INTRODUCTION

This report presents the results of cultural resources planning study of the proposed Sussex East-West Corridor, Delaware Routes 404/18 and 9, in Sussex County, Delaware (Figure 1). The study was conducted between March and August of 1989 by archaeologists from the University of Delaware, Center for Archaeological Research (UDCAR), by the request of the Delaware Department of Transportation (DelDOT) to provide planning information for the Sussex East-West Corridor for compliance with Section 106 of the National Historic Preservation Act in consultation with the State Historic Preservation Office in the Bureau of Archaeology and Historic Preservation (BAHP). Funding for the project was provided by the Delaware Department of Transportation and the Federal Highway Administration (FHWA).

The Sussex East-West Corridor extends from the Maryland-Delaware boundary at Adams Crossroads to the vicinity of Five Points on State Route 1; it is approximately 30 miles long and five miles wide, centered on State Roads 404, 18, 40, and 9 (Figure 2). The proposed Corridor is located almost exclusively in Sussex County, with the exception of a small portion of the proposed Corridor in the extreme northwestern section near Hickman, which is in Kent County. All of the area within the project corridor was included in the study area, except for the town of Bridgeville, the town of Georgetown, the National Register District of Belltown, and the Historic District at Harbeson. These areas contained historic sites in concentrated numbers, and were avoided during this planning survey. The specific goals of the project were to identify zones within the

FIGURE 1

Project Corridor Location

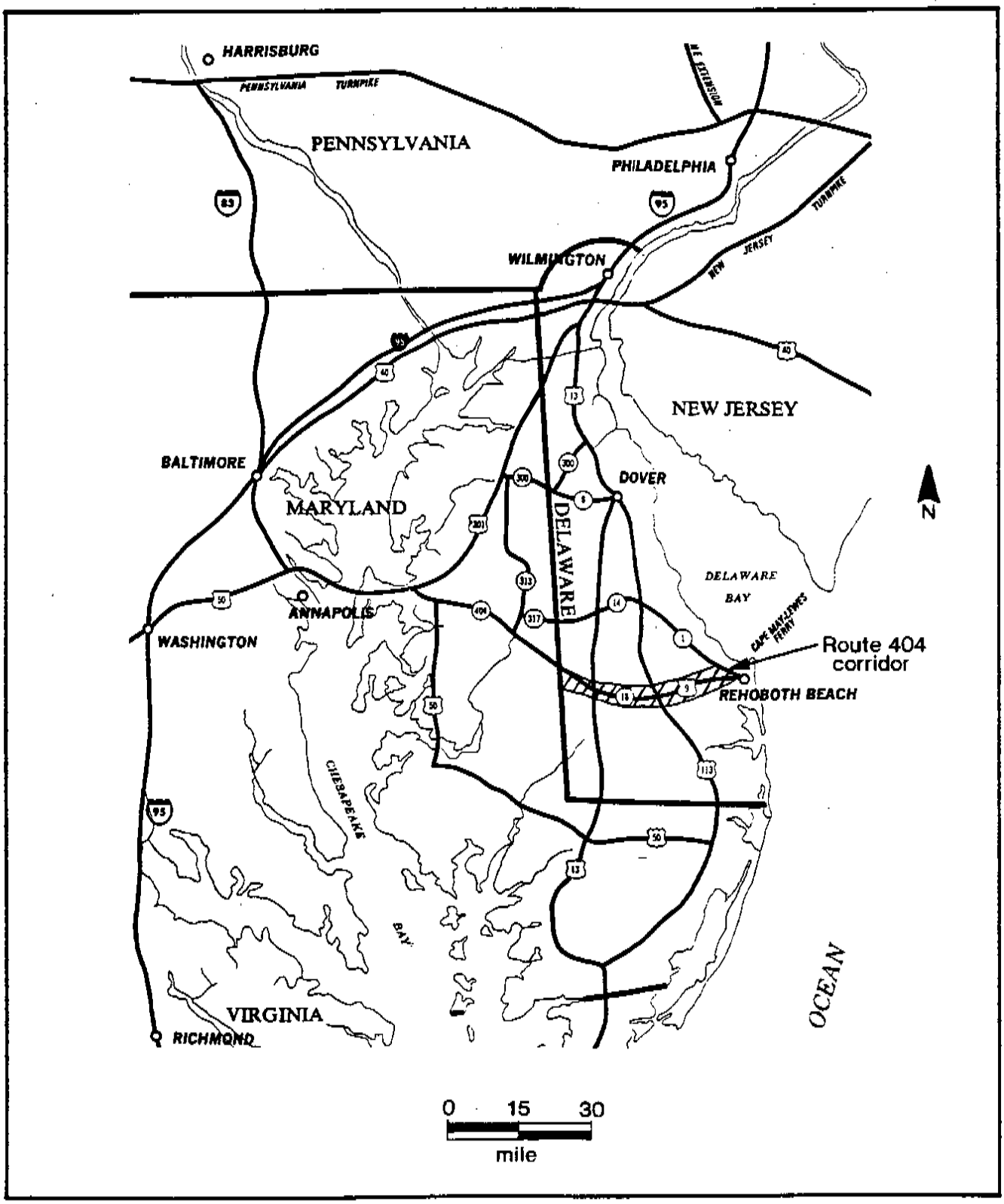
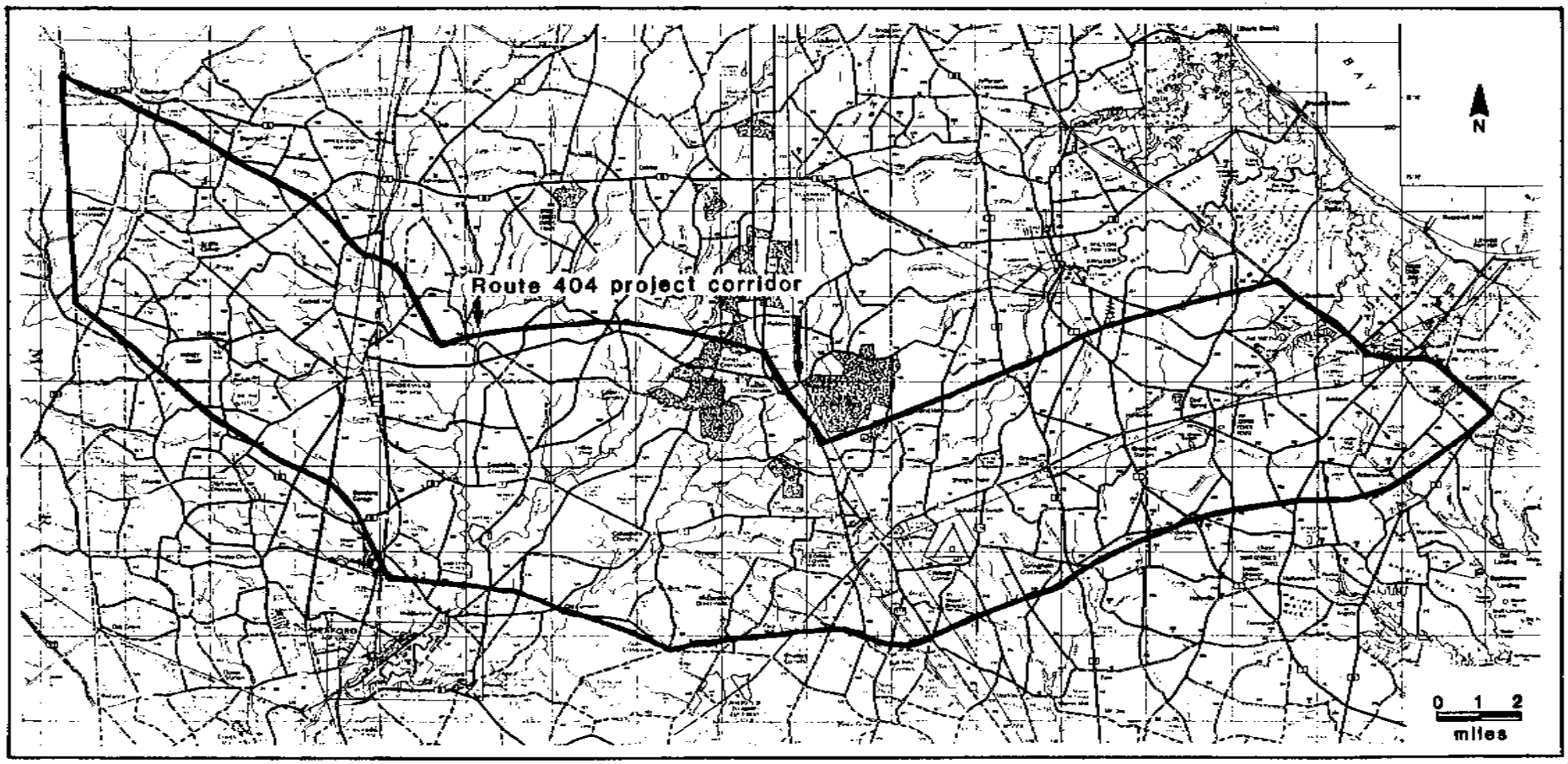


FIGURE 2

Map of Project Corridor



Corridor that were likely to contain significant prehistoric archaeological, historic archaeological, and/or historic standing structures. The project did not seek to determine the significance of any particular site or structure. Rather, it sought to outline the potential cultural resources that may be encountered in various sections of the proposed Corridor. Further survey work will be necessary to determine the impact of proposed individual alignments on specific sites and to determine the eligibility of these sites for listing on the National Register of Historic Places.

The report is organized in several sections. The first section provides a brief description of the environmental setting of the project area, and reviews the regional prehistory and history of the lower Delmarva Peninsula and Sussex County. The second section presents the existing data base of information available on the prehistoric and historic resources located within the project corridor. The cultural context of this information and the quality of the existing data is discussed. The third section of the report describes the application of predictive models to planning studies, discusses the various predictive models utilized in this study, and presents the results of their application within the project corridor. The application of LANDSAT satellite data in the development of the prehistoric predictive model for the project corridor is also presented. The fourth section of the report discusses the potential significance of the known prehistoric and historic resources in the project corridor, and addresses the potential

