THE OLD SCOTS BURYING GROUND: A CASE STUDY IN THE ARCHAEOLOGY OF RELIGION

By

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A dissertation submitted to the Graduate Faculty in Anthropology in partial fulfillment of the requirements for the Degree of Philosophy, The City University of New York

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ABSTRACT

THE OLD SCOTS BURYING GROUND: A CASE STUDY IN THE ARCHAEOLOGY OF RELIGION

By

Gerard Paul Scharfenberger

Advisor Professor Thomas McGovern

The Old Scots Burying Ground in Marlboro, New Jersey is the site of the first Presbyterian congregation in New Jersey and possibly the New World (ca. 1692) and the site of the ordination of the first Presbyterian minister in the New World (1705). This dissertation details the results of a four-year long archaeological project undertaken to locate and examine the earliest meetinghouse of these first Presbyterians and the activities, both sacred and secular, that occurred at the site. The research design for the project was intended to specifically answer a number of questions related to the sub-topics of historical archaeology and cultural landscape studies. My intention throughout this project is to use archaeology to clarify, correct and expand the historical record, while drawing a comprehensive profile of the people whose material culture we attempt to interpret, and the environmental conditions that greeted them as they laid claim to their share of a region predicated upon religious freedom and tolerance.

This dissertation is a combination of three integrated components. First, the environmental setting of the region and the project area will be discussed to gain insight into the geomorphological conditions, and the events, both natural and man-made, which modified the landscape of Monmouth County prior to the arrival of the Presbyterians in the late seventeenth century.

Second, an historical overview of the Presbyterians, from the origins of the faith during the Reformation in Europe to the establishment of the first Presbyterian settlement in New Jersey is provided. In addition, the symbols and rituals utilized in Presbyterian dogma will be examined. It is essential to the identification and interpretation of artifacts from a religious site to have a thorough understanding of the symbols and rituals of the subject group, and the ways, if any, they were manifested in the physical record.

The third component focuses on the results and interpretation of the archaeological fieldwork and laboratory work. In addition, the artifact analysis within the context of the site history is discussed.

ACKNOWLEDGEMENTS

This study would not have been possible without the support of a number of individuals who graciously lent their time and expertise to numerous aspects of the project.

First and foremost, I wish to acknowledge the members of The Louis Berger Group, Inc., both past and present: Mallory Gordon, for assisting in the analysis of curved glass; Rob Tucher, for the spectacular artifact photos; Kris Beadenkopf for invaluable assistance with the figures and plates and also for numerous days spent in the field; and Anne Moiseev, for helping me to assemble the final draft.

Dan Sivilich of the Battlefield Restoration and Volunteer Organization (BRAVO) deserves special recognition for the countless days spent surveying, mapping, and excavating the site. I wish to thank Ron LaBarca, for lending his time, equipment and expertise to conduct a ground-penetrating-radar survey of the Old Scots cemetery; and Dr. Richard Veit, Robert Northerner, Mike Gall, and Alison Savarese of Monmouth University, for assisting in the fieldwork.

I thank the New Jersey Historical Commission for awarding me a mini-grant which allowed me to have radiocarbon testing performed on several charcoal samples from the Old Scots Burying Ground, which provided invaluable physical data to support my dissertation and BRAVO for supplementing the NJHC grant to cover the extra costs for processing some of the C-14 samples. My appreciation goes to Alex Wiedenhoft of the USDA Forest Service for analyzing and identifying the coffin wood from Features 16 and 20. Special thanks go to Dr. Peter L. Scharfenberger and Peg Davis for help in the

identification of skeletal remains from the site. My appreciation also goes to the volunteers who assisted in the fieldwork; their names are listed in Appendix C.

I am deeply indebted to Dr. Sherene Baugher, of Cornell University, who patiently guided me through my Masters research and continued on through the entire process of researching and writing my dissertation. Her patient reading and commenting on numerous drafts of the dissertation from its embryonic stages to its finished form was immeasurably helpful in reaching completion. Special thanks also go to the members of my dissertation committee, Dr. Thomas McGovern of Hunter College, Dr. Diana Wall of CCNY and Dr. Arthur Bankoff of Brooklyn College who provided encouragement and useful suggestions on the early drafts of the dissertation and whose guidance helped me to avoid many potential pitfalls.

The staffs of the various institutions where background research was conducted: the Monmouth County Historical Association; the Special Collections at Rutgers University; the Princeton Theological Library at Princeton University; The Guggenheim Memorial Library at Monmouth University; the Presbyterian Historical Society; Philadelphia, Pa.; the New Jersey Historical Preservation Office, Trenton, New Jersey; the New Jersey State Library, Trenton, New Jersey; the National Archives of Scotland, Edinburgh; and the archives of the Old Tennent Church, Manalpan, New Jersey.

My deep appreciation goes to the Old Tennent congregation, and particularly trustee Chuck Vastbinder, who graciously allowed me free reign to conduct this study on their "God's acre" known as the Old Scots Burying Ground. The rich legacy left by the antecedents of the Old Tennent Church is testament to the important role they played in the founding of this nation.

Last but not least I thank my wife Gerry and children Melanie, Alannah, and Daniel, who patiently supported me when my time and attention were frequently diverted.

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I. INTRODUCTION

During the fall of 2000, having recently completed my Masters degree, I was looking for a project to use for my dissertation research. My good friend, Dan Sivilich mentioned to me that there was a site in Marlboro, New Jersey known as the Old Scots Burying Ground that was believed to be the location of the first Presbyterian meetinghouse in the New World (ca. 1692). Having just completed an extensive study of the Old First Church in Middletown, New Jersey, which was the first Baptist meetinghouse in New Jersey (ca. 1688), this appeared to be an almost too good to be true scenario: the meetinghouses of two different denominations, the first of each in the state, temporally identical and located about ten miles apart. My interest piqued, I began the process of contacting the congregation to test the waters for a possible archaeological investigation of this important site.

After contacting the congregation and explaining my intentions to the church elders, I was granted permission to conduct the fieldwork. However, another potential problem was looming that would have had a serious negative impact on the site. Monmouth County was planning to widen Gordon's Corner Road, a narrow, busy two-lane road that formed the northern boundary of the site. The plan had proposed among other things, taking fifteen feet of the Old Scots site to straighten a bend and widen the road. Since burials represented by extant markers are present right up to the edge of the road, this would have necessitated disturbing at least several dozen graves. With this possible scenario in mind, Archaeologist Garry Wheeler Stone and Bob Craig, Senior Historic Preservation Specialist for the New Jersey Historic Preservation Office (NJHPO) contacted me and asked if I were willing to write a national register nomination for the

site. Having the property listed in the State and National Registers of Historic Places would prevent any annexation and destruction of the site by the county. This, however, created two new problems. First, the deadline for a draft of the nomination form was April 4, 2001, which allowed just four months to produce a document that usually takes at least a year, and second, I had never written one and had absolutely no idea where to begin. Nevertheless, if it meant saving the site, it would be done.

The research on the site began in December, 2000. As a way of justifying the time needed for research and to derive some admittedly selfish benefit, I convinced my advisor, Dr. Thomas McGovern, to allow me to use the exercise for an independent study under the auspices of Dr. Diana Wall. Bob Craig of the NJHPO also provided a tremendous amount of guidance during the research and writing of the nomination. Thankfully, the site was approved unanimously for inclusion in the State Register of Historic Places in June of 2001, and in the National Register of Places in July of 2001, effectively ending any hope of the county to encroach on the site.

A fortuitous by-product of writing the Old Scots nomination was the examination of many secondary histories of the congregation and the site, along with the broader topic of Scottish emigration to New Jersey. These resources provided a general overview of the Scottish Presbyterians as a distinct cultural entity, but offered limited, often repetitive details on the secular and sacred aspects of everyday life. For example, the supposed dimensions of the meetinghouse are mentioned in several early texts, but appear to be based on nothing more than the approximate size of a depression in the ground prior to the construction of a monument in 1895 (Smith 1895:13). Also, the meetinghouse is

described as being a "log structure" similar to the building known as the "Log College" of Neshaminy, Pennsylvania. However, the log college post-dates the meetinghouse by nearly 30 years and may be pure conjecture as to its similarity to the Old Scots meetinghouse.

Presently, the Old Scots Burying Ground property is owned and maintained by the congregation of the Old Tennent Church, located about six miles southwest in Freehold. It occupies a venerated place in the annals of American Presbyterianism, and is often referred to in early Presbyterian histories. The site has a number of early grave markers, the oldest identified being from 1722, and the most recent from 1977. In the approximate center is a square, earthen mound with a granite monument to the founders of the congregation, which was erected around 1895 (Plate 1). Most important, the property has the remains of what is historically known as the first Presbyterian meetinghouse in the New World and the site of the ordination of the first Presbyterian minister in the New World. The individuals who comprised the Old Scots congregation were part of a larger group of religious refugees who fled the British Isles during the seventeenth century. Fiercely pro-independence, it was the Presbyterians who ran the Revolution in New Jersey, controlling everything from the allocation of political jobs to officer's appointments in the Continental Army (Fleming 1977:62). Thus, the site is important not only to the religious history of the country, but the social, political, economic and cultural development as well.

PLATE 1: View of Monument Facing West. (Photo by Author)

While the prospect of excavating the Old Scots Burying Ground site, temporally similar, but denominationally and culturally different from the Old First Church site offered a remarkable opportunity for a comparative study, there were larger issues that could be addressed. The study of the Old Scots Burying Ground site and other historic religious sites is important on a higher level to archaeology as a discipline. During the course of conducting research for my master's thesis, it became apparent that the study of historic religious sites, or church archaeology, was grossly underrepresented in the archaeological record. This added another dimension to my research, namely, to fill a void in our understanding of the role religion played in past cultural development, particularly during the colonial period in America.

The reasons for the comparative dearth of archaeological study of religious sites are fourfold. First, churches and religious organizations in general, have always been bastions of literacy, having been the harbingers of education and the written word even during the scholarly decline of the Dark Ages. Thus, the existence of written records associated with a structure or organization usually provide substantial evidence regarding the temporal and spatial aspects of a site, and the activities of those who utilized the site. As a result, some researchers have mistakenly believed that all possible information about a particular congregation is already known and all that remains is to re-analyze the existing written record. Second, religious structures, for the most part, are rarely in danger of impact from modern development. Renovations and additions are usually undertaken with private funds, precluding any legally mandated cultural resource surveys. Further, religious structures and cemeteries are generally not considered eligible for listing in the National Register of Historic Places except under special circumstances (Townsend et al, 1993:16).

Third, some archaeologists simply believe churches are generally not productive archaeological sites, and contribute little to the body of knowledge that is not already known. As late as 1978, one British archaeologist argued that, "Churches are particularly unedifying as archaeological sites: the structural sequence is difficult to read and usually impossible to date...artifacts are rare, and the only biological deposits susceptible to analysis are generally those of human bones" (cited in Rodwell 1981:35). This is categorically false, as numerous studies, including this one, have and are demonstrating (Rodwell 1981, Scharfenberger 2000). Fourth, and perhaps most insidious is the lack of

interest on the part of many archaeologists to investigate the spiritual aspect of past cultures, both ideologically and materially. This can be attributed in part to the positivist notion associated with the New Archaeology that only data that are objectively quantifiable and result in laws that transcend time, space and culture, are worthy of investigation (Merrifield 1987, Trigger 1989, Willey and Sabloff 1993). Aspects of the human condition, such as religious beliefs and symbolism, aesthetic sensibilities and scientific knowledge, are given little credence (Trigger 1989:327). Moreover, the lingering effects of Marxist theory on the discipline, with its emphasis on materialism and general denigration of religion as a social factor, have resulted in a prevailing agnosticism/atheism among archaeologists. Some researchers, however, such as Gordon Childe, believed that the spiritual aspects of a society can be as visible in the archaeological records as other aspects, such as technology (Trigger 1989:262).

Even contemporary texts seem to overlook the importance of religion at historic sites. Charles Orser, in the 2004 edition of his magnificent text *Historical Archaeology*, categorizes churches under the heading "special-purpose sites" (Orser 2004:84). Other sites in this eclectic group include stores, mental hospitals, and taverns. Orser goes on to give examples of excavations at a store site and a tavern site. However, he does not describe any particular sacred sites, or elaborate on the value of churches or religious sites as archaeological study entities. In fairness, this may be the result of the limited published material on religious sites from which to draw on, rather than a deliberate attempt by the author to downplay their importance.

An early attempt to stimulate interest in church archaeology was the thematic symposium "Colonial Churches and Churchyards" organized by my mentor and colleague Dr. Sherene Baugher and me for the 2002 Society for Historical and Underwater Archaeology conference in Mobile, Alabama. The success of this session and the caliber of the papers led to the creation of a thematic issue of *Historical Archaeology* devoted to religious sites and edited by Baugher, Dr. Richard Veit and me. However, the level of research involved in writing a dissertation allows for the type of comprehensive, exhaustive study found in other areas of historical archaeology, but sadly lacking in the realm of church archaeology.

The power and importance of religion in the colonies prior to the Revolution cannot be overstated. The appearance of preachers with great oratory skills could draw hundreds if not thousands of people. Debates between preachers of different denominations aroused particular interest. Similarly, sermons, catechisms and various theological treatises accounted for the majority of published material up to the Revolution (Bonomi 1986:3-4). Religion was an integral part of colonial life, often times being the only respite in the otherwise dismal existence on the frontier (Scharfenberger, in press). Houses of worship, in addition to holding religious services, also hosted legal, civil, and social gatherings (Earle 1891:192). This was a continuation of a practice in place in pre-Reformation Europe (Howard 1995:168). Meetinghouses were even a conduit of information during the Revolution, acting as the dissemination point of news from the war front to those at home (Scharfenberger, in press).

The spirituality embedded in such documents as the Constitution, Declaration of Independence, and Articles of Confederation, as well as period deeds, diaries, and treaties is conclusive evidence that religious ideals were at the forefront of colonial and post-colonial thought and governed virtually every aspect of sacred and secular life. Thus, it is imperative that the sacred aspect of past cultures be accorded the same attention as other facets of past life by archaeologists.

The objective of the Old Scots Burying Ground project is to answer a number of research questions related to historical archaeology, cultural landscape studies and general questions related to archaeology as a whole. These questions are elaborated on fully in Chapter VIII. The methodology for this study will involve a combination of research strategies. The intention through this project is to use archaeology to expand upon, clarify and correct the historical record and to interpret the material culture of the Presbyterians of Monmouth County, drawing a comprehensive profile of them and the environmental conditions that greeted them as they laid claim to their share of a region predicated upon religious freedom and tolerance.

The Presbyterians of Marlboro established the earliest Presbyterian congregation in New Jersey, circa 1692. The founders of the Old Scots Congregation also played a pivotal role in the formation of Marlboro, then known as Freehold, as well as the newly patented Monmouth County (Figure 1). It should be noted that Marlboro became a separate municipality in 1848 (Meyers 1922:340). Therefore, the place names Freehold and Marlboro will represent the same locality, unless otherwise specified (Figure 2). In addition to an archaeological profile, this dissertation explores the role religion played

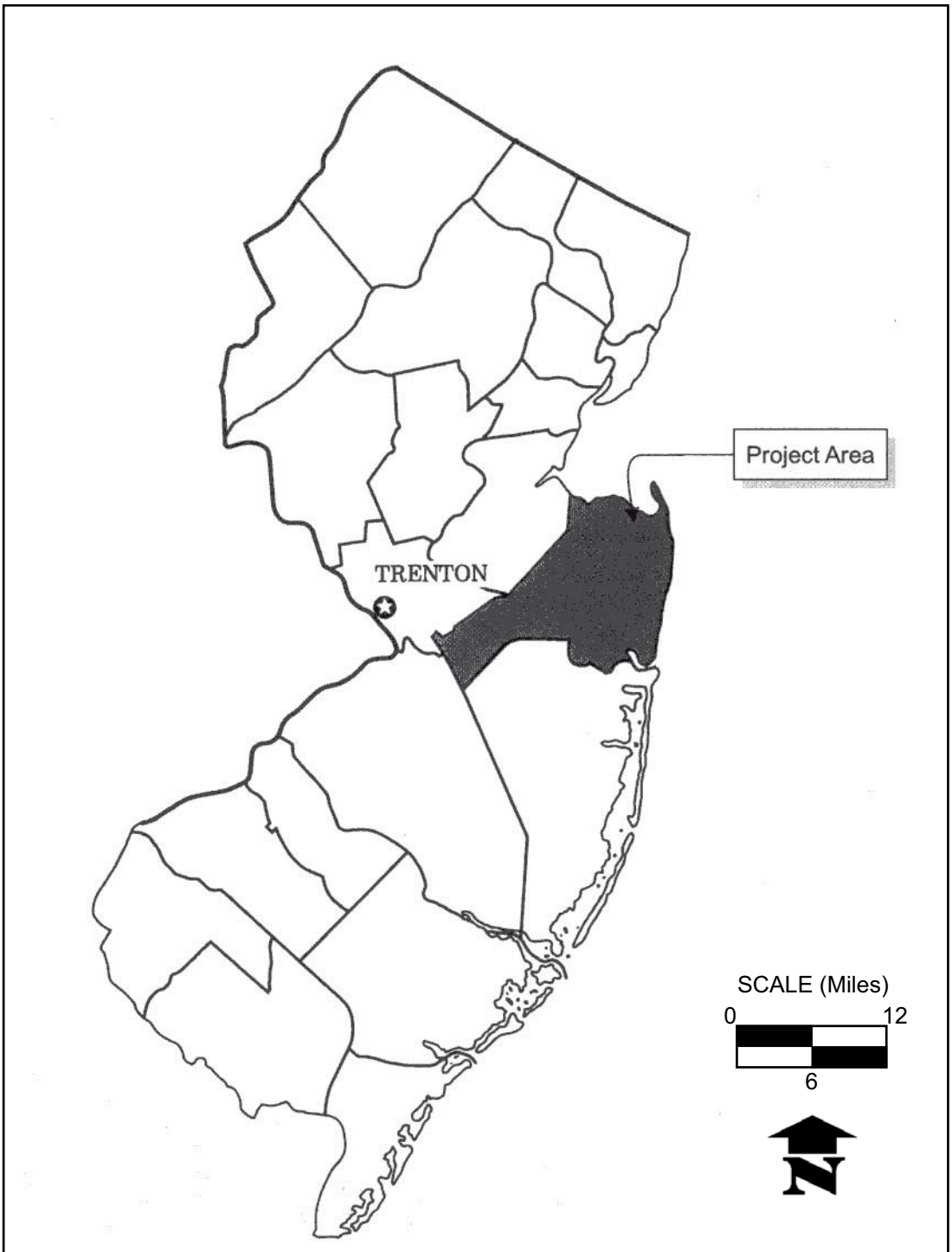


FIGURE 1: Location of Monmouth County in New Jersey.

Source: Soil Survey of Monmouth County 1981

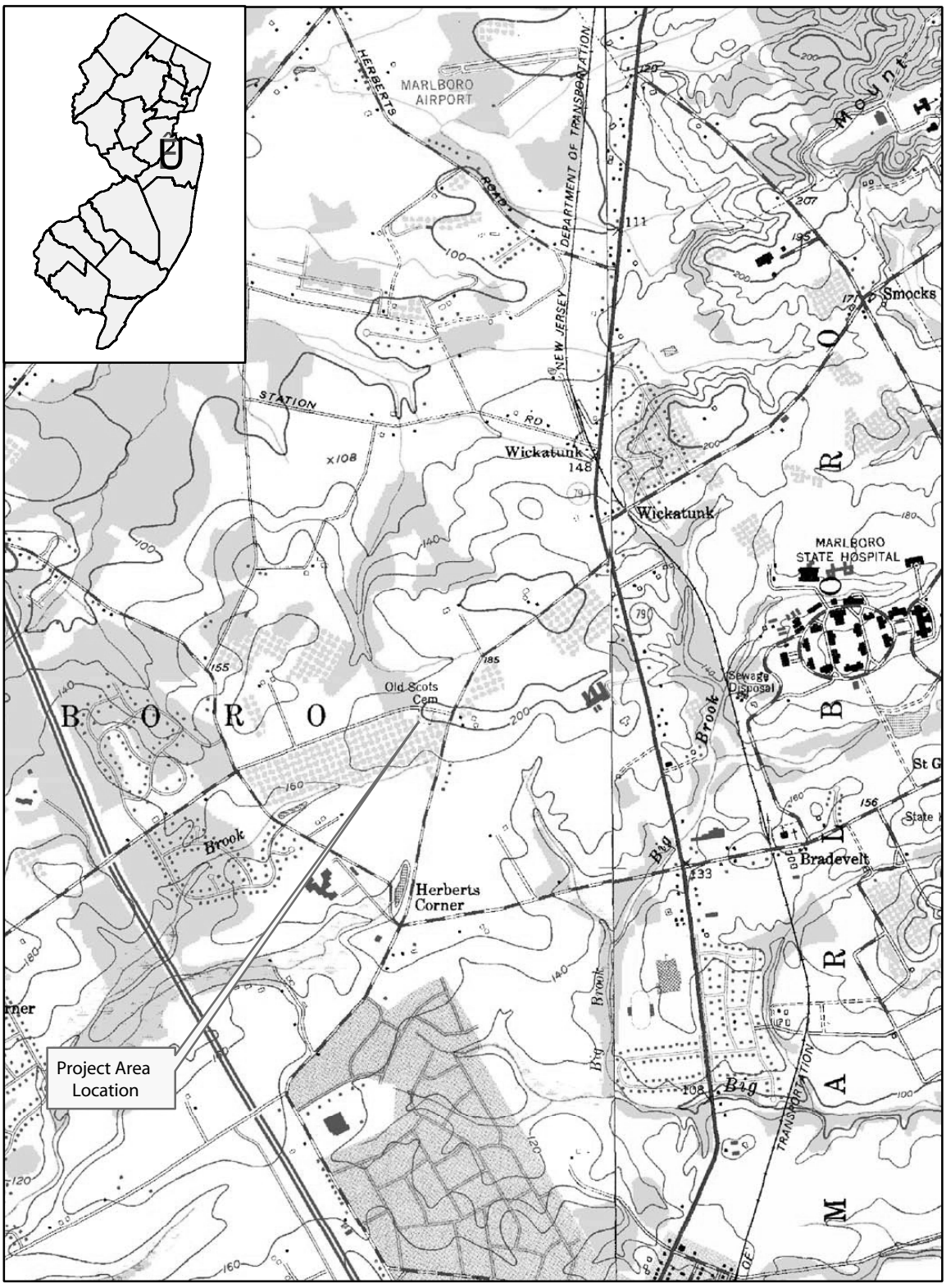


FIGURE 2: Location of Old Scots Burying Ground

in the physical, moral, and governmental development of Monmouth County using historical documentation, eyewitness accounts, and period church texts. Moreover, the historical conditions that contributed to the formulation of Presbyterian thought, along with the interplay of secular and religious interests, are discussed.

A review of the scant historical data relating to the congregation during the seventeenth and early eighteenth centuries provide the framework for the archaeological fieldwork and subsequent research. Several early histories written by Presbyterian ministers provide some background on the congregation and the first meetinghouse. However, much of the development of the congregation, the early rituals, activities at the site, even the precise design and dimension of the structure are either elucidated speculatively, or ignored completely.

The documentary sources relating to the origins of the church structure(s) are tenuous at best. Seventeenth-century record-keeping was rife with inconsistencies and misinformation, lending little assistance to the search. As a people who were isolated both socially and denominationally from the dominant group, written records are relatively rare: partially as a result of economic and religious conditions and partially from a concerted effort to maintain a cultural distance from the oppressive, ruling elite.

As with any endeavor in historical archaeology, this study relies heavily on historic documents to piece together the origins and activities of the Old Scots congregation. An exhaustive search was made of all relevant repositories to gather as much primary and secondary material as possible. The results were mixed. The number of primary documents that ever existed is believed to be small. Among these was the record book of

the Philadelphia Presbytery, which had jurisdiction over the Old Scots congregation. Correspondence with the Presbyterian Historical Society in Philadelphia where many of the Presbytery's records are stored, revealed no trace of the original document. Fortunately, later reprints during the 19th century have preserved the text, and an historic photo of the first page has survived. In addition, a fire in 1869 destroyed many of the congregation's early records (Symmes 1904:14). Due in large part to an educated clergy from early colonial times until the present, many 19th and early 20th-century papers on the first congregants and the meetinghouse exist today. These were relied on heavily for background on the meetinghouse and the congregation. It should be noted, however, that these texts contain data filtered through the prism of the author's own biases and abilities, therefore, their accuracy can never fully be affirmed.

This study uses a variety of techniques and sources to create a holistic profile of the Old Scots congregation. That is, to understand the environmental, political, technological, economic and spiritual climate they encountered in the New World. This approach will challenge the processualist view that the examination of a limited number of variables can be studied to address a distinct archaeological problem (Trigger 1989:350).

Thus, the goals of the Old Scots Burying Ground study extend beyond issues related directly to the congregation and the meetinghouse itself. Uncovering evidence of the daily activities of the congregants, the dimensions and building design of the meetinghouse and the age of the structure is critical to the study, however, larger theoretical issues related to archaeology as a discipline are also at hand. To that end, the focus of this study seeks a dual outcome: to determine if religion, or sacred activities are

visible in the archaeological record, and to create a template for the excavation of sacred sites from the historic period.

I propose that the paucity of excavations at historic sacred sites mentioned earlier has left a void in our ability to create a predictive model for the subsequent excavation of such sites. The value of sacred sites to historic groups as alluded to by the documentary resources cannot be questioned. However, we know little of the extent to which it can contribute to the archaeological record and what the archaeology of religion can add to the knowledge drawn from the written records. Further, the lack of attention paid to sacred sites archaeologically has resulted in the absence of a proven, reliable methodology to apply to these sites. The unique nature of sacred sites, both artifactually and spatially, calls for a multi-facted approach to elicit the most information from the often nominal assemblages found at these excavations.

The importance of the Old Scots Burying Ground extends well beyond the confines of church archaeology. It is representative of one of the driving forces behind the colonization of the New World, namely, religious freedom, and will provide information on a group that existed outside the dominant, ruling power structure of the day. The relatively sparse documentary record further underscores the need for archaeology to fill the significant gaps in our knowledge of the Old Scots congregation. One of the tenets of historical archaeology is the recovery of the history of groups who were not well documented, and existed on the margins of colonial society. The Old Scots congregation, comprised of refugees banished from their ancestral homeland in Scotland, is a classic

example of those whose history can only be retrieved through the examination of the archaeological record.

This dissertation is interdisciplinary in nature and combines historical and environmental documentary research in addition to extensive archaeological fieldwork and artifact analysis. The dissertation is divided into chapters as follows. Chapters II-III (Part One) describe the environmental condition of Monmouth County with specific reference to the geomorphological, geological, and paleoenvironmental events that shaped the physical character of the project area, along with the modifications of the landscape by both prehistoric and historic populations. This will provide a context for understanding the landscape that the Old Scots congregation first encountered, and the role that the natural environment played in the design, layout and location of the first meetinghouse. Chapters IV-VII (Part Two) presents an ethnohistoric profile of the Presbyterians, from their origins in late sixteenth-century Scotland, through their migration to America, up to the settlement and prosperity realized by the group in Monmouth County, New Jersey. The religious belief systems and social attitudes of the early Presbyterians are examined, using historical references and period church documents to provide a context for interpreting the material culture from the site. The analysis of the liturgical process, church services, and church records, juxtaposed with the chain of ownership of the site, and the profile of the founders and early ministers of the congregation creates a blueprint for the types of artifacts and features likely to be encountered based on a theological, economic, ethnic and technological framework. Chapters VIII-XIII (Part Three) examines all aspects of the

archaeological research, including the research design, methodology, fieldwork, and the results and interpretation of the artifact analysis.

PART ONE: THE PHYSICAL AND CULTURAL LANDSCAPE

There can be little doubt about the extent of human influence on the natural environment, on the other hand there is compelling evidence to show that landscape and environment have imposed (and continue to impose) their own constraints on human activity.

Martin Bell and M.J.C. Walker

II. ENVIRONMENTAL SETTING

This is a very good land to fall with and a pleasant land to see . . . full of great and tall Oakes . . . the Lands . . . were as pleasant with Grasse and Flowers, and goodly Trees as ever they had seene, and very sweet smells came from them. . . .

Robert Juet, 1609

A. INTRODUCTION

The passage quoted above (Wacker 1975:19), from the journal of Robert Juet, first mate on Henry Hudson's *Half Moon*, illustrates the *prima facie* impression the pristine landscape of Monmouth County made upon the first Europeans to set foot on its fertile shores. The physical diversity of the county proved an irresistible allure to both prehistoric and historic colonizers. Sources of water, the lifeblood of any human settlement, were abundant in the form of natural harbors, ocean coastline, and myriad rivers and streams that provided food, transportation, and power. Miles of shoreline juxtaposed against a backdrop of formidable hills furnished navigators with a dependable datum point when approaching from the sea and provided a coveted vantage point for purposes of defense.

Further inland, the rich fertile floodplain known as the Coastal Plain (Figure 3) was utilized agriculturally, first by indigenous groups, who needed to fill the sustenance void created by the extinction of Late Pleistocene megafauna and growing populations, and later by Europeans, who brought Old World farming designs and methods to the New World's seemingly endless supply of arable land. The wide array of soils present in a relatively small radius allowed a multiplicity of crops acclimated to radically different types of soils with varying degrees of nutritional value to flourish in close proximity to each other

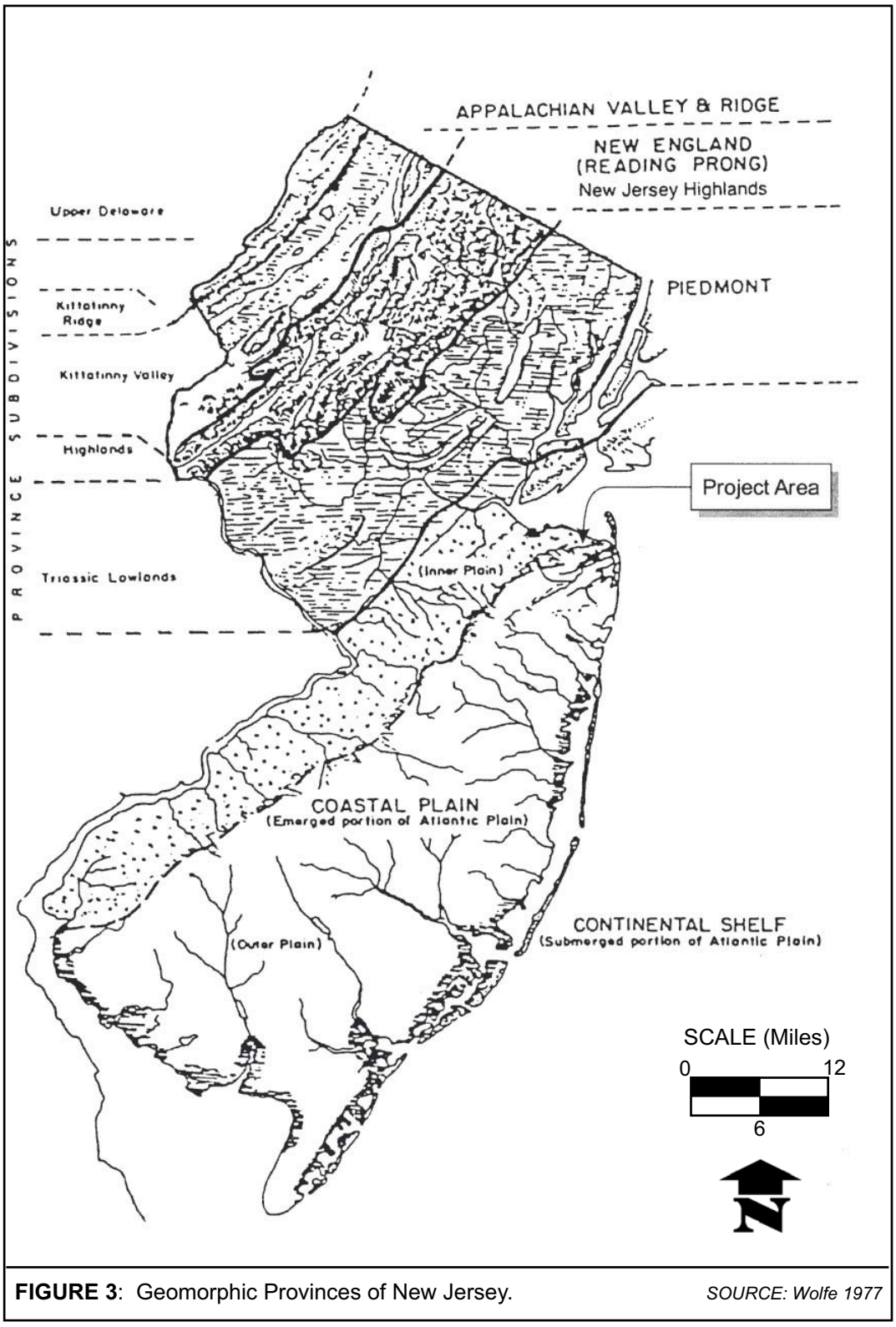


FIGURE 3: Geomorphic Provinces of New Jersey. *SOURCE: Wolfe 1977*

(Wacker 1975:11-13). Moreover, the combination of salt marshes, forests, floodplains, and beaches created an ecosystem brimming with marine and terrestrial wildlife readily exploited as a dietary supplement. It would be difficult to find an archaeological site within Monmouth County, prehistoric or historic, that does not have one or more shell middens, or at least a dense horizontal scatter of clam or oyster shell fragments collected from one of the numerous inlets or estuaries.

These environmental riches were not without their drawbacks. Powerful currents, constantly shifting sands, and unpredictable weather patterns made the navigation of Sandy Hook Bay a hazardous proposition, as evidenced by the numerous shipwrecks that dot the continental shelf just off the shoreline (Moss 1991:136-142). Inland, highly acidic, sandy soils could be found adjacent to desirable, fertile soils, making agriculture a tenuous undertaking at first. Also, the marshy lowlands of New Jersey were a haven for mosquitoes, which proved devastating to both American Indian and European populations during the yellow fever epidemics of the seventeenth and eighteenth centuries (Duffy 1979:155-156). These impediments notwithstanding, Monmouth County's unique physiography continued to attract scores of settlers to its eclectic environmental offerings, which spurred its unchecked growth and prosperity through the years.

B. GEOLOGICAL HISTORY

The project area lies on the border between the Inner Plain and Outer Coastal Plain Physiographic Provinces of New Jersey in Monmouth County (Figure 4). This zone consists of gently rolling terrain that has developed upon the continental shelf of the Atlantic Ocean. These sediments were the result of alternate deposition and erosion during

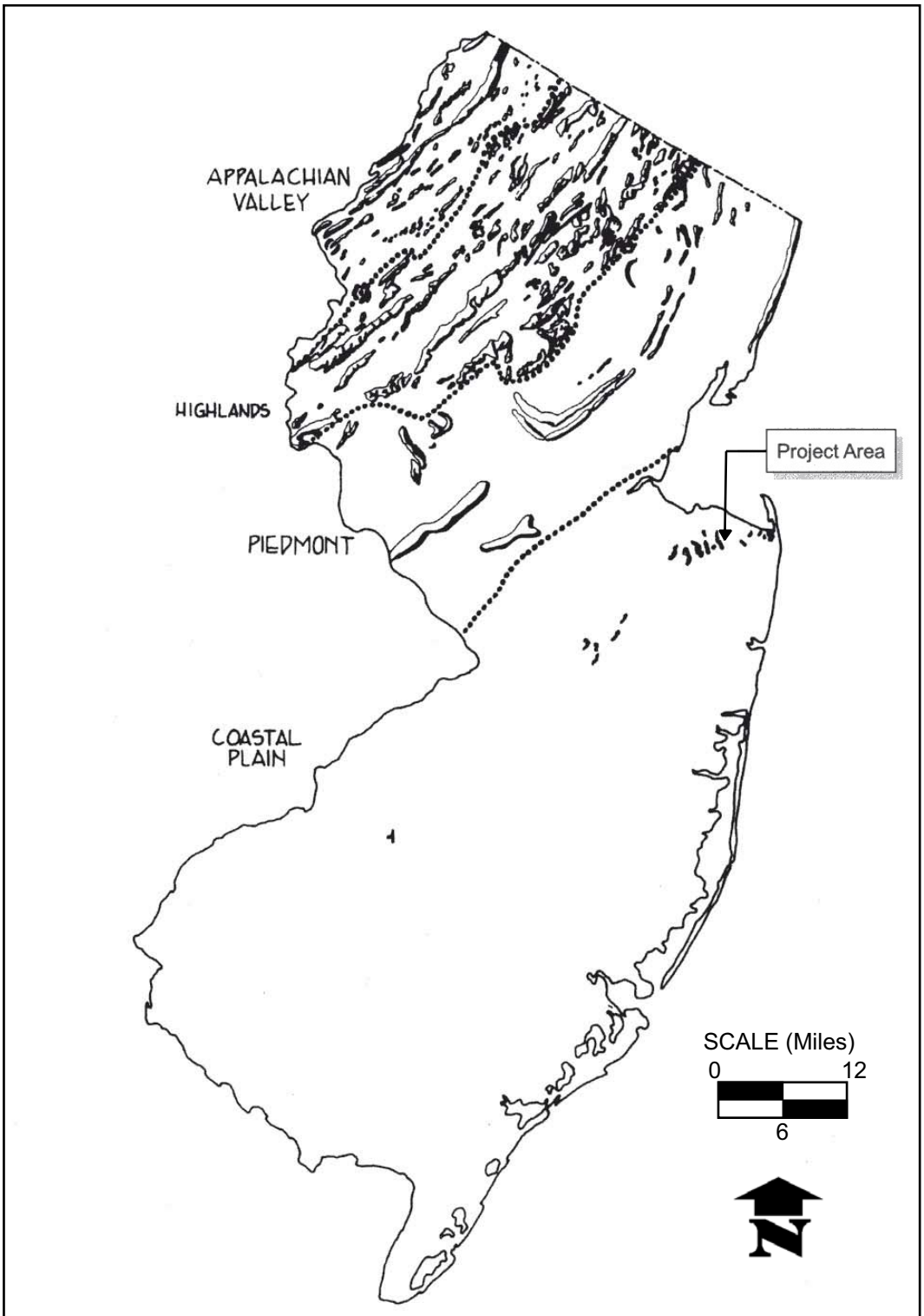


FIGURE 4: New Jersey Physiographic Provinces. *SOURCE: Tredrow 1986*

the Late Cretaceous (135 million to 70 million years before present [BP]) and Tertiary (70 million to 1 million years BP) periods. Much of the sediment in the project area is the eroded material from the Northern New Jersey Piedmont Province, which was subsequently deposited on the Coastal Plain during one of several marine transgressions and regressions (Wycoff 1966:63). The area consists of unconsolidated sediments of the Kirkwood Formation, which dates to the Miocene Epoch (28 million to 12 million years BP), overlain by the Cohansey Formation, characterized by fine sands with laminae often mottled with pebbles, gravel, and clay. It is possible that the Cohansey Formation dates not from the Miocene, but from the Pleistocene or Ice Age epoch (Widmer 1964). In effect, these soils were the result of the periodic rise and fall of sea levels during the various warming and cooling trends that occurred over time.

The Coastal Plain of New Jersey shares many of the characteristics found in the contiguous Coastal Plain regions to the south, with one notable distinction: a cuesta produced by the upper Cretaceous sand and marl formations (Widmer 1964:90). The rolling lowlands of the Outer Coastal Plain are situated east of the gradual slope of the cuesta, facilitating drainage toward the Atlantic Ocean (Cavallo 1981:1).

The Laurentide Ice Sheet (Figure 5), which covered North America from Canada down to northern New Jersey, began to retreat about 12,000 years ago (Schneider and Londer 1984:92-93, Wycoff 1966:222). By about 10,000 years ago, temperatures had risen by approximately five to six degrees Celsius, signaling the beginning of the Holocene interglaciation. Conversely, a theoretical drop in temperature of five to six degrees Celsius today would cause glaciation to the degree those parts of North America, including Canada

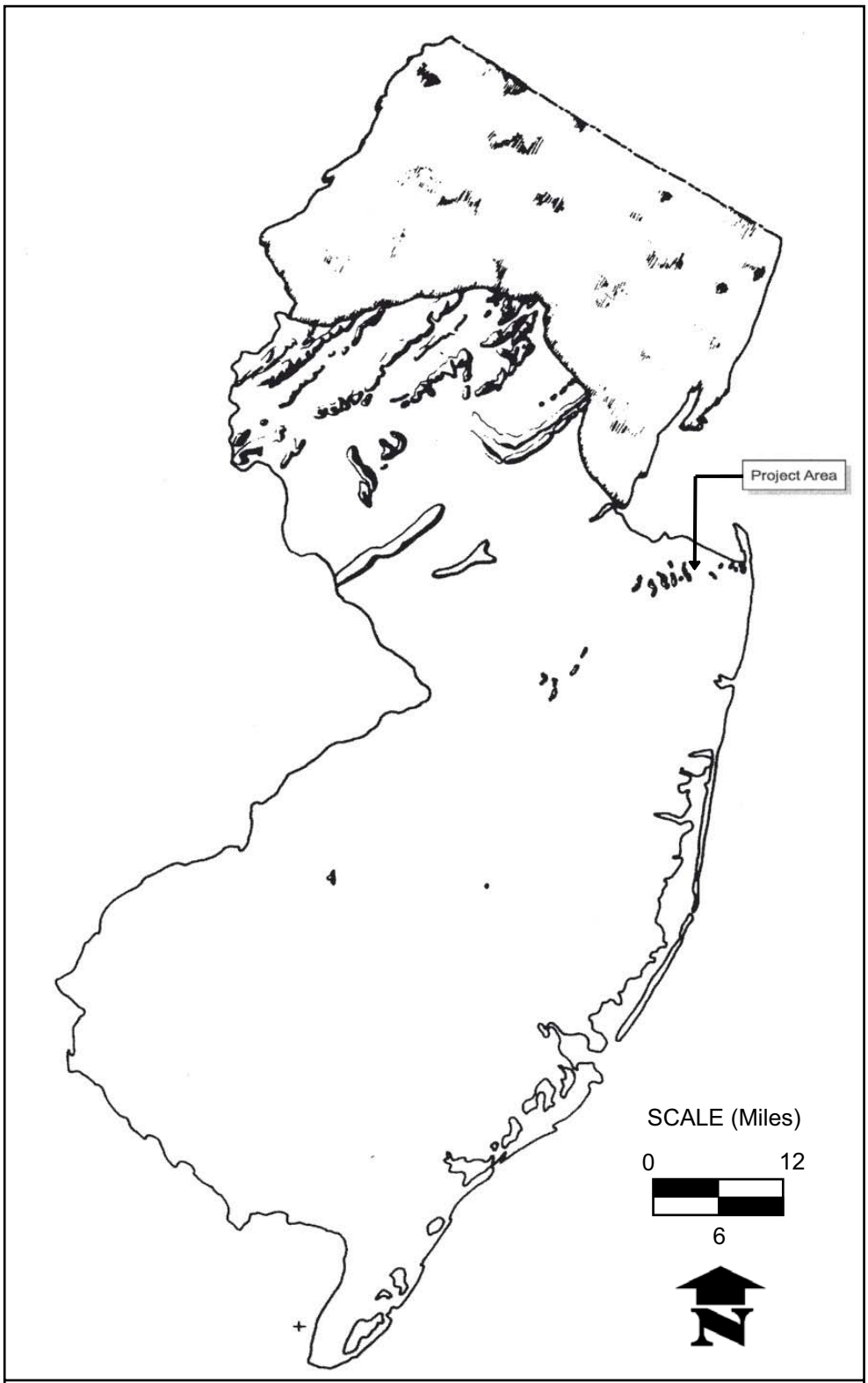


FIGURE 5: The Ice Cover of New Jersey During the Wisconsin Glacial Maximum. *SOURCE: Tredrow 1986*

and the northeastern United States would be largely uninhabitable (Wolfe 1977:174). The change in climate at the end of the Pleistocene was the lead domino in a chain of events that would not only change the physical state of the Coastal Plain, but also the life forms that inhabited it. According to C.K. Brain (1982:1), "Fluctuations in global temperature are regarded as primary environmental changes which then led to secondary effects, such as rainfall and vegetation changes." The Holocene was characterized climatically by warmer, wetter conditions than the Pleistocene, creating an environment more suited for habitation by humans than in earlier times (Funk 1972:7; Schneider and Londer 1984:101-102). The climatic changes that occurred during this time undoubtedly had profound effects on the biological ecosystem to which prehistoric populations had to acclimate themselves (Custer 1987:6). Presently, the mean annual temperature in New Jersey is 54 degrees Fahrenheit, with summer temperatures reaching highs of approximately 96 to 100 degrees Fahrenheit, and winter temperatures, as represented by January averages, measuring about 32 degrees Fahrenheit (Tedrow 1986:50). The average annual rainfall ranges between 40 and 48 inches, with approximately half occurring during the warm season (April to September) so critical to the state's agricultural economy (Tedrow 1986:47-48).

Glacial movement in Northern New Jersey during the Pleistocene resulted in the erosion and truncation of northern folded mountains, whose sediments were spread along the Atlantic coastal plains and out onto the continental shelf in the form of sand and clay (Wycoff 1966:136). Since the Coastal Plain of New Jersey is, in fact, the edge of the continent, it is subject to the episodic rising and sinking inherent in this physiographic location. It is estimated that the coast of New Jersey has sunk four feet over the past 1,000

years; however, it follows a period of substantial uplift, keeping the plain, at present, above sea level (Wycoff 1966:193). The geological overlay for sheet 29 of the New Jersey Department of Conservation and Economic Development Atlas depicts the lithologic formations of the project area.

The retreat of glaciers from northern New Jersey at the end of the Pleistocene resulted in a terminal moraine that stretches across the present-day counties of Warren, Morris, Union, and Middlesex (all north of Monmouth County), east along Montauk Point, Long Island, finally culminating at the islands of Nantucket and Martha's Vineyard (Widmer 1964:89; Wolfe 1977:144-147). This terminal moraine, composed of glacial till, is approximately one-mile wide and ranges in thickness from 25 to 300 feet (Widmer:1964:122; Wolfe 1977:147). The boundary formed by the terminal moraine represents the southernmost extent of the glaciers during the Wisconsin glaciation (Wolfe 1977:149). Tectonic features south of the terminal moraine are significantly younger (Miocene or later) than those further north (Cretaceous to Eocene) (Wolfe 1977:109-110). The Coastal Plain, which includes Monmouth County, lies south of the terminal moraine and is characterized by Pleistocene interglacial deposits known as "yellow gravels," which consist of gravel, sand, and clay that resulted from alluvial activity during periods of warmer climate (Wolfe 1977:136).

C. SOURCES OF WATER

The variety of water sources in and around Monmouth County has played a large part in the development of the regional geomorphology, as well as the settlement of both prehistoric and historic populations. Monmouth County is bordered on the north by the

Raritan and Sandy Hook bays and on the east by the Atlantic Ocean. The Navesink River, an easily navigable tributary, empties into the Atlantic Ocean at the junction of the Sandy Hook peninsula. The Raritan River is the dividing line between northwestern Monmouth County and southern Middlesex County.

Late Cretaceous marine sediments encountered across the Coastal Plain indicate that Monmouth County was submerged under the sea during this period of relative warmth. In fact, the shoreline during the maximum rise in sea level of the Late Cretaceous/Early Tertiary periods is believed to have been located as far west as Scranton, Pennsylvania (Widmer 1964:109). During the Wisconsin glaciation, the New Jersey shoreline was located on the continental shelf (Figure 6), approximately 60 to 80 miles east of the present shoreline (Kraft 2001:39; Widmer 1964:126). The analysis of well-core borings and the thickness of glacial till deposits suggest, according to one view, that the ancestral Hudson River actually flowed southwest of its present orientation and emptied into the Raritan River (Widmer 1964:123; Wolfe 1977:200).

The retreating glacier also left the landscape pockmarked with countless depressions, which acted as basins to catch the melting icewaters. These ponds and watering holes, along with similarly formed marshes, streams, and meadows, would become a haven for freshwater plant life and associated terrestrial vegetation that would act as a magnet for both animal wildlife and human colonizers (Kraft 2001:39, 55, 90).

Of all the changes in land/water boundaries within Monmouth County, none are as profound as those of the beaches and landforms altered over the years by the elements

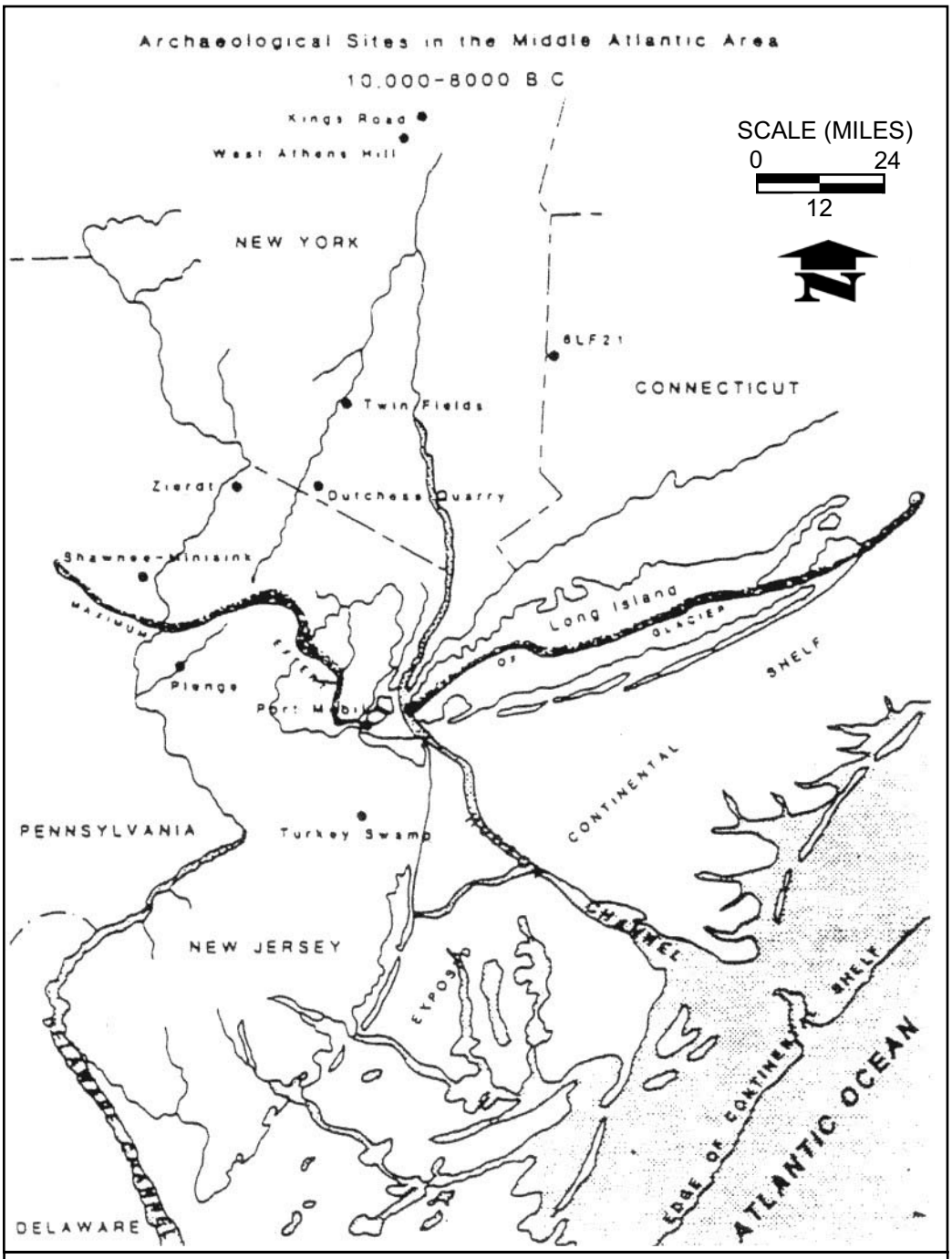


FIGURE 6: Extended Continental Shelf, 12,500 to 10,000 BP. *SOURCE: Kraft, 2001*

along the Atlantic Ocean/Sandy Hook Bay continuum (Rochibaud and Buell 1973:234). The dynamics of the coastline are evidenced by the plethora of shipwrecks along the reef east of New Jersey, and the cyclical emergence and submergence of islands, peninsulas, and sandbars due to weather conditions and tidal activity. The peninsula of Sandy Hook, in eastern Monmouth County, is a microcosm of the geophysical modifications that have occurred over time because of the volatile combination of weather and water. Sandy Hook is actually a spit, which has been formed from a sand barrier that has blocked longshore currents and collected suspended sediments to form a hook-shaped geographical appendage (Wycoff 1966:313). During the Pleistocene, when sea levels were much lower than at present, Sandy Hook was part of the exposed land surface. With the rise in sea level at the beginning of the Holocene, the process of sediment accumulation resulted in the creation of a landform that would eventually become the peninsula of Sandy Hook. Over time, sediments deposited through littoral drift and washed away during storms would alternately detach and reattach Sandy Hook to the mainland (Scharfenberger and Sara 1996:6). This process of island/peninsula formation has been calculated to have occurred in cycles of 50 years (Figure 7) (Moss 1991:139-141).

In the project area there are no known bodies or sources of flowing water, either permanent or ephemeral; the closest creeks lay approximately 600-feet to the north and 300-feet to the south. These creeks, known as Deep Run Creek and Milford Creek respectively, are presently weakly flowing bodies of water that have been irrevocably neutered by modern development; however, the deep-cut nature of the creek and the numerous extant

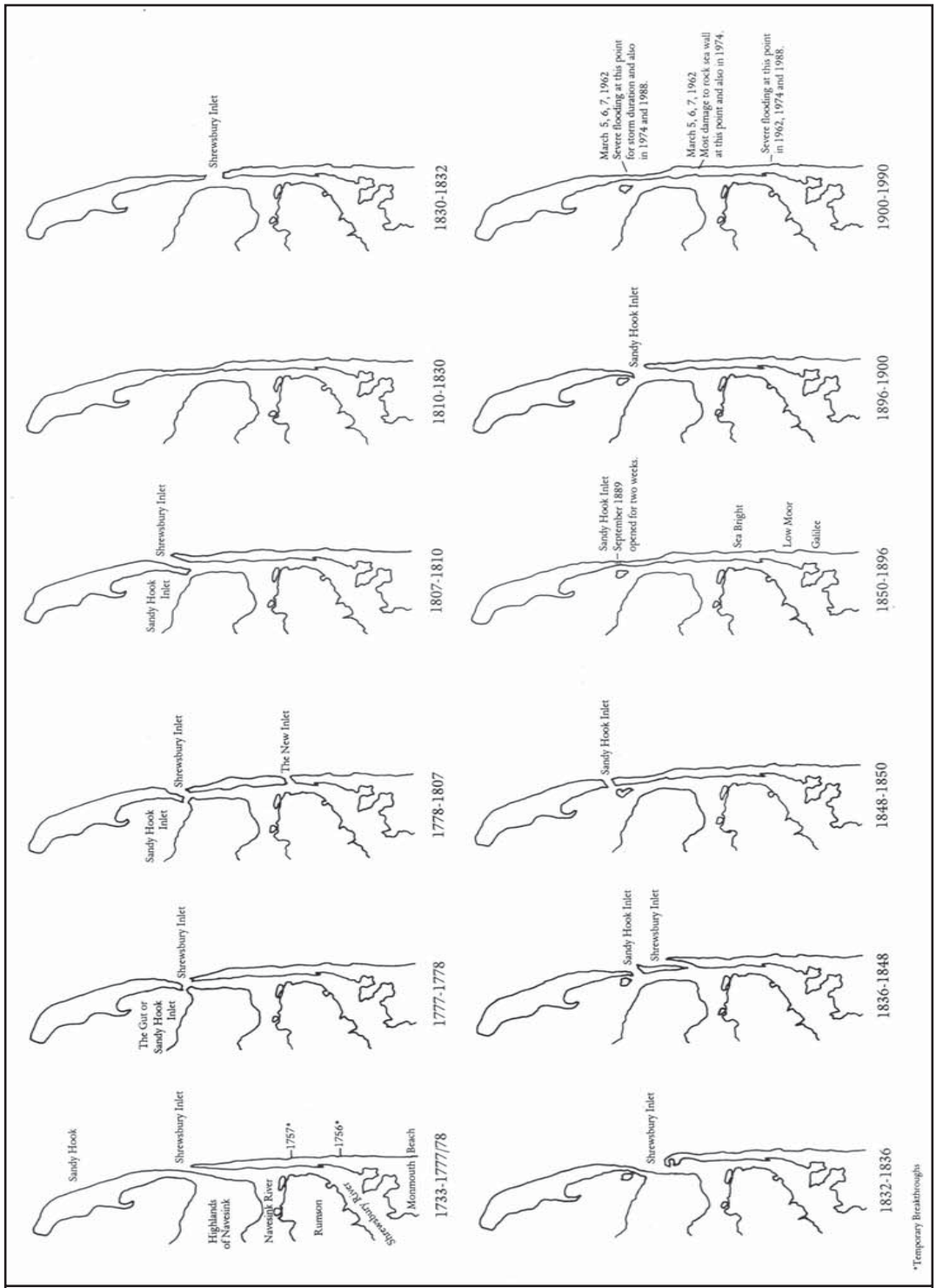


FIGURE 7: Map of Sandy Hook and Shrewsbury Inlets. *SOURCE: George H. Moss, Jr. 1991*

terraces indicate a once-substantial stream capable of supporting significant numbers and varieties of riverine life.

D. SOILS

The soils of the Coastal Plain consist of a series of unconsolidated deposits of sand with some silt, gravel, and clay dating from the Cretaceous to the Quaternary (Tedrow 1986:15). The variety of soil types that form the Coastal Plain is unusual in its horizontal distribution, in that a band of extremely fertile soil will cross-cut highly acidic, sandy soils with low fertility. J.C.F. Tedrow (1986:316-317), in his *Soils of New Jersey,* states that "most soil series in the Coastal Plain tend to have widespread distribution. This is brought about by several causes, the most important of which is that geologic formations are mantled with surficial deposits in discontinuous and isolated patterns."

One of the anomalies inherent in Monmouth County soils is the phenomenon of "cementation." This occurs when iron-bearing sediments are cemented into a conglomeration of sandstone or ironstone. Tedrow notes: "Between Red Bank and Raritan Bay, cemented deposits are common" (1986:316-317). Pockets of ironstone are generally encountered at a depth of one to two feet below the overlying soil cover in a matrix of brown gravelly sandy loam, underlain by reddish, yellow subsoil (Tedrow 1986:316).

