

**Phase II Archaeological Testing of the Hothouse Structure (18TA314), Talbot
County, Maryland
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Abstract

Organization of this Report

This report contains the results of the Phase II Archaeological Testing of the Wye House Hothouse Structure (18TA314). It is divided into the following sections:

Chapter 1: Introduction

Chapter 2: Research Design and Methodology

Chapter 3: Cultural Context and Historical Background

Chapter 4: Previous Archaeological Investigations and Significant Architectural Structures

Chapter 5: Archaeology and Interpretations

Chapter 6: Conclusions and Recommendations

Chapter 1 of this report is an introduction to the Hothouse excavation in May 2012. Included within in this chapter are the dates of fieldwork, laboratory processing and analyses, as well as the identification of key project staff.

Chapter 2 of this report details the project's research design and methodology. Included within this chapter are the method employed during the research process of locating the structures, excavation, pollen sample recovery, and laboratory processing. In addition, this chapter lists the research questions that guided this fieldwork.

Chapter 3 of this report details the cultural context and historical background of the Wye House Plantation, particularly surrounding the standing Greenhouse. Included within this chapter is a short history of the Wye House Plantation, scientific gardening, and a contextualization for understanding West African spirit practices.

Chapter 4 of this report details reported archaeological excavations at the Wye House Plantation, particularly surrounding the standing Greenhouse.

Chapter 5 of this report details the results of archaeological testing conducted at the Hothouse structure in May 2012. Included within this chapter is an account of stratigraphic layers, features, and significant artifacts encountered within individual test units. Also included within this chapter are interpretations of layers, features, and artifacts.

Chapter 6 of this report details the conclusions based on the data recovered from these excavations and recommendations for further investigations.

Acknowledgements

The remains of the Hothouse are located in the garden of the Wye House, which is the property of Richard and Beverly Tilghman. Mr. Tilghman's mother, Mrs. R. Carmichael Tilghman, invited Archaeology in Annapolis to their property in 2006, contributing significant funds to its research, operation, and analysis. The Greenhouse structures on the plantation, as well as its gardens, remain of importance and interest to the family, and we dearly appreciate the support and curiosity. Thank you for allowing us to put holes in your garden.

I sincerely appreciate the help and guidance of John Blair, who conducted the original excavations in and around the Greenhouse in 2008 and 2009. Thank you for providing context, advice, and distilled water from Target. In addition to John, Amanda Tang, Jocelyn Knauf, and Kate Deeley were invaluable volunteers for this project.

A sincere thank you to Amy Speckart, who provided the transcriptions of the federal direct tax records and the Lloyd family ledgers. Without her work, we would not have made the connections necessary to find the Hothouse when we did.

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CHAPTER 1: INTRODUCTION

The Greenhouse at the Wye House Plantation is known for being the only standing greenhouse from the eighteenth century in North America, especially unique for its hypocaust system. When Archaeology in Annapolis began its excavations at Wye, particular attention was paid to this structure, at the request of the owners. The work reported here focused on continuing the archaeobotanical analyses from previous years. This will allow us to add to our understanding of the multiple glasshouse structures—buildings such as greenhouses and hothouses that are used to house and cultivate exotic plants and fruits—on the Wye House property.

Landscapes never stand still. Though the Wye Greenhouse appears today as a singular structure in the garden, directly behind the mansion with an unhindered view, the scene in the eighteenth century would have contained multiple gardening buildings. One of those additional buildings has been found in the form of a hothouse, though where the others—at least one other greenhouse and possibly a second hothouse—are located still remains a mystery.

A Phase II archaeological investigation of the Hothouse Structure was undertaken in May 2012 at the Wye House property (18TA314), located near Easton, Maryland, in Talbot County. Archaeological excavations of the Hothouse took place in order to confirm the location of an additional glasshouse building to the eighteenth-century Greenhouse still standing on the property.

The initial archaeological excavations reported here took place between May 12, 2012 and May 24, 2012. This report contains the results of the fieldwork that was completed during these dates, and the laboratory work that continued through the 2012-2013 fall and spring semesters. Dr. Mark P. Leone is the director and the principal investigator of this project. Beth Pruitt is the assistant director, with the consultation of John Blair and the volunteered labor of Jocelyn Knauf, Amanda Tang, and Kate Deeley. During the fall and spring semesters of 2012 and 2013, volunteer students aided in laboratory work supervised by Archaeology in Annapolis staff.

CHAPTER 2: RESEARCH DESIGN AND METHODOLOGY

Research Methodology

Federal tax records and the Lloyd family ledger books provided the historical data necessary to determine that there were additional, concurrent glasshouse structures to the one that stands in the present day at Wye House. These records, transcribed by Amy Speckart, revealed that one of these structures was a hothouse in operation at Wye in the late eighteenth and early nineteenth centuries. According to the 1798 federal direct tax record, which contains a description of each building on the Wye Plantation after the death of Edward Lloyd IV, there were two greenhouses and one hothouse that were used simultaneously. The hothouse is recorded in the direct tax as being “16 x16 feet, 1 Story Brick with 4 wind[ows]” (Maryland State Archives 1798). A ledger from 1785-1787 additionally notes the payment received by workers for building hothouse structures:

:250 12/85-3/87 William Eaton, joiner
building hot houses, repairing green house, work on main house £157 (Lloyd
Papers 1785)

Bryan Haley’s ground penetrating radar analysis reported in *A Geophysical Survey of Portions of the Wye House Grounds, Talbot County, Maryland* (Haley 2009) provided the location of a 16x16 ft. structure near the standing Greenhouse. Haley’s report shows the structure beginning to take shape at a depth of 1.14 feet and seems to solidify around a depth of 1.49 feet. It shows the northwest corner of the structure to be approximately 15 feet east and 10 feet south of the standing Greenhouse’s southeast corner.

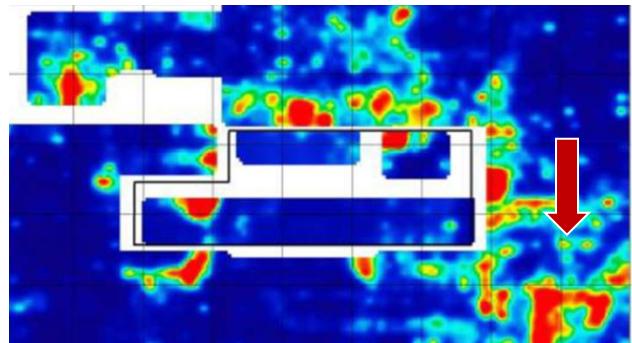


Figure 1: Ground penetrating radar showing an anomaly southeast of the standing Greenhouse at a depth of 1.49 feet.

On the landscape in the present day, there is a small ridge along the northern edge of this GPR anomaly on the ground surface, with a slight slope toward the south. It was on this basis that excavators decided on the location for two units to the southeast of the Greenhouse in an attempt to straddle the north wall and uncover the northwest corner.

Excavation Methodology

Excavations at the Wye House Hothouse were carried out on weekends in May 2012 by a rotating team of current and former archaeologists from the Archaeology in Annapolis Project at the University of Maryland, College Park. The locations of the two units were recorded in relation to the southeast corner of the Wye Greenhouse. Excavations were conducted stratigraphically, using trowels and shovels. Elevations were recorded using rulers and line-

levels, with all measurements taken from the highest corner of the unit. Each unit was excavated until reaching sterile subsoil, denoted in illustrations by Bottom of Excavation (BOE).

Each unit was numbered individually, continuing the sequential order from the previous Greenhouse excavations. Excavators kept detailed field notes, recording soil color, soil texture, inclusions, artifacts recovered, features, and interpretations.

All soils recovered from excavation units were screened through a 1/4" mesh wire screen.

Pollen Recovery

Archaeobotanical analysis allows archaeologists to recreate the plant environment of the past. Previous excavators of the Greenhouse collected soil samples in the southern main room of the building as well as the attached slave quarter. These samples were sent to Heather Trigg and Susan Jacobucci at the Fiske Center for Archaeological Research at the University of Massachusetts, Boston for analysis. The results showed the diversity of plants in and around the building throughout time (Jacobucci and Trigg 2010). The enslaved who stayed in the quarter likely worked in the Greenhouse and gardens, so evidence of many plants appears in both locations. However, there were distinct differences in type and quantity between the Greenhouse and the quarter.

The Greenhouse was home to fruits and vegetables that could be made to grow all year round due to the artificial environment. These include citrus in the nineteenth and mid-twentieth centuries, as well as olives and the family that includes spinach and beets in the late-eighteenth century. There were also ornamental flowers such as lilies, geraniums, and irises.

The presence of certain pollen in the attached quarter, but not in the Greenhouse demonstrates the ways in which the enslaved may have made use of local vegetation for food, medicine, and chores. In the quarter, there is the family that includes blueberries and cranberries, as well as groundcherry and wild ginger. Lobelia, snakeroot, and saxifrage have medicinal uses. Others, such as yucca and horsetail, possess leaves and fibers that have practical household uses.

These categories are not mutually exclusive, as many plants have multiple uses. Pollen remains of medicinal, practical, ornamental, and edible plants were found in both the Greenhouse and the slave quarter in varying quantities.

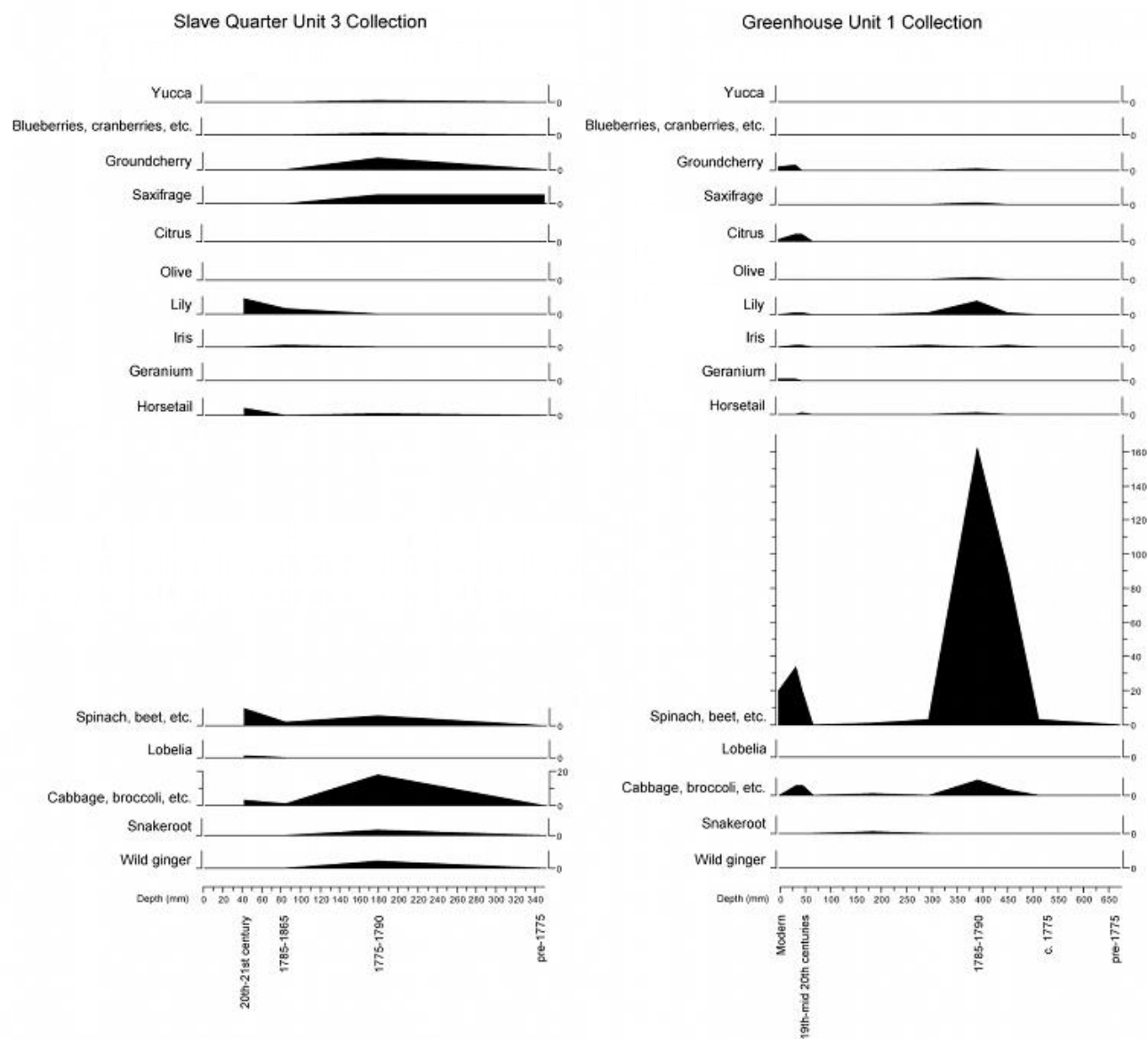


Figure 2: Selected pollen counts from the Greenhouse and attached slave quarter for comparison (reproduced from the data reported in Jacobucci and Trigg 2010).

