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New Philadelphia Pedestrian Survey: Phase I Investigations at an Historic Town Site

ABSTRACT

The authors directed an initial archaeological survey of the New Philadelphia town site in 2002 to 2003. This pedestrian survey and related database work using Geographic Information Systems (GIS) computer software yielded detailed distribution maps of over 7,000 artifacts, and identified a large concentration of artifacts within the north-central part of the town site. These artifacts consisted mostly of nails, ceramics, and bottle glass, indicating that many of the town lots served primarily domestic and residential purposes, rather than craft or industrial functions. Material remains of some of the town's businesses, such as a blacksmith operation, were also present. The methods used in this Phase I project, which combined basic pedestrian surveying techniques with sophisticated database and mapping programs, provided a highly valuable baseline for designing and undertaking later geophysical surveys and full excavations of residential and business locations within the town site.

Introduction

The historic town of New Philadelphia, located in Pike County, Illinois, was founded in 1836 by "Free Frank" McWorter, and is the first known town planned and legally registered by an African American. The town was platted with 144 lots, each measuring 60 × 120 ft., and was situated in a prime agricultural area that attracted both African American and European American settlers. New Philadelphia prospered during the mid-19th century; a grocery was established in 1839, and by 1850 the town boasted a post office, stage coach stand, blacksmith shop, and wheelwright, along with two shoemakers and two cabinet makers. New Philadelphia experienced its greatest growth in the 1860s, but began to decline after 1869, when bypassed by the railroad. Merchants relocated to areas served by the railroads, and the decline of New Philadelphia as a market center hastened population decrease. The community's

legal status as a town was vacated in 1885 (Walker 1983:164–169).

Today, most of the land that originally comprised the town has returned to agricultural use, with only a few foundations, a gravel road, and an historic marker to indicate its location (Figure 1). In 1996, community leaders in Pike County formed the New Philadelphia Association to preserve and commemorate the site of Free Frank's enterprise, as well as the social history of the many families who lived in this integrated town. Without evidence of extant resources at the site, however, it was difficult to raise awareness and bring the necessary resources to bear in order to put New Philadelphia back on the map. To this end, the Association, working with the University of Illinois at Springfield, the University of Maryland, and the Illinois State Museum, organized a pedestrian survey of the town to examine more fully the development of this integrated community on the western



FIGURE 1. THE 1836 TOWN PLAT FOR NEW PHILADELPHIA IS SHOWN OVERLAIN ON A 1998 U.S. GEOLOGICAL SURVEY AERIAL PHOTOGRAPH OF THE PRESENT-DAY LANDSCAPE. STRUCTURES REMAINING WITHIN THE TOWN SITE INCLUDE A FEW REMNANT FOUNDATIONS (*top center*) AND A HOUSE WITH OUTBUILDINGS (*bottom center*). (HISTORIC TOWN PLAT COURTESY OF LIKES LAND SURVEYORS, BARRY, IL, 2002; IMAGE BY AUTHORS, 2009.)

frontier. Archaeologists and volunteers from local colleges and universities and the surrounding community conducted a pedestrian survey and controlled surface collection of the 42 ac. site in the late fall of 2002 and early spring of 2003.

The Pedestrian Survey of New Philadelphia

Pedestrian surveys are designed to delineate archaeological properties, identify cultural affiliations, and determine a site's research potential, and are particularly useful for assessing large land tracts where widespread subsurface testing is not practical. At the 42 ac. New Philadelphia site, this survey method was selected so that artifacts could be located within a predetermined timeframe: three long weekends during the fall of 2002 and spring of 2003. The project provided a baseline determination of the presence of archaeological resources at the site and identified areas of high potential for subsequent investigations.

Before starting the survey, the project area was plowed and disked (using 10 in. disks) in order to break up crop roots and sod. This generally provided greater than 75% ground visibility over the majority of the plowed areas. Subsequent precipitation and weathering of the site greatly improved artifact visibility and translated into nearly optimal survey conditions. An area of 26.5 ac.—approximately 63% of the 42 ac. site—was plowed (Figure 2).

Two large areas within the New Philadelphia site were necessarily excluded from the survey. A 2.25 ac. area near some remnant foundations and reconstructed buildings had never been plowed and contained protected native prairie grasses (Figure 2 top center)—avoiding plowing this area ensured that any stratified deposits would be preserved. Also, a 3.75 ac. area for which one owner did not provide permission for the survey was not disturbed (Figure 2 left side of bottom-right quadrant). A total of 9.5 ac. were not plowed due to terracing for soil conservation, tree cover, roads, or water features. Additionally, early spring field conditions prevented a small section of the site from being disked; instead, this area was prepared using a harrow prior to the pedestrian survey.

The first step in the survey process involved a floating baseline pedestrian survey using teams of volunteers along with archaeologists. The survey

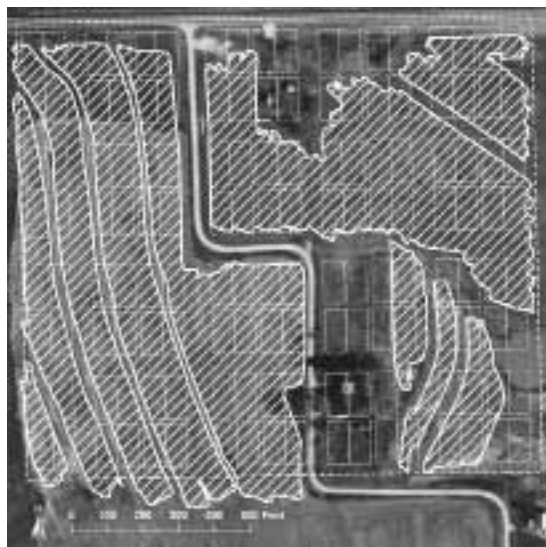


FIGURE 2. THE PEDESTRIAN SURVEY ENCOMPASSED THE HIGHLIGHTED AREAS OUTLINED WITHIN THE TOWN BOUNDARIES—APPROXIMATELY 26.5 AC. (IMAGE BY AUTHORS, 2009.)

team systematically walked over the survey area in transects, marking each visible historic or pre-historic artifact on the ground surface with a flag. The process was repeated until the entire 26.5 ac. project area had been examined.

After all artifacts had been marked, the flagged artifacts were collected by teams of archaeologists and volunteers. The attributes of each artifact were recorded on a log sheet, and each object was assigned a unique provenience identifier. The flag marking the collected artifact was also marked with this unique provenience number.

Artifact Location Survey

In coordination with the pedestrian survey and artifact collection, a survey of the spatial location of each artifact was performed. To establish provenience for artifacts collected, a site-specific 10,000 × 10,000 ft. grid was defined for the site using the land survey data and markers previously established. A primary control point was established at the northwest corner of Block 13, Lot 4 (designated 5000N, 5000E), and a secondary control point was established at the southwest corner of Block 8, Lot 5 (5080N, 5000E). Using these controls, a site grid oriented to the historic town block and lot layout was

established. Additional control points were set up as required by lines of sight to target locations.

With a system of control for the site established, targets were surveyed sequentially using an electronic total station (Sokkia SET500), and each target's spatial location was recorded with an electronic data recorder (Sokkia SDR 8100). For example, an artifact location recorded at 5200N, 5010E would define an artifact 200 ft. north and 10 ft. east of the primary control point. The site-specific spatial location information was annotated with the artifact's unique provenience identification (ID) assigned by the artifact collection teams. These data were then downloaded from the data recorder to a laptop computer for in-the-field accuracy and completeness checking, and then translation to, and analysis by ESRI's ArcGIS geographic information system software.

Attribute Data Entry

Parallel with the artifact location survey, the attribute information logged by the artifact collection teams was entered into a Microsoft Access relational database, recording each unique artifact provenience ID, preliminary artifact identification, collection date, and collection team members. The field log data was then "normalized" to create basic continuity among the collection teams' records. This included spell-checking all records and adding a primary category tag where necessary (for example, ceramic, glass, metal, etc.). The site-specific spatial location of each artifact was then entered from the spatial survey data, and a unique spatial-location-to-attribute tag was generated from these data for each artifact, to facilitate the linking of spatial information within the GIS to the attribute database.

With the spatial location and artifact characteristics recorded, a translation (world) file was created to map the site-specific grid coordinates to "real-world," Universal Transverse Mercator (UTM) coordinates and allow co-registration of site aerial photographs (digital orthophotos), the historic town plat, and artifact locations. The spatial data acquired from the field survey were generated as a layer within the GIS and linked to the attribute database. Using this attribute-to-location linkage, preliminary queries of the data were performed, and a preliminary categorization of artifact types was created and visualized.

Laboratory Methodology

Over 7,000 artifacts were recovered from the New Philadelphia town site during the pedestrian survey, including over 5,900 historic period artifacts. Three basic steps were followed: artifact preparation, historic artifact cataloging, and delineation of the catalog assemblages. Museum staff and volunteers in cooperation with faculty and staff from the University of Illinois at Springfield, analyzed the faunal and prehistoric assemblages. Artifact analysis of historic period artifacts was performed by arGIS Consultants of Bethesda, Maryland.