One of the most unusual features of the Monmouth County soils is the fortuitous presence of greensands, or marl (Figure 8). Marl is described by Tedrow as:

> a broadly defined term generally used for loose earth or friable deposits containing calcium carbonate or dolomite. In the Coastal Plain of New Jersey the term also included

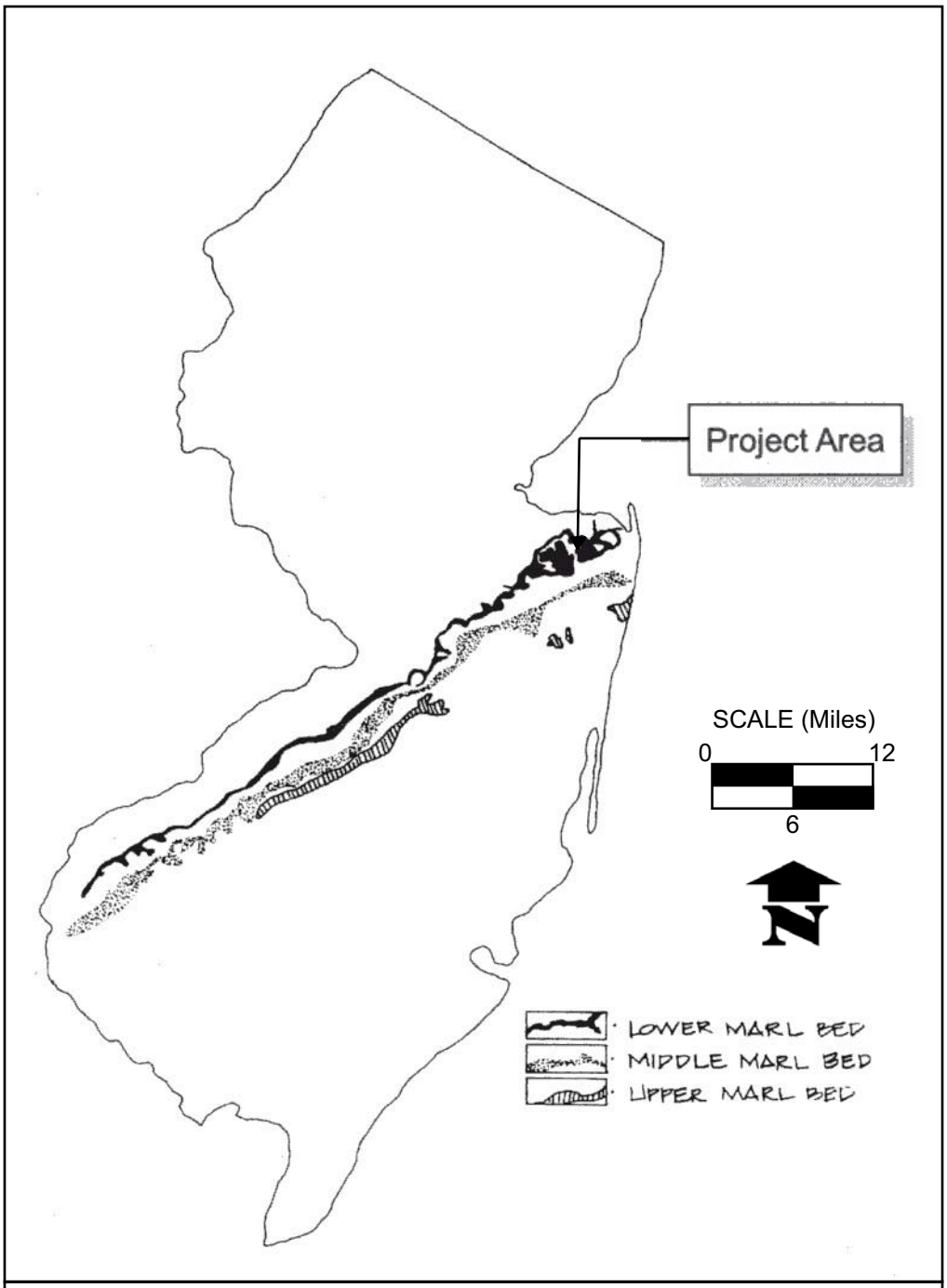


FIGURE 8: Major Marl Beds of New Jersey. *SOURCE: Tedrow 1986*

> calcareous sands, silts and clay, unconsolidated shells, and glauconite-bearing sediments. Within the state, glauconite-bearing deposits are generally referred to as marls or greensand marls. [Tedrow 1986:328]

As a result of its sedimentary origin when the Coastal Plain was deeply submerged in the ocean, marl often contains a large percentage of marine fossils (Schmidt 1973:129). Marls that contained a high percentage of phosphoric acid were successfully utilized as a fertilizer during historic times (Tedrow 1986:331). This practice is discussed further in Chapter IV.

Old Scots Burying Ground is situated on a sand dune or hill known in the seventeenth and eighteenth centuries as "Free Hill." This sand was deposited by outwash or meltwater from the glacier that covered the northern half of New Jersey approximately 13,000 years ago. According to the *Soil Survey of Monmouth County*, the soils present in the site are Freehold sandy loam-Urban land complex (0 to 10 percent slope) , which consists of well-drained, sandy soils on uplands (Jablonski 1989:80, 91). These moderately well drained to well drained soils of the uplands are typically formed in Coastal Plain sediments. These soils are characterized by a pH value of 3.6 to 5.5, low organic content, and low natural fertility, with 10 to 40 percent glauconite, a greenish silicate of iron and potassium (Figure 9).

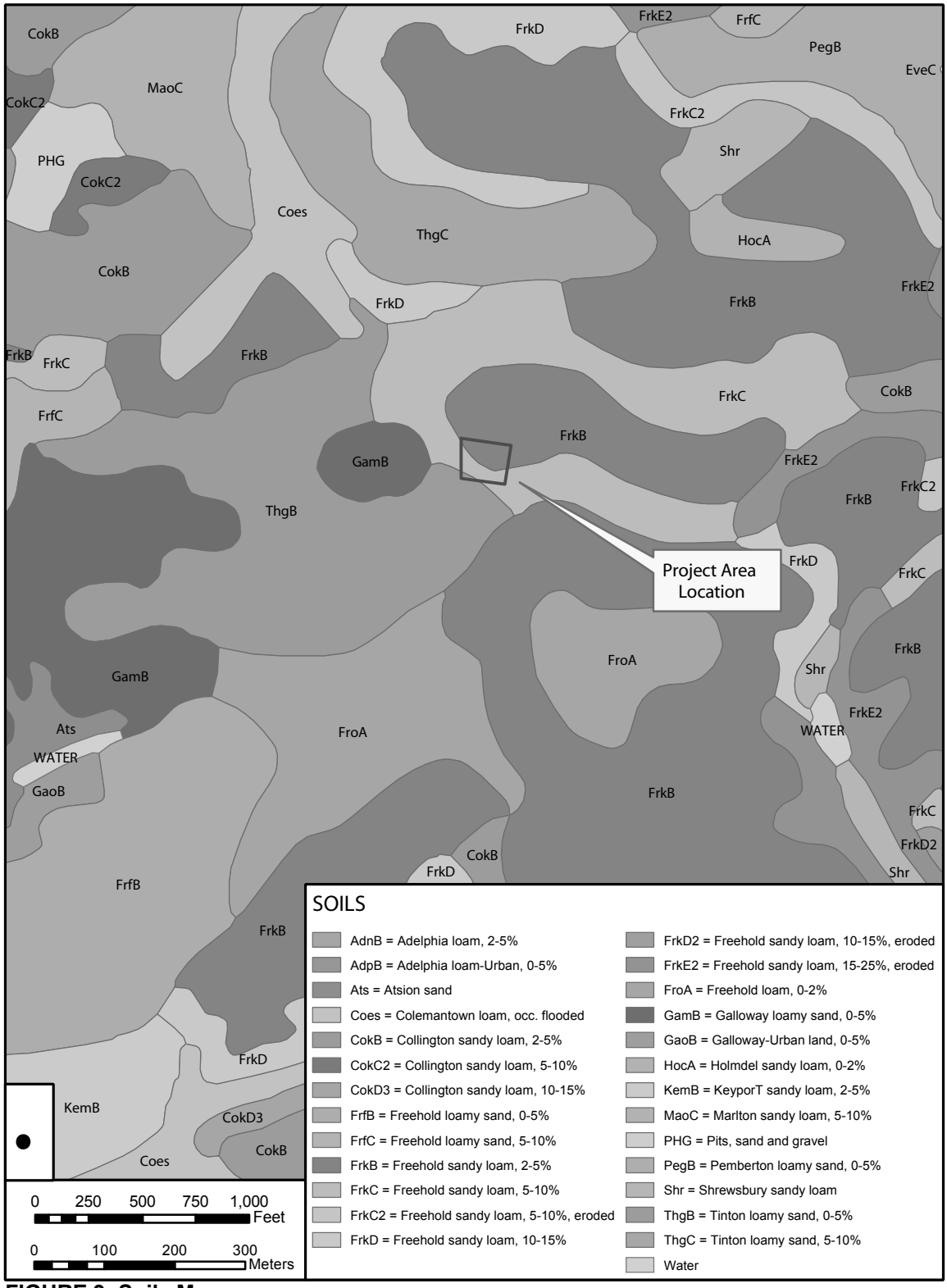


FIGURE 9: Soils Map

E. FLORA

Fossil pollen remains and associated radiocarbon dates suggest a gradual warming trend following the retreat of the Pleistocene glaciers (Marshall 1982). Previously tundra-covered surfaces consisting of lichens, mosses, grasses, sedges, and trees such as the dwarf birch and Arctic willow began to support a more varied vegetation cover (Kraft 2001:56). Monmouth County, located just below the edge of the Laurentide Ice Sheet, was covered with a forest dominated by cold-climate spruce, pine, and birch (Kraft 2001:55). With the warmer temperatures of the Holocene, oak, a species more suited for warmer climates, became more prominent in the project area (Schneider and Londer 1984:98-100). Other species of trees that took hold at that time include pine, cedar, hickory, birch, and alder (Figure 10) (Kraft 2001:56). By 10,000 BC, hearty edible plants, such as goosefoot, pigweed, wild lettuce, grape hackberry, sedge, ground cherry, blackberry, hawthorn plum and pokeweed, were growing in areas chiefly dominated by conifer trees (Kraft 2001:69). Pollen cores dated to circa 7000 BC offer further evidence of the rise of deciduous trees, such as oak, hemlock, and beech (Kraft 2001:92).

The soil on the site presently supports a wide range of trees and shrubs. An inspection of the site by landscape architect Thom Ritchie has provided an extremely detailed inventory on the species currently on the site. A list of the trees and shrubs are provided in Table 1.

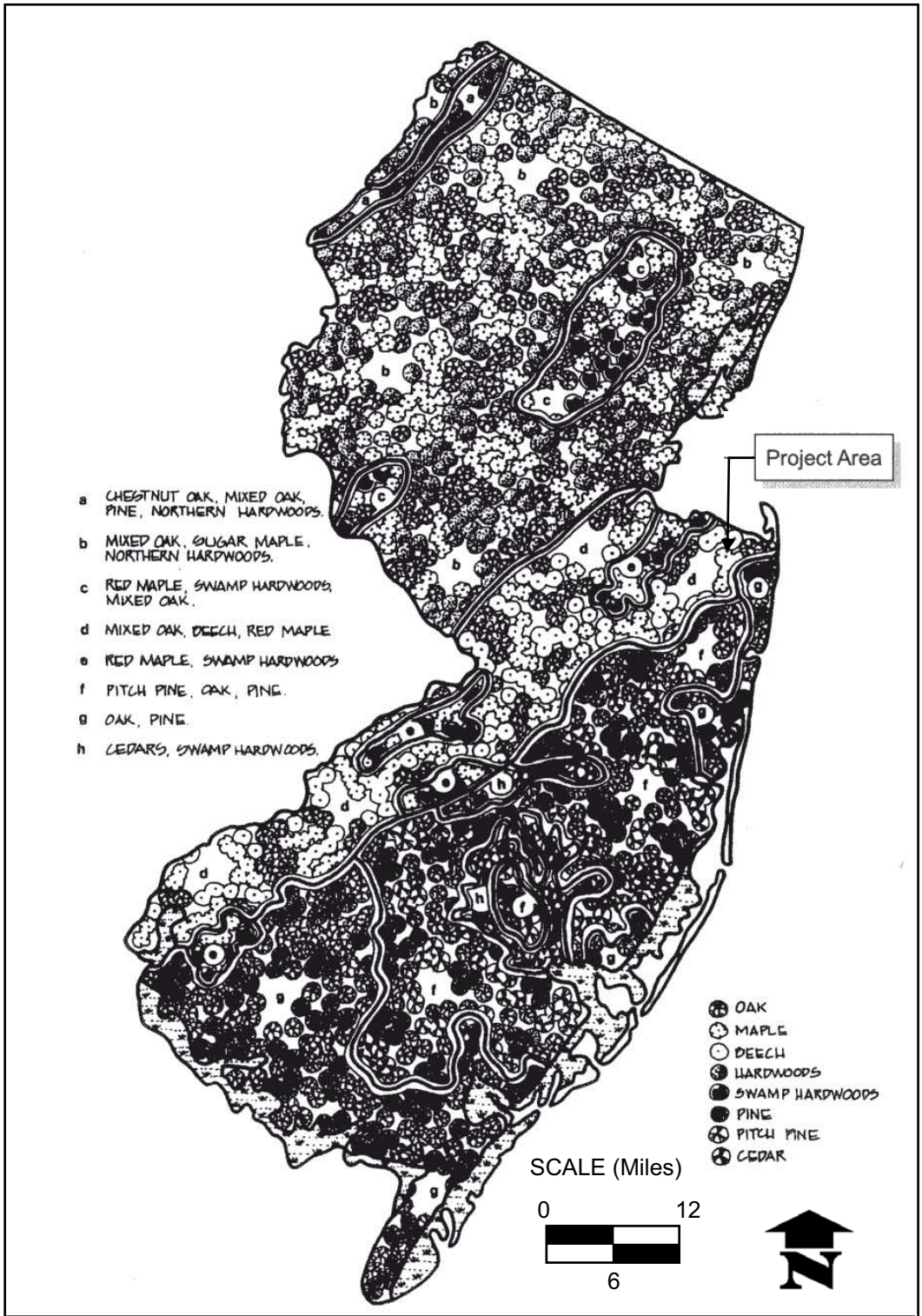


FIGURE 10: Forest Types of New Jersey. *SOURCE: Tedrow 1986*

TABLE 1

LIST OF VEGETATION TYPES FROM OLD SCOTS BURYING GROUND

Trees	**Shrubs**	**Plants**
Sassafras	Autumn Olive	Day Lily
Black Cherry	Arrowwood Viburnum	Periwinkle, Myrtle
Black Locust	Border Forsythia	Lily-of-the-Valley
Boxelder Maple	Hetz Juniper	Poison Ivy
Red Maple	Tatarian Honeysuckle	Virginia Creeper
Norway Maple	Multiflora Rose	Japanese Honeysuckle
Shagbark Hickory	Winged Euonymus	Oriental Bittersweet
Chinese Chestnut	Spicebush	Roundleaf Green Briar
Blackgum	Adam's Needle Yucca	Brambles: Raspberries, Dewberries, Blackberries
Norway Spruce	Sweet Mockorange	Asiatic Dayflower
White Pine		Ground Ivy
		Yellow Woodsorrel
		Common Pokeweed
		Stonecrop
		Fern Lady Fern

According to Mr. Ritchie, the largest Black Locust tree is approximately 93 years old, with several of the sassafras around the same age. Several of the Norway spruce trees

were estimated to be between 40 and 50 years old. Many of the trees are typical of "early succession" growth, namely, trees that grow in open areas after clearing. The shrubs on the site are a mixture of natural growth and introduced shrubs and plants. Some of the plants in the wood line are plants that appear to be cultivated plants mixed with wild natural growth. This suggests that some of the overgrown wood line plants were originally planted within the cemetery, indicating that the cemetery may have extended beyond the current cleared area, particularly to the south and southwest (Thom Ritchie, personal communication 2003).The open area of the cemetery is covered with a thin turfgrass cover. This condition creates the potential for occasional erosion under certain weather conditions, whereby soil could wash down several gullies from the eastern/central portion of the project area to the western half of the site. A large number of burrowing animals adds to the soil displacement.

F. FAUNA

The types of fauna that inhabited Monmouth County during the Pleistocene, as well as much of the northeastern United States, bear little resemblance to the fauna types of today. Extinct species, such as the wooly mammoth, mastadon, giant beaver, and musk-oxen, along with animals no longer native to the region, such as walrus, caribou, and sloth, were fixtures in the cold-climate environment of the Late Pleistocene.

The lacustrine environment of New Jersey during the ensuing interglacial period of the early Holocene was well suited for many species of birds, including ducks, geese, auks, and ptarmigans. Fish, shellfish, and mollusks were also plentiful along the ocean coasts and inland rivers (Kraft 2001:57). It is unclear as to precisely why successful species such

as the wooly mammoth and mastadon became extinct. Paul S. Martin has argued strongly in favor of overhunting, while recent models have been formulated using climatic change as a prime factor in the late Pleistocene extinctions (Grayson 1991:194, 215). Likely, the cause is a combination of factors. Certainly, these species were present at the time of the first human arrival in the area. A mastodon kill site in Saltville, Virginia, dated to 12,000 BC, provides conclusive evidence of human hunting activities at a time prior to the earliest known human occupation in New Jersey (Kraft 2001:59). Still, it is doubtful that the small, widely dispersed bands of hunter-gatherers that inhabited the Northeast during paleolithic times could have effected such a radical change as the mass extinction of numerous well-adapted species. Rather, it was more likely caused by the change in climate, which altered the vegetation serving as the huge browsers' food supply, coupled with man's overhunting (Fagan 1995:85-87; Grayson 1991:220; Wolfe 1977:172).

Coniferous forests dominated the early Holocene landscape, creating podzol soils with their decaying, acidic needles. The high acidity of these forest soils retarded the growth of the leafy underbrush that was the dietary base for many of the Pleistocene megafauna (Kraft 2001:81).

Large game animals, such as white-tailed deer, elk, beaver, black bear, and woodland bison, replaced the megafauna of the Late Pleistocene. These comparatively smaller species more easily adapted to the differing food supply and range changes than the slower reproducing megafauna (Grayson 1991:214-215). The toolkits of Late Paleo-Indian hunters reflected the change in available game, with smaller fluted points replacing substantially larger specimens (Kraft 2001:82).

III. EUROPEAN SETTLEMENT OF MONMOUTH COUNTY

A. INTRODUCTION

This chapter describes the project area's historical context, with specific reference to the historic settlement of Monmouth County. The historical overview of Monmouth County in this chapter will provide the cultural and historical parameters within which the beginning and subsequent growth of the Old Scots congregation occurred.

B. SUMMARY OF MONMOUTH COUNTY HISTORY

The earliest permanent European occupation of Monmouth County occurred in 1664, when English settlers came from Gravesend, Long Island, establishing massive plantations in what are now Middletown and Shrewsbury (Cunningham 1953:189). The first European contact with the area, however, had actually taken place some 55 years earlier in 1609, when Henry Hudson and several crew members, including mate and journal-keeper Robert Juet, stepped onto the pristine beach of Sandy Hook and declared it a "very good land to fall in with and a pleasant land to see" (Ellis 1885:42-43). Originally constituted in 1683, Monmouth County was part of the province of East New Jersey, under the rule of Colonial Governor George Carteret. Carteret was granted the territory of East New Jersey by James, Duke of York, in 1664 (Cunningham 1992:28-29). James had gained control of an enormous tract of land that stretched from lower New England to Delaware and included Monmouth County through a grant and patent from his brother, King Charles II, dated March 12, 1663 (Ellis 1885:22). This action wrested control from the Dutch, who had maintained jurisdiction over the area since 1646 (Ellis 1885:22). In 1673, the Dutch regained temporary control of New York and New Jersey by virtue of

military force, only to relinquish their sovereignty permanently in 1674 through a treaty signed with England.

Once the succession of control had passed from the Duke of York to George Carteret, the task of enticing settlers to populate and develop the area began. The need for industrious people to clear and cultivate the land was essential to the growth and survival of the region. In 1665, a document with the unwieldy title, "The Concession and Agreement of the Lords Proprieters of the Province of New Jersey, to and with all and every, the Adventurers, and all such as shall Settle and Plant there," was published (Ellis 1885:71-72). This document allowed for 150 acres to be given to every freeman who was "arm'd with a good Musket, bore twelve Bullets, with Bandilears and Match convenient, and with six Months' Provision for his own Person arriving there . . ." (Ellis 1885:71).

Although nearly a century would pass before Monmouth County's vast supply of marl would be recognized and exploited, the naturally fertile soils of the region quickly established it as "a great resort for industrious and reputable farmers" (Cunningham 1953:189). In addition to agriculture, Monmouth County was also an important hub of early industry in the state. New Jersey's first ironworks was founded in Shrewsbury by James Grover (one of the original patentees of Middletown and founding member of the Old First Church) in 1674. By 1675, Colonel Lewis Morris had taken control of the operation, expanding it to include 3,540 recently purchased acres on the Shrewsbury River for the purpose of mining and transportation. It was the influential Morris, whose nephew went on to become New Jersey's first royal governor independent of New York, who had the county named Monmouth after his native Monmouthshire, Wales (Cunningham

1953:189; Ellis 1885:101; Horner 1974 [1932]:293). Even as early as 1680, Monmouth County's abundant potential was being realized: it was already the wealthiest county in the province and therefore paid the most taxes.

Monmouth County grew steadily during the eighteenth century, as Scottish, Dutch, and French Huguenot settlers joined the already established English colonists in pushing settlement westward to the towns of Allentown and Imlaystown. The county's thriving agricultural and commercial pursuits were further intensified by the favorable juxtaposition of exceptional water routes, such as Raritan Bay, and easily navigable rivers, such as the Shrewsbury, Navesink, Shark, and Manasquan rivers. These arteries provided relatively easy access to important markets across the state, as well as New York and Philadelphia (Cunningham 1953:190). By the second half of the eighteenth century, Monmouth County could boast of two strategically placed lighthouses, one at the Navesink Highlands and the other at Sandy Hook, to guide the bustling shipping trade and protect it from hostile French ships during the mid-century conflict between France and England (Cunningham 1953:190; Ellis 1885:536-537). Ironically, these lighthouses would aid the Americans immeasurably in defending against British attacks and Tory raids during the American Revolution years later.

The residents of Monmouth County played an emotionally charged role in the years leading up to and during the American Revolution. At a meeting of Freeholders and residents of the county, held on June 6, 1774, in Freehold, a resolution was drafted articulating the unanimous sentiment of those in attendance regarding the "recent" unrest in Boston, and the increasing infringement on the rights of freeborn Americans by the British

crown through its myriad taxes and trade restrictions (Ellis 1885:117). Several months earlier, in April 1774, a British tea ship was detained at Sandy Hook by the Sons of Liberty and eventually forced to return to England with its entire cargo (Horner 1974 [1932]:22). Scenes like this occurred repeatedly throughout Monmouth County, as well as in townships and villages throughout the colonies, as dissatisfaction with British rule grew, and the young nation headed down the slippery slope toward war. While the patriot cause was well supported in Monmouth County, loyalty to the crown was an omnipresent force; it was factionalized, but fervent, often with deadly results. Raids on patriot residences in which the occupants were assaulted or killed were commonplace, as Tories exploited the rich bounty of Monmouth County to support the enemy cause. In fact, Toryism was considered to be more widespread in Monmouth County than in any other county in New Jersey. The Congress of New Jersey responded to this on July 3, 1776, by deploying 200 militiamen to Monmouth County to crush the insurgents using whatever force was deemed necessary (Ellis 1885:203-204).

The most notable event of the American Revolution involving Monmouth County was the Battle of Monmouth, fought on June 28, 1778. This would turn out to be a large and pivotal battle, with the Americans winning a stunning victory over the British in sweltering temperatures that reached over 100 degrees (Fleming 1977:73, Van Benthuysen and Wilson 1983:27).

After the Revolution, Monmouth County continued to grow in more diversified directions. The earliest signs of the county's future as a haven for vacationers became apparent toward the end of the eighteenth century, when notable men of means, like U.S.

Senator William Bingham of Philadelphia, came to the shore area and built summer homes. By the early nineteenth century, Monmouth County, most notably the town of Long Branch, equaled Cape May as a favorite stopover of Philadelphians passing through on business or pleasure excursions across the state. Still, agriculture remained the lifeblood of the Monmouth County economy. The discovery of marl in 1788 and its subsequent usage on lands previously considered unarable fueled an explosion of crop output throughout the county by the 1840s. It was around 1840 that Monmouth County farmers began to plant and harvest Irish potatoes, a crop so successful that it led to the invention of a mechanical potato digger by Thomas Stout of Keyport in 1853 (Cunningham 1953:193).

The natural marriage of agricultural produce and water transportation would begin to dissolve with the introduction of railroads to Monmouth County. By the late 1860s, railroads were revolutionizing the shipping of farm produce, reaching places previously inaccessible by boat or prohibitively far by coach. Moreover, short-term vacationers of middling standing were now able to join the gentry who could afford summer-long stays along the shore. So desirable was Monmouth County as a vacation spot that seven presidents, including Rutherford B. Hayes, Benjamin Harrison, James Garfield, Woodrow Wilson, and Ulysses S. Grant, utilized the bucolic shore region as a summer capital.

In the late nineteenth and early twentieth centuries Monmouth County played an instrumental role in the development and implementation of the U.S. national defense system. Sandy Hook, which can trace its military affiliation back to the eighteenth century, became home to Fort Hancock, designated in 1895 in honor of Civil War veteran and 1880 presidential candidate General Winfield Scott Hancock. In addition to its role as a strategic

coastal fortification, Fort Hancock served as a military proving grounds, especially active during the years 1874 to 1919 (Scharfenberger and Sara 1996).

C. SITE HISTORY

This section details the development of the site and the surrounding community from the earliest time of European settlement. The project area lies within the eastern half of Monmouth County in the present-day village of Marlboro, which was a part of Freehold until the nineteenth century. The town of Freehold was first settled around 1680 by Scottish immigrants (Office of the Monmouth County Clerk 2002:33). Earlier settlements near the shore in Middletown and Shrewsbury, founded by the Baptists and Quakers respectively, forced the Scots, who were predominantly Presbyterian, further inland (McCauley 1900:5, Smith 1895:11). This however, did not result in settling for less desirable land. The area encompassed by Freehold consisted of rich, fertile soils well-suited for the agricultural pursuits of the settlers (Van Benthuysen and Wilson 1983:19). Early in the eighteenth century, John Reid, a prominent land owner and surveyor-general of the Province of East Jersey, donated land for the construction of a courthouse (OMCC 2002:33). In 1713, Freehold was selected as the location of the county seat (Van Benthuysen and Wilson 1983:19). Prior to this, few houses existed in Freehold. However, the act passed by the Assembly fixing the location of the new courthouse mentions the house of John Okeson, which is believed to have been a tavern serving travelers along the Burlington Path (Ellis 1885:385).

The town was laid out along a former Indian path known as the Burlington Path. This was a “kings highway” that ran from Crosswicks to Tinton Falls (Ellis 1885:385).

The town was laid out with two rows of building lots bifurcated by this road which later became the extant Main Street. This design followed the New England system, whereby landowners resided on lots in the village, with most of their land situated on outlying lots (Schmidt 1973:30, Wacker 1975).

During the Revolution, Freehold, also known as Monmouth Courthouse was the focal point of patriot sentiment in the country (Van Benthuysen and Wilson 1983:19). As noted earlier, in June of 1778, General Washington's army met British troops under the command of General Clinton at the Battle of Monmouth in Freehold (Farner 1996:35). It was the largest battle of the war, and marked a turning point for the patriot cause. Among the notable generals who participated in the battle beside Washington were American generals William Alexander, Anthony Wayne, Nathaniel Greene, and French General Lafayette. Perhaps the most storied participant in the battle was Mary Ludwig Hays, better known as "Molly Pitcher" who took her husband's place in the field after he was wounded. In 1783 after Congress declared an end to the war, the church bells of Freehold's Old Tennent Church, converted to a hospital after the battle, rang in celebration (Van Benthuysen and Wilson 1983:27).

The Burlington Path, along with other early roads such as Gordon's Corner Road and Pleasant Valley Road, were major thoroughfares during the colonial period, even serving as retreat routes for British soldiers on their way to Sandy Hook Bay following the Battle of Monmouth. The American militia staged attacks against the army along these routes as it withdrew from the area (Handlin 1998:1). The Old Tennent Church that

succeeded the Old Scots meetinghouse structure played a prominent role during the retreat, serving as a combination hospital/headquarters for the battered British troops (Ellis 1885).

The entire village of Freehold was a hotbed of activity for the duration of the American Revolution. Loyalties were divided among the townspeople between allegiance to the crown and devotion to the patriot cause. Sentiments ran deep on both sides, as evidenced by the anti-British gatherings at the Monmouth Courthouse on one side, and the Anonymous Spy Map of Monmouth County (Figure 11) on the other, complete with distances between houses to assist the local Tories in their provisional raids (Mandeville 1927:13). A number of descendants of the Old Scots congregation fought for the Continental Army including, Abraham Probasco, David Rhea, William and John Campbell, and Samuel, James and David Craig (Symmes 1904:106-107, 365).

After the war, the town of Freehold remained largely an agricultural settlement, with the export of marl to other parts of the country its only true industry. In 1848, Marlboro became a separate political entity. The 1851 Lightfoot *Map of Monmouth County* shows the area around the Old Scots Burying Ground to be sparsely settled (Figure 12). At this time, its population was about 1,500, growing to 2,200 by the time of the 1880 census. The 1873 Beers *Atlas of Monmouth County* (Figure 13) and 1889 Wolverton *Atlas of Monmouth County* (Figure 14) show development to be concentrated mainly to the south of the burying ground on Marlboro proper, and along the Freehold and Keyport Railroad line, which ran north/south approximately 0.5-miles to the east. The area around Marlboro remained primarily farmland into the early twentieth century. After the end of World War

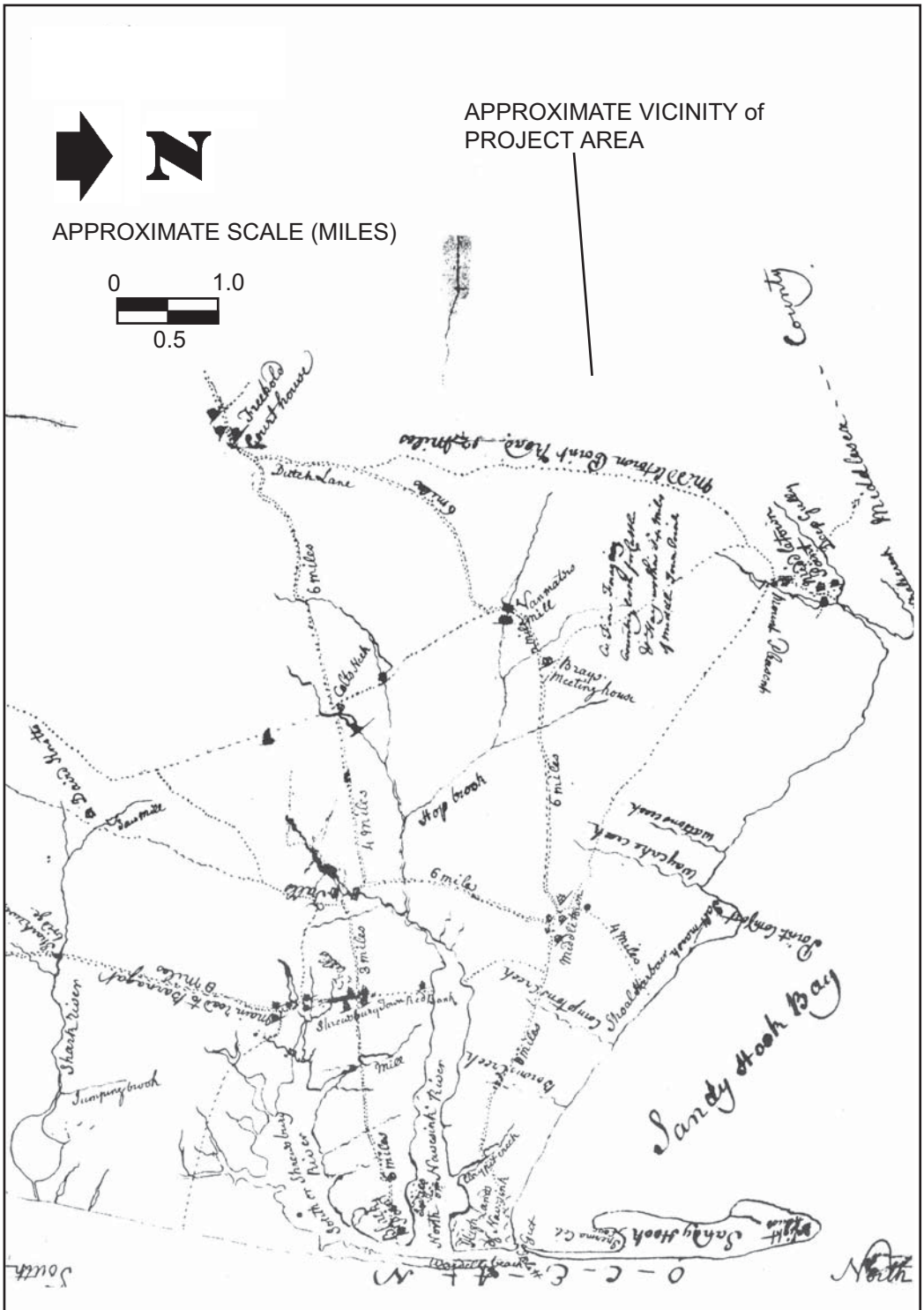


FIGURE 11: Anonymous Spy Map of Monmouth County. *SOURCE: Monmouth Battlefield State Park*

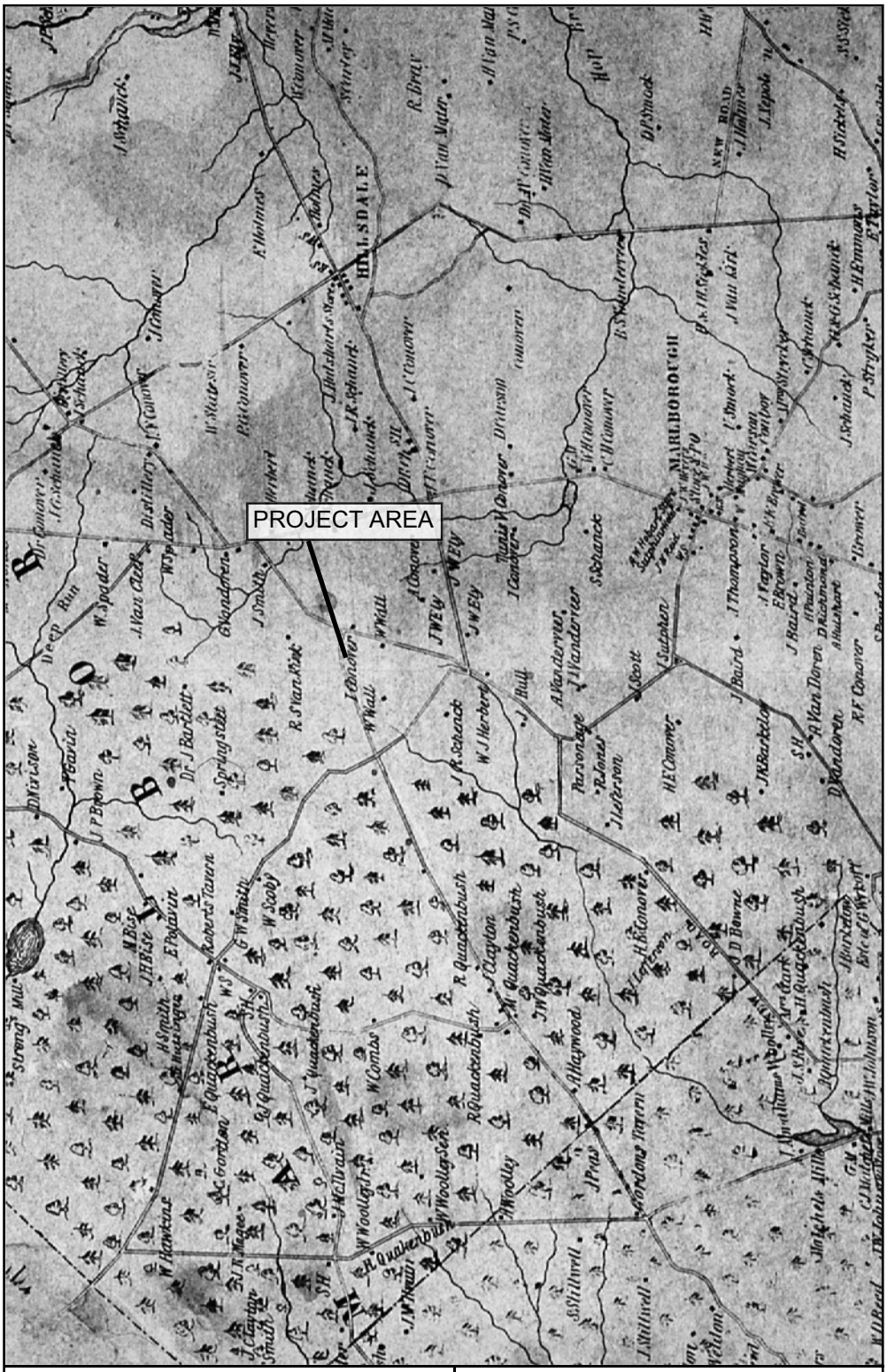


FIGURE 12: Monmouth County, 1851.
SOURCE: Lightfoot 1851

FIGURE 13: Monmouth County, 1873.
SOURCE: Beers 1873

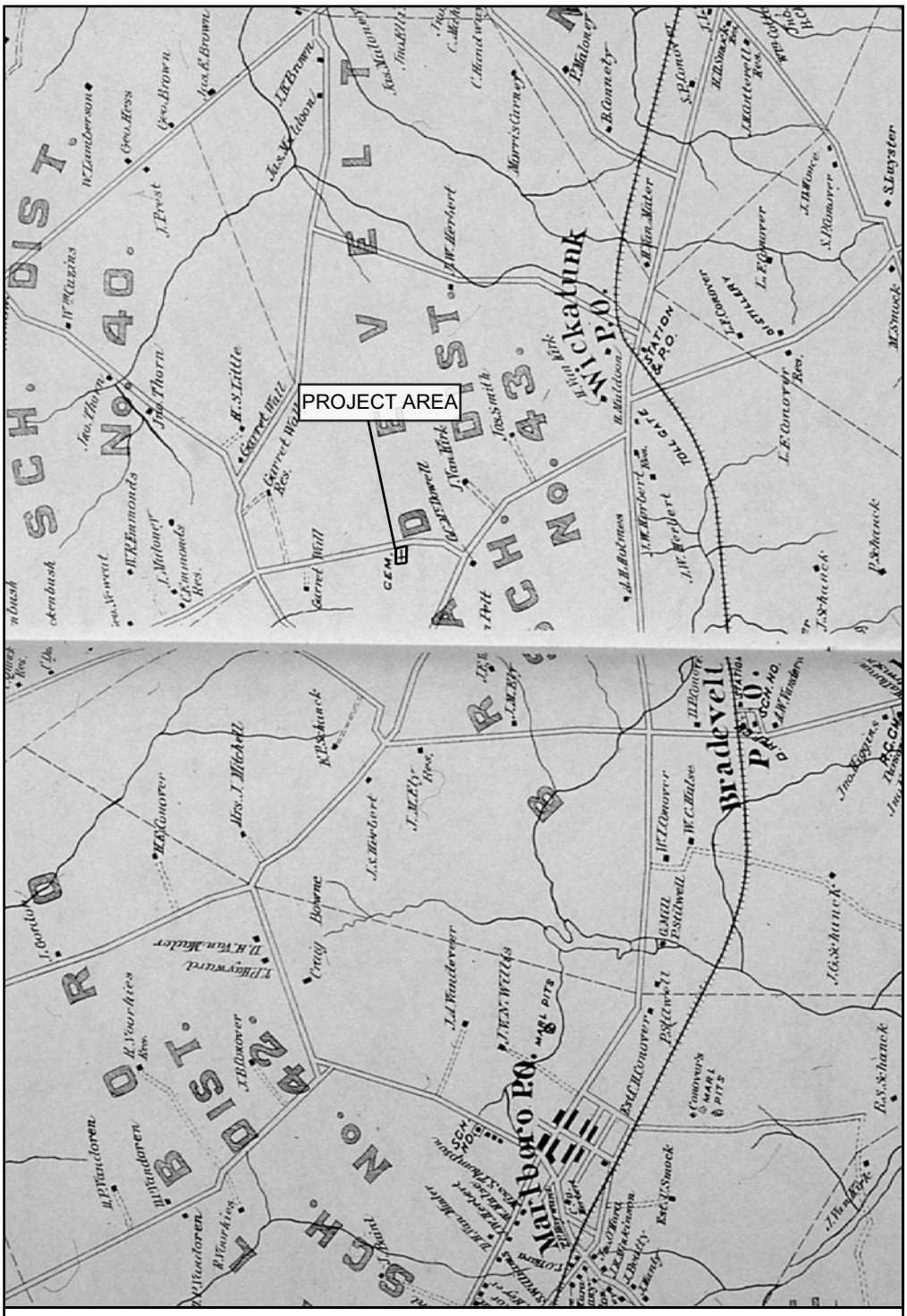


FIGURE 14: Monmouth County, 1889. *Source: Wolverton 1889*

II, the improvement of Marlboro's infrastructure resulted in significant increases in population. Marlboro saw its population grow from 18,000 in 1980, to 28,000 in 1990, to over 30,000 in 1998 (Handlin 1998:1).

PART TWO: ETHNOHISTORY OF THE PRESBYTERIANS

IV. HISTORY OF THE PRESBYTERIANS

A. INTRODUCTION

The Presbyterians who settled in Marlboro, New Jersey, were part of a larger wave of religious groups seeking the freedom and promise offered by the New World. The lure of worship without persecution proved as irresistible as that of the boundless economic opportunities being offered by the various trade groups, such as the Virginia Company and Massachusetts Bay Company, as an enticement to immigrate to the labor-starved colonies (Henretta 1993:39-41). The vision of America as a panacea for divergent religious expression was overly optimistic, however; the splintered congregations resulting from the Reformation created their own systems of oppression and contempt for one another in America reminiscent of the Catholic-Anglican-Protestant schisms of a century before. This scenario is a textbook example of what historian Edmund Leach termed "the passionate adherence to sectarian belief," whereby "the whole of Christendom shares a single corpus of mythology so it is surely very remarkable that the members of each particular Christian sect are able to convince themselves that they alone possess the secret of revealed truth" (Leach 1982:43). Moreover, the frequency and relative ease with which dissident groups left one sect, only to re-emerge as part of another, created a highly dynamic environment for new religions to flourish. According to anthropologist Stanley Brandes, "Protestants who object to one set of ideas, need not feel bound to a given sect; they move on to or found another" (1990:188). The unsettled area of Monmouth County that encompasses the village of Freehold (Marlboro) attracted a number of these religious denominations, including Presbyterian, Quaker, Dutch Reformed, Episcopalian (Anglican), and the

Baptists (Horner 1974 [1932]). From the earliest time of settlement, the question of religion — its practice, diversity, and tolerance — bore a weighty influence on the founding fathers of the region, forming the cornerstone of many of the civil statutes instituted during the seventeenth and eighteenth centuries.

This chapter provides a general history of the Presbyterians, from their founding in Europe in the early sixteenth century, to the time just prior to the mass exodus from Scotland in the late seventeenth century and their subsequent arrival in America. The following chapter will discuss the specific history of the Presbyterians of Freehold (Marlboro) from their arrival in New Jersey during the last quarter of the seventeenth century, including their place in local government, their symbols and rituals, and the activities of the congregation as recorded in the early church records. The chain of ownership of the site and profiles of some of the most notable founders and early ministers are given to provide information on those responsible for the material remains and modifications to the site.

B. ORIGINS OF THE PRESBYTERIANS

This monk will confuse all the doctors. He will start a new religion and reform the whole Roman Church, for he bases his theology on the writings of the Prophets and the Apostles. He stands on the words of Christ, which no philosophy or sophistry can upset or oppose, be it that of the Scotists, the Albertists or the Thomists

Anonymous professor of Martin Luther, 1511

These intuitive words (quoted in Jordan and Stifle 1990:5-6) foretold the actions of Martin Luther's historic nailing of the 95 theses on the door of the castle church in 1517. Rather than starting the definitive new religion, Luther's writings inspired a movement that sought to reform the church and wrest the power over secular affairs from the papacy

(Chernow and Vallasi 1993:1631). The seeds of this sentiment spawned the creation of numerous religious groups during the late sixteenth and early seventeenth centuries. One of these evolved into the Presbyterian denomination.

The origins of the Presbyterian faith date back to the early sixteenth century in Scotland as part of the Reformation movement that was sweeping Europe. Disillusionment with the Roman Catholic Church, with its rigid hierarchical structure and reliance on myriad rituals unrelated to Biblical reference, resulted in a number of separatist movements under the general heading of Protestantism (Jordan and Stifle 1990:11-12). The dissatisfaction generated by the perceived materialism and overly ritualistic nature of the Roman Catholic Church, and with the state-sanctioned, similarly structured Anglican Church, split up dissenting Christians in various directions, leading to the formation of religious groups that each addressed the concerns of a segment of the fractured flock (Jordan and Stifle 1990:12). For some, the question of who had authority over church affairs was answered by the Presbyterians.

While there were numerous individuals who played a part in the development of the Presbyterian religion, one man in particular, John Knox, was particularly prominent in the rise of Scottish Presbyterianism. Knox was a former priest who turned Protestant around 1558 (Lingle and Kuykendall 1988:38). Knox's rise as a leader in the protestant movement grew out of the violent conflicts between the reformers and the established church. In 1546, after a number of Scottish reformers were executed by Catholic authorities, protestant rebels broke into St. Andrew's castle and hung Cardinal David Beaton, an early persecutor of the reformers, in retaliation (Mowat 1939:81). In a gesture

aimed at insulting Catholics, the mob then hung his body from the castle wall. The Protestant leaders, cognizant of the inevitable reprisals they would likely suffer, barricaded themselves inside the castle. Within the confines of the castle, the rebels chose John Knox as their preacher. He was a Protestant extremist in much the same way Cardinal Beaton was a Romanist extremist (Mowat 1939:82). This first "congregation" was short-lived, as the Scottish authorities enlisted French soldiers to blast their way into the castle and forcibly remove the rebels. For the next year and a half, Knox and the others were forced into slavery aboard a French galley ship. Eventually, Knox was freed by King Edward VI of England, who was sympathetic to the protestant cause. This would be short-lived, however, as the death of King Edward VI in 1553 and the subsequent ascension to the throne of his Catholic half-sister, Queen Mary I (Bloody Mary), resulted in an exodus of Knox and his followers to the mainland to avoid a repeat of the earlier persecutions of dissenters (Protestants not affiliated with the Anglican Church). He spent the next three years in Geneva with John Calvin, whose influence on Knox would permeate the future tenets of Scottish Presbyterianism for generations (Lingle and Kuykendall 1988:38-39, Smylie 1996:17). By 1560, Knox was ready to return to Scotland with a desire to institute the reforms predicated on a strongly Calvinistic view of religion.

Knox's time spent in Geneva resulted in his writing of the treatise *The First Blast of the Trumpet against the Monstrous Regime of Women* in 1558, and the translation of the *Geneva Bible* in 1560. The former publication attacked the Catholicism of Mary Tudor of England and Mary of Guise, Queen of Scotland. Knox's influence on Scottish politics was profound, as the Scottish parliament abolished Roman Catholicism and established a

governing body based on the Presbyterian order espoused by Knox (Smylie 1996:30-31). His writings were the catalyst for the formation of a presbyterian form of church government in Scotland in the sixteenth century (Lingle and Kuykendall 1988:39). Rather than creating a new faith, it was Knox's intention to create a Christian doctrine as he believed the bible had mandated (Bulloch 1977:15).

The roots of Scottish Presbyterianism date back to 1567, when Knox established a doctrine that was centered around three core precepts: original sin, predestination, and severe punishment for wrongdoing. Knox and his fellow ministers adhered to a puritannical zealousness in all their teachings. The Calvinist extremism of the Scottish Reformation resulted in a bitter hostility toward Catholicism, even suggesting that refuting the pope and church hierarchy was the preferred method of serving God (Henretta et al 1993:30, Jackson 1993:7-8, Kull 1930:339).

The rigid adherence of the Scotch-Presbyterians to the absolutism of scripture directly influenced the importance placed on education by church members. Thus, Scotland was considered a leader in education well before any other European country and was committed to maintaining an educated ministry (Jackson 1993:7-8, Westerkamp 1988:145). The combination of advanced education and religious absolutism made the Scotch-Presbyterians a formidable collective foe of the government in times of political and theological disputes. The Presbyterian tradition of education would survive the exodus to America, resulting in the establishment of the "Log College" in Neshaminy, Pennsylvania and the College of New Jersey, which later became Princeton University (Smylie 1996:48-50). Other universities founded by Presbyterians include Dickinson

College, the University of Pittsburgh, the University of Pennsylvania and the University of North Carolina (Jackson 1993:104).

For a period of twenty-eight years, from 1660 until 1688, Presbyterians adhered to a policy of non-conformity to the imposition of prelatic worship upon them under the rule of Charles II. Stating that, "Presbyterianism is no religion for a gentleman," Charles II was particularly vitriolic in crushing the dissenters (Lingle and Kuykendall 1988:43). This attitude was a response from the favored aristocracy against anyone who would review its conduct (Nichols 1968:47). During this period, known as the "Highland Watch," or "killing time," Presbyterian dissent was characterized by worship held in private homes or in fields away from the established church (Pomfret 1962:185, Steel 1984:114). Many of these gatherings turned into meetings of armed bands with the topic of sermons often centered on the denunciation of the government (Mitchison 1983:73). In retaliation, the king instituted a policy of submission for Presbyterian dissenters in Scotland, which resulted in punishments that included imprisonment, banishment and enslavement, with some being shot or butchered to death. Some estimates put the number of people banished or killed during the twenty-eight years at about 18,000 (Clark 1931:1, Symmes 1904:9-10). Lists were kept of ministers deemed "nonconformist," who were suspended from their duties as practicing clergymen (McFarlane 1970:28).

A series of legislative measures designed to institutionalize the government's response to the dissenters were collectively called the "Clarendon Code" attributed to Lord Clarendon, one of Charles II's most trusted advisors. These five acts were:

■

The Corporation Act of 1661 which prohibited any non-conformist from holding office in any municipal corporation or city

■

The Act of Uniformity of 1662 which mandated that only clergy ordained episcopally and who publicly declared their "unfeigned assent and consent" to a particular prayer book revised with an anti-Puritan bias were recognized as valid.

■

The Coventicle Act of 1664 which declared any gathering of five or more unrelated persons over the age of sixteen in a place other than a church illegal.

■

The Five Mile Act of 1665 prohibited all preachers and teachers who refused to take the oaths from coming within five miles of any corporate town.

■

The Test Act of 1673 forbade Dissenters from holding any naval, civil or military position under the government.

The penalties for violating these acts were extreme. For example, the penalties for violating the Coventicle Act, even for worshipping in their own homes, were as follows:

The first offense required an imprisonment of three months or a fine of £5. The penalties were doubled for the second offense and for a third offense; a person could be banished to a colonial plantation other than New England or Virginia (Authers 1960:12-13).

Early in 1685, James II ascended the throne following the death of his brother Charles II, who had no legitimate heirs to succeed him as king. He was fervently anti-Protestant, and was determined to force the Scottish people into submission (Jackson 1993:33). An avowed Catholic, James II initiated Roman Catholic rituals at Westminster during Holy Week. Protestant sentiments of resistance in Western England and Scotland soon grew into open revolt. The Duke of Monmouth, illegitimate son of Charles II, led a short-lived uprising against James II, only to die a traitor to the "King's religion" (Smith 1895:5-7).

The Duke of Monmouth's Scottish counterpart in dissent was the Earl of Argyle. Argyle led a small group to the coast of Cantyre in a half-hearted attempt to enthrone the Duke of Monmouth as king. However, many of the Scottish Presbyterians had ambivalent feelings toward the Duke of Monmouth, and the movement quickly dissolved at the first hint of opposition. In June of 1685, Argyle was beheaded in Edinburgh, Scotland, two weeks prior to the Duke of Monmouth's beheading in the Tower of London (Smith 1895:6).

Following the deaths of the Duke of Monmouth and Argyle in the summer of 1685, approximately one hundred Presbyterian men and women were imprisoned in Dunottar castle, located along the eastern coast of Scotland overlooking the North Sea (Figure 15). Conditions in the prison were horrific; inmates were cloistered in a room that was"...ankle-deep in mire with but one window overlooking the sea" (Symmes 1904:10). The lack of fresh air and adequate food and water facilitated the spread of disease, causing death among many of the prisoners (Clarke 1931:2).

Escape attempts were punished in a number of barbarous ways, including the placing of matches between the fingers, which were kept burning for hours at a time. By the end of the summer, the surviving persons were forced to walk sixty-six miles to Leith, all with their hands tied behind their backs with small cords (Symmes 1904:10). This

Figure 15: Aerial View of Dunottar Castle, Northern Scotland (Landsman 1985)

marked the end of the Scottish oppression for many of the Presbyterian dissenters as many of these prisoners were among those banished to America in the coming months.

V. PRESBYTERIANISM IN AMERICA

Presbyterianism in America first took hold around 1680, comparatively late in relation to other Protestant denominations. Although Presbyterians were among the earliest Protestant immigrants, they often settled in wilderness regions and became congregationalized, sometimes with the more established Puritans (Smylie 1996:39-40). Even in to the eighteenth century, it was not unusual for Presbyterians to share meetinghouses with other denominations. In Middletown, located approximately ten miles northeast of the project area, Presbyterians and Baptists even shared a common burying ground (Scharfenberger 2000).

Presbyterianism in America had its roots in several places, namely English Puritanism and Scottish Presbyterianism. Interestingly, Northern Ireland was the origin of most Scottish Presbyterians with only a relative few coming directly from Scotland (Trinetrud 1949:15). Other countries from where Presbyterians emigrated were Holland, France and Germany (Webster 1857:45). The diversity of its founders resulted in American Presbyterianism being a composite of forms that had existed in Europe, with the additional influence of New England Puritanism also contributing to the faith (Trinetrud 1949:15). Thus, Presbyterianism in a prototypical form existed in the colonies decades before the first congregation and presbytery were established. In fact, Presbyterianism was one of the more dynamic denominations in colonial America, with different factions emerging and modifying the faith into the Great Awakening of the mid-eighteenth century (Nybakken 1982:815).

Some say that a congregation met in 1672 at Jamaica, Long Island; however, it was not until almost thirty five years later that the first official presbytery would meet near Freehold, New Jersey (Lingle and Kuykendall 1988:66). As far back as 1620, the Scots had planned to establish a settlement in America in competition with those of England, Holland, Sweden, Spain, Portugal and France. Several minor attempts to establish small settlements in the region of Nova Scotia and Newfoundland between 1622 and 1632 ultimately failed (Schmidt 1989:51). Other early attempts to settle a group of Presbyterians in the colonies failed for a number of reasons. In 1637, the ship the *Eagle's Wing* left Scotland with ministers and worshippers from Scotland and Ireland intending to replicate the Puritan settlement in America. However, storms and rough seas caused the ship to return to its home port (Presbyterian Board of Publication and Sabbath School Work 1903:8).

The first Presbyterian minister to arrive in the colonies was Francis Makemie in 1683 (PBPS 1903:14). Makemie is considered by many to be the founder of Presbyterianism in America, akin to Roger Williams of the Baptists and William Penn of the Quakers. The catalyst for his emigration to America was a request in 1680 from Colonel William Stevens, a member of Lord Baltimore's council in Maryland (PBPS 1903:13, Webster 1857:67). Although an Anglican, many of the settlers in Steven's colony were Presbyterians (Schlenther 1971:13). Makemie was ordained by the Presbytery of Laggan in Northern Ireland in 1683 just prior to leaving for America. After arriving in America, he spent the next twenty years conducting a "tent-making" ministry without establishing a permanent congregation. In 1704, Makemie traveled to England to recruit

other Presbyterian ministers to return with him to America. His intention was to bring religion and preach the gospel in wilderness areas. Thus, religion was seen as a civilizing force, and a stabilizing influence in the colonization process (Kuykendall and Lingle 1988:66). Makemie also realized that there was a concerted effort to establish the Church of England in the colonies; therefore additional Presbyterian clergy would help solidify the opposition (Schlenther 1971:19). The following year, Makemie and seven other ministers convened the first American presbytery in Marlboro, New Jersey, thus marking the official beginning of Presbyterianism in the New World. Of these seven ministers, all but one was Scottish or Irish. As a result, American Presbyterianism was a continuation of the form practiced in Scotland and Ireland, with a governing hierarchy and doctrinal structure modeled after those in the mother countries (Presbyterian Board of Publication and Sabbath School Work 1903:14-15).

Makemie's presence in America and his high profile activities would test the tenet of religious tolerance in the colonies. Although he was a licensed preacher, the royal governor Lord Cornbury forbade him from preaching in any New York church. In a blatant act of defiance, Makemie entered a private house, opened all the windows, and preached loudly enough for the authorities to hear, even baptizing an infant. As a result, Lord Cornbury had him arrested on the grounds that the 1689 Act of Toleration, which guaranteed religious freedom, did not extend to the colonies. Makemie, however, was unrepentant, instead accusing Cornbury of flouting the law. Makemie's articulate defense won his acquittal and resulted in Lord Cornbury being relieved of his position and recalled back to England. Still, Makemie had spent forty-five days in jail and was forced to pay for

his expenses during his incarceration and also the cost of the trial. Once released, Makemie became a symbol to dissenters throughout the colonies; even publishing a book in 1707 about his experience entitled *A Narrative of a New and Unusual American Imprisonment* (Kuykendall and Lingle 1988:66, Smylie 1996:42-43). Although Makemie was successful in establishing a presbytery in the colonies, he was faced with the constant struggle of securing enough pastors to serve the scattered Presbyterian faithful (Schmidt 1989:53). Up until his death in 1708, Makemie's time was spent mainly on ordaining ministers and overseeing the expansion of Presbyterianisim throughout the colonies (Schlenther 1971:26-28).

VI. PRESBYTERIAN WORSHIP IN NEW JERSEY

Nothing shall be wanting on my part to promote the Interest of the Church. . . .
Lord Cornbury, Governor of New Jersey, 1703

This chapter examines the phenomenon of Presbyterian worship in New Jersey and its place in colonial society. To fully understand the world view of the Presbyterians, the belief system that shaped its ideology and the historical context in which it flourished must be discussed in detail. These will be organized as sub-chapters designed to articulate the concepts of the role of religion in New Jersey government, the ritual expression of the congregation, the fragmented records pertaining to the Presbyterians, and the background of the individuals who established the first meetinghouse.

