

## ISSN 0003-8067

**Fall 2001**

# The 1659 Dutch fort on Pilottown Road in Lewes: Zwaanendael map re-evaluated

Marshall Joseph Becker  
West Chester University

By 1629 Dutch explorers and merchants had established a network of trading stations on the shores of North America stretching from Maine down to Delaware Bay. Several important purchases of land in the Delaware Bay region provided various Dutch merchants with tracts on which to build fortified trading stations. The earliest of these European outposts in the Delaware Valley had been established in 1623 on what is now Burlington Island, New Jersey (see Veit and Bello 1999).

On 1 June 1629 Samuel Godyn, acting for the (Dutch) West India Company, purchased a tract of land in present Delaware from the "Ciconicins" (Kent 1979: 5-9). In 1630 the Dutch purchased land in southern New Jersey (Becker 1998). The Dutch maintained exclusive control of trade throughout the region until Sweden in 1638 established a trading post (Becker 1999) on the present site of Wilmington, Delaware.

Principal data relating to the whaling station in Ciconicin territory were gathered by Brodhead (1853, I: 206; also 1859, I: 206). Within a year after the purchase of this tract from the Ciconicin, another expedition to Delaware Bay left Holland to establish an outpost there. The goal of the expedition of 1630 was to set up a whaling station in the New World. Whaling equipment was loaded onto two ships along with agricultural implements and a small herd of cattle. Self-sufficiency in food was a standard procedure for military as well as economic outposts of that period.

The two expedition ships of 1630 were the 18-gun *Walvis* (Whale) and a small yacht. They sailed in mid-December of 1630. The yacht was captured by privateers early in the journey (Brodhead 1859, I: 205). *Walvis* continued along the planned route to the Tortugas, then turned north toward the South (Delaware) River, where it arrived in April of 1631.

The party sailed only a few miles into the bay itself where they intended to establish

the whaling station. The location of this outpost was described as follows:

"within Cape Carnelius, Heyes came to the Horekill, 'a fine navigable stream,' filled with Islands, abounding in good oysters, and bordered by land of 'exhuberant fertility.'"

(Brodhead 1853, I: 206).

Gillis Hossett was in charge of this expedition:

"... Dutch title [to this tract], by discovery, purchase, and occupation, was solemnly asserted by the erection of a pillar, surmounted by a piece of tin, on which were emblazoned the arms of Holland" [the location being] "near the present town of Lewiston [Lewes]."

Brodhead (1853, I: 206)

Brodhead (1853) also offers an extensive footnote referencing the original documents and secondary sources from which his summary is derived. Included are citations from various works including David Petersz. de Vries's "Korte Verhael [Historiael] van Nieu Nederland...Vertoogh van N. N. (as cited in *the Holland Documents* iv, 71 and in ii; *New-York Historical Society Collection*, volume 2). The "purchase" of the land on which the 1631 station was built, described by surviving documents presented and reviewed by Kent (1979: 5-9).

In 1631 expedition members are said to have erected a significant structure of brick, probably from ballast bricks carried by the relatively empty ship (Becker 1977). This may be the same building described as "a brick house" that was to serve as part of the defensive system. Specifically noted is "a brick house" to serve as a fort as well as a residence, was soon erected and enclosed with palisades." Most colonial constructions of that time were of logs or frame.

## Dutch West India Company fort

In 1659, the West India Company built a fort at a known location on Pilottown Road, in what is now Lewes.

This fort was far to the south of the 7 June 1659 additional purchase of land made by the Dutch from the native group then living around Bombay Hook (Kent 1979: 34-35). The native vendors were members of one of the southern Lenape bands. In 1659 the Dutch were

consolidating their hold in the area through land purchases, such as that of 7 June, and attempts at upgrading their defensive works throughout the Delaware Valley, as in the construction of the fort at Lewes.

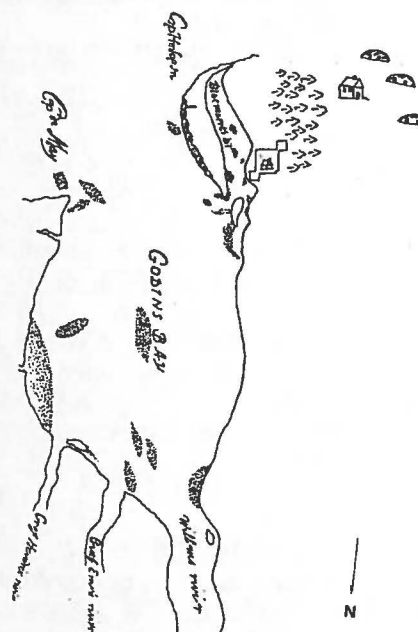


Figure 1: The Dutch fort at "Bloemaerts kil" (from Bonine 1956: Plate I, fig. 1; also Peets 1952: page 2A). Bonine incorrectly suggested that this was the fort erected at Swanendael in 1631. The 1631 constructions were located on the Whorekil, but probably somewhat to the north. The north arrow in this figure has been added by Becker and is only approximate. The actual date of this map is believed to be after 1659.

The Sussex Society of Archeology and History investigated a site in that area, believed to represent the 1631 fortifications. Architectural and archaeological findings from the excavation are described by Bonine (1956, 1964; cf. Peets 1952, Boyd 1938). The enclosure was a diamond-shaped "palisade," with two structures identified as bastions at the long ends.

The preponderance of evidence indicates that the Lewes site is not the 1631 fort, but a later structure built by the Dutch West India Company in 1659. The evidence includes the following items.

The tract where the enclosure stood was identified by historical documents as the site of the West India Company fort of 1659 (Marine 1955; Thomas 1983).

The enclosure found at Lewes appears to represent the same defensive system that is indicated on two known versions of an early map of the area (Peets 1952, Bonine 1956, 1964). Evidence for the dates of this early map and the early copy of it (Fig. 1) provides several clues that now can be reviewed. I believe the evidence indicates a later date for this map than had been supposed previously by some authors.

Of note in the Lewes excavation is the lack of a palisade trench for a defensive work (Bonine 1964). Rails, or horizontal boards, evidently were hung on the posts with the result commonly known as a "post and rail" system. Excavation of the south "bastion" of the Lewes enclosure reveals that square holes were used to erect the posts. These posts were arranged roughly in the shape of a small diamond, extending from the end of a larger diamond. This small "bastion" measures about three to four meters on a side, being indicated now only by a series of discontinuous holes. This small "bastion" is at one end of the principal and larger "diamond" shaped enclosure which measures about 75 meters along each edge. The long intervals between the holes into which the posts were set suggest that the enclosure at Lewes was a post and rail type, probably faced with boards attached to the posts.

#### *Five reasons for dating the anonymous map to 1659 or later*

1. Bonine (1956: 13) notes that the version of the map that he offers ("Courtesy Algemeen Rijksarchief [sic], The Hague, Holland") has "No. 17" written in the lower left corner of the sheet. Bonine suggests that this map may have been part of a numbered folio.

Peets (1952) reproduces an early copy of the map shown by Bonine. Peets said that the copy he reproduces was found "inserted" into an original copy of de Vries' book that recounted de Vries' travels between 1618 and 1644. Peets also says that this early edition of De Vries's work was then in the Library of Congress. Peets evidently refers to the "De Vries 1655" volume now in the Library of Congress. The Peets version of this map is a very accurate copy of the version provided by the Algemeen Rijksarchief [sic], and this was the version printed by Bonine (1956). However, the person making the copy used by Peets appears to have been unable to read or to translate the writing on the original. The copyist of the map has provided only an approximation of the words on the map, suggesting to me that the copy was made to augment the de Vries 1655 volume, possibly by

an American who did not know Dutch. All of this suggests that the Peets copy may postdate the 1655 publication of the book. This does not provide a date for the original version of the map held in the archives in Holland. The copy of the map also could indicate that the original version was not available or known to de Vries, or that it simply was not used in the writing of this book after 1644.

2. The location of the fort on the map is indicated as being on "Bloemaerts Kil" (the Whorekil), near where Lewes now stands. The Whorekil generally is described in early documents as the location of the Ciconicin "village" in 1629, at the time of their sale of a tract of land (Kent 1979; Peets 1952; Bonine 1956, 1964). The 1631 Dutch whaling station is more likely to have been located some distance from the Ciconicin "village," but along the shore of Delaware Bay.

3. The "fine big house" (Peets 1952) seen on this map located beyond the woods, to the southwest of the fort, is not likely to represent an early trading station of ca. 1631. More probably it reflects a later (post-1650) colonial farmhouse. It is more likely to represent the settlement known as the Whorekill Town, probably the same as the Townsend Site (Omwake and Stewart 1963) and possibly the 1663 Plockhoy settlement of Dutch pietists.

4. Perhaps the most important evidence for a later date for the anonymous map is the appearance of four native structures situated beyond the outlying colonial house (the Peets 1952 version depicts only three). The Ciconicin village noted in several early documents relating to the 1631 Swanendael settlement is nowhere indicated on this map, suggesting that the fort depicted in the drawing is not near a Ciconicin village.

Dunn (2002: 5, 11, fig. 12) discusses the early Godin's Bay map in her paper from a recent conference on native built "longhouses." While Dunn accepts the popular 1630 date that some assign to this map, she also addresses the general problem of "longhouses" as they are depicted on 17<sup>th</sup>-century maps, and whether they were real or imagined. The possibility must be considered that these depictions of native structure are space fillers, like many map cartoons, or meant to indicate that the setting is on the native frontier.

On the other hand, the centralized Ciconicin chiefdom was in decline by 1659. No archaeological evidence of a contact period

native habitation area in the Ciconicin zone of Delaware has ever been identified.

5. The archaeology of the enclosure found at Lewes, presumably the same location that is indicated by the map (Bonine 1956), suggests hewn and squared posts were used to hang planks or rails. This suggests a leisurely rate of construction, probably at a later date than the original Swanendael whaling station. Furthermore, the excavations did not locate a brick structure in association, while the documents clearly indicate that a brick structure had been part of the 1631 outpost.

## Conclusion

Taken together these various details suggest that the fort depicted on the original map, and the copy, was built at a time later than the Swanendael whaling station; or after 1631.

Dutch fortifications in the New World remain poorly known from either the archaeological or the documentary records. The diamond shaped enclosure at Lewes is among the better known of these early defensive works, but there is an unfortunate lack of information surviving from the original excavations. The dates of the ceramics recovered, or of the more important white clay smoking pipes from this excavation, would provide valuable clues to specific period of use and occupation. In the absence of this information we must turn to other bits of evidence to assign a possible date, and to fit this piece of the puzzle into its correct historical position.

## Acknowledgements

Since thanks are due the many people who provided encouragement and information relating to the writing of this manuscript. Special thanks are due Ned Heite for his useful advice and considerable editorial efforts in the production of this version of the text. This paper was written while the author was a Research fellow in Anthropology at The University of Pennsylvania. Any errors of presentation or interpretation are solely the responsibility of the author.

## References

- Bancroft, George  
1883-85 *History of the United States of America* (6 volumes, author's last revision). New York: D. Appleton and Company. LAC 22534-22537.

Becker, Marshall Joseph

- 1977 "Swedish" Colonial Yellow Bricks: Notes on their uses and possible origins in 17th Century America. *Historical Archaeology* 11: 112-118.

- 1999 Mehoxoy of the Cohansey Band of South Jersey Indians: His Life as a Reflection of Symbiotic Relations with Colonists in Southern New Jersey and the Lower Counties of Pennsylvania. *Bulletin of the Archaeological Society of New Jersey* 53: 40-68.

- 1999 Excavations at the Printzhof (36DE3), The Only Documented Late 17th Century Swedish Site in the Delaware Valley. *Journal of Middle Atlantic Archaeology* 15: 77-94.

Bonine, Chesleigh A.

- 1956 Archaeological Investigation of the Dutch Swanendael Settlement Under DeVries, 1631-1632. *The Archeolog* 8 (3): 1-17.

- 1964 The South Bastion of the De Vries Palisade of 1631 (75-D-11): Lewes, Delaware, 1964. *The Archeolog* 16 (2): 1, 13-19.

Boyd, Julian P. (compiler)

- 1938 *A Catalogue of Books and Materials Relating to Swedish Colonization on the Delaware River*. Philadelphia: Gilpin Library of the Historical Society of Pennsylvania.

Brodhead, John Romeyn

- 1853 *History of the State of New York: First Period 1609-1664* (2 Volumes). First edition. New York: Harper & Brothers.

De Vries, David Pietersz.

- 1912 From the "Korte Historiae ende Journaels Aenteyckeninge" (1630-1633, 1643). Pages 7-29 of, *Narratives of Early Pennsylvania West New Jersey and Delaware*, edited by Albert Cook Myers. New York: Charles Scribners Sons.

Dunn, Shirley W.

- 2002 The Longhouses of Seventeenth-Century Maps: Real or Imagined. *The Bulletin: Journal of the New York State Archaeological Association* 118: 2-18.

Ferris, Benjamin

- 1846 *A history of the original settlement on the Delaware, from its discovery by Hudson to the colonization under William Penn. To which is added ... Swedish settlers, and a history of Wilmington*. Wilmington, Delaware: Wilson & Heald. LAC 16195.

Hazard, Samuel

- 1850 *Annals of Pennsylvania*. Reissued 1970, by Kennikat Press, Port Washington, New York.

Heite, Edward F. and Louise B. Heite

- 1986 Delaware Valley fortified colonies: New Netherlands and New Sweden. Synopsis of a Presentation (October). Privately printed (2 pp).

Kent, Donald H. (editor)

- 1979 *Early American Indian Documents: Treaties and Laws, 1607-1789. Volume I: Pennsylvania and Delaware Treaties, 1629-1737*. Washington, DC: University Publications of America.

Marine, David

- 1955 Duke of York Patents on Pilot Town Road. *The Archeolog* 7 (2):1-4.

Moulton, Joseph White (see under Yates, John V. N. and Joseph White Moulton)

Omwake, H. Geiger, and T. D. Stewart

- 1963 The Townsend Site Near Lewes, Delaware. *The Archeolog* 15 (1).

O'Callaghan, E. B. (editor)

- 1858 *Documents Relative to the Colonial History of the State of New-York, Volume I*. Albany: Weed, Parsons.

Peets, Orville H.

- 1952 [Investigations at Lewes, Delaware]. *The Archeolog* 4 (2): two unnumbered pages.

Thomas, Ronald A.

- 1983 An archaeological study of a Proposed Research Park near Lewes, Sussex County, Delaware. *The Archeolog* 34 (1):1-41.

Veit, Richard and Charles A. Bello

- 1999 "A Unique and Valuable Historical and Indian Collection": Charles Conrad Abbott Explores a 17th-Century Dutch Trading Post in the Delaware Valley. *Journal of Middle Atlantic Archaeology* 15: 95-123.

Vries, see de Vries

Yates, John V. N. and Joseph White Moulton

- 1824-26 *History of the State of New-York, including its aboriginal and colonial annals* (1 volume in two). New York: A. T. Goodrich. LAC 15772.

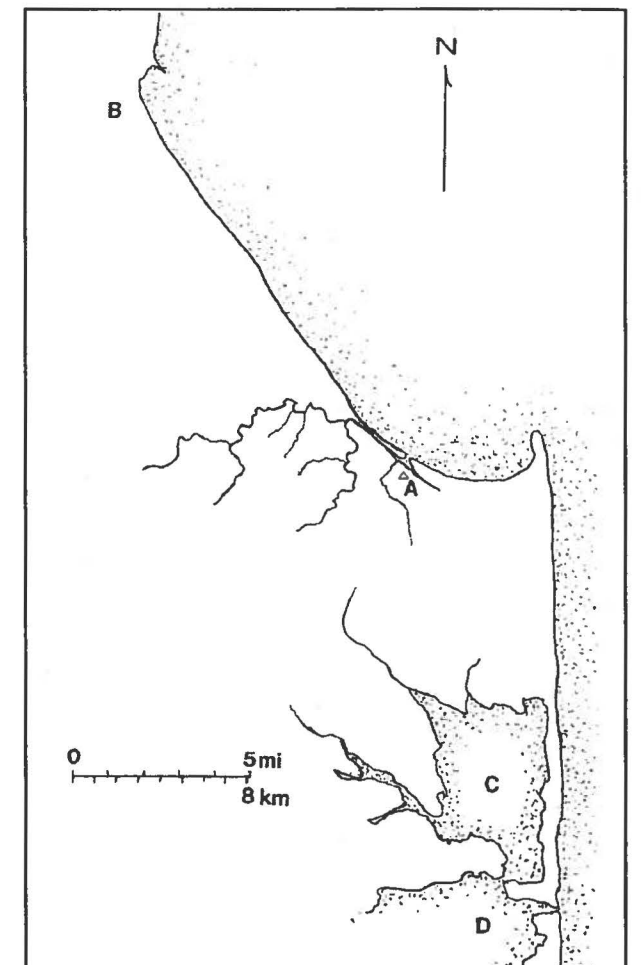


Figure 2: The central area of Modern Delaware State.

A. The Lewes area, west of Cape Henlopen, with a triangle marking the area suspected to be the location of the 1659 Fort.

B. The area of modern Slaughter Beach, a possible location of the 1631 Swanendael settlement.

C. Rehoboth Bay, the southern limits of the territory of the Ciconicin.

D. Indian River Bay, the shared resource zone separating the Ciconicin from their southern neighbors, who may have been the Assateague, later called the Indian River Indians, among the ancestors of the present Nanticoke community.



## From farm to city:

### Thesis work on the George Read House and Gardens and Mount Cuba

Carin Bloom and Lu Ann De Cunzo  
University of Delaware

The Read House and Gardens in Historic New Castle is a rich resource for its community to learn about Delaware's early history and the preservation of its past. Its abundant story is not only in the house itself, still standing from its construction in 1802, nor is it solely in the antiques (some original and some donated) that give the place a unique "living history" atmosphere. The lessons go deep into the ground, underneath the well-groomed garden walk, into every living-surface since before the Dutch settled the land. That is the long-ignored information that was carefully coaxed from the soil for five years from the field seasons of 1995 to 1999. Here is an overhead view drawing of the garden property, and this is a plan of the units excavated on that property. Lu Ann De Cunzo was in charge of the project, and for five seasons the backyard of the majestic Read House was transformed into a laboratory and a classroom. Archaeologists were on hand to collect and record data, and there were public outreach programs in the form of community archaeology days. These allowed the people of New Castle County to get a crash-course field school education, as well as be involved in the preservation and stewardship of their past. Since the last archaeological unit was back-filled at the end of the 1999 season, no public outreach in archaeology has been attempted at the Read House, as the team's attention has been turned towards curation, research, and analysis of the collection, as well as preparing a final report.

The lack of public education is not only a problem in New Castle, Delaware. There is a distinct gap in most communities' knowledge of archaeology, and yet, the past belongs to all of us. The earlier individuals are involved in the stewardship of their community's history, the sooner they will understand the importance of preserving the past. A way to spread the awareness of how much we can learn from our past and how important is its preservation, is to provide historical sites with educational materials regarding archaeology.

The Read House site has extensive educational programming for primary schools in its vicinity, but has less to offer older students, and all of the programs deal with history in the more traditional sense of the word. In conjunction with the Historical Society of Delaware, it is my intention to cater to the secondary school students, using information gathered from the work that Dr. De Cunzo has completed on the museum's grounds. I am creating a program *about* archaeology, and *using* archaeology, in order to establish a permanent public outreach for the youth of New Castle and its surrounding communities. I want to provide not only a new topic of study, but also an awareness of the many areas in which archaeology can be a supplemental teaching tool.