All recovered artifacts were processed by the Illinois State Museum (ISM) staff and volunteers under the guidance of Terrance J. Martin. Processing of the artifacts was designed to prepare them for analysis and permanent storage, and followed standard museum collection protocols. Under the guidance of Lynn Fisher of the University of Illinois, the prehistoric artifact assemblage was cataloged, and Terrance Martin of ISM cataloged the faunal materials.

Historic Assemblage Cataloging

All historic artifacts were identified, classified, and cataloged according to the accepted National Park Service (NPS) protocols and typology set forth in the *Museum Handbook, Part II* (NPS 2000) using the coding structure under the Automated National Cataloging System (ANCS+). Artifacts, photographs, field notes, and other documentary data are stored at the Illinois State Museum in Springfield, Illinois.

Under the NPS protocol, each historic artifact was cataloged by recording unique identification and descriptive information. This included recording the provenience number which uniquely identifies each artifact and links it to its spatial location within the town tract, an object name, quantity, manufacturing dates when determinable, and descriptive codes enumerating materials, manufacturing techniques, decorative elements, colors, and part characteristics of each artifact. Makers' marks were noted where present, and comments were also recorded when elaboration was required beyond predefined codes.

For datable ceramics, manufacturing beginning and end dates were assigned using standard

reference materials. These standard date ranges were interpreted by the cataloger in certain instances when datable characteristics overlapped. Typically the tighter date range was used, so the later *terminus post quem* (TPQ) and the earlier *terminus ante quem* (TAQ) were applied. Some date ranges, however, are “open ended,” as is the case when a ceramic type is still in use. For these cases, a TAQ of 1940 was applied, as the latest date of occupation of the town was ca. 1940. A *median* manufacture date for each datable ceramic artifact was also recorded in the database where a reference date was available. A *mean* manufacture date was calculated and entered using the average of the TPQ and TAQ when a median date was not available (for example, undecorated whiteware would have a mean date of 1880, based on a TPQ of 1820 and a TAQ of 1940). The weighted average, mean ceramic date (MCD) (South 1977) for the site and each block, lot or other section of the town was then calculated using the formula below:

As ceramics may of course be used and discarded beyond their MCD, or even their referenced TAQ, the exact dating of blocks and lots within the town site is not possible based on these artifact dates. Also, these dates are based on sherd counts rather than vessel counts, and sample sizes for individual blocks and lots are fairly small, so sizeable distortions are possible. Therefore, for this survey these dates were considered only as a relative dating tool to assist in the determination of areas in which further detailed investigations were warranted.

Visualization and Analysis

The detailed classification of each artifact was entered into the relational database. Once these data were linked to the GIS, each artifact was correlated to the town plat, coded as to block and lot (04:1) or street designator (ST:) if not within an historic block. If an artifact was in a block, but within one of the alleys and not a specific lot, it was coded simply with the block

number (04:). As a few of the collected historic artifacts were outside the town boundaries, they were coded as OUT (OU:). The spatially linked data were visualized, and queries performed to ascertain areas of interest.

As previously discussed, the pedestrian survey’s focus was limited to determination of the presence of archaeological resources and identification of particular artifact concentrations. Because of the limitations of this survey methodology—stratigraphy is lost due to plowing—in-depth landscape and artifact-assemblage analyses were not undertaken. Each cataloged artifact was assigned, where possible, to a single “functional” category, however. Functional categories utilized in artifact analysis include architectural, domestic, kitchen, and personal. As Shackel notes later in this volume, functional categorization can be problematic, and present-day assemblage analysis has striven to “move beyond functional and systems approaches.” For the pedestrian survey, however, such simple categorization was deemed appropriate, as it might help identify activity areas and permit assumptions about landscape use to be made (domestic versus industrial, for example). Visualization of such activity areas can also inform the development of future research questions and help focus Phase II field investigations.

Artifacts in the architectural category include nails, structural spikes, brick, mortar, roofing slate, flat glass, and door or window hinges (Figure 3). Kitchen artifacts included all objects related to the storage, serving, or preparation of food and beverages, such as glass and ceramic vessels, serving and eating utensils, etc. (Figure 4). Personal artifacts include clothing-related items such as buttons or buckles, as well as coins, sewing-related items, tobacco pipes, etc. (Figure 5). The domestic category functioned as a set which distinguishes household-related items that do not easily fit into either the kitchen or architectural categories, such as clothing items, or containers that cannot be identified as to type (Figure 6). As several doll parts and other

$$\text{MCD} = \frac{\sum_{i=1}^n (d_i f_i)}{\sum_{i=1}^n f_i} \quad \left| \quad \begin{array}{l} \text{where } d_i = \text{median manufacture date of ceramic type } i, \\ f_i = \text{frequency of ceramic type } i, \\ \text{for } n \text{ ceramic types in the area of analysis.} \end{array} \right.$$

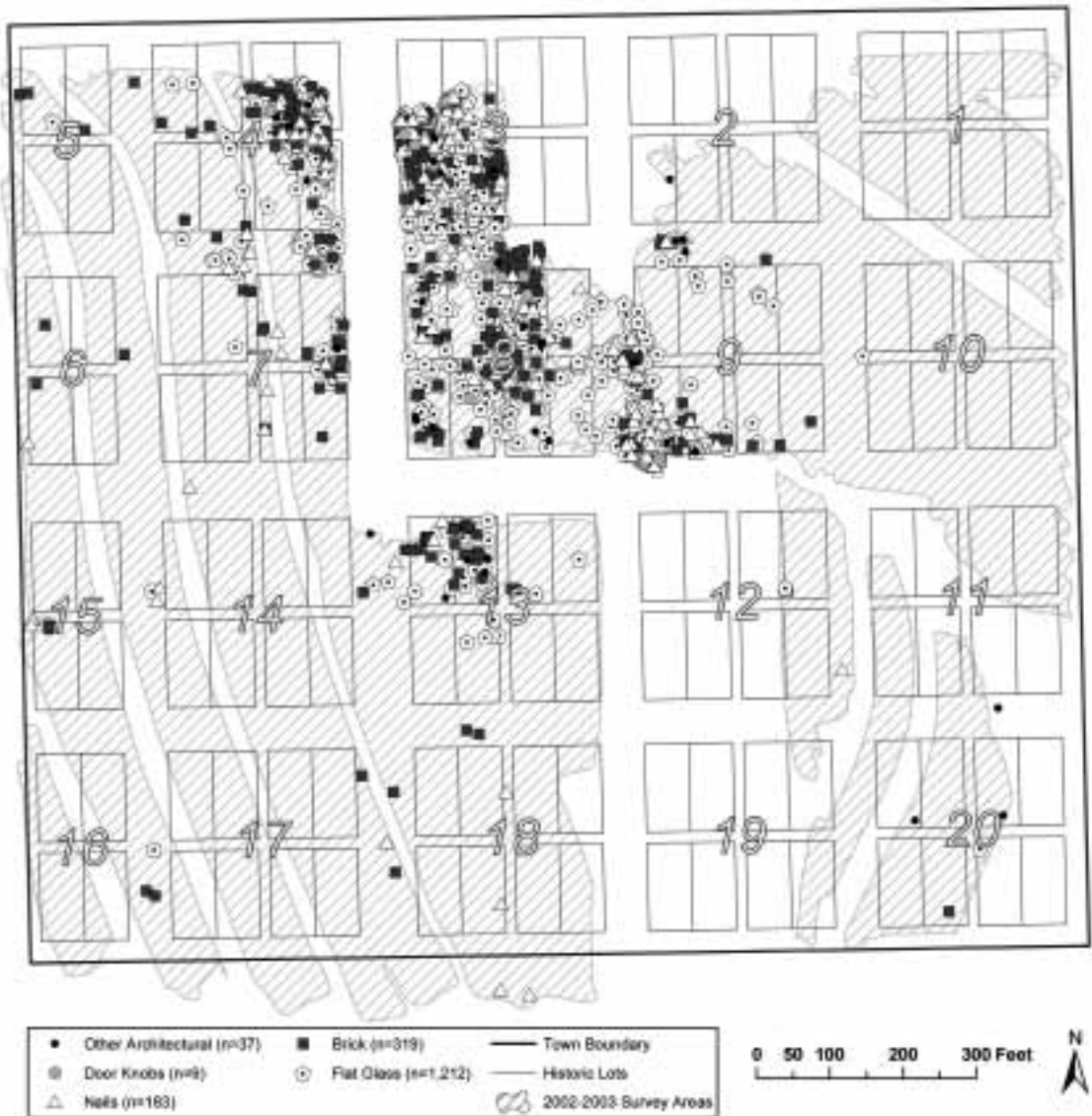


FIGURE 3. ARCHITECTURAL MATERIAL DISTRIBUTION OVER THE TOWN SITE INCLUDED DOORKNOBS, NAILS, STRUCTURAL SPIKES, BRICK, FLAT GLASS, AND OTHER MATERIALS. (IMAGE BY AUTHORS, 2009.)

toy artifacts were recovered, this category of personal items is listed separately in the results (Figure 7).