These findings provide us with a glimpse of the botanical past of Wye House, but the Hothouse structure investigated here can add another set of data upon which to base our understanding. Upon completion of the excavations, soil samples were recovered from the profile walls of both units by Beth Pruitt for future archaeobotanical analysis. Samples were taken from each level of the southern walls of both units, representing the inside of the Hothouse. Due to time constraints only one soil sample from the northern walls of each unit was taken for comparison to the southern wall. After scraping away the exposed dirt of the profile, soil samples were taken using a trowel cleaned with distilled water and placed into 4x6" plastic bags.

Table 1: Soil Samples for Pollen Analysis

Date	Unit	Level	Location	Bag #
5/20/12	11	D	south wall	1
5/20/12	11	A	south wall	2
5/20/12	11	B	south wall	3
5/20/12	11	F	south wall	4
5/20/12	11	D	top, north wall	5
5/20/12	11	E	south wall	6
5/20/12	11	C	south wall	7
5/24/12	10	A	south wall	8
5/24/12	10	C	south wall	9
5/24/12	10	D	south wall	10
5/24/12	10	D	top, north wall	11
5/24/12	10	B	south wall	12
5/24/12	10	G	south wall	13
5/24/12	10	F	south wall	14

With the Hothouse and the standing Greenhouse in operation concurrently, the Hothouse may have housed plants that needed a specialized environment that the Greenhouse could not provide at the time. My hypothesis for the Hothouse is that this pollen will differ from the samples collected in the slave quarter and the contemporaneous Greenhouse, showing fewer local vegetation and more exotic plants and comestibles that could be brought to ripen out of season.

Laboratory Methodology

All artifacts recovered from the Hothouse structure in the May 2012 excavations were transported to the Archaeology in Annapolis Laboratory, located in the Department of Anthropology at the University of Maryland, College Park. All of these materials were then washed, identified, rebagged, and catalogued by University of Maryland undergraduate students. The artifacts were sorted by material type and placed in re-sealable archival quality plastic bags and labeled with site number, unit number, and level or feature number. Brick, concrete, and mortar were counted, weighed and discarded in the field and in the laboratory.

Research Questions

1. Is the anomaly detected in the GPR report the hothouse structure noted in the Lloyd family historical records?
2. How intact is this structure?
3. If this is a hothouse, what is the means of artificial heating?
4. How does the pollen in this structure compare to that of the Greenhouse?
5. Is there evidence of buried West African spirit practices as there was in the Greenhouse excavations?

CHAPTER 3: CULTURAL CONTEXT AND HISTORICAL BACKGROUND

Wye House History

The Wye House occupies land situated on the Wye River in the center of Talbot County, Maryland. When Edward Lloyd I arrived in Talbot County around 1660 as part of the original Virginian colonizers, he built the Wye House Plantation with immediate access to the Wye River and, therefore, Chesapeake Bay. When the estate passed to Edward Lloyd IV in 1770 (Speckart 2011:190), his redesign and modernization of the landscape in the years after his inheritance demonstrated his desire to establish himself unquestionably as the new master of the estate. It is during the period just after the property transferred to Edward Lloyd IV that the currently-standing Greenhouse was erected and the entire axis of the plantation reoriented (Forman 1967).

The most famous national figure associated with the Wye House plantation was Frederick Douglass, who was enslaved there as a child. The writings in his autobiographies provide researchers at the Wye House with context for the landscape and daily life. His descriptions of the buildings and layout of the plantation, however, are drawn from his early life as a slave. This would have influenced his perspective and sense of boundaries. For example, Douglass describes the contents of the garden, but does not mention the Greenhouse or any other garden buildings. His aversion to that portion of the landscape is explained by the lengths to which the plantation owner went to keep the enslaved away from the garden:

The colonel [Lloyd] had to resort to all kinds of stratagems to keep his slaves out of the garden. The last and most successful one was that of tarring his fence all around; after which if a slave was caught with any tar upon his person, it was deemed sufficient proof that he had either been in the garden, or had tried to get in. In either case, he was severely whipped by the chief gardener. (Douglass 1845:26)

That area of the plantation was meant to be off-limits to him, and consequently, much of our understanding of the greenhouse buildings must come from contemporary scientific gardening books, historical documents that the Lloyds kept of the Wye House Plantation, and the archaeology conducted there.

West African Spirit Practices

With the focus of Archaeology in Annapolis on the lives of the enslaved at Wye House, there has been interest in religious practices and to what extent those practices derive from Africa. It is important to note that the translation of cultural beliefs or practices from Africa to the New World is not exact, and the expression of identity is dynamic. The new identity of diasporic groups is constantly negotiated within the specific hostland, with individuals deciding which elements, symbols, or traditions of their former country to preserve and how to incorporate those of the host society. The same symbols may take on different meanings in different locations and different materials may take on the same meanings.

This understanding comes from a body of literature that shows the ways in which African Americans—who were often forced to hide such beliefs in enslavement—used iconography and

ways of understanding the spiritual realm. As Euro-Americans attempted to convert the enslaved to Christianity throughout the diaspora, the religious beliefs of both groups were changed. Drawing from Herskovits, Andrew Apter (1991) expresses the “evolving synthesis” of African religious identities, arguing that cultures in contact and conflict go through processes of resistance and revision in the formation of new dominant ideologies.

Using historical and ethnographic understandings of West African spirit practices, Mark Leone (Leone and Fry 1999) and Fennell (2003) have found that there is a significant pattern in buried bundles or caches found in African-American contexts in the United States that represent a mediation of the spirit world through particular materials. More important, perhaps, than what the objects are is the materials from which they are made, their color, arrangement, or placement within a space, since many objects used in this way are found and repurposed. For example, the caches often include quartz crystals, iron nails, beads, or coins and were often found below entryways and/or in the formation of a cosmogram (Leone and Fry 1999; Fennell 2003).

With this in mind, a buried arrangement of artifacts found outside of the door to the Greenhouse slave quarter in 2008 can be interpreted as a cache. The artifacts included a metal coin and two projectile points—one made of chert and one of quartz. Another cache in the furnace of the Greenhouse hypocaust consisted of a stone pestle in the keystone position. As understood from ethnographic studies of West African practices, these found and repurposed objects were placed deliberately to direct spirits away from the entrance and to emphasize the importance of the forge to particular West African religious beliefs (Blair et al. 2009; Leone 2011).

Scientific Gardening History

The eighteenth century saw an increased interest in empirical science, experimentation, and the control over nature, and the elite looked to enlightenment principles of philosophy, rationality, and scientific inquiry in the founding of the new Republic. Fervor for gardening and greenhouses became a part of the standard for high society, and “Gentlemen used their offices and gardens to experiment with science. They examined, collected, and compared the plants in their gardens and greenhouses” (Sarudy 1998:105). Greenhouses allowed them to cultivate exotics and bring plants to bloom out of season. These “scientific gardeners” competed with one another and shared their ideas and specimens, creating a social network in the pursuit of botanical knowledge.

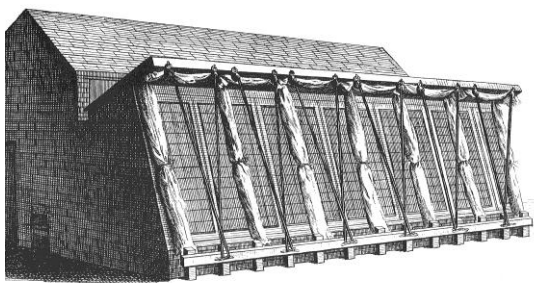


Figure 3: A hothouse heated by a furnace in the rear shed and a system of flues. Published in the *Dictionnaire Encyclopedie* (Diderot and d’Alembert 1760, reproduced in Woods and Warren 1988:58).

Hothouses are a structure similar to a greenhouse, but with the addition of an artificial heating element on top of the heat provided by the sun. Through the use of stoves, hot-beds, hypocausts, and warming pits, gardeners were able to achieve far higher temperatures and more closely regulate the climates inside the structures of hothouses. Along with greenhouses, hothouses became permanent and necessary fixtures of elite gardens. According to William Speechly, gardener and the author of *A Treatise on the Culture of the Pine*

Apple and the Management of the Hot-House, “Hot-houses are found by experiences to be of so much importance, that no garden is esteemed complete without one” (Speechly 1779, quoted in Woods and Warren 1988:61). The structures were widespread in Europe by the mid-eighteenth century, and a great deal of literature was dedicated to their proper construction and use (Woods and Warren 1988:61).

Similar to greenhouses, hothouses in the eighteenth and nineteenth centuries mostly consisted of brick and glass frames. As scientific gardeners gradually understood the relationship between the construction and the sun for creating an artificial environment, they experimented in order to achieve optimal climates for temperamental tropical plants. Authors published advice on using the angle of the glass and position of the plants to provide higher temperatures to those that needed it (Hix 1974:16). The architect of the Hothouse at Wye may have followed similar advice, providing us with an idea of what the building may have looked like. A brick northern wall and a sloping glass frame may explain the slope of the present-day ground.

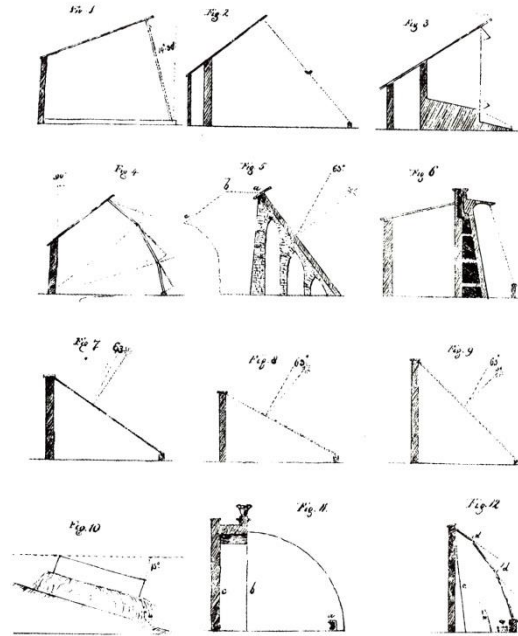


Figure 4: Comparisons of eighteenth and early nineteenth hothouse constructions and the angle of the glass frame (reproduced in Hix 1979:17).

The Lloyds had an obvious interest in scientific gardening based on the books contained in their home. Included in the Lloyd family library are two books of particular note: *The Hot-House Gardener, or the General Culture of the Pine-apple* by John Abercrombie and *Every Man his own Gardener: Being a new...Gardener's Kalendar* by Thomas Mawe and John Abercrombie (Wolf 1969:103-104). Mawe emphasizes the use of a hothouse for bringing fruit out of season, including instructions for the cultivation of cucumbers, strawberries, grapes, melons, citrus, and pineapples (Mawe and Abercrombie 1782). The plant family that includes pineapples—scientific name Bromeliaceae—did not appear in any of the previous pollen samples analyzed. If Lloyd were interested in pineapples, as the library suggests, the hothouse may have been the place in which these were kept.

Mawe and Abercrombie's instructions also advise the gardener to open the windows to the hothouse only on warm and windless days, which hopefully suggests that there will be little invasion from external, windborne pollen. This enclosure could provide us with a degree of certainty when it comes to identifying plants that were kept inside it.

Frederick Douglass describes the variety of edibles produced in the gardens in his autobiography, *My Bondage and My Freedom*. He writes of the garden that it is:

The fertile garden, many acres in size, constituting a separate establishment, distinct from the common farm—with its scientific gardener, imported from Scotland, (a Mr. McDermott,) with four men under his direction, was not behind, either in the abundance

or in the delicacy of its contributions to the same full board. The tender asparagus, the succulent celery, and the delicate cauliflower; egg plants, beets, lettuce, parsnips, peas, and French beans, early and late; radishes, cantelopes, melons of all kinds; the fruits and flowers of all climes and of all descriptions, from the hardy apple of the north, to the lemon and orange of the south, culminated at this point. (Douglass 1855:108-109)

On Lloyd's death in 1796, the property passed to his wife, Elizabeth Tayloe Lloyd, the daughter of John Tayloe II of Mount Airy. Mount Airy is also home to an eighteenth-century greenhouse, and Elizabeth Lloyd may have continued to maintain an active interest in the greenhouse structures at Wye House after her husband's death. Her continued involvement is evidenced by the upkeep of repairs to the Greenhouse and Hothouse in the years after 1796 and payment in her accounts for pineapples to be delivered to Wye House and to William Booth, a seedseller, for "Sundrys for your Garden at Wye House" (Lloyd Papers 1798).

Despite Mrs. Lloyd's contributions to the garden at Wye, it has been her husband who has received the most attention as a scientific gardener. According to Barbara Sarudy, it was not uncommon for the ladies of the house to be in control of the greenhouse and kitchen gardens, though were often not charged with the management of the gardens in their entirety (Sarudy 1998:83). Despite this commonly female involvement in the greenhouse, scientific gardening is often categorized as a male-dominated pursuit. Ann B. Shteir (2006) sheds light on the historical omission of women as scientific gardeners by tracing the changes in gender attitudes in gardening and botany through the iconography of the goddess Flora in England in the eighteenth and nineteenth centuries. She examined the frontispieces of botanical books and discovered a trend in the way in which nature is symbolized. In these illustrations, Flora, the Roman goddess of flowers, had related women, fertility, and the "Mother Nature" mythos to the pursuit of botanical knowledge.