A. RELIGION IN GOVERNMENT

The colony of New Jersey was predicated on religious freedom and tolerance, two lofty concepts that would be tested repeatedly as groups from varying denominations settled in the fertile, desirable region. While the separation of church and state was more a figurative notion than a literal reality, efforts were made to ensure the freedom of every citizen to worship (or not to worship), with no legislative impediments or government intervention. In the Monmouth Patent of 1665, which transferred ownership of lands bought from the American Indians by the Duke of York to the 36 patentees, the right to live "without any molestation or disturbance whatsoever in their way of worship" was explicitly guaranteed (Salter 1890:26).

While the right to worship freely presumably applied to the non-intervention of the government in religious affairs, it became obvious that religion and government were

inextricably connected from the very formation of Monmouth County. In addition to the Monmouth Patent, a document was published entitled "The Concession and Agreement of the Lords Proprietors of the Province of New Jersey, to and with all and every, the Adventurers, and all such as shall Settle and Plant there" (see Chapter V). This document subsumed the Monmouth Patent and made even more stringent provisions for religion and the right to worship (Ellis 1885:71-72). One of the provisions set aside land specifically designated for religious purposes. It stated:

> We do also grant Proportions of Land . . . for Churches, Forts, Wharfs, Kays, Harbours and for Public Houses; and to each Parish, for the use of their Ministers, Two Hundred Acres, in such Places as the General Assembly shall appoint. All lands laid out for the purposes named to be free and exempt from all rents, taxes and other charges and duties whatsoever. (Ellis 1885:72)

Although no single denomination was specified by name in this mandate, the not-so-subtle use of "Churches" to represent the town's house(s) of worship implies the Church of England, or Anglican Church, since during the late seventeenth century, Anglicans (called Episcopalians in America after the American Revolution) worshipped in churches, while Catholics worshiped in chapels and Presbyterians, Baptists and Quakers worshiped in meetinghouses (Sullivan 1975:41). Other, more overt attempts to establish the Anglican Church in New Jersey occurred in the first decade of the eighteenth century. John Keith and John Talbot, two Anglican ministers, mounted a vigorous campaign to convert local Quakers and have the Anglican Church appoint a bishop for the new colony, a significant step in the direction of officially establishing the Anglican Church in the area. As one would expect, this idea drew the ire of the Presbyterians, along with the Quakers and

Baptists, and the plan never materialized (Fleming 1977:19). This only served to exacerbate the feelings of the Scottish Presbyterians who were historically suspicious of all things Anglican and English (Schmidt 1989:33).

New Jersey's laws regarding religion, particularly after 1700 were progressive when compared to the other colonies. New England's myriad statutes legislated every facet of religious life, from the construction of the meetinghouse to attendance at services. In 1675, a law was passed mandating that a meetinghouse be built in every town in the colony (Earle 1891:192). Another law required colonists to construct their homes within one-half mile of the meetinghouse. This law, however, was doomed to obsolescence as expanding populations and the need to maintain suitable farming areas necessitated moving beyond the half-mile limit (Earle 1891:193). The construction and supplying of materials were also legislated by the colony. Each citizen was required to take part in the construction of the building and contribute materials, such as nails and lumber and provide funds toward rum and other victuals for the crew (Earle 1891:194). Houses of worship were also the means of broadcasting legal notices, with diverse edicts, such as town meeting notices, prohibitions to selling liquor or gunpowder to the Indians, laws against breaking the Sabbath, auction sales and cattle brands nailed to the front of the door (Kull 1930:329, Earle 1891:196). In New Jersey, an act designed to keep undesirables out of the colony required all persons, "within eighteen months of their arrival... produce a certificate, under the hands of such of that religious society to when he or they belong..." (Kull 1930: 329).

After taking office in 1702, Lord Cornbury was issued detailed orders by the British government regarding the role of religion, albeit in a more general sense than the New England laws. One passage illustrates the degree to which religion was a part of government at the time: "You shall take especial care that God Almighty be devoutly and duly served throughout your government, the book of common prayer as by law established, read each Sunday, and holyday, and the blessed sacrament administered according to the rites of the church of England" (Kull 1930:332). This mindset would remain in place not only in New Jersey, but throughout colonial America.

B. SYMBOLS AND RITUALS

"A people's ritual is a code for understanding their interpretation of life" (Worgul 1980, cited in Asad 1993:78). The Presbyterian religion, unlike the Baptists, is not defined by a single rite which is the embodiment of both ritual and belief. Rather, it is the church political structure which reflects the principles on which the denomination was founded and continues to operate to the present day.

The earliest theologians writing during the Reformation argued that in order for a church to exist and to maintain its ideals, some form of government is necessary, although that government must defer to the word of God (Sykes 1957:18-19). The Presbyterian Church hierarchy is centered on a political structure known as a "synod." A synod is a form of non-secular court of the Presbyterian Church which was the moral watchdog of the Presbyterian congregations, monitoring and regulating the behavior of both ministers and congregants (Bulloch 1977:43). They were comprised of a minister and a group of lay elders, each of whom had equal duties and authority (Bulloch 1977:43). These were

elected positions decided by the congregation (Bulloch 1977:40). The Presbyterian faith was structured around the principle that the power and ability to interpret the teachings of God lay not in the hands of a self-anointed clergy, but with the congregation itself. Thus, the Presbyterian Church is in reality, a representative form of government run by elders drawn from and chosen by the congregation (Lingle and Kuykendall 1988:13).

The belief system of the Presbyterians is centered on the absolute power of God, one that supersedes any other power in the universe (Forsyth 1858:7; Lingle and Kuykendall 1988:100). This sovereignty is manifested in numerous ways, the most important being the concept of predestination (Smylie 1996:34). Predestination, a cornerstone of Calvinistic dogma, states that some individuals are chosen by God for a special relationship and destiny resulting in eternal salvation, while others are damned for their inevitable propensity for sin.

They believed that Christ's death would save only those "saints" whom God had chosen, and that to believe otherwise would be tantamount to questioning the absolute truth of the Word of God (McBeth 1987:39-40; Waldron et al. 1977:8-9). This idea, however, is wrought with problematic contradictions. Theologians have wrestled with the seemingly unresolvable binary pair of predestination and free will since the Reformation. Many conclude that humans do, indeed, possess a certain degree of free will and agency, but only within the parameters set by God. Predestination, then, has become a double-edged sword, on the one hand choosing some as God's "elect" and on the other, excluding those who were not, for reasons known only to God, chosen to be saved.

Early seventeenth-century texts, such as *The Directory of Public Worship* (1644), *The Westminster Confession* (1647) and *The Westminster Larger and Shorter Catechisms* (1648), articulated the framework for both the Presbyterian belief system and the ritualistic expression by its followers. The latter two were formally adopted by the Synod of Philadelphia in 1729 as the official canon of American Presbyterianism (Lingle and Kuykendall 1988:67). These works affirmed the totality of God's omnipotence over the universe, while embracing the doctrine of election, predestination and foreordination. In a manner similar to the Puritans, it placed great emphasis on the covenant of grace and the covenant of work (Smylie 1996:34).

The *Directory* also created a framework for Presbyterian ceremonial expressions. Included in worship were Baptism, the reading of the bible, preaching, the Lord's Supper, sometimes called confirmation, singing and public prayer. Singing was fulfilled through the authorized use by the General Assembly of Francis Rous' *Psalms* (Bulloch 1977:23, Smylie 1996:33). The act of baptism was performed on infants under the belief that all children born into Christian homes should be baptized (Bulloch 1977:25). Unlike other Christian denominations, Presbyterianism does not include confirmation, marriage, and ordination under the heading of sacraments. This is consistent with the basic Presbyterian tenet that only the Word of God can dictate the behavior of his followers. Since Jesus Christ admonished his followers to be baptized and receive communion, but not to be married or ordained, only the former are considered sacraments (Bulloch 1977:24-25).

Presbyterian ritual was formulated entirely in response to Catholic traditions. Holy days and ritual practices essential to Catholicism were either eliminated or marginalized in

Presbyterian worship. Palm Sunday, Good Friday, and Easter were looked upon as papist holy days, while communion rituals were transformed into proceedings that were uniquely Presbyterian (Schmidt 1989:12, 17). Although differences in doctrine fueled much of the debate between Catholicism and Protestantism, differences in ritual practice were far more volatile (Schmidt 1989:14). Presbyterians believed that Christ did not distribute bread and wine to the apostles; rather, the apostles divided it among themselves. Therefore, Presbyterians argued that there was no need for a priest or minister to deliver Holy Communion. As a result, the Presbyterian Eucharistic sacrament moved from the altar to the non-hierarchical communion table where the congregants passed the bread and wine among themselves (Nichols 1968:49, Schmidt 1989:14).

Presbyterian worship followed a fairly loose framework that allowed each minister to conduct services according to his own particular style. However, certain decorum was expected to be maintained by all of the congregants. Worshippers were to "lay aside the dust and dirt of the week and come clad in habiliments which indicate industry and neatness" (Nichols 1968:96). Generally, services began around 9:00 or 10:00 A.M. with a psalm followed by a collective prayer. At this point the men removed their hats and the whole congregation stood. Although standing for prayer was not embraced by everyone, sitting was considered to be a sign of laziness and consequently, counter to biblical practice (Bynum 1996:158). Contrary to current norms, men kept their hats on for the entire service except during prayer (Bynum 1996:157). Next, readings from the Old and New Testaments, also known as lessons, are recited. After the readings, hymns are sung and more prayers are said. The conclusion of the second prayer is followed by a sermon. The

sermon during the seventeenth and eighteenth centuries could be extremely long, usually an hour or more, often resulting in services that lasted several hours. Breaks were allowed when sermons ran from two to three hours (Nichols 1968:96). Conversely, present-day services rarely exceed one hour in total length (Bulloch 1977:23-24).

The length of prayer, like many aspects of Presbyterianism, was the subject of intense debate. Prayers were so long that many congregants had trouble maintaining the proper attention and decorum. The committee who drafted a new Directory in 1788 complained that during prayer, many are "...gazing about, some turning about their back to the Minister, and others putting themselves into different attitudes of ease; and but few, either are in the posture, or have the appearance of devotion" (Bynum 1996:158). As a result, the recommended length of prayer was set at between twelve and twenty minutes.

The delivery of a sermon, in addition to its length, was confined to the guidelines set down by the Directory. Sermons were typically memorized or extemporaneous, however, preachers who read their sermons from notes were held in low-esteem by both Americans and Scots (Bynum 1996:159).

After the sermon, a closing psalm or hymn was sung. This was followed by a collection which was used for the poor or some specialized church expense. Since Presbyterians lacked tithes, they were wholly dependent on donations from the congregation (Westerkamp 1988:138). Everyday expenses, such as building maintenance and minister's salary, were procured through the renting of pews or through "subscriptions" from individual families. Some researchers claim that offerings were collected at the door

prior to or after services. However, there have been instances where congregations have literally "passed the hat" during services (Bynum 1996:159).

One of the most important elements of Presbyterian worship is communion, alternately known as admission to the Lord's Supper. In the early years of the Reformation, communion was celebrated only at long intervals. During the Reformation, many Scottish Presbyterians lobbied for weekly communion. However, the entrenched traditions remained and communion was only celebrated occasionally. Thus, depending on the congregation, communion would be celebrated two to four times a year (Bulloch 1977:27). In New England, and presumably New Jersey, communion was celebrated monthly (Nichols 1968:96).

The time of communion was known historically as the "sacramental season" with several congregations and ministers often combining for a series of services of three to five days in duration. The most important day besides the Sunday service was the Saturday preparation for the sacrament, where communion tokens were distributed. These tokens were used as "admission" to the Lord's Table and were the only means by which a congregant could receive communion. In addition, tokens were a way of excluding those deemed unworthy of receiving communion (Westerkamp 1988:161). Physically, these tokens resembled coins, usually being lead or pewter, square or rectangular-shaped objects with the initials of the church or minister scratched into them. The importance of the sacrament of communion is exemplified by the practice of having those wishing to receive communion apply to the minister ahead of time, with prospective communicants subject to

review by the elders (Bynum 1996:166, Nichols 1968:77). At times when the numbers of those attending exceeded the capacity of the meetinghouse, services were moved outdoors.

In keeping with Protestant belief, communion in the Presbyterian Church was administered with an austere minimum of necessary equipment. On Sundays in colonial America, when communion was celebrated, the ministers and elders would gather around a long communion table similar to the one depicted at the Last Supper and after a short prayer, the congregants are invited to join in the sacrament (Bulloch 1977:28, Nichols 1968:70). A communion table reportedly used at the Old Scots meetinghouse and later at the Old Tennent Church is depicted as a simple, rectangular table with no ornamentation (Symmes 1904:72). The table would be covered with a plain, white cloth and set with cups for bread and wine. After several prayers, the minister breaks the bread and drinks the wine. He then hands the bread and wine to the elders, who, after partaking in the bread and wine themselves, in turn distribute them to the congregants.

The length of Presbyterian services necessitated a partitioning of the ritual into morning and afternoon services. Generally, the morning service was at least two hours or more, followed by a lunch break lasting anywhere from fifteen minutes to one hour. This was followed by a second service of equal or greater length than the first. This would facilitate activities outside of the ceremony itself, as congregants would gather and remain near the meetinghouse to rest, eat and communicate the occurrences of their everyday lives.

C. CHURCH RECORDS

Much of the early history of this ancient church is wrapt in obscurity on account the absence of faithful records of their organization.

Rev. E. Everett Jones and Wheelock H. Parmly

The activities and events surrounding colonial life are often embodied in the pages of early church documents. The formative years of the Old Scots Congregation are no exception, as numerous eighteenth- and nineteenth-century records have survived to the present day. However, the recorded activities at the meetinghouse deal predominantly with the events surrounding the Philadelphia Presbytery, rather than the daily routine of the congregation or weekly religious services. This was in keeping with one of the primary functions of the presbytery, which was to supervise congregations not under an individual pastor's control (Westerkamp 1988:144). The earliest records associated with the Old Scots congregation are the "Minutes of the Presbytery (1706-1716)." This handwritten volume chronicles the activities of the first presbytery found in the United States. The minutes have been reprinted numerous times; first in 1841, later in 1856 and 1904, and most recently in 1976. Regrettably, the first two pages of the original book are missing. The third page opens with the ordination of the Rev. John Boyd on August 6, 1706 at the Old Scots meetinghouse. After this passage, there are only sporadic mentions of the Old Scots congregation, with the majority of the entries relating to correspondence between congregations and the presbytery, and the chronicling of meetings. The Minutes of the Presbyterian Church in America: 1706-1788 (Klett 1976) contains by far the most comprehensive information on the early church structure and operation. Although it

recounts the activities of the presbytery for a large geographic region, particularly in the earlier years, there are specific references to the Freehold congregation and its ministers.

Early entries illustrate the difficulties faced by Frances Makemie in securing and settling ministers to serve the newly formed congregations. In addition to John Boyd's ordination and appointment in December of 1706, he is mentioned in March of 1707 as, "preparing some overtures to be considered by the presbytery for propagating religion in their respective congregations" (Klett 1976:3). The severe shortage of ministers is evidenced by this entry on May 22nd, 1708: "Ordered that Mr. Boyd shall supply Woodbridge every third Sabbath if they desire it, and the Presbry (sic) are to write to the people of Freehold desiring their Consent thereto, and the Meeting-House shall be the only place of meeting or not at all in Woodbridge, but may be at Amboy if the people of Woodbridge and Amboy are content..." (Klett 1976:5). Woodbridge is located about 14 miles north of the Old Scots meetinghouse and Amboy about 5 miles south of Woodbridge. This illustrates the shortage of ministers during the early eighteenth century, and the measures taken to see that the growing distribution of congregations was served.

The entry regarding Boyd's Woodbridge appointment was the last entry for the year 1708. Interestingly, John Boyd died on August 30 of that same year. This entry at the next meeting of the Presbytery on May 10, 1709 is the last mention of John Boyd, "The Reverend Mr. John Boyd being dead, what relates to him ceases" (Klett 1976:6). It is not known what he died from, but given his ability to travel and maintain a heavy work schedule, it must have been a severe acute illness such as yellow fever with an incubation period of four or five days, rather than something chronic, such as tuberculosis or

"consumption" as it was known during colonial times. In fact, Boyd's service to congregations in the shore villages of Woodbridge and Amboy would have exposed him to infected mosquitoes from ships along the coast (Duffy 1979:138).

While most of the entries in the minutes pertain to correspondence with congregations, attendance at meetings and other relatively routine activities, there is compelling evidence which shows the extent of control exerted by the Presbytery over both congregants and ministers. In 1712, a minister and member of the Presbytery Paul Van Vleck were accused of "the crime of bigamie. (sic)" After hearing the evidence, the presbytery agreed that the only way to exonerate him was for proof of his first wife's death (Klett 1976:14). In a letter to Mr. Van Vleck's congregation later that year, the Presbytery explained their position and to regretfully inform them that he could not preach because his vindicating proof was deemed "insufficient" (Klett 1976:79).

One of the most remarkable documents related to this study is a record book kept by John Reid, Surveyor-General of the colony of New Jersey during the years 1703-1723. It was Reid who gave the lot on which the Old Scots meetinghouse was built. The Reid manuscript was found in the 1940s lodged in the wall of a house in Perrineville, New Jersey, by a state worker and eventually came into the possession of archaeologist Ralph Phillips. Reid's manuscript was written during a time when there was a general expansion of education and a shift from an oral to a literary mode of informational recordation and transmission (Macfarlane 1970:5). This was critical to an individual such as John Reid, whose position as Surveyor-General and activities as a private land speculator made a systematic form of record-keeping essential. Reid's manuscript was entitled *The Volume of*

Figures, Maps and Tables Belonging to the Mathematical Compendium or Choice Collections by John Reid of Hortencia, Anno Domini, 1719 and consists mainly of numerical recordations for his surveying activities.

Congregational records were kept for the Old Scots congregation. These records are mentioned by several nineteenth-century writers, including Frank Symmes, who cites the text numerous times in his 1904 *History of the Old Tennent Church*. However, an exhaustive search of the Old Tennent Church offices and the archives at the Monmouth County Historical Association failed to uncover any of these records. In addition to citing information from these records, Symmes notes that "the edges of the leaves are broken off or so stained that the writing is illegible" (Symmes 1904:37). Therefore, the fact that these documents were in an advanced state of decay over one hundred years suggests that they may have completely deteriorated and been discarded sometime after.

D. THE OLD SCOTS CONGREGATION

[A]ll denominations of Christians have really little difference in point of doctrine, though they may differ widely in external forms....I think all Christians, whether Papists or Protestants, agree in the essential articles, and that their differences are trivial, and rather political than religious.

Dr. Samuel Johnson, 1763

The individuals who comprised the Old Scots congregation were among the most important to the development, growth and success of the colony of New Jersey. This is reflected in the listing of the Old Scots Burying Ground site in the New Jersey State and National Registers of Historic Places. This is a significant occurrence when one considers

that religious sites or cemeteries generally are not considered eligible for inclusion in the National Register of Historic Places (Townsend et al 1993:16).

The Old Scots Burying Ground site is significant for a number of reasons. It is the site of the first Presbyterian Meetinghouse in New Jersey built (ca. 1692) where the ordination of the first Presbyterian minister in America took place in 1706. It is considered to be the place where Presbyterian history begins in the New World (Clarke 1931, Derry 1979, Ellis 1885, Smith 1895, Symmes 1904). The Old Scots Burying Ground site is also significant because it is associated with the lives of persons significant in New Jersey's past. The Rev. John Boyd, was the first Presbyterian minister ordained in the New World and was the first official minister of the congregation that worshipped at the Old Scots meetinghouse. He is interred in the Old Scots Burying Ground. Walter Ker was among the Scotch-Presbyterians banished during the period of religious persecution of dissenters in Scotland. He was one of the founders of the first congregation and helped in the construction of the meetinghouse at "Free Hill" and the successor structure known as the Old Tennent Church. The Reverends John and William Tennent had a combined 47-year tenure as pastors of the Old Scots/Old Tennent Church and were prominent preachers during and after the Great Awakening movement of the eighteenth century.

When the Old Scots congregation was established in the late seventeenth century, Monmouth County was still largely a wilderness region. American Indian groups still resided in the area, and European settlement was still in its infancy. Its history is tied to the development of Monmouth County, the relationship between European settlers and indigenous groups, and the establishment of Presbyterianism in the New World.

The settlement of the Freehold area of Monmouth County, which encompasses the Old Scots Burying Ground, was the result of an exodus by Scottish Presbyterians who were fleeing the brutal persecution at the hands of the British monarchy. The Scottish settlers had a profound effect on the colonization and culture of New Jersey, as well as the entire middle Atlantic region. By 1750, Scots comprised one-fifth of the central Jersey population (Landsman 1985:101). This group would continue to settle throughout central New Jersey during the eighteenth century, evolving into what would become the center of colonial Presbyterianism (Landsman 1985:11). The first half of the eighteenth century also saw the settlement at Freehold meld into a cohesive community, combining persons of all backgrounds ranging from former indentures to wealthy planters into a single community sharing a common religious and political identity (Landsman 1985:174).

The founders of the Old Scots congregation arrived in America during the last quarter of the seventeenth century. Early in 1685, a ship called the *Caledonia* brought a group of Scotch dissenters to East Jersey. This ship was chartered by Lord Neil Campbell, who was the brother of the executed Earl of Argyle. In August of 1685, he purchased a one-fourth of one twenty-fourth share of the East New Jersey province (Whitehead 1875:153-154). Lord Campbell was warmly received by the East Jersey Proprieters, and was appointed Deputy Governor of the province in 1686 (Smith 1895:8, Symmes 1904:13). A list of the persons "imported" by Lord Campbell as indentures aboard the *Caledonia* includes several congregants who first worshipped at the Old Scots meetinghouse (Nelson 1899:68). They include:

Archibald Campbell Michael Marshall David Symson Janet Thomson

Dougald Symson	Adam Symson	John Graige	James Graige
Archibald Graige	Orsella Graige	Bessie Pollocke	John Hog
Grissell Hog	Bessie Richardson	James Sinzeour	Sicella Senzeour
Sicella Lawson	Agnes Lawson	William Thomson	Margery Thomson
William Thompson	Margaret Edger	Robert Gurrey	Agnes Marshall
George Korrie	John Duncan	Gyles Duncan	Margarett Robertson
John Chalmers	Robert Chalmers	Marion Chalmers	Janett Cuningham
William Dunlop	Agnes Dunlop	John Dunlop	Alexander Wilson
Magdalen Hattmaker	Andrew Grantt	Alexander Lermont	David Allexander
John Campbell	William Sharpe	David Heriott	Patrick Tait
John Wilkey	Patrick Symson	Thomas Sheerer	John Boyd
John Scouler	Alexander Thomson	William Toish	Robert Campbell
John Pollocke			

One of the passengers, Archibald Campbell, was a reluctant participant in the 1685 rebellion led by the Duke of Argyll. After his capture, he petitioned the government to spare his life and allow him to emigrate to America stating, "Archibald Campbell late Earl of Argyll having with his rebellious accomplices come and invaded this Kingdome and forced me out of my bed to goe (sic) alongst with him for which I am most heartily sorrie (sic)...May it therfor (sic) Graciouslie please your Lordships...to spair (sic) your poor petioners life And allow me to be transported to any of his majesty's forraigne (sic) plantations" (Scottish Record Office 1994:1). Banishment served a dual purpose for the government: it relieved Britain of undesirables while providing the labor-starved colonies with much needed manpower (Scottish Record Office 1994:1).

Shortly after the *Caledonia* sailed, the Laird of Pitlochie, George Scot, tired of being repeatedly fined and imprisoned for his religious beliefs, secured permission to leave

Scotland for the promise of religious freedom in East Jersey. He chartered a ship called the *Henry and Francis*, described as, "...a ship of 350 tons, and twenty great guns, Richard Hutton, master, or captain" (Symmes 1904:11). As a means of offsetting the costs involved in this endeavor, Scot advertised his intentions through a 272-page treatise entitled *The Model of the Government of the Province of East New-Jersey in America and encouragement for such as design to be concerned there*. It was believed by some officials in East Jersey that the increase in population resulting from Scotch immigration would help raise the price of land (Kull 1930:150). The majority of the surviving Dunottar prisoners, having been sentenced to permanent banishment in America, were handed over to Scot and included among the passengers. Many wore the hideous scars of slit noses, cropped ears, and branded cheeks from time spent in the prisons of Glasgow, Edinburgh, Leith and Stirling (Kull 1930:340).

On September 5, 1685, the *Henry and Francis* set sail from the port of Leith (Horner 1932:293). Of the 200 passengers on board, at least 72 were banished prisoners. Far from signaling an end to the brutal persecution of the crown, the voyage was immediately beset by a multitude of problems. Animosity shown toward the former prisoners by the captain resulted in large planks being thrown down on them as they worshipped under the deck. At one point, he threatened to take his entire human cargo to Virginia or Jamaica "...and dispose of them in bulk" (Smith 1895:9). Exacerbating the situation further was a lack of adequate food, water, and fresh air below deck on the overcrowded ship. Finally, a virulent fever broke out, affecting not only the prisoners, but the crew and passengers as well. The epidemic claimed nearly a third of the 200 people on

board including George Scot and his wife, their bodies disposed of at sea; sometimes as many as three or four deaths in a single day (Ellis 1885:81, Scottish Record Office 1994:25, Symmes 1904:11). While the records of the day do not give specific information regarding the type of disease, it was likely typhus that afflicted the passengers (Duffy 1951:25).

After fifteen weeks, the ship finally arrived at its destination, Perth Amboy, New Jersey. The Dunottar prisoners stepped into the freezing temperatures of winter wearing only the ragged summer clothes they had departed from Scotland with during the previous summer (Griffin 1989:13). At first, the Scotch-Presbyterians were met with disfavor by the residents of Perth Amboy. This sentiment, which ran from indifference to state-sanctioned hostility, manifested itself in a number of ways. On August 1, 1699, the East Jersey Proprietors issued a proclamation, "...warning the people of East Jersey against giving aid to the Scotch parties who intend to settle in America" (Nelson 1899:161). Conflict with the religious preference of the Governor of East Jersey, Lord Cornbury, who was a proponent member of the Anglican Church, caused the congregation to delay the official recording of their meetinghouse for nearly thirteen years (Smith 1895:16-18). The recording of the meetinghouse with the courts gave the congregation a type of charter and title of possession (Symmes 1904:29). In spite of the prevailing feelings, a former Presbyterian turned Quaker of Scottish descent named John Reid, advised them to move several miles southwest to a rich agricultural settlement known as Topanemus (present-day Freehold). It was about two miles north of the Quaker meetinghouse at Topanemus that the Scotch Presbyterian refugees would erect their meetinghouse.

John Reid was a prominent figure in the early history of New Jersey, having held numerous positions including member of the General Assembly and Surveyor-General of East Jersey. He was also a noted attorney who oversaw many early land transactions, and was the first owner of the property on which the Old Scots meetinghouse would be built. Reid was born at Mildew Castle in the parish of Kirkliston, Scotland on February 13th, 1655. By his twelfth birthday, he was apprenticed to an Edinburgh wine merchant. In 1673, with his master near death, Reid returned home only to find that his father had died and his mother remarried. Soon after, he left once again, this time to study gardening at the Hamilton gardens, where he also converted to Quakerism. In 1676, he went to Lawres, where he wrote a book entitled *The Scotch Garden.* In 1678 he married Margaret Miller, eleven years his senior, who, prior to leaving Scotland for New Jersey, bore him three daughters; Anna, Helen and Margaret. He arrived in East Jersey in 1683, and was immediately employed by the Scotch proprietors of East New Jersey as an "overseer" of the growing number of Scotch emigrants. For his services, Reid was paid 25 pounds sterling annually, and a "share" of ten acres in Perth Amboy. Over the next forty years, Reid served in a number of important capacities in East Jersey. He was elected to the General Assembly several times, served as Surveyor General of the province under Queen Anne, and was an attorney who oversaw many of the early land transactions in New Jersey. He died near Freehold on March 16th, 1722 at age sixty-seven. Reid's children also went on to prosper. His daughter, Anna, married John Anderson, who held numerous important positions, including President of the Council and Acting Governor of the Province. Reid's

only son John, studied law under one of the chief justices of the New York Supreme Court, and was surrogate of Westchester county from 1760 to 1764 (Ellis 1885:78-79).

E. CHAIN OF OWNERSHIP

Historic documentation of the Old Scots Burying Ground property dates back to the late seventeenth century. On October 13, 1685, John Reid was issued a warrant by Surveyor General George Keith for "...surveying and laying out land in the Province" (Nelson 1899:130). As payment, he was granted several tracts of land in the Monmouth County area, one of which included the land encompassing the Old Scots Burying Ground. On Feb. 5, 1697, Reid sold the property to Alexander Neiper (East Jersey Deed Book: 535-537). Neiper had come to America as an indentured servant in 1684 (Nelson 1899:61). He retained ownership of the property for the next thirty years.

Although the exact date is still in question, most historic sources indicate 1692 as the date for the construction of the meetinghouse. Aside from church tradition, a letter written by the Rev. John Woodhull of Freehold on April 23, 1792 stated: "The Church was formed about an hundred years ago, chiefly by persons from Scotland" (Smith 1895:14). Other references suggest a date before 1692. A passage from a document entitled *Outline History of Old Tennent* states that, "The Old Scots meetinghouse was built prior to 1692" (n.d.). An article from the Newark Evening News states, "...the covenanters reared a church there [Old Scots] in 1685" (1895). However, if the 1692 date is accurate, then it was John Reid who gave the lot to the Presbyterian congregation prior to selling the property to Neiper for the first meetinghouse and burying ground.

In 1727, Alexander Neiper sold the property to the trustees of the first Presbyterian congregation of Freehold. The parties representing the congregation included: John Johnstone, Peter Watson, Walter Ker, Patrick Imlay, Archibald Craige and Richard Watson. (East Jersey Deed Book: 535-537).

The next transfer of ownership occurred on October 1, 1816. The trustees of the First Presbyterian Congregation sold two and a half acres to Garret Covenhoven, "...excepting and reserving out of the same, one acre which has been occupied and used for a burying ground by the Presbyterian Congregation" (Monmouth County Deed Book:288). The transfer guaranteed that the site would, "...remain for that use and purpose forever hereafter" (Monmouth County Deed Book: 288). On the reverse side of the deed, written on thick white paper, the following agreement and memorandum was written, "Before the signeing (sic) and sealing of this Deed, the within Mentioned persons Doth all promise that them theire (sic) heirs and Every of them shall use the said Land for a burying yard and to Keep a prisbteran (sic) Meeting and for No Other Use..." (Symmes 1904:368). The site remains the property of the Old Tennent Church to the present day, with no changes in the configuration or size of the lot since the transfer of the 1816 deed. The dimensions and boundaries of the Old Scots Burying Ground as described in the 1816 deed are as follows:

> East 5 chains, North 5 chains, West 3 chains and South 5 chains. Within these parameters, the burying ground is sectioned off as a parcel, "containing 94/100 acre beginning at a stake which lies N.N.West and two degrees more northerly 16 chains and ¾ of a chain from Walter Benhils Northeast along Alexander Nepier's line and from the Said Line due east 2-71 chains and running East 5 chains 2 North 5 chains 3 West 5 chains 4 South 5 chains to where it began Containing 2 50/100 acres dated 1st June, 1727" (cited in Symmes 1904:33).

After the Old Scots Meetinghouse was abandoned, the site continued in use as a burying ground for over two hundred years. A total of 72 documented burials occurred between 1750, the approximate time of abandonment of the original meetinghouse, and 1977, the date of the most recent burial. This figure is based on a list compiled in 1895, and an inventory of extant grave markers from the present. More burials may have occurred during this period which are not represented on the 1895 inventory, or by gravemarkers that have since been removed. It should be noted that a recent inventory of extant stones shows that approximately fifteen headstones have been removed or are no longer visible above ground since the 1895 inventory.

F. EARLY ORGANIZERS OF THE OLD SCOTS CONGREGATION

A number of individuals played critical roles in the formation of the Old Scots congregation. Clearly, the benevolence of John Reid, discussed earlier, was essential to the establishment of both the congregation and the town of Freehold. However, the efforts of early ministers John Boyd, Joseph Morgan, John Tennant and William Tennant and elder Walter Ker were critical to the spiritual and organizational development of the old Scots congregation. Below is a brief overview of each of these men's lives.

WALTER KER

One of the passengers who sailed as a freeman on the *Caledonia* was Walter Ker (1656-1748), believed to be the leading catalyst behind the formation of the congregation that first worshipped at the Old Scots Burying Ground site. Ker was twenty-nine years old when he had his property confiscated and was banished to America for refusing to denounce his religious beliefs. He became one of the early ruling elders of the

congregation, along with Capt. John Anderson, Robert Cumming, Charles Gordon, John Henderson, John Hutton, Joseph Ker, and David Rhe (Clarke 1931:4). Ker was instrumental in the survival and growth of the congregation over the course of nearly half a century and lived to be 92 years of age. He was a powerful force within the congregation who recruited Rev. John Tennent to serve as pastor at a time when the church's future was extremely bleak. He led the movement to build a new church on "White Hill," perhaps as a means of starting anew after years of spiritual deterioration. He died on June 10, 1748 and was buried on a hill near his house overlooking the present-day Tennent Church (Smith 1895:51).

REVEREND JOHN BOYD

The Reverend John Boyd (1680-1708) was one of the most prominent people in the history of the Old Scots' congregation. He was born in Scotland in 1680. Although the list of passengers from the *Caledonia*, which sailed in 1685, contains a person by the name of John Boyd, it is believed that the Reverend John Boyd came to America around 1705. Prior to coming to America, Boyd was educated in the fourth class of Glasgow University. According to early Presbyterian histories, it is likely that the Reverend John Boyd left Scotland with the ministers McKemie, McNish, and Hampton in the fall of 1705.

A little over a year after his arrival, an event occurred that would assure Boyd his place in the annals of American history. The first entry in the record book of the first Presbytery in America describes the examination of John Boyd (Symmes 1904:60-61). On December 27, 1706, Boyd took the examination for ordination before the Presbytery. This would mark the ordination of the first Presbyterian minister in the New World (Clarke

1931, Ellis 1885, Smith 1895, Symmes 1904). This entailed proving a proficiency in "the languages," the defense of a thesis, a Latin essay "De Regimime ecclesiae," and a popular sermon. His sermon was based on the passage John 1:12, which read in part, "But as many as received him, to them gave the power to become the Sons of God, even to them that believe on his name." The members of the committee reviewing Boyd's examination included, moderator Rev. Francis Makemie, Rev. Jedidiah Andrews, and Rev. John Hampton (McCauley 1900:5). Each one of the examiners was a respected minister and theologian in his own right. Francis Makemie was educated at Glasgow University in 1675, and founded half a dozen churches in Maryland. John Hampton was educated at Glasgow University in 1696, and came to America from Ireland with McKemie in 1705. Jedidiah Andrews was educated at Harvard in 1695 and served as pastor of the First Presbyterian Church in Philadelphia (Smith 1895:21-22). Francis McKemie was considered to have been the head of the American Presbytery during the seventeenth century, in much the same way as William Penn was to the Quakers, and Roger Williams was to the Baptists (Fischer 1989:797).

The first leaf of the record book is missing, so the account of the proceedings begins abruptly. At the top of the page is the word "BOOK" followed by the description of the ordination process: "De Regimine Ecclesiae, which being heard was approved of and sustained. He gave in also his Thesis to be considered of against next sederunt. Sederunt 2d. 10 bris. 27. Post preces sederunt. Mr. Francis McKemie Modr. Mr. Jedidiah Andrews and John Hampton Minisr. Mr. John Boyd performed the other parts of his tryals, viz. Preached a popular sermon on John i. 12; defended his thesis; gave satisfaction as to his

skill in the Languages, and answered to extemporary questions; all which were approved of and sustained. Appointed his ordination to be on ye next Lord's day, ye 29th inst., which was accordingly performed in the publick meeting house of this place, before a numerous assembly; and the next day he had ye Certificat (sic) of his ordination" (cited in Smith 1895:19-20, Symmes 1904:60). The ordination of Rev. John Boyd marked what Rev. Hugh McCauley described as, "the first recorded meeting of Presbytery and the first recorded Presbyterian ordination in America...at the threshold of that little meetinghouse was the small beginning of the great stream of organized American Presbyterianism" (1900:5-6).

Records of the Monmouth Court in December 1705 (Plate 2) described Boyd as "Minister of ye said Presbyterians." This suggests that Boyd had assumed the role as preacher of the congregation a full year before his official ordination. During the late seventeenth and early eighteenth centuries, it was common for preachers to be ordained "ministers of the Gospel" prior to becoming ordained by the Presbytery to serve in the capacity of minister. Therefore it is possible that transient preachers, such as the Reverend George Keith and John Gray were among those who preached at Old Scots in the years before Rev. Boyd's arrival (Clarke 1931:5, Ellis 1885:730, Symmes 1904:58). In 1708, Boyd's ministerial duties expanded to include regular services at Woodbridge and Middletown (Symmes 1904:62). The assignment to Woodbridge may have been an attempt by the Synod to help mend a division between English and Scotch congregants. As the only Scottish minister in the province, Boyd's time at Woodbridge saw the addition of

nine Scotsman as members, including several exiles who had not taken communion since their arrival in New Jersey (Landsman 1985:173).

Little is known about Reverend John Boyd aside from his service to the Old Scots congregation. No records of his home, salary or family members are known to exist. One history of the Old Tennent Church suggests that Rev. Boyd married a woman named Sarah Knott, and had a son or other direct descendant named William, who became the pastor of the Lamington Presbyterian Church in Somerset County, New Jersey (Symmes 1904:59).

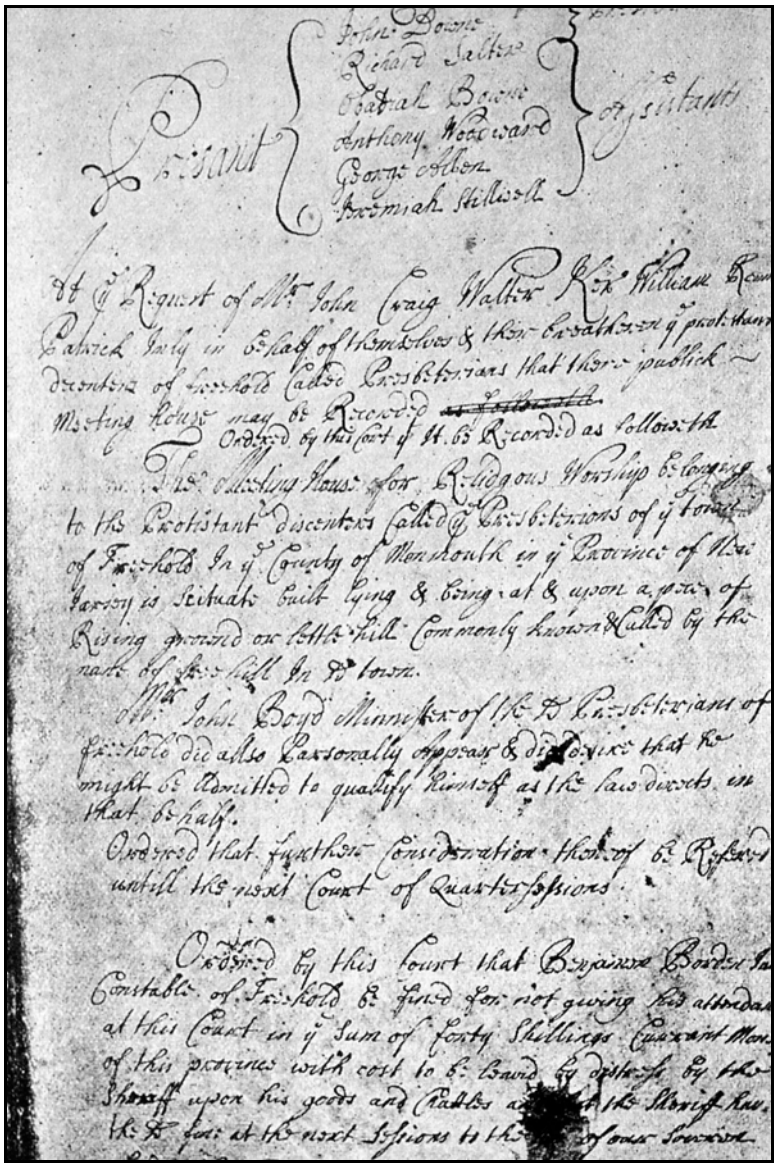


PLATE 2: Page from Early County Court Records Detailing the Recordation of the Old Scots Meeting House. (Symmes 1904)

John Boyd's promising career was tragically cut short less than two years after his ordination. He died suddenly on August 30, 1708 at 28 years of age. In the abbreviated span of his service, Boyd apparently left an indelible mark on the congregation. The inscription on his gravestone, translated from the original Latin transcription, reads: " The ashes of the very pious Rev. John Boyd Pastor of this church of Calvin, are here buried,

whose labour, although expended on a sterile soils, was not lost. They who knew him well also proved his worth who was at that time distinguished for his virtues. Reader, follow perseveringly his footsteps and I hope thou wilt be happy. He died on the thirtieth day of August, one thousand, seven hundred and eight, in the twenty-ninth year of his age" (Smith 1895:28). Ironically, John Boyd was buried in a place of prominence under the eaves of the Old Scots meetinghouse, with an ornately inscribed tombstone, while the Reverend Francis McKemie, spiritual leader of the American Presbyterian Church, lies in an unknown grave (Symmes 1904:65).

Upon his death, it was learned that Reverend Boyd did not leave a will, rather, Governor Richard Ingoldsby, "...granted letters of administration upon the estate of [Reverend] John Boyde (sic) of Monmouth County to Peter Watson." This indicates that Peter Watson, one of the future elders of the congregation, was a close friend and associate of Rev. John Boyd (Symmes 1904:65).

REV. JOSEPH MORGAN

After the death of John Boyd, the Reverend Joseph Morgan (1674-1742) took over as pastor of the Old Scots Church. Much is known about the enigmatic Rev. Morgan; the documentary evidence indicates a lengthy, albeit tumultuous tenure. The Reverend Hugh McCauley, writing in 1900, describes Morgan as, "a man of fine ability, but erratic character" (McCauley 1900:6). Author William L. Griffin describes his career as "brilliant but controversial" (1989:21). Morgan was born in New London, Connecticut on Nov. 6, 1674. He was the grandson of James Morgan, who came to America in 1647, possibly from Wales (Symmes 1904:70). He served the Old Scots congregation from either late

1708 or 1709 to 1729. In addition to his duties at Old Scots, he was also dominie of the Brick Church of Marlboro, which later became the First Reformed Church of Freehold. Morgan was ordained by the Association of Ministers of Fairfield, Connecticut in 1696 as a minister of the Gospel and educated at Yale, graduating in 1702. He served in Greenwich in 1696, in Bedford, New York in 1700, and in Eastchester and Westchester, New York in 1704 (Clarke 1931:5). He arrived in Freehold in late 1708 or early 1709. Morgan was accepted by the Philadelphia Presbytery in September of 1710 (Smith 1895:33-34). He was presented to the court by seven congregants: Jacob Lane, John Wicof, John Sutfin, William Hendrickson, John Esmith, William Wilkins and Auri Marbison. The first three were from the Dutch Reformed church, and the rest were from the Presbyterian Church (Smith 1895:32).

The court appearance included the taking of several oaths in order to become a minister of the gospel. Since he was not a minister of the Church of England, the law stated, "...every minister not in communion of the English Church is obliged to take oath that he would not teach the doctrine of transubstantiation, nor anything contrary to the doctrine of the Trinity, as taught in the thirty-nine articles of the English Church (Ellis 1885:730).

On October 17, 1709, Morgan was installed as first pastor of the Dutch Reformed church, which required him to divide his time between the Dutch congregation and the Scotch-Presbyterian congregation. He spent three-fourths of his time at the Reformed Church. He was permitted to occupy the parsonage of the Dutch Reformed church with, "a glebe of one hundred acres of good arable land, as good as any in Freehold on which a

family may subsist comfortably." This proved to be quite profitable, earning Morgan thirty pounds a year in addition to his salary as a minister (Smith 1895:32).

In addition to preaching at the Old Scots and Dutch Reformed churches, Morgan was also committed to preach at the Presbyterian Church of Middletown. Its church edifice was an old, deteriorating building. The condition of the church so angered Morgan, that he would take it upon himself to close doors or windows that were left open as he rode by on his horse.

Morgan's term at the Old Scots was marked by periods of incredible creativity and contribution, contrasted with inexplicable turmoil within the congregation. His rambunctious spirit often conflicted with the strict, comparatively reserved congregation. He was a prolific writer, who published diverse essays on topics ranging from Predestination and Church unity, to a variety of mechanical inventions. The latter led to confrontations between his allegiance to the Presbyterian faith and his fascination with technological advancement. He was a gifted orator who preached in English and the "Low Dutch" languages. Morgan's writings included a treatise on Baptism, published in 1713, and a treatise on the Deists, published in 1714, which he sent to the esteemed preacher Cotton Mather. In 1718, he published *The most effectual way to Propagate the Gospel,* which was aimed at reconciliation with the Church of England. This did not endear Morgan to the Scotch congregants, who still harbored intense feelings of hatred for the established church. Morgan's rebellious persona caused friction between himself, and both the Scotch and Dutch congregations. He was willing to baptize the children of "disaffected" Dutch congregants, infuriating the Reverend Frelinghuysen of Raritan. This

led Rev. Frelingheysen to characterize him as, "the friend and advocate of a lifeless, God-dishonoring formality" (Ellis 1885:730). He angered the Presbyterian Synod by questioning the Synod's supremacy and self-proclaimed right to impose discipline on "subordinate judicatories." In addition, Morgan's mercurial behavior alienated the Presbyterian congregation, as frequent absences from important church meetings and debates resulted in reprimands from the Philadelphia Presbytery.

One of Morgan's chief antagonists was Old Scots elder Walter Ker. From the day of Morgan's acceptance by the Philadelphia Presbytery in 1710, to the time of his departure from the congregation at Old Scots in 1729, Ker was at odds with the maverick preacher. Ker spoke out vehemently against Morgan as a replacement for the popular, highly-respected John Boyd. His protests were so strident that Morgan reported the situation to the Presbytery, who instructed him to censure Ker. Part of the problem may have been the fact that Morgan was born and raised in New England. Numerous attempts were made to recruit a pastor from Scotland after John Boyd's death, to no avail. Ker and a significant number of his fellow congregants wanted a Scotsman to serve as pastor (Landsman 1895:179-180). In addition, Ker's rigid adherence to the Presbyterian doctrine fostered resentment toward having to share a minister with the Dutch Reformed congregation (Smith 1895:32). Perhaps as a compromise, Walter Ker was chosen to serve as the first ruling elder shortly after Morgan's appointment (Landsman 1985:180).

Morgan's independent spirit and willingness to embrace positions that may have run counter to the prevailing thought of the day were the reasons for his ministration's great diversity. An example of this diversity is illustrated by an event that occurred in 1727. In

June of that year, an Indian king named "Wequalia" was found guilty of murdering Capt. John Leonard in Perth Amboy. Prior to his execution, the sheriff asked him if he wanted to pray with any of the ministers before he died. The condemned man asked for Mr. Morgan, "...because he was his Neighbor" (Symmes 1904:71). This event shows not only the proximity of Indians still living near the Old Scots site, but the wide appeal of Rev. Morgan as a preacher.

Morgan's interest in inventions and the future of technology was evident in a number of ways. In a time when the county was largely forested and the most common mode of transportation was by horseback, Morgan was the first in the region to travel in a two-wheeled carriage (Clarke 1931:6). With great foresight, he wrote to the Lords of Trade in a letter dated August 5, 1714, detailing an invention utilizing steam, "...which will work against wind at sea, will save many a ship from ship-wreck, will shorten voyages by many weeks and months and be excellent in war" (Smith 1895:32-33). Amazingly, Morgan's description of steam as a source of power predated the first practical steam engine prototype by nearly 75 years (Berger 2001). He included thirteen diagrams which detailed the various wheels, cranks and booms which were necessary for powering the vessel. Fearing his first correspondence was lost, on August 28, 1714, he wrote once again to the Lords, this time enclosing an additional fifteen diagrams of his prototype. There is no record, however, that the Lords ever acted on Morgan's proposals (Ellis 1885:506). Another interest of his was astrology. He was so consumed with its practice, that he admitted to Cotton Mather, "I had no leisure for reading, nor for writing discourses for the church, and often knew not my text before the Sabbath" (Smith 1895:33). The extent of

Morgan's intellectual aptitude is illustrated by his ability to write fluently in English and Latin; an example of the latter survived into the twentieth century in the form of a letter to Cotton Mather (Symmes 1904:72).

In 1728, Morgan was brought before the Synod in Philadelphia to face a number of charges, including intemperance; promiscuous dancing, practicing astrology, and actions related to his navigation schemes, to name a few. The Synod ruled in Morgan's favor on most of the charges, but the damage had already been done (Smith 1895:36). After missing an important debate in 1729, Morgan's relationship with the Old Scots congregation unraveled permanently. At the end of 1729, he resigned his ministry at the Old Scots church. His twenty year association with the congregation was deemed a failure in which the church, "...did not flourish, divisions increased, all spiritual life seemed to die out, and the congregation became financially embarrassed" (Hallock 1887:238). Late in 1730, Morgan lodged a complaint against the congregation, accusing them of owing him 200 pounds sterling in back salary (Hallock 1887:238). The last mention of Rev. Morgan in the church records pertains to the salary dispute: "October 15, 1730. The Revd. Mr. Joseph Morgan [having made a complaint against this congregation that they owed him above 200 pounds arrears of Sallerie] met the congregation at the Old Scots meeting House, where accompts (sic) were fairly made up, and Mr. Morgan gave the congregation a Discharge in full"(Smith 1895:37). Morgan's troubles, however, did not end with his departure from the Old Scots congregation. In 1736, records show that the Presbytery reprimanded him for "intemperance," an indication that much of his past, erratic behavior transcended his

association with the Old Scots congregation. After a year's suspension, he was reinstated, and remained in good standing from then on (Clarke 1931:5, Symmes 1904:72).

After he left the Old Scots Church, Morgan remained at the Dutch Church in Marlboro before moving on to churches in Hopewell and Maidenhead. In 1738, upon hearing the noted evangelist George Whitefield preach, Morgan was inspired to become a traveling evangelist, bringing the gospel to small settlements throughout East Jersey (Ellis 1885:731). He died in 1742 while serving as a missionary along the sea coast of New Jersey. Much of Rev. Morgan's tenure at Old Scots can be described as productive, with only the last several years becoming problematic for the congregation (Symmes 1904:72).

JOHN TENNENT

With the departure of Rev. Morgan, the Old Scots congregation was at perhaps, its lowest point since its inception. However, a stabilizing force in the person of Reverend John Tennent (1707-1732) would heal the wounds of the last twenty years, and set the congregation on a course of prosperity that would last to the present day.

John Tennent was born in Ireland on November 12, 1707. His father, William Tennent, Sr. was the founder of the "Log College," in Neshaminy, Bucks County, Pennsylvania, about 20 miles north of Philadelphia (Clarke 1931:5). The elder Tennent and his four sons came to America in 1718. William Tennent, Sr. was accepted into the membership of the Philadelphia Synod Presbytery. He trained his four sons and others in the gospel ministry at the "Log College." On Sept. 18th, 1729, John Tennent was licensed to preach by the Presbytery of New Castle. His first assignments were as a preacher at Brandywine, Middletown, New Castle and Middle and Lower Octorara (Smith 1895:40-

41). During this time, Tennent was invited to preach at the Old Scots church on a number of occasions. John Tennent was sought out by influential church elder Walter Ker, who traveled to the "Log College" to meet with William Tennent, Sr. and his son. The Tennents' intense evangelical style, along with their Scotch-Irish roots appealed to Ker, who was eager to erase the legacy of his nemesis Joseph Morgan (Landsman 1985:182). The phenomenon of limiting the search for a minister to individuals of Scottish descent supports Ian Hodder's belief that cultural traditions play an important role in formulating cultural change (Trigger 1989:354). On April 15, 1730, he accepted the congregation's request to become its third minister (Hallock 1887:239).

In 1744, William Tennent, Jr. described the state of the church as it was when his brother John became pastor:" The major part of the congregation could not be said to have so much as a name to live. Family prayer was unpracticed by all, a very few excepted. Ignorance so overshadowed their minds, that the doctrine of the new birth, when clearly explained and powerfully pressed upon them, as absolutely necessary to salvation was made a common game of, so that not only the preachers but professors of that truth were called, in derision, "New born," and looked upon as holders forth of some new and false doctrine; and indeed their principles, viz:"loose and profane" (cited in Smith 1895:41). Even John Tennent had doubts that the congregation could be saved. However, preaching to the congregation convinced him that the he would be able to unite the divided church. Seven months after arriving at permanently at the Old Scots church, John Tennent was ordained (Smith 1895:43).

Under Rev. John Tennent's stewardship, the congregation once again prospered. His tireless efforts, impeccable character, and fiery oratory were the source of inspiration that brought many congregants back to the church after a long absence. His evangelical prowess predated the more well-known preachers of the "Great Awakening" that included Jonathan Edwards, John Wesley, and George Whitefield (McCauley 1900:6). So emotional were his sermons, it is written that "...both he and the congregation were often in tears together" (Griffin 1989:23). Tragically, in a scenario that closely parallels the passing of Rev. John Boyd twenty-three years earlier, Rev. John Tennent died suddenly on April 23, 1732 at the age of twenty-five (Hallock 1887:239). The following entry in the church records illustrates the high esteem with which John Tennent was held by the congregation: "A Mournful Providence & cause of great Humiliation to this poor Congregation to be bereaved of the flour of Youth. The most Laborious Successful Qualified & pious Pastor this Age aforded (sic) tho but a Youth of 25 Years 5 months & 11 Days of Age"(Clarke 1931:5). The Rev. Robert C. Hallock, wrote in 1887, "His life was brief, but it may truly said of him that he gained more poor sinners to Christ in that little compass of time than many in the space of twenty, thirty, forty or fifty years" (1887:239). He was buried in the Old Scots Burying Ground eight yards southwest from the grave of Rev. John Boyd.

WILLIAM TENNENT, JR.

After the death of Rev. John Tennent, the congregation once again found itself in need of a pastor. The fourth and last pastor to preach at the Old Scots meetinghouse was William Tennent, Jr. (1705-1777). Although William was two years older than his late brother John, he was ordained after John Tennent's death, in 1733 (Hallock 1887:242).

Like his brothers, he was educated at his father's "Log College." William Tennent, Jr. took over as pastor of the Old Scots congregation in 1733 and remained until his death in 1777. During his tenure, he oversaw the growth of the congregation, and the construction of a second, larger meetinghouse about five miles south of the original meetinghouse. One event, however, stands out in both church history and lore to the present day.

After contracting a fever, William Tennent, Jr. was pronounced dead. Arrangements were made for the funeral, and mourners had gathered when a young doctor noticed a slight tremor under his arm and implored William's brother to delay the funeral. For the next three days and nights, the doctor stayed with the body, with no change in its condition. When the congregation assembled for the funeral again, the doctor pleaded for an additional hour, then a half hour, and finally another fifteen minutes. At the last moment, William Tennent opened his eyes. His body still stiff, several mourners pried open his mouth enough to fit a quill which was used as a straw to administer liquids. Remarkably, he eventually made a full recovery. He described in detail to fellow minister, the Rev. John Woodhull his "death experience" and the feeling of reawakening back to the mortal life (Clarke 1931:6).

In addition to his storied "trance," William Tennent, Jr. was renowned for his extraordinary service to the congregation over the lengthy span of forty-four years. Rev. Robert C. Hallock, writing in 1887, describes him as: "...a power of righteousness in the church, in the community, and in all the surrounding country. Few names in the history of Monmouth County have been so influential or as honored as that of William Tennent. He was a preacher of righteousness who lived the gospel he proclaimed; he was a pastor who

loved his people with a father's love; he was a patriot who believed that the nation is most blessed whose God is the Lord, and so desired above all else to make the nation Christian, that the truth might make them free; he was a thinker of real force and insight; a theologian of no small abilities; a pulpit orator of extraordinary power" (Hallock 1887:242). Aside from his role as pastor of the Old Scots congregation, he was also chosen as one of the first trustees of the College of New Jersey (Princeton University) and is listed in the school's first charter of 1747 (Symmes 1904:84). The College of New Jersey was also the foremost Presbyterian educational institution in North America, producing a significant number of political and religious figures (Landsman 1985:11). William Tennent died on March 8, 1777, a year before the Battle of Monmouth would bring the Revolutionary War to the doorstep of the Presbyterian Church.

G. CHURCH SERVICES

The persecution and subsequent banishment from their homeland for refusing to renounce their religious beliefs, illustrates the unyielding devotion to faith by the Scotch-Presbyterians. The expression of their faith through the belief and practice endured even during the most intense efforts of the English authorities to extinguish it, thus, the desire to continue worship in the New World remained unabated.

One of the defining characteristics of the Scotch-Presbyterians was the defiant practice of holding worship in private homes or open fields. It can therefore be postulated that this tradition was carried over upon their arrival in America. The conditions of persecution in Scotland necessitated safety measures when holding services outdoors. To ensure secrecy, the congregation would encircle the minister and as the service began, the

worshippers turned their backs to observe any approaching authorities attempting to disrupt the meeting. This tradition was carried over to America in areas where hostilities existed with local Indian groups (Jackson 1993:34). Although indigenous populations were dwindling even before the arrival of Europeans to the area, there was still a viable threat to the Old Scots congregation as Indian groups were present for nearly one hundred years after initial settlement of the site (Clarke 1931:3). In 1671, conflicts between Indian groups and European settlers in the Upper Delaware Valley caused New York and New Jersey officials to prepare defensive measures of their own (Weeks 2001:59). In fact, baptismal records of the congregation mention a member of the congregation, John M. Gaston, whose father William was killed by Indians in 1755 (Symmes 1904:210).

Several nineteenth-century histories mention the practice of worshipping in private houses before a permanent structure was built (Hallock 1887:236). Around 1692, the congregants finally erected a meetinghouse on the "Free Hill." The location of a meetinghouse on a hill was rooted in the biblical belief that it was, "...very like the way to heaven; 'tis uphill" (Earle 1891:193). However, in colonial America there were also practical reasons for situating a meetinghouse on a raised elevation, namely, it could be seen for miles around and could also be used as a lookout in areas during times when hostilities existed between local Indian groups and settlers (Earle 1891:193). While few details survive describing the first structure, the Rev. Henry Goodwin Smith, writing in 1895, makes the following observation, "Of the building itself, no memory, tradition, or trace remain except the slight depression in the soil, which would indicate the humble dimensions of a structure perhaps some twenty feet square (Smith 1895:13). One early

history suggests that the structure was made from logs smoothed on the inner and outer sides, or a frame with an inclosure of unpainted, heavy boards (Symmes 1904:25). Members of the congregation cut and squared the logs themselves. The early meetinghouse was unheated, a condition common in most religious structures prior to the Revolution (Clarke 1931:9).

