaboration, since by inheritance they began with more possessions than did earlier generations. Demographic profiles may indeed have had a great deal of effect on material possessions, and especially on their representation in inventories. Menard et al. (1974) found that, according to age at death profiles, wealth tended to increase until late middle age and then decline. Gifts in old age may be a large factor in this situation, although it might also be suggested, somewhat facetiously, that the most active entrepreneurs died of exhaustion before reaching old age.

One effect on the early demographic profiles, in the years when immigrants made up large proportions of the populace, was "seasoning"-- the term used for the high mortality rate among newcomers who had yet to adjust to the climate, the diet, and the diseases (especially malaria and dysentery) of the Chesapeake (Walsh and Menard 1974). Earle (1979) notes also the effect of fluctuating salinity and flow in the tidal estuaries, not fully understood by early settlers who drew their drinking water directly from rivers. The effect of seasoning was "substantial" (Walsh and Menard 1974; Middleton 1953), but statistics are difficult to derive.

For men in the seventeenth-century Chesapeake, life expectancy was 10 to 20. The effect of this on household structure, and particularly on the material wealth reflected by inventories, would be worth further study. On the other hand, many men delayed in marrying because of the shortage of women in an essentially frontier society. More than a quarter of the men who left estates between 1650 and 1700 (lower Western Shore) died unmarried (Walsh 1979:127). The overall effect was that household structure remained fairly fluid. Some unmarried men lived in the households of other families, but others were heads of households,

or shared houses with fellow bachelors. Householders were in much better position to accumulate property than non-householders (Walsh 1979; Carr and Menard 1979).

The demographic structure changed as Chesapeake society established itself. Indigenous populations brought age and gender proportions into more of a balance, while the effect of seasoning was overcome by those who grew up in the region. Perhaps the next major imbalance occurred after plantations became too crowded to subdivide further than the crop-fallowing system could carry, and young adults began to emigrate. In Prince George's County this situation occurred after three generations of settlement, and by the 1770's the sex ratio and the lack of males between the ages of 15 and 24 reflected the movement of the youth to the tobacco frontier (Papenfuse 1972).

In the mid-eighteenth century, a new act of legislation began to have a far-reaching impact on many aspects of tidewater society. In another attempt to bolster the price of tobacco, the Maryland Assembly passed an inspection act in 1747 (Maryland Archives 44:595), intended to raise the quality and thus the value of the crop that reached the market. Effects were seen rather quickly. In Annapolis, for instance, even though freight rates were low, the number of ships loading also remained low; this resulted in part from the bypassing of the port in favor of upriver landings, where the piedmont crop was loaded, but also from the fact that there was simply less tobacco to load. With less tobacco to sell, planter indebtedness increased.

Complaints of debt began almost as early as the colony (Maryland Historical Society 1889:175), and were a familiar part of the plantation system. In 1708, Governor John Seymour wrote that "the Planters here being so Vastly indebted to the Merchants Allmost dispair of clearing themselves" (Anonymous 1921:218). After 1750, however, debts grew worse. Earle (1975) argues that before 1750 planters had adapted to the 23-year boom and bust cycle, but that

after 1750 the cycle shortened to a third of its former period, and the entire pattern of response was thrown out of kilter. Small farmers found as much as half their crops thrown out due to insect, and price increases did not compensate for loss in bulk. Large planters felt the same squeeze, but more importantly, were unable to adjust to the rapid recurrences of booms and busts; their investments were less and less soundly planned, less and less in phase with market fluctuations, and, more and more, they drew losses.

By the time of the American Revolution, debts were a serious problem, and the whole of the fiscal structure of the colony helped set the stage for reform. Studies by Skaggs (1973) and Hoffman (1973) are valuable in understanding the economics of the Revolutionary period in Maryland.

The members of the Governor's council were not only appointed from the gentry known to be sympathetic to the proprietary, but were bound more closely to the establishment by a strong and deliberate system of patronage. Councilors, already wealthy, received the most remunerative public offices. Daniel Dulany the younger, for example, was a councillor from 1757 to 1776, and also held the offices of Attorney General, Commissary General, and Deputy Secretary of Maryland, among others. The key was that all of these offices involved the collection of fees, a percentage of which was retained by the collector. The cost of this system to the Maryland citizenry was enormous: Skaggs (1973) reports that in 1772 the proprietor's income amounted to £12,500, while the leading placemen reaped some £50 to £300 yearly.

Nor did this extensive patronage limit itself to the most important offices, was calculated to cultivate loyalty to the proprietor because of the financial and social privileges that could be conferred by appointment" (Skaggs 1973:213). Even in the county government, the gentry was quite happy to fill such posts as sheriff, county clerk, and county justice, which were less lucrative than higher offices but exerted much local influence. In a time when

profits in the tobacco market were uncertain, an understandable degree of resentment by those out of favor and the general taxpayer was exacerbated.

Colonial debts to British creditors by this time were considerable, and debtors' prospects, as everyone's, fluctuated with the market. Hoffman (1973) shows that in 1758 the balance of trade was favorable to the colony, but that from 1759 to 1763 the market was poor and the colonists went further into debt. Then in 1763 came the German currency failure. British creditors began calling in their debts, while authorities cracked down on payment of duties and on smuggling. Hoffman (1973:101) quotes a letter of Benedict Calvert in 1765: "Our trade is ruined, we are immensely in debt, and not the least probability of our getting clear."

In 1770 a new conflict arose that undercut the proprietary's tottering authority: the tobacco inspection law came up for renewal. The law's importance to the colony's economic health, now that inspection had become integral to the system, was such that it should have been renewed immediately. But one issue proved to be a stumbling block. Attached to the inspection law was the schedule of fees that comprised so much of the personal incomes of the officeholders. Popular leaders as well as the "outs" among the gentry took this opportunity to attack the whole system of patronage. One result was that the inspection law and the fee schedule by proclamation, a move that led to vicious political infighting (Skaggs 1973; Hoffman 1973).

Politics, as Hoffman (1973) so lucidly and logically explains, were closely tied to economics, and economics were key factors in the restructuring of Maryland government after the War of Independence. The traditional elite, by a "very clever bargain," maintained their authority and their status by radical change in the fiscal structure of the government, in which they lost heavily in their financial dealings.

The first move was written into the constitution. The traditional poll tax was abolished, and in its place was substituted a graduated property tax,

with special status for certain lower classes and debtors. The tremendous tax burden on the lower classes was thus measurably relieved, and, even better, placed on the elite. The second part of the fiscal legislation was enacted the year after the constitution went into effect, and was even more radical. This act made paper money legal tender for all debts, including those incurred before the war. Since paper money was depreciating rapidly, this act was to the debtors' advantage, while the moneylenders--chiefly the elite--lost heavily (Hoffman 1973). By this diversionary tactic, the colonial elite became the state's elite, poorer but still in control.

The effects of these measures on tidewater society have not yet been studied. Changes in tax structures intended to ease the budgets of the less wealthy planters, plus the rise of mass production and drop in prices of so many commodities, undoubtedly wrought changes in the standard of living of free citizens. Loss of trade restrictions after independence may have affected the diversity of goods imported, and continuing diversification in crops, in manufactures, and in occupational specialization, must have changed household and community structures. As with the spatial aspects of these new influences, the societal ramifications should prove to be worthy subjects for study.

Urban processes in the colonial Chesapeake

Historians have often shown interest in the development of urbanism in the United States, in what Schlesinger has called the "persistent interplay of town and country in the evolution of American civilization" (1940:43). Schlesinger saw that early steps toward urbanization, as well as early solutions to such urban problems as sanitation, were experimental, and like all experiments, were not always successful.

Bridenbaugh (1955) chose to study the early cities and towns of the eastern seaboard, unusual in that most historians and geographers prefer to treat later periods, when towns and cities were more definite entities. Bridenbaugh

implicitly refers to the problems both of establishing the first cities, and of studying them, because of their differences from later urban centers. "In the seventeenth century material greatness was commercial, not industrial. Those towns prospered, therefore, whose sites commanded certain vital trading advantages-- the possession of good natural harbors, the control of avenues of trade and communication, or the domination of a productive countryside" (Bridenbaugh 1955:3).

Models and explanatory devices employed by geographers or historians do not often treat the preindustrial city. Muller's (1977) concept of nodality, for instance, applies best to the growing cities of the nineteenth century and the westward frontier. These budding central places were nodes of support for a frontier expansion, provision centers that were essentially extensions of a settlement system that remained in relative proximity. The colonial situation of the Eastern Seaboard, and particularly the Chesapeake tidewater, was quite different, as colonists retained direct ties to the long-established urban capitals for the marketing of a rapidly-developed cash crop.

Ernst and Merrens (1973) noted that relatively little had been written on urban processes in the colonial South, and that the general view of the region was that Charleston formed an island of urbanity in a swamp of rusticity. The problem, in their view, is the definition of an urban place by observers and by scholars. Ernst and Merrans suggested that there were two major aspects of the definition as generally accepted, both misleading: that urbanism required substantial nucleated settlements, and also an urban hierarchy.

The problem of drawing distinctions based on size has been noted by Flatres (1971) and Trewartha (1943), both considering the small end of the urban spectrum, the hamlet. The number of houses required to define a hamlet, and the threshold of nucleation, proved to be stumbling blocks in consistent definition. These are the problems of discerning towns in the colonial South, where a large

plantation could resemble and function as a hamlet, and simultaneously a place designated a town might look no larger.

Ernst and Merrens (1973) argue that urban functions were more useful as criteria for the recognition of a town. They suggested that the functions of a town, more evident with increasing size, include retailing, marketing of produce, administration of government and justice, and provision of services and occupational specialization. Trade and commerce are perhaps most visible, and government secondary, in most towns. The authors considered that the maintenance of these functions does not necessarily demand large concentrations of personnel or structures, as are usually expected in a town. "A simple, crude, although fairly effective method of appraising the functional elaboration of the settlement is to identify the emergence of key structures in and around the early site, focusing on their function rather than their form... [i.e.,] buildings devoted to special purposes" (Ernst and Merrens 1973). They listed as examples such buildings as an inn, a courthouse, mills, stores, and churches, but admitted that "crucial urban functions may be more or less unrelated to buildings."

Replies to Ernst and Merrens' (1973) article were prepared quickly. Wel-lenreuther (1974) believed that their approach was oversimplified, and offered other functions of urban places that might also be important: defense, administration (as distinct from government?), and a "wish to imitate" the English settlement pattern, which might be termed a cognitive function. Siegel's (1974) response was briefer, but also pointed. He thought that Ernst and Merrens "should ask themselves whether there was any relationship between crop areas and the types of cities servicing and organizing these areas" (Siegel 1974:668), for instance between tobacco-producing and wheat-producing areas. He pointed out that plantations might serve as "alternative nodal centers" in a functional network, and argued that the definition of a town should include its success as

centers of demand, of technical services, of labor and capital markets, and of communications. Ernst and Merrens' (1974) reply was essentially, "well, shove it."

Most of Siegel's comments and definitions apply more to established towns, particularly in the post-colonial era. Ernst and Merrens (1973) point was precisely the same as Siegel's "alternative nodal centers," in that urban functions in the colonial South were not necessarily centralized. They were interested in the growth of towns in a rural setting, and the threshold at which an observer could decide that a given place was indeed a town. The question remains. All four authors implicitly agree that the entire geography-- physical and cultural-- of a region is involved in the system of "urban" functions, and in the growth of or lack of towns.

Price (1974) also was concerned about the functions of the pre-industrial town, and divided them into four sectors: administration, maritime transport and marketing, manufacturing, and internal services. His attempt to measure the functional proportion in some major colonial cities is interesting, but again he is studying established towns, even though still of the colonial period. These methods are worth pursuing, but aid little in the investigation of the rise of the first towns and cities in a colonial region.

The problem is particularly interesting in the colonial Chesapeake tidewater, which region Price terms "paradoxical." The situation is most often described as "the lack of towns in the Chesapeake tidewater." Rainbolt (1969) summarizes the traditional explanations for the inability of urban centers to develop in the Chesapeake. Foremost is the complexity of the drainage system and the length of the navigable waterline, which allowed nearly unlimited access to water transport and thus discouraged any concentration of storage or loading facilities.

Closely related is the nature of the staple crop, tobacco. Rainbolt (1969) presents the usual argument in terms of the depletion of soil by tobacco cropping,

which forced scattering of production to local areas of good soil. Papenfuse (1972), however, noted that soil was not badly depleted, although the need for a rotational fallowing system did to some extent encourage dispersion of plantations. More important are the low bulk and relatively easy preservation of the crop, which did not encourage centralization of storage or processing (cf. Price 1974). Further, the small volume produce by any given area, and the willingness of each planter to trade on his own with the ship masters that called at his wharf, prevented the specialization of a merchant group (Earle and Hoffman 1977).

Colonial observers presented much the same argument, as John Clayton did in 1688 (in Reps 1972):

No Country in the World can be more curiously watered. But this Conveniency... I look on /to be/ the greatest Impediment to the Advance of the Country, as it is the greatest Obstacle to Trade and Commerce. For the great Number of Rivers, and the Thinness of the Inhabitants, distract and disperse a Trade. So that all Ships in general gather each their Loading up and down an hundred Miles distant; and the best of Trade that can be driven is only a Sort of Scotch Pedling; for they must carry all Sorts of Truck that trade thither.... The Number of Rivers, is one of the chief Reasons why they have no Towns.

As Carr (1974:144) summarizes the situation, "in the seventeenth century, the costs of centralizing the tobacco trade were higher than the benefits."

Rainbolt's (1969) third of the traditional explanations suggests a nascent Jeffersonian dislike for cities, in preference for the clean and moral country life. This is the explanation with which he disagrees, arguing that many colonists, particularly those in the governments, were very much in favor of stimulating the growth of towns.

Earle and Hoffman (1977) identify a subtle fear of towns in the colonial era, since cities, exemplified by London, were subject to the terrors of fire, plague, and poverty. But they emphasize the colonial views in favor of towns, and the consistent dreams of colonial planners who expected rapid development

of networks of roads and prosperous cities. The first Lord Baltimore was no exception, and his instructions to the colonists clearly anticipated town life:

10. That they cause all the Planters to build their houses in as decent and vniform a manner as their abilities and the place will afford, & neere adioyning one to another, and for that purpose to cause streetes to be marked out where they intend to place the towne and to oblige euery man to buyld one by another according to that rule and that they cause divisions of Land to be made adioyning on the back sides of their houses and to be assigned vnto them for gardens and such vses according to the proportion of euery ones building and adventury... (Maryland Historical Society 1889:138).

Baltimore's commissions to the first few governors of his colony included the authority to designate ports and to specify places for the conduct of markets and fairs (Maryland Archives 3:52, 205). Both of these functions were of major importance to regional planners, and the concerns were reiterated many times during the next century.

Even aside from the commercial functions of towns, Englishmen of the seventeenth century considered town life a requisite of civilization. Dispersed people were irresponsible and uncontrollable. Compact settlement was necessary for the control of behavior that resulted in social order (Rainbolt 1969; Earle 1977; Berkley 1924). William Penn expressed the feeling quite clearly. In planning for the orderly settlement of towns in Pennsylvania, "I had in my view Society, Assistance, Busy Commerce, Instruction of Youth, Government of Peoples Manners, Conveniency of Religious Assembling, Encouragement of Mechanicks, distinct and beaten roads..." (in Myers 1912:263). Pastorius, in 1700, explained once again Penn's "weighty reasons" for insisting on towns. "Among the chief is that in that way the children can be kept at school and much more conveniently brought up well. Neighbors also can better offer each other loving and helpful hands and with united mouths can in public assemblies praise and extol the goodness of God" (in Myers 1912:407, cf. p. 380).

Like Lord Baltimore in 1633, Penn assumed that society could not develop properly unless the people built together in community. In Lemon's (1978:195)

words, "Properly considered, physical layout would enhance social life." Seventeenth-century planners understood what Leone (1973) saw in the Mormon towns of Utah, that spatial order and proximity defined the occupants' places in society. Thus the emphasis on the town plat, and the survey to "cause streets to be marked out" that always preceded the establishment of an intended town in the Chesapeake tidewater (Reps 1972). As with the Mormons, the plat was a recording device for convenience and documentation, but also an affirmation of social order.

The lack of towns in the Chesapeake colonies was thus distressing psychologically, as well as difficult to administer efficiently. In the third quarter of the seventeenth century the governments of Virginia and Maryland both took steps to rectify the lack. In the manner of bureaucrats and politicians everywhere, the stated argument was commercial, declaring the need to centralize and thus to stimulate trade. These steps are known collectively as the Town Acts, and followed similar developments in Virginia (Riley 1950) and Maryland (Reps 1972).

There were three groups of Town Acts in Maryland, each beginning with a major bill and followed by supplementary legislation. The first was actually a proclamation of the Governor's Council, which in June, 1668 published "the declaracon of the leivtenn^t Generall & Councell concerning the appointing of certeyne places for the unladeing & selling of all goods and m^rchandizes brought into this pvince" (Maryland Archives 5:31-32). This declaration established 11 sites that were to be the official centers of all commercial traffic. Ships were to market imports nowhere else on penalty of imprisonment of the master.

"Forasmuch as it is necessary for the good of Trade that Certain Ports... be appointed for the Lading and unlading of Merchandize," a second proclamation was published in April, 1669 (Maryland Archives 5:47-48). This time, 12 sites were appointed, most repeated from the first list. Again in 1671 essentially

the same act was repeated, now with 15 sites (Maryland Archives 5:92-94). All sites were granted "such rights Jurisdiccōns libtys & privildges... as some shall seeme most expedient" to constitute them "Sea Ports," giving them the legal status of towns (Maryland Archives 5:31).

In 1668, following the first proclamation, the council ordered that any person who built in one of the towns should be granted extra land (Maryland Archives 5:35). This statement demonstrates both the expectation that the designated towns would grow into habitation centers, and also a willingness to offer incentives for persons to stimulate the process. The same act, however, foreshadows much of the uncertainty that would mark the practical status of these towns, adding two new town sites to the original list, one in Charles County and one in a place "to be pitched upon" in Port Tobacco River. Throughout the period of the Town Acts there would be all sorts of special acts for establishing particular towns, and petitions asking for towns to be established.

How many of these sites actually were or became towns has never been clear from the records. Many sites were repeated consistently in later acts, and were considered towns, such as St. Mary's City, Battle Creek on the Patuxent River, Port Tobacco, Annapolis (though not by that name until the last decade of the seventeenth century), Londontown, and Chestertown. Others may have contained a storehouse or a couple of structures, perhaps only for a very short period. But such phrases as "to be pitched upon" imply that there was nothing extant to fix a site in many cases, and it is likely that no activity ever took place on some sites. Evidently some sites were designated because the landowner, usually a planter with a large estate, hoped that revenue from the sale of lands and commercial traffic would accrue to his own profit. In occasional instances, as William Burgess' land on the South River which became the port of Londontown (see chapter 4), such speculation indeed resulted in a town, but whether the planter benefited is not clear. Other planters undoubtedly were badly disappointed in similar speculations.

Augustine Herrman's map of Maryland, drawn in 1670 (Browne 1894:135), includes symbols meant to represent towns. Thirteen of these symbols were included, two without labels, while Oxford is shown by name but not by a symbol (cf. Kuethe 1935; Reys 1972). Unfortunately it is impossible to tell whether these are actual towns, identified and mapped by Herrman, or the papers towns given legal entity by the proclamations. The latter case seems more probable.

Richard Blome's description of Maryland, published in 1672, evidently refers to the optimistic Town Acts:

The Inhabitants being in number at present about 16,000 have begun the building of several Towns, which in few Yeares 'tis hoped may come to some perfection; as Calverton, Herrington, and Harvey-Town, all Commodiously seated for the benefit of Trade, and conveniency of shipping, but the principal Town is St. Maryes... being beautified with divers well-built Houses, and is the chief place or scale of Trade for the Province (Garrett 1939:15).

Carr (1974) suggests that the chief seat of trade contained fewer than 20 buildings in the 1670's. Lord Baltimore provided perhaps the best description of St. Mary's City in 1678:

But it cann hardly be call'd a Towne It beeing in Length by the Water about five Myles and in Breadth upwards towards the Land not above one Myle in all which space excepting only my owne house and Buildings wherein the said Courts and Publique Offices are kept There are not above Thirty houses and these at considerable distances from each other... Other places wee have none That are called or cann be called Towns. The people there not affecting to build nere each other but soe as to have their houses nere the watters for conveniencye of trade... in most places there are not ffifty houses in the space of Thirty Myles (Maryland Archives 5:265-266).

Some of these concentrations of conveniency are likely to have been the nuclei of Town Act towns, expected to grow by enfranchisement. By 1678, after a decade of statutory encouragement, it is apparent that none had grown as hoped. In 1674 the assembly passed an act requiring each county to build a courthouse and prison (Maryland Archives 2:413-414). The sites were not specified, and were left up to the discretion of the county commissioners. Had there been a definable center of activity in each county, it is likely that those sites would have been mentioned in the act.

In 1683 the lack of effect of the previous Town Acts prompted a new set. On October 9, the Upper House drew up a list of nominations for town sites, which was sent to the Lower House two days later (Maryland Archives 7:459-461, 465-466). After some discussion, the assembly passed "An act for Advancement of Trade," naming 31 sites to be constituted ports, including most of those from the previous acts (Maryland Archives 7:609-614).

In February, 1684, the Governor's Council issued a proclamation concerning the Town Act of the previous year. It noted that "little or noe pgress" had been made in establishing the legislated towns, a matter of "soe great moment and Import to this Province (as the Erecting of towns and places of Trade the first foundation and Rise of all Countries)" (Maryland Archives 17:219). In the same year, a second act of assembly renewed the intent to build towns, adding new sites, moving two, and setting a deadline for lot-holders to build in the towns and thus to retain their titles (Maryland Archives 13:111-120).

In 1685 the council issued two proclamations to follow the supplementary act. The first, in March, pointed out that the Charles County town sites had not been surveyed, and ordered that the surveys be done (Maryland Archives 17:358). Then in October, a proclamation extended the deadline for building in towns, and stated that a storehouse 20 feet square would be sufficient to meet the requirement (Maryland Archives 17:403-404).

In the following year the assembly passed another supplementary act, adding 13 new sites but abolishing four (Maryland Archives 13:132-139). Two years later, the assembly debated and voted in favor of a resolution to "Encourage Tradesmen of all sorts to come and Inhabit the Towns & carry on a Manufacture," though how exactly they intended to do this was not stated. At the same time, the representatives heard a petition of complaint that the officers for towns named in the last act had not been appointed, and thus were not functioning as needed "for the quick Dispatch of Shippes &c.... for want of which Trade has

been discouraged to the great Greivance of the Inhabitants" (Maryland Archives 13:170-174). Also in 1688, another supplementary Town Act was passed, providing for seven more town sites (Maryland Archives 13:218-220).

Worry about establishing towns seems to have subsided for a time after 1688, during which period little activity seems to have occurred on most of the sites. In 1695 (Maryland Archives 19:279) and again in 1704 (Maryland Archives 27:332-333), laws were enacted to secure the rights of those who had built on town lots, "Whereas... severall persons of this Province and others have taken up lotts in severall Town Lands laid out and surveyed... and have built and improv'd thereon." Even in the few towns where a few lots had been improved, there was fear that the original owner of the land might retain all titles. In such cases it is obvious that lot owners held little optimism for the growth of any substantial village.

By the turn of the eighteenth century, observers still saw little movement into towns. Governor Blakiston received a letter in 1700 warning of possible attacks by the Iroquois: "I fear Virginia and yo^r Province would not Subsist many months where you have no townes to be a retreate and Security to yo^r People" (Maryland Archives 24:43). The capital of the province had been moved from St. Mary's City to Annapolis in the mid-1690's, but the new colonial metropolis was not yet firmly established (Maryland Archives 19:71ff, 110-113, 119). At the same time, Annapolis and Oxford were enfranchised as official ports of entry for the Western and Eastern Shores, respectively, in an effort to centralize regulation of all important shipping. Ships were required to register in these ports before going on to unload at other places.

The year 1706 saw the beginning of the last spate of Town Acts in Maryland. The assembly passed "An Act for advancement of Trade and erecting Ports & Towns in the Province of Maryland" (Maryland Archives 26:636-645), naming most of the same sites already on record. Some sites are identified as towns, some "formerly

laid out for a Town," and six sites were officially ports: Annapolis, St. Mary's City, Chestertown, Oxford, and two also-rans. Apparently the attempt to centralize shipping regulation was encountering the same trouble as the towns: each region wanted its own, until so many were designated that none actually centralized activity.

A supplementary act of 1707 (27:159-168) had the 1706 towns "revived and others Erected," since some of the former had not been established. The last of the Town Acts was passed in 1708, a supplementary bill in response for petitions for still more towns. Somerset, Queen Annes, Kent, and St. Mary's County each was granted a new town, each site to contain 50 acres. The assembly was still bending over backwards to encourage lotholders to build, providing that "Inhabitants of this province who have taken up Lotts in Severall Townes within this province, some whereof have began to build houses and made improvements," but who had not yet finished, would have the deadlines extended for another year to construct a house of 400 square feet (Maryland Archives 27:346-349).

The same act mentioned the public buildings at St. Mary's City, the former capital, which were "now diverted from the Use for which they were intended, therefore it is thought fitt the same be sold and disposed of for the use of the public." This move evidently marks the last gasp of the town of St. Mary's. Without its public and governmental functions, there was little reason for St. Mary's to exist. Carr (1974) concludes that, as a town, St. Mary's was defunct by 1722.

In a letter of December, 1708, Governor Seymour discussed the last act. "The Title of this Law being the Whole Scope of it shews how desirous the Inhabitants of this Province are to have Towns Convenient for Cohabitation and Commerce... the Ports in this Province may perhaps be worthy of the name of Townes but the other Towns will only serve her Rolling places to receive Tobacco in order to be water borne" (Anonymous 1921:218).

Even this last major effort did not clear up the questions about specific sites. Which sites actually contained towns? Which were plantation wharves, and which never saw any activity beyond the survey, if that much? In a few cases, towns hung on, at least as hamlets or places marked on a map; in others, even the exact location is not reconstructable. Reps (1972) conducted an extensive search for the original plats of the Chesapeake towns, but found only a few. Other authors have published brief studies of extinct river towns and of the migrating sites of early towns, including a general essay (Berkley 1924) and specifics of Baltimore towns and county (Ritchie 1906; Leakin 1906; Brown 1909), Port Tobacco (Hayden 1945), Havre de Grace (Marye 1918), New Yarmouth (Wroth 1908), and the "Ghost Towns of Talbot County" (Mullikin 1959). Details of the site locations or reconstructed locations can be found in these studies, but none undertook an exhaustive investigation of the activities and processes in the towns, so that the extent of actual urbanization is yet uncertain. In most cases, the records are simply too fragmentary.

But some towns did grow, especially during the eighteenth century. Annapolis, as a Port of Entry and especially as the seat of government, was the center of sophistication and commerce in the early eighteenth century. Even this port did not grow very large. William Black of Virginia described the town in 1744, which "consists of a great many Good Buildings, but very Irregular, they covered a good deal of Ground..." (in Riley 1905:66). Even Annapolis was somewhat dispersed, in the traditional manner of Chesapeake settlement.

Similarly Londontown, on the South River, went into a boom period in the first half of the eighteenth century. Carville Earle's (1975) detailed study of the area shows that Londontown found itself a node of transportation at the turn of the century, with a ferry carrying traffic from six southward roads toward the new provincial capital. Travellers' accommodations grew up, which enhanced the facilities of the harbor and brought in ships to anchor, which in

turn attracted merchants, particularly factors for British merchant houses who needed a strategic place to set up their stores. Between 1705 and 1748, the South River attracted 43% of the tobacco ships from England, and Londontown was a thriving tidewater port.

Other towns have not been studied thoroughly at all, but would be worth serious investigation. Benjamin Tasker, for instance, wrote to Charles, Lord Baltimore, in 1744 that "I am very glad to tel your Lord Ship that the New Town on N.^o East River Improves very fast, and that the Trade from Conostogo is carried there instead of to Philadelphia" (Browne 1894:113).

Tasker predicted the major factors of later eighteenth-century urban growth, strategic location and commercial competition. With the spread of tobacco plantations into the piedmont, new towns took hold. Transportation moved by land rather than water routes, and crossroad stores and travellers' accomodations became the nuclei for growing hamlets. The need for break-in-bulk points and storage facilities for a diversifying produce stimulated fall line towns such as Frederick, Georgetown, Alexandria, Petersburg, and Fredericksburg. Baltimore was also in this category and, with Norfolk, received a additional boost from the burgeoning West Indiaes trade. Wheat, produced more in the northern piedmont, required more facilities for bulk storage than had tobacco, and the concentration of facilities led to a year-round rather than seasonal market. In the later eighteenth century Baltimore was rivalling Philadelphia as a trade center, and Tasker's town on the North East River probably fell due to competition with the city on the Patapsco. Other crafts and services found such centers to be strategic locations, as well (Earle and Hoffman 1976).

With the rise of population centers on the piedmont, the transportation system of much of the province underwent change. The river towns of the coastal plain were increasingly bypassed. Londontown, for instance, was faltering by the 1740's (Earle 1975).

A new factor entered with the passage of the Tobacco Inspection act of 1747, which not only mandated inspection, but designated certain inspection points. The marketing system restructured to flow through the designated points, and spatial patterns in many river basins were directly affected. Londontown was not allotted an inspection point. Losing its nodality in the traffic system as well as its centrality for tobacco merchants, the South River port simply died (Earle 1975).

The Patuxent River was equally affected by the 1747 act, as revealed by Brune's (1979) study of tobacco marketing. Before 1747 there were no major concentrations of settlement or commerce along the Patuxent. Brune suggests that the area was too close to the Potomac and Bay settlements to support any town concentrations. Between 1747 and 1830 the inspection posts centralized local marketing more than at any other time, stimulating hamlets around at least some landings. After about 1790, Baltimore began its rapid growth, coming to dominate the Chesapeake trade and by competition causing an "increasingly fragmented marketing pattern" in areas like the Patuxent. In the years following the 1830's, Baltimore established a virtual monopoly of the market, and the Patuxent marketing patterns decentralized once more (Brune 1979).

Annapolis was one of the very few colonial towns that retained any importance into the nineteenth century, due to its status as the seat of government and to the essential inertia of urban places. Its commerce largely departed with the rise of Baltimore. Eastern Shore urban patterns have received even less study than those of the Western Shore. Chestertown rivalled Annapolis by the 1750's (Earle and Hoffman 1976); the Chester River town probably rose at the expense of earlier, Town Act towns, and then was eclipsed by Baltimore.

Nineteenth century urban processes also require more study, but the case of Triadelphia (Stabler 1948) is a reminder that the rise and fall of smaller towns was not solely a colonial phenomenon. In the nineteenth century,

industrialism and more varied forms of transportation of goods and people resulted in even more complex changes in settlement patterns.

Morrill's (1963:3) summary of the factors involved in urbanization emphasizes their complexity, and the need to take a regional, spatial perspective in such areas as the Chesapeake Bay: "The development of an urban pattern is a growth process involving the location of central place activities, that is, those which serve a local hinterland, non-central place activities, for example much manufacturing and transportation which have a non-local market, and migration, which provides many of the people for the growing towns."

Archaeological implications

The foregoing discussion was intended to emphasize the aspects of Chesapeake Bay history that are amenable to forming archaeologically testable models, in terms of chronology, spatial variables within the site and the region, site function and interaction, and socioeconomic status. On a very general level models are fairly easy to suggest, as in the increase in material culture with time and status, and town sequence-- St. Mary's City dying as Annapolis rises, or Londontown faltering just as the Patuxent River drainage becomes more centralized. These low-level models are well known to practitioners of historical archaeology in the tidewater, but will take on more interpretive value as each local area is understood in detail.

Demographic patterns as derived from historical data offer interesting questions for archaeological investigation. Age-at-death profiles are better derived from gravemarkers than from skeletal material, given the legalities of excavating cemeteries, but human remains would of course be useful for questions of disease and diet. Of more direct concern are variations in household composition, as suggested by Walsh (1979) and Carr and Menard (1979). How an archaeologist might distinguish a single male's household, particularly one shared by single males, from a small family's, from that of a family housing one or

two servants, is a tricky question. Particularly in the seventeenth century, when material culture is sparse at best, such differences may be undetectable. Children may be indicated by toys, but early toys were usually homemade (Walsh 1979) and probably perishable.

Carr and Menard (1979) note the emergence of a Creole African labor society in the early eighteenth century. Questions of ethnicity have not been discussed to great extent and Burnston (1981) recently referred to Maryland slaves as the "invisible people." To what extent this sub-society is visible, and how early, are interesting problems. The separation of servant quarters from the main plantation dwellings probably depends both on time and socioeconomic status; earlier and less wealthy planters would be more likely to house their few servants or slaves with the family, not being able to provide separate quarters.

Perhaps the most useful study to date for deriving archaeological test cases is Earle's (1975) historical geography of All Hallows Parish. His conclusions about chronology, spatial distributions, and site function, particularly in the urban-rural dialectic, are most appropriate for archaeological investigation.

Earle (1975:103ff) specifies several variables of planter behavior that are potentially quite informative. As a geographer, he was interested in primary, secondary, tertiary, and consumptive activities among plantations. Primary activities are those which extract resources, such as hunting, agriculture, or mining. Secondary activities modify the extracted resources in various manufacturing pursuits, with which Earle includes repair work since in the colonial period repairs were usually performed by the same artisans that did the manufacturing. The provision of services such as marketing or transport of goods, or government or educational occupations, is a tertiary activity. Consumptive activities use and consume other products, and do not produce income.

Earle examined inventories for items that would fall in activity categories, in much the same way archaeologists might sort an assemblage. Two indexes useful to Earle's models can be derived from this analysis, scales of specialization, based on the proportion of each activity category in the inventory/assemblage, and of potential self-sufficiency, based on the presence of key items. In both cases, allowance must be made for preservation in an archaeological assemblage, as crops, meat, and clothing would be represented differently in an archaeological assemblage. Earle also assigns an estate value based on total pounds sterling assessment. Archaeological indexes of wealth might be substituted (e.g., G. Miller 1980).

With such indexes, models can be proposed for the development of plantations in the colonial period, based on Earle's conclusions about diversification and self-sufficiency within sites and regions. Careful control of temporal contexts within a plantation site would be necessary, particularly by use of feature data, which also would provide better indications of perishables such as faunal and floral remains. In general, archaeological data can test propositions about the rise in spatial and assemblage complexity over time.

It is questionable whether even feature data would provide a resolution sufficient to discern the boom-and-bust cycle identified by Earle: "the value of personal material assets rose in every depression until 1740" (Earle 1975: 108). Prior to 1750, according to Earle, the period between boom and bust averaged 11.5 years, approaching the limit within which an archaeological assemblage is likely to be assignable. After 1750, when the boom-and-bust cycle shortened to about eight years, it is unlikely that even full cycles would be distinguishable, but the overall trend would be testable.

Earle suggests three phases of plantation types, most visible among the larger plantations. Before 1710, plantations were specialized, concentrating on the production of tobacco, corn, cattle and hogs. From 1710 to 1739 Earle

sees a period of experimentation and diversification in response to fluctuating market conditions. After 1740 plantations tended to be diversified and flexible; most planters in this period owned carpenters' and coopers' tools and small hand mills, for instance.

The other major theme of Earle's (1975) study is the dialectic between urban and rural processes. The main activity in Londontown corresponds generally to the middle period of plantation type, and should be identifiable by archaeological testing. The town site should reveal a rise in complexity in spatial distribution and special-function buildings, and then a collapse after 1750.

These concerns, phrased more specifically, would be best investigated by a program of survey and testing in All Hallows Parish. Site locations would indicate regional complexity, while controlled surface investigations would indicate site complexity, and test excavations would provide the temporal resolution necessary to discern inter-site processes. As the regional data base increases, the same questions may be asked of other localities: how well does Earle's All Hallows model fit other areas? Does the urban-dialectic pattern fit the lower Eastern Shore?

Investigation of the sites of Town Act towns would not only have bearing on whether or not they existed, but also on urban processes in the colonial South. Comparison with Londontown and with badly needed historical geographies similar to Earle's would cast much light on the Ernst and Merrens (1973) question of the threshold size for a "town." The rise of special-function structures and their degree of clustering in the region, especially with reference to Earle's (1975) finding that even at the height of Londontown's prosperity, occupational specialists were widely scattered among the plantations, are key variables in the assessment of an urban system. Two Town Act towns in Virginia have been investigated archaeologically, Marlborough on the Potomac (Watkins

1968) and Newtown on the Elizabeth River (Wittkofski et al. 1980). The former project evidently revealed a plantation that followed the heyday of the town, if the town ever had much of a heyday. The latter study identified 11 sites with eighteenth-century materials, of which two were tested, and a detailed report on the entire site should be most informative in the study context of urban processes.

Similar models of site function will be valuable in the study of larger, later towns and cities. Price, admittedly from "disparate and shaky data" (1974), offers the hypothesis that the service sector in a late eighteenth-century port accounts for approximately 50% of adult male employment, maritime and industrial sectors about 20% to 25%, and government less than 5%. To some extent, these sectors may be archaeologically inferable. Long-term projects such as that in Alexandria (Cressey et al. 1981a, 1981b), which has already demonstrated an awareness of the complexity of models required to investigate the city-site, are needed in many cities.

In fact, long term projects have yet to be coordinated in most areas, particularly projects that consciously attempt to synthesize on a regional level. Only with an approach combining the perspectives of the archaeologist, the historian, and the geographer, can complex problems of the development of colonial societies be fully understood.

Chapter 3

The Icehouse Point site, 18Qu28

According to his field notes (Ludlow 1966-1973), in 1966 Mr. John Ludlow and several other members of the Archaeological Society of Delaware began an archaeological survey of Bennett's Point, a narrow peninsula of Queen Anne's County, Maryland (Figure 1). The point was known to have been named after Richard Bennett III, a wealthy colonial planter, an identification supported by a small cemetery that contains Bennett's grave. The investigators began with a series of probings and small tests (Figure 2; details below), including several in the vicinity of a foundation eroding from the east bank of the peninsula, on a smaller protuberance known as Icehouse Point. Tests in this area proved to be quite productive of colonial materials, and Ludlow's team began an extensive excavation of the foundation and an associated trash area. The project was conducted intermittently between the summers of 1966 and 1973, when construction of the present lot owner's house was begun.

Ludlow (1974) presented a preliminary description of the excavation, but was unable to prepare a full report due to his untimely death. Most of the collection from Bennett's Point, and the field notes from Ludlow's investigation, were transferred into the keeping of the Division of Archaeology, Maryland Geological Survey.

Unless otherwise noted, the following description of the Bennett's Point investigations are based on Ludlow's project notes. These include several file folders, five small notebooks, and a large blueprint drawing of the final state of the exposed foundation (Figure 3). This final site plan proved to be invaluable. It was prepared with the aid of a transit in the field (Steven Israel, personal communication), and is taken to be the "authorized version" in the few cases of conflict between it and the field notes.

It should be emphasized that the following analysis is far from exhaustive. The purpose here is to provide a basic idea of the materials and their contexts, and to suggest overall patterns in the assemblage and the occupation. Further study of the collection would be quite valuable, and suggestions for such analysis will be included in the summary of this chapter.

Setting

Bennett's Point is a narrow peninsula, bounded on the west by the Eastern Bay and on the east by the Wye River estuary. The whole of the point lies less than 20 feet above sea level. The area of the archaeological investigations is a small part of the southern portion of the peninsula, an eastward bump in the shoreline that protrudes into Wye River. The bump is known as Icehouse Point. Its shoreline is marshy in spots, but on the east and south rises in a small bluff of about four feet in height. At this writing, the area is covered by a housing subdivision, but until about a decade ago it was cultivated.

Historical Background

Although a thorough title search for Bennett's Point has not been completed, Ludlow was able to identify ownership through most of the colonial period. The original English owner of Bennett's Point was Henry Morgan, who received a grant of "Morgan's Neck" from Cecilius Calvert, second Lord Baltimore, in 1650. Morgan died intestate ca. 1663, and his daughter, Frances Morgan Sayer, was awarded the property by court action. Frances Sayer died in 1698, willing the land to her neice, Elizabeth Rousby Bennett, wife of Richard Bennett III (Ludlow notes).

In the terms of Frances Sayer's will, if Elizabeth Bennett were to produce no heirs, Morgan's Neck should revert to an heir of Henry Morgan. Upon Elizabeth's death in 1740, title to the land fell to her brother, John Rousby. Rousby died in 1744, leaving a will which permitted Richard Bennett III to live on the property until the latter's death, at which time Rousby's son John would inherit. Richard Bennett III died in October, 1749, but the younger John Rousby's will

was proven only four months later, at which time the land was divided between Rousby's wife and daughter.

Evidently, Richard Bennett III never owned the land then called Morgan's Neck, but he did live there, possibly as early as 1698. It was by Bennett's authority that Morgan's Neck was resurveyed in 1735. The tract, as resurveyed by Robert Wright, Deputy Surveyor of Queen Anne's County, lay between "the Water Side now called the Eastern Bay, but formerly Esteem'd the Eastern side of Saint Michaels River," and "the side of the Wye River formerly called Morgan's Creek," the whole containing 400 acres (Maryland Hall of Records, Queen Anne's County Patented Certificate of Survey #688). The location of the land, and the area defined by the metes and bounds, clearly refer to Bennett's Point.

None of the sources mentioned above describes or locates buildings on the property. Augustine Herrman's map of Maryland, dated 1673 (Browne 1894:135), shows a structure or plantation symbol on Bennett's Point. This would have been during the time of Frances and Peter Sayer's ownership.

Available records concerning Peter Sayer are scarce. Emory's history of Queen Anne's County merely includes his name "among the names not heretofore mentioned" (Emory 1950:48). Tilghman (1967:65,66) mentions that Major Peter Sayer was replaced as county sheriff of Talbot County in 1681, that he lived at the "Ancient Town of Doncaster," and that he bought Bruff's Island from William Crouch before 1697 (1967:106fn; see Chapter 5, below). Proceedings of the Talbot County Court show that Peter Sayer served as an attorney in that county (Maryland Archives 54:522, 524, 540, 541, 569), that the court ordered him to make a payment of 450 pounds of tobacco to one Jn^o Harrison in August, 1673 (Maryland Archives 54:571), and that he served as court clerk for Kent County from 1671 to 1674 (Maryland Archives 54:xix, 318). He died by 1690, as indicated by a reference in the will of his wife, Frances Sayer, to "where my husband Peter Sayer is buried" (Maryland Hall of Records, Wills, liber 6, fols. 167-168). This will bears the date of 20 May, 1690.

"An Inventory of all and singular the Goods Chattels and Credits of Colo: Peter Sayer late of Talbot County deceased" was taken in March of 1697/8, apparently upon the death of Frances Sayer (Maryland Hall of Records, Inventories and Accounts, liber 17, fols. 78-92). An indication of the economic status of the Sayers is that the inventory covers 14 folio pages. A room-by-room inventory implies that the house in which the belongings were recorded was a substantial structure: "the Colo's Chamber" (also the "Sayers Roome" and the "Coll's Closett," here presumed to be or the same as in the Chamber); "the Porch Chamber;" "the Parlour;" "the Hall;" "the Chappel Roome;" "the Small Chamber over it;" "the Small Roome next the Chappell Roome;" "the Chamber over the Kitchin;" "the Chamber over the Hall and Parlour;" and "the Kitchin." Possibly in a separate building were "the Store and Shoppe," and inventory was also taken from the "Well House & Elsewhere," elsewhere including a brick kiln. Taken together, these entries indicate a wealthy planter's estate (total value assessed at £1617:09:07), with a story-and-a-half or two-story house and at least one other building. More likely, there were quite a few outbuildings, since cattle and horses are mentioned, as were 32 "Negroes & Mallatoes" and three indentured servants, all of whom must have been housed. Whether these quarters were close to the main house is not evident from the records.

Although it is not stated that the house so inventoried is on Bennett's Point (then Morgan's Neck), certain indications support this likelihood. Other properties inventoried were "the Next Plantation," the "Towne Plantation," "the Wading Place" (probably on Kent Island), and "Poplars Island." The "Towne Plantation" is probably at Doncaster, across the Wye River (Chapter 5, below). (Although Bennett's Point is now in Queen Anne's County, and Peter Sayer has been consistently placed in Talbot County, there is no conflict, since Queen Anne's County was not established until 1706 [Emory 1950].) Frances Sayer's will, cited above, contains the following stipulation, which further indicates that her dwelling place is not at Doncaster:

I order that there be a Chappell built of Lime and Brick... over the burial place where my husband Peter Sayer is buried. I order that there may be One Acre of Land annexed w ye said Chappel Round about it for Ever and another acre I Join w ye other Chappel upon my Lande adjoyning to the Towne of Doncaster... (Maryland Hall of Records, Wills, liber 6, fols. 167-168)

There is, as noted earlier, a cemetery on Bennett's Point (Figure 2), which contains gravestones marked with the names of Richard Bennett III, Elizabeth Rousby Bennett, Dorothy Carroll, and Thomas Greene. Quite a few other subterranean brick vaults have been discovered in the vicinity. Rev. Edward B. Carley of Centreville and Mr. Milton Barbahen, of the Archaeological Society of Delaware, are presently uncovering a foundation around the visible headstones (Figures 4, 5). Whether it will be shown to match the dimensions given by Frances Sayer is a primary question, but these investigators feel that two of the graves probably are those of Frances and Peter Sayer. They hope, incidentally, to stabilize the ruins, so that this small cemetery which seems to contain so many of the prominent Catholics of the colonial Eastern Shore may be properly maintained and not, once again, be lost from sight under tangles of poison ivy.

More certainly associated with the Bennett's Point property is Richard Bennett III, both by virtue of his grave marker and the reference in the elder John Rousby's will (above). He was born in 1667, the grandson of Richard Bennett I, who led a group of Puritans to Maryland in 1650 (Chapter 4, below) and served as governor of Virginia from 1652 to 1655. Richard III's father, Richard II, died four months before III's birth, and III's mother later married Philemon Lloyd, member of a prominent Catholic family of Maryland. At the age of eight, Richard III became the chief beneficiary of his grandfather's estate (Jones n.d.; Randall 1887; Preston 1972).

Richard Bennett III thus began life in a wealthy milieu, and evidently his talents were equal to the task of maintaining his status. The majority of the extant records of his activities are land transactions. Like most of the

Chesapeake's wealthy planters, he operated a store, but he also owned a fleet of ships (Preston 1972). His will, written shortly before his death in October, 1749, covers 16 folio pages (Maryland Hall of Records, Wills, liber 28, fols. 466-481). His obituary and funeral notice emphasize his wealth, and his generosity:

On the Eleventh Instant Died, at his Seat on Wye River in Queen Anne's County, RICHARD BENNETT, Esq.; in the Eighty-third year of his Age, generally lamented by all who knew him. As his great Fortune enabled him to do much good, so (happily for many) his Inclination was equal to his Ability, to relieve the indigent and distressed, which he did very liberally, without regarding of what Party, Religion or Country, they were. As he was the greatest Trader in this Province, so great Numbers fell in his Debt, and a more merciful Creditor could not be, having never deprived the Widows or Orphans of his Debtors of a Support; and when what the Debtors left, was not sufficient for that purpose, frequently supply'd the deficiency. His long Experience and great Knowledge in Business, as well as his known Candor and generosity, occasioned many to apply to him for Advice and Assistance, and none were ever disappointed of what was in his Power, and several were by his means, extricated out of great Difficulties. He was always solicitous to prevent Differences among his Neighbors, and to reconcile such as he could not prevent. In short, nothing gave him so much pleasure as doing humane and benevolent Actions; and it may be truly affirm'd, that by his Death, the poor and needy have lost their greatest Friend and Benefactor. (Maryland Gazette, Oct. 18, 1749).

On Wednesday last was solemnized the Funeral of RICHARD BENNETT, Esq. of Wye River, in a very handsome and decent Manner, by the Direction of his sole Executor, the Hon. Col. EDWARD LLOYD. Mr. Bennett, by his will, has forgiven above one hundred and fifty of his poor Debtors, and has made Provision for the Maintainance of many of his Overseers, and other Dependents; and settled a Sum of Money to be paid annually to the Poor of a Parish in Virginia; and done many other Acts of Charity and Munificence. He was supposed to be the Richest Man on the Continent; and as he died without Issue, he has, left the Bulk of his Estate to his Executor. (Maryland Gazette, Nov. 8, 1749).

Bennett's will, aside from being impressively philanthropic, contains a few references to the property then called Morgan's Neck. Bennett confirmed the arrangement made by the elder John Rousby, as "the Land whereon I Dwell called Morgan's Neck... I do hereby Give and Bequeath unto my Cousin John Rousby Son of John Rouseby Esq." The size of the holding is evident by the properties attached to it, including cattle, horses, sheep, hogs, and crops of tobacco,

wheat, oats, "and other Grain," not to mention a dozen slaves and uncounted children. He named, and specified bequests to, eight persons who lived in his household, and also an indentured servant. Evidently, the plantation on Morgan's Neck was an excellent example of the busy and diversified establishment of a wealthy Chesapeake planter.

Parenthetically, it is worth noting that Bennett left a goodly sum of money, £250, to young Rousby "to be laid out and Expended in a Decent House to be built Over the Grave-Yard and Burying Place where my Dear Wife lays interred." Whether the foundation now under excavation can be correlated with this structure, or the one ordered by Frances Sayer, has yet to be determined.

The survey begun in 1966 by John Ludlow, then, might have had a number of expectations in attempting to locate the Sayer-Bennett plantation. The diversified plantation should have had numerous outbuildings, such as animal shelters, grain and tobacco storage, a well house, servants' quarters, and a main dwelling house. The house would be a substantial structure, perhaps the one-plus story described in the Sayer inventory, and artifacts associated with it should reflect the wealth of the inhabitants. Should contexts be isolated that would demonstrate change within the period of occupation (minimally 1670, when located on Herrman's map, to 1750, just after Bennett's death), the process of diversification noted by historians might be discernable. Additionally, evidence of Catholicism would be valuable, as the social position of Catholics in colonial Maryland would be an interesting problem to study from an anthropological perspective. A survey and excavation of the Bennett's Point area, then, held the potential of producing valuable socioeconomic data.

The Excavations

John Ludlow and his team began their examination of Bennett's Point on Sunday, September 18, 1966. Their initial approach was by use of a steel probe, in conjunction with shovel test pits. Ludlow's field notes * record weekend

*Actually, the field notes seem primarily to be the work of Mr. & Mrs. John Watkins, but for convenience are referred to as Ludlow's.

visits through mid-November, resuming in March 1967 for a brief period and then again in May 1968. The notes include sketches of test holes and probe locations, and explanations of findings. Most tests were excavated to determine the nature of solid surfaces indicated by the probe. Figure 2, redrawn from Ludlow's notes, shows the test areas.

In June, 1968, the team began another test, pit A, in an area where probing revealed softer earth. This test was 40 inches in width, eventually reached a length of 96 inches, and was excavated to subsoil, 34 inches deep at the south end. The deposit proved to be a very rich accumulation of secondary refuse dating to the eighteenth century. One more small test, number 10, was also excavated before work ceased in early July.

Ludlow's team returned at the end of May, 1969, concentrating on the area of the cemetery. A new set of small tests was begun, designated in series with a "CL" (cemetery lot) prefix. No materials from these tests are in the collection at the Maryland Geological Survey, and the field notes do not indicate that anything other than brick and a single pipe bowl was found. These tests revealed underground, vaulted brick crypts (which were not opened), and also a wall foundation around the visible grave markers.

In the following month, tests were placed in the beach (tests A, B) and in the area of the eroding foundation (tests I(1), I(2), I(3), I(4)). A sketch of the latter group shows the relationship among them and to a section of the foundation, but it has not proven possible to locate them precisely in the overall site plan.

At some point during the summer, the system by which catalogue numbers were assigned to the artifacts changed. Artifacts from the surface and tests had evidently been assigned sequential numbers as they were found. This record was kept in an "artifact book", which, unfortunately, does not seem to be part of the records collection now at the Maryland Geological Survey.

The new system was applied to excavated materials, and applied retroactively to the earlier test pits. Artifacts from each provenience were given an ER ("excavation record"?) lot number. Each test unit received a number in sequence, and levels or special proveniences in each square were distinguished by letters. For instance, test I(2), 0-6", was given the catalogue number ER48; 6-10", ER48A; 10-14", ER48B, etc. These numbers were marked in the field notes (usually), on the collection bags, and on those artifacts which were washed and labelled. Surface finds continued to be recorded sequentially in the artifact book.

In August, 1969, the team began a long-term, extensive excavation of the foundation whose east end was eroding from the bank of Icehouse Point. The investigators established a new recording system, a grid of 10-foot squares based on the system depicted by Noel Hume (1968:80, 83). The Bennett's Point squares were additionally divided into five-by-five quadrants, designated a-d. The square designations are superimposed on the site plan, Figure 3.

The first square excavated was IB10b, which revealed the southwest corner of the foundation. (This square is actually IB15b on the final site plan.) The second square was designated IB12a, but seems to be IB12d on the final plan. This square located the foundation toward the center of the north wall. In the former square, the bottom of the brick wall was found at 20 inches below the surface, and the second excavation proceeded to a depth of 19 inches where it encountered sterile clay. According to the field notes, no builder's trench was discerned in either square, although one had been recorded in tests I(1)(2)(3)(4). Brick rubble made up much of the fill from approximately eight to 11 inches depth in each square. The season ended with the completion of IB12a in October, 1969.

Excavation resumed in May, 1970, with squares IB7b and IB8a, expanding to cover the hearth foundation. There is no need to continue a square-by-square

narrative of the excavation; it will be sufficient to note that by the cessation of the project in 1973, the areas shown on the site plan, plus two contiguous five-by-five squares to the northwest (IIC21c and IID1b), had been completed. The latter test revealed a trash deposit similar to that in pit A, perhaps an accumulation in a natural depression (see profiles, Figure 6). Excavation ceased on June 4, 1973, to make way for construction of a new suburban residence.

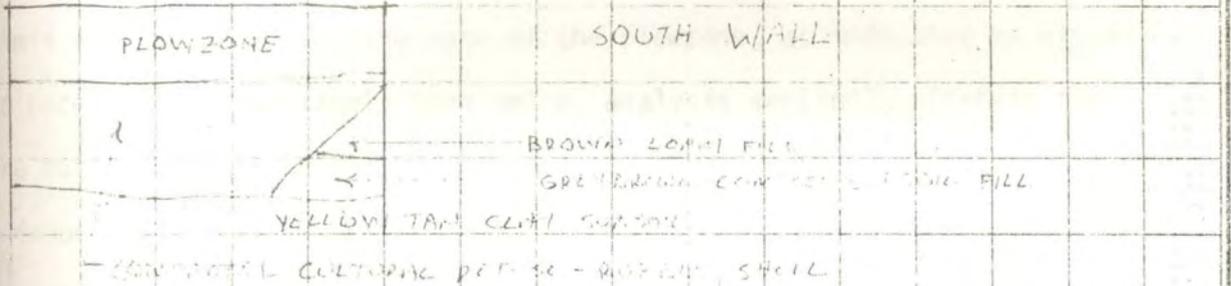
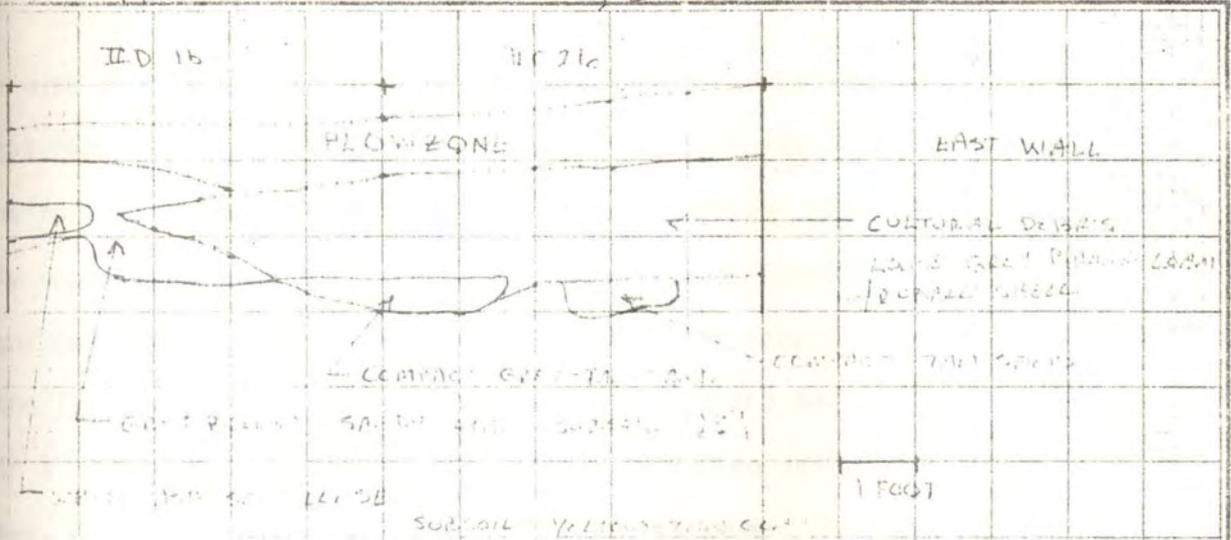
Although in most cases excavation proceeded by five foot squares, several ten-by-tens were not subdivided. These units, excavated in 1972, were IB9, IB14, IB13, IB8, and IB7. Some five-by-fives in the latter two squares had already been excavated in 1970, however: IB7b, IB8a, and IB7d. It is not clear whether these five-by-fives were backfilled and then re-screened in 1972, a problem which will be discussed further in the analysis, below.