Methodological Limitations

As noted, the New Philadelphia pedestrian survey was designed to optimize the use of time, funding, and personnel. The success of the survey relied greatly on the participation

of volunteers, primarily composed of students from local colleges and universities, as well as local citizens. For this reason, the survey was conducted over three long weekends: 11–14 October and 8–10 November 2002, and 14–16 March 2003.

A number of biases inherent in this survey process must be noted, as they could affect the overall results of the survey. Field conditions varied from weekend to weekend as the



FIGURE 4. THE DISTRIBUTION OF KITCHEN ARTIFACTS IN THE SURVEY AREA. (IMAGE BY AUTHORS, 2009.)

amount of precipitation fluctuated. Due to the extraordinary number of artifacts recovered at the site, the survey could not be completed within the original October to November timeframe contemplated, and therefore the last segment of the survey had to be completed in the early spring of 2003. This permitted the final survey segment to weather four additional months. Moreover, the first segment of the survey was completed during daylight saving time, so the

light quality changed somewhat over the three survey weekends. Both of these factors may have affected general artifact visibility, and also made certain artifacts, such as nails or other small ferrous materials, less visible. Another bias was imposed by variability in the archaeological expertise and experience of the volunteers. Less-experienced volunteers did not always recognize certain objects as artifacts, a factor which may potentially minimize the

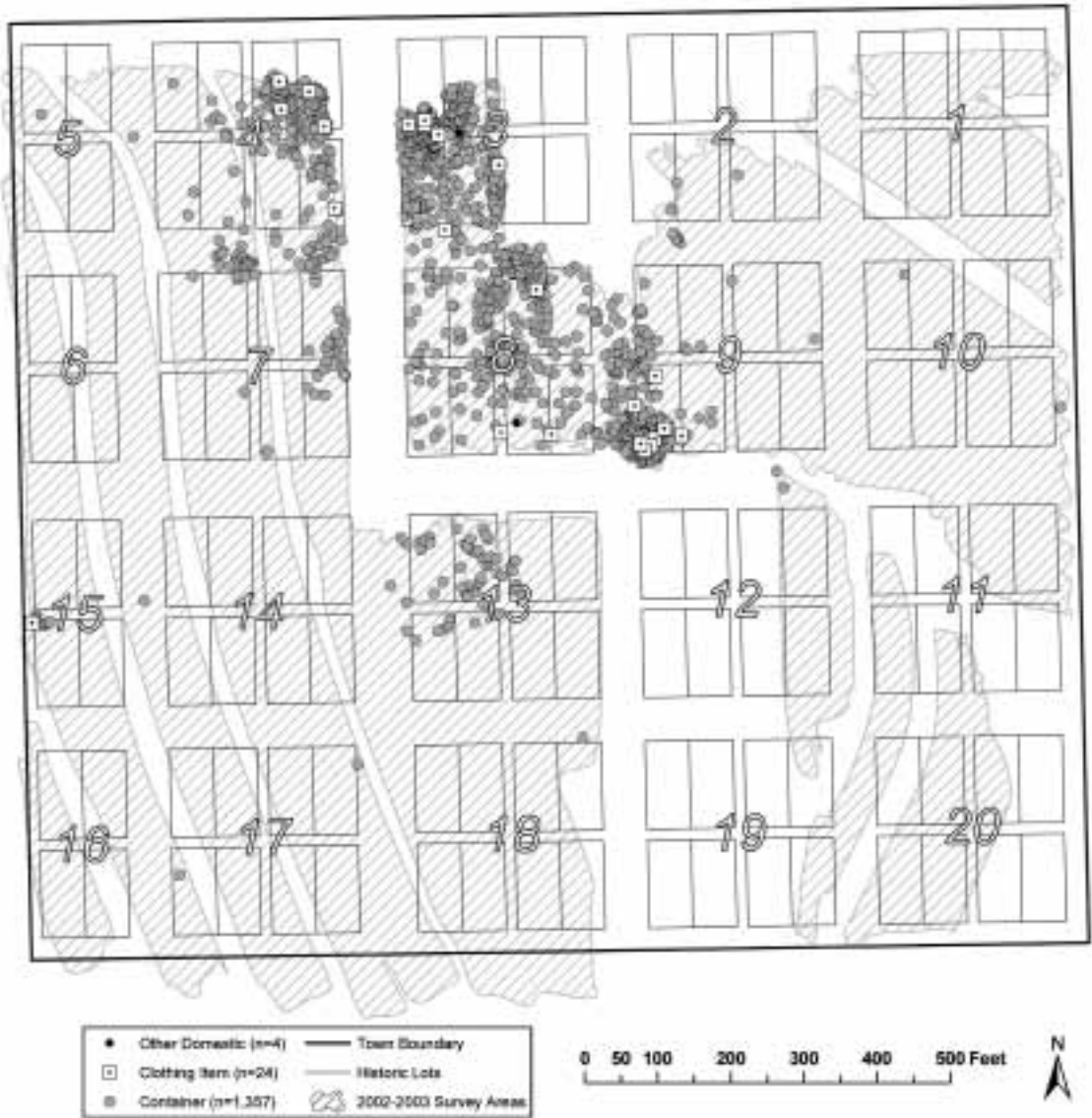


FIGURE 6. DOMESTIC MATERIALS MAPPED IN RELATION TO THE TOWN BLOCKS AND LOTS. (IMAGE BY AUTHORS, 2009.)

Results

The project recovered 7,073 historic and prehistoric artifacts, which were identified, collected, and mapped during the 10-day survey. Of these, 5,932 artifacts (including 43 faunal items) were considered historic, and the balance comprised prehistoric or non-cultural material. The distributions of historic and prehistoric materials are shown in Figures 8 and 9.

Categories of Historic Materials Recovered

Among the many different kinds of artifacts flagged, collected, and surveyed were domestic materials such as broken glassware and ceramics, architectural debris such as brick fragments and nails, as well as lithic tools and debitage. While artifacts were scattered throughout the project area, a number of very dense historic

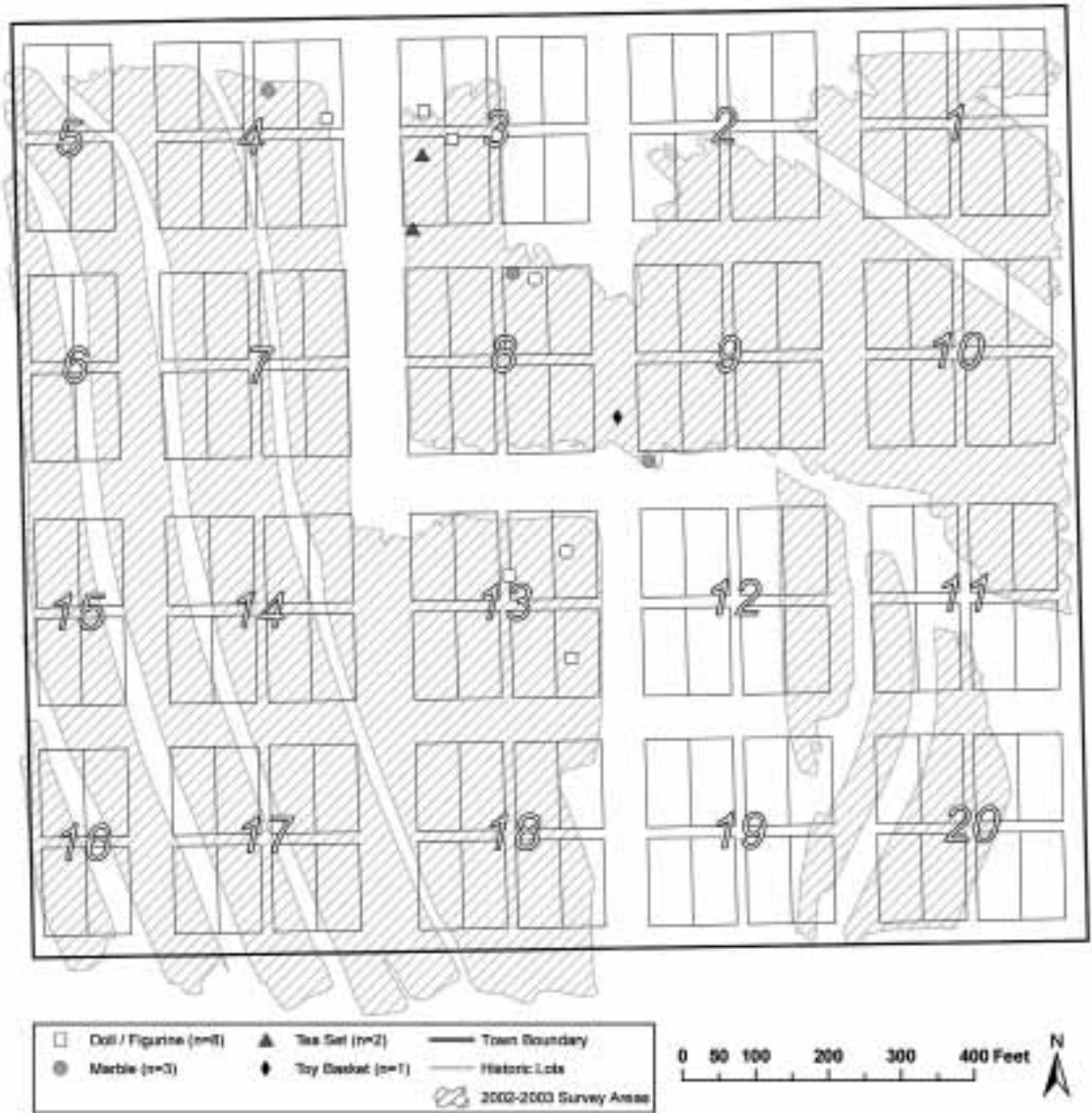


FIGURE 7. THE DISTRIBUTION OF TOY AND DOLL PARTS MAPPED ON THE TOWN SITE. (IMAGE BY AUTHORS, 2009.)

deposits were identified. Table 1 details the types of historic materials collected.

