

INTRODUCTION

The purpose of this report is to describe Phase II excavations at three prehistoric archeological sites in New Castle County, Delaware (Fig. 1 & Plate 1). Excavations were carried out during the late Summer and Fall of 1982. A description of the findings of the excavations follows a discussion of the regional prehistory and the regional context of the sites.

BACKGROUND INFORMATION

In order to understand the methods utilized in the test excavations at 7NC-E-43, 7NC-E-45, and 7NC-D-75, it is necessary to look at the general prehistory of northern Delaware. Previous research will also be considered.

Regional Prehistory*

The prehistoric archaeological record of northern Delaware can be divided into four blocks of time: The Paleo-Indian Period (ca. 12,000 B.C. - 6500 B.C.), The Archaic period (6500 B.C. - 3000 B.C.), the Woodland I Period (3000 B.C. - A.D. 1000), and the Woodland II Period (A.D. 1000 - A.D. 1650). A fifth time period, the Contact period, may also be considered and spans from A.D. 1650 to A.D. 1750, the approximate date of the final Indian habitation of northern Delaware in anything resembling their pre-European Contact form. Each of these periods is described below.

Paleo-Indian Period (12,000 B.C. - 6500 B.C.) - The Paleo-Indian Period encompasses the time period of the final disappearance of Pleistocene glacial conditions from Eastern North America and the establishment of more modern Holocene environments. The distinctive feature of the Paleo-Indian Period is

*This summary of the regional prehistory is abstracted from Custer (1980, 1981).

an adaptation to the cold, and alternately wet and dry, conditions at the end of the Pleistocene and the beginning of the Holocene. This adaptation was primarily based on hunting and gathering, with hunting providing a large portion of the diet. Hunted animals may have included now extinct megafauna and moose. A mosaic of deciduous, boreal, and grassland environments would have provided a large number of productive habitats for these game animals in northern Delaware and watering areas would have been particularly good hunting settings.

Tool kits of the people who lived at this time are oriented toward the procurement and processing of hunted animal resources. A preference for high quality lithic materials has been noted in the stone tool kits and careful resharpening and maintenance of tools was common. A lifestyle of moving among the game attractive environments has been hypothesized with the social organizations being based upon single and multiple family bands. Throughout the 5500 year time span of the period, the basic structure has remained relatively constant with some modifications being seen as Holocene environments appearing at the end of the Paleo-Indian Period.

Numerous Paleo-Indian sites are noted for northern Delaware including a hunting and processing site near Hockessin, possible quarry sites near Iron Hill, and isolated point finds.

Archaic Period (6500 B.C. - 3000 B.C.) - The Archaic Period is characterized by a series of adaptations to the newly emerged full Holocene environments. These environments differed from earlier ones and were dominated by mesic forests of oak and hemlock. A reduction in open grasslands in the face of warm and wet conditions caused the extinction of many of the grazing animals hunted during Paleo-Indian times; however, browsing species such as deer flourished. Sea level rise is also associated with the beginning of the Holocene Period in northern Delaware. The major effect of the sea level rise

was to raise the water table, which helped to create a number of large swamps such as Churchmans Marsh. Adaptations changed from the hunting focus of the Paleo-Indians to a more generalized foraging pattern in which plant food resources would have played a more important role. Large swamp settings such as Churchmans Marsh apparently supported large base camps as indicated by the remains at the Clyde Farm Site. A number of small procurement sites in favorable hunting and gathering locales are also known in northern Delaware.

Tool kits were more generalized than earlier Paleo-Indian tool kits and showed a wider array of plant processing tools such as grinding stones, mortars, and pestles. A mobile lifestyle was probably common with a wide range of resources and settings utilized on a seasonal basis. A shifting band-level organization which saw the waxing and waning of group size in relation to resource availability is evident. Known sites include large base camps (Clyde Farm Site) and smaller processing sites situated in a variety of locations.

Woodland I Period (3000 B.C. - A.D. 1000) - The Woodland I Period can be correlated with a dramatic change in local climates and environments that seems to have been a part of events occurring throughout the Middle Atlantic region. A pronounced warm and dry period set in and lasted from ca. 3000 B.C. to 1000 B.C. Mesic forests were replaced by xeric forests of oak and hickory and grasslands again became common. Some interior streams dried up; but the overall effect of the environmental change was an alteration of the environment, not a degradation. Continued sea level rise also made many areas of the Delaware River and Bay shore the sites of large brackish water marshes which were especially high in productivity. The major changes in environment and resource distributions caused a radical shift in adaptations for prehistoric groups. Important areas for settlements included the major

river floodplains and estuarine swamp areas. Large base camps with fairly large numbers of people are evident in many areas of northern New Castle County such as the Clyde Farm Site, the Crane Hook Site, and the Naamans Creek Site. These sites seem to have supported many more people than previous base camp sites and may have been occupied on a year-round basis. The overall tendency was toward a more sedentary lifestyle.