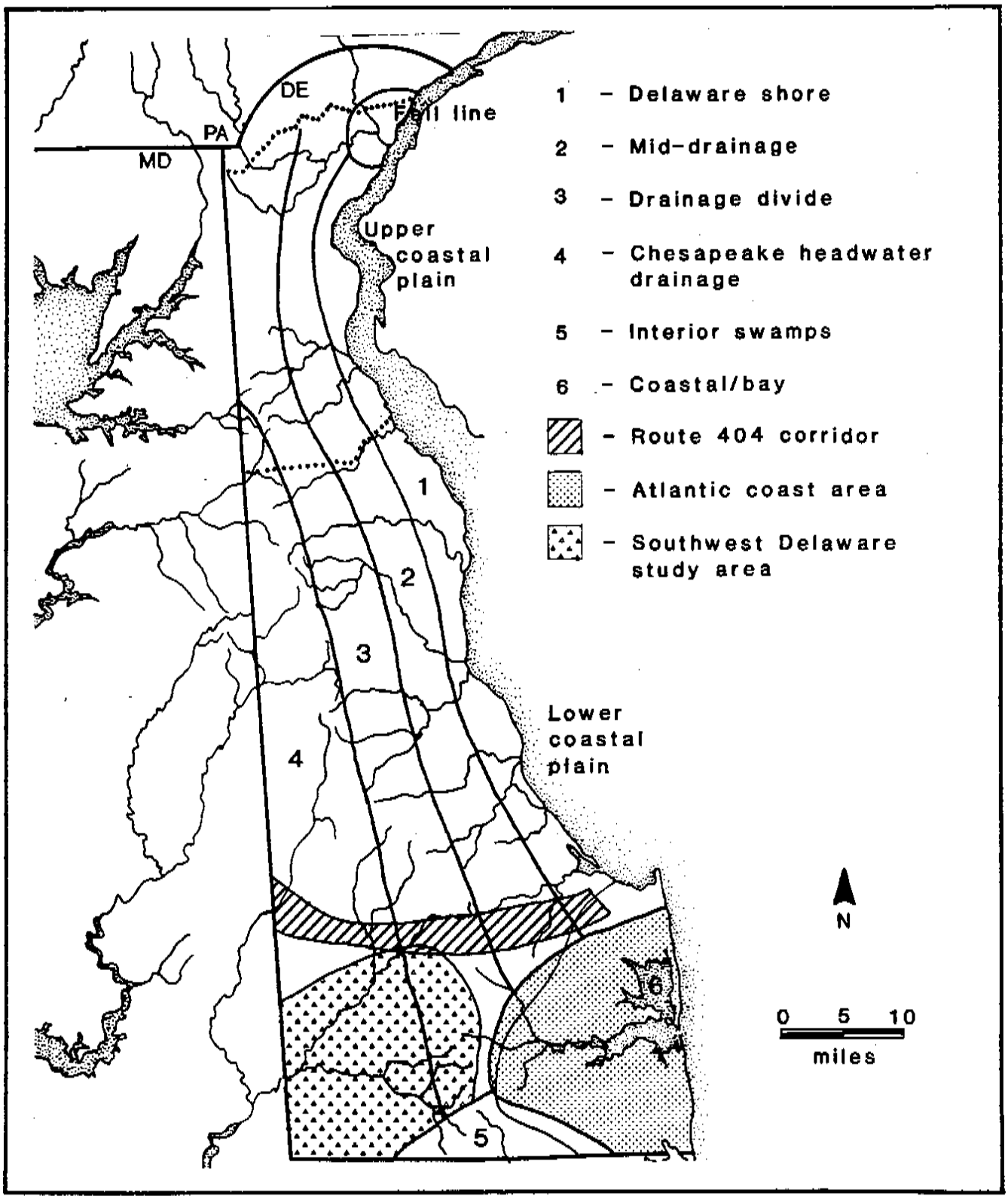
significance of sites that may be discovered based on the applications of predictive modelling. A series of sensitivity zones (management units) based on the potential occurrence of significant sites is also presented and described, and recommendations concerning cultural resource management strategies are provided. The final three sections of this report are accompanied by a series of small-scale maps illustrating site locations, predicted site locations, and sensitivity zones.

ENVIRONMENTAL SETTING

The study area falls within the Low Coastal Plain physiographic zone (Figure 3), which includes most of Kent and Sussex Counties. The Low Coastal Plain is underlain by the sands of the Columbia Formation (Jordan 1964; Delaware Geological Survey 1976) and these sands have been extensively reworked by various geological processes. The result is a very flat and relatively featureless landscape with elevation differences that range up to 10 meters (30 feet). These small differences in elevation are further moderated by long and gradual slopes. Surface water settings have been severely affected by rising sea level and most river systems, including much of the Nanticoke, Marshyhope, Broadkill, their tributaries and lower order tributaries of Indian River and Rehoboth Bay in the study area, are tidal in their middle and lower reaches. In general, the watercourses of the study area, particularly the main course of the Nanticoke River, some of its larger tributaries, such as Deep Creek, Broad Creek, and Clear Brook, and the Marshyhope provide a richer range of resources than the less well watered

FIGURE 3

Physiographic Setting



interior. Therefore, for the purposes of this report two basic environmental zones, the riverine settings and the interior, will be delimited for the survey area.

Most of the riverine areas of the Sussex East-West Corridor have an associated fringing tidal marsh characterized as the Arrow-Arum - Pickerel Weed Marsh Type (Zone VI - Daiber et al. 1976:86-87, Figure 25). These marshes occur within tidal mud flats where the water salinity ranges between fresh and slightly brackish. The prominent plants are Arrow-arum and pickerel weed; and reed grass, marsh mallow, and wild rice are also common. Many species of duck and muskrat are found in the area and various species of fish, including anadramous species, use these marshes as spawning areas. In general, these marshes provide a plethora of faunal and floral food sources not seen in other parts of the study area. Adjacent to the fringing marsh there is usually a steep bluff which is undergoing continual erosion. Cultivation often extends right up to the bluff, but in some cases a fringing woodland of hydrophytic species such as loblolly pine, sweet gum, mixed oaks, and Virginia pine (Ireland and Matthews 1974), is present. In a few places along the Nanticoke there are some developed floodplain settings, but these geomorphological settings are rare. For the most part, movement of the main channel of the major drainages has been constrained between the present river-edge bluffs over the course of the last 10,000 years.

Cypress swamps along some of the higher order tributaries of the Nanticoke, such as in the vicinity of James Branch, Hitch Pond, and Trussum Pond provide a unique environmental setting

within the riverine area. In the study area, as is the case throughout the Delmarva Peninsula, cypress swamps are located just upstream of the tidal marshes. Bald cypress, swamp black gum, and red maple are the dominant tree species (Braun 1967:93; Brush et al. 1980:83) and there are many associated edible aquatic plants. Deer, and many other game animals frequent these swamps and they are highly productive environmental settings for hunters and gatherers. Unfortunately, the antiquity of these swamps and their vegetation history is not well known.

In contrast to the well watered and environmentally diverse riverine areas of southwestern Delaware, the interior is not as well watered. Certainly, the diversity of the tidal wetlands is not found in the interior. However, studies of environmental diversity in the Middle Atlantic Coastal Plain (Brush, Lenk, and Smith 1980; Braun 1967) note the importance of soil drainage in determining environmental composition and there are many large patches of poorly drained soil settings in the interior (Ireland and Matthews 1974). These poorly drained areas are now characterized by woodlands of either deciduous or coniferous species, with the later developmentally older. Common species include willow oak, white oak, sweet gum, red maple, water oak, cow oak, black gum, sweet oak, holly, and dogwood (Braun 1967:268). Thus, the interior, prior to the artificial draining of agricultural fields, was probably at one time a rich mosaic of poorly drained, fresh water swamps and bogs, and well drained sand ridges. The poorly drained woodlands would have been productive settings for hunters and gatherers and would have been attractive settlement locations even though they were not as

productive as the riverine areas. In sum, the study area can be generally characterized as a contrast between the very rich and productive riverine settings which included the oligohaline ecotone and a less rich, but still very productive, interior zone.

Numerous sources of data indicate that there were marked climatic and environmental changes over the past 12,000 years in both riverine and interior areas. Detailed discussions have been presented elsewhere (Custer 1983a:17-24; 1984a:30-37, 44-48, 62-64, 89-93, 154) and only a summary will be presented here. It should be noted that there are numerous relevant sources of paleoenvironmental data for Delaware's Low Coastal Plain including the Dill Farm Site (Custer and Griffith 1984), a series of cores from the Nanticoke drainage (Brush 1986), cores from a bay/basin feature near 7NC-H-20 (Custer and Bachman 1986b) and other bay/basin sites (Webb, Newby, and Webb 1988), and a series of cores from the mouth of the Chesapeake Bay (Harrison et al. 1965). Table 1 summarizes the changing environments through time and notes their distributions in the riverine and interior portions of the study area. It should also be noted that the productivity of the riverine zone has changed through time as post-Pleistocene sea level rise (Belknap and Kraft 1977) inundated the drainage and pushed tidal and brackish water settings further into the interior along the major drainages. Perusal of Table 1 shows that the basic dichotomy between the riverine and interior areas probably was present for much of the Holocene and was an important factor in historic and prehistoric settlement decisions.

TABLE 1

PALEOENVIRONMENTS IN THE STUDY AREA

Episode	Interior Well-Drained	Poorly Drained	Riverine
Late Glacial (12,000 BC - 6500 BC)	Boreal forest, limited grasslands	Bogs and swamps with deciduous gallery forest	Deciduous gallery forest with some floodplain grasslands
Pre-Boreal/ Boreal (8000 BC - 6500 BC)	Boreal forest	Bogs and swamps with deciduous gallery forest	Deciduous gallery forest and boreal forest
Atlantic (6500 BC - 3000 BC)	Oak-hemlock mesic deciduous forest	Extensive bogs and swamps with deciduous gallery forest	Mesic deciduous forests
Sub-Boreal (3000 BC - 800 BC)	Oak-hickory-pine xeric forests and grasslands	Few bogs and swamps	Deciduous gallery forests with fringing wetlands
Sub-Atlantic /Recent (800 BC - recent)	Oak-pine forest with mixed mesophytic communities	Bogs and swamps with deciduous gallery forests	Deciduous gallery forests with fringing wetlands

REGIONAL PREHISTORY

The prehistoric archaeological record of the study area, and the Delmarva Peninsula in general, can be divided into four major periods: 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 includes the time period from A.D. 1650 to A.D. 1750, the approximate date of the final Indian habitation of southern Delaware in anything resembling their pre-European

Contact form. The descriptions of these periods noted below are derived from Custer (1983a; 1983b; 1984a; 1988) and the chronology of these periods is shown in Figure 4.

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 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 throughout southern 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 recent analysis of fluted points (Figure 5) from the Delmarva Peninsula, including some from the study area, shows this preference (Custer 1984b). A lifestyle of movement 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 settlement structure remained relatively

