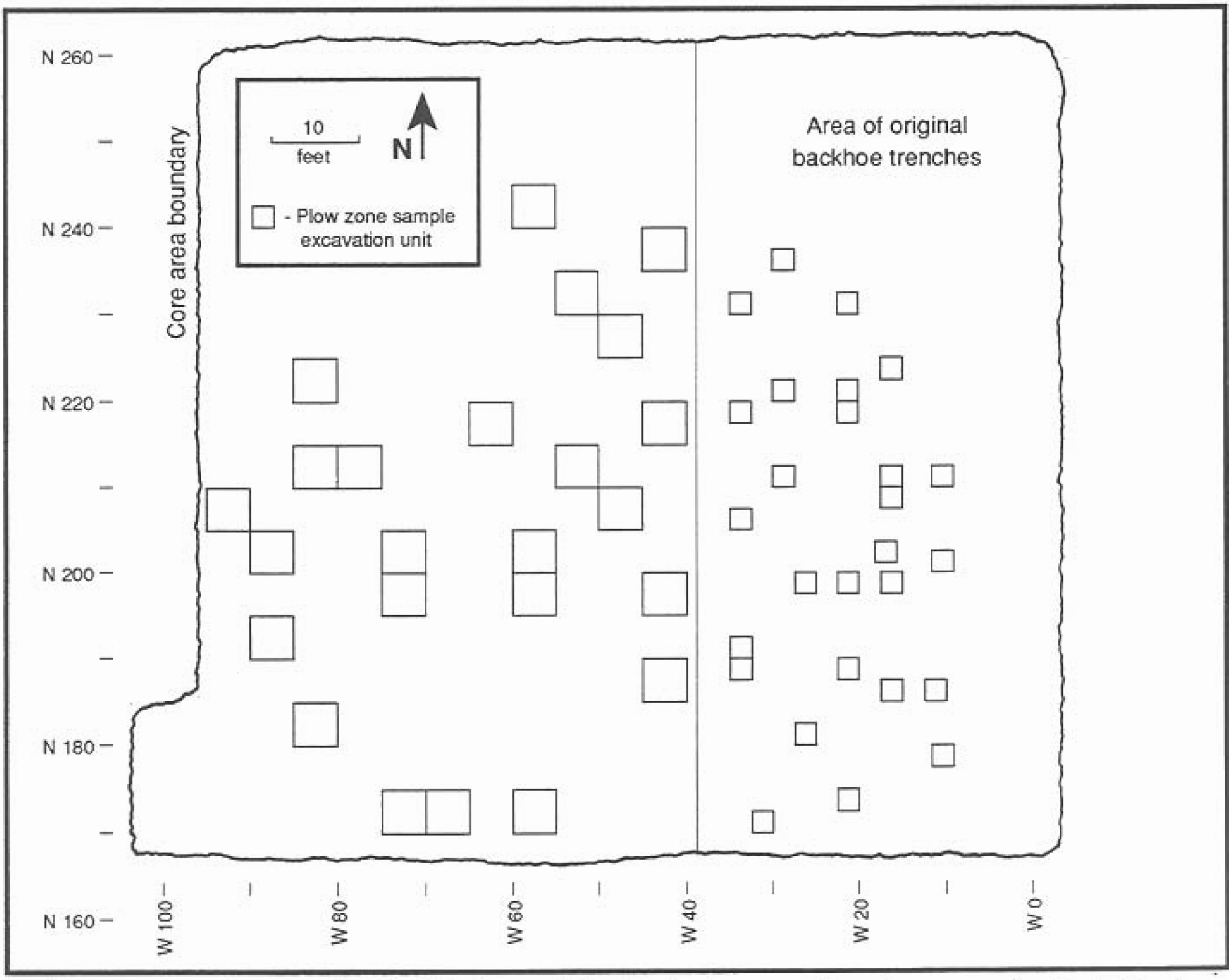
RESEARCH METHODS

Archival Research Methods

The Phase I and II archival research by Grettler et al. (1991) provided an initial chronology of site ownership and site function from the mid-eighteenth century to the present and identified much of the pertinent archival material needed for further work. Therefore, archival research for Phase III data recovery investigations of the William Strickland Plantation Site focused on providing more detailed historical data about the site's occupants and function through time. Furthermore, archival research sought to develop an understanding of the social and economic context of the site. Tax assessments for Duck Creek Hundred, the local historic land area somewhat equivalent to a "township" within which the site is located, dating from 1726 to 1757 were compiled from the Delaware State Archives. Research of other scholars (notably Bushman and Hawley 1987) on Kent County inventories between 1725 and 1775, also provided important data on the site's context as did studies of the Eastern Shore of Maryland (Clemens 1980; Mason 1984). Additional archival research consisted of examination of deed records, probate documents, surveys, and other primary sources at the Delaware State Archives. Several published