In December, 1705, the congregation petitioned the courts of Monmouth to have their meetinghouse recorded. The reason for waiting nearly fourteen years before officially recording the property is unclear, but may have been motivated by fear under the rule of Governor Lord Cornbury. During his administration, Lord Cornbury engaged in a number of illegal acts aimed at subjugating dissenting churches and ministers. In various sections of New York, Puritan churches were forced to convert to the established religion, and Puritan ministers were forced to conform or retire (Smith 1895:16). By recording the church property, the Presbyterians gained a degree of legal legitimacy, which would protect them from the tyrannical actions of the governor. Moreover, at that time, the Monmouth courts were comprised mainly of Baptists, who shared the dissenting views of the Presbyterians (Smith 1895:18). The document on which the event was recorded, still in existence, stated: "At ye request of John Craig, Walter Ker, William Bennet, Patrick Imlay, in behalf of themselves and their breathren (sic), ye protestant desenters of freehold called presbiterians, that their Publick meeting house may be recorded. Ordered by this Cort (sic), that it be Recorded as followeth. The Meeting House for religious worship, belonging to the Protistant discenters, called ye Presbiterians of ye Town of Freehold, in ye County of Monmouth, in ye Province of New Jarsey (sic), is situate, built, lying and being at and upon

a piece of Rising grownd, commonly known and called by the name of free hill in sd Town" (cited in Smith 1895:15-16). The minutes also mention the presence of Rev. John Boyd at the meeting, "Mr. John Boyd, minister of the d. presbeterians, did also personally appear, and desire that he might be admitted to qualify himself as the law directs in that behalf" (Salter and Beekman 1980:267).

The Old Scots meetinghouse on Free Hill served as the sole house of worship for the next twenty-two years. However, in 1727 with the congregation growing and the population base shifting, a group of church elders which included Walter Ker, Archibald Craig, and David Rhea applied for a permit to build a new church upon "White Hill," approximately five miles south of the existing meetinghouse. Increased settlement in the inland section of Freehold caused many residents to voice displeasure with the long walk from their homes to the meetinghouse for services (Landsman 1985:181). The congregation and church remained at the site for the next 26 years. Sometime after 1750, services were no longer held at the Old Scots meetinghouse. The congregation who worshipped at Old Scots was comprised mainly of Scotch-Presbyterians and their descendants, but also included English congregants, along with French Hugenots and Dutch Reformers who embraced the Calvinist doctrines of Presbyterianism (Smith 1895:15, Symmes 1904:13). Family names present in the burying ground and in church records, such as Van Dorn, Polan, Vanderhiden, Duell, Hulseart, Trueax, LeConte, DeBue and Van Dusen are representative of the latter two groups (Symmes 1904:179-181). Other names in the burying ground can be found on the passenger lists and lists of indentured servants from Scotland during the seventeenth and early eighteenth centuries (see Nelson

1899:61-73). These include Campbell, Craige, Symson, Reid, Clarke, Morgan, Henderson, and Alexander. One of the earliest extant carved stones in the cemetery belongs to William Redford, who died in 1725 at the age of 84, and Margaret Redford, who died in 1729, also at the age of 84. The inscription states that both, "…came from North Britain in 1682." Other stones that are little more than crude fieldstones set in line with sandstone gravestones, may represent early burials that pre-dated the availability of carved gravestones.

In addition to the Dutch and French Huegenots, there is evidence that a number of local Indians worshipped at the Old Scots meetinghouse. A passage from the *Memoirs of David Brainerd* a missionary to the Indians of Monmouth county states:

"We, whose names are undersigned, being elders and deacons of the Presbyterian church in Freehold, do hereby testify, that in our humble opinion, God, even our Saviour, has brought a considerable number of the Indians of these parts, to a saving union with himself. Of this we are persuaded from a personal acquaintance with them; whom we not only hear speak of the great doctrine of the Gospel with humility, affection and understanding, but we see as far as man can judge them, soberly, righteously and Godly. We have joined with them at the Lord 's Supper, and do from our hearts esteem, as our brethren in Jesus.

For those who were not God's people may now be called the children of the living God. It is the Lord's doing and is marvellous (sic) in our eyes, until he has subdued all things to himself this is and shall be the unfeigned desire and prayer of Walter Ker, Robert Cummins, David Rhea, John Henderson, John Anderson, Joseph Ker, Elders. William Ker, Samuel Ker, Samuel Craig, Deacons. Presbyterian church, Freehold, August 16th, 1746."

On July 20, 1730, a group of church elders and representatives of the congregation met at a private house and finalized plans to build a new meetinghouse in an area known as "White Hill," located between " William Ker's Barns and Rocky Hill Bridge" (Clarke 1931:4). This was the same meeting that approved the appointment of Reverend John Tennent as pastor (Smith 1895:43). Shortly after this meeting, the same attendees agreed, "that the Old or lower meeting-House To be repaired with all Haste that can be" (Smith 1895:49). It was decided to "…go on in Building with all the Speed possible after this Sowing-time is Over and the Congregation is to give each Man their Bill or Bond to the Said Mannagers (sic) to enable them to go on with their work. The Meeting House to be made Forty feet Long and Thirty feet Wide and Each of the Builders to have One Seat in it above their Common Due" (cited in Symmes 1904:38). The first service in the new meetinghouse was the baptism of Walter Ker's daughter, Margaret, on April 18, 1731 (Clarke 1931:4).

For a time, services were held in both locations. The Old Scots meetinghouse was known as the "Lower Meetinghouse," while the new structure on White Hill was known as the "Upper Meetinghouse." At first, the services were held alternately at each location. Around 1733, the schedule became two services at the Upper Meetinghouse and one at the Lower Meetinghouse. Both John Tennent and William Tennent preached at the Upper and Lower Meetinghouses. The Lower Meetinghouse eventually fell into irreparable decay, and was abandoned or torn down sometime after 1750. In 1753, the Upper Meetinghouse was enlarged, and services were held exclusively at that location. The exact date of the last service at Old Scots is unknown, but it likely was around the time of improvements to the

Upper Meetinghouse, where the convenience and appeal of superior accommodations would have made further repair of the Lower Meetinghouse pointless (Smith 1895:50).

The application for a new church building in the same year as the acquisition by the church of the Old Scots lot, suggests the existence of two factions within the church; a further indication of the intra-congregation divisions at the end of Joseph Morgan's pastorship (Smith 1895 :47). Morgan's residence in the parsonage of the Dutch Reformed church illustrates the partiality of commitment to the Old Scots congregation (Symmes 1904:71).

Historian David Hackett Fisher once wrote, "Of all the determinants which shaped the cultural character of British America, the most powerful was religion" (1989:795). The Old Scots congregation was a microcosm of this phenomenon, as the post-Reformation exodus from Scotland resulted in the establishment of Presbyterianism in the New World and a number of successful settlements, including one at Marlboro, New Jersey. With little more than the mental and physical scars of religious persecution, and the unwavering desire to worship unmolested, the refugees who settled at Free Hill braved economic uncertainty and governmental obstruction to establish the first Presbyterian meetinghouse in the New World. This site, known as the Old Scots Burying Ground, was the place where Presbyterianism began in the New World, with the first meeting of the Philadelphia Presbytery and the ordination of the first American Presbyterian minister occurring in 1705.

The Presbyterian faith, as exemplified by the early settlers of Marlboro, New Jersey, was the culmination of both colonization and religious rebellion during the

seventeenth century. This scenario is indicative of anthropologist Ernest Crawley's assertion that "the greater the dangers, the more the religion" (Evans-Pritchard 1965:37). Colonial America in the seventeenth and eighteenth centuries was a world filled with uncertainty and peril, some imagined, but most all too real. Tenuous relationships with local American Indian groups, food shortages, disease, and poor transportation all combined to create an atmosphere in which religious ideals would flourish and the stability provided by unyielding faith would prove critical to the survival of the pioneers. In addition, deviation from the established church often meant brutal persecution in both Europe and the New World.

Although the Presbyterians were resolute in their religious convictions, and committed to the expansion and maturation of their congregation, there were contradictory aspects that tore at the heart of their doctrine. The main catalyst for the formation of the Presbyterian religion was the rejection of a state-sanctioned church that exerted iron-fisted control over a powerless laity. Yet Presbyterians created their own bureaucracy, composed of pastors, deacons, and elders, which maintained control of the parishioners through regulation, monitoring, and disciplining of the congregants. This power structure was in some ways more oppressive than the system it sought to replace, micro-managing the lives of the parishioners to extreme degrees in areas as seemingly trivial as punctuality in attending church meetings to the all encompassing but extremely vague "violating the covenant." Perhaps the development of a governing body within a given religion is not the result of subjective maneuvering by a power-hungry core, but the inevitable outgrowth of

the essential need to maintain order in a volatile organization, or, to paraphrase Freud, “you can’t have religion without some oppression.”

VII. RELIGIOUS STRUCTURES OF THE HISTORIC PERIOD

One of the primary objectives of this study is to determine the dimension and form of the Old Scots meetinghouse in an effort to see what effect, if any, the environment of the New World had on the congregations' building practices. In addition, it is critical to understand how the design of the meetinghouse reflected their religious beliefs and if the Presbyterian meetinghouse differed from other Protestant denominations. To achieve this goal, a thorough examination of extant religious structures in the British Isles will provide data on what building practices and materials were used prior to and shortly after the time of the congregation's emigration to America, and how the attributes of Old World design were either replicated or transformed in the New World. In addition, an examination of doctrinal limitations on sacred structures and the patterns of Scottish architecture during the period will be included. Moreover, the limitations placed on the congregation regarding the design and construction of their meetinghouse in a frontier situation will be explored.

The methodology of this portion of the study is fairly straightforward. Only British sites that closely pre-date or are contemporaneous with the period of the Old Scots meetinghouse are included. Thus, structures from the period 1650-1750, which will encompass the cultural and environmental period of the Old Scots meetinghouse, will be considered for comparison and examination. Interestingly, there was a particularly intense period of building activity of Presbyterian meetinghouses in Great Britain between the years 1662 and 1672 (Parsons 1989:1, 21, 58, 103). This may have been caused by the ejection of hundreds of Presbyterian ministers around 1662, and the eventual move from clandestine worship in fields and private houses to more permanent quarters (Parsons

1989:58). The Toleration Act of 1689 further facilitated the construction of nonconformist meetinghouses (Parsons 1989:103). In general, organized dissent among Protestants moved into churches and meetinghouses around the middle of the seventeenth century (Parsons 1989:1). Still, the social unrest of the seventeenth century resulted in lengthy delays and interruptions to many church construction projects (Hay 1957:37-38).

Data was collected from several outstanding surveys of religious structures in England and Scotland (Hume 2000; Parsons 1989; Stell 1994), as well as publications of the Council for British Archaeology about church archaeology. These sources provided information regarding the original denomination and date of construction (if known), the dates of any additions or modifications, the design of the building and the materials used in its construction. While far from complete in terms of the total number of religious structures present during the temporal period in question, it nevertheless is representative of the types of buildings that would have influenced the construction of the Old Scots meetinghouse. It should be noted that in some instances, more recent structures were built on the site of an earlier structure or structures. Where no information is available on the latter, the site was omitted from the study.

Church construction after the Reformation evolved over the course of three centuries: from a desire for Puritan expression (ca. 1540-1660), to an increasing consciousness of preaching and the comfort of the listeners (ca. 1660-1820), to an elaboration in both design and architecture (ca. 1820-1850) (Morris 1983:92). During the period of 1660-1820, which encompasses the building of the Old Scots meetinghouse, construction exhibited a significant degree of uniformity with the most common design

being a rectangular plan with a center aisle. The altar would have been situated against the east wall of the structure and cordoned off from the pews. The pulpit was located against one of the long walls, typically the north. The font may have been mobile, capable of being moved into position for ceremonies and stored out of the way for worship (Morris 1983:92-93). One of the major differences between meetinghouses within the Protestant faith was the presence/absence of an indoor baptismal font. During the colonial period, Baptist meetinghouses did not have an indoor baptismal font; rather, adult baptisms were performed outside, usually in a nearby creek or lake (Scharfenberger 2000; Waldron 1977). Another contrast was the use of a communion table in Presbyterian services in place of an altar. While its function was relatively the same, symbolically it was diametrically opposed to the hierarchical underpinnings and social separation of altars. However, most Protestant meetinghouses shared the same austere lack of iconography; the antithesis of that which characterized Roman Catholic churches. This Puritanistic attitude used to describe the Congregationalists, Baptists and Presbyterians, did not affect all images, but just those likely to be worshipped (Authers 1960:7). The purposeful austerity of Protestant meetinghouses was a rejection of the elaborate iconography of the Catholic Church.

In his *First Book of Discipline*, John Knox makes provisions for the transition from Catholic churches to Protestant houses of worship. Rather than demolish existing structures, Knox mandated that any suitable building be used, with certain modifications, for worship or educational purposes (Howard 1995:170). These modifications were the result of an overall reorganization of Presbyterian ritual and beliefs. The high altar, statues, minor altars, silver chalices and communion plates were all to be removed (Howard

1995:172). Rood screens, which were ornamental partitions between the nave and the chancel of the church, were to be removed. The doors in rectangular churches were to be moved from the west end to a central location along the side (Howard 1995:177). Houses of worship constructed during the early seventeenth century reflected the immense poverty of the period - thatched roofs with no windows (Howard 1995:175). Early churches usually had windows along the north side, while the windows of later buildings were located along the south side with the addition of windows on the remaining walls varying from structure to structure. Pre-Reformation windows were generally large and situated along the east side.

The data examined indicates that the majority of meetinghouses were constructed of stone, while a lesser number were built of brick (Table 2). Only a very small percentage (1.5%) were timber framed. Deborah Howard's 1995 *Scottish Architecture: Reformation to Restoration 1560-1660* also describes stone as being the predominant material of period Presbyterian churches in Scotland. This is easily explained by the deforestation of the British Isles that reached a crisis proportion during the middle of the seventeenth century. Shipbuilding and wood for fuel had depleted England's forests to the degree that government regulations were necessary to avert complete environmental disaster. The *1677 Edwards Map of Angus* shows a severe scarcity of woodlands in the Scottish countryside (Smout 1969:129). By the early seventeenth century, the bulk of Scotland's timber was being imported from Norway (Howard 1995:8). Naturalist John Ray, traveling through Scotland in 1661 noted that "all of the ordinary country houses...are built of stone, many of them with no chimneys" (Chambers 1885:310). As early as 1543, Parliament

placed restrictions on the harvesting of timber (Cronon 1983:20-21). Later, in 1647, glasshouses were forbidden from burning wood in their furnaces. The success of Scotland's first glasshouse, set up by Sir George Hay in 1619, needed the restriction of coal exports from Scotland to ensure a reliable source of fuel for its furnaces (Chambers 1885:212). Also, new sources of timber from the New World resulted in many necessary products, such as ships' masts being made in the colonies. Thus, with wood supplies dwindling, it is not surprising that other building materials were relied on more heavily during the seventeenth and eighteenth centuries.

TABLE 2

MATERIAL USED IN ENGLISH MEETINGHOUSES BUILT BETWEEN 1650-1750 BY COUNTY

County	Stone	Brick	Wood	Total
Berkshire	7	6	2	15
Cheshire	8	12	1	21
Cornwall	4	0	0	4
Cumberland	19	7	0	26
Devonshire	16	3	0	19
Dorset	9	4	0	13
Durham	2	2	0	4
Hampshire	0	8	0	8
Lancashire	26	8	0	34
Northumberland	7	0	0	7
Somerset	21	3	0	24
Westmoreland	8	0	0	8
Wiltshire	12	6	0	18
Yorkshire	42	13	0	55
Totals	181	72	3	256

This, however, was not always the case. Woodland management during medieval times was an effective, widely-used technique to regenerate forests and ensure a reliable source of timber. This process produced tall timber for framing structures and shorter underwood for fuel (Grenville 1997:25). Different species were used for structures;

however, oak was almost always used by the upper classes while lesser quality trees, such as elm, ash and aspen were found in lower status buildings (Grenville 1997:27). The ability to maintain the delicate balance between the regeneration and harvesting of trees was severely compromised by the excessive demands of both industrial and domestic needs during the seventeenth century (Cronon 1983:111-114).

The construction of meetinghouses in colonial America, regardless of denomination, followed a similar pattern. While Scottish meetinghouses had well-defined architectural styling, often designed by well-known architects, American meetinghouses were overwhelmingly utilitarian in form (Hay 1957:38). Some Scottish church architecture was influenced by leading European architects such as Christopher Wren, Alberti and Francesco di Giorgio, while American houses of worship were beholden to the abilities or lack thereof of the settlers (Hay 1957:41, 65). Initially, when settlers erected a house of worship, it was usually a simple structure just large enough to accommodate the small number of people present in a frontier situation. As the number of people in the congregation grew, smaller buildings were expanded or replaced. It is not unusual to find a present-day church that is the second or even third religious structure on the site (Scharfenberger 2000).

The plentitude of timber in colonial America resulted in many early meetinghouses constructed of wood. In addition, other materials such as brick were often times prohibitively expensive and scarce in some areas. As a congregation grew in number and wealth, better grade materials and more elaborate ornamentation, such as bells and windows, were utilized (Earle 1891:192).

Contemporaneous meeting houses in New Jersey seemed to follow a similar design pattern to the Old Scots meetinghouse. The Presbyterian meetinghouse built around 1700 in Basking Ridge, New Jersey, by Scottish Presbyterians was a log structure. This was followed by a wooden frame structure around 1749 (W.W. Munsell 1882:263). Similarly, the first church building in Whippany, New Jersey, built by Presbyterians in the first half of the eighteenth century was also purported to be a small log structure that was replaced by a more substantial frame structure between 1755 and 1773 (W.W. Munsell 1882:225). This design, however, was apparently not universal throughout the colonies. Historian George C. Mason has written extensively on early colonial meetinghouses in Virginia. His research has shown that many of these structures were constructed from brick. Meetinghouses in Isle of Wight County (1632), Elizabeth River (1640), Lynnhaven (1640), and Gloucester County (1693) were all brick structures (Mason 1938a, 1938b, 1941). However, the earliest meetinghouses at Jamestown are believed to have been log, or possible"crotch" style structures, which were later replaced by frame buildings in 1610 and 1617 and a brick building in 1639 (Mason 1939:512-515). The presence of brick structures in Virginia prior to, or during the time of the Old Scots settlement may be the result of two factors. First, the settlements in Virginia may have had better access to materials such as brick than settlements in rural New Jersey. Second, the meetinghouses in Virginia were Anglican, which often had the legislative backing of the local government to facilitate the acquisition of land, labor and materials for its construction (Mason 1939:510).

Doctrinal changes in colonial America also resulted in alterations to church structures over time. While the schism with Catholicism resulted in significant changes in

Protestant church architecture initially, these designs did not remain static forever (Howard 1995:172). The radical austerity that characterized many early Protestant buildings gave way to a less restrained aesthetic sensibility during the nineteenth century that included stained glass windows, elaborate pulpits and decorated baptismal fonts. These changes undoubtedly will leave their imprint on the archaeological record.

PART THREE: ARCHAEOLOGICAL RESEARCH

VIII. RESEARCH DESIGN AND METHODOLOGY

This chapter will discuss the theoretical framework within which this study is contained and the methodology used during the undertaking. A description of the relevant subfields of archaeological study; historical archaeology and cultural landscape studies will provide the reader with the understanding of the theoretical underpinnings used to address the numerous research questions that will be addressed by the data collected during the fieldwork, and the various documentary resources available. The study of landscapes, while a worthy complement to historical archaeology, remained detached from most archaeological inquiry into historic sites until recently (Rubertone 1989:50). The research questions for this study, as well as the methodology will be listed at the end of the chapter as they relate to each respective subfield category.

The research objectives of this study will fill in several gaps in the record of the congregation who worshiped at the Old Scots Burying Ground. Little is known of the individuals' lives in Scotland before they emigrated to America in the late 17th-century. Similarly, the religious practices and design and layout of their meetinghouses prior to their arrival in America are unknown at present. Examining these issues will add immeasurably to our understanding of the transition of the Scottish Presbyterians from life in the mother country to life in the New World. Acculturation as a process that was realized through settlement in a pioneer situation and as a denomination apart from the dominant faith in the colonies at the time will be studied through the changes between Scotland and New Jersey. Evidence of Old World building techniques, liturgical practices, and social standing will be

juxtaposed against the archaeological remains from the Old Scots Burying Ground to create a profile of the seventeenth-century Scottish Presbyterians of New Jersey.

The objective of this study is to address a number of questions related to the current subfields of archaeological inquiry encompassed under the headings of cultural landscape studies and historical archaeology. While complementary in some respects, each serves to address different aspects of cultural change and development. A discussion of each subfield will be followed by a set of questions formulated to address issues specific to the Old Scots Burying Ground site, and the congregation who settled the area.

A. Cultural Landscape Studies

The study of landscapes is a critical component in piecing together the lifeways of both prehistoric and historic groups. The landscape is the dominant framework for the development and modification of human behavior and transcends all geographic and temporal boundaries (Fagan 1996:385). Cultural landscape studies focus on the role of culture in recognizing and understanding the choices people made in altering their landscape and how they designed their "built" environment. Although cultural landscape studies have been a distinct area of academic study for only about twenty years, it has clearly been a part of archaeological research since the late nineteenth century, albeit in more subtle terms. As archaeology moved beyond the typological and classificatory stages of research, the larger issue of the environment and the role it played in cultural change and development became more of a force in the reconstruction of past societies.

Many of the archaeologists of the late nineteenth century made cursory observations of the landscape and the dynamics of past environments during their studies of prehistoric

sites. During the 1850s, Danish scientists studying shell middens in Sjaellad were able to reconstruct important information regarding the paleoenvironment of the region, as well as the seasonal time frame for the accumulation of the shells (Trigger 1989:82). Also during the nineteenth century, German ethnologist Adolf Bastian acknowledged the role of the environment in the development of cultures that faced similar problems in varying parts of the world (Trigger 1989).

Cultural landscape studies attempts to place archaeological sites in the context of geographic and environmental parameters (Adams 1990:92). Its concerns range from the seemingly mundane, such as the dirt path or wooden fence, to the all-encompassing entirety of site settlements (Groover 2004:25; Rotman and Nassaney 1997:43; Yentsch 1996:xxvii). The "use of space" issue may be examined from two perspectives: macroscale and microscale. At the macroscale, this issue relates to the development within a region of specialized areas such as churches (meetinghouses), farmsteads, commercial centers, and public facilities within the larger framework of a defined site, such as a village or city. At the microscale, land use studies focus on the patterning of activities and structures within village, farmstead, urban lot, factory, fort, or meetinghouse sites. Even relatively minor modifications to the landscape, such as walkways and fences are an indication of one group's attempt to control the flow of others (Beaudry 1986:44). Further, such features when used in colonial cemeteries could maintain segregated space in death as it existed in life (Fitts 1996:62).

The study of landscape and land-use patterns is also closely related to issues of archaeological site formation. An understanding of past cultural activities must rest on at

least a general understanding of the processes that formed the archaeological features and deposits used in analysis (Schiffer 1972, 1976, 1983, 1987). Objects can become deposited in the ground, and features formed, through a variety of different cultural and natural processes.

Landscape studies of historic sites generally offer the most potential for information useful in recreating past environments and land use patterns. For the late nineteenth and twentieth centuries, city atlases provide quite detailed information regarding the placement of structures within urban lots, and the increasing intensity of land use, manifested by a decrease in the amount of open space, is one of the obvious characteristics of urban development. Relative to earlier periods, typical house lots of the industrial period were generally quite small, and it is assumed that the decreasing amount of open yard space was accompanied by a decline in the range of subsistence-related activities that were carried out by the household during the eighteenth and early nineteenth centuries. These subsistence-related activities could include gardening, the raising and slaughtering of animals, and home manufactures. For example, in many cities in the Middle Atlantic region, there is evidence of extensive subsistence-related activities in urban lots (e.g., Berger 1986; Cheek et al. 1983).

B. Development of Cultural Landscape Studies

As an analytical tool, cultural landscape study serves a dual purpose. First, it attempts to provide an understanding of the natural environment, or natural landscape first encountered by a particular group or groups. Many researchers, particularly since World War II, have placed great emphasis on the environment and the role it plays in shaping

culture. V. Gordon Childe, in his landmark work *Dawn of European Civilization*, inadvertently underscores the importance of landscapes to the development of prehistoric societies. Although generally regarded as a strict unilinear evolutionist, Childe's description of the natural environment and the materialist response of the inhabitants place the role of landscape firmly at the forefront of settlement patterns and technological developments in prehistory. Throughout the text, Childe details the environmental setting of a particular region and how human societies adapted to them. In describing the Central European loess lands, Childe states that hunter-gatherers pursued mammoth and reindeer in an area that was also well-suited for simple agriculture. Well-drained, easily tilled soils with ample water supplies provided agriculturists with the luxury of abandoning territories whose productivity had been exhausted in favor of virgin fields (Childe 1967:105-106). Thus, the transition from a hunter-gatherer to an agriculturalist/pastoralist mode of subsistence was facilitated by the environment.

In discussing the Forest Culture of the Eurasian circumpolar zone, Childe points out that the variability in environments resulted in the modification of cultures to adapt to the various changes and deviations in the regional landscape. In some areas, such as the Norwegian coasts and the North European plain, the environment was not favorable to agriculture. However, the rich game, wild plants, and marine life necessitated a specialized tool kit and settlement pattern geared specifically to the unique landscape of northern Europe (Childe 1967:203-204).

Grahame Clark has also proposed that all elements of culture were affected to varying degrees by environmental constraints (Trigger 1989:265). Large-scale landscape studies through either ground surveys or aerial photography have enabled archaeologists to estimate population size and density, along with providing a greater understanding of the factors behind choosing sites for occupation (Champion et al 1984:6). Julian Steward, one of the pioneers of this "cultural ecology" states emphatically, "...cultural-ecological adaptations-the adaptive processes through which a historically derived culture is modified in a particular environment-are among the important creative processes in cultural change" (Steward1955:21). The methodology of landscape studies is described by Steward as "The interaction of physical, biological, and cultural features within a locale or unit of territory..." (Steward 1955:31). Gordon Willey, building upon Steward's work, applied the approach of examining settlement patterns within a particular landscape in the Viru Valley in Peru (Willey 1953). Willey's work showed that settlement patterns were predicated upon a combination of technology, social systems and the natural environment (Shackel 2003:4).

Also critical to the study of cultural landscapes is the response to different cultures occupying the same environment or econiche. For example, Dutch settlers in New Amsterdam may have constructed an all encompassing fort to serve the needs of the settlement as a trading post. Architecture that was distinctly Dutch and the construction of a canal was intended to replicate the appearance of their Old World settlements. However, the English settlement of the area included a more formal design, with a planned street grid and numerous public works projects such as landfilling and the drainage of the canal, ponds and lakes. Landfilling also began in 1687 after the English had wrested permanent control of the area from the Dutch (Rothschild 1990:36).

Second, cultural landscape studies examine the process whereby individuals organize their households, farms, workplaces, and places of worship within the framework of the larger community. In this context, the organization of a farmhouse and its outbuildings, the disposal of trash, the creation of gardens all become interdependent facets of the occupants lives. These cultural landscapes have been used to establish and reinforce relations between different ethnic, racial, social and religious groups, as well as a visible means of defining ones' place in the world (Deetz 1977:2-4). Landscape archaeology also takes into account the attitudes toward the land of those who settled a particular region (Ireland 2003:62). Modifications to the landscape may reflect economic, as well as symbolic considerations (Rotman and Nassaney 1997:58). The type of structure on a sacred site, therefore, would be influenced by both religious doctrine and economic capabilities.

The first landscape archaeology project was conducted in 1930-1931 at the Governor's Palace in Williamsburg, Virginia. However, it would be more than fifty years before a formal, scholarly discussion on the subject would take place (Baugher and DeCunzo 2002:71). The 1987 Society for Historical Archaeology annual meeting's symposium on landscapes illustrated the depth and variety of research potential associated with the study of cultural landscapes. Diverse sites such as Boott Mills in Massachussetts, Jack London's Ranch in California, and three Georgia coastal plantations to name a few, transcended not only regional boundaries, but class, technological and political boundaries as well (Kelso 1989:48).

One of the first texts devoted exclusively to the study of landscapes as archaeology is *Earth Patterns: Essays in Landscape Archaeology*, edited by William Kelso (1990). This text is a collection of articles that detail a variety of landscape studies under the headings "Virginia County

Garden and Landscapes, ""Early American Urban Landscapes," "Ancient Gardens and Landscapes," and "Landscape Science." Many of these studies examine the gardens and spatial organization of houses and associated outbuildings on sites in colonial America. These sites are usually limited to a single household or other confined entity, such as a religious congregation or commercial establishment. An example of the single household analysis is the gardens at Thomas Jefferson's home, Monticello. Others however, relate to the landscapes of areas on a much larger scale. Representative of macroscale studies in this book is the chapter entitled, "Between the Bradano and Basento: Archaeology of an Ancient Landscape." This deals with the ancient rural landscape and early farmsteads in southern Italy. In this survey, a total of 488 identified sites were recorded, of which approximately 24 were excavated.

While the macroscale study of ancient landscapes in southern Italy may seem incompatible both geographically and temporally with that of the microscale examination of a colonial farmstead in Virginia, the two have numerous comparable and contrasting elements. Both reflect the spatial organization of a farmstead or farmsteads in a unique geographic setting and provide information on the occupants beyond agriculture. However, the most important connection may be the fact that Thomas Jefferson traveled to Italy to observe the design and composition of rural Italian landscapes in an effort to replicate the layout at Monticello. This demonstrates the significance of landscapes across time and space and the diffusion of ideas that have occurred that transcends any geographic constraints.

A second important text dedicated to recent landscape archaeological projects is *Landscape Archaeology*, edited by Rebecca Yamin and Karen Metheny. Similar to the *Earth Patterns* text, *Landscape Archaeology* examines the phenomenon of gardens in the eighteenth and nineteenth

centuries under the heading "Landscape Biographies." The text departs from the format of the former with a number of articles grouped under the heading "Vernacular and Sacred Space." These articles examine a diverse collection of landscape studies from farmstead, urban and suburban house lots, and religious sites.

The objective of the Yamin and Metheny volume is the interpretation of *historical* (italics mine) landscapes, that is, the cultural manifestations of issues of ethnicity, class, gender, race, and religion as reflected in the ordering of settlement patterns and landscape modifications by historic groups. Their analyzes draw heavily on an hermeneutic approach to understanding the relationship between humans and the landscape, partly as a result of anthropological and social theory, and partly as a refutation of positivist frameworks of analysis (Yamin and Metheny 1996:xv).

Although cultural landscape studies are at the forefront of contemporary archaeological inquiry, they have heretofore been somewhat limited in their scope. The overwhelming number of landscape studies has examined colonial gardens, with a significant number examining the spatial organization of such expansive sites as plantations and farmsteads. Virtually no studies to date have been directed at the examination of religious sites, and except for peripheral mention in larger studies, or cemeteries associated with houses of worship sacred landscapes have been, for the most part, ignored (Baugher and DeCunzo 2002, Kealhofer 1999, Spenser-Wood 2002). Although landscape archaeology has witnessed tremendous growth over the past twenty years, the majority of sites have been those of well-known, or wealthy, upper-class individuals with large estates and landholdings (Baugher and DeCunzo 2002). However, there have been recent studies of historically-marginalized groups, such as slaves, and their relationship to the landscape (Orser

2004) and other groups with limited historic documentation (Rotman and Nassaney 1997:42). These studies have shown how the control of space was used by one group to reinforce social relations that existed in other facets of plantation life (Fitts 1996:56-57). Other recent macroscale studies involved the examination of frontier landscapes to understand the effects of colonization on the transition from wilderness to settlement (Lewis 1999: 10), battlefields or "landscapes of conflict" (Orr 2003; Smith et al 2003; Greir 2003), and industrial landscapes to examine changing technology and the relationship between labor and the workplace (Shackel 2004). The unique methodology involved in examining sites spatially allows for the recovery of information that may not be represented artifactually. Such data could expose differences in sites once grouped together, such as urban/rural farmsteads (Rotman and Nassaney 1997:44-45).

Cultural landscape study as it relates to the Old Scots Burying Ground is important on a number of levels. The unique activities occurring at a sacred site place different demands on the locational and use attributes of the surrounding landscape. Symbolic considerations, such as structure location and orientation and ancillary land use modifications, such as walkways, fences and burials are all visible on the cultural landscape. Practical and spiritual issues weighed heavily on where a congregation erected a house of worship. Biblical tradition mandated that houses of worship be built on a hill "to be closer to heaven" (Symmes 1904). Yet the reality of the few, often poorly constructed roads that existed during the 17th century placed limits on the distance from population centers that they could be built. The natural environment provides myriad information regarding the type of landscape and associated features favored by historic groups (Orser 2004:134). Thus, the very location of a site, particularly a religious site, may have significant social or symbolic meaning (Baugher and DeCunzo 2002:69). Moreover, the area

around the structure was subjected to use and modification unlike most other historic sites. Surrounding features included cemetery grounds, walkways, fences, and in later years, ornamental plantings and statues. All of these have the capacity to leave an indelible mark on the cultural landscape.

C. Historical Archaeology

Historical archaeology has been alternately called the study of culture since the advent of writing, and the archaeology of European colonization. Unlike the study of prehistoric cultures which was the catalyst for the development of archaeology as a discipline, historical archaeology, with rare exception, is a twentieth-century phenomenon (Schuyler 1978:1). Early proponents of the genre, such as J.C. Harrington and John Cotter recognized the importance and value of sites that date after the colonization of the New World to our understanding of past cultural development and the interaction between indigenous groups, Europeans and displaced Africans. The excavation of such high profile sites as Jamestown, Virginia, Fort Necessity and Roanoke, Virginia by J.C. Harrington, Jamestown, by John Cotter, and Fort Michilimackinac, Michigan by Lewis Binford and Lyle Stone, to name a few, have resulted in myriad data from sites on the frontier with little corroborating written documentation.

Many of the large scale excavations conducted at historic sites were intended to find the location of a historic structure. Others had the additional objective of determining the form and dimension of historic structures for the purpose of recreating the site (Harrington 1978:3). While there are no plans at present for a reconstruction of the Old Scots meetinghouse, uncovering the location, form and dimension are paramount objectives of the project.

The methodology of historical archaeology differs as much from prehistoric archaeology as the subject groups themselves. Historical archaeology involves the use of historic texts, records and maps to supplement the archaeological fieldwork in an effort to paint as complete a picture of a site and its inhabitants as possible. Much of the documentary research is done before a shovel is even put into the ground. This includes primary documents such as maps, deeds, wills, journals, business records, burial lists and census records, to name a few. Secondary sources, such as early histories may provide information on important events in an area or the occupants of a given site. While the documentary and archaeological records are complementary and can provide a great deal of information, allowances must still be made for the inherent variability in behavior of each group occupying a specific site (Deetz 1977:43).

One of the debates among historical archaeologists is just how much influence archaeology and texts should have in a particular study. Some researchers argue that archaeology is simply a modest, but useful tool for historical research (Cotter 1978:18, Griffin 1978:20). This position sees archaeology as a technique, not unlike archival research, or the construction of a genealogy, which provides data relevant to a particular problem in history or anthropology. The opposing view would be that historical documentation is merely a supplement to archaeological inquiry and plays a limited, if useful role in much the same way that GIS systems analysis, predictive modeling, and radiocarbon dating contribute to the interpretation of a site.

The argument is even taken further as to whether or not a text is, in and of itself, an artifact. In reality it is, however, for our purposes, texts are usually valuable in terms of what information they can provide, rather than the physical text. Exceptions would be original church documents, such as the church record book of The Old First Church in Middletown, New Jersey. This book,

dated from 1712, includes handwritten entries detailing events ranging from the important to the mundane. This book, when examined as an artifact, provides such critical information as the literacy of at least some of the members, the chronologic ordering (or lack thereof) of church record keeping, the sociopolitical structure of the congregation and the enforcement of secular and sacred laws within the church (Scharfenberger 2000).

While the value of documentary resources to historical archaeology cannot be overstated, it is archaeology that will ultimately be the most important component of the discipline. I will argue that archaeology has contributed more to our knowledge of past societies than history, and its influence will grow exponentially as time goes on, while history will remain an essential, but secondary player. Carl Fish has correctly stated that "We have learned more of Mycenaean civilization from archaeology than from Homer" (Fish 1978:8). In addition, the historical record is far from infallible. It is not uncommon for archaeological data to directly contradict the written record. In these cases, we must defer to the archaeological record and conclude that the documentary source is either inaccurate, incomplete or erroneously biased (Waselkov 2001:20). Historical archaeologists derive special satisfaction in correcting or clarifying the written record through the analysis and interpretation of a group's material culture (Scharfenberger 2000).

Regardless of what role written documents are accorded, their limitations must be articulated before their value in interpreting a site can be determined. Simply put, history has always been written by a literate few, about a literate few, to be read by a literate few or, as Charles Orser correctly states, "only archaeology has the power to resurrect the daily lives and cultural patterns of the invisible men and women of the past" (Orser 1996:10). As a result, archaeology becomes the sole means of retrieving the information on the lives of those

marginalized groups of the past. Thus, the majority of written records deal with a select few individuals of means, while the lives of the vast majority of people have passed in anonymity (Walker 1978:208). The latter condition, for the most part, describes the congregation who worshipped at the Old Scots meetinghouse.

Historical archaeology poses many challenges unique in the scope of archaeology as a whole. Some researchers argue that artifact assemblages and their related contexts found on historic sites are generally more complex than those on prehistoric sites. As a result, knowledge of the historic phase from when the artifacts originate is as important as an ability to identify the form and function of the objects themselves (Cleland and Fitting 1978:243). I argue, that this holds particularly true for colonial and post-colonial religious sites. It is not enough to say, for example, that European chalk flint flakes represent the manufacture or retouching of gunflints on the site. What is significant is that gunflints were found on a site during a period when a sacred structure is present, and how they relate to the activities at the site, or the attitudes of the occupants. The use of historic documents provides the archaeologist with a decided advantage when attempting to interpret anomalous material culture found on historic sites.

One of the seminal works combining archaeological data with historic documentation is Diana Wall's (1994) *The Archaeology of Gender*. This study used data collected from several temporally-related sites in New York City and historic records of the associated households to understand the changing role of women as the workplace moved from the home to a separate, outside location. Wall has demonstrated the importance of both documentary resources and artifacts to a comprehensive study of historic period sites and how archaeology can and does shed new light on the past. Historical records provided numerous variables in which to test her theories.

Other studies used probate inventories to compare the archaeological record of a site with an assessed inventory to determine the value, both sentimental and financial, placed on certain items. Other records, such as family bibles can provide a great deal of information about family milestones and cultural transformations over time. Excavations at the Luyster House site in Middletown, New Jersey combined the use of both of these sources. An existing 18th-century probate inventory included, among other things, entries for case bottles and clothing accessories such as wool hats, items not thought of as objects of value in today's world. However, several 18th-century case bottles found in a context dated to circa 1830 suggest that these bottles were valued for a significant period of time and were passed down, possibly over several generations (Scharfenberger and Veit 2001-2002). The Luyster family bible also contained a variety of useful information, including family milestones, such as births, marriages, and deaths inside the blank leaves. The first entry in the Luyster bible is dated August 12, 1688 and the final entry is dated Dec. 12, 1875. Each entry written between 1688 and 1806 is written completely in Dutch. Beginning with the date Oct. 7, 1835, until Dec. 12, 1875, every entry is in English. In entries during the latter part of the eighteenth century into the first decade of the nineteenth century, English words were sporadically mixed with Dutch (December instead of desember), and the anglicization of first names became prevalent (Peter instead of Pieter, John instead of Johannes). This suggests a gradual transition from Dutch to English over the course of several generations. This gave researchers an opportunity to compare the material culture of a Dutch family with the changes in language and familial relationships over time. Thus, the trend evident in the early-nineteenth century archaeological record from the site appeared to be paralleled by surviving historic documentation.

D. Research Questions for the Project

To achieve the goals put forth under the subfields of Cultural Landscape Studies and Historical Archaeology, a number of specific questions which have the potential to be answered based on the preliminary fieldwork and documentary research include, but are not limited to:

CULTURAL LANDSCAPE STUDIES

What were the dimensions of the meeting house?

What was the design?

Was the layout similar to contemporaneous meeting houses in Great Britain?

Was the Old Scots meetinghouse a standard design for colonial sacred structures on the frontier?

Is there evidence of worship in the open field prior to a structure on the site?

Was there a pattern of grave placement by class, ethnicity or gender relative to the location of the meeting house (i.e. prominent members, church elders, ministers, etc. closest to the meeting house)?

Does this compare to Scottish practices?

Can it be discerned from the extant grave markers?

Is the anomaly under the fieldstone marker a grave?

Do they differ from Anglican stones?

If so, can the cultural/temporal affiliation be determined?

How was the site utilized after the meetinghouse was abandoned?

HISTORICAL ARCHAEOLOGY

Does the artifact assemblage give an indication of what activities took place at the meeting house?

Was it strictly religious or secular also?

What role did the meetinghouse play in the larger context of everyday life?

Was the meeting house, and religion in general, a means of "holding on" to the ethnic identity of the congregation in the New World?

When was the structure built?

When was it abandoned?

Was it demolished, or left to deteriorate?

When did services cease being held at this location?

Are the repair episodes cursorily mentioned in the historic records evident in the archaeological record?

What type of goods did the congregation have the access and means to acquire?

If food remains were found, is there a difference in their church meals versus other religious and ethnic groups?

Can artifacts associated with religion, or more specifically, Presbyterian ritual be identified in the archaeological record?

What types of objects were used in the early religious services?

How effective is GPR in the study of Old Scots, and similar sites?

Is there evidence of American Indian converts at the site?

GENERAL QUESTIONS

Is religion, or sacred activities visible in the archaeological record?

Does the study of religious sites require a different methodology from other sites?

If so, what would it entail?

The research questions posed for this study are designed to examine both the spiritual and secular aspects of the Old Scots congregation. Questions related to the physical attributes of the meetinghouse may provide information on how building techniques changed, if at all, from those

in the Old World. Similarly, the materials used give some indication of the influence on the local builders. The organization of the surrounding graveyard could address the larger questions of the role class, gender or ethnicity played in sacred activities. The use and treatment of the site during and after the period of the meetinghouse allows for the examination of veneration toward the site, and the changes in religious doctrine that occurred over time.

IX. FIELDWORK

This chapter details the methodology employed in the survey and excavation of the Old Scots Burying Ground site. All of the fieldwork for the project was done as a voluntary effort. Soil from all shovel tests and units was sifted through 1/4-inch screens, and excavation units were troweled. The dating of deposits is discussed in below in Chapter XII artifact analysis.

A. OLD SCOTS BURYING GROUND (Site 28-Mo-294)

Before the excavations began, site benchmarks were set from a recently completed, detailed surveyor's plat of the project area (Figure 16). Site benchmarks of known coordinate and elevation were then established, to be used in the accurate mapping of the location and limits of all archaeological excavation units and features. The fieldwork consisted of a metal detecting survey, shovel testing and the hand-excavation of test units and trenches. A ground penetrating radar (GPR) survey of the entire site was conducted prior to the fieldwork. A block excavation was undertaken to expose the foundation of the meetinghouse. Each component of the fieldwork will be described within a discreet subsection of this chapter. The block excavation will be discussed within the unit subsection. Features will be discussed within the excavation unit in which they were encountered. A summary of the features encountered at the Old Scots Burying Ground site is provided in Table 3.

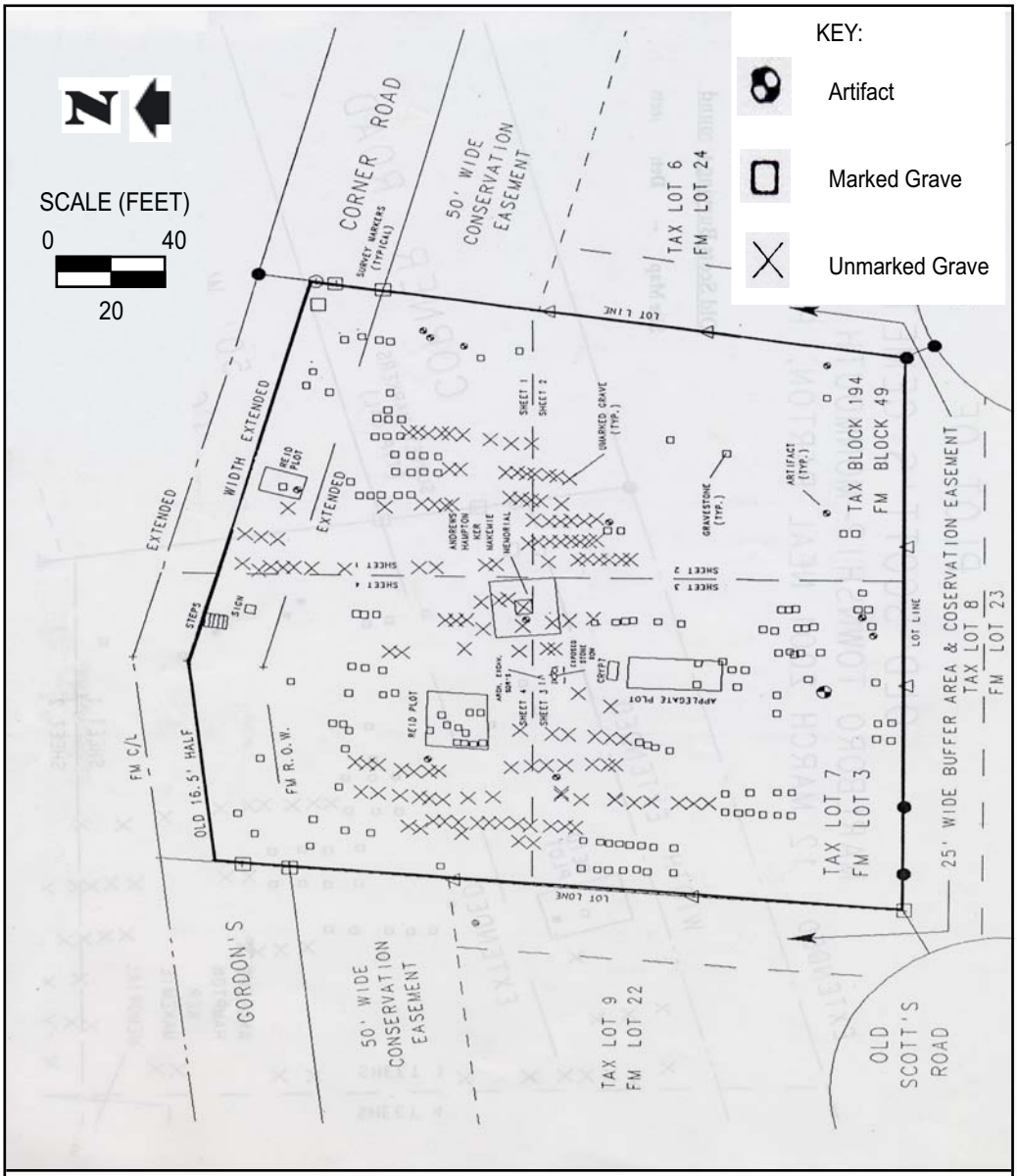


FIGURE 16: Surveyor's Plat of Old Scots Burying Ground.

TABLE 3

SUMMARY OF FEATURES FROM OLD SCOTS BURYING GROUND SITE

Feature No.	Provenience	Description
1	Multiple	Meetinghouse foundation
2	Unit 6	Post mold
3	Unit 6	Robbed footing
4	Units 8 and 10	Robber's Trench
5a	Unit 10	Post mold
5b	Unit 10	Post mold
6	Unit 10	Post mold with basin extension
7	Unit 9	Post mold
8	Units 11 and 12	Grave shaft
9	Unit 14	Soil anomaly
9b	Unit 14	Post mold
10	Unit 15	Post mold
11	Trench 1	Possible robbed foundation
12	Trench 2	Post mold
13	Trench 2	Post mold
14	Trench 2	Possible robbed footing
15	Trench 2	Post mold
16	Units 11 and 12	Grave shaft
17	Units 11 and 12	Grave shaft
18	Units 11and 12	Grave shaft
19	Unit 16	Animal burrow disturbance
20	Unit 16	Grave shaft
21	Unit 9	Horizontal post mold

1. *Metal Detecting Survey*

The initial phase of fieldwork at the Old Scots Burying Ground was begun in November, 2000 under the direction of the author, with assistance from Dan Sivilich and several volunteers from the Monmouth Battlefield State Park. A walkover of the graveyard and a survey of the area using electronic surveillance equipment uncovered several artifacts. To ensure complete coverage of the subject area, 300-foot tapes were used to create corridors that would provide the metal detector operator (hereafter operator) with a visual guide to delineate areas to be swept. The tapes were set at widths of 10 feet and were oriented north/south along the eastern boundary of the site. Metal detecting commenced along the easternmost boundary of the historic buffer and proceeded

west. As the operator completed a pass, a tape was laid out 10 feet west of the previous tape until the operator reached the treeline along the western boundary of the historic buffer. During each pass, the operator would overlap the tapes with the metal detecting unit to ensure that there were no gaps in the survey.

The metal detecting unit used in this survey was a *White's Spectrum XLT*. This machine allows the operator to choose from a variety of settings, which range from discriminating against all but precious metals to identifying any and all metallic materials present. All of the available settings were tested for their viability; however, the setting used during this survey was the "Relic" setting, which was the second most sensitive available. The "Prospecting" setting, which was the most sensitive, registered too many false "hits" and was abandoned after initial testing. To exhaust the potential of the project area, every metal detecting hit was excavated and the surrounding soils screened 100%.

All artifacts were recovered from a depth of one to eight inches below the surface. Particular attention was paid to large open areas east and north of the monument. These areas would have theoretically been large enough for the type of structure built during the seventeenth century. The metal detecting survey of the site was conducted using a system developed and perfected at the Monmouth Battlefield (see Sivilich 1996) and used successfully at other religious sites (see Scharfenberger 2000). This system calls for the identification, excavation and tagging of artifacts across the site (Figure 17). Each artifact is then assigned an individual number. The location of each artifact is taken in relation to pre-established benchmarks. A linear measurement and compass reading to the benchmark, along with the depth at which the artifact was recovered are recorded. This data is placed in an ArcView program, which allows a map of the site to be

FIGURE 17: Locations of Isolated Finds from Old Scots Burying Ground.

generated showing the horizontal and vertical location of each artifact. This allows any patterning that would ordinarily fall between the cracks of shovel test intervals or arbitrary unit placement to be observed.

Most of the artifacts recovered from the site were architectural-related, with a moderate amount of personal items and a nominal amount of coffin-related hardware and domestic items. Among the coffin-related hardware were several coffin handles. One was a smaller, ornate white metal handle with the embossment, "Our Darling" (Plate 3). This was recovered near the Reid family plot, which includes the graves of John (d. 1904, aged 76), wife (d. 1899, aged 69) and daughter Hannah (d. 1869, aged 17 years). It is possible that the handle was from the latter burial who predeceased both of her parents. Two "plain ball" coffin handles (Plate 4) were found along the extreme southern boundary of the site. Both were found relatively close to the surface and may represent a burial disturbed by modern development on the lot adjacent to the cemetery.

PLATE 3: White Metal Coffin Handle with Embossed “OUR DARLING”. (Photo by Rob Tucher)

PLATE 4: Example of “Plain Ball” Coffin Handle. (Photo by Rob Tucher)

PLATE 5: Ornate Brass Tablespoon Found West of Meeting House. (Photo by Rob Tucher)

Other notable artifacts include an elaborately decorated brass tablespoon (Plate 5) found approximately 60 feet northwest of the monument and a shipping tag found on the west side of the mound. These artifacts will be discussed further in Chapter XII.

2. Ground-Penetrating Radar (GPR)

On February 17, 2001, Ron LaBarca of USRADAR, Inc., conducted a ground-penetrating-radar (GPR) survey of the burial ground (Plate 6). This was undertaken to determine the number of burials, if any, present in the areas where no grave markers currently stand, and to locate any possible stone-lined features, such as privies or wells, that may be associated with the church structure.

PLATE 6: View of Old Scots Burying Ground Facing Southeast. (Photo by Author)

The GPR system utilized for the Old Scots Burying Ground survey consisted of a mobile unit roughly the size and form of a push lawn mower (Plate 7). The system works by the emission of pulses of electrical energy directly into the ground under the unit. This energy either dissipates or is reflected back to the unit, where the signal is processed and displayed on a screen monitored by the operator. When a disturbance, or anomaly, is encountered, the visual representation is characterized by a series of arcing lines that may be measured vertically against a depth chart located on the right side of the screen. These data are recorded in the unit memory, and can be printed out in hard copy for further quantification and analysis (LaBarca 2000:2-3).

PLATE 7: Ron LaBarca Conducting GPR Survey of the Site. (Photo by Author)

The GPR survey of the site consisted of numerous individual passes oriented north/south, with each transect given a separate survey number. Each subsequent pass was set approximately 4.0-feet from the previous transect to avoid recording a single anomaly twice. As anomalies were encountered, a pin flag was placed at each location along the transect (Plate 8). Once the survey was completed, the first pin flag from each transect was given a compass and linear tape measurement relative to Bm-1. This allowed all of the identified anomalies to be recorded within the FastCad map of the graveyard. For the purpose of discussion, the assumption will be made that each of these anomalies represents a grave shaft. The unit was calibrated with known burials to visually identify the appearance of a grave shaft on the screen. Particular care was taken to

identify the boundaries of known, marked grave shafts to avoid interpreting the edge of an existing grave as an anomaly.

The interpretation of the GPR data results from the intensity and degree of arcing occurring in the horizontal lines visible on the screen. As illustrated in Figure 18, the arcing lines to the left of the printout are less bold than those on the right, which indicates the anomalies on the right are more defined and possibly consist of more solid materials than those on the left. This could be the result of deteriorated coffins on the left and intact coffins on the right, the latter creating a defined void below the initial obstruction.

PLATE 8: Pin-Flagged Locations of Anomalies Detected During GPR Survey. (Photo by Author)

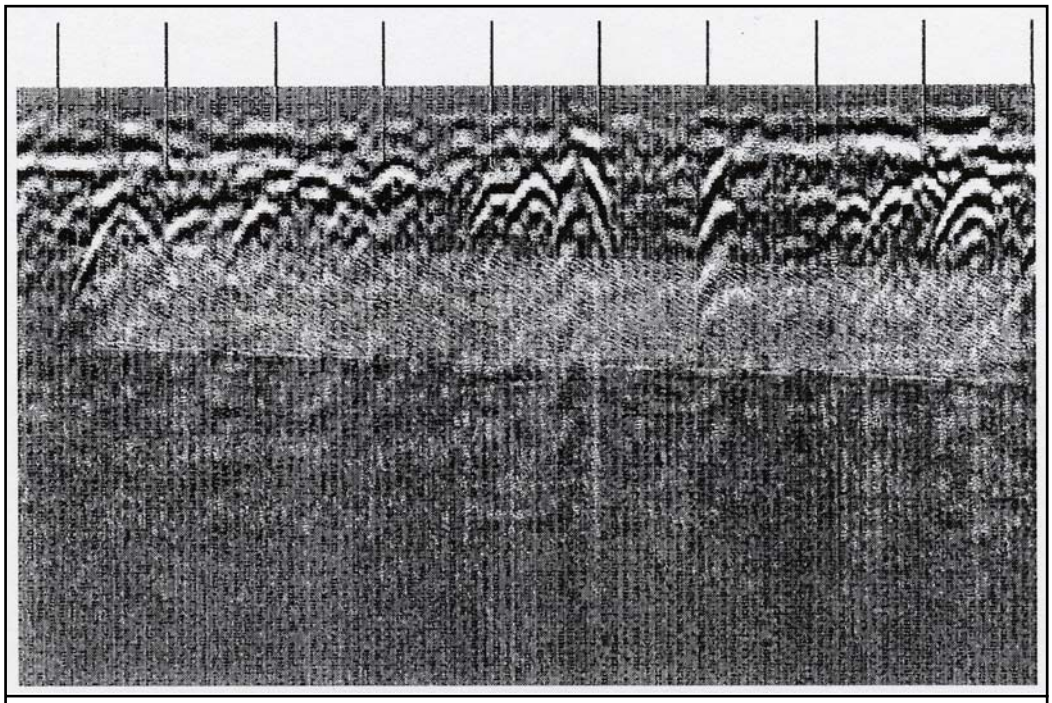


FIGURE 18: Ground-Penetrating Radar Printout (Single Burials).

An approximate total of 177 unmarked grave shafts were recorded during the survey. Several burials appeared to contain more than one coffin: some side by side, others stacked vertically (Figure 19). There could be several explanations for so many grave shafts without any surface markers. One reason could be through accidental trauma and/or removal. The GPR survey has indicated that approximately five burials are situated under the monument mound. This may have resulted in the removal of markers during the time of its construction in 1895. Also, a brush removal program during the 1940s may have accidentally broken or dislodged stones, with loose fragments inadvertently removed with other debris. Another reason could be that the markers have simply deteriorated over the years and either were removed or disintegrated, leaving no trace of their existence or original location. It should be noted, however, that stone markers in other sections of the graveyard that have cracked or broken are still partially represented by an existing base or a displaced fragment lying on the surface nearby. Another reason for the markers' absence may be the fact that the markers used on these graves were fashioned from wood, which is prone to decay and decidedly less sturdy than markers fashioned from limestone, marble, or shale. Wooden markers, along with ones made of stone, were common in the seventeenth and early eighteenth centuries (Sarapin 1994:19-20). If the markers associated with the grave shafts were made from wood, they likely would have been in the form of a cross, or post with an engraved inscription. Wooden crosses as a means of marking graves have been used in England since Saxon times. The archaeological evidence of a wooden marker would be a square or circular postmold feature at the head, foot, or both ends of a burial (Riordan 1997:35-38). Because of time constraints, however, the excavation of the grave

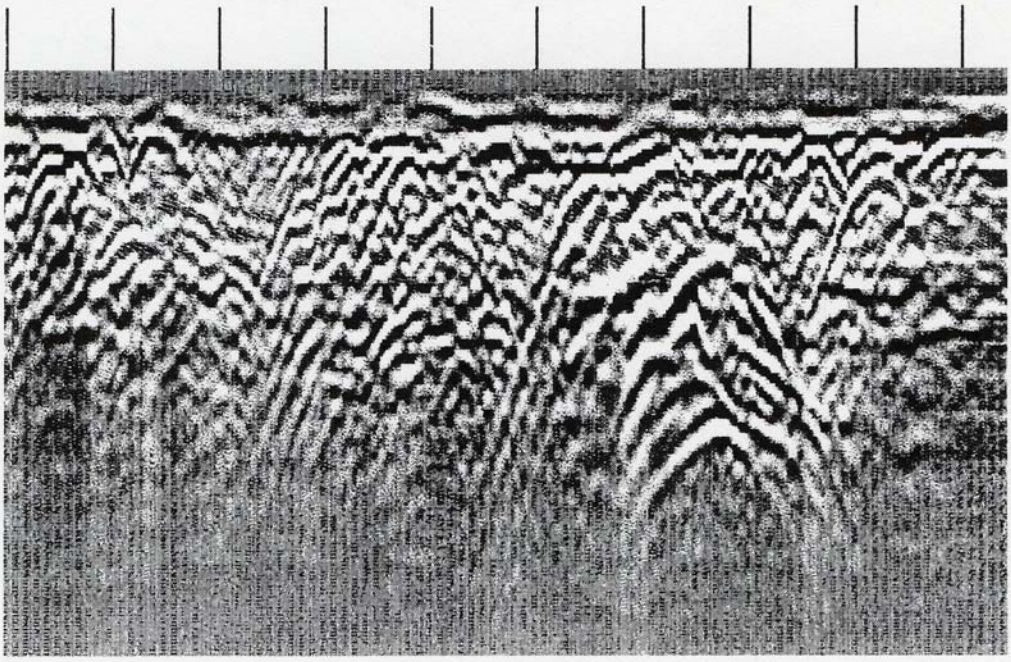


FIGURE 19: Ground-Penetrating Radar Printout (Multiple Burials).

shafts identified by GPR to determine the presence or absence of these features fell outside the parameters of this study.