A few comments are in order concerning the present interpretation of the field notes. As any archaeologist who has studied another's (or, often, his own) records knows, occasional bits of information escape the record. The final volume of Ludlow's notes has not been transcribed into more organized form, as were the notes before 1972. Thus, several problems may be due simply to misreading.

Evidently the eastern portion of Icehouse Point, including all the excavated areas covered by the grid, was a plowed field during the project. The first mention of plowzone in the excavation notes, however, occurred during work on square IB7d, in August 1970. In this square, the plowzone was measured at 95 inches in depth, beneath which was sterile yellow clay subsoil outside the foundation. Elsewhere the plowzone is indicated to be up to 12 inches deep. Depth measurements at the top of the intact brick foundation also vary to some extent, but are generally eight to nine inches, presumably coincident with the base of the plowzone at those points.

PROFILES

II D-15, II C-21c



REVERSE VIEW FROM SECTION NORTH SIDE II D SE 112

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

FIGURE 6.

Over much of the western part of the foundation, excavation uncovered an intact, charred wooden floor. This is significant not only because of its implications for the manner of destruction of the house, but also because it apparently represents the bottom limit of excavation in those squares. The excavations do not seem to have disturbed the floor or removed any floorboards. In IB8, the floor lay at 10 inches below surface, and the soil above it was removed in a single zone. Square IB9 was removed in two units, 0-3 inches and 3-10 inches, also comprising a plowed zone. It is assumed in this analysis that the charred floor was the base of the plowzone, and that no artifact found "on" the floor can be presumed to be in situ. In most squares, in fact, the bottom limit of the square was the base of the plowzone, as indicated by either the field notes or the bag labels (see below, analysis section). Certain features were dug to greater depths, of course.

The importance of these details is in the interpretation of non- or sub-plowzone contexts. The best, or least-likely disturbed, contexts were in the sub-floor rectangular pits on either side of the H-shaped hearth, designated cisterns I-IV in the field. Cistern I, in IB7d, reached a depth of seven feet four inches below surface; cistern II, in IB7d and IB8c, seven feet two inches; cistern III, in IB14, seven feet nine inches. The depth of cistern IV, also in IB14, is less clearly noted, but apparently reached to seven feet seven inches below surface. Further discussion of specific contexts will be reserved for the analysis section, below.

Two final problems involve the comparison of the field sketches with the final site plan, Figure 3. The reinterpretation of the grid designations of the first two squares excavated, IB10b (=15b) and IB12a (=12d), has been mentioned. There was little difficulty in these squares, since the sketches and the site plan matched quite well. However, the sketches for IB7b, IB8a, IB7d, and IB8c--recording the excavation of cisterns I and II--do not quite match

the site plan. The grid seems to have been displaced a foot or two to the northeast when the field team returned to the site after uncovering the two cisterns. Artifact distributions discussed and illustrated in the following section place the materials from these squares as though they coincided with the squares as drawn on the site plan.

The last problem has to do with measurements within squares. The first mention of a balk is found in the notes on square IB7d, when the balk was removed. In other squares, certain measurements of lengths or diagonals do not add up to those of five-by-five or ten-by-ten squares, and may relate to balks. References to balks are inconsistent. In the following analysis, it is assumed that all balks were eventually removed, and that the investigators took care to assign the proper catalogue numbers to each provenience.

Analysis

The collection housed in the Division of Archeology, Maryland Geological Survey, is in the same condition as when it was transferred from the control of Ludlow's team. The artifacts are contained in a number of boxes, of various sizes and origins. Some materials have been washed and labelled, others remain unwashed in the bags which received them in the field. There is no order to the manner of storage. Some labelled artifacts are grouped by provenience lot, while others, some of which had evidently been part of an exhibit, were intermingled in a jumble of proveniences.

This analysis, in the spirit of true conservation (Margalef 1968), did not interfere with the system. Each box was examined in turn and its contents recorded, by catalog number or provenience as marked on the artifacts or bags. Bags of unwashed materials were sorted, and artifacts washed only when necessary for identification. As the bulk (and heft) of many bags was taken up with dressed limestone, brick rubble, mortar and plaster, to wash these materials was not deemed an efficient use of available time.

The long list of materials from the boxes was condensed by cross-matching catalogue numbers and proveniences, compiled from the field notes, the artifact labels, and the bag labels. This effort was, all in all, fairly successful. Only five squares could not be matched to catalogue numbers, while no catalogue (ER) number is without a provenience. Twelve small bags of artifacts could not be correlated with either a catalogued provenience or a lot number, but only five of these seem to be associated with the main excavation. Three of the latter can be located on the site plan with some probability, but their proveniences may cross square lines.

Table 2 lists the materials identified in the collection, in order of the ER numbers. The explanation and key to the format were given in Chapter 2. Several proveniences are not represented in the collection. Personal communications from Tyler Bastian and several of the project participants indicate that a number of special artifacts, notably coins and silver or pewter, were retained by project members. Hints as to some of the missing items are found in the field notes, and will be mentioned where appropriate.

One valuable source of information included with the project records is a letter from Ivor Noel Hume (1971) to Mrs. John Watkins, concerning his examination of a set of artifacts from pit A, the foundation area, and the beach along Icehouse Point. Especially as Noel Hume referred to catalogued specimens which were identified in this analysis, his letter proved to be quite educational, and has been exploited shamelessly in the following discussion.

This discussion will deal first with the various provenience groups, then with special contexts within the foundation. More general comments on the entire collection will follow. Table 3 presents the artifact counts for the provenience groups, as tallied from Table 2.

General surface

"General surface" materials, in this analysis, include all those labelled with non-ER numbers, i.e. those which were recorded in the artifact book. There

are, however, two major problems with analysing them as a group. The first is that, while numbers noted on artifacts ranged well above 1200, fewer than 800 specimens were found in the collection. Second, materials from pit A and other tests were originally recorded in the artifact book. Although most excavated materials were later reassigned to ER lots, none of them seems to have been relabelled. Thus, pit A and test materials are included in the "general surface" list, but without the artifact book they are impossible to separate from the surface materials.

In spite of the problems of representativeness, it is interesting to note that the Binford pipestem date of the general surface collection is 1735.85, and the South ceramic date (delft=1700) is 1739.37, which dates are surprisingly close. Since no pearlware was identified in the collection, it seems reasonable to remove whitewares from the ceramic total (assuming them to be later intrusions), and the resulting South ceramic date is 1721.13. However, using a 1750 median date for delft brings the South date back to 1735.08, extremely close to the pipestem date. The earlier date is further from the pipestem date, but closer to the median for the postulated minimal 1670 to 1750 span of occupation for the Sayer-Bennett plantation. Ten sherds of North Devon gravel-tempered ware and two shsherds which resemble North Devon sgraffito (Noel Hume 1969:105) suggest that such an initial date may not be unreasonable, while two creamware sherds indicate that the occupation may have lasted into the 1760's.

Perhaps the most notable artifacts from the surface collection are four "black" glass wine bottle seals bearing the initials RB (Figure 7). These constitute arguments in favor of identifying the occupation with Richard Bennett (cf. Noel Hume 1969:61).

Test holes 1-12

Test holes 1 through 12 are the small, exploratory pits dug by Ludlow's team to investigate anomalies found by probing. Like pit A materials, these

seem initially to have been entered into the artifact book, and only later assigned ER numbers (and not relabelled?). The only materials identifiable with a testhole were found in a box with a tag labelled "Hole #9a." Table 4 summarizes the information in the field notes about each test. There is no mention of a hole 11, either in field notes or artifact labels.

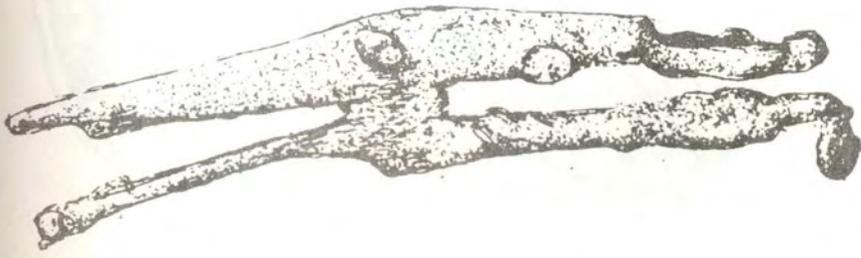
The artifacts from test hole 9a, ER 15, are included in table 2. The sample is quite small, but based on the brown stoneware sherd and the preponderance of blown black glass, the materials may be associated with the chiefly eighteenth-century occupation represented by the general surface collection. Of course, most or all of these materials are probably from a plowzone context.

Pit A

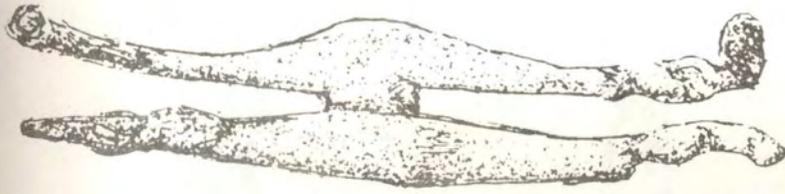
As noted above, pit A materials were labelled with artifact-book numbers, and though later assigned to ER numbers 16 to 33, apparently were not relabelled. Numbers for pit A materials noted in the field notes range from the 320's to 1008. Probably many of these numbers can be matched with labelled artifacts in the collection, but time constraints, and the unlikelihood that the final result could be shown to be representative of the pit A excavation, argued against the attempt.

One of the more spectacular sets of records in the MGS collection is a series of drawings of artifacts (Figures 9-16). All specimens but the fork, Figure 16, apparently were recovered from pit A. These excellent illustrations are signed "Stump '72" and are drawn on stationery bearing the name E. Charles Stump III, who was mentioned in the field notes as an excavator.

In the absence of an authoritative list of the materials that were recovered from pit A, the best source of information is Noel Hume's (1971) letter to Mrs. Watkins. Noel Hume estimated the date of deposition at ca. 1740-1760, probably closer to the latter date. Items manufactured quite a bit earlier were also present, including some dating back to the late seventeenth century.



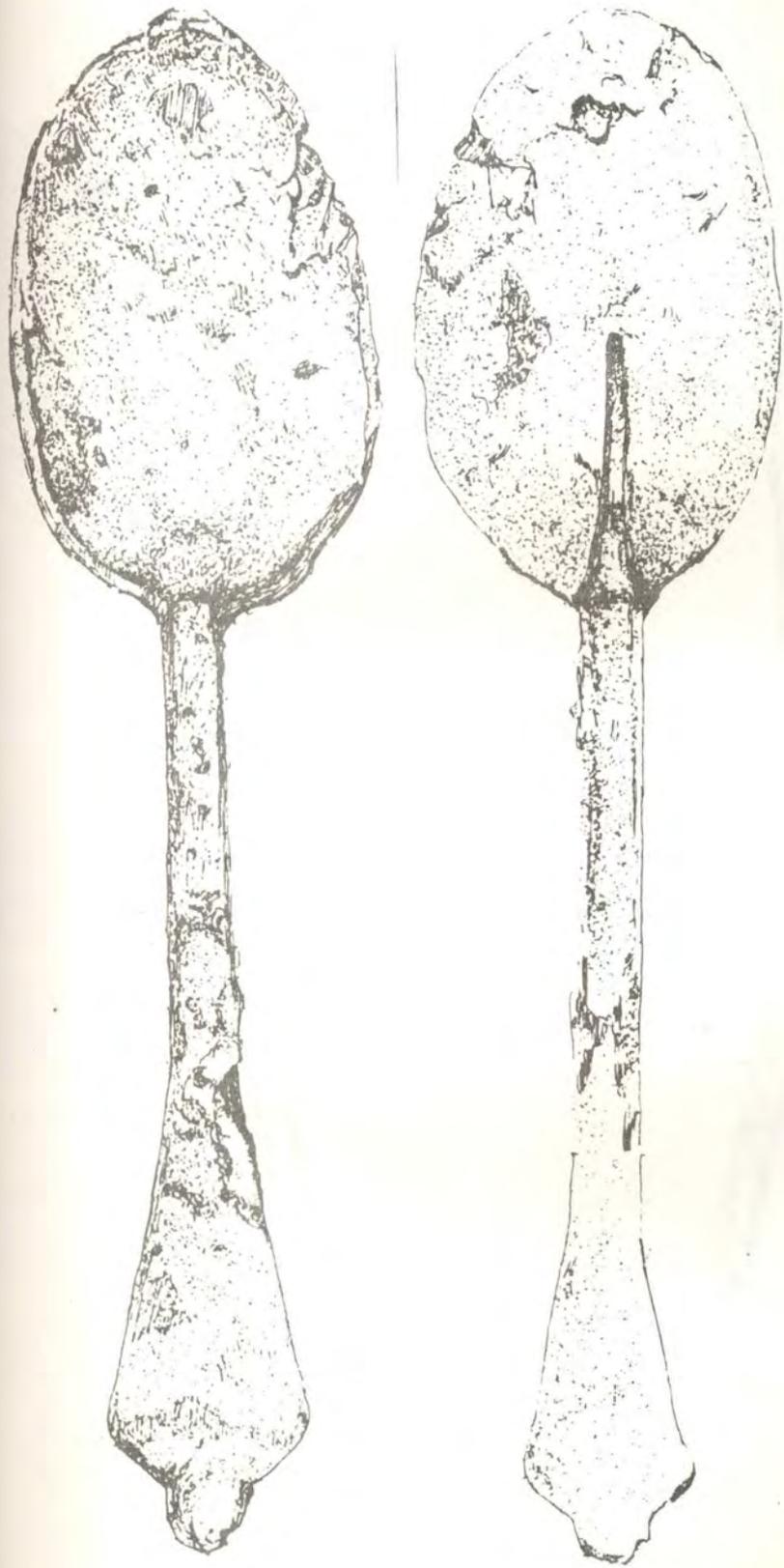
Stump '72



QA-1

Seaw 1:1

FIGURE 9.

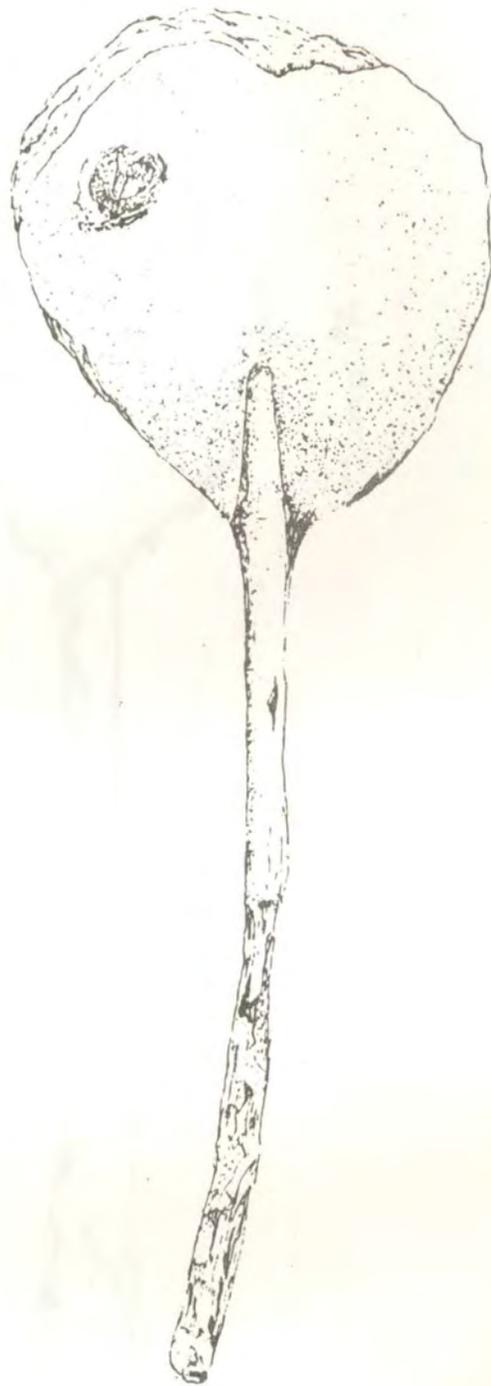
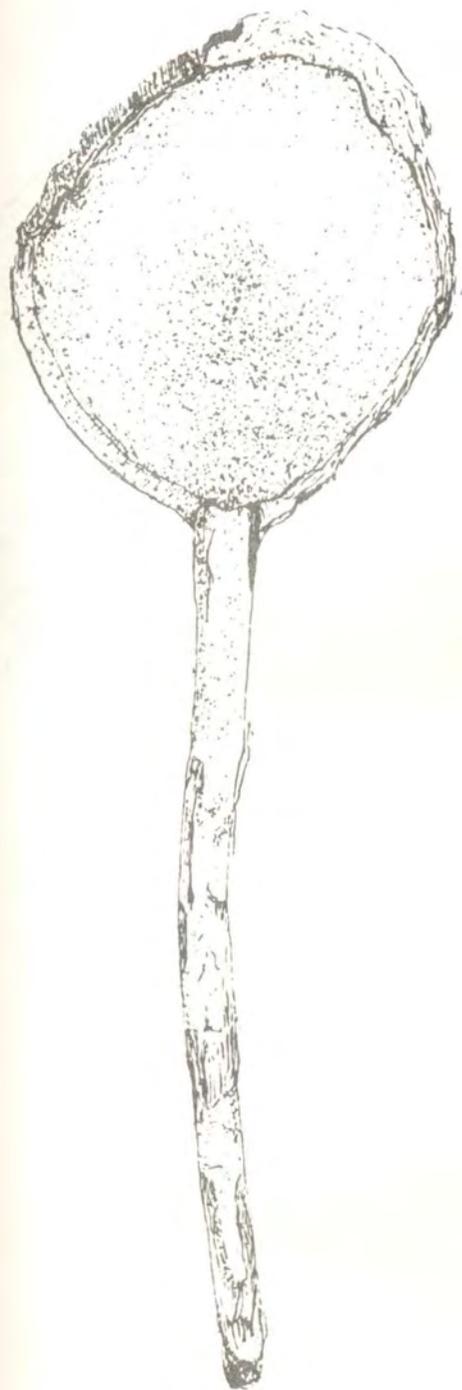


SCALE 1:1

QA-1 935

Slump '72

FIGURE 10.

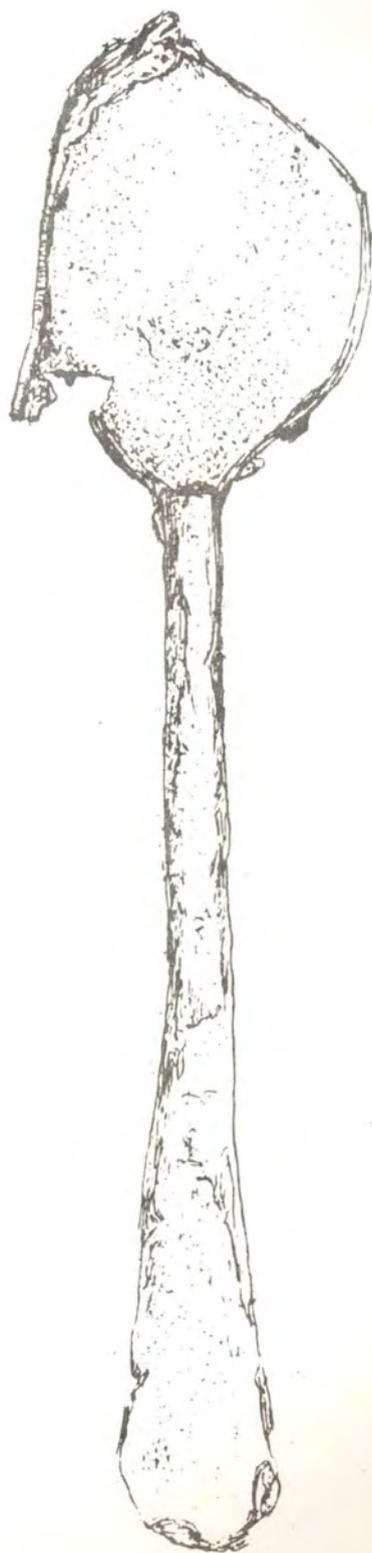
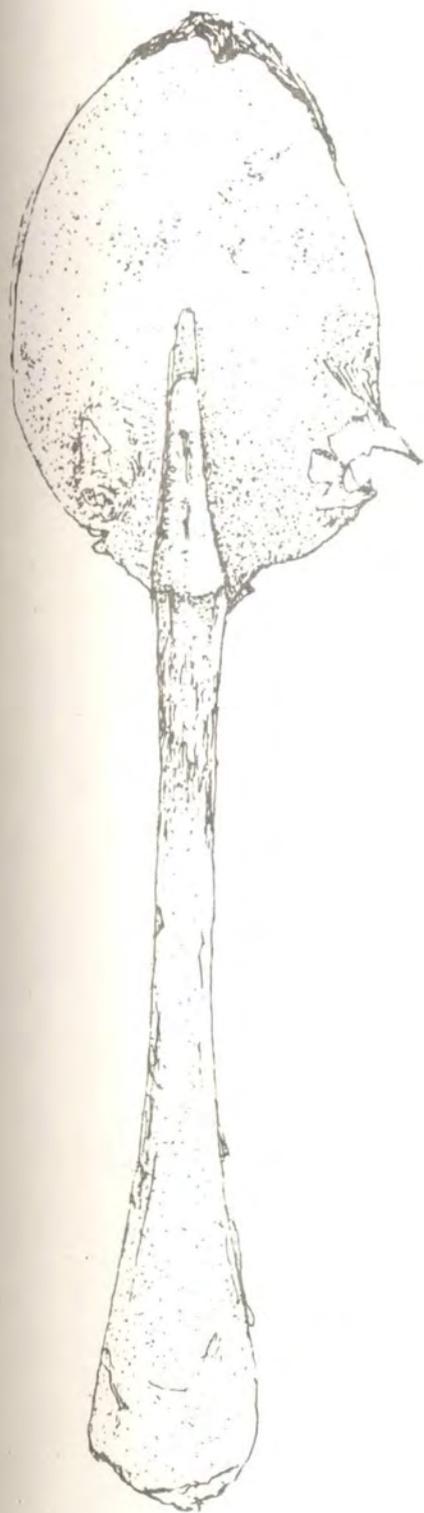


SCALE 1:1

QA-1 967

Slump '72

FIGURE 11.

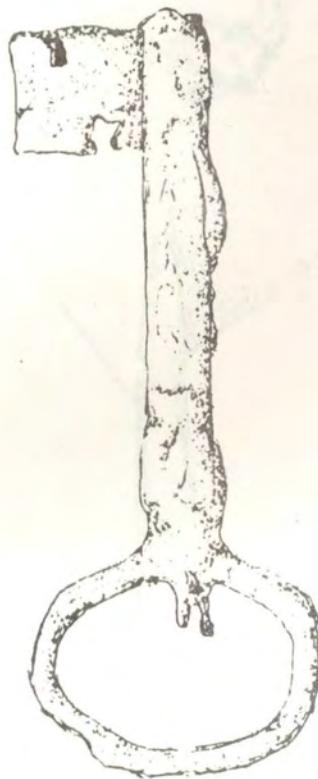
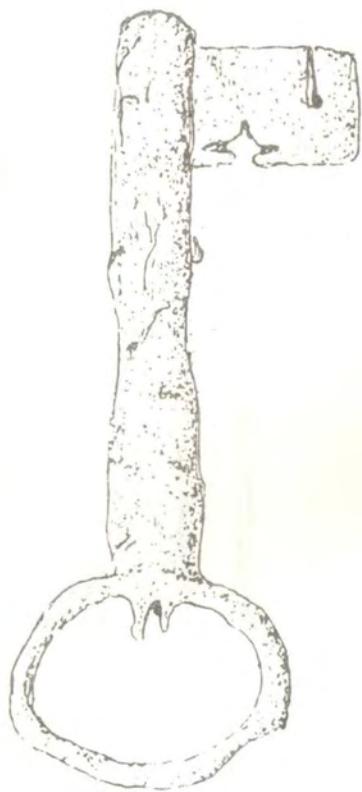


Scale 1:1

QA-1968

Stump '72

FIGURE 12.

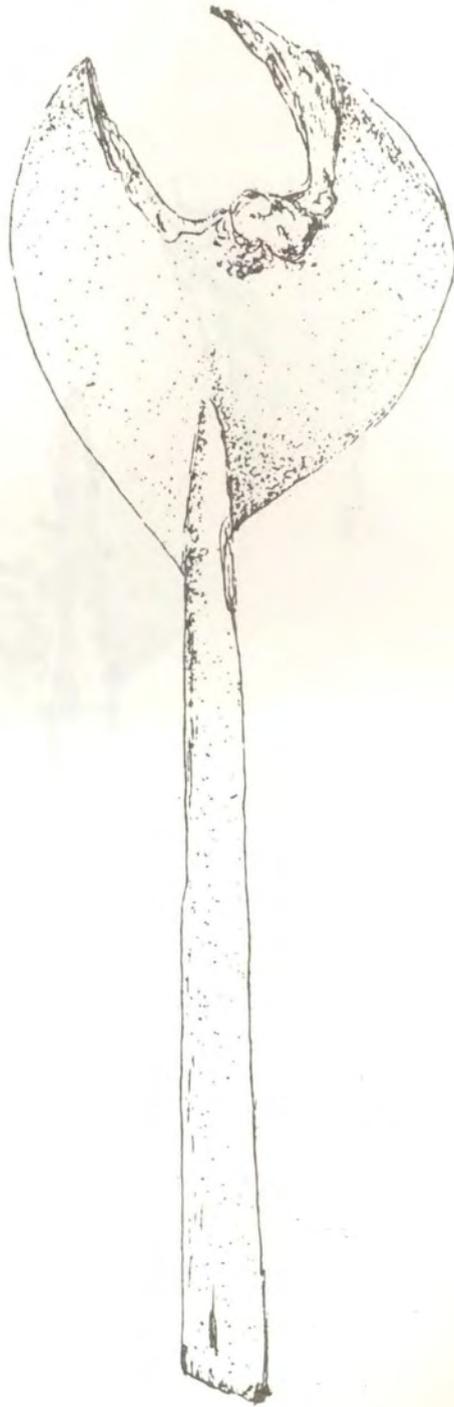
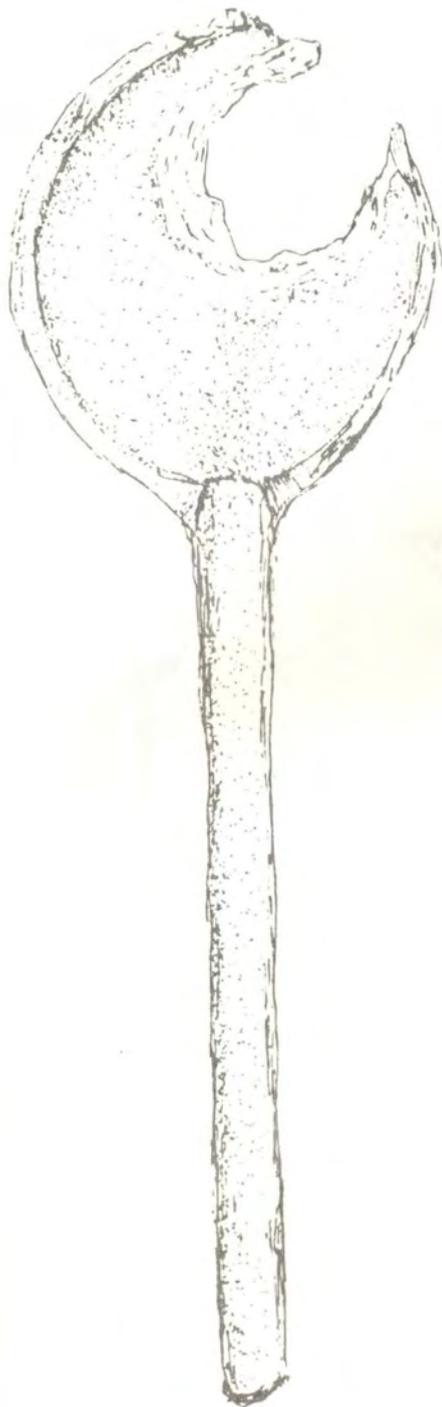


SCALE 1:1

QA-1 1160

Slump '72

FIGURE 13.

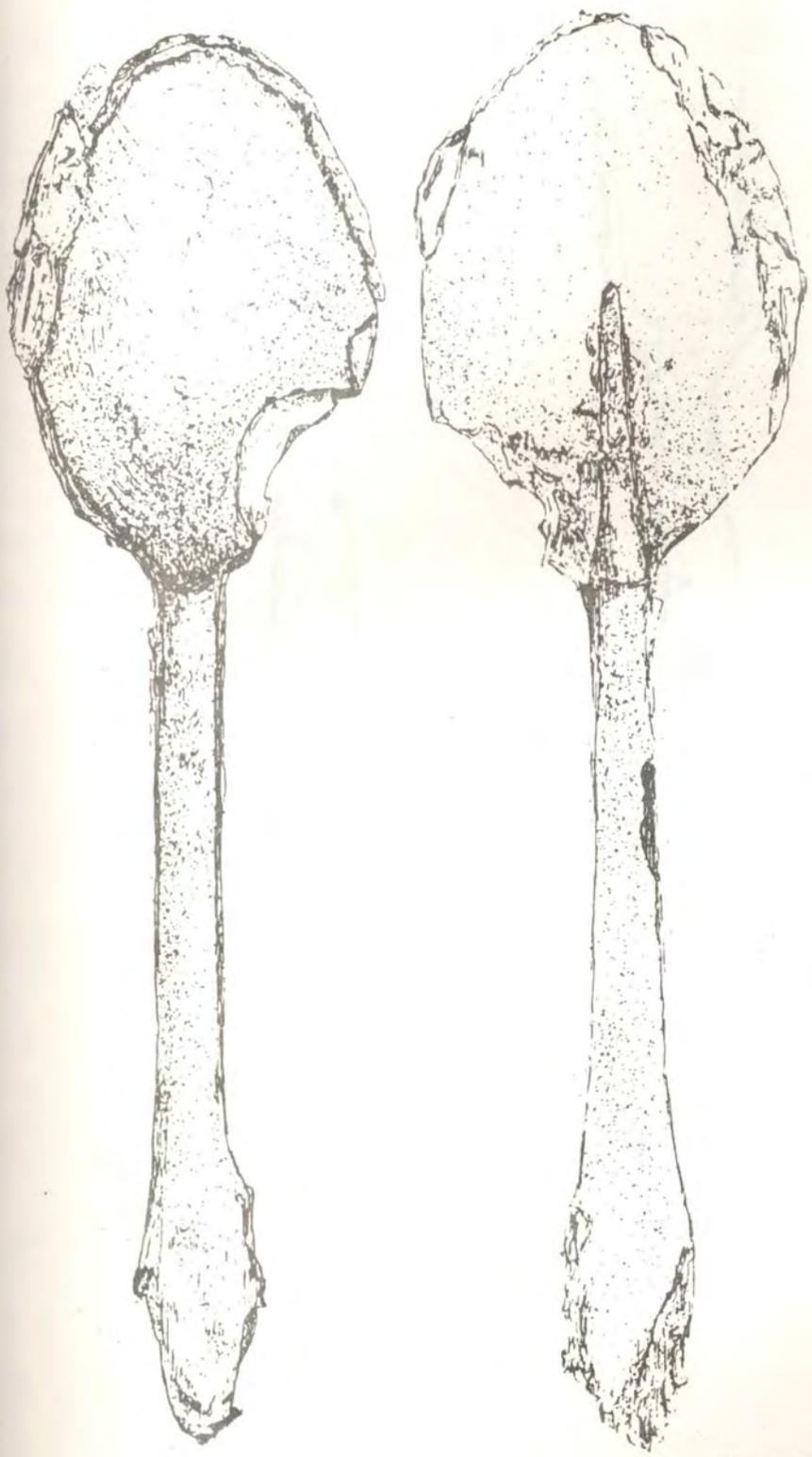


Scale 1:1

QA-1 1163

Stump '72

FIGURE 14.

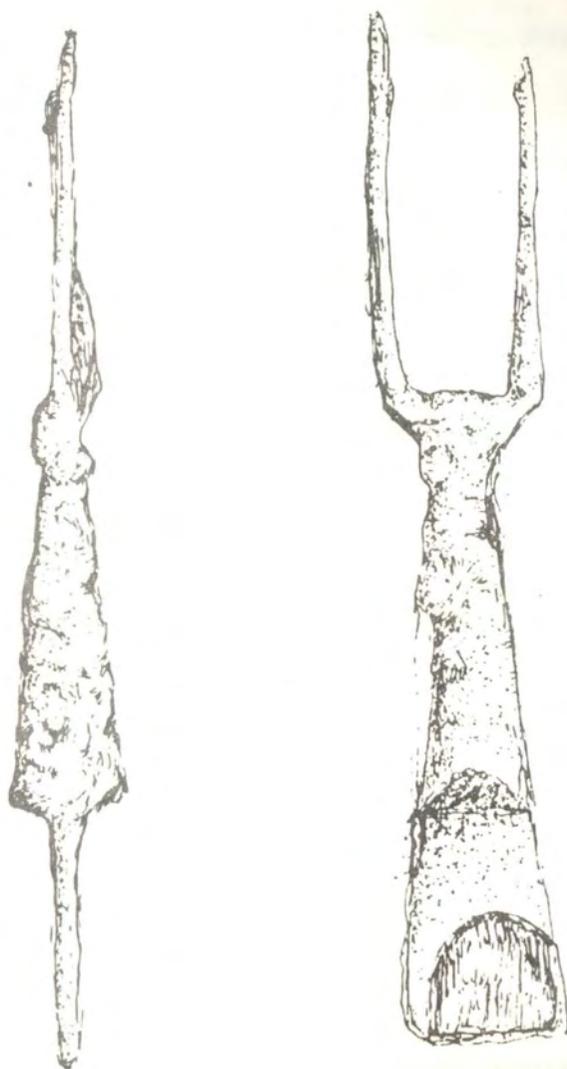


Scale 1:1

QA-1 1164

Slump '72

FIGURE 15.



SCALE 1:1

QA-2 ER 50 1610

Stamp '72

FIGURE 16.

Noel Hume identified a pair of ember tongs (Figure 9?), a portion of a copper alloy spigot, turned lead fragments which may indicate casement windows (but which may have been merely waste lead), and various pieces of ceramics and glass which were consistent with a late-seventeenth to mid-eighteenth-century occupation. Although Noel Hume did not mention creamware, one sherd is listed in the field notes from a depth of 19 inches, suggesting a deposition date in the 1760's rather than before.

Another unusual object that was recovered from pit A was a corked black glass wine bottle, still containing liquid. Ludlow had the liquid contents analysed, and his report on the results is presented in Appendix A. Briefly, the analysis indicated that the contents were almost pure water, in spite of an observed odor of cider. Probably the original contents were diluted or leached by ground water.

Although numerous partial sketches were included in the field notes, no coherent plan or profile of pit A was ever compiled. At least one intrusive pit, with charcoal, a button, a disintegrating pewter spoon, and pipe fragments, was defined, as was a concentration of bones designated a "bone bundle" in the notes. Tentatively, pit A may be interpreted as a secondary refuse deposit, with date of deposit in the 1760's. Whether this was a deliberately excavated trash pit, a natural depression, or perhaps a dump area north of the original bank, is not clear.

Squares IIC21c-IID1b

The excavation of these squares (hereafter referred to as IICD) was mentioned briefly above, and profiles were presented in Figure 6. The materials from this provenience in the MGS collection are listed in Table 2, ER 76 and 77.

Square IIC21c was excavated in five arbitrary levels, and reached a depth of 34 inches. The paucity of artifacts identifiable as coming from the lower four levels suggests that part of the sample is missing or was overlooked.

Square IID1b was excavated in five levels also, plus a separate "sand feature" in level 4. Judging by the profile sketch, this square seems to have been excavated to a depth comparable to that of the former. Aside from the plowzone, the artifact-bearing deposit apparently was fairly homogeneous.

Two sherds of whiteware are included in the artifact counts, one from each square. The sherd from IIC21c is clearly from the plowzone. The sherd from IID1b is quite small, its identification as whiteware is questionable, and it is not unmistakably from a sub-plowzone context. Since no pearlware was identified from these squares, arguing against continuity through the late eighteenth and early nineteenth centuries, whiteware will be regarded as intrusive and ignored in this analysis.

Creamware constitutes a very small percentage of the collection, but five sherds were found in level 4 of IID1b, indicating a fairly secure context within the deposit. The Binford date for the pipestems is 1724.62, and the South ceramic date is 1711.27 (delft=1700; 1744.32, delft=1750). Like pit A, the date of deposition of IICD may be estimated in the early 1760's, based primarily on the few sherds of creamware. Occupation of the area, however, may have begun as early as the late seventeenth century, as evidenced by 27 sherds of North Devon gravel-tempered ceramics and six (possible) North Devon sgraffito.

Several special artifacts from these squares deserve mention. One RB wine bottle seal, of the same design as those in the "general surface" collection, was recovered in level 2 of each square, and a third in level 4 of IID1b. Another wine bottle seal bearing a heraldic device was found in the latter level. Miscellaneous artifacts include a jew's harp, a teardrop-shaped ball of lead, two iron buckles, a silver or pewter button, a copper button, a copper coin (no legible inscription), a straight pin, and a red tubular glass bead. Large numbers of dressed stone fragments, mortar fragments, iron nails, and animal bone were also present.

In sum, this area would seem to be a refuse deposit which accumulated in a depression, but whether a natural or artificial (e.g., borrow pit) depression is uncertain.

Foundation

Materials from the foundation are divisible into two groups. The first group was recovered from tests I(1)(2)(3)(4), and constitutes only a small sample. The second group is the main collection from the extensive excavation.

As noted previously, tests (1-4) cannot be located precisely on the site plan. Test I(1) was measured from the base line, but as the base line was later resurveyed, there is too much margin for error to be certain of its location. The relationships of the tests to each other are shown in Figure 17. Evidently the trenches revealed the foundation of one of the long walls of the structure.

The artifact tallies from tests I(1-4) are listed in Table 2, ER 47-49, 49X. The general character of the sample is consistent with the collections already described, the single whiteware sherd having been found in a plowzone context. White saltglazed stoneware includes one sherd of "scratch blue," while other special artifacts from these tests are two straight pins, a round-headed brass tack, and three lead scraps, one of which may be a casement fragment. A hinge is mentioned in the field notes, but was not found in the collection.

Pipestems number 33, and yield a Binford date of 1698.8. The South date calculates to 1728.55 (delft = 1700; 1736.61, delft = 1750) without the whiteware sherd. The very early date for the pipestems may reflect the contents of the builder's trench, mentioned in the field notes but not recorded as a separate provenience. The presence of a creamware sherd indicates a post-1760 terminal deposition, while two sherds of North Devon gravel-tempered ware suggest an occupation beginning in the late seventeenth or early eighteenth century.

The best summary of the excavation of the foundation is the site plan, Figure 3. A total area of over 1200 square feet was excavated, equivalent to 49 five-by-five-foot squares plus a pair of wedges in OA19a and IB2b.

The site plan reveals a rectangular structure outlined by a brick foundation, with a massive, H-shaped hearth in the center of the western half. The house is approximately four times as long as it is wide, circa 80 by 23 feet. The central H-chimney is common in seventeenth-century construction (Noel Hume 1968:128), with prototypes in East Anglia (Hewett 1969) and similar forms in New England (Kelly 1963:7-8; Brunskill 1978:106). Deetz (1977:96-97) discusses several New England house sites with a 4:1 length:width ratio, one of which had two hearths. One of Brunskill's (1978:107) house plans also contains two hearths. Excavation on the Icehouse Point site, unfortunately, was terminated before the east end of the foundation could be investigated, and whether there may be another hearth is unknown.

Noel Hume (1968:126-128), as a rule of thumb, that foundation width may indicate the height of the house. The west half of the Icehouse Point structure is drawn as a brick and a half wide, while the exposed sections of the east half are two bricks wide. The former measurement, in Noel Hume's scheme, suggests a two-story frame or one story brick structure, while a two-brick foundation could support a story-and-a-half brick structure with a basement. There is no indication of a basement in the field notes, but at no point, evidently, was the excavation in the east half pursued to a depth that would locate one. With or without an eastern-half basement, the foundations indicate a structure of more than a single story.

The most numerous category of construction material is the "dressed stone," of which over 2500 fragments were counted (a couple of batches, through oversight, were not tabulated). These are fragments of limestone slabs, varying from about one-half to more than two inches in thickness. Several slabs are

shown in situ in the site plan, around the hearth. Brick fragments are far less numerous in the collection, although brick rubble was encountered frequently in the excavation. It is possible that brick was not generally collected by the excavators, but since the dressed stone is equally bulky and still heavier, there seems little reason to keep the latter while discarding the former.

Dressed stone also outnumbered brick in the collection from the deposit in IICD. Whether these limestone slabs were used primarily as facing on the outside of the house, or paving in and around the house, or other purposes, is uncertain. It is worth noting, however, that similar limestone slabs are present as paving stones in the cemetery.

The most interesting, or at least the most identifiable, architectural features are the "cisterns," two on each side of the hearth. These are rectangular, brick-lined pits which reach to depths of over five feet below the floor. The bottom of cistern II is paved with limestone slabs. Noel Hume (1973), in a letter to John Ludlow, suggested that these pits be classified as root cellars, though he had not seen brick-lined examples. Elsewhere, Noel Hume (1968:132) states that root cellars "were sometimes nothing more than rectangular holes of any size one had the energy to dig; others were carefully laid out and revetted with vertical timbers, wooden sheathing to the sides, and with board flooring." Root cellars would thus seem to be the most reasonable interpretation of the "cisterns" in the Icehouse Point site, root cellars which underscore the impression of substantial construction given by the wide foundations.

Several features are marked on the plan that seem to be under-the-floor supports. Between the hearth and the south foundation wall, Ludlow shows two lines of bricks. These may be supports for a heavily-used area of the floor, perhaps an entrance hallway. Two parallel lines are dotted in between the south wall and cisterns III and IV, apparently indicating supports below the floor, but no explanation appears in the field notes.

In the center of the foundation are two apparent floor supports, each approximately bisecting the floor plan. A short section of brick wall is very roughly sketched in the field notes, but no information is recorded. Just east of it is a length of timber, described thus: "cleaned of 'center beam' of house, has 12" max. width, appeared to be a halftree laying with flat side up" (commas added). This would appear to be a floor joist, but no further data are available.

A small brick feature is depicted in the northwest corner of the foundation. This area was apparently excavated toward the end of the project. A charred board lay across the bricks on the east side of the feature. The fill inside the feature is described as sandy clay mixed with mortar. The square of bricks was laid on top of a flat limestone slab at an unrecorded depth. An opening in the brick wall, in the southwest corner just above the limestone floor, was noted, but the excavators could not determine whether it was an intentional or accidental aperture. Ludlow, in his notes, suggested that this might be a sub-floor "strong box".

Two other groups of architectural materials are worthy of note. Plaster, included for convenience with "mortar" in the artifact tallies, was well represented. Also, approximately three dozen fragments of delftware tiles were included in the collection. Two-thirds of the pieces bore purple and just less than a third had blue decoration, but none was large enough to identify a motif with confidence. Plaster and tile fragments afford some hint of the appearance of the interior of the house.

The field notes for squares (A19b and OA25b mention a "shell lense" to the south of the foundation wall. Apparently no such layer was encountered in IA21a, just to the west. It is possible that there was a shell pavement along part of the east side of the house, but too little testing was done to be sure.

The artifact counts for the foundation are presented in Table 2, ER 50-51, 55-59, 62-75, 78ff, and category totals are included in Table 3. The general character of the collection is quite consistent with the provenience groups already discussed, and, in fact, the small sample from tests I(1-4) prove to be surprisingly representative. The Binford date calculates to 1694.49, and the South date to 1736.26 (delft + 1700; 1743.08, delft = 1750). These dates correspond quite closely to those from tests I(1-4), even to the very early date for the pipestems.

Noel Hume (1971), in his letter to Mrs. John Watkins, provided some comments from the first foundation squares. He refers to a Roman coin labelled ER51B (square IB12a), which he already discussed in two previous (but unavailable) letters. This is apparently the coin he illustrates in his Rubbish volume (Noel Hume 1974:121). According to the field notes, the coin was found just outside the foundation, at a depth of 13 inches, with brick rubble and a bit of plaster.

Noel Hume (1971) also mentions a pewter button which seemed not to have been trimmed for use after removal from the mold. One such button with a matching catalogue number (ER51A) is indeed in the collection. Noel Hume further notes a polychrome rim fragment of delftware, suggesting that it might be a soap dish lid of circa 1720-40; a dipped white saltglaze handle fragment; a molded white saltglaze plate rim in the barley pattern; and a small piece of Nottingham brown stoneware. These ceramics are consistent with the mid-eighteenth-century date indicated by the South ceramic formula (above).

An examination of several lines of evidence is necessary to estimate a terminal date for the occupation. First, the lack of pearlware suggests an absence of activity in the late eighteenth and early nineteenth centuries, and that whiteware is intrusive into the assemblage. Only seven sherds of whiteware were found in the foundation collection, and all are from certain or

probable (one sherd) plowzone contexts. The small number of creamware sherds, only 2.6% of the ceramics, further suggests a terminal date not far into the 1760's.

The most extensive non-plowzone contexts excavated are the four "cisterns" or root cellars. Cisterns I and II, ER 58 and 59 respectively, unfortunately are represented by no materials in the collection. The artifacts from cistern III, ER64B, include only three sherds of brown stoneware from which to infer a date, too small (incomplete?) a sample to be of much help.

Materials from the fourth cistern, ER64D, are more numerous. Charred floorboards extended across the top of cistern IV, sagging into it slightly. It thus appears that the context was effectively sealed before or during the burning of the house. Nine sherds of creamware (of the 15 total for the foundation) were in the collection from cistern IV. It is unlikely, then, that the house was destroyed before circa 1762 (Noel Hume 1969:125).

The South ceramic date from cistern IV is 1750.26. (No delft is in the collection from the cistern, obviating any manipulation of the median date for delft.) No pipestem date can be computed, as no stems were found in the collection.

Nor were any sherds of black glass found, though three pieces of window and three of curved glass were noted. As pipe fragments and black glass are present in every other collection, it is possible that those recovered from cistern IV have been removed from the collection. The representativeness of this sample is thus suspect. The proportion of dressed stone is also relatively low, but the nail count is over 100, which suggests that this is not simply kitchen refuse in spite of a high bone count ("animal bone" includes fish bone and crab claws), the presence of eggshell, and implements such as a fork and two spoon handles.

The excavators noted differences in the construction between this cistern and cisterns I and II. Cistern IV was missing bricks in its lining, had little mortar in its brick floor, and lacked the plastered interior of the other cisterns. The fill resembled, according to the field notes, that of "a very sandy trash pit which /had/ considerable kitchen trash in it." The best interpretation would seem to be that cistern IV was deliberately filled with refuse, possibly scooped up from outside the house, shortly before the house burned or was abandoned.

There are very few other contexts from the foundation which can be identified as non-plowzone with any confidence, and the collection from none of these is extensive. For example, provenience unit ER50B, from 13-15" in IB10b, was apparently below plowzone, but only three nails (of "lots" recorded in the field notes), a pair of brick fragments, and one piece each of mortar and animal bone were found in the collection. A two-tined fork is mentioned in the field notes (but missing from the collection) at a depth of 13 inches in the interior of the foundation corner. The charred floor lay at a depth of 15 inches in this square. Provenience units ER50C and ER50D, which might have been deeper, are not mentioned in the notes, and thus can be ascribed no more specifically than to the square.

Square IB12a apparently revealed the foundation wall at 11 inches depth. Provenience units ER51, 51A, and 51B include the fill above that depth. ER51C is recorded as including depths of 15 to 17 inches, and 51D-F reached to 29 inches, but very little material is found from these units in the collection. The gap in measurements also remains unexplained.

A similar situation is found in all the other probable sub-plowzone units, that is, very few materials. These proveniences will simply be listed here: ER62A; ER63C; ER65A (probable); ER79A,B (probable); ER82A; and ER91 (probable). The total number of artifacts, particularly of ceramics, from these units is quite small.

There is a reference to a "trash cash" in the field notes, located just outside the foundation wall in IB2a (ER72B). The very rough sketch in the notes suggests a highly localized concentration of materials, and the artifacts mentioned correspond fairly well with those tallied in the collection. Thirty-eight straight pins, of a total of 48 for the entire foundation, were recovered from this feature. Aside from a laconic, "Bottom down 16" from corner," no description of feature size, shape, or fill is available, nor is there any indication that the feature fill might have been different from the surrounding matrix. It is in sum quite difficult to interpret any behavioral significance in this "cache".

A special note should be made of unit ER63F, in IB9. This unit is listed as being in an area "west of stair case, south of chimney base, no. of south wall," and was excavated during the last frantic day of the project. No description of this unit, other than the above notation in the provenience record, can be found in the field notes. The datum which especially indicates that this was a sub-plowzone context is the relatively intact condition of two ceramic artifacts, a polychrome-enamelled white saltglaze cup (Figure 8) and a large fragment of a creamware plate (no photo available), which comprises over half the plate. Both pieces are broken, but neither is in the fragmentary condition normally associated with plow-disturbed materials. There is also a bottom corner of a case bottle from this unit.

Ludlow referred to a staircase or probable staircase several times in the notes, indicating the area south of the H-chimney. The reason for this identification is not stated. Unfortunately, at no point are the field notes detailed enough concerning the staircase, or the unit ER63F, to interpret the deposits.

Although few special proveniences are identifiable, several small categories of artifacts should prove helpful in interpreting the site. Nine sherds

of polychrome-enamelled white saltglaze were recovered from the foundation. Seven, including the large portion of a cup (or tea bowl) and the six mendable sherds of another cup (Figure 8), were found in IB9, and two sherds came from IB14. Due to the generally small amounts in which enamelled white saltglaze was made (Miller and Stone 1974:72) and to the fact that most pieces were sold as parts of matched sets (Mountford 1971:59), these sherds would seem to be indicators of expensive tastes.

One wine bottle seal bearing the initials RB was recovered from square 0A19b. It is of identical design to those already described from the surface and from IICD, directly linking the three provenience units.

Finally, a pewter or whitemetal button from which the flashing had not been trimmed, as noted by Noel Hume (1971), has already been mentioned. This specimen was recovered in square IB12a (ER51A). Four other, nearly identical buttons were also found in the collection: two from cistern IV (ER64D) and one each from IB2a (ER72A) and IA22d (ER79). These buttons conform to South's (1964) type 11, defined in a second- and third-quarter eighteenth-century context. To infer from the untrimmed flashing, a resident of the site may well have been manufacturing these buttons for household use.

In sum, except for the (possibly incomplete) sample from cistern IV, the materials from the foundation excavation must be interpreted primarily as plow-zone deposits. The few probable sub-plowzone, non-cistern contexts are represented by few materials and, generally, are not clearly described in the notes. General patterns in the whole collection, then, especially in comparison to patterns in the other provenience groups, are more likely to offer interpretive data than are definable contexts.

Discussion

Perhaps the first question which should be addressed is the initial historical one, whether this site may be identified as that of the Peter Sayer-Richard

Bennett plantation. Historical records summarized above place Richard Bennett on Bennett's Point. Bennett's will states that Morgan's Neck was the land where he dwelt, and the 1735 resurvey of the neck unmistakably refers to the parcel now known as Bennett's Point. Elizabeth Rousby Bennett having inherited the land from the Sayers, it follows that the latter couple was also associated with the land. It is possible that the Bennetts built the house, since the Sayer dwelling indirectly described in the inventory is not stated to be on Morgan's Neck, but the fact that Herrman's map shows a plantation on the point in 1670 argues for a Sayer occupation.

The time span represented by the artifact collection from the Icehouse Bottom site roughly matches the Sayer-Bennett tenure. A few late seventeenth-century pieces, including North Devon ceramics (which could also have arrived after 1700) and special artifacts identified by Noel Hume (1971), are found in the collection, while other artifacts, notably ceramics, indicate continuity into the third quarter of the eighteenth century, or until shortly after Richard Bennett's death. The floor plan of the house, while not an infallible indicator, also suggests a seventeenth-century construction.

Several signs of wealth are apparent, which would further support an association with planters such as Sayer and Bennett. The house structure is quite a substantial one, and would easily fit the two-story dwelling described in the Sayer inventory. Expensive ceramics, in particular the enamelled white saltglaze, indicate well-to-do occupants. Several coins and pewter artifacts, as indicated by the field notes and illustrations (Figures 10-12, 14, 15), are also likely to have belonged to the higher class of planters.

The most direct tie between the artifacts and the occupants, however, is in the form of eight black glass wine bottle seals bearing the initials RB. Seals bearing the initials of the customer were common in the colonial period (Noel Hume 1969:61). RB seals were found on the surface, in the foundation,

and in the trash deposit at the Icehouse Point site. The combination of seals with Richard Bennett's initials and of the above lines of evidence argues strongly for identification of this site as Bennett's, and by extension Sayer's, home.

More general observations on the assemblage may place the site, and its inhabitants' activities, in broader perspective. Distribution plots of several artifact categories over the area of the foundation are presented in Figures 18 to 22. In those squares which were excavated as 10-foot units (IB9, IB13, IB14), the total for the square was quartered and plotted by five-foot quadrants. In the two other 10-by-10's, however, quadrants had previously been excavated: IB8a, IB7b, IB7c. These latter squares have been plotted with the "no data" symbol (?), and the total for each 10-by-10 has been divided and plotted according to the number of remaining quadrants in the unit. Materials from sealed cistern IV are not included in the distribution for IB8, but all other proveniences are included in their proper squares.

The distributions in Figures 18 to 22 show few differences in overall pattern among the artifact categories. Consistently, a clear peak in frequency is seen in IA22d. Lesser rises occur in the northwest corner of the excavation, and in the southeast in squares IA21a and OA25b. In the isolated squares further to the southeast, the more southerly square, OA14d, is consistently high. The area over the hearth generally has a low frequency of materials. Most of these squares, of course, were essentially averaged over their 10-by-10's. An apparent rise at or near IB1d, midway up the east side of the excavation, is difficult to interpret due to the lack of data for the squares immediately to the south.

Most squares of highest frequency are those with the most area outside the foundation walls. This may reflect an out-of-doors refuse scatter, as opposed to the relatively clean living quarters inside. The apparent peak at IB1d, of course, most clearly seen in the nail distribution (Figure 21), does not fit

Pressure - Power

Black - 6000 - 2 1/2 2 1/2

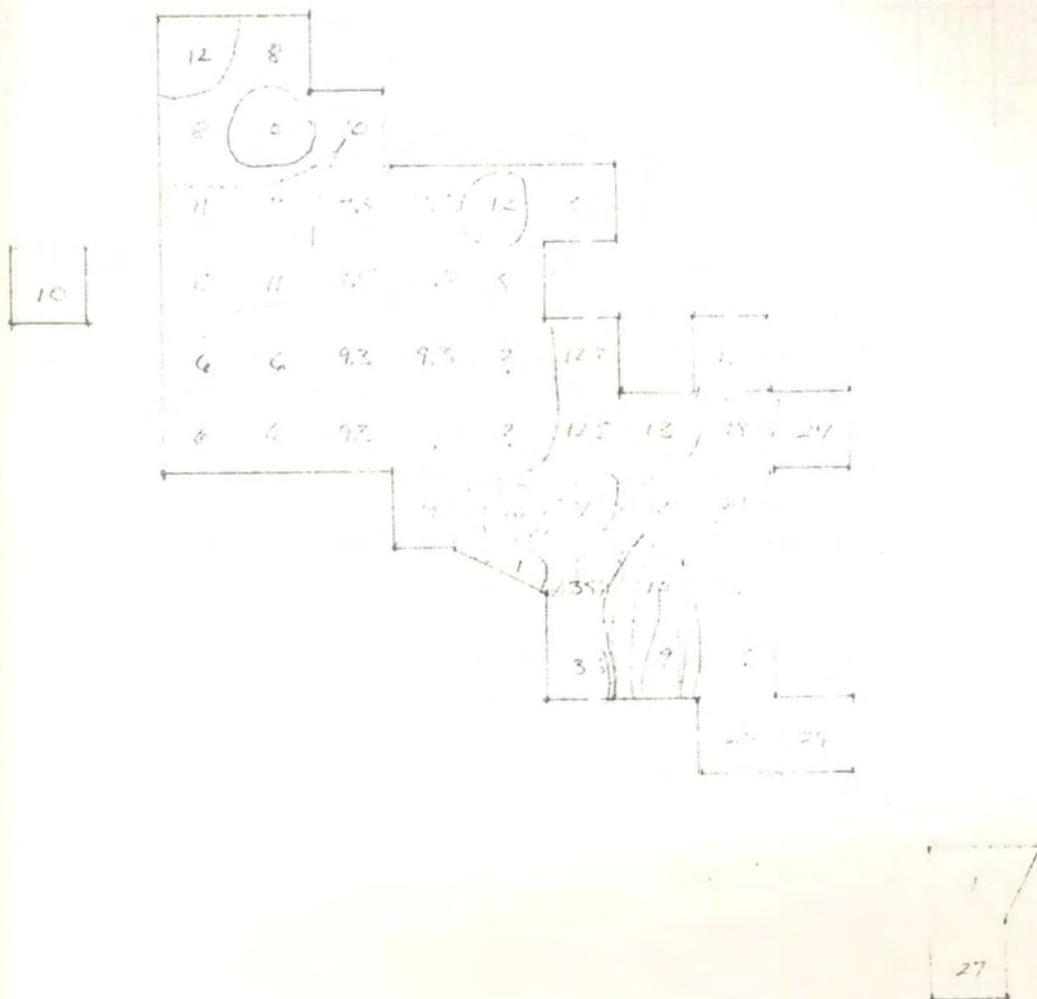


FIGURE 19.

