

The University of Delaware Soil Testing Laboratory determined the levels of pH, phosphate, potassium, magnesium, and calcium in 46 soil samples from plow zone contexts, 382 from the subsoil, and 113 from features. The readings from the plow zone and subsoil samples were then entered into a data base and distribution maps generated. An insufficient distribution of samples prevented preparation of valid maps of the plow zone chemical readings. As high levels of each of these chemicals in the soil ideally indicate different human activities and uses of that area of the site, the soil chemistry analyses were conducted in the hope of contributing data relevant to the research questions relating to landscape and land use.

Relatively high levels of phosphate are known to be derived from the deposition of organic wastes through purposeful manuring or due to the presence of an area where animals were confined either by fences or by a structure. [They would also be expected from privy features, for example.] Elevated concentrations of potassium are derived from the deposition of wood ash through surface burning or by the dumping of fireplace or stove ash. Calcium concentrations result from agricultural liming, the deposition of oyster shells, or the presence of building materials such as mortar or cement. Magnesium concentrations are affected by most of the processes controlling calcium concentrations and magnesium is especially elevated if dolomitic limestone has been applied. With the pH of a soil, readings greater than 7.0 indicate alkaline soils and less than 7.0 indicate acidic soils. Delaware soils are naturally acidic, and readings above 6.0 indicate agricultural liming (Coleman et al. 1985:81).

ARCHAEOLOGY AND MATERIAL CULTURE

Introduction

A 190' by 240' area of the John Darrach Store site, 45,600 square feet or just over one acre, was stripped and virtually completely excavated in the course of the Phase III excavations. The only exceptions were the three wells incompletely excavated due to their depth and the gully and pond only sampled due to their size. The landscape and land use data generated by the excavations are outstanding. Discussion will begin with the brick store itself, then move to the post-in-ground outbuildings, the wells, privies, trash pits and midden, and then to the series of fence-lines which divided functional areas of the site and planting holes often found in association with them. From there, attention will be turned to the roasting pits, the grave, the gully and pond, and finally to the remaining miscellaneous and unidentified features. Artifacts from each feature will be considered along with the site data. Specialized analyses will be reported separately. These include the distribution studies of the plow zone artifact assemblages, the faunal analysis, the feature ceramics analyses, and the soil chemistry distribution studies. Synthetic conclusions and interpretations will complete the presentation of the intrasite data. In a final section of the report, intersite comparative analyses will be presented.

Before proceeding with the dissection of the site into its component features, an overview of the site layout and land use is warranted. This introductory orientation to the site is based solely on the nature and distribution of features (Figure 26). The Darrach Store site is bounded to the north by Woodland Beach Road. To the east and south, the site boundary was defined as the point beyond which no features occurred. On the eastern side, this is just beyond the edge of the midden. To the south, features become sparse beyond a cluster at S130-S150, and disappear altogether by S180. The western boundary of the site appears to be marked by a fence and planting line about 40' west of the gully, and oriented roughly along the grid north-south line.

The remains of the brick store occupy the central portion of the site along its northern boundary. Evidence of a small addition, similarly oriented, appears beyond the store's east wall. Not far from the southeast corner of this addition was found a grave. The balance of the site can perhaps best be described by reference to the natural and cultural features created and/or used by the store's owners and residents to separate and segregate spaces upon the land. The gully and pond form the only natural boundaries in the Darrach Store landscape. The pond occupied the southwestern corner of the site and was drained by the gully trending roughly grid north-south. With the

exceptions of the aforementioned fenceline west of the gully and a scattering of possible post and planting holes, there are no features indicating extensive use of the land beyond the gully and pond.

The boundary with cultural meaning that appears to have spanned the longest period is that formed by the generations of northeast-southwest trending fencelines running parallel to the store's rear wall about 35' to the south. At their eastern terminus stood two privy houses and to the south, beyond the fences, lay the large irregular livestock pen/midden. At the fences' western end, a small rectangular outbuilding sits in the inner yard, its back wall built right into the fence. Twenty feet directly behind the first outbuilding stood a second outbuilding, similarly oriented, but somewhat larger, and between the two structures lay two wells. Another fenceline, this one single generation, ran southwest to northeast from a few feet behind the second outbuilding to the edge of the midden. Another met this one at a right angle and extended northwest to meet up with the long-lived fence separating the inner and outer store yards. Thus was the work yard defined by the two outbuildings and wells set off from the domains of animals and waste to the east. This southernmost fenceline appears not to have reached all the way to the pond, but the gravelly soils underlying and surrounding the pond made the identification of small features such as shallow fence post holes difficult. The only other cultural features identified in the outer yard lay in the far southeastern corner, more than 50' south of the midden. There, two fire pits were accompanied by a scattering of post holes, planting holes and trees.

The features' nature and distribution suggests a differential use of the inner yard immediately surrounding and behind the store. The area between the back of the store and the long-lived fenceline was virtually free of features, with clusters occurring between the store's western wall and the gully, and a scattering of features extending from the store's east wall to the site's eastern limits. The features west of the store include several containing concentrations of the site's earliest artifacts. A well, in line with the later two but in the inner yard in front of the northern outbuilding, was the earliest of the three. A north-south trending fenceline defined by the largest, most trash-filled post holes, paralleled the gully just west of the store. These features also contained among the earliest of the site's artifacts, as did a large post hole/ trash pit and a small post mold between the fenceline and the gully. Small shallow post or planting holes clustered on both sides of the fenceline off the southwest corner of the store, but they did not clearly define either a structure or additional fences.

On the other side of the yard, a third fire pit was discovered just north of the end of the long-lived fenceline, northeast of the privies. A single trash pit also appeared just north of the fence, 25' west of the privies.

The Darrach Store's builders and residents thus seem to have embodied in material, spatial form their conceptions of the relationships among the activities comprising their daily lives. Certain domestic chores took place away from the store/residence, and they were further separated from the domain of animals and discarded wastes. Furthermore, these conceptions, or at least their material expression, show evidence of change over time. To understand more fully the site's inhabitants, their lives and their ideas requires a more detailed consideration of the individual components of this landscape.

The Store

At the time of, or sometime after, the demolition of the store in the 1860s, the east, west and most of the north foundations were robbed, leaving only the south foundation wall and the rubble-filled cellar for the archaeologists. Excavation revealed a square store, its exterior dimensions at the foundation 32' by 32' (note that at the conclusion of the Phase II excavations the limited testing suggested dimensions of 32' x 37.5'). Oriented to the Landing (now Woodland Beach) Road, the store faced about 20 degrees west of grid north (Figures 26 and 27).

When excavation began, an average 0.9' plow zone deposit covered the store remains, and the cellar floor lay beneath an average of another 1.5' of brick demolition rubble at roughly 2.5' below grade (Figure 16). The entire south wall of the store's foundation remained intact, including both the east and west corners, to an average height of just under 2' below grade. Only two other small sections (the largest a section 4' in length) survived in place, these in the eastern half of the north wall. The intact south foundation was constructed of mostly large