FIGURE 4

Prehistoric Chronology Chart

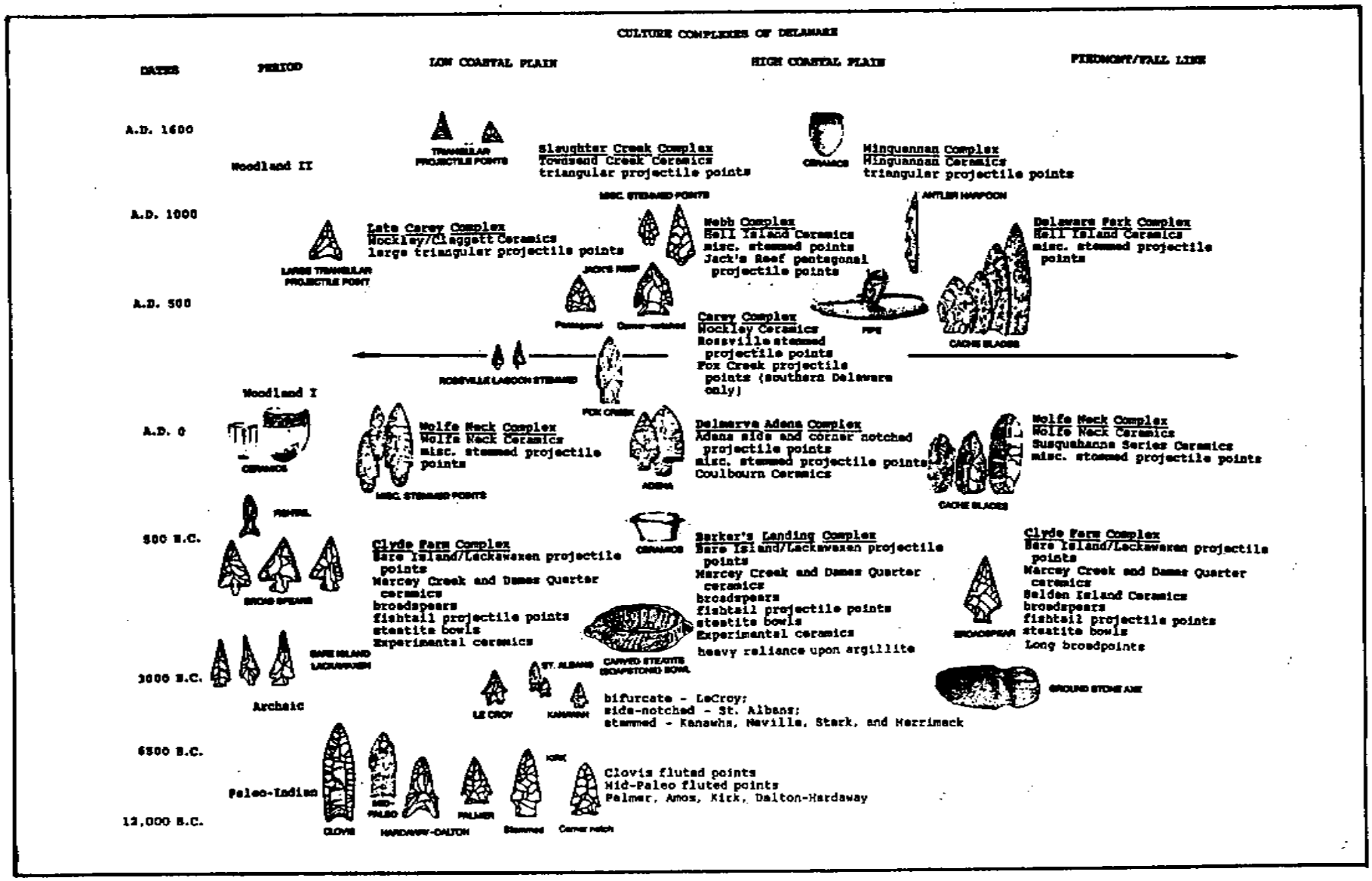
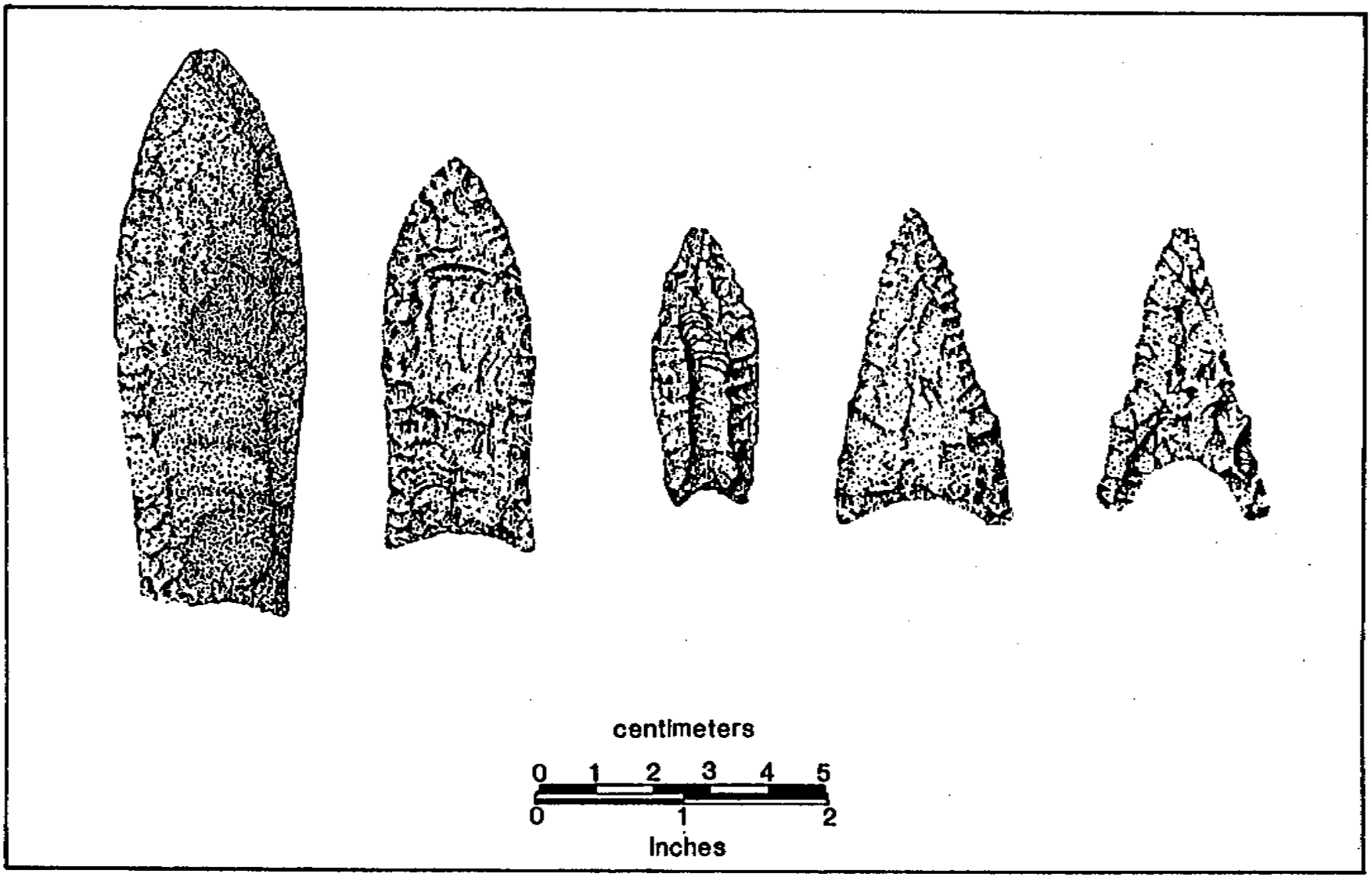


FIGURE 5

Paleo-Indian Fluted Points



period, the basic settlement structure remained relatively constant with some modifications being seen as Holocene environments appeared at the end of the Paleo-Indian Period.

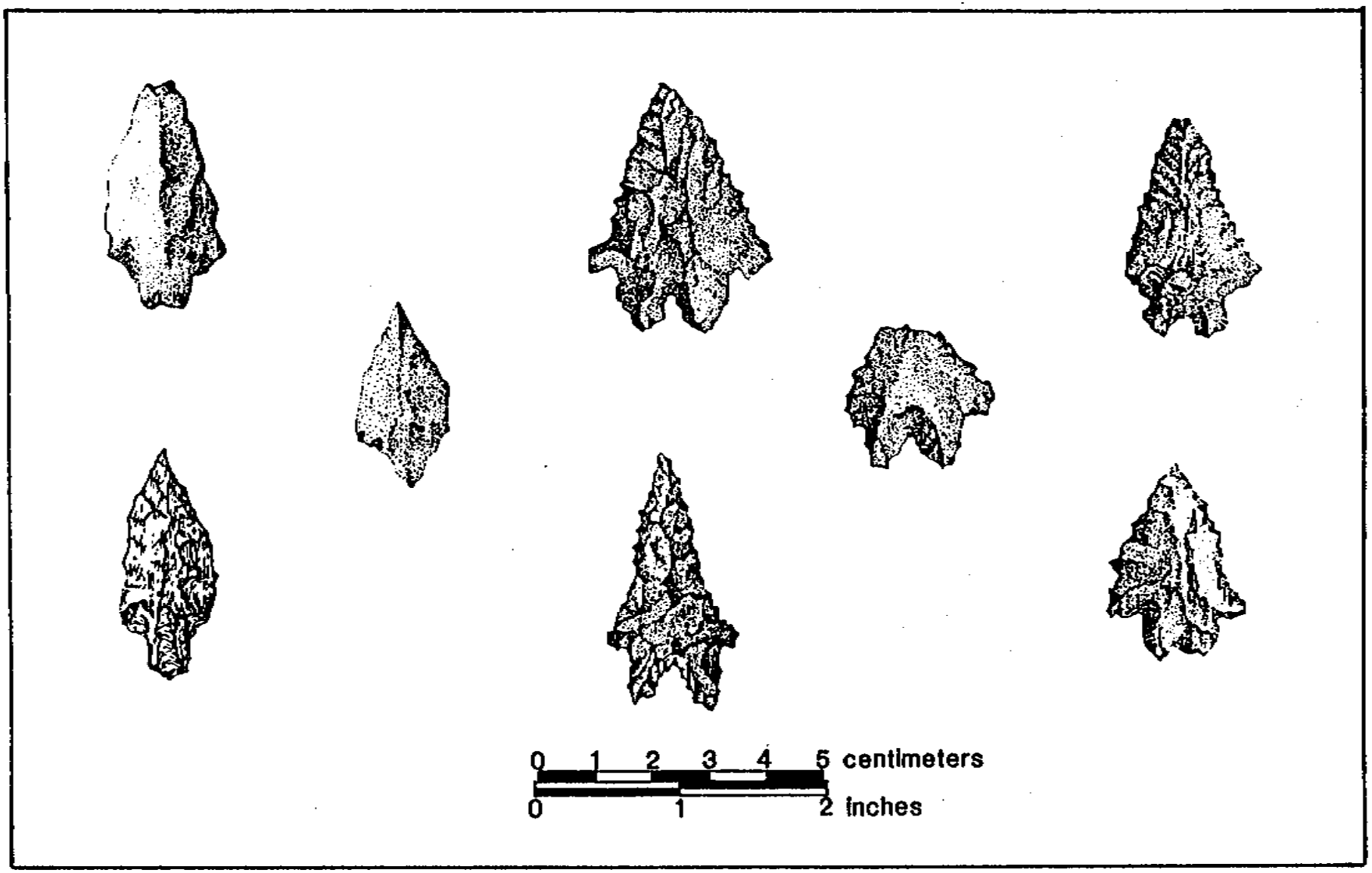
The main types of Paleo-Indian sites known for the study area are base camps, base camp maintenance stations, and hunting sites. The riverine settings of the Nanticoke and its major tributaries would be the expected locations for base camps while poorly drained interior swamps and bogs would be the foci of maintenance and hunting sites.

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 hemlock and oak. 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. 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.

Tool kits were more generalized than earlier Paleo-Indian tool kits (Figure 6) 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 seasonal waxing and waning of group size in relation to resource availability is evident. A recent study of Archaic site distributions on the Delmarva Peninsula

FIGURE 6

Archaic Period Points



(Custer 1986a) indicates that although there were changes in adaptations between the Paleo-Indian and Archaic time periods, the basic site location patterns remained the same.

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 hemlock-oak 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 changes was an alteration of the environment, not a degradation. Continued sea level rise created extensive brackish water marshes which were especially high in productivity throughout much of southern Delaware.

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 areas. Many large base camps with fairly large numbers of people are evident in many parts of the Delmarva Peninsula. These sites supported many more people than earlier base camp sites and may have been occupied nearly throughout the year. The overall tendency was toward a more sedentary lifestyle with increases in local population densities.

Woodland I tool kits show some minor variations as well as some major additions from previous Archaic tool kits. Plant processing tools became increasingly common as would be expected

in the face of an intensive harvesting of wild plant foods that may have approached the efficiency of horticulture by the end of the Woodland I Period. Chipped stone tools changed little from the preceding Archaic Period; however, more broad-bladed knife-like processing tools became prevalent (Figures 7 and 8). 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 (Custer 1984c). 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 containers for surplus food resources.

Social organizations also 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 began to develop (Custer 1982). One indication of these early ranked societies is the presence of extensive trade and exchange and some caching of special artifact forms.