FIGURE 7

Plow Zone Test Unit Locations in Core Area of Site



primary sources also were invaluable in providing the background historic context for Duck Creek Hundred and Kent County in the eighteenth century. These include the several works by Harold Hancock (1962a, 1962b, 1963), the records of the Colonial American Church (Perry 1878), James Tilton's agricultural observations from the 1780s (Bausman and Munroe 1946), and John Watson's journal from 1750 (Jordan 1915).

Field Research Methods

Phase III field investigations at the William Strickland Plantation Site began with the excavation of a 25% stratified, systematic, unaligned sample of the plow zone soils in the core area of the site (Figure 6). This sampling method and sampling fraction have been shown to be especially effective and efficient at historic sites in the Middle Atlantic region (Custer 1992). The sample consisted of a randomly selected 5 x 5-foot unit from each of the larger 10 x 10-foot units that covered the 140 x 170-foot site grid. In the area of the initial backhoe test trenches, smaller 3 x 3-foot units were excavated so that the units could be placed between the trenches (Figure 7). Only the plow zone soils of the core area were sampled in this fashion because the outlying areas (Area II - Figure 6) had low artifact densities. Plow zone test units were excavated in a single soil level, and all soils were screened through 1/4 inch wire mesh.

PLATE 4

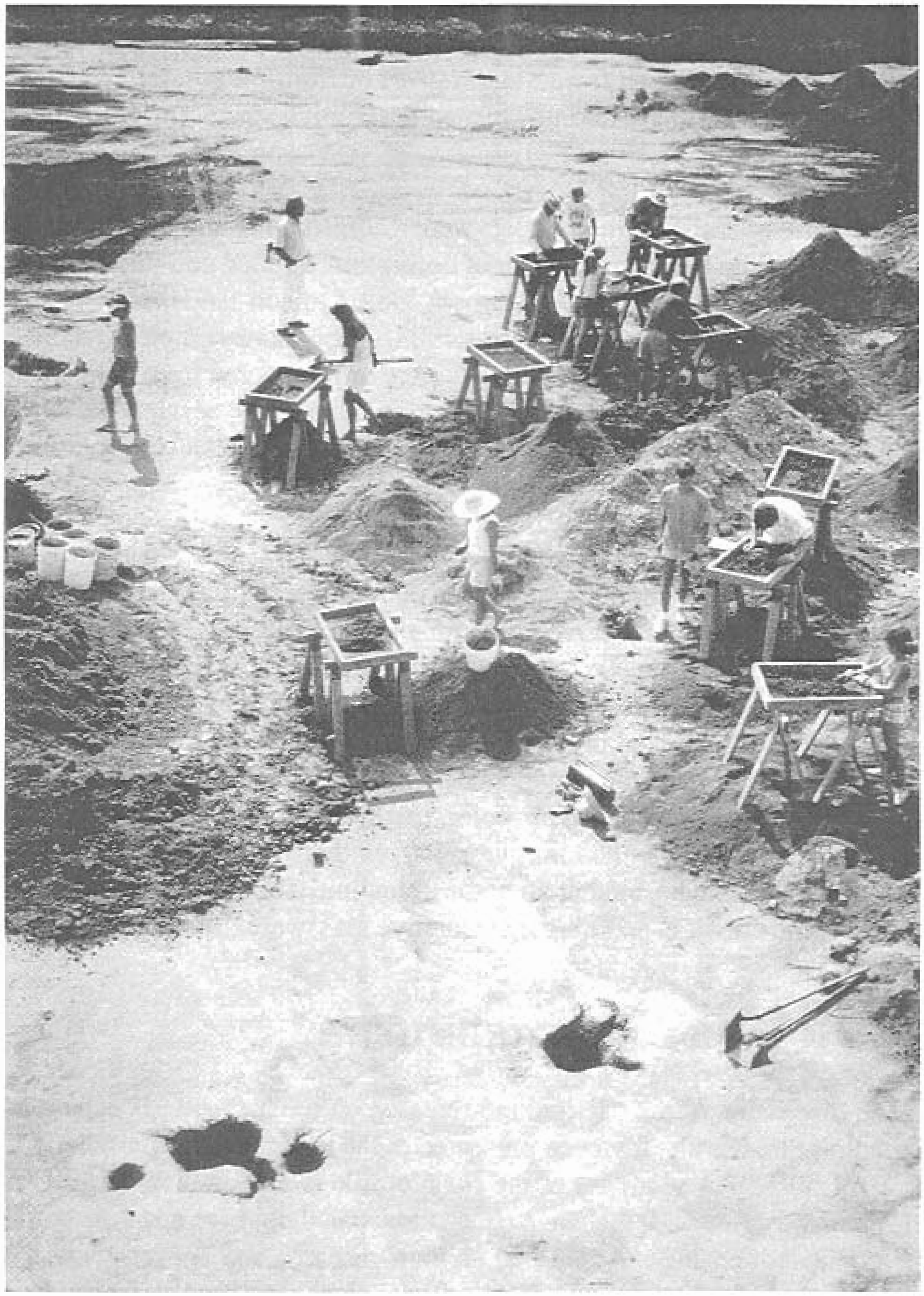
Excavating a Feature

Following the sampling of the plow zone, the remaining plow zone was carefully removed mechanically with a grade-all, and all subsurface features were identified and mapped. All features were excavated and recorded (Plates 4 and 5). All soils from the features were screened through 1/4 inch mesh. Soil samples were collected from each of the 5 x 5-foot plow zone test units, and from the subsurface 10 x 10-foot sub-units. Chemical analyses of the soil samples were conducted by the Soils Laboratory of the University of Delaware College of Agriculture. Black and white photographs, 35 mm color slides, and video tapes, were taken of selected features, soil excavation profiles, and test unit plan views.

Laboratory Research Methods and Artifact Analysis Methods

Prior to a detailed artifact analysis, the standard artifact processing procedures of the Delaware Bureau of Museums were applied to all artifacts recovered from the data recovery excavations. All artifacts, bone, and shell, were cleaned with plain water, or, such as in the case of deteriorating bone,

PLATE 5
Aerial View of Feature Excavations