The GPR survey uncovered no features other than grave shaft features. Historic references indicate that during the seventeenth and eighteenth centuries, services were held every other week, or sometimes once a month, depending on the availability of a preacher (Mandeville 1927:91; Waldron 1977:7, 9). In addition, there is no evidence that anyone ever lived at the site. A parsonage associated with the Reverend William Tennent was built in 1705 on a section of what would become the Monmouth Battlefield (Plate 9). It appears that the congregation only purchased the property in 1735. Documentary sources indicate that the previous pastors lived away from the Old Scots site. Therefore, the relatively sporadic activity suggests the church did not have a need for a privy or well, which was a labor-intensive undertaking.

PLATE 9: 1857 Line Drawing of Old Tennant Parsonage, Built Circa 1705. (Author's Collection)

3. *Shovel Testing*

Shovel testing in an area with known burials presents several challenges which make traditional field methodology impractical. It is not feasible to create a grid for shovel test placement across a known cemetery site. Much of the site has been disturbed by graves and the areas of intact soils would likely be too small to invest such labor intensive energy in testing the entire site. Therefore, it was decided to place transects judgmentally in areas determined by the GPR survey and field reconnaissance to be potentially undisturbed. However, a set interval of ten feet would be utilized along every transect to maintain a consistent sampling strategy for the duration of the fieldwork. Shovel tests were placed along these transects at 10-foot intervals. If the remains of a structure were present, either in the form of features, artifact deposits, or building rubble, then close-interval shovel testing over such a relatively small area would undoubtedly uncover some evidence. The shovel tests followed a sequential numbering system, since the transect orientation resulted in perpendicular placement in some instances.

Once the preliminary survey was completed, it was decided to place shovel tests in the areas immediately east and north of the monument where no graves were visibly marked. Two transects were laid out: Transect A was oriented north-south and Transect B was oriented east-west A third transect, Transect C was placed in the southwest quadrant of the site to examine the accuracy of the GPR in identifying unmarked graves. Transect D was placed parallel to Transect A five feet to the west in an attempt to examine the soils under the extreme eastern edge of the monument mound. Transects E and F were oriented east/west and were placed along the extreme southern and northern edges of the monument mound.

A total of 43 shovel tests were excavated across the site (Figure 20, Appendix A). Artifact density was relatively light (N=296), with 16 shovel tests completely sterile. Stratigraphy was relatively consistent, generally comprised of two to three strata and consisting mainly of a silty loam plowzone (0 to 1.3 feet thick), underlain by a sandy loam/sandy clay loam (0.4 to 2.6 feet), underlain by a fine sand/sandy loam (1.5 feet to base of excavation). When a shovel test was placed over a grave, two strata were present: the silty loam Stratum A plowzone, underlain by a mottled, fine sandy loam which extended to the bottom of the excavation.

Transects A and B were placed in areas with no extant gravestones and where the GPR indicated that graves were sporadic or not likely present. Based on these conditions, this area was considered to be a potential location for the meetinghouse. Of the eleven shovel tests excavated along these transects, five contained cultural material. These consisted of small amounts of architectural material, personal items and heating by-products. No features or dense artifact deposits were present that would indicate a structure as having been within the immediate vicinity. However, the small scatter of architectural material likely originated in the meetinghouse.

Transect C was placed in the southwest quadrant of the site specifically to test the accuracy of the GPR survey in regard to locating unmarked graves. Six shovel tests were laid oriented north/south. Shovel Tests 13, 15, 16, and 17 consisted of two strata and the soil was relatively loose throughout. Conversely, Shovel Tests 14 and 18 contained three, very compact strata.

Transect D was laid out along the extreme eastern edge of the monument mound, five feet west of Transect A. A total of five shovel tests were excavated along Transect D. All five contained cultural material, including a glazed redware sherd from Shovel Test 23 and a clay pipe fragment from Shovel Test 25. Shovel Test 26 was the only shovel test with two strata along

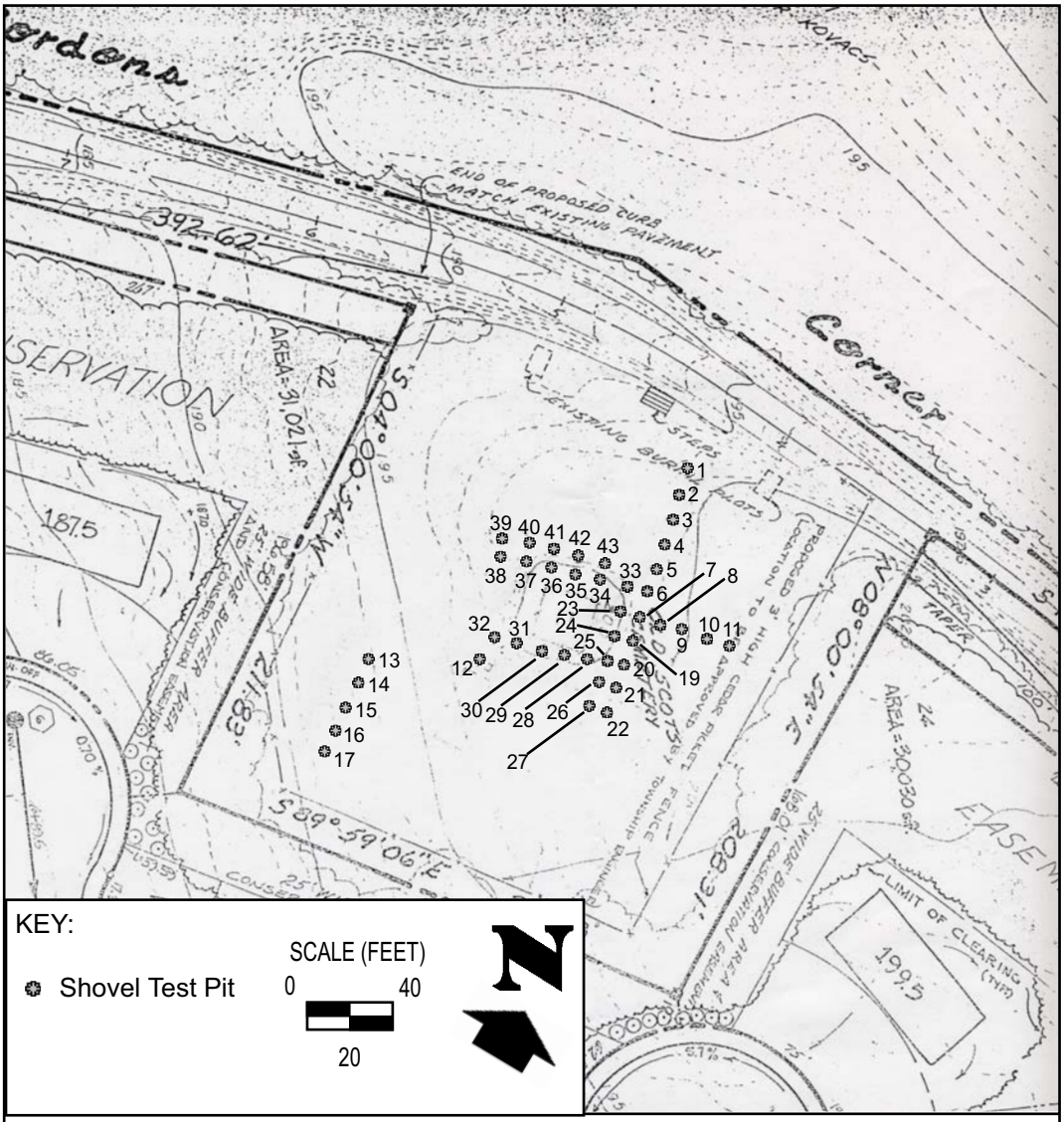


FIGURE 20: Locations of Shovel Tests at the Old Scots Burying Ground.

Transect D. Interestingly, a handwrought nail and large brick fragment were recovered from Stratum B. The brick fragment was recovered at a depth of 3.5-feet below the surface, indicating that it may have been included in the soils that were backfilled after a grave was dug. The nail and brick from Shovel Test 26 and the handwrought nail from Shovel Test 27 likely represent architectural material from the meetinghouse.

Transect E was placed along the southern edge of the monument mound. A total of five shovel tests were excavated along Transect E, none indicating unmarked graves. All five contained a small amount of cultural material, including a stoneware body sherd (Plate 10) from Shovel Test 28 and brick fragments from Shovel Tests 30, 31, and 32. A fieldstone fragment, possibly from the foundation was also recovered from Shovel Test 32.

Transect F was placed along the northern edge of the monument mound. Six shovel tests were excavated along this transect, all positive for artifacts. These artifacts included broad window glass fragments, handwrought nails, some pulled, amber bottle glass, clay pipe fieldstone fragments and charcoal. The fieldstone fragments were identical to the foundation stone, but did not exhibit the form or density that would indicate a feature or some type of patterning. All of these shovel tests consisted of three strata, indicating that there were no graves present.

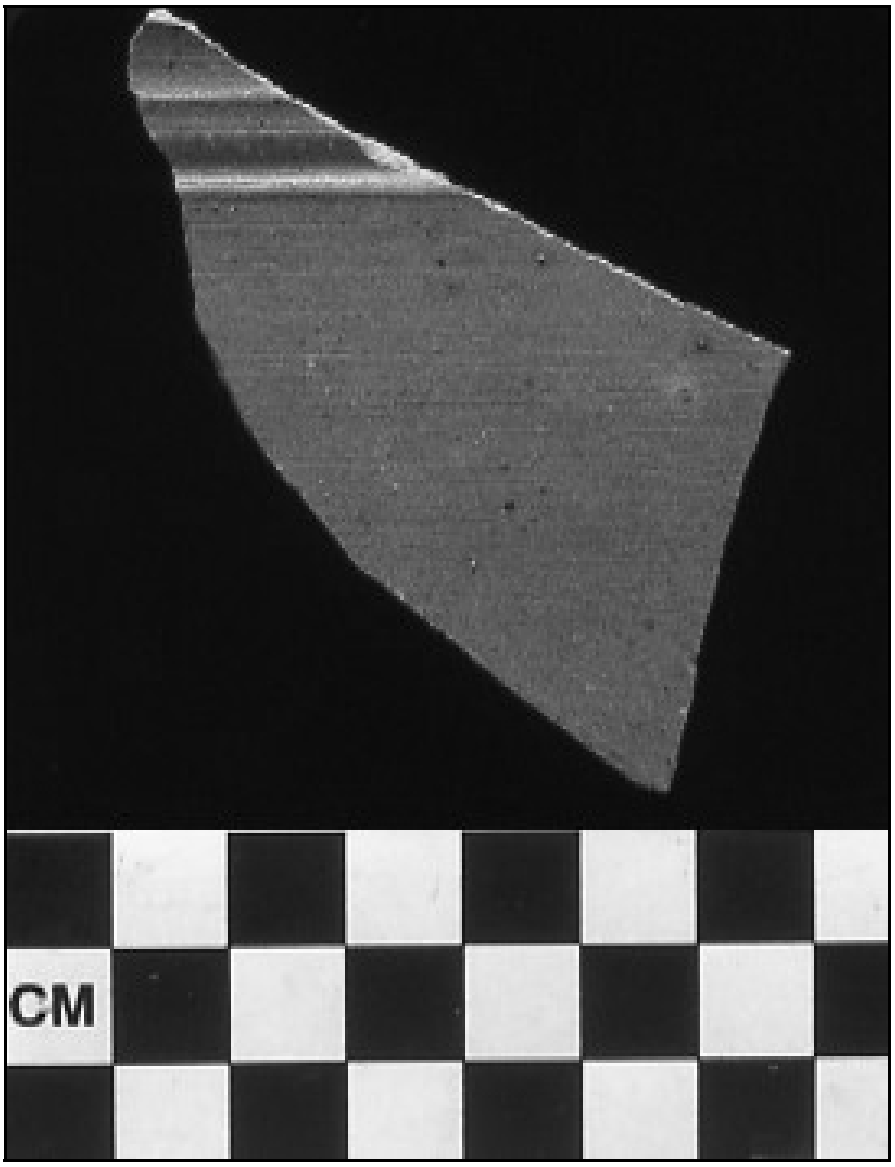


PLATE 10: Brown Stoneware Body Sherd Recovered from STP 28. (Photo by Rob Tucher)

As a result of the relatively high artifact count in Transect F, an additional transect was laid out five feet to the north. This was designated Transect G. A total of five Shovel tests were excavated along Transect G. Shovel Tests 39, 41, and 43 were positive for cultural material. These consisted of broad window glass, nails, fieldstone fragments, charcoal and possibly cultural lithic material. However, the density was significantly less than that of Transect F. This indicates

that the debris field decreases further north from the meetinghouse. Interestingly, all five shovel tests also consisted of three strata, indicating that there were no graves present.

4. *Unit Excavation (Unit 1)*

Unit 1 was a 3.0' x 3.0' square placed in the northeast corner of the monument border to examine the soils and stratigraphy of the monument mound (Figure 21). Initial excavation of Unit 1 indicated that the soil was silty clay that was difficult to screen. This soil was unlike those encountered during shovel testing, which were easily screened sandy soils. This suggests that the soil that comprises the mound was imported onto the site and placed on the original ground surface. At a depth of 0.8-feet below the surface, it was decided to put a shovel test inside the unit to determine the depth of the fill. At a depth of 2.8-feet below the surface, light brownish gray medium sand was encountered. This was interpreted to be the original ground surface. Underlying this was yellowish-brown fine sand beginning at 3.3-feet. At this level, a bucket auger was used to excavate the unit down to a depth of 5.0-feet below the surface. No artifacts were recovered from the soils below the monument mound.

5. Miscellaneous Test Units (Units 9, 13, 14 and 15)

These four units were placed west of Block 1 to examine an anomaly encountered by the GPR believed to be a buried walkway. In addition, the topography in this area was characterized by an undulating ground surface which appeared to be a raised mound adjoining a gully-like depression. Both were oriented east/west, with a slight northwest curve.

Unit 9 was placed 25.0-feet west of the block excavation in an area characterized by a brown-out of the grass cover along a raised mound extending west from the meetinghouse foundation. Stratum A consisted of loose, loamy sand underlain by a heavily-mottled, compact

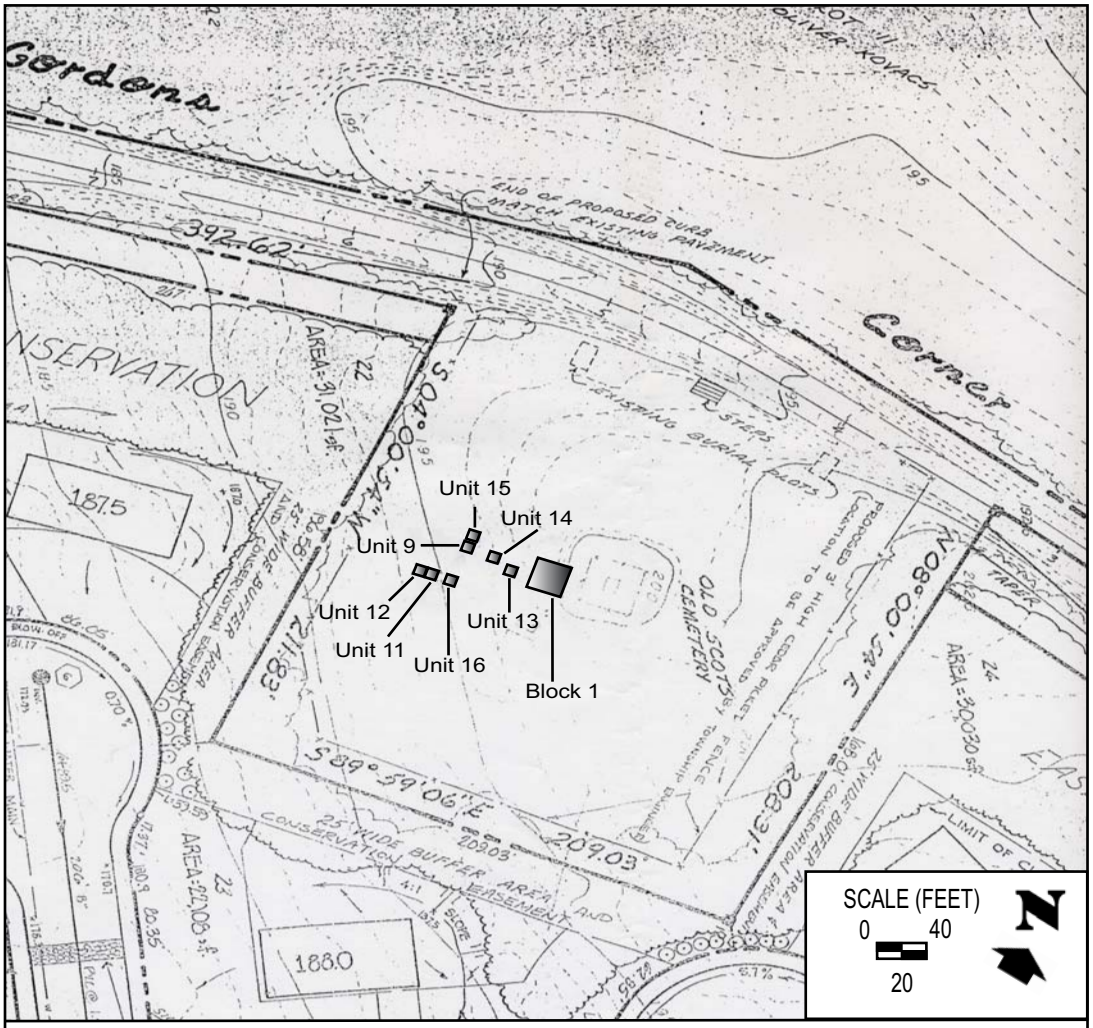


FIGURE 21: Locations of Units at the Old Scots Burying Ground.

sand. Interestingly, a horizontal "post-mold" was situated next to what at first appeared to be a concentration of bone, but was in reality, wood that had been softened by insect activity. The horizontal post mold appeared to be a fence post that was dislodged and lying horizontally. This was designated Feature 21, mapped and excavated. Several machine-cut nails were recovered within the feature. A second dark stain was encountered in the southwest quadrant of the unit. This at first appeared to be a vertical post mold approximately 0.8' in diameter, however further excavation showed it to be larger and more irregularly-shaped. This was designated Feature 7, photographed and excavated. A large amount of charcoal, redware flower pot sherds and machine-cut nails were recovered from Feature 7. Once excavated, it became evident that Feature 7 was a fence post with a tapered or pointed end that was set at an angle and burned *in situ*.

Dark mottled soils were present in the northwest quadrant of the unit at a depth of 1.5-feet below horizontal. This mottling became an irregular-shaped stain which appeared to be associated with Feature 7. As a result, this anomaly was designated Feature 7 Ext. and photographed. Feature 7 Ext. is believed to be the remnants of a root ball or debris that was burned at the same time as the fence post. Feature 7 Ext. produced charcoal, redware flower pot sherds and interestingly, a handwrought nail.

Units 13 and 14 were placed in an area shown by the GPR survey to be the possible location of a gravel walkway. Unit 14 was oriented slightly northwest to accommodate the possible curve in the walkway identified by the GPR. Unit 13 was located four-feet west of Block 1. Unit 13 consisted of a total of two strata and four levels and contained few artifacts. No evidence of a paved walkway was uncovered in Unit 13. The area where Unit 13 was located is

likely an undisturbed area west of the meetinghouse and east of the fenceline encountered in Unit 9.

Unit 14 was located 6.0-feet east of Unit 9. This unit consisted of three distinct strata. Stratum A contained a moderate amount of artifacts including several sherds of ironstone and redware flower pot, a clinched horseshoe nail and a pulled handwrought nail, among others. Artifact density remained moderate in Stratum B, with redware flower pot sherds (Plate 11), a clay pipe stem, brick fragments, an embossed ironstone body sherd (Plate 12), square nails and a clinched wire nail among the items recovered. In Stratum B, Level 3, at a depth of 1.05' BH a dark stain was encountered. This was designated Feature 9. It was irregular in size and was located along the center of the unit, measuring a maximum width of 0.8' at the east end, and widening to 1.6' at the west end. Feature 9 was photographed and removed. The depth of the feature was approximately 0.6' BH and contained nails and charcoal. Once Feature 9 was excavated, a second anomaly was encountered. This feature was located along the north wall. It was similar in both form and composition and was designated Feature 9B. The excavation of Feature 9B indicated that it may be an irregularly-shaped post mold measuring 0.7' x 0.45' with an adjoining divot measuring a maximum of 1.0' x 0.5'. A single sherd of ironstone recovered from the northeast corner of the unit is likely related to Features 9/9B. An examination of the north wall of Unit 14 indicates that Feature 9 extends north and a flat ferrous metal strip situated 1.5' BH also extends well into the north wall.

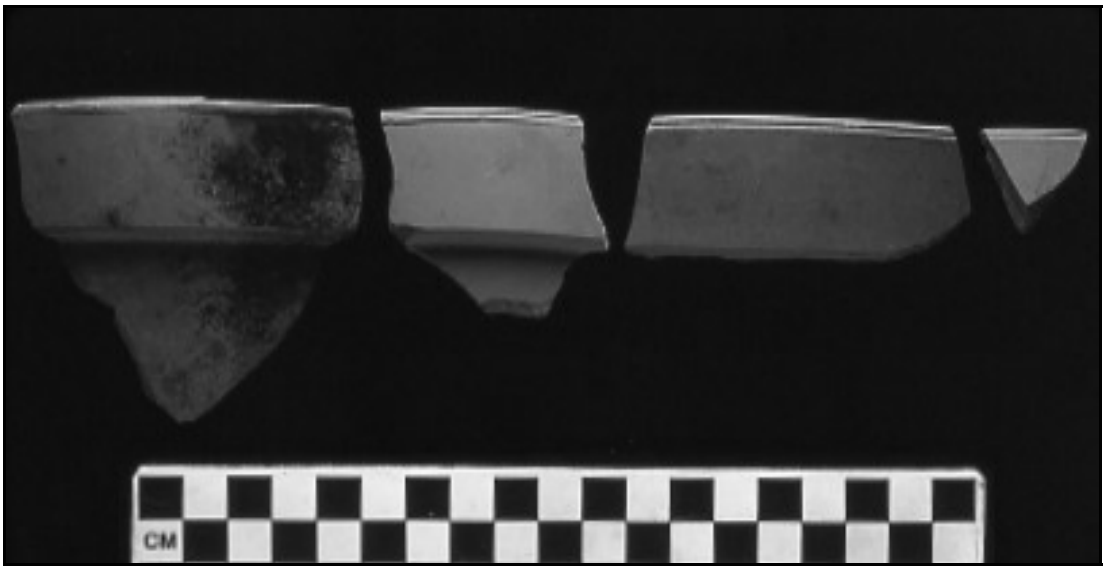
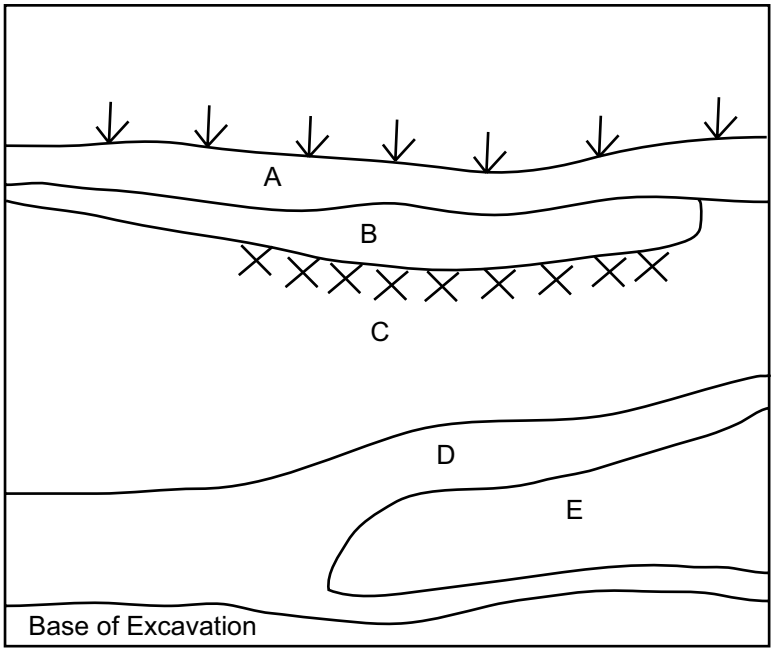


PLATE 11: Redware Flower Pot Sherds Recovered from Unit 14. (Photo by Rob Tucher)

PLATE 12: Embossed Ironstone Sherd Recovered from Unit 14. (Photo by Rob Tucher)

Unit 15 was placed two-feet north of Unit 9 in a corridor-like depression west of the meetinghouse foundation and oriented in an east/west direction. At the base of a relatively thin Stratum A (0.0'-0.55') was a shallow, but dense layer of gravel. This layer cross-cut the entire unit and contained no cultural material (Figure 22). Underlying the gravel layer was a yellowish brown sandy loam Stratum B. This stratum contained numerous artifacts including redware flower



SCALE (FEET)
0 1.0
0.5

Key:

A: 10YR4/4 dark yellowish brown silt loam

B: 7.5YR5/6 strong brown fine sand loam

C: 10YR3/3 dark brown sand loam

D: 10YR5/6 yellowish brown sand clay loam

E: 10YR2/1 black ash/charcoal

Wire Mesh

FIGURE 22: Unit 15, North Wall Profile.

pot sherds, machine-cut nails, clear bottle fragments, wire fragments and charcoal. The wire appeared to be part of a large mesh lodged in the east wall of the unit, possibly part of a fence. The large amount of charcoal and redware flower pot sherds indicates an association with the deposits first encountered in Unit 9. Stratum C, underlying the fence section was a dark brown sandy loam containing redware, clear bottle glass and a large quantity of charcoal. A clinched handwrought nail was also found in Stratum C. A circular post mold was encountered at a depth of 1.6' BH. This was designated Feature 10. Upon excavation, Feature 10 measured 0.2' deep and 0.5' in diameter. The southwest quadrant of Unit 15 was characterized by a dense concentration of charcoal, including several large fragments of charred wood. This deposit appears to be the result of a burned stump and roots. Underlying Feature 10 and the charcoal deposit was Stratum D, a yellowish brown, sandy clay loam. The excavation of Stratum D in the southeast quadrant uncovered a discreet layer of black powdered charcoal/ash. This appeared to cross-cut Stratum D, with the latter overlying and underlying the ash layer.

The ash layer was designated Stratum E. This stratum produced a large ironstone body sherd, possibly from a pitcher, and a square nail shank. The unit was then profiled, photographed and backfilled.

Block 1 included nine units and two unit extensions (Units *2-8, 10, 16, 2 Ext. and 5 Ext*,) that covered an area of 132 square feet (Figure 23). The objective of Block 1 was to examine the foundation of the meetinghouse and to see how much, if any, extends underneath the monument mound (Plate 13). The Block 1 excavation revealed a thin layer of silty loam overburden over a well-preserved, but partially robbed section of the foundation and natural

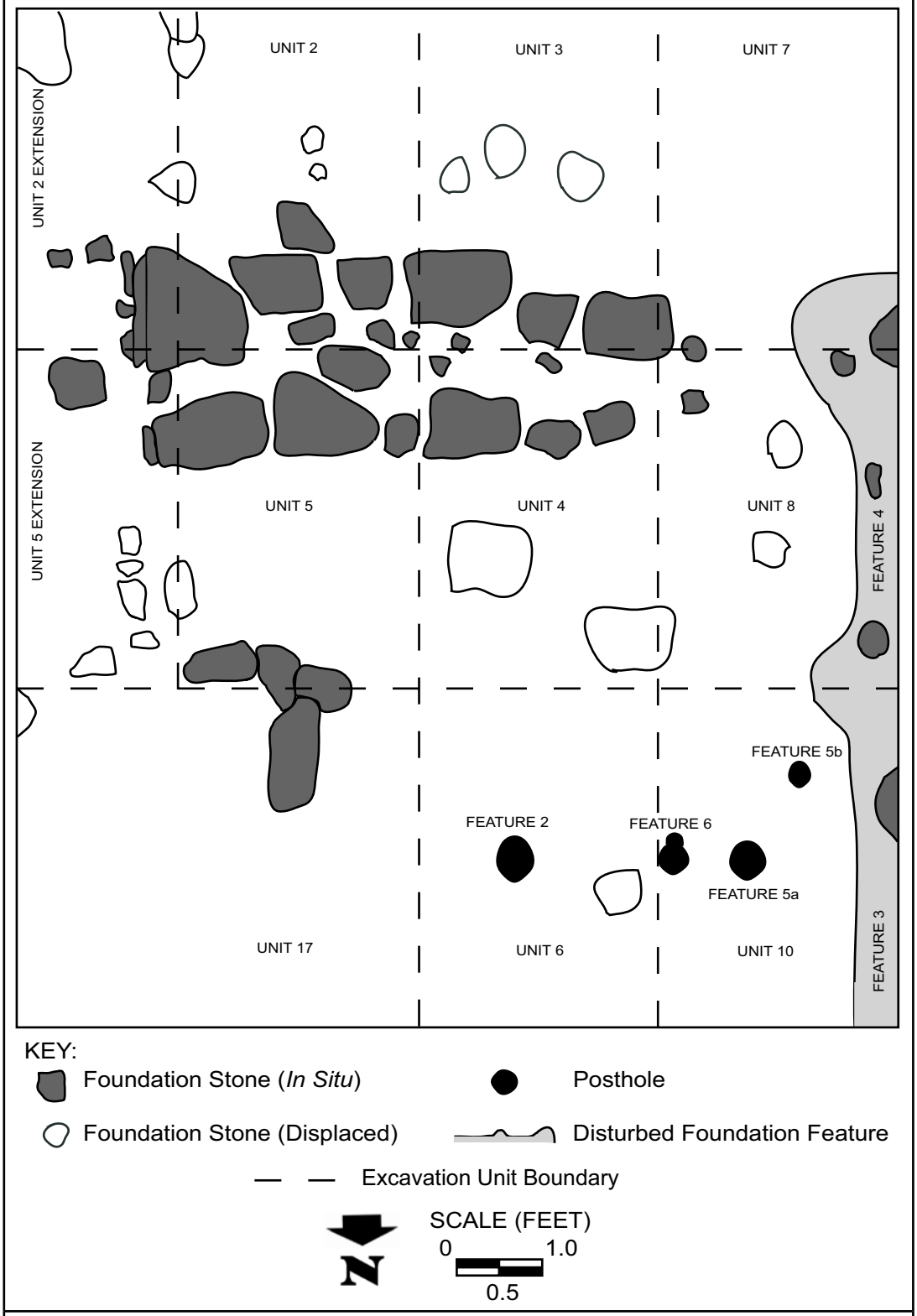


FIGURE 23: Block 1 Excavation, Plan View.

subsoil. The extreme eastern end of Block 1 actually cut into the base of the monument mound, thus the uppermost layer was comprised partially of fill soils originating in the mound.

All of the units within Block 1 measured 3.0' x 4.0' with the exception of the unit extensions, which measured 2.0' x 4.0'. Evidence of the foundation was found in all of the units; however, it was most intact in Units 2-5. The foundation was designated Feature 1. A master datum point was established in the southeast corner of the block to allow a consistent depth to be taken for all units from the same horizontal. Soils from all units were screened separately in arbitrary levels of 0.3'. A representative stratigraphic profile of Block 1 units is provided in Figure 24.

Unit 2 was the first unit excavated in Block 1 and was located in the southeastern corner of the block. The removal of Stratum A exposed numerous large fieldstones, some with oyster-shell mortar still present. This was determined to be part of the meetinghouse foundation, which was originally located during the GPR survey.

PLATE 13: Partially Excavated Foundation Section from Block 1. View East. (Photo by Author)

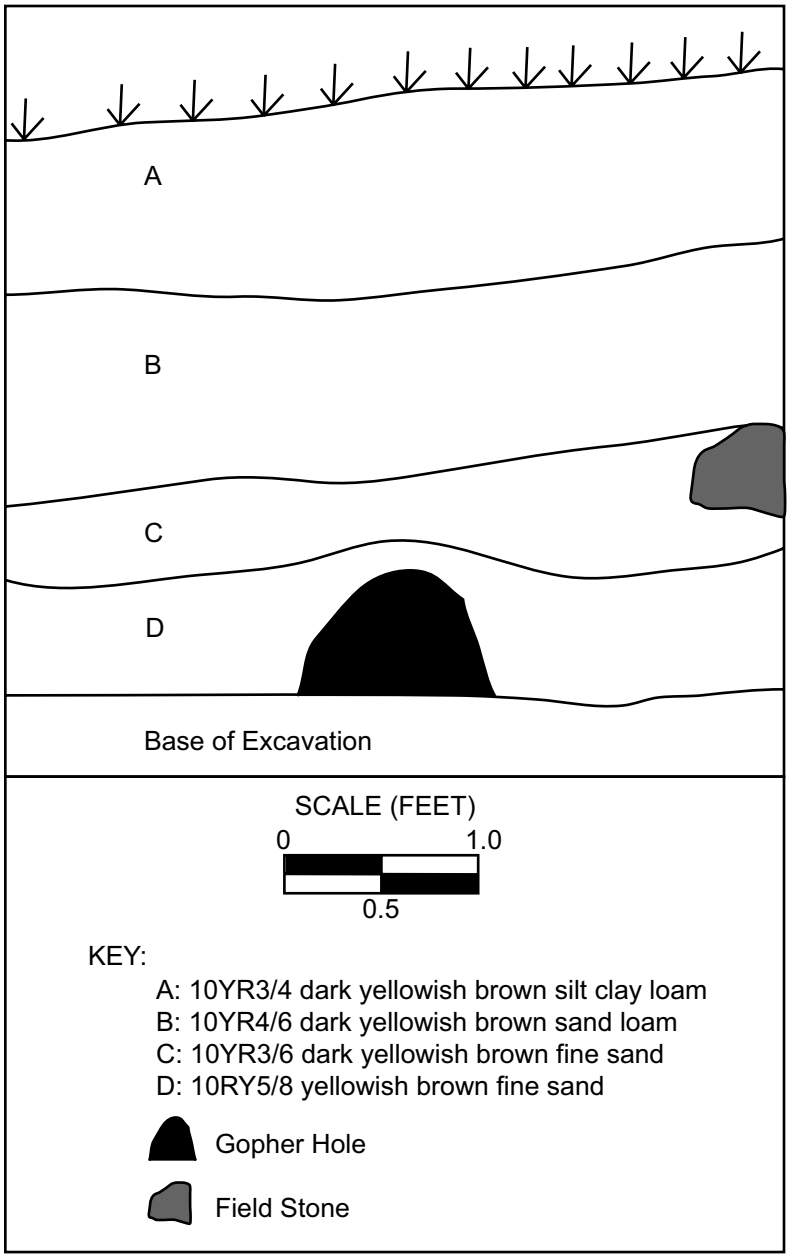


FIGURE 24: Unit 17, East Profile.

Probing surrounding soils indicated that the foundation continued further east and west of Unit 2. As a result, Units 3-5 were placed adjacent west and north of Unit 2 in an attempt to expose the foundation and determine its limits. Similar to Unit 2, the foundation was encountered in these units relatively close to the surface. Soils around the foundation generally consisted of a relatively thin 10YR 3/3 brown silty loam Stratum A underlain by a heavily mottled, sandy loam Stratum B. This was underlain by a sterile, 10YR 4/6 dark yellowish brown fine sandy Stratum C subsoil. Artifacts were concentrated mainly in the two upper strata.

Evidence of the foundation was found in all units within Block 1. A number of stones were disarticulated; however, they were still, in most cases, aligned with the others, which provided the orientation and location of the walls (Plate 14). Feature 4 was encountered along the west

PLATE 14: Disarticulated Foundation Stones from Block 1. (Photo by Author)

walls of Units 8 and 10. This feature was determined to be a robbed section of the builder's trench. A number of large loose stones were situated just to the east. Artifact density varied within Block 1, although the majority was architectural-related. Feature 3, encountered in Unit 6, and was interpreted to be a possible robbed footing from inside the meetinghouse.

A number of features were found within and just outside of the foundation. These included several post molds found in Units 4, 9, 10, 15 and Trench 2. The post molds encountered in Units 4, 10 and Trench 2 appears to be a support system for the meetinghouse floor. The post molds found in Units 9 and 15 were not related to the meetinghouse, rather, they are likely part of a fenceline constructed during the nineteenth century.

Unit 17 was located in the northeast corner of Block 1 and encompassed both the 3' x 4' unit and 2' x 4' unit extension. This unit had a relatively thick monument mound soil overburden, underlain by the same heavily mottled Stratum B found in the other Block 1 units that were determined to be the soils in the meetinghouse crawlspace. Artifacts found include brick fragments, handwrought nails and a glazed redware handle fragment, possibly from a porringer.

Within the excavation of Stratum B, a row of large, dry-laid foundation stones were encountered along the south side of the unit. These stones were oriented in an east/west direction and consisted of a single row of stones. This appears to be a center support system for the meetinghouse. Interior support foundations are usually situated perpendicular to the front or long walls, which would indicate that the meetinghouse was oriented with the front door facing west. However, if the structure was square as the documentary sources suggest, there would not have been a long wall to orient the interior floor supports.

The excavation of Unit 17 was terminated when sterile subsoil was encountered. A profile was drawn of the east wall (see Figure 24), which depicted four distinct strata. Stratum A consisted of a silty loam topsoil intermixed with silty clay loam monument mound soils. Stratum B was a mottled, sandy loam that produced mainly architectural material, along with a glazed redware handle fragment and interestingly, a quartzite groundstone. Stratum C was fine sand that contained the row of interior fieldstones. Stratum D was fine sand subsoil.

7. Excavation Units 11 and 12

Excavation Units 11 and 12 were placed west of two upright fieldstones that were believed to be crude gravemarkers (Plate 15). The GPR survey had indicated that there were anomalies that likely represent at least two grave shafts west and one east of the fieldstones. Unit 11 was a 5.0' x 5.0' square placed immediately west of the fieldstones. All soils were screened and natural strata were excavated in arbitrary levels of 0.3-feet.

Stratum A was a 10YR 4/4 dark yellowish brown fine sandy loam. Artifacts found include, a lamp glass fragment, an ironstone sherd, four square nail shanks and charcoal. At a depth of between 0.4-feet and 0.7-feet, a color change was encountered. This was designated Stratum B, Level 2. Artifact density throughout Stratum B was light, with 17 non-burial artifacts recovered. At a depth of 2.0' BH, it was decided to put a shovel test in the base of the unit to examine the underlying stratigraphy and determine if this was, in fact, a grave. At a depth of between 2.0' and 2.6', a human molar (Plates 16 and 17) and a handwrought nail with wood still affixed (Plate 18) were recovered. The human molar and all additional remains will be discussed at length in Chapter XIII. Excavation of the unit resumed with Stratum B, Level 6. All soils were carefully

PLATE 15: Upright Fieldstone Markers, View East. (Photo by Author)

troweled and screened, with dental picks used to expose any skeletal remains. Several handwrought nails were encountered, and were point provenienced in an attempt to define the form, size and location of the coffin. The entire burial was designated Feature 8. The burial shaft appeared to extend westward. At this point, it was decided to open up Unit 12 adjacent west of Unit 11 to expose the entire burial.

PLATE 16: Exterior View of Human Molar from Feature 8. (Photo by Rob Tucher)

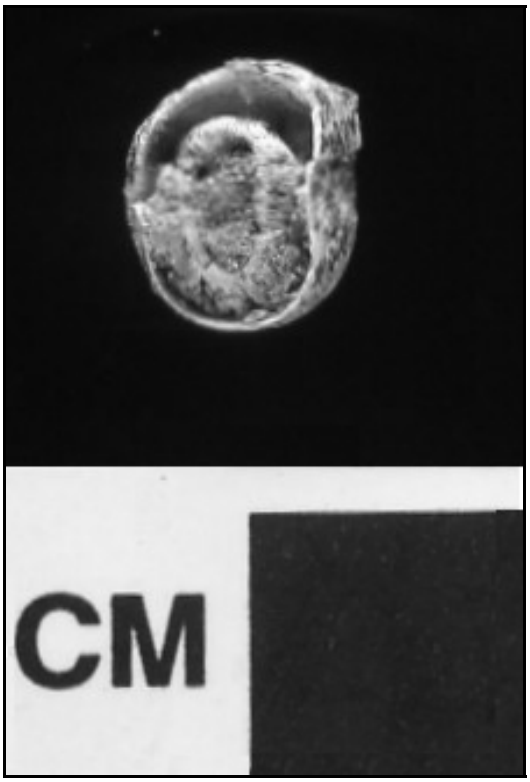


PLATE 17: Interior View of Human Molar from Feature 8. (Photo by Rob Tucher)

PLATE 18: Coffin Nails with Wood Fragments Still Affixed from Feature 8. (Photo by Rob Tucher)

The excavation of Unit 12 proceeded in the same manner as Unit 11. At a depth of 2.0', a coffin nail was encountered in Unit 12. Several other nails were soon recovered. Most of the nails were oriented vertically, while others were situated horizontally. The location of the nails indicated that the coffin was hexagonal in shape. The outline of the coffin indicated that it was oriented with the head to the west and feet to the east, which is the typical orientation of Christian burials. In addition, the absence of coffin handles or extraneous hardware is indicative of coffin construction from the early colonial period. Once Unit 12 was excavated down to the same level as Unit 11, excavations proceeded as a single entity; Feature 8. Coffin nails and skeletal remains continued to be recovered to a depth of 3.3' B.H (Figure 25).

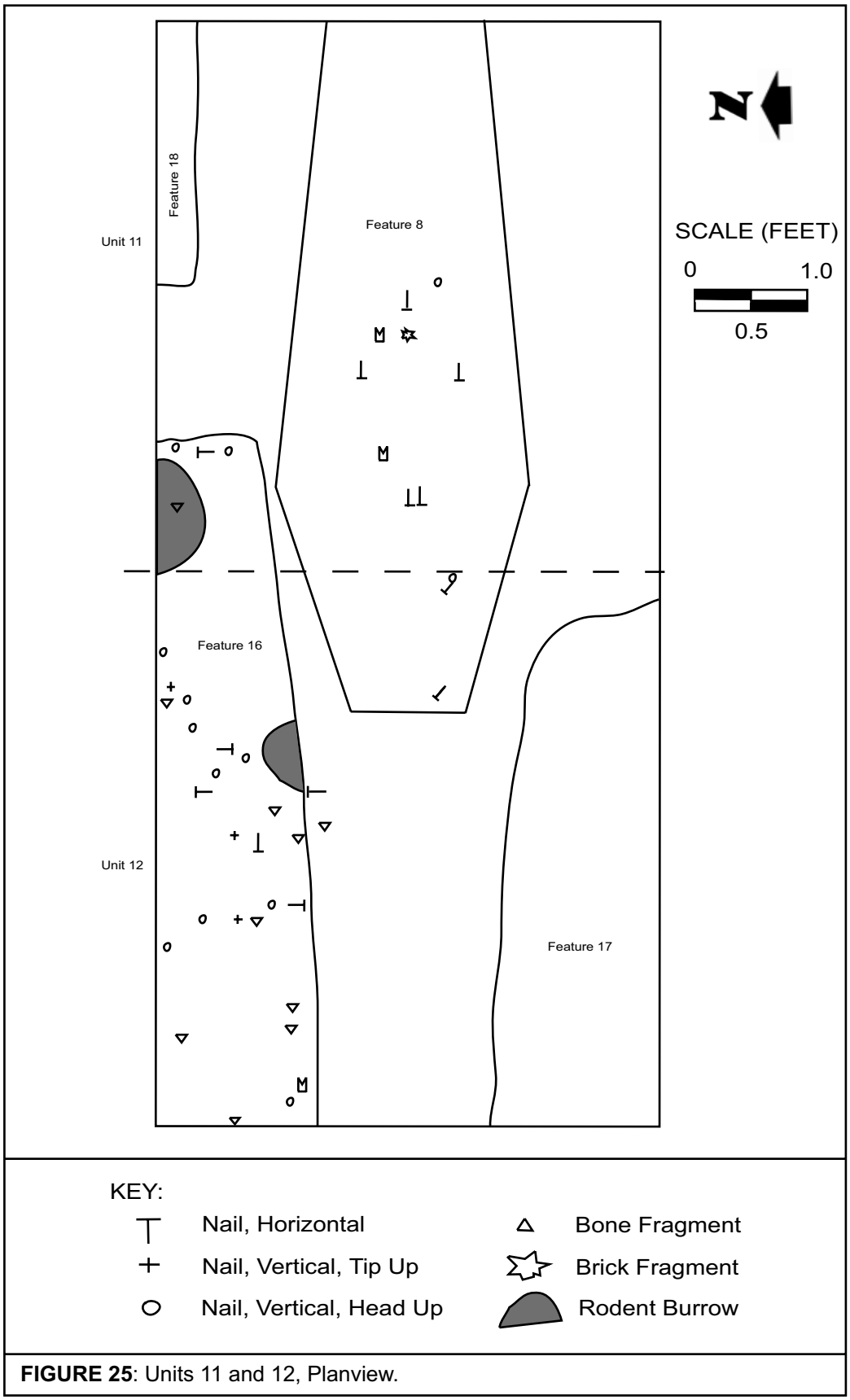


FIGURE 25: Units 11 and 12, Planview.

The teeth recovered from Feature 8 were distributed over a somewhat wide area. Artifact #9 and Artifact #12, both unidentified teeth, were found 1.05-feet apart. This suggests that there was a significant amount of post-burial movement, perhaps as the interred remains decayed and soils moved within the deteriorating coffin. Interestingly, a corner fragment of glazed brick (Plate 19) was also recovered near the location of Artifact #9.

PLATE 19: Glazed Brick Fragment from Feature 8.
(Photo by Rob Tucher)

At a depth of just under 3.0-feet, it became apparent that there was more than one grave shaft within Units 11 and 12. A narrow strip of compact soil was encountered directly west, as well as along the north and south edges of Feature 8. Along the north wall of the unit, well-defined, angled edges of softer soils became evident. Two shafts were also identified northwest and southwest of Feature 8. These were assigned feature numbers: Feature 16 is located northwest

and Feature 17 is located southwest of Feature 8. Feature 18 is located along the northern edge of Feature 8. Only Feature 16 was excavated. All of the exposed outlines of the four features were included in the plan view of Feature 8.

Feature 16 was located in the northern half of Unit 12. A portion of the shaft extended into the north wall of the unit. A total of 21 coffin nails were recovered, along with 12 bone fragments and two fragmented teeth. All were point provenienced and plotted on the plan view. Feature 16 was encountered at a depth of 2.4', similar to Feature 8, however, it extended to a depth of 4.4', 1.4' below the depth of Feature 8 and no grave goods were recovered from the burial. The base of Feature 16 was characterized by a rich, organic layer with numerous wood fragments. This was determined to be the bottom of the coffin. Samples of this wood were sent for analysis to Alex Weidenhoft of the Center for Wood Anatomy Research in Madison, Wisconsin. The wood was determined to be hard pine from either the red or yellow group. A single brick fragment was also recovered from this burial. Two circular stains were encountered just below the wood layer. These were interpreted to be rodent burrows, suggesting some post-burial disturbance to the feature and remains.

8. *Excavation Unit 16*

Excavation Unit 16 was a 5' x 5' unit placed adjacent east of the two fieldstone markers. The objective of this unit was twofold: to determine the presence/absence of a grave or graves as indicated by the GPR survey and if one or more were present, determine if it was associated with one or both of the fieldstone markers. Based on the results of Units 11 and 12, it was decided to screen all of the soils 100% in natural strata, as opposed to subdividing the excavation further into arbitrary levels.

Interestingly, shortly after beginning the excavation of Stratum A, the base of what appeared to be a third fieldstone marker was uncovered (Plate 20). This was located in the

PLATE 20: Base of Fieldstone Marker From Unit 16, View East. (Photo by Author)

southeast quadrant of the unit, and was left in place until the depth could be determined. Out of respect for the congregation's wishes, the marker was not removed and an underlying platform measuring 1.4' x 1.1' was left unexcavated. An aluminum grave marker, placed by a local Boy Scout troop in 2002 to mark the graves found through the GPR survey, was also uncovered at 0.15' BH. This illustrates the amount of soil movement that can occur in this section of the site in a relatively short amount of time, particularly in a westerly direction.

Stratum A was a thin humus layer (0.0'-0.35'-thick) consisting of a 10YR 3/2 silty loam. No cultural material was recovered from this stratum. Stratum B was distinguished by varying

degrees of mottling across the unit. A number of artifacts were recovered including brick, handwrought nails, a clay pipe bowl fragment, wire fragments, possibly from a chain, a glazed brick fragment and interestingly, a complete animal foot trap. The latter was recovered at a depth of 1.5' BH and was a smaller sized trap, possibly used for trapping mink, muskrat or fox. The depth of the trap may represent an effort to capture the animal by placing the trap inside the hole of the den.

At a depth of approximately 1.75' BH, the north half of the unit became noticeably softer and more mottled than the south half. The excavation of Features 8 and 16 in the units west of Unit 16 have shown that grave shafts are characterized by softer soils, while the surrounding, undisturbed soils were more compact. At this point, it was decided to excavate the north half of the unit only until the feature could be fully defined. At a depth of approximately 2.0' BH, three handwrought nails were recovered. These were found clustered and lying horizontally, with the tips facing east. All three were T-heads and had wood adhering to the shanks. A bone fragment was recovered just below the level of the nails along the north wall of the unit. This anomaly was designated Feature 19. Based on the artifacts recovered, it was first assumed that this feature represented a grave shaft. However, further excavation indicated that this feature extended only to a depth of 2.1-feet BH. At this point, the soil became noticeably more compact, indicating undisturbed subsoil. It is possible that this feature was actually an animal burrow related to the ferrous trap recovered from the northeast quadrant of Unit 16, or perhaps this was part of a grave shaft that had been severely disturbed by the activities of the animal. The nails and bone fragment were likely displaced by the burrowing animal, eventually resting in the matrix of soil encountered between 1.7-feet and 2.1-feet BH in the northwest quadrant of the unit (Figure 26).

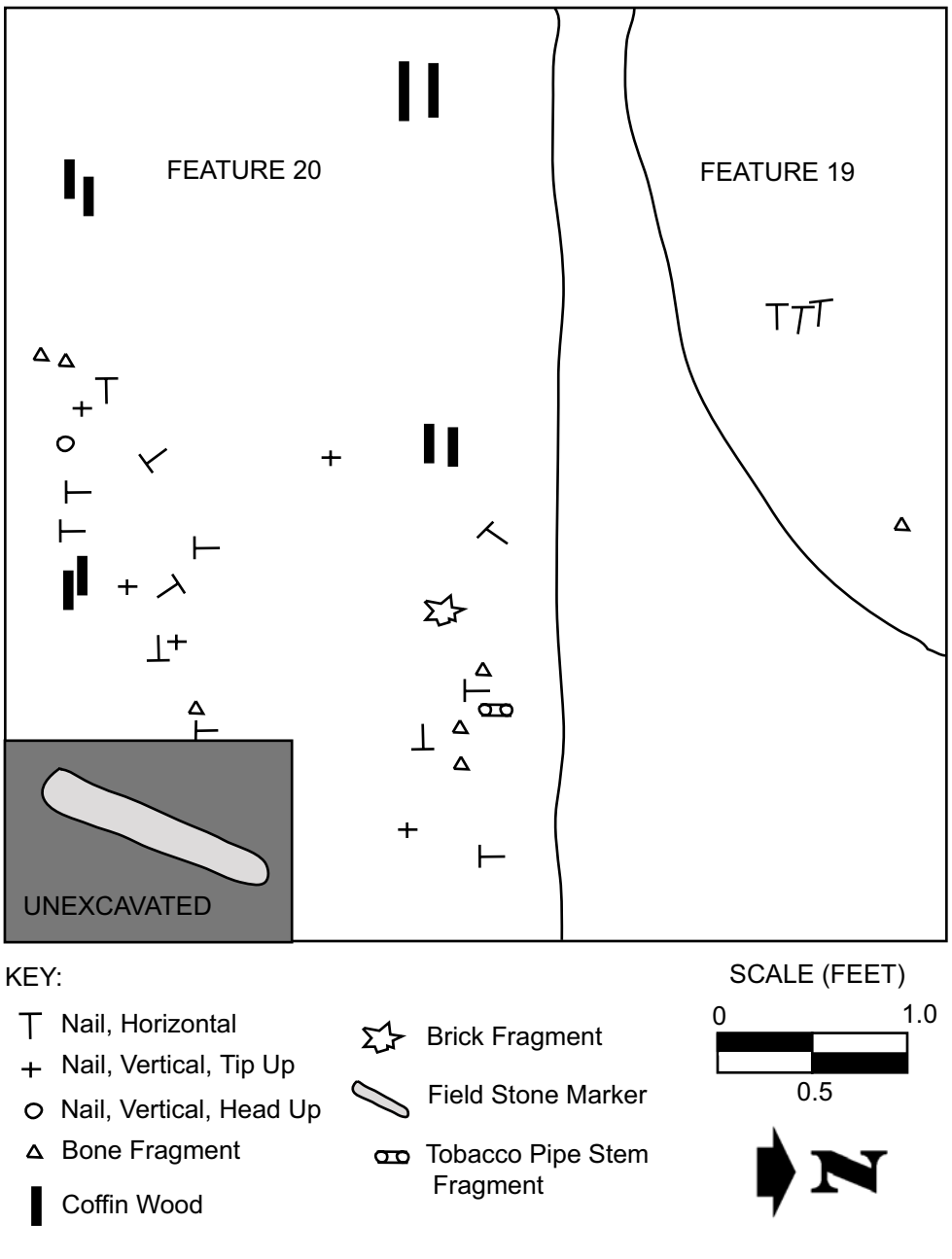


FIGURE 26: Unit 16, Planview.

At a depth of 2.2-feet BH the outline of a grave shaft became visible near the center of the unit. This was designated Feature 20. The animal burrow in the northern half of the unit likely significantly post-dated the underlying grave, thus the soil was less compact than the soils comprising the burial matrix of Feature 20. Feature 20 extended under the platform left unexcavated in the south half of the unit. Therefore, it was decided to excavate the entire south half of the unit with the exception of the fieldstone fragment in the southeast quadrant of the unit. The south half of the unit was shovel-scraped and all soils were screened 100%. A handwrought coffin nail was recovered at a depth of 2.7-feet BH. At this point, excavations were performed with a trowel only, to allow the point proveniencing of all additional materials. A total of 17 coffin nails and seven bone fragments were recovered. Interestingly, a single brick fragment and clay pipe stem were recovered from within the burial. These, however, are likely intrusive, having originated on the ground surface prior to the digging and backfilling of the grave. Several wood fragments were encountered that may be coffin remnants. These were determined to be hard pine from either the red or yellow group and were identical to those recovered from Feature 16.

In addition to the point proveniencing of the coffin nails using standard X, Y, Z coordinates, the orientation of each nail where discernable was recorded. This allowed an examination of the post-burial collapse of the coffin over time and how conditions affected the interred remains after the decay of the supporting coffin walls. In addition, the orientation of nails, such as vertical with the tip facing upward would be an indication of the base of the shaft. Most of the nails had irregular orientations, that is, they were positioned as a result of the collapsing in of the coffin prior to the complete decomposition of the surrounding wood. This occurred before the interior was filled with soil, which likely would have supported the walls and top in place.

Nails were recovered to a depth of 4.0-feet BH. Several were found with the tips facing upward and the underlying soils became noticeably more compact. The plotted nail positions indicate a great deal of post-burial movement of the coffin elements and nails, which obscured the original outline of the coffin in the soil. Fragments of wood were encountered at this level. These were determined to be the base of the coffin. Excavations were terminated when compact subsoil was encountered, and a plan view of the entire unit was drawn. Interestingly, a single bone fragment was recovered below the base of the coffin. This bone was determined to be a cow skull fragment found at a depth of 4.2' BH, 0.2' below the deepest nail. It is possible that this fragment was thrown into the shaft before the coffin was lowered, or that it, like other intrusive artifacts, was part of the backfill.

A review of the point provenienced nail locations shows two distinct clusters of nails within the Feature 20 outline. This suggests that there were actually two coffins within a single shaft. There was no compact, undisturbed soil between the two, and both nail clusters extended to virtually the same depth. This indicates that if there were in fact, two separate coffins, they were buried at the same time in a single shaft. This would also explain the presence of two upright fieldstone gravemarkers situated closely together. Compact soils were present along the south and east walls of the unit, indicating that the burials terminated at these points. The base of the feature was taken down to a depth of 4.4' BH. The soil at this level was compact and represented a level of 0.4' below the deepest coffin nail.

The identifiable bone fragments from Feature 20 consisted of two wrist bone fragments from an adult of indeterminate sex (see Chapter XIII). These were found close to the south wall and just under two feet from the west wall. This indicates that the cranial section likely extended

slightly into the west wall. It also supports the theory that there were likely two burials within the Feature 20 grave shaft, since the wrist bones were found well south of the northern cluster of nails.

9. Unit Summary

Units 9, 13-15 contained deposits that were likely the result of erosion from a point further east of the excavations. Additional disturbance in the vicinity of these units occurred during the removal of a wooden fence and brush/trees nearby, most likely by means of a controlled burn. A thin layer of gravel in Unit 15 was the only evidence of a pavement-like feature indicated by the GPR survey.