Determining Relative Dating of the Artifact Assemblage

Of the historic artifacts cataloged, 2,084 (35.1%) were datable. As noted, for ceramic types still in use, for purposes of analysis a TAQ of 1940 was assigned. Using standard

reference sources (Ramsay 1939; South 1977; Sussman 1977; Noel-Hume 1980; Oswald 1982; Jones and Sullivan 1985; Zilmer 1987; Conroy 1998; Stelle 2001), date ranges were assigned where possible, and a mean ceramic date (MCD) was calculated (Table 2). Dates were also assigned to other materials where possible, such as one-piece flat buttons, specific types of container glass, and so on.

From these data, a weighted mean date

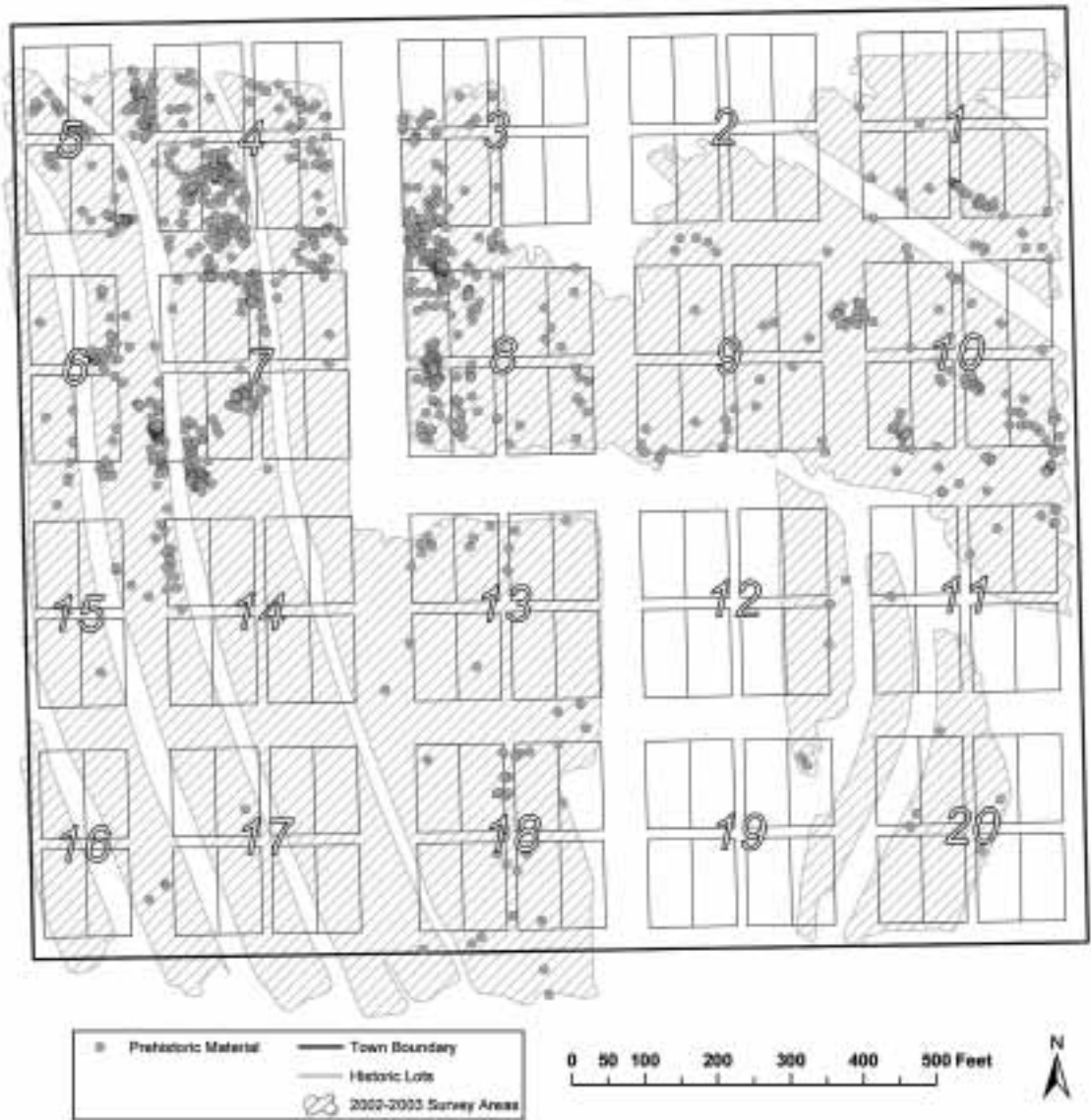


FIGURE 8. PREHISTORIC MATERIAL DISTRIBUTION IS MAPPED ON THE NEW PHILADELPHIA TOWN PLAT. DIAGNOSTIC ARTIFACTS FROM THE PREHISTORIC ASSEMBLAGE DATE FROM THE EARLY TO MIDDLE ARCHAIC ERA. (IMAGE BY AUTHORS, 2009.)

of 1870 was calculated for the town. This weighted mean is skewed toward later dates, however, because of the preponderance of open-ended, undecorated whitewares in the sample. If datable materials with open-ended MCDs are discounted, the site's mean date is 1862. This may be correlated with historical land records for a reasonable estimate of the site's peak occupation period. A summary of mean dates by block and lot, based on pre-1880 materials

is provided in Table 3 to show the relative dating of blocks and lots based on artifacts recovered in the pedestrian survey.

Dating of individual lots given such a small sample of datable materials is highly problematic, of course. Therefore, the dates for both lots and blocks were considered an indicator of the relative dates of occupation, that is, which lots may have been occupied first during the town's settlement period.