Over time, however, the use of female icons to represent abstract concepts began to fall out of fashion in England—an attempt to associate the masculine with an increasingly empirical, practical science and separate it from the French rhetorical, "feminine" form of science (Shteir 2006:17). Through this study, Shteir found that a decline in the use of Flora and feminine imagery in botanical books corresponded to a shift in the study of nature from a philosophical, poetical endeavor to a scientific and technical one. Shteir concludes that "Languages of nature that formerly had resonated with symbolic meanings were challenged by technical scientific vocabularies during the eighteenth and nineteenth centuries, and one result was the erasure of symbols associating women with science" (Shtier 2006:5). Though at one time the study of gardening and the dominion over nature may have been linked to the feminine, this ideology was undergoing a significant change during Mrs. Lloyd's lifetime. What was once a female province had become male.

Archaeologists such as Carmen Weber (1996) have recognized the absence of a discussion of women in the scientific gardening pursuits of the eighteenth century and noted that they are often overshadowed in the historical record by their male counterparts. In looking at the connections between the Lloyd family and relative Margaret Carroll from Mount Calvert, Weber discovered that the similarities between the two estate's greenhouses may reflect an exchange of knowledge and ideas between the women of this extended family. Both families were in possession of Phillip Miller's *Garden Dictionary*, but the architectural similarities between the two structures

extend beyond Miller's advice. For example, the gardener at the Wye House seemed to favor some of the same practices that Margaret Carroll recommended to George Washington—an older hypocaust system design, for example—and the placement of the furnace for the hypocaust are identical, despite no direction on that matter from the *Dictionary* (Weber 1996:39-41).

Mrs. Lloyd's likely involvement in the scientific gardening pursuits at Wye House allows us to shift the focus away from a male-dominated story. In telling the history of botanical experimentation and early scientific gardening, it is important to acknowledge the possible contributions of women rather than assuming the interest to only belong to men.

CHAPTER 4: PREVIOUS EXCAVATIONS AND SIGNIFICANT ARCHITECTURAL STRUCTURES

Archaeology in Annapolis has been excavating at Wye House since 2005. Past reports of excavations conducted by Archaeology in Annapolis staff include: *Shovel Test Survey at Wye House (18TA314), East Cove / South Long Green, April 2011* (Skolnik 2011); *Archaeological Excavations at the Middle Building (Locus 2) on the Long Green (18TA314), 2006-2010, Talbot County, Maryland, 2010 report* (Tang 2010); *Archaeological Mitigation of the Great House Front Steps (18TA314), Talbot County, Maryland, 2010* (Tang and Knauf, 2010); *Phase II Archaeological Testing on the Interior of the Wye Greenhouse (18TA314), Talbot County, Maryland, 2009 report* (Blair and Duensing 2009); and *Phase II Archaeological Testing on Wye Greenhouse (18TA314), Talbot County, Maryland, 2008 report* (Blair et al. 2009).

The final two reports focus on the Greenhouse specifically, and provide a significant basis for our understanding of the botanical life within the structure as well as the domestic life of the enslaved living in the attached north shed. In Fall 2008, archaeological excavations conducted by Archaeology in Annapolis focused on the interior and exterior of the north shed of the Greenhouse, and those in Summer 2009 placed two units within the south room. The previous Greenhouse excavations focused on establishing a chronology for the Greenhouse construction phases, collecting soil samples for archaeobotanical analysis, and interpreting the hidden caches as a manifestation of West African spirit practices. Both investigations collected and analyzed pollen taken from soil samples in these areas, the findings of which are reported in *An Analysis of Pollen Recovered from the Greenhouse at Wye House Plantation, Easton, Maryland* (Jacobucci and Trigg 2010).

In 2008 and 2009, researchers used the Lloyd family ledger books to help provide dates for the building and alteration phases of the standing Greenhouse. As it exists today, the Greenhouse is a two-story brick building with a main block and two 26-foot wings to either side. Attached to the back is a shed that contained domestic items, leading archaeologists to conclude that it was a slave quarter (Blair and Duensing 2009). A wood-burning furnace in the back would have been used to heat a hypocaust system running throughout the walls of the wings and along the floors.

The reports from these excavations concluded that there were three main building phases. In the first, a main two-story building with 6-foot truncated wings was constructed around 1775, including the attached quarter. In the second, the hypocaust system and longer wings were built around 1784. The reasoning behind this date comes from the 1785-87 ledger entry that refers to payment for “building hothouses” (Lloyd Papers 1785). Researchers took this to mean building the hypocaust, since the hypocaust—consisting of a furnace and hot-air flues—effectively turned the Greenhouse into a hothouse. The final phase of construction, around 1820, was an enclosure for the furnace (Blair and Duensing 2009; Blair et al. 2009).

Reviewing the historical records in the context of having at least one hothouse on the plantation, it now seems more likely that the ledger entry refers to a separate hothouse than the Greenhouse. This is also supported in that the 1798 tax records list the greenhouse structures as “1 Green House 33 by 16 feet 2 Story on [...] of Brick with 4 windows” and “1 Green House 1 Story Brick 36 by 10 feet with 10 windows” (Maryland State Archives 1798). This first greenhouse

listed has the same dimensions and stories as just the main block of the current Greenhouse. If this is true, the building in 1798 did not include the wings, and likely the heating elements that it does today. Therefore, the hypocaust was not added to the building in 1784, as concluded in the previous reports, but at a later date.

In 1822, an entry for the payment of the brickmason Daniel Kenney to repair the flues of the Greenhouse indicates that the hypocaust system was in place by then (Lloyd Papers 1822). The additions and furnace must have been built between 1798 and 1822. This means that Edward Lloyd IV was not alive to see the completion of the hypocaust system in the Greenhouse. It is unclear who oversaw the modifications to that structure, though with a knowledge of the greenhouse at Mount Airy and communications with female relatives with similar interests, it is not out of the question that Elizabeth Lloyd played a part in its construction.

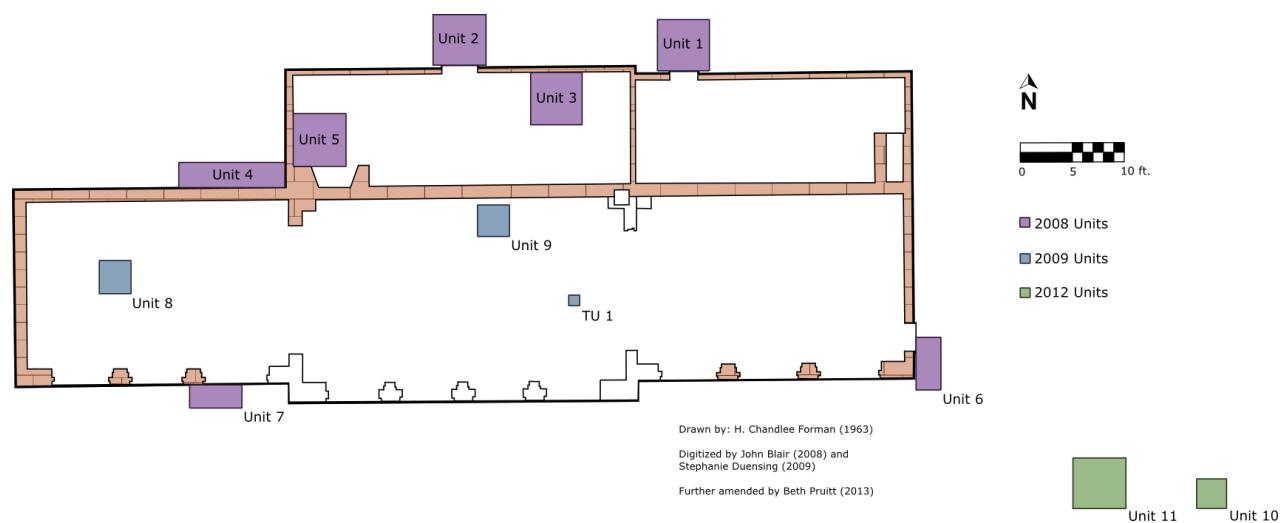


Figure 5: Schematic of the Greenhouse and the unit placements in the three years that Archaeology in Annapolis has excavated in or around the building.

CHAPTER 5: ARCHAEOLOGY AND INTERPRETATIONS

Introduction

One 3x3 ft. and one 5x5 ft. were placed to the southeast of the currently standing Greenhouse. Based on the historical records and the GPR report, this was the most likely location of a 16x16 ft. Hothouse structure that existed on the property from the late-eighteenth to the mid-nineteenth centuries. Units 10 and 11 were placed in an east-west oriented line in order to locate the north wall of the structure.

18TA314: Wye House Hothouse

Unit 10

Description

Unit 10 measured 3' by 3' and was located southeast of the standing Greenhouse. The northwest corner of Unit 10 was placed 27 feet east and 9.6 feet south of this building in order to find the most likely location of the north wall of the Hothouse, according to the GPR report. It was excavated to an average depth of 2.69 feet below datum (ftbd). Within this test unit, there were seven stratigraphic levels and four features.

Level A started at 0.21 ftbd and ended at 0.26 ftbd and consisted of a 7.5YR3/2 dark brown loam. There were no artifacts recovered from Level A, which represents the top soil.

Level B started at the ground surface which was 0.26 ftbd and ended at 0.40 ftbd and consisted of a 10YR4/3 brown clay-loam. Artifacts recovered from Level B consisted of 1 fragment of window glass.

Level C started at 0.40 ftbd and ended at 0.48 ftbd and consisted of a 7.5YR3/4 dark brown loam. Artifacts recovered from Level C include 1 small piece of chert worked for gunflint, 1 small cut nail, 29 fragments of flatglass—18 of which have a green tint—2 dark olive fragments of bottle glass, 2 small pieces of oyster, and 2 small pieces of brick. This level likely represents remains of the destruction of the Hothouse.

Feature 19 is brick rubble concentrated in the southern half of the unit, likely the remains of the north wall of the Hothouse which have fallen in or been used to fill in the structure after destruction. The soil around this rubble consisted of a 7.5YR4/3 dark brown loam with some inclusions of peagravel. The top of Feature 19 was at 0.44 ftbd and the bottom was at 0.67 ftbd. Artifacts recovered from this level include 2 fragments of flatglass, 4 fragments of oyster shell, and 25 pieces of brick, weighing 1.88 lbs.

Level D started at 0.57 ftbd and ended at 0.72 ftbd and consisted of a 10YR3/6 dark yellowish-brown clay-loam. Excavations of Level D began in the northern half of the unit, with the later stages of Feature 19 in the southern portion. There were patches of ash, especially in the southern portion of the unit, underneath Feature 19. Artifacts recovered from Level D

include 2 pieces of chert gunflint, 1 sherd of refined earthenware—which likely had a tin glaze at one point—3 fragments of bottle glass, 5 pieces of window glass, 3 cut nails, 1 tooth with an intact root, 6 small fragments of oyster shell, and 17 pieces of brick, weighing 4.01 lbs.

Feature 20 is a concentration of brick rubble in the southern part of the unit, with larger and less fragile bricks than Feature 19. The soil around the rubble consisted of a 10YR3/6 dark yellowish-brown loam. The top of Feature 20 was at 0.58 ftbd and the bottom was at 0.77 ftbd. Artifacts recovered from this feature include 1 general nail and 38 pieces of brick, weighing 10 lbs.

Level E started at 0.76 ftbd and ended at 1.38 ftbd and consisted of a 10YR3/4 dark yellowish-brown clay-loam. Artifacts recovered from Level E include 7 pieces of French gunflint, 3 pieces of British gunflint, 11 sherds of unglazed red coarse earthenware, 1 piece of an undecorated pipe bowl, and 1 piece of a dark green wine/liquor bottle. Organic materials included 14 fragments of mammal bone and 9 pieces of oyster shell, which weighed 0.77 lbs. Architectural materials consisted of 28 fragments of window glass, 3 cut nails, 27 pieces of brick, weighing 5.34 lbs., and 17 pieces of mortar, weighing 1.28 lbs. Level E very similar to Level D and likely part of the same deposit, but appeared underneath Feature 20.

Feature 22 is a mortar deposit running east-west across the unit, cutting through Level F close to the northern wall of the unit. The feature consisted of a 2.5Y8/3 pale yellow mix of mortar and soil. The top of Feature 22 was at 1.33 ftbd and the bottom was at 1.59 ftbd. Artifacts recovered from this feature include 1 unworked piece of chert, 3 fragments of window glass, and 82 pieces of mortar, weighing 8.59 lbs.

Level F started at 1.38 ftbd and ended at 2.14 ftbd and consisted of a 10YR4/3 brown loamy-clay. Artifacts recovered from Level F include 2 pieces of window glass, 1 piece of shaped bone, 5 unidentifiable nails, 5 pieces of unworked chert, 2 lumps of corroded iron, 1 stone pestle, 3 pieces of brick, weighing 0.22 lbs., and 19 pieces of oyster shell, weighing 1.04 lbs.