My historical archaeology curriculum is designed for eighth-grade Social Studies students in groups of 20-30. These can either be Social Studies classes or other organizations like scout troops or church youth groups. The program includes pre-visit activities that should take no more than two class periods or group meetings to complete, and entails an all-day field trip at the Read House, scheduled for 9:00 a.m. – 1:00 p.m. Critical thinking skills will be developed, as well as problem-solving skills and analysis of data. This program will not only be a public outreach about archaeology, it will use archaeology as a new and exciting way to meet State Standards and develop the aforementioned skills. Through a series of in-class worksheets, and hands-on activities at the Read House and Gardens, including examination of a stratigraphy, working with primary documents, and studying unknown objects, the students will get a sense of the process of archaeology.

As you can read **Attachment 1**, my overall objectives for the program are straightforward, and common to many in-classroom history lessons. The reason I offer this program as an alternative to such a lesson is to pique the interest of the students, give them a

change from all of the other history lessons they *will* learn, in the classroom. Also, by helping educate the public about their role in the process of archaeological discovery, we only help ourselves, ensuring that future generations will have a vested interest in the past and its preservation. Again, the earlier students are presented with this idea the better, keeping our field intact and moving towards better understanding of our ancestors.

All of the Delaware State Standards this program meets are in the category of History for eighth graders, and they include numbers one through four: Chronology, Analysis, Interpretation, and Content. I am including these standards in **Attachment 2** and how the program is related to each in both the Teachers' Packet and the Read House Guides' packet, so that both sets of educators can easily justify having their students participating in this program.

First, students will be introduced to the Read House and archaeology itself in a series of activities to be completed in their classroom and as homework. **Attachment 3** is a sample of one of the activities they will complete in class with their teacher, or at their group meeting with their leader. It involves identifying artifacts that would either decay over time, or remain in the ground long enough for archaeologists to find, and asks them to make statements about the conclusions archaeologists draw.

**Attachment 4** is a sample of the directions in the Read House Guides' Packet, outlining one of the activities the students are to engage in, including how long it should take, and what key information the guides should reiterate and be sure the students know before proceeding.

In this particular activity, the groups are split in two, and each guide takes his or her "team" into a separate room of the house. The guides have the responsibility of giving the students in their team the choice of one of three unknown objects to study. It will be the guide's job to encourage questions from the students about the name and function of the object, as well as help the students describe it physically. After educating the students as much as possible about a foreign object that could be encountered in the archaeological record, the guides will write down a student-generated list of characteristics for the object. Finally, the guides and their two separate teams are to get together in each respective room, and have the students guess the other team's objects.

Once the visiting team guesses the object, it is the first team's responsibility to educate their classmates about the object. This empowers the students not only through learning, but through teaching as well. I will have predetermined those three objects for each room, as historic objects of which no ordinary eighth grader should have prior knowledge.

This is only a small sample of the kinds of activities the students will be participating in at their schools and at the Read House site. Others include a Garden walk, working with inventories, and reading the fictional journal of a student their age who participated in the public archaeology days at the Read House in 1997, in the middle of the excavation.

At the end of their visit, the students as well as their teacher(s) or group leader(s) will be asked to complete an evaluation form so that I can gather data about my program and what worked and what didn't. They will also tell me what information needs to be expanded upon, and what information can be glossed over in less time than I allowed. I plan to pilot two test-runs of my program in January in cooperation with two willing teachers or group leaders and their classes or organizations. Using their evaluations, and those of the Read House staff who help execute the program, I will be able to get a good sense of what to change or keep the same to make sure the shelf life of this program endures, long after I've moved on.

In closing, with the cooperation of Historical Society of Delaware, I intend to provide the Read House and Gardens with a comprehensive tool for public outreach, and to provide students with an exciting and fun alternative to their everyday history lesson. Archaeology holds these objectives together, and is the avenue down which these students can travel to the understanding of how significant their past is, and how important its safekeeping has become.

#### Attachment 1

##### Objectives:

Promote an understanding of the basic processes of archaeology:

how to begin answering questions through primary and secondary document research

how to study an object using primary and secondary documents, and the context of the other objects it is found with, to determine its use

how to use a sample stratigraphy to answer chronological questions

Develop critical thinking, problem solving, and data analysis skills through various parts of the archaeological process:

determine relative dates of features and artifacts present in a sample stratigraphy

understand how documents relate to investigative research

determine with just an inventory and situational context what an object that was common in the early nineteenth century, but is now unknown, was used for

Teach eighth grade students about Delaware and American History in a fun and exciting way:

through a short tour of the Read House to give the students an idea of what time period they are about to experience

through the study of chronology, and foreign objects

through learning about an object that was common in the early 1800s, but is virtually unknown today

Garner interest for further study in archaeology after the field trip.

## Attachment 2

Delaware Social Studies State Standards: Eighth Grade

### History Standard 1: Chronology

8.427 – describe and support cause/effect relationships within a region, society, or theme using historical materials

8.428 – analyze changes over time to regions, societies, and themes using historical materials

### History Standard 2: Analysis

8.429 – design and implement strategies for locating historical materials on a specific topic

8.430 – judge the credibility of historical materials based on purpose, perspective, or point of view

### History Standard 3: Interpretation

8.431 – conclude how several historians' descriptions of a society may differ

### History Standard 4: Content

8.432 – identify and describe major people and events in American history to 1877, and assess their significance to the nation's development

8.433 – identify and explain the impact of major political, social, and economic trends in American history to 1877 and connections to Delaware history

8.434 – identify and describe major technological advances in American history to 1877, and assess their significance to the nation's development

## Attachment 3

### Pre-Visit Packet

#### Activity 1: Artifact Interpretation

List three of the items that your teacher has brought in to class today and also whether they would or would not survive for an archaeologist to find hundreds of years from now.

Of the ones that would survive, what could an archaeologist determine about you and your life from looking at these items?

Is it possible that two different archaeologists could give you two different opinions on how they interpret your three artifacts?

Why? Discuss this possibility with the class.

How could an archaeologist research your artifacts more than just looking at them?

## Attachment 4

### Activity 3 : Artifact Interpretation (Part I )

12:00 - 12:30 (12:00 - 12:20 during a pilot session)

*\*The student objective for this activity is to learn how there can be different interpretations of artifacts, based on how much context (or lack thereof) surrounds the artifacts, and how many different people are trying to form an interpretation. This extends to examining interpretation of artifacts in not only archaeological context, but also in the context of the space in which it was used during a specific historical period.*

Return after lunch to the room you and your team were occupying before. Reveal three obscure artifacts that no student should be able to identify. Name each object and tell the students its purpose in the household (including the reason it is found in that particular room) and who used it. This should take no more than 10 minutes total.

Ask the team to choose one of these three artifacts to write clues about for their classmates in the other room. Explain to the students that they will be coming up with 3 or 4 clues to help their classmates identify the object, without giving it away by revealing a location. You will write down the clues they come up with, ranging from the artifact's appearance to its name, or even to its function if your team feels that would be an appropriate way to aid their classmates (without making it too easy!). Be sure to replace all three objects in their places around the room before the visiting team arrives to guess! Ask for three or four volunteers to reveal facts about their artifact once it has been guessed, so that they may help teach their classmates.

**Part II: 12:30 - 1:00 (12:20 - 12:40 during a pilot session)**

The team in the Front Parlor will join the team in Mrs. Read's bedroom, and the clues will be read aloud. The visiting group will be asked to raise their hands and individuals may be chosen to point to an object they think is being described. This guessing period should take no more than 5 minutes.

If the artifact is identified, congratulate the successful student. If the artifact is not identified, identify it for the visiting group. Have your three or four volunteers give information pertaining to their artifact, and add one piece of information yourself. Ask if the visiting students have any questions. This process should not take more than 7-10 minutes.

*The process in one room should take 15 minutes at the most, 10 during a pilot session.*

At 12:45 (or 12:30) have the entire class move downstairs to the Front Parlor. Repeat the process above, guessing and identifying the artifact, then sharing information about it.

*This activity fulfills the State of Delaware's History Standard 3: Interpretation for eighth grade.*



# Kinship, inheritance and landscape at Mount Cuba

Jason B. Smith

University of Delaware

The past three years I have had the pleasure to work as an intern on the Mt. Cuba Historical Archaeology Project. Implemented by the late Mrs. Pamela C. Copeland, the project strives to advance the understanding of the physical, social, cultural, economic and technological history of the village and area known as Mt. Cuba, located in Mill Creek and Christiana Hundreds, and the surrounding piedmont region of northern Delaware. The lands of Mrs. Copeland, now the Mt. Cuba Center, Inc., and Red Clay Reservation have been studied and documented thus far.

## The BG-Map Cultural Resources Database System

To accomplish the goals of this contextual study of the people and their environment, large amounts of data are gathered and processed. The BG-Map Cultural Resources Database System has been of immense value and assistance in this study. Developed by Mark Glicksman of Glicksman Associates, Inc. with funding provided by Mrs. Copeland and the Mt. Cuba Center, Inc., the Cultural Resources module has been custom designed to meet the needs of historical, landscape, cultural resource, and archeological research. Lu Ann De Cunzo, Nedda Moqtaderi and I have contributed to the database design. The database has four submodules each containing a number of fields tailored to the type of information that the submodule is designed for. Though I will discuss each of these submodules separately and briefly, the system follows the Relational Database Model in which multiple data tables are interrelated. All

submodules follow the same format requiring a unique key code for each entry that can be used throughout the system. The entire system is further interfaced with a basemap in AutoCAD, the computer mapping program. The basemap, created for the use of the Mt. Cuba Center, Inc., to assist in their management of plants, facilities, and cultural resources, provides the unique feature of visually and spatially locating data.

The Biographical submodule records a complete life history of an individual. All the information from the census records (1790-1930) can be entered in this submodule as well as the information from the agricultural census, tax assessments, literacy, occupation and employment history, residence (which can be linked to the properties in the Documents and Properties submodule, see below), and community, public, and military service. Immigration, emigration, naturalization, religion, and burial place also can be entered. Families are linked together by the listing of the spouse(s) and child(ren) in the respective records. Once linked these records can be accessed from their relative's date record; for example a child's data record can be accessed from either one of their parent's records and vice-versa. The submodule allows for the creation of as detailed a biography as the historical record will allow.

Additionally, the submodule also allows for study of an area. At this time, the 1800, 1810 and 1850 census records, the 1850 agricultural census, and the 1784, 1785, 1798, and 1803-1804 tax assessments for Mill Creek Hundred have been entered in their entirety. Data entry is still ongoing on at both the individual and Mill Creek Hundred levels.

Documents and Properties are connected in the submodule that bears the same name. Documents contains fields for data from wills, letters of administration, Orphan's Court records, court cases, patents, estate sales, inventories and deeds. The individual codes created in the Biographical submodule are used here to link a person's interaction with other individuals, items, and the land through the historic documents left behind. This connection is further enhanced in the Properties component. Here all the information on a specific property is entered - metes and bounds, its lineage, and neighboring properties. We are indebted to Kathy Goldstone of Vandemark and Lynch who has mapped the individual properties in our study area in AutoCAD and overlaid them onto the basemap. Accordingly, these mapped properties are connected with

their respective codes and through this medium we have the opportunity to visually see how a property changed over time individually and in relation to these around it.

The visuals that can now be seen are not restricted to the just the metes and bounds of a property. The Resources submodule allows us a view of how individuals influenced the land. Extant cultural resources (everything from homes to plantings to clusters of stone in a field) have been plotted into AutoCAD by Kathy Goldstone. The plotted resource is linked to the data that is entered from the field survey form(s) that identified the resource via a code.

Extant cultural resources are not the only resources mapped. Archeological sites and excavations are also shown and the data from excavations are documented in the Sites, Units and Levels submodule. The Sites data entry window contains general information about the site itself - predominant soil types, associated properties, stratification and other documentation. Data entered about each excavation unit, stratum, and feature includes soil type and color, inclusions, measurement points, associated levels, media documentation, stratification and comments. Soil samples may also be entered, and a newly developed submodule allows for creation of artifact databases. Excavation units and excavated features may be mapped on the basemap.

In 2002, Mark Glicksman, Dr. Lu Ann De Cunzo, Nedda Moqtaderi, and I began working to design the Search and Reporting tools. Suppose we wished to know all the people living in Mill Creek Hundred in 1850 that were born in Scotland. Our query would generate a list of the people living in Mill Creek Hundred in 1850 who met these criteria. Though this is a somewhat simplified example, the possibilities of what can be done with this powerful tool appear endless.

## A Senior Thesis

I began to explore what the BG-Map System could do in the writing of my senior thesis, titled "Family Ties: A Look at Family Relations in Mt Cuba, Delaware, 1750 -1850". My main questions were: How was land passed down over time? What possessions were passed on, to whom and why? What means were used to pass on inheritance? Was inheritance affected by family size? What role did the law play in inheritance practices? How are the practices of the Mt. Cuba area similar or different when compared against a broader context, such as the

Chesapeake and New England? These questions arose from the seemingly complex kinship ties that had been observed during the research prior to this thesis. Though this thesis built upon the past and continuing research of the Mt. Cuba Historical Archaeology Project, the focus was slightly different. I focused this study on nine families, the majority of whom had once resided on the lands of either the Mt. Cuba Center, Inc. or Red Clay Reservation for several generations. The remaining families were either family members of those landowners who lived in the area or land owners who bordered on Mt. Cuba and Red Clay that had not yet been studied.

## Methodology

Primary sources such as land deeds, wills, probates and Orphans Court records defined the chain of title for the land, the family members, their history and the social context. Information from the BG-Map database assisted this process and the new information gathered during the research process was entered. This material was further supplemented by genealogical information from family trees and birth, marriage, and death records. The vital information was then entered into the Family Tree Maker computer program to produce family trees. With the assistance of these trees, the families were assembled into generations based on marital relations.

The thesis focused on ten families. These families were either those who had once owned the lands now of the Mt. Cuba estate - Bishop, Armstrong, Montgomery and Daniel Barker Joseph (1) Lobb and the families of his three sons - families who were related to these, such as Samuel Barker and Jonathan Strange, and those that bordered on the Mt. Cuba estate such as the McKnight family. Marriage between these and other families in the area appears quite common and was the reason that the generations were based on marital relations.

## Analysis

During the course of this study I have read analyses of communities of New England, the Chesapeake, and Pennsylvania. Information from all of these has been of the utmost value. I will, however, draw heavily from three. Phillip J. Greven's study *Four Generations: Population, Land and Family in Colonial Andover Massachusetts* had been selected due to the similarities to this study. Despite the fact that Greven's work was primarily one of historical demography, he looked at how life in colonial Andover changed

in all aspects, including land and inheritance. *The Best Poor Man's Country: A Geographical Study of Early Southeastern Pennsylvania* by James T. Lemon and *Quakers and the American Family* by Barry Levy were selected for the Pennsylvania studies due to the presumption that there were Quakers among those in the project area (though this has proven incorrect, the study is still of value, especially when held in light of my limited knowledge of the Quakers to the north and west of Mt. Cuba) and for their closeness in proximity to the project area. The information on the Chesapeake comes from Daniel Blake Smith's *Inside the Great House*. All of these studies with their respective subjects and areas are focused primarily on the seventeenth and eighteenth centuries. A study dealing with, or related to, inheritance in the nineteenth century has not yet been located; these studies will be applied with caution as the analysis progresses.

Why was inheritance distributed? William Armstrong states in his will that it was his duty as a Christian to dispose of his "temporal goods" (Register of Wills, William Armstrong). There are other reasons as well and in these reasons, there are interesting differences between the generations in the Mt. Cuba community and the case studies. I begin with landed inheritance. In Andover the settlers were granted large tracts of land at the time of settlement and the town held large tracts as well in trust. These town lands were eventually portioned out to the settlers as needed, providing land to settle the next generation when the paternal land became too small to divide (Greven, 128). In the Chesapeake, original settlements were along the waterway as that was the main route of transportation, leaving the interior almost untouched and allowing for expansion inland (Walsh, "Community Networks" 200).

Delaware and Pennsylvania were different because of Penn's plans. William Penn's idea was a structured society, laid down on an orderly plan of occupation that was built on square one hundred acre lots (Lemon, 50-55). The one hundred acre lots were surveyed as perfect squares. When the settlers came onto the land the squares changed shaped. The largest farm in the study here is Samuel Barker's which combined squares for a total of 400 acres.

Work done by James Lemon shows that the minimum amount of acres a farm needed to have to be economically profitable in the 1700s in Pennsylvania was about 150 acres (Lemon, 90-91). The farms in Mt. Cuba, not far

from Pennsylvania and engaged in very similar agricultural practices (intensive agriculture), were not much above 150 acres so they could not bear division<sup>1</sup>. As land in the northeastern portion of Mill Creek Hundred was occupied by this time, land outside of the area was sought. Land in Wilmington was readily available by the mid 1750s as the city expanded. This fact is evidenced by the many land deeds from Wilmington that time mention new roads being laid out. The presence of land speculators also suggests that land was a commodity.

All second generation fathers purchased or acquired land in Wilmington. Since the size of the family born to the second generation was small, fathers could provide land in this manner. Eventually farming methods and practices improved with the agricultural reform movement that began in the 1820s enabling smaller holdings, like those John Bishop gave to his children in 1840, to be profitable (Herman, *Architecture*, 109-147).

As the paternal holdings could not be divided we begin to see parents helping their children become established. The unfortunately vague wording within the Armstrong wills "what they have already received" hints at this phenomenon as does the token silver dollar Thomas Montgomery gave to his children. There are a few cases where a father purchased a specific property and then sold it to his son. That is how John Armstrong acquired his land. It appears Robert Montgomery also did the same for the two sons he settled outside of the Mt. Cuba area. John Boughman parceled out of his large plantation two farms for his sons and when these lands were seized he purchased them at sale and then sold the whole plantation to another son. For those who did not establish their children on the land, fathers distributed money instead. Clearly, land in the area was scarce, as it was in Andover and Pennsylvania when parents in those areas began gifting money. In Andover specifically, and in cases in the Chesapeake, an education or training in a

<sup>1</sup> The twenty-five acres of Robert Barker supported a fulling mill. John Valentine Webber (or Weaver), who bought the southern portion of the 148 acres that was once belonged to Daniel Barker and later brought the acquisition to seventy acres, was a papermaker. The 100 acres to the west of McKnight was owned by Isaac Dixon, a wheelwright, and later by John Hollahan, a blacksmith. These men, identified by their occupations in various land deeds, were not primarily farmers, hence the smaller land size.

trade was given to a child instead of land (Greven, 227; Smith 242). Some sons in the Mt. Cuba area may have received either of these but that information currently remains unknown.

Over time, more estates were left undistributed and therefore were settled by the Orphans Court. Why this occurred is not clear though it has been witnessed in New England (Greven, 131). Daniel Blake Smith, in his study of the lives of planters in the Chesapeake in the 1700s comments that will writing was a way to pass on accumulated material wealth and social status to the surviving generation (Smith, 231). If a man has little to nothing, one can logically assume he would not write a will. William Barker did not own the land he lived on at the time of his death and, in his eighties by 1840, had not done much farming for some time so he may have had little to bequeath. Joshua Lobb, also in his eighties, may have thought that his only son would purchase the land through the Orphans Court. Jacob Lobb did attempt this, but his sudden death and small estate required the land be sold outside the family.