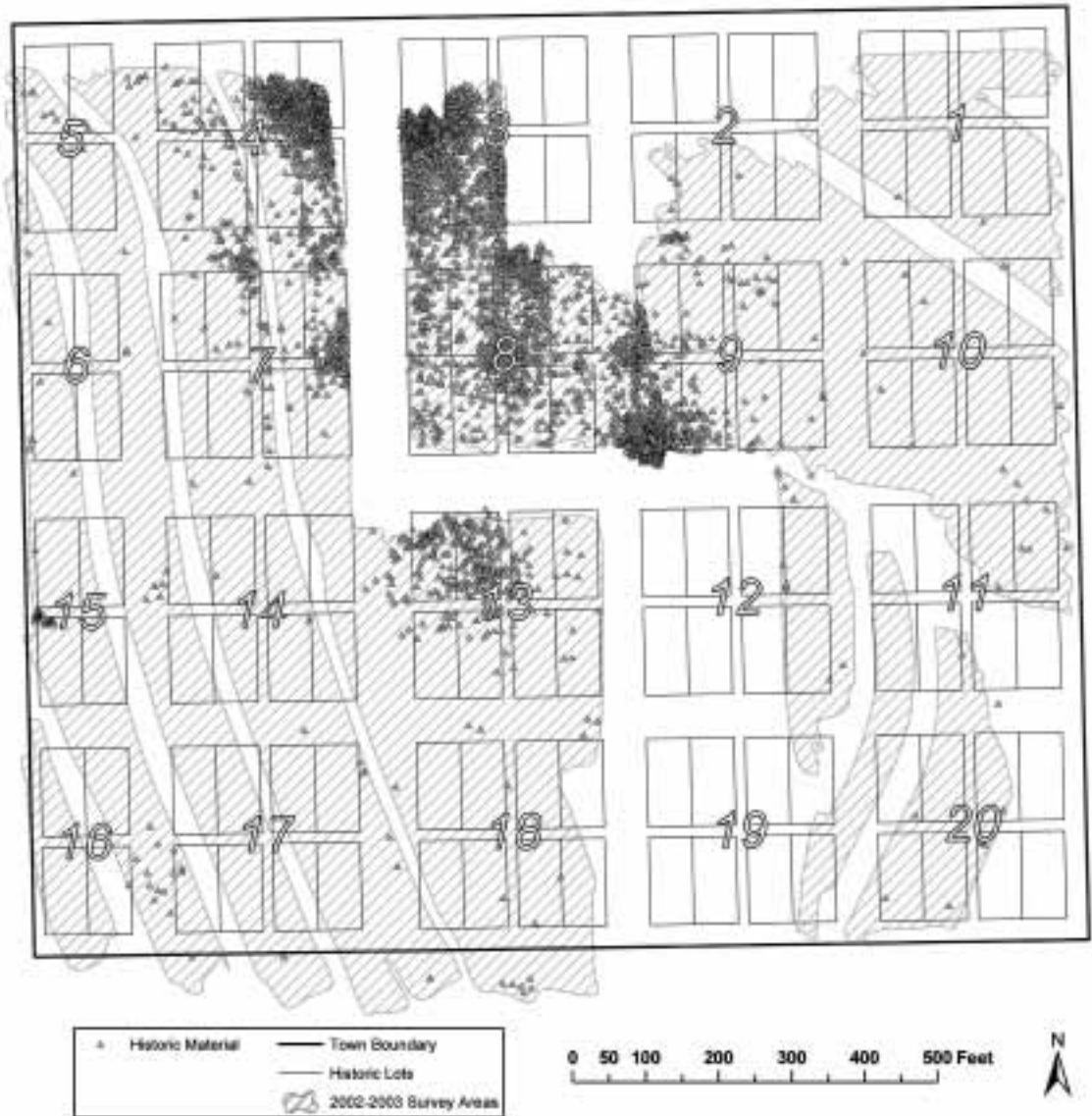


FIGURE 9. HISTORIC MATERIAL DISTRIBUTION IS MAPPED ON THE NEW PHILADELPHIA TOWN PLAT. HIGH CONCENTRATIONS OF ARTIFACTS ARE NOTED IN BLOCKS 3, 4, 7, 8, 9, AND 13. (IMAGE BY AUTHORS, 2009.)

Creating Functional Categories for Analysis and Visualization

All artifacts for each block were then analyzed by functional categories without respect to date. Architectural ($n=1,760$), domestic ($n=1,387$), kitchen ($n=2,361$) (with tableware and utilitarian items separated where identifiable), and personal items ($n=26$) were detailed. The kitchen-tableware subcategory was used for utensils or ceramics designed for table use. This includes bowls

suitable for serving at the table, cups, forks, refined hollowwares, drinking glasses, knives, plates, spoons, etc. The kitchen-utilitarian subcategory was used to designate utility wares, including bottles, crocks, jars, and jugs. When an artifact was identifiable as a kitchen item, but could not be categorized as tableware or utilitarian, it was assigned to the basic kitchen category. Table 4 shows the percentage breakdown of these categories within town blocks, as well as the percentage of the whole that each block

TABLE 1
SUMMARY OF HISTORIC ARTIFACTS RECOVERED DURING THE PEDESTRIAN SURVEY

Brick	319	5.4%
Buttons	19	< 1.0%
Ceramics		
Earthenware		
Bennington/Rockingham	15	
Buff paste	2	
Gray paste	5	
Pearlware	33	
Red paste	13	
Saltglazed	2	
Whiteware	1,031	
Whiteware, <u>hardpaste</u>	361	
Yellow ware	35	
Other	12	
Total earthenware	1,509	25.4%
Porcelain	164	2.8%
Stoneware		
Brown paste	4	
Buff paste	460	
Gray paste	160	
Red Paste	7	
Other	2	
Total stoneware	633	10.7%
Terra-cotta	4	< 1.0%
Ferrous metal		
Machine cut nails or fragments	94	
Wire nails or fragments	44	
Other ferrous materials	304	
Total ferrous metal	442	7.5%
Glass		
Flat glass	1,223	
Curved/other glass	1,484	
Total glass	2,707	45.6%
Kaolin/Ball clay	4	< 1.0%
Mortar/Plaster	13	< 1.0%
Slag	17	< 1.0%
Slate	10	< 1.0%
Faunal	43	< 1.0%
Other	48	< 1.0%
Total artifacts	5,932	

Note: Sixteen artifacts (< 0.3%) were missing before or during cataloging, and were cataloged to the extent possible using field notes. One additional artifact was unaccounted for after cataloging, but all attributes were recorded.

TABLE 2
MEAN CERAMIC DATES (MCDS) FOR SELECT
CERAMIC MATERIALS RECOVERED
DURING THE SURVEY

Bennington/Rockingham earthenware	1873
Bristol glazed stoneware	1888
Albany-type slip glazed stoneware	1863
Parian porcelain (toy doll parts)	1866
Pearlware (various decorations)	1804–1808
Whiteware (various decorations)	1833–1924
Yellow ware	1865

TABLE 3
MEAN DATE ESTIMATES FOR BLOCKS AND LOTS BASED ON MEAN CERAMIC DATES (MCDS)
OF SELECT CERAMIC MATERIALS RECOVERED DURING THE SURVEY

Block: Lot	Datable Artifact Count	Mean Date	Earliest MCD	Latest MCD
3: 3	31	1864	1835	1870
3: 4	25	1850	1805	1870
3: 5	31	1865	1845	1878
3: 6	26	1861	1804	1874
3: 7	3	1864	1863	1865
3: Alleys	60	1862	1805	1873
<i>Block 3</i>	<i>176</i>	<i>1861</i>		
4: 1	26	1859	1804	1870
4: 2	43	1860	1808	1878
4: 3	1	1870	1870	1870
4: 4	4	1854	1810	1878
4: 5	1	1878	1878	1878
4: 6	1	1860	1860	1860
4: 7	4	1862	1850	1870
4: 8	23	1844	1800	1878
4: Alleys	17	1855	1804	1878
<i>Block 4</i>	<i>120</i>	<i>1856</i>		
7: 1	23	1854	1805	1873
7: 8	5	1869	1863	1878
7: Alleys	8	1859	1805	1878
<i>Block 7</i>	<i>36</i>	<i>1857</i>		
Block: Lot	Datable Artifact Count	Mean Date	Earliest MCD	Latest MCD
8: 1	7	1860	1835	1870
8: 2	22	1863	1845	1873
8: 3	7	1864	1863	1870
8: 4	11	1865	1860	1878
8: 5	2	1870	1870	1870
8: 6	2	1868	1863	1873
8: 7	6	1865	1863	1870
8: 8	4	1864	1860	1870
8: Alleys	14	1864	1850	1873
<i>Block 8</i>	<i>75</i>	<i>1864</i>		

TABLE 3 (CONTINUED)
MEAN DATE ESTIMATES FOR BLOCKS AND LOTS BASED ON MEAN CERAMIC DATES (MCDs)
OF SELECT CERAMIC MATERIALS RECOVERED DURING THE SURVEY

Block: Lot	Datable Artifact Count	Mean Date	Earliest MCD	Latest MCD
9: 2	3	1844	1805	1878
9: 4	2	1863	1863	1863
9: 5	30	1859	1805	1878
9: 6	6	1853	1805	1863
9: 7	1	1870	1870	1870
9: Alleys	1	1863	1863	1863
<i>Block 9</i>	<i>42</i>	<i>1858</i>		
13: 2	2	1862	1860	1863
13: 3	12	1864	1863	1873
13: 4	7	1864	1860	1870
13: 7	2	1871	1863	1878
13: Alleys	1	1866	1866	1866
<i>Block 13</i>	<i>23</i>	<i>1864</i>		

Note: Only blocks with more than 10 artifacts are represented.

TABLE 4
FUNCTIONAL CATEGORY BREAKOUT OF ARTIFACTS BY BLOCK

Block	Category	Count	% within Block	% within Survey
1	Kitchen-tableware	1	100.0%	0.0%
2	Architectural	1	20.0%	
	Domestic	3	60.0%	
	Kitchen	1	20.0%	
	Total	5		0.1%
3	Architectural	539	31.4%	
	Domestic	405	23.6%	
	Kitchen	17	1.0%	
	Kitchen-Tableware	456	26.6%	
	Kitchen-Utilitarian	198	11.5%	
	Personal	13	0.8%	
	Toy	4	0.2%	
	Other	85	5.0%	
	Total	1,717		28.9%
4	Architectural	273	26.5%	
	Domestic	217	21.0%	
	Kitchen	10	1.0%	
	Kitchen-Tableware	371	35.9%	
	Kitchen-Utilitarian	124	12.0%	
	Personal	4	0.4%	
	Toy	2	0.2%	
	Other	31	3.0%	
	Total	1,032		17.4%