Level G started at 2.14 ftbd and ended at 2.57 ftbd and consisted of a 10YR4/2 dark grayish-brown silty-clay. Artifacts recovered from Level G include 1 fragment of dark olive bottle glass, 1 small piece of brick, and 5 fragments of oyster shell, weighing 0.30 lbs.



Figure 6: Posthole feature (F. 24) and Level G in progress in Unit 10.

Feature 24 is a posthole in the northeast corner of the unit, roughly underneath where the north wall of the Hothouse is suspected to have been. The soil consisted of a 10YR5/6 yellowish-brown clay. The top of Feature 24 was at 2.41 ftbd and the bottom was at 3.27

ftbd. Organic materials recovered from this feature consist of 7 fragments of oyster shell, weighing 0.40 lbs.

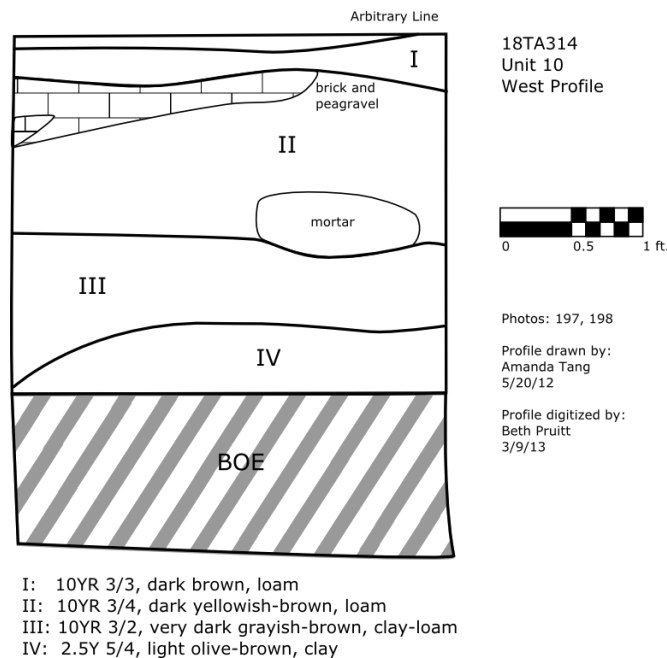


Figure 7: Unit 10 western profile wall, showing the layer of wall destruction.

Unit 11

Description

Unit 11 measured 5' by 5' and was located southeast of the standing Greenhouse. The northwest corner of Unit 11 was placed 15 feet east and 7.6 feet south of this building, and 7 feet to the west of Unit 10, in order to find the most likely location of the northwest corner of the Hothouse, according to the GPR report. It was excavated to an average depth of 3.24 feet below datum (ftbd). Within this test unit, there were six stratigraphic levels and four features.

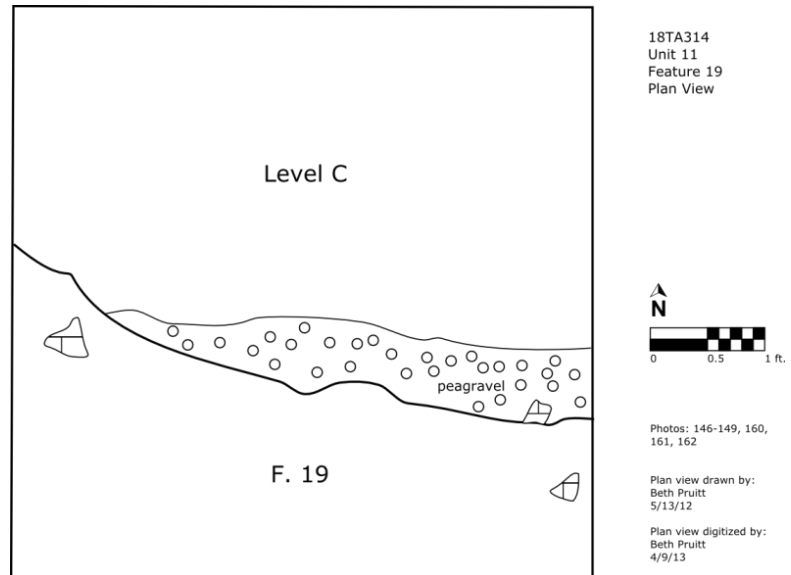
Level A started at the ground surface which was 0.17 ftbd and ended at 0.15 ftbd and consisted of a 7.5YR3/3 dark brown loam. There were no artifacts recovered from Level A, which represents the top soil.

Level B started at 0.15 ftbd and ended at 0.24 ftbd and consisted of a 10YR3/2 very dark grayish brown loamy-clay. The only artifact recovered from Level B was a BIC electronic lighter. This suggests that this level represents a modern context.

Level C started at 0.24 ftbd and ended at 0.39 ftbd and consisted of a 10YR4/3 brown loamy-clay with brick and peagravel inclusions. Artifacts recovered from Level C include 1 small sherd of earthenware, 1 sherd of undecorated ironstone—which appeared in

American contexts after 1842—1 sherd of blue underglaze transfer-printed whiteware—dating to the middle of the nineteenth century—4 British gunflints, 4 French gunflints, 1 fragment of bottle glass, and 1 thin iron hook. Organic materials recovered include 2 small pieces of oyster shell, 3 fragments of mammal bone, and 1 fin bone from a fish. Architectural materials include 46 fragments of flatglass—34 of which are tinted green—1 small piece of brick, 8 cut nails, and 5 unidentifiable nails. Level C represents the fill layer after the destruction of the Hothouse.

Feature 19 is brick rubble, probably continued from Unit 10, in the southern half of the unit. The soil around this rubble consisted of a 10YR 3/3 dark brown loamy-clay. The top of Feature 19 was at 0.30 ftbd and the bottom



was at 0.71 ftbd. Artifacts recovered from Feature 19 consisted largely of 136

Figure 8: Plan view of the brick rubble feature (F. 19) in Unit 11, with a mixture of brick, mortar, and peagravel.

pieces of brick, 2 of which were glazed, weighing 42.76 lbs. Other architectural materials included 20 fragments of window glass, 5 cut nails, 8 pieces of mortar, weighing 1.32 lbs. Also recovered were 5 fragments of mammal bones, 3 wine/liquor bottle fragments, 1 stone pestle, 8 sherds of coarse earthenware, 3 French gunflints, 2 corroded lumps of iron, 1 small piece of quartz, and 10 pieces of oyster shell, weighing 1.50 lbs. This level likely represents the wall rubble from the destruction of the Hothouse.

Level D started at 0.39 ftbd and ended at 1.77 ftbd and consisted of a 10YR2/2 very dark brown loamy-clay with inclusions of peagravel and small pieces of brick. These inclusions are likely spill-over from the destruction of the wall in the southern section of the unit. Artifacts recovered from Level D include six pieces of a dark green wine/liquor bottle, 8 shards of coarse red earthenware—6 of which were unglazed, 2 of which possessed a black glaze on the inside—1 fragment of a tobacco pipe stem measuring 4/64" (dating to around 1750-1800), 16 pieces of French gunflint, and 6 pieces of British gunflint. Organic materials included 24 fragments of mammal bone and 34 pieces of oyster shell, weighing 3.16 lbs. Architectural materials were prevalent in this level, consisting of 73 fragments of window glass, 11 cut nails, 22 pieces of mortar, weighing 3.16 lbs., and 60 pieces of brick, weighing 25.12 lbs.

Feature 21 is a nearly intact segment of a brick wall, likely part of the north wall of the Hothouse. The feature is oriented east to west, with five bricks laid side-by-side and mortar in between. The soil around the bricks consist of 10YR 2/2 very dark brown



Figure 9: Intact hothouse wall segment (F. 21) in Unit 11.

loamy-clay. The top of Feature 21 was at 0.75 ftbd and ended at the top of Level E. Artifacts recovered from this feature included 5 pieces of brick, weighing 16.60 lbs. and 2 pieces of mortar, weighing 0.70 lbs.

Level E started at 1.77 ftbd and ended at 2.08 ftbd and consisted of a mottled 90% 2.5Y3/3 dark olive brown and 10% 2.5Y5/6 light olive brown clay-loam. This level did not contain the inclusions of Level D, and the soil began a transition to more clay. Artifacts recovered from Level E consist of 1 fragment of window glass.

Feature 23 is a layer of more compact soil running underneath the wall of Feature 21. The soil consisted of a 2.5Y4/4 olive brown loamy-clay with inclusions of brick and mortar. The top of Feature 23 was at 1.33 ftbd and the bottom was at 1.57 ftbd. Artifacts recovered from this feature include 1 unworked piece of chert, 1 fragment of window glass, 1 medium-sized mammal bone, and 2 pieces of unglazed coarse earthenware that are possibly pieces of a roof tile. Architectural materials included 37 pieces of mortar, weighing 7 lbs., and 9 pieces of brick, weighing 14 lbs. This feature may have been a lower level of the north wall, possibly part of the base to level the ground.

Level F started at 2.08 ftbd and ended at 2.21 ftbd and consisted of a 2.5Y4/4 olive brown loamy-clay. There were no artifacts recovered from Level F, which represents sterile subsoil.

Feature 25 is a posthole, just outside of where the north wall of the Hothouse is suspected to have been in the north-central part of the unit. It is roughly aligned on an east-west axis with Feature 24. The soil consisted of a mottled 50% 10YR5/8 yellowish-brown and 50% 10YR2/1 black clayish loam. The top of Feature 25 was at 2.29 ftbd and the bottom was at 4.26 ftbd. There were no artifacts recovered from this feature.

Excavation ended at 2.21 ftbd at sterile subsoil and 4.26 ftbd at the bottom of a posthole feature (F. 25).

Interpretation

Like Unit 10, the brick and mortar rubble in Unit 11—and especially the in-place portion of brick wall represented in Feature 21—strongly indicate that this is the north wall of the structure in the GPR report. Although excavators were unable to discover the extent of the wall by finding the northwest corner, it was probably not much farther west-ward. The diagnostic artifacts

recovered in the fill of this unit place the date of destruction of the building in the mid-nineteenth century.

Conclusions

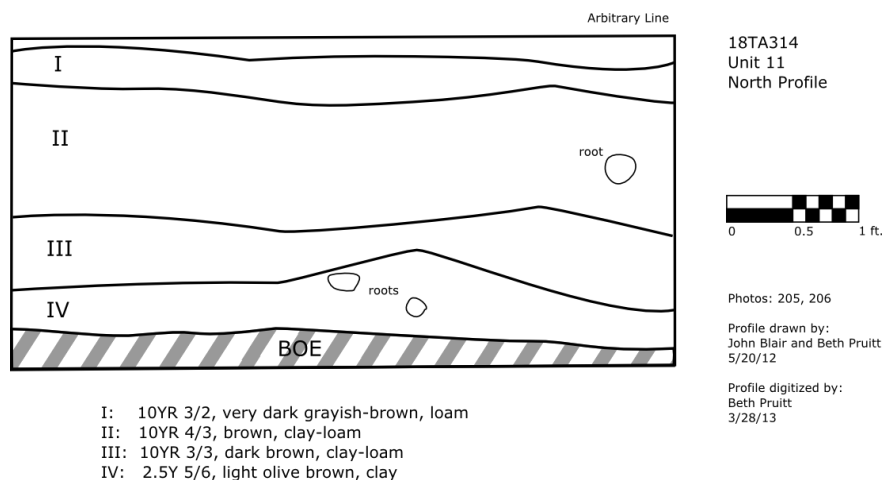


Figure 10: Unit 11 northern profile wall, outside of the hothouse structure.

The high prevalence of brick and mortar (48% of the total artifacts recovered), flatglass (21% of the total artifacts recovered), and earthenware flower pots (91% of the total ceramics recovered) lends support to the hypothesis that the structure excavated is the 16x16 ft. Hothouse described in the 1798 federal tax records.

The presence of chert worked into gunflints coming from Europe in both Units 10 and 11 is curious, but not inexplicable. Kent (1983) has suggested that large amounts of chert and quartz have found their way into East Coast plantation contexts due to their use in ship ballast. The French style of gunflints on American shores date from the late eighteenth century and the British style dates to the nineteenth- and early twentieth century. These dates roughly correlate to the early- and mid-nineteenth dates of the transfer-printed whiteware, ironstone, and pipestem also excavated in the rubble fill. However, it is odd that these pieces of worked chert are found so readily in the Hothouse, when they were not in the Greenhouse or slave quarter excavations.

The transition from flintlock technology to percussion caps was wide-spread by 1830. With the flint becoming obsolete, it is also possible that the gunflints were in use at Wye House until the mid-nineteenth century and were simply used as fill at the time that the Hothouse would have been torn down.

The postholes along the perimeter of the wall indicate that the Hothouse at Wye House was possibly constructed using a hotbed technique described in eighteenth-century gardening books, such as *Every Man his own Gardener*, found in the Lloyd library. The authors recommend staking the area around which the hotbed is to be created, then laying a bed of dung within the boundaries of the stakes. This will begin to naturally produce heat. Once this is completed and the dung has fermented, the frame can be constructed around it (Mawe and Abercrombie 1782:2). *A General Treatise of Husbandry & Gardening* by Richard Bradley, a contemporaneous manual to *Every Man*, additionally suggests laying pebbles on the bottom of a brick-lined pit as a foundation for the hotbed to better maintain the heat (Bradley 1726:281). This could explain the prevalence of peagravel in the destruction levels.