The fact that Joshua's brother, Joseph, left no will is intriguing. As Joseph was landless for most of his life one would expect a will to be made to keep his children from the same fate, yet this was not the case. Maybe he realized that his wife would survive him (which she did for close to twenty years) and so thought that she would take possession of the property after his decease. Another possibility is that as his entire family was living in the house at the time of his death, it most surely would be held within the family for at least the next generation. Joseph's heirs took this thinking a step further when they sold the property to his granddaughter Frances Merryweather, ensuring that it would remain in the family for some time.

More intriguing is that by 1861, in spite of the increased profitability of smaller farms, only Joshua B. Barker and the children of John (2) Armstrong continued to live on the farms that had been within their respective families. Barker occupied only sixty-three acres of the once 250 acre farm that had been in his family since 1725/6. Armstrong had obtained two farms, a 98 acre farm in 1821 and a 106 acre farm in 1842, which his children kept almost in their entirety until they sold. The rest of the farms under study here had been divided and sold outside the families that carved them from the land in the early 1700s. Members of some families did remain in the area but they no longer occupied the paternal homestead. It appears that some sold for lands on the frontier,

like Robert Barker and Jesse Bishop, while others had their lands seized in the crisis years of the 1820s. In Andover, Greven gives the impression that fewer estates were passed on due to the complexity of family life and family structure (Greven, 257). Several reasons support the observation that few lands were held within a family line by 1850. More research is needed before a definitive answer can be reached.

What can be discerned from the sample is the concern for family members. In the Chesapeake, there was a very high mortality rate up until the 1700s. Large families were uncommon and land was plentiful. As death rates were high many wills were written with the maintenance of the spouse and the security and protection of the inheritance of the children in mind (Smith, 240). This same thinking is reflected in the wills of Jonathan Strange and William Armstrong who left young children to survive them. Stipulations are placed against the wife if she was to remarry, such as revoking her third and replacing it with only a small sum of money. Steps were also taken to protect the minors' inheritance from negligence and misuse. Parents were often afraid of a step parent abusing the inheritance of their children, as was the case in *The Stolen House* where a stepfather stripped the land of his stepchildren and removed the house.

Unmarried daughters were granted money and items, often a bed, as a dowry. They were also given use of the house until marriage. This was the father's way of insuring that they could attract a suitor and bring something to the household they would establish at marriage. Married daughters were granted their share in the form of a monetary gift. Their dowry may have included money and a bed just as it was for a single daughter in her father's will.

Maintenance of an aged spouse was also a concern. In New England the child who inherited the home plantation often received the responsibility of caring for the aged parent or parents (Greven, 138). The case was similar among the families in the Mt. Cuba area with some patriarchs spreading out the duties among the male children. As the only female will suggests sometimes these precautions were not adequate. Ann Armstrong was bequeathed a yearly moiety of £10 to be paid by the executors and sons, among other items. In her will written four years after the death of her husband, the entire £40 moiety was noted as still "due".

Often at times in the background, was state law. The law required that widows receive



one third of their husband's estate. If the husband died intestate, the Orphans Court granted the widow her one third, giving her the "best" land, as was done for the widowed mother of Joshua and Joseph Lobb. When a widow was not granted her third, it was because she had remarried, as was the case with Daniel Barker's wife, Elizabeth, who remarried during the settlement of the estate. Though the interest of the court was to protect and care for one who had little economic power without a husband, the court also gave her the right to give up her third.

Also by law, only the eldest son had the right to purchase the land from his siblings if there was no will. The son was to pay his siblings the value of the land that was determined by court appointed appraisers. Eldest sons often took advantage of this as was the case with Daniel Barker's son, Robert, and Jacob Lobb. Some, in the era of equal rights after the Revolution, did not proceed to court in the division of land, but believed each heir had an equal share and sold that share to the purchasing party. This was the case with the heirs of Robert Galbreath when they sold to their brother-in-law, John Boughman, and the heirs of Peter Plankinton.

In addition to the law, wills also reflected gender roles. The husband was the provider and therefore females were provided with money, items for a dowry, use of the house if they were single, or a combination of these. Females were not given the choice to singly purchase the plantation or freely use it as was the case in the Chesapeake where with a few slaves a plantation could easily be run (Lee, 326). From the wills women were not providers or decision makers. Women were to establish and contribute to the household as can be seen with such gifts as beds and drawers. Once married, women were perceived as fully provided for by their husbands and received a token sum of money. Supporting the idea of husbands as the only decision makers, a law in Maryland barred married women from writing wills (Lee, 312). Though this law has not been mentioned in research on the laws of Delaware, it may explain the lack of female wills. This law enforces the ideal that the husband is the head of household and decision maker.

In regard to slaves, of the families studied only Robert Montgomery bequeathed slaves to his children (Register of Wills, Robert Montgomery). Samuel Barker, the younger, owned two slaves according to his inventory and these were not bequeathed (Register of

Wills, Samuel Barker). Bound labor was expensive as shown by Barker's inventory and apparently not a necessity.

In addition to the above, it appears that some families may have engaged in a tradition of will writing. It has been proposed that wills were standardized documents, but the wills in this study exhibit so much variation as to make this unlikely. Joseph Barker bequeathed his plantation to his son Samuel the younger, who in turn did the same, passing it to his two eldest sons. The knowledge that his father and grandfather wrote wills may have encouraged Abraham to write a will as well. In his will he granted his half of the farm to his brother, William. Since Abraham never married, what purpose did it serve to write a will? It may have been to protect his half from other possible claimants or to simply follow tradition.

The same may be said of the Armstrong and the Montgomery families. Even though the wills of John Montgomery, and his son, Alexander, are missing, the two brothers of Alexander, Thomas and Robert, have similar details regarding division of the estate and care of their respective widows. The Armstrongs as well, display similarities over time in the details of personal estate division and care of the widow.

To fully understand families and inheritance, it is necessary to examine the choice of marriage partners and the role of intermarriage within the Mt. Cuba community. Through marriage to neighbors, family alliances were built, creating a support network that spread through the whole community. This network reached into the fabric of daily life – from chores to childbirth to economic support – and created a complex system that deeply united the people and the community.

For example, sometime prior to 1745, Mary Bishop, daughter of Nicholas Bishop of this study, married James (some records say Jacob) Springer. James was one of twelve children of Charles Christopher Springer and Maria Hendrickson. The Hendrickson family was among the early settlers of the area and quite large. One of the children of James Springer and Mary Bishop was Mary Springer. Mary Springer married John (1) Armstrong of this study and they had eleven children, one of whom was named Elizabeth Springer Armstrong. Elizabeth married Benjamin Chandler, one of the many Chandlers in the area and effectively became Elizabeth Springer Armstrong Chandler. Within just four

generations five of the largest families in the area – Springer, Hendrickson, Bishop, Armstrong, and Chandler – had been linked by marriage and three of these links can be seen in the name of one person – Elizabeth Springer Armstrong Chandler.

The lineal description above does not consider the spouses of one's siblings. Where these sibling marriages are considered the network of relations becomes more intertwined. Elizabeth Springer Armstrong Chandler's sister, Mary, married into the Poulson family, another large family that had been among the early Swedish settlers. Sister Margaret Armstrong married Moses Montgomery, youngest son of Thomas Montgomery of this study. Sister Rhoda Armstrong married Silas Gregg, another of the early settlers who was related through marriage to the Dixon (Dickson, Dixson), Hollingsworth and Hadley families.

The spouses of the three Armstrong sisters are those whose identities we know for certain. From the research gathered, none of the families studied here married into the same family twice – such as another Bishop daughter marrying a Springer, whether they are siblings of Mary Bishop and James Springer or generations removed from them. The only possible exception is the Armstrong family which had several daughters in different generations married to other Armstrongs. The family relation between these other Armstrong families has not been studied nor has additional genealogical research been conducted that would possibly link the entire community together. The effect these complex relationships have across the community and family lines has also yet to be studied, though there are some interesting glimpses in which people appear together time and again in the historical record. These are not rare occurrences and beg further study as well.

In spite of these relations, the immediate family remained the primary institution within the community as evidenced by the wills and probate records. Typically only spouses, children and their spouses, and grandchildren were granted part of the estate. The will of Daniel Nichols in which he bequeaths items to his "late wife's children" as well as his siblings, nieces, nephews and step-grandchildren, is a rarity among the records studied for this thesis and for the Mt. Cuba Historical Archaeology Project (Register of Wills, Daniel Nichols). Orphans were often placed with the surviving spouse, an older

sibling that may or may not have been married, or in some cases, siblings of the parents.

By keeping children and assets within the immediate family parents could easily provide for their children when they reached adulthood and control the use of those assets. Through wills and the Orphans Court land was granted to sons who established themselves and their families there. For the early years of this study families were generally small so they could easily provide land for all the sons. Gradually land became scarce and expensive in the Mt. Cuba area, and families became larger, which led parents to establish their children outside the community prior to the death of the father. If the father died before a daughter was married, a dowry of cash and furniture for her household was left to her. Other precautions in wills were for not only the unmarried daughter, but also provided protection and care of any minor children, and the widowed spouse. These precautions often were written in great detail. As parents began establishing and granting independence to their children earlier, they were granted money, sometimes "token" gifts such as a silver dollar in addition to all they had been granted during the father's life.

## Conclusion

In the Mt. Cuba project area, the nuclear family was important and central to life. Not only were social norms taught and enforced, children were also provided for. Fathers ensured that their unmarried daughters were well-cared for with a monetary dowry and furniture for the house they would establish upon marriage. Fathers/parents made sure that land continued in the family line by granting it to sons who certainly understood the importance of the land because of familial ties and would see that it prospered more than a son-in-law might. Those sons not settled on the paternal homestead were established elsewhere, often with the help of their parents. Parents attempted to provide for and protect the inheritance of orphans after the parent's death. Widowed spouses also were given extensive protection through greatly detailed wills promising ample supplies of all that a widow would need for the rest of her life.

Though family was close it was not as close as it was in New England. Due to the scarcity of available land children were forced to settle outside the community and away from their parents. As only one child could inherit the paternal homestead, the remaining children gained their inheritance early in life as there was

little to wait for. Those children who did stay continued in the network their parents were a part of and increased that network through a marriage partner from the community.

Most family members left the community while a few, typically one, remained and intermarried. This contributed to a unique, in some cases almost lineal family structure, beginning with the father and descending through one son and his children according to this study. This stands in contrast to the community of Andover that contained several siblings and their families and the Chesapeake where the lineal structure arose out of mortality. The sample size of this study is small and as a result more research needs to be done, expanding the sample size to gain a greater understanding of the families.

### Acknowledgements

Dr. Lu Ann De Cunzo, advisor and mentor  
Nedda E. Moqtaderi, senior researcher of the Mt. Cuba Historical Archaeology Project  
Mark Glicksman, Glicksman Associates, Inc.  
Kathy Goldstone, Vandemark and Lynch, Inc.  
The late Mrs. Pamela C. Copeland and the Mt. Cuba Center, Inc.  
Dr. Juan Villamarin, Former Chair and Dr. Karen R. Rosenberg, Chair, Department of Anthropology, University of Delaware  
Department of Undergraduate Research, University of Delaware

### References

- Greven, Phillip J.  
1977 *Four Generations: Population, Land and Family in Colonial Andover, Massachusetts*. Cornell University Press, Ithaca.  
Herman, Bernard L.  
1999 *Architecture and Rural Life in Central Delaware, 1700-1900*. University of Tennessee Press, Knoxville.  
1992 *The Stolen House*. University Press of Virginia, Charlottesville.  
Lemon, James T.  
1976 *The Best Poor Man's Country: A Geographical Study of Early Southeastern Pennsylvania*. W. W. Norton and Company, New York.

Levy, Barry.

- 1988 *Quakers and the American Family: British Settlement in the Delaware Valley*. Oxford University Press, New York.

Mancel, Timothy J.

- 2001 *Archival Research on the Village of Mt. Cuba: The Mt. Cuba Estate Mill Property, the Boughman Property and the Woodward Property*. Mt. Cuba Historical Archaeology Project. Report No. 5.

Moqtaderi, Nedda E.

- 2000 *Archeological Testing and Archival Research at the Vandever-O'Neal Site, Mt. Cuba, Greenville, Mill Creek Hundred, Delaware*. Mt. Cuba Historical Archaeology Project. Report No. 1.

- 2000 *Archival Research of the Properties Situated on the Southern 92 Acres of the Bishop Farm, 1840-1920, Mt. Cuba, Greenville, Mill Creek Hundred, Delaware*. Supplement to Mt. Cuba Historical Archaeology Report No. 1.

- 2002 *Archival Research of the Chandler, Armstrong, Bradford, and Hobson Properties, Mt. Cuba, Mill Creek Hundred, New Castle County, Delaware*. Mt. Cuba Historical Archaeology Project. Report No. 6. 2002.

New Castle County Register of Wills

Copies of records at University of Delaware Library, Newark.

Smith, Daniel Blake.

- 1980 *Inside the Great House: Planter Family Life in Eighteenth Century Chesapeake Society*. Cornell University Press, Ithaca.

Walsh, Lorena S.

- 1988 "Community Networks in the Early Chesapeake" in Lois Green Carr, Phillip D. Morgan and Jean B. Russo, eds., *Colonial Chesapeake Society*. Published for the Institute of Early American History and Culture, Williamsburg, Virginia, by The University of North Carolina Press, Chapel Hill.

## Post-mortuary activities at Cathedral Cemetery

Andrew J. Stanzeski  
MAAR Associates

### Abstract

While monitoring backhoe operations during the removal of overburden and grave fill at the excavation of Old Cathedral Cemetery (MAI-D-66) in Wilmington, Delaware, a large number of artifacts were noted that appeared to relate directly to cultural activities carried out within the cemetery. These included such items as flower pots and wine goblets, reflecting the Victorian (19th century) practice of holding picnics within memorial gardens. The following summarizes the observations of the writer made over a nine-month period.

### Old Cathedral Cemetery

Old Cathedral, a formerly prominent and long abandoned Irish-Catholic cemetery located at 12th and Madison Streets in Wilmington, Delaware, was the site of a nine month long archaeological project. The burials recorded and disinterred from Old Cathedral dated from the 1840's to as late as 1925, when it was finally closed. At and prior to the time of its closing, some burials were removed to a new Cathedral Cemetery, opened in 1876. After years of urging that parishioners remove family members from Old Cathedral Cemetery, the Catholic Diocese of Wilmington sold the land in the 1950's, which was then turned into a parking lot for use by the nearby Wilmington Hospital. In 1998, during the building of a new outpatient surgical center by the present owners, Christiana Care Health Services, human remains were encountered. Arrangements were hastily made for MAAR Associates, Inc. to take on the task of recovering the burials and data associated with them.

The following are the basic statistics on Cathedral Cemetery. A total of 3181 burials were encountered in individual graves and multiple burials in common shafts and elaborate

crypts. The greatest numbers of these burials were infants and young children. Approximately 21% of the individual burials had been interred in multiple burial features. One hundred and thirty four individuals were identified by "name plates" found on coffin lids. Other Individuals were identified by partially intact stone markers found above the grave shafts. Research conducted among documents filed at the current cemetery administrative offices revealed the names of almost 2,000 additional individuals. Cathedral Cemetery was a Catholic Cemetery with as many as 90 % of the named individuals apparently of Irish descent. Many of these individuals appear to have been immigrants, from a number of counties in Ireland. These included Donegal, Fermanagh, Typerary, Tyrane and Galway counties. Names of some of the Parishes were also recorded, including Killmanar, Clandoradough, Gleneagha, Carmanungun, and Killmsdough.

Other nationalities were found as well, including French, German, Polish and African-Americans. A small number of Civil War veterans were recovered. The recovered Veterans were Edward Brarety, died January 1, 1864 (Burial # 34); John Hanlan, died February 20, 1865 (Burial # 369); Patrick Clark, 4<sup>th</sup> Delaware Infantry (Burial # 1992), Corporal E. H. Anderson, U.S.C. Infantry (unplaced marker); Patrick Gartland, 1st Delaware Battery 4; and Unknown, Military Hardware (Burial # 309).

### Cemetery Features

The main objective of monitoring the backhoe operations was to assure the location of fallen tombstones, crypts, and grave shafts. When these cemetery features were encountered they were mapped in location. When tombstones or inscribed family plot borders were encountered *in situ*, their locations were carefully plotted to help determine the identity of the individual(s) buried in the plot. Approximately 80 stones were found with names, some with both headstones and footstones. A number of stones had the maker's mark. The carvers of these stones were Davidson, Smith and Callahan.

During construction of the parking lot many of the tombstones and other grave furnishings and materials were moved, knocked flat and broken. They were then covered with a layer of gravel and then paved over. The total number of stones located in the cemetery was low compared to grave shafts found, however, probably due to their being removed before and



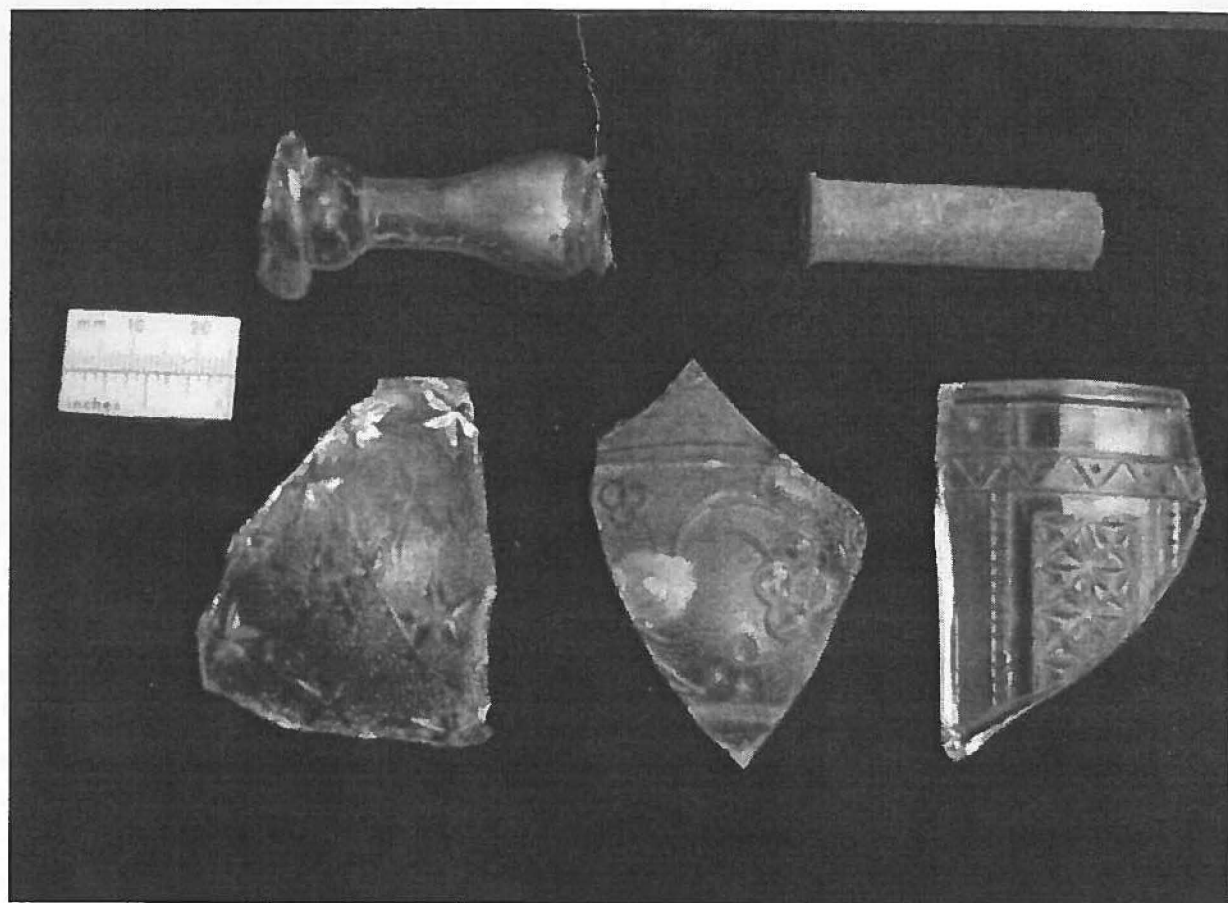


Figure 1: Left to right and top to bottom: Hand-blown stem, 45/70 cartridge, stippled star pattern, stippled starflower pattern, and Jacob's ladder pattern.

after the closing of the cemetery. Stripping operations were done deliberately and with care due to the presence of grave markers as well as because the coffins of young children and babies were located close to the surface.