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 and large-scale village life (Custer 1986b). In southern Delaware, however, the change in lifeways is not as marked. There have been some finds of cultivated plants in southern Delaware (Custer 1984a:165; Doms et al. 1985), but cultivated food remains are far less common than wild, gathered plant foods (Custer and Griffith 1986:44-49). In general, the Woodland II subsistence

FIGURE 7

Woodland I Projectile Points

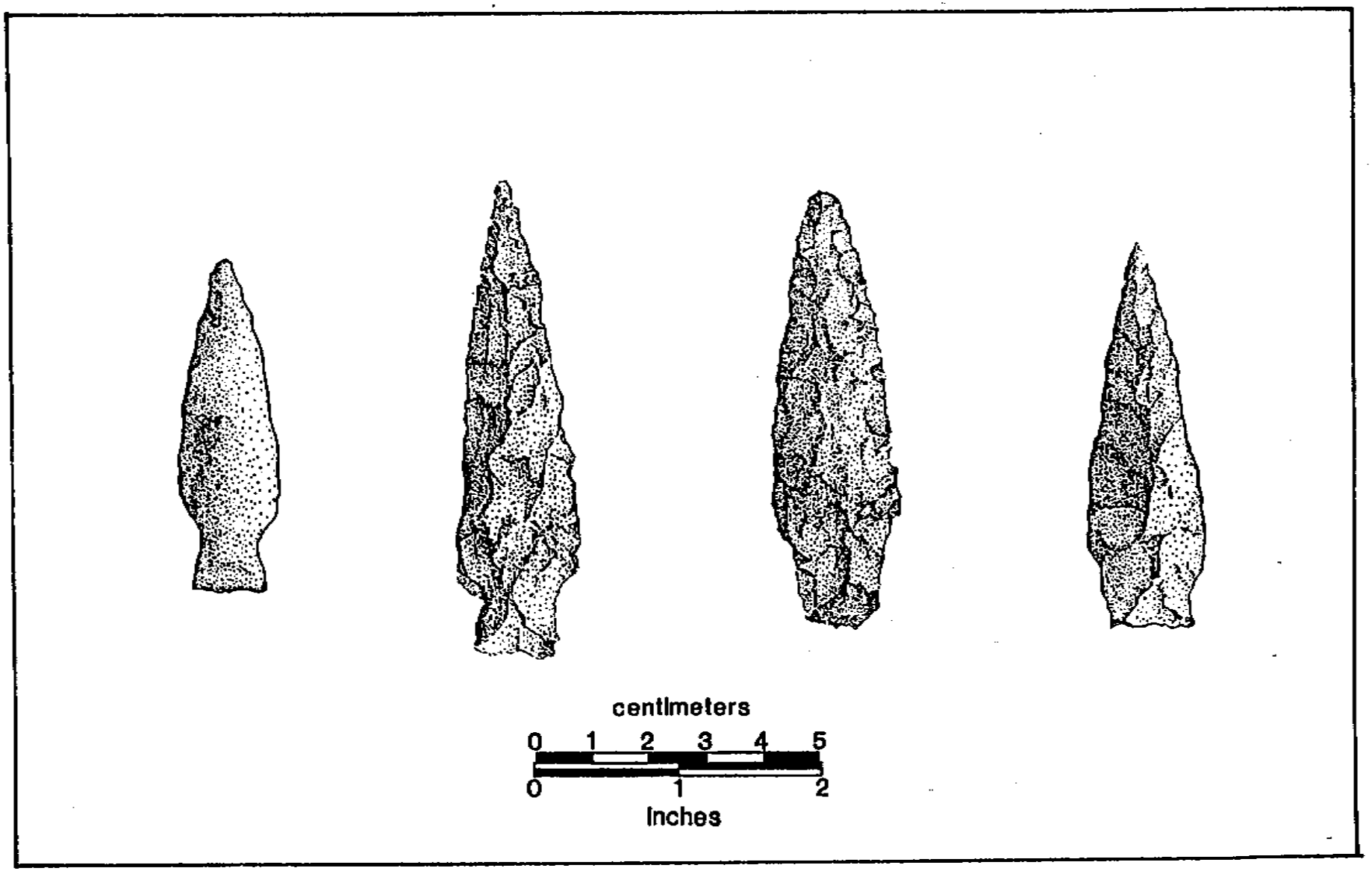
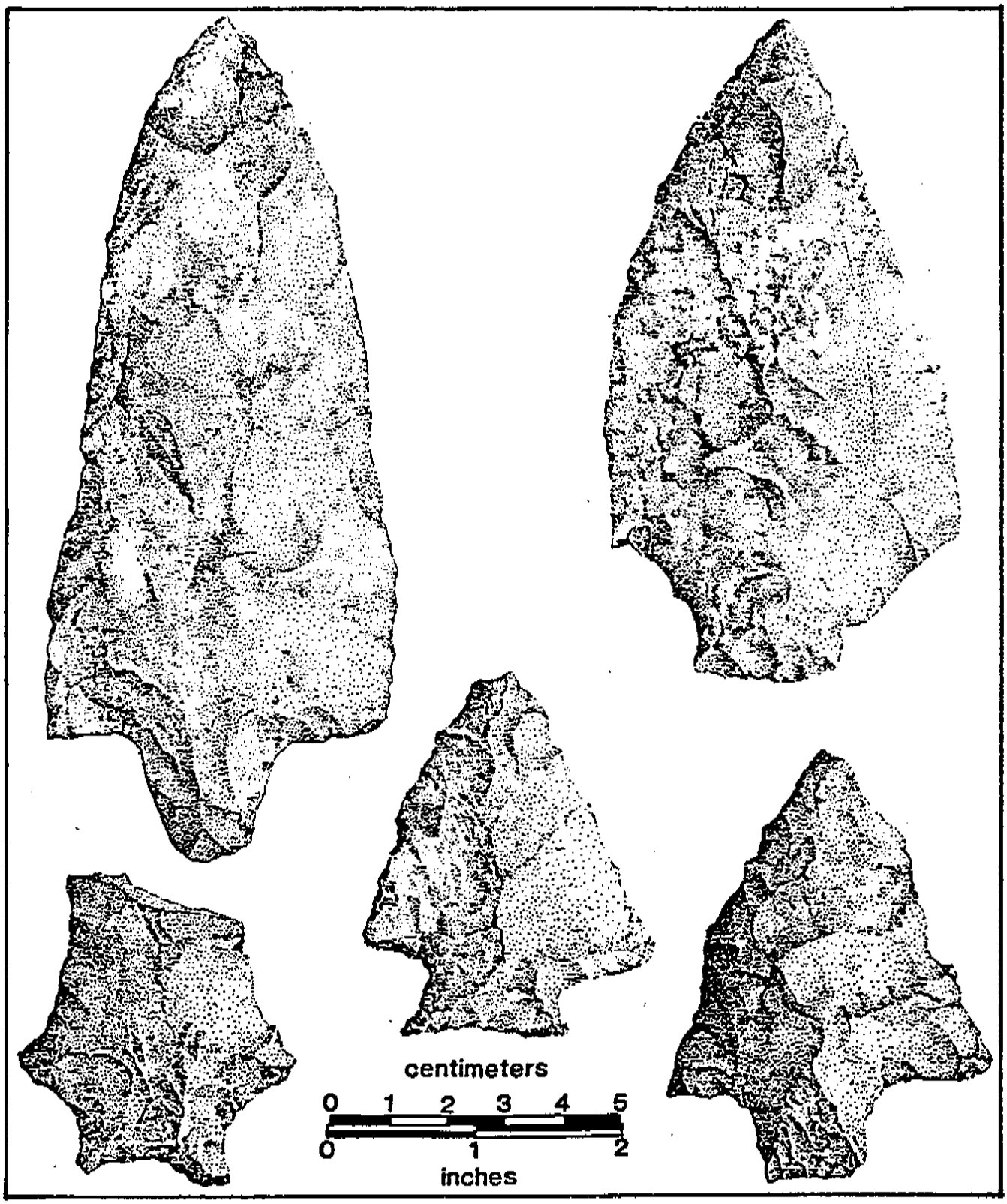


FIGURE 8

Woodland I Broadspears



patterns in southern Delaware are similar to those of the Woodland I Period with the likely addition of minor amounts of cultivated plant food resources.

Changes in ceramic technologies and projectile point styles can be used to recognize archaeological sites from the Woodland II Period. Triangular projectile points (Figure 9) appeared in stone tool kits immediately before the beginning of the Woodland II Period and by A.D. 1000, triangular projectile points are the only styles seen in prehistoric tool kits. Woodland II ceramics of southern Delaware are classified within the Townsend series (Griffith 1982) and show certain technological similarities with the preceding Woodland I ceramics. However, the appearance of more complex decorations including incised lines and cord-wrapped stick impressions distinguish the Townsend ceramic styles (Figure 10).

Contact Period (A.D. 1650 - A.D. 1750). The Contact Period is an enigmatic portion of the archaeological record of southern Delaware which began with the arrival of the first substantial numbers of Europeans in Delaware. The time period is enigmatic because only one Native American archaeological site that clearly dates to this period has yet been discovered in Delaware (7NC-E-42 - Custer and Watson 1985). In southern Delaware, Contact occupations have been reported for the Townsend Site (Omwake and Stewart 1963); however, the associations of European and Native American artifacts are problematic (Custer 1984a:177). Nevertheless, numerous Contact Period sites are evident in southeastern Pennsylvania and on the Maryland Eastern Shore