T.U.s 2-8, 10, 17, 2 Ext. and 5 Ext. represent the area where the meetinghouse was located. The stratigraphy of these units was fairly straightforward: a thin Stratum A overlying a mottled, culture-bearing Stratum B underlain by a sterile Stratum C. Stratum B contained the majority of the artifacts; however, they included material from the meetinghouse, as well as objects deposited after the structure was abandoned, and in some cases, artifacts from before the European occupation of the site. Numerous features, such as post molds and a robber's trench feature provided information regarding the design and orientation of the meetinghouse. Units along the eastern edge of Block 1 had an additional stratum formed by monument mound soils.

Units 11, 12 and 16 were located in an area characterized by numerous burials. This area likely represents the earliest interments of the site. Each of the units consisted of a moderately thick Stratum A, underlain by a thick mottled Stratum B that resulted from the backfilling of the numerous graves. Redeposited soils that originated west of the units were evident. The soils encountered in these units were similar to those found across the site in color, texture, and stratigraphic order. All of the burials exhibited a great deal of post-interment movement within the

shafts. This phenomenon, combined with the destructive forces of burrowing animals, bioturbation, and extremely acidic soils, resulted in poorly defined feature outlines, and the overlapping of individual burials in the archaeological record.

10. Trenches

The presence of the monument mound in the vicinity of the meetinghouse created a major obstacle in examining the ground surface surrounding the structure. As a result, it was decided to trench through the mound to examine sections of the underlying original ground surface nearest the exposed foundation located adjacent west. Two 3.0' x 7.0' trenches were excavated: one along the outside of the western concrete border and one along the inside of the same border (Figure 27). Since it had been determined that the soils comprising the mound were imported, they were simply removed without screening. Artifacts were grab sampled from the mound fill as they were observed during the excavations. A line level was set from the top of the mound and the depth to the natural ground surface adjacent to the mound was taken to determine how deep the mound soils would extend. The mound was approximately 3.3' above the ground surface where the trenches were located. At a depth of 3.0' all remaining soils were carefully trowelled until the original ground surface was uncovered. At this point, opening depths were taken from the surface of the mound.

Trench 1 was placed outside of the concrete border along the west side of the monument mound (Figure 28). The fill soils that comprised the monument mound consisted of s silty clay loam that was markedly different from the site soils. A total of two sherds of gray salt-glazed stoneware were recovered at depths of 2.9' and 3.1' respectively. At 3.3' below horizontal, the soil became noticeably darker and sandier with some mottling. This was designated Stratum A, Level

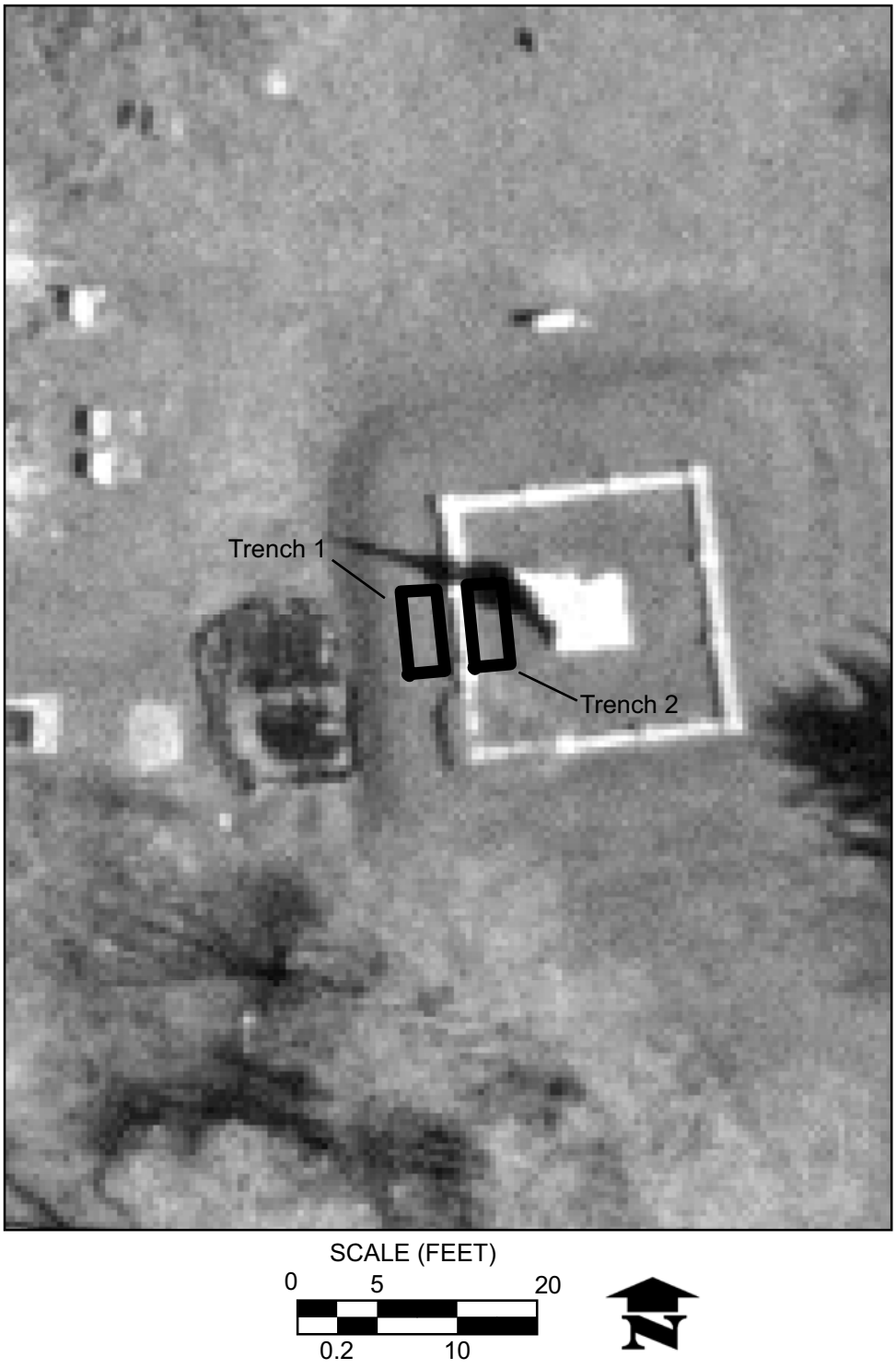


FIGURE 27: Locations of Trenches at the Old Scots Burying Ground.

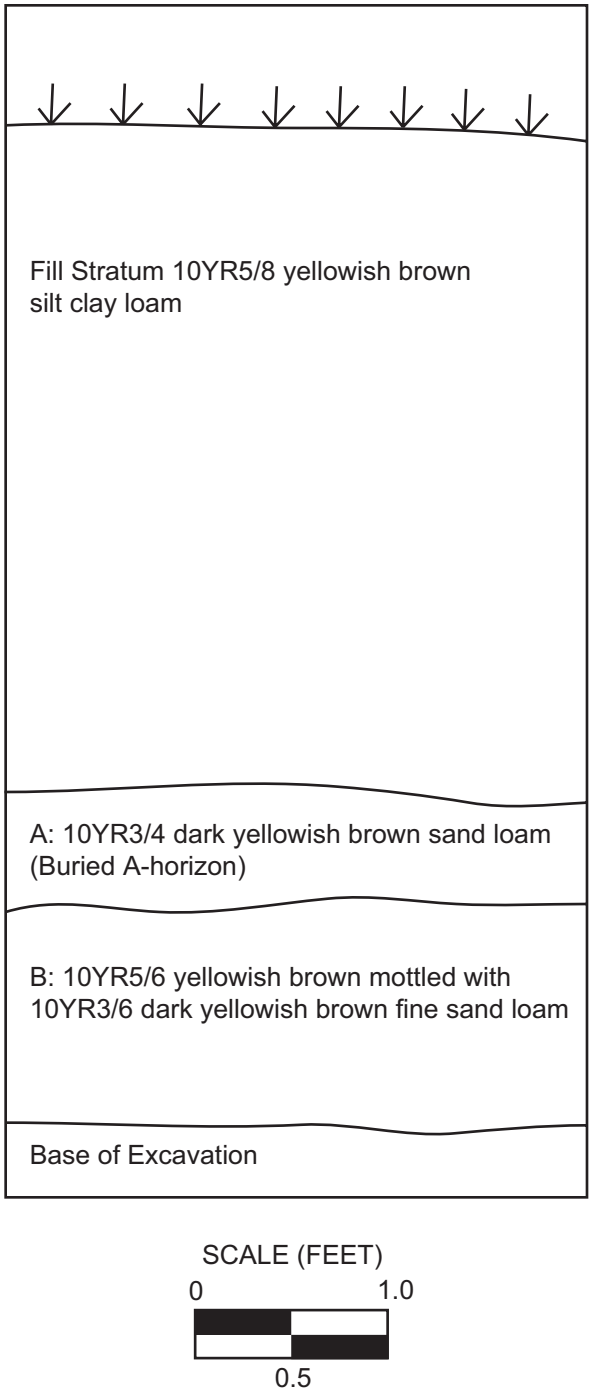


FIGURE 28: Trench 1, South Wall Profile.

1. Artifacts recovered from this level include broad window glass, handwrought nails, brick fragments and charcoal. At a depth of 4.5' below horizontal, two additional handwrought nails were recovered, both vertically oriented near the south wall of the trench. A single, large fieldstone was encountered at a depth of 4.2' below horizontal near the north wall of the trench. Two smaller fieldstone fragments were found nearby. At a depth of 5.2' below horizontal, the soils in Trench 1 became more compact, indicating undisturbed subsoil. It appeared at first that the soils under the fill level in Trench 1 were located behind the meetinghouse, however, a dark stain situated along the south wall of the unit designated Feature 11 may represent a robbed portion of the builder's trench. No features such as post molds or *in situ* foundation stones were encountered. However, the excavation of Trench 2 suggested that Trench 1 represented a portion of the interior floor of the meetinghouse.

Trench 2 was placed inside the western concrete border adjacent east of Trench 1. The fill soils were removed without screening. Five sherds of gray salt-glazed stoneware (Plate 21) were grab-sampled at a depth of 1.5' below horizontal. At approximately 3.1' BH, the original ground surface was encountered. At this point, opening depths were taken and all soils subsequently excavated were screened 100%. This was designated Stratum A, Level 1. Shortly after beginning the excavation of this level, a series of well-defined dark stains were encountered at a depth of 3.5' BH. One was circular and another was roughly rectangular. The third was irregular in shape. These were designated Feature 12, 13 and 14, respectively. All three features were excavated and plotted on a plan view of the trench.

PLATE 21: Gray Salt-Glazed Stoneware Sherds from Trench 1. (Photo by Rob Tucher)

Feature 12 was determined to be a slightly oval post mold measuring 0.6' x 0.45.' It had an angled base, which extended to a depth of 3.7' to 3.8' BH. Feature 12 had a well-defined base and walls and contained a small amount of charcoal. No other cultural material was recovered from this feature. Feature 13 may also be a post mold that was roughly rectangular and measured 0.9' x 0.5.' This feature was somewhat less definitive, but its depth and dimension indicate that it likely was a post. Similar to Feature 12, it extended to a depth of 3.8' BH. No cultural material was recovered from Feature 13. Feature 14 was an irregular-shaped stain measuring a maximum of 1.0-foot at its widest points. This feature was only 0.15-feet in total depth and may represent an area where foundation stones were removed from the rear of the meetinghouse.

A fourth feature, designated Feature 15, was encountered in the northern half of the trench. This feature at first appeared to be a post mold defined by significant amounts of charcoal in a circular pattern. It was encountered at a depth of 3.5' BH, and measured 0.5' in diameter. Upon excavation, it became evident that much of the interior matrix was sand, suggesting that most of the smaller organic material had likely leached out of the soil. Charcoal samples were the only material collected from the feature. The extent of the depth of Feature 15 was approximately 3.8' BH, with the base being much less defined than the other features present in Trench 2.

A moderate amount of fieldstone fragments, many in the form of flakes were recovered throughout the excavated soils of Trench 2. Larger fragments were point provenienced and plotted on the plan view of Trench 2. The presence of flaked fragments may be an indication that larger fieldstones used in the meetinghouse foundation were modified, perhaps to allow a tighter fit when stacked.

Interestingly, a tin can was recovered in the extreme northwest corner of the trench at a depth of 3.9-feet below horizontal. This piece appeared to be sealed with lead, indicating that it was manufactured in the early nineteenth century. The area where it was found appeared to be disturbed, possibly during the construction of the monument mound. This would explain why this piece was found at a level below the features encountered within the trench.

At a depth of 4.6-feet below the surface, which marked the base of Stratum B, Level 5, a concentration of fieldstones were encountered along the east wall of the trench. In addition, numerous clay pipe stems, nails and window glass fragments were recovered just inside the fieldstone row. This appeared to represent a builder’s trench that had been partially robbed.

The northern and southern halves of Stratum B, levels 5 and 6 were excavated separately. This was done to allow a platform to safely exit the trench during excavations. Artifact density dropped off significantly with Level 6. At approximately 4.9-feet BH, a noticeable color change was encountered. The soil also became more compact. This was designated Stratum C. Excavations down to a depth of 5.4-feet BH uncovered no cultural material. At this point, a profile of the south wall was drawn and the trench was backfilled.

X. LABORATORY METHODS AND ARTIFACT ANALYSIS

This chapter covers the methods of laboratory work and the analysis of the artifact collection from the Old Presbyterian Burying Ground site.

A. LABORATORY METHODS

1. *General Laboratory Procedures*

All cultural material recovered during the investigations at the Old Scots Burying Ground site was subjected to a set of standardized laboratory procedures. Preliminary processing of the collection was undertaken immediately upon completion of the fieldwork and included cleaning and rough sorting. All recovered artifacts were washed or dry-brushed as appropriate, and stabilized. The materials from each major artifact class were placed in resealable plastic bags with cards indicating provenience. The cards included with the artifacts note the field provenience information as well as the assigned catalog numbers.

2. Artifact Cataloging

Upon completion of the artifact analysis, data were entered into a WordPerfect table to compile the artifact inventory. Information displayed in the table includes catalog number, provenience, quantity and/or weight, and description. All artifacts were counted with the exception of heating by-products (coal, cinder, etc.), which were weighed. Brick, mortar, and window glass received both count and weight.

Each provenience was assigned a sequential catalog number. Artifacts gathered from surface collections were assigned to a single catalog number within a horizontal provenience. Artifacts recovered through electronic surveillance were given an individual catalog number, along with an artifact number consisting of the prefix "I" with a sequential numeric suffix. This appears

in the column designated "Provenience." The location of all isolated finds appears on the AutoCad map.

Some dates used in the artifact description field, as well as the general text, were based on dates taken from the *Analytical Coding System for Historic Period Artifacts* (Azizi et al. 1996) published by the Cultural Research Group of Louis Berger and Associates, Inc., except where otherwise noted.

All artifacts are to be catalogued, bagged, and boxed in provenience order and turned over to the trustees of the Old Tennent Church, with the exception of those recovered from the four excavated burials, which were reburied along with any recovered human remains in accordance with the wishes of the congregation.

3. *Conservation*

All of the nails recovered from excavations in the cemetery were treated with a rust inhibitor and conserved. After the artifacts were washed, the surface of each piece was manually brushed with a toothbrush-sized wire brush. Each nail was coated with tannic acid, allowed to dry, and brushed repeatedly. Once the surface was free from rust, the artifact was sealed with a coating of B-72 Acryloid. The B-72 Acryloid sealant was diluted with the solvent Toluene at a ratio of one part sealant to five parts solvent. The mixture was applied to one side of the artifact with a fine-bristled paintbrush and left to dry for 48 hours under a fume hood. Once dried, each piece was turned over and the sealing process repeated.

4. Carbon-14 Dating

Nine samples from the Old Scots Burying Ground site were chosen for carbon testing (Table 4). C-14 dating is not usually meaningful on later historic sites, but can be useful as a

supplemental information source on sites from the early historic period. Dr. Herb Kraft of Seton Hall University used C-14 testing on the Miller Field and Pahaquarra sites, both of which had mid to late 17th-century Contact Period components (Herb Kraft, personal communication, 1999). One example of the successful use of C-14 dating on a historic site is the Old First Church site in Middletown, New Jersey (Scharfenberger 2000). This project sought to find evidence of the first meetinghouse built circa 1688, although some sources put the date at 1668. The exact location was unclear, having been placed in three different locations by three different historians. Architectural wood found in a stratified context in the present church (built 1832) basement was subjected to Carbon-14 testing. This sample, designated Sample 20, was found directly overlying several fragments of broad window glass and was believed to be from a context that predates the 1735 structure (the second church structure) and was carbon dated to have an end date of 1635. This data was used to supplement the artifactual and stratigraphic data from the site. A similar strategy is employed with the Old Scots Burying Ground site. Data sheets for the C-14 samples are provided in Appendix D.

Of the nine samples submitted for the Old Scots Burying Ground site, eight were ultimately processed. The small amount of available material in the samples necessitated Accelerated Mass Spectrometer (AMS) or extended counting in eight of the nine samples. Both procedures are significantly more costly, therefore a decision was made in order of importance to process those samples from the most meaningful contexts.

The samples were chosen from a representative cross-section of excavations from the site and were intended to identify prehistoric, early historic or later historic deposits that did not have any definitively datable associated artifacts. Although radiocarbon dating has been predominantly

used on prehistoric sites, its value on Contact Period and early historic sites is becoming increasingly recognized (Scharfenberger 2000). The antiquity of historic colonial sites combined with the increased precision of date ranges offered by extended counting and AMS processes make radiocarbon dating a valuable tool for the analysis and evaluation of such sites.

TABLE 4

RESULTS OF RADIOCARBON TESTING FROM THE OLD SCOTS BURYING GROUND

No.	Type	Context	Result
1	Oyster Shell	Unit 3	21950 B.C-1680 A.D.
2	Charcoal	Unit 6	1670-1950 A.D.
3	Charcoal	Unit 6, Feature 2	Not processed
4	Charcoal	Unit 8	1420-1660 A.D.
5	Charcoal	Unit 9	1460-1680 A.D.
6	Charcoal	Unit 10	1520-1580 A.D.
7	Charcoal	Unit 11	1440-1650 A.D.
8	Charcoal	Unit 14	1510-1600 A.D.
9	Charcoal	Trench 2	1680-1730 A.D.

Sample 1 was a quantity of burnt oyster shell used to form the mortar found in the meetinghouse foundation. These fragments were recovered from Unit 3, with additional fragments recovered from Units 2, and 8. It can be assumed that they originated from the time of construction of the building or possibly from one of the later repair episodes. The end date of 1680 suggests that it was from mortar applied during the construction of the meetinghouse. Moreover, it would indicate that the building was older than the 1692 date assigned by documentary resources.

Sample 2 was a charcoal sample taken from Unit 6. This material yielded a date range of 1670-1950, which is too wide to be of any analytical value.

Sample 3 is a quantity of charcoal recovered from Feature 2, a post mold recovered from Unit 6.

Sample 4 is a charcoal sample from Unit 8. This material yielded a date range of 1420-1660 and was found in a lower level of a stratum that also included historic artifacts (gun flint, brick, handwrought nails, burnt oyster shell) and prehistoric artifacts (jasper flake, quartzite cobble FCR). It is unclear if this was prehistoric material that was intermixed with historic deposits, or older wood that was utilized after the meetinghouse was constructed. However, it is evident that the tree from where this sample originated was cut prior to the arrival of the Old Scots congregation.

Sample 5 was charcoal recovered from Unit 9, located approximately 15-feet from the west wall of the meetinghouse. Interestingly, this sample had an end date of 1680 and was found in a mixed context with several handwrought nails including one clinch nail and numerous redware flower pot sherds. This wood likely originated in the meetinghouse and was deposited west of the foundation by erosion or during the movement of materials after the structure was abandoned.

Sample 6 was charcoal recovered from Unit 10 Stratum D, Level 4. This stratum likely represents undisturbed subsoil below the culture-bearing, mottled stratum associated with the meetinghouse. This stratum was cross-cut by Feature 4, which was interpreted to be a robbed section of the builder's trench. The date range for Sample 6 was 1520-1580, which suggests a prehistoric presence on the site as late as one hundred years prior to the arrival of the Old Scots congregation.

Sample 7 was taken from a charcoal concentration that originated in a charred root mass encountered along the east wall of Unit 11 at a depth of approximately 2.0-feet. This was located at the extreme edge of Feature 8 and likely represents a section of the charred root mass that was

disturbed when the grave was dug. The date range for this sample was 1440-1650 A.D., which clearly predates the European occupation of the site.

Sample 8 was a charcoal sample taken from Feature 9b, a charred post recovered from Unit 14. The two-sigma date range for this sample was 1510-1600 A.D., with an intercept date of 1660 A.D. which also predates the known European occupation of the site.

Sample 9 was a quantity of charcoal recovered from Trench 2, Stratum B, Level 4. This sample was recovered from an area near the east wall of the meetinghouse. The date range for this sample was 1680-1730, which places its origin within the peak period of activity at the meetinghouse.

B. ARTIFACT INTERPRETATION: OLD SCOTS BURYING GROUND

The artifact assemblage from the Old Scots Burying Ground consists of 1,401 artifacts (Table 5, Appendix B) and is composed mainly of architectural and household objects, with personal effects represented to a somewhat lesser degree by the large amount of kaolin pipe fragments, and gunflint fragments. In addition, several artifacts directly related to the graveyard and its associated activities were recovered. In this section, each group (small finds/architectural, ceramics, curved glass, clay pipe, etc.) of artifacts is discussed individually, with an overview of the entire collection presented at the end of Chapter XII.

TABLE 5

ARTIFACT PATTERN ANALYSIS,
OLD SCOTS BURYING GROUND SITE

Artifact Group/Class	Count	%
KITCHEN		
Ceramics	121	8.6
Bottles/and Lamp Glass	96	6.8
Utensils	1	
Kitchen-Subtotal	218	15.4
ARCHITECTURAL		
Nails, Fasteners, etc.	288	20.5
Window Glass	86	6.1
Brick, Arch., Wood, etc.	599	42.7
Architectural-Subtotal	973	69.3
FURNISHINGS		
Coffin Hardware	5	
Coffin Wood	25	1.7
Gravestone	1	
Furnishings-Subtotal	31	2.2
CLOTHING		
Buttons and other fastenings	4	
Clothing-Subtotal	4	
ARMS		
Ammunition	5	
Gun Flints	2	
Arms-Subtotal	7	0.5
PREHISTORIC		
Prehistoric Lithics	28	2.0
Prehistoric Subtotal	28	2.0
ACTIVITIES		
Livestock	5	
Animal-Trap	20	1.4
Hardware	20	1.4
Activities-Subtotal	45	3.1
TOBACCO PIPES		
White Clay Pipes	28	2.0
Tobacco Pipes-Subtotal	28	2.0
FAUNAL		
Other Faunal	25	1.7
Faunal-Subtotal	25	1.7
SHELL		
Oyster	40	2.8
Clam	1	
Belemnite	1	
Shell-Subtotal	42	2.9
TOTAL	1401	100

* Less than .1 %; 1-Excludes coal, charcoal, charred wood, cinder, and slag, which are weighed but not counted;
2-Unidentified (30), Plastic (1)

1. Small Finds/Architectural

This category encompasses material remains associated with architecture, as well as artifacts not included in any of the other assigned categories of ceramics, curved glass, clay pipe, or faunal. Artifacts represented in significant numbers, or possessing diagnostic attributes critical to the present study, are further divided into subcategories, such as grave-related and church-related.

The technological changes in architectural hardware that occurred between 1692, the estimated date of the meetinghouse, and the present are numerous and quantifiable, which provides reasonably accurate temporal markers for many of the site strata. More precise dating is possible through relation to other material

groups. Window glass and nails are material types that this study will rely on to determine a likely date range for proveniences and establish a chronology of deposition for the various building/demolition/abandonment episodes that occurred on the site. A brief description of the form, manufacturing techniques, and date ranges for window glass and nails will precede the discussion of the architectural assemblage.

2. *Window Glass*

Window glass was first manufactured in the United States in 1608. A glassworks operated by the London Company was erected in Jamestown, Virginia, and staffed by European glassblowers. Rather than producing glass for the colonies, this venture was designed to exploit the vast sources of fuel available in the New World as a replacement for exhausted resources in England (McKearin and Wilson 1978:26; Wilson 1972:3). Other early attempts at glassmaking in America occurred at Salem, Massachusetts, in 1639 at a factory run by Obadiah Holmes; at New

Amsterdam during the 1650s in factories run by Everett Duycking and Johanas Smedes; and in a factory near Philadelphia in 1682 under the direction of Joshua Tittery, described as a "broad glass maker" (McKearin and Wilson 1978:27-28). Interestingly, it was the aforementioned Obadiah Holmes who was one of the original patentees of Monmouth County and a founding member of the Baptist church in nearby Middletown (Ellis 1885:65).

Two types of window glass were used between 1692 and 1750, crown glass and broad, or cylinder, glass. Both types had been used in Europe from the sixteenth century into the nineteenth century (Dodsworth 1996:8). Although both were contemporaneous, crown glass fell out of use early in the nineteenth century, and broad glass remained the preferred type until the advent of flawless modern window glass around 1926. Historic documentation indicates that crown glass was the predominant type of window glass used during the colonial period. Broad glass has been found in eighteenth-century archaeological contexts, however, and was apparently manufactured in the United States where it is mentioned in the period documents of several American manufacturers. In fact, most window glass manufactured in the United States prior to 1780 was made using the broad or cylinder method (Starbuck 1986:9). One reference to the production of broad glass in the United States comes from this excerpt from a letter written by the clerk of the Germantown Glassworks to the proprietors in 1754: "We have about eight hundred foot of glass, stretched and cut, which I shall pack and send to Boston per the first opportunity" (Wilson 1972:44-45). The broad glass method was introduced into the American glassmaking community by German glassblowers during the eighteenth century (Wilson 1971:12). In addition, broad glass has been identified in deposits associated with the James Wray house in Williamsburg, Virginia, where he lived and worked from 1732 until his death in 1750 (Davies 1973:84). Moreover, a

property list from the sale of the Wistarburgh Glassworks in Allowaystown, New Jersey, in 1780 included ovens for annealing glass and flattening ovens, both essential in the production of broad glass (McKearin and Wilson 1978:33).

The processes for manufacturing crown and broad glass produce different physical attributes on the finished products, which can be identified in the archaeological record. The process of making crown glass is described by Wilson: "A large bubble was blown, a pontil rod was attached opposite the blowpipe, and the blowpipe was cracked off, leaving a hole in the bubble. The bubble was then reheated and twirled several times so that it became flat and disk-shaped. The disk was cooled and cut into panes of glass" (1972:56).

The crown method resulted in imperfections, such as a "bull's eye," a raised scar where the pontil was attached, and worm-shaped bubbles or curved stress marks (Plate 22), which can occasionally be seen with the naked eye but are often only detectable under a microscope (Noël Hume 1991:234-235).

The cylinder or broad glass method is described by Wilson: "A cylinder about five feet long and one foot in diameter was blown; then the end was cut off, the blowpipe was cracked off, and the cylinder was slit and opened out into a flat sheet" (1972:46). Once opened, broad glass had to be ground and polished to smooth the surface. Fragments of broad glass often exhibit elongated, "rice-shaped" bubbles (Plates 23 and 24) that are generally oriented in the same direction, parallel to the edge of the sheet (Noël Hume 1991:234-235).

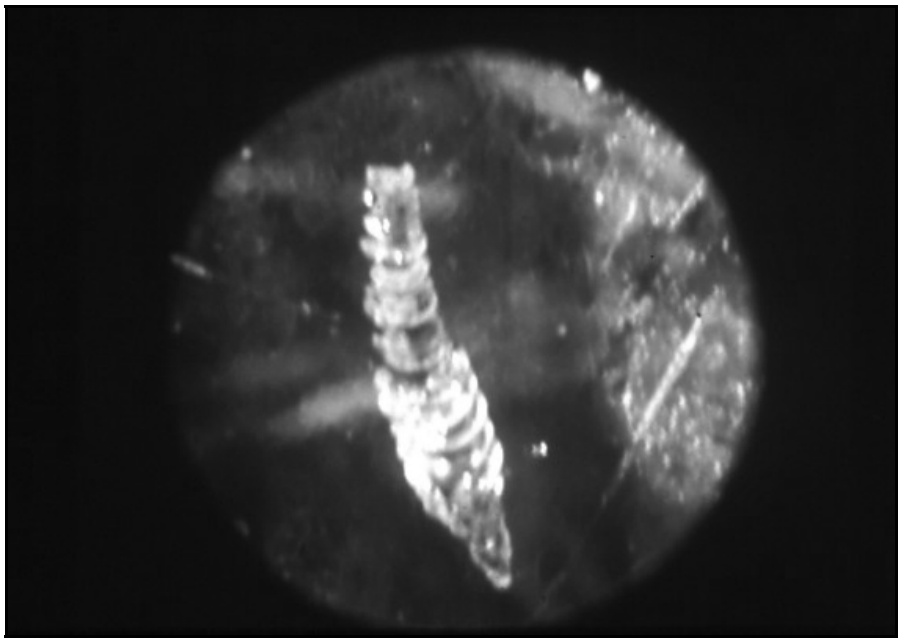


PLATE 22: Crown Window Glass Bubble. (Photo by Marie-Lorraine Pipes)

3. *Nails*

Three types of nails were recovered from the site: handwrought, machine-cut, and wire. Handwrought nails were used throughout the seventeenth and eighteenth centuries, as well as the early nineteenth century. The handwrought nails recovered from the site can be further divided into the subtypes of rosehead, T-head, and L-head brads. Handwrought nails are characterized by a shank that tapers evenly on all four sides, culminating in either a sharp or dull, "spoon-shaped" point. These nails were produced in America in moderate quantities beginning in the early seventeenth century, but the majority was imported from Europe (Lanier and Herman 1997:95; Nelson 1968).

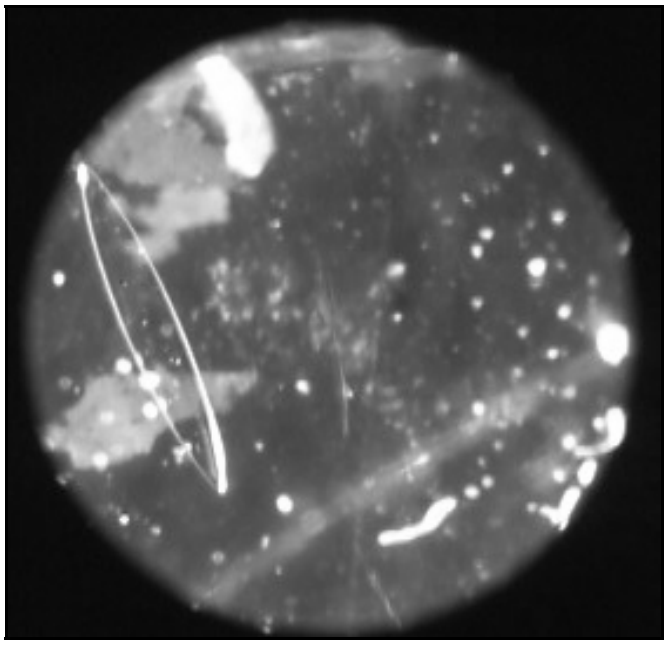


PLATE 23: View of Broad Glass Bubbles Oriented in Same Direction. (Photo by Nadia Maczaj)

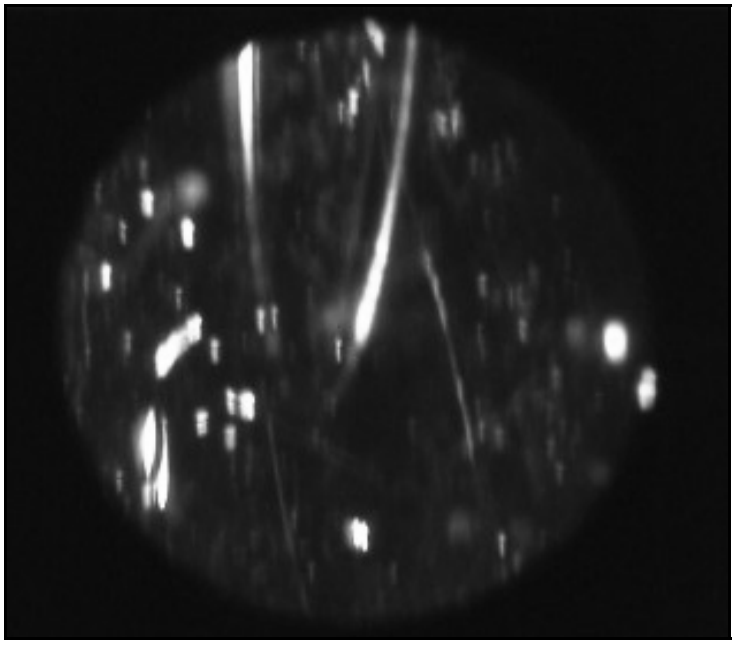


Plate 24: Close-up View of Broad Glass Bubble

(Photo by Nadia Maczaj)

In 1790, the first machine for mass-producing nails was patented. This machine produced a nail with a uniform shank tapering evenly on two sides. The nails were formed from iron or steel sheets called nail plates. These sheets were fed through the machine and nail blanks were cut at an angle, producing a nail body tapered on both sides, with a flat or rounded point (Wells 1998:83). Until about 1830, the heads on machine-cut nails were still hand-forged (Fontana and Greenleaf 1962:46-47; Lanier and Herman 1997:95). After 1830, the entire nail was produced by machine, resulting in a uniform shank with an unfaceted, rectangular-head. Machine-cut nails had one serious drawback in that their composition from sheet iron and cross-grained fiber structure made them more brittle than the softer handwrought nails, and therefore ill-suited for clinching (Lanier and Herman 1997:95; Nelson 1968:34; Noël Hume 1991:253-254).

Around 1850, a machine was patented in France that produced nails made from wire. Wire nails are generally manufactured by drawing steel wire through gripper dies and then heading the nail (Marsh and Jacobs 1984:303). Each nail is fed through the machine to the desired length and separated by a cutting die, and the operation repeated (Nelson 1968:36). The early nails made from steel wire were small at first and had limited functions, mainly for picture frames, cigar boxes, molding, and furniture, among others (Fontana and Greenleaf 1962:48; Marsh and Jacobs 1984:303; Noël Hume 1991:254). By the 1880s, the price of wire nails had dropped considerably, resulting in their preference over machine-cut nails for all modes of construction and manufacturing (Marsh and Jacobs 1984:303).

4. Architectural

The architectural remains, while very fragmented, are extremely relevant to the research objective of this study (Table 6). The architectural material recovered from the site provides firm

evidence for the design of the meetinghouse, the size and circumstances for its demise. Since the meetinghouse was built in the seventeenth-century, handwrought nails can be associated with the structure, since machine-cut nails were introduced circa 1790 and came into widespread use by the first quarter of the nineteenth century (Nelson 1968) (see discussion above).

The overwhelming majority of the window glass fragments recovered from the site was broad glass, with only three fragments of crown glass recovered. Both types had been used exclusively during the colonial period (Davies 1973: 80) (see discussion above). None of the recovered fragments exhibit signs of fire-scarring, suggesting the probability that the building containing them had not been burned.

TABLE 6

ARCHITECTURAL FASTENER DISTRIBUTION FROM OLD SCOTS BURYING GROUND SITE

Type/Subtype	Shovel Tests	Trenches	Block 1 Units	Exterior Units (non-burial	Burial Units	Total	%
HANDWROUGHT NAILS							
T-head				2	5	7	2.4
Rosehead			2		2	4	1.4
T-head pulled				1		1	0.4
Unknown head	2				62	64	22.2
Unknown head, clinched	4			1		5	1.7
Subtotal-Handwrought	6		2	4	69	81	28.1
MACHINE CUT NAILS							
Machine cut nails, general	64	2	5	2	14	87	30.2
Machine cut nails, pulled				3		3	1.2
Machine cut nails, dropped				3	2	5	1.7
Subtotal-Machine Cut	64	2	5	8	16	95	33.1
WIRE NAILS	2		4	9		15	5.1
WIRE NAILS, CLINCHED			1			1	0.4
WROUGHT/CUT	11	9	50	18	4	92	31.9
WROUGHT/CUT, CLINCHED			2			2	0.7
FERROUSSTAPLE	1		1			2	0.7
TOTAL	84	11	65	39	89	288	100.0

* Less Than 0.6 %

The handwrought nails consisted of both T-head, and rosehead types, and all were "brads," a term that refers to nails two inches or more in length (Nelson 1968:37). A moderate amount was identified as "dropped," which indicates unused nails discarded or lost during construction (Plate 25). Others were characterized by a gently arcing shank, which is indicative of a nail that was removed after use (Plate 26). The identifiable nail assemblage consisted of dropped, pulled or clinched. This type of nail assemblage is indicative of a structure that was partially dismantled and partially deteriorated in place (Young 1994:57).

The presence of handwrought and machine-cut, dropped nails and pulled nails in the same provenience is significant since it suggests the commingling of artifacts from the building, abandonment and post-meetinghouse construction episodes in a single level. Machine-cut nails post-date the meetinghouse by over 100 years and likely would have been the primary fastener in any post-meetinghouse features. Therefore, it can be assumed that all of the handwrought nails found at the site originated in the meetinghouse.

A total of eleven clinch nails were recovered from the Old Scots site (Plate 27). "Clinching" was a technique whereby the end of a nail was bent at a ninety-degree angle to create a tighter grip and prevent loosening (Wells 1998:96). Unattached clinch nails could only occur by the removal of the surrounding wood by processes such as burning, trauma, or deterioration. Any attempt to manually remove only the nail would result in a partial straightening of the shank (Young 1994:56-57).

In addition to the nail assemblage, a large amount of window glass, predominantly broad window glass, was recovered mostly from the vicinity of Block 1 (Plate 28). Many of these fragments were clustered near the inside of the foundation walls.

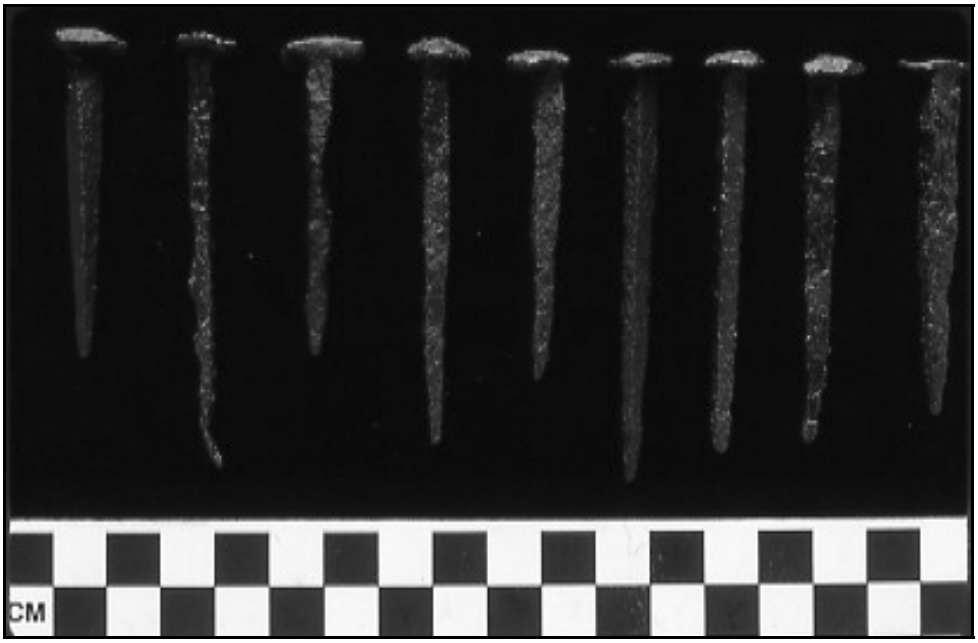


PLATE 25: Examples of Dropped Nails (Photo by Rob Tucher)

PLATE 26: Examples of Pulled Nails (Photo by Rob Tucher)

PLATE 27: Example of a Clinched Nail (Photo by Rob Tucher)

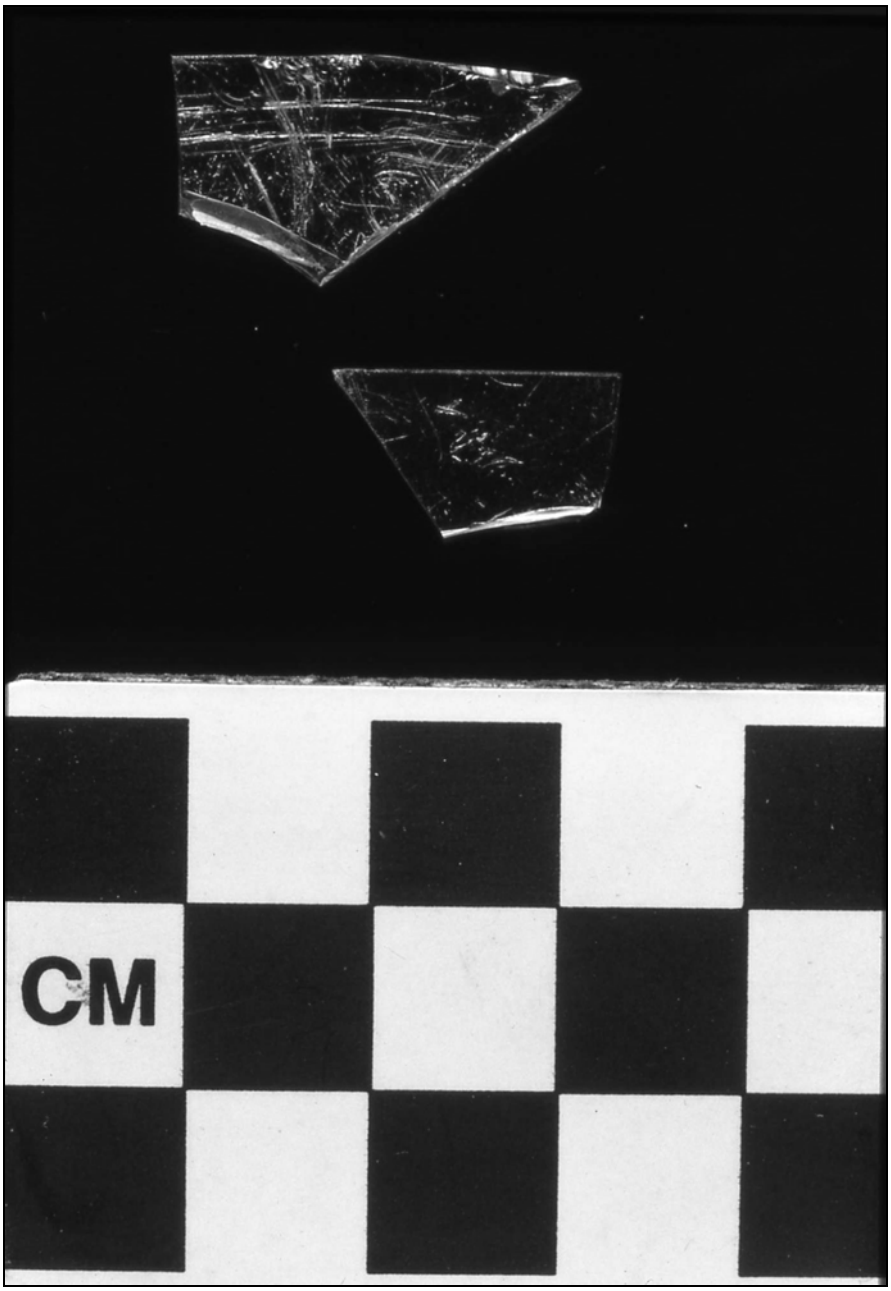


PLATE 28: Broad Window Glass Recovered From Block 1
(Photo by Rob Tucher)

Surprisingly, no window lead was recovered from the site. The construction of windows using milled lead to anchor diamond-shaped panes of glass dates back to medieval times. This process was used by both Europeans and Americans up to about

1725, when wooden muntins began to replace milled lead as the framing in both sash and casement windows (Ross 1994). Window lead is a rather common find on many historic sites, usually characterized by twisted strips measuring 3 or 4 inches in length. These strips would have initially been H-shaped, with the thin vertical extensions folded inward to support a pane of glass. The reasons window lead can be so significant to an archaeological study are twofold. First, they are indicative of pre-1725 construction. Second, during production, as the raw lead was drawn through the glazier's vise, a stamp consisting of the date of manufacture and the maker's initials was applied to the internal track to regulate quality control.

Mortar and plaster were recovered from several units in the vicinity of the foundation. Some fragments consisted only of mortar and others were mortar with a plaster skin. The former may represent the mortar used to patch the foundation, while the latter is likely from the interior of the structure. All of the mortar was a lime/sand conglomerate, which was the most common form used from the earliest time of European settlement in the New World until the late nineteenth century. The lime used in the Old Scots meetinghouse was derived from burning oyster shells (Plate 29). This was common in areas where limestone and marble were rarely found, and is testament to the plentitude of oysters in the region (McKee 1973:62).

5. *Ceramics*

The ceramic assemblage from the Old Scots Burying Ground site was surprisingly small, consisting mainly of unglazed redware flower pot sherds (Table 7). The majority of

PLATE 29: Burnt Oyster Shell Used to Make Mortar (Photo by Rob Tucher)

the ceramics from the site post-date the period of use of the meetinghouse. A total of 121 ceramic sherds have been recovered from the site thus far. The date range for the ceramic assemblage is relatively wide, with redware, an earlier form manufactured from the earliest

period of European settlement, found in the same level as ironstone, which has a beginning date of 1840.

The majority of the ceramics recovered from the site are miscellaneous body sherds. This precludes, in most cases, the identification of form and function; however, several groups of sherds mend to form recognizable, partial vessels, or single sherds with diagnostic attributes that provide an indication of the original form of the vessel. These include redware flower pots, an ironstone pitcher and a possible porringer.

Ceramics are divided into three classes: earthenware, stoneware, and porcelain, and each class are divided into types, such as redware, creamware, and pearlware (all earthenwares). A brief description of the ware types recovered from the site is presented below.

TABLE 7

HISTORIC CERAMIC DISTRIBUTION FROM OLD SCOTS BURYING GROUND SITE BY WARE TYPE

Ceramic Type/Subtype	Shovel Tests	Trenches	Block 1 Units	Exterior Units	Total	%
COARSE EARTHENWARE						
Redware (undated)	3	-	7	78	88	72.5
WHITEWARE						
Plain (after 1815)			1	1	2	1.8
IRONSTONE (After 1840		-		11	11	9.1
YELLOWWARE (1827-1940)			1		1	0.9
GRAY SALT-GLAZED STONEWARE (UNDATED)		18			18	14.8
BROWN SALT-GLAZED STONEWARE (UNDATED)	1				1	0.9
TOTAL	4	18	9	90	121	100.0

* Based on sherd counts

a. *Earthenware*

1) Redware

Redware is often the most common type of ceramic found on many colonial and post-colonial sites. It is characterized by a coarse, reddish-orange body and can be glazed or unglazed, decorated or plain. A total of 88 sherds were recovered from the site. All but two of these were from flower pots. A single body sherd of glazed redware was recovered from Stp 25, located east of the meetinghouse. A glazed redware handle fragment, possibly from a porringer, was recovered from Unit 16 in Block 1. These are significant in that it suggests food consumption during the period of the meetinghouse.

2) Yellowware

Yellowware is a type of earthenware first introduced to American consumers during the 1820s. Most yellowware is unmarked and is characterized by simple, heavy forms in varying shades of yellow. The popularity of yellowware peaked circa 1860-1870, eventually being replaced by whiteware, metal, or glass, and later by plastic utensils (Leibowitz 1985:9-10). One sherd of glazeless yellowware was recovered from Unit 3.

3) Whiteware

Whiteware, first introduced circa 1805, continues to be manufactured to the present day. Whiteware was developed from pearlware, with the major difference being an absence of the diminished blue tint on the surface characteristic of the latter and a decrease in the amount of lead in the glaze (Miller 1980:2). A total of 23 sherds were recovered from the site.

4) Ironstone

Ironstone is a type of earthenware developed toward the end of the eighteenth century as a durable alternative to the popular imported Chinese-made ware. By 1813, English potter Miles Mason was producing wares under the name, "Patent Ironstone China." Although ironstone china was being produced as early as 1780 by the Rorstrand factory in Sweden, it was the products of Mason and his contemporaries that ultimately captured the American market (Wetherbee 1981:13-14). White ironstone, or white granite, came into widespread popularity during the 1850s (Miller 1980:29). A total of six sherds were recovered from the site.

B. *Stoneware*

Stoneware is among the earliest and most durable ceramic ware types found on American archaeological sites. Prior to the end of the eighteenth century, most stoneware used in the colonies was produced in England. By the end of the eighteenth century into the nineteenth century, American potters had mastered the production of stoneware (Moran et al 1982:125). These came in both smooth-finish and salt-glazed varieties. The latter is so-named because of salt thrown into the kiln, which gave the finished vessels a shiny, grainy finish referred to as an "orange peel" finish, for its physical resemblance to the surface of an orange (Moran et al. 1982:118; Neumann 1984:239). Decorations ranged from incised decorations, which date primarily to before 1840, to handpainted cobalt blue designs, which were among the earliest designs to appear in the colonies (Ketchum 1991:4-5). Around 1850, stoneware vessels began to be manufactured with a dark brown slip known as an "Albany slip" (Noel Hume 1991:101). A total of 19 sherds were recovered from the site.

5. Curved Glass

A moderate amount of non-architectural glass was recovered from the site, which can be further divided into the subcategories of bottle glass and lamp glass. While the bottle glass assemblage was very fragmentary, several generalizations can be made from the recovered sherds. The approximate date of manufacture, place of origin, and use may be determined by several factors. First, a lip or base section can help to date a bottle by the technology used to form the piece. Second, embossments will often contain the bottlemaker's name and location. Third, the coloring of the glass itself can be an indication of both date (the technologies used to manufacture certain colors can be traced to certain years) and use. For example, the process that produced clear glass that turned slightly amethyst-colored after exposure to the sun's ultraviolet rays was developed circa 1880; therefore, a fragment of amethyst glass found in a level gives that provenience a TPQ of 1880 (Jones and Sullivan 1985:13; Kincade 1964:22). The identifiable bottles and bottle fragments from the Old Scots Burying Ground were comprised mainly of types manufactured during the nineteenth century with one notable exception. A dark green, V-shaped finish and several body fragments, probably from the same vessel were recovered from Units 2, 3 and 7 in Block 1 (Plate 30). Based on

PLATE 30: 18TH-Century Bottle Fragments From Block 1
(Photo by Rob Tucher)

the form of the finish, this vessel is dated to the first quarter of the eighteenth century. This puts its time of deposition during the main period of activities at the meetinghouse. The coloring of the glass suggests its use as a container for alcohol, since dark green or "black glass" bottles were generally used to store liquor during the seventeenth, eighteenth, and nineteenth centuries (Jones and Sullivan 1985:14).

A number of clear bottle fragments were recovered from Unit 15, Stratum B, Level 3. One fragment had a partial embossment, "ONE" which may indicate the capacity of the bottle. Although the finish is missing, the thickness of the body fragments suggests that it

may have been a milk bottle. A second bottle, recovered from Unit 13 is a cylindrical, aqua-colored vessel with the partial embossment, "___TNIN___/___S/____ARK." This may be a "Lightning Hot Drops" bottle, possibly manufactured in Newark.

Aside from its physical characteristics, the coloring of the glass along with its form is often an indicator of a bottle's original use. According to Kincade, bottles made of dark amber, brown, black, or dark green were used for alcohol, in part to keep the contents from spoiling (1964:10). Aqua blue or green bottles were popular for soda and mineral water (McKearin and Wilson 1978:8). Cobalt blue bottles were used as containers for medicine and cosmetics, while cobalt-colored table glass was used as salt dishes and decanters (Jones and Sullivan 1985:14).

The lamp glass consists of fragments (N=5) that likely originated in clear lamp chimneys. All were plain body fragments, with two rim fragments represented. One of the body fragments exhibited horizontal lines on the exterior, which may be a consequence of the turn-molding manufacturing process. These lines were the result of the body coming into contact with grit on the lining of the mold. The turn mold process was in use at least as early as 1865, and was commonly used in the manufacture of nineteenth-century lamp chimneys (Jones and Sullivan 1985:30-31).

6. *Grave-related Artifacts*

Several artifacts strictly associated with the Old Scots Burying Ground were recovered during electronic surveillance of the graveyard. Two identical coffin handles of a type referred to as a "plain ball" were found near the southern boundary of the site. Each piece measured 7 inches in length, and came from an adult coffin. While there are no

identifying marks, its form suggests that it dates from the mid-nineteenth century. Identical specimens were recovered from excavations at the St. Thomas Anglican Churchyard in Belleville, Ontario, Canada, with a date range of interment from 1821-1874 (McKillop 1995:77, 84-85). Thus it appears that this type of coffin hardware was rather common, at least within the northeast geographic region, and that it was not in any way limited to use by one denomination. In fact, the 1865 *Illustrated Catalogue of American Hardware of the Russell and Erwin Manufacturing Company* contained nine variations of size, decoration, and material type of the pieces recovered from the Old Scots Burying Ground (Nelson 1980 [1865]:333-335). The fact that coffin hardware was being mass produced and advertised in a national catalogue is testament to the commercialization of funerary rites during the 1860s.

A second type of coffin handle found during the electronic survey of the cemetery was an elaborate white metal handle with the embossment, "Our Darling." This piece is believed to have been associated with the grave of a girl who died in 1869 at the age of 17. Interestingly, the handle is relatively small, similar to the type of handles found on the coffins of very small children. This suggests that the interred was small in stature, perhaps as a result of a chronic illness that ultimately claimed her life.

Numerous fragments of lead were recovered from the cemetery, distributed across the entire site. These crudely formed pieces had no definable shape, but were all less than 2 inches in maximum width and were relatively flat. It is likely that these fragments served as wedges or dowels to level and secure grave markers set onto a stone base. One source describes the process this way:

> where the marker has an even base in good, sound condition, set it on lead shims and hold it in place in the slot in the base with the lead wedges along its sides.. . . Once the marker is set in place, fill the space between the marker and the edge of the slot with a mortar or with "lead wool" and "lead rope" hammered in to provide a seal. [Anson-Cartwright 1998:28-29]

A small pewter finial was recovered during electronic surveillance of the cemetery (Plate 31). This specimen was broken off a larger piece, and was characterized by an ornate, sunburst-like design. This piece may have been part of a larger grave marker decoration or ceremonial object. A white metal coffin tack or screw head was also recovered. This was typical of ones used during the second half of the nineteenth century and were advertised in the 1865 *Illustrated Catalogue of American Hardware of the Russell and Erwin Manufacturing Company* (Nelson 1980 [1865]:331-332).

7. Faunal

Non-human skeletal material from the site was relatively underepresented in comparison to other material groups. The faunal assemblage from the site was too fragmentary to identify species or element; however, several of the fragments did appear to

8. *Clay Pipes*

The clay pipe assemblage (Plate 32) from the Old Scots Burying Ground site is proportionately large compared to other non-architectural material groups (Table 8). Fortunately, clay pipe is an artifact that survives the years remarkably well, and can be extremely helpful in dating a provenience or site. Usually, a relatively tight date range

PLATE 31: White Metal Finial Found During Metal Detecting
(Photo by Rob Tucher)

TABLE 8

CLAY PIPE DISTRIBUTION FROM OLD SCOTS BURYING GROUND SITE

Part	Shovel Tests	Trenches	Block 1 Units	Exterior Units	Total	%
STEMS						
Stem 4/64	-	-	2	-	2	7.1
Stem 5/64	3	4	3	3	13	46.6
Stem 6/64	1	1	1	1	4	14.2
Unmeasurable Stems	-	2	-	-	2	7.1
Subtotal-Stems	4	7	6	3	21	75.0
BOWL FRAGMENTS	1	1	4	1	7	25.0
TOTAL	5	8	10	4	28	100.0

can be determined by examining either of three physical characteristics of a pipe. The most common method is by measuring the bore of the stem, which decreased in size from the late sixteenth century to the nineteenth century. This is done by backing the smooth end of a wood drill, measured in increments of sixty-fourths of an inch, into the bore and comparing the number to the Harrington Scale, a formula developed by J. C. Harrington of the National Park Service in 1954 to approximate the age of a clay pipe within a predetermined date range.

Another method developed by Dr. Lewis Binford and based on the Harrington Scale allows a mean date for an entire clay pipe assemblage to be calculated by using the straight-line regression formula, Y=1931.85-38.26X. Ivor Noël Hume, in *A Guide to Artifacts of Colonial America*, outlines the formula as follows: "Y being the mean date for the group, 1931.85 the theoretical date when the stem hole would disappear altogether, 38.26 the number of years between each sixty-fourth-of-an-inch decrease, and X being the

PLATE 32: Representative Clay Pipe Fragments From Old Scots Burying Ground
(Photo by Rob Tucher)

mean hole diameter for the group"(Noël Hume 1991:299). Using this formula, a mean date of 1736.47 was determined for the Old Scots Burying Ground clay pipe stem assemblage, which consists of a total of 19 measurable fragments.

A second though somewhat less precise way of dating clay pipes is by the shape and size of the bowl. From the seventeenth century to the nineteenth century, the size, shape, and position of clay pipe bowls have gone through a steady, traceable transformation. Bowls on seventeenth-century pipes were almost always plain and smooth, and set at a moderate angle from the stem. This characterizes the bowl fragments recovered from the Old Scots Burying Ground. Pipes of the early part of the century were marked by relatively small bowls proportionate to short stems, which averaged about 3.5 inches in length. By the close of the seventeenth century, pipe bowls had increased in size along with the length of the stems, which reached lengths of 11 inches or more (Noël Hume 1991:296-298).

A third method of dating clay pipes is through the identification of makers' marks. These marks usually consist of the manufacturer's initials and/or decorative motif, which can sometimes be compared to existing records and traced to a time when a particular maker's products were exported to the United States. Until the nineteenth century, however, it was not common practice among London pipemakers to stamp their names or initials on their products. Around 1690, pipemakers began to use molds with their incised initials to produce pipes with the mark in relief on either side of the heel (Atkinson 1965:254). Unfortunately, none of the specimens found at the site had any initials or decorative markings.

