

RESEARCH DESIGN

Theoretical orientaton

The Fork Branch community offers the social scientist a laboratory for the study of both commercial and ethnic history over a long period. The relative wealth of documentary evidence, folklore, and material remains will force any researcher to set priorities and focus on single aspects of the community.

In the midst of an expanding urbanizing community, Fork Branch has suffered few physical intrusions that might have compromised the archaeological record of more than two centuries. However, it may not be readily possible to define an ethnic identity from the material remains at Fork Branch.

Archaeology should be able to interpret the documented changes in wealth and status over time. While various researchers have studied many sites of wealthy and upwardly-mobile scientific farmers, little attention has been paid to the inverse of upward mobility. These are the people from whom the large tracts were acquired, and who did not share in the various peaks of agricultural prosperity that characterized the nineteenth century in Delaware.

The common culture of poverty may mask certain ethnic patterns that might otherwise be detectable in a site. Indeed, space use, rather than artifact use, may be the principal clue to the ethnic identity of such a site (Kelley and Kelley 1980, pp. 137-138). House plans and toft layouts, which should be present here, may therefore be more important than individual artifacts or assemblages. Since a sizable sample of sites, occupied at different times over a centruy, can be identified at Fork Branch and tied to individuals, the possibilities of this locality for the archaeology of ethnicity are considerable.

Although the site's residents apparently shared fully the material, religious, and social environment of their neighbors, there may be some material cultural attribute that sets them apart. Weslager, Speck, and others have tried in vain for nearly a century to find significant native survivals in the culture of Delaware's remnant Indian groups.

If such traits survive, they lie outside the scope of the present study. If some future archaeological researcher is to seek such evidence, Fork Branch would be a likely place to look.

Predictive model for historic component

In an agricultural society, soils and markets are the prime

determinants for locations of homes and businesses. In the project area, available evidence indicates the truth of this assertion (Figure 8).

Every known historic-period dwelling site, past and present, has been built at the edge of the Sassafras soil type, never in the middle of large expanses of the best farmland. Bridges over Fork Branch and its tributaries have been the most popular homesites in all periods. The Fork Branch settlement that became known as duPont Station grew up on the margin of the arable land, overlooking the swampy valley. Based upon the documented affinity for field-edge sites, the investigators determined that special attention should be paid to places where Sassafras soil meets less desirable types. For edaphic reasons, prehistoric people may have chosen similar places.

Changed status and wealth over time should be reflected in the archaeological record of the community, providing almost a laboratory example of the interpretation of downward mobility.

Predictive model for prehistoric component

The project area lies on the northern edge of the area studied by Custer and Galasso (1983) in their survey of the St. Jones and Murderkill drainages. They divided the drainages into four zones, beginning with the bayside marshes (I), the inland side of the marsh zone (II), the mid-drainage (III), and the drainage divide transition zone (IV). This site lies on the edge of the third and fourth zones. Paleo period sites were found exclusively in the third and fourth zones. For all prehistoric periods, "procurement" sites dominated the inventory in these zones.

Archaic procurement sites "seem to be scattered on small areas of relatively higher elevation adjacent to swampy, poorly drained ground or large and small drainages (Custer 1984, p.72). Among the swampy sites, Custer has paid special attention to what he calls "bay/basin" environments like the swamp where Denney's Road crosses the proposed new right-of-way.

During the Woodland I period, the population became more sedentary and favored sites on rivers at the "mid-drainage" divide between fresh and salt water for their macro-band base camps. Political and social hierarchies became apparent in the archaeological record with the arrival of the Delmarva Adena complex (Custer 1984, p. 126). From base camps strategically located at mid-drainage, Woodland period people would make forays into the interior (p. 132).

Thomas, Griffith, Wise, and Artusy (1975), in their analysis of the Delaware coastal plain, postulated that prehistoric people of the Archaic and Woodland periods would have used similar interior woodland micro-environments most intensively during the

fall nut-gathering season and during the winter deer-hunting season. To tap these resources, they could have built semi-permanent base camps on sites like this one. In his summary of early and middle Woodland settlement patterns, Gardner (1982) visualized small groups seasonally breaking away and moving to the interior from larger sedentary base camps in or near the tidal zone.

Thomas (1974, p. 355) identified this locality as an area with high salvage priority because of its cultural importance and the level of potential development.

Methods of determining test loci

In consultation with Kevin Cunningham of the Department of Transportation, the investigators chose transects and test locations that would provide a sample of all soil types and conditions within the project area, with emphasis on areas where predictive models and settlement hypotheses presume a high likelihood of prehistoric and historic activity.

Field techniques

Surface collection, shovel testing, and test units were the principal field techniques employed in this project. Test units with trowelling were situated in places with a high likelihood and in places where buried soil horizons were expected.

Domesticated plantings are an important class of artifact on any historic site. Hedgerows and abandoned tofts often harbor plant species that reflect domestic taste, economic activities, trends in agricultural practice, and possibly even ethnic identification. Both herbaceous and woody perennials tend to survive for generations after they cease to be tended. Any research design that involves the study of domestic sites or agricultural processes should therefore include a survey of plant materials. The technique for recovering this data is a simple walkover survey at appropriate times of the year. In the present study, the surveys were done in late summer and early spring.

Physical constraints

The field north of Denney's Road was in corn and the fields south of the road were in soybeans. Because of a late fall season, these crops were not harvested until late November. After the harvest, the fields were obscured by undergrowth and stubble.

Not until the middle of November, after the field was plowed, was it possible to begin field investigations on the Smith farm north of the road, which was the area with the highest likelihood of containing sites.