FIGURE 9

Woodland II Projectile Points

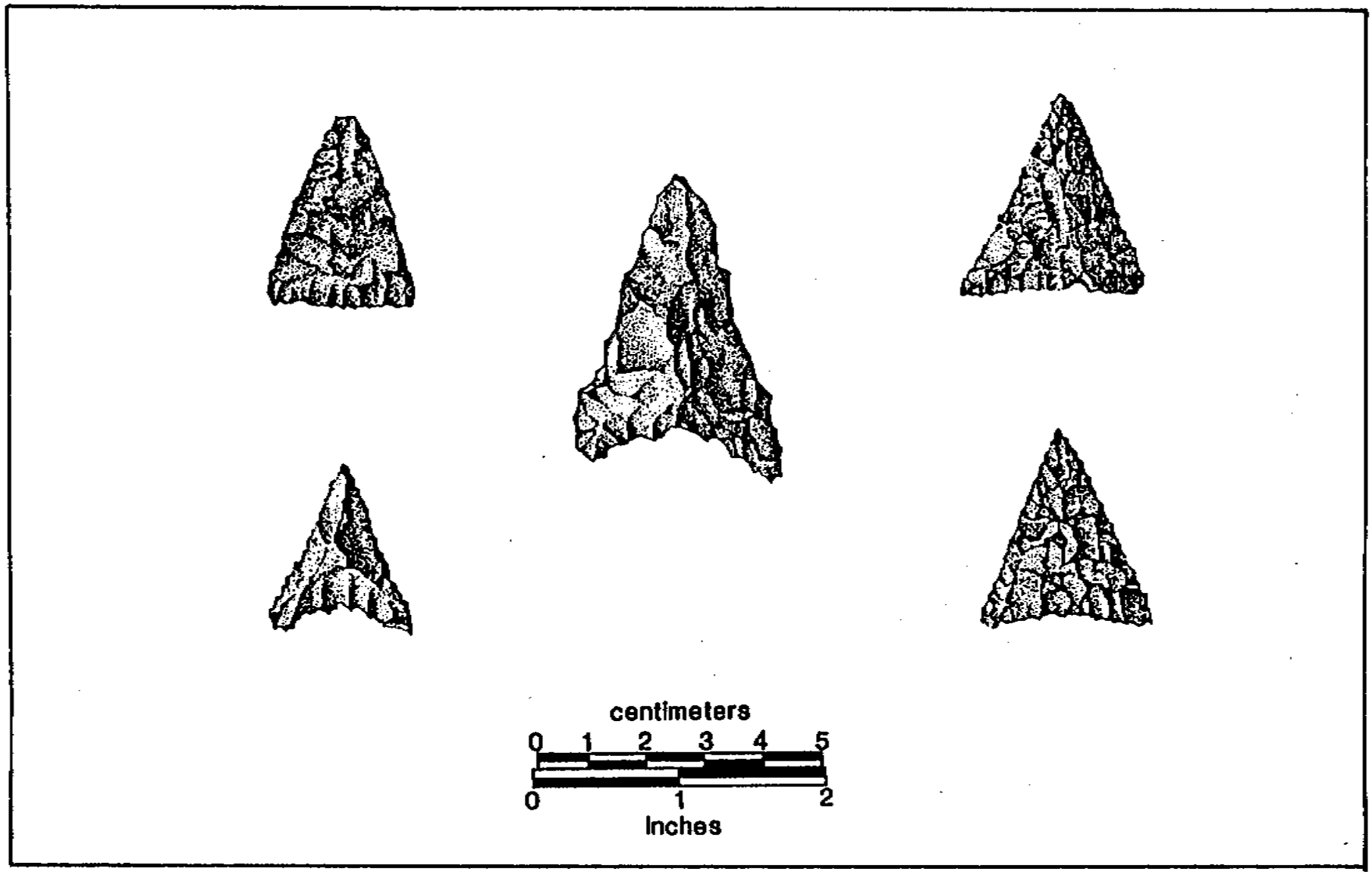
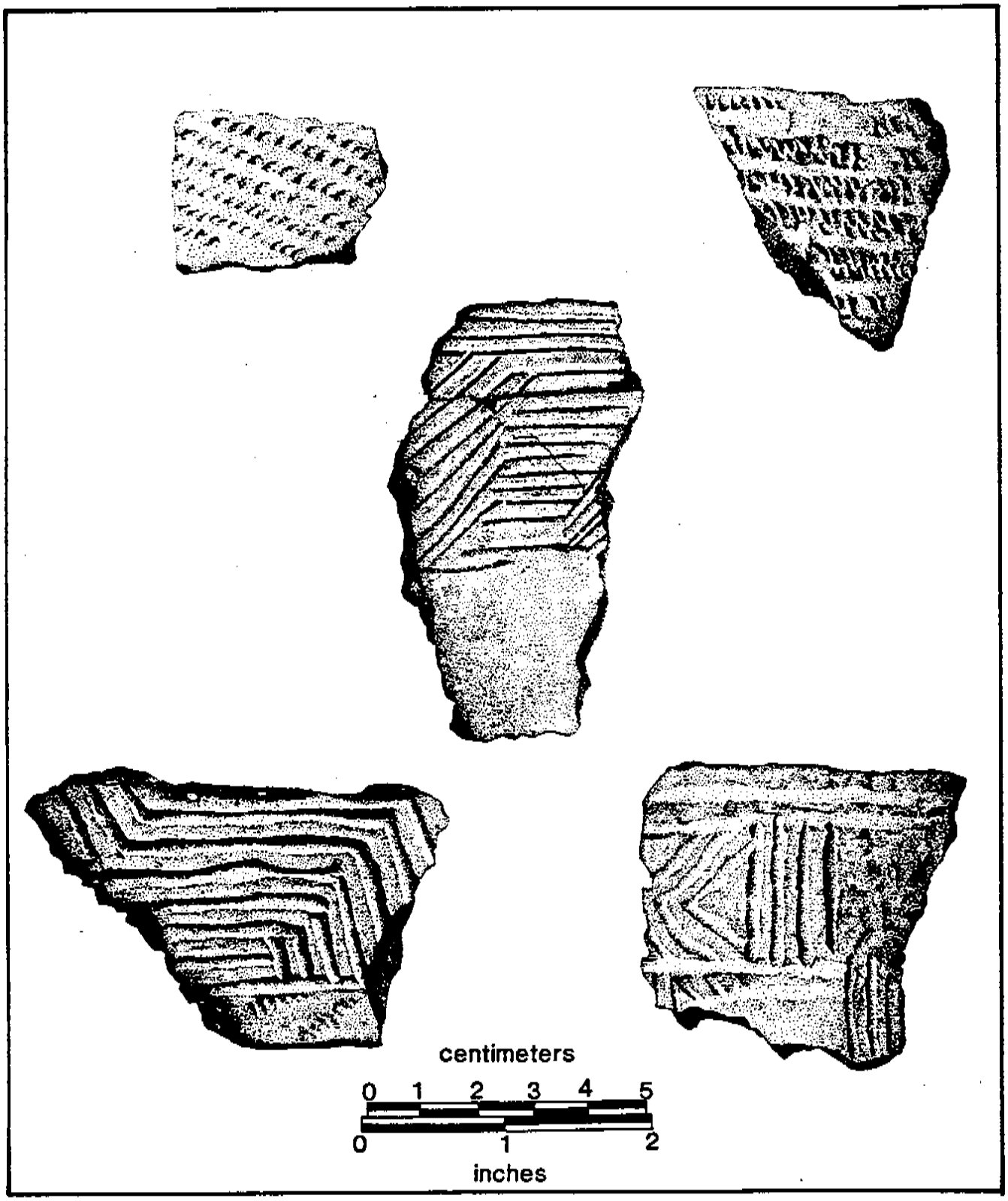


FIGURE 10

Townsend Ceramic Sherds



(Davidson 1982; McNamara 1985; Davidson, Hughes, and McNamara 1985). It seems clear that the 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, who lived during the same time period (Kent 1984). The Contact Period ended with the virtual extinction of Native American lifeways in the Middle Atlantic area except for a few remnant groups.

REGIONAL HISTORY

The following regional historical summary is presented to provide a brief background on important local and regional historical events that shaped and affected the inhabitants of Sussex County. The historical periodization is obtained from the State Historical Plan (Ames et al. 1987; Herman and Siders 1986), and descriptions of regional historical events are based on the works of Munroe (1978, 1984), Hoffecker (1977), and Scharf (1888).

1630 to 1730: Exploration and Frontier Settlement

The earliest colonial settlement in Delaware, known as Swanendael ("valley of swans"), was made at present Lewes, Sussex County in 1631 under the sponsoring of the patroons of the Dutch West India Company for the purpose of whaling and raising grain and tobacco. This venture was privately financed, but it ended in tragedy when the all-male population was wiped out in a massacre by the local Indians, the Sickoneysincks, in 1632. Farther north a group of Swedes in the employ of the New Sweden Company built Fort Christina in 1638 in what is now part of the

present City of Wilmington. Fort Christina thus became the first permanent European settlement in Delaware. The Swedish government supported the venture, and Fort Christina, located at the confluence of the Brandywine and Christiana Creeks, became the nucleus of a scattered settlement of Swedish and Finnish farmers and traders known as New Sweden (Weslager 1987).

The Dutch claimed the identical land -- from the Schuykill River south -- by right of prior discovery, and in 1651 the West India Company retaliated by building Fort Casimir at the present site of New Castle, in an attempt to block Swedish efforts to control commerce on the Delaware River. The Swedes responded by capturing this fort in 1654 and renamed it Fort Trinity. Rivalry between the Swedes and the Dutch continued, and the Dutch returned to the Delaware Valley in 1655 with a large military force and recaptured Fort Trinity and also seized Fort Christina. As a result, New Sweden ceased to exist as a political entity due to a lack of support from the homeland. Nonetheless, Swedish and Finnish families continued to observe their own customs and religion.

In 1657, as a result of peaceful negotiations, the City of Amsterdam acquired Fort Casimir from the West India Company, and founded the town in the environs of the fort called New Amstel. This was a unique situation in American colonial history -- a European city became responsible for the governance of an American colony. The Dutch erected a small fort at Lewes, called the Whorekil [also spelled Hoerenkil, Horekill, Horekill, and Hoorekill], near the mouth of the Delaware Bay in 1659 for the purpose of blocking English incursions, particularly settlers

from the Chesapeake Bay and Virginia, since Lord Baltimore considered the lands on the eastern shore of the Chesapeake Bay and extending to the western shore of the Delaware as part of his Proprietorship. At the Whorekil (Lewes) several Dutch families built homes, including Dutch Mennonites under the leadership of Cornelius Plockhoy, who established a semi-socialistic community there in July of 1663. They too, were under the supervision of local officials appointed by the burgomasters of Amsterdam.

English hegemony of the Delaware River and Bay area began in 1664 when Sir Robert Carr attacked the Dutch settlement at New Amstel on behalf of James Stuart, Duke of York, brother of Charles the II. This was an important move on the part of England to secure her economic position in the New World. The settlement at the Whorekil was also seized and pillaged by the English.

A transfer of political authority from the Dutch to the English then followed, and the Dutch settlers who swore allegiance to the English were allowed to retain their lands and personal properties with all the rights of Englishmen. Former Dutch magistrates continued in office under the Duke of York's authority, and the Swedes, Finns, and Dutch alike peacefully accepted the rule of the Duke of York through his appointed governors. In 1670 the first local court was established at the Whorekil by Governor Lovelace. By 1671 the population of the Whorekil consisted of forty-seven individuals, both Dutch and English (Gehring 1977:100). It was reported at that time that the Marylanders were unlawfully settling within the boundaries of

the Duke of York's lands, specifically about 20 miles from the Whorekil in the vicinity of Assawoman Inlet. Indeed, in 1670 Lord Baltimore had created a new county, called Durham, which encompassed all of the lands presently occupied by much of the State of Delaware (Papenfuse and Coale 1982:11). Between 1670 and 1682, when William Penn became the Proprietor of the lands from the Whorekil to New Castle, Baltimore issued at least 45 warrants for lands on the west side of the Delaware Bay, along "Duke Creek" (probably Duck Creek), Slaughter Creek, Prime Hook, Indian River, and Whorekil Creek (Skirven 1930). In 1673, during the third Anglo-Dutch War, the Dutch recaptured New Netherlands, including New Amstel and the Whorekil. The Dutch retained possession of the region only briefly, returning the lands to the English in 1674 in exchange for the captured Dutch colony of Surinam. The short war had an effect on the settlers at the head of Delaware Bay, however, for in December of 1673, the Maryland government sent an expeditionary force of forty men to the Whorekil, which was burned and pillaged for a second time in less than a decade (deValinger 1950). Following the peace treaty, the English again regained control of the region.

In 1682, the granting of proprietary rights to William Penn and his representatives by the Duke of York essentially gave political and economic control of the Delaware region to Philadelphia, the new seat of government in Penn's colony of Pennsylvania (Munroe 1978). Two years earlier, in 1680, Governor Edmund Andros had established the County of Deale, which included the settlements at the Whorekil northwards to Cedar Creek. The settlement of the Whorekil region, particularly around the town

of Whorekil, and the area ten miles south at Indian River and Assawoman Inlet, was encouraged by Governor Andros. Between 1676 and 1678 forty-seven land patents were issued by the Duke of York's government for lands in the area, all fronting on the coast or on navigable streams and rivers (Hancock 1976:17).