were damp brushed. Bone and shell were then placed in labeled bags, while other artifacts were themselves labeled with site numbers and a three-digit provenience number. Historic artifacts were sorted into categories for cataloging based on their material composition (ceramics, bone, shell, nails, and glass). The functional group classification system devised by South (1977) was then used to organize and tabulate artifact frequency data.

Ceramics recovered from all features of the Strickland Site were sorted as to ware type, and vessel reconstruction and cross-mending were carried out to arrive at minimum vessel estimates. These minimum vessel counts were then used in all analyses because vessel counts have been shown to be more accurate than sherd counts (Rice 1987). Vessels were then coded to a set of standard descriptive terms for analytical purposes using the systems developed by South (1977) and Carlson (1983). Mean ceramic dates (MCDs) were obtained from South (1977) or from the adjusted dates found in Carlson (1983). The time-sensitive attributes and use-related descriptive vessel attributes were entered into a computer data base program.

Special attributes of each minimum vessel were recorded including ware type, plastic decoration (such as bat-molded plate rim treatments), color of decoration, applied non-plastic decorations, variety of decoration, number type code (South 1977, Brown 1982, Carlson 1983), use, shape, date range, and median date (South 1977, Brown 1982, Carlson 1983). For more complete reconstructed vessels, vessel form was noted. Flatware plates and saucers were differentiated from hollowware bowls, cups, mugs and jugs. Varied vessel functional types such as tablewares, serving vessels, tea and coffee wares, food preparation and storage containers, medicinal vessels, decorative ceramics, and condiment containers, were also noted where possible.

Glass sherds, excluding those from windows, from all features were sorted as to type, and vessel reconstruction and cross-mending were carried out to arrive at minimum vessel estimates. Vessels were coded to a set of standard descriptive terms for analytical purposes. Date ranges were obtained from vessel type comparisons with known glass vessel manufacturing dates. The time-sensitive attributes and use-related descriptive glass vessel attributes were entered into a computer data base program. The glass vessel data were also organized into a functional group and classification system modeled after the ceramic vessel classification system developed by South (1977). Attributes recorded for each glass sherd and/or minimum vessel included type, color, markings and decoration, mold seams, size, use, shape, function, and date range. Functional vessel types that were noted included alcoholic versus non-alcoholic beverage containers, medicinal bottles, condiment bottles, chemical containers, drinking vessels (tumblers, stemmed ware, and mugs), decorative glassware, lighting fixtures, and mirrors.