During the monitoring of the stripping operations, a variety of 19<sup>th</sup> century artifacts were encountered in the tops of the burial shafts and within the fill around the stones. Wine goblets (Figures 1 & 2), was the most numerous artifact type after flower pots. After goblets there were bar type tumblers. The tumbler number was only half or less that of goblets. Two of the tumblers with panels had pontil marks (one with greenish cast, circa A.D. 1840+). The rest are typical tumblers between 1840 and 1890's most with panels. Goblet types found in the greatest frequency was common wine glass; no cordial types were found. Two goblets were hand blown (Figure 1). Early pressed glass was starting to be made in the late 1820's (McKearin 1989:332).

No other early types of pressed glass were found except for the two tumblers with pontil marks (shear marks). The goblets, tumblers and very small number of bowls, pitchers and celery were pressed tableware of the early to late Victorian period (1840 to 1890's). This was also when most of the individuals were interred at Cathedral Cemetery.

Among the ceramic ware types encountered were white refined tablewares, stoneware, red earthenware and yellowware. Functional ceramic types included dishes, pitchers and platters.

Artifacts were found throughout the spatial extent of the cemetery. During the 19<sup>th</sup> century, residences were located immediately adjacent (east) to the cemetery. At this end of the cemetery the number of bottles and other artifacts did increase slightly. Cans and other artifacts were the most numerous here. The east end of the cemetery was also the possible

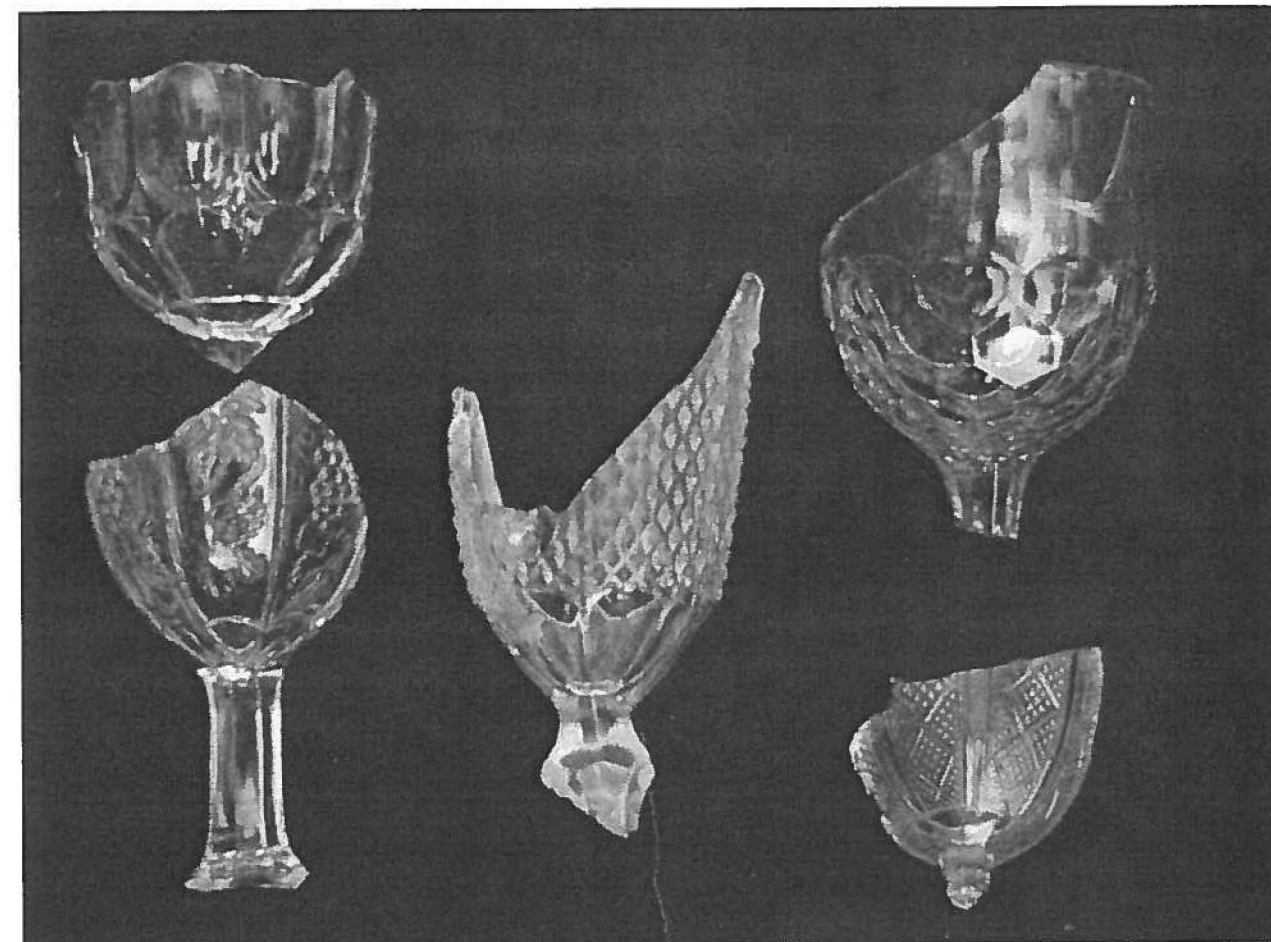


Figure 2: Goblets found at Cathedral Cemetery

location of the cemetery garage. Pharmaceuticals, and ink bottles were the most numerous artifact type in the garage area.

Many goblets were found atop, or near the top, of a rise at the north side of the cemetery. At first these goblets were thought to be used for "toasting the dead." But no goblets were found next to any coffins or with burials. Broken fragments were found in the shafts and almost whole goblets found in exhumed burials. Fragments were also found in the fill around tombstones. Other fragments and almost whole goblets were found at the level of the cemetery 100 years ago some near the base of tombstones. Goblets were found either by themselves or in concentrations with other types of artifacts. As few examples included:

Goblet fragments, 50+ flower pots, (whole and broken), dishes, broken bottles, pressed tableware fragments of a bowl and pitcher, mason jars

(fragments), broken up fence from a grave plot (near center of cemetery).

Goblet fragments with tumbler fragments and Wedgwood-type creamer (near top of hill)

Goblet fragments with red ware crock fragments and animal bone (beef) and Mason jar fragments close by (top of hill)

Goblet fragments with Mason jar fragments (central part of cemetery).

Wine goblet fragments with pressed glass bowl fragments (central part near top of hill).

Also noted in the cemetery were a few grouped artifacts such as a red earthenware crock with chicken bones. There was also a mix of tableware to go with it and animal bone. Complete wine bottles, however, were a problem. Although some fragments were

found, there was no particular location within the cemetery where they were abundant. Most wine bottle fragments actually dated earlier than the cemetery.

The most common glass at the cemetery was the Mason jar. The Mason jar (preserve jar or canning container) was the most used jar of the period. Only one fragment of a base of a hand blown canning jar was found with no marking near Crypt # 1305 (north side of the cemetery). The other canning jars were the type with Mason's patent. The goblet and Mason jars had three things in common, first the most used artifacts after flower pots (of what was left behind), second they were found together or close by, and third, they were with other artifacts.

A mix of activities certainly occurred during Victorian cemetery picnics. The items used during such activities seem to be reflected in the mix of artifacts found at the cemetery, although perhaps differing as to materials that made up the picnic assemblage - bowls, dishes, cups, tumblers, crocks, pitchers, pocket knives, marbles, creamers, Mason's jars and goblets. The Mason jar was probably the primary container in which food, and drink was carried to the cemetery. In the assembly of artifacts the easiest to break were the wine goblets. Objects such as drinking cups usually last longer. Dishes don't break easily since they are stored lying flat. Pitchers and creamers can break easily since they stand upright. Wine bottles, being stronger, did not break as easily as Mason jars would.

As was suggested above, toasting the dead was possibly the primary use of the goblets found within Old Cathedral Cemetery. Goblets from throughout the eastern United States made their way to Old Cathedral Cemetery. The towns and states where they were manufactured include Pittsburgh, Tarentum, and Philadelphia, Pennsylvania; Cambridge, Sandwich and Boston, Massachusetts; and Wheeling, West Virginia. The recovered goblets had a variety of patterns, a total of 16 have been recognized (Table I). Most were Victorian pressed glass dating from 1840 to the 1890's. Three fragments of non-pressed glass wine goblets were found. These included one engraved (rim), one hand-blown base fragment, and one hand blown stem fragment. The two hand blown examples, from different goblets (Table I), were found in the southern part of the cemetery. This section appeared to be the "Potters" section in which the poor, orphans, veterans and others were

buried. Pressed glass goblets of the period were found throughout the cemetery, mostly at the top of the rise. The most frequent patterns used were Honeycomb and plain (no pattern). Nearly every factory made Honeycomb (Lee 1985:194-195), in different varieties, was one of the most produced patterns of the time.

The two most unusual patterns were cord and tassel, and Stippled Star. The Stippled Star (Figure 1) made for the centennial in 1876, possibly by Gillinder and Sons of Greensburg and Philadelphia (Lee 1985:494-496). The cord and tassel was not a popular pattern and not many were produced. It was produced around 1872, possibly by Sandwich see Glassworks, Mass (Lee 1985:550-551). Another pattern was Sunburst, a cheap imitation of the fine English and Irish glass probably dating to the 1870's (Lee 1985:338).

Goblets (Figure 1) were found near grave markers including those of Mary Smith - 1873, M & Castello, and WJ Mc. The pattern was Stippled Starflower, made in the late 1880's, ten years after the death of Mary Smith. Another goblet was found at the base of a stone (level of the cemetery) of John Nagle - 1855, 18 years old. The pressed glass pattern was Jacob's Ladder, produced around the late 1870's by Bryce Brothers of Pittsburgh (Lee 1985:357-359). John Nagle died in 1855, indicating that if he were being toasted the event occurred 20 years or more after he died. Most likely the goblets are affiliated with picnics, but to some there is always a reason to toast, even 20 years later.

Other interesting artifacts that were found included sea shells, marbles, cartridge cases, antarget, a pocket knife, and a dog burial. The sea shells found included a Knobbed Whelk (*Busycon carica*) and a Pink Conch (*Strombus gigas*), both found together near the Haggerty grave plot. The Knobbed Whelk was painted with a first coat of burgundy brown, overlain by a red coat and then a green coat. Knobbed Whelks are found in Delaware Bay and off the coast of New Jersey and Delaware. The Pink Conch is one of the largest shells found in the Florida and Caribbean areas. Victorian England and America used this shell as a decoration and displayed it prominently in various contexts (Rehcher 1981:471). It should be noted that Wilmington was noted for its trade with the Caribbean area. Three coconuts were found together in another area of the cemetery.

Artifacts left at a grave are not unusual. At Easter in Polish and Czechoslovakian cemeteries in Trenton there were always

different color eggs left. Marbles were probably lost at the cemetery by children when playing, likely when they came with their parents to the graveside of a deceased relative. The pocketknife was likely lost by a workman for the cemetery, a passer by or by a person visiting (cutting flowers). A dog contained in a wooden box was located in the east end of the cemetery. The collar age was the type used long after the cemetery was closed. The dog was most likely buried by the occupants of a nearby house. The collar was of a type used long after the closing of the cemetery. Three 45/70 cartridge cases were found with the target about 100 feet away, all on the south central edge of the cemetery.

The cartridges (Figure 1) were marked 8-R-84F, 2-R-84F and 2,R-84F, and were made by Remington for Frankford Arsenal, two in February of 1884 and one in August of 1884 (Personal communication, Dr. Atwater). The target was a copper cap shaped object ( $\pm$  3" across) showed five entry marks, four from one side and the other from the opposite side, and one bullet grazed off the top. The target, based on the fact that three of the shots hit near the top, may have been on or near the ground. Observations as these have been noted during other historic events (Scoutt 1989). Although target practice usually occurs away from nearby houses, this may not have been the case during the 19<sup>th</sup> century. Also, in crypt 1307, on the floor, there were five 22 short cartridges found. The 45/70 cartridges could have been from a salute to veterans and the target not related at all. 45/70 was the service cartridge from 1873 until 1892 (Matunos 1989:408). The head stamps showed military markings (month, year and maker). The year 1884 was near the end use of the cemetery. Looking again at the target, the entry holes were about 30  $\pm$  caliber. The cartridges were related to a salute to a veteran and target from target practice most likely by a handgun of 30 caliber or less. The cartridges were found near veterans' graves. The military rifle of the time was a Trapdoor, Springfield, single shot.

A famous cemetery in the Philadelphia area is Laurel Hill Cemetery, founded around the same time period as Cathedral Cemetery. In *Annals of Philadelphia and Pennsylvania in the Olden Time* (Watson 1850) Laurel Hill Cemetery was the place to see "that home of the dead could be made of interest and beauty". Talking to Joe Direso, a caretaker of the cemetery, the author asked about past practice of picnics, "Yes, they did". According to Direso, Laurel Hill Cemetery used to have so many people

Table I: Goblets

<u>Pressed Glass</u>	
Diamond Point	1
Arched Grape	1
Open Rose	1
Excelsior	1
Thumbprint	1
Cabbage Rose	1
Baltimore Pear	1
Cord and Tassel	1
Jacob's Ladder	1
Stippled Starflower (Stippled flower band)	1
Waffle	1
Bohemian	1
Honeycomb	3
Sawtooth	1
Paneled Forget-me-Not	1
Leaf and Dart (pitcher fragment)	1
Stippled Star	1
<u>Hand Blown Glass</u>	
Plain (Three types 2-1-1)	3
Engraved	1
Hand Blown (Two types)	2
Total	24 goblet fragments 1 pitcher fragment

visiting it that they had to give out passes to get in and places to park horses and buggies. Using horse and buggy at the time to get to the cemetery must have taken some time and after arriving, the visitors would likely stay for a time. In this period of time they would have something to eat and a type of picnic would take place.

*Nooks and Corners of the New England Coast* (Drake 1875) is a book on places to visit or see along the coast in New England. The book contains a section on Newport, Rhode Island and other cemeteries with illustrations of the



graves and monuments, and famous people interred therein. Many of the cemeteries had a park setting with benches and beautiful monuments. The cemeteries were visited not only on holidays but all year around.

### Summary

Cathedral Cemetery contained 3,186 graves. Evidence of post funeral activities were noted, including burying ceremonies that used flowers in or on top of the coffin; possible gun salutes to the departed veterans; flowers placed in flower pots; children playing; possible toasts to lost friends; target shooting; and the placement of offerings to the dead such as sea shells, coconuts and other artifacts. Of importance was the picnic, in a place of calm, beautiful stones and a park setting.

### Acknowledgments

More than 130 people worked at Old Cathedral Cemetery. The project was under the overall supervision of Ronald A. Thomas, MAI President of MAAR Associates, Inc., of Newark, Delaware. Robert F. Hoffman was the Project Director during the entire course of the excavation. A backhoe monitoring crew consisted of John Hoffman, Dan Holding, Warren Kinney, Jr. Judy and Serge. Richard A. Eitel, backhoe operator, with the Wohlsen Company, efficiently operated a five foot backhoe to remove overburden throughout the course of the project. A mapping crew was under the direction of Richard L. Green. Marge Green served as project photographer. Field Supervisors included Brian Ludwig, Charlane Gross (who also assisted as a field osteologist), Chip Huston, Jerry Traver, and Ted M. Payne. Fred Carlson was facilities/equipment manager (if we did not have it, he would get it) and Milt Barbehenn was documents manager. Chris Campbell was Laboratory Supervisor and Berry Williams was in charge of computerized data management. The owners of O'Friel's Bar and Restaurant, who put up with the dirt tracked by our crew during lunch hour, are thanked for their patience. Acknowledgement should also be made for help in identification of the 45/70 cartridges to Dr. Atwater of the Aberdeen Proving Grounds. I also offer my thanks to John Stanzeski, who had the patience to do a better burial excavation than me. The acknowledgments can go on forever - there should be a Mash Unit book written because we worked through cold, hot, rain and boredom. Finally, for editing this article, I thank Ronald A. Thomas.

### References

- Drake, Samuel Adams  
1876 *Nooks and Corners of the New England Coast*, New York, Harper & Brothers Publishers, Franklin Square
- Lee, Ruth Webb  
1985 *Early American Pressed Glass*, Charles E. Tuttle Company, Rutland, Vermont and Tokyo, Japan
- Matunas, Edward A  
1989 *American Ammo Selection, Use & Ballistics*, Outdoor Life Books, Grolier Book Clubs, Inc., Danbury, Connecticut
- McCain, Mollie Helen  
1996 *The Collector's Encyclopedia of Pattern Glass*. Collector Books, P.O. Box 3009, Paducah, Kentucky 42001
- McKearin, George S. & Helen  
1989 *American Glass*, Bonanza Books, New York
- Pepper, Adeline  
1971 *The Glass Gaffers of New Jersey and Their Creations from 1739 to the Present*, Charles Scribner's & Sons, New York
- Rechler, Harold A  
1988 *The Audubon Society Field Guide to North American Seashells*, Borzoi Books, Alfred A. Knopf, Inc.
- Scott, Douglas D, Richard A. Fox, Jr., Melissa A. Connor & Rick Harman  
1989 *Archaeological Perspectives on the Battle of the Little Bighorn*, University of Oklahoma Press, Norman
- Stanzeski, Andrew J  
1989 A Possible Wister Mug, or What is a Wister, *Journal of Middle Atlantic Archaeology*, Volume 5, pp 59-65
- Watson, John F.  
1850 *Annals of Philadelphia and Pennsylvania in the Olden Time*, A Hart, J.W. Moore= J Pennington, Vi. Hunt and H.F. Anners

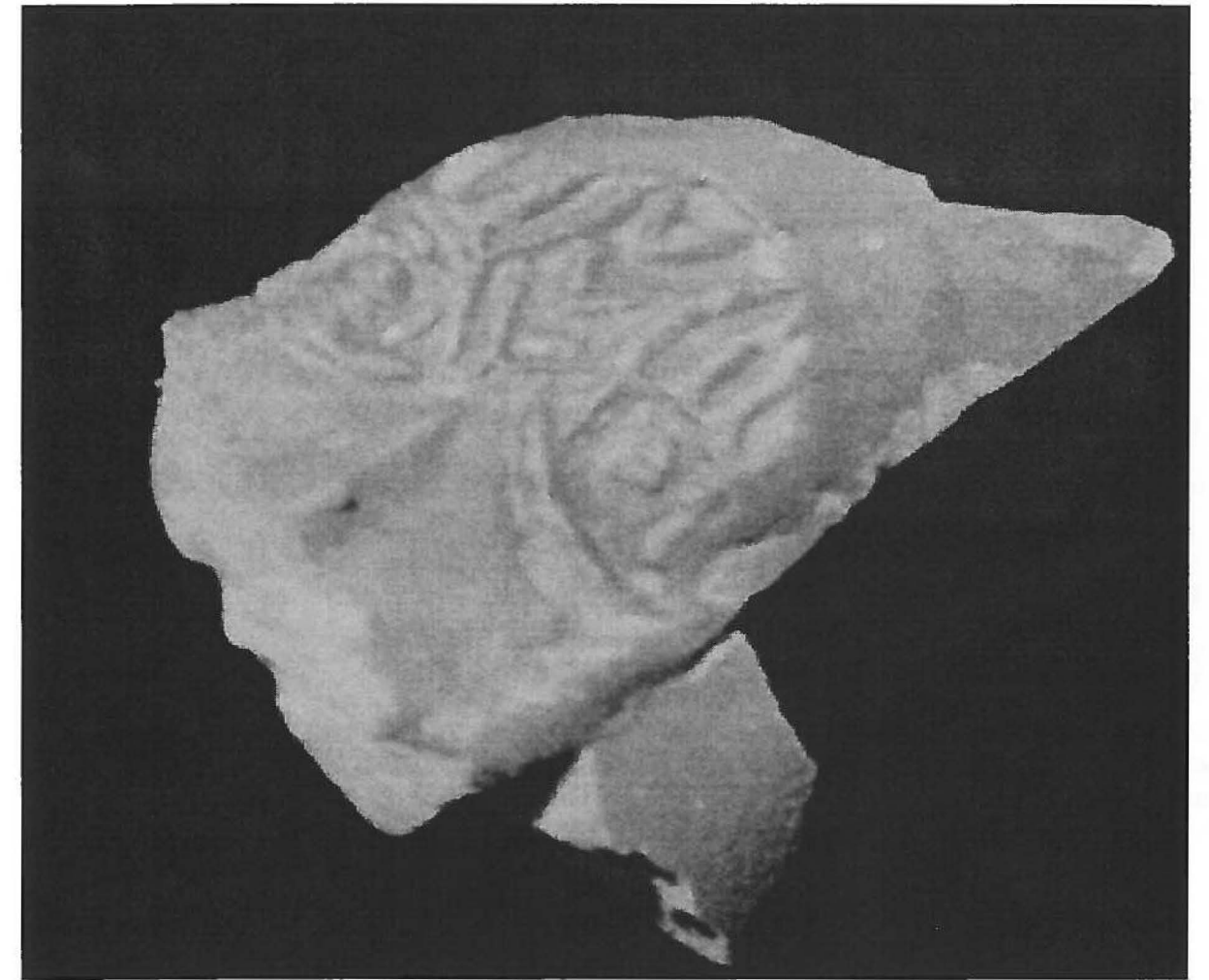


Figure 1: This is the Bloomsbury bellarmine jug mask, enlarged.