TABLE 4 (CONTINUED)
FUNCTIONAL CATEGORY BREAKOUT OF ARTIFACTS BY BLOCK

Block	Category	Count	% within Block	% within Survey
5	Architectural	3	37.5%	
	Domestic	1	12.5%	
	Kitchen-Tableware	3	37.5%	
	Other	1	12.5%	
	Total	8		0.1%
6	Architectural	2	100.0%	0.0%
7	Architectural	55	23.6%	
	Domestic	37	15.9%	
	Kitchen	5	2.1%	
	Kitchen-tableware	74	31.8%	
	Kitchen-utilitarian	47	20.2%	
	Personal	1	0.4%	
	Other	14	6.0%	
	Total	233		3.9%
8	Architectural	323	38.0%	
	Domestic	214	25.1%	
	Kitchen	7	0.8%	
	Kitchen-tableware	164	19.3%	
	Kitchen-utilitarian	96	11.3%	
	Personal	2	0.2%	
	Toy	2	0.2%	
	Other	43	5.1%	
	Total	851		14.3%
9	Architectural	160	25.0%	
	Domestic	142	22.2%	
	Kitchen	27	4.2%	
	Kitchen-tableware	187	29.3%	
	Kitchen-utilitarian	61	9.5%	
	Personal	1	0.2%	
	Other	61	9.5%	
	Total	639		10.8%
10	Domestic	1	20.0%	
	Kitchen-tableware	1	20.0%	
	Kitchen-utilitarian	2	40.0%	
	Other	1	20.0%	
Total	5		0.1%	
11	Kitchen-tableware	2	40.0%	
	Kitchen-utilitarian	2	40.0%	
	Other	1	20.0%	
Total	5		0.1%	
12	Architectural	3	50.0%	
	Kitchen-tableware	2	33.3%	
	Kitchen-utilitarian	1	16.7%	
Total	6		0.1%	

TABLE 4 (CONTINUED)
FUNCTIONAL CATEGORY BREAKOUT OF ARTIFACTS BY BLOCK

Block	Category	Count	% within Block	% within Survey
13	Architectural	67	19.5%	
	Domestic	50	14.5%	
	Kitchen	16	4.7%	
	Kitchen-tableware	124	36.0%	
	Kitchen-utilitarian	54	15.7%	
	Toy	3	0.9%	
	Other	30	8.7%	
	Total	344		5.8%
14	Kitchen-tableware	2		0.0%
15	Architectural	5	11.6%	
	Domestic	10	23.3%	
	Hardware	6	14.0%	
	Kitchen-tableware	2	4.7%	
	Kitchen-utilitarian	1	2.3%	
	Other	19	44.2%	
	Total	43		0.7%
16	Kitchen-utilitarian	1	100.0%	0.0%
17	Domestic	1	50.0%	
	Kitchen-tableware	1	50.0%	
	Total	2		0.0%
18	Architectural	2	50.0%	
	Other	2	50.0%	
	Total	4		0.1%
20	Architectural	4	66.7%	
	Kitchen-tableware	2	33.3%	
	Total	6		0.1%
No block (in street or offsite)	Architectural	323	31.7%	
	Domestic	305	29.9%	
	Kitchen	17	1.7%	
	Kitchen-tableware	168	16.5%	
	Kitchen-utilitarian	113	11.1%	
	Personal	5	0.5%	
	Toy	3	0.3%	
	Other	92	9.0%	
	Total	1,026		17.3%
	Grand total	5,932		

TABLE 5
TABLEWARE VS. UTILITARIAN BREAKDOWN OF DATABLE, PRE-1880 ARTIFACTS BY BLOCK

Block	Category	Count	% within Block
3	Tableware	21	11.8%
	Utilitarian	157	88.2%
	Total	178	
4	Tableware	25	21.4%
	Utilitarian	92	78.6%
	Total	117	
7	Tableware	7	20.6%
	Utilitarian	27	79.4%
	Total	34	
8	Tableware	6	7.9%
	Utilitarian	70	92.1%
	Total	76	
9	Tableware	8	19.0%
	Utilitarian	34	81.0%
	Total	42	
13	Tableware	2	8.7%
	Utilitarian	21	91.3%
	Total	23	

assemblage represents. Of interest in these raw data is the ratio of tablewares to utilitarian materials. In Block 3, for example, tablewares ($n=456$) are roughly 2.3 times more common than utilitarian items ($n=198$). In Block 4, the ratio is 2.1 to 1 ($n=371$ versus $n=124$). Similar ratios are found in almost all other blocks.

These ratios are somewhat unexpected given the dating of the site, as it would be anticipated that early settlers would be using utilitarian items such as red-paste earthenware in greater quantities than refined tableware. The ratios seen in Table 4, however, reflect the large quantities of open-ended-date whiteware recovered which have MCDs of ca. 1880 and later. When only datable, pre-1880 materials are analyzed by functional group (Table 5), the ratios reflect the pattern expected with early settlement. It can be maintained, however, that such filtering of later-

dated materials is deterministic, as it skews the sample to earlier pieces which are not refined, and eliminates items which are not tightly datable. This is, of course, an inherent limitation in a pedestrian survey methodology, as artifacts are divorced from their subsurface contexts due to disturbance.

Visualization of Other Materials of Possible Phase II Interest

Certain distributions of materials were visualized to provide input to the Phase II investigations, and facilitate comparison with the data recovered in the Phase II investigations. These included ferrous material scatter (Figure 10) which shows distinct nail concentrations in Blocks 3, 4, and 9. Also, burned and melted materials were plotted (Figure 11) to see if there were concentrations. Doorknobs

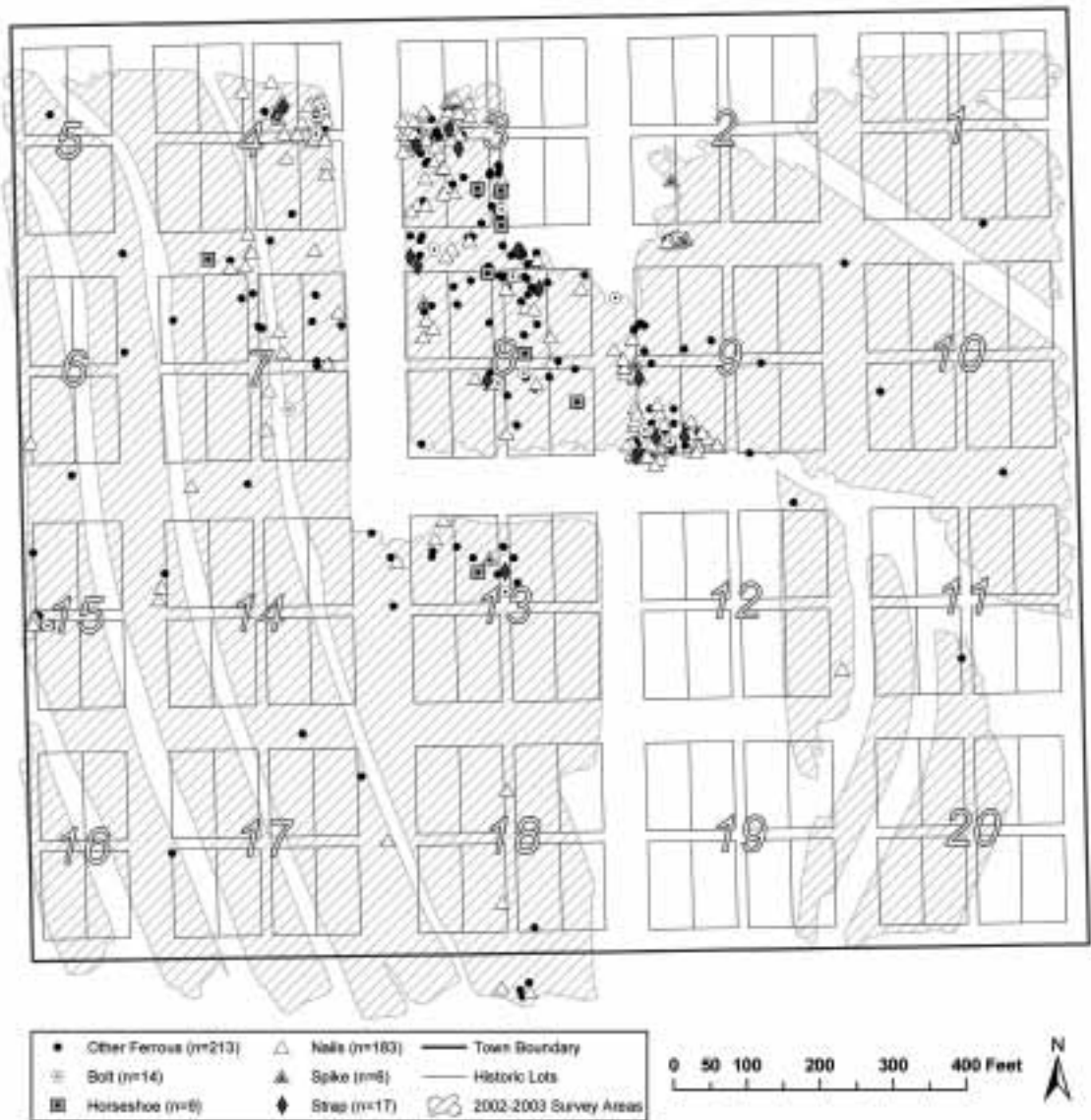


FIGURE 10. FERROUS MATERIAL SCATTER IS MAPPED ON THE NEW PHILADELPHIA TOWN PLAT. NAIL CONCENTRATIONS MAY BE NOTED IN BLOCKS 3, 4, AND 9. (IMAGE BY AUTHORS, 2009.)

were plotted to show possible associations with subsurface features (Figure 12).