Beam 100 ft
 15 ft sq. ft

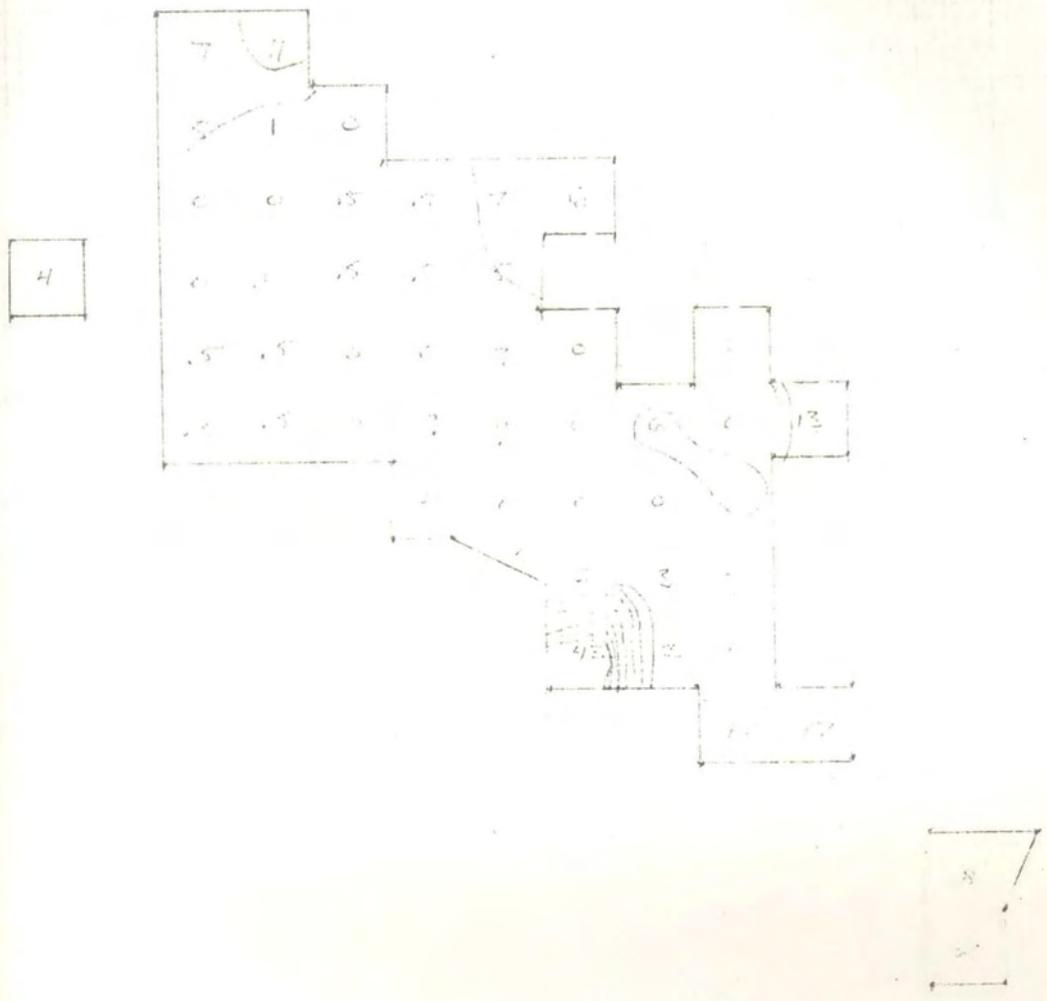
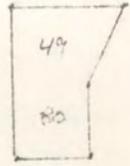
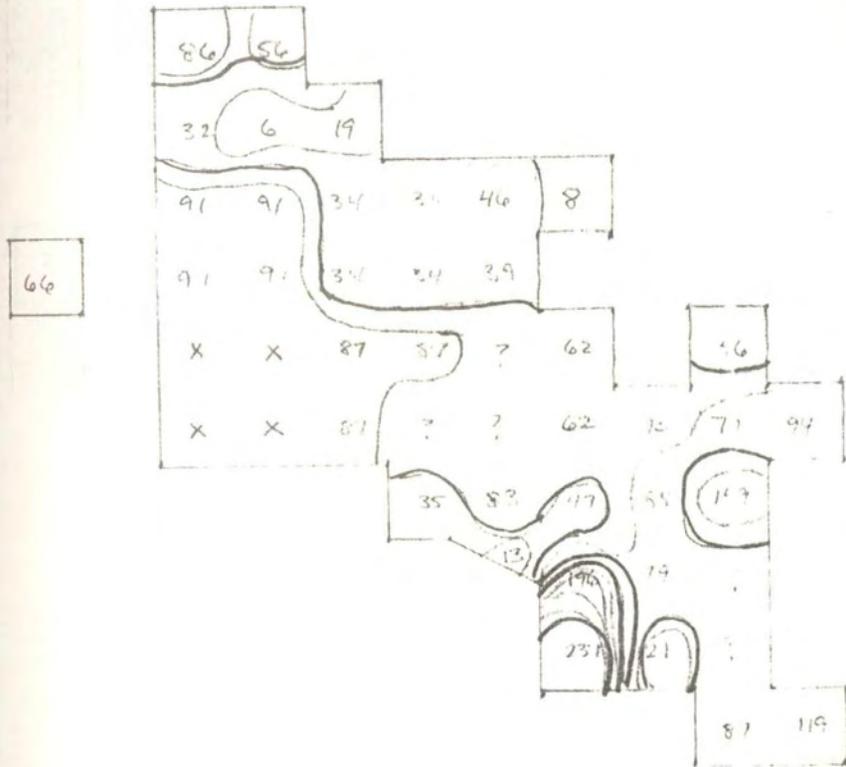


FIGURE 20.

BENNETT POINT
 Nails 1/5 ft square

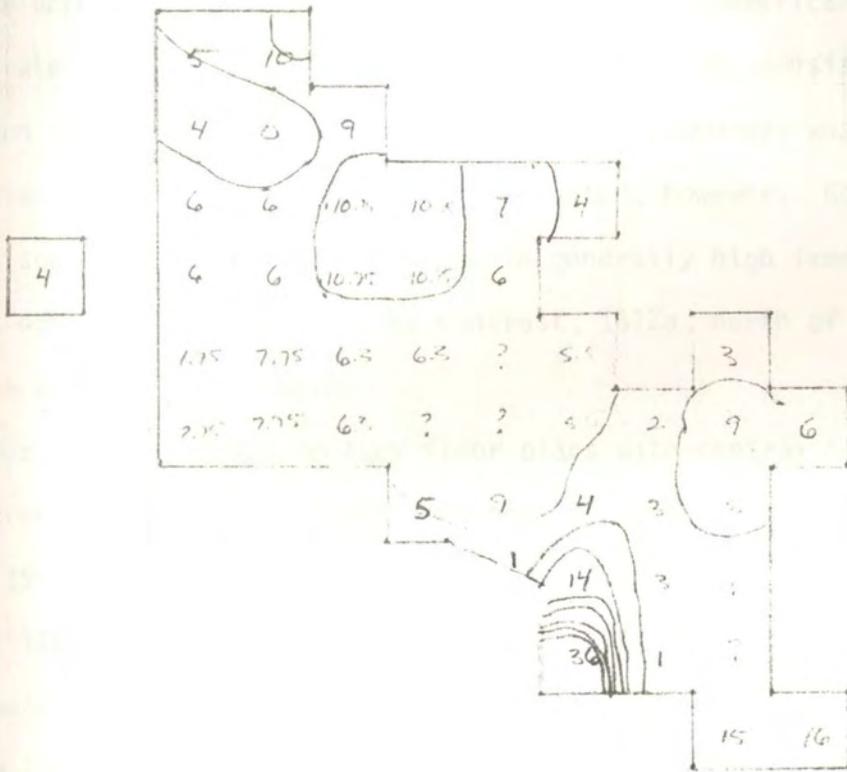


? do not
 X do not
 Contour interval 25'

FIGURE 21.

BENNETT POINT

WINDING CHANNELS / 5 ft square



? = no data

CONTOUR INTERVAL = 5'

FIG. 22

this pattern. No other artifact category rises so prominently in this area, and unless the nails may be somehow associated with the half-log joist lying parallel to the length of the house, this distribution remains an anomaly.

South (1977:48) has defined the Brunswick pattern of refuse disposal, in which refuse deposits around eighteenth-century British-American structures are concentrated near entrances. It is possible that the consistently high concentration of materials in IA22c indicates that a doorway was nearby. Only a few comparably extramural squares were excavated, however. Squares IA21b and OA14b, both south of the foundation, contain generally high frequencies of materials, but not as high as IA22c. By contrast, IB12a, north of the foundation, shows a rise only in the ceramics.

A number of seventeenth-century floor plans with central H-shaped chimneys contain entrances next to the hearth, especially in New England (Hewett 1969: 111; Kelly 1963:7-8). Brunskill (1978:106) describes this central-fireplace "family" of floor plans for both New England and Lowland England; they tend to have "the main entrance at the junction ... where fireplace jambs and outer wall form a little lobby." Two rows of bricks between the hearth and the foundation wall, in the Icehouse Point site plan, may have been floor joists, and perhaps demarcated the "little lobby."

Refuse from a doorway next to the chimney may be reflected in the high counts of artifacts in IA22c. Unfortunately no other five-foot units near the possible doorway were excavated. With so few squares whose data might support or controvert this idea, the placement of a doorway south of the chimney must be offered only as an hypothesis.

No clear pattern has emerged in the distributions, particularly none which would indicate differential use of space within the structure. Problems of representativeness of the data may be a large reason. Materials from some provenience units and also various special artifacts are missing from the collection.

Further, the area of the excavation is quite irregular, and nearly half of the contiguous squares were dug as 10-by-10's rather than five-by-fives, adding difficulty to the recognition of patterns which may have existed. Finally, it may be unreasonable to expect patterning to be evident within so small an area in plowed deposits.

South (1977) has recently proposed a different approach to pattern recognition, based on percentage profiles of functional artifact categories. This method is intended for use primarily on whole-site assemblages, for inter-site comparison. It may, however, prove interesting to compare proveniences within sites in search of significant differences.

Table 5 presents the profiles for the major provenience groups of the Ice-house Point site, plus cistern IV. Profiles were also compiled for squares IA22d, the peak square in the frequency distributions, and OA14d plus OA19b. The latter profiles were added to test the relationships of these probable refuse areas to the refuse deposits of IICD and cistern IV.

The profiles, however, are quite consistent, with the glaring exception of IICD. Cistern IV is slightly anomalous in the absence of tobacco pipe fragments, but the other categories are closely comparable to the rest of the foundation profiles. By contrast, the profile for IICD shows a clear reversal of the first two categories, with Kitchen group materials heavily represented and Architecture group artifacts slightly fewer than 25%. (Following South 1977: 95-96, the Architecture group does not include building materials such as brick, dressed stone, or mortar; however, delft tiles were included in the counts, though not mentioned on South's list.)

By use of similar profiles, South (1977) has identified two recurring patterns. The Carolina pattern (British-American domestic) is characterized by a high percentage in the Kitchen group, while the Frontier pattern (outpost, especially military) is most notable for the high representation of the Architecture

Table 5. Icehouse Point site, artifact category profiles.

group	foundation		IICD		I(1-4)		cistern IV		IA22d		OA14-19	
	#	%	#	#	#	%	#	%	#	%	#	%
Kitchen	1234	24.8	1394	65.0	60	21.7	36	23.8	76	18.4	78	29.7
Architecture	3398	68.2	497	23.2	181	65.6	109	72.2	281	68.0	154	58.6
Furniture	4	0.1	0	0	1	0.4	0	0	0	0	0	0
Arms	10	0.2	1	0	2	0.7	0	0	2	0.5	0	0
Clothing	71	1.4	6	0.3	2	0.7	4	2.6	3	0.7	0	0
Personal	4	0.1	1	0	0	0	1	0.7	0	0	0	0
Tobacco pipe	228	4.6	238	11.1	30	10.9	0	0	50	12.1	30	11.4
Activities	<u>36</u>	<u>0.7</u>	<u>6</u>	<u>0.3</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0.7</u>	<u>1</u>	<u>0.2</u>	<u>1</u>	<u>0.4</u>
TOTALS	4985	100.1	2143	99.9	276	100.0	151	100.0	413	99.9	263	100.0
Bone	556	10.0	707	24.8	17	5.8	140	48.1	27	6.1	28	9.6

group, particularly of nails. According to predicted ranges for these two patterns (Table 5a), only IICD fits into the Carolina pattern, while the foundation profiles clearly belong to the Frontier pattern.

Evidently, "identification" of the patterns within the site is of limited interpretive value. More important is to explain the difference between the two provenience groups. The deposit at IICD would seem to be an accumulation of refuse from a "typical" British colonial occupation, that is, one that fits the Carolina pattern. The high representation of the architecture group in the house area probably is due to the burning of the house, the rubble not having been disturbed except by plowing. The plowzone thus has a high proportion of architectural materials, mainly nails, mixed into the assemblage, which an undisturbed midden such as IICD would not have.

The cistern IV profile remains something of an anomaly. Assuming that black glass and pipestems have been removed from the collection, the profile can be adjusted for heuristic purposes. The black glass count in the foundation collection is approximately equivalent to the ceramic count, while in IICD black glass total is about 85% of the ceramic total. The percentages of pipestems average about 10% among the other profiles. Taking black glass equal to ceramics and pipestems at 10% of the total, an adjusted cistern IV profile can be suggested for comparative purposes (Table 5b).

This profile still falls within the Frontier pattern, again due largely to a high nail count. The earlier explanation does not fit this case, as the cistern/root cellar apparently was sealed by floorboards during the destruction of the house. Nails, then, should not have been mixed into the sealed deposit as they did in the plowzone. Materials from cistern IV, particularly the ceramics, were scattered among several boxes in the collection. It is likely that many of the ceramics went the way of the black glass and the pipestems, and that the collection tallied-- and reflected in the profiles in Tables 5 and 5b-- simply is not representative of the feature.

group	Table 5a. Pattern profiles.		Table 5b. Adjusted cistern IV.		Table 5c. Total profile.*	
	Carolina	Frontier	#	%	#	%
Kitchen	47.5-78.0	10.2-45.0	66	32.8	2688	36.3
Architecture	12.9-35.1	29.7-74.3	109	54.2	4076	55.1
Furniture	0 - 0.7	0 - 0.5	0	0	5	0.1
Arms	0 - 1.5	0 -15.6	0	0	13	0.2
Clothing	0 - 8.5	0 - 6.9	4	2.0	79	1.0
Personal	0 - 0.6	0 - 0.7	1	0.5	5	0.1
Tobacco	0 -20.8	0 -27.1	20	10.1	496	6.7
Activities	<u>0.1- 3.7</u>	<u>0 -11.8</u>	<u>1</u>	<u>0.5</u>	<u>42</u>	<u>0.6</u>
	from South (1977:119, 145)		201	100.0	7404	100.1

* Foundation plus IICD plus I(1-4).

In South's (1977) patterning scheme, bone is not included in the percentage profiles. South does note, however, that bone ratios do occur in patterned relationships. Particularly, he suggests that a low bone/artifact ratio indicates a refuse deposit near the house, while a high ratio is found in refuse deposits away from the structure (South 1977: 47, 179ff).

In Table 5, these ratios have been expressed as the percentage of bone in the combined total of artifacts plus bone. Here the cistern IV and IICD percentages are strikingly higher than those of the other proveniences. Of course, as noted above, the cistern IV collection may be significantly underrepresented in Kitchen and Tobacco artifact groups. If we adjust the cistern IV ratio by taking the Architecture group to be 25% of the artifact total (close to that of IICD), then the percentage of bone of the postulated total becomes 24.3%, quite comparable to the IICD figure.*

The difference, then, seems to be one of sealed deposits with high bone percentages, versus plowzone deposits with low bone ratios. Whether this is a matter of preservation or of South's (1977:47) house/lot-dump dichotomy is not clear, though both factors may be involved.

In shorthand fashion, both the Binford pipestem and the South mean ceramic formulas are also methods of pattern recognition, tied more to the archaeological concept of horizon than to the cultural traditions investigated by the functional group profiles. The Analysis, above, was somewhat complicated by the presentation of two ceramic dates for each provenience group. ~~The reason for this was noted in Chapter 2.~~ In South's formula, the longevous delFTWARE is assigned a median date of 1650 for sites which were occupied during the seventeenth century, and 1750 for eighteenth-century sites. What, then, of a site whose median occupation date falls close to the turn of the century? By the

*From Table 5, take $109=25\%$; total artifacts= $109 \times 4=436$; % bone= $140/436+140=24.3\%$.

1650/1750 reasoning, delftware should perhaps take a middle-of-the-road value of 1700. Use of either mid-century date could bias the mean ceramic date toward one or the other end of the occupation. Another alternative might be to drop delftware altogether as being too insensitive a time indicator, but this too might bias the interpretation when the date is compared to that of another site where delftware was included in the calculation.

Table 6 presents the pipestem dates and three ceramic dates-- delft at 1700, delft at 1750, and without delft-- for the major provenience groups. If consistency among the dates is the most desirable characteristic, then the set of dates with delft at 1750 might be considered the "best". This set also provides a close match with the pipestem date for the general surface. But the closest match to the pipestem date for IICD is the date computed without delftware. On the grounds of reducing the "static" of an insensitive marker type, the latter set might be preferable. Yet the question of using a median date of 1700 for a site with a median occupation circa 1700 still nags. (It might be noted that all the creamware sherds seemed referable to the earlier, "deeper yellow" category, and 1771 median date for creamware as used in these calculations.)

None of the ceramic dates approaches the pipestem dates for the foundation and tests I(144). This is interesting especially since the two pipestem dates, in spite of so limited a sample in the tests, agree quite well. The closest match between the foundation and test ceramic dates is in the delft = 1750 set, but the variation among the foundation/test differences is so small as to make this criterion useless.

By way of comparison, the collection from cistern IV contained no delft, thus manipulation of the delft has no effect on the 1750 date. Originally the cistern date, the latest of all the computed dates, was thought to reflect a filling of the cistern relatively shortly before the house was abandoned.

Table 6. Icehouse Point site, computed dates.

	pipestems	ceramics delft @ 1750	ceramics delft @ 1700	ceramics no delft
Gen. surface	1735.8	1735.08	1721.27	1729.30
IICD	1724.62	1744.32	1711.27	1731.94
I(1-4)	1698.8	1736.61	1728.55	1734.04
Foundation	1694.5	1743.08	1736.26	1741.99
Cistern IV	-----	1750.26	same	same

Table 7. Icehouse Point site, percent of total ceramics for certain types.

	creamware	N. Devon gravel tempered	sgraffitto
Gen. surface	1.68%	8.40%	1.68%
IICD	0.95	3.67	0.82
I(1-4)	2.22	4.44	6.67
Foundation	2.66	2.84	0.0
Cistern IV	30.00	0.0	0.0

Comments above concerning the probable lacunne in the cistern IV collection, however, raise serious doubts about this interpretation. It might be noted, however, that the cistern IV sherds are included in the foundation dates, and removal of the cistern collection would be reflected in slightly earlier foundation dates (less than two years earlier in each case).

Salwen and Bridges (1977) have proposed that mean artifact-manufacture dates must be used as interpretive tools in comparison with other dates, and other data. Vagaries in deposition, in intensity of occupation, perhaps in status and ethnicity, may affect the percentages of the ceramics in a site, and thus the "dates" computed by formula.

Of first importance is to date the deposition of a context, following which the occupation span represented by the materials in the deposit may be interpreted more fully. All of the provenience groups in the Icehouse Point site contain some creamware, no pearlware, and minor--assumed intrusive--white-ware. Creamware constitutes a small percentage of the ceramics in each provenience group (Table 7), except in the probably unrepresentative cistern IV. This indicates that the occupation reflected by each assemblage continued into the 1760's, but not late enough to allow the occupants to obtain, or at least to discard, large quantities of creamware. Particularly, creamware sherds below the plowzone in IICD, and in the apparently sealed context of cistern IV, provide a fairly secure terminus post quem which is in all probability not very much earlier than the end of the occupation.

The initial date of the occupation is less clearly definable. Sherds of North Devon gravel-tempered ceramics, and sherds which resemble North Devon sgraffito (Noel Hume 1969:104) are assigned the earliest median manufacture dates of the ceramic types. Either could have been imported into the colonies as early as 1650 (Noel Hume 1969:104, 133), and the latter ware is assigned a median date of 1710 (South 1977:211). In the general surface and IICD collection:

the sgraffito ware makes up proportions quite as respectable as creamware. While no sherds of sgraffito were found in the main foundation collection, specimens are present in the tests.

On purely ceramic grounds, then, a reasonable initial occupation date might be estimated at circa 1700. Estimating an occupation span of 1700 to 1765 provides a median date of 1732.5. Several dates in Table 6, notably the set of dates computed without delftware, become quite reasonable, as do the pipestem dates for the general surface and IICD.

Historic data, however, indicate that the occupation began by 1670, accepting that the temporal character of the collection, the wealth evident in the enamelled saltglaze and the (missing) pewter and silver artifacts, and the eight RB wine bottle seals establish this site as the Peter Sayer-Richard Bennett plantation. Noel Hume (1971) also dated several artifacts from the site to the seventeenth century. Roundly estimating an occupation of 1665 (Francis Sayer having received the property in 1663) to 1765, then, provides a median date of 1715. Only the ceramic dates for the general surface and IICD, with delft at 1700, are reasonable approximations of this date. The foundation and test pipestem dates remain conspicuously early.

Perhaps a combination of factors may be included in an explanation of the dates in Table 6. Excavations around the foundation might be expected to yield materials from the builder's trench, which, although noted, was not segregated as a context in the field. Thus pipestems from the very first activity in the house lot, construction of the house, might lower the date calculated for this data set-- as witnessed by the pipestem dates for the foundation and tests I(1-4). Since the builder's trench would have been effectively sealed before household activities were fairly begun, early ceramics would not be expected to have a comparable impact on the dating tools.

In fact, ceramics might tend toward an opposite bias. As table ceramics such as white saltglaze were made in greater numbers, and as wealth in the

Chesapeake (and probably the Bennett Point plantation) rose in the eighteenth century, later tablewares would have been more available and thus more heavily represented in archaeological collections. Ceramic dates for the foundation area might well be slightly later than the median date of occupation, reflecting the numerical superiority of later ceramics.

A general refuse deposit such as IICD, and a general surface collection that represents a mixture of contexts, might be expected to reflect more accurately the entire occupation. The pipestem dates for these two groups of materials actually run a bit late, compared to a 1715 median date. The ceramic dates based on delft at 1700 come fairly close to expectations, though, comparing most favorably with the occupation median in the surface and IICD collections and falling a bit later in the foundation area. It might be suggested, then, that a ^{at}median date of 1700 for a site whose occupation spans the turn of the eighteenth century is the most reasonable one to use. (The problems of determining this beforehand, however, may be formidable in an undocumented site!)

In sum, pattern studies of the Icehouse Point collection have been of variable utility. Recognition of spatial patterns was limited, due largely to gaps in the data, and to a sample area which was too small and irregularly shaped to yield clear patterning. Artifact class profiles indicated a striking difference in the assemblages of the refuse deposit, IICD, and the foundation area. This was interpreted as a result of house destruction, significantly raising the nail count over the foundation. The bone ratio also was indicative of a difference between sealed and plowzone deposits, but this may be due largely to less favorable preservation in the plowzone. The artifact class profiles also raised a reasonable suspicion that the collection from cistern IV was not representative of its context. Finally, a comparison and discussion of formula dating techniques suggested that employing a mean date of 1700 for delftware

resulted in the most useful set of ceramic dates for this site. Further comparison of pipestem and ceramic dates will be reserved for Chapter 6.

Conclusions

Several conclusions have been presented in the foregoing pages, but most were either implied or buried in the discussion. They will be most concisely repeated in a list:

1. The foundation uncovered by the main excavation reveals a general floor plan which is quite consistent with a seventeenth-century date of construction. The width of the foundations indicates a substantial structure, probably one and a half or two stories in height.

2. The artifact assemblages from the foundation, the refuse deposit at IICD, foundation tests I(1-4), the general surface collection, and refuse pit A (judging by Noel Hume's 1971 comments), are associated with a single major occupation. The date ranges of the assemblage indicates an occupation from the late seventeenth to the third quarter of the eighteenth centuries.

3. The deposit revealed in IICD is a refuse accumulation which reflects most or all of the occupation. Charred floorboards indicate that the house burned, and high nail counts in the foundation excavations are the result of the mixing of house rubble by the plow. Evidently, very little of the house was salvaged after its destruction. Cistern IV, sealed by charred floorboards, was apparently filled shortly before the destruction of the house. Although the collection studied is probably not representative of the cistern contents, the assemblage and the sandy nature of the fill suggest deliberate transport of the fill dirt from a refuse deposit much like that of IICD. Creamware in the collection from cistern IV serves as a terminus post quem for the destruction of the house.

4. The presence of creamware implies that the occupation lasted into the 1760's, but the relatively small quantities of the ware, normally plentiful

on sites of the later 1760's and 1770's, suggest a terminal date fairly early in the decade.

5. Historical evidence tying Richard Bennett to Bennett's point, and the consensus of the time span and probable wealth indicated by the artifacts plus the eight RB wine seals, allow identification of this site with the plantation manor of Peter Sayer and Richard Bennett III.

6. On both historical and artifactual data, a period of occupation for the house may be suggested as circa 1665 to 1765.

7. Few data were recovered that illustrate the special nature of the Chesapeake plantation in the colonial period. Several matching buttons, apparently newly removed from the mold, suggest on-site manufacture, very slim indications of the diversity and self-sufficiency of the plantation community. Undoubtedly more thorough investigation of the whole area of Icehouse Point would have revealed numerous outbuildings and thus the complexity of the Sayer-Bennett community. Unfortunately, the project was terminated before such contexts could be located and explored.

8. Artifact category profiles of the refuse deposit, IICD, implies that the Carolina Artifact Pattern proposed by South (1977) may be applicable to the colonial Chesapeake region. High nail counts in the foundation area, due to the destruction of the house, resulted in category profiles which fit South's Frontier Pattern. It is evident that simple "recognition" of a defined pattern, is, as South (1977:160) points out, only a very preliminary step in explaining the archaeological record. Since the total site assemblage, foundation plus tests I(1-4) plus IICD, (Table 5c) also fits the Frontier pattern, the "military outpost" rationale behind this pattern as defined must be applied with extreme caution.

It must be re-emphasized that this analysis has been very preliminary. Much work remains to be done with the Bennett's Point collection, especially

in terms of detailed artifact identification. Some minor mending of ceramics has been done, but further work, resulting in vessel reconstructions and counts, would be quite valuable. Groups of artifacts which were mentioned most summarily here, such as nails, dressed stone, mortar and plaster, may be divisible into informative types (e.g., at least three thickness categories of dressed stone probably can be recognized, and spatial studies of the groups may be informative). All comments about patterns must be weighed against the gaps in the collection, but the quantities of artifacts missing are probably not large enough to affect greatly the few general patterns which have been perceived.

ANALYSIS OF THE CONTENTS OF A BOTTLE FOUND ON BENNETT'S POINT, MARYLAND

Provenience

The bottle (Item 646) was found lying on its side in a trash pit (designated Pit A, L-3) in the field of Icehouse Point of the Bennett's Point peninsula on June 1, 1968 by J. Terrence Ludlow and Mary H. Watkins. The uppermost side of the bottle was 18 inches below the surface of the ground.

Bottle Description

The general condition of the bottle was very good with only a minor surface patina which revealed several swirls in the glass which are probably a result of variations in composition of the original metal. The bottle is 8.94 inches high; the neck, to the beginning of the shoulder, is 4.0 inches long and the minimum/maximum diameters of the body are 4.60/4.73 inches. (See attached Figure.) The cork is about 0.5 inch below the top of the neck and only about 0.5 inch long. The general shape of the bottle is similar to that of the 1756 specimen shown on page 66 by I. Noel Hume, "A Guide to Artifacts of Colonial America," 1970. There is also a resemblance to the 1734 and 1739 shapes shown on page 65. Thus, the bottle was probably made in the second or early third quarter of the eighteenth century.

The liquid level in the bottle was about one half inch below the neck when found and, until the analysis, the bottle was stored on its side to prevent the cork from drying out and shrinking.

Analysis of Contents

The contents were analysed by Dr. W. L. Truett and associates of the DuPont Company on August 11, 1970. A #20 (0.9 mm OD) 5.5 inch hypodermic needle could not be pushed through the cork with gentle pressure because of hard deposits on the cork surface. The surface was penetrated with a 1/32 inch twist bit in a hand drill. The cork was black and quite friable. The needle was inserted below the liquid level with the bottle upright and a 15 ml sample was withdrawn without shaking the contents.

The liquid was just visibly turbid and slightly reddish amber in color. It smelled distinctly like cider to several uncoached observers. It was not tasted at this time because of the uncertainty of what the contents might be. It was tasted on January 15, 1971 and characterized by three individuals as tasting "like water." The smell was slightly sourish and resembled that of apples.

The pH of the liquid was barely on the acid side as shown by the value of 6 obtained with phthyrion paper. The presence of a very small amount of acid or carbon dioxide could give such a pH value.

The infra-red (IR) spectrum obtained with a standard rock salt prism on a Perkin Elmer No. 221 instrument was that of water with no indications of organics present. The sensitivity to organic compounds is such that less than 1-5% would not be detected.

A nuclear magnetic resonance (NMR) spectrum obtained on a 60 megahertz Varian Corp. instrument indicated only water. The sensitivity to organic materials is such that, if present, they were below the 1% level.

The most sensitive assay for the more volatile organic compounds (eg. methyl or ethyl alcohol, acetic acid, ethyl acetate etc.) was run with a high sensitivity, gas chromatographic column (6' Polypak column) at 130°C. The only volatile found again was water. The presence of volatile organic compounds at a level of greater than 0.01% would have been detected.

The ash content of the sample was about 1000 ppm (0.005 g ash for a 5 ml sample). An emission spectrographic analysis of the ash showed calcium to be the major component, magnesium the next most plentiful, with silicon, iron and manganese as next and phosphorus, copper, aluminum and titanium present as traces. This amount of ash and its composition do not indicate anything unusual.

The level of ash is in line with what might be expected with an aged wine sample. Thus, it is reported (Helvetica Chim. Acta 2 173-181 (1919)) that a wine made in 1834 had an ash content of 1220 ppm and one bottled in 1840 had 2380 ppm of ash.

The cationic composition of the ash seems reasonable for a cider or wine and especially for one which had been buried for 170-235 years under conditions where the contents could interchange with ground water, which certainly can be high in calcium and magnesium. (The time span is based on the estimate that the bottle could not have been buried before about 1734 and probably not later than 1800, which is a conservatively late date based on the age of the other artifacts associated with the bottle.)

There could be traces of non-volatile organic compounds present; however, these most probably are at the trace level (~0.5%) because they were not evident in the IR and NMR analyses.

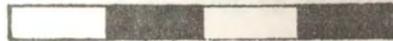
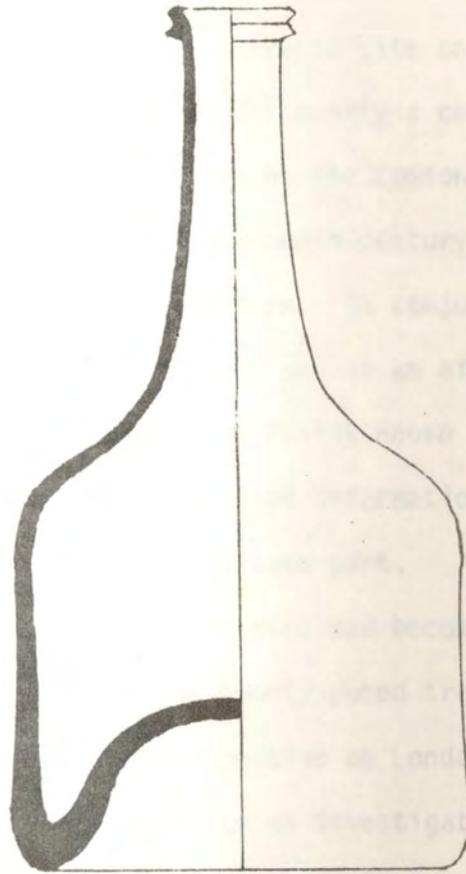
Conclusions

The analytical study indicates that the bottle contains water which is greater than 99.5% pure. There is considerable uncertainty as to what was in the bottle when it was buried. Since the burial was 170-235 years before it was excavated

and the cork would not be much of a barrier, it seems likely that interchange with ground water occurred with the loss of most of any organic compounds which may have been originally present. It is almost certain that the bottle was essentially full when discarded and that it did not become full underground. Thus, in laying on its side, water could not have seeped in to fill it, as could have occurred if an empty, corked bottle was buried upright. It can be assumed that the bottle, when buried, may have contained wine, or an apple-based drink such as cider. The latter is the most probable from the observed odor.

The bottle and probably the contents were of some value when discarded and why they were not used or saved is unknown. It is interesting that in the same pit were also found six pewter spoons and a small iron, hearth (?) shovel which were all undoubtedly in useable condition when buried. It is possible these items were discarded during a change of tenants or during the destruction of a house on the estate and were considered not worth saving.

John L. Ludlow



Four Inches

Chapter 4.

Londontown, 18An48

In 1965, Anne Arundel County established an historic site on a 10-acre tract of land which had been in county possession for nearly a century and a half. The main building on the property, now known as the Londontown Publik House, was the last remaining structure of the eighteenth-century port of Londontown, once a thriving center of Chesapeake commerce. In conjunction with the restoration of the house as a tourist attraction and as an affirmation of Anne Arundel County's rich heritage, the Londontown Publik House Commission began a program of research that would gather detailed information on the history of the house, and of the town of which it had been part.

By the late 1970's, the administration of the site had become interested in exploring the archaeological resources of the county-owned tract, both as an aid to management of the land and as another perspective on Londontown's history. Two groups of archaeologists prepared reports on investigations, one an underwater survey of the shoreline, the other a terrestrial reconnaissance commissioned to assess the resources of the property and to evaluate its potential for retaining informative contexts from the colonial period.

Personal dissatisfaction with the negative findings of the latter report led the present author to conduct brief supplementary testing in the vicinity of the restored Londontown Publik House. This chapter reports the results of the tests, and revises the conclusions of the previous survey. The following sections will provide synopses of the historical background and previous investigations of the Londontown Publik House and Gardens, and then will describe and interpret the most recent archaeological tests.

Setting

Figure 23 shows the general location of the Londontown peninsula. The site overlooks the South River to the north and east, about 3½ miles west of

the river mouth at the Chesapeake Bay. To the northwest of the peninsula is Almshouse Creek, and to the southwest, Glebe Creek, which widens into Glebe Bay. The channel of the South River is about twenty feet deep before the site, and bottom dropping abruptly approximately 400 to 500 feet from the shore (Shomette n.d.).

The surface of the peninsula rises over 20 feet above sea level, outlines by steep bluffs down to narrow beaches or bulkheaded terraces. The river frontage is heavily eroded, and three ravines, thought to have been streets of the eighteenth-century port, provide drainage to the South River shore. The slope of the land is slightly less steep on the eastern side of the peninsula, the mass of which is actually a broad knoll, separated by a gentle dip from the mainland to the southwest.

Historical background

Several discussions of the history of Londontown have been published, ranging from brief (Berkley 1924; Atterbury 1977) to detailed (Shomette 1978). In addition, an excellent historical geography of All Hallows Parish, of which Londontown was the economic center during its brief reign, is widely available (Earle 1975). This discussion will provide only an outline of the development of the port.

In 1650, William Burgess and his brother-in-law, Richard Beard, settled on the south side of the South River, in an area which provided fine natural harbors. In the same year, Burgess brought some 150 colonists to populate the area, though the official patent from Lord Baltimore was not granted until 1658 (Berkley 1924; Shomette 1978). There is no indication of anything other than a widely dispersed settlement pattern, and no concentration of structures resembling a town is likely to have been established for some time.

The Town Act of 1683 named Londontown-- or Burgess' land on the South River-- as a site of an official town. The tract was probably surveyed and platted, but no plat has survived. The first lot was sold in 1684 (Shomette

1978:10). Within the next decade a building was erected for use as a courthouse, and a cage, a pillory, and a whipping post were provided. In 1695, however, those legal appurtenances were removed to Annapolis, the town newly established as the colonial capital (Berkley 1924; Shomette 1978). With no government functions to help it grow, the erstwhile town on the South River saw very little activity and attracted few residents.

By 1703 there was still little development on the town tract. But there were signs of the activity to come, as already several ordinaries were in operation (Shomette 1978:15). Traffic to Annapolis was the rise, especially during court sessions, elections, and general assemblies, and the South River ferry at Londontown was becoming a main focus of the transportation routes. Londontown had been the site of a privately operated ferry as early as 1673, and was supported by public funds beginning in 1710 (Shomette 1978:38). The importance of this route was shown by the census of public roads in 1734. Seven of 20 Anne Arundel County roads traversed All Hallows Parish, and six of them terminated at the ferry (Earle 1975:154).

Already becoming established as a node of transportation and overnight accomodation, Londontown's potential as a center of business received a bigger boost following the Treaty of Utrecht in 1713. Relatively safer shipping lanes allowed expansion of the tobacco trade (Shomette 1978:19), even though piracy was at its height due to the peacetime unemployment of former privateers (Middleton 1953). Merchants, particularly factors for English houses of commerce, found an opening market, and saw that Londontown's access to the All Hallows Parish hinterland would make it a strategic base for business. In the next decade and a half, at least nine merchants, a physician, an innkeeper, and a shipwright located in Londontown. By 1719, some 30% of the occupational specialists of All Hallows Parish were concentrated in the port, even though it contained only 5% of the parish population (Earle 1975:91).

By the 1730's, Londontown was quite a prosperous port. Tradesmen, artisans, and physicians found it a fine place of business. The town's protected harbor, its low salinity discouraging the toreador worm, its tobacco warehouses and boat landings offering easy access from the water, and its nodal position in the road system, combined to attract all sorts of commercial interests. They particularly attracted the tobacco merchants, who were the lynchpin of Londontown's success.

In Earle's (1975:221) words, the merchants "superimposed a unique and viable urban place on the dispersed and decentralized system" of settlement. This effective dependence on tobacco merchants for its success, however, also foreshadowed the town's decline. In spite of the relative concentration of specialists in the port, 80% or more of the heads of households in the parish remained on the plantations. Planters tended to maintain their self-sufficiency to a great extent, and to diversify their activities as time went on and as tobacco prices went through their boom-and-bust cycle. Many merchants, physicians, and artisans stayed on the plantations, and other social and economic mainstays such as mills, woodworkers' shops, schools and churches remained scattered (Earle 1975). Londontown's functional centrality, all in all, was quite limited, despite its thriving appearance.

In the 1740's, major patterns of commerce and travel throughout the colony began to change. Urban places took hold in the back country and along the fall line, towns such as Fredericksburg, Alexandria, Georgetown, Upper Marlboro, and Baltimore. Increasing traffic through the towns of the interior wrought changes in the overall transportation patterns, as important road connections and population centers shifted westward from the coast. Londontown's function as a transportation center waned as the inland towns expanded (Earle 1975).

Then in 1747, Maryland passed a tobacco inspection law, designed to upgrade the quality of the leaf and thus maintain at higher levels the uncertain

price of the economic staple (Middleton 1958). Prices indeed stabilized, but rejection of "trash" tobacco cut saleable quantities by as much as half, leaving many middling and poorer planters still feeling pinched (Earle 1975). At the same time, only a few centers were designated for official inspection stations, to which all tobacco for sale had to be shipped. Londontown, for as yet unaccountable reasons, was not granted an inspection station. Merchants no longer found the port a lucrative center of trade, and began to drift away (Earle 1975; Shomette 1978).

Earle (1975) argues that, before about 1750, the boom-and-bust cycle of tobacco prices was fairly long, on the order of 22 years, and that tidewater planters had adjusted to it. They would diversify their interests in lean times, and invest in tobacco or other products as their understanding of the tobacco cycle advised. After 1750, however, the cycle was shortened to little more than a third of its previous period. Planters fell out of step with the cycle, unable to adjust to the quick fluctuations, and consequently their investments were less and less soundly planned. At the same time, occupational specialization had constrained merchants' flexibility, and while successful planters diversified to dampen the effects of the tobacco price cycle, merchants remained dependent on the trade of the leafy crop and their indebtedness increased (Earle 1975). Merchants thus found Londontown an increasingly unfavorable market, and withdrew.

This combination of predicaments, and perhaps others, could be seen clearly in the decline of the port. The town contained 30 to 40 dwellings in 1747; by 1765, there were about a dozen (Earle 1975:95-96). The town's major industry, a ropewalk, was probably shut down by 1765, and by the American Revolution travellers mentioned Londontown as only a small hamlet, if they made not of it at all (Shomette 1978). By the twentieth century, no structure except that now called the Londontown Publik House stood complete, though Berkley (1924) stated

that ruins thought to have been the old Burgess manor house were still visible on Glebe Creek.

The Londontown Publik House, a fine Georgian structure, was built between 1744 and 1750 as an inn. It was constructed in the very last years of Londontown's prosperity, and must have proved a disappointing investment. Shomette (1978:63) describes the various transfers of ownership of the house and property. In 1806 the inn was turned over to Anne Arundel County, and immediately auctioned back into private domain. In 1828, however, the county repurchased the building with 10 acres of land for use as an almshouse. Actually, it had performed that function for some time before the County Trustees for the Poor gained legal title (Shomette 1978:65).

The house and 10-acre tract have remained in county ownership since 1828. Until 1965 it was maintained as a facility for the needy and the aged. With the passage of the Welfare Act, the county considered the facility to be obsolete. The tract was then dedicated and opened to the public as an historic site, the Londontown Publik House and Gardens, and the inn-turned-almshouse was restored to its present appearance.

Previous investigations

Two reports of archaeological investigations of the Londontown site are available for study. Both projects were conducted in the late 1970's, but they employed widely different techniques, and studied entirely separate aspects of the town site.

The earlier project was conducted during 1976 and 1977, and was an underwater inspection of the shoreline of the Londontown peninsula (Shomette n.d.). Historic materials of various ages had long been noticed along the river front, where the staff of the Londontown Publik House and Gardens had collected numerous artifacts. The South River frontage was shrinking under heavy erosion, both from natural process and from constant boat traffic (Shomette n.d.:85).

The narrow modern beach consisted of sand which had at least in part been imported. Especially since there had evidently been a street along the waterfront during the heyday of the port (Shomette 1978:21; Figure 24), a reconnaissance of possible drowned contexts seemed advisable.

Nautical Archaeology Associates, under the direction of Shomette (n.d.), divided the peninsula shoreline into eight sectors for the reconnaissance. Their intent was to inspect the river bottom within 150 feet of the shore, but due to extremely poor visibility that distance was halved. Teams of three divers swept each area approximately ten feet apart, recording sightings of structural features and artifact concentrations, and paying particular attention to anomalies located by infrared photography.

Several concentrations of objects were noted by the survey. In sector C, immediately in front of the Publik House and the old ferry landing, materials ranging from the late seventeenth to the twentieth centuries occurred. One concentration of artifacts contained stonewares, green bottle glass, and pipe fragments, while another pile of brick, ceramics, pipes, and glass was thought likely to be the remains of a nineteenth-century bathhouse recalled by a local informant. A large brick concentration farther east might have been the remains of a waterside brick warehouse mentioned in a 1772 deed transfer. Although the main objective of the reconnaissance was not artifact recovery, the survey did collect occasional materials, including Rhenish stoneware, black glass bottle necks, pipestems, and a worn British penny, many of which correlate well with the span of operation of the port of Londontown (Shomette n.d.). Several sections of shell beds may be the remains of old roadways.

Shomette (n.d.) believes that many concentrations contain materials, such as bricks, that are too heavy to have been moved much by the tides. They thus may represent original deposits, remains of buildings such as the shops and warehouses known to have been built along the waterfront. There is great

potential for informative assemblages from drowned eighteenth-century contexts. Unfortunately, the expense of recovering such information has, as yet, precluded the attempt, but these data should be considered in all future plans of research and resource management.

A second archaeological survey was performed in 1978, commissioned by the Londontown Publik House Commission for the purpose of assessing the potential for surviving eighteenth-century contexts within the 10 acres of the county historical site. Archaeological Services, Inc., accepted the contract and performed the survey (ASI 1978). The investigators established a 10-meter grid around the Publik House, and took soil samples from 49 grid nodes for soil chemical and artifactual data. The samples were recovered from excavations of 15 cm diameter and 20 cm depth; whether removed by auger or posthole digger is not stated. Two sub-areas were sampled in similar fashion, presumably to a similar depth, on smaller grid intervals. The next step was the excavation of 22 one-by-one meter test squares, placed in part to test anomalies present on infrared photographs.

According to the ASI (1978) analysis, results were disappointing. Neither soil chemical data nor artifacts indicated spatial patterning or the presence of archaeological features. Only one further datum is reported from the one-meter tests, the presence of a layer of shell west of the Publik House. The shell layer is stated to lie at a depth of approximately 60 cm, corresponding to the ground level indicated by a 1937 photograph of the Publik House, then almshouse. Whether the photograph shows the shell layer is not stated, and presumably it does not. This shell layer is presently buried by a deposit interpreted as construction fill imported during the restoration.

ASI (1978) states that the majority of the artifacts date to the nineteenth and twentieth centuries, and that no interpretation of eighteenth-century activities is feasible. As a result, "it is ASI's firm conclusion that there are

not any non-disrupted pre-1800 archaeological features within the grounds... ASI concludes that there is little potential for further archaeological research at the site of the Londontown Publik House" (ASI 1978:19). Most unfortunately, acceptance of this recommendation has precluded funding for any further archaeological investigation at the site.

Severe shortcomings of the report, however, raise serious questions about ASI's conclusions. Most of the soil samples at the grid nodes were taken in an area which had been plowed, and which also had been repeatedly impregnated with wastewater from a sewage treatment plant. The latter circumstance might well play havoc with soil phosphate analyses. ASI does not document its method of soil analysis, and its results are suspect: pH fluctuations are extremely wide, and the relationship of the pH and phosphorous readings are not well explored, since phosphorous availability in such an analysis is dependent on the pH and phosphorous readings are not well explored, since phosphorous availability in such an analysis is dependent on the pH of the provenience (Alf Sjoberg, personal communication). In sum, uncertainties left by the reporting of the soil analysis leave the conclusions difficult to evaluate.

Nor are the excavation units described, either individually or in the aggregate. Again, the only note of test pit context or even depth is the shell lense mentioned in a single square, found beneath 60 cm of construction fill. The reader is left with the impression that the excavations proceeded only to the bottom of disturbed contexts, construction fill in the test units and plow-zone in the sample postholes. If this is the case, it is little wonder that no features or eighteenth-century deposits were identified.

"After the 13th unit... the disrupted and deflated nature of the site was established" (ASI 1978:25), and test units were no longer screened. Thus, artifact assemblages from nearly half of the 22 test units cannot be compared entirely with those from the other half, ensuring that patterns, particularly

spatial patterns, in materials from the tests would be difficult to demonstrate. Artifact counts from the test units are presented only in the gross categories of coal, rock, slag, shell, nails, iron, brick, mortar, ceramics, glass, and pipe fragments.

No attempt to analyze the artifacts in any greater detail is evident in the report. In fact, ASI (1978:iii) decided that, "in the absence of significant cultural features within the archaeological record, in-depth artifact analysis is not highly productive." One would think that, in the absence of any other significant data, in-depth artifact analysis would be the only avenue of making any interpretation whatsoever. Without artifact identifications, even an evaluation of the stated nineteenth and twentieth-century date range for the majority of the collection is impossible.

ASI graciously allowed the present author to inspect the artifacts from their tests at Londontown. Unfortunately, the records from this brief study have been lost. Preliminary assessment of the collection did support ASI's contention that most of the materials dated from the nineteenth and twentieth centuries, after the decline of the port. There were, however, materials present from the colonial period, and an analysis of these artifacts might well be informative, if only on a general level.

In sum, it is extremely difficult to evaluate fully the data presented in the ASI (1978) report, or to accept its blanket conclusion that no contexts remain from the eighteenth-century port. The dissatisfactions and questions outlined above prompted this author to conduct limited tests on the site of the Publik House in an attempt to verify or revise ASI's conclusion. Ms. Sandria Ross, then Administrator of the Londontown Publik House and Gardens, granted permission for the work described in the following section.

The excavations

The new tests were designed to meet two limited objectives: first, to establish the depositional contexts of soils around the Publik House (described

inadequately by the ASI report), and second, to obtain a sample of artifacts for study. It was expected that the area south of the Publik House (see Figure 25) would reveal a plowzone and underlying subsoil, and would demonstrate a potential-- ignored in ASI's report-- for truncated subsoil features such as postholes, privy pits, or trash pits. The deposits around the Publik House were, however, unknown, except on the west side where ASI reported some 60 cm of construction fill in one of the test units. Accordingly, two tests were planned, one in each area.

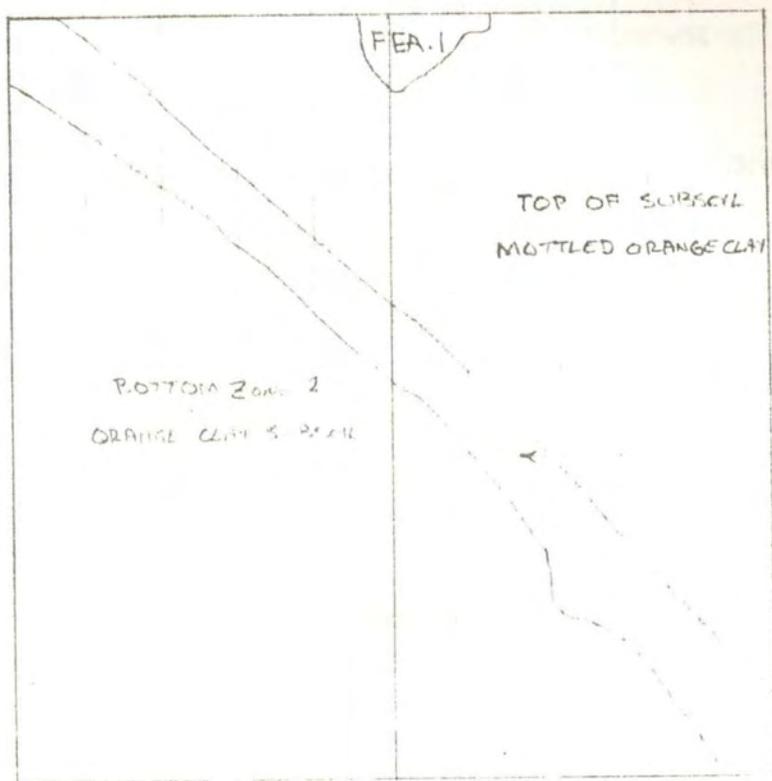
Work began in early July of 1979. An attempt to locate ASI's prime datum was unsuccessful, and a new 0-0 datum was established in the same general area, measured at 13 meters (magnetic) west of the pipe-marker at the edge of the ravine that constitutes the eastern boundary of the county property. Test I was laid out at 2-4 m N, 0-2 m W. This location was chosen to be comparable to ASI's tests 3 and 21, in the formerly plowed lawn to the southwest of test I, and because it seemed likely to have been undisturbed by recent construction or archaeological activities.

Excavation of test I began with removal of the sod, then the plowzone (zone 1) was removed by shovel-skimming. All fill was screened through 3/8" hardware cloth. At approximately 6 cm below the surface, a flat band of mottled orange clay, extending diagonally from the northwest to the southeast corners of the unit, became visible (Figure 26). This band was the top of a back-filled backhoe trench that had obviously been excavated since the lawn was plowed last, probably for the placement of underground cable. (Note: all depth measurements were taken by line-level from the southeast corner of the test, and are translated to below-surface measurements for this discussion.)

The plowzone to either side of the backhoe trench was removed and screened. The base of this level was encountered at depths of 18 to 20 cm. A dark stain of irregular outline was noted in the top of the subsoil, bisected by the north

N40 W20

N40 W00



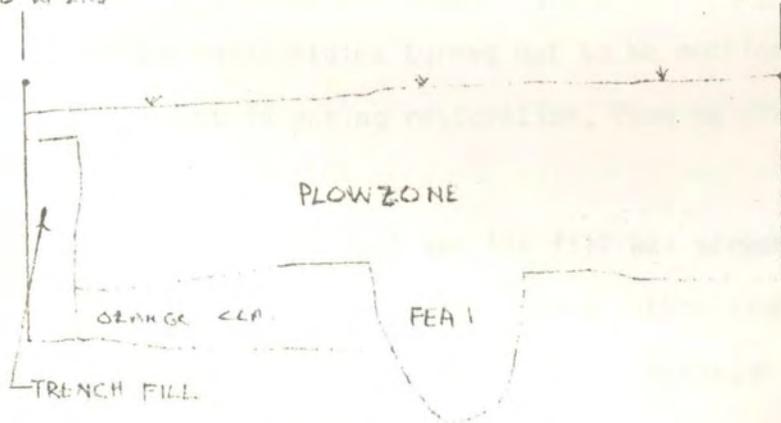
N20 W20

N20 W00

TEST 1, EXCAVATION, FLOOR PLAN

N40 W20

N40 W00



TEST 1, NORTH PROFILE, LOOKING NORTH

SCALE: $\overline{\hspace{2cm}}$ HORIZONTAL
 $\overline{\hspace{1cm}}$ VERTICAL
 10CM

FIGURE 26

profile, and designated feature 1. The brown fill, definitely less compact than the surrounding clay, was removed to a depth of 21 cm below subsoil. From the irregular shape of the feature, and the small amount of cultural material, it is interpreted as a small tree stump.

To ensure that the clay at the base of zone 1 was indeed culturally sterile subsoil, the west half of the square was shovel-skimmed to an additional 10 cm depth (zone 2). Very few artifacts were encountered, all in the upper few centimeters, and they apparently represent downward migration during times when the soil was wet. The test was completed by removing the protruding section of the backhoe trench in the west half of the square (zone 3), and photographing the finished excavation (Figure 28). No attempt was made to remove the fill from the rest of the backhoe trench. Test I was backfilled before test II was begun.

The second test, test II, was laid out at 28.5-30.5 m N, 20-22 m E from the datum. This square was placed next to the northeast corner of the Publik House, in an area that appeared to have been little disturbed by restoration activities. Upon removal of the sod, a very complex pattern of soil stains was revealed, dominated by a squarish feature in the southwest corner of the square. This stain was designated feature 2, and was tentatively identified as an ASI test. Other soil stains turned out to be mottles on the surface of construction fill brought in during restoration, thus no plan of this level is included in this report.

Feature 2 was removed by trowel and the fill was screened. The base of the feature was sealed with clear plastic, and a ribbon identifying the feature as an ASI test lay diagonally across the plastic. Although test II had not been designed to reveal a previous test, the accident was helpful. The small test profile revealed several strata, a shell layer at the bottom, and orange clay subsoil approximately 40 cm. below the surface. ASI had shovel-tested

the subsoil in the northeast corner of the test, apparently to demonstrate its cultural sterility.

In the southwest corner of the ASI test, an interesting feature was revealed (Figure 29), a square outline filled with fine white clay ("potter's clay"). This feature was partly excavated on the last day of the project. The square outline continued downward for at least 10 cm, and contained nothing but compact white clay to that depth. The outline is too regular to be a natural occurrence. Evidently a square hole was dug deliberately and packed with clay, but to what purpose is not clear. Unfortunately, no point of origin is discernable due to truncation by the ASI test. No mention of this feature can be found in the ASI (1978) report. The significance of the feature remains enigmatic, but it does indicate that subsoil contexts do indeed remain near the Publik House.

With the profiles of the ASI test as a guide, the fill of test II was excavated in four levels, by shovel-skimming and screening. Zone 1 consisted of mottled clay and loam containing galvanized roofing nails, steel finishing nails, and beer bottle glass. This was undoubtedly recent construction fill, and reached to a depth of approximately 8 cm below the surface.

Zone 2, darker in color than zone 1, was originally separated into zones 2 and 3, but the two were combined in the analysis. The top of zone 2 in the west half of the square, the half closer to the Publik House, was distinguished by heavy inclusions of coal rubble. Since the public house had been heated by a basement coal furnace during part of the nineteenth century (Jack Keene, personal communication), the initial interpretation was that the coal represented the remains of the fuel pile for the furnace, which would have been fed through a nearby basement window.