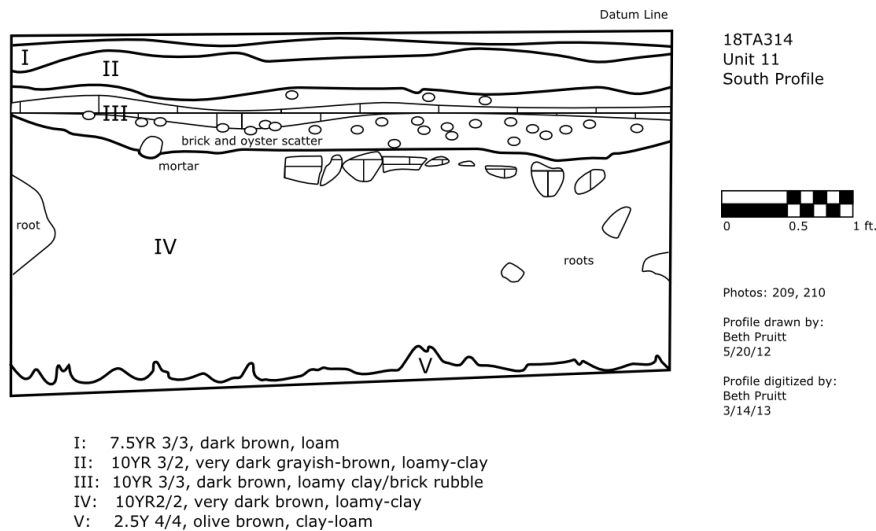


Figure 11: Unit 11 southern profile, showing the destruction inside of the hothouse structure.

Any layers of the hotbed laid for the Hothouse were not stratigraphically intact at the time of excavations, and have likely been churned up in the destruction of the building. Aside from the small patches of ash in Level D of Unit 10, there is little indication that the Hothouse was heated by a furnace or stove. The main artificial heating element appears at this time to be a hotbed.

In both units, there were contexts which contained items that may relate to the caches discovered in the 2008 excavations of the Greenhouse connected to West African spirit practices. In Level F of Unit 10 in the 2012 excavations, archaeologists recovered nails, chert, two lumps of iron, and a stone pestle. In Feature 19 of Unit 11, there were nails, chert gunflints, a single piece of quartz, two lumps of iron, and a stone pestle. It is more than a coincidence that these same materials are found together in the rubble of a second greenhouse structure. Due to the destruction of the building, any purposeful arrangement of the items has been disrupted. Finding them together, however, suggests a relationship between the objects in a manner that has been observed previously at Wye House.

Table 2: Artifacts From 18TA314 Hothouse

Item	Count	Percent
Coarse Earthenware	2	0.2
Refined Earthenware	1	0.1
Earthenware	29	2.9
Ironstone	1	0.1
Whiteware	1	0.1
Total Ceramics	34	3.3
Bottle Glass	17	1.7
Flatglass	210	20.7
Total Glass	227	22.3
Cut Nails	31	3.1
General Nails	21	2.1
Iron	5	0.5
Total Metals	57	5.6
Brick	324	31.9
Mortar	168	16.5
Total Construction Materials	492	48.4
Bone	48	4.7
Oyster Shell	99	9.7
Total Organic Materials	147	14.5
Gunflint	46	4.5
Natural Chert	7	0.7
Quartz	1	0.1
Stone Pestle	2	0.2
Total Lithics	56	5.5
Tobacco Pipe	2	0.2
Plastic	1	0.1
Total Small Finds	3	0.3
Total	1016	100

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

From these preliminary excavations of this structure, there is strong evidence that this is the 16x16 ft. Hothouse listed in the 1798 direct tax records and one of the hothouses built around 1785. There is little of the north wall remaining, but the recovered artifacts—mainly consisting of flower pots, window glass, and brick—suggest a building associated with gardening activity. It was likely built to house and force exotic plants prior to the construction of the hypocaust in the Greenhouse. It was torn down sometime in the mid-nineteenth century, by which time the Greenhouse would have been equipped to deal with these types of plants, perhaps rendering the Hothouse redundant. The construction and tearing down of multiple Greenhouse structures gives form to the interest in scientific gardening held by the Lloyds. These buildings are indicative of a period of time, the late eighteenth and early nineteenth centuries, of great botanical experimentation at Wye House.

Since this continued research into the greenhouse structures at Wye House have revealed multiple greenhouse and hothouse structures, the accepted dates of the hypocaust addition to the standing Greenhouse has shifted from 1784 to between 1798 and 1822. This may necessarily shift the focus of researchers from Edward Lloyd IV as the manager of these scientific gardening achievements to his wife. With the widowed Elizabeth Lloyd as the executor of the Wye House and its gardens during its very late eighteenth- and early nineteenth-century developments, it is important to examine how the lady of the household may have contributed to its realization.

There is the possibility of found and repurposed objects by the enslaved at Wye House like those in the Greenhouse caches, though the destruction of the wall prevents us from seeing how the materials were arranged or hidden. The presence of the same materials—quartz, chert, metal, and shaped stone—found in the same context, however, suggest that they were originally deposited together and meant to form a cache. These finds in both units can be interpreted as evidence of spiritual protection provided to the building by the enslaved.

For future excavations, opening units to the south in an attempt to locate the eastern or western walls would test the hypothesis that the postholes continue around the rest of the perimeter, which would support or refute the idea that this Hothouse was constructed using the hotbed methods described in eighteenth-century gardening books.

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Bag No.	Unit	Level	Feature	Item #	Mcode	Category	Type	Description	Form Code	Form Description	Quantity	Comments	Excavation Date	Excavaters	Cataloger	Computer Entry Date
1	11	B		1	980000	Synthetic/Recent Materials	Plastic	identifiable			1	modern lighter, white, "BIC ELECTRONIC LIGHTER"	5/12/2012	BP, AT, SB	AB	12/6/2012
2	11	C		1	760000	Architectural Materials	Brick	brick general			1	27 g, discarded	7/9/2012	PD	AB	12/6/2012
2	11	C		2	820001	Organic Materials	Shell	oyster shell			2	5.5 g, discarded	7/9/2012	PD	AB	12/6/2012
2	11	C		3	100000	Ceramics	Earthenware	general			1	small frag of terra cotta	5/12/2012	AT, JB, BP	AB	12/6/2012
2	11	C		4	752004	Architectural Materials	Stone	worked for flints	9640	gunflints	3	gray, possibly British	5/12/2012	AT, JB, BP	AB	12/6/2012
2	11	C		5	752004	Architectural Materials	Stone	worked for flints	9640	gunflints	1	white, possibly British	5/12/2012	AT, JB, BP	AB	12/6/2012
2	11	C		6	752004	Architectural Materials	Stone	worked for flints	9640	gunflints	4	brown, possibly French	5/12/2012	AT, JB, BP	AB	12/6/2012
2	11	C		7	136020	Ceramics	Ironstone	undecorated			1	body frag	5/12/2012	AT, JB, BP	AB	12/6/2012
2	11	C		8	134434	Ceramics	Whiteware	transfer printed			1	frag with various shades of blue in underglaze transfer print	5/12/2012	AT, JB, BP	AB	12/6/2012
2	11	C		9	609999	Glass	Flatglass	general			10	clear glass	5/12/2012	AT, JB, BP	RS	12/6/2012
2	11	C		10	609999	Glass	Flatglass	general			34	green tinted glass	5/12/2012	AT, JB, BP	RS	12/6/2012
2	11	C		11	609999	Glass	Flatglass	general			2	diseased so it looks white	5/12/2012	AT, JB, BP	RS	12/6/2012
2	11	C		12	629999	Glass	Bottleglass	general			1	opaque curved glass	5/12/2012	AT, JB, BP	RS	12/6/2012
2	11	C		13	810001	Organic Materials	Bone	Mammal			2	1 long bone fragment and one unidentifiable fragment	5/12/2012	AT, JB, BP	RS	12/6/2012
2	11	C		14	810004	Organic Materials	Bone	Teeth			1	part of a tooth	5/12/2012	AT, JB, BP	RS	12/6/2012
2	11	C		15	810003	Organic Materials	Bone	fish			1	part of a fin	5/12/2012	AT, JB, BP	RS	12/6/2012
2	11	C		16	712000	Architectural Materials	Nails	Cut			8	all mildly corroded cut nail fragments	5/12/2012	AT, JB, BP	RS	12/6/2012
2	11	C		17	710000	Architectural Materials	Nails	general			5	nondescript corroded nails	5/12/2012	AT, JB, BP	RS	12/6/2012

2	11	C	18	910001	Metal Materials	Iron	form identifiable			1	thin hook	5/12/2012	AT, JB, BP	RS	12/6/2012
3	10	B	1	610000	Glass	Flatglass	window glass	5999	flatware	1		5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	1	630003	Glass	Bottle glass	wine/liquor frag	6200	bottle	6	very very diseased	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	2	610000	Glass	Flatglass	window glass	5999	flatware	3		5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	3	710000	Architectural Materials	Nails	nails general			5		5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	4	712000	Architectural Materials	Nails	Cut			11		5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	5	120001	Ceramics	Earthenware	Coarse earthenware	8500	flowerpot	6	red, unglazed	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	6	752004	Architectural Materials	Stone	worked for flints	9640	gun flints	16	red, probably french	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	7	752004	Architectural Materials	Stone	worked for flints	9640	gun flints	6	black, probably british	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	8	610000	Glass	Flatglass	window glass	5999	flatware	70	very very diseased	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	9	810001	Organic Materials	bone	mammal			2	large flat frags	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	10	810001	Organic Materials	bone	mammal			8	bone nubs	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	11	810001	Organic Materials	bone	mammal			1	joint or pelvis frag	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	12	810001	Organic Materials	bone	mammal			4	tiny frags	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	13	810004	Organic Materials	bone	teeth			1	fang	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	14	120002	Ceramics	Earthenware	Coarse earthenware	8500	flowerpot	2	black glaze on the inside	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	15	820001	Organic Materials	Shell	Oyster shell			34	1.6lbs and 706g	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	16	730000	Architectural Materials	Mortar	mortar			22	25g and 3.1lbs	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	17	760000	Architectural Materials	Brick	Brick general			60	803g and 22.1lbs and 565.25g	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	18	520004	Tobacco Pipes	Stems, plain	4/64			1	frag	5/13/2012	JFK, AT	MS	12/6/2012
4	11	D	19	120004	Ceramics	Earthenware	Coarse earthenware	33	hollow body frag	1	lead glazed black, both sides	5/13/2012	JFK, AT	MS	12/6/2012

5	11	19	1	810001	Organic Materials	Bone	mammal		3	large round frags	5/19/2012	BP	MS	12/6/2012
5	11	19	2	810001	Organic Materials	Bone	mammal		2	abnormal shapes	5/19/2012	BP	MS	12/6/2012
5	11	19	3	810001	Organic Materials	bone	mammal wine/liquor frag		3	short flat frags	5/19/2012	BP	MS	12/6/2012
5	11	19	4	630003	Glass Architectural Materials	Bottle glass		6200 bottle	1	green	5/19/2012	BP	MS	12/6/2012
5	11	19	5	752000	Architectural Materials	Stone	worked		1	stone pestle	5/19/2012	BP	MS	12/6/2012
5	11	19	6	760000	Architectural Materials	Brick	Brick general		2	glazed	5/19/2012	BP	MS	12/6/2012
5	11	19	7	120003	Ceramics	Earthenware	Coarse earthenware	33 hollow body frag	2	interior glazed lead	5/19/2012	BP	MS	12/6/2012
5	11	19	8	120001	Ceramics	Earthenware	Coarse earthenware	35 base	2	flowerpot	5/19/2012	BP	MS	12/6/2012
5	11	19	9	120001	Ceramics	Earthenware	Coarse earthenware	33 hollow body frag	3	flowerpot	5/19/2012	BP	MS	12/6/2012
5	11	19	10	120001	Ceramics	Earthenware	Coarse earthenware	32 rim	1	flowerpot	5/19/2012	BP	MS	12/6/2012
5	11	19	11	610000	Glass	Flatglass	window glass wine/liquor frag	5999 flatware hollow body frag	20	diseased	5/19/2012	BP	MS	12/6/2012
5	11	19	12	630003	Glass Architectural Materials	Bottle glass		33	2		5/19/2012	BP	MS	12/6/2012
5	11	19	13	710000	Architectural Materials	Nails	nails general		2		5/19/2012	BP	MS	12/6/2012
5	11	19	14	712000	Architectural Materials	Nails	Cut worked for flints		5		5/19/2012	BP	MS	12/6/2012
5	11	19	15	752004	Architectural Materials	Stone		9640 gun flints	3	red, probably french	5/19/2012	BP	MS	12/6/2012
5	11	19	16	760000	Architectural Materials	Brick	Brick general		61	30.1lbs large blobs of corroded Iron	5/19/2012	BP	MS	12/6/2012
5	11	19	17	910000	Metal Materials	Iron	Iron		2		5/19/2012	BP	MS	12/6/2012
5	11	19	18	750000	Organic Materials	Bog Iron	Quartz		1	small piece of quartz	5/19/2012	BP	MS	12/6/2012
5	11	19	19	820001	Organic Materials Architectural Materials	Shell	Oyster shell		10	1.5lbs	5/24/2012	KD	EB	12/6/2012
5	11	19	20	730000	Architectural Materials	Mortar	mortar		2	1.1lbs	5/24/2012	KD	EB	12/6/2012