With Penn's arrival in 1682, the name of Deale County was again changed, this time to Sussex County, and the name of the town of Whorekil was changed to Lewes, the county seat of the English county of Sussex. In 1682 the first surveyors of highways and bridges were appointed for the county. Sussex County at this time was heavily forested and swampy, and settlement in the county for much of this period was confined to an area within about 10 to 12 miles of the coastline, extending inland along a line running roughly from modern Milford-Milton-Harbeson-Millsboro-Dagsboro. Grist mills were established on Broadkiln creek (Milton) by 1695 and on Bundick's Branch soon thereafter; an earlier grist mill had existed in Lewes by 1676. Lewes was the only town of any size in the county, and it became a political, maritime, and commercial center for the region, and Anglican, Presbyterian and Quaker houses of worship were established in the town by the end of this period. A second Presbyterian Church, the Cool Springs Meeting House, was erected about six miles west of Lewes on Cool Spring Branch by 1728. Yards for ship building were present in Lewes by the early 1680s (Hancock 1976:21). The population of Sussex County has been estimated to have been less than 1000 persons by 1700, and the majority of these inhabitants were farmers, raising crops of tobacco (the primary medium of exchange), corn, wheat, and rye.

Hogs and cattle were also raised. The exporting of cattle, by driving them overland from Lewes to New Castle, appears from the records to have been a significant source of income for the settlers of Sussex (Munroe 1978:198).

Political relations between the Three Lower Counties and Pennsylvania deteriorated and by 1704 representatives from Sussex County began to meet with legislators from New Castle and Kent Counties in a seperate assembly at the Town of New Castle, but the Governor continued to be appointed by Pennsylvania. Economic and social ties, however, continued to link the Lower Counties with Philadelphia throughout the seventeenth and eighteenth centuries (Munroe 1954).

1730 to 1770: Intensified and Durable Occupation

Settlement in Sussex County by the start of this period had penetrated the interior portions of the region, reaching the area of the mid-penisular divide (just to the west of present-day Georgetown). Patents for land west of the headwaters of the Broadkiln and Indian rivers, and along Gravelly Branch and its tributaries were being issued from the Pennsylvania government by the second decade of the eighteenth century (Scharf 1888:1237, 1293). According to one contemporary observer

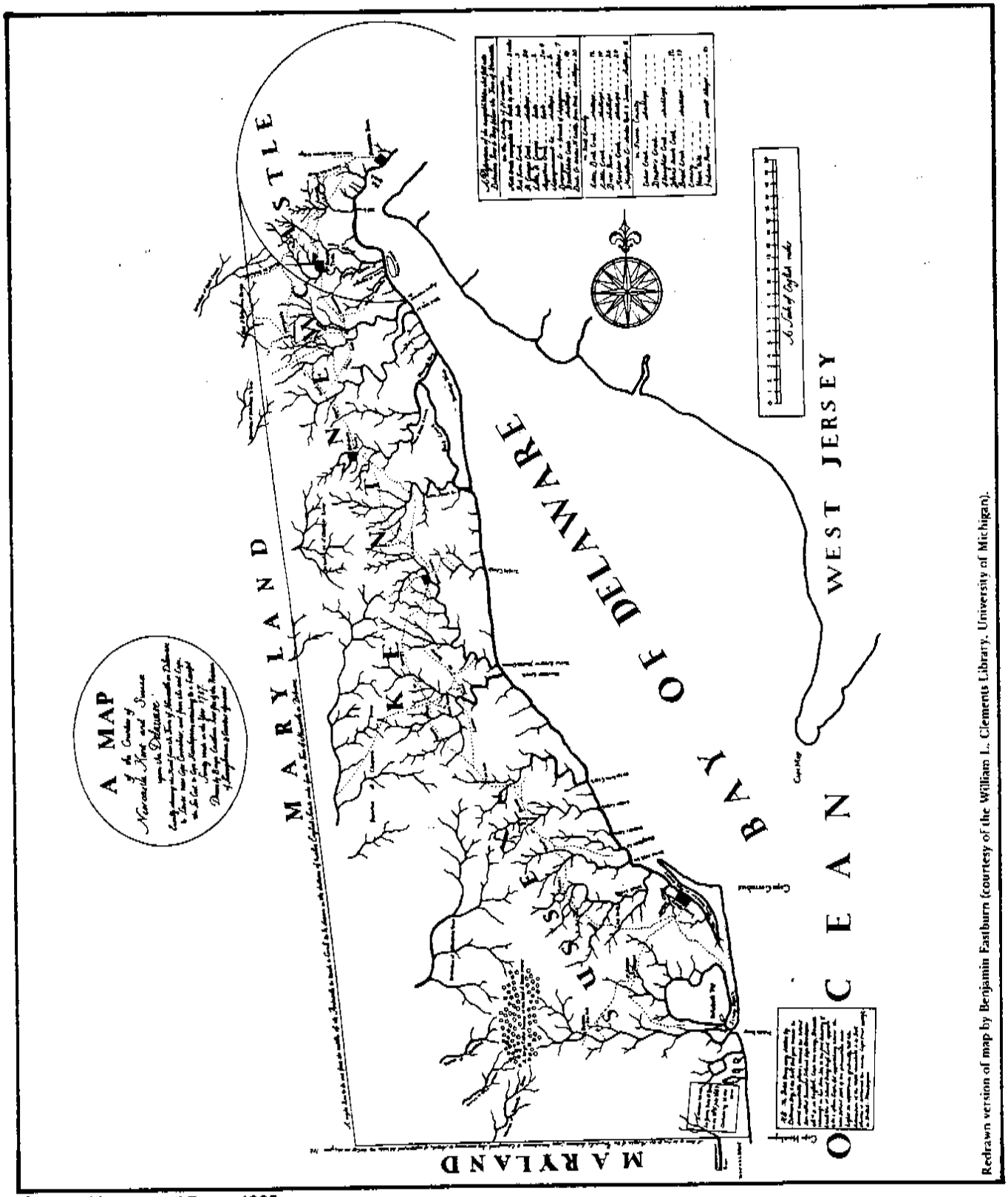
> The Inhabitants here live scattering generally at 1/2 a mile or miles distance from each other, except in Lewes where 58 families are settled together. The business or Employment of the Country Planters, is almost the same with that of an English Farmer, they commonly raise Wheat, Rye, Indian Corn, and Tobacco, and have Store of Horses, Cows, and Hoggs. The produce they raise is commonly sent to Philadelphia ... The people here have generally the Reputation of being more Industrious then they of some of the Neighboring Counties .... (Hancock 1962:139).

On the opposite side of the Peninsula, in the area that would become Northwest Fork, Nanticoke, and Seaford Hundreds, the Maryland government was issuing patents and warrants as early as the 1680s for lands on the Marshyhope Creek, Clear Brook Branch, and other tributaries of the northwest fork of the Nanticoke River. In 1682 John Nutter of Maryland took up the tract of land between Clear Brook Branch and Bridge branch that would eventually contain the town of Bridgeville (Hancock 1985:13). Other prominent family names from the western part of Sussex County, such as Cannon, Polk, Richards and Adams, appeared in the area during this period under Maryland land patents. Until the settling of the dispute over the boundary line between Maryland and Pennsylvania (including the Three Lower Counties) in 1765 by the establishment of the Mason-Dixon Line, the traditional western boundary between Sussex County and Worcester County was the Nanticoke River and its tributaries, particularly Tussocky Branch and Gravelly Branch. Those settlers on the west side of the Nanticoke resided in the Province of Maryland, and those on the east side lived in Sussex County. Needless to say, this rather arbitrary boundary caused considerable confusion and dissention among the "Border People" on the Peninsula, and numerous annoying disturbances occurred along the borders of New Castle, Kent, and Sussex counties throughout the period.

For most of the eighteenth century, the land remained heavily wooded and overland passage was difficult. The limited extent and development of the road network in the county is shown on Benjamin Eastburn's map of the Lower Counties in 1737 (Figure 11). Major roads included the King's Highway, officially

FIGURE 11

"A Map of the Counties of New Castle, Kent, and Sussex upon the Delaware", by Benjamin Eastburn (1737)



Redrawn version of map by Benjamin Eastburn (courtesy of the William L. Clements Library, University of Michigan).

Source: Monroe and Dann, 1985.

established by an Act of the General Assembly in 1752, which ran northwards from Lewes to Cedar Creek and St. Mathews Anglican Church (built in 1707), and from there to Dover and up country to Wilmington (Laws of the State of Delaware 1797:320, 390-394). From Lewes the main road ran south through St. Georges Chapel to Warwick and the ferry crossing on the Indian River, and from Lewes southeast down the Atlantic Coast towards the Inlet. At St. Georges Chapel (built in 1719), a side road extended down Angola Neck, a site of early settlement in the county (Munroe and Dann 1985). In the western part of the county, claimed at this time by Maryland, a major overland route ran from Choptank Bridge across Gravelly Branch in the vicinity of Coverdale Crossroads. The roads were described at the beginning of this period as "very commodious for travelling, the land being level and generally sandy, so that the people usually come to Church Winter and Summer some 7 or 8 miles, and others 12 or 14 miles...."(Hancock 1962:140).

The population of Sussex County grew slowly throughout this period. In 1728, The Reverend William Beckett reported that there were a total of 1,750 inhabitants in the county, consisting of 1,075 Anglicans, 600 Presbyterians, and 75 Quakers. Beckett also noted that there were 241 slaves and free blacks in the county. The presence of so many Presbyterians, Beckett said, was due to the great influx of at that time of Scotch-Irish settlers "of the most bigotted sort" (Hancock 1962:138). By the 1740s, it was estimated that the population of Sussex County was between 1,800 and 2,000 (Pennsylvania Archives 1891), and Hancock (1976:26) estimates that by 1775 there were nearly 14,000

inhabitants. The tremendous growth of the population between 1740 and 1775 may be attributable to the strong migration of settlers from the eastern shore of Maryland to Delaware lands, as well as to overseas immigration from Great Britain (Munroe 1978:150).

Throughout the period, farming continued to be the major occupation of the settlers in Sussex. The farms and plantations in Sussex have been generally characterized as subsistence farms, operated by poorer farmers and farm laborers, particularly when compared to the farms located in New Castle County (Main 1973:26-32). Tobacco declined from its position as the prominent cash crop in Kent and Sussex counties, and was replaced somewhat by corn and wheat. The lumber industry, particularly the harvesting of vast stands of cedar and pine from the Indian River area, began in this period to grow in importance, and the shellfish industry was established in the bays of Sussex. Shipbuilding remained a significant industry, especially at Lewes, on the Broadkiln, and along Indian River.

An important industry that flourished in the county during this time period was the iron industry. Several iron furnaces and plantations were established along the Nanticoke, Gravelly Branch, and Deep Creek beginning in the 1760s (Tunnell 1954; Heite 1974). These furnaces used bog iron ore, dug from the surrounding swamps and wetlands, for their sources of ore. The Deep Creek Furnace was established in 1763, as was Nanticoke Forge, located at Middleford. Pine Grove Furnace was located at the present site of Concord, and the Unity Forge (blast furnace),

owned by Joseph and Samuel Shankland, was located at the Head of the Nanticoke River in Northwest Fork Hundred. Most of these furnaces were out of production by the beginning of the American Revolution.

Lewes continued to be the major town in the region, though there was some dissention in the 1760s among the inhabitants of the southern and western portions of the county to have the county seat moved to the Crossroads on the Broadkiln (present-day Milton). Several small hamlets began to spring up during this time period, mostly located at stream and river crossing points. Besides the Crossroads, also known as Clowes, these hamlets included Bridgebranch (later Bridgeville) in Northwest Fork Hundred, established in 1730 with the erection of a bridge over the creek of the same name; Warwick in Indian River Hundred, a ferry-point erected before 1750 on the upper reaches of Indian River; and St. Johnstown in Nanticoke Hundred, the location of crossroads village and Presbyterian Church in the last quarter of the eighteenth century.