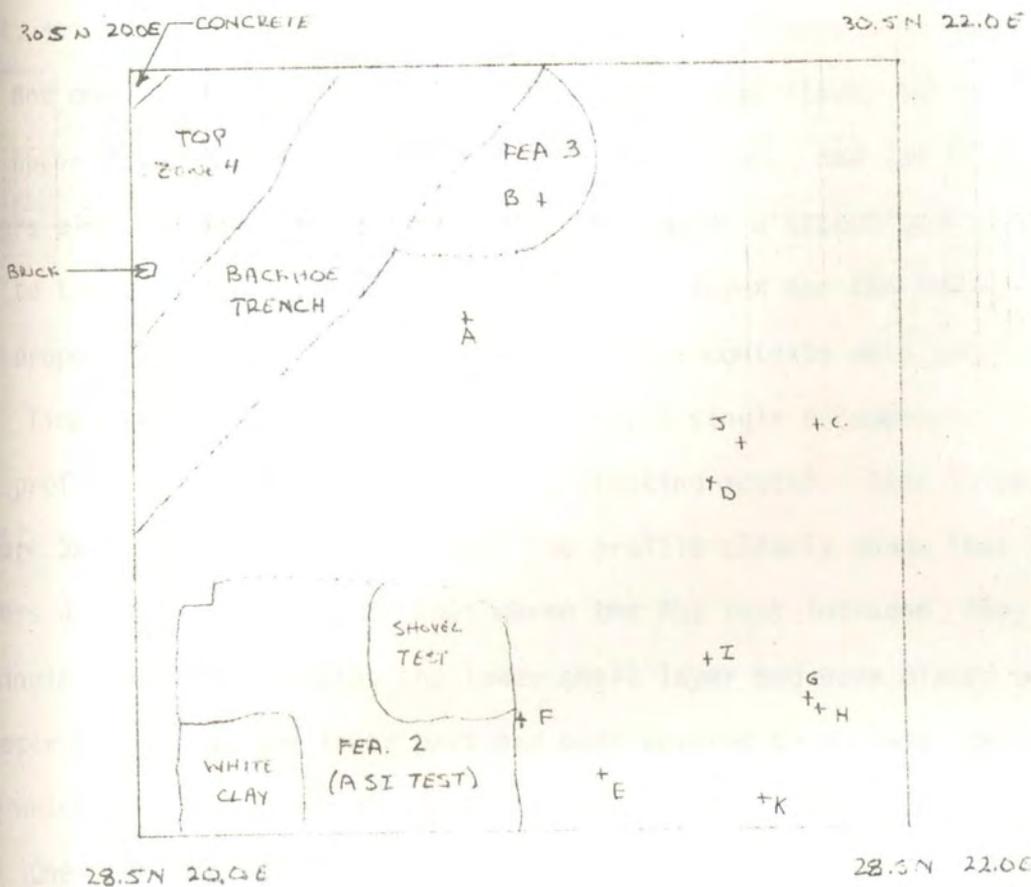
Accordingly, the east half of the square was taken down until coal inclusions were relatively heavy, and this zone was designated zone 2. The entire

square, with the coal inclusions, was then excavated as zone 3, down to a change in fill character-- absence of coal and presence of clay mottling-- at a depth of approximately 16 cm below the surface on the east side, and 20 cm on the west. The thickest layer of coal was contained in the southwest quadrant.

The top of zone 4, a lighter brown fill with clay mottling, revealed an even lighter, clayey stripe or band diagonally across the northwest corner of the square (see Figure 33). This band ran parallel to the house and directly under two sunken electric lights just outside the brick gutter. The band is evidently the top of a recent backhoe trench, and has two significant implications: that zones 2 and 3 are recent construction fill, unrelated to any nineteenth-century coal pile, and that the deposits below zones 2/3, having been intruded by the backhoe trench, pre-date the restoration.

Zone 4 was excavated by shovel-shaving to within about 2 cm of the shell layer, then removed to the surface of the shell by use of small tools. The northwest corner, including the backhoe trench and the small triangle of zone 4 against the square walls, was left unexcavated. Every effort was made to maintain in situ context at the top of the shell layer, and, generally, the effort is believed to have been successful (Figures 30, 31). The shell was covered with a refuse scatter that included eighteenth- and nineteenth-century ceramics, glass, animal bone, nails, and miscellaneous other items, quite probably simply pitched out the doors and windows. Several sherds of whiteware indicate that the oyster shell surface was open into the nineteenth century.

The top of zone 5, the shell layer, was cleaned and photographed on a Friday afternoon. Other commitments beginning the following Monday necessitated finishing the project by Sunday, on which day the site was open half the day, allowing time to backfill the unit. The plan at that point was to remove the shell on Saturday, packing up the materials with only minimal screening and sorting, and to clean and photograph the test floor the same day.



ARTIFACTS IN SITU, TOP OF LEVEL 5

- A GLASS VASE
- B IRON (FRAGMENT)
- C PIPE STEM
- D BRICK
- E BROWN STONE WARE
- F MARBLE
- G WHITEWARE
- H WHITEWARE
- I WINDOW GLASS
- J BRICK FRAGMENT
- K SMALL BRICK

TEST II, EXCAVATED, FLOOR PLAN

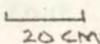
SCALE  20 CM

FIGURE 33.

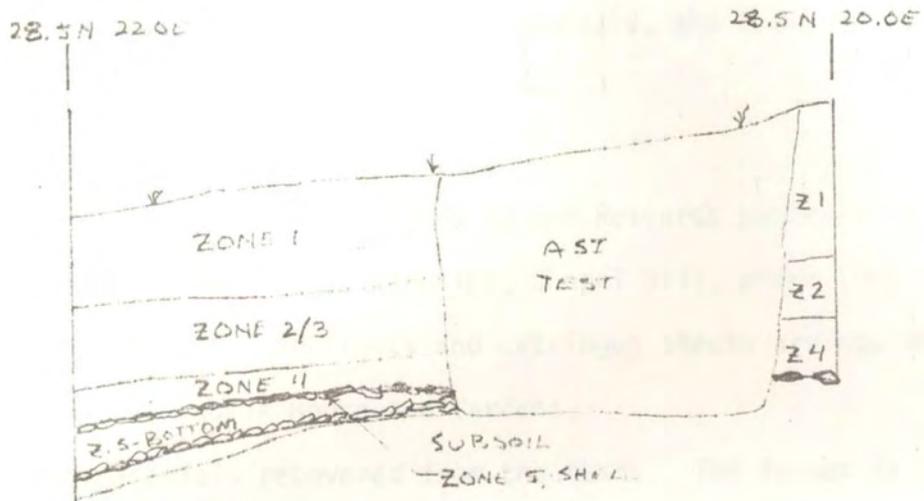
Excavation of the shell layer began in the southwest corner, at the ASI test, and proceeded eastward. It became evident in very short order that there was not one shell layer present, but two, with some clayey fill in between. The upper shell layer, zone 5, was removed as a unit, and the fill between the layers plus the lower shell layer were removed as a second unit, zone 5-bottom. Due to time pressure, neither the lower shell layer nor the floor of the test was properly cleaned and photographed, but the contexts were kept separate.

Time permitted the preparation of only a single documentary photograph, the profile of the southeastern corner (looking south). This is reproduced in Figure 32, and drawn in Figure 34. The profile clearly shows that the two shell layers diverge eastward, and that where the ASI test intruded, they merged into a single layer. Evidently, the lower shell layer had been placed on a slightly steeper slope, and the lower part had been covered by a clayey deposit, following which a second pavement of oyster shells was spread.

One feature, feature 3, was noted in the top of zone 5, a semicircular disturbance of the shell bisected by the backhoe trench (see Figure 33). The oyster shells in this area were standing diagonally or on edge, suggesting that a hole had been dug through the shell, the shell layer re-laid, and shells over the hole had tipped as the earth settled. A dark stain was visible in the subsoil beneath the shell, but no clear pit walls could be discerned in the excavation. The feature seems to have been only a shallow depression, and no cultural materials were recovered below about 5 or 6 cm in the fill. Without clear-cut walls, any deliberate function of this feature is difficult to suggest, and it may have been no more than a removed shrub.

On July 29, 1979, the excavation was backfilled, and the testing project was concluded.

During the course of the excavation, a visitor to the site mentioned that she had seen artifacts around a nearby construction site, on which a basement



SCALE | 20 CM HORIZONTAL
 | 10 CM VERTICAL

TEST II, SOUTH PROFILE, looking S.W.

was being excavated in preparation for the building of a house. The site was on Widow's Mite Road, east of the main access road that bisects the Londontown peninsula (see Figure 23). After the conclusion of the excavations, this author made a quick surface collection around the newly constructed foundation. Preliminary inspection revealed eighteenth-century materials, and these data are reported following the test data in the next section.

Analysis

The materials from the project were taken to the Research Laboratories of Anthropology at the University of North Carolina, Chapel Hill, where they were washed, catalogued and recorded. Artifacts and catalogue sheets are now on deposit with the Londontown Publik House and Gardens.

Table 8 lists the materials recovered from the tests. The format is in the same as that used in the previous chapter, and the key is found in Chapter 2, Table 1.

Test I may be considered to be entirely a plowzone context. Numerous ceramic sherds and pieces of bottle and window glass, 20 pipestems, and several miscellaneous artifacts were recovered from the unit. The materials range in date of manufacture from a single sherd of North Devon gravel-tempered ware (possibly as early as late seventeenth or early eighteenth century) to modern glass and whitewares. Among the ceramics, whitewares are clearly predominant, comprising nearly half the sherds. This sample is probably comparable to most of the ASI (1978) test materials, reported to be chiefly nineteenth and twentieth centuries in origin. The presence of delftware, white saltglazed stoneware, Chinese porcelain, fine brown stoneware, and creamware, however, indicates a significant eighteenth-century component in the occupation.

As presented in Table 9, the pipestem date for test I is 1736.7, while the mean ceramic date (delft at 1750) is 1826.58. The pipestem date suggests that the major eighteenth-century activity in the south yard of the Publik House

Table 9. Londontown, computed dates.

	pipestem	ceramic
test I, total	1736.7	1824.28
test II, total	1733.66	1814.45
test II, z. 4	-----	1848.2
test II, z. 5	1743.99	1787.43
test II, z. 5b	1733.80	1748.13
test I+II	1734.51	1821.49

occurred early in the century, when the town was in its heyday. The ceramic date, on the other hand, indicates the continued use of the area through recent years. Direct association of the entire deposit with activities in the Publik House is not possible, especially since the pipestem date falls prior to the construction of the inn, but many of the materials may be so associated. Only sampling of a large area of the south yard, in search of such artifact patterning as lessening density with distance from the Publik House, will illuminate yard use. (The small sample size also casts some doubt on the pipestem date.)

Miscellaneous artifacts from test I include a honey-brown gunflint, two bone utensil handle fragments with roughened exteriors, a pewter button, and an iron trigger. The pewter button is round, approximately 13 mm in diameter, and has a raised rim. A wire eye is cast in place with a center boss. The button is much like South's (1964) type 8, except for the raised rim and the small size.

Large quantities of architectural materials also occurred, including window glass, brick, mortar, rusted nails, and thin fragments of slate, here interpreted as roofing material. Whether these materials were scattered during the restoration is not clear.

A summary overview of the artifacts from test I indicates a span of occupation from the early eighteenth century to the present, as expected from historical information. The small size of the sample, the small area excavated, and the plowzone context preclude detailed inferences of behavior at this point. Further comments will be included in later discussion, below.

Test II offers several isolatable contexts which will be more informative if analyzed separately. It is evident from Table 8 that the assemblages from zones 1 to 3 are consistent with a late twentieth-century construction fill, with only traces of earlier materials mixed in. Materials from these zones will be ignored in the rest of this discussion.

Zone 4, the dark compact soil intruded by the backhoe trench, provided more in the way of domestic refuse. The ceramics are predominantly whiteware, with a few sherds of pearlware and a single piece of Chinese porcelain. A small necklace clasp (Figure 35) was also recovered from this zone. Like test I, this zone yielded a number of architectural items, particularly nails and window glass. A nineteenth- or twentieth-century deposition is certain for this zone.

Zone 5, the upper shell layer, contained several sherds of eighteenth-century origin, but also half a dozen whiteware sherds. As noted previously, whiteware was recovered in situ in the refuse scatter on top of the shell, indicating that the surface was open into the nineteenth century. As earlier materials-- such as the delftware and Rhenish stoneware sherds-- could easily have been churned up from earlier contexts, no estimate of when the shell layer might have been laid down is immediately possible.

Large numbers of brick fragments, window glass, nails, and animal bone create a picture of a disorganized scatter of trash. Several miscellaneous artifacts, including a white clay marble, two straight pine (Figure 35), a small brass buckle (harness?), a very thin brass hinge (about 2.5 cm in length-- jewelry box?), a glass stopper, part of a decorative glass pedestal, and various pieces of scrap iron or unidentifiable iron implements, also suggest general refuse. A pair of embroidery scissors (Figure 35) was recovered from the disturbed shell over feature 3, but whether it should be associated with the shell or the feature is uncertain.

Most gratifyingly, the materials from zone 5-bottom, below the upper shell layer, include only artifacts that are consistent with an eighteenth-century deposition. In fact, the zone did not even yield any creamware, suggesting a pre-1760 date for the closing of the context. The other artifact categories can easily be associated with a mid-eighteenth-century deposition. The

miscellany among the few specimens also suggests a general refuse scatter much like that of zone 5.

Bearing in mind the small sample sizes, computation of both pipestem and ceramic dates (Table 9) provides excellent correlations with the stratigraphic sequence. Test II, zone 5-bottom yields a pipestem date of 1733.8, while the ceramic date indicates a median of 1748.13 for the deposition. The latter date closely follows the 1744 construction date of the Publik House, while the former may include some scatter from earlier activities, in similar fashion to the pipestem date for test I. Zone 5, the upper shell layer, provides a mean ceramic date of 1787.43, and a pipestem date of 1743.99. Only two pipestems were recovered from zone 4, so that a pipestem date was not calculated, but a date of 1848.2 results from the mean ceramic formula.

With reference to these dates, a depositional sequence for the test II area can be suggested. The lack of creamware and the 1748 mean ceramic date in zone 5-bottom imply that the lower shell layer was open for only a short period after the Publik House was built in 1744 or soon after. It may be postulated, then, as a round date, that the upper shell layer was laid in place about 1760. This upper layer, zone 5, was still an open surface in the nineteenth century; however, the relatively small proportion of whiteware, reflected in the 1787 mean ceramic date, suggests an early nineteenth-century sealing of the shell. Again as a round (and quite arbitrary) figure, 1830 may be suggested as the time when the deposit of zone 4 began to accumulate. (Taking a strict interpretation of the "median dates," a span of 1744 to 1752 may be suggested for zone 5-bottom and 1752 to 1822 for zone 5. These dates are reasonable, but a bit too tight for comfort.)

Zone 4, then, represents accumulation from circa 1830 to 1865, when the fill from the restoration effectively sealed the zone. The fact that the mean ceramic date of zone 4 is too early to represent the median of an 1830 to 1865

occupation need pose no problem. South's (1977) dating scheme is not designed to be accurate for late nineteenth or twentieth-century deposits. Since whiteware receives a median date of 1860, which is the most recent mean date included in the formula, 1860 is the latest date that can be produced by the calculation. A date of 1847, then, indicates the clear preponderance of nineteenth- and twentieth-century ceramics lumped under the term "whiteware", and thus a solidly post-1820 deposit.

As a parenthetical comparison, the data from the surface collection on Widow's Mite are presented in Table 10. A few items, notably the buckle stamped "IRSSON" and the four sherds of whiteware, are quite recent in origin, but most may be associated with the colonial period. As at Bennett's Point, a lack of pearlware in the collection is interpreted as signifying a discontinuity of occupation in the late eighteenth and early nineteenth centuries. No creamware was recovered at Widow's Mite, either, supporting such an inference. This gap in the ceramics suggests that whiteware can be ignored for the purpose of calculating a ceramic date. In spite of the small size and haphazard nature of the sample, the ceramic and pipestem dates fit very well within the historic heyday of the port. The pipestems yield a date of 1723.71, and the mean ceramic date comes to 1742.4. This small collection from Widow's Mite, then, provides a better archaeological indication of the spatial extent of the original town, and also suggests that colonial contexts may still be lurking among the suburban houselots now covering the Londontown peninsula.

Also for the purposes of comparison, artifact class profiles have been calculated following South's (1977) pattern recognition scheme (Table 11). Most of the profiles fit within the "Frontier pattern" as defined by South. The "total" profile deliberately excluded recent construction fill, which would be expected to bias the profile toward a high Architecture group frequency. This profile is the least conformable to the Frontier pattern. It comes closest,

Table 11. Londontown, artifact category profiles.

group	Test I+II*		Test I		Test II z. 5b		Test II z. 5**		Test II z. 4		Test II z. 4-5b	
	#	%	#	%	#	%	#	%	#	%	#	%
Kitchen	485	45.6	346	54.0	26	26.5	73	37.8	28	26.7	127	32.1
Architecture	485	45.6	253	39.5	50	51.0	98	50.8	73	69.5	221	55.8
Furniture	1	0.1	0	0	0	0	1	0.5	0	0	1	0.3
Arms	3	0.3	2	0.3	1	1.0	0	0	0	0	1	0.3
Clothing	4	0.4	1	0.15	0	0	4	2.1	0	0	4	1.0
Personal	2	0.2	1	0.16	0	0	0	0	1	1.0	1	0.3
Tobacco	76	7.2	36	5.6	20	20.4	15	7.8	3	3.9	38	9.6
Activities	<u>6</u>	<u>0.6</u>	<u>2</u>	<u>0.3</u>	<u>1</u>	<u>1.0</u>	<u>2</u>	<u>1.0</u>	<u>0</u>	<u>0</u>	<u>3</u>	<u>0.8</u>
TOTALS	1062	100.0	641	100.02	98	99.9	193	100.0	105	100.1	396	100.2
Bone	293	21.6	159	19.9	14	12.4	64	25.2	51	32.7	130	24.7

* Excluding construction fill, test II zones 1-3.

** Including shell over Feature 3.

in fact, to the "aberrant" profile of Fort Watson, South Carolina (South 1977: 154). The latter profile was explained as a result of a high Arms group frequency, an explanation clearly inapplicable here.

A possible explanation for a high Architecture group frequency might be the inclusion of restoration debris in the plowzone of test I. Such reasoning, however, cannot be applied to the undisturbed deposits of zones 4, 5, and 5-bottom in test II. These latter profiles match the Frontier pattern quite closely. In contrast, the test I profile is the only one which fits the Carolina pattern. A caveat of "inadequate sample size" for the undisturbed deposits is not unreasonable, but the consistency among the profiles argues against such a simplistic dismissal. The Carolina pattern in test I, incidentally, suggests that the architectural materials are not primarily restoration detritus.

Further discussion of the category profiles will be deferred to Chapter 6, when comparisons among several Chesapeake sites may be attempted. For the moment, it will be sufficient to reiterate that unwary use of "Frontier" or "Carolina" patterns as explanatory devices may be quite misleading. This would come as no surprise to South, who recognized from the outset that any patterns must be explained, not simply calculated (1977:160).

Conclusions

The most evident result of these brief tests is that, ASI's (1978) firm conclusions notwithstanding, eighteenth-century contexts exist within the grounds of the Londontown Publik House and Gardens and are potentially very informative. In the south lawn of the Publik House, plowing has destroyed any undisturbed midden that may have accumulated, but there is a good possibility that any disturbance of the soil that reached below 20 cm beneath the present surface, such as postholes, trash pits, or privy pits, will contain undisturbed deposits. On the east side of the Publik House, test II revealed three definable deposits in stratigraphic relationship, and suggested that deeper features

may also be found below the top of the subsoil. Further study of all areas of the county historic site would be most worthwhile.

A chronological sequence of the depositional episodes revealed in test II can be postulated, based on artifact occurrences and supported by mean ceramic dates. A layer of shell was placed on the east side of the Publik House, and probably all around it, when the building was constructed. An accumulation of soil covered the lower slope of the shell layer, and a new layer was spread to replace it (again, on the east side of the house). The second layer was probably put down about 1760. This upper layer remained open as a working surface into the nineteenth century, perhaps about 1830, when soil began to accumulate once more. The upper soil deposit, zone 4 in the excavation, rose slowly until 1965, when the Publik House was restored and the grade was raised by the importation of construction fill. Excavation of larger areas on the east side of the Publik House should provide larger samples that will refine this scheme, and tests elsewhere around the building may demonstrate similar or substantially different (e.g., no second layer) sequences.

These depositional episodes may be correlated roughly with historic periods in the history of the Publik House. Zone 5-bottom almost certainly includes the time when the building operated as an inn, in the declining years of the port. The small sample from the test cannot demonstrate use of the building by a steady stream of guests, but it is possible that creative interpretation of an extensive sample from this context could distinguish this refuse assemblage from one left by a single family.

Zone 5 corresponds to the period between the decline of the town and the use of the house as an almshouse. The deposit probably overlaps the historic periods at both ends of the span, but corresponds in the main to the period of quick turnover of the house among a number of owners. It is not clear from Shomette's (1978:63) discussion, and probably not from the documentary record,

how long after the death of the original owner the house might have operated as an inn. For at least a decade around the turn of the nineteenth century, the Publik House was owned by Colonel John Hoskins Stone. Stone was Governor of Maryland during part of that time, and evidently rented the house to several tenants at least during his incumbency. Whether or not most of the period represented by zone 5 is the result of (serial) single-family occupancy, then, is not certain. Such zone 5 artifacts as the marble, the embroidery scissors and straight pins, and the thin metal hinge could have belonged as easily to guests as to resident family members.

Zone 4, having built up after circa 1830, belongs entirely to the period of county ownership and use of the house as a county home. Here again the small sample provides little hint as to the composition of the household. The small number of sherds, less than half the quantity of zone 5 in spite of the fact that zone 4 may have accumulated for twice as long, suggests more careful curation of ceramics and thus a poorer household, as might be expected in an almshouse. On the other hand, a change in habits of refuse disposal might also account for this difference, and the lack of coarse wares in the zone 4 sample does suggest some change in use of ceramics or of the east yard.

Incidentally, it is not difficult to interpret the function of the shell layers. Oyster shell was often used as paving material in the Chesapeake region, and still is used for farm roads in place of gravel in some areas. Erosion control and enhancement of runoff were probably the key purposes around a building such as the Publik House. A discussion in the Upper House during the Assembly of April-May, 1969, demonstrates that this use of oyster shell was accepted during the colonial period. While planning the construction of the court house in Annapolis, the Upper House directed "That the Court House be paved at least Six foot round that Good Store of oyster shells be laid round the House especially at the lower end where it is most Sandy and that the

Pavement Come upon that to be laid with a descent to Carry the water off every way..." (Archives 19:286).

No correlation of specific contexts with historical periods can be made in test I. The entire deposit has been disturbed, chiefly by plow action. It is, however, evident that the materials from this test represent a span of occupation from the construction of the Publik House to the present day, and perhaps even extending to pre-Publik House days of Londontown. Although ASI's (1978) data may not indicate spatial patterning in the south yard, further excavation in search of patterns would be worthwhile. Extensive removal of plowzone might also reveal subsurface features or posthole patterns, and at least would provide a much larger sample of artifacts of which detailed analysis might shed light on the chronology and activities of this particular portion of the town.

The small collection from Widow's Mite indicates that archaeological traces of the town can be recovered from much of the peninsula. This particular site has not been traced through the documentary record, but may occupy part of Lot 51 or 52 as reconstructed in the Londontown plan (see Figure 24). Some records are available concerning the original ownership of these lots (Shomette 1978: 22), but whether the site may be associated with any particular owner is yet uncertain. Similar sites may well be waiting on the Londontown peninsula.

In sum, extensive excavations in the Publik House and Gardens property could yield valuable data. The refuse deposits in the vicinity of the Public House should be studied for spatial patterning in the refuse (cf. Brunswick pattern [South 1977] and probable changes during the nineteenth century), and for information about food preparation and consumption, based on the large quantities of animal bone recovered from the tests. A combination of excavation in the Londontown peninsula, and survey and testing within All Hallows Parish, could be designed to test many of the propositions contained in Earle's (1975)

historical geography. Relationships of the dispersed parish settlement pattern to the brief urbanization, of the varieties of site function through time, could be tested; perhaps, if feature data would provide deposits representing short time spans, the processes of increasing diversification among the plantations, of the dispersion of some specialized activities and vocations and the centralization of others, might be traced in the archaeological record and compared to the documentary data. The primary implication of these suggestions is, simply, that a program of archaeological study in Londontown has tremendous potential for producing invaluable data, and the Londontown Public House Commission should be urged to continue planning for archaeological investigation.

Chapter 5.

Surface collections

As explained in the introductory chapter, the original aim of this survey project was to identify and collect data from sites of towns that were established in the Town Acts of the late seventeenth and early eighteenth centuries. These data, it was hoped, would provide information on site complexity, function, and duration, so that preliminary statements might be made concerning the relationships among urban centers (or would-be centers) in the developing settlement system of the tidewater Chesapeake. Controlled surface collection was chosen as the most cost-effective method of revealing town patterning, with limited testing as necessary or possible. Accordingly, sites that might be contained largely within areas now under cultivation were the prime targets of the survey effort.

Some town sites, such as Londontown, already had been identified by archaeologists or historians, while remnants of other towns--surviving as modern hamlets--pinpointed their locations quite adequately. Still other towns could be located only generally from historic sources, and would have to be found by archaeological survey.

Efforts to find these vaguely known sites were unsuccessful. At the same time as the search for town sites was falling flat, however, other, smaller sites were turning up. Some of the latter were discovered by the survey, while others were pointed out by local informants who were interested in the history of their areas and of particular sites. Both to bolster the data base of the project, and to document these other sites for the Maryland site survey files, materials were collected from each site. All of the surface collections will be reported in this chapter. The final section of the chapter will, for the record,

describe unsuccessful attempts to find certain other sites.

The collected sites range from probable single-family dwellings to a considerable area of at least one town, from the turn of the eighteenth century to the first half of the twentieth century. While no claim can be made for representativeness of the sample, for instance as a cross-section of a tidewater settlement system, these sites do provide an initial perspective on historic site variability on the middle Chesapeake coast.

The data were not gathered in such a way as to be useful for formal testing of specific hypotheses. Two general questions will be considered in the analysis, especially in the inter-site comparisons contained in the next chapter. The first is tied to the historical archaeology of the Chesapeake tidewater, and is, broadly, how these data may illustrate or be correlated with the historic processes of the diversification of plantation economies and the development of a rural-urban settlement system. The second question might be considered a more general, disciplinary one: whether the pattern-recognition method suggested by South (1977) can be applied to surface collections, and what might be the relationships of category profiles between surface and excavated collections. Discussion of both questions will for the most part be deferred until after presentation of the data, in the inter-site comparisons of chapter 6 and the overview in chapter 7.

Survey methods were fairly standardized, and since the survey party usually consisted of one person, were also fairly simple. For a controlled surface collection, a grid was established by marking grid nodes with wire survey flags. The grids were generally oriented along the plow lines, with a OR or OL base line following a straight field edge or road where possible. The base lines and first perpendiculars were measured by metal tape, and the rest of the grid nodes were located by pace and eyeball. This method obviously is not as accurate as survey

by transit and tape, but given the preliminary, town-plan level of pattern recognition for which the method is designed, the inaccuracies are inconsiderable. Also because the method was designed for patterning on a town scale, the grid interval was set at 15 meters. One of the smaller sites was collected in 10-meter squares, in search of finer spatial discrimination.

General surface collections were made on sites that were too small in area or too sparse in materials for a gridded collection to be worthwhile. In several cases, this decision was made after flagging surface artifacts in an initial walkover. On other sites, a preliminary inspection was sufficient to indicate the potential for spatial patterning.

All materials from the surface collections were washed and catalogued by grid unit, and analyzed to the same extent as the excavated collections already described. The collections and catalogue sheets will be deposited with the Maryland Historical Trust, Annapolis. Small amounts of prehistoric materials were included in several collections, and will be reported elsewhere.

Lower Marlboro, 18Cv155

Setting

Lower Marlboro is situated on the bank of the Patuxent River, which in this section forms the western boundary of Calvert County (Figure 38). The area under investigation lies above the 20-foot topographic contour, and there is a pronounced bluff along the shoreline of the Patuxent. Just north of the modern hamlet is a draw through which drains Graham Creek. Above and below the town land, and across the river, interior bends of the channel are low and swampy, unsuitable for habitation. The river channel is now somewhat silted, but was easily navigable as far as Lower Marlboro in the eighteenth century.

Historical background

As with many of the early towns of the Chesapeake tidewater, no plat of the original survey of Lower Marlboro survives (Reps 1972). It was one of the many Town Act towns, legally established during the second set of acts in the 1680's (Reps 1972; Stein 1960). Simply to list the dates of the acts, however, disguises the much less decisive origins of this town.

In the preliminary discussion of the Town Act bill of 1683 (Maryland Archives 7:459ff), the Upper House of Assembly included a site "in or near Coxes Creek in the freshes of Patuxent" among the nominations. The final version of the bill (Maryland Archives 7:609-619) substituted John Bowling's land "near Gaunts" for the Cox property. In 1684, however, the supplementary act (Maryland Archives 13:111-120) changed the site to Coxes Creek, since John Bowling's land was not convenient and anyway had not been surveyed.

A year later, though, the Governor's Council granted a petition to reverse the change, once more substituting Bowling's land for "Henry Cox's land" (Maryland Archives 17:409-410). After yet another year, in September of 1686 (Maryland Archives 5:500-503), the Council attempted to encourage the development of the Town Act towns by appointing officers for each site--including "Coxes Town," but none at Bowling's. Evidently the previous year's proclamation had been effectively ignored. In 1688, another spate of town creation resulted in a further supplementary act (Maryland Archives 13:218-220), which provided for a new town at Bowling's Point, in the freshes of the Patuxent, to be called Bowlington. No attempt to disenfranchise Cox's Town is evident in this bill.

The Town Act of 1706 (Maryland Archives 26:636-645) began the third round of the towning of the Chesapeake. This act also provided for a town in the freshes of the Patuxent, but on the plantation of George and Thomas Hardisty. Whether this is a new site, or signifies a change in ownership of one of the

previously named plantations, is not clear. Reps (1972) cites the supplementary act of 1707 (Maryland Archives 27:159-168) as establishing the official town at the Cox site, but neither it nor the 1708 supplement (Maryland Archives 27:346-349) refers to Calvert County. By this time Coxtown had been renamed Lower Marlboro in honor of the Duke of Marlborough (Stein 1960:92).

Especially given the seesaw rivalry between the Bowling and Cox sites, it is difficult to imagine that any significant town actually existed at Lower Marlboro by the beginning of the eighteenth century. Brune (1979), in his study of tobacco marketing in the Patuxent valley, finds that the system was quite decentralized before the passage of the Tobacco Inspection Act of 1747. After 1747, however, there were 12 designated inspection points on the Patuxent, including Lower Marlboro, and Brune suggests that the period from 1748 to circa 1830 saw the greatest centralization of marketing in the Patuxent region.

Apparently there never was a town of any considerable size on the Patuxent, since the Potomac River and Bay shore centers were too close, and too competitive, to allow urban growth in between (Brune 1979). Accordingly, tobacco inspection regulation probably had the most influence on settlement systems, and centralization, along the Patuxent. Unlike Londontown, for which the Inspection Act of 1747 was the death blow, the same act probably afforded Lower Marlboro its major impetus for growth. Some further attraction would have been afforded by the Marlboro Academy, which was, according to Stein (1960:92), "the most important school of Calvert County in the Colonial period." Stein does not provide the dates of operation of the school.

Unfortunately, most records of Calvert County were lost in the courthouse fire of 1882, so that further information about Coxtown/Lower Marlboro is scarce. As a working model, Brune's (1979) period of market centralization may be suggested as the heyday of the town, beginning with the Tobacco Inspection Act of

1747 and waning as competition from Baltimore grew after the 1790's.

The three remaining structures in Lower Marlboro provide some support for this interpretation. The Grahame house (Figure 39), the Henman house and store, and the Mills house, are all dated to the mid-eighteenth century (Maryland Historical Trust 1980). With no earlier above-ground evidence for a town, a circa 1750 date of initial urban growth is quite reasonable.

It is an interesting feature of modern Lower Marlboro that there are several buildings of colonial origin clustered just north of the hamlet, on the other side of Graham Creek (see Figure 38). These houses are not original to their present sites, having been brought in by a developer and restored (Anonymous 1978). An unwary investigator, not knowing the history of the development, might mistake this cluster of colonial homes for an original town. A close look at the settlement pattern, however, clearly reveals a modern subdivision rather than a town of the eighteenth-century gridded pattern (Reps 1972). The imported houses face in too many directions, and are irregularly arranged in lots of several acres (Figure 40), quite unlike a planned town site of the colonial period. The historic site of Lower Marlboro obviously lies to the south of the creek, where houses of the middle 1700's still occupy their original sites.

Survey and analysis

Potentially the most productive area of Lower Marlboro for surface collection is the large plowed field just north of the T intersection of state road 262 (Figure 38). The field lies directly in front of the Grahame house (Figure 39), and covers approximately 15 acres. Because of the high visibility of the surface, and its proximity to the Grahame house, this area was selected for investigation.

The site was flagged on a 15-meter grid as described earlier, with the R0 baseline running north along the road and parallel to the Patuxent shore. The

intent was to collect the entire field, but rain and time pressure interfered. Six grid rows along the north-south line were collected, and then a two-row-wide (30 meter) sample strip was collected toward the east, toward the Grahame house. Shortly before the project was to end, a dark soil stain with a surprising concentration of colonial materials was noticed in the strip of plowed field between the road and the river. This area was gridded to encompass the major concentration of artifacts, and collected also.

The materials are listed by grid unit in Table 12, following the key in Table 1. It is evident from a cursory inspection that materials dating from the colonial to the modern periods are represented. Obvious road trash, such as beer cans and soda bottles, was not collected, but many sherds of glass especially along the road probably are modern litter. The preponderance of earlier materials throughout the field, however, is suggested by the patriotic date of 1776.16 that results from the mean ceramic formula. The pipestem date is 1734.96, which may indicate some activity on the site prior to the postulated heyday of the town.

The spatial distribution of the total artifact assemblage (less coal, brick, and mortar) is plotted in Figure 41. (Note: the road and ditches measure approximately 9 m. in width, but are drawn at 15 m. for convenience.) Some slight weighting of the totals along the roadside, probably representing litter, is evident, but three artifact clusters stand out clearly. One center is at 75R75, and another at 105R165; neither cluster, unfortunately, is fully represented due to the strip-sample method employed in the eastern half of the field. By comparison, the cluster on the west side of the road is huge, peaking at 165L0 but nearly as high in frequency in the two squares directly south. The soil stain, incidentally, was contained mostly in the peak square.

Since the "total artifacts" distribution might be biased or obscured by modern trash, several artifact categories were plotted for comparison, beginning

with ceramics. The intent of the ceramic plots was to show that whiteware was scattered generally over the field, and so could be ignored. Figures 42 through 45 show that this expectation was not fulfilled. The distribution in Figure 42 includes the fine ceramics that represent early to mid-eighteenth-century horizons. The peaks at 165L0 and 105R165 are visible in this distribution, but the rise at 75R75 does not appear at all. The creamware plot, Figure 43, may be considered to represent a late third-quarter eighteenth-century horizon. There is still a peak at 105R165. The 75R75 cluster leaps out in the creamware, and even more interestingly, the peak west of the road shifts south two grid units, to 135L0. Evidently, the huge cluster in the "total" distribution was actually two clusters.

The late eighteenth-early nineteenth-century horizon, represented by pearlware (Figure 44), and the post-1820 horizon, represented by whitewares (Figure 45), reveal essentially the same pattern as the creamware. The clusters around 75R75 and 105R165 continue, as does that around 135L0, although the latter is somewhat diffused in the whitewares. In fact, although the whitewares do cluster in the earlier pattern, they number relatively few in all clusters, which suggests that the occupations or activities indicated did not continue long past the circa 1820 introduction of whitewares.

The distributions of other artifact categories tend to confirm the patterning evident in the ceramics. Figure 46 displays the black glass distribution, which corresponds closely to the two clusters of the mid-eighteenth-century ceramics (Figure 43). Architectural materials, window glass and nails, provide an interesting counterpoint (Figure 47). The window glass, highlighted by the contour lines, clusters in the later western peak, 135L0, and the easternmost peak, 105R165 (slightly). The cluster at 75R75 does not show up. Nails are too sparse to be interpreted easily, but occur to some extent in similar clusters to the window glass.

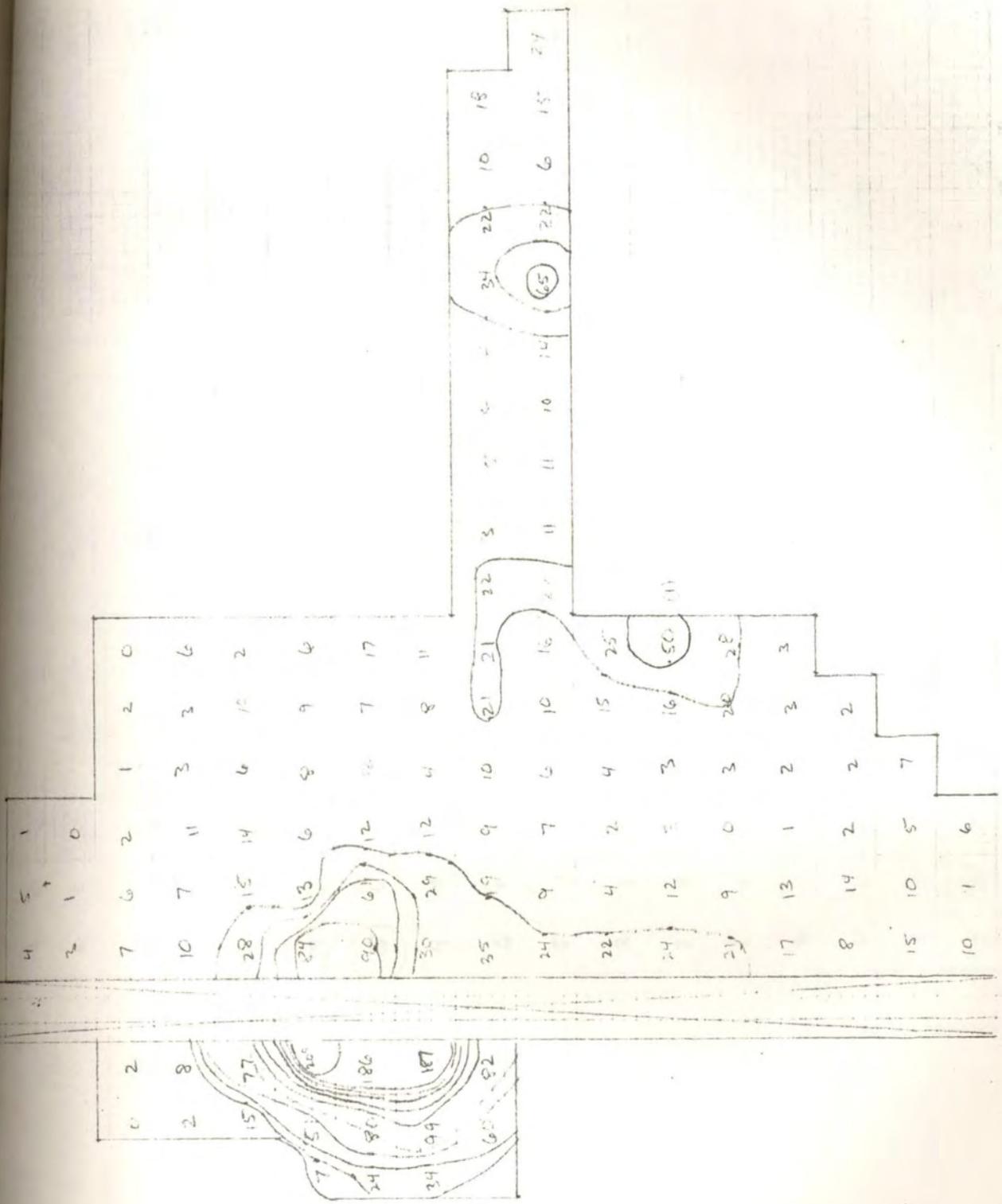
Yet another perspective is obtained by plotting ball clay ("kaolin") pipe fragments, as in Figure 48. The peak at 105R165 shows up, though just barely. Another peak appears in the square next north of 75R75. To the west of the road, the pipe cluster rises 150L0--between the two clusters previously revealed.

An initial interpretation, which assumes the four clusters represent dwelling structures, is as follows. Two buildings stood in the survey area circa 1750-1760, those at 105R165 and 165L0. During the 1760's two more structures were built, shown by distribution peaks at 75R75 and 135L0. The structure at 165L0 disappeared not long afterwards; the dark soil stain, and a couple of discolored sherds, raise the possibility that it was burned. The pipestem peak between the houses at 135L0 and 165L0 implies a common social ground, and that there was some overlap in the use-spans of the houses. It is even possible that the houses represent two generations of the same family. Alternatively, the house at 135L0 may have been built to replaced a destroyed house at 165L0, by the same occupants. All of the structures probably were gone or in ruins by the mid-1800's.

The relative paucity of artifacts in the eastern two clusters, as opposed to those west of the road, may indicate a disparity in wealth and status. Wine-glass stems and polychrome delftware sherds occur in the western area, which may support this suggestion. There may, however, be other factors involved than socioeconomic status. For instance, the dramatic peak in the creamware in the 75R75 cluster, tapering off quickly in the pearlware and whiteware horizons, may indicate that a short occupation span is involved. The cluster of pipe fragments to the north of this square may reveal a yard of this house. The black glass peak at 105R165 is more dramatic than in any other artifact category. Other than possibly representing a family of poor drunks, the significance of the black glass is not immediately apparent.

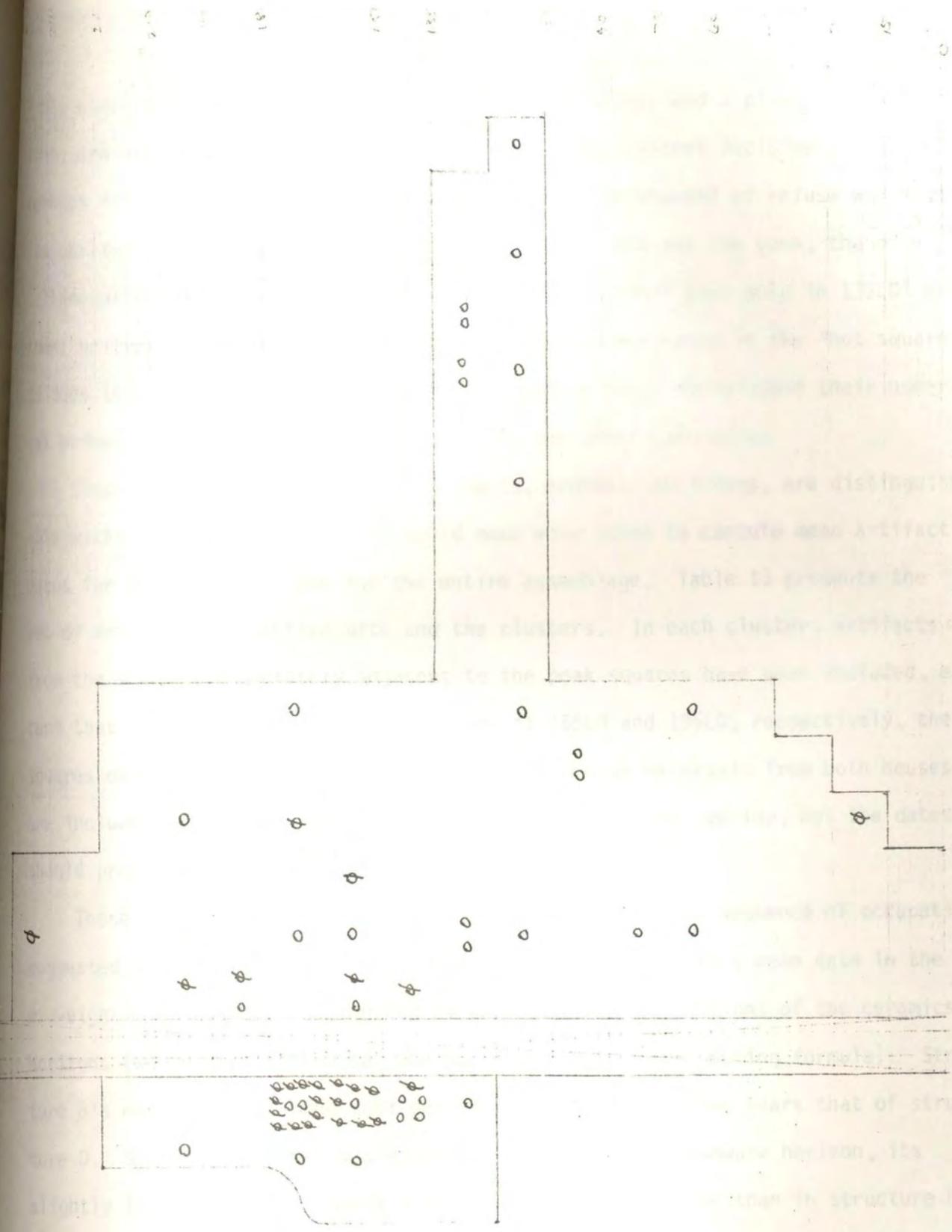
The distributions of miscellaneous artifacts and animal bone reinforce the impressions gained from the other plots (Figure 49). (Note: miscellaneous arti-

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(Contour Interval)



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facts clearly of recent origin, such as plastic buttons and a plastic comb fragment, are not included in Figure 49). Animal bone clusters decisively in 165L0, perhaps following Deetz's (1977) contention that the discard of refuse was more lax earlier in the eighteenth century than later. Without the bone, the miscellaneous materials in Figure 49 reveal a clear overall peak only in 135L0; but then, neither of the eastern clusters contains two artifacts in the "hot square" as does 165L0. On balance, then, the two western dwelling maintain their numerical primacy in the miscellaneous as well as the other categories.

Since four concentrations of artifacts, probably buildings, are distinguishable within the greater site, it would make more sense to compute mean artifact dates for each, rather than for the entire assemblage. Table 13 presents the set of dates for the entire site and the clusters. In each cluster, artifacts from the squares immediately adjacent to the peak squares have been included, except that for dwellings A and B, centered at 165L0 and 135L0, respectively, the squares of the 150 row--which would be overlapped by materials from both houses--are included with neither. Probably there is still some overlap, but the dates should provide a basis for comparison.

These dates show, in shorthand fashion, much the same sequence of occupation suggested above. Structure A is clearly the earliest, with a mean date in the mid-eighteenth century, as implied by the spatial distributions of the ceramics horizons (which are, of course, the basis for the ceramic dating formula). Structure B's median date is the next earliest, antedating by two years that of structure D. Since structure D was discernable in the pre-creamware horizon, its slightly later date may signify a longer time of occupation than in structure B. Alternatively, if structure B replaced a destroyed structure A, the inhabitants of structure B may have had to replace the majority of their ceramics at one time, the disproportionate investment in creamware in the 1760's (for example) effectively biasing the computation for structure B toward an earlier mean ceramic date.

Table 13. Computed dates for Lower Marlboro.

structure	center	squares included	pipestem	ceramic
A	165L0	180L0, 165L15, 180L15	1732.13	1756.7
B	135L0	120L0, 120L15, 135L15	1719.89	1778.23
C	75R75	60R75, 90R75, 60-90R60	1740.55	1790.01
D	105R165	105R150, 105R180, 120R150-180	1740.55	1780.56
total site	----	----	1734.36	1776.16

Without further investigation, this question must remain unanswered.

Structure C's ceramics produce the latest median date. The fact that this cluster was not discernable at all in the pre-creamware horizon, whereas at least structures A and D were, agrees well with the later mean ceramic date.

It will be noted that the pipestem dates do not follow the sequence of the ceramic dates, and that they are consistently earlier. Discussion of the latter point will be deferred to chapter 6. As to the former, the most troubling aspect is the drastically early date for structure B. Perhaps even more odd, the pipestem date for 150L0, the discounted "between" square, is 1750.1, which is the latest of all the pipestem dates. It is possible that 150L0 represents the social area in which most of structure B's pipe smoking took place, and that some earlier context was intruded and thus protected by the structure (or lies just south of it), but such an explanation cannot be substantiated at this point.

Preliminary conclusions

From both the distribution patterns in the ceramic horizons, and the mean ceramic dates based on the same horizons, a hypothetical reconstruction of the change in the occupation of this part of Lower Marlboro may be offered. Structure A probably stood not far from the Patuxent bluff in the 1750's, perhaps housing neighbors to the occupants of the Graham, Mills, and Henman houses. Structure A burned, perhaps in the early 1760's. Structure B either replaced it shortly thereafter, or had been built not long before. The peak in the pipestem distribution between the two structures may indicate a common social area for neighbors, or a continued use of the same area by persons who were habituated to this particular yard. Whether there was one household that split and then merged again, as two generations of a family, or one household that reestablished itself on the same or next lot, or two households with either overlapping tenancies or even no relationship at all, cannot be ascertained.

Structure D may have been erected and inhabited in the third quarter of the eighteenth century, followed by structure C perhaps in the 1770's. These buildings may have been occupied by families of lesser means, or perhaps households containing considerably fewer persons. Structures B, C, and D persisted into the nineteenth century, but not very long past circa 1820, as indicated by the small amounts of whiteware associated with each cluster.

These dates fit extremely well with Brune's (1979) suggestion that the period 1748 to 1830 saw the greatest centralization within the Patuxent drainage. One building, structure A, may have stood at the beginning of the period, and three more appeared and disappeared during the next four decades. If business in Lower Marlboro was falling off after circa 1790, as Brune suggests, it is quite likely that buildings in the town would have been abandoned gradually over the next quarter century or so, as structures B, C, and D may well have been.

Further investigation of this site would be quite valuable. A controlled surface collection of the entire field, perhaps on a smaller grid, might well reveal still other artifact clusters. Other areas surrounding the main intersection of Lower Marlboro also may reveal building sites, affording a more complete picture of the spatial extent and perhaps the plan of the town. A long-term research plan should include excavation, in search of probable diversity of function among structures or sections of the town. Whether Lower Marlboro was entirely a tobacco-trading hamlet, or to what extent it might have attracted other specialization, is a matter which would cast greater light on the importance of these centers in the eighteenth-century Chesapeake. The section of Lower Marlboro investigated by this survey illustrates the rise and fall of the ephemeral tobacco ports that served as towns in the tidewater, but the information contained in this town-site has only barely been tapped.

Doncaster, 18Ta30

Setting

The site of Doncaster is in Talbot County, on the low-lying shore at the mouth of Wye River (Figure 50). It is, in fact, directly across the river from the tip of Bennett's Point, and within sight of Icehouse Point, discussed in chapter 3. North of the Doncaster site is a peninsula called Bruff's Island, jutting north between Wye River and Shaw Bay. Bruff's originally was an island, and the channel between it and the mainland at Doncaster has silted in only since the bridge was built, circa 1930.

Though the land is generally low, the shoreline drops abruptly some 10 or a dozen feet to the water. Along the Wye River frontage the low bluff is now rip-rapped, which undoubtedly is a factor in the steepness of the shoreline. Along Shaw Bay the slope is more gentle, but rises in a definite knoll before dropping once more to the first creek to the east. The land surface is thus slightly rolling, at least by comparison to Bennett's Point, and is well drained.

Historical background

Like Londontown and Lower Marlboro, Doncaster was a Town Act town, owing its legal existence to the civilizing efforts of the provincial government. Its legislative history is more straightforward than was Lower Marlboro's, since there does not seem to have been any rivalry evident between this and another nominated site.

The town was first established in the supplementary act of 1671 (Maryland Archives 5:92-94), which placed a town in Talbot County "at the Land of Ionathan Syberry at the Mouth of Wye River on the Eastern Side thereof." At this time, the site was known as Wye Town (Reps 1972). In each of the two subsequent sets of town bills, Wye Town was included from the first. Nominations for the sites

to be established in 1683 (Maryland Archives 7:459-461) included a site "at or near Adjacent to the Town Point at Wye River Mouth," and the final form of the act (Maryland Archives 7:609-619) stipulated the town land at Wye River. Again in 1706, the Town Act (Maryland Archives 26:636-645) specified the Wye River site, this time under the name of Doncaster.

Tilghman (1967) provides a number of details about Doncaster and Bruff's Island, although occasionally his dates are confusing. According to Tilghman (1967 v. 2:540ff), Bruff's Island originally belonged to one William Crouch, who owned both the island and a tract called Crouch's Choyce at the mouth of Wye River. "The town of Doncaster was located on this tract called Crouch's Choyce" (Tilghman 1967 v. 2:541). Crouch willed his Choyce to his son Josias in 1676 (Tilghman 1967 v. 2:540). He had already sold the island to Peter Sayer; Sayer sold it to Thomas Bruff. Tilghman (1967 v. 1:106fn) has the date of this transaction as 1762, which makes more sense if read as a typographical error for 1672.

Thomas Bruff, a silversmith, came to Maryland about 1665, and died in 1702. "He devised to son Richard, dwelling plantation at Doncaster... and one-half of Crouch's Island, and to son Thomas, residue of island." Of the former son, Tilghman says, "Richard Bruff, son of Thomas, born 1670, was an Inn-keeper at the town of Doncaster, and owned a large tobacco warehouse, fronting on a narrow strait of water which then separated Bruff's Island from the mainland on which the town of Doncaster stood" (Tilghman 1967 v. 2:540-541). Here again Tilghman's dates are confusing: he says that there is a record of son Richard's warehouse in 1780 (ibid.), and that Thomas Bruff was keeping a ferry at Bruff's landing in 1760 (1967 v. 2:11). Whether these dates are accurate, referring to a long-lived warehouse and another generation of Thomases, is unclear.

Two more references by Tilghman help establish that a town did exist at Doncaster. Tilghman notes that a courthouse was built at Doncaster (1967 v. 2:

38), and that in 1700 Thomas Bruff (one of them!) was directed "to set up a pair of stocks and whipping post, at the town of Doncaster" (1967 v. 2:215). These structures, Bruff's "dwelling plantation at Doncaster," and Richard Bruff's warehouse, must have been a nucleus of a town, but whether there was much more to the place is questionable.

Reps (1972) mentions that a 1707 plan of the town survives, on which five lots were noted as "improved formerly." Tilghman (1967 v. 2:542) admits that there probably never were more than a dozen houses at Doncaster. The wording of the nomination of 1683, "at or near Ajacent," suggests that by that time the town was not firmly fixed on the ground. The general picture created by the references is one of an ephemeral hamlet, rather optimistically --if not euphemistically--given the legal status of a town.

Father Edward Carley of Centerville has very generously donated a copy of a survey plat, as an aid to this project (Figure 51). (The original is privately owned.) The plat was drawn, according to the legend at the bottom, for Mrs. Henrietta Maria Lloyd in 1695. It clearly shows Crouch's Choyce and Bruff's Island, as well as the "Town Point" below the narrows between the mainland and the island. Father Carley (personal communication) suggests that the structure sketched beside the narrows is Thomas Bruff's house. It may also be a symbol for the town, since only one other structure is drawn on the plot. The latter is evidently the chapel to which Frances Sayer referred in her will as the other chapel at Doncaster (chapter 3). Colonel Sayer's land in the upper left of the plat is, of course, Bennett's Point. (The circle around the chapel is a recent addition to the plat.)

In sum, the evidence suggests that, at best, the town of Doncaster was little more than a waterside hamlet of the turn of the eighteenth century. Further research is needed even to gauge how long the hamlet might have existed. If Tilghman's later eighteenth-century dates for the ferry and warehouse are not

errors, some activity may have continued for quite a while. One incentive for an archaeological survey, then, is to gain another perspective on the life-span and activities of the town.

Survey and analysis

The site of Doncaster had been identified before this project began, and had been assigned the number 18Ta30. A preliminary National Register nomination form was begun for the site, and notes are still on file with the Maryland Historical Trust. Unfortunately the notes were filed in pencil draft, and now are nearly illegible. Evidently the investigator of record (Wayne Clark) noted a sufficient quantity of historic materials in the field to suggest that the town of Doncaster was indeed on the point below Bruff's Island, as the historical sources indicate.

On the first day of the survey, the property owner loaned the surveyor a collection of pipestems recovered from the site before the last plowing. The bore diameters of the 25 stems were measured that evening, resulting in a mean bore diameter of 5.96 (64ths inch) and a computed date of 1703.82. This date was quite consistent with the few records of activity in the town.

The field at the town point was plowed to the edge of the Wye River, but only to the beginning of the slope down to the former channel between the island and the mainland (Figures 52, 53). At the northern edge of the field, closest to the island, a scatter of brick was noticeable.

A 15-meter grid was flagged with OLO at the northern corner of the field. The LO base line followed the edge of the field roughly southwest. A rectangle the width of the field-- $11\frac{1}{2}$ grid units northwest to southeast--and six grid units deep along the base line was collected systematically. After the sixth row, materials were so sparse that continuation of the controlled surface collection would have been highly inefficient, and the rest of the field was inspected by

walking every third plow row without reference to the grid.