5	11		19	21	760000	Architectural Materials	Brick	Brick general	58	5,084.3g	7/9/2012	EN	EB	12/6/2012
5	11		19	22	730000	Architectural Materials	Mortar	mortar	6	100g	7/9/2012	EN	EB	12/6/2012
5	11		19	23	760000	Architectural Materials	Brick	Brick general	15	658.5g (no material circled on the discard form; brick is a guess)	7/9/2012	EN	EB	12/6/2012
6	10	C		1	712000	Architectural Materials	Nails	Cut worked for flints	1	small cut nail	5/13/2012	AT,JK	RS	12/6/2012
6	10	C		2	752004	Architectural Materials	Stone		1	small piece of chert	5/13/2012	AT,JK	RS	12/6/2012
6	10	C		3	609999	Glass	Flatglass	general	18	green tinted glass	5/13/2012	AT,JK	RS	12/6/2012
6	10	C		4	609999	Glass	Flatglass	general	9	clear glass with slight aqua tint	5/13/2012	AT,JK	RS	12/6/2012
6	10	C		5	609999	Glass	Flatglass	general	2	highly diseased fragments	5/13/2012	AT,JK	RS	12/6/2012
6	10	C		6	629999	Glass	Bottleglass	general	2	dark olive green bottle glass	5/13/2012	AT,JK	RS	12/6/2012
6	10	C		7	760000	Architectural Materials	Brick	general	2	discard, 40 grams	7/9/2012	PD	RS	12/6/2012
6	10	C		8	820001	Organic Materials	Shell	oyster shell	2	discard, 3.5 grams	7/9/2012	PD	RS	12/6/2012
7	10		19	1	609999	Glass	Flatglass	general	2	diseased flatglass fragments	5/13/2012	AT,JK	RS	12/6/2012
7	10		19	2	760000	Architectural Materials	Brick	general	25	discard, 853.5 grams	7/9/2012	PD	RS	12/6/2012
7	10		19	3	820001	Organic Materials	Shell	oyster shell worked for flints	4	discard, 50 grams medium pieces of chert	7/9/2012	PD	RS	12/6/2012
8	10	D		1	752004	Architectural Materials	Stone		2	probably tin glazed with the glaze knocked off	7/9/2012	AT,JK	RS	12/6/2012
8	10	D		2	130000	Ceramics	Refined Earthenware	general	1	thick, relatively flat piece	5/13/2012	AT,JK	RS	12/6/2012
8	10	D		3	629999	Glass	Bottleglass	general	1		5/13/2012	AT,JK	RS	12/6/2012
8	10	D		4	609999	Glass	Flatglass	general	4	aqua tinted fragments	5/13/2012	AT,JK	RS	12/6/2012
8	10	D		5	609999	Glass	Flatglass	general	1	highly diseased clear fragment	5/13/2012	AT,JK	RS	12/6/2012
8	10	D		6	629999	Glass	Bottleglass	general	2	highly diseased (olive green tinted?)	5/13/2012	AT,JK	RS	12/6/2012

8	10	D		7	712000	Architectural Materials	Nails	Cut			3	mildly corroded nail	5/13/2012	AT,JK	RS	12/6/2012
8	10	D		8	710000	Architectural Materials	Nails	general			1	highly corroded nail	5/13/2012	AT,JK	RS	12/6/2012
8	10	D		9	810004	Organic Materials	Bone	teeth			1	part of a tooth w/ root	5/13/2012	AT,JK	RS	12/6/2012
8	10	D		10	820001	Organic Materials	Shell	oyster shell			6	discard, 53 grams	7/9/2012	PD	RS	12/6/2012
8	10	D		11	760000	Architectural Materials	Brick	general			17	discard, 1818.5 grams	7/9/2012	PD	RS	12/6/2012
9	10		20	1	710000	Architectural Materials	Nails	nails general			1	nail	5/13/2012	AT, JK	EB	12/6/2012
9	10		20	2	760000	Architectural Materials	Brick	Brick general			38	10lbs	5/24/2012	KD	EB	12/6/2012
9	10		20	3	820001	Organic Materials	Shell	Oyster shell			1	.6lbs	5/24/2012	KD	EB	12/6/2012
10	10	E		1	752004	Architectural Materials	Stone	worked for flints	9640	gun flints	7	red, probably french	5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		2	752004	Architectural Materials	Stone	worked for flints	9640	gun flints	3	black, probably british	5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		3	712000	Architectural Materials	Nails	Cut			3		5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		4	710000	Architectural Materials	Nails	nails general			2		5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		5	510000	Tobacco Pipes	bowls, plain	bowls, plain			1	inside is stained, outside white	5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		6	120001	Ceramics	Earthenware	Coarse earthenware	8500	flowerpot	11	terracota, red, unglazed	5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		7	810001	Organic Materials	bone	mammal			3	long frags	5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		8	810001	Organic Materials	bone	mammal			1	joint or pelvis frag	5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		9	810001	Organic Materials	bone	mammal			10	tiny frags	5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		10	610000	Glass	Flatglass	window glass	5999	flatware	27	very very diseased	5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		11	630003	Glass	Bottle glass	wine/liquor frag	6200	bottle	1	dark green very diseased	5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		12	760000	Architectural Materials	Brick	Brick general			27	2420g	5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		13	730000	Architectural Materials	Mortar	mortar			17	482.5g	5/13/2012	JGK, AT	MS	12/6/2012
10	10	E		14	820001	Organic Materials	Shell	Oyster shell			9	349.5g	5/13/2012	JGK, AT	MS	12/6/2012

11	11		21	1	760000	Architectural Materials	Brick	Brick general	5	16.6lbs	5/24/2012	KD	EB	12/6/2012
11	11		21	2	730000	Architectural Materials	Mortar	mortar	2	.7lbs	5/24/2012	KD	EB	12/6/2012
12	10		22	1	750000	Stone	stone, natural	chert rock	1	chert rock	5/12/2012	AT	EB	12/6/2012
12	10		22	2	610000	Glass	Flatglass	window glass	3	diseased window glass frags	5/12/2012	AT	EB	12/6/2012
12	10		22	3	730000	Architectural Materials	Mortar	mortar	82	diseased window glass frags	7/9/2012	DM	EB	12/6/2012
13	10	F		1	610000	Glass	Flatglass	window glass	2		5/19/2012	AT	EB	12/7/2012
13	10	F		2	810000	Organic Materials	Bone	Bone	1	shaped bone	5/19/2012	AT	EB	12/7/2012
13	10	F		3	710000	Architectural Materials	Nails	nails general	5	nails general	5/19/2012	AT	EB	12/7/2012
13	10	F		4	810000	Organic Materials	Bone	Bone	3	small bone fragments	5/19/2012	AT	EB	12/7/2012
13	10	F		5	750000	Architectural Materials	Stone	stone natural	5	chert rock	5/19/2012	AT	EB	12/7/2012
13	10	F		6	910000	Metal Materials	Iron	Iron	2	corroded Iron	5/19/2012	AT	EB	12/7/2012
13	10	F		7	880000	Architectural Materials	Stone	prehistoric materials	1	rock pestle	5/19/2012	AT	EB	12/7/2012
13	10	F		8	760000	Architectural Materials	Brick	Brick general	3	102g	7/9/2012	DM	EB	12/7/2012
13	10	F		9	820001	Organic Materials	Shell	Oyster shell	19	472g	7/9/2012	DM	EB	12/7/2012
14	11		23	1	750000	Stone	stone, natural	chert rock	1	chert rock	5/20/2012	JB,BB	EB	12/6/2012
14	11		23	2	610000	Glass	Flatglass	window glass	1	vitrfied window glass	5/20/2012	JB,BB	EB	12/6/2012
14	11		23	3	810001	Organic Materials	Bone	mammal	1	medium mammal bone	5/20/2012	JB,BB	EB	12/6/2012
14	11		23	4	120001	Ceramics	Earthenware	unglazed	2	possible roof tile?	5/20/2012	JB,BB	EB	12/6/2012
14	11		23	5	730000	Architectural Materials	Mortar	mortar	37	7lbs	5/24/2012	KD	EB	12/6/2012
14	11		23	6	760000	Architectural Materials	Brick	Brick general	9	14lbs	5/24/2012	KD	EB	12/6/2012
15	10	E		1	609999	Glass	Flatglass	general	1	aqua/green tinted fragment	5/20/2012	JB, BP	RS	12/7/2012
16	10	G		1	629999	Glass	Bottleglass	general	1	small dark (olive green?) piece	5/20/2012	AT	RS	12/7/2012

16	10	G		2	760000	Architectural Materials	Brick	general		1	discard, 44.5 grams	7/9/2012	PD	RS	12/7/2012
16	10	G		3	820001	Organic Materials	Shell	oyster shell		5	discard, 137.5 grams	7/9/2012	PD	RS	12/7/2012
17	10		24	1	820001	Organic Materials	Shell	oyster shell		7	discard, 182.5 grams	7/9/2012	EN	RS	12/7/2012

APPENDIX B: LEVEL AND FEATURE FORMS

ARCHAEOLOGY IN ANNAPOLIS LEVEL REPORT

Site: _____

Date: _____

Square: _____

Excavator(s): _____

Level: _____

Recorder: _____

Opening Elevations: NE _____

NW _____

Instrument Height: C _____

SE _____

SW _____

Closing Elevations: NE _____

NW _____

Instrument Height: C _____

SE _____

SW _____

Level Definition:

Munsell:

Texture:

Soil description (inclusions, other comments):

Associated Features and Levels:

Level above:

Level below:

Bag number:

Artifacts:

Interpretation:

Photographs:

B/W Roll/Frames:

Color Roll/Frames:

Terminus post quem:

Soil Samples:

ARCHAEOLOGY IN ANNAPOLIS
LEVEL REPORT
Page 2

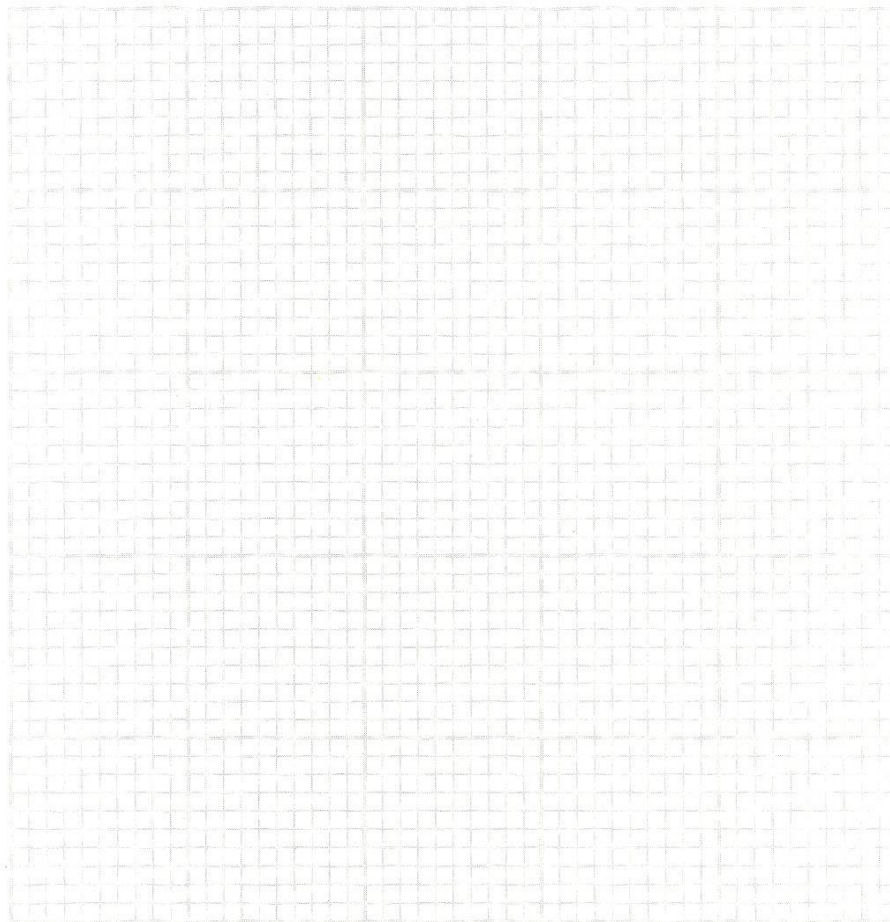
Site: _____

Date: _____

Square: _____

Excavator(s): _____

Subject of drawing: _____



ARCHAEOLOGY IN ANNAPOLIS FEATURE REPORT

Site: _____
 Square: _____
 Feature: _____
 Level w/in feature: _____
 Elevations (top): NE _____
 NW _____
 Instrument Height: C _____
 SE _____
 SW _____