1770 to 1830: Transformation from Colony to State

By the start of this period, the century-long boundary dispute between Maryland and Pennsylvania had been decided, and the area west of the Nanticoke offically became part of Sussex County. The addition of such a substantial tract of land spurred the creation of five new hundreds in Sussex; Baltimore, Little Creek, Dagsborough, Nanticoke, and Broad Creek. These hundreds in "New Sussex" were joined with the five hundreds of "Old Sussex; Lewes and Rehoboth, Indian River, Northwest Fork, Broadkill, and Cedar Creek (Hancock 1976:25) (Figure 12). Sussex

FIGURE 12

Delaware Map of Hundreds, c1700–c1800

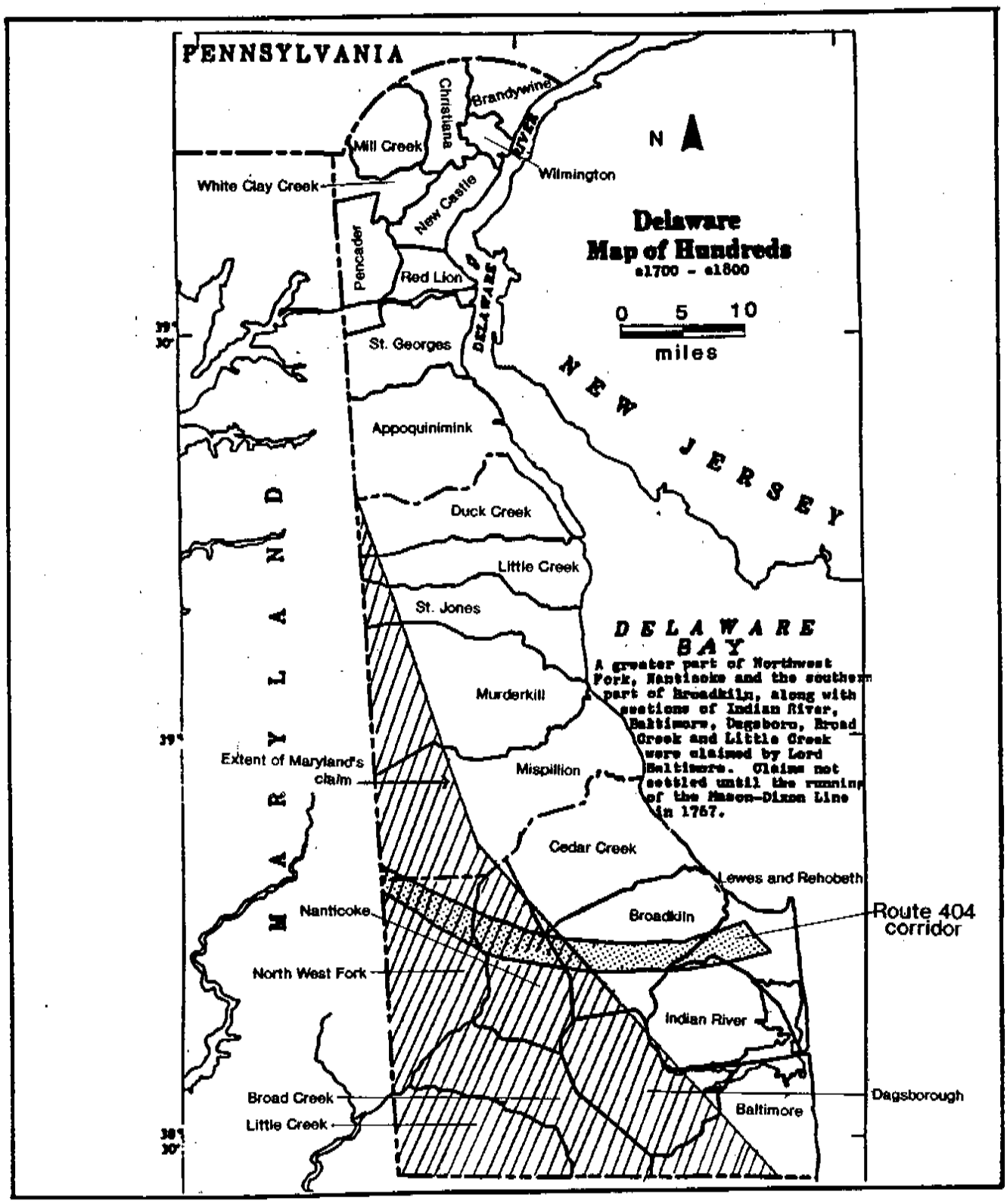


TABLE 2

POPULATION OF SUSSEX COUNTY, 1800

Hundred	TNWM	TNWF	TWP	NOFP,NT	NS	TP	PS
Cedar Creek	956	1008	1964	169	382	2515	15.2%
Broadkiln	1117	1065	2182	140	255	2577	9.9%
Nanticoke	753	723	1476	117	239	1832	13%
Northwest Fork	961	983	1944	138	459	2541	18%
Little Creek	894	921	1815	94	255	2164	11.8%
Broad Creek	764	747	1511	73	235	1819	13%
Baltimore	556	551	1107	32	256	1395	18.3%
Lewes and Rehoboth	527	518	1045	230	239	1514	15.8%
Dagsborough	554	504	1058	90	270	1418	19%
Indian River	572	550	1122	185	240	1547	15.5%
Total	7654	7570	15,224	1268	2830	19,322	

KEY:

TNWM = Total Number of White Males, all Ages
TNWF = Total Number of White Females, all Ages
TWP = Total White Population
NOFP,NT = Number of Other Free Persons, Not Taxed
NS = Number of Slaves
TP = Total Population
PS = Percent of Slaves

*From **Return of the Whole No. of Persons within the Several Districts of the United States**, 2nd Census of the U.S., Duane, Washington, D.C.

County thus became the largest of the Three Lower Counties, with a surface area of 94 square miles, nearly the size of both New Castle and Kent counties combined. By 1800 the population of the county was 19,358 inhabitants, with nearly 40% of the total located in the hundreds of Northwest Fork, Nanticoke, and Broadkill. The largest slaveholding hundreds at this time were Northwest Fork, Baltimore and Dagsborough, each with between 18% and 19% slaves in their respective populations (Table 2).

At the start of this period, the American Revolution dominated the social and political scene in the county. Much of the effects of the war were limited to the coastal areas around

Lewes, the Mispillion, Broadkill, and Indian rivers, where British blockades and shore raids disrupted trade and commerce. Inland, however, strong loyalist sentiments among the population prevailed, and in 1780 about 400 Tories took part in the Black Camp Rebellion. The headquarters of the rebellion was located in a swamp about six miles north of Georgetown, and was quelled with the use of Kent County militia (Hancock 1976:43). Many of the participants in the rebellion were inhabitants of the poorer regions of the county, and complained about a lack of paper currency, and of destitution for their families. Economic grievances of this sort would continue after the Revolution, and throughout the period.

In 1791, the Sussex County legislature voted to move the county seat from Lewes to the new town of Georgetown, located near the center of the county. As a result of this move, improvements in the transportation network, particularly in the interior parts of the county, were undertaken. By 1796 a road running south from Georgetown to Laurel was established, as was a road from Georgetown north to Milton and the Broadkill (Sussex County Road Papers 1792, 1796). Within the project area, both the transportation network and the settlement pattern focused on grist mills, saw mills, and mill dams. The mills provided nodal points for the surrounding population, and other services, such as taverns, shops, and stores were erected in their vicinities. The mill dams often provided the easiest means of crossing low, swampy ground and of crossing the mill ponds, thus becoming ready-made causeways across streams and creeks in the area. The

mills located at Collins Pond, Hunter's Pond, and Red Mill Pond are examples of this settlement pattern, as are the roads which cross at their dams.

Mill seats sometimes expanded into larger towns, such as Laurel (1802), Millsboro (1792), and Dagsboro (circa 1780). Other small towns grew up around crossroads and fords, such as Seaford (1799) and Bridgeville (renamed in 1810), and ship building provided the impetus for the growth of Bethel (1800) and Milton (1807).

Beginning in 1779 the Sussex Legislature passed several "Ditch Acts" in an effort to reclaim swampy or low ground so that it would be suitable for agricultural use. Between 1779 and 1812 over thirty ditch acts were passed, and these effected such drainages as the Marshyhope, Indian Run, Pot Hook Creek, and Almshouse Ditch. The reclamation of land in this fashion would be a continuing operation in Sussex, and today is represented by County Tax Ditches. By 1976 there were 106 independent tax ditch companies in Sussex (Passmore 1978:19).

Corn agriculture predominated throughout this period in Sussex County, and in the southern part of the county livestock raising contributed substantially to the economy (Macintyre 1986; Michel 1985; Garrison 1988). Homesteads in Sussex were generally characterized by a frame or log 1 and 1/2 story house averaging under 450 square feet of living space, a small orchard of apple and peach trees, and usually about four outbuildings, including a corn barn, smoke or meat house, and kitchen. Livestock on the farm might include a herd of hogs, cows, sheep, oxen, and an occassional horse. On most plantations, only 50% of the total

acreage of the farm was under cultivation (Hancock 1987:24-25). "Out plantations" or "out fields" might be located close by the farm, and were locations of tenant houses or well-used fields. A form of extensive subsistence farming coupled with home manufacturing dominated the economy of Sussex County during this period. Tench Coxe (1814:76), in his report on the manufactures of the United States for the year 1810, indicated that over 70% of the looms in the state of Delaware were located in Sussex County. Over 62% of the total value of flaxen goods, and over 75% of the wool produced in Delaware, came from homes in Sussex County. Coxe also reported that the five iron forges in the state were located exclusively in Sussex and produced 215 tons of iron annually. Twenty distilleries in the county produced nearly half of the annual value of all of those establishments in the state. Other categories of manufacturing, like grist mills, fulling mills, cotton and woolen factories, and snuff mills, were located predominantly in the industrial counties of Kent and New Castle (Table 3).

Though the demise of the iron furnaces of western Sussex County occurred at the start of this period, they were replaced by bloomery forges, which were smaller and more economical to maintain. The forge at Collins Mill Pond and the Unity Forge near Bridgeville are examples of these types of forges (Heite 1974).