### Flea market archaeology:

A new look at artifact dating, consumer behavior, and flea markets, with reminiscences of Delaware traditional recycling practices.

Edward F. Heite  
Heite Consulting

While excavating the Bloomsbury site in northeastern Kent County, Delaware, we confronted several discoveries that caused us to seriously re-examine old assumptions about class, consumption patterns, the use of dating

tools, and behavior differences between persons of different economic levels.

Most important, in my opinion, was the realization that different people, or groups of people, in the same community might relate differently, at a fundamental level, to their material-culture environment. And different communities with similar characteristics might relate differently to accumulation of material goods.

Documentary research had established that the site's occupants were poor tenant farmers, living on land that was poorly drained, heavy with clay and relatively infertile. This low-status, dirt-poor tenant house site was occupied from the middle of the eighteenth century into the second decade of the nineteenth century. As one should expect for any household of the period, the family's table settings included creamware, pearlware, and a large quantity of red-bodied utilitarian earthenware. In particular, a site occupant evidently took great pains to assemble a tea set

of a certain pattern of creamware from several different sources. The resultant collection at least indicated that the individual was conversant with the newly introduced fashion of sets of china, which Josiah Wedgwood was promoting in order to sell more dishes. It's interesting to note how quickly an idea could have transferred from the stylish London show rooms to the backwoods of Kent County.

While the site occupants were enjoying their stylish tea ware, a large stoneware jug broke. One part, which we recovered from the well, was the face mask of a later bellarmine jug, traditionally dated to the end of the seventeenth century or the beginning of the eighteenth century, at the very latest.

Before we invoke the "heirloom factor," it is important to note that there were at least three such jugs on the site, all of them old when the site was first occupied. The mask portion was found in the construction deposit of a well (excavation register 182) that was dug about 1770. Another specimen of the same ware had been broken, and then re-used as a dipper or basin in another well that was dug around 1798

and closed before 1814. Our traditional concept of a site's artifact assemblage presumes that the newest artifact dates each deposit, but the preponderance of artifacts will date, or at least bracket, the period of greatest activity, as reflected in the mean ceramic date. Even though the house was built when these jugs were already perhaps a half-century old, we should be able to comfortably dismiss their heirloom value, especially since they clearly received hard use on this site.

Instead, we must remember that they were utensils in use by a household, an everyday part of the environment, even though today we would call them antiques. In an era when Strawberry Shortcake bed sheets bring big money on eBay, it is sobering to realize that our ancestors considered an object's useful life as lasting as long as the object remained useable.

Any late eighteenth century assemblage containing three bellarmine jugs will return a noticeably early mean ceramic date, and of course a very early initial date, and very broad bracket dates.

Such early ceramic dates might also



Figure 2: This log outbuilding is nothing special, nor are the vehicles stored in and around it. Standing a few miles from the affluent suburbs of the state capital, this log outbuilding at Chapeltown still is an unnoticed utilitarian structure in the yard of a nondescript farmhouse.



Figure 3: These marks are found on a collection of blue willow dishes accumulated at the twice-weekly sale in Dover between about 1945 and 1970. A similarly varied collection of creamware, all pieces of the same pattern, was found at the Bloomsbury site. The sale in Dover has been operating for nearly three centuries; during the time Bloomsbury was occupied, documentary evidence suggests a similar sale was active in nearby Smyrna. Proximity of a regular sale may be reflected in the date range and variety of artifacts from a site. Without access to a regular sale, acquisition should be expected to reflect a less robust pattern.

indicate a class of consumer behavior that might result from scarcity, or personal taste, or poverty, or isolation from the larger market. At Bloomsbury, these four factors might not apply, since the tenants, though poor, were clearly conscious of the newest trends in consumer behavior.

Alternatively, I suggest that the bellarmine jugs and the accumulated "set" of creamware may be evidence for the lively Delaware custom of trading goods at twice-weekly markets. The court towns of New Castle, Lewes, and Dover, had proprietary charters for markets to be held on Wednesdays and Saturdays. The market in Dover continues in unbroken existence to the present day, but it is held on Tuesdays and Fridays. In the nearby town of Smyrna, there was no chartered market, but we have documentary evidence in merchant accounts that the two days were observed as market days anyway.

It is not uncommon to find century-old ceramics and tools offered for sale, not as

antiques but as useful utensils, at the Dover market. This same market existed when the Bloomsbury site was occupied. When the Bloomsbury housewife wanted jugs for water or other liquids, she would naturally have gone to the "sale," as we call it, probably in nearby Smyrna.

During my own childhood, we ate from a mixture of blue willow china that is today considered a collection of valuable antiques. When we children broke a few pieces, my mother would buy replacements from the many second-hand dealers who regularly set up at the sale. It was not unusual for us to eat our breakfast cereal from bowls that were a half-century old, just as the bellarmine jugs were about that old at Bloomsbury.

We found another clue to market activity at Bloomsbury. Aside from nails and a few parts of implements that probably were in use at the time the house was abandoned, all the ferrous scrap on the site was cast iron. No substantial amount of wrought iron was present,



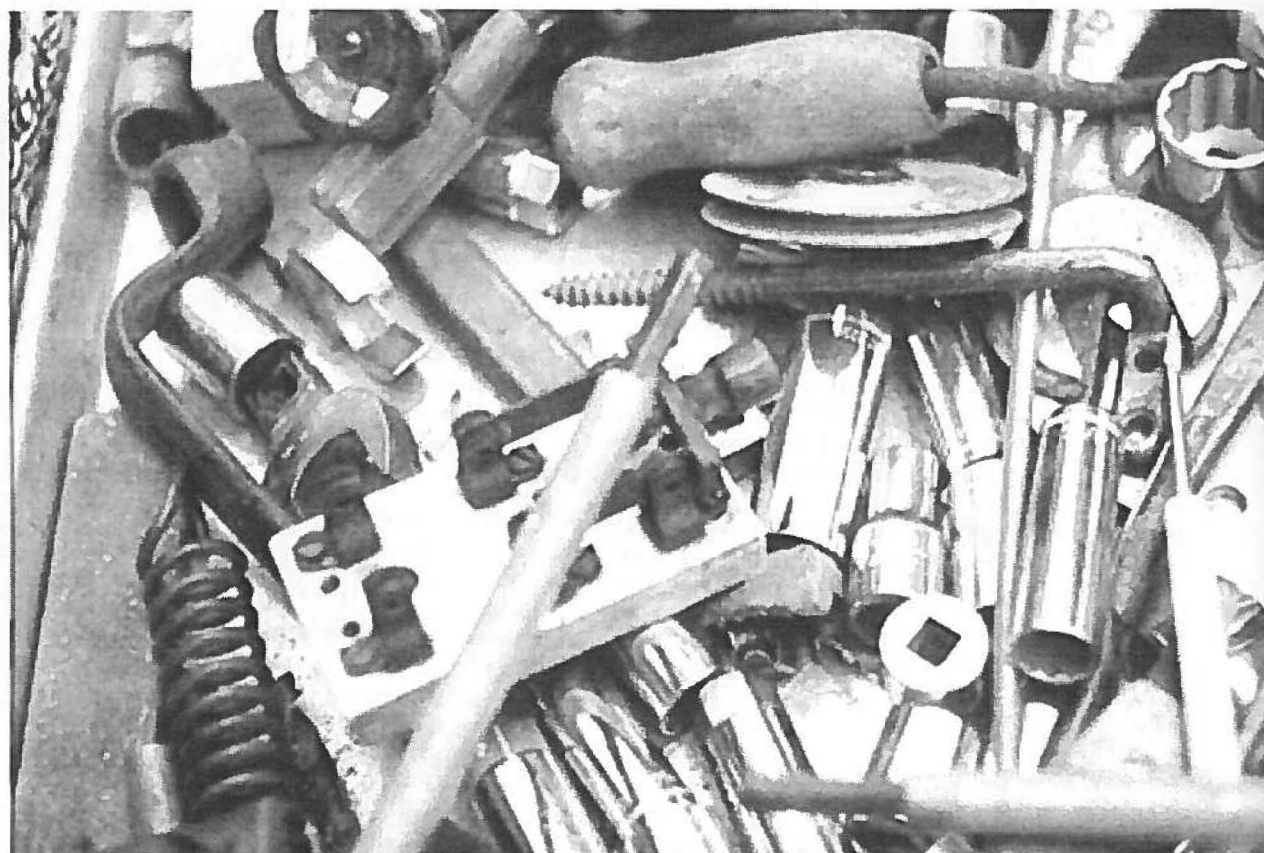


Figure 4: This is a typical "box lot" of tools offered for sale at the twice-weekly auction in Dover. The socket wrenches could be brand-new. The electrical switch is fifty or more years out of date, and the wooden handled tool at top is decidedly pre-war. If these items were excavated in an archaeological context, the context might be assigned bracket dates of 1920-2000, when in fact this picture was taken in 2002 at Spence's Bazaar in Dover. The tools probably will remain in use, or at least in a shop environment, for decades to come.

although there were pieces of at least three cast iron pots scattered about the site.

Cast iron had no value on the local market, because it could be re-used only in a furnace or foundry, neither of which existed in the central Delaware market area. On the other hand, any piece of wrought iron could be converted into useful tools by a blacksmith or a farmer with a forge. Nearly every estate inventory of the period includes a quantity of scrap iron, to which a value was assigned.

Even in my grandfather's day, in downtown Dover, the local metal dealer would take scrap in exchange for new metal. As a child, it was my job to knock the brass bushings out of old iron fittings. My grandfather would exchange brass for new metal shapes from the yard a block away. Brass was money, but any metal could be exchanged. My grandfather could exchange clean cast iron as well, which

was not the case during the eighteenth century when the nearest foundry was sixty miles away overland.

A frugal farmer, in an economy where cash was almost nonexistent, could appreciate the real value of an old jug that still held water, or a worn-out tool that contained reusable metal.

While our farmer might stretch the family budget to assemble a nearly matching tea set from offerings at the sale, the intrinsic value of household utensils was their survival value for their owners. When the neck broke off the old stoneware jug, its bottom half could still serve many years as a ladle or basin.

But do these behaviors indicate poverty? It could be argued that a very long date range is a marker for poverty. Clearly, second-hand goods will find their way down the

economic ladder. I recall one plantation site in Virginia where the Chinese Export Porcelain was found in the trash of the slave quarters and not in the big house. When the old stuff went out of fashion, it went to the quarters.

We must remember that we are looking at these artifacts from the perspective of a society where last year's shoes simply cannot be worn in public, or last year's car has lost much of its value by the mere act of being a year old.

Instead, I submit, the sum of the evidence at Bloomsbury, from the creamware, to the stoneware jugs, to the lack of wrought iron, reflects the recycling mentality of a society where goods were constantly being re-sold until they retained absolutely no utility whatever. Then, as now, the regular town sale day offered a quick and easy way to exchange goods and meet consumer demand without resorting to outside sources of supply. It was, and is, a market in which all classes of society participated on a relatively level playing field that characterizes a barter economy in which goods are valued according to usefulness and not according to arbitrary money prices set by the world market.

Bloomsbury has demonstrated that eighteenth-century consumer behavior cannot be evaluated by twenty-first century perceptions of value, duration of usefulness, and style. Still, I wouldn't advise tearing up a Strawberry Shortcake bed sheet to make scrub rags.

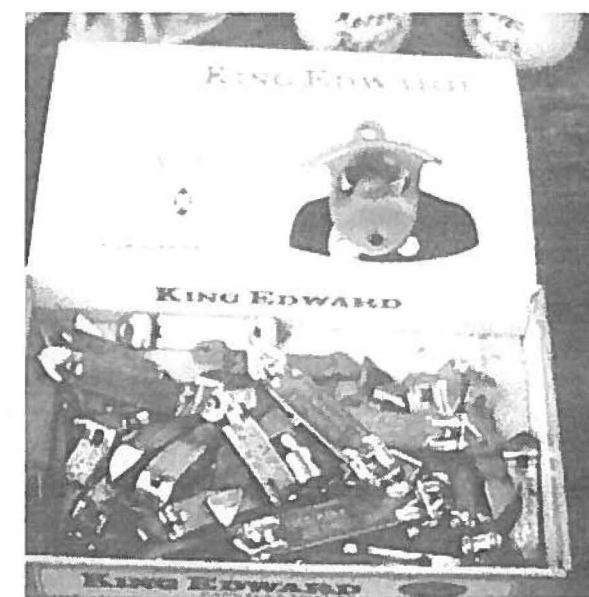


Figure 5: When was the last time you needed a puncture-type ("church key") bottle/can opener? Do you still have a bottle opener mounted on the wall of your kitchen? How often do you store things in cigar boxes? This display of useful items was on sale by a vendor at Spence's Bazaar in Dover during the summer of 2002. It is doubtful that anything in the picture is newer than 15 years old, and much of it probably is more than 25 years old.



## More than just bricks

Edward F. Heite  
Heite Consulting\*

Traditional excavation reports of brick clamps have generally been purely descriptive, at best treating brickmaking sites as illustrations of the history of technology. Throughout the history of American archaeology, bricks and brickmaking sites have been treated as a poor relation, marginally able to provide a tiny bit of information that might -- just might -- be useful to someone yet unidentified, perhaps an architectural historian.

It is a mistake to presume that the data from a brick clamp site is of no interest except to historical architects, who might not be interested anyway. Beyond the "gee-whiz" aspects, brickmaking sites have substantially contributed to archaeological literature mainly because they have produced large holes. The massive structure of a Virginia great house, Rosewell, required a huge amount of clay for bricks, which in turn caused a huge hole, which in turn was filled with trash, which in turn was excavated by Ivor Noël Hume. But what of the bricks made from the clay that came from the hole in the first instance?

The obvious answer usually is clear as the nose on your face. For every isolated country brick clamp, there should be a brick house, or a brick church, or some other big consumer of finished bricks. But let us look again at that process of selecting and using bricks. A clamp was a temporary kiln, built for a specific project, and fired with cordwood near the construction site. Without the sophisticated controls of a permanent kiln, clamp-fired bricks are likely to display a wide range of firing temperatures, with a large number of waste bricks.

Once the bricks were burnt and ready to be used, the bricklayer went through the supply and picked out special bricks for special purposes. For the more public faces of the building, the best-looking products would be selected. In earlier times, the bricklayer would choose some of the dark-glazed bricks that had been very close to the fire. These would be arranged in patterns for decorative effect. Later,

as fashion changed, all the bricks on the facade would be plain and uniform, without any glazing whatever. For back and side walls, some spotty glazed bricks were allowed, as long as they were firm and not distorted. Inside walls might be built of underfired bricks uniform in size but not hard enough to withstand weathering.

Such soft, underfired bricks also were used for nogging the walls of frame houses. The building of a nogged house would have little use for hard, weatherproof bricks from a clamp. It is regrettable that architectural historians and archaeologists have not examined the sources for brick nogging. Did soft brick nogging come from clamps or even permanent kilns that were primarily built for the construction of brick houses?

The answer is that we don't know because we haven't looked.

The hit or miss nature of temporary clamp firing produced a wide range of bricks, some of which were not fit to be used in the customer's house or church. The under fired, over fired, warped, cracked, and discolored bricks would simply be left there. The brickmaking site would eventually be reclaimed

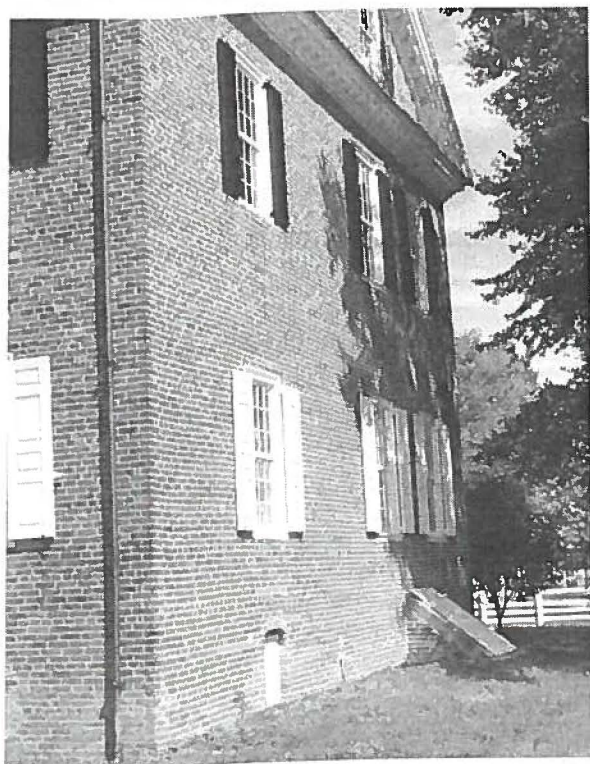


Figure 1: Loockerman Hall



Figure 2: Churchmans Meadow brickbats

by nature.