Artifacts were flagged where spotted, and left until the entire field had been covered. Two dubious concentrations, designated A and B, were defined visually, and collected separately. They were roughly plotted by line of sight and pace from the original grid. Cluster A fell between the L90 and L105 lines, approximately 22 to 30 meters from the edge of the grid, and B between the L75 and L90 lines about 34-40 meters further southwest. Both clusters are plotted in Figure 32. No brick was noted in either cluster. The remainder of the materials from the south part of the field were bagged as a general surface collection.

The data from all the provenience groups are presented in Table 14. A general impression of the assemblage tends to support the early eighteenth-century date suggested by the historic data and the loaned pipestems. Only three sherds of whiteware are present, all from cluster B. No pearlware was found, and only one sherd of creamware. In fact, even the creamware may be out of place, since Chinese porcelain and white saltglazed stoneware both are lacking. Perhaps significantly, the creamware sherd belongs to cluster A. The heavy predominance of black glass, including a number of case bottle fragments, and of coarse ceramics, also is consistent with an early eighteenth-century occupation, before finer tablewares were made in such quantities that many Chesapeake planters could afford them.

The computed dates support this interpretation quite nicely (Table 15). The pipestem date comes to 1703.4, astonishingly close, given sample sizes, to that of the loaned collection. The ceramic date was computed using a delFTWARE median of 1700, as at Bennett's Point. Without whiteware, but with the creamware sherd, the mean ceramic date is 1730.11, a suitably early date. Since the creamware sherd does not really seem to belong to the main site area, it might be more reasonable to delete it from the computation, and the revised date comes to

Table 15. Computed dates from Doncaster.

loaned pipestems	1703.82	sample	25
pipestems from survey	1703.4		35
mean ceramic date	1730.11		27
" " ", less creamware	1728.54		26
structure, ceramics*	1733.45		11
structure, pipestems*	1704.85		15

* Squares 0-30L15, 0-30L30, 0-30L45.

1728.54. The median date employed for the ware of highest frequency, Rhenish grey stoneware, would tend to bias the mean toward a later date, since several sherds in this "lump" category are assignable to earlier types. Initial findings, then, indicate an occupation during the first part of the eighteenth century, perhaps beginning before the turn of the century, when Thomas Bruff and sons were active in Doncaster.

Few other artifacts were recovered that would aid in dating the site. The most interesting specimens are shown in Figure 54. The wineglass stem is of the "air twist" form, which Noel Hume (1969:193) does not consider to have been introduced before 1725 at the earliest. No information is available to help date the other pieces with any accuracy.

The spatial distribution of all artifacts assignable to the colonial period, collected within the grid, is shown in Figure 55. Only one cluster is obvious, near the north, or 0L0, corner of the survey area. Due in part to the 15-meter grid scale, and in part to the generally small quantity of artifacts, no "fine tuning" of the spatial patterns is evident. Two small rises in frequencies, at 15L90 and 45L135, are due to high counts in single squares, and may not have any particular significance. The main concentration, with its center at 15L30, corresponds to the concentration of brick rubble, which was noted in the field but not collected.

Several artifact categories were plotted in search of possible variations in the distributions. Small sample sizes make interpretations somewhat tentative, but certain suggestions are possible. The ceramics (Figure 56) clearly are the major component of the "total" distribution, except that the high count in 45L135 is not due to ceramics. That high, as it happens, is due chiefly to black glass (Figure 57). In fact, the 45L135 unit holds the highest frequency of bottle glass in the entire grid. At least two vessels are represented, since a round basal kick and a flat case bottle fragment are included. The sample of

pipe fragments (Figure 58) in this area is too small to interpret with confidence. The sample of architectural materials (Figure 59) is also very small, but half of the specimens are in the area of grid unit 45L135, while the other half are quite scattered. It is possible that an outbuilding stood in this area.

Counts in the possible "peak" at 15L90 are equally small, especially since this unit is close enough to the main concentration to contain some scatter. A glance at Table 14, though, shows that coarse ceramics make up the major part of this high count, and that at least three vessels--a North Devon gravel-tempered, a black-glazed and a brown-glazed red earthenware vessel-- are represented. The center of this square is 40 meters from the peak of the main concentration, a goodly distance for a turn-of-the-eighteenth-century building (especially recalling that the requirement for lot owners in towns was a building 20 by 20 feet square [e.g., Maryland Archives 27:1637, "besides Shedd's"]). It seems unlikely that any materials at 15L90 would be from a deposit at the door of a structure at 15L30. Although the sherds are not large enough to extrapolate vessel shape with any confidence, Deetz (1977:53-55) notes that a large percentage of seventeenth and early eighteenth-century ceramics, particularly of lead-glazed coarse wares, served household dairying needs. Again very tentatively, it may be suggested that this small peak represents an outbuilding connected to dairying. It is interesting that the distribution of "miscellaneous" materials (Figure 60) shows that 15L105 is one of only two squares with more than a single object of this category. One of these specimens is an oddly shaped piece of band iron, which could be part of a door latch, possibly from the postulated outbuilding.

The main concentration is evidently the most important, assuming not the only, structure represented in the collection. As noted above, the ceramics are the main component of this cluster. The distribution of bottle glass contrasts markedly, but the pipestems, though somewhat scattered, fall chiefly within the area. Only a chip of a gunflint, among either the architectural or the miscel-

DONCASTER TA30
TOTAL ARTIFACTS (COLONIAL)

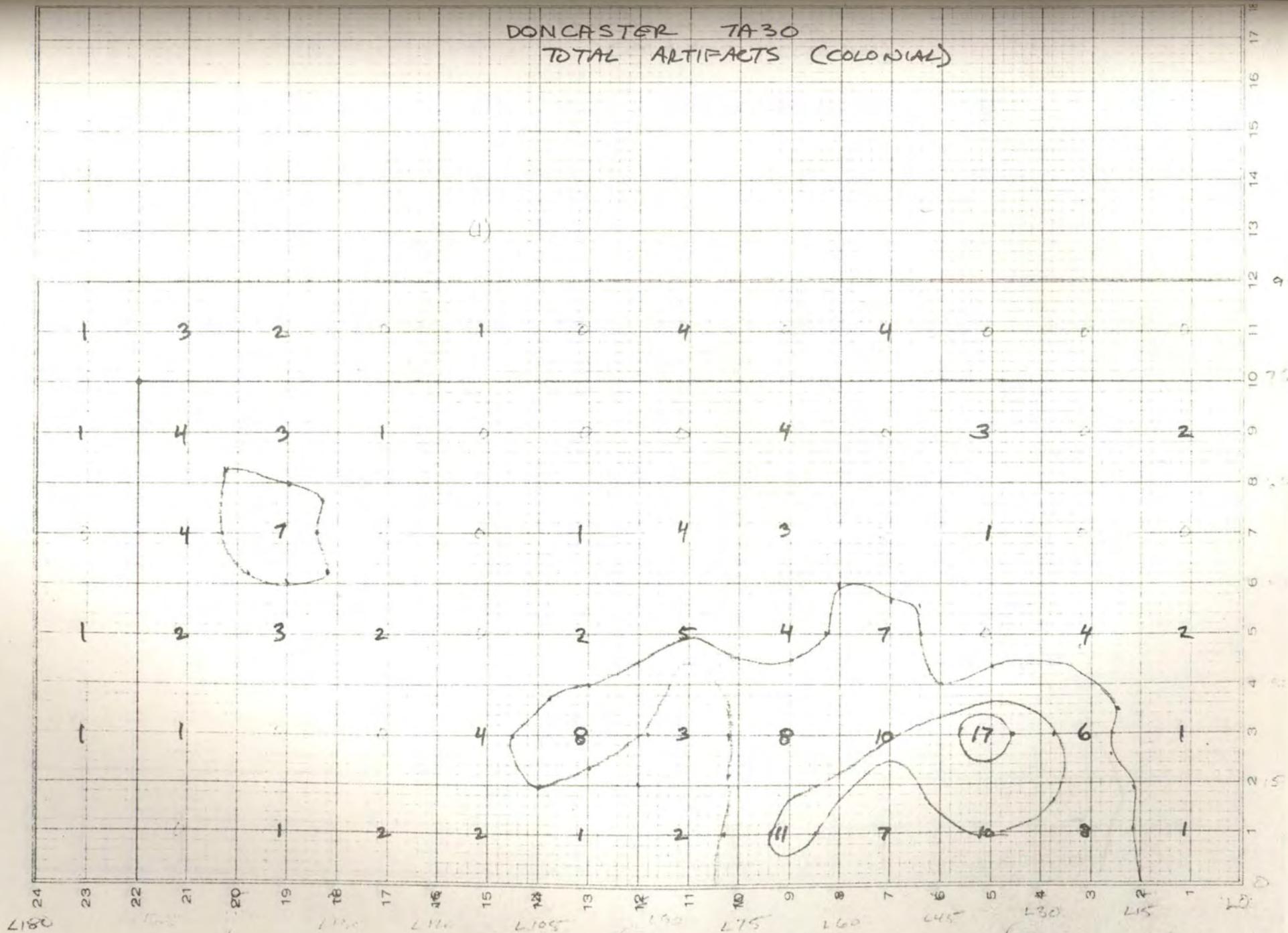


FIGURE 55.

DONCASTER TA 30
CERAMICS (COLONIAL)

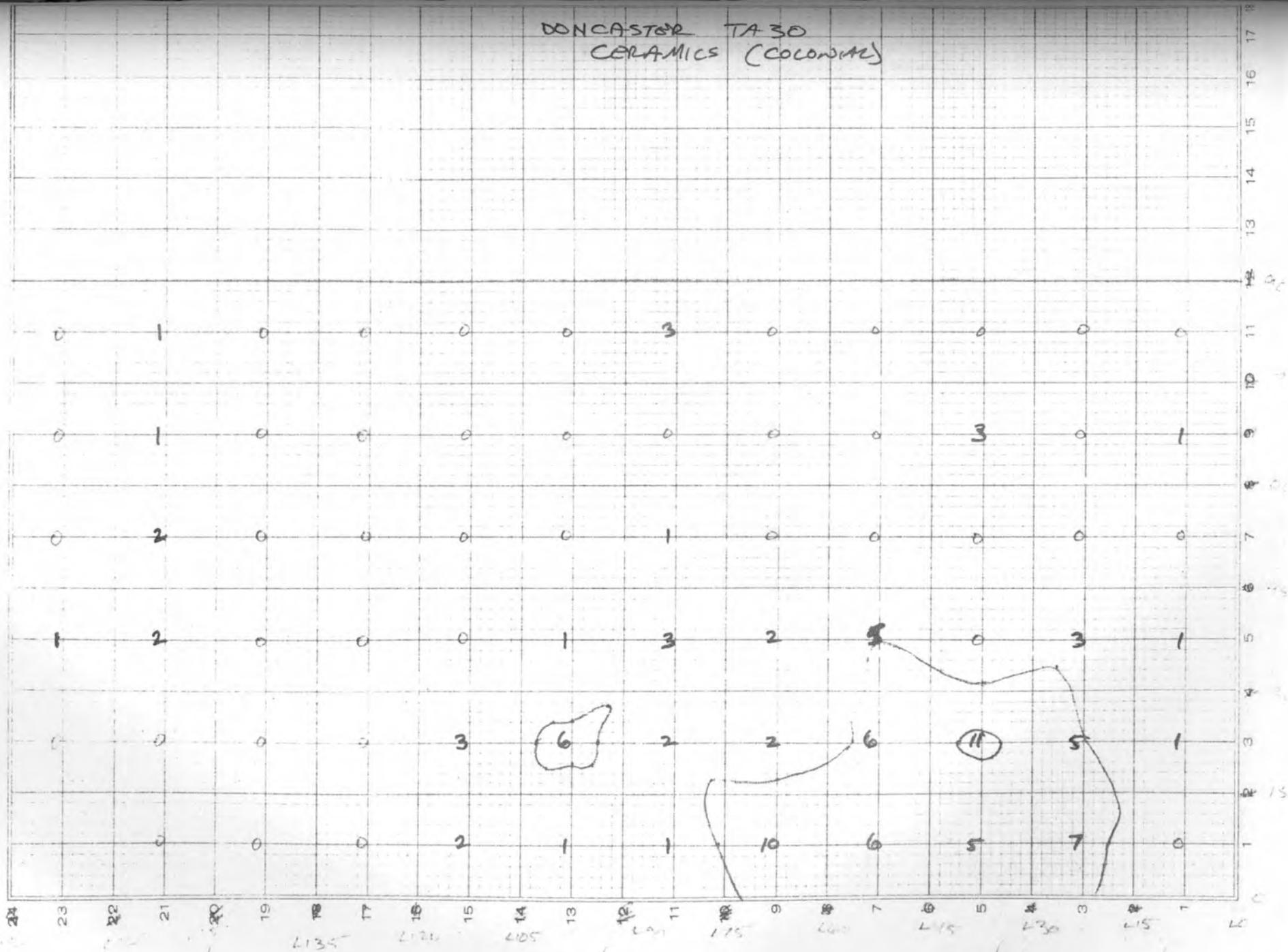
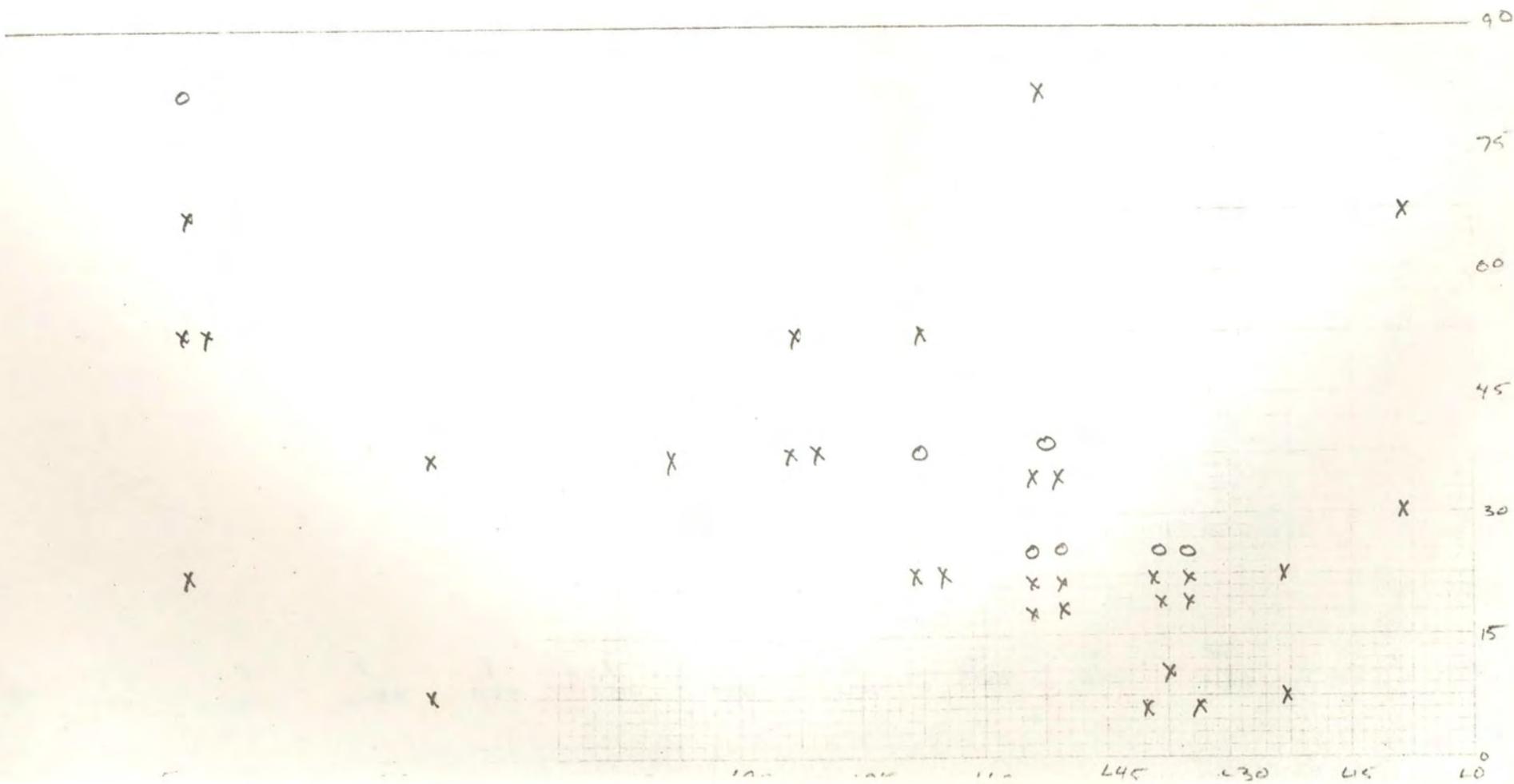


FIGURE 56

DONCASTER TA 30

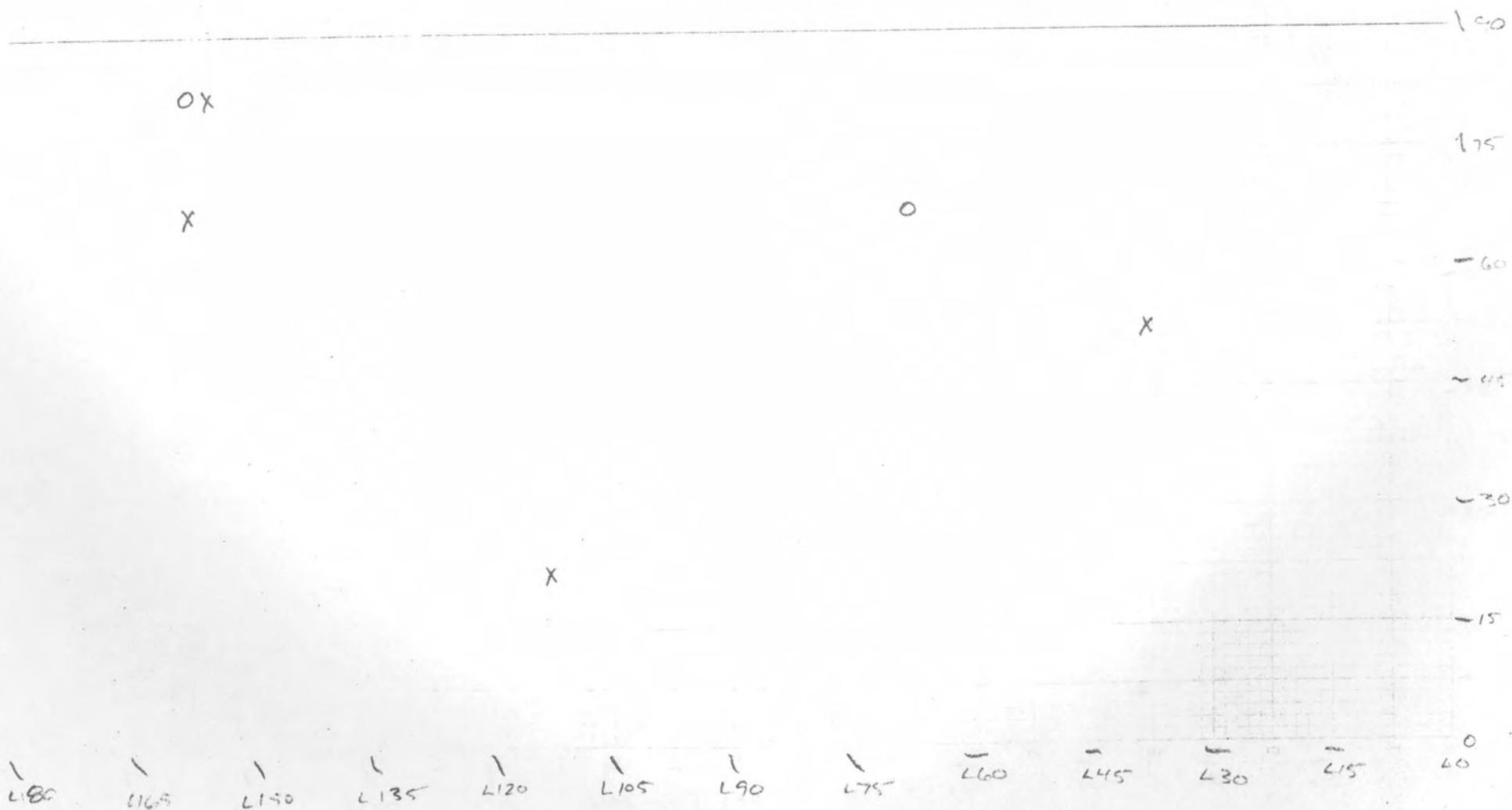
X PIPE

O ALUMINUM (TO BE DELETED FROM THE FIGURE)



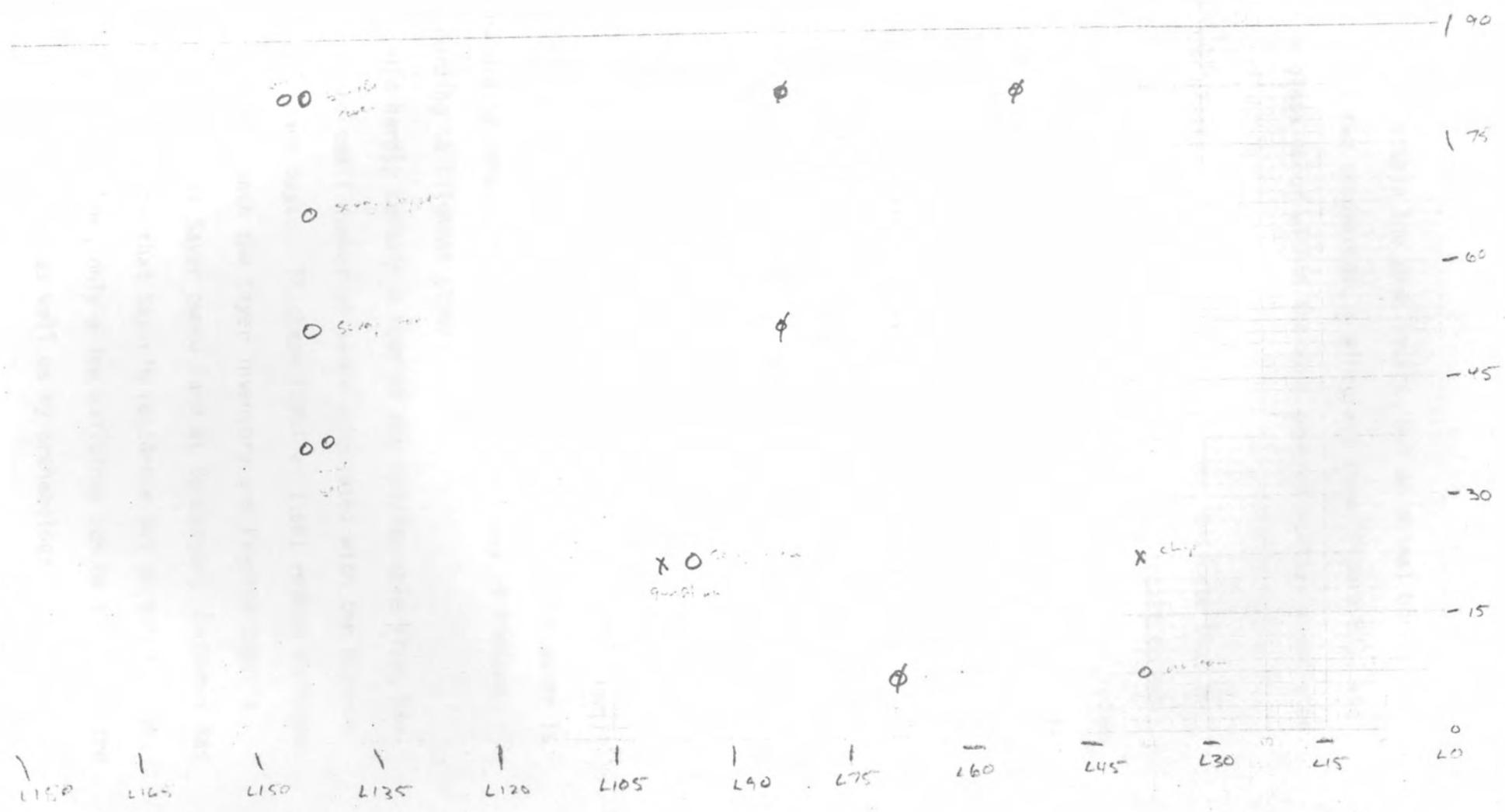
DONCASTER TA30

X nail O window glass



DONCASTER TA30

x Flint φ bone O other



laneous materials, also falls within the peak square, but an animal bone, a chunk of mortar (one of only two recovered), a wineglass stem (Figure 57), and several sherds of bottle glass occur within the more general scatter associated with the peak square.

These data, plus the cluster of brick in the same area, indicate that a structure stood in the vicinity of unit 15L30, and it is not difficult to interpret as a dwelling. The relatively small quantity of artifacts is consistent with a house of the turn of the eighteenth century, but the diversity among so small a sample clearly suggests a domestic structure.

The data do not, however, indicate a town site. Only one structure of any importance, with two possible outbuildings, is discernable. The collection suggests the manor house of a middling plantation more than a town.

At the time of the original recording of the site, the plowed area was larger than it was when inspected for this project, extending northward and much closer to the shore of Shaw Bay and the silted channel. The main concentration of artifacts, which served to identify the site, may actually have been within the formerly plowed area now covered with grass (Wayne Clark, personal communication). It is thus possible that the main portion of the town of Doncaster is within the uncollected grassy area. This would include the area of Richard Bruff's warehouse, according to Tilghman (1967).

The grassy area could hardly contain a town of any considerable size, however. This fact recalls the small number of names associated with the history of the town: Crouch, Bruff, and Sayer. Tilghman (1967 v. 1:66) refers to Sayer as a resident of Doncaster, and both the Sayer inventory and Frances Sayer's will (chapter 3) make it clear that Sayer owned land at Doncaster. Evidence has already been presented that suggests that Sayer's residence was across the Wye, on Bennett's Point. At the same time, only a few buildings can be placed at the town site from the historical records, as well as by archaeology.

Preliminary conclusions

The overall impression of this investigator is that Doncaster was essentially a Bruff "company town," and comprised little more than the Bruff plantation. The name "Doncaster" may have referred to a loose enough area that Sayer's plantation at Bennett's Point could be considered part of the town, for the legal purposes of bringing trade "only to those Ports or Towns" specified in the Town Acts (Maryland Archives 27:163). The plantation of so wealthy a man as Sayer would have competed effectively as a wharf with the erstwhile Bruff town, stunting the growth of the latter and thus the hoped-for profits would accrue to its proprietors in land sales, warehouse and inn fees. The Bruffs, in sum, may have been a very frustrated family.

Much further research, both documentary and archaeological, must be completed before such an interpretation can be substantiated. Historical information is needed to create a more complete understanding of the functions and importance of the town. Intensive archaeological investigation, perhaps including test excavation, would add valuable data. It is possible, for instance, that the town was more extensive than was indicated by this survey, with improved lots to the east on Shaw Bay or to the west where erosion might have destroyed the sites. Comparison of the modern land outline (Figure 50) and the 1695 plat (Figure 51), though, suggests that the major impact of erosion has taken place at the point below Chapel Cove, rather than farther up toward the town point. Local residents remember a brick foundation, thought to have been that of the chapel, that has been lost into the waters of Eastern Bay (Father Edward Carley, personal communication).

At present, the artifactual material and its limited spatial extent indicate a plantation or small hamlet of the turn of the eighteenth century, probably occupied until about 1730 or shortly thereafter. These data support an identification of the site as the town of Doncaster, and of the town of Doncaster as a

center of very limited activity.

Carvel site, 18Qu206

Setting

The Carvel site is on the eastern side of Kent Island, a low, flat peninsula cut off from the mainland of the Delmarva by a narrow channel bordered by marshes. The site is near the south end of the island (Figure 61), in a field next to Eastern Bay and an unnamed, silted inlet, now a marshy pond. The entire southern part of the island lies below the 20-foot contour, although much of the heavily eroded shoreline drops sharply as far as 10 feet to the level of the water. Local variations in relief are slight, but the Carvel site is on a swale and is thus in one of the best drained locations in its immediate area.

Historical background

A discussion of the earliest settlement of Kent Island will be included in a later section of this chapter. As will be seen, the artifact dates from this site make it unlikely to belong to the first wave of settlement, circa 1630 and thereafter. Since the site appears to be located well away from any center of activity, no secondary sources refer to its locality. Only a deed search of the property will provide information that might identify the occupants, a project that has not been attempted.

Survey and analysis

This site was located during a reconnaissance of lower Kent Island sponsored by the Kent Island Heritage Association. During surface inspection of the field, the surveyors noticed a concentration of brick and oyster shell in the northwest corner of the plowed field, directly south of the silted inlet (Figure 61). A small collection of artifacts was recovered, but surface visibility was poor due

to weed and corn stubble.

The survey party returned after the site was plowed, and conducted a controlled surface collection over the area of the concentration. An arbitrary OR0 point was established in what appeared to be the southwest fringe of the cluster. The RO base line ran roughly southwest to northeast, following the plow rows (Figures 62, 63). This site was the last to be surveyed by controlled provenience, and in an effort to improve the resolution of potential spatial patterning, the unit was reduced to 10 meters. An initial grid was established in a rectangle of eight units along the OR line and six units wide, after which two more rows were added to the west. Brick and shell were not collected due to their quantity.

Table 16 lists the materials recovered from the site. A quick overview reveals a striking paucity of artifacts, even compared to the site at Doncaster. Yet, to judge by the frequency of creamware and the presence of white saltglaze, this site was occupied during the third quarter of the eighteenth century, considerably later than the dwelling at Doncaster.

Only one sherd of pearlware and four sherds of whiteware are included in the assemblage. The relative lack of pearlware suggests that the major occupation ended by the end of the eighteenth century, and that the whiteware is intrusive into the collection. For this reason (and also spatial indications, below), whiteware was not included in the computation of the mean ceramic date (Table 17), which comes to 1751.63. The pipestem date, however, is considerably earlier at 1705.02. The only wine bottle base that was complete enough to measure had a very shallow kick, and resembles most closely several illustrated by Noel Hume (1969:65) and attributed to the 1730's. A second- and third-quarter eighteenth-century occupation may be assigned to this site, with the pipestem date remaining an anomaly.

Figure 64 displays the spatial distribution of the artifacts recovered by the controlled survey (except for the few pieces of brick and the slag). A peak

Table 17. Computed dates for the Carvel site.

Total surface, ceramics*	1751.63	sample 49
Total surface, pipestems	1705.02	14
Structure, ceramics	1755.77	22
Structure, pipestems	1702.29	3

* less whiteware.

in frequency is quite evident in unit 20L0. This area was noticed in the field as containing a higher proportion of tablewares--creamware, porcelain, white salt-glaze-- than the rest of the grid, but the relative concentration of materials was not fully appreciated until the analysis.

An irregular area of relative artifact frequency occurs just east of the main cluster, extending off to the northeast. A concentration of bricks at the edge of the field to the northeast of the grid was noted during the survey, but as no materials other than brick were found, it was not tied into the grid. Possibly the extension of the secondary concentration within the grid points to the outlying brick patch, indicating a well-used pathway toward an outbuilding.

Several artifact categories were plotted separately: ceramics (Figure 65), bottle glass (Figure 66), pipestems and window glass (Figure 67), and miscellaneous (Figure 68), which latter group includes only one nail, three gunflints or fragments (one), and four pieces of animal bone. The ceramics concentrate to some extent in the 20L0 area, with a small local peak at 10R10. The assemblage from the latter unit includes at least three vessels, but no other materials, leaving the significance of this "peak" rather enigmatic. Whiteware is not included in the frequency counts in Figure 65, but is marked by x's. The whiteware sherds do not concentrate near the 20L0 "hot spot," which is the second reason why it was not included in the mean ceramic date.

Bottle glass (Figure 66) also shows a primary concentration in 20L0, with a secondary peak in the "pathway" area. Pipestems (Figure 67) tend to scatter more along the "pathway" than to cluster around 20L0. Window glass, though not tightly clustered, does fall mainly in the area of the primary concentration, indicating that the peak does represent a structure. The single nail (Figure 68) also occurs in the peak square, which is a nice correlation. Animal bone and gunflints, however, fall more to the northeast. It would be difficult to argue for a direct connection between guns and bones, but the tendency of these two groups plus pipestems and, to

TOTAL ARTIFACTS (HISTORIC)

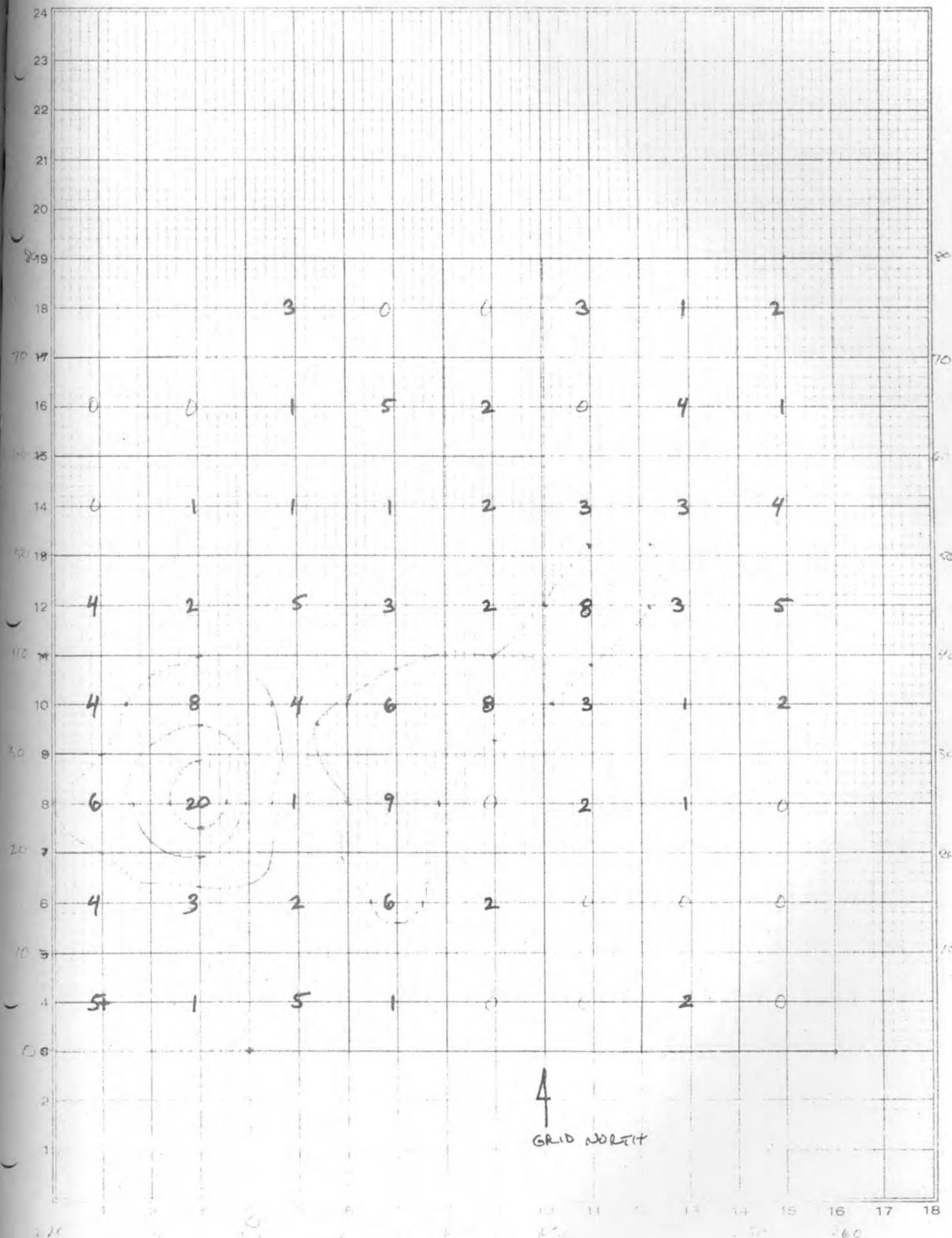


FIGURE 64.

CERAMICS (less white ware)

X white ware

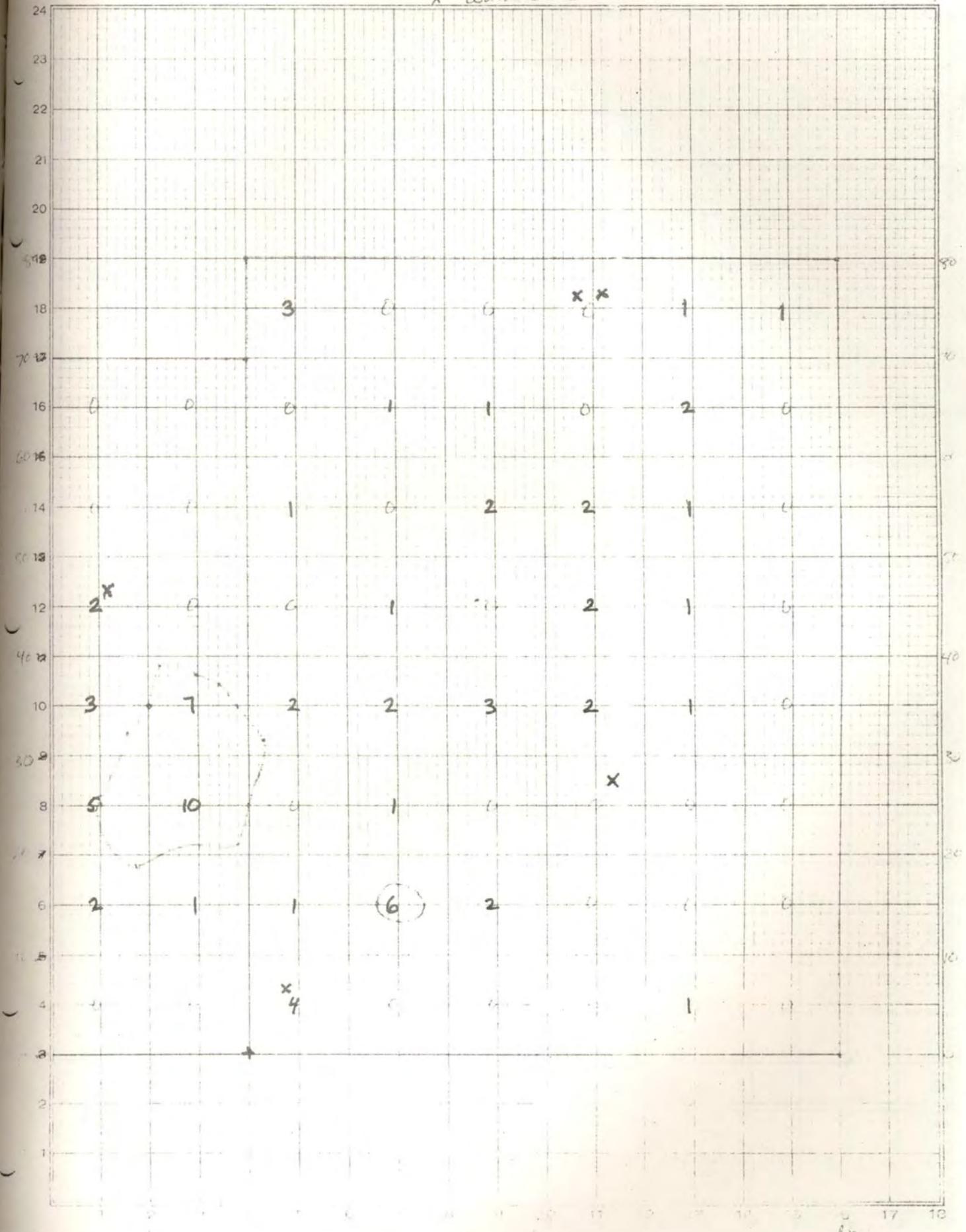


FIGURE 65

BOTTLE GLASS

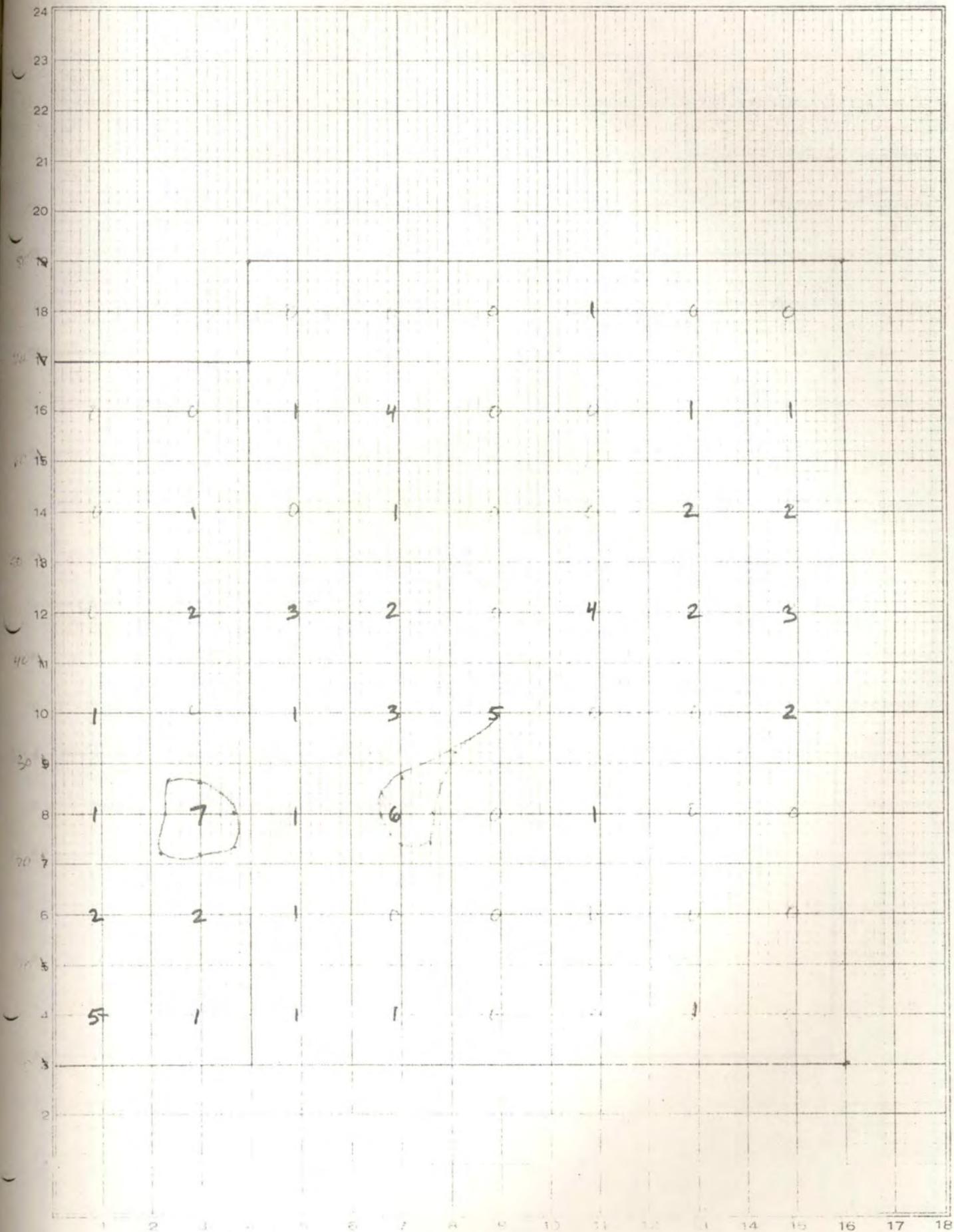


FIGURE 66

X PIPES O WINDOW GLASS

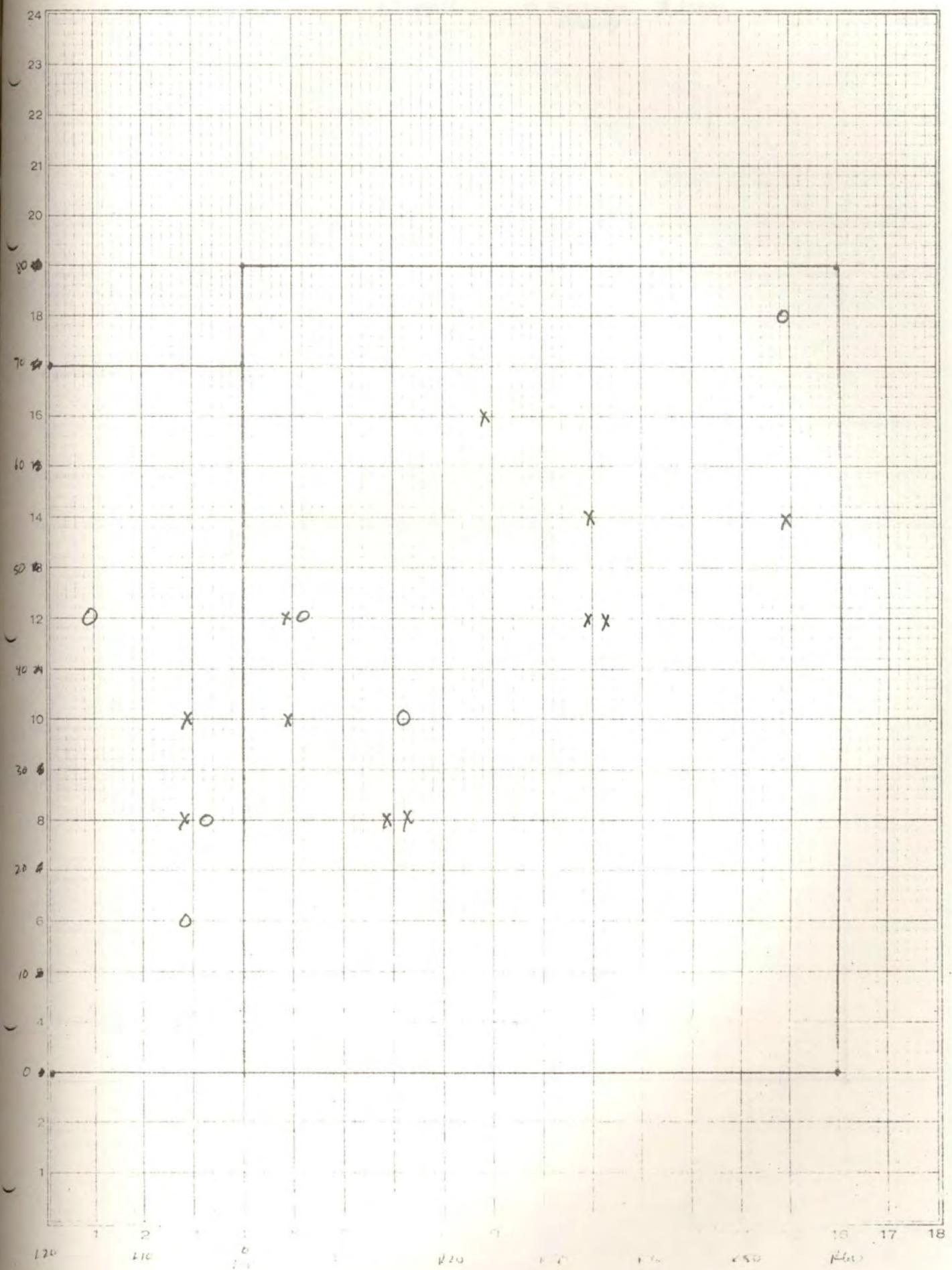


FIGURE 67

NON-CERAMIC, NON-GLASS
X = nail O = O.C.L. - ϕ 6one
(AIR)

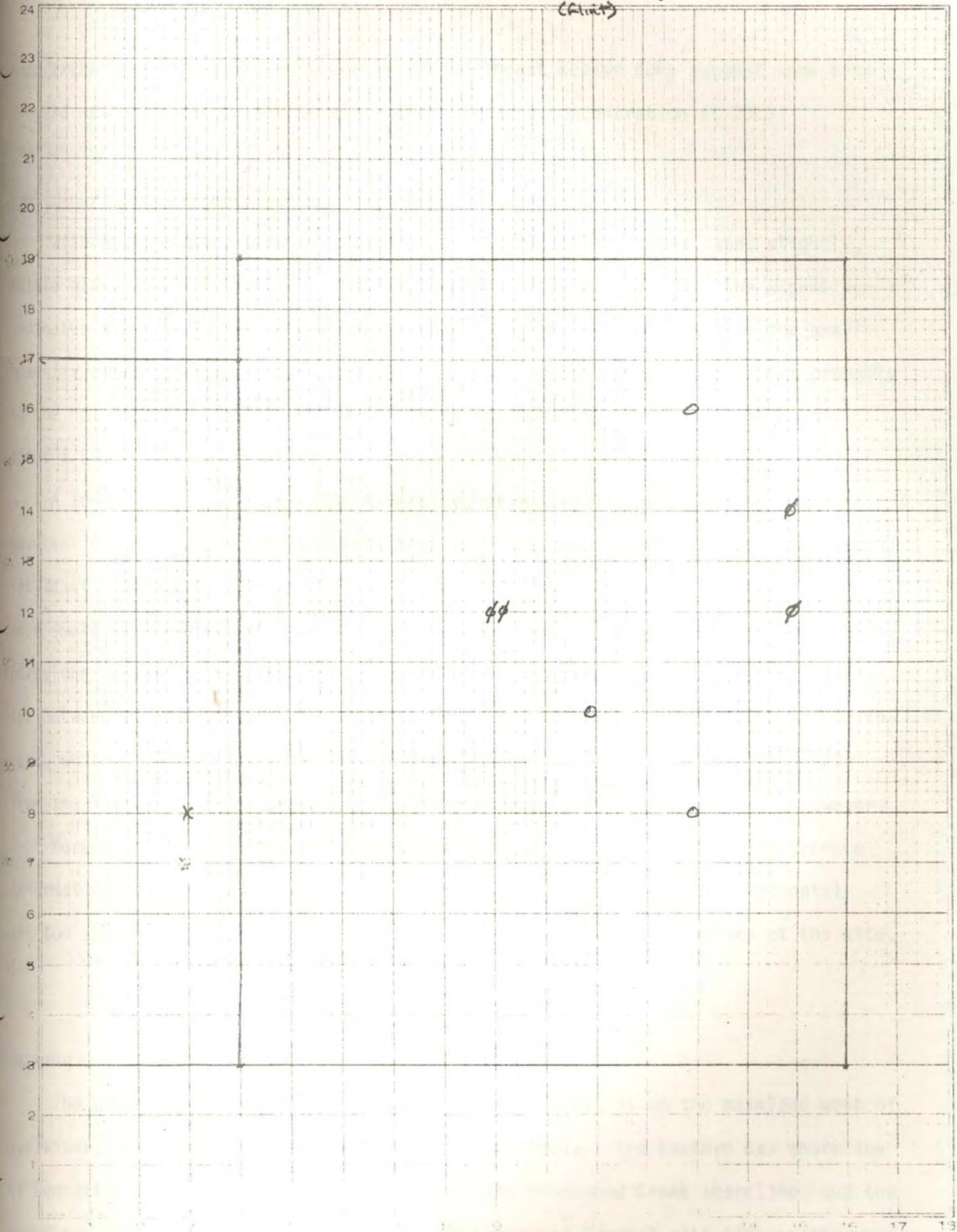


FIGURE 62.

some extent, bottle glass to occur in the northeast sector does suggest some kind of yard activity distinct from that of the primary concentration at 20L0.

Preliminary conclusions

With the concentration of ceramics, architectural materials, and, slightly, bottle glass at 20L0, this area can be interpreted as a dwelling. The assemblage indicates a second-to-third quarter eighteenth-century occupation. By the small quantity of artifacts, a fairly low level of wealth can be inferred. This probably is the home of a planter of the poorer sort or, possibly, a tenant farmer, of about 1750.

A lower density, but greater diversity, of materials toward the northeast quadrant of the survey grid suggests that this area was a yard, the scene of social (at least smoking) and practical outdoor activities. There may have been one or more small, ephemeral outbuildings in this area, but no cluster of materials supports the possibility. It is also possible that the area was conveniently situated between the house and the buildings indicated by the brick rubble to the northeast, which should in retrospect have been plotted into the grid. No artifacts from the latter area are present to confirm a postulated contemporaneity, however.

More extensive surface collection and a title search probably would produce information that would add to this interpretation. Present data, unfortunately, are too sparse to provide a more detailed reconstruction of activities at the site.

Greenwood Creek I, 18Qu207

Setting

The Greenwood Creek I site, in Queen Anne's County, is on the mainland west of Wye River, at the top of the Bennett's Point peninsula. The Eastern Bay shoreline of Bennett's Point merges imperceptibly into the Greenwood Creek shoreline, and the creek can be followed north to a fork. The Greenwood Creek I site lies on the west side of the easterly branch, near the headwaters, far enough upstream that it is

unlikely that any vessel larger than a canoe could ever have navigated so far inland. The gently rolling field in which the site is located contains one of the few small areas west of the Wye River that rises higher than 20 feet above sea level, although the site is located slightly below the 20-foot contour. The area is well drained.

Historical background

The Greenwood Creek I site, first recorded by this survey, was investigated as a result of the interest of local historians. The house was removed from this site circa 1940, and placed in nearby Queenstown, Maryland (Figure 71). The agreement to move the house included removal of the brick foundation to a depth of 24 inches, which undoubtedly disturbed some archaeological deposits. The house originally faced the road just to the south, and barns and a dairy once stood to the west (William Willis, personal communication).

The property on which the house was built was part of a tract called Sayer's Forest, owned by the same Peter Sayer who has been mentioned previously. The structure was thought to have been built by Sayer as a wedding gift to his nephew, Charles Blake, when the property was deeded to the latter circa 1699 (Father Edward Carley, personal communication). The site thus held the potential for comparative data in the same time range as other sites considered by this project.

A residence is marked on this site in the 1877 Atlas of the Eastern Shore (1876), labelled "R. S. Bryan Res." The Bryan cemetery occupies a small wooded area directly across the road from the site.

Survey and analysis

The site was easily located in the field due to a dark stain in the plowzone, pictured in Figure 72. A heavy concentration of historic artifacts, particularly brick, coincided with the stain. A 15-meter grid was established with the ORO datum in the southwest corner of the field, and the RO baseline ran west along the road-

side edge of the field, parallel to the plow rows. The grid extended eight squares to the west and seven to the north, to capture and center the soil stain. A walk-over of the rest of the field after the grid was collected revealed no further stains or quantities of artifacts, and the survey was then terminated. Because of the tremendous quantities involved, brick and oyster shell were not collected.

The materials recovered from Greenwood Creek I are reported in Table 18. The total number of artifacts, in comparison even to the excavated Bennett's Point collection, is staggering, and reveals the increase of material goods associated with houses of the nineteenth and twentieth centuries. The relative cheapness, due to mass production, of glass and ceramics is quite evident in the high frequency of whiteware and bottle glass. Architectural materials, particularly window glass, are also well represented.

The small numbers of pipestems, black glass sherds, and especially pre-whiteware ceramics, including pearlware, indicate a predominantly post-1820 occupation. The lack of pipestems, in particular, argues against a construction date in the 1690's. The mean ceramic date of 1852.9 only reiterates the predominance of whiteware in the assemblage. (This date, by habit, employs the 1771 median for creamware. The more general creamware median, 1791, results in a mean date of 1853.64.)