11. Ammunition-related

A significant amount of artifacts related to early firearms were recovered from the site, including two gun flint fragments (Plate 33). One gunflint fragment was recovered

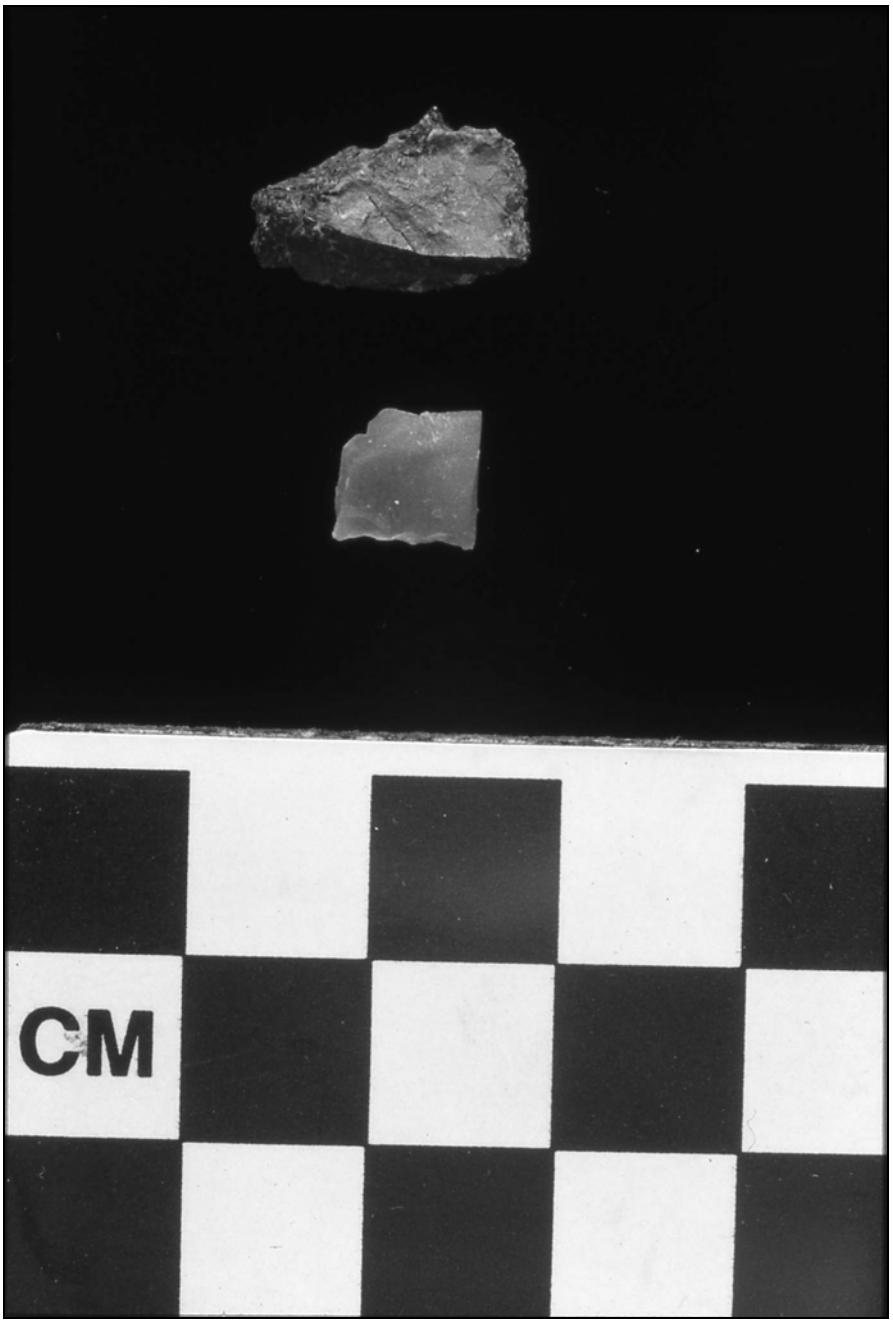


PLATE 33: Gunflint Fragments From Block 1 (Photo by Rob Tucher)

from Unit 9, Stratum B. This piece may be a flake from gunflint production, rather than an actual gunflint. No striking edge is visible, and it is small and irregular in shape; however, prior to the eighteenth century, gunflints, or spalls, took on many forms, the result of

unskilled knappers with little regard for uniformity in style or size (Noël Hume 1991:219-220). The material seems to be European in origin, probably a low-grade English chalk flint. The presence of flakes indicates the reworking of the flint into gunflints or strike-a-lites (Luedtke 1998:37, 41).

One of the fragments is fashioned from the dark-colored European flint that may have been used as shipping ballast. The second one is also a European flint, possibly French "honey" flint, which is characterized by a light brown, opaque coloration. The majority of gunflints found on colonial sites are French; French gunflints were considered superior to those fashioned from the English chalk flint.

It is interesting to note that a relatively large quantity of post eighteenth-century ammunition was recovered from the site. Of these artifacts, 18 were 12-gauge shotgun shells and two were various-sized smaller caliber shell casings. Several had legible backmarks including, "Winchester Fader No. 12" dating to sometime after 1885 and "REM-UMC SHURSHOT," dating to after 1911. This may be an indication of the limited development in the Marlboro area that allowed for the discharge of firearms near the site well into the twentieth century.

13. Small Finds

A small number of artifacts of varying form and function which are subsumed under the broad general category of small finds were recovered from the site. One of these is a small copper alloy sleeve button (Plate 34). This piece has a loop shank, plain face and a faint backmark, "BE____/Co." Although the maker cannot be identified, the presence of a backmark indicates its manufacture after 1800. A small broach with a pin back,

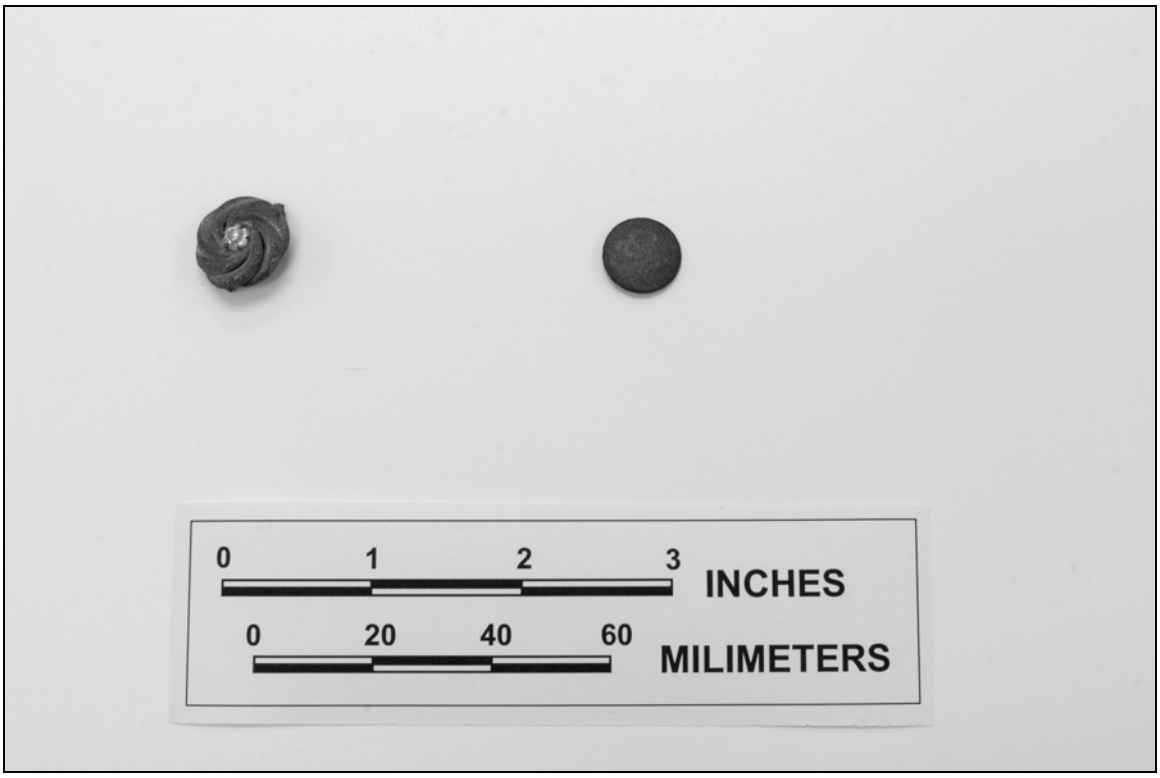


PLATE 34: Buttons Found During Metal Detecting Survey (Photo by Bruce Harms)

intricately formed from sheet metal strips to form a small flower with a faux paste stone, was recovered during metal detecting. Based on its design, this piece appears to date to the second half of the nineteenth century.

Several horse-related artifacts were recovered during the metal-detecting survey. Three horseshoe fragments, possibly from one specimen were recovered. Based on its irregular shape and asymmetrical fullering, it appears to be hand-forged. A side section from a horse bridle bit was recovered along the southern boundary of the site. This piece, constructed of ferrous metal, is typical of ones used during the second half of the nineteenth century.

A small animal foot trap was recovered from Unit 16. This piece was complete and is described in the 1865 *Illustrated Catalogue of American Hardware of the Russell and Erwin Manufacturing Company* as being a muskrat and mink trap capable of holding animals as large as a fox. Several wire loop and chain fragments found nearby may have been the anchor chain (Nelson 1980 [1865]:331-332).

14. Prehistoric Artifacts

A moderate amount of prehistoric material was recovered from the site. The majority consisted of flakes, with a number of broken cobbles and fire-cracked rock (FCR) also recovered. The most diagnostic prehistoric artifact was a quartzite groundstone recovered from Unit 17 in Block 1. This would have been used in the processing of plant foods such as nuts, seeds or grain, suggesting a Woodland Period occupation of the site by prehistoric groups.

15. Grave Markers

Arguably the most informative artifacts present within the site are the large number of gravemarkers, many with clearly legible inscriptions. The earliest gravestone dates from 1722 and the most recent is dated 1977. They were carved from a variety of materials, such as sandstone, white marble, granite and even fieldstone. One of the objectives of this study is to use the information from the gravemarkers to try and understand the relationships between the various congregants and examine broader issues such as ethnicity, social standing and access to goods based on the iconography, inscriptions and location of the gravestones.

The location of an individual's grave relative to the meetinghouse may have some significance as to social hierarchy within the congregation. One of the recurring themes of this study is the relationship between the secular aspects of colonial life, such as social standing, economic status and occupation and the role they played, if any, within the church. Directly related to this is one of the research questions posed in Chapter X, namely, Was there a pattern of grave placement by class, ethnicity or gender relative to the location of the meeting house (i.e. prominent members, church elders, ministers, etc. closest to the meeting house)? In an attempt to answer this question, I examined several of the extant gravestones and the individuals they represent to determine the correlation between the secular aspects and burial location.

Although a large number of gravemarkers are missing from the site, particularly in the area around the meetinghouse and understandably, under the monument mound, there were enough present and in good condition to conduct the analysis. The graves of the Reverends John Boyd and John Tennent were not considered, since their location near the meetinghouse was clearly attributed to their position as ministers of the congregation. Fortunately, a series of stones belonging to the Craig family were located 15.7-feet east of John Tennent's grave, which placed them at roughly the same distance south of the meetinghouse (Plate 35).

The three gravestones were in order from the closest to the meetinghouse: Samuel Craig, died Nov. 17, 1746, Archibald Craig, Esq., died March 6, 1751, and Mary Craig, died Nov. 1, 1752. This suggests a temporal pattern and not one based on gender. Although these are the only stones present, a base visible on the surface may represent

PLATE 35: Craig Family Gravestones (Photo by Author)

another family member buried even closer to the meetinghouse. Archibald Craig was born in Scotland in 1677 and was the son of John Craig, the patriarch of the family in America. He came to America with his father, mother and brother James, on the *Henry and Francis* in 1685 (Symmes 1904:462). In 1702, he purchased or was given a tract of land in Topanemus from his father (Horner 1932:262). During his lifetime, Archibald Craig served in a number of capacities including Justice of the Peace and trustee of the Tennent Church. As indicated by the "Esquire" on his gravemarker, he was also an attorney. In addition, Archibald Craig and his brother, James, operated a dock or wharf in Matawan, located approximately six-miles north of the Old Scots site, which they purchased in 1700

(Symmes 1904:463). This maritime association may explain the title "Captain" before his name in some references.

Archibald Craig's probate inventory also provides information regarding his occupation. This inventory, valued at £ 358, lists a large number of farming implements, livestock, and harvested crops, suggesting that agriculture may have been his primary occupational pursuit (Deed Book E: 1819). This same inventory also lists two "negroes," a looking glass, a clock, 33 pewter plates, 6 tables and 24 chairs - all indicating a fairly large number of possessions beyond those necessary to sustain life. A number of books and pamphlets included in the inventory attest to the literacy of Archibald Craig and the value of printed materials. However, no items related to religion were listed, not even a family bible, which was common in households of all social classes.

Samuel Craig, who predeceased both of his parents, is buried closest to the meetinghouse. He was born in 1708 in Freehold, well after the establishment of the Old Scots congregation. Although he died at the relatively young age of 38, it appears that Samuel Craig was an accomplished craftsman who left an estate valued at slightly over £492. A number of items on his probate inventory indicate that he was a clockmaker. These include weights and scales, clockmaker's tools, and several clocks. It appears that agriculture was also an important activity, as evidenced by the large amount of livestock, farming implements and crops, both harvested and "on the ground" (Deed Book E: 1287).

Samuel Craig's probate inventory also shows a significant number of what may be considered "luxury" items. These include a silver tankard, two looking glasses, 12 pictures, and silver cases, to name a few. He also left a number of forks, which is

significant during this period because they were considered to be a sign of civility and refinement. Those who knew how to use a knife and fork were looked upon as embracing the latest technology and were distanced from the lower classes, who retained the crude, unsophisticated manner of eating with their hands from communal bowls (Bedell and Scharfenberger 2000:37-38).

Interestingly, there is an array of "boards, shingles, glass, bricks, nails, locks...and all other materials for Finishing the New House" listed in the inventory. This suggests that Samuel Craig died rather suddenly, perhaps while building a new and presumably larger house. This may be the house mentioned by Symmes as being located on the old Englishtown road, which is the present-day Route 522 (Symmes 1904:48). This is further evidence that he was financially successful and could afford not only large quantities of household furnishings, but a fine house as well. Like his father, a number of books and pamphlets were included in the inventory, but no items related to religion.

The third Craig gravemarker belongs to Mary, wife of Archibald who died in 1752. No will or probate inventory exists for Mary, however, it can be assumed that she occupied the same social standing as her husband. At least two other members of the Craig family are buried at the Old Scots Burying Ground, although neither gravemarker is present. Ironically, both are named William: one being the son of Archibald who died in 1726 at age two, and the other being the son of Samuel who died in 1743 at age three. These stones were identified in an inventory compiled around 1900 (Symmes 1904:260).

It is apparent that the Craigs were accomplished members of society who also held important positions within the congregation. Archibald was a trustee and Samuel was a

deacon. It is likely, then, that their grave placement close to the original meetinghouse near the two beloved ministers Boyd and Tennent was due in part to their material wealth, in addition to their standing within the congregation. This is supported by an examination of a 1734 seating plan for the Lower Meetinghouse (Plate 36). The pews of both Samuel and

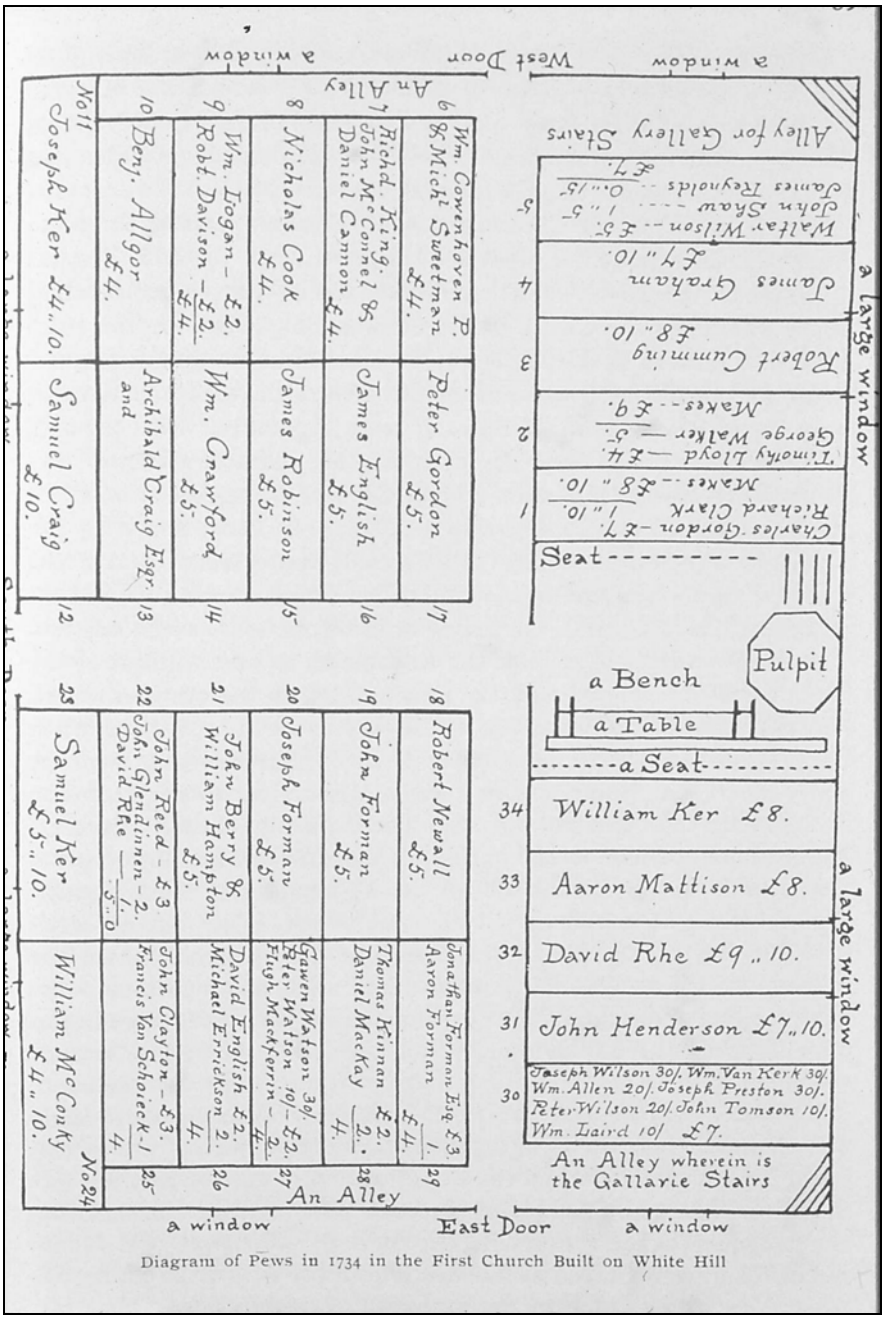


PLATE 36: 1734 Seating Plan For Old Tennent Church. (Symmes 1904)

Archibald Craig were located far from the pulpit in an area next to a stairway that would appear to be less than desirable. However, the fee assessed for both pews was £10, the highest of all the congregants. This fee was determined by a person's assets and income, clearly indicating that secular wealth was factored into the affairs of the church. During the late 17th/early 18th centuries, age was the primary factor in determining church seating. However, by the third decade of the eighteenth century, wealth clearly supplanted age as the basis for seating assignments (Dinkins 1988:411).

Interestingly, all three Craig burials occurred after the second meetinghouse was built in Freehold. Interments also began at the new site in the early 1740s, indicating that the graveyard was available at the time of death of Archibald, Mary and Samuel Craig. The reason for burial in the Old Scots Burying Ground may be related to the fact that two younger children had already been buried there and this area was thought of as a family burial plot.

The three extant Craig gravestones are characterized by identical "death's head" iconography. This is significant, since the trend toward less ominous symbols on gravemarkers had been in place since around the 1730s and gravestones with cherubs and other similar uplifting symbols were certainly available in New Jersey by this time. The use of a symbol that was clearly out of vogue at the time may have more to do with religious doctrine than commercial availability. This holds particularly true, since the Craigs obviously had the means to afford the latest style gravestones and examples of the

newer iconography were present in the Old Scots Burying Ground on gravestones that predate the Craig family gravestones.

The change in mortuary art during the first half of the eighteenth century was directly related to the Great Awakening movement that championed a more hopeful, positive view of the afterlife - a concept that was reflected on gravestone iconography. Thus, it is possible that the Craigs rejected at least part of the Great Awakening doctrine in favor of the more orthodox, Puritan-based dogma that characterized Presbyterian worship during the late seventeenth/early eighteenth centuries. It was not unusual for congregations who were more conservative in their views to forbid visits by itinerant preachers, however, it is clear that the Old Scots congregation as a whole did accept the new teachings and the Craigs were simply acting on an individual level (Deetz 1977).

Symbols found on other gravemarkers illustrate the influence Scottish iconography had on the Old Scots congregation well into the eighteenth century. One of the best examples is the table stone of the Reverend John Tennent, who died on April 23, 1732. The oversized form of the stone allows for a variety of symbols and inscriptions. Among these are crossed long bones at the base of the stone. Harold Mytum states that this motif was commonly found on Scottish monuments of the seventeenth and eighteenth centuries (Mytum, in press). A winged skull below an hourglass is also present at the top of the stone. Both are also typical of Scottish mortuary symbolism, although the former is rare in Scotland after the seventeenth century (Mytum, in press).

Another gravestone is unusual in that it has the names of three individuals who died at significantly varying times (Plate 37). The complete inscription reads, “Here Lies Ye

PLATE 37: Gravestone Marking the Burials of Three Members of the Henderson Family (Photo by Author)

Bodys (sic) of Michael Henderson Died Aug't Ye 28, 1722 and Jane his wife Died Oct Ye 10th 1722 Stevens Nichl. Henderson Their Grand Son Nov Ye 27th 1737 Aged 3 Months." This piece likely represents a replacement gravestone placed sometime after the latest interment. It was not unusual to initially mark a grave with a crude marker until the family of the deceased could afford a more formal one, or in rural areas, until a professional stone carver came into the area (Little 1998:18-19). It is possible that the Henderson gravemarker replaced a crude fieldstone marker similar to ones situated just to the west.

XI. METHODOLOGY OF THE OSTEOLOGICAL ANALYSIS

This section describes the methodology used in the analysis and evaluation of the human remains encountered at the Old Scots Burying Ground. The analysis of the human remains was conducted by the author, with invaluable assistance from Dr. Peter L. Scharfenberger and Peg Davis, of the Louis Berger Group, Inc. and utilized traditional approaches for the assessment of the general physical characteristics of the individual's age at death, sex, and stature (e.g. Stewart 1979; Brothwell 1981; Bass 1987; Iscan and Kennedy 1989). It consists of a five phase procedure, as follows: 1) a general description of the osteological material; 2) the estimation and identification of the minimum number of individuals; 3) the determination of sex; 4) the estimation of age and; 5) the estimation of stature. No destructive analysis was undertaken. The osteological remains were handled with the utmost care and respect during the recovery and analysis phases of this project.

General Description of Skeletal Material

The osteological elements are identified as being human or faunal. The individual elements are inventoried. Observations are made on condition and preservation. In addition, evidence of post mortem damage, if present, is noted.

Minimum Number of Individuals

During this phase, the minimum number in individuals (MNI) is estimated, and the skeletal material is separated into discrete individuals. Determination of discrete individuals is based on the duplication of diagnostic bones.

Determination of Sex

Determination of sex is based on direct observation of sexually dimorphic criteria. Adult males and females differ in size and characteristics and this variation is reflected in the skeletal morphology. Determining the sex of juveniles is problematic as the distinct male/female traits are age dependent. Jackes (1992:195) has had success in sexing subadults by combining morphological and metrical characteristics.

Morphological traits which assist in determining the sex of an individual have the strongest signatures in the crania (skull) and pelvic region. Landmarks in the skull which are diagnostic of sex include supra-orbital ridges, forehead, mastoid processes, occipital protuberance, orbits, mandible, and gonial angle. Landmarks which identify sex difference in pelvic morphology include pubic symphysis, subpubic angle, obturator foramen, acetabulum, greater sciatic notch, ischiopubic ramus, and preauricular sulcus.

Estimation of Age at Death

The determination of age relies on an assessment of physiological age, as opposed to the chronological age of the individual (Iscan and Kennedy1989:8). The physiological age is based upon relative growth patterns. Theoretically, this measurement is expected to give an accurate estimate of chronological age, but environmental, nutritional, and disease stresses often cause changes in the skeleton which will mask the true age of the individual (Gray 1964).

The accuracy with which age can be estimated varies inversely with the age of the individual (Stewart 1979:128). In sub adults, age estimation is based primarily upon observed developmental changes, and more precise estimates are possible (Saunders 1992).

In older individuals, age estimates are more often accomplished through the observation of degenerative changes, with less accuracy (Kerley 1970).

A holistic approach which considers all possible age-related attributes is best for an overall estimate. Attributes utilized in this analysis include: 1) dental eruption and occlusion; 2) cranial suture closures; 3) postcranial epiphyseal unions: 4) pubic symphyseal face morphology; 5) auricular surface morphology; 6) phase changes in the sternal rib; and 7) age-related degenerative conditions.

Estimation of Stature

Estimation of stature is based on extrapolation formulae derived from populational averages of long bone lengths. These averages are compiled from known populations, resulting in some degree of error when applied to prehistoric population. The formulae utilized Native American populations (Steele and McKern 1980). Bones utilized in this phase of analysis include the humerus, radius, ulna, femur, tibia, and fibula.

Osteological Analysis of the Material Recovered at the Old Scots Burying Ground

This section details the results of the osteological analysis of 17 skeletal fragments recovered from the Old Scots excavations. Osteological analysis determined that four human individuals were represented (MNI) in the remains which were recovered during the archaeological investigation at the Old Scots Burying Ground. All of the bones were in fair to poor condition. They were extremely friable and fragile and were handled with the utmost care and respect. An inventory of the elements and a brief description follows:

Feature 8 consisted of three teeth fragments. Two were highly deteriorated due to taphonomic conditions. The third tooth was a molar determined to be from an individual

who was probably in his or her late teens or early twenties. The crown was extremely worn, indicating a coarse diet during a relatively short life span.

Feature 16 consisted of one unidentifiable small fragment of tooth enamel, three unidentifiable highly deteriorated bone fragments, and four small unidentifiable long bone fragments.

Feature 19 consists of one small unidentifiable cranial fragment. This fragment was likely displaced by animal burrowing activities.

Feature 20 consists of two unidentifiable bone fragments, one unidentifiable small bone fragment, one highly deteriorated left navicular (scaphoid) which is a bone in the wrist, and one highly deteriorated greater multangular (another wrist bone). The latter two are adult by size and sex is indeterminate.

Overall, the human remains from the Old Scots site were extremely fragmentary and limited to those elements which are the densest, such as long bone joints and teeth. This precluded much of the analytical potential of the assemblage, including sex, race, and in most cases, age. However, grave orientation, depth of the burials and social standing based on the absence of grave goods were discernable based on an analysis of the recovered remains.

XII. CONCLUSION

The excavations at the Old Scots Burying Ground uncovered invaluable physical evidence that may ultimately answer a number of questions related to the original meetinghouse of the First Presbyterian Congregation of New Jersey and the activities of the earliest congregants. The archaeological evidence and the documentary resources used during the course of this study also provide critical insight into the growth and evolution of the Presbyterian congregation as both a religious body and a secular entity.

Clyde Dollar has stated that historic sites are generally shallow, which results in artifacts from disparate time periods deposited together in mixed strata (Dollar 1978:220). While Dollar's conclusions may be overstated, they do hold true for the Old Scots Burying Ground site. Its actual occupation was only around sixty years, with occasional use thereafter restricted to burials, construction of the monument mound, and visits by descendants and latter-day congregants. Activities during its peak period of occupation were limited to only a few days a month, thus the volume of artifacts generated was anticipated to be small.

The presence of late nineteenth-century artifacts associated with dining may be related to the Victorian practice of "picnicking" at cemeteries. This was a reflection of the move away from excessively long grieving periods where death and its associated ritual were transformed from somber events to an almost uplifting remembrance of the deceased. Cemeteries became manicured landscapes where superintendents were told, "if you can put smiles into your cemeteries you will be acting on the modern principle of making cemeteries cheerful places" (Stannard 1980: 28). The large number of flower pots recovered from Units 9, 14 and 15 is further evidence of the late nineteenth-century attempt

to make cemeteries "picturesque" where grief would be soothed, rather than intensified (Simon 1980:59). The relatively large amount of nineteenth-century artifacts indicates a significant degree of activity at the site, likely in association with burial exercises, as well as visitation by congregants and descendants. Thus, the appearance of cemeteries during the Victorian period differed considerably in form and layout from those of the eighteenth century.

The architectural evidence uncovered at the site in the form of both features and artifacts provides new data about the construction and form of the meetinghouse and the circumstances surrounding its demise. Stratigraphic evidence indicates that the building did not have a cellar. Well-defined post molds within the foundation is evidence of post-in-ground interior construction, with short logs of no more than 0.5-feet in diameter used to support the floor joists. A total of 10 post molds were encountered in Units 6, 9, 10, 14 and Trench 2. These were distributed in a somewhat irregular pattern, suggesting that they were judgmentally placed for support where needed, rather than arranged at set intervals. Additional posts that may have been present within the foundation may have been obliterated by the dismantling of the structure or the construction of the monument mound.

The surrounding foundation appears to have been partially robbed, with loose stones present along the south, east and west walls. Features 3 and 4, large dark stains appear to be robbed sections of the builder's trench along the west wall. Numerous fieldstone flakes indicate that larger stones were modified to provide a tight fit and moderate-sized stones used to fill pockets created by the larger stones. A row of fieldstones found in Unit 17 oriented east/west may be an interior support system for the meetinghouse floor. This may also indicate that the front of the building faced west.

Radiocarbon dating provides supporting evidence for the initial date of construction of the meetinghouse. An end date of 1680 that was calculated for the burned oyster shell used for making mortar suggests that the meetinghouse was constructed prior to 1692, possibly soon after the first refugees arrived in America in 1684.

The meetinghouse itself was only partially covered by the monument mound. An 1898 paper presented to the Executive Council of the Presbyterian Historical Society articulated the Synod's guidelines for the construction of the mound, recommending that it "not be situated over the original location of the meetinghouse" - a recommendation to which the builders partially adhered (Lowrie and Ludwig 1898). The excavation of Trench 2 suggests nominal disturbance to the original ground surface during the construction of the monument mound. The tin can with lead seals recovered from the extreme northwest corner of the trench at a depth of 3.9-feet below the surface was situated in a matrix of heavily mottled soils below the level of Features 12-15, which were clearly *in situ* features related to the meetinghouse.

The exposure of the foundation gave an indication of the dimensions of the meetinghouse. Although only three sides were defined during the excavations, it is likely that the actual footprint of the building measured 25-feet square. A measurement taken from the robbed foundation trench along the west wall to the east wall foundation encountered in Trench 2 was 25-feet. Therefore, if the building footprint was square, as proposed by the nineteenth-century documentary resources, it would have been somewhat larger than the original twenty-foot square estimate.

The architectural remains also give insight into the effect the environment of the New World had on the building practices of the Scottish Presbyterians. The Old Scots

meetinghouse, which was made almost entirely of wood, was a marked departure from the contemporaneous houses of worship in the British Isles, which were almost entirely made from stone and on occasion, brick. The availability of vast amounts of trees as a local resource undoubtedly allowed builders greater latitude in building design, and resulted in structures that could be erected quickly and relatively inexpensively from local materials. However, the frequent repairs and relatively short span of use-life of the meetinghouse suggests that the building was poorly designed and shoddily constructed.

Significant physical evidence was recovered that gives some indication as to what ultimately became of the meetinghouse structure. The 11 clinched nails are indicative of a structure that was at least partially deteriorated, while the six pulled nails suggest that at least part of the building was dismantled. Thus, it can be concluded that the building was abandoned and whatever useable elements existing were retrieved, while those beyond repair were simply left behind to deteriorate. The varying conditions of nails indicate that much of the disrepair mentioned in period documents was related to the wood frame, although some of the wooden components, perhaps later additions or repaired sections were redeemed. The absence of any window lead further supports the salvage theory, whereby the highly valued windows would be among the first items removed. Moreover, the absence of any large hardware, such as hinges, hasps, door latches or locks may have resulted from the removal of other still functional elements. It is possible that some of these elements were used in the Old Tennent Church. The communion table from the Old Scots meetinghouse was moved to the Old Tennent Church and is still in use (Plate 38). Materials from the robbed portions of the foundation that were encountered during excavations may have been used to construct bases for monuments in the cemetery.

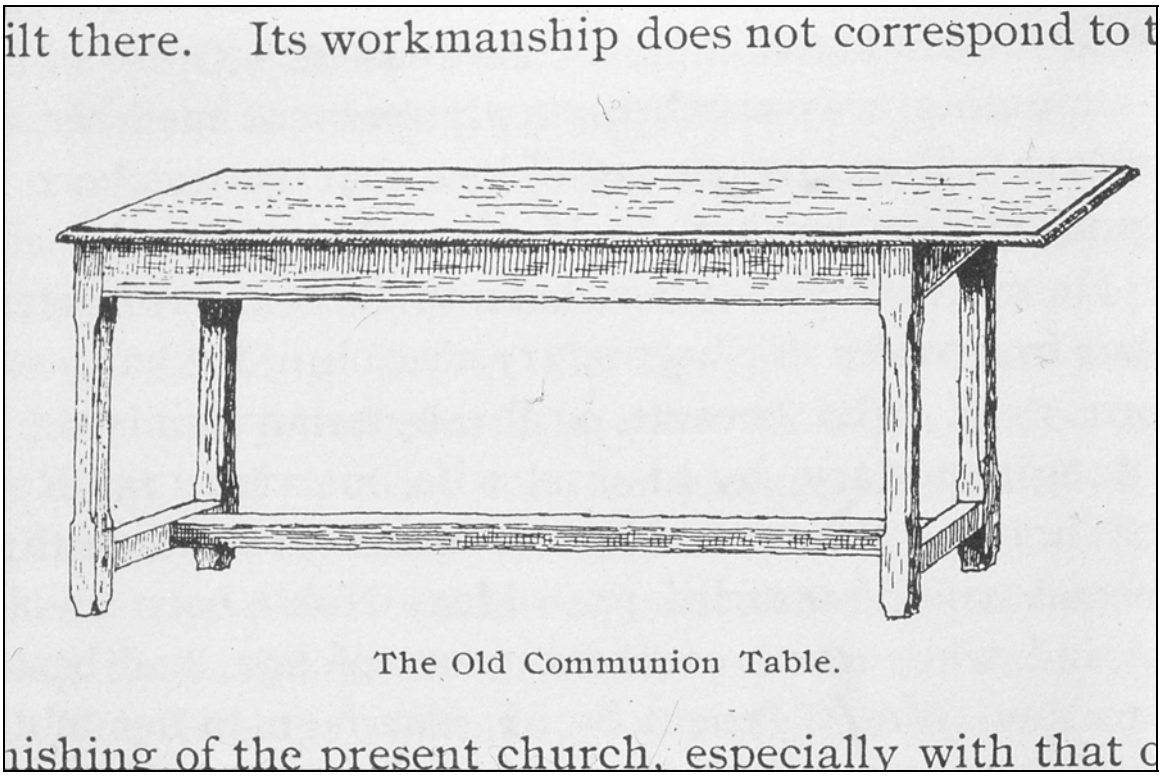


PLATE 38: Drawing of Communion Table From Old Scots Meetinghouse (Symmes 1904)

Fieldstones of the size and form of those from the foundation are present under monuments dating from the 1850s (Plate 39). If these stones were taken from the foundation of the meetinghouse, it would indicate that the remnant foundation was visible on the surface as late as the mid nineteenth century. Thus, the meetinghouse foundation stood as an exposed ruin for over one hundred years after its abandonment.

The majority of the clinch nails, along with significant numbers of window glass fragments were recovered from the units west of the meetinghouse. This illustrates the degree of erosion on the site and the movement of materials from the location of the meetinghouse westward after the structure was abandoned. The location of the

PLATE 39: Monument with Fieldstone Base Possibly Robbed From Meetinghouse Foundation (Photo by Author)

meetinghouse on a pronounced rise and the relatively thin grass cover of the surrounding surface exacerbates the erosion problem.

The absence of certain artifacts can be used deductively to infer the materials used in the meetinghouse. No slate fragments were recovered from the site, which indicates that the roof was probably thatched or made of wood shingles. This is further evidence of the plentitude of timber available for building during the seventeenth century. Slate shingles or ceramic pantiles were widely used on structures in the New York/New Jersey area during the seventeenth century, thus the availability of such materials was clearly in place prior to the construction of the Old Scots meetinghouse.

The presence of glazed brick at the site suggests at least one nominal decorative feature within the meetinghouse. Fragments were recovered from Units 6, 10, 16 and interestingly, from Feature 8, one of four unmarked burials uncovered at the site. The latter fragment was recovered from within the level of skeletal remains from the burial. It is unlikely that this piece was included in the coffin with the interred. Rather, it is probable that it was on the ground surface prior to the grave being dug, and redeposited as part of the backfill. After the coffin and enclosed remains deteriorated, the brick fragment became part of the burial matrix.

Other brick fragments recovered from the site may be an indication of a fireplace, possibly along the south wall of the meetinghouse. Charcoal recovered from nearly every excavated context may be the heating by-products from heating the structure. This appears to contradict several of the early histories that describe the meetinghouse as being unheated. Moreover, few if any of the artifacts exhibit any evidence of charring, which would indicate that fire was a contributing factor to the demise of the meetinghouse. Underfired brick fragments recovered from Units 5, 7 and 17 suggest the presence of interior brick, possibly for use as nogging or filler between structural timbers, in addition to a fireplace. Plaster fragments recovered from Units 6, 9 and Stp 33 indicate that the interior walls were plaster coated, probably on a base of wood lathe, or boards. The presence of oyster shell mortar on sections of the foundation may be the result of repair attempts mentioned in early documents, since most of the foundation was dry-laid. Quantities of burnt oyster shell recovered from Units 2-5 and 8 indicate that the mortar was mixed on site and possibly manufactured on site. Although most lime derived from oyster shell was produced in kilns, producers in rural areas could create a fire of sufficient

temperature, about 1650 degrees F., over an open fire of logs. It was preferable to have lime made right before mixing, since exposure to air or moisture would render it unsuitable for making mortar (McKee 1973:62-63). However, no evidence of a fire of the magnitude needed to produce lime was found at the Old Scots Burying Ground.

The window glass recovered from the site indicates the presence of numerous windows in the meetinghouse. Window glass was found along every side of the structure, with the heaviest concentration being along the east elevation. This may be an indication that the east elevation had the most windows, perhaps to maximize the east/west daylight exposure during services. All of the fragments were aqua broad glass with the exception of two fragments of light green crown glass from Trench 2 and a single fragment of light green crown glass from Unit 6. It is possible that the crown glass fragments represent a replacement pane. The broad glass fragments were all fairly uniform in regard to color, suggesting that these were from the original windows used in the structure.

The malleability of Presbyterian doctrine and the role it played in shaping religious thought in the New World is embodied in the inscriptions on many of the gravemarkers that are extant in the Old Scots Burying Ground. The presence of the phrase "Rest in Peace" on several gravemarkers shows a softening of the aversion to terms once exclusively associated with Catholicism. Also, the numerous mortuary symbols popular in Scotland well before their appearance in America suggest a stylistic influence of Old World iconography on the stone carvers operating in the New World. There appears to be a degree of time lag between the peak popularity of certain mortuary symbols in Scotland and the New World. William Hampton Adams has proposed that the time lag on frontier sites was even longer than on urban sites (Adams 2003:54). Thus, the symbols familiar to

the first congregants of the Old Scots Burying Ground from Scotland, were the ones utilized in the new settlement and subsequent styles only came into use as information worked its way to the New World. This phenomenon was identical to changes in style of other secular objects, such as clothing, ceramics and architecture.

Artifacts that can be definitively associated with religious symbolism or practice were absent from the site. One of the most difficult aspects of attempting to identify artifacts attributable to the Presbyterians is the paucity of material representations of iconography. This holds particularly true for the period of use of the Old Scots site. Aside from the extant gravemarkers, nothing in the recovered assemblage would give any indication of the sacred nature of the site. This could be the result of several factors. First, the doctrine of colonial Presbyterianism did not allow for many physical representations of the faith. The desire to distance Protestantism from the supposed idolatry of the Catholic Church resulted in an austerity and sparseness of religious material culture. Second, the economic condition of the early congregation would likely have placed severe limits on the acquisition of anything more than the most basic tools of worship. The first congregants arrived with little more than the clothes on their back, thus merely surviving in the frontier environment of 17th-century Monmouth County would have left little to indulge in extraneous expressions of the faith. Finally, the materials and forms of those objects that were in use, such as pewter or wood plates or pattens, wood communion tokens, linen altar cloths, etc. would leave little or no trace in the archaeological record. Thus, the question of whether or not religious aspects of a site can be discerned in the archaeological record is dependent upon certain diverse variables, namely, the belief system of a given

denomination, the economic status of the congregants and the taphonomic conditions of the site.

Activities outside of those associated with religious practice were evident at the site. These included the use of tobacco and firearms. A surprisingly high number of clay pipe fragments were recovered from the site, from contexts within and outside the meetinghouse structure. This runs counter to religious doctrine since tobacco use near colonial meetinghouses, particularly ones associated with a Puritan-like doctrine like the Old Scots congregation, was strictly forbidden (Earle 1891:379). This highlights the differences between religious doctrine, and the reality of the congregants' actions and may be a reflection of the male-centered activities that ranged from the construction of the meetinghouse to the gathering of male elders to tend to the affairs of the congregation. Alcohol consumption also appears to have occurred at the site, as evidenced by the rum bottle finish and numerous body fragments recovered from Feature 1. This however, could have been used for religious purposes, since the drinking of wine was an integral part of Presbyterian services during the time period of the meetinghouse's existence.

The presence of gunflint flakes is somewhat more puzzling since these have no known ritual function. They may be a characteristic of the frontier conditions and the uneasy relationship with competing groups, both indigenous and colonial that existed when the meetinghouse was first built. Also, panthers and wolves were an ever-present threat in Monmouth County, particularly in the sparsely populated Freehold area into the eighteenth century. The need for protection against any number of dangers, either real or perceived, would have necessitated the possession of a weapon even at a sacred site. Interestingly, the

large number of shotgun shells found on the site is evidence of the site's use as a hunting area well into the twentieth century.

The paucity of certain artifacts, such as ceramics and faunal material, can be explained by examining such diverse factors as access to goods, style and form of period objects, and the burial environment of the site. Documentary research has indicated that religious services were lengthy events where meals were consumed at one or more times during the day. Moreover, non-service meetings, construction of the building, and time devoted to repairs all would likely have resulted in food consumption at the site. However, the practice of using tableware made of wood or pewter during the seventeenth and early eighteenth centuries does not always leave evidence in the archaeological record (Cantwell and Wall 2001:273). Objects made from these materials, while more durable than ceramics in everyday use, do not fare well in archaeological contexts with poor preservation. Similarly, the highly acidic soils at the site would obliterate any trace of faunal material that was not charred or significantly dense in structure. The presence of a cow skull fragment may be related to congregational food consumption.

The GPR survey of the Old Scots Burying Ground produced mostly favorable results. While not infallible, it can produce reliable data for identifying unmarked graves when calibrated against known grave shafts. The graves represented by Features 8, and 16-20 were first identified by the GPR survey. However, the identification of non-burial features is less predictable. The walkway identified by the GPR survey west of the meetinghouse was not confirmed by the numerous units placed along the corridor. Rather, a possible 19th-century fenceline and sections of gravel were the only anomalies encountered. The anomalies located west and east of the upright fieldstones, designated

Features 8, 16 and 20 respectively, were proven to be grave shafts. Other anomalies uncovered adjacent west, east north and south of Feature 8 were also shown to be unmarked graves.

The prehistoric presence at the site, while tantalizing given the well-documented relationship between indigenous groups and the Old Scots congregation, remains largely indeterminate. All of the identified prehistoric material consists of debitage, FCR and a possible groundstone. No definitive diagnostic artifacts, such as projectile points or pottery were recovered, thus the dates or extent of the occupation could not be determined. However, the C-14 dates from the site may shed some light onto the probable time of the prehistoric settlement of the site. Sample 7 was a concentration of charcoal recovered from Unit 11 near a charred root ball at a depth of approximately 2.0-feet BH. This root was located along the east wall of the unit, which was adjacent to the Feature 8 grave shaft. The two-sigma calibrated date range was 1440-1650 A.D. The end date predates the European settlement of the site by around forty years. This charcoal may have originated during the clearing of the land by indigenous groups through a controlled burn later in the prehistoric period, possibly just prior to contact with European groups. A second sample, Sample 6 yielded a two-sigma calibrated date range of 1520-1580 A.D. This sample was taken from Unit 10, Stratum D, Level 4. This stratum was underlying deposits associated with the meetinghouse. A third sample dated 1510-1600 A.D. came from a charred post that suggests a structure on the site prior to the arrival of the Old Scots congregation during the last quarter of the seventeenth century. This evidence indicates a prehistoric occupation of the site as late as one hundred years or less before the arrival of the Old Scots congregation.

Evidence for the treatment of the site after the meetinghouse ceased being used is embodied in the features and artifacts found west of the meetinghouse foundation. It has been determined that a wooden fence, probably a split rail was oriented east/west of Block 1. A significant amount of redware flower pots probably lined the fence, particularly in the vicinity of Units 9 and 15. Numerous spent shotgun shells and smaller caliber shells encountered are representative of the rural nature of the site that allowed hunting well into the twentieth century. The animal foot trap recovered from Unit 16 provides evidence for a diversity of animal procurement strategies and the extent to which animal burrowing played a role in soil displacement across the site. This also suggests that the importance of the site as both an historic and sacred site was largely overlooked after the nineteenth century.

The excavated burials first encountered during the GPR survey provided significant information regarding burial practices, social status and probable temporal/spatial organization of burials at the site. The burials represented by Features 8 and 16-18 were not spaced in an orderly, linear fashion. Rather, their irregular arrangement suggests a lack of burial organization and symmetry during the early period of the site's historic occupation. The condition of the remains, lack of grave goods and location within the site all contribute to our understanding of the early site development. Based on the often faint outlines encountered, it appears that all of the burials were entombed in wooden, hexagonal coffins with no apparent ornamentation or extraneous hardware other than nails. They were oriented with the feet to the east and head to the west positioning typical of Christian burials. All three likely represent European burials. Analysis of the recovered human molar from Feature 8 indicates that the interred individual was probably in his or her late

teens or early twenties. However, the extremely worn condition of the crown indicates a coarse diet during a relatively short life span.

The cluster of three upright fieldstones located west of the meetinghouse was determined to be crude gravemarkers, possibly representing more than one burial each. The size and unaltered shape indicates that these stones were not once part of the meetinghouse foundation. This is likely the area where the first historic burials on the site occurred. It is possible that an extant red sandstone marker with the names of three individuals located about 5.0-feet southeast of the upright fieldstone encountered in Unit 16 was a replacement marker for a similar crude marker. The dates of interment cannot be determined from this survey, but they may date from the earliest time of the site's historic occupation, presumably when seventeenth- and early eighteenth-century stone grave markers were rare and expensive. In a recent study of seventeenth- and eighteenth-century grave markers from neighboring Middlesex County, Dr. Richard Veit states, "The purchase of a gravestone was a sign of status and many individuals could not afford them" (1996:77). This coincides with the paucity of grave goods and non-architectural artifacts recovered from the site that reflects the poor financial condition of the first congregants.

The shallowness of the graves represented by Features 8, 16 and 20 is somewhat puzzling. All were encountered at a depth of approximately 1.7'-2.7' below the surface. This is nearly 2.0-feet closer to the surface than is the standard depth for a grave shaft that is usually 6.0-feet below the surface at its base and 4.0-feet below the surface to the top of the coffin. While erosion is a problem in some parts of the site, it is extremely unlikely that it would have removed 2.0-feet of soil. Moreover, extant, early eighteenth century grave markers located nearby actually have soil *build up* at the base. These markers are at the

same level as the ground surface overlying the three burials, indicating an absence of soil truncation in the area. The shallowness of these graves may be the result of interment during the harsh winter months where a shaft was excavated through frozen ground to the minimal practical depth. Another explanation could be that the congregation simply did not conform to the uniform procedures that have become standard in modern burial practices.

The overall condition of the interred remains made the analysis and evaluation of the excavated burials difficult. The positioning and patterning of the coffin nails were very erratic and the advanced decay of the skeletal material and post-burial movement inside the shaft resulted in confusing outlines and unclear burial boundaries. Moreover, several of the burials may have occurred at the same time, which further obscured the feature delineations. The poor condition of the recovered skeletal material precluded the definitive identification of the original element, thus, aside from the few identified teeth from Features 8 and 16, cranial fragment from Feature 19 and wrist bone fragments from Feature 20, it was not readily evident which part of the interred was present. Rodent burrows encountered at the base of Feature 16 and in Feature 19 also illustrate the additional post-burial movement of human remains by animals.

The extant gravemarkers provided a wealth of information regarding religious doctrine, class, gender and social standing. The case study conducted for the Craig family gravemarkers, which combined the positioning of the graves relative to the meetinghouse with an examination of their probate inventories and church seating plan indicates that secular wealth did figure into the affairs of the church in some respects, but not all. The Craigs' pew fees were the highest in the congregation, yet their seating locations were less

than desirable. Still, they were accorded a burial plot location near the Old Scots meetinghouse equal to that of the beloved minister John Tennent.

Future research of the Old Scots Burying Ground Site should focus on several key questions. First, the identity and nature of the graves and associated markers identified through the ground-penetrating-radar survey should be established through controlled excavations of the areas away from the meetinghouse and monument mound. Second, the prehistoric presence represented by the debitage, FCR and groundstone should be further explored through additional testing in the areas of the site that may not have been disturbed by the digging of graves. Finally, testing in areas under the monument mound that were not examined during this survey, particularly the southeast corner and center areas may yield additional data regarding the activities of the congregation during the seventeenth and eighteenth centuries.

With this study, an attempt has been made to answer a number of questions regarding the first Presbyterian meetinghouse and to draw a comprehensive profile of the congregation itself, from its establishment in the late seventeenth century up to the abandonment of the structure near the middle of the eighteenth century. In the process of nearly four years of extensive historical research and archaeological testing, an image has crystallized of a people who have persevered through the most difficult times of early colonization in the seventeenth and eighteenth centuries, through the myriad social, cultural, and technological changes of the nineteenth and twentieth centuries. One need only take a sobering walk past the graves of infants, toddlers, and women of childbearing age in the burying ground to understand the fragility of life and the hardships endured

during those early days. Yet, through it all, the church remained stalwart in its place as a center for religious, social, and even civil activities.

One of the goals of this study was to create a template for the excavation of sacred sites from the historic period. The approach employed at the Old Scots Burying Ground site is an effective, multi-facet strategy that can be applied to all similar, sacred sites to maximize the data potential from the often inadequate documentary and archaeological record. The combination of archaeological excavations, documentary research, metal-detecting, and GPR, provides several lines of evidence from which to examine the activities of the congregation, site layout, building design, religious doctrine, and site formation processes.

The Old Scots Burying Ground site is critical to our understanding of one of the major aspects of European colonization. Aside from economic opportunity, religious freedom was the prime motivation for many of the emigrants who came to the United States during the seventeenth and eighteenth centuries. The Old Scots Burying Ground and other similar sites have the potential to help understand the complex amalgam of social factors involved in the establishment of a religious congregation amidst the challenges to survival and economic uncertainties of a frontier environment. Although the religious component of these sites is important, their place in the secular world of the congregants is every bit as crucial as understanding the economic, political, technological, and social aspects of life in Colonial America. Thus, researchers who overlook the spiritual aspect of past cultures ignore one of the most important, defining components of a society, and therefore, only draw a partial picture of the lifeways and the role religion played in other, more visible aspects of the archaeological record.

The Presbyterian congregation who founded the Old Scots meetinghouse arrived in New Jersey as refugees from the persecution that was prevalent in Scotland during the seventeenth century. Their house of worship and associated ritual expression was a reflection of the austerity that characterized not only their economic condition, but their belief system as well. As time went on and the congregation established itself financially, socially and politically in the area, they outgrew the first meetinghouse and moved to a new location approximately six miles southwest.

The archaeological investigation of the Old Scots Burying Ground site (28-Mo-294) provided data that help to fill in the many voids that exist chronicling the formative years of the congregation. The archaeological component of this study has helped to further our understanding of such aspects of the congregation as class, ethnicity, burial practices, meetinghouse building techniques and religious doctrine. They were a group outside the mainstream of colonial society both ethnically (Scottish) and denominationally (Presbyterian) who came to America as refugees with no political clout, rather than colonists in a position of power. Thus, they fell into the category of "invisible men and women of the past" that historical archaeologists point to as the cornerstone of historical archaeology and its value in resurrecting the past lives of those with little written documentation. Their importance to the founding of the nation is nevertheless, as critical as those who are well-represented in the written record.

The founding members of the Old Scots Burying Ground represented the first great movement of American Presbyterians, which quickly spread to the midwestern, southern and southwestern United States. Having suffered both legal and physical cruelties at the hands of the British monarchy, the Old Scots congregation carved a successful settlement

out of the wilderness that was seventeenth-century Monmouth County. With a pioneering spirit and an unshakeable faith in God, they constructed a meetinghouse of simple design and devoid of ornamentation; a reflection of the doctrine that sustained them through the most challenging of circumstances. The archaeological remains from the Old Scots Burying Ground not only tell a great deal about the morphology of the first structure, but also speak volumes about the congregants who worshipped in Monmouth County for over 300 years. Both building and people were austere, resilient, and destined to survive, the evidence of which still stands along Gordon's Corner Road today.

APPENDIX A: SHOVEL TEST PROFILES

TEST NUMBER	DEPTH BELOW SURFACE (in feet)	MUNSELL CODE	SOIL DESCRIPTION	CULTURAL MATERIAL CATALOG NUMBER (see Appendix B)
1	0.0 - 0.4 0.4 - 1.0 0.6 - 0.8	10 Y/R 2/2 10YR 3/6 10YR 6/6	Sa Lo Si/Sa Fi Sa Sa	
2	0.0 - 0.6 0.6-1.9 1.9 - 2.4	7.5YR 2.5/1 10YR 5/6 10YR 6/6	Si Lo Si Sa Fi Sa	Y
3	0.0 - 0.4 0.4 - 1.1 1.1-2.5	7.5YR 2.5/1 10YR 4/4 10YR 6/6	Si Lo Si Sa Fi Sa	N
4	0.0 - 0.7 0.7 - 3.0	7.5YR 2.5/1 7.5YR 5/6	Si Sa Fi Sa	N

TEST NUMBER	DEPTH BELOW SURFACE (in feet)	MUNSELL CODE	SOIL DESCRIPTION	CULTURAL MATERIAL CATALOG NUMBER (see Appendix B)
5	0.0 - 0.6 0.6 - 2.4	7.5YR 2.5/1 7.5YR 4/6	Si Sa Fi Sa	N
6	0.0 - 0.7 0.7 - 2.9	7.5YR 2.5/1 7.5YR 5/6	Si Sa Fi Sa	Y
7	0.0 - 0.6 0.6 - 2.7	10YR 2/1 10YR 5/6	Sa Lo Fi Sa	N
8	0.0 - 0.5 0.5 - 3.0 3.0 - 3.6	10YR 2/1 10YR 5/8 2.5Y 5/6	Sa Lo Fi Sa Fi Sa	N
9	0.0 - 0.5 0.5 - 3.0 3.0 - 5.0	10YR 2/1 10YR 5/8 2.5Y 5/6	Sa Lo Fi Sa Sa Cl	N

TEST NUMBER	DEPTH BELOW SURFACE (in feet)	MUNSELL CODE	SOIL DESCRIPTION	CULTURAL MATERIAL CATALOG NUMBER (see Appendix B)
10	0.0 - 0.4 0.4 - 2.6	10YR 3/2 7.5YR 3/3	Sa Lo Fi Sa	Y
11	0.0 - 0.5 0.5 - 1.6 1.6 - 2.2	7.5YR 2/1 7.5YR 4/3 10YR 6/6	Sa Lo Fi Sa Fi Sa	N
12	n/a	n/a	Tennent vault profile	Y
13	0.0 - 0.4 0.4 - 4.0	10YR 4/3 10YR 5/6	Sa Lo Fi Sa -	Y
14	0.0 - 0.4 0.4 - 1.2 1.2 - 3.2	10YR 4/3 10YR 5/8 10YR 4/6	Sa Lo Fi Sa Fi Sa -	N
15	0.0 - 0.7 0.7 - 4.2	10YR 3/2 10YR 5/6	Sa Lo Fi Sa	Y
16	0.0 - 0.5 0.5 - 4.2	10YR 3/2 10YR 5/8	Sa Lo Fi Sa	Y

TEST NUMBER	DEPTH BELOW SURFACE (in feet)	MUNSELL CODE	SOIL DESCRIPTION	CULTURAL MATERIAL CATALOG NUMBER (see Appendix B)
17	0.0 - 0.4 0.4 - 4.1	10YR 3/2 10YR 5/8	Si Lo Fi Sa	Y
18	0.0 - 0.5 0.5 - 2.4 2.4 - 4.0	10YR 3/3 10YR 5/8 10YR 4/6	Si Lo Fi Sa Fi Sa	N
19	0.0 - 1.2 1.2 - 2.6 2.6 - 4.2	10YR 2/1 10YR 5/8 10YR 4/6	Si Lo Fi Sa Med. Sa	N
20	0.0 - 0.4 0.4 - 2.8 2.8 - 4.1	10YR 2/1 10YR 5/6 10YR 4/6	Si Lo Fi Sa Med. Sa	N
21	0.0 - 0.6 0.6 - 3.0 3.0 - 4.0	10YR 2/1 10YR 5/6 10YR 4/6	Si Lo Fi Sa Sa Lo	Y

TEST NUMBER	DEPTH BELOW SURFACE (in feet)	MUNSELL CODE	SOIL DESCRIPTION	CULTURAL MATERIAL CATALOG NUMBER (see Appendix B)
22	0.0 - 0.4 0.4 - 3.1 3.1 - 4.0	10YR 2/1 10YR 5/6 10YR 4/4	Si Lo Fi Sa Sa Lo	Y
23	0.0 - 1.0 1.0 - 2.6 2.6 - 3.3	10YR 3/2 10YR 4/6 10YR 3/6	Si Lo Fi Sa Sa Lo	N
24	0.0 - 0.9 0.9 - 3.0 3.0 - 4.1	10YR 3/3 10YR 5/6 10YR 3/6	Si Lo Fi Sa Sa Lo	Y
25	0.0 - 0.7 0.7 - 3.1 3.1 - 4.5	10YR 2/2 10YR 4/4 10YR 5/6	Si Lo Fi Sa Fi Sa	N
26	0.0 - 0.6 0.6 - 4.6	10YR 2/2 10YR 4/6 mottled W/10YR 5/8	Si Lo Fi Sa	Y

TEST NUMBER	DEPTH BELOW SURFACE (in feet)	MUNSELL CODE	SOIL DESCRIPTION	CULTURAL MATERIAL CATALOG NUMBER (see Appendix B)
27	0.0 - 0.5 0.5 - 2.6 2.6 - 4.1	10YR 2/2 10YR 4/4 10YR 5/6	Si Lo Fi Sa Fi Sa	Y
28	0.0 - 0.5 0.5 - 2.75 2.75 - 4.1	10YR 2/2 10YR 4/4 10YR 5/6	Si Lo Fi Sa Fi Sa	Y
29	0.0 - 0.7 0.7 - 2.6 2.6 - 3.7	10YR 2/2 10YR 4/4 10YR 5/8	Si Lo Fi Sa Fi Sa	Y
30	0.0 - 0.9 0.9 - 2.4 2.4 - 3.7	10YR 2/2 10YR 3/3 10YR 5/8	Si Lo Sa Lo Fi Sa	N
31	0.0 - 0.7 0.7 - 2.9 2.9 - 3.7	10YR 3/3 10YR 4/4 10YR 5/6	Si Lo Sa Lo Fi Sa	N

TEST NUMBER	DEPTH BELOW SURFACE (in feet)	MUNSELL CODE	SOIL DESCRIPTION	CULTURAL MATERIAL CATALOG NUMBER (see Appendix B)
32	0.0 - 0.3 0.3 - 3.0 3.0 - 3.6	10YR 3/2 10YR 4/6 10YR 3/6	Si Lo Fi Sa Fi Sa	N
33	0.0 - 0.7 0.7 - 2.2 2.2 - 4.0	10YR 2/2 10YR 4/4 10YR 5/6 -	Si Lo Fi Sa Med. Sa	Y
34	0.0 - 0.4 0.4 - 0.9 0.9 - 2.8 2.8 - 4.1	10YR 3/3 10YR 3/6 10YR 4/6 10YR 5/6	Si Cl Si Lo Fi Sa Med. Sa	N
35	0.0 - 0.4 0.4 - 0.8 0.8 - 2.6 2.6 - 4.1	10YR 3/3 10YR 3/6 10YR 4/6 10YR 5/6	Si Cl Si Lo Fi Sa Med. Sa	Y
36	0.0 - 0.4 0.4 - 0.8 0.8 - 2.5 2.5 - 4.1	10YR 3/3 10YR 3/6 10YR 4/6 10YR 5/6	Si Cl Si Lo Fi Sa Med. Sa	N

TEST NUMBER	DEPTH BELOW SURFACE (in feet)	MUNSELL CODE	SOIL DESCRIPTION	CULTURAL MATERIAL CATALOG NUMBER (see Appendix B)
37	0.0 - 0.6 0.6 - 0.9 0.9 - 2.7 2.7 - 3.7	10YR 3/2 10YR 3/3 10YR 3/6 10YR 4/4	Si Cl Si Lo Fi Sa Med. Sa	Y
38	0.0 - 0.6 0.6 - 1.3 1.3 - 2.5 2.5 - 3.2	10YR 3/1 10YR 3/3 10YR 5/4 10YR 6/6	Si Lo Fi Sa Fi Sa Med. Sa	N
39	0.0 - 0.5 0.5 - 0.9 0.9 - 2.7 2.7 - 3.0	10YR 3/3 10YR 4/4 10YR 5/4 10YR 5/6	Si Lo Si Lo Fi Sa Cl Sa	N
40	0.0 - 0.5 0.5 - 0.9 0.9 - 3.1	10YR 3/2 10YR 4/4 10YR 5/6	Si Lo Si Lo Fi Sa	Y
41	0.0 - 0.5 0.5 - 2.2 2.2 - 3.5	10YR 3/3 10YR 5/4 10YR 5/6	Si Lo Fi Sa Fi Sa	N

TEST NUMBER	DEPTH BELOW SURFACE (in feet)	MUNSELL CODE	SOIL DESCRIPTION	CULTURAL MATERIAL CATALOG NUMBER (see Appendix B)
42	0.0 - 0.7	10YR 3/3	Si Lo	
	0.7 - 2.9	10YR 5/4	Fi Sa	
	2.9 - 4.2	10YR 5/6	Fi Sa	
43	0.0 - 0.6	10YR 3/3	Si Lo	Y
	0.6 - 2.5	10YR 5/4	Fi Sa	
	2.5 - 4.2	10YR 5/6	Fi Sa	

Cl= Clay, Lo= Loam, Sa= Sand, Si= Silt, C. Shell= Crushed Shell

APPENDIX B: ARTIFACT INVENTORY

Old Scots Burying Ground

Artifact Inventory

Cat#1 Stp 4, Stratum A — 2pcs. wire nails

2pcs. aqua broad window glass fragments, 3g.