Date: _____
 Excavator(s): _____
 Recorder: _____
 Elevations (bottom): NE _____
 NW _____
 Instrument Height: C _____
 SE _____
 SW _____

Feature Description:
 Munsell:

Soil texture:

Soil description (inclusions, other comments):

Bag number:
 Artifacts:

Interpretation:



Photographs: B/W Roll/Frames:
 Color Roll/Frames:

Terminus post quem:
 Cross section? Drawing #:

APPENDIX C: CATALOG CODE

ARCHAEOLOGY IN ANNAPOLIS ARTIFACT CATALOG COMPUTER CODES

(Where XX appears, substitute codes from attribute list)

CERAMICS

<u>Earthenware</u>	100000
<u>Coarse Earthenware</u>	120000
Unglazed (describe in comments)	120001
Aboriginal (describe in comments)	123000
Iberian Storage Jars (1763)c.1745-1780--	
ext wash,int clear glaze [p.143]	124000
Interior Lead Glazed (describe in comments)	120002
Exterior Lead Glazed (describe in comments)	120003
Int/Ext Lead Glazed (describe in comments)	120004
Black Glazed Redware (only true black glaze)	127100
Staffordshire Manganese Mottled (late 17th, early 18thc)	
buff body streaked brown glaze, very porous.....	126000
North Devon Gravel Tempered Ware (1713)c.1650-1775--red	
to gray body, apple green glaze	121100
Buckley Ware (1746)c.1720-1775--streaked body, black glaze	
[pp.132-133,135]	122000
Coarse Agate (1780)c.1750-1810--marbled body--date	
excludes doorknobs, [p.132]	129500
<u>Slipwares</u>	129000
Slip Combed (1733)c.1670-1795 [pp.107,134-135]	129005
Combed + Dotted (1733)c.1670-1795 [pp.107,134-135]	129400
Trailed (describe in comments)	129006
North Devon Sgraffito (1680)c.1650-1710--incised dec	
[pp.104-105]	129100
American Brush Trailed (describe in comments) [p.99] ...	127500
American Brush Trailed w/ copper green dec [p.99]	127508
Other Coarseware Attributes (describe in comments)	120009
<u>Refined Earthenwares</u>	130000
<u>Tin Glazed Earthenware</u>	112000
White Glazed (1720)c.1640-1800 (may have blue tint)	
[p.109]	112011
Blue Dash Chargers (1670)c.1630-1720--rim dec	
[pp.108-109]	112012
Identifiable Design Motif (describe in comments)	112013
Manganese stippling (green or brown stipple dec)	112016
Blue on White (other)	112017
Polychrome Palette (describe in comments)	112018
Other (describe in comments)	113200

CERAMICS (CONT.)

Whieldon-Wedgewood wares	131099
Agateware (1758)c.1740-1775--thin, clr glz [p.132].....	131100
Tortoiseshell (1755)c.1740-1770--brown + white dec	
[p.123]	131200
Clouded (1755)c.1740-1770--multi-color dec [p.123]	131300
Cauliflower (vegetable motifs)	131400
Other (describe in comments)	131500
 Creamware	132000
Undecorated (1791)c.1762-1820--comment	
if deeper yellow [pp.125-128]	132020
Annular (1798)c.1780-1815--slip dec [p.131]	1321XX
Handpainted (1788)c.1765-1840	1322XX
Transfer Printed (1790)c.1765-1815 [p.126-128]	1324XX
Shell edged	1325XX
Featheredge	132600
 Pearlware	133000
Undecorated (1805)c.1780-1830 [p.128-132]	133020
Annular (1805)c.1790-1820--slip dec [pp.131-132]	1331XX
Handpainted	1332XX
underglaze blue (1800)c.1780-1820 [pp.128-129]	133221
underglaze polychrome (1805)c.1795-1815--	
peasant palette [p.129]	133222
Transfer Printed (1818)c.1795-1840 [pp.128-130]	133434
Shell Edged (1805)c.1780-1830 [p.131]	1335XX
 Whiteware	134000
Undecorated (1860)c.1820-1900 [pp.130-31]	134020
Annular (slip dec)	1341XX
Handpainted	1342XX
Transfer Printed	1344XX
Shell Edged	1345XX
Fiesta	1346XX
 Yellow Ware	135000
Undecorated	135020
Annular (slip dec)	1351XX
 Other 19thc. Wares (describe in comments)	138000
Other 18thc. Wares (describe in comments)	138500

CERAMICS (CONT.)

HIGHLY FIRED REFINED WARES (these types of ceramics are under debate as to whether they are earthenware or stoneware) . 250000

Black Basalt (1785)c.1750-1820--dry, black body [pp.121-122]	2361XX
Rosso Antico (1733)c.1690-1775--dry, red body; sprig molded [pp.121-122]	236252
Engine Turned (1769)c.1763-1775--dry, red body; incised lines [p.121]	236251
Jasper (1774 to early 19thc) dry, color tinted; sprig molded	236352
Lead Glazed Refined Redware	2365XX
Jackfield (1760)c.1740-1780--red to purple body, black glz [p.123]	2370XX
Astbury (1738)c.1725-1750--red body, white sprig molding [p.123]	238052
Shaw (1741)c.1732-1750--red body, int wht slip [p.118].	2390XX
Ironstone (1870) c.1840-1900, [p.131]	136000
Undecorated	136020
Rockingham (19thc) hard, buff body, mottled br glz	137500
Undecorated	137520

STONEWARE

Coarse Stonewares	200000
Gray Bodied	220000
rhenish blue and gray (1668)c.1650-1725-- w/manganese dec [pp.280-281]	221047
rhenish blue and gray	221048
rhenish blue and gray (1713)c.1650-1775--incised [pp.280-81]	221050
rhenish blue and gray (1738)c.1700-1775-- stamped or geometric designs [pp.284-285]	221048
American blue and gray (mid 18th-19thc) thick cobalt dec [p.101]	211000
w/albany slip (int slip--indicates later ware) [p.101].	213000
Hohr (1700)c.1690-1710--plain gray, incised or sprig molded [p.284]	220050
Other gray bodied (describe in comments)	220009
Frechen (1625)c.1550-1700--Bellarmine Bottles [pp.55-57]	222000
Brown Bodied	229999
English Brown (1733)c.1690-1775 [pp.112-14]	230000
Burslem (1738)c.1700-1775--crouch ware [p.114]	232000
Fulham (1733)c.1690--1775--mugs and tankards [pp.112-114]	233000
American Brown (mid 18thc) [p.100]	212000
Other Brown Bodied (describe in comments)	230500

CERAMICS (CONT.)

Refined Stonewares	240000
Nottingham (1755)c.1700-1810--drab body, luster br glz [p.114]	231000
White Saltglazed (1763)c.1720-1805--date excludes plates and molded vessels [pp.115-117]	235000
slip-dipped WSG (1745)c.1715-1775--gray body w/wht slip [pp.114-115]	235100
scratch brown (1725)c.1720-1730--incised, br dec [p.117]	235350
scratch blue (1760)c.1744-1775--incised bl dec [p.117]	235450
debased scratch blue (1780)c.1765-1795--incised, sloppy bl dec [p.118]	235550
handpainted (describe in comments)	2356XX
transfer printed (1760)c.1755-1765 [p.128]	2357XX
molded (1753)c.1740-1765-plates (describe in comments) [p.115]	235056

PORCELAIN

Porcelain (undistinguished)	300000
Chinese general	310000
undecorated	310020
blue on white (1730)c.1660-1800 [p.257]	310021
batavian c.18thc--ext brown glz [p.18]W	310037
imari overglaze enamels (1740)c.1700-1780--red + gold [pp.258-259]	310038
famille verte (1696)c.1662-1730--translucent enamels [pp.15-16]W	310040
famille rose 18thc (1730-)--opaque enamels; intro of wht [pp.16-17]W	310039
encre de chine (1762)c.1730-1795--black ink lines [pp.17-18]W	310042
blanc de chine (1700)c.1650-1750--molded, all wht, no sheen [p.45]W	310044
canton (1815)c.1800-1830-diagnostic rim design [p.262]	310041
other Chinese (describe in comments)	310043
English (1770)c.1745-1795--softer paste, some transfer print [p.137]	3200XX
bone china (c.1794-) very thin, very white paste	321000
Other Porcelain (describe in comments-put semi-pcln here)	340000

HANDPAINTED DECORATIVE ATTRIBUTES

No further analysis	00
Undecorated	20
Blue on White	21
18thc. palette (peasantware)	22
19thc. palette (reds, etc...)	23
Stenciled	24
Sponged	25
Luster Glazed	26
Finger-trailed	27
Mocha	28
Banded	29
Overglaze Painting	30
Gold Gilding	31

TRANSFER PRINTED DECORATIVE ATTRIBUTES

No Further Analysis	00
Overglaze Transfer Print	32
Underglaze Black	33
Underglaze Blue	34
Underglaze-other 18thc colors	35
Underglaze-19thc colors	36
Flow Blue	37
Decalcomania	38
Underglaze Green	39
Underglaze Red	40

OTHER DECORATIONS

Incised/applied design	50
Engine-turned	51
Sprig-molded, relief dec	52
Molded rim (identify design)	53
Molded	54
Incised	55
Applied	56

TOBACCO PIPES

Pipes general	500000
Bowls, plain	510000
Bowls, marked	511000
Bowls, molded	512000
Stems, unmeasurable	520000
Stems, plain 4/64	520004
Stems, plain 5/64	520005
Stems, plain 6/64	520006
Stems, plain 7/64	520007
Stems, plain 8/64	520008
Stems, plain 9/64	520009
Stems, marked 4/64	521004
Stems, marked 5/64	521005
Stems, marked 6/64	521006
Stems, marked 7/64	521007
Stems, marked 8/64	521008
Stems, marked 9/64	521009

GLASS

Glass general	600000
Flatglass	609999
Window	610000
Bull's eye	610001
Mirror	660000
Bottle Glass	629999
Wine/Liquor Bottle (dk olive green)	630000
wine/liquor neck	630001
wine/liquor base	630002
wine/liquor frag	630003
Round Bottle (whole)	630084
round neck	630081
round base	630082
round frag	630083
Case Bottle-square (whole)	630074
case neck	630071
case base	630072
case frag	630073
Medicinal Phial-18thc.	621000-16*
Medicinal Bottle-19thc. (see Hume, p.73).....	620017-21*
Blown-in-Mold Bottle (whole).....	631000
blown-in-mold neck	631100
blown-in-mold base	631200
blown-in-mold frag	631300
Machine Made Bottle (whole).....	632000
machine made neck	632100
machine made base	632200
machine made frag	632400
Drinking Glass	640000
Wineglass (whole)	641000
wineglass frag	641090
wineglass bowl	641091
wineglass stem	641050-75*
wineglass base	641085-89*
(see Noel Hume, p.190)	

Drinking Glass (cont)

Tumbler (whole)	642000
base	642001
rim	642004
body	642005
stenciled or etched	642002
faceted body	642003
other 18thc. attributes	643000
other 19thc. attributes	643200
 Serving Glass	 650000
Decanter.	651000
top	651005
 Urinal Bottle.	 652000
 Storage Jar	 653000
canning/mason jar	653001
 Lighting Glass	 654000
 Cosmetic Jar	 655000

ARCHITECTURAL MATERIALS

Nails General	710000
Handwrought	711000
rose head	711001
L-head	711002
headless	711003
Cut	712000
Modern (wire)	713000
 Plaster	 720000
Shell Tempered	721000
Shell Tempered, painted	721001
Shell Tempered, lath marked	721002
Horse Hair Tempered	721003
Modern	722000
 Mortar	 730000
Shell Tempered	730001
Modern (concrete goes here)	730002
 Stone	
Stone, Natural (bog iron goes here)	750000
architectural or landscape	
worked	752000
paving	752001
step or landscape	752002
other building related	752003
Worked for Flints	752004
Worked, other	752005
Prehistoric Materials	880000
Stone debitage	752006
Stone Tools (specify)	752007
Stone Tool Fragment	752008
 Brick	
Brick General	760000
wall brick	760001
well brick (curved)	760002
coping brick	760003
marked	760004
paving brick	760005
fire brick	760006

Tile (ceramic)	
Tile General	770000
roofing	770001
paving	770002
flooring	770003
drain (terra cotta)	770004
Sewer Pipe	780000
Fire Place Tile	1150XX
Organic Materials (egg shell goes here)	800000
Bone, Fragments (turtle)	810000
mammal	810001
bird	810002
bird/rodent	810005
rodent	810006
fish	810003
teeth	810004
Shell, Fragments	820000
oyster	820001
clam	820002
blue crab	820003
mussel	820004
other (describe in comments)	820005
Wood, building related	840000
worked, other	840001
natural	840003
form identifiable	840004
unidentifiable	840099
Leather	850000
form identifiable	850001
Textile	860000
form identifiable	860001
Paper	855000
Charcoal	840002
Plant Remains	870000
leaves	870001
seeds and nuts (specify)	870002
pollen samples	870003
Soil Samples	870500
Worked or Shaped Shell	881000
form identifiable	881001

Organic Materials (cont)

Worked or Shaped Bone	881500
form identifiable	881501
Worked or Shaped Horn	882000
form identifiable	882001
Coal/Clinker	870004
Coal	870005
Clinker	870006
Bog Iron (same code as stone, natural)	750000

Metal Materials (Slag)

Iron	910000
form identifiable (other than nails)	910001
Brass	920000
form identifiable	920001
Pewter	930000
form identifiable	930001
Lead	940000
form identifiable	940001
debitage-puddles	940002
printing type	943000
Copper	960000
form identifiable	960001
Silver	970000
form identifiable	970001
Other Metal	950000
form identifiable	950001

Synthetic/Recent Materials

Synthetic/Recent Samples

Mixed Materials	990000
form identifiable	990001

Forms Key

0000-1000 = General Ceramic Attributes

5000-5999 = Glass General/Table Glass

6000-6999 = Storage Vessels

7000-7999 = Cooking

8000-8999 = Misc. Ceramics and Glass

9000 = Misc Artifacts

9100-9199 = Architectural/Hardware

9200-9299 = Kitchen

9300-9399 = Clothing

9400-9499 = Personal

9500-9599 = Tools

9600-9699 = Weapons

9700-9799 = Harness

9800-9899 = Decorative

9900-9999 = (unassigned)

Form codes below may be grouped by material rather than numerically
i.e. Flower Pot appears under ceramic.