The pipestem date, however, is 1731.72. Whether so few pipestems indicate an early eighteenth-century occupation of short duration, or simply general scatter from occasional land use by Blake's field hands (for instance), is not immediately apparent. A closer look at the ceramic counts does not indicate an early occupation. In spite of the fact that two sherds of early slipware, interpreted as North Devon sgraffito (Noel Hume 1969:104), only three sherds of white saltglazed stoneware-- one a dipped white saltglaze over a grey body-- suggest any early to mid-eighteenth-century activity. The lack of the storage wares which made up significant portions of the early eighteenth-century assemblages, including Rhenish grey stoneware, English brown stonewares, and North Devon gravel-tempered earthenware, also argues

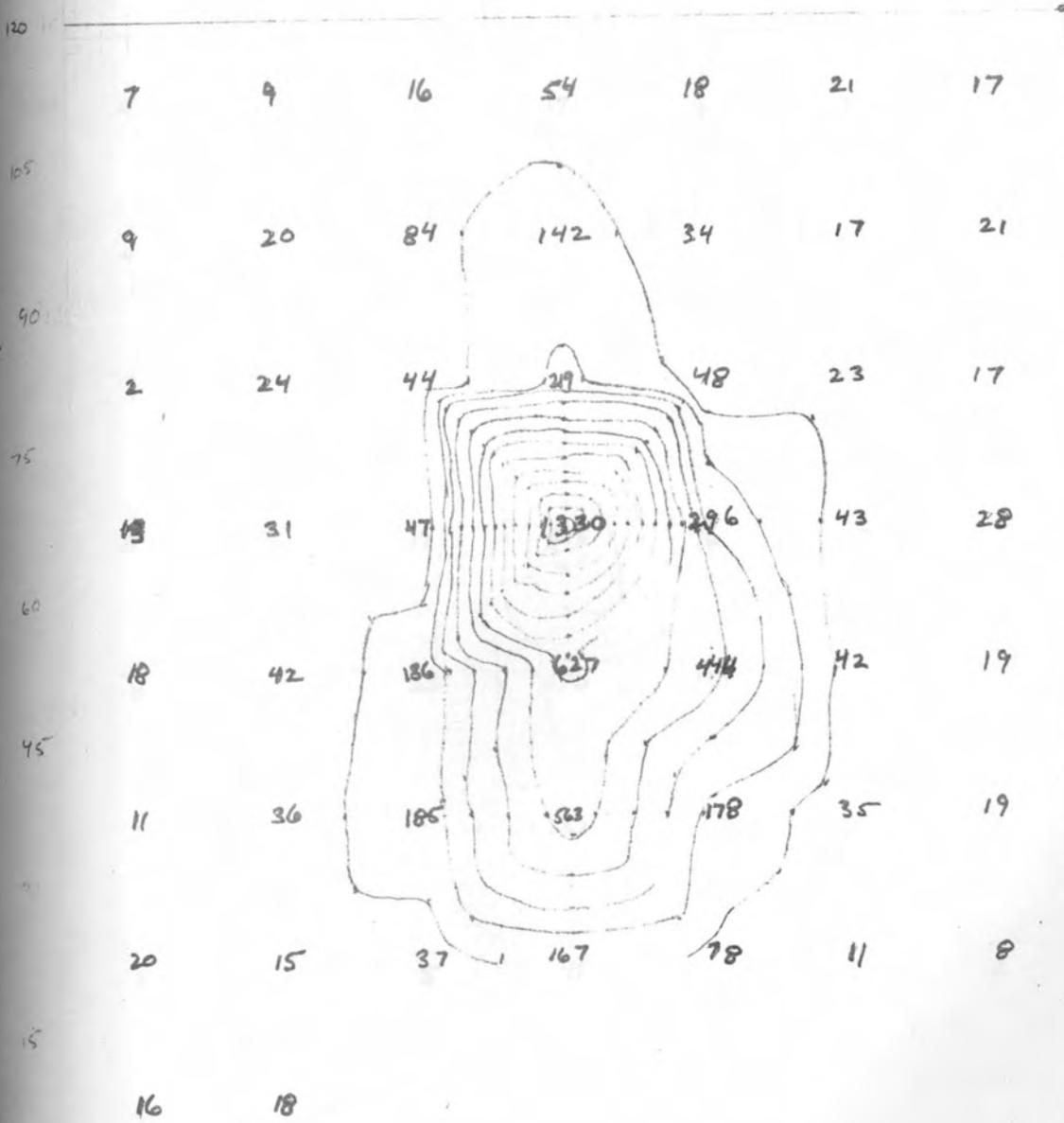
against an early date for the site.

Spatial data, however, raise the question once again. Figure 72 displays the distribution of the artifact totals, less the few bricks that happened to be collected (note: squares OR30-90 disappear due to the contour of the edge of the field). The massive concentration of artifacts has its center in 60R45, and coincides with the soil stain. Whitewares (Figure 73) quite evidently are the main component of this pattern. Pre-whiteware fine ceramics, however, including pearlware, are distributed in a markedly different pattern (Figure 74). Approximately equal peaks at 45R15 and at 45R60, and a noticeable decline in the peak whiteware square, show a definite disparity with the whiteware and total artifact distributions. Black glass and ball clay pipestems, however, agree more with the total and whiteware charts (Figure 75).

Referring back to Table 18, the major component of the peak at 45R15 is creamware, and the same is true of 45R60. Pearlware evidently does not show the same concentrations, nor do the other eighteenth-century wares co-occur. The distribution of creamware is an anomaly, which may represent a happenstance of grid placement, a random occurrence, or even a pair of late-1760's picnics. It does not seem to indicate a substantial occupation previous to circa 1800.

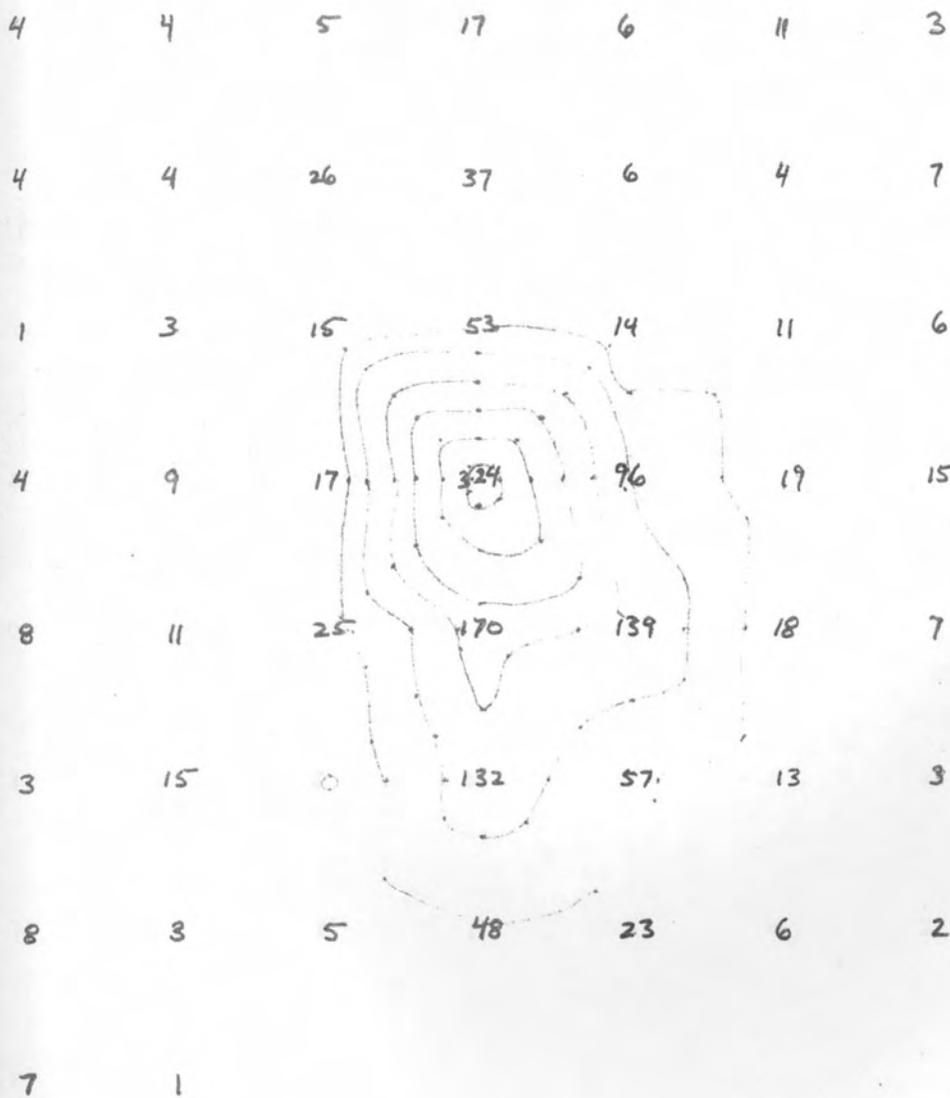
A few more distributions, those of coarse ceramics (Figure 76), non-black bottle glass (Figure 77), window glass (Figure 78), and nails and spikes (Figure 79), merely reiterate the primary pattern of concentration. Figure 80 is a somewhat confusing attempt at a different method of display, intended to distinguish among a few broad varieties of "miscellaneous." The general elongation of the central concentration, following the directions of plowing and downward slope as well as the length of the house, show up clearly. The front yard (the central R30 row) also seems to be characterized by a high frequency of miscellaneous artifacts, compared to the rest of the grid. The distribution of horseshoes, sparse as it is, suggests at most that horses were not allowed in the house. A few of these "miscellaneous" specimens are

GREENWOOD CREEK Z
 TOTALS (less Wick, mount)



GREENWOOD CREEK I

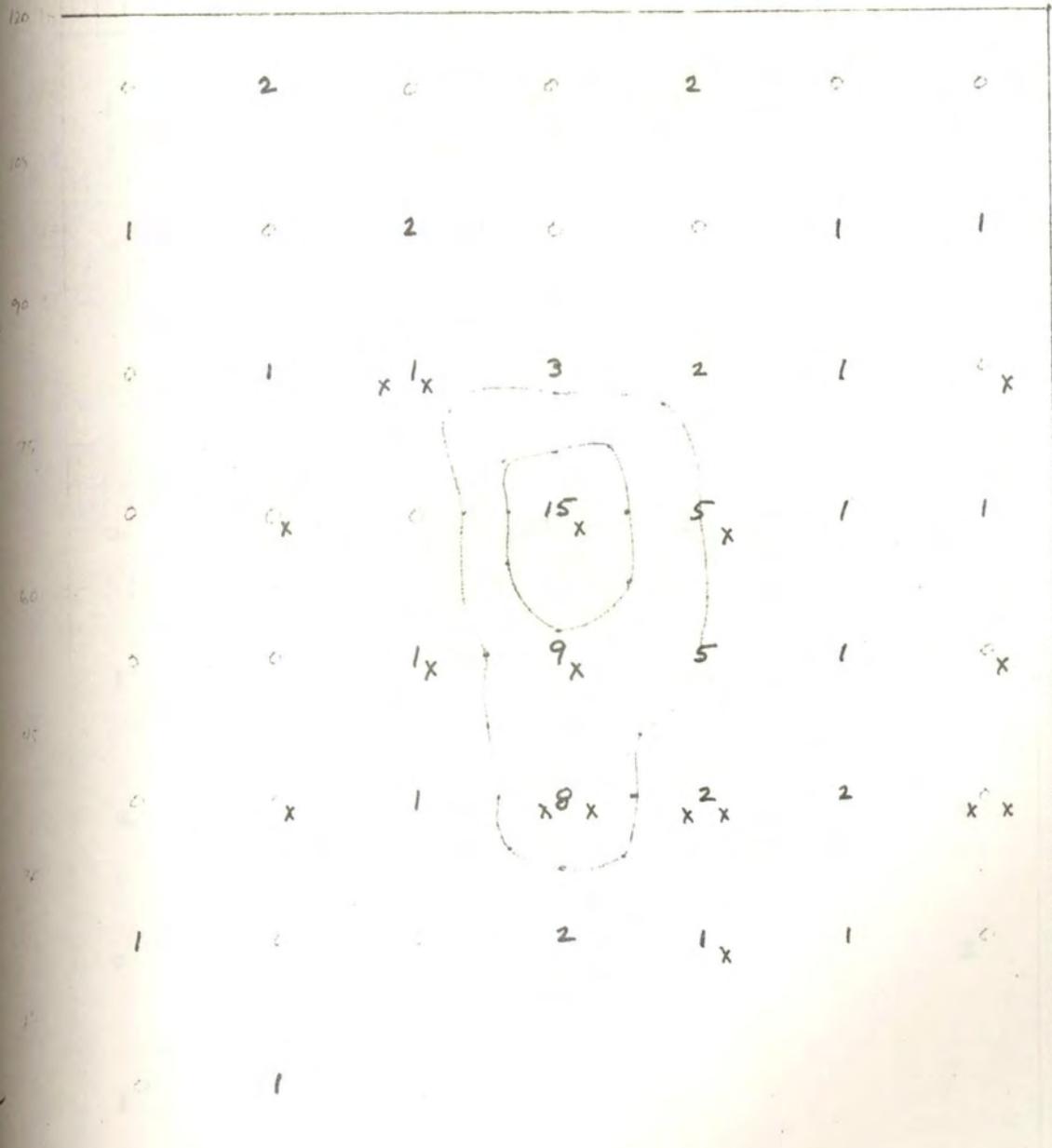
WITTEWARE



GREENWOOD CROSS I

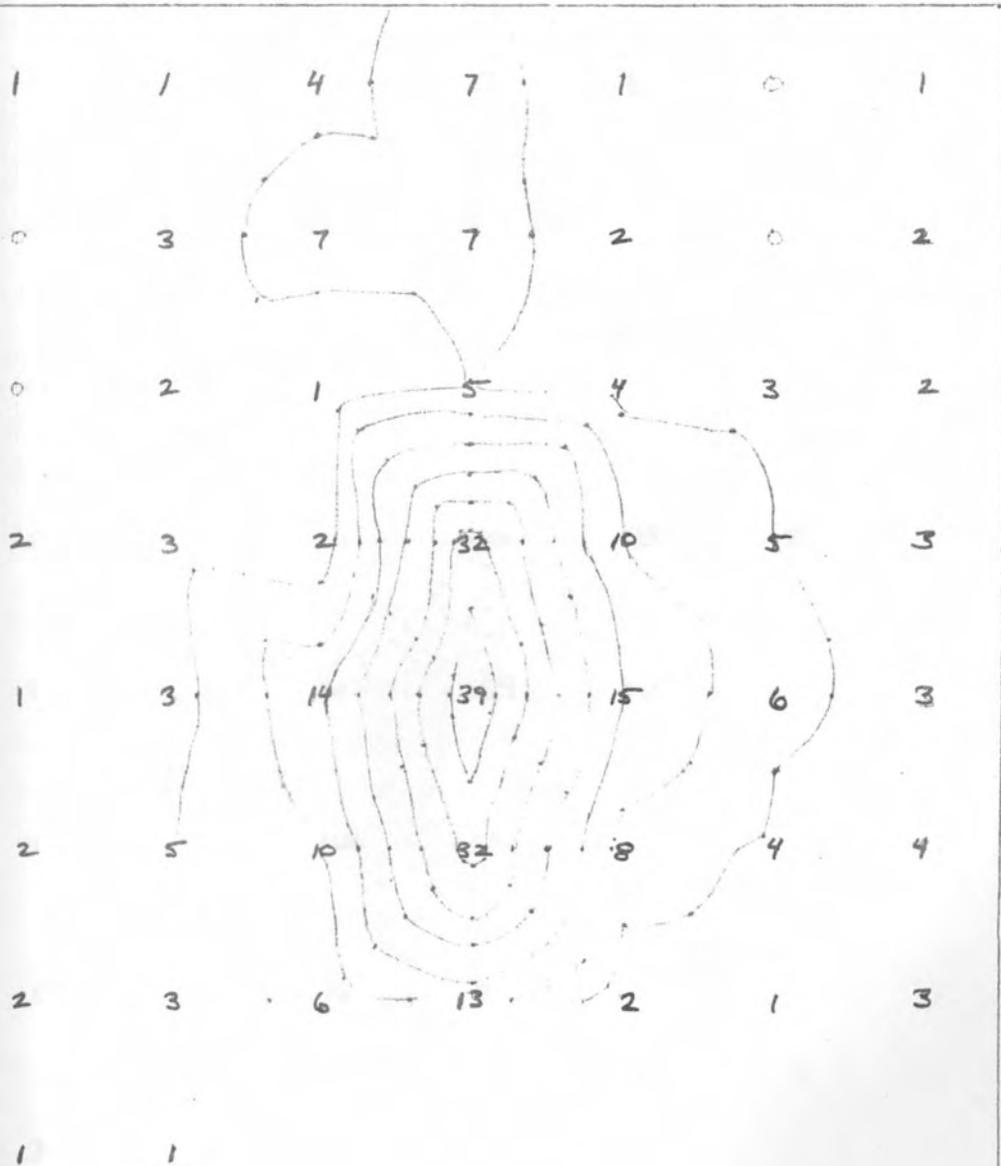
BLACK GLASS

x pipes ^{frags} (white clay)



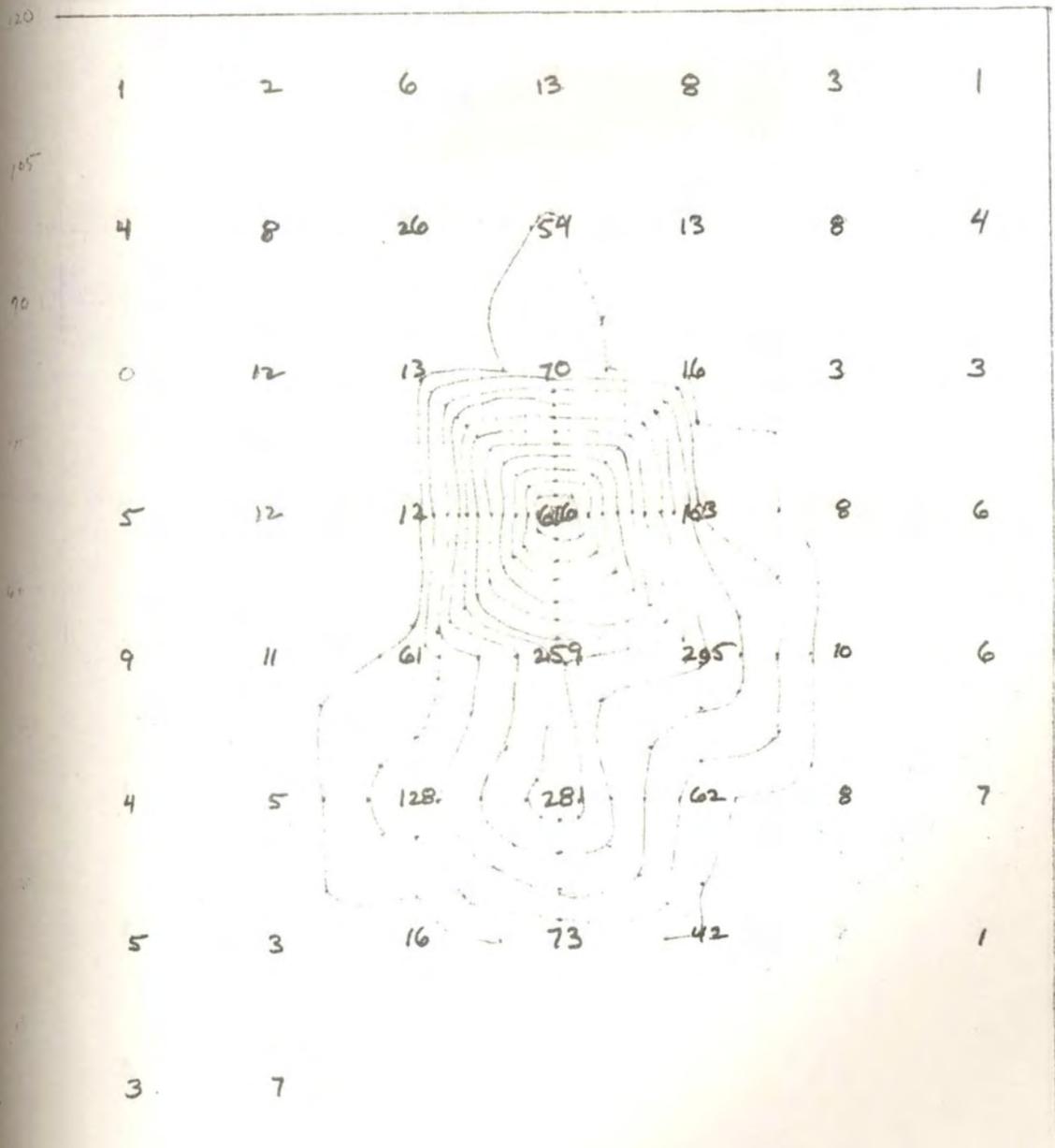
GREENWOOD CREEK I

COARSE WARES (S, M-O, R, SHALLOWES, S)



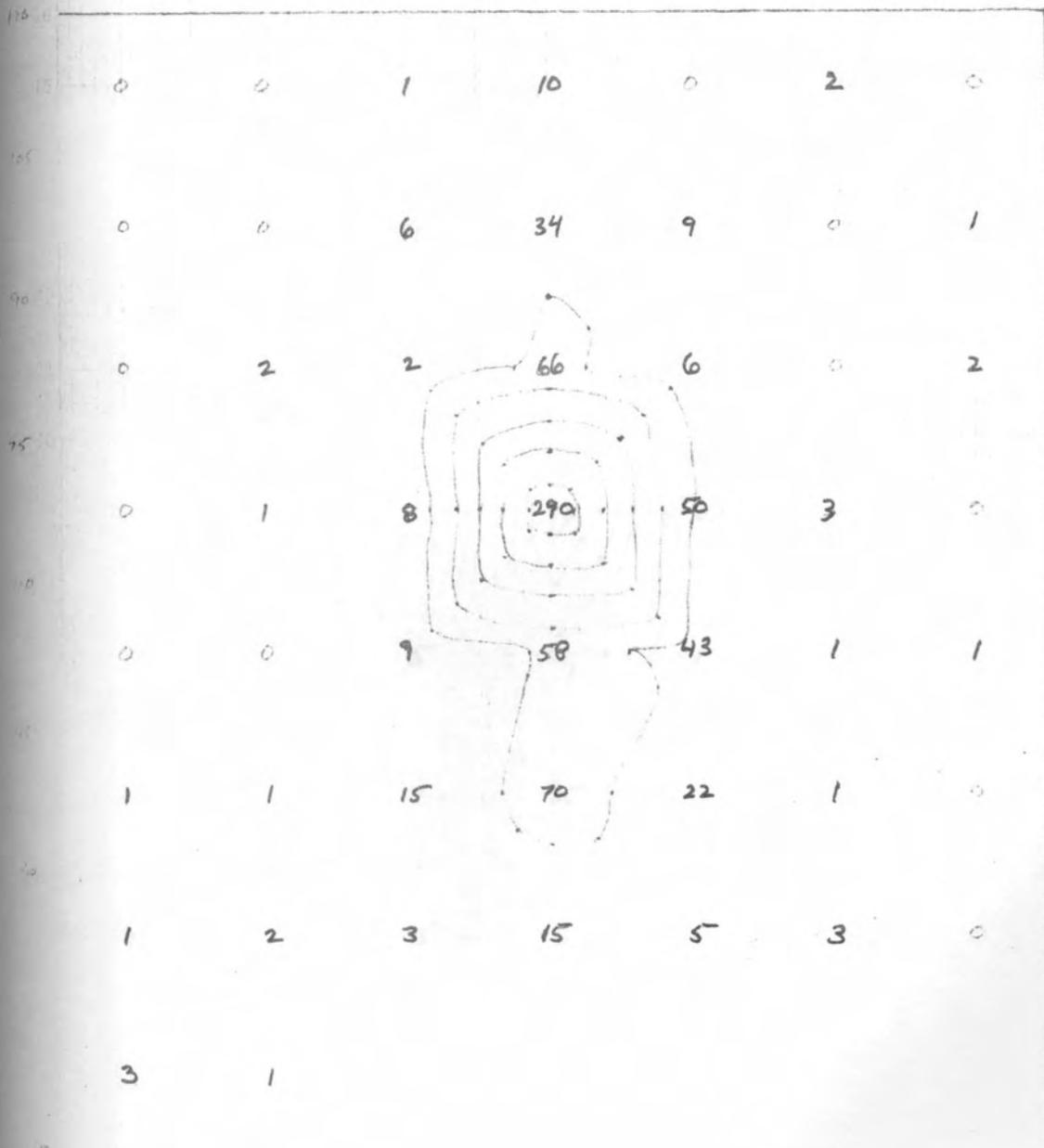
GREENWOOD CREEK I

GLASS (W-X) [cont 2: U-BB]



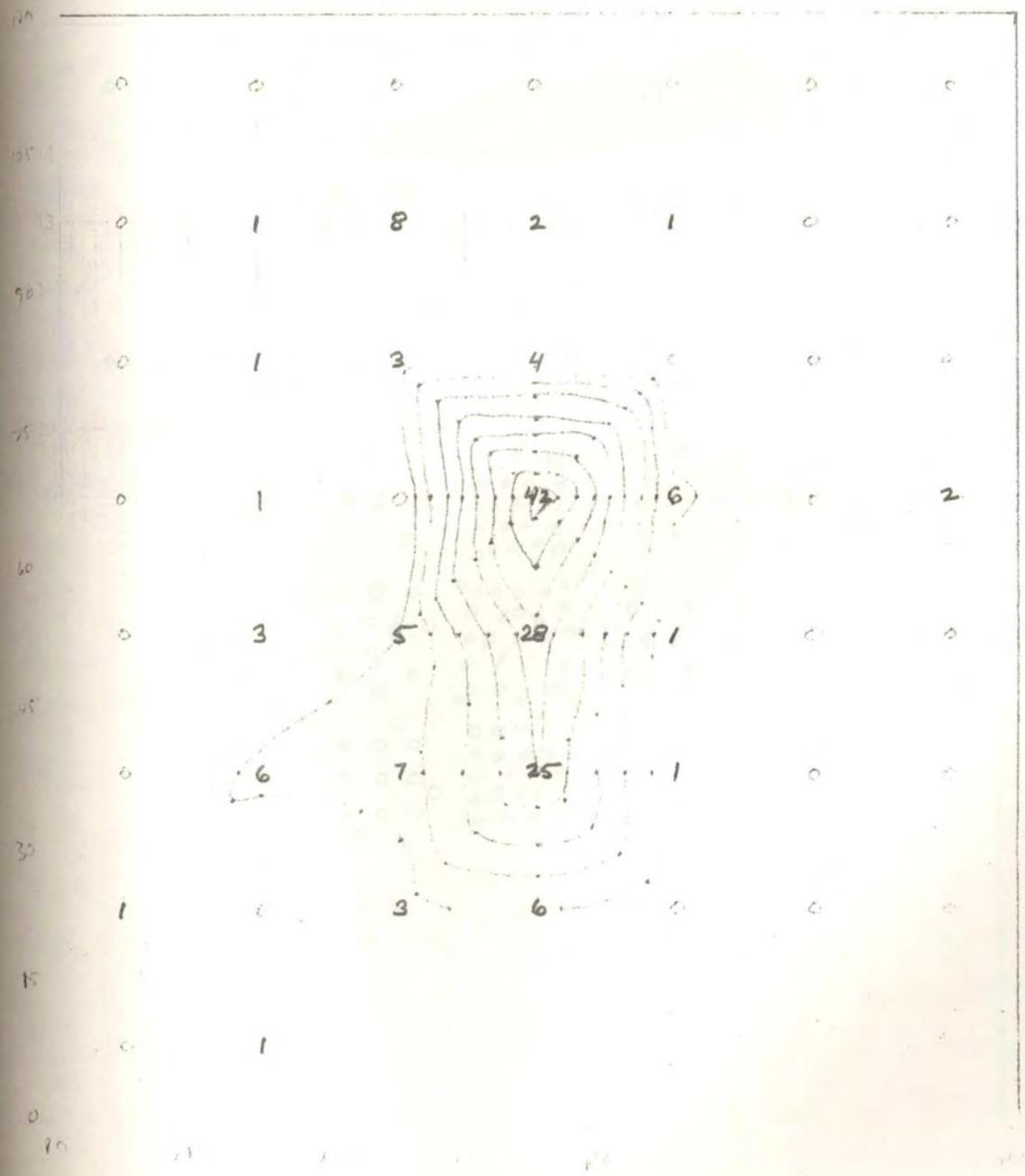
Greenwood Close Z

Window GCAS



GREENWOOD CLARK I

NAILS & SPIKES



shown in Figure 81.

Ceramics will be discussed further in inter-site comparisons, chapter 6, but several marks should be noted here. Two manufacturer's marks can be identified with some confidence by reference to the Kovels' (1953) Dictionary. Both are somewhat fragmentary. The more clearly identifiable is the D. F. Haynes and Company, white granite, Baltimore, with an eagle inside a circle. The Kovels (1953:168) state that this company was established in 1879. The Greenwood Creek specimen was found in unit 75R45. Less certainly identified is a corner of a crown inside a wreath, which resembles the Bennett Pottery Company mark (Kovel 1953:205). This Baltimore company was established in 1840, according to the Kovels (1953:205), or 1856, according to Ramsay (1947), continuing in operation until 1900. The base of the crown on the Greenwood Creek specimen, however, bears a horizontal line rather than the initials in the Kovels' example, which casts some doubt on the identification.

In this connection, it is interesting to note two more artifacts whose origins are evidently in Baltimore. A sherd of black interior, buff exterior, very fine-paste stoneware carries the stenciled letters "LTIMO" (Figure 82). A clear, slightly curved sherd of glass has the molded letters "MICK &" over "IMORE," probably McCormick & Company, Baltimore. Still another sherd of glass, this one amber, bears the molded letters "MD," presumably Maryland.

Several other ceramic marks may be identified, one positively, the other by informed guess. An "IRONSTONE CHINA" mark over paired lions belongs to the Crown Pottery of Evansville, Indiana, established in 1891 (Thorn 1947). Another mark, "DRE" inside a globe, may identify a product of the Dresden Pottery, 1875-1892, or the succeeding Potters Co-operative Company, 1892-1900, or East Liverpool, Ohio (Thorn 1947; Ramsay 1947), but no identical mark is listed in any available source.

There is also a sherd with about half a mark, which includes "ROYAL IRONS" over a crowned lion and circle, over "OHNS" and "ENG" (?). This may belong to the Johnson Brothers pottery at Hanley and Tunstall, England, established 1891 (Mankowitz and

Haggar 1957:118-119). Again, no listed mark quite matches. There is, however, a mark of the Alfred Meakin pottery of Tunstall which is identical to the Greenwood Creek I specimen except that it bears the name "ALFRED MEAKIN" where "JOHNSON" is interpreted (Thorn 1947). Finally, there is a mark of "CARROLLTON CHINA," which certainly sounds as though it should be a Maryland product, but no mention of such a mark has been found. It is evident that by the turn of the twentieth century ceramics, at least, were obtained from both local and widely-spread commercial networks.

Preliminary conclusions

This site is almost certainly the R. S. Bryan residence marked on the 1877 atlas. Bryans apparently still owned the site as of the time when the house was removed, circa 1940, but did not live there (William Willis, personal communication). The exact chain of title and of occupancy remains to be reconstructed.

A tentative construction date of the house can be suggested. It is clear that the house was not built circa 1690-1700, as county historians had hoped. The small quantities of mid-eighteenth-century wares do not indicate any early occupation, while the anomalous distribution of creamware does not encourage an argument for a third-quarter eighteenth-century house construction. Pearlware is present, but in small numbers, equal to less than 4% of the whiteware total. An initial date of 1810, probably conservatively early, can be interpreted for the occupation, and thus the construction, of the house. The circa 1940 date of removal is nicely supported by a 1930 Lincoln head penny from 45R30.

In sum, Greenwood Creek I appears to represent the dwelling of a middle class, probably farming, family or series of families of the nineteenth and early twentieth centuries. Few specific patterns of behavior can be detailed from such a surface collection, although such artifacts as toys (marbles, a doll's ear and teacup), a stub-stemmed pipe, a glass bead, two Lincoln head pennies, horseshoes and a probable

harness buckle (90R30), indicate a number of domestic activities that need little detailed comment. Marked pieces of glass and ceramics, in particular, are potentially informative in terms of economics--marketing as well as household consumption--but will require further study. Spatial distributions, in part because of the 15-meter grid, are not very informative within the site, though the secondary concentration of miscellaneous artifacts in front of the house indicates a preference for use of the front yard.

Several more general comments on patterning in the, particularly in comparison to eighteenth-century sites, will be included in chapter 6.

Tanyard Creek site, 18Qu209

Setting

This site is located in Queen Anne's County, and is the northernmost site on the Eastern Shore to be investigated by the project. The Tanyard Branch of Reed Creek, a tributary of Chester River, flows northeasterly beside the site (Figure 83). An eastward finger of a plowed field (Figure 84), the sides of which are nearly steep enough to make it a promontory over the creek, contains the site. The locality is just above the 20-foot contour line, and except for the relatively incised stream valleys, the area shows only gentle relief. It seems unlikely that Tanyard Branch was ever navigable to this point.

Historical background

This site was investigated as a candidate for the first Free School of Queen Anne's County. Although it was first recorded in the Maryland site survey files as a result of this project, local historians had known of it for some time, and had recognized its potential for representing an early colonial occupation.

Queen Anne's County was erected in 1706, from Kent and Talbot Counties (Emory 1950). The county government moved to establish a school in less than twenty years,

and by 1724 had constructed a building to house it. The land set aside for the schoolhouse and the support of the schoolmaster comprised 100 acres "situate on the south side of the main road that leads from Queenstown to Chester Mills" (in Brown 1911:2).

The first schoolmaster was one David Davis, who was appointed January 16, 1724. For his support, he would receive tuition and the produce of the land, so long as he did not grow tobacco, as well as a salary of 20 pounds current money. The last master was appointed in 1787, and after his tenure, the school was turned over to the Alms House (Brown 1911).

At least by the 1760's, there was evidently a dwelling house for the schoolmaster that was separate from the school proper (Brown 1911:9). How much of a distance might have separated the two structures is unknown. Archaeologically, then, the question of identifying the school site is tricky, since even though the schoolhouse was used from the 1720's to nearly the last decade of the century, it is not clear how long a domestic occupation should be represented.

Survey and analysis

The first visit to the site took place before the stubble of the previous crop had been plowed under. Only a few artifacts were visible on the surface. These materials were collected, and work was postponed until cultivation activities would improve collecting conditions.

The second visit to the site occurred in June, when, again, very few artifacts were visible on the surface. The area was inspected by walking every third plow row, and artifacts were marked by wire survey flags. Materials were still too sparse over the 1-2 acre corner of the field to offer much potential for spatial patterning. No materials were noted in the field to the west or south of the site. Flagged artifacts were collected and bagged as a general surface assemblage, and have been merged with the original collection for analysis.

The data from Qu209 are presented in Table 19. The sparseness of the collection, 36 historic artifacts over an area of more than an acre, and from two collections, is quite apparent. Five brick fragments were noted in the field during the second collection, indicating some probability that there was a structure associated with the site, a probability further supported by a piece of window glass.

As before, the lack of creamware and pearlware, and even white saltglaze, implies that the single whiteware sherd is intrusive into the collection. The same lack suggests an early eighteenth-century date for the occupation. Mean artifact dates agree with this interpretation, though any specific year-result must be considered in light of the small sample sizes. The pipestems yield a median date of 1699.34, or just at the turn of the eighteenth century. Applying the usual formula to the ceramics, and taking delftware at a 1700 median date as indicated by the pipestems, produces a date of 1721.4, which is suitably early. The two sherds of Rhenish grey stoneware, one bearing part of an elaborately combed medallion with cobalt blue highlighting, might better be referred to the "sprig molded, combed lines" etc. category to which South assigns a median date of 1668 (1977:210). Entering this median into the mean ceramic date formula yields a considerably earlier result, 1707.4. The latter date agrees much better with the pipestem date.

Preliminary conclusions

Both computed dates indicate a median occupation before the schoolhouse was built. These preliminary data would argue against an identification of the Tanyard Creek site as the Free School site, even assuming the school housed the master for only two decades after its construction. An occupation of the latter period would be expected to produce some trace of white saltglaze, and a later pipestem date.

It is more likely that this site represents the home of a small planter of the turn of the eighteenth century. The resident (or family) probably was part of the population whose growth persuaded the General Assembly to establish a new county below the Chester River. The small assemblage, consisting of a few fragments of ceramics, black glass, pipestems, and uncollected brick, and one specimen each of window glass and scrap iron, does not allow much insight into patterns of behavior. The small quantity of material possessions is, however, consistent with an occupation by a small planter of this period, perhaps one of the pioneers of the Queen Anne's County interior.

Greenwood Creek II, 18Qu208

Setting

The Greenwood Creek II site is south of Greenwood Creek I, on the same (west) side of the easterly branch of Greenwood Creek (Figure 85). The site is in a plowed field that lies between the two forks of the creek, and is far enough downstream that the channel has widened out into marsh-bounded estuary. The surface of the field is fairly irregular, and the site is on top of a local swale or ridge, though still lying less than 20 feet above sea level. Between the effects of silting and water level rise, it is difficult to guess how deep the creek at this point might have been during the colonial period.

Survey and analysis

This site was located after completion of the surface collection at Greenwood Creek I. The investigator finished walking the field around the latter with about two hours remaining in the work day. Faced with a choice between returning home and taking a nap, and making a quick inspection of the field to the south, out of sheer dedication to the cause of archaeology he chose the latter course.

The new site, 18Qu208, was visible as a dense patch of oyster shell at the

surface of the plowed field, on a low rise near the widening of the creek. The shell scatter was very small, about 15 by 20 meters in area, elongated in the direction of plowing. Two fragments of brick were noted. Due to the localized nature of the scatter, no grid was established, and the materials were bagged as a general surface collection.

Besides the small quantity, the notable aspect about the collection is the lack of fine ceramics such as white saltglaze, delftware, or creamware. (One fine earthenware sherd is unidentifiable due to the lack of glaze.) The sherds are primarily stonewares and coarse earthenwares, the latter being of the North Devon gravel-tempered type. As usual among the sites discussed in this work, small sample sizes cast some uncertainty into the computed dates, but the results are reasonably consistent: the pipestem date comes to 1750.115, and the mean ceramic date to 1727.375. This is one of the few instances, in this report, where the mean ceramic result has predated that of the pipestems, a point which will be discussed further in chapter 6.

The probable manufacture dates of two specimens support a second-quarter or mid-century date for the assemblage. One of the grey stoneware sherds bears the lower portion of a GR cipher, attributable to the reigns of the Georges of England between 1714 and 1760 (Noel Hume 1969:282). One of the black glass fragments comprises the major portion of a bottle base in the shape of an elongated octagon, much like one pictured by Noel Hume (1969:66) and attributed to circa 1740. A mid-eighteenth-century deposition for the assemblage is a reasonable estimate.

Preliminary conclusions

The small spatial extent of the shell and artifacts suggests that Qu208 represents a truncated trash pit, much like that reported by Alexander (1979) in Kent County. No contemporaneous house site was found along the east side of Greenwood Creek that might be associated with this trash pit. The lack of fine

ceramics, of which white saltglazed stoneware would be expected from this time, further suggests that the assemblage may not represent household debris.

Perhaps the heavy inclusion of oyster shell indicates the nature of this site: an oystering station, used repeatedly for a few years or heavily at one time by workers who brought daily provisions. It is also possible that an ephemeral, poor tenant's or slave's quarters stood nearby and does not show up on the surface. The couple of brick fragments may support the latter interpretation. The few materials from the surface are a primarily utilitarian assemblage, whether from specialized activities or slim means, of circa 1750.

Donaldson site, 18Qu201, and unnamed 18Qu205

These two sites were recorded during the Kent Island Heritage Association survey of lower Kent Island, and are discussed together because of the paucity of materials from either. These sites merely will be reported, and not discussed after this section. The map, Figure 86, shows the locations of the sites.

The Donaldson site, 18Qu201, is located on the heavily eroded western shore of Kent Island, below the silted mouth of Carter Creek. The area is now part of a housing development. The few materials available from Qu201 were recovered by the site owner from a shovel pit in the shrub garden behind her house. The owner was understandably reluctant to have any major investigation in their newly-established lawn, but graciously allowed an inspection of the materials recovered.

These artifacts are listed in Table 21. The five sherds of delftware can be mended, and form the base of a single vessel, similar to an ointment pot. The sherd attributed to North Devon gravel-tempered ware is unusually thin and has very fine paste, but the temper and glaze are much like the typical, coarse North Devon wares. Pointless as it seems to compute dates for so small and haphazard a collection, the dates are fairly close: 1673.6 for the four pipestems, and

1663.26 for the ceramics (delft = 1650), excluding whiteware.

One of the pipe fragments, however, retains much of the spurless bowl, which is most comparable to a shape that Noel Hume (1969:303, #18) attributes to the period 1720-1820. As this is the stem whose bore diameter is 5/64ths, the latest according to the Harrington-Binford scheme, it could indicate an early eighteenth-century assemblage, an early eighteenth-century deposition of an assemblage dating back to the late seventeenth century, or a couple of mixed colonial contexts.

Based on present information, it is difficult to say more than that an early colonial deposit may exist at the Donaldson site. Without intensive investigation in both field and archives, the significance of the finds remains enigmatic.

Site 18Qu205 was recorded during an inspection of the cultivated field on the west side of the mouth of Tanner's Creek. The surface at the time was partially obscured by crop stubble, and visibility was only fair. A light scatter of materials was noted on the surface of the plowed field next to the creek, and bagged as a general surface collection.

Only a few artifacts were recovered, as listed in Table 22. They were scattered quite sparsely, over an area of about an acre, and it is not certain that they represent a single, coherent site. The lack of any materials elsewhere in the field and in the field next west, however, argued for recording the location as a site.

A few pearlware and whiteware sherds and a smattering of other wares constitute almost the entire assemblage. Of the pearlware, one had blue feather-edge and one annular decoration. The creamware sherd, a small rim section, belongs to the "New Feather Edge" pattern that Wedgwood developed in 1773 and that Noel Hume (1973:238) states is "extremely rare from archaeological sites." The white saltglaze sherd exhibits cobalt blue bands, probably from a "debased scratch blue" vessel of the late eighteenth century (Noel Hume 1969:117-118). The ceramics thus fall fairly consistently into a late eighteenth to early nineteenth-century time

frame, and the mean ceramic date of the small sample, 1806.56, is quite reasonable.

Like the Donaldson site, however, it is difficult to do more than note that Qu205 is present. Again, documentary and archaeological work would reveal more about the property and site. The small assemblage indicates little about the activities or nature of the site, possibly a small planter's or tenant's site of the turn of the nineteenth century.

Mount Ivey, 44Sy135

Mount Ivey is the only site reported in this work that is not in Maryland, and is included primarily because it has a nineteenth-century component and is thus somewhat more comparable to the Greenwood Creek I site than the rest of the Maryland sample. The field work at Mount Ivey was conducted during the summer of 1974, and reported in an unpublished honors thesis (Wesler 1975). The following discussion of the artifacts should supersede that of the previous work, but the major conclusions will not be affected substantially.

Setting

Mount Ivey is in Surry County, Virginia, on the south side of the James River. The cultivated area of what was, in 1974, a working farm took up approximately half of the property's 365 acres. Two swampy creeks border the farm, Cedar Field Creek to the northwest and Blizzards Creek to the southeast (Figure 87).

The site is located in the northern corner of a plowed field, known as the River Field, just north of Blizzards Creek. The field fronts on the James River along a 50-foot bluff that drops down to a narrow, shell-laden beach. Just northeast of the site is a ravine or erosion cut through which a small railroad line

used to run to a wharf on the river shore. Until well into this century, much of the business of Mount Ivey was conducted directly from this wharf, now in ruins.

Historical background

The farm at Mount Ivey was in the possession of this author's (distant) family until shortly after the field work in 1974, and had been, it is thought, since the first settlement of the James. The Surry side of the river has a history as long as that of Jamestown, and, according to family legend, one of the earliest of Jamestown's settlers was the original owner of the plantation. Allegedly John Proctor, arriving in the Sea Venture in 1610, chose to build his home on the side of the river that had high, breezy bluffs, rather than on the swampy, mosquito-ridden island of Jamestown. Allis Proctor, his wife, is supposed to have been ready to defend her house on Mount Ivey by herself during the massacre of 1622, refusing to evacuate until the "rescue" party threatened to burn her out.

It is difficult to confirm this tradition, since the earliest records of Surry County were lost in a courthouse fire. Records are preserved only since 1652 (Bohannon 1957:43). Kornwolf (1977) has published an extensive study of Surry County land records, pieced together from numerous sources. The present Mount Ivey was part of a tract originally owned by William Ewens. Ewens patented Cedar Fields farm, next east of Mount Ivey, in 1619, and in 1621 expanded his holdings to encompass over 1000 acres, which included Mount Ivey. Seven years later he sold the property to William Edwards, and Mount Ivey remained in the Edwards family until after the Civil War (Kornwolf 1977:35, 81, 86).

The property went through several changes of ownership from the 1870's until 1906, when Benjamin C. Berryman purchased the 365 acres of the present Mount Ivey. Berryman passed away in 1959, leaving the farm to Miss Mary Faison, by whose per-

mission and hospitality the field work was accomplished.

One incident in the history of Mount Ivey is related by the county historians (Bohannon 1957:39-40). During the Civil War, a unit of Union soldiers landed on the farm. They were met by four grey-clad heroes of the Confederacy, who chased off the dastardly Yankee marauders in short order. It is unlikely that the incident had any major impact upon the archaeological record.

Survey and analysis

The emphasis of the field work in 1974 was an apparent prehistoric site in the same plowed field, to the east of the historic site. Test excavations were conducted in the area of the prehistoric materials, which revealed an untyped Archaic period scatter of lithics contained entirely within the plowzone (Wesler 1975). The historic site was surface-collected chiefly for something to do while the test units dried out after rain. The materials thus represent a general surface collection recovered during several walkovers. There was no attempt to control for spatial distribution at any point during the collections.

The materials from Mount Ivey were re-studied briefly during this analysis, and this collection is the only one reported here that remains in the possession of the author. The artifact counts are presented in Table 23. Perhaps two aspects of the collection are most immediately noticeable: first, the small quantity of pipe fragments, and second, the low frequencies of creamware and pearlware. These two fine earthenwares together are fewer than the white saltglaze sherds. Whiteware, though, is also heavily represented. In other words, there is a constriction in the frequency curve during the late eighteenth and early nineteenth centuries.

There are several possible explanations for this situation. There may actually have been two houses on the site, with a short gap in occupation for a couple of decades around the turn of the eighteenth century. (Minor pothunting

in the mid-1960's established the presence of a brick foundation, but did not open any considerable area of the site.) Alternatively, more formal methods of refuse disposal in the late eighteenth century (cf. Deetz 1977) may have reduced the representation of creamware and pearlware in the immediate vicinity of the house, while a nineteenth-century destruction of the house may have relatively over-represented the ceramics in current use--i.e., whiteware--on the site. It is also possible that changes in family structure, resulting in smaller families living in the house around the turn of the nineteenth century, would have reduced the quantities of ceramics in use, but this would be extremely difficult to demonstrate even by intensive documentary and archaeological investigation.

Black glass, well represented in the assemblage, includes both blown and molded specimens, a collection that would as easily result from smooth transition rather than a gap between the eighteenth and nineteenth centuries. A plate stock-lock of eighteenth century style (Noel Hume 1969: Figure 77b #2) indicates a building constructed in the eighteenth century, but no comparable architectural item was found from the nineteenth century. Further, several sherds of burnt whiteware, but none of earlier wares, were noted in the collection. Based on these slim bits of evidence, it will be assumed in this analysis that the site was occupied continuously from the eighteenth to the nineteenth centuries.

A few sherds suggest an initial occupation date towards the beginning of the former century. Most notably, several sherds of Rhenish stoneware (Figure 88) are referable to the embellished grey Hohn types and equally early blue and manganese decorated wares (Noel Hume 1969:280-281, 284). They are well outnumbered, however, by long-lived or mid-eighteenth-century wares, as white saltglaze, Nottingham stoneware, "Jackfield" (Figure 89), delftware (including a teacup base, cf. Noel Hume 1969:111), and underglaze blue decorated Chinese porcelain. No North Devon gravel-tempered ware, or sgraffito wares, were found, which also

argues against an early eighteenth-century dwelling. An initial date for the occupation, then, might be estimated at about mid-century. One other eighteenth-century artifact should be mentioned here, a miniature brass-cased padlock of the type illustrated by Noel Hume (1969: Figure 79, right).

Unlike the Greenwood Creek I site, where the whiteware was decorated with transfer prints in blue, red, brown, black, green and polychrome, all of the Mount Ivey transfer prints are blue. According to Godden (1963:113), blue was the predominant color in transfer printing until the 1820's, by the end of which decade other colors, as red, green, and brown, were manufactured. Blue was so common by then that these new colors were preferred in the "genteel" circles, which perhaps implies a slight price difference. (Miller ⁵/1980/, however, notes no differences in price due to color.) Multi-colored transfer prints did not come onto the market until the late 1840's (Godden 1963:113).

The lack of colors other than blue at Mount Ivey suggests a terminal occupation date in the first half of the nineteenth century. There are few other artifacts that would help pinpoint the date. Two sherds of buff-bodied, highly fired stoneware were recovered, apparently from one or two ale bottles of the type described by Switzer (1974:9ff) from the steamboat Bertrand, sunk in 1865. Noel Hume (1969:80) is able to say only that such bottles were made in the mid-nineteenth century and later.

One sherd of unknown type is worthy of special mention. It is a finely turned, thin, lead-glazed red stoneware with a white interior, and dark green exterior and a black rim (Figure 89, center). The rim is beaded, much like a Staffordshire pattern (cf. Miller and Stone 1974:Figure 20e), and has a diameter of approximately 2½ inches. Stanley South (personal communication) raised the possibility that it might be a product of the Moravians of North Carolina, but after inspection by a number of scholars of the East Coast, this sherd remains unidentified.

Tentatively, a mid-eighteenth to mid-nineteenth-century occupation can be

assigned to the house site at Mount Ivey. The mean ceramic date for the collection is 1821.16. This date falls slightly later than a 1750 to 1850 median. If the destruction of the house circa 1850 resulted in a disproportionate representation of the whitewares in use in the house, a late bias for the mean ceramic date is understandable.

For comparison, the mean ceramic date was also computed employing a more thorough breakdown of ceramic types, more in line with South's (1977) scheme. White saltglazed stoneware included two sherds of "debased" scratch blue and one of dipped ware, while Rhenish grey stoneware included sprig-molded grey Hohn (two sherds) and decorated manganese and cobalt (at least four sherds), each of which is assigned its own type median. In addition, creamware was computed at its general date of 1791, rather than the 1771 date previously used, though a half-and-half split of earlier, deeper yellow and later, pale yellow might be nearer the mark. The resulting date, after incorporating these changes, is 1821.23, little different from the first computation.

A note should also be included about the coarse, probably locally-made stonewares from Mount Ivey, most of which may belong to the nineteenth century. The variety of these sherds is not matched in all of the Maryland sites put together. There are sherds with underfired-looking red paste, grey saltglazed exteriors and unglazed interiors; pinkish paste, grey interiors, and brown salt-glazed exteriors; grey paste, brown interiors and exteriors, the exteriors bearing dark floral designs as though of overfired cobalt; pink/buff underfired stoneware or hard earthenware with black interiors and grey saltglazed exteriors; and brown-red paste with brown exteriors bearing black floral designs; plus a few odds and ends. The brown-red sherds resemble Pogue's (1981:130) description of the underfired wasters from the Trees Point pottery, farther up the James River, which operated during the 1850's and possibly later. Whether the inhabitants of Mount Ivey were buying seconds from local potters, or there was simply

so much variation among the local wares, is not evident.

Preliminary conclusions

The house site at Mount Ivey appears to be a planter's dwelling of the mid-eighteenth to the mid-nineteenth centuries. Neither date is particularly well specified. Mr. Benjamin Berryman, before his death at an advanced age in 1959, recalled seeing the ruins of the house when he was a small boy, which would probably have been in the 1870's (Ann N. Wesler, personal communication). How long the house might have stood in ruins before that time is not directly known.

The occupants of the house do not seem to have been wealthy. No sherds of the expensive enamelled white saltglaze, or of nineteenth century porcelains, were identified in the collection. The inhabitants would have been Virginia planters of the middle sort, becoming middle-class farmers of the nineteenth century.

Wild gorse - 1865

Section on page.

Chapter 6.

Inter-site comparisons

Detailed site analyses, specifically in terms of artifact identifications, have been forborne in favor of a more general approach, in search of broad patterns among the assemblages. Recurring patterns, of course, cannot be defined in a single site. This chapter will consider several aspects of site patterning by comparison among the sites reported in the foregoing chapters. Four categories of patterning will be considered: dating schemes based on artifact frequency and median manufacture date; spatial distribution; artifact category profiles, a la South (1977); and socioeconomic status.

Dating by artifact frequency formulas

The discussion of each site in the three preceding chapters has reflected the two dating schemes most prevalent in historical archaeology, formulas based on the frequencies of certain categories of pipestems and ceramics. Each category is assigned a median date of manufacture, derived chiefly from historical sources in the case of ceramics (South 1977; Noel Hume 1969), and from observed changes in bore diameters of ball clay pipestems (Harrington 1954; Binford 1962). The aim in each case is to compute a weighted mean manufacture date that is equivalent to the median date of occupation represented by the assemblage.

The question of "accuracy" of the formulas has received some discussion, occasionally acrimonious. Pipestem dating was proposed first, and thus attacked first; after early "proof" that the formula required a nearly prohibitive sample size (A. Noel Hume 1963), Ivor Noel Hume (1969:300) finally pointed out that even a fairly small sample produced a useful ball-park figure.

It may be that South's mean ceramic formula will be regarded in similar light. Several authors (especially Salwen and Bridges 1977) have already argued

that cultural and other factors in the deposition may bias the artifact frequencies to greater or lesser extents, thus biasing the derived median date. An extreme example might be a site occupied 1770 to 1780 and again 1869 to 1900, which could give a very misleading mean ceramic date of 1840 or so, when the site was abandoned. South, of course, never argued for so uncritical an application of the formula, and demanded interpretation of absent ceramics and of other data in any analysis.

But the question, "how accurate is accurate," has not been considered to great extent. South (1972), at one point, suggested subtracting one year from the computed date "for the maximum statistical correlation between the ceramic date and predicted median occupation date" (1977:236). It is difficult to see how the difference between an occupation of 1710 to 1720, and one of 1712 and 1722, will affect any but the most historically particularistic analysis, still less for occupations of longer periods.

For many purposes, particularly for comparative or systemic pattern recognition, a rule-of-thumb figure (presumably accepted after judicious consideration of all available data) may be quite useful. A major consideration then would be consistency in the application of the formula as applied to sites in the sample. Especially in the case of a surface-collected site with little or no documentation, or a site with a small or dubiously representative sample, assignment of a median occupation date to a decade can allow meaningful comparison and synthesis.

This project has employed just such an approach, in which the pipestem and mean ceramic formulas have been viewed essentially as shorthand seriation devices. The mean ceramic formula, in particular, had been modified in the direction of generalized type categories and median dates, for convenience of recording, computation, and spatial analysis. The modifications were discussed in chapter 2, and occasionally explicitly revised in the analysis of

certain sites. One modification that may be of general significance was the use of a median date of 1700 for delftware in sites whose occupations spanned the turn of the eighteenth century.

The pipestem and ceramic dates matched closely only infrequently, but the discussions did not concentrate on the disparities. Vagaries of sample representation and size were noted where appropriate. Small samples, however, did not deter the use of the formulas. The assumption that a small sample is more informative than no sample, and thus should be utilized, implicitly guided the analysis.

Table 24 lists the ceramic and pipestem dates for each site or major component already reported, ranked in order by ceramic dates. Several interesting patterns emerge. First, it is notable that the two negative differences, where the pipestem date is later than the ceramic date, are both from trash deposits, probably secondary refuse. The Icehouse Point trash pit (IICD) is an excavated sample, while the Greenwood Creek II assemblage is a surface collection. The Greenwood Creek II situation might be explained by the lack of fine tablewares, which tend to be more temporally discriminatory and thus more accurate dating tools. Any explanation for the Icehouse Point IICD dates is less evident, as for the coincidence of the secondary refuse contexts.

The smallest difference among the positive group (ceramic date later than pipestem date) is at Tanyard Creek. The ceramic formula was modified deliberately to include an earlier type of Rhenish grey stoneware, however, and is thus not entirely comparable to the other dates. The uncorrected ceramic date was 22.06 later than the pipestem date, comparable to the difference at Doncaster.

Aside from Tanyard Creek, the smallest positive differences are in the Londontown zone 5-bottom and the Widow's Mite dates. This fact is surprising, in view of the small samples in both assemblages and the relatively haphazard (bulldozed) nature of the Widow's Mite collection. The assemblages belong to

Table 24. Comparison of ceramic and pipestem dates.

<u>Site/component</u>	<u>ceramic</u>	<u>pipestem</u>	<u>difference</u>
1. Tanyard Creek	1707.4	1699.34	8.06
2. Icehouse Point, IICD	1711.27	1724.62	-13.35
3. Greenwood Creek II	1727.375	1750.115	-22.74
4. Doncaster	1728.54	1703.4	25.14
5. Icehouse Point, foundation	1736.26	1694.5	41.76
6. Widow's Mite	1742.4	1723.72	18.68
7. Londontown z. 5-bottom	1748.13	1733.80	14.33
8. Carvel site	1751.63	1705.02	46.61
9. Lower Marlboro, structure A	1756.7	1732.13	24.57
10. Lower Marlboro, " B	1778.23	1719.89	58.34
11. Lower Marlboro, " D	1780.56	1734.36	46.2
12. Londontown z. 5	1787.43	1743.99	43.44
13. Lower Marlboro, structure C	1790.01	1740.55	49.46
14. Mount Ivey	1821.16	-----	-----
15. Londontown z. 4	1848.2	-----	-----
16. Greenwood Creek I	1852.9	*	*

* Pipestems not representative of entire occupation.

the same town site, and both pairs of dates are in line with the historic date range for the heyday of the port, though whether any of the four represents an historic "median" date for its site or component is impossible to say.

The largest differences are in the Lower Marlboro structure B and C sites, with Lower Marlboro D and the Carvel site tied for third. The Lower Marlboro B site dates are particularly out of line, a problem that was mentioned in the analysis for that site. Barring a no-smoking drive in Lower Marlboro in the later eighteenth century, the relatively great disparity in the Patuxent port dates is not immediately explicable.

It is interesting to compare a similar set of dates from South's (1977: 227) test sites (Table 25). The average difference between his pairs of dates is only 7.8 years, roughly one-quarter the average difference of the Maryland sites. Two factors are probably most responsible for the higher differences in the Maryland sample.