Faunal Materials: A Brief Overview

The majority of faunal remains were cataloged at the Illinois State Museum by Terrance Martin. Forty-three faunal specimens were recovered during the survey including cat ($n=3$), cattle ($n=2$), deer ($n=1$), large mammal ($n=1$), medium mammal ($n=3$), freshwater mussel shell ($n=23$),

pig ($n=7$), rabbit ($n=1$), sheep or goat ($n=1$), and unidentified ($n=1$) remains. Distinct concentrations of faunal materials may be noted in Blocks 4, 9, and 13 (Figure 13).

It may be noteworthy that the majority of faunal materials recovered were freshwater mussel shell (53%). As Martin noted, the materials are most likely historic, as the temporally diagnostic lithics are suggestive of Early to Middle Archaic occupation, whereas the faunal materials are too well preserved to date to that

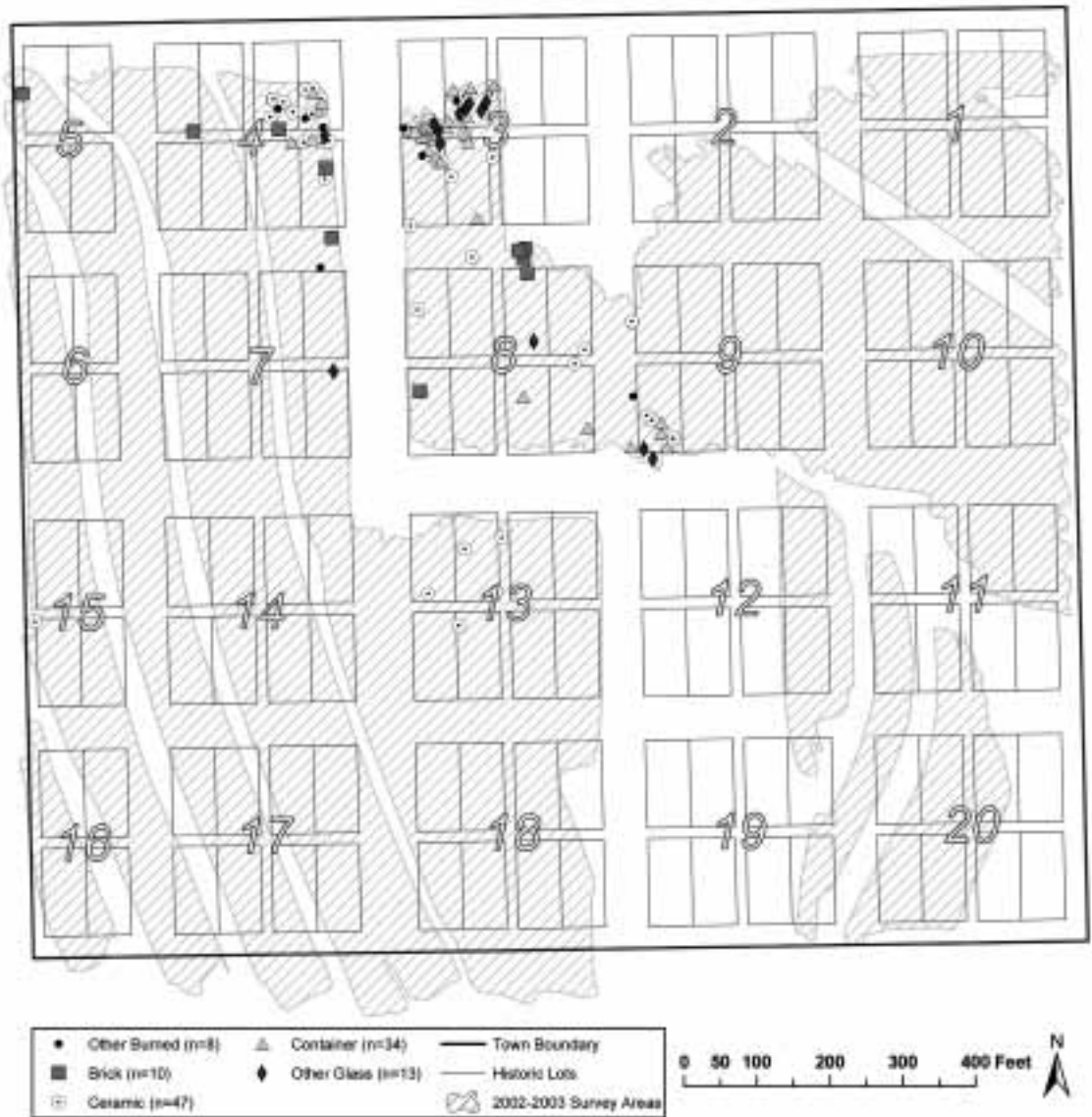


FIGURE 11. BURNED OR MELTED ARTIFACTS ARE SHOWN MAPPED ON THE TOWN PLAT. (IMAGE BY AUTHORS, 2009.)

era. He further noted, “It will be interesting to see if excavations reveal local freshwater mussel shells in 19th-century contexts,” perhaps used for making shell buttons (Martin 2004, pers. comm.; T. Martin and C. Martin, this volume).

Discussion

The 10-day pedestrian survey met its objectives, as it identified the presence of historic

artifacts at the New Philadelphia site, and isolated several artifact concentrations within the town. The results of the survey show that both domestic and architectural cultural resources are present on the site and discrete concentrations can be noted in the categorizations.

Follow-on research was then directed towards the identification and evaluation of intact subsurface cultural resources, pursuant to nominating the site under National Register Criterion D (United



FIGURE 12. THE DISTRIBUTION OF DOORKNOBS RECOVERED IS MAPPED ON THE TOWN PLAT TO SHOW POSSIBLE ASSOCIATIONS WITH SUBSURFACE FEATURES. (IMAGE BY AUTHORS, 2009.)

States Code of Federal Regulations 1966). While the site has significance and may meet several criteria for nomination to the National Register, the primary criterion pertinent to the pedestrian survey results is that the site “yielded, or may be likely to yield, information important in pre-history or history.” Follow-on archaeological and geophysical surveys, discussed in later chapters in this volume, have further defined the integrity of the New Philadelphia site.

Specific areas of concentration were considered “high priority” for further research, based on the survey (Figure 14). These include town Blocks 3 (primarily Lots 3–6), 4 (Lots 1, 2, and 8), 7 (Lot 1), 8 (scatter in Lots 1–8), 9 (Lot 5), and 13 (Lots 3 and 4). Concentrations of datable materials are not weighted evenly, however. Block 4, with the second highest concentration is the “earliest” block, with a mean date of 1856, and with Block 4, Lot 8 dating to ca. 1844.