FORMS

Identifiable Ceramic Fragment Attributes

Spout	0030	Lid	0036
Handle	0031	Cup	0037
Rim	0032	Plate	0038
Hollow Body Frag ...	0033	Bowl	0039
Flat Body Frag	0034	Figurine	9801
Base	0035	Flowerpot	8500

Identifiable Glass Fragment Attributes

Hollowware	5998	Jar	6300
Flatware	5999	Canning Jar	6951
Bottle	6200	Jar lid liner	6952
Bottle finish	6201	Lamp Globe	8761
Carboy	6970	Lamp Base	8763
Perfume	9416	Lamp Chimney	8762
Patent medicine	6960	Candle sticks	8760

Identifiable Attributes

Window Came	9110	Thimble	9340
Hinges gen or type unknown..	9125	Wig Curler	9345
door	9126	Coin	9410
furniture	9127	Comb	9415
other	9129	Jewelry	9420
Locks general.....	9135	Key	9430
door	9136	Doll/Doll Parts	9441
Keyhole	9146	Marble	9442
Screw	9150	Game Piece	9443
Upholstery Tacks (brass) ...	9176	Slate Pencil	9445
Wire	9180	Toy	9446
Insulator	9181	Writing Implement ..	9460
Drain/Sewer Pipe ...	9102	Toothbrush	9406
Cutlery	9201	Bead	9401
Buckles	9305	Spring	9550
shoes	9306		
other	9308		
Button	9310	Weapon Related	
1-piece	9311	Gunflints	9640
2-piece	9312	Shell Casing	9660
Collar button	9426	Shot, Ball, Bullet .	9661
Clothing Fastener ..	9316		
Pin	9320	Harness Related	
handwrought	9321	Horse shoe	9726
machine made	9322		
Safety	9323		
Scissors	9335		

Cataloguing Abbreviations
for use in "Comments" section

COLORS

Amber -- Amb
Aqua -- Aq
Black -- Blk
Blue -- Bl
Brown -- Br
Clear -- Clr
Cobalt -- Cob
Dark -- Dk
Gold -- Gld
Gray -- Gy
Green -- Gn
Light -- Lt
Manganese -- Mang
Olive -- Ol
Orange -- Or
Pink -- Pk
Purple -- Pp
Red -- Rd
Silver -- Slv
Turquoise -- Trq
White -- Wht
Yellow -- Yw

BODY TYPES

Brown Bodied -- Brbod
Buff Bodied -- Bfbod
Dry Bodied -- Drybod
Gray Bodied -- Gybod
Hard Bodied -- Hrdbod
Pink Bodied -- Pkbod
Red Bodied -- Rdbod
Salmon Bodied -- Smnbod
Soft Bodied -- Sftbod
White Bodied -- Whtbod
Yellow Bodied -- Ywbod

ABBREVIATIONS CONTINUED

METALS

Aluminum -- Al
Copper -- Cu
Gold -- Au
Iron -- Fe
Lead -- Pb
Magnesium -- Mg
Silver -- Ag
Tin -- Sn

SPECIFIC PATTERNS/EDGE DECORATIONS

Barley Pattern -- Brlypttrn
Basketweave -- Bsktwve
Bead and Reel -- B&R
Beaded -- Bead
Diamond -- Dimnd
Dot, Diaper, and Basket -- D.D.B
Feather Edged -- Fthredg
Fluted -- Flut
Queen's Shape -- Qshp
Royal Pattern -- Rylpttrn
Scalloped -- Scldpd
Shell Edged -- Shldgd
Spearhead -- Sprhd
Wheat Pattern -- Wheat

PLACE CODES

Removed for Conservation -- RFC (02)
Removed for Exhibit -- RFE (03)
Removed for Study -- RFS (04)
Removed for Crossmending -- RFM (06)
Water Screen -- WS

GENERAL DESCRIPTIVE ATTRIBUTES

American -- Amn	Ironstone -- Irnstn
Annular -- Anlr	Jewelry -- Jwlry
Applied -- Appld	Knife -- Knf
Assorted -- Asst	Large -- Lge
Banded -- Bnd	Long -- Lng
Base -- Bse	Lead Glaze -- Pbglz
Body -- Bod	Maker's Mark -- MM
Bottle -- Btl	Mammal -- Mml
Bottom -- Bttm	Material -- Matl
Bowl -- Bwl	Modern -- Mdrn
Buckle -- Bckl	Mold -- Mld
Burned -- Brnd	Mottled -- Mttld
Button -- Bttn	Neck -- Nck
Century -- C	Overglaze -- Overglz
Chamber Pot -- Chmbrp	Pattern -- Pttm
Chinese -- Chn	Pearlware -- Plwr
Clothing -- Clthg	Plastic -- Plstc
Coarse -- Crs	Plate -- Plt
Combed -- Cmbd	Platter -- Pltr
Corroded -- Corrd	Porcelain -- Pcln
Creamware -- Cmw	Round -- Rnd
Crossmend -- Crsmend	Salt -- Slt
Curved -- Crvd	Serving -- Srvng
Cutlery -- Ctlry	Slip -- Slp
Decorated -- Dec	Slipware -- Slpwr
Diameter -- Dia	Small -- Sm
Drinking -- Drnkg	Spanish -- Spn
Dutch -- Dtch	Sponge -- Spng
Earthenware -- Erthnwr	Spoon -- Spn
Edge -- Edg	Spout -- Spt
Embossed -- Emb	Stamped -- Stmpd
Enamel -- Enml	Stencilled -- Stncld
Engine Turned -- Engtrnd	Stoneware -- Stnwr
English -- Engl	Square -- Sq
Exterior -- Ext	Tempered -- Tmprd
Flat -- Flt	Thick -- Thk
Fork -- Frk	Thin -- Thn
Fragment -- Frag	Trailed -- Trld
French -- Fren	Transfer Printed -- Trnsfrpr
Frosted -- Frstd	Undecorated -- Undec
German -- Germ	Underglaze -- Undrglz
Glass -- Gl	Unglazed -- Unglz
Glaze -- Glz	Unidentifiable -- Unident
Glaze Chip -- Glzchp	Ware -- Wr
Gravel Tempered -- Gvltmpd	Whole -- Whl
Handle -- Hndl	Window -- Wndw
Handpainted -- Hndptd	With -- W/
Hardware -- Hdwr	Whiteware -- Whtwr
Incised -- Incsd	
Interior -- Int	

FORMS

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Spout	0030
Handle	0031
Rim	0032
Hollow Body Frag	0033
Flat Body Frag	0034
Base	0035
Lid	0036
Cup	0037
Plate	0038
Bowl	0039
Figurine	9801
Flowerpot	8500

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shoes	9306

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2-piece	9312
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Identifiable Attributes (cont)	
Pins	9320
handwrought	9321
machine made	9322
Safety	9323
Scissors	9335
Thimbles	9340
Wig Curlers	9345
Coins	9410
Combs	9415
Jewelry	9420
Keys	9430
Dolls/Doll Parts	9441
Marbles	9442
Game Pieces	9443
Slate Pencils	9445
Writing Implement	9460
Toothbrushes	9406
Bead	9401
Weapon Related	
Gunflints	9640
Shell Casing	9660
Shot, Ball, Bullet	9661
Harness Related	
Horse shoe	9726

APPENDIX D: AUTHOR QUALIFICATIONS

Elizabeth Pruitt
Curriculum Vitae

Education

- University of Maryland – College Park, Maryland* Sep 2010-May 2012
Masters of Applied Anthropology
- Historical Archaeology and Heritage concentrations
- University College Dublin – Dublin, Ireland* Sep-Dec 2009
- Archaeology and History concentrations
- Michigan State University - East Lansing, Michigan* Aug 2006-Dec 2009
Bachelor of Arts in Anthropology
- 4.0 GPA in major, 3.9 GPA overall on a 4.0 scale
 - Honors College
 - Spatial Information Processing and Asian Studies specializations

Excavation Experience

- The Hill – Easton, Maryland* Aug 2012
University of Maryland
Principal Investigator: Mark P. Leone
- Archaeology in Annapolis – Anne Arundel and Talbot Counties, Maryland* 2011, 2012
University of Maryland
Principal Investigator: Mark P. Leone
- MSU Campus Archaeology Excavations – East Lansing, Michigan* Apr 2008-Aug 2009
Michigan State University
Principal Investigator: Terry Brock
- Frank's Ruin - Socorro County, New Mexico* Jun-Jul 2007
Michigan State University-James Madison University
Principal Investigator: Alison E. Rautman
- Goodman Point Pueblo - Montezuma County, Colorado* Jun 2005
Crow Canyon Archaeological Center
Principal Investigator: Kristin A. Kuckelman

Work Experience

- Archaeology in Annapolis Staff* May 2011-present

- Taught undergraduate students field excavation and laboratory methods
- Created official website (aia.umd.edu) and blog (blog.umd.edu/aia)
- Built a searchable Wye House historical census database (wyehousedb.host-ed.me)

University of Maryland Anthropology Department Graduate Assistant Sep 2010-present

- Lectured, held discussion, wrote and graded exams for archaeology and cultural anthropology classes
- Conducted research at the request of Department faculty

Michigan State University Campus Archaeology Aide Apr-Aug 2008

- Excavated archaeological sites on MSU's campus
- Interpreted sites for public visitors
- Cleaned, catalogued, and analyzed artifacts

Awards and Scholarships

- UMD Flagship Fellowship 2010-present
- Anthro+ Student Paper Award 2013
- M. Peter McPherson Study Abroad Scholarship 2009
- Benschop International Enrichment Award 2009
- Office of Study Abroad Academic Excellence Award 2009
- Bradbury Lynch Scholarship 2008
- Scholarship America Award 2007-2008
- Ford/EEOC Endowed Scholarship 2006-2009
- MCH Michigan Merit Award 2006-2007
- Wilcox Foundation Essay Contest Second Place Award 2006

Professional Memberships

- UMD Practicing Anthropologist Student Association 2010-present
- Society for Historical Archaeology 2008-present

Publications and Presentations

Kathryn H Deeley, Beth Pruitt, Benjamin A. Skolnik, and Mark P. Leone. "Local Discourses" In *Encyclopedia of Global Archaeology*. Claire Smith (ed). Springer. In Press

Mark P. Leone, Amanda Tang, Benjamin A. Skolnik and Elizabeth Pruitt. Jun 2013
 "In the Shade of Frederick Douglass: the Archaeology of Wye House" In *Reclaiming Archaeology: Beyond the Tropes of Modernity*. Alfredo González-Ruibal (ed). Routledge.

Beth Pruitt. *Bigger on the Inside: Authentic Objects in Doctor Who*. Apr 2013
 Anthro+ Annual Conference

Beth Pruitt and Benjamin Skolnik. *Challenging Landscapes: Alternate Perspectives of Chesapeake Plantation Gardens*. Society for Historical Archaeology Annual Conference Jan 2013

Kathryn Deeley, Jocelyn Knauf, Beth Pruitt, Michael Roller, Benjamin Skolnik, and Amanda Tang. *Cooking a Colonial Pot Luck: Actualistic Studies in Foodways of Wye House Plantation*. Anthro+ Annual Conference Mar 2012

Beth Pruitt. *Distinct from the Common Farm: Early Scientific and African-American Gardening*. Society for Historical Archaeology Annual Conference Jan 2012

Beth Pruitt, Kathryn Deeley and Mark P. Leone. "New Outlets for Old Foundations: Archaeology in Annapolis and Web-based Outreach". *African Diaspora Archaeology Network Newsletter*. Dec 2011
<http://www.diaspora.uiuc.edu/news1211/news1211-5.pdf>