First, South's ceramic dates are computed on a more detailed set of identifications than are the Maryland dates. They should, *ceteris paribus*, be more representative of the ceramic horizons characteristic of the occupation, and so more closely reflect the span of occupation. Two dates in the present sample were re-computed after more thorough identification of sherds. The Tanyard Creek ceramic date was substantially modified, earlier by some 22 years, while the Mount Ivey date was effectively unchanged. It is not surprising that a small sample should be more affected by revisions of ware dates, since each sherd has greater importance in the mean.

Second, South's samples are drawn primarily from excavated sites, while most of the present samples are surface collections. Indeed, of the three excavated samples from the Maryland sites (barring the Icehouse Point plowzone), Londontown zone 5-bottom, Londontown zone 5, and Icehouse Point IICD, the 5-bottom and IICD samples yield the least differences. As in most archaeological analy-

Table 25. Dates for South (1977:227) test sites.

<u>Site/component</u>	<u>ceramic</u>	<u>pipestem</u>	<u>difference</u>
1. 38CH1	1654	1667	-13
2. 38AK4-15	1726	1731	-5
3. 38AK5-A	1742	1744	-2
4. S15	1746	1748	-2
5. S2	1749	1748	1
6. 38PN4	1750	1756	-6
7. S7	1755	1756	-1
8. 38PN1	1763	1750	13
9. Paca (Maryland)	1763	1753	10
10. S18	1776	1751	25

ses, an undisturbed context may be expected to produce more representative data than a disturbed one.

The combination of these two factors probably explains much of the magnitude of ceramic-pipestem differences in the Maryland samples. Another pattern emerges, however, that cross-cuts the above explanators. In the Maryland sample, the average difference between the ceramic and pipestem dates is 31.74. The average difference of the sites that, by ceramic formula, date before 1750 is 20.58, while in the post-1750 sites the average difference is 44.77 years. In South's sample, three of the four largest differences occur in sites that post-date 1750. The average of these differences is clearly larger than the average of the pre-1750 ceramic-dated sites. The fourth of South's largest differences is found in his earliest site, which pre-dates any of the Maryland sites. Actually, this pattern should not be much of a surprise, given that the recognized period of accuracy of the pipestem dating formula is circa 1680 to 1760 (Noel Hume 1969:300).

It may be worthwhile to return briefly to consideration of the Icehouse Point dates (see Table 6). In the foregoing paragraphs, the ceramic dates accepted for Bennett's Point are based on a delftware median of 1700, which produced dates more in line with the median of the interpreted circa 1665 to 1765 occupation. These dates resulted in a negative ceramic-pipestem difference for the trash deposit, and a large difference for the foundation, by far the largest of the pre-1750 ceramic median sites. The disturbed nature of the latter context may be part of the explanation for so large a difference.

It is evident from the ceramic totals, however, and from other studies (e.g., Deetz 1972, 1977), that the quantities of ceramics in use at equivalent sites increased markedly through the colonial and into the national periods. In a site occupied for a long period of time, as in the century-long occupation of the Icehouse Point site, a weighted mean ceramic date should be expected to

reveal a bias toward the later end of the occupation. From this point of view, the ceramic dates with delFTWARE at 1750 might be preferable. This change in the formula results in a ceramic date 20 years later than the pipestem date for the trash deposit, and raises the difference between the computed foundation dates to 44.58 years.

The question, in effect, returns to what is meant by "accuracy." If the historic median occupation date, as South intends, is the goal of the mean ceramic formula, then use of a delFTWARE median of 1700 produces the preferable dates for the Icehouse Point site. If the result should reflect higher use of ceramics with time, as Salwen and Bridges (1977) might argue, then the original South suggestion of a 1750 median for delFTWARE (justifiable by the majority of the occupation having been in the eighteenth century) is the better choice. How this question is to be resolved, or whether the dilemma at Icehouse Point is unique to that site, remains to be seen. It is evident, though, that careful thought must precede any conclusion based on a mean artifact frequency date-- a position that is unlikely to be contradicted by any of the authorities cited in this discussion.

In the remainder of this work, it will be assumed that the mean ceramic dates are sufficiently useful to produce a site series accurate within the quarter-century; that is, that grouping the sites into quarter-century units on the basis of the mean ceramic dates will not do great violence to the historical sequence in which the sites were occupied. The single exception to this rule will be the Icehouse Point trash pit, which will be assigned to the quarter-century following that indicated by the date in Table 24.

Spatial distributions

Distribution plots of several artifact categories were discussed for each site from which materials were collected by areal provenience units. For the

most part, little detail was visible in the distributions by which activity areas or clusters could be interpreted. The large grid size employed in the controlled surface collections was designed to reveal patterning on the town-site level, rather than within the homelot. The results from Lower Marlboro were fairly good, although not enough area was surveyed to allow an accurate reconstruction of the town plan. Four structures were discerned in the analysis, and temporal discrimination was sufficient to suggest a sequence of building as well as to assign all four to the predicted period of concentration in the tobacco marketing system, circa 1750 to 1830. The analysis thus afforded some preliminary insight into the dynamics and the spatial extent of the port of Lower Marlboro.

The other sites, each containing one structure, produced fewer spatially significant data. The Greenwood Creek I site contained a dramatic concentration of artifacts, and a detailed chart of "miscellaneous" materials (Figure 80) revealed a minor concentration to one side of the structure. Eyewitness accounts of the house had described it as facing the road, so that the secondary concentration area could be identified as the front yard. The late date of this site, circa 1810 to 1940, provided a graphic illustration of the general increase of household material culture--and refuse production--through time.

One structure was identified at Doncaster, with two possible outbuildings. From historical accounts, the site was occupied about the turn of the eighteenth century, but how long before and after is not clear, nor is it certain how much activity (and how much construction) ever actually took place on the site.

The Carvel site also contained a single structure. No outbuildings were identifiable, at least no certainly contemporaneous outbuildings, but a scatter to the northeast of the structure suggested diffuse activity, indicating noticeably greater use of the area than of the southeast part of the grid. A concentration of bricks to the northeast of the grid, though not certainly contemporaneous, allows the inference of a pathway or yard between two structures.

The Icehouse Point site was investigated much more intensively, and excavated in a 10-foot (approximately 3 meters) grid, raising the potential of finely tuned spatial analysis. Since most of the excavation stayed within the structure walls, and since the collection available for study had gaps in several provenience units, attempts to delineate spatial patterns were unsuccessful. It is evident that there were trash deposits to the northeast of the house, of which artifact category profiles were distinct from those of the foundation, but whether the refuse was dumped in purposeful trash pits, opportune borrow or natural pits, or over the bank, cannot be told.

In sum, a few general hints of spatial patterning can be inferred from each site, but comparability among sites is limited. Comparisons among artifact groups within sites were discussed in the analysis of each. Only a couple of cross-site comparisons seem to be informative.

It is interesting to note minor differences in the distributions of coarse and fine ceramics. Here, "coarse" ceramics are those which are thick-bodied, usually lead- or salt-glazed, basically utilitarian wares. "Fine" ceramics, also referred to as "table" ceramics, are lighter, thinner, and usually more decorative, and are assumed to serve the functions of display and food consumption for the most part. Due to the difficulty of reconstructing vessel types in surface and plowzone collections, the distinction will be drawn along ware lines rather than from detailed analyses of each specimen.

To begin with, two sets of coarse ceramics have been plotted for Lower Marlboro. Figure 95 shows the distribution of coarse earthenwares and English brown stoneware. Figure 96 includes the "J" category of coarse grey stonewares, and miscellaneous stonewares included in "R" in the recording format. This distinction was an attempt to validate the typology employed, based on a belief that the coarse glazed earthenwares were predominantly early, seventeenth and eighteenth centuries, and the coarse grey stonewares were later, nineteenth and twentieth cen-

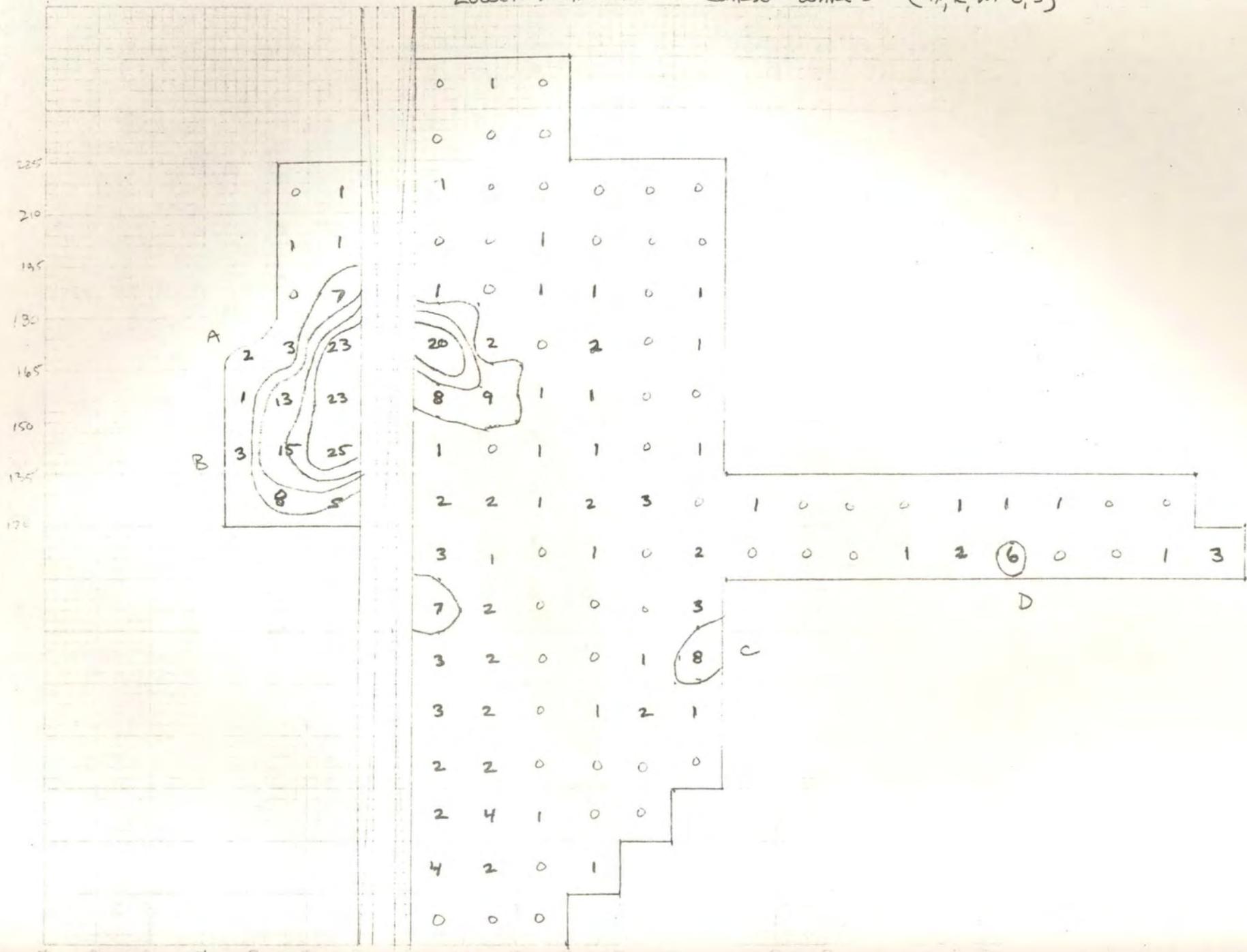
turies (for instance, compare the category totals for Greenwood Creek I with Icehouse Point, Doncaster, and the Carvel site).

The test at Lower Marlboro is not entirely successful, perhaps because of the transitional eighteenth-to-nineteenth-century occupation of the entire survey area. Figure 95, earthenwares and English brown stonewares, closely resembles the total artifact distribution (Figure 41). There is not much to be seen in Figure 96 at all, though a bias toward structure B, west of the road, and very slight local rises at Structures C and D, can be identified.

Rhenish grey stonewares, category "I", are deliberately excluded from these two figures, and are plotted in Figure 97. These sherds obviously cluster at structures A and D, the same two clusters visible in the pre-creamware fine ceramic horizon (Figure 42). This distribution is quite distinct from the dominantly coarse grey stoneware pattern of Figure 96. The coarse grey category "J" is interpreted as the relatively later product of the local Chesapeake industry, and the distributions tend to confirm at least the morphological dichotomy employed in the sorting. The result will not surprise anyone working with historic ceramics in the Chesapeake tidewater, but does support the typology employed in the analysis.

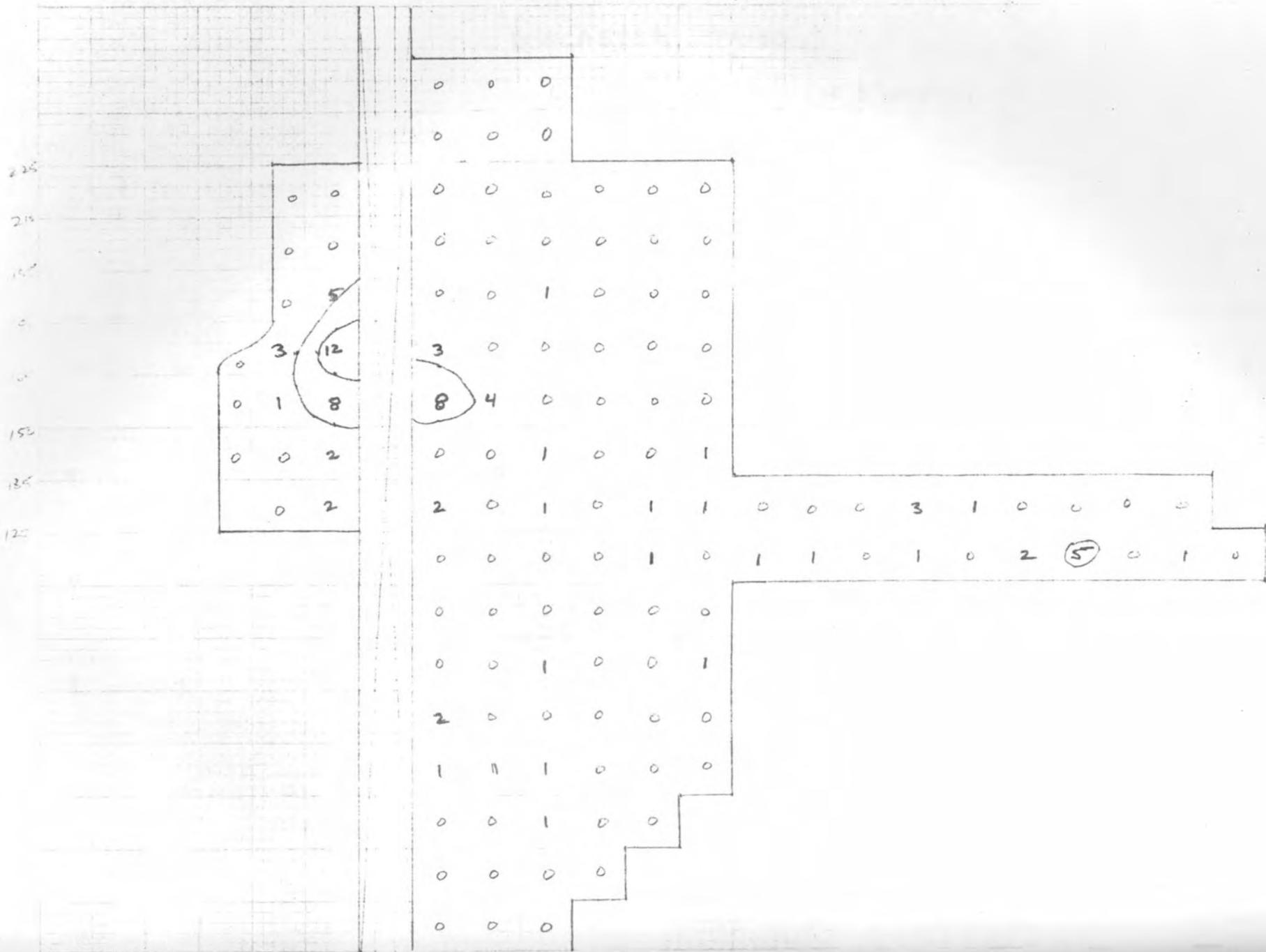
Rhenish grey stonewares also are plotted separately in two other surface collections, but for a slightly different reason. At Doncaster, the coarse wares (Figure 98) show two clusters, a minor one mentioned earlier as a possible outbuilding, and a major one in the northern or bottom row of the grid, where the main structure was identified. Whether this concentration is truncated to the north is, of course, not known. Figure 99 plots the fine ceramics. The small quantity, consistent with an early eighteenth-century household in which the main functions of ceramics were dairy and storage-related (Deetz 1977:53-55; cf. Stone et al. 1972), renders pattern recognition difficult, but the tablewares seem to cluster in the second and third grid rows rather than the first, with the

LOWER MARLBORO COARSE WARES (H, K, M-O, S)



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

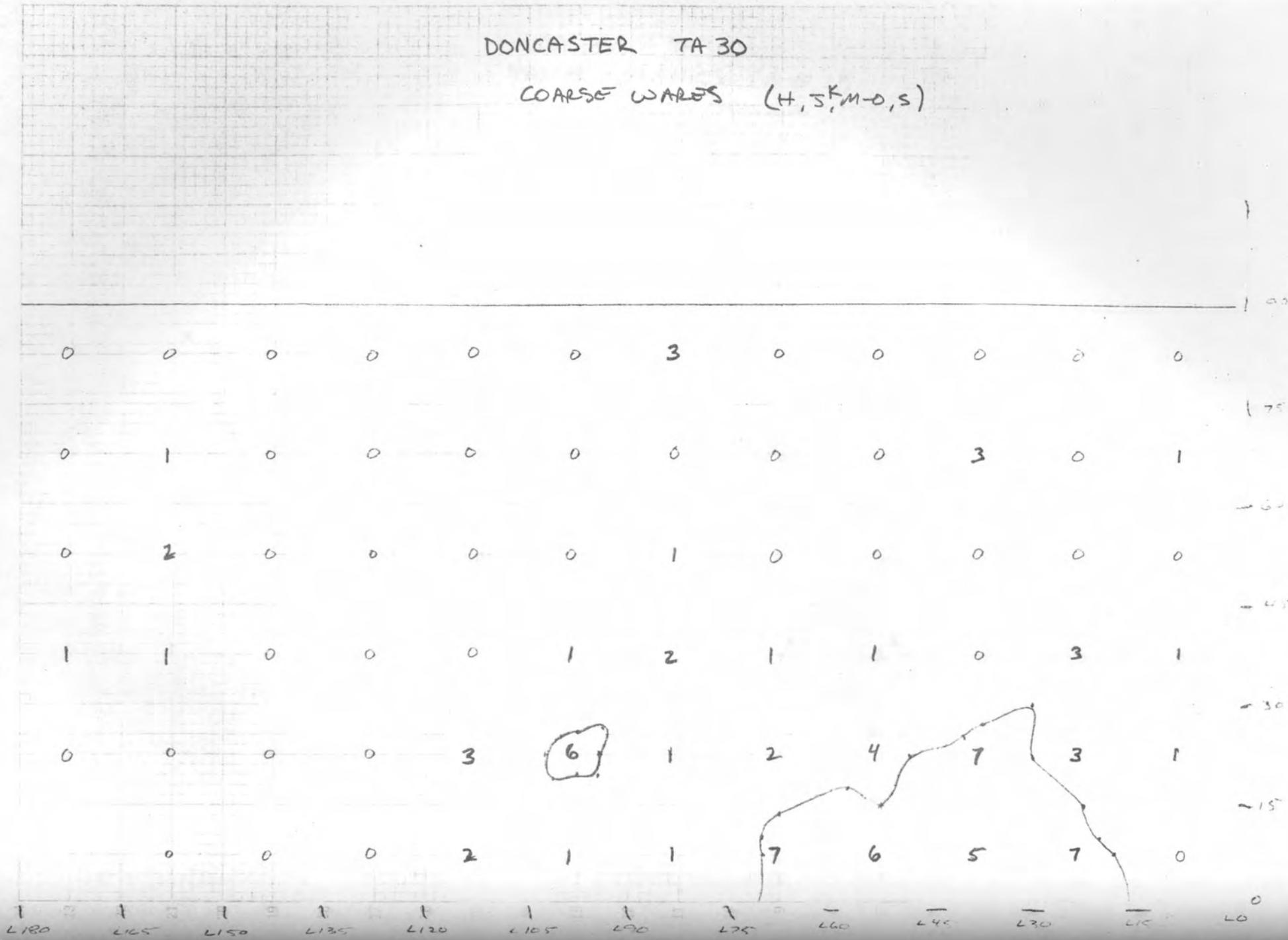
LOWER MAINFORD - HISTORICAL SCHEDULE



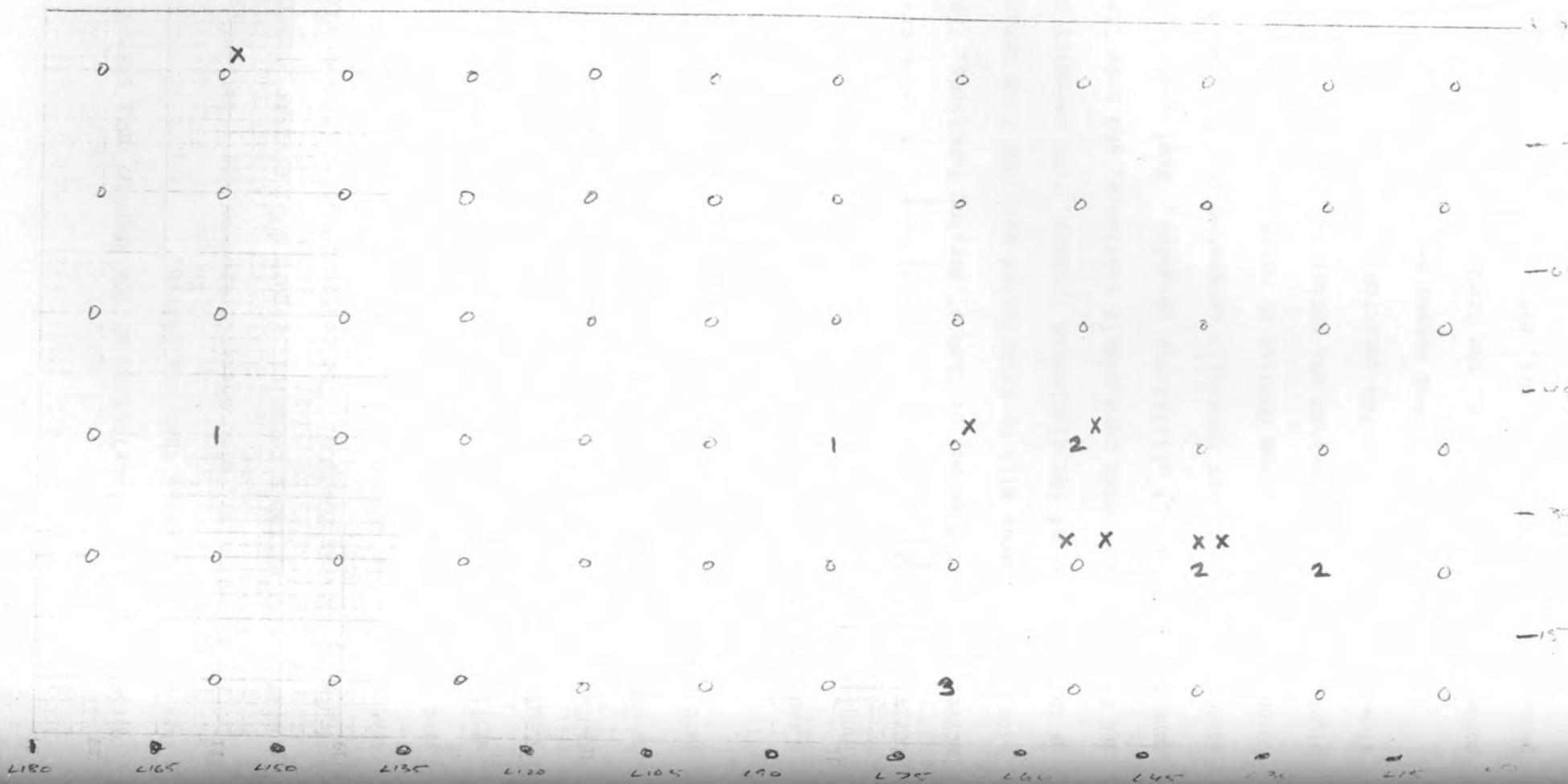
145 150 155 160 165 170 175 180 185 190 195 200 205 210 215 220 225

DONCASTER TA 30

COARSE WAVES (H, S, M-O, S)



DONCASTER TA30
 TABLE CERAMICS (A-E, 4A)
 X Rhenish stoneware



coarse wares. The distribution of the Rhenish grey sherds is much more like that of the fine wares than the coarse.

The Carvel site, also characterized by small samples, forms an interesting comparison. The table ceramics, Figure 100, cluster in the structure area, particularly squares 20-30L0. The coarse ceramics (Figure 101) are much less concentrated in the structure area, and are widely scattered particularly in the yard area to the northeast. This distribution suggests more of a generalized, utility function, as assumed previously. In Figure 102, both creamware and Rhenish stoneware are plotted. Creamware is the major single ware among the table ceramics, and shows a conspicuous focus on the structure. The Rhenish sherds, by contrast, scatter away from the structure, and fully 50% of them are in the yard. The Rhenish grey stoneware behaves like a utilitarian ware on this site.

Given that sample sizes are too small to confirm patterns in these two sites, a tentative hypothesis can be formulated about the distribution and use of Rhenish stonewares. In the early eighteenth century, relatively few "table" ceramics were available, and the finely made, highly decorative Rhenish products served display and formal or "table" serving functions. Thus, in early colonial sites, these sherds will be distributed with the fine ceramics. By the middle or third quarter of the eighteenth century, fine ceramics such as white saltglaze and creamware were much more widely available, and grey stonewares were relegated more to the status of utilitarian ceramics. Noel Hume (1969:284-285), for instance, notes that less carefully decorated storage vessels were shipped to the colonies, apparently from Rhenish or nearby centers, in the middle years of the eighteenth century. Whether the potters were adapting to consumer trends, or vice-versa, is an interesting question.

The other sites from this survey are not very useful in testing this hypothesis. In Lower Marlboro, the large grid and the presence of several buildings obscure patterning (Figures 103, 104). It is worth noting that coarse wares

TABLE CERAMICS (A-F)(ST)

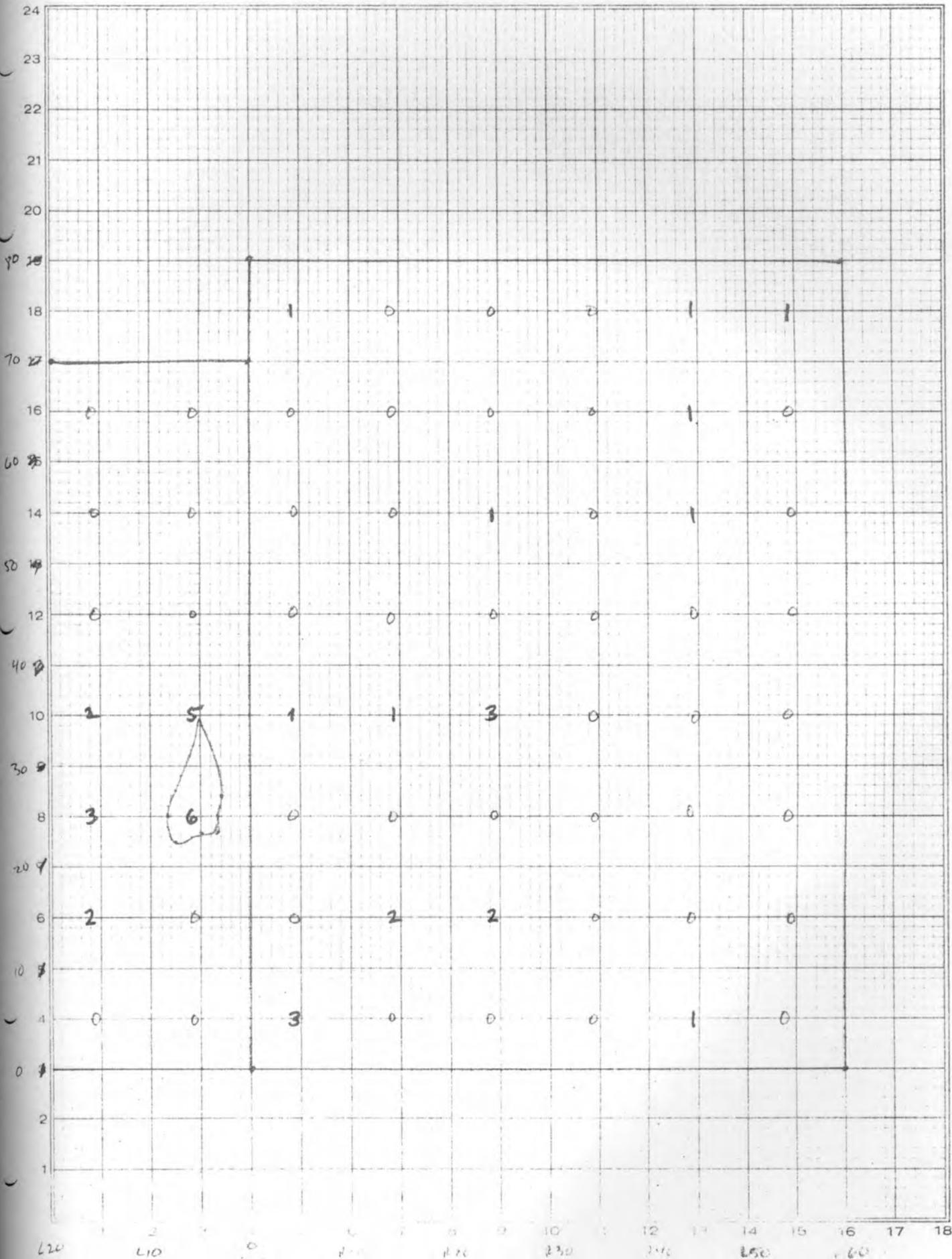


FIGURE 100.

COARSE WALS (H, S, M-O, S)

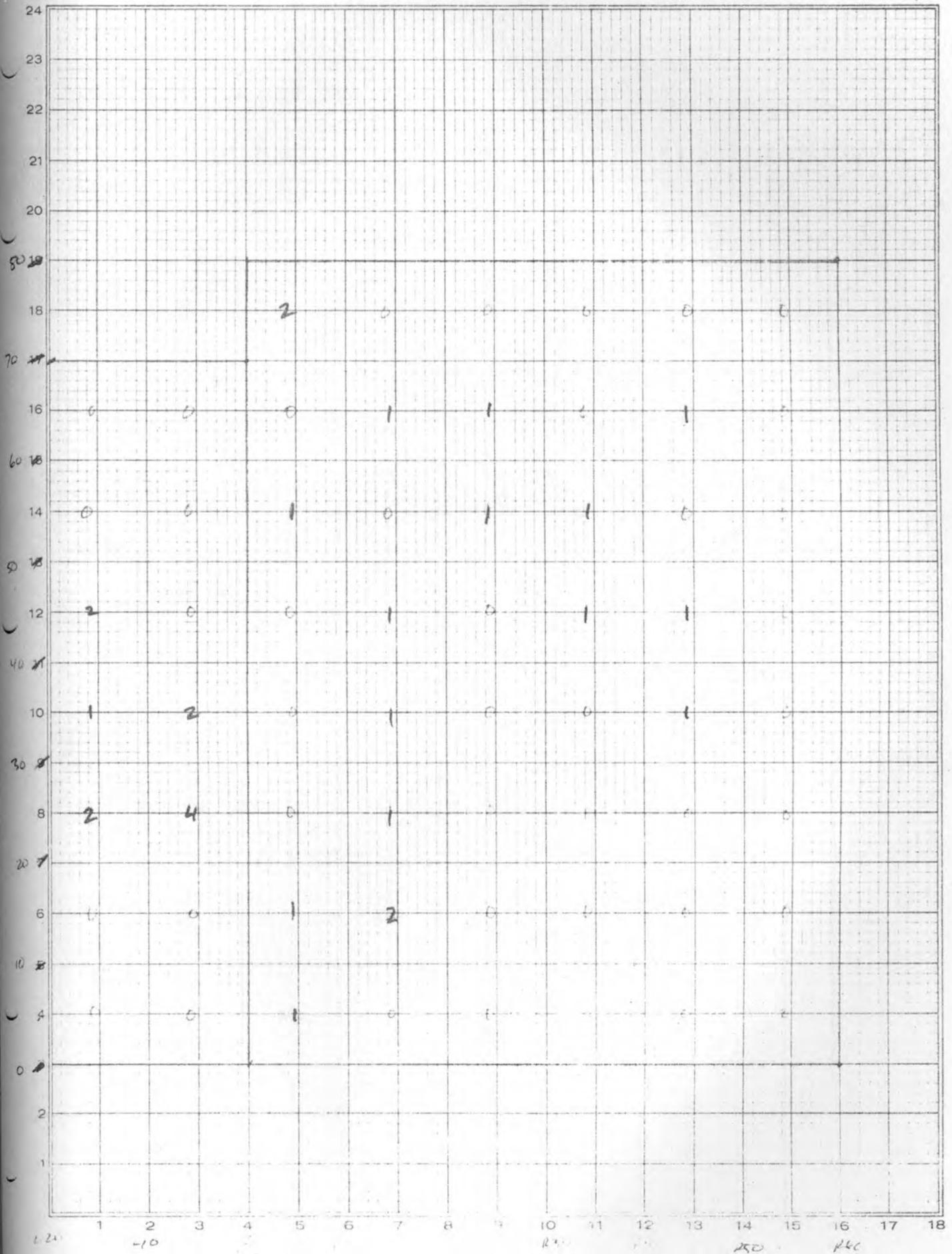


FIGURE 101

X creaminess O Rheology

→ Rheology (G' and G'') vs. Creaminess

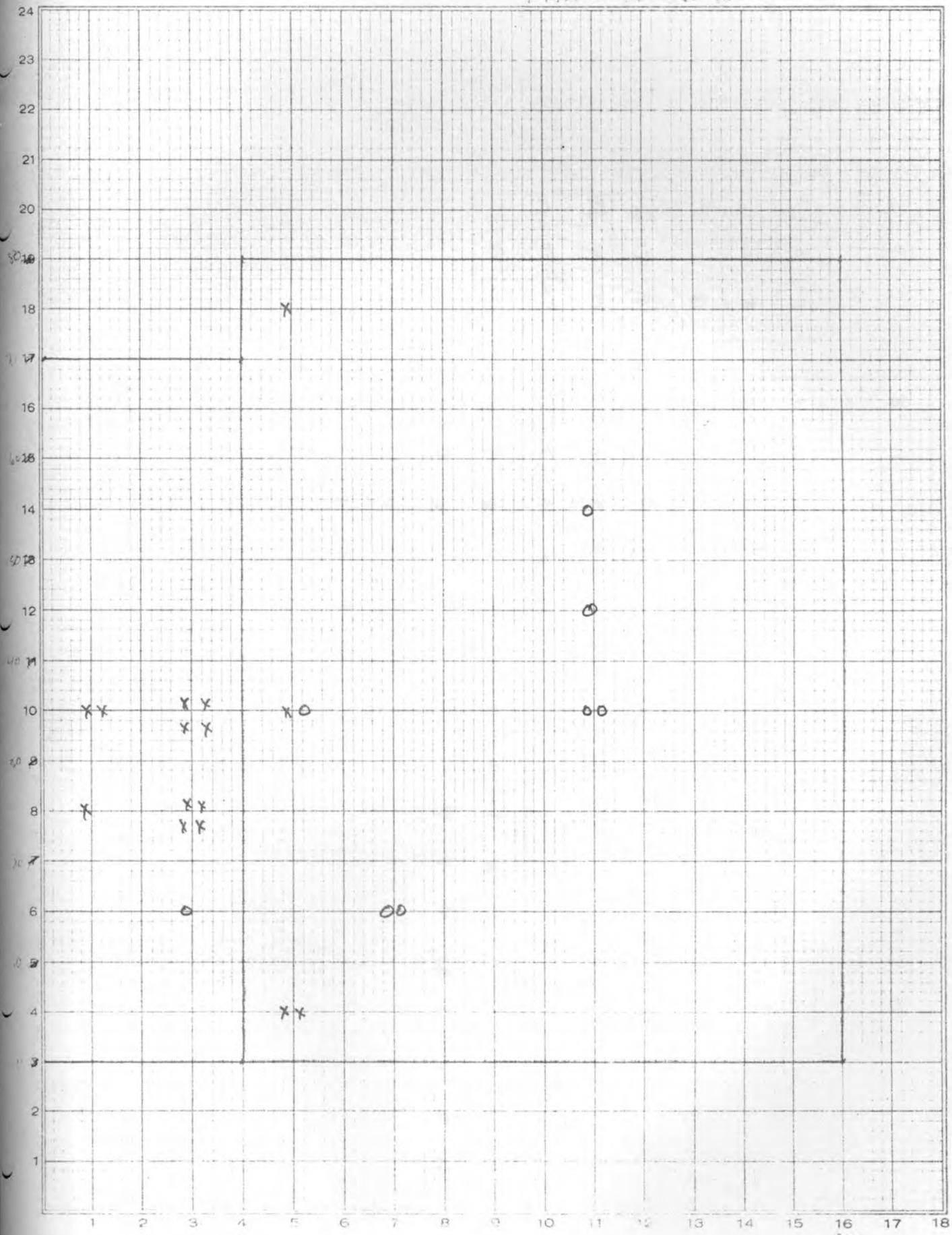
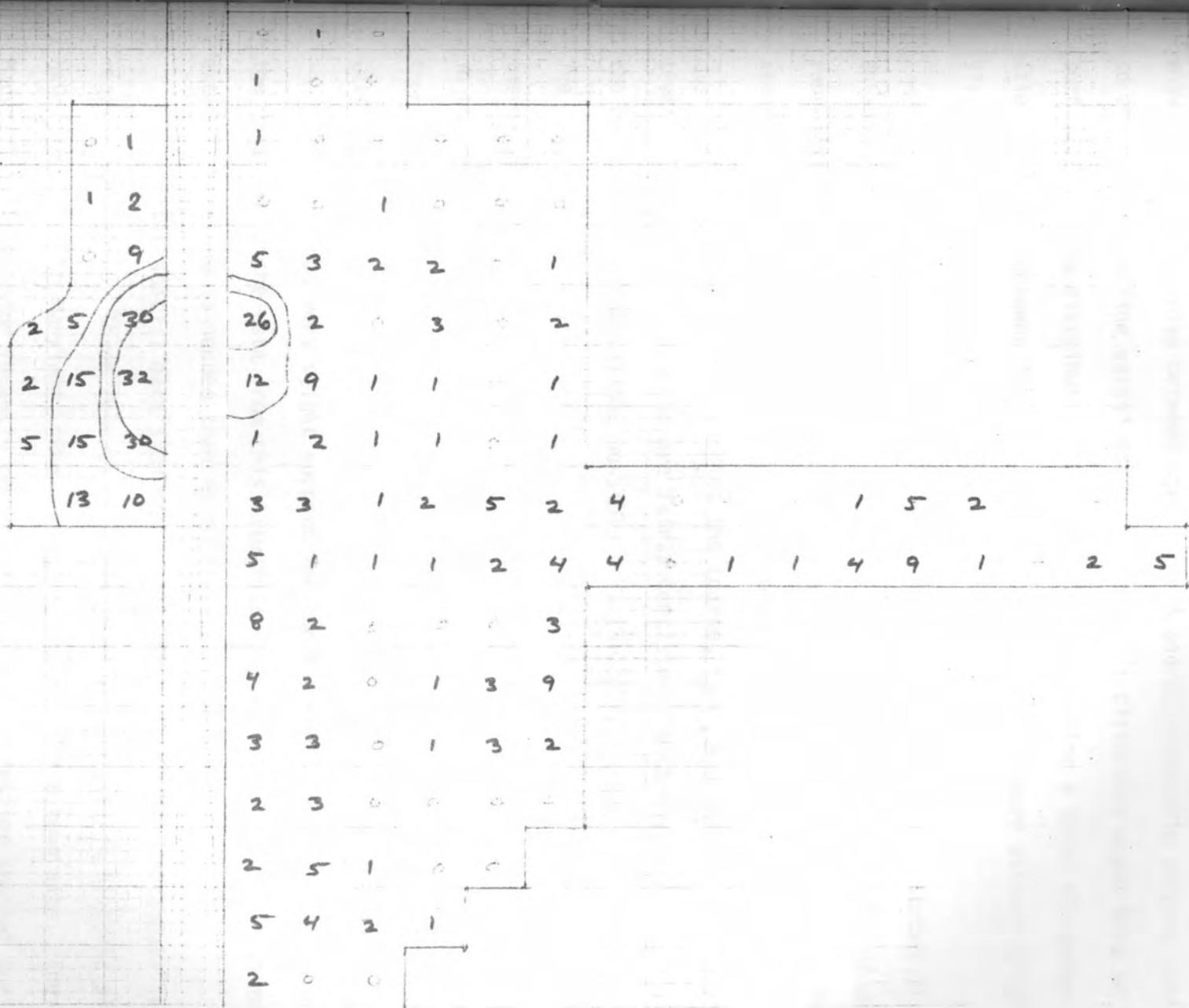


FIGURE 102



CONTAIN INTERACTION

FIGURE 104

show a very slight rise between structures A and B, noticeable only by comparison to the dip in the fine wares' distribution. This difference would tend to support the pipestem distribution (Figure 48) in indicating a focus of outdoor activities in a yard between the buildings. The Rhenish stoneware pattern (Figure 97), however, does not particularly resemble either.

The smaller grid of the Icehouse Point site might be better suited to such an analysis. It could be assumed that the pattern inside the foundation would represent the latter part of the occupation, and thus should demonstrate Rhenish stoneware affinities to coarse wares, according to the hypothesis.

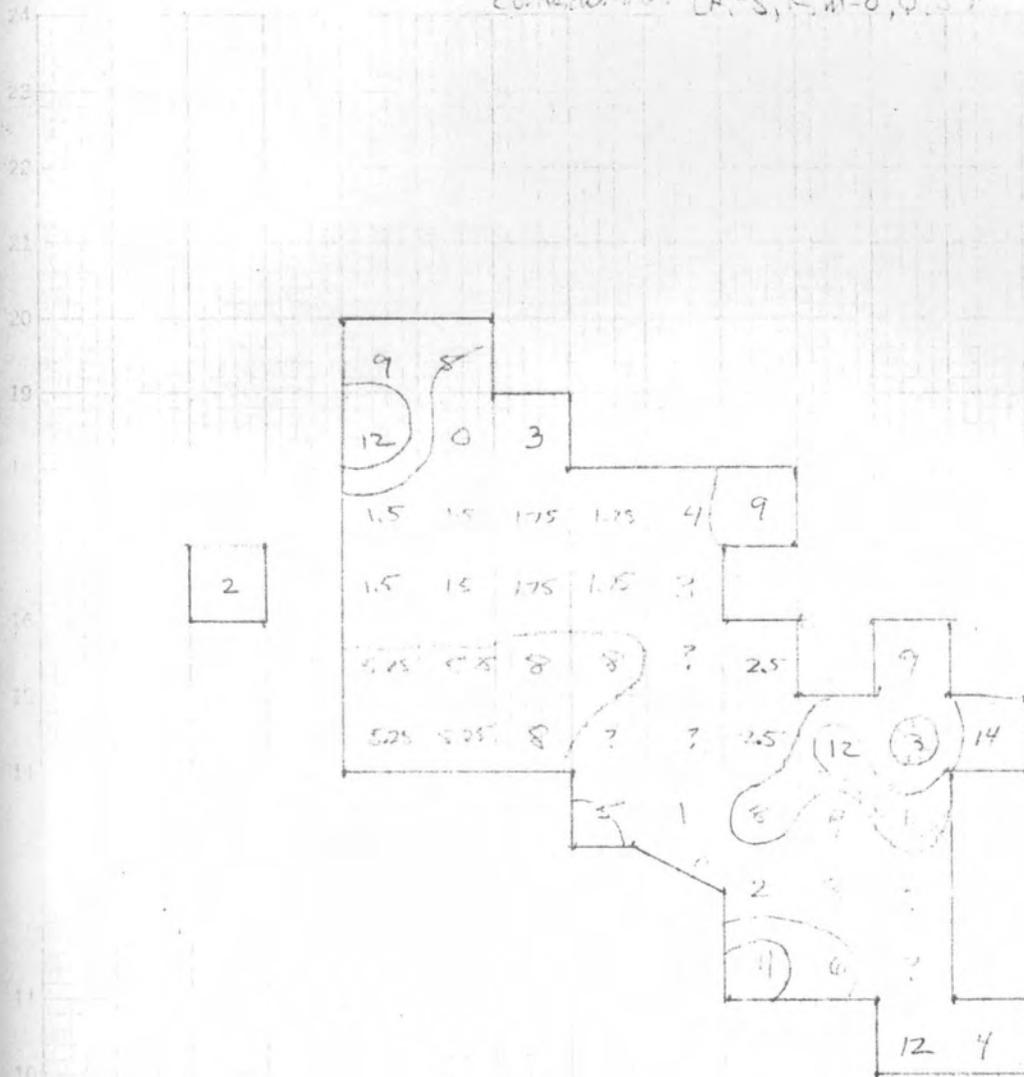
Figures 105 through 107 depict the coarse, fine, and Rhenish wares, respectively. The overall patterns are fairly consistent, with the usual trough through the middle of the foundation, possibly a factor of the state of the collection. The tablewares show a slight peak in IB1c, with nine sherds, at the east edge of the excavation. Coarse wares are high in the same square, but marginally higher in the square diagonally northeast, IB6b, where table ceramics are very low. Rhenish sherds are locally most frequent in IB6b, but infrequent (one sherd) in IB1c.

There is thus very slight support for the hypothesis at Bennett's Point, but the vagaries of the data from this site inspire little confidence. Much more extensive testing is needed than is possible with present data.

Comparable spatial data from other sites in the colonial Chesapeake are not readily available. Three reports utilizing spatial analyses in historic sites have circulated in Maryland, none attempting to describe a town site. The St. Mary's City Commission recently proposed a project for testing spatial variability in Maryland's first capital (Miller et al. 1981), but data have not yet begun to appear.

Keeler (1977) prepared a dissertation on the homelot in colonial Maryland, in which he used spatial data from artifact and soil chemical analyses to good

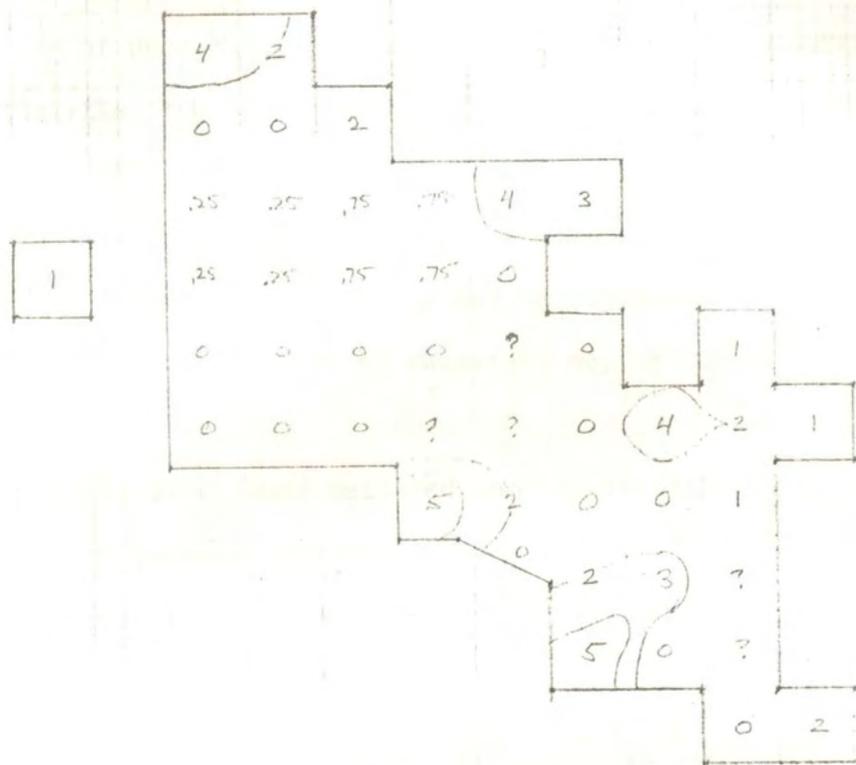
CUTS: WINDS (H, S, K, M-O, P, S)



Center of mass

FIGURE 105.

BENNETTS 16-17
 RICHMOND STATION



? = no data

CONTINUE IN PART 2

advantage. His primary source of archaeological information was the St. Johns site, an outlier of St. Mary's City, occupied from 1638 to circa 1710 or 1720 (cf. Stone 1974). Pipestems, in particular, clustered in strategic areas, with concentrations behind the hall of the main house, around the kitchen, and between the front door and the fenceline. The irregular occurrence of features suggested that the front yard was a more formal area than the back yard, similar to a courtyard rather than an area of general use. Phosphate tests coupled with low artifact frequencies indicated that an animal pen stood east of the kitchen (Keeler 1977). A similar possibility may be suggested for the Carvel site, where the diagonally-trending scatter of materials may be cut off to the southeast by a fence line.

Keeler (1977) also found detailed comparative data to be scarce, having to rely primarily on personal communication and unpublished reports from Virginia sites. His overall conclusions emphasized the impermanence of the early structures (probably best exemplified by the Tanyard Creek site in this project's sample), and the variability of form in the colonial homelot, affected most evidently by chronology and socioeconomic status. Wealthier planters established more substantial complexes, while among most if not all classes, a trend toward increasing elaboration and permanence paralleled the development of settlement and community systems. The Icehouse Point site exemplifies the sturdy construction of the planter of means, as, perhaps, does the complex of the Bruff plantation at Doncaster.

Clark and Smolek (1981) prepared a preliminary report on a survey of an area at the mouth of St. Leonard's Creek, on the lower Patuxent River in Calvert County. These authors employed spatial distributions chiefly for the delineation of sites, and have not yet prepared a detailed analysis of the materials. A seventeenth century site, 18Cv77, is most interesting in connection with the present discussion. Peaks in the distribution of stoneware, delftware, and pipestems are near-

ly coextensive, but noticeably different from the peak of red (coarse) earthenware. The distinction between these early stonewares and the utilitarian earthenwares resembles the situation at Doncaster.

At the other end of the historic time spectrum, Fine (1980) conducted a controlled surface inspection of the "Godiah Spray" site, a tenement of circa 1890 to 1920 associated with the St. Mary's City property. Carefully identified glass and especially Baltimore-manufactured ceramics provided a confident date range for the site. The locality was collected in a 50-foot grid (approximately 15 meters), but the concentration of artifacts was gridded in 10-foot (3-meter) units, providing greater resolution in the distributional data. Spatial analysis allowed the investigator to distinguish front and back yards, a task more difficult here than at Greenwood Creek I, where informants had already described the direction in which the house had faced.

Spatial data from the present project, due in part to the large grid size, are not sufficiently detailed for good comparison to Keeler's (1977) or Fine's (1980) project. The sites described in the foregoing chapters afford little detail about homelot arrangements, though hints may be gleaned of the Carvel site yard, possible Doncaster outbuildings, the Greenwood Creek I front yard, and the yard between structures A and B in Lower Marlboro. One hypothesis about change in the use-patterns of Rhenish grey stonewares was suggested, and very general trends such as the increase in material culture through the historic period, the increase in coarse, probably locally-made ceramics and the decrease in use of white clay pipes in the nineteenth century, are evident. The indications of spatial extent and temporal change in the port of Lower Marlboro are especially interesting, and emphasize the fact that grid size, like most methodic tools, must be considered according to the problem under investigation.

Artifact category profiles

Artifact category percentage profiles, based on South's (1977) pattern recognition study, were compiled for the two excavated sites in the Maryland sample, reported in chapters 3 and 4. Questions about the relationships among components within sites prompted those inquiries, but in the following chapter, which discussed sites that were in effect single components, computation of the profiles was not conducted. The percentages are most useful in comparison, whether among themselves or against South's defined patterns.

Three broad questions will be investigated by comparing category profiles across the sample. The first question is that intended by South: to what extent do the sites in Maryland confirm or conflict with the defined Carolina and Frontier patterns? Some comments on this matter were included in the analyses of Londontown and Icehouse Point.

Whether or not the first question even applies to the rest of the sites, is the second question. In other words, how do the profiles of surface assemblages compare to the patterns and profiles of excavated sites? South's (1977) patterns are based on excavations, and on entire site assemblages. Vagaries of preservation and sample size may affect seriously the profiles of surface collections. It might be expected, for example, that small and delicate items belonging to the Activities, Clothing, or Personal artifact groups would be overlooked or would not survive in surface or plow-disturbed contexts. South's component ranges, however, include zero or 0.1 representation in most of the categories, so that surface collections may indeed be comparable.

The third question is one of perceiving temporal change. South's (1977) scheme established static patterns, which, at least in the case of the Carolina pattern, apparently would apply to sites from the early eighteenth late into the nineteenth centuries (1977:124-125). Perhaps partly due to a small sample, South did not attempt to trace changes in the patterns through time. The present sam-

ple contains sites and components ranging from the turn of the eighteenth century to the middle nineteenth century, based on mean ceramic dates, and longer based on interpreted occupation spans. The total time period is comparable to that of South's data, and 16 assemblages can be separated or lumped for examination (Table 24). The Widow's Mite sample will not be included due to its manifestly disturbed nature, but the total Londontown assemblage will be added.

The profiles are presented in Table 26, roughly in chronological order by mean ceramic date. Two reinterpretations of dates are reflected, the Greenwood Creek II site and the Icehouse Point site having been pushed forward in time as indicated by data in addition to the ceramic formula. South's (1977) pattern ranges are repeated in Table 27 for ease of reference.

Two trends or patterns are most easily noticed, neither surprising. The general decrease in popularity of the ball clay tobacco pipe through time, or at least the drop in the nineteenth century, is quite clear. A quick calculation of mean percentages merely codifies the sequence: 1700-1750, 19.3%; 1750-1800, 6.1%; and 1800-1853, 2.1%. Since the three later Lower Marlboro structures and Londontown zone 5 represent nineteenth as well as eighteenth-century deposition, the drop in percentages in the latter half of the eighteenth century is probably exaggerated.

There is a clear dichotomy between excavated and surface samples in the proportion of animal bone in the entire assemblage, with the surface sites ranging from none to 3.2% and the excavated sites from 10.0 to 32.7%. This, too, is quite predictable, since bone would disintegrate relatively quickly in plowzone and surface contexts. The small quantities of bone in most of the assemblages effectively prevent any recognition of patterned occurrence.

A closer look at the Furniture, Arms, Clothing, Personal, and Activities groups reveals consistently low percentages across the entire sample, between 0 and 2% in all cases. The highest is the 2.1% entry for the Clothing group in

Table 26. Artifact category profiles.

Group	Tanyard Creek		Doncaster		Greenwood Creek II		Icehouse Pt. IICD		Icehouse Pt. foundation		Londontown z. 5-bottom	
	#	%	#	%	#	%	#	%	#	%	#	%
Kitchen	18	56.25	186	79.8	28	75.7	1394	65.0	1234	24.8	26	26.5
Architecture	1	3.1	7	3.0	0	0	497	23.2	3398	68.2	50	51.0
Furniture	0	0	0	0	0	0	0	0	4	0.1	0	0
Arms	0	0	2	0.9	0	0	1	0.1	10	0.2	1	1.0
Clothing	0	0	3	1.3	0	0	6	0.3	71	1.4	0	0
Personal	0	0	0	0	0	0	1	0.1	4	0.1	0	0
Tobacco	13	40.6	35	15.0	9	24.3	238	11.1	228	4.6	20	20.4
Activities	0	0	0	0	0	0	6	0.3	36	0.7	1	1.0
totals	32	99.95	233	100.0	37	100.0	2143	100.1	4985	100.1	98	99.9
Bone	0	0	4	1.7	1	2.6	707	24.8	556	10.0	14	12.5
mean date	1707.4		1728.54		1727.37		1711.27		1736.26		1748.13	

Table 26. Artifact category profiles (cont.).

Group	Carvel site		Lower Marl- boro A		Lower Marl- boro B		Lower Marl- boro D		Londontown zone 5		Lower Marl- boro C	
	#	%	#	%	#	%	#	%	#	%	#	%
Kitchen	166	86.9	297	87.9	376	89.3	150	92.6	73	37.8	140	91.5
Architecture	7	3.7	10	3.0	26	6.2	5	3.1	98	50.8	3	2.0
Furniture	0	0	0	0	0	0	0	0	1	0.5	0	0
Arms	3	1.6	1	0.3	2	0.5	0	0	0	0	0	0
Clothing	0	0	1	0.3	1	0.2	1	0.6	4	2.1	1	0.7
Personal	0	0	0	0	0	0	0	0	0	0	0	0
Tobacco	15	7.9	29	8.6	15	3.6	5	3.0	15	7.8	9	5.9
Activities	0	0	0	0	1	0.2	1	0.6	2	1.0	0	0
totals	191	100.1	338	100.1	421	100.0	162	99.9	193	100.0	153	100.1
Bone	4	2.1	11	3.2	1	0.2	0	0	65	25.2	0	0
mean date	1751.63		1756.7		1778.23		1780.56		1787.43		1790.01	

Table 26. Artifact category profiles (cont.).

