

centers in the Philadelphia-Wilmington-Baltimore corridor underway in the early 190th century. As Catts and Coleman (1986) note, the later 19th century was a period of ever increasing industrialization, population growth and urbanization. Despite this, northern Delaware continued to be primarily agricultural during the 19th century. Interestingly, from the perspective of this report, tenancy continued to be a viable factor in agricultural production into the 20th century.

FIELD METHODOLOGY

Field research at the Grant Tenancy was separated into three steps, each with specific research goals. These include, in order of completion: 1. controlled surface collection; 2. screened plowzone sample; and 3. location, mapping and excavation of the house foundation and associated features. The first step was to obtain a sample of artifacts across the site from a controlled surface collection. This was done to help isolate artifact concentrations that would provide clues to locating activity areas and subsurface features. Since surface visibility was obscured by ground vegetation, the first step required that the site be plowed in order to provide maximum surface visibility and optimal collecting conditions. Once the plowing was completed, a grid was laid out with wooden stakes placed at twenty foot intervals. The grid origin was established near the entrance to the field and was arbitrarily designated as North 100, West 500, to insure that all coordinates from the site would possess a northwest quadrant designation (Figure 2).

Collecting was facilitated by fabricating a movable grid using rope. The grid was stretched from each of the wooden stakes dividing each 20 foot square section into four ten by ten units. Ten by ten foot units were chosen primarily for convenience. Each ten by ten unit was designated with the coordinate of its southwest corner and all artifacts from each unit were collected and bagged separately. Artifact counts were tabulated in the field after each section was collected. Figure 3 shows the foundation and selected features. The results were then plotted on three separate distribution maps, one indicating architectural debris (brick, nails, flat glass), one indicating artifact totals, and one showing ceramics only (Figures 4-6). The maps were useful in making decisions about the placement of five by five foot excavation units utilized in the next step of the field investigations as they delineated "hot spots" or artifact concentrations.

Step 2 was designed to retrieve a sample of artifacts from the plowzone in areas where surface concentrations were high. A total of thirty-seven five by five foot units were excavated by flat shovel and trowel (see Figures 2 and 3). All plowzone soil from the 37 hand excavated 5'x5's was screened through 1/4 inch mesh and all sub-plowzone features revealed in these units were mapped and numbered for subsequent excavation. The screened plowzone units provided additional artifact distribution data as well as giving a more complete sample for subsequent functional

and temporal analysis (see Laboratory Analysis section for additional details). The excavated five by five units also provided stratigraphic control across the site.

Step 3 involved the location, mapping and excavation of the house foundation and associated features. This step was facilitated by the use of heavy equipment provided by DelDOT to remove the plowzone over areas of the site not already exposed by the hand excavated five by five units. The house foundation was first discovered during the excavation of N170E85 during the plowzone sampling, excavations which partially exposed the south and east foundation walls. The machine was used to expose the remaining walls. The plowzone removal was accomplished using a front end loader to excavate the majority of the plowzone layer while the remaining few inches were removed with a backhoe fitted with a smooth-edge bucket. This provided a relatively clean surface and eliminated having to drive over freshly exposed subsoil which would have obliterated any features present. Five foot wide balk strips, following the 20 foot grid stakes previously laid out for the surface collection, were left in place to simplify mapping and eliminate the need to reset the stakes. Once the plowzone was removed by the machine, features were exposed by carefully flat shoveling the surface of the subsoil. Many of the features were visible only as faint discolorations in the soil matrix, requiring the frequent use of a water sprayer to heighten subtle color variations.

The house foundation was treated as a large feature consisting of several components, each of which were excavated separately. These components include, starting with the oldest: the cellar wall, the builder's trench, the cellar floor consisting of a thin layer of midden deposit, the "exterior midden" associated with a porch or an addition to the house, and the cellar fill, deposited when the house was abandoned and destroyed. A more complete description of each of these provenience groupings is provided in the Results of Excavations section of this report. They are mentioned here because each represents a separate episode and the excavation of the house required careful separation of these components.

The cellar wall, built from stone, was virtually 100% intact below the plowzone. It was left intact during excavations except for the central portion of the south wall which was removed during the excavation of the builder's trench. The cellar fill and the cellar floor were excavated and screened completely.

A stone lined well (Feature 8) was uncovered during the plowzone removal. Time and safety restrictions required that the well be excavated in steps using a backhoe provided by DelDOT. Excavation of the well contents proceeded by hand, leaving the walls in place until the depth of the excavation was unsafe, a little more than waist high. The base of the excavation was then covered to protect the well contents from contamination and damage. The surrounding soil was then removed with the backhoe until it was safe once again to proceed with hand excavation

inside the well. This system was repeated until the well was completely excavated.

The remaining features at the site, predominantly postmolds and rectangular pits, were excavated using standard excavation procedures. Each was cross sectioned and excavated in halves in order to provide a profile view. Soil samples and flotation samples were taken and the remaining feature fill was screened through 1/4 inch mesh.

LABORATORY METHODOLOGY

A number of different types of artifacts were collected from the archeological investigations at the H. Grant Tenancy site. Because of their varying information potential with regard to the research design and the use of computer coding, different artifact types were handled in slightly different ways. Because of changes in technology and decorative styles, the ceramics and glass were considered to be the most sensitive temporal indicators. In addition, based on previous research (Miller 1980; Beidleman et al 1983; Thompson 1985), the ceramics have been demonstrated to provide a means of evaluating economic status, thus contributing directly to the research design. Therefore, a more detailed attribute analysis of these two classes which would be amenable to computer analysis was used to record these artifact types. The attributes coded for the ceramics and glass are present in more detail below. Metal and the remaining artifact category, Miscellaneous, were simply described according to material, method of manufacture, and function, insofar as these items could be determined for a particular object. Only samples of brick and mortar were saved, the rest was counted, either in the field or in the lab and discarded. Brick which was sufficiently whole to warrant measurement, width, length and thickness dimensions were taken. Conservation measures were used on those artifacts which were felt to warrant this. These measures consisted of electrolysis for ferrous metal, treatment with Polyethylene Glycol 10-00 (Carbowax) for wood and castor oil for leather. Any artifacts which did not merit conservation, either because they were too deteriorated or of limited information potential, were described as well as possible and discarded. Examples of the kinds of artifacts that were discarded are coal, cinders and small brick fragments.

The following artifact analysis procedures were developed in connection with a data recovery project in New Jersey and greater detail on artifact coding is presented in that report (Thompson 1985), only a summary is presented here. Any deviation from that coding system is noted. A number of attributes of potential interest were identified (separately) for the glass and ceramics. Numerical codes were assigned for each of a range of possible variable states. A standard IBM 80 column coding form was subdivided and the numerical codes for each variable state were recorded directly from the artifacts. Artifacts from each Field Specimen Number were sorted and the numerical values were