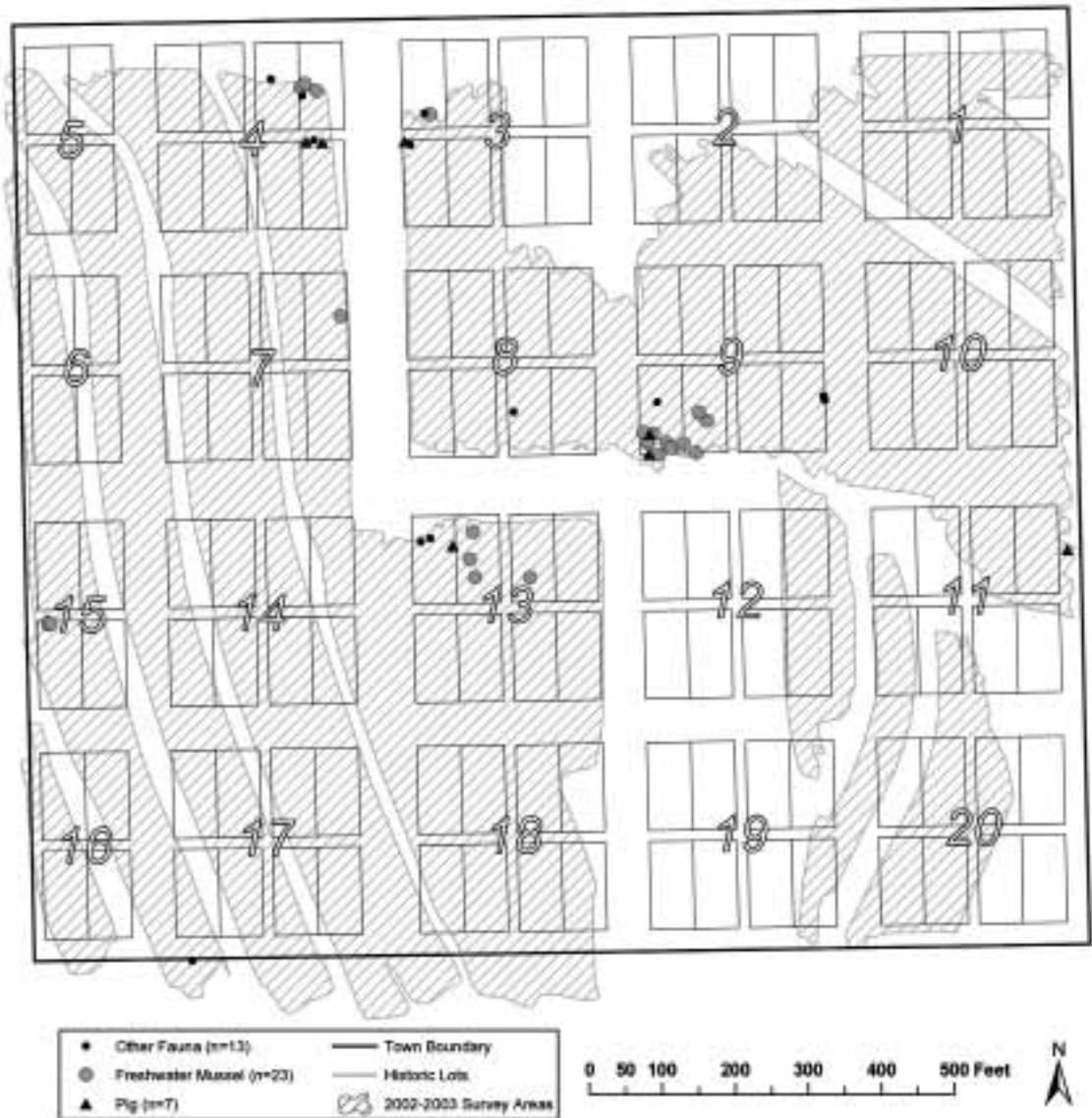


FIGURE 13. FAUNAL MATERIALS ARE MAPPED ON THE NEW PHILADELPHIA TOWN PLAT. CONCENTRATIONS OF FRESHWATER MUSSEL SHELL FRAGMENTS MAY BE NOTED IN BLOCKS 4, 9, AND 13. (IMAGE BY AUTHORS, 2009.)

Block 7, Lot 1 is also fairly early, at ca. 1854. Thus, when these concentrations were viewed chronologically, the ca. 1860 and earlier artifact assemblages appeared to be concentrated in Blocks 3, 4, 7, and 9. After approximately 1860, additional materials appear to be concentrated

in these same blocks, as well as in Block 13. Some post-1860 artifacts are also scattered in the vicinity of Block 8. These concentrations were used to direct the geophysical surveys conducted at the site in a subsequent field season, which in turn focused the Phase II efforts.

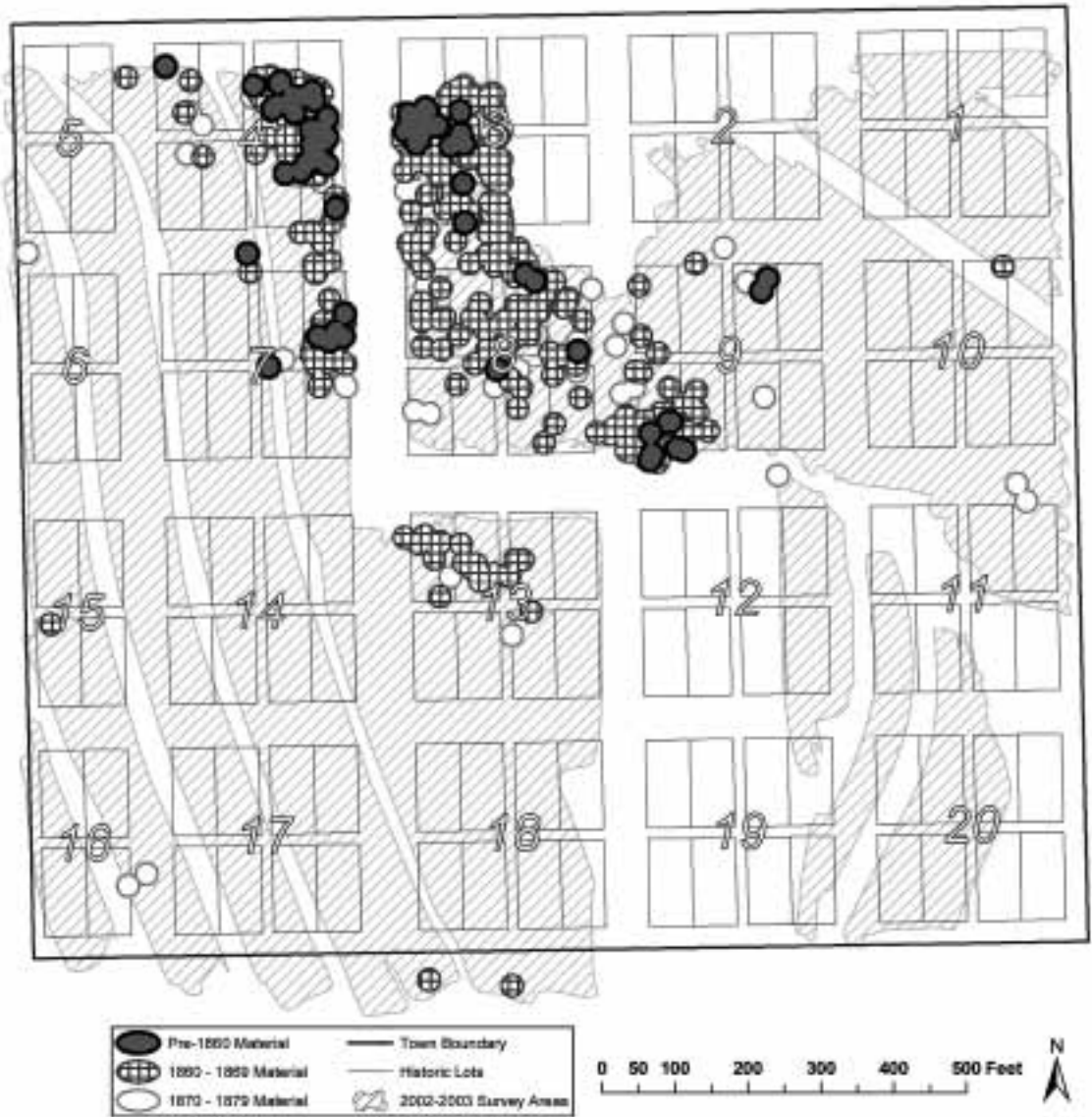


FIGURE 14. DATABLE MATERIALS PLOTTED BY DATE RANGE, DEMONSTRATING THE EARLIEST CONCENTRATIONS AND A “TIME VIEW” OF THE CHANGE IN THE OCCUPATIONAL LANDSCAPE AS INDICATED BY ARTIFACT DISTRIBUTIONS. (IMAGE BY AUTHORS, 2009.)

Conclusion

In sum, the pedestrian survey at New Philadelphia revealed that the landscape has tremendous research potential. Modern disturbance associated with the present-day road, farm access road, and

agriculture has impacted the resources at the site, but significant intact archaeological deposits exist, given the extent of the materials recovered. Indeed, such archaeological deposits and features were located with subsequent investigations. As the first step in the determination of the site’s

National Register eligibility, the pedestrian survey began the process of obtaining archaeological recognition for New Philadelphia's unique place in America's national story.

References

- CONROY, BARBARA J.
1998 *Restaurant China: Identification & Value Guide for Restaurant, Airline, Ship & Railroad Dinnerware*, Vol. 1. Collector Books, Schroeder Publishing Co., Paducah, KY.
- JONES, OLIVE, AND CATHERINE SULLIVAN
1985 *The Parks Canada Glass Glossary for the Description of Containers, Tableware, Flat Glass, and Closures*. With contributions by George L. Miller, E. Ann Smith, Jane E. Harris, and Kevin Lunn. National Historic Parks and Sites, Canadian Parks Service, Ottawa, ON.
- NOEL HUME, IVOR
1980 *Guide to Artifacts of Colonial America*. Alfred A. Knopf, New York, NY.
- NATIONAL PARK SERVICE
2000 *Museum Handbook, Part II: Museum Records*. National Park Service, Washington, DC.
- OSWALD, ADRIAN
1982 *English Brown Stoneware 1670–1900*. In collaboration with R. J. C. Hildyard and R. G. Hughes. Faber and Faber, London, UK.
- RAMSAY, JOHN
1939 *American Pottery & Porcelain*. Hale, Cushman & Flint, Boston, MA.
- SOUTH, STANLEY
1977 *Method and Theory in Historical Archaeology*. Academic Press, New York, NY.
- STELLE, LENVILLE J.
2001 *An Archaeological Guide to Historic Artifacts of the Upper Sangamon Basin*. Center for Social Research, Parkland College, Champaign, IL <<http://virtual.parkland.edu/lstelle1/len/archguide/documents/arcguide.htm>>. Accessed 29 May 2004.
- SUSSMAN, LYNNE
1977 Changes in Pearlware Dinnerware, 1780–1830. *Historical Archaeology* 11:105–111.
- UNITED STATES CODE OF FEDERAL REGULATIONS
1966 *National Register of Historic Places, Criteria for Evaluation*. Title 36, Part 60.4. National Park Service, Washington, DC.
- WALKER, JULIET E. K.
1983 *Free Frank: A Black Pioneer on the Antebellum Frontier*. University Press of Kentucky, Lexington.
- ZILMER, DANA L.
1987 A Socioeconomic Indexing of 19th-Century Illinois Farmsteads. Department of Anthropology, University of Illinois, Urbana-Champaign.
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