Group	Mount		Londontown		Londontown		Greenwood	
	Ivey		total		zone 4		Creek I	
	#	%	#	%	#	%	#	%
Kitchen	657	88.9	721	50.6	28	26.7	4420	81.5
Architecture	62	8.4	608	42.7	73	69.5	917	16.9
Furniture	0	0	1	0.1	0	0	3	0.06
Arms	2	0.3	4	0.3	0	0	5	0.1
Clothing	4	0.5	6	0.4	0	0	10	0.2
Personal	2	0.3	2	0.1	1	1.0	12	0.2
Tobacco	2	0.3	71	5.0	3	2.9	17	0.3
Activities	10	1.4	11	0.8	0	0	42	0.8
totals	739	100.1	1424	100.0	105	100.1	5426	100.06
Bone	no data		308	17.8	51	32.7	22	0.4
mean date	1821.16		1821.49		1848.2		1852.9	

Londontown zone 5; whether this is due to the fact that it is an excavated, sealed component, or a small sample, thus exaggerating the importance of a few specimens, is difficult to say. In all cases, the low frequencies are consistent with South's predicted ranges.

A less obvious, but more important, pattern is the dichotomy between surface and excavated collections in overall profile patterning. Only the profiles of the excavated assemblages fit within South's predicted ranges, Carolina or Frontier. Of the profiles in Table 26, a single collection matches the Carolina pattern, the Icehouse Point trash deposit IICD. The Icehouse Point foundation and the sealed Londontown zones all fit within the Frontier pattern, while the total Londontown profile falls between the two defined patterns. More accurately, it partakes of both, being the combination of the Frontier pattern test II and the Carolina pattern test I. The manifestation of the Frontier profile at Icehouse Point was tentatively explained as a high Architecture count due to in-place destruction of the house, but an explanation for the sealed Londontown zones' profiles is still lacking.

The surface profiles are far more consistent, and, on the Carolina-Frontier pattern continuum, they out-Carolina the Carolina pattern. The ranges and mean of the surface collection frequencies are listed in Table 28a. Similarity to the Carolina pattern is clear, but the Kitchen group tends to be more heavily weighted, while the Architecture group weighs light. In addition, the upper range of the Tobacco group in the surface sample is considerably higher than predicted for either the Carolina or the Frontier range.

There are two anomalies in the surface sample, perhaps by coincidence at the early end of the sequence. The Tanyard Creek site yields a low percentage of Kitchen artifacts, in fact within the Carolina pattern range. The Architecture group, however, is much too low even for the Carolina pattern, while the Tobacco group is dramatically high. This situation most likely correlates with

the early date of the site, or rather to the ephemeral nature and ceramic poverty of the small planter's homestead of the seventeenth and turn of the eighteenth centuries.

The Greenwood Creek II assemblage is most anomalous in its entire absence of architectural items. Only two artifact categories are represented at all, the Kitchen and Tobacco groups. The specialized nature of the component is especially clear in this profile, a refuse deposit unassociated with a substantial domestic occupation. A special-purpose assemblage, for instance from an oystering expedition, would be unlikely to fit domestic-site patterns whether investigated by surface collection or excavation.

Without these two anomalous assemblages, the surface profiles are even more consistent (Table 28b). In spite of a general similarity to the Carolina pattern, the difference is manifest. The Kitchen group frequencies are slightly to greater than those of the Carolina pattern, while the Architecture ranges overlap only slightly. The Tobacco and other groups fall within the Carolina tolerances, and also within the Frontier pattern.

It is worth noting that the Tanyard Creek site fits the surface range in the Architecture group quite well, emphatically removing the assemblage from the Frontier pattern.

The profiles are presented in graphic form in Figure 108, in which the distinctions are more visible. The reversal of the Kitchen and the Architecture frequencies from the Carolina to the Frontier patterns (mean percentages plotted) and the even heavier Kitchen components in the surface collections, are highlighted. The consistently small contributions of most of the other categories also are easily visible.

These data suggest that a "Carolina surface" pattern may be derivable, useful for the identification of British colonial domestic sites prior to intensive investigation. As an initial formulation, the means and ranges in Table 28b

Table 27. Profile patterns.

<u>group</u>	<u>Carolina</u>	<u>Frontier</u>
Kitchen	47.5-78.0	10.2-45.0
Architecture	12.9-35.1	29.7-74.3
Furniture	0 - 0.7	0 - 0.5
Arms	0 - 1.5	0 -15.6
Clothing	0 - 8.5	0 - 6.9
Personal	0 - 0.6	0 - 0.7
Tobacco	0 -20.8	0 -27.1
Activities	0.1- 3.7	0 -11.8

Source: South 1977:119, 145.

Table 28. Profile ranges for surface sites

<u>group</u>	a. All surface sites		b. Modified sample*	
	<u>range</u>	<u>mean</u>	<u>range</u>	<u>mean</u>
Kitchen	56.25-92.6	83.0	79.8-92.6	87.3
Architecture	0 -16.9	4.9	2.0-16.9	5.8
Furniture	0 - 0.06	0.006	0 - 0.06	0.008
Arms	0 - 1.6	0.37	0 - 1.6	0.46
Clothing	0 - 1.3	0.38	0 - 1.3	0.48
Personal	0 - 0.3	0.05	0 - 0.3	0.06
Tobacco	0.3 -40.6	10.95	0.3-15.0	5.6
Activities	0 - 1.4	0.3	0 - 1.4	0.4

* Tanyard Creek and Greenwood Creek II deleted.

are proposed as the parameters. The pattern's most characteristic trait is the high frequency of Kitchen group artifacts, and a corresponding dearth of Architecture materials. The breakup and oxidation of iron nails, a large component of the Architecture group totals in most sites, are probably key factors in the exaggeration of the Carolina pattern Kitchen-Architecture relationship.

Returning to the graph, Figure 108, it is difficult to discern any major trends through time. The diminution of the Tobacco group is of course quite evident in the surface sequence. There is also a rise in the Architecture group in the nineteenth-century sites, Mount Ivey and Greenwood Creek I. Greater availability and affordability of window glass, and the introduction of steel and galvanized nails, may elevate the levels of Architecture group materials, particularly in a late nineteenth and twentieth-century site such as Greenwood Creek I. The juxtaposition of high Tobacco and low Architecture frequencies in early colonial sites, and the converse in late historic sites, may provide for some slight temporal discrimination in a "Carolina surface" pattern.

Socioeconomic patterns

Inferences of socioeconomic status have been frequent in historic site analyses. Most, like those in the site descriptions presented in previous chapters of this work, have been based largely on impressions gained from the assemblages, using relative quantities of materials and indicative artifacts such as highly decorated pottery, silver, and personal ornaments. Otto (1977, 1980) brought better focus to the problem in his investigation of planter, overseer, and slave assemblages in an antebellum Georgia plantation. He demonstrated that ceramic ware and vessel form, and also faunal food refuse, provided insight into dietary patterns and procurement strategies (of ceramics as well as food) that reflected status quite convincingly.

Recently, G. Miller (1980), in a very important article, outlined a classi-

fication and economic scaling scheme for nineteenth-century ceramic assemblages. The system is based on careful study of price records of the early nineteenth century, from which he compiled indices for various decorative types and vessel shapes. The indices are keyed to the cheapest ceramic, undecorated cream-colored ware, as the basic cost unit in terms of which all other wares were measured for cost. This method provides a consistent scale for translating ceramic into a cost of procurement, by inference a means for procurement, indicator.

The ceramic and glass analysis format by which the data have so far been presented was designed for efficient recording of the Icehouse Point collection, and modified only slightly for use with the other sites. For the nineteenth and twentieth-century Greenwood Creek site, however, with its variety of ceramics lumped under the term "whiteware," this format proved less useful. Miller's (1980) classification of whiteware/ironstone by decoration allows a more discriminating sorting process.

The scheme as Miller proposed it, however, has several drawbacks for the study of a collection such as that from Greenwood Creek I. Vessel forms are difficult to identify in a plowzone collection, due to the fragmented state of the specimens. (This is also a problem in using some of South's [1977:210-212] dating categories, e.g., everted rim ointment pot, with half-inch plowzone sherds.) Miller's discussion of the difficulty of distinguishing nineteenth-century white-wares, lightly tinted creamwares, and pearlwares--the latter two having persisted throughout the century, though "the potters did not perceive the differences which archaeologists have chosen to call pearlware and whiteware" (G. Miller 1980:18)--applies even more to small sherds than to whole vessels. Miller suggests that, for an assemblage that spans a large part of the nineteenth century, sub-assemblages be separated to correspond more closely to the short periods between his index dates. This is impossible in a plowzone collection. Further, Miller's (1980:11) latest index date (so far) is 1858, too early to allow full applicability

to a site of circa 1800 to 1940.

A major assumption of South's (1977) dating and pattern recognition techniques is that fragment counts, rather than whole vessel counts, of entire assemblages provide useful bases for indexing sites. This perspective should be applicable to a scheme such as Miller's (1980), even though it might "coarsen" the resolution somewhat. Assigning generalized values to Miller's decorative types, the classification he suggested instead of ware types, should be manipulable into a useful index formula for comparison among nineteenth and early twentieth-century ceramic assemblages. Accordingly, the recording format in Table 29 was used for the ceramics from Greenwood Creek. Glass was also divided into new categories, to provide better classification for comparative purposes.

This approach with the ceramics is quite experimental, and several problems are immediately apparent. The first has to do with identification of sherds, particularly of the white, undecorated ironstone that came into popularity in the mid-nineteenth century (G. Miller 1980:29). Several authors have discussed the difficulty of distinguishing ironstone from whiteware (Smith 1976; Price 1979), and South (1974:248, 1977) merges the two types at least for dating purposes. Yet Miller makes it clear that for purposes of economic scaling, the distinction is important.

In this analysis, sherds that had a hard, clear glaze, a very white surface under the glaze, no decoration, and a paste that approached stoneware in consistency, were recorded as undecorated ironstone, while those that had less glossy glaze and a softer earthenware paste (usually thinner in cross-section), were considered whiteware, or CC when undecorated. In only a few cases did a possibly "ironstone" sherd bear decoration, and each was listed in the appropriate decorative class. As the above-cited authors note, this method is not entirely satisfactory, but the attempt needed to be made.

It also should be noted here that creamware and pearlware were included in

Table 29a. Format for reporting nineteenth-century ceramics.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1.	CC															
2.	Edged															
3.	Dipped*															
4.	Sponged															
5.	White glazed															
6.	Underglazed lined															
7.	Painted															
8.	Ironstone															
9.	Willow															
10.	Transfer print															
11.	Flowware															
12.	Basalt															
13.	Porcelain															

Top codes:

A to D plates: A 10", B 8", C 7", D 6" and smaller; E handled cups, F unhandled cups, G bowls, H unknown shape, I total; J to P decoration colors: J blue, K green, L black, M red, N purple/lavender, O brown, P polychrome.

* Includes annular and mocha.

Table 29b. Nineteenth-century ceramics from Greenwood Creek I.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1.	9	5			3	9	10	958	994							
2.		1						33	34	28	6					
3.		1						34	35	16	4	2		3	3	7
4.								4	4	4						
5.																
6.								10	10	7	1				1	1
7.			1		3		1	20	25	7	5		1		1	11
8.	1	6			6	7	7	191	218							
9.								1	1	1						
10.	1	4	4		1	2	3	183	198	65	5	3	2	68	9	46
11.								29	29	26	1				1	1
12.																
13.					1	5	2	95	103	2			6	4		10
ttl	11	17	5		14	23	23	1558	1651	156	22	5	9	75	14	76

in the counts in Table 29, under the appropriate categories, even though they were separated in the earlier data format. Certain other sherds listed as white-ware/ironstone in Table 18 belong to miscellaneous unlisted types, for instance a couple of sherds identifiable as early twentieth-century Fiesta, and are not included in Table 29.

A second problem is the assignment of scaling values to the decorative types. Miller's (1980) indices vary by year, but the method attempted here requires a generalized approach. Miller presents two index tables that have reasonably numerous entries, for bowls (1980:33) and for plates (1980:26). Table 30 lists the index values from the years 1856 and 1858 for both vessel forms, averaged where both years have entries, and a composite list based on the available entry or the average of the two entries.

Two entries are absent from both bowl and plate lists. The "white glazed" category is somewhat enigmatic. Miller (1980:32) found the term in only one 1814 price list, and suggests that it refers to undecorated pearlware. He notes, however, that undecorated pearlware is at best rare. This category was unused in the present analysis, so that the lack of an index value poses no problem.

"Underglazed lined" sherds, though, did occur, and need to be taken into account. This term refers to a technique of decoration by one or two lines applied around the rim of the vessel. Miller (1980:28) notes that the design is consistently higher in price than edged ware. For the composite index, a value of 1.25, arbitrarily chosen to fall between the edged and hand-painted ware values, is employed.

For the record: all sherds of whiteware, pearlware, or creamware that bore no decoration were recorded under the CC or undecorated "cream-colored" category. This group obviously includes sherds from vessels with edged or underglaze lined decoration, which is applied only around the rim. The practice somewhat biases the resulting mean index value for the assemblage toward the lower end of the

Table 30. Index values for economic scaling.

	<u>bowls</u> ¹	<u>plates</u> ²	<u>composite</u>
1. CC	1.00	1.00	1.00
2. Edged		1.22	1.22
3. Dipped	1.10		1.10
4. Sponged	1.10	1.22	1.16
5. White glazed			
6. Underglazed lined			1.25 ⁴
7. Painted	1.30		1.30
8. Ironstone	2.00	1.76	1.88
9. Willow		1.52	1.52
10. Transfer print	2.00	1.52	1.76
11. Flowware	2.40	2.40	2.40
12. Basalt	6.00 ³		6.00
13. Porcelain		4.80 ³	4.80

1. Miller 1980:33, 1856 and 1858 indices.
2. Miller 1980:26, 1856 and 1858 indices.
3. This is the only index value available.
4. Arbitrary.

scale, but should apply consistently to all assemblages and so maintain comparability.

The final problem to be noted is the lack of comparative data in this project, preventing any rigorous assessment of the utility of the method. The Greenwood Creek I site is the only nineteenth to twentieth site in the sample. The Mount Ivey site is included in this report as a partially comparable case, having a heavy nineteenth-century component (Tables 23, 31), but represents only a very preliminary sort of comparison.*

The assemblage index, under the experimental method of scaling, is calculated essentially in the same manner as South's mean ceramic date and Miller's index. The sherd count for each category is multiplied by the category's index value, the products are added, and the sum of the products is divided by the total sherd count.

The process arrives at index values of 1.48 for the Greenwood Creek I site, and 1.29 for Mount Ivey. At face-value, these figures suggest that the Greenwood Creek occupants were slightly better off than the residents of Mount Ivey. The question of index dates may have a bearing on the interpretation of these figures. It would be expected, for instance, that a site occupied during the latter half of the nineteenth century, such as Greenwood Creek I, would contain a higher proportion of undecorated ironstone than would an earlier nineteenth-century site like Mount Ivey, occupied before undecorated ironstone became fashionable.

In this connection, a computation of percentages represented by each category is interesting (Table 32). The comparability of several categories, particularly the CC and edged wares, is striking. Sponged and underglaze lined sherds are equivalently infrequent. Greenwood Creek I does have a slightly higher percentage of ironstone, but this is easily balanced by Mount Ivey's higher transfer-

* It should also be noted that the "willow" category is unused in this analysis due to the investigator's inability to identify the motif on the fragmentary sherds.

Table 31. Nineteenth-century ceramics from Mount Ivey.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1.			1		1	1	1	142	146							
2.								7	7	6	1					
3.								12	12	8					2	2
4.																
5.																
6.								1	1	1						
7.								1	1						1	
8.	3	1				1	2	18	25							
9.																
10.	2							40	42	42						
11.							1	9	10	10						
12.																
13.																
ttl	5	1	1	0	1	2	4	230	244	67	1	0	0	0	3	2

Table 32. Percentages of ceramic decorative categories.

	Greenwood Creek I		Mount Ivey	
	#	%	#	%
1. CC	994	60.2	146	59.8
2. Edged	34	2.1	7	2.9
3. Dipped	35	2.1	12	4.9
4. Sponged	4	0.2	0	0
5. White glazed				
6. Underglaze lined	10	0.6	1	0.4
7. Painted	25	1.5	1	0.4
8. Ironstone	218	13.2	25	10.2
9. Willow				
10. Transfer print	199	12.1	42	17.2
11. Flowware	29	1.8	10	4.1
12. Basalt				
13. Porcelain	<u>103</u>	<u>6.2</u>	<u>0</u>	<u>0</u>
	1651	100.2	244	99.9
	index: 1.48		index: 1.29	

printed and flowware counts. No nineteenth-century porcelains comparable to those at Greenwood Creek I were found at Mount Ivey, however. It might be inferred that the nineteenth-century residents of Mount Ivey were less able to afford porcelain than were those at Greenwood Creek. Without the porcelain, the Greenwood Creek I assemblage produces an index value of 1.26, very close to Mount Ivey's, lending credence to the index values of the entire assemblages.

Two sites can do little more than illustrate the proposed method. Even more than previous patterns or hypotheses suggested in this chapter, this economic scaling method will demand critical review and testing before it can be accepted as a useful tool. As Miller reviews more price information and refines his indices, so too must the indices adapted for sherd counts be refined. A scaling method useful for full sherd assemblages and surface collections, employed in conjunction with Miller's vessel count index, would be an extremely valuable source of socioeconomic data.

Chapter 7.

Overview

Ten sites have been discussed in detail in the preceding chapters, including one town site in which four structures were discerned. The locations of all sites reported here are shown in Figure III. Patterns of artifact occurrence were compared among the sites, in chronological perspective. It remains to consider the archaeological record against the historical and geographical background of society in the Chesapeake tidewater.

Work on the sites was fairly limited, and interpretations of the sites are thus less detailed than might be preferred. Two aspects of the project particularly limit inferences on a regional level. First, the sample is by no means representative even of a limited area, so that only a few hints of "settlement patterns" can be gleaned, and these subject to concordance with the known historical geography. Second, only one site, the Londontown Public house, provides distinguishable contexts, so that changes within sites are difficult to infer. By contrast, the intensively-investigated St. Johns site of St. Mary's City (Stone 1974; Keeler 1977) yields an excellent picture of the elaboration of a plantation complex through the seventeenth century, fitting well within Earle's (1975) first period of plantation type. The local "urban center" was dying about the time when the St. Johns site was abandoned, and this site with the comparative case of the nearby John Hicks site (Stone et al. 1972) of the second quarter of the eighteenth century, in which boat parts, and carpenters' and sewing implements, indicate growing self-sufficiency a la Earle's second period, will provide an interesting test of rural-urban models that might be derived from Earle's conclusions when the full site inventories can be studied from such a perspective.

Some general comments on the present sample are possible, however, and may illuminate the archaeological aspects of social trends. The following

discussion will proceed roughly by quarter-centuries, with sites assigned primarily by mean ceramic dates as listed in Tables 24 and 26.

Probably the earliest site of the sample is the Icehouse Point site, 18Qu-28. The structure was apparently built circa 1665 to 1670, on a well-protected waterway for access to ship transport. The substantial nature of the structure, in an area that had been open to settlement for less than two decades, indicates the wealth of the occupant and builder, who was probably Peter Sayer. Some of the artifacts found at the site are consistent with a seventeenth-century occupation, but most materials belong to the following century, and will be discussed further below.

Two sites can be dated to the first quarter of the eighteenth century, both perhaps occupied before the turn of the century. The Donaldson site, 18-Qu201, has so far yielded little more information than its location, on the Bay-ward shore of Kent Island. The Tanyard Creek site, 18Qu209, is also marked by few materials. There was probably a structure here, but the lack of brick implies an ephemeral structure in sharp contrast to the dwelling at Icehouse Point. It was probably the home of a small planter, who may not have occupied the site for very long, either moving to a more substantial house when he could afford it or going broke in a tobacco depression.

The ephemeral nature of the surface scatter and, by inference, of the home, shows similarity to seventeenth-century house sites briefly reported by Clark and Smolek (1981). Their lower Patuxent sites were found at spring heads in close proximity to a major water-way. The Tanyard Creek site, however, is relatively far inland. It is possible that the planter could have floated a small boat down Tanyard Creek, but unlikely that the creek was useful for shipping tobacco or other goods. This landholding is probably part of the second wave of ownership, taken up after the shoreline was effectively claimed. The owner may have been a freed servant who took up his fifty acres in the best

location he could find, where fresh water was available from the creek but from where he would have to "roll" his crop nearly a mile to reach navigable water.

A number of sites were found to date to the second quarter of the eighteenth century, all near open water. On the Eastern Shore, the site of Doncaster, 18Ta30, is located on lands set aside in the Town Acts. The median (ceramic) date for the site is very early in the quarter, and it may date from the turn of the century or even earlier. A lack of white saltglazed stoneware suggests that the area was unoccupied by mid-century. One structure can be identified, and there may be two small outbuildings associated with it. The amount of brick and the quantity of artifacts recovered indicate a more substantial and perhaps longer-lived dwelling than is found on Tanyard Creek. Occasional niceties such as wineglass stem and pewter bottle cover imply a reasonably comfortable income. At this early date, fine ceramics are still scarce, and scanty distributional data suggest that decorated Rhenish grey stoneware functioned as table and serving rather than as storage ceramics. By comparison with the roughly contemporaneous Tanyard Creek site, then, Doncaster can be interpreted as the home of a planter of middling or better means.

According to the historic records, the site was legally enfranchised as a town. Although much of the site as originally recorded apparently was hidden by grass at the time of this survey, there is little indication that any extensive town-building ever took place on the site. As the Town Act site of Doncaster, the place probably had a wharf and at least a tobacco storehouse. The Icehouse Point site, by now Richard Bennett III's plantation, would have been a busy loading place in its own right; almost directly across the river, Bennett's wharf may have been close enough to the Doncaster site to be considered part of the town, in terms of the loading and unloading specifications in the Town Acts. This competition for shipping probably stunted the growth of

Doncaster, which may never have amounted to much more than the Bruff plantation in spite of their hopes. The fact that the Doncaster site seems to have been abandoned by mid-century, when the Icehouse Point site was still going strong, casts an interesting light on the plantation-urban ambivalence of the Wye River area.

The Greenwood Creek II site, 18Qu208, represents activity late in the quarter, when a trash deposit evidently filled a subsurface pit. The ceramics, primarily storage wares, produce a mean date in the third decade of the century, but the pipestems and an octagonal wine bottle base place the date of deposition close to the mid-century mark. The heavy concentration of oyster shell and the proximity of the site to the tidal reaches of Greenwood Creek make it likely that the deposit represents a special activity site, where oysters were procured and prepared. A trace of brick raises the possibility that the trash pit is associated with an ephemeral dwelling site, but no such structure can be identified; the lack of table ceramics would support the evidently flimsy structure in suggesting a very poor planter's or servant's dwelling. Eighteenth-century materials were found in the upper part of Greenwood Creek, where the pipestems from the Greenwood Creek I site produced a computed date of 1731. No unmistakable building of the eighteenth century can be located in the area, however, and until further investigation produces more information, the Greenwood Creek II site may best be interpreted as a short-use oystering station.

On the Western Shore, the second quarter of the eighteenth century is represented by the town of Londontown, 18An48. Zone 5-bottom of the Publik House test pit represents the end of the quarter, and the median date for Widow's Mite falls in the same decade. Based on the small reported samples from the two sites, it is difficult to affirm a direct connection, but in the context of historical knowledge the early eighteenth-century rise of the South River port can be seen. Shomette (n.d.) identified drowned sites along the Londontown shoreline, some of which could date to the same period. The Londontown

House and Gardens facility also houses a large number of surface collected artifacts, which date from the late seventeenth to the twentieth centuries. (These materials were examined, but are not reported due to uncertainties of provenience.) The aggregate quantity and areal extent of these sites and materials, particularly by comparison with the Greenwood Creek and Doncaster localities, do indeed indicate a substantial center of activity. Available samples from each site, however, do not aid in determining structure identities. That the Publik House was an inn, and whether the site at Widow's Mite was a dwelling or a commercial establishment, will require further investigation to establish by archaeological means.

Further investigation should also seek data from plantations in the port's hinterland, for indications of how the rise of Londontown might have affected or been reflected in conditions in the countryside. The only Maryland site from this period that has been reported in any detail is the John Hicks site (Stone et al. 1972), associated with St. Mary's City. This site represents a modest "first house" of a planter, occupied circa 1723 to 1743 and torn down when the owner could afford better. The town of St. Mary's was dying or dead by the time this house was built. The variety of implements in the assemblage, including boat parts, carpenters' tools, and seamstress' or tailor's tools, fits well the increasing self-sufficiency Earle (1975) saw in the 1710-1740 period.

Ceramics from the Carvel site, 18Qu206, place the median date of occupation just after 1750. The structure may have been built in the first half of the century, but the high frequency of creamware suggests predominantly third-quarter occupation. The total number of artifacts recovered is comparable to the total at Doncaster, but the significantly later date of the Carvel site emphasizes the sparseness of the materials and thus suggests less wealth in the occupants. The distribution of Rhenish grey stoneware implies that the

availability of finer wares had relegated the grey vessels to the function of storage rather than display. Discussions of the Hicks site ceramics (Stone et al. 1972; Carr 1972) note that ceramics were regarded as status markers by mid-century, and the fine white stonewares and refined earthenwares evidently took precedence in formal use. There is some indication of use of a yard at the Carvel site, possibly between the house and brick outbuildings. (Although brick barns would imply a more substantial complex than indicated by the house area). The site is still strategically located on the waterways, commanding the shorelines of the Eastern Bay as well as a broad inlet. The owner of the Carvel site was probably a tobacco planter of the poorer sort in the pre-Revolutionary period, trying to hold out against an every-worsening market. He may have had his own small wharf, but he would have been required to take his crop to an inspection station to sell it.

The Icehouse Point site, still occupied during much of the life of the Carvel site, contrasts markedly. It apparently burned during this quarter, and much of the material remains seem to represent the latter part of its near-century span. Although this excavated collection cannot be compared in quantity to that of the Carvel site, the presence of a number of pewter pieces, silver, coins, porcelain, polychrome delftware and especially polychrome-enamelled white saltglaze attests to the wealth of the occupants, commensurate with the substantial nature of the building and also with the historically-known Richard Bennett III. The inventory of materials is quite varied, including a hammer, a fishhook, an apothecary weight, gunflints, sewing implements, newly molded buttons, several unidentified iron implements or parts, a barrel spigot and a shovel (the latter two listed in the field notes on pit A). Wine bottle seals with the owner's initials indicate not only his identity, but his direct ties to English suppliers. These mercantile and production-maintenance items suggest Bennett's participation in the diversification process that Land (1972) and Earle (1975) identified.

Background knowledge of Richard Bennett III, wealthy merchant-planter, entirely support the picture of a colonial Chesapeake tycoon. His plantation would have been fairly complex in layout. Investigations did indicate the presence of other buildings on Icehouse Point, but aside from recent work at the cemetery chapel, none was investigated. Investigation for possible storehouses might reveal something of Bennett's commercial interests, and would be especially interesting in comparison to similar studies at Doncaster, if there was competition for shipping traffic. The complexity of Bennett's household, which included several relatives and unrelated bachelors, is also notable, but given the predominantly plowzone context of the recovered materials it is difficult to infer household structure. That the materials from the trash deposit match South's (1977) Carolina pattern of British colonial domestic refuse suggests that such subtleties of household composition will be difficult to discern archaeologically.

Processes of change on a regional level on the Western Shore are inferable from the sites dating from the third quarter of the eighteenth century. There is no indication that the site at Widow's Mite lasted long into the quarter, leaving the Publik House to represent the port by itself. Based only on the archaeology, it would be difficult to conclude that the port had appeared and died in the first half of the century, but in light of known historical processes, the fact that 50% of the known buildings have disappeared in the third quarter is consistent with expectations.

Lower Marlboro, however, begins to grow in this quarter. Structure A was probably standing by mid-century, the residence of a comfortable if not wealthy holder of a lot in the Town Land. The high frequency of artifacts, the presence of such niceties as wineglass stems, polychrome delftware, overglaze-enamelled porcelain, and scratch blue saltglaze, distinguish this dwelling from the modest but roughly contemporaneous Carvel site. The tight cluster of the materials at

structure A suggests that it was not nearly so large as the house at Icehouse Point, but it may well have exceeded the 20-foot square minimum set by the Town Acts.

Structure D probably stood by the end of the quarter, farther from the river shore. The cluster of artifacts here is much smaller than at structure A, and it could easily be considered an outbuilding or servant quarter for a plantation house represented by cluster A. The presence of three standing buildings of the era in modern Lower Marlboro, and the documentary evidence that this area had been designated and surveyed as a town, make it more likely that A and D occupied separate lots. Whether D might represent a very modest dwelling, or some special-function or intermittently-occupied structure, cannot be told on present evidence. Broadly, the influence of the Inspection Act of 1747, as predicted by historical geography, can be seen in the rise of Lower Marlboro and the concurrent fall of Londontown in the third quarter of the century, even in so limited an archaeological sample.

The fourth quarter of the eighteenth century includes the War of American Independence and the early national period. Whether the American Revolution can be seen by archaeologists (i.e., who won the war) is a question worth serious study. Deetz (1977) implicitly suggests that the ideological revolution was over by the 1770's, and it remained only for the politics to catch up; whether his processes of individualization and ordering can be seen to differ from processes in Britain and the non-rebelling colonies, suggesting an essentially systemic reason for all the battlefields of the late 1770's, has yet to be investigated. It is possible that the deregulation of trade, resulting in a diversification of origins of materials goods, will be discernable, particularly in trade centers such as Baltimore, New York, and Philadelphia. The data at hand allow speculation, and no such interpretative leaps.

The small sample reported here does not even provide Eastern Shore sites that were occupied in this quarter. It is possible that the Greenwood Creek

I site, 18Qu207, was built at the very end of the century, but the evidence is dubious.

On the Western Shore, the two town sites are still occupied, but Londontown is represented only by zone 5 at the Public House. The Public House probably made a transition from inn to private residence in this quarter, but the small test is inadequate to identify the change in occupation. The oyster shell pavement was open and collecting trash during the period, casting doubt on the sanitary conditions of the occupants, but until more of the area is carefully excavated, general patterns of trash disposal will remain uncertain.

In Lower Marlboro, three structures have appeared since mid-century, suggesting an intensification of activity. Structure B probably replaces structure A, although there may be some overlap. Two small buildings, C and D (the latter evidently having been constructed late in the previous quarter) are located inland. Materials are too scanty to suggest the functions of the buildings, whether modest dwellings, shops, or outbuildings, but the presence of the highest number of known contemporaneous structures in this and the next quarters is significant in light of Brune's (1979) conclusion that the period from 1750 to c. 1830 marks the maximum centralization of tobacco marketing in the Patuxent drainage. Including the standing structures, seven buildings stood in Lower Marlboro during the period, at least six in use simultaneously, clearly comprising a waterfront hamlet if not a port on the order of (historically known) Londontown.

Only two median dates fall within the first quarter of the nineteenth century, both at 1821. They include the overall mean ceramic date from the Londontown Public House, but since stratigraphic data provide an internal chronology for the site, this median will not be given much weight. Structures B, C, and D, are still occupied during the quarter, but not long past it. The house at Greenwood Creek I may well have been built by the end of the quarter, but the majority of the materials are clearly later.

Only the Virginia site, Mounty Ivey (44Sy135), belongs solidly to this quarter according to its mean ceramic date. The materials, however, indicate as much as a hundred-year life span for this house, so that discussing it for the early nineteenth century is rather arbitrary. The participation of this plantation in the general Chesapeake settlement and economic system does allow comparison to the Maryland sites.

There is no indication that the occupants of this house were very wealthy, and in fact they may have lost a bit in standard of living from the eighteenth to the nineteenth centuries; fine, sprigged Rhenish stonewares and Chinese porcelains belong to the earlier period, but ceramics of the latter century are represented predominantly by blue transfer-printed whitewares, with no trace of porcelain. Even so, the quantity of artifacts from this site is greater than from any earlier surface site, indicating the general rise in material belongings through the historic period. The proximity of the house to the wharf correlates with its colonial origins. The wharf was actually in use until well into the twentieth century, but later dwellings on the same property were removed inland, and oriented toward the road system.

By the mid-nineteenth century, the buildings known archaeologically at Lower Marlboro were gone. Baltimore's monopoly over the marketing patterns of the upper Chesapeake had reduced Lower Marlboro to an out-of-the way hamlet. Zone 4 at the Londontown Public House represents the post-1830 (circa) period, when the building was used as a public shelter. The small test does not provide information to distinguish these occupants from previous tenants, although a change in spatial or refuse patterns-- visible in the lack of coarse storage and utility ceramics-- can be inferred.

The Greenwood Creek I site is the major representative of this period, occupied for perhaps a century or even a little more before the house was removed about 1940. The quantity of artifacts is boggling by comparison to any

other surface site (this from a field where the landowner suggested that there would be nothing to see except a brick or two!) The proportion of architectural materials was slightly higher than on earlier surface sites, implying that the relative price drop in manufactured commodities had some effect on building styles or practices.

Transportation and marketing patterns contrast with earlier sites, also. The house (by informant's description) faced the road, and was built in proximity to the road rather than to a navigable stream. Higher use of the front yard may attest the entertainment value of traffic, but contrasts with the formal, orderly "court yard" of the colonial St. Johns site (Keeler 1977). American maker's marks on refined ceramics have implications for the rise of domestic production by the end of the nineteenth century, and also for the progressive elaboration of domestic marketing systems. A very experimental method of ranking ceramics for socioeconomic status suggests that the occupants of the Greenwood Creek site were slightly better off than those at Mount Ivey, and were probably solid middle-class farmers of the Eastern Shore. The frequency of non-blue and polychrome transfer printed vessels and of undecorated ironstone, compared to Mount Ivey, probably has more to do with time period than with status. A few sherds of Fiesta wares are recognizable in the Greenwood Creek I collection, but for the most part twentieth-century materials were not factored out.

Summary

In spite of a rather scanty sample, it has proven possible to compare a number of sites to background knowledge of the history and geography of the Chesapeake tidewater, and to relate assemblages to trends in the developing colonial society. From historical studies, these trends can be related to a number of aspects of the colonial situation, and especially to settlement demography and to the fluctuations of the tobacco market. On present archaeological

data, only the broad outlines of a historical-geographical model can be inferred, but continued investigations should provide contexts and assemblages to refine the synthesis.

The rise in material culture, historically connected to an increased overall standard of living, can be seen clearly in the sample, capped by Greenwood Creek I with its mass production run rampant. An early waterline settlement pattern, with inland but still water-related expansion after the shoreline was taken up, and a nineteenth-century shift to a road orientation, can be illustrated, but larger, representatively surveyed samples are needed to demonstrate the settlement systems.

The variety in socioeconomic status among Chesapeake planters can also be seen in the present sample, from the ephemeral homestead at Tanyard Creek, to the plantation at Doncaster, to the substantial house foundation at Icehouse Point in the first part of the eighteenth century; similarly, in the latter eighteenth century, from the modest Carvel site to the comfortable residence of structure A at Lower Marlboro, and again to the wealthy Bennett manor at Icehouse Point. It is notable that the builder of the house at Icehouse Point had made his fortune already, or he would not have built such a structure. It might be difficult, however, to decide from the archaeology whether the wealth were introduced to the region or if this were a second house to replace the early homestead. An attempt to compare socioeconomic status in ceramic assemblages of two nineteenth-century sites was suggestive, but far from conclusive, and much thought and many samples will be needed before the method can be accepted or proven unusable.

Some perspective on rural-urban processes can be gained from the sample, when interpreted in the light of Earle's (1975) model for All Hallow Parish. The plantation house at Icehouse Point gave some indication of the self-sufficiency of the large planter in the later eighteenth century, whose diverse

interests allowed him to ride out an increasingly bumpy ride on the tobacco road. The rise and fall of Londontown, followed by Lower Marlboro, and the tension between the Icehouse Point plantation and the "town" at Doncaster, can be inferred.

Spatial analysis within sites produced little information, in large part because the grid size of the controlled surface collections was selected for the investigation of town rather than house-lot patterns. Four structures or concentrations were identified in the town of Lower Marlboro, where only one had been noted in the field, and a useful idea of relative chronology among the clusters was also gained. A probable yard area at the Carvel site, and two tentatively identified outbuildings at Doncaster were also revealed, and an hypothesis about the functional behavior of Rhenish grey stonewares was also formulated based on these two sites. The Greenwood Creek I distributions, coupled with informants' descriptions, allowed distinction of a front yard, but no other patterns were evident.

South's (1977) Carolina and Frontier patterns were no entirely useful for the interpretation of most excavated assemblages in the present sample. That is, the domestic refuse deposit at Icehouse Point clearly fits within the Carolina pattern, as expected, but the foundation there and the sealed deposits at the Londontown Publik House equally clearly fit the Frontier pattern, though neither could be considered a "frontier" site. Problems of sample size (at Londontown) and disturbed contexts (at Icehouse Point) may be involved in the anomalous patterning, but use of the Frontier pattern, in particular, as an interpretive device should be cautious. By contrast, the surface patterns were quite consistent and quite close to the Carolina pattern, with the exception of the site at Tanyard Creek-- which might with some justification be considered a frontier homestead.

This sample has provided conclusive evidence of few, if any, patterns or trends. More research is obviously needed, including survey and testing projects

and also intensive, and fully reported, excavations like those under analysis at St. Mary's City. It is hoped, however, that the foregoing chapters have indicated the need for detailed research designs that integrate the perspectives of historians and geographers, and have demonstrated the interpretive value of looking beyond the single site towards regional syntheses in historical archaeology.

so much variation among the local wares, is not evident.

Preliminary conclusions

The house site at Mount Ivey appears to be a planter's dwelling of the mid-eighteenth to the mid-nineteenth centuries. Neither date is particularly well specified. Mr. Benjamin Berryman, before his death at an advanced age in 1959, recalled seeing the ruins of the house when he was a small boy, which would probably have been in the 1870's. (Ann N. Wesler, personal communication). How long the house might have stood in ruins before that time is not directly known.

The occupants of the house do not seem to have been wealthy. No sherds of the expensive enamelled white saltglaze, or of nineteenth century porcelains, were identified in the collection. The inhabitants would have been Virginia planters of the middle sort, becoming middle-class farmers of the nineteenth century.

Wild goose sites

The remainder of this chapter will be a brief discussion of the several sites that were sought, but not located, during the project. It will be evident that the effort expended varied among the sites, and in no case will it be demonstrated certainly--though it may be concluded--that the sites cannot be found. This discussion, it is hoped, will either prevent duplication of effort, or suggest alternative approaches, to other investigators who may be interested in the same sites.

Claiborne's trading post, Kent Island

The first settlement in Maryland (as opposed to the first settlement of Maryland, which is St. Mary's City) was located on Kent Island, and was established about 1631 by William Claiborne of Virginia. Extensive litigation between Claiborne and associates in England (Semmes 1933) and conflict between

Claiborne and the Calvert proprietors of Maryland have made the story of his settlement as well known as any part of Maryland history. Despite all the historical attention to the matter, however, there is a major gap in the documentary record: in Isaac's (1957:94) words, an "absence of any definite knowledge of where precisely the first settlement was located."

The story of Claiborne's venture has been published many times (e.g., Isaac 1957; Hale 1951), and only the barest outline is necessary here. Claiborne was given a commission by the Crown to trade in the Chesapeake Bay (Maryland Archives 3:19-20), but not to establish a settlement--the major point in Lord Baltimore's favor when the latter was granted the colony of Maryland in 1633. Claiborne did establish a settlement, under the label of a trading post. Petitions from Claiborne and Sir John Wolstenhome in 1633 (Maryland Archives 3:24-25) and from Claiborne's London financiers in 1634 (Maryland Archives 3:27-28) make the fact of the settlement clear, as do Claiborne's accounts in litigation in the Court of the Admiralty (Semmes 1933). Baltimore clearly knew of Claiborne's settlement when he sent his first colonists, instructing that Claiborne, "of that Iland where he is... that plantation was first begunn and so farr advanced," be treated with diplomacy (Maryland Historical Society 1889: 135).

Diplomacy was short-lived, however, and in 1638 Governor Leonard Calvert decided to occupy Kent Island by force (Maryland Archives 3:64, 70, 82-83) and to confiscate Claiborne's property on Kent and Palmer's Islands. An account of the property seized from Palmer's Island was recorded (Maryland Archives 3:76-77), but unfortunately no record of property siezed on Kent Island is available. Calvert commissioned George Evelyn "commander" of Kent Island, who proved so unreliable that command was transferred to William Brainthwaite in the same year (Streeter 1868). Claiborne's legal wrangling and malice toward the Maryland proprietary lasted for many years, but he never regained control of Kent

Island. Claiborne's land, Kent Fort Manor, was given to Giles Brent (Steiner 1911).

Enough is known of the plantation to demonstrate that a sizeable settlement existed, including a palisade, several structures, and a windmill (Isaac 1957). Yet only occasional hints of the location of the settlement can be gleaned from the records. Secondary sources, interestingly enough, are much more specific.

Perhaps the most recent, as well as the most definite, description of the site is found in Hale's (1951) poorly referenced biography of Claiborne. According to this account,

when Claiborne arrived in August of 1631 he instructed Mr. Watlington to head the Africa straight for a gut leading to a fine anchorage in an inlet he had previously discovered. It was on the eastern side of the island about two miles northeast of Kent Point. This cove could "hide two ships or galley ships of five hundred tun," so well protected was it. Emptying into the little bay were two branches of Long Creek [Tanners Creek] between them being "an Isthmus of low ground like a Tongue environed with fresh water." Just above on a ten foot rise the fort could be built. (Hale 1951:150)

Hale, unfortunately, cites no source for his quotes. Members of the Kent Island Heritage Society attempted to obtain the source from him in 1975, but he was unable to recall it (Alexander Speer and Mildred Schoch, personal communication).

Other secondary sources contain somewhat similar accounts but, perhaps significantly, do not name Long Creek (see Figure 86). Emory (1950:92) states that "Kent Fort was situated on that part of the Island which borders on Eastern Bay, on the first navigable creek lying on the left hand, in ascending that bay after passing Kent Point." He cites Davis (1855:44) for this statement, but Davis says only that "the seat of Claiborne's settlement was at Kent Point."

Tilghman, whose work was compiled prior to 1914, tells a similar story.

The precise location selected by Capt. Claiborne for his post and settlement upon the Isle of Kent, was the most southern extremity of the Island, upon what is now known as Kent Point. Just within the point, and upon the first navigable creek, being on the left hand in ascending the Eastern Bay, he proceeded at once to erect a stockade or fort. (Tilghman 1967 v. 1:497).

Tilghman cites no source for this statement. Two aspects of his and Emory's accounts might be noted, particularly in reference to Hale's. The question of which creeks were navigable, given water level rise and siltation since 1630, complicates the interpretation. Hale evidently took the first modern navigable creek, being Lond or Tanners Creek. Tilghman and Emory, however, following Davis, place the site on Kent Point, which does not encompass Tanners Creek except by a very broad application of the name.

Later in his first volume, Tilghman returns to the matter, with a story that may be the root of the later accounts. He describes a visit by the historian B. C. Steiner to Kent Island in the summer of 1974, titling the section, "Baltimore professor and friend discover the place where Claiborne lived" (Tilghman 1967 v. 1:517-519).

They found it on a slight elevation back of an old landing on the bend of a navigable creek above Kent Point. To the north of the site, now known as Chew's Gardens and cultivated as a field, in a valley which was probably once an inlet so that the site was surrounded on three sides by water, they found several fragments of glazed bricks about seventy yards from the shore, which may have been part of the Brent manor house.

This description sounds amazingly like Hale's site, so much so that it may actually have been Hale's source, directly or indirectly. Needless to say, a few glazed bricks do not signify the Claiborne site. Although there is a persistent rumor in Kent Island Heritage Society circles that someone besides Hale has seen the original source, as Hale quoted it, in Virginia documents, unless such a document can be produced it is most reasonable to assume that Steiner's bricks are the origin of this version of the site location.

The only original source that can be located, that places Claiborne's fort, is Governor Leonrad Calvert's letter to his brother, Lord Baltimore, in which he reports his reduction of Kent Island (Maryland Historical Society 1889:184ff; also Hall 1910:151ff). Several portions of this account are relevant. Calvert's force landed on Kent Island, "at the southernmost end thereof where Capt. Cley-

bornes howse is seated within a small ffort of Pallysadoes." Calvert entered through "the gate toward the sea," and noted at least one more gate. He then sent men to "Botelers dwelling called the great thicket some five miles from the fort," and to "an other place called Craford... two miles distant from thence." Calvert also mentions stopping at "Thomas Smiths who lived at a place called beaver neck right against Boteler on the other side of a Creeck."

The present Kent Point is approximately six miles from Craford, while Tanners Creek isthmus is about four miles from Craford. A trip of about five miles north-northeast from Kent Point would end beside Shipping Creek, close to two miles from Craford. A similar trip from Tanners Creek isthmus would have to cross Tanners Creek to end at Warehouse Creek, and return southeasterly to Craford. Since there is no indication that Calvert's men went to "Botelers" by boat, and none that they passed Craford only to return to it, incidentally covering more than the five miles by land it would require to reach a point two miles from Craford, Calvert's distances would accord well with his phrase, "the southernmost end whereof," that is, Kent Point.

One other original reference indirectly establishes Claiborne's tie to or interest in Kent Point. In 1645, the Governor's Council recorded instructions for a surreptitious reconnaissance to Kent Island, where Claiborne's ship was riding "against the Southerne pt. of Kent" (Maryland Archives 3:161). Tenuous as the inference of Claiborne's attachment to the location may be, the spot at which he was anchored was clearly Kent Point.

These two possible locations, Tanners Creek and Kent Point, would seem to be prime subjects for verification by archaeological survey. Not surprisingly, several archaeologists have made attempts to locate the site, including the present state archaeologist (Tyler Bastian, personal communication). Beam (1965) published a short article on his attempt to locate Claiborne's fort, which included a promise of further investigation. No doubt other occasional reconnais-

sances, aside from Steiner's of 1904, have been attempted.

Undaunted by previous failures (and initially unaware of them), the present author began a search for the site in 1977. More intensive and thorough survey was conducted in 1981, under the sponsorship of the Kent Island Heritage Society. At this time, every plowed field between the mouth of Tanners Creek and Kent Point, which comprises nearly the entire shoreline, has been examined. The 1981 project also included inspection of the shoreline of Tanners Creek isthmus, which is wooded and thus has poor surface visibility, and the point east of the same creek, now being developed for housing.

Although several historic and prehistoric sites were recorded by the survey, not one yielded signs of occupation during the seventeenth century. In fact, the few artifacts from the Donaldson site, 18Qu201, are the earliest historic materials presently known from Kent Island. Watkins (1960:40) mentions North Devon ceramics from a site that may be equally old, but ^{it is} near Kent Island Landing, on the north end of the island. His specimens have not been located at the Smithsonian (Dennis Pogue, personal communication), and the site is not recorded in the Maryland site survey files.

This lack of early seventeenth-century sites on Kent Island is puzzling, particularly in light of Leonard Calvert's (Maryland Historical Society 1889: 186) count of 120 men on the island in 1638 ("of the women and children I make no estimate"). In the case of Claiborne's fort, the explanation is probably found in the combined effects of water-level rise and erosion.

Singewald and Slaughter (1949) prepared a study of erosion rates in tide-water Maryland by comparing shorelines of circa 1850 with those of the 1940's. Erosion on lower Kent Island has been severe (Figure 90). Long Point, east of the mouth of Tanners Creek, has receded 800 feet since 1850, and recession of Kent Point has been comparable. Prior to 1850 erosion may have been less severe due to lesser boat traffic, but even the loss of 700 or 800 feet, straight-line

distance away from the shore, could erase all traces of a seventeenth-century site. Erosion coupled with a three-foot water level rise since circa 1600 (Froemer 1980) would have had a very heavy impact on all early sites near the shoreline.

It is most likely that Kent Fort was on Kent Point, and is now lost to the waters of the Chesapeake. The area around Tanners Creek is a less likely candidate based on historical records, but cannot be discounted archaeologically due to poor surface visibility. Of the lands between Tanners Creek and Kent Point, only the wooded north shore of the first pond (silted inlet) above Kent Point has not been adequately inspected, due to tree cover. There remains a possibility, particularly if the "first navigable inlet" part of the historical accounts is based on an original source, that the site of Claiborne's fort is in these woods, although the belt of trees is sufficiently narrow that some scatter of materials might have been expected in the plowed field directly north.

Providence

In 1648, the Virginia Puritan leaders William Durand and William Bennett I fled into Maryland. Durand was granted 800 acres of land on the north side of the Severn River, and Bennett received 250 acres, which he divided into lots. In the following year a number of Puritan families from Virginia came to the Severn to take up lots on Bennett's tract, which became known as the Town Point. According to all accounts, the tract was the land now known as Greenberry Point (Figure 91), at the north side of the mouth of the Severn River (Randall 1886; Riley 1905; Warfield 1967; Moss 1976).

The population of Providence, which name applied both to the Town Point and to the surrounding region (Randall 1886), grew quickly enough that the area was granted the status of a county in 1650 (Maryland Archives 1:292, 345). The Maryland Archives contain a number of references to the area during that time

(especially volumes 1, 3, 22). None, however, necessarily implies the existence of a nucleated settlement. Most authorities suggest the contrary. Moss (1976), whose work is primarily an amateur historical novel, provides a thorough discussion of the original sources in an appendix. His "conjectural" map shows a settlement along the shorelines of Greenberry Point.

A more likely interpretation comes from Randall's (1886) study, which infers that any concentration of people on the point had dispersed within five years. "The original existence of 'town-lands' upon the Severn should not be regarded as decisive evidence that there was anything more than the germ of a town planted upon Greenberry's Point" (Randall 1886:120). His five-year figure probably was drawn from a 1654 record cited by Warfield (1967:9), recording the previous return of numerous lots to Richard Bennett and Bennett's sale of "the said several parcels unto our trusty and well beloved counselor, Nathaniel Utie."

This record makes it clear that the parcel was entirely owned by Bennett, and probably abandoned, by 1654. Whether there were ever any structures on the point, comprising a town or plantation of Providence, is uncertain. Although Moss (1976:87n) lists several shops and buildings in or near Providence, the place-name was evidently applied loosely enough that the structures could have been anywhere on the Severn.

The possibility of a short-lived, mid-seventeenth-century occupation on Greenberry Point prompted an archaeological reconnaissance in 1979. The point has been in the possession of the U. S. Navy since 1908. The U. S. Naval Radio Transmitting Facility, which now occupies the point, kindly gave permission for the work, and allowed a brief study of its files on the history of the property.

The most interesting records, from an archaeological surveyor's point of view, had to do with changes of the land form. A 1938 photograph of the point shows the middle portion (see Figure 92) under water, and indicates that the shoreline along Carr Creek has filled in considerably since the 1930's. In fact,

a hurricane in the late 1920's entirely wiped out the center part of the point, and the lower-lying areas of the modern point are made up of introduced fill. This situation, plus Singewald and Slaughter's (1949) estimate that Greenberry Point has receded about 800 ^(240 meters) feet since circa 1850, has clear implications for the survival of any substantial seventeenth-century remains.

The survey thus was confined to the higher areas of the Transmitter Facility property, essentially a pair of knolls. The knolls were covered in thick grass, preventing effective surface inspection. Subsurface tests were excavated as indicated in Figure 92, by use of a two-handled posthole dogger. The fill was screened through 3/8" hardware cloth, and the tests were backfilled. The typical profile consisted of about 20 cm of old plowzone over sandy clay subsoil.

In only one location was any sign of cultural materials found. Tests in group C yielded brick, mortar, window glass and an iron spike, and the location was recorded as 18An529. This is evidently the foundation of the base executive officer's house, moved to the north side of the point to avoid crossfire from the Naval Academy firing range on the west side of Carr Creek. (The investigator was mentioned each day in the Orders of the Day, the last line invariably, "Make sure he doesn't get shot.")

No sign of any materials of colonial origin was found. If any occupation of the original Providence was located on Greenberry Point, it has evidently disappeared due to natural processes.

Herrington, Warrington

The final two sites were not targets of intensive investigations. Each was a Town Act site, vaguely located in the available records. Each was sought by a brief reconnaissance in a "likely" area, and the two areas are reported here for the record. In both cases, careful deed search will be necessary to

locate the sites more closely.

Herrington was originally patented and surveyed by Samuel Chew in 1650, and other grants around Herring Bay (Figure 93) were patented over the next decade and a half. Chew left the Town of Herrington to his heirs in 1676. The Herring Creek area was the center of a parish as of 1652 (Riley 1905; Warfield 1967). Leonard Strong, in his "Babylon's Fall" of 1655 (Hall 1910:235-246), mentions "a place called Herring-Creek," where "one of the Commissioners" of Providence was found. Though the establishment of a parish even more than Strong's reference indicates population in the area, it is unlikely that Herrington, despite its name, was anything other than the Chew plantation in its first decade.

The site is designated a town in each of the sets of Town Acts. The supplementary Act of 1669 (Maryland Archives 5:47-48) specified a site "afore Herrington in Herring Creek," while the second supplementary Act of 1671 (Maryland Archives 5:92-94) merely mentions Herring Creek. Both the nominations and the Act of 1683 (Maryland Archives 7:465-466, 609-619) referred to "Herring Creek on the Town Land," evidently recalling that it had been designated previously. Apparently no further mention of the site was deemed necessary in the supplements to that act. In the last set of Town Acts, beginning in 1706 (Maryland Archives 26:636-645), the Assembly named Herring Creek, "where the Town was formerly laid out," as a site, specifying its area as 50 acres "and no more" in the supplement of 1707 (Maryland Archives 28:159-168).

As usual, none of these references establishes that a town actually existed at Herrington. Nor are they very specific about its location. Herrman's map, published in 1673 (Browne 1894:135), places a town symbol on Herring Bay beside the name, "Herrington," but the scale of the map prevents accurate identification on the ground.

A glance at the modern maps revealed that the south side of the mouth of Herring Creek bears the name, "Town Point," which seemed promising. The area

around Herring Bay is, unfortunately for the archaeologist, heavily built up with suburban and beach housing and marinas, so that survey conditions are poor. One plowed field, known as Town Point Farm, lies in the vicinity of Town Point. By permission of the landowner, the field was surveyed, yielding only two ball clay pipstems representing pre-twentieth century activities.

Another possible town site on the Bay shore of Calvert County was known as Warrington. Stein (1960:33) places the site on Captain Waring's plantation, near Dare's Beach (Figure 94). Later, he gives its location as approximately Dare's Beach Wharf (1960:57). Stein suggests that its lack of good harbor and competition with other towns assured Warrington of a short life.

Interestingly, Herrman's map of Maryland in 1670 (Browne 1894:135) has a label for Warrington, yet the town is not mentioned in the Town Acts until 1683. The Act of that year is the only one to mention Warrington. In the nominations for the Act of 1683, a site is suggested "At or near Warrington upon the Cliffs," while the act as passed specifies "Warrington on the Cliffs Town Land" (Maryland Archives 7:459-461, 609-619). It is possible that a special petition to establish a town at Warrington was granted between the Town Acts of 1668 and 1683, but if so, it does not appear in the Archives of Maryland.

As usual, none of these records demonstrates that a town really existed. Herrman's map shows Warrington on the Bay shore, some seven miles south of Plum Point by Herrman's scale (cf. Kuethe 1935). More important than the measured distance, it would seem, is that a large creek is depicted directly below the symbol for Warrington.

The largest creek between Plum Point and the mouth of the Patuxent River is Parker Creek, between Dare's Beach and Scientists Cliffs, about six miles from Plum Point. Just north of the creek, according to the topographic maps, is a relatively flat area that could encompass a town of perhaps 30 acres. Most of it happens to be plowed, and by permission of the landowner and the farmer,

a surface inspection was conducted on the property. As at Town Point, however, only two pipestems were found that would indicate activity in the colonial period, although one small concentration of nineteenth- and twentieth-century materials was recorded (18Cv156).

The farmer mentioned that an archaeologist had been through the area some years before, and had found a "colony" north of Dare's Beach. This was evidently the site of Angelica Knoll, recorded second-hand (and rather dubiously) as 18Cv60. Watkins (1960:40) mentions this site as a source of North Devon ceramics, a "plantation or small settlement" of the late seventeenth century to circa 1765. Both Watkins and the Maryland site survey form attribute work at the site to one Robert Elder of the Smithsonian Institution. Efforts to find the collection in the Smithsonian have so far been fruitless (Dennis Pogue, personal communication.)

Whether Angelica Knoll is the "town" of Warrington is impossible to say. Stein (1960:50) mentions Quaker settlements on the Upper Cliffs below Plum Point, down to Parker's Cliffs, and on the Lower Cliffs at St. Leonards. The whole of the Calvert County shoreline is rugged, and undoubtedly the entire length was referred to as the "Cliffs." Angelica Knoll probably is associated with one of the Quaker plantations of the Upper Cliffs, but only further information in both documentary sources and the field, preferably with study of the putative Smithsonian collection, will clarify the situation.

With no clear "next step" in the search for either of these town sites in the field, the survey effort went on to greener pastures.