The overall tool kits show some minor variations as well as some major additions from previous Archaic tool kits. Plant processing tools became increasingly common and seem to indicate an intensive harvesting of wild plant foods that may have approached the efficiency of agriculture by the end of the Woodland I Period. Chipped stone tools changed little from the preceding Archaic Period; however, more broad-blade knife-like processing tools became prevalent. Also, the presence of a number of non-local lithic raw materials indicates that trade and exchange systems with other groups were beginning to develop. The addition of stone, and then ceramic, containers is also seen. These items allowed more efficient cooking of certain types of food and may also have functioned as storage for surplus plant foods. Storage pits and house features during this period are known from the Delaware Park Site. The social organizations seem to have undergone radical changes during this period. With the onset of relatively sedentary lifestyles and intensified food production, which might have produced occasional surpluses, incipient ranked societies may have begun to develop, as indicated by the presence of extensive trade and exchange and some caching of special artifact forms. In any event, by the end of the Woodland I Period a relatively sedentary lifestyle existed in northern Delaware.

Woodland II Period (A.D. 1000 - A.D. 1650) - In many areas of the Middle Atlantic the Woodland II Period is marked by the appearance of agricultural

food production systems; however, in northern Delaware there are no indications of such a shift. The settlements of the Woodland I Period, especially the large base camps, were also occupied during the Woodland II Period and very few changes in basic lifestyles and artifact assemblages are evident. Intensive plant utilization and hunting remained the major subsistence activities up to European Contact. Similarly, no major changes are seen in social organization for the Woodland II Period of northern Delaware.

Contact Period (A.D. 1650 - A.D. 1750) - The Contact Period is an enigmatic period of the archaeological record of northern Delaware which began with the arrival of the first substantial numbers of Europeans in Delaware. The time period is enigmatic because few Native American archaeological sites that clearly date to this period have yet been discovered in Delaware, although numerous Contact Period sites are evident in southeastern Pennsylvania. It seems clear that Native American groups of Delaware did not participate in much interaction with Europeans and were under the virtual domination of the Susquehannock Indians of southern Lancaster County, Pennsylvania. The Contact Period ended with the virtual extinction of Native American lifeways in the Middle Atlantic area except for a few remnant groups.

Previous Research and Regional Settings

Previous research at the sites included random surface collection of 7ND-E-43, 7NC-E-45, and 7NC-D-75 carried out in 1979 (Thomas 1980). No subsurface testing was conducted and no data were provided on the surface distribution of the recovered artifacts. Table I lists the artifacts recovered from Thomas' excavations.

TABLE 1

Site 7NC-E-43:

- 1 fragmentary quartz projectile point (stemmed-Savannah River like)
- 6 quartz fragments
- 3 fire-cracked rocks
- 1 19th century historic debris unspecified

Site 7NC-E-45:

- 1 quartz projectile point (stemmed)
- 4 quartz chips
- 4 quartz fragments
- 2 flint chips
- 1 flint fragment

Site 7NC-D-75:

- 1 chert projectile point (lanceolate - Fox Creek like)
- 1 jasper utilized fragment
- 21 quartz chips
- 19 quartz fragments
- 1 quartzite chip
- 2 flint chips
- 2 jasper chips
- 3 fire-cracked rocks
- 2 hammerstones
- 1 milling stone
- historic redware sherds, brick, and glass

The limited number of artifacts makes it difficult to ascribe a function to these three sites; however, the low number of artifacts and limited tool types suggests some kind of specialized, short-term processing sites. The absence of diagnostic artifacts makes it difficult to establish a time period of occupation; although, an occupation between 5000 BC and AD 500 seems most likely.

All three sites are located on bluffs bordering a small, swampy tributary of the White Clay Creek (Plate 1). Site 7NC-D-75 lies closest to the confluence of the tributary and the White Clay Creek, while the other two lie further upstream on the ephemeral tributary on gently sloping ground. The sites, therefore, all share the feature of being located in highly productive habitats and should show similar activities by prehistoric inhabitants. Thomas states that these sites "...represent a portion of a subsistence-settlement

pattern adapted to a 'highland flats' environment and may tie to a more sedentary base camp which would be located in a stream valley location" (Thomas 1980:VI-15). The artifacts recovered are few in number and do not necessarily support this contention, although the regional setting of the sites does. All three sites are located slightly upstream from a series of large base camp sites located near the confluence of White Clay Creek and Churchmans Marsh (Custer 1982). There appears to be a temporal similarity among the larger base camps and the three sites proposed for research may have been outlying processing sites which functioned to support them. As such, these sites would be significant for they would reveal a range of activities not seen at the larger, and more completely studied, base camps.