But nature wasn't the only force acting upon abandoned brickmaking sites. A few years ago, we were digging the site of the house built by a poor black farmer on eleven acres that had been part of the Loockerman Hall estate. Nathan Willliams, the site owner, left very few material goods on the site, but we did find his bricks. Every brick from the Nathan Willliams house site was somehow defective, clearly a reject or a waster, from a clamp. We did not need to look far.

The bricks were identical in size and

color to the bricks in Loockerman Hall, less than a mile away.

By the time Nathan Willliams built his house, about 1840, there were commercial brickyards in the area, but obviously the young black man went to another source: the Loockerman Hall brick clamp, abandoned fifty years earlier.

Nathan Willliams evidently got his brick from the same clamp that produced the bricks for Loockerman Hall, built around 1790 (figure 1), now on the campus of Delaware State University. Notice that bricks on the side wall are uniform, while random glazed bricks were permitted on the back wall, part of which is seen at the left in figure 1.

Clearly Nathan Willliams was a scrounger. He took advantage of a local resource, and probably didn't have to pay anyone anything for the bricks to build his chimney. Was this an isolated case, or did salvaged bricks from abandoned clamps fill a significant niche in the lower levels of the economy?

Part of our answer came in 2002 at another site, near the village of Christiana in



Figure 3: Strata cut, Churchmans Meadow

\* Prepared for presentation at the Eastern States Archaeological Federation November 2002



little to wait for. Those children who did stay continued in the network their parents were a part of and increased that network through a marriage partner from the community.

Most family members left the community while a few, typically one, remained and intermarried. This contributed to a unique, in some cases almost lineal family structure, beginning with the father and descending through one son and his children according to this study. This stands in contrast to the community of Andover that contained several siblings and their families and the Chesapeake where the lineal structure arose out of mortality. The sample size of this study is small and as a result more research needs to be done, expanding the sample size to gain a greater understanding of the families.

### Acknowledgements

Dr. Lu Ann De Cunzo, advisor and mentor

Nedda E. Moqtaderi, senior researcher of the Mt. Cuba Historical Archaeology Project

Mark Glicksman, Glicksman Associates, Inc.

Kathy Goldstone, Vandemark and Lynch, Inc.

The late Mrs. Pamela C. Copeland and the Mt. Cuba Center, Inc.

Dr. Juan Villamarin, Former Chair and Dr. Karen R. Rosenberg, Chair, Department of Anthropology, University of Delaware

Department of Undergraduate Research, University of Delaware

### References

Greven, Phillip J.

1977 *Four Generations: Population, Land and Family in Colonial Andover, Massachusetts*. Cornell University Press, Ithaca.

Herman, Bernard L.

1999 *Architecture and Rural Life in Central Delaware, 1700-1900*. University of Tennessee Press, Knoxville.

1992 *The Stolen House*. University Press of Virginia, Charlottesville.

Lemon, James T.

1976 *The Best Poor Man's Country: A Geographical Study of Early Southeastern Pennsylvania*. W. W. Norton and Company, New York.

Levy, Barry.

1988 *Quakers and the American Family: British Settlement in the Delaware Valley*. Oxford University Press, New York.

Mancel, Timothy J.

2001 *Archival Research on the Village of Mt. Cuba: The Mt. Cuba Estate Mill Property, the Boughman Property and the Woodward Property*. Mt. Cuba Historical Archaeology Project. Report No. 5.

Moqtaderi, Nedda E.

2000 *Archeological Testing and Archival Research at the Vandever-O'Neal Site, Mt. Cuba, Greenville, Mill Creek Hundred, Delaware*. Mt. Cuba Historical Archaeology Project. Report No. 1.

2000 *Archival Research of the Properties Situated on the Southern 92 Acres of the Bishop Farm, 1840-1920, Mt. Cuba, Greenville, Mill Creek Hundred, Delaware*. Supplement to Mt. Cuba Historical Archaeology Report No. 1.

2002 *Archival Research of the Chandler, Armstrong, Bradford, and Hobson Properties, Mt. Cuba, Mill Creek Hundred, New Castle County, Delaware*. Mt. Cuba Historical Archaeology Project. Report No. 6. 2002.

New Castle County Register of Wills

Copies of records at University of Delaware Library, Newark.

Smith, Daniel Blake.

1980 *Inside the Great House: Planter Family Life in Eighteenth Century Chesapeake Society*. Cornell University Press, Ithaca.

Walsh, Lorena S.

1988 "Community Networks in the Early Chesapeake" in Lois Green Carr, Phillip D. Morgan and Jean B. Russo, eds., *Colonial Chesapeake Society*. Published for the Institute of Early American History and Culture, Williamsburg, Virginia, by The University of North Carolina Press, Chapel Hill.

## Post-mortuary activities at Cathedral Cemetery

Andrew J. Stanzeski  
MAAR Associates

### Abstract

While monitoring backhoe operations during the removal of overburden and grave fill at the excavation of Old Cathedral Cemetery (MAI-D-66) in Wilmington, Delaware, a large number of artifacts were noted that appeared to relate directly to cultural activities carried out within the cemetery. These included such items as flower pots and wine goblets, reflecting the Victorian (19th century) practice of holding picnics within memorial gardens. The following summarizes the observations of the writer made over a nine-month period.

### Old Cathedral Cemetery

Old Cathedral, a formerly prominent and long abandoned Irish-Catholic cemetery located at 12th and Madison Streets in Wilmington, Delaware, was the site of a nine month long archaeological project. The burials recorded and disinterred from Old Cathedral dated from the 1840's to as late as 1925, when it was finally closed. At and prior to the time of its closing, some burials were removed to a new Cathedral Cemetery, opened in 1876. After years of urging that parishioners remove family members from Old Cathedral Cemetery, the Catholic Diocese of Wilmington sold the land in the 1950's, which was then turned into a parking lot for use by the nearby Wilmington Hospital. In 1998, during the building of a new outpatient surgical center by the present owners, Christiana Care Health Services, human remains were encountered. Arrangements were hastily made for MAAR Associates, Inc. to take on the task of recovering the burials and data associated with them.

The following are the basic statistics on Cathedral Cemetery. A total of 3181 burials were encountered in individual graves and multiple burials in common shafts and elaborate

crypts. The greatest numbers of these burials were infants and young children. Approximately 21% of the individual burials had been interred in multiple burial features. One hundred and thirty four individuals were identified by "name plates" found on coffin lids. Other Individuals were identified by partially intact stone markers found above the grave shafts. Research conducted among documents filed at the current cemetery administrative offices revealed the names of almost 2,000 additional individuals. Cathedral Cemetery was a Catholic Cemetery with as many as 90 % of the named individuals apparently of Irish descent. Many of these individuals appear to have been immigrants, from a number of counties in Ireland. These included Donegal, Fermanagh, Tiperary, Tyrane and Galway counties. Names of some of the Parishes were also recorded, including Killmanar, Clandoradough, Gleneagh, Carmnamungun, and Killmsdough.

Other nationalities were found as well, including French, German, Polish and African-Americans. A small number of Civil War veterans were recovered. The recovered Veterans were Edward Brarety, died January 1, 1864 (Burial # 34); John Hanlan, died February 20, 1865 (Burial # 369); Patrick Clark, 4<sup>th</sup> Delaware Infantry (Burial # 1992), Corporal E. H. Anderson, U.S.C. Infantry (unplaced marker); Patrick Gartland, 1st Delaware Battery 4; and Unknown, Military Hardware (Burial # 309).

### Cemetery Features

The main objective of monitoring the backhoe operations was to assure the location of fallen tombstones, crypts, and grave shafts. When these cemetery features were encountered they were mapped in location. When tombstones or inscribed family plot borders were encountered *in situ*, their locations were carefully plotted to help determine the identity of the individual(s) buried in the plot. Approximately 80 stones were found with names, some with both headstones and footstones. A number of stones had the maker's mark. The carvers of these stones were Davidson, Smith and Callahan.

During construction of the parking lot many of the tombstones and other grave furnishings and materials were moved, knocked flat and broken. They were then covered with a layer of gravel and then paved over. The total number of stones located in the cemetery was low compared to grave shafts found, however, probably due to their being removed before and



Figure 1: Left to right and top to bottom: Hand-blown stem, 45/70 cartridge, stippled star pattern, stippled starflower pattern, and Jacob's ladder pattern.

after the closing of the cemetery. Stripping operations were done deliberately and with care due to the presence of grave markers as well as because the coffins of young children and babies were located close to the surface.

During the monitoring of the stripping operations, a variety of 19<sup>th</sup> century artifacts were encountered in the tops of the burial shafts and within the fill around the stones. Wine goblets (Figures 1 & 2), was the most numerous artifact type after flower pots. After goblets there were bar type tumblers. The tumbler number was only half or less that of goblets. Two of the tumblers with panels had pontil marks (one with greenish cast, circa A.D. 1840+). The rest are typical tumblers between 1840 and 1890's most with panels. Goblet types found in the greatest frequency was common wine glass; no cordial types were found. Two goblets were hand blown (Figure 1). Early pressed glass was starting to be made in the late 1820's (McKearin 1989:332).

No other early types of pressed glass were found except for the two tumblers with pontil marks (shear marks). The goblets, tumblers and very small number of bowls, pitchers and celery were pressed tableware of the early to late Victorian period (1840 to 1890's). This was also when most of the individuals were interred at Cathedral Cemetery.

Among the ceramic ware types encountered were white refined tablewares, stoneware, red earthenware and yellowware. Functional ceramic types included dishes, pitchers and platters.

Artifacts were found throughout the spatial extent of the cemetery. During the 19<sup>th</sup> century, residences were located immediately adjacent (east) to the cemetery. At this end of the cemetery the number of bottles and other artifacts did increase slightly. Cans and other artifacts were the most numerous here. The east end of the cemetery was also the possible

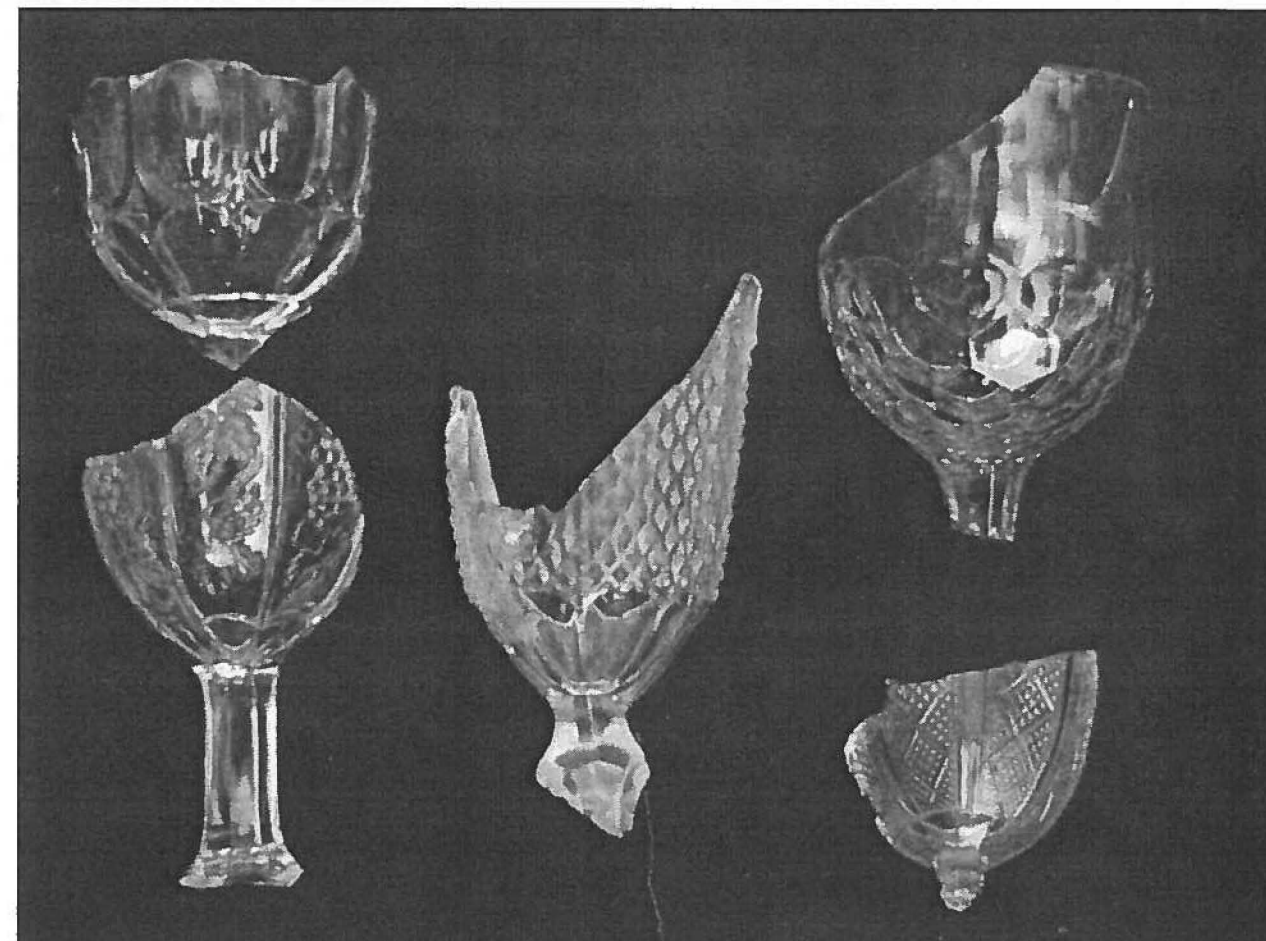


Figure 2: Goblets found at Cathedral Cemetery

location of the cemetery garage. Pharmaceuticals, and ink bottles were the most numerous artifact type in the garage area.

Many goblets were found atop, or near the top, of a rise at the north side of the cemetery. At first these goblets were thought to be used for "toasting the dead." But no goblets were found next to any coffins or with burials. Broken fragments were found in the shafts and almost whole goblets found in exhumed burials. Fragments were also found in the fill around tombstones. Other fragments and almost whole goblets were found at the level of the cemetery 100 years ago some near the base of tombstones. Goblets were found either by themselves or in concentrations with other types of artifacts. As few examples included:

Goblet fragments, 50+ flower pots, (whole and broken), dishes, broken bottles, pressed tableware fragments of a bowl and pitcher, mason jars

(fragments), broken up fence from a grave plot (near center of cemetery).

Goblet fragments with tumbler fragments and Wedgwood-type creamer (near top of hill)

Goblet fragments with red ware crock fragments and animal bone (beef) and Mason jar fragments close by (top of hill)

Goblet fragments with Mason jar fragments (central part of cemetery).

Wine goblet fragments with pressed glass bowl fragments (central part near top of hill).

Also noted in the cemetery were a few grouped artifacts such as a red earthenware crock with chicken bones. There was also a mix of tableware to go with it and animal bone. Complete wine bottles, however, were a problem. Although some fragments were



found, there was no particular location within the cemetery where they were abundant. Most wine bottle fragments actually dated earlier than the cemetery.

The most common glass at the cemetery was the Mason jar. The Mason jar (preserve jar or canning container) was the most used jar of the period. Only one fragment of a base of a hand blown canning jar was found with no marking near Crypt # 1305 (north side of the cemetery). The other canning jars were the type with Mason's patent. The goblet and Mason jars had three things in common, first the most used artifacts after flower pots (of what was left behind), second they were found together or close by, and third, they were with other artifacts.

A mix of activities certainly occurred during Victorian cemetery picnics. The items used during such activities seem to be reflected in the mix of artifacts found at the cemetery, although perhaps differing as to materials that made up the picnic assemblage - bowls, dishes, cups, tumblers, crocks, pitchers, pocket knives, marbles, creamers, Mason's jars and goblets. The Mason jar was probably the primary container in which food, and drink was carried to the cemetery. In the assembly of artifacts the easiest to break were the wine goblets. Objects such as drinking cups usually last longer. Dishes don't break easily since they are stored lying flat. Pitchers and creamers can break easily since they stand upright. Wine bottles, being stronger, did not break as easily as Mason jars would.

As was suggested above, toasting the dead was possibly the primary use of the goblets found within Old Cathedral Cemetery. Goblets from throughout the eastern United States made their way to Old Cathedral Cemetery. The towns and states where they were manufactured include Pittsburgh, Tarentum, and Philadelphia, Pennsylvania; Cambridge, Sandwich and Boston, Massachusetts; and Wheeling, West Virginia. The recovered goblets had a variety of patterns, a total of 16 have been recognized (Table I). Most were Victorian pressed glass dating from 1840 to the 1890's. Three fragments of non-pressed glass wine goblets were found. These included one engraved (rim), one hand-blown base fragment, and one hand blown stem fragment. The two hand blown examples, from different goblets (Table I), were found in the southern part of the cemetery. This section appeared to be the "Potters" section in which the poor, orphans, veterans and others were

buried. Pressed glass goblets of the period were found throughout the cemetery, mostly at the top of the rise. The most frequent patterns used were Honeycomb and plain (no pattern). Nearly every factory made Honeycomb (Lee 1985:194-195), in different varieties, was one of the most produced patterns of the time.

The two most unusual patterns were cord and tassel, and Stippled Star. The Stippled Star (Figure 1) made for the centennial in 1876, possibly by Gillinder and Sons of Greensburg and Philadelphia (Lee 1985:494-496). The cord and tassel was not a popular pattern and not many were produced. It was produced around 1872, possibly by Sandwich see Glassworks, Mass (Lee 1985:550-551). Another pattern was Sunburst, a cheap imitation of the fine English and Irish glass probably dating to the 1870's (Lee 1985:338).

Goblets (Figure 1) were found near grave markers including those of Mary Smith - 1873, M & Castello, and WJ Mc. The pattern was Stippled Starflower, made in the late 1880's, ten years after the death of Mary Smith. Another goblet was found at the base of a stone (level of the cemetery) of John Nagle - 1855, 18 years old. The pressed glass pattern was Jacob's Ladder, produced around the late 1870's by Bryce Brothers of Pittsburgh (Lee 1985:357-359). John Nagle died in 1855, indicating that if he were being toasted the event occurred 20 years or more after he died. Most likely the goblets are affiliated with picnics, but to some there is always a reason to toast, even 20 years later.

Other interesting artifacts that were found included sea shells, marbles, cartridge cases, antarget, a pocket knife, and a dog burial. The sea shells found included a Knobbed Whelk (*Busycon carica*) and a Pink Conch (*Strombus gigas*), both found together near the Haggerty grave plot. The Knobbed Whelk was painted with a first coat of burgundy brown, overlain by a red coat and then a green coat. Knobbed Whelks are found in Delaware Bay and off the coast of New Jersey and Delaware. The Pink Conch is one of the largest shells found in the Florida and Caribbean areas. Victorian England and America used this shell as a decoration and displayed it prominently in various contexts (Rehcher 1981:471). It should be noted that Wilmington was noted for its trade with the Caribbean area. Three coconuts were found together in another area of the cemetery.

Artifacts left at a grave are not unusual. At Easter in Polish and Czechoslovakian cemeteries in Trenton there were always

different color eggs left. Marbles were probably lost at the cemetery by children when playing, likely when they came with their parents to the graveside of a deceased relative. The pocketknife was likely lost by a workman for the cemetery, a passer by or by a person visiting (cutting flowers). A dog contained in a wooden box was located in the east end of the cemetery. The collar age was the type used long after the cemetery was closed. The dog was most likely buried by the occupants of a nearby house. The collar was of a type used long after the closing of the cemetery. Three 45/70 cartridge cases were found with the target about 100 feet away, all on the south central edge of the cemetery.