Cat# 2 Stp 5, Stratum A — 2pcs. cut/wrought nails

1pc. aqua broad window glass fragment, 1g.

Cat# 3 Stp 5, Stratum B	4pc. cut/wrought nail fragments, badly deteriorated
Cat# 4 Stp 6, Stratum B	1pc. sandstone fragment, possible foundation stone, possible trace of red/white paint. 1pc. cut/wrought nail fragment 1pc. clay pipe stem fragment, 6/64" bore diameter
Cat# 5 Stp 7, Stratum A	1pc. aqua broad window glass fragment, 1g.
Cat# 6 Stp 7, Stratum B	1pc. clear bottle glass fragment
Cat# 7 Stp 10, Stratum B	4pcs. badly deteriorated iron fragments, possible nail
Cat#8 Stp 12, Startum A	56pcs. Brick fragments, 68g. 1pc. Ferrous staple 6pcs. Sand-temper mortar with pebble inclusions, 26g. 2pcs. Clear curved glass rim fragments, possibly lamp 1pc. Belemnite
Cat# 9 Stp 12, Stratum B	120pcs. Brick fragments, 182 g.
Cat#10 Stp 20, Stratum B	2pcs. Handwrought nails

Cat#11 Stp 21, Stratum B	1pc. Metal fragment
Cat#12 Stp 23, Stratum A	1pc. Glazed redware body sherd
Cat#13 Stp 24, Stratum A	Iron slag, 43g.
Cat#14 Stp 25, Stratum A	1pc. Jasper pebble 1pc. Oyster shell, 5g.
Cat#15 Stp 25, Stratum B	1pc. Clay pipe stem fragment, partial bowl section, 5/64" bore diameter
Cat#16 Stp 26, Stratum B	1pc. Brick fragment, 86g. 2pcs.Cut/wrought nail shank, mendable 2pcs. Quartzite cobbles, possible FCR Charcoal, 4g.
Cat#17 Stp 27, Stratum B	1pc. Handwrought nail
Cat#18 Stp 28, Stratum A	1pc. Brown salt-glazed stoneware body sherd, incised decoration

Cat#19 Stp 29, Stratum A	1pc. Clear bottle glass
	1pc. Whole clam shell
Cat#20 Stp 29, Stratum B	1pc. Brick fragment, 1g.
	Charcoal, 4g.
Cat#21 Stp 31, Stratum A	1pc. Brick fragment, 2g.
Cat#22 Stp 31, Stratum B	4pcs. Brick fragments, 10g.
Cat#23 Stp 32, Stratum A	1pc. Fieldstone fragment
Cat#24 Stp 33, Stratum B	1pc. Aqua broad glass fragment, 1g.
	4pcs. Handwrought nail fragments
	1pc. Quartzite cobble, possible FCR
Cat#25 Stp 33, Stratum C	1pc. Aqua broad window glass, 1g.
	1pc. Possible mortar or plaster fragment
Cat#26 Stp 34, Stratum B	1pc. Handwrought nail, pulled
	2pcs. Brick fragments, 3g.
	1pc. Clay pipe bowl fragment
	1pc. Unidentified bone fragment

2pcs. Cut/wrought nail shank fragments

2pcs. Unidentified ferrous metal fragments

3pcs. Fieldstone fragments, sampled

1pc. Oyster shell, 10g.

Charcoal, 2g.

Cat#27 Stp. 35, Stratum B 3pcs. Aqua broad window glass, 5g.

1pc. Handwrought nail, pulled

1pc.Cut/wrought nail shank

1pc. Unidentified calcined bone fragment

Cat#28 Stp 36, StratumA 1pc. Aqua broad window glass, 2g.

1pc.Cut/wrought nail shank

1pc. Unidentified bone fragment

Cat#29 Stp. 36, Str. B 5pcs. Aqua broad window glass, 10g.

2pcs. Handwrought nails, dropped

1pc.Cut/wrought nail shank

2pcs. Clay pipe stem, mendable, 5/64" bore diameter

Charcoal, 8g.

Cat#30 Stp. 37, Str. B 3pcs. Aqua broad window glass, 6g.

Charcoal, 2g.

Cat#31 Stp. 38, Str. A	1pc. Brick fragment, 3g.
	2pcs. Redware flower pot sherds
	1pc. Aqua broad window glass, 1g.
	2pcs. Brown bottle glass
	1pc. Quartzite core
Cat#32 Stp 38, Str. B	1pc. Aqua broad window glass, 1g
Cat#33 Stp 39, Str. A	1pc. Handwrought nail, pulled
	1pc. Handwrought nail shank.
Cat#34 Stp 39, Str. B	Charcoal, 1g.
Cat#35 Stp 40, Str. A	Charcoal, 4g.
Cat# 36 Stp 41, Str. B	1pc. Handwrought rosehead nail, pulled
	3pcs. Aqua broad window glass, 6g.
	Charcoal, 3g.
Cat#37 Stp 43, Str. B	1pc. Handwrought nail
	2pcs. Metal fragments, possibly nails
	2pcs. Aqua broad window glass, 2g.

Cat#38 Unit 2 Ext.,	2pcs. Brick fragments, 2g.
Str.A, Lev. 1	2pcs. Oyster-shell mortar, 2g.
	1pc. Wood fragment, possible architectural
	1pc. Unidentified nail or hook fragment
	1pc. Clear broad window glass, 1g.
Cat#39 Unit 2 Ext.,	3pcs. Fieldstone fragments
Str. B, Lev. 2	3pcs. Brick fragments, 3g.
	1pc. Handwrought nail, head only
	1pc. Unidentified bone fragment
Cat#40 Unit2 ext., Str. B,	2pcs. Brick fragment, 11g.
Lev. 3	1pc. Handwrought nail
	1pc. Quartzite cobble
Cat#41 Unit 2, Str.A,	1pc. Brick fragment, 1g.
Lev.1	2pcs. Oyster-shell mortar, 2g.
	1pc. Dark green bottle finish, V-shaped lip, early 18th-century.
	1pc. Quartz FCR
Cat#42 Unit 2, Str. B, Lev. 2	2pcs. Quartz flakes

	3pcs. Brick fragments, 5g.
	1pc. Unidentified bone fragment
	1pc. Fieldstone fragment
Cat#43 Unit2, Str. B, Lev. 3	1pc. Clay pipe stem fragment, 4/64" bore diameter
	4pcs. Charred oyster shell fragments
Cat#44 Unit 2 ext., Str. B, Lev.3	1pc. Oyster Shell Fragments, 2g.
Cat#45 Unit 3, Str. A, Lev. 1	1pc. Unglazed redware, possible flower pot
	1pc. Unidentified clear window glass, 2g.
	10pcs. Oyster-shell mortar, 8g.
Cat#46 Unit 3, Str. B, Lev. 2	2pcs. Brick fragments, 2g.
	1pc. Quartz flake
Cat#47 Unit 3, Str. B, Lev. 3	1pc. Handwrought nail, slightly S-shaped, possibly burned
	15pcs. Burnt oyster shell, 4g.
	2pcs. Dark green bottle glass, body fragments.
	3pcs. Brick fragments, 3g.

Cat#48 Unit 3, Str. B, Lev. 4	1pc. Brick fragment, 1g. 1pc. Unidentified nail fragment
Cat#49 Unit 3, Str. B, Level 5	Charcoal, 2g.
Cat#49 Unit 4, Str. A, Lev. 1	3pcs. Brick fragments, 17g. 1pc. Handwrought nail 2pcs. Burnt oyster shell, 1g. 1pc. Oyster shell fragment, 1g. 1pc. Redware flower pot sherd Soil sample
Cat#50 Unit 4, Str. B, Lev. 2	1pc. Handwrought nail 5pcs. Burnt oyster shell, 2g. 3pcs. Sand-tempered mortar, 1g. 1pc. Fieldstone fragment 1pc. Unidentified bone fragment Charcoal, 2g.
Cat#51 Unit 4, Str. B, Lev. 3	4pcs. Oyster shell mortar, 8g. 2pcs. Burnt oyster shell, 2g. 9pcs. Fieldstone fragments, possibly foundation

	1pc. Jasper primary flake
	1pc. Quartz flake
Cat#52 Unit 5, Str. A,	6pcs. Burnt oyster shell, 3g.
Lev. 1	Charcoal, 1g.
	4pcs. Brick fragments, underfired, 4g.
Cat#53 Unit5, Str. B,	10pcs. Oyster shell mortar, 20g.
Lev. 2	
Cat#54 Unit5, Str. B,	5pcs. Underfired brick fragments, 45g.
Lev. 3	1pc. Aqua broad window glass, 8g.
	1pc. Jasper pebble, broken
	1pc. Quartzite, possible block shatter
	1pc. Clay pipe stem fragment, 6/64" bore diameter
	1pc. Fieldstone fragment
Cat#55 Unit 5 Ext., Str.A,	1pc. Oyster shell mortar, 1g.
Lev. 1	1pc. Wrought/cut nail
	5pcs. Brick fragments, underfired, 1g.
	1pc. Brown bottle glass body fragment
Cat# 56 Unit 5 Ext., Str. B,	1pc. Brick fragment, 2g.

Lev. 2	1pc. Clay pipe stem fragment, 5/64" bore diameter
Cat# 57 Unit 5 Ext., Str. B,	1pc. Quartz pebble, broken
Lev. 3	2pcs. Underfired brick fragments, 3g.
	4pcs. Brick fragments, 31g.
Cat#58 Unit 6, Str. A,	3pcs. Brick fragments, 1g.
Lev.1	1pc. Glazed brick fragment, 1g.
	1pc. Wood fragment, possibly architectural
	2pcs. Plaster
	1pc. Bone fragment
	Charcoal 3g.
	1pc. Possible chert block shatter
	1pc. Shotgun shell. Stamped "Winchester Fader No. 12."
Cat#59 Unit 6, Str. A,	1pc. Fieldstone fragment
Lev. 2	14 pcs. Brick fragments, 6g.
	1pc. Unidentified bone fragment
	1pc. Plaster
	1pc. Clear glass fragment, possibly decorative
	1pc. .32 Caliber lead bullet
	1pc. Aqua broad window glass, 1g.
	1pc. Wrought/cut nail fragment

Cat#60 Unit 6, Str. B, Level 2	3pcs. Fieldstone fragments 2 pcs. Brick, 2g. 1 pc. Yellowware with Rockingham glaze
Cat#61 Unit 6, Str. B, Lev. 3	1pc. Brick fragment, 4g.
Cat#62 Unit 6, Str. B, Lev. 4	6pcs. Brick fragments, 2g. 2pcs. Unidentified bone fragments 1pc. Green crown window glass fragment Charcoal, 10g.
Cat#63 Unit 6, Str. B, Lev. 4/5	1pc. Brick fragment, 40 g.
Cat#64 Unit 6, Str. B, Lev. 5	2pcs. Lt. green broad window glass, 2g. 4pcs. Unidentified bone fragments
Cat#65 Unit 6, Fea. 3	4pcs. Brick fragments, 2g. 1pc. Clay pipe stem fragment, 4/64 Charcoal, 5g.

Cat#66 Unit 7, Str. A, 1pc. Fieldstone fragment (sampled)

Lev. 1 3pcs. Wrought/cut nail shanks

11pcs. Brick fragments, 5g.

1pc. Brick fragment, underfired, 1g.

1pc. Sand-tempered mortar, 12g.

1pc. Dark green bottle glass, heavily pitted, discolored blue from devitrification

Slag, 22g.

Cat#67 Unit 7, Str. B., 1pc. Fieldstone (sampled)

Lev. 2 2pcs. Handwrought nails, rosehead

2pcs. Wrought/cut nail shanks

17pcs. Brick fragments, 8g.

1pc. Brick fragment, underfired, 1g.

1pc. Dark green bottle glass fragment

2pcs. Clay pipe bowl fragments

1pc. Clay pipe stem fragment, 5/64"

1pc. Aqua broad glass fragment, 2g.

1pc. Quartz flake

5pcs. Unidentified bone fragments

Charcoal, 3g.

Cat#68 Unit 7, Str. B.,	1pc. Brick fragment, 1g.
Lev. 3	1pc. Possible argillite flake
Cat#69 Unit 7, Str. B,	3 pcs. Fieldstone fragments
Lev. 4	1 pc. Unidentified bone fragment
	1 pc. Brick fragment, 7g.
	1pc. Handwrought nail
	1pc. Oyster shell mortar, 70g.
Cat#70 Unit 7/8, Wall	1pc. Brick fragment, 1g.
Tumble	1pc. Aqua broad window glass, 1g.
	Charcoal, 3g.
Cat#71 Unit 8, Str. A.,	10pcs. Brick fragments, 4g.
Lev. 1	1pc. Fieldstone fragment (sampled)
	1pc. Burnt oyster shell, 1g.
	1pc. Unidentified bone fragment
	1pc. Chert flake with partial cortex.
Cat#72 Unit 8, Str. B.,	3pcs. Brick fragment, 3g.
Lev. 2	1pc. Handwrought nail, head and partial shank
	2pcs. Ferrous sheet metal. One piece slightly curved with folded rim. Possible white paint on exterior.
	1pc. Burnt oyster shell, 1g.

	1pc. English chalk flint flake. Battered edge may indicate origin from a gun flint.
	1pc. Jasper flake
	1pc. Clay Pipe Stem, 5/64" bore diameter
	Charcoal, 3g.
Cat#73 Unit 8, Str. B, Lev. 3	1pc. Quartzite cobble, possible FCR
	1pc. Brick fragment, 1g.
	1pc. Fieldstone flake
	Charcoal, 14g.
Cat#74 Unit 9, Str. A., Lev. 1	7pcs. Redware flowerpot fragments
	22pcs. Brick fragments, 111 g.
	1pc. Whiteware body sherd
	3pcs. Handwrought clinch nails
	3pcs. Wrought/cut nails
	3pcs. Wrought/cut nails, shanks only
	2pcs. Clear bottle glass, mendable
	1pc. Fieldstone fragment (sampled)
	3pcs. Plaster/bone
	Charcoal, 10g.
Cat#75 Unit 9, Str. B,	1pc. Wrought/cut nail shank

Lev 2	Charcoal 15g.
Cat#76 Unit 9, Str. B,	7pcs. Cut/wrought nails
Lev. 3	1pc. Cut/wrought clinch nail
	1pc. Fieldstone fragment (sampled)
	22pcs. Redware flower pot fragments
	1pc. Bone fragment
	2pcs. Brick Fragments, 5g.
	3pcs. Machine-cut nails
	Charcoal, 9g.
Cat# 77 Unit 9, Str. C,	12pcs. Redware flower pot
Level 4	3pcs. Handwrought clinch nails
	1pc. Handwrought nail pulled
	10pcs. Machine-cut nails
	2pcs. Unidentified nails
	1pc. Handwrought T-head, head section
	2pcs. Wrought/cut nail shanks
	3pcs. Brick fragments, 3g.
	Charcoal 11g.
Cat#78 Unit Unit 9, Str. C.,	8 pcs. Cut/Wrought nails
Level 5	7 pcs. Redware flower pot fragments

Cat#79 Unit 9, Str. C, Lev. 4	1pc. Redware flower pot rimsherd
Feat. 7	2pcs. Machine-cut nails
	1pc. Wrought/cut nail shank
Cat#80 Unit Unit 9, Str. C.,	9 pcs. Redware flower pot fragments
Feature 7 ext.	1 pc. Handwrought clinch nail
Cat#81 Unit 10, Str. A,	3pcs. Mendable redware flower pot sherds
Lev. 1	4pcs. Brick fragments, 2g.
	1pc. Broad window glass, aqua, 2g.
	1pc. Whiteware body sherd
	1pc. European gunflint flake, possibly “honey” flint
	2pcs. Folded sheet metal fragment, trace of white paint
	1pc. Handwrought nail shank, clinched
	1pc. Wrought/cut nail
	Charcoal, 1g.
Cat#82 Unit 10, Str. B,	4pcs. Fieldstone fragments
Lev. 2	1pc. Sand-tempered mortar
	1pc. Glazed brick fragment
	19 pcs. Brick fragments, 12g.

	15 pcs. Ferrous sheet metal fragments, folded rim, trace of white paint, possible can. 1pc. Clay pipe bowl fragment Charcoal 6g.
Cat#83 Unit Unit 10, Str. C, Lev. 3	1pc. Redware flower pot sherd 1pc. 12-gauge shotgun shell stamped "REM-UMC SHURSHOT" 1pc. Clay pipe bowl fragment 1pc. Heavily encrusted metal strip
Cat#84 Unit 10, Str. D, Lev. 4	Charcoal, 26g.
Cat#85 Unit 10, Feature 4	1pc. Fieldstone fragment 2pcs. Brick fragments, 4g. Charcoal, 5g.
Cat#86 Unit11, Str. A, Lev. 1	1pc. Ironstone body sherd 1pc. Clear curved glass body fragment, possible lamp glass 4pcs. Wrought/cut nail shanks Charcoal 10g.

Cat#87 Unit 11, Str. B,	5pcs. Brick fragments, 6g.
Lev. 2	1pc. Ironstone body sherd
	1pc. Clay pipe stem 5/64" bore diameter
	7pcs. Wrought/cut nail fragments
Cat#88 Unit 11, Str. B,	1pc. Handwrought nail
Lev. 3	Charcoal, 4g.
Cat#89 Unit 11, Str. B,	1pc. Brick fragment, 2g.
Lev. 4	1pc. Clay pipe stem 5/64" bore diameter
	Charcoal, 10g.
Cat#90 Unit Unit 11, Str. B.,	7pcs. Handwrought coffin nails with wood fragments
Level 6, Feat. 8	Charcoal, 8g.
Cat#91 Unit 11 and 12,	1pc. Glazed brick fragment
Feat. 8	6pcs. Handwrought nail fragments with wood affixed
	2pcs. Brick fragments, 2g.
	Charcoal, 2g.

Cat#92 Unit 12, Str. A, Lev. 1	9pcs. Fieldstone fragments
	7pcs. Brick fragments, 68g.
	7pcs. Wire nails
	4pcs. Wrought/cut nail shanks
	1pc. Handwrought t-head nail, head only
	1pc. Machine-cut nail
Cat#93 Unit 12, Str. A, Lev. 2	1pc. Aqua broad window glass, 2g.
	2 pcs. Redware flower pot body sherds
	2pcs. Wire nails
	3pcs. Wrought/cut nails
	1pc. Clear melted bottle glass
	7pcs. Brick, 15g.
Cat#94 Unit 12, Str. B, Lev. 3	1pc. Brick fragment, 1g.
Cat#95 Unit Unit 12, Str. B, Level 4	1pc. Brick, 1g.
Cat#96 Unit 12. Feat. 8	7pcs. Handwrought coffin nail fragments with wood splinters affixed.

F. Str. A, F. Lev 1	Probably two specimens represented.
Cat#97 Unit 12, Feat. 16	20 pcs. Handwrought coffin nails
	1pc. Brick fragment, 3g.
	15pcs. Coffin wood fragments
Cat#98 Unit 13, Str. A,	1pc. Fieldstone fragment
Level 1	1pc. Brick fragment
	1pc. Sand-tempered mortar, 1g.
	14pcs. Lt. aqua bottle glass. Partial embossment,
	"...TNIN../..R..."
Cat#99 Unit 13, Str. B,	1pc. Unidentified bone fragment
Lev. 2	1pc. Brick fragment, 1g.
	1pc. Aqua-colored curved bottle glass
	2pcs. Aqua broad window glass, 1g.
	Charcoal, 3g.
Cat#100 Unit 13, Str. B,	1pc. Brick fragment, 1g.
Lev. 3	Charcoal, 1g.
Cat#101 Unit 14 Str. A,	5pcs. Ironstone body sherds
Lev 1	1pc. Ironstone hollowware base sherd

2pcs. Redware flower pot sherds

1pc. Horseshoe nail clinched

5pcs. Wrought/cut nail shanks

1pc. Metal plate with two machine-cut nails, broken off larger strip

1pc. Handwrought T-head nail, pulled

1pc. Ironstone fragment with quartz inclusion

1pc. Mortar/concrete

Charcoal, 5g.

Cat#102 Unit 14, Str. B, Lev. 2

1pc. Redware flower pot sherd

1pc. Clay pipe stem fragment, 5/64" bore diameter

3pcs. Machine-cut nails

1pc. Wire clinch nail

5pcs. Wrought/cut nail shanks

Charcoal 6g.

Cat#103 Unit 14, Feature 9B

1pc. Unidentified nail shank

Charcoal, 5g.

Cat#104 Unit 14, Str. B, Lev. 3

3pcs. Brick fragments, 3g.

1pc. Ironstone embossed hollowware body sherd

3pcs. Machine-cut nails

	6 pcs. Cut/wrought nail shanks
	1 pc. Lt. green broad window glass fragment, 1g.
	Charcoal, 8g.
Cat#105 Unit 14, Str. B, Lev. 3, Feat. 9b	Charcoal, 20g.
Cat#106 Unit 14, Str. B, Lev. 4, Poss. Assoc. With Feat. 9b	1pc. Heavily encrusted nail, probably handwrought
Cat#107 Unit 15, Str. B,	16pcs. Flower pot sherds, at least two vessels represented
Lev. 2	4pcs. Wire nail
	9pcs. Medium gauge wire
	1pc. Double twisted wire
	1pc. Plastic (sampled)
	3pcs. Machine-cut nails
	3pcs. Machine-cut nail fragments
	3pcs. Brick fragments, 12g.
	9pcs. Clear bottle glass
	2pcs. Lime fragments

Cat#108 Unit 15, Str. C, Lev. 3	51pcs. Clear bottle glass 12 pcs. Redware flower pot, rim, base and body sherds, some mendable 2pcs. Aqua broad window glass, 2g. 4pcs. Brick fragments, 14g. 1pc. Aqua curved glass fragment 6pcs. Wrought/cut nails, heavily encrusted 1pc. Wrought/cut clinch nail 1pc. Heavy gauge wire, probably fence 1pc. Iron staple Charcoal, 90g.
Cat#109 Unit 15, Str. C, Lev. 4, SW Quad.	Charcoal, 20g.
Cat#110 Unit 15, Str. C, Lev. 4	3pcs. Clear bottle body fragments. 3pcs. Redware flower pot fragments 1pc. Handwrought nail, clinched 1pc. Cut/wrought nail shank Charcoal, 20g
Cat#111 Unit 15, Str. C, Lev. 4 (2.25' BH),	Charcoal, 10g.

SE Quad	
Cat#112 Unit 15, Str.D,	Charcoal, 10g.
Lev. 5, SE Quad	
Cat#113 Unit 15, Str. E,	1pc. Ironstone embossed hollowware body sherd, possible
Lev. 6, SW Quad	pitcher
	1pc. Wrought/cut nail shank
Cat#114 Unit 15, Str. E,	Charcoal, 10g.
Lev. 6	
Cat#115 Unit 16, Str. B,	8pcs. Brick, 6g.
Lev. 2	1pc. Glazed brick fragment
	18pcs. Wire fragments, some looped, possible fence
	1pc. D-shaped wire loop
	2pcs. Handwrought nail fragments, rosehead
	1pc. Small ferrous animal leg trap
Cat# 116 Unit16, Feat. 19	4pcs. Handwrought coffin nails, T-head with wood affixed. Three specimens represented
	2pcs. Handwrought nail tips
	1pc. Brick fragment, 4g.

	1pc. Cow skull fragment
Cat# 117 Unit 16, Feat. 20 2.7' BH	2pcs. Handwrought nail shanks
Cat# 118 Unit 16, Feat. 20	17 pcs. Handwrought nails. 1pc. Brick fragment, 2g. 1pc. Clay pipe stem 6/64" bore diameter 10pcs. Coffin wood fragments
Cat# 119 Unit 17, Str. A, Lev. 1	1pc. Brick fragment, 1g. 1pc. Aqua broad glass fragment, 2g. 1pc. Hard rubber, four-way sew-through button 2pcs. Calcined bone fragments 1pc. Quartzite cobble, broken
Cat# 120 Unit 17, Str. B, Lev. 2	19pcs. Underfired brick fragments, 54g. 2pcs. Heavily encrusted nail fragments with wood still affixed. Mendable.
Cat# 121 Unit 17, Str. B,	1pc. Glazed redware handle fragment. Possible porringer

Lev. 3	2pcs. Heavily encrusted nail fragments with wood still affixed. Mendable.
	2pcs. Brick fragments, 2g.
	4pcs. Fieldstone flakes
	1pc. Quartzite groundstone
Cat# 122 Unit 17, Str. B,	1pc. Aqua broad glass fragment, 1g.
Lev. 4	1pc. Quartzite cobble, broken, possible FCR
Cat# 123 Trench 1, Str. A,	4pcs. Handwrought nail fragments
Lev. 1	2pcs. Aqua broad window glass, 3g.
	1pc. Brick fragment, 1g.
	Charcoal, 5g.
Cat# 124 Trench 1, N. Half,	2pcs. Aqua broad window glass, 4g.
Str. A,	Charcoal, 6g.
Lev. 4.2'-4.6' BH	4pcs. Brick fragments, 6g.
	1pc. Small fieldstone fragment, probably foundation-related
	2pcs. Sandstone fragments with partial cortex, possible FCR
Cat# 125 Trench 1, N. Half	1pc. Gray salt-glazed stoneware body sherd with blue

3.1' BH	hand-painted decoration
Cat# 126 Trench 1, S. Half	1pc. Gray salt-glazed stoneware body sherd
2.9' BH	
Cat# 127 Trench 1, Str. A,	1pc. Fieldstone fragment
Level 1	1pc. Handwrought nail, tip fragment
	2pcs. Aqua broad window glass, 3g.
	4pcs. Brick fragments, 4g.
Cat# 128 Trench 1, Feat. 11,	1pc. Handwrought nail
F. Str. A, Lev. 1	2pcs. Aqua broad window glass, 2g.
SE Corner	2pcs.Cut/wrought nail shank fragments
	1pc. Brick fragment, 1g.
Cat# 129 Trench 1, Strat. A,	2pcs. Brick fragments, 1g
Level 2	1pc. Sandstone gravestone fragment
Cat# 130 Trench 2, 1.5' BH	5pcs. Gray Salt-Glazed Stoneware body sherds, at least two vessels represented.
Cat# 131 Trench 2, 1.5' BH	10pcs. Gray salt-glazed stoneware sherds, more than one vessel represented

Cat# 132 Trench 2, Str. A, Level 1	1pc. Brick fragment, 4g. Charcoal, 10g.
Cat# 133 Trench 2, Str. A, Lev. 2	5pcs. Brick fragments, 5g. 11pcs. Fieldstone fragments 1pc. Heavily encrusted ferrous disks fuzed together. Possible button or locket. Charcoal, 10g.
Cat# 134 Trench 2, Str. B, Lev. 3	17pcs. Fieldstone flakes 2pcs. Cut/wrought nail shanks 2pcs. Brick fragment, 3g. 5pcs. Aqua broad window glass, 4g. 1pc. Sandstone fragment with partial cortex, possible FCR
Cat# 135 Trench 2, Str. B, Lev. 4	9pcs. Fieldstone flakes 4pcs. Brick fragments, 20g. 7pcs. Handwrought nail fragments 1pc. Clay pipe bowl fragment 1pc. Clay pipe stem fragment split axially 1pc. Clay pipe stem, 5/64" bore diameter 1pc. Clear lamp glass

16pcs. Aqua broad window glass, 16g.

Charcoal, 10g.

Cat# 136 Trench 2, Str. B
Lev. 5, North Half

10pcs. Aqua broad window glass, 12g.
2pcs. Green crown window glass, 2g.
1pc. Ferrous disk, ridged, possible button?
2pcs. Handwrought nail, mendable
1pc. Heavily encrusted ferrous sheet metal fragment
1pc. Fieldstone fragment
1pc. Clay pipe stem fragment, split axially
1pc. Clay pipe stem, 5/64" bore diameter
1pc. Clay pipe stem, 6/64" bore diameter

Cat# 137 Trench 2, Str. B
Lev. 5, South Half

1 pc. Aqua broad window glass, 2g.
1pc. Fieldstone fragment, possible flake
2pcs. Clay pipe stem fragments, 5/64" bore diameter

Charcoal, 6.3g

Cat# 138 Trench 2, Str. B
Lev. 6, North Half

1pc. Fieldstone flake
2pcs. Handwrought nail shanks

Cat# 139 Trench 2, Str. B
Lev. 6, South Half

1pc. Aqua broad glass fragment, 2g.
2 pcs. Handwrought nail shanks

Cat# 140 Trench 2, Feat. 12 Charcoal, 2g.

Cat# 141 Trench 2, Feat. 14 2pcs. Fieldstone flakes

1pc. Handwrought nail shank fragment

Cat# 142 Trench 2, Feat. 16 Charcoal, 0.3g

I-1 1pc. Rectangular ferrous plate with two nail-like shanks

I-2 1pc. Ferrous tube with brass inner sleeve

I-3 1pc. Brass tube with crossways holes

I-4 1pc. .45 caliber shell casing, centerfire

I-5 1pc. Ferrous horse bit

I-6 1pc. Lead strip fragment

I-7 1pc. Copper alloy, dome-shaped disk with two pointed flanges. Possible leather applique.

I-8 1pc. 12-gauge shotgun shell with paper wadding

I-9 2pcs. Thin lead strip

I-10 1pc. White metal coffin tack head, 19th-century.

I-11 1pc. White metal, plain ball coffin handle

I-12 1pc. White metal, plain ball coffin handle

I-13 3pcs. Horseshoe fragments, one specimen represented

I-14 3pcs. Copper identification plates with crudely scratched, "JED"

I-15 1pc. Small pewter disk, center hole with crossbar, possible buckle

I-16 1pc. Brass identification plate. Raised letters “L.L. Manning and Sons, Plainfield, N.J.”

I-17 1pc. White metal, ornate coffin hardware fragment

I-18 1pc. White metal coffin handle, embossed “My Darling”

I-19 1pc. Brass tablespoon with ornate handle

I-20 1pc. Small copper alloy sleeve button with a loop shank, plain face and a faint backmark, “BE____/Co.”

I-21 1pc. Small copper alloy broach with a pin back, intricately formed from sheet metal strips to form a small flower with a faux paste stone

APPENDIX C: LIST OF FIELD PERSONNEL

Russ Balliet	Neal Barton	Glen Gunther
Richard Harris	Bill Hermstedt	Carlo Iovino
Mary Lou Iovino	Ron LaBarca	Ralph Phillips
Dan Sivilich	Jerry Tirone	Adele Barbato
Brock Giordano	Tiffanie Salisbury	Mark Mahasky
Mike Mahasky	Bryan Zimmerman	Amy LaFleur
Dennis Fredericks	Wendy Rejan	Scott Boguchwal
Mike Minue	Phyllis Troy	Korleen Minton
Liza Gijanto	Segun Adekunle	

APPENDIX D: C-14 DATA SHEETS

(Variables: C13/C12=-2.8:Delta-R=0±0:Glob res=-200 to 500:lab. mult=1)

Laboratory number: **Sample 1**

Conventional radiocarbon age: **540±40 BP**

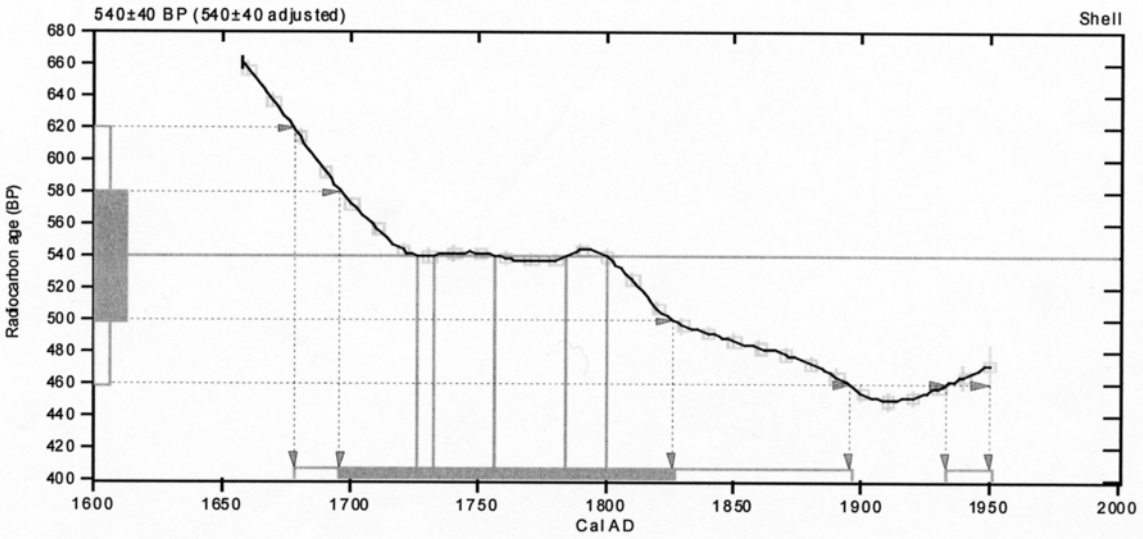
(local reservoir correction not applied)

2 Sigma calibrated results: **Cal AD 1680 to 1900 (Cal BP 270 to 60) and**
(95% probability) **Cal AD 1930 to 1950 (Cal BP 20 to 0)**

Intercept data

Intercepts of radiocarbon age with calibration curve: Cal AD 1730 (Cal BP 220) and
Cal AD 1730 (Cal BP 220) and
Cal AD 1760 (Cal BP 190) and
Cal AD 1780 (Cal BP 170) and
Cal AD 1800 (Cal BP 150)

1 Sigma calibrated result: Cal AD 1700 to 1830 (Cal BP 250 to 120)
(68% probability)

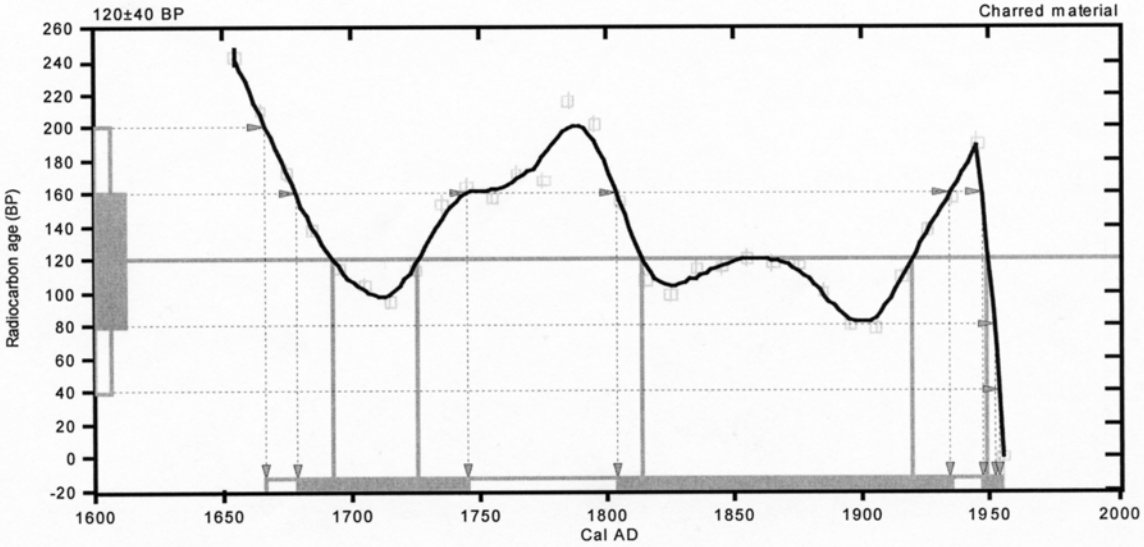


(Variables: C13/C12=-24.6:lab. mult=1)

Laboratory number:	**Sample 2**
Conventional radiocarbon age:	**120±40 BP**
2 Sigma calibrated result: (95% probability)	**Cal AD 1670 to 1950 (Cal BP 280 to 0)**

Intercept data

Intercepts of radiocarbon age with calibration curve:	Cal AD 1690 (Cal BP 260) and Cal AD 1730 (Cal BP 220) and Cal AD 1810 (Cal BP 140) and Cal AD 1920 (Cal BP 30) and Cal AD 1950 (Cal BP 0)
1 Sigma calibrated results: (68% probability)	Cal AD 1680 to 1740 (Cal BP 270 to 200) and Cal AD 1800 to 1930 (Cal BP 150 to 20) and Cal AD 1950 to 1950 (Cal BP 0 to 0)

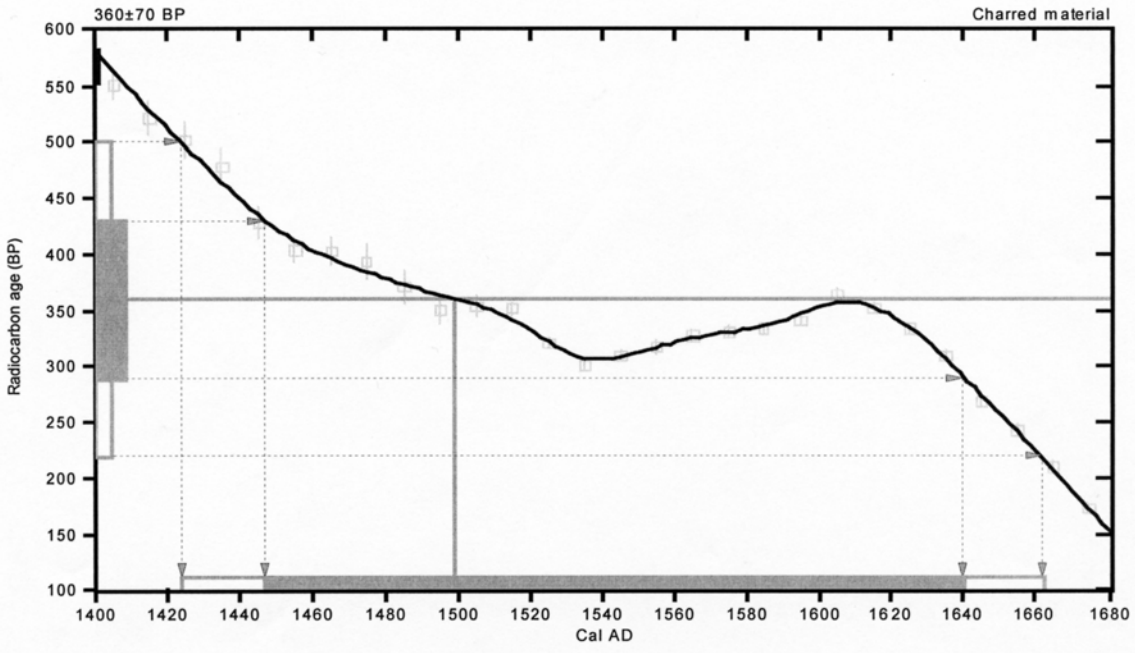


(Variables: C13/C12=-26.5:lab. mult=1)

Laboratory number:	**Sample 4**
Conventional radiocarbon age:	**360±70 BP**
2 Sigma calibrated result: (95% probability)	**Cal AD 1420 to 1660 (Cal BP 530 to 290)**

Intercept data

Intercept of radiocarbon age with calibration curve:	Cal AD 1500 (Cal BP 450)
1 Sigma calibrated result: (68% probability)	Cal AD 1450 to 1640 (Cal BP 500 to 310)

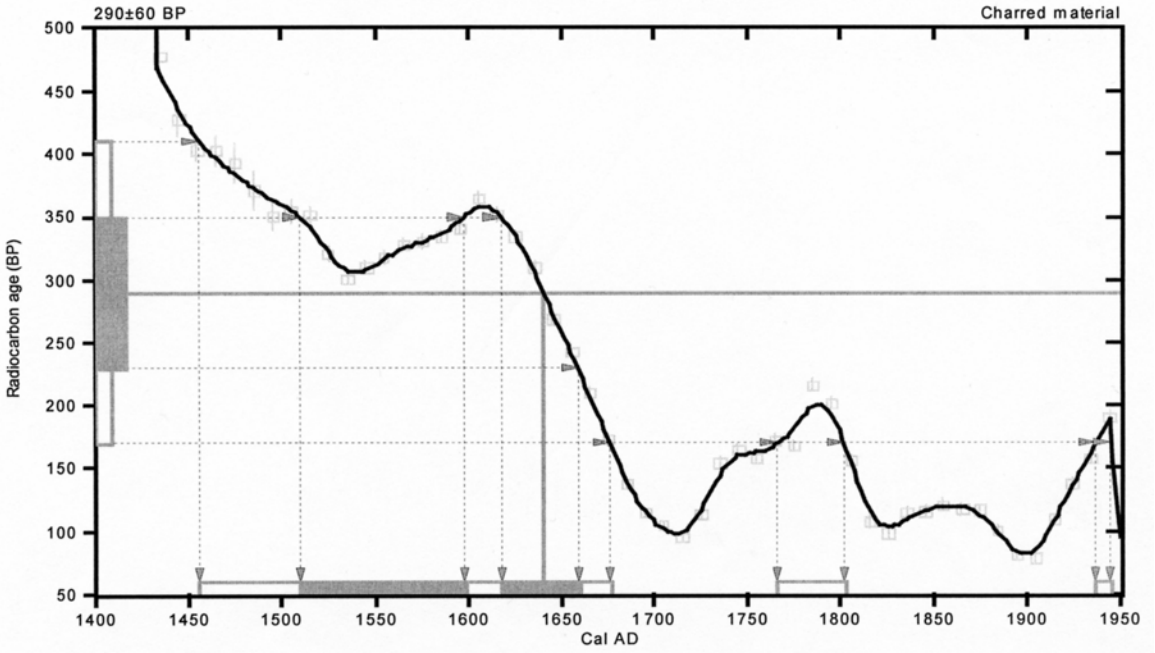


(Variables: C13/C12=-25.5:lab. mult=1)

Laboratory number:	**Sample 5**
Conventional radiocarbon age:	**290±60 BP**
2 Sigma calibrated results: (95% probability)	**Cal AD 1460 to 1680 (Cal BP 490 to 270) and Cal AD 1770 to 1800 (Cal BP 180 to 150) and Cal AD 1940 to 1950 (Cal BP 10 to 0)**

Intercept data

Intercept of radiocarbon age with calibration curve:	Cal AD 1640 (Cal BP 310)
1 Sigma calibrated results: (68% probability)	Cal AD 1510 to 1600 (Cal BP 440 to 350) and Cal AD 1620 to 1660 (Cal BP 330 to 290)



(Variables: C13/C12=-26.2:lab. mult=1)

Laboratory number: **Sample 6**

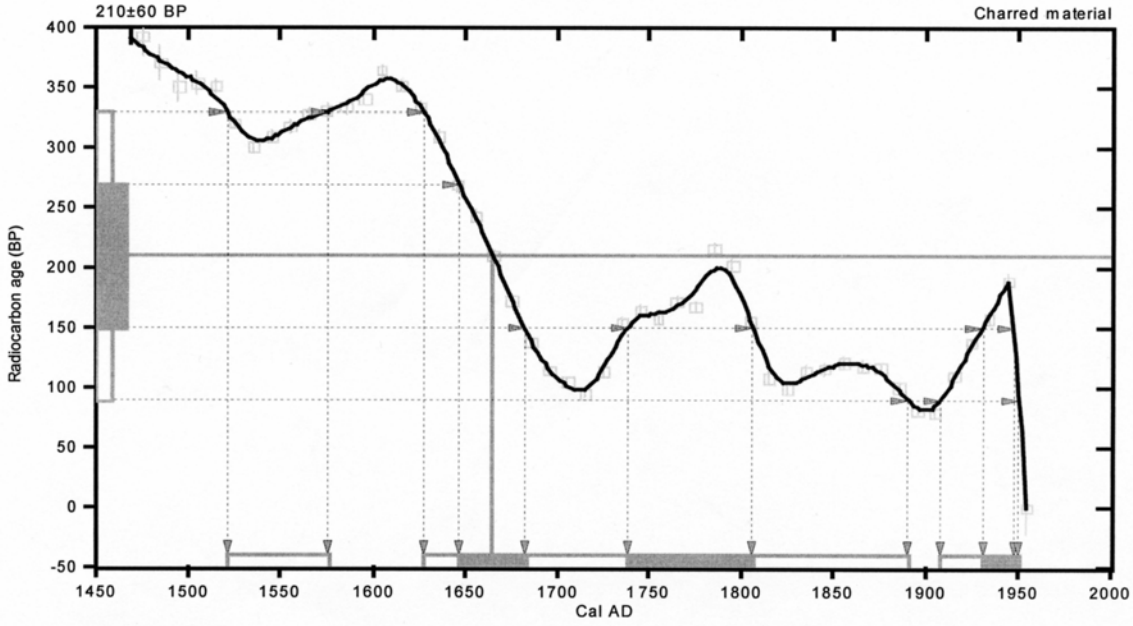
Conventional radiocarbon age: **210±60 BP**

2 Sigma calibrated results: **Cal AD 1520 to 1580 (Cal BP 430 to 380) and**
(95% probability) **Cal AD 1630 to 1890 (Cal BP 320 to 60) and**
Cal AD 1910 to 1950 (Cal BP 40 to 0)

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 1660 (Cal BP 290)

1 Sigma calibrated results: Cal AD 1650 to 1680 (Cal BP 300 to 270) and
(68% probability) Cal AD 1740 to 1810 (Cal BP 210 to 140) and
Cal AD 1930 to 1950 (Cal BP 20 to 0)



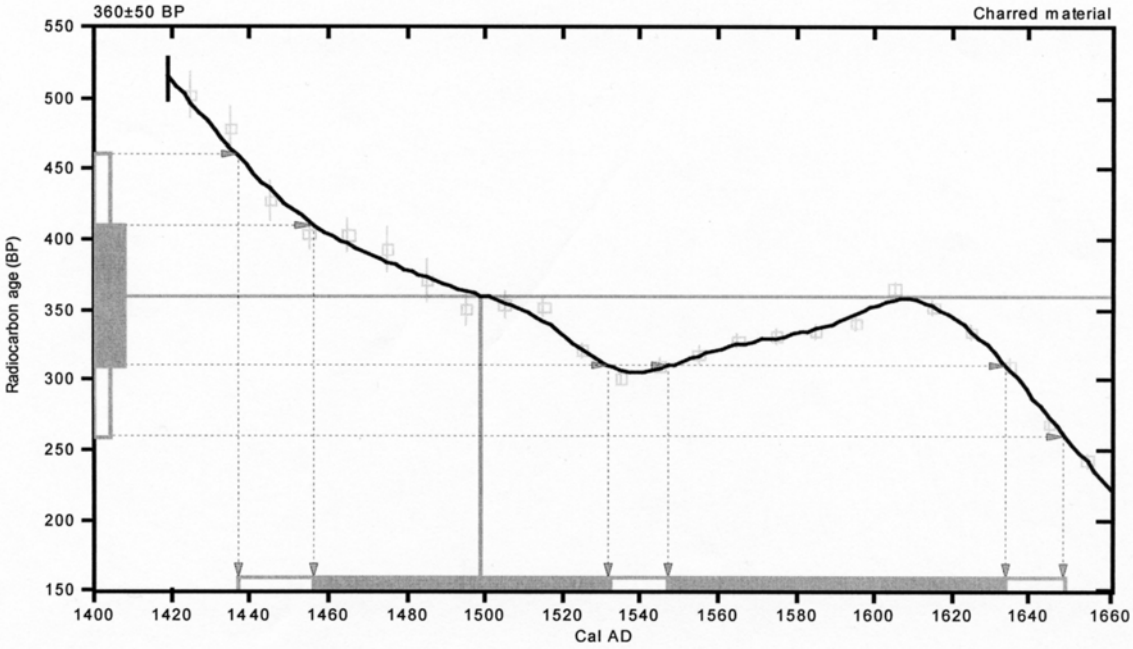
Calibration of Radiocarbon Age to Calendar Years

(Variables: C13/C12=-25.8:lab. mult=1)

Laboratory number:	**Sample 7**
Conventional radiocarbon age:	**360±50 BP**
2 Sigma calibrated result: (95% probability)	**Cal AD 1440 to 1650 (Cal BP 510 to 300)**

Intercept data

Intercept of radiocarbon age with calibration curve:	Cal AD 1500 (Cal BP 450)
1 Sigma calibrated results: (68% probability)	Cal AD 1460 to 1530 (Cal BP 490 to 420) and Cal AD 1550 to 1630 (Cal BP 400 to 320)

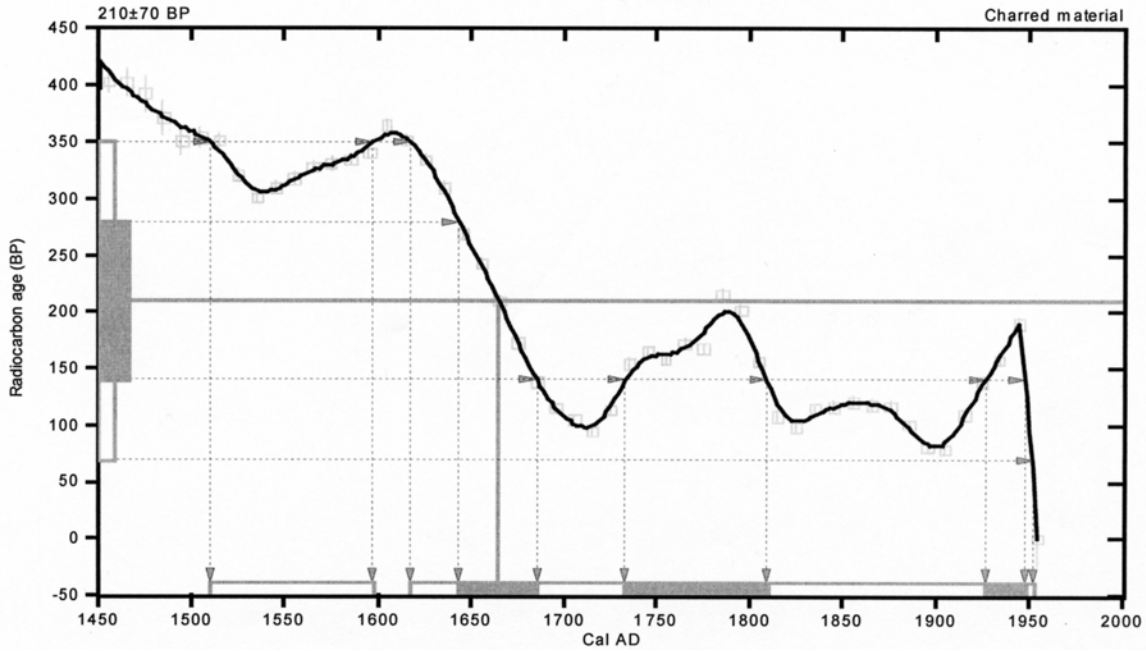


(Variables: C13/C12=-25:lab. mult=1)

Laboratory number:	**Sample 8**
Conventional radiocarbon age:	**210±70 BP**
2 Sigma calibrated results: (95% probability)	**Cal AD 1510 to 1600 (Cal BP 440 to 350) and Cal AD 1620 to 1950 (Cal BP 330 to 0)**

Intercept data

Intercept of radiocarbon age with calibration curve:	Cal AD 1660 (Cal BP 290)
1 Sigma calibrated results: (68% probability)	Cal AD 1640 to 1680 (Cal BP 310 to 260) and Cal AD 1730 to 1810 (Cal BP 220 to 140) and Cal AD 1930 to 1950 (Cal BP 20 to 0)



(Variables: C13/C12=-25:lab. mult=1)

Laboratory number: Sample 9

Conventional radiocarbon age: 60±40 BP

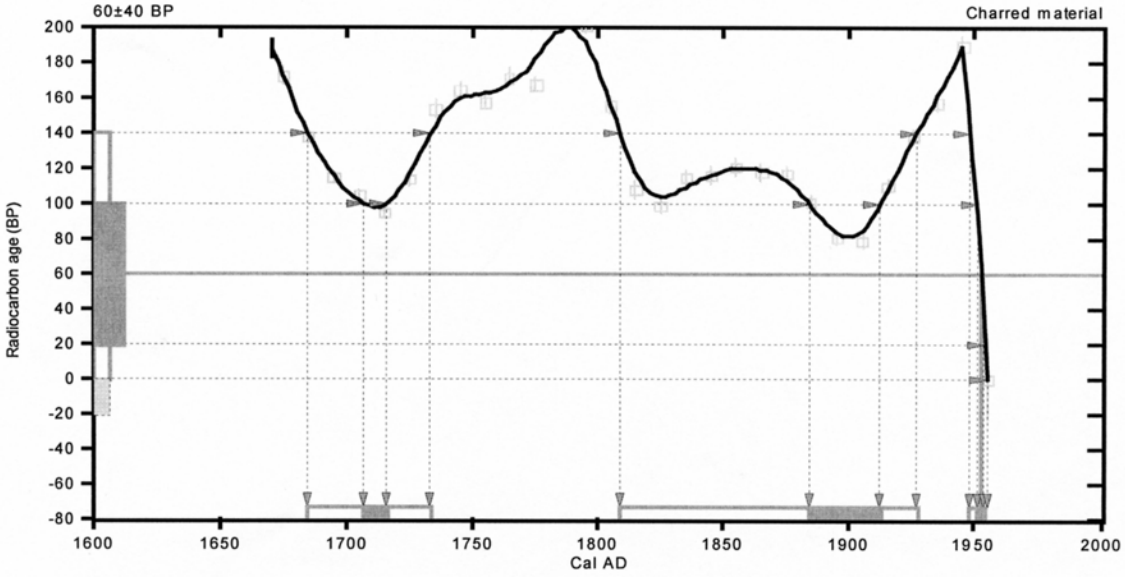
2 Sigma calibrated results[2]: (95% probability) Cal AD 1680 to 1730 (Cal BP 260 to 220) and Cal AD 1810 to 1930 (Cal BP 140 to 20) and Cal AD 1950 to beyond 1960 (Cal BP 0 to 0)

[2] 2 Sigma range being quoted is the maximum antiquity based on the minus 2 Sigma range

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 1950 (Cal BP 0)

1 Sigma calibrated results: (68% probability) Cal AD 1710 to 1720 (Cal BP 240 to 230) and Cal AD 1880 to 1910 (Cal BP 70 to 40) and Cal AD 1950 to 1950 (Cal BP 0 to 0)



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