The cartridges (Figure 1) were marked 8-R-84F, 2-R-84F and 2,R-84F, and were made by Remington for Frankford Arsenal, two in February of 1884 and one in August of 1884 (Personal communication, Dr. Atwater). The target was a copper cap shaped object ( $\pm 3"$  across) showed five entry marks, four from one side and the other from the opposite side, and one bullet grazed off the top. The target, based on the fact that three of the shots hit near the top, may have been on or near the ground. Observations as these have been noted during other historic events (Scoutt 1989). Although target practice usually occurs away from nearby houses, this may not have been the case during the 19<sup>th</sup> century. Also, in crypt 1307, on the floor, there were five 22 short cartridges found. The 45/70 cartridges could have been from a salute to veterans and the target not related at all. 45/70 was the service cartridge from 1873 until 1892 (Matunos 1989:408). The head stamps showed military markings (month, year and maker). The year 1884 was near the end use of the cemetery. Looking again at the target, the entry holes were about 30  $\pm$  caliber. The cartridges were related to a salute to a veteran and target from target practice most likely by a handgun of 30 caliber or less. The cartridges were found near veterans' graves. The military rifle of the time was a Trapdoor, Springfield, single shot.

A famous cemetery in the Philadelphia area is Laurel Hill Cemetery, founded around the same time period as Cathedral Cemetery. In *Annals of Philadelphia and Pennsylvania in the Olden Time* (Watson 1850) Laurel Hill Cemetery was the place to see "that home of the dead could be made of interest and beauty". Talking to Joe Direso, a caretaker of the cemetery, the author asked about past practice of picnics, "Yes, they did". According to Direso, Laurel Hill Cemetery used to have so many people

Table I: Goblets

<u>Pressed Glass</u>	
Diamond Point	1
Arched Grape	1
Open Rose	1
Excelsior	1
Thumbprint	1
Cabbage Rose	1
Baltimore Pear	1
Cord and Tassel	1
Jacob's Ladder	1
Stippled Starflower (Stippled flower band)	1
Waffle	1
Bohemian	1
Honeycomb	3
Sawtooth	1
Paneled Forget-me-Not	1
Leaf and Dart (pitcher fragment)	1
Stippled Star	1
<u>Hand Blown Glass</u>	
Plain (Three types 2-1-1)	3
Engraved	1
Hand Blown (Two types)	2
Total	24 goblet fragments 1 pitcher fragment

visiting it that they had to give out passes to get in and places to park horses and buggies. Using horse and buggy at the time to get to the cemetery must have taken some time and after arriving, the visitors would likely stay for a time. In this period of time they would have something to eat and a type of picnic would take place.

*Nooks and Corners of the New England Coast* (Drake 1875) is a book on places to visit or see along the coast in New England. The book contains a section on Newport, Rhode Island and other cemeteries with illustrations of the

graves and monuments, and famous people interred therein. Many of the cemeteries had a park setting with benches and beautiful monuments. The cemeteries were visited not only on holidays but all year around.

### Summary

Cathedral Cemetery contained 3,186 graves. Evidence of post funeral activities were noted, including burying ceremonies that used flowers in or on top of the coffin; possible gun salutes to the departed veterans; flowers placed in flower pots; children playing; possible toasts to lost friends; target shooting; and the placement of offerings to the dead such as sea shells, coconuts and other artifacts. Of importance was the picnic, in a place of calm, beautiful stones and a park setting.

### Acknowledgments

More than 130 people worked at Old Cathedral Cemetery. The project was under the overall supervision of Ronald A. Thomas, MAI President of MAAR Associates, Inc., of Newark, Delaware. Robert F. Hoffman was the Project Director during the entire course of the excavation. A backhoe monitoring crew consisted of John Hoffman, Dan Holding, Warren Kinney, Jr. Judy and Serge. Richard A. Eitel, backhoe operator, with the Wohlsen Company, efficiently operated a five foot backhoe to remove overburden throughout the course of the project. A mapping crew was under the direction of Richard L. Green. Marge Green served as project photographer. Field Supervisors included Brian Ludwig, Charlane Gross (who also assisted as a field osteologist), Chip Huston, Jerry Traver, and Ted M. Payne. Fred Carlson was facilities/equipment manager (if we did not have it, he would get it) and Milt Barbehenn was documents manager. Chris Campbell was Laboratory Supervisor and Berry Williams was in charge of computerized data management. The owners of O'Friel's Bar and Restaurant, who put up with the dirt tracked by our crew during lunch hour, are thanked for their patience. Acknowledgement should also be made for help in identification of the 45/70 cartridges to Dr. Atwater of the Aberdeen Proving Grounds. I also offer my thanks to John Stanzeski, who had the patience to do a better burial excavation than me. The acknowledgments can go on forever - there should be a Mash Unit book written because we worked through cold, hot, rain and boredom. Finally, for editing this article, I thank Ronald A. Thomas.

### References

- Drake, Samuel Adams  
1876 *Nooks and Corners of the New England Coast*, New York, Harper & Brothers Publishers, Franklin Square
- Lee, Ruth Webb  
1985 *Early American Pressed Glass*, Charles E. Tuttle Company, Rutland, Vermont and Tokyo, Japan
- Matunas, Edward A  
1989 *American Ammo Selection, Use & Ballistics*, Outdoor Life Books, Grolier Book Clubs, Inc., Danbury, Connecticut
- McCain, Mollie Helen  
1996 *The Collector's Encyclopedia of Pattern Glass*. Collector Books, P.O. Box 3009, Paducah, Kentucky 42001
- McKearin, George S. & Helen  
1989 *American Glass*, Bonanza Books, New York
- Pepper, Adeline  
1971 *The Glass Gaffers of New Jersey and Their Creations from 1739 to the Present*, Charles Scribner's & Sons, New York
- Rechler, Harold A  
1988 *The Audubon Society Field Guide to North American Seashells*, Borzoi Books, Alfred A. Knopf, Inc.
- Scott, Douglas D, Richard A. Fox, Jr., Melissa A. Connor & Rick Harman  
1989 *Archaeological Perspectives on the Battle of the Little Bighorn*, University of Oklahoma Press, Norman
- Stanzeski, Andrew J  
1989 *A Possible Wister Mug, or What is a Wister*, *Journal of Middle Atlantic Archaeology*, Volume 5, pp 59-65
- Watson, John F.  
1850 *Annals of Philadelphia and Pennsylvania in the Olden Time*, A Hart, J.W. Moore= J Pennington, Vi. Hunt and H.F. Anners

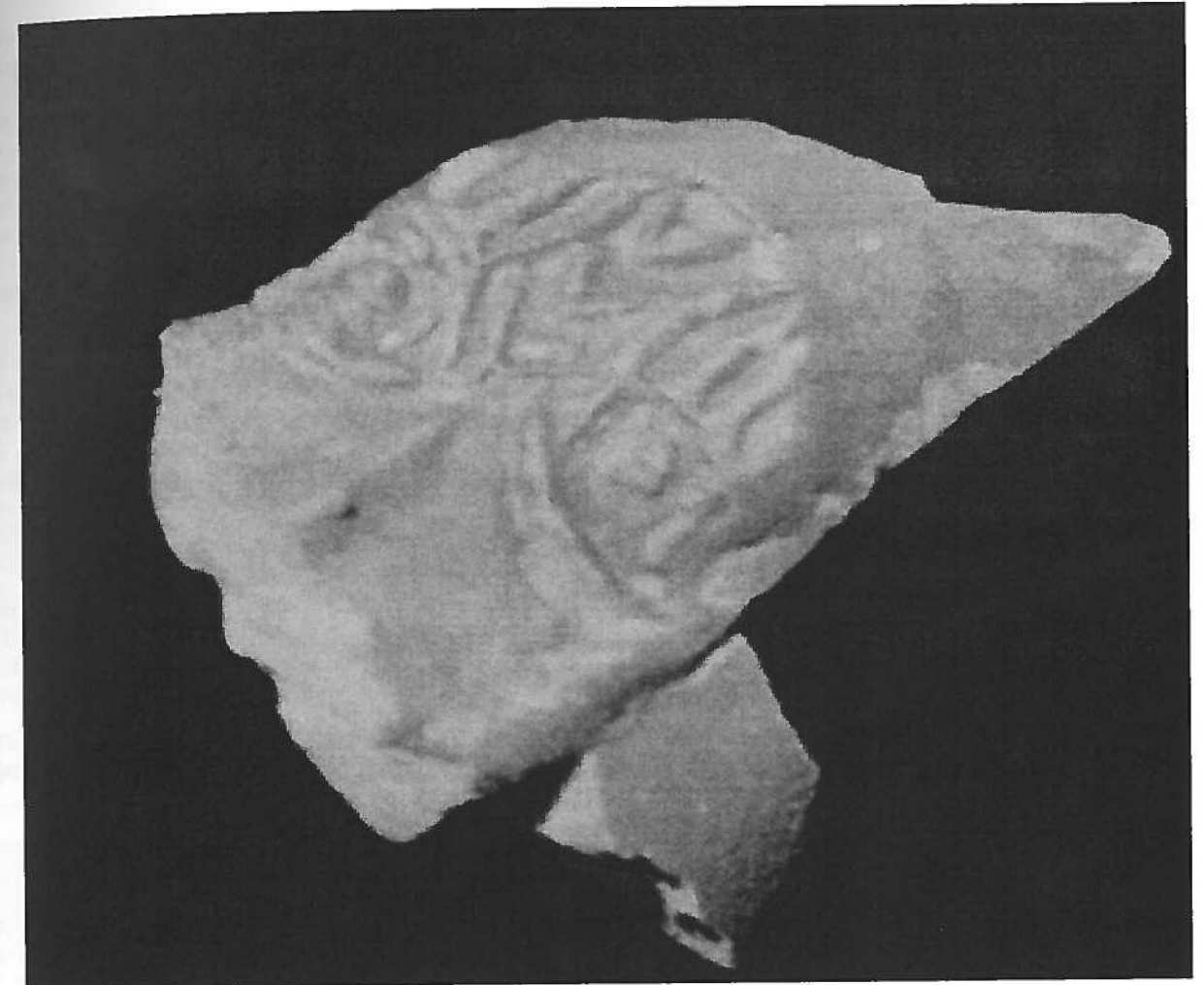


Figure 1: This is the Bloomsbury bellarmine jug mask, enlarged.

## Flea market archaeology:

A new look at artifact dating, consumer behavior, and flea markets, with reminiscences of Delaware traditional recycling practices.

Edward F. Heite  
Heite Consulting

While excavating the Bloomsbury site in northeastern Kent County, Delaware, we confronted several discoveries that caused us to seriously re-examine old assumptions about class, consumption patterns, the use of dating

tools, and behavior differences between persons of different economic levels.

Most important, in my opinion, was the realization that different people, or groups of people, in the same community might relate differently, at a fundamental level, to their material-culture environment. And different communities with similar characteristics might relate differently to accumulation of material goods.

Documentary research had established that the site's occupants were poor tenant farmers, living on land that was poorly drained, heavy with clay and relatively infertile. This low-status, dirt-poor tenant house site was occupied from the middle of the eighteenth century into the second decade of the nineteenth century. As one should expect for any household of the period, the family's table settings included creamware, pearlware, and a large quantity of red-bodied utilitarian earthenware. In particular, a site occupant evidently took great pains to assemble a tea set



of a certain pattern of creamware from several different sources. The resultant collection at least indicated that the individual was conversant with the newly introduced fashion of sets of china, which Josiah Wedgwood was promoting in order to sell more dishes. It's interesting to note how quickly an idea could have transferred from the stylish London show rooms to the backwoods of Kent County.

While the site occupants were enjoying their stylish tea ware, a large stoneware jug broke. One part, which we recovered from the well, was the face mask of a later bellarmine jug, traditionally dated to the end of the seventeenth century or the beginning of the eighteenth century, at the very latest.

Before we invoke the "heirloom factor," it is important to note that there were at least three such jugs on the site, all of them old when the site was first occupied. The mask portion was found in the construction deposit of a well (excavation register 182J) that was dug about 1770. Another specimen of the same ware had been broken, and then re-used as a dipper or basin in another well that was dug around 1798



Figure 2: This log outbuilding is nothing special, nor are the vehicles stored in and around it. Standing a few miles from the affluent suburbs of the state capital, this log outbuilding at Chapeltown still is an unnoticed utilitarian structure in the yard of a nondescript farmhouse.

and closed before 1814. Our traditional concept of a site's artifact assemblage presumes that the newest artifact dates each deposit, but the preponderance of artifacts will date, or at least bracket, the period of greatest activity, as reflected in the mean ceramic date. Even though the house was built when these jugs were already perhaps a half-century old, we should be able to comfortably dismiss their heirloom value, especially since they clearly received hard use on this site.

Instead, we must remember that they were utensils in use by a household, an everyday part of the environment, even though today we would call them antiques. In an era when Strawberry Shortcake bed sheets bring big money on eBay, it is sobering to realize that our ancestors considered an object's useful life as lasting as long as the object remained useable.

Any late eighteenth century assemblage containing three bellarmine jugs will return a noticeably early mean ceramic date, and of course a very early initial date, and very broad bracket dates.

Such early ceramic dates might also



Figure 3: These marks are found on a collection of blue willow dishes accumulated at the twice-weekly sale in Dover between about 1945 and 1970. A similarly varied collection of creamware, all pieces of the same pattern, was found at the Bloomsbury site. The sale in Dover has been operating for nearly three centuries; during the time Bloomsbury was occupied, documentary evidence suggests a similar sale was active in nearby Smyrna. Proximity of a regular sale may be reflected in the date range and variety of artifacts from a site. Without access to a regular sale, acquisition should be expected to reflect a less robust pattern.

indicate a class of consumer behavior that might result from scarcity, or personal taste, or poverty, or isolation from the larger market. At Bloomsbury, these four factors might not apply, since the tenants, though poor, were clearly conscious of the newest trends in consumer behavior.

Alternatively, I suggest that the bellarmine jugs and the accumulated "set" of creamware may be evidence for the lively Delaware custom of trading goods at twice-weekly markets. The court towns of New Castle, Lewes, and Dover, had proprietary charters for markets to be held on Wednesdays and Saturdays. The market in Dover continues in unbroken existence to the present day, but it is held on Tuesdays and Fridays. In the nearby town of Smyrna, there was no chartered market, but we have documentary evidence in merchant accounts that the two days were observed as market days anyway.

It is not uncommon to find century-old ceramics and tools offered for sale, not as

antiques but as useful utensils, at the Dover market. This same market existed when the Bloomsbury site was occupied. When the Bloomsbury housewife wanted jugs for water or other liquids, she would naturally have gone to the "sale," as we call it, probably in nearby Smyrna.

During my own childhood, we ate from a mixture of blue willow china that is today considered a collection of valuable antiques. When we children broke a few pieces, my mother would buy replacements from the many second-hand dealers who regularly set up at the sale. It was not unusual for us to eat our breakfast cereal from bowls that were a half-century old, just as the bellarmine jugs were about that old at Bloomsbury.

We found another clue to market activity at Bloomsbury. Aside from nails and a few parts of implements that probably were in use at the time the house was abandoned, all the ferrous scrap on the site was cast iron. No substantial amount of wrought iron was present,



of a certain pattern of creamware from several different sources. The resultant collection at least indicated that the individual was conversant with the newly introduced fashion of sets of china, which Josiah Wedgwood was promoting in order to sell more dishes. It's interesting to note how quickly an idea could have transferred from the stylish London show rooms to the backwoods of Kent County.

While the site occupants were enjoying their stylish tea ware, a large stoneware jug broke. One part, which we recovered from the well, was the face mask of a later bellarmine jug, traditionally dated to the end of the seventeenth century or the beginning of the eighteenth century, at the very latest.

Before we invoke the "heirloom factor," it is important to note that there were at least three such jugs on the site, all of them old when the site was first occupied. The mask portion was found in the construction deposit of a well (excavation register 182J) that was dug about 1770. Another specimen of the same ware had been broken, and then re-used as a dipper or basin in another well that was dug around 1798

and closed before 1814. Our traditional concept of a site's artifact assemblage presumes that the newest artifact dates each deposit, but the preponderance of artifacts will date, or at least bracket, the period of greatest activity, as reflected in the mean ceramic date. Even though the house was built when these jugs were already perhaps a half-century old, we should be able to comfortably dismiss their heirloom value, especially since they clearly received hard use on this site.

Instead, we must remember that they were utensils in use by a household, an everyday part of the environment, even though today we would call them antiques. In an era when Strawberry Shortcake bed sheets bring big money on eBay, it is sobering to realize that our ancestors considered an object's useful life as lasting as long as the object remained useable.

Any late eighteenth century assemblage containing three bellarmine jugs will return a noticeably early mean ceramic date, and of course a very early initial date, and very broad bracket dates.

Such early ceramic dates might also



Figure 2: This log outbuilding is nothing special, nor are the vehicles stored in and around it. Standing a few miles from the affluent suburbs of the state capital, this log outbuilding at Chapeltown still is an unnoticed utilitarian structure in the yard of a nondescript farmhouse.



Figure 3: These marks are found on a collection of blue willow dishes accumulated at the twice-weekly sale in Dover between about 1945 and 1970. A similarly varied collection of creamware, all pieces of the same pattern, was found at the Bloomsbury site. The sale in Dover has been operating for nearly three centuries; during the time Bloomsbury was occupied, documentary evidence suggests a similar sale was active in nearby Smyrna. Proximity of a regular sale may be reflected in the date range and variety of artifacts from a site. Without access to a regular sale, acquisition should be expected to reflect a less robust pattern.

indicate a class of consumer behavior that might result from scarcity, or personal taste, or poverty, or isolation from the larger market. At Bloomsbury, these four factors might not apply, since the tenants, though poor, were clearly conscious of the newest trends in consumer behavior.

Alternatively, I suggest that the bellarmine jugs and the accumulated "set" of creamware may be evidence for the lively Delaware custom of trading goods at twice-weekly markets. The court towns of New Castle, Lewes, and Dover, had proprietary charters for markets to be held on Wednesdays and Saturdays. The market in Dover continues in unbroken existence to the present day, but it is held on Tuesdays and Fridays. In the nearby town of Smyrna, there was no chartered market, but we have documentary evidence in merchant accounts that the two days were observed as market days anyway.

It is not uncommon to find century-old ceramics and tools offered for sale, not as

antiques but as useful utensils, at the Dover market. This same market existed when the Bloomsbury site was occupied. When the Bloomsbury housewife wanted jugs for water or other liquids, she would naturally have gone to the "sale," as we call it, probably in nearby Smyrna.

During my own childhood, we ate from a mixture of blue willow china that is today considered a collection of valuable antiques. When we children broke a few pieces, my mother would buy replacements from the many second-hand dealers who regularly set up at the sale. It was not unusual for us to eat our breakfast cereal from bowls that were a half-century old, just as the bellarmine jugs were about that old at Bloomsbury.

We found another clue to market activity at Bloomsbury. Aside from nails and a few parts of implements that probably were in use at the time the house was abandoned, all the ferrous scrap on the site was cast iron. No substantial amount of wrought iron was present,



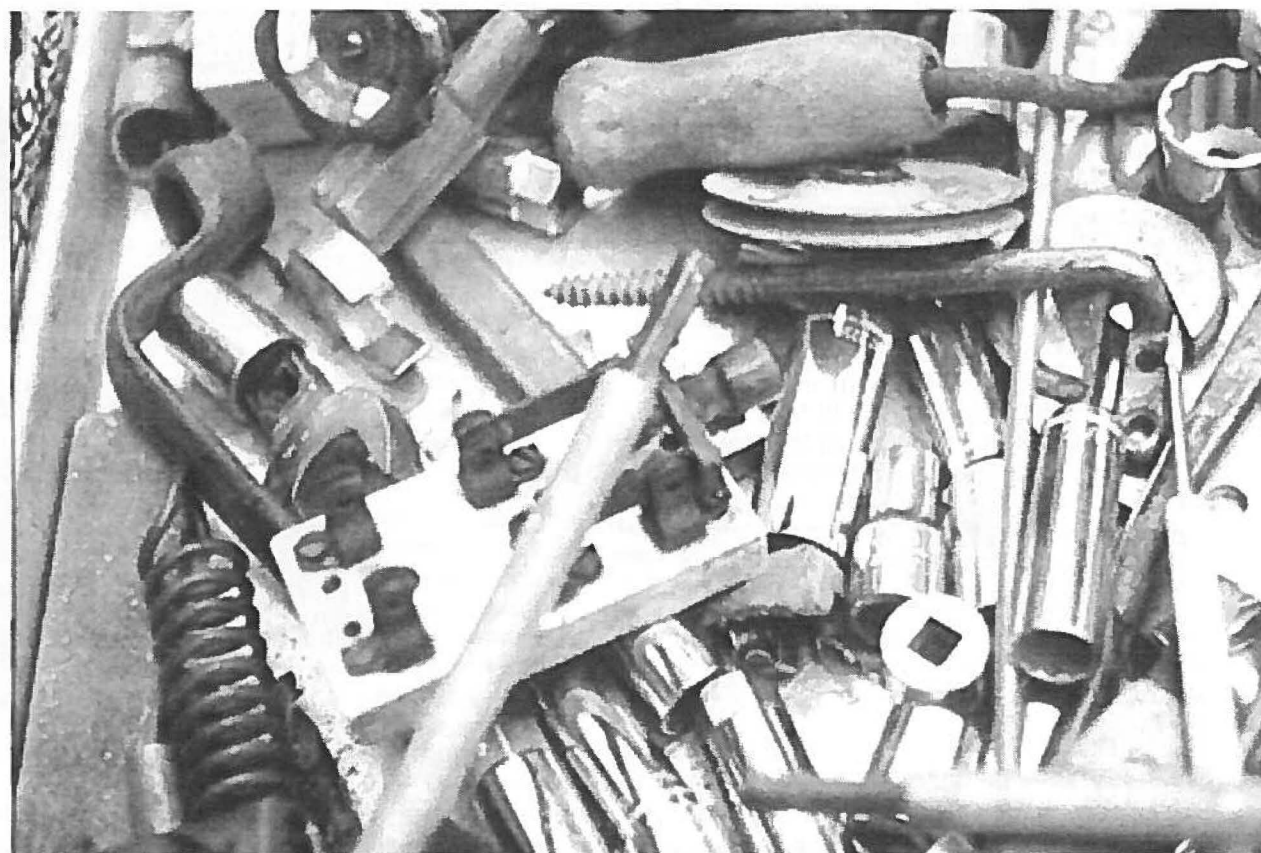


Figure 4: This is a typical "box lot" of tools offered for sale at the twice-weekly auction in Dover. The socket wrenches could be brand-new. The electrical switch is fifty or more years out of date, and the wooden handled tool at top is decidedly pre-war. If these items were excavated in an archaeological context, the context might be assigned bracket dates of 1920-2000, when in fact this picture was taken in 2002 at Spence's Bazaar in Dover. The tools probably will remain in use, or at least in a shop environment, for decades to come.

although there were pieces of at least three cast iron pots scattered about the site.

Cast iron had no value on the local market, because it could be re-used only in a furnace or foundry, neither of which existed in the central Delaware market area. On the other hand, any piece of wrought iron could be converted into useful tools by a blacksmith or a farmer with a forge. Nearly every estate inventory of the period includes a quantity of scrap iron, to which a value was assigned.

Even in my grandfather's day, in downtown Dover, the local metal dealer would take scrap in exchange for new metal. As a child, it was my job to knock the brass bushings out of old iron fittings. My grandfather would exchange brass for new metal shapes from the yard a block away. Brass was money, but any metal could be exchanged. My grandfather could exchange clean cast iron as well, which

was not the case during the eighteenth century when the nearest foundry was sixty miles away overland.

A frugal farmer, in an economy where cash was almost nonexistent, could appreciate the real value of an old jug that still held water, or a worn-out tool that contained reusable metal.

While our farmer might stretch the family budget to assemble a nearly matching tea set from offerings at the sale, the intrinsic value of household utensils was their survival value for their owners. When the neck broke off the old stoneware jug, its bottom half could still serve many years as a ladle or basin.

But do these behaviors indicate poverty? It could be argued that a very long date range is a marker for poverty. Clearly, second-hand goods will find their way down the

economic ladder. I recall one plantation site in Virginia where the Chinese Export Porcelain was found in the trash of the slave quarters and not in the big house. When the old stuff went out of fashion, it went to the quarters.

We must remember that we are looking at these artifacts from the perspective of a society where last year's shoes simply cannot be worn in public, or last year's car has lost much of its value by the mere act of being a year old.

Instead, I submit, the sum of the evidence at Bloomsbury, from the creamware, to the stoneware jugs, to the lack of wrought iron, reflects the recycling mentality of a society where goods were constantly being re-sold until they retained absolutely no utility whatever. Then, as now, the regular town sale day offered a quick and easy way to exchange goods and meet consumer demand without resorting to outside sources of supply. It was, and is, a market in which all classes of society participated on a relatively level playing field that characterizes a barter economy in which goods are valued according to usefulness and not according to arbitrary money prices set by the world market.

Bloomsbury has demonstrated that eighteenth-century consumer behavior cannot be evaluated by twenty-first century perceptions of value, duration of usefulness, and style. Still, I wouldn't advise tearing up a Strawberry Shortcake bed sheet to make scrub rags.



Figure 5: When was the last time you needed a puncture-type ("church key") bottle/can opener? Do you still have a bottle opener mounted on the wall of your kitchen? How often do you store things in cigar boxes? This display of useful items was on sale by a vendor at Spence's Bazaar in Dover during the summer of 2002. It is doubtful that anything in the picture is newer than 15 years old, and much of it probably is more than 25 years old.

## More than just bricks

Edward F. Heite  
Heite Consulting\*

Traditional excavation reports of brick clamps have generally been purely descriptive, at best treating brickmaking sites as illustrations of the history of technology. Throughout the history of American archaeology, bricks and brickmaking sites have been treated as a poor relation, marginally able to provide a tiny bit of information that might -- just might -- be useful to someone yet unidentified, perhaps an architectural historian.

It is a mistake to presume that the data from a brick clamp site is of no interest except to historical architects, who might not be interested anyway. Beyond the "gee-whiz" aspects, brickmaking sites have substantially contributed to archaeological literature mainly because they have produced large holes. The massive structure of a Virginia great house, Rosewell, required a huge amount of clay for bricks, which in turn caused a huge hole, which in turn was filled with trash, which in turn was excavated by Ivor Noël Hume. But what of the bricks made from the clay that came from the hole in the first instance?

The obvious answer usually is clear as the nose on your face. For every isolated country brick clamp, there should be a brick house, or a brick church, or some other big consumer of finished bricks. But let us look again at that process of selecting and using bricks. A clamp was a temporary kiln, built for a specific project, and fired with cordwood near the construction site. Without the sophisticated controls of a permanent kiln, clamp-fired bricks are likely to display a wide range of firing temperatures, with a large number of waste bricks.

Once the bricks were burnt and ready to be used, the bricklayer went through the supply and picked out special bricks for special purposes. For the more public faces of the building, the best-looking products would be selected. In earlier times, the bricklayer would choose some of the dark-glazed bricks that had been very close to the fire. These would be arranged in patterns for decorative effect. Later,

as fashion changed, all the bricks on the facade would be plain and uniform, without any glazing whatever. For back and side walls, some spotty glazed bricks were allowed, as long as they were firm and not distorted. Inside walls might be built of underfired bricks uniform in size but not hard enough to withstand weathering.

Such soft, underfired bricks also were used for nogging the walls of frame houses. The building of a nogged house would have little use for hard, weatherproof bricks from a clamp. It is regrettable that architectural historians and archaeologists have not examined the sources for brick nogging. Did soft brick nogging come from clamps or even permanent kilns that were primarily built for the construction of brick houses?

The answer is that we don't know because we haven't looked.

The hit or miss nature of temporary clamp firing produced a wide range of bricks, some of which were not fit to be used in the customer's house or church. The under fired, over fired, warped, cracked, and discolored bricks would simply be left there. The brickmaking site would eventually be reclaimed



Figure 1: Loockerman Hall



Figure 2: Churchmans Meadow brickbats

by nature.

But nature wasn't the only force acting upon abandoned brickmaking sites. A few years ago, we were digging the site of the house built by a poor black farmer on eleven acres that had been part of the Loockerman Hall estate. Nathan Williams, the site owner, left very few material goods on the site, but we did find his bricks. Every brick from the Nathan Williams house site was somehow defective, clearly a reject or a waster, from a clamp. We did not need to look far.

The bricks were identical in size and

color to the bricks in Loockerman Hall, less than a mile away.

By the time Nathan Williams built his house, about 1840, there were commercial brickyards in the area, but obviously the young black man went to another source: the Loockerman Hall brick clamp, abandoned fifty years earlier.

Nathan Williams evidently got his brick from the same clamp that produced the bricks for Loockerman Hall, built around 1790 (figure 1), now on the campus of Delaware State University. Notice that bricks on the side wall are uniform, while random glazed bricks were permitted on the back wall, part of which is seen at the left in figure 1.

Clearly Nathan Williams was a scrounger. He took advantage of a local resource, and probably didn't have to pay anyone anything for the bricks to build his chimney. Was this an isolated case, or did salvaged bricks from abandoned clamps fill a significant niche in the lower levels of the economy?

Part of our answer came in 2002 at another site, near the village of Christiana in



Figure 3: Strata cut, Churchmans Meadow

\* Prepared for presentation at the Eastern States Archaeological Federation November 2002





Figure 4: Corbit-Sharp House

Homes of the wealthy were built with special attention to the quality and, especially, the color of the face bricks. Selection for a house like this, the Corbit-Sharp House in Odessa, Delaware, would have caused many otherwise useful bricks to be rejected or relegated to less visible uses.

New Castle County, Delaware. While conducting a Phase II survey on a nineteenth-century farmstead site, we discovered the characteristic scatter of unmortared brick fragments, ranging from over fired to under fired. Because there wasn't much else, the SHPO mandated a Phase III dig on the supposed brick clamp site, which clearly was older than any other feature on the property today.

Brickbats at Churchmans Meadow were found only in a small area, but none of them would have been acceptable.

Even the ordinary home of a prosperous farmer would require several clamps of brick for the house and its outbuildings. In figure 5 we see a typical Delaware farm complex near the town of Frederica, for which the bricks almost certainly were made on the property. All those outbuildings, erected at various times, required brick foundations. And where did they get the brick?

Although we were looking forward to digging a brick clamp, we found something much more interesting. We quickly identified a clay pit, and recovered a large collection of over-fired brick bats.

But the clamp was completely gone. And so were all the useful bricks. What we found was a collection of tiny, useless fragments, not one of which was a full half-brick in size. Clearly this clamp site had not been



Figure 5: Farm complex near Frederica

merely abandoned. Instead it was mined for any useful bricks that might have been left.

The archaeological record tells a story. At the bottom of the clay pits, we found a deep layer of earth the same color as the plowzone. Overlying this layer was a dense blanket of brick waste, most underfired. Above the brick waste, we found a layer of soil that included the plowzone, of the same color as the soil found below.

A short distance away we found a pile of brickbats, lying as if they had been discarded during some operation. Not a single one of these brick bats was a whole half brick; that is to say, they were worthless.

As we reconstruct the site history, the

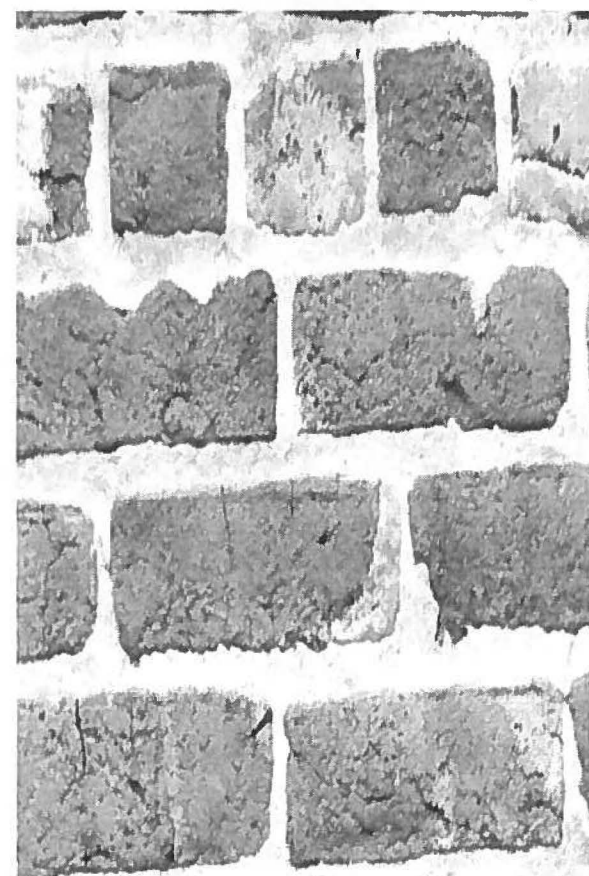


Figure 6: Thomas Chapel

The bricklayer who built Thomas Chapel, west of Dover, early in the nineteenth century, used bricks burnt on the site. This is a detail of the east wall, very near the facade. Only the facade bricks were selected for their smoothness and lack of glaze, but all the bricks in the exterior of the chapel have stood up well against the weather.

bricks for a nearby house were burnt here and the brickmaking site was abandoned. People scavenged whatever brick were useful until finally the owner decided the site should be cleaned up and reclaimed for agriculture. I'd venture a guess that the workmen were paid, at least in part, with whatever bricks they could salvage. In any case, they didn't leave any useable bricks lying around, but they did clean up the site and fill the holes with topsoil.

Unfortunately, our mandate did not extend to examining the homes of the less affluent residents of the neighborhood. Undoubtedly we would be rewarded with evidence that the unknown residents along the Christiana Turnpike were building their chimneys with bricks salvaged from this particular clamp.

These exercises demonstrate the importance of looking closely at the commonplace, and allowing the sites to speak for themselves. Clearly the presence of a robbed-out brick clamp should trigger a broader survey of the community's use of its products at all layers of society. Unfortunately, in American archaeology there are few examples in the literature to cite as models.

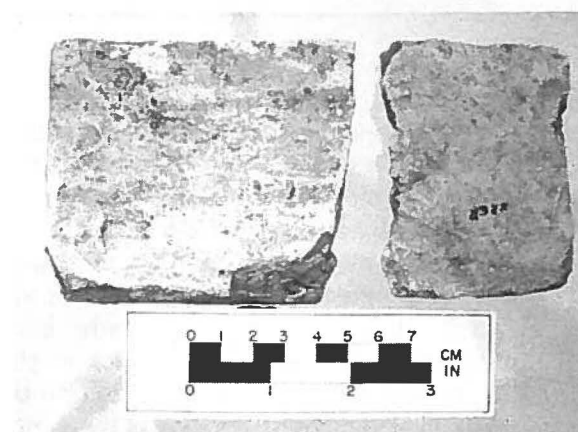


Figure 7: Dutch brick from Fort Casimir  
Early in the colonial period, bricks were imported for military purposes. These specimens of yellow Dutch brick were found in the ruins of the 1651 Fort Casimir, in the present town of New Castle, Delaware. Because they were imported from Albany and possibly from the Netherlands, the only yellow Dutch brick we find are complete, marketable specimens. Within a few years, the settlers established a brick yard that continued to mine the local clay until late in the twentieth century.

## Brick References

Cox, Alan

1979 *Survey of Bedfordshire: Brickmaking, A History and Gazetteer*. Bedfordshire County Planning Department, Bedford, England

Gurcke, Karl

1987 *Bricks and Brickmaking: A Handbook for Historical Archaeology*. University of Idaho Press.

Heite, Edward F.

1973 Several Virginia Brick Clamps: A Summary of Brickmaking. *Quarterly Bulletin Archeological Society of Virginia*, 28(1): 48-55.

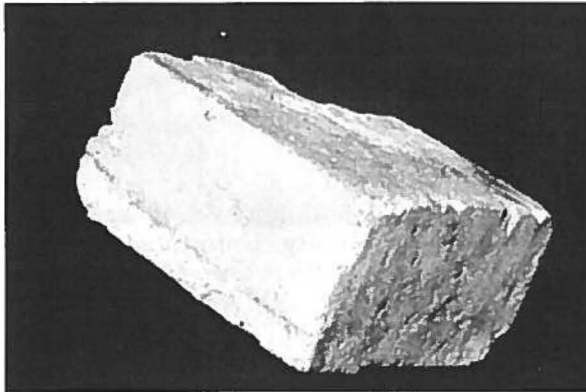


Figure 8: Brick from vault at Lingo Point

During the later years of the eighteenth century, fashionable builders were very careful to fire and select some bricks for use as face brick on uniform facades. In any kiln of that period, a few bricks would be exposed to the flames and thereby glazed. This brick was found in a burial vault structure that was made entirely of unglazed face bricks. The brick is glazed on both large faces and partly glazed on both long edges. Given the technology of the period, there is no place in a brick clamp where a brick would be exposed to a glazing fire on both faces in a single firing. The obvious conclusion was that this was a sacrificial brick, which went through two firings in the fire channel, where it protected the bricks behind from glazing. Unmarketable as a face brick, this specimen apparently was included in the lot dispatched to a remote farm site for the purpose of bricking up a grave. Have we examined the brickwork we encounter in cemeteries? Was there an aftermarket in bricks for bricking up graves?

Jones, Tim

1995 *Wall Building Technical Brief: Brick Clamps*. German Appropriate Technology Exchange, Eschborn, Germany.

Wingfield, Derek M., Michael D. Richmond, and Henry S. McKelway

2000 *Archaeological remains of a mid nineteenth century brick clamp: A first look at brick clamps in Kentucky*. Cultural Resource Analysts, Inc.



Figure 9: Indian River Hundred

Brick nogging in the walls of frame houses did not need to withstand the rigors of weather, so they were a ready market for low-fired brick, like this house in Indian River Hundred. How many brick clamps were scavenged for nogging? This house required well fired brick only for the chimney and for the piers underneath, so the nogging brick must have come from a kiln or clamp where the quality brick were diverted to another building. The chimney, shown in the upper picture, clearly is made of waste bricks, many of which have perished on exposure.



# Contents

The 1659 Dutch fort on Pilottown Road:  
Zwaanendael map re-evaluated

Marshall Joseph Becker .....1

From farm to city:  
Thesis work on the George Read House  
and Gardens and Mount Cuba

Carin Bloom and Lu Ann De Cunzo.....7

Kinship, inheritance  
and landscape at Mount Cuba

Jason B. Smith..... 11

Post-mortuary activities  
at Cathedral Cemetery

Andrew J. Stanzaski ..... 18

Flea market archaeology:  
A new look at artifact dating, consumer  
behavior, and flea markets, with reminiscences  
of Delaware traditional recycling practices

Edward F. Heite .....23

More than just bricks

Edward F. Heite .....28

**Archaeological Society of Delaware**  
**P O Box 12483**  
**Wilmington, Delaware 19850-12483**

**Member, Eastern States Archaeological Federation**