1830-1880: Industrialization and Capitalization

The most significant event to occur within the county during this period was the arrival of the railroad (Figure 13). Prior

TABLE 3

CENSUS OF MANUFACTURES IN DELAWARE, 1810

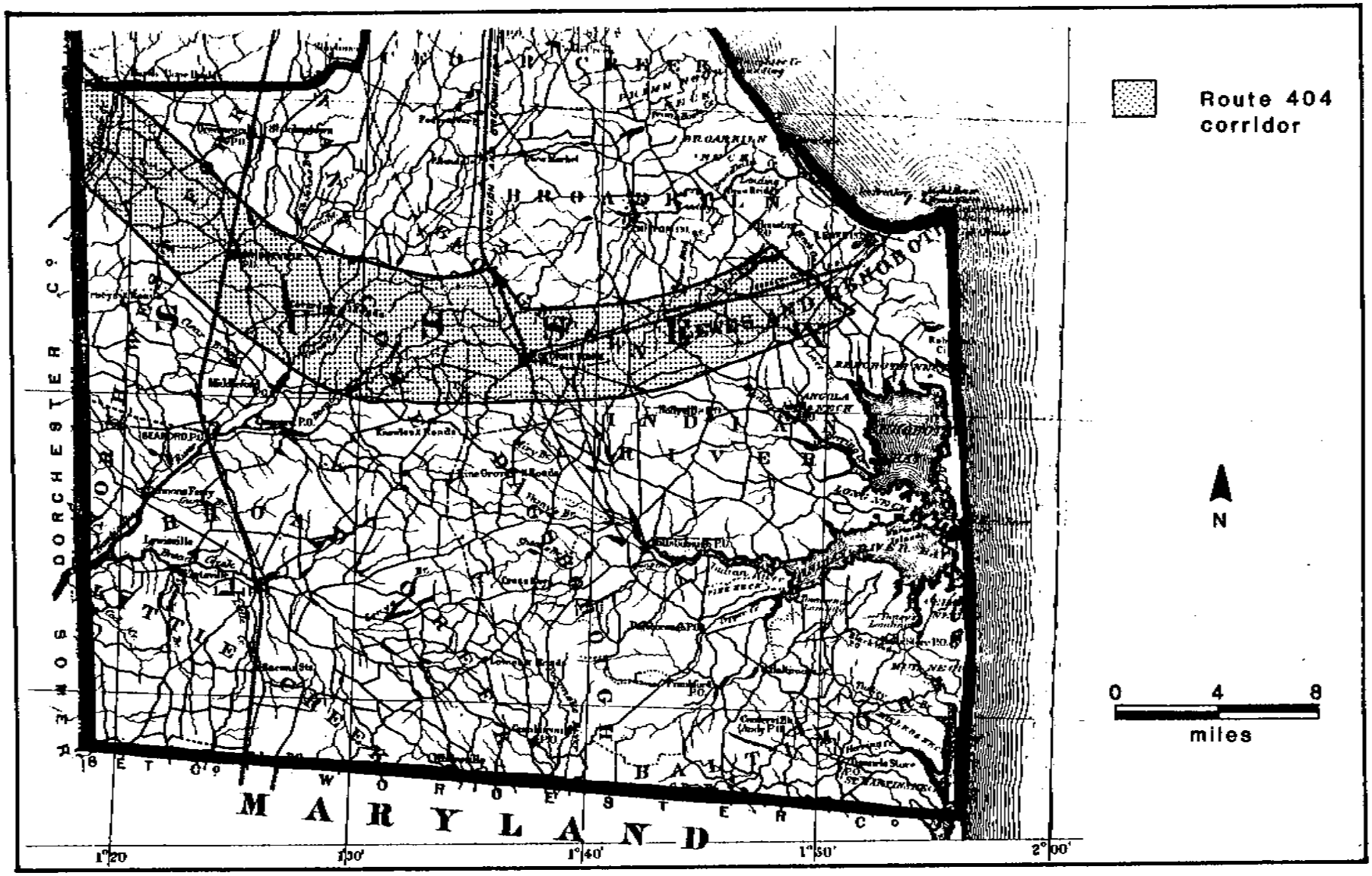
Category	Counties New Castle	Kent	Sussex	Total	Values
Textiles:					
No. of cotton manufactures	3	-	-	3	
Cotton (yds) made in families	661	-	-	661 yds	$ 661
Woolen manufactures	2	-	-	2	
Woolen (yds) made in families	1,524	4,269	48,150	63,943	$ 63,943
No. of looms	167	200	1,638	2,005	
Carding machines	10	1	-	11	
Flaxen goods (yds) made in families	75,440	38,427	166,502	280,369 yds	$132,640
Iron:					
Forges	-	-	5	5	$ 23,220 (215 tons)
Naileries	1	-	-	1	
Tanneries:					
No. of manufactures	10	12	3	25	
Pounds tanned hides and skins tanned	-	-	14,330	14,330	
	16,180	16,000	-	32,180	
Value of the above	$56,405	$52,000	$ 2,866		$111,271
Distilleries					
No. of manufactures	19	12	20	51	
Value of Distilleries	$ 5,400	$ 2,880	$ 7,200	-	$ 15,400
No. of Breweries	2	-	-	2	
Mills:					
No. of paper mills	2	-	-	2	
No. of snuff mills	2	-	-	2	
No. of rope walks	2	-	-	2	
No. of gunpowder mills	1	-	-	1	
No. of salt works	-	-	7	7	$ 2,050
No. of grist mills	27	15	-	42	
No. of barley mills	2	-	-	2	

KEY:
No. = Number
Yds = Yards

*From Tench Coxe, **A Statement of the Arts and Manufactures of the United States for the Year 1810.** A. Cornman, Jr., Philadelphia 1814, p. 76.

FIGURE 13

Detail of Sussex County, from D.G. Beers' Atlas of the State of Delaware (1868)



to this time, the preferred method of long-distance travel out of the county had been by steamboat, since overland travel was hampered by poor roads. Constructed in the western portion of the county, the Delaware Railroad reached the town of Seaford in 1856, and exited the state at Delmar by 1859 (Hancock 1976:63). The Delaware, Maryland and Virginia Railroad ran from Harrington to Milford, and from Milford south to Georgetown in 1869 (LeeDecker et al. 1989:32). A third line, the Junction and Breakwater Railroad was constructed between 1859 and 1868, when it reached Lewes; a spur line eventually connected to Rehoboth in 1878 (Hancock 1976:89).

The arrival of the railroad in the county stimulated changes in agriculture and industry, and the growth of new towns. The growing of perishable market crops, particularly fruits like peaches, blackberries and strawberries, became possible after the railroad. By the end of this period, Sussex County was the leading peach producing area of Delaware, and most of this crop was shipped by rail or water to urban locations. The transportation of the fruit crops was made possible in turn by the establishment of canneries, like the Fruit Preserving Company and the Georgetown Packing Company, both constructed near the railroad depot in Georgetown by the mid-1870s (Scharf 1888:1241). Other towns, such as Milton and Bridgeville, also constructed packing companies at this time (Hancock 1976:88).

Town growth was also spurred by the railroad, and depot towns of Lincoln, Ellendale, and Greenwood were established as direct results of the passage of the railroad. These towns were laid out on gridded patterns of streets utilizing the rail line

as the primary axis, and were a departure from the layouts of the earlier towns in the region. Smaller cross-roads hamlets, such as Harbeson (started in 1869) and Bennum, sprang up at the railroad stations on the Junction and Breakwater Railroad between Georgetown and Lewes (Eckman 1955:494).

The arrival of the railroad allowed the tourism industry to grow in the county during this time period. Beaches and coastal areas had always held a special allure to the region's inhabitants, and with the improved transportation methods these areas became more accessible to the urban populations of Philadelphia and Baltimore, who no longer had to rely soley on the steamboat to travel to Lewes. The Rehoboth Beach Camp Meeting was organized by the Methodists in 1873, and the Hotel Henlopen, with 75 rooms, was constructed in 1879 (Hancock 1976:90).

At the outbreak of the Civil War, Sussex County was the largest slaveholding area in Delaware, containing over half of the state's slave population. The vast majority of these bondsmen were the property of small farmers, and worked as domestic servants or field laborers. Free blacks in the county generally owned little land, and like their enslaved conterparts, worked as day laborers and hired farm hands, though some were skilled artisans. As in the rest of Delaware, blacks were denied the opportunity of education, were not permitted to own firearms, and had their freedom severely circumscribed by laws (Hancock 1976:65). The end of the Civil War and the emancipation of the slaves in Sussex, though providing freedom, did little to improve

their social or economic status. Several small black communities sprang up at the end of this period, notably the villages of Belltown (started in the 1840s) and Jimtown in Lewes and Rehoboth Hundred (Eckman 1955:494).

During the Civil War, Southern sympathies and leanings were strong in the county, particularly in the southern and western hundreds. In Broad Creek Hundred the inhabitants openly celebrated Confederate victories, and the town of Seaford was notorious for it's role as an illicit trade center with the south. For the most part, however, the population of the county was pro-Union, or at best neutral, and Sussex's economy did well during the War due to high grain prices and renewed construction activities at the local shipyards (Hancock 1976:89).

As in the previous historical periods described above, corn agriculture continued to dominate the Sussex County. The corn that was raised was used to feed livestock, and the small livestock herds of Sussex County were the chief source of agricultural income for the area's farmers. Home manufactures also continued to be a major source of income in Sussex. Long after few New Castle County or Kent County farmers produced any home manufactures, between 50 and 85% of the Sussex County farmers reported it as a source of income in the 1849 Census Schedule. The majority of Sussex inhabitants have been characterized as self-reliant, and often in addition to farming used smithing, carpentry, fishing, milling, tanning, hunting and trapping as suppliments to their incomes (Michel 1985:10-12; Garrison 1988).

Industrialization in the county still lagged behind that seen in New Castle and Kent counties. By 1860 there were a total of 141 manufacturers of all kinds located in the county, including thirty-seven grist mills, fifty-six lumber mills, fifteen blacksmith shops, and six shipyards in Sussex, with smaller numbers of boot and shoe manufacturers, leather works, agricultural implement shops, fisheries, wagon and carriage shops (U.S. Census of Manufactures 1865:54). The majority of these industries were oriented towards intra-county services, though shipbuilding touched all areas of the Delaware and Chesapeake Bays, with ships constructed at Seaford and Laurel, as well as Milton and Lewes, and the lumber industry was nationally known. By the end of this period shipbuilding in villages like Milton had reached its peak (Eckman 1955:416), and the number of flour and grist mills, though still important in the County, had declined to twenty-six (Passmore 1978:24).

1880-1980: Suburbanization

Trends in agriculture begun in the preceeding periods continued in Sussex County, and the county remains the most important agricultural section of the state. At the start of this period corn was still dominant as a cash crop, the county producing over 1,676,000 bushels in 1900. Today corn and soybeans, both used for feed in the broiler industry, are primary products of the county, and Sussex is characterized by a "broiler-corn-soybean complex". Several large-scale agri-businesses, such as the Newtons and Cannons of Bridgeville, and the Townsends of eastern Sussex, dominate the agricultural

ecomomy of the county (Munroe 1984:233; Hancock 1976:100-101). The trends in truck farming and market gardening, started in the 1870s, saw their zenith by 1890, when Sussex became the peach producing center of the State. By 1900 over 7 million quarts of strawberries were grown in the county, making Sussex the leading producer in the nation (Hancock 1976:89). By the early 1960s, however, the orchard crops had been supplanted by other, more lucrative, agricultural products.

The holly wreath industry flourished in Sussex from the 1880s until the 1960s, and many farmers supplemented their incomes during the months of November and December in the holly business. It was an especially significant industry during the Depression, and in 1936 over 2 million wreaths were shipped from the towns of Bridgeville, Milton, Millsboro, and Selbyville. The industry declined quickly after the Second World War (Eckman 1955:385; Hancock 1976:102).

At the start of the twentieth century, the lumber industry was a significant source of income for Sussex County. In 1909 a record amount of timber, over 55 million cubic feet, was shipped from the county. Most of this was virgin Sussex pine which had grown following the initial cuttings caused by the arrival of the railroad several generations earlier. Along with lumbering, the charcoal industry was an important related industry of the county; some charcoal was still being produced in the Redden area as late as the 1950s (Passmore 1978:13,14).

The county also experimented with new agricultural methods, most notably in the chicken industry (broilers, or chickens

weighing under three pounds). In 1923 Mrs. Wilmer Steele, a farmer in Ocean View, raised chickens for profit to be sold in the urban markets for broiling, frying, and roasting. She was extremely successful; the number of broilers raised in Delaware grew from 7 million in 1934 to 54 million in 1942, or over one-quarter of the entire commercial broiler production in the country (Munroe 1984:214-215). By 1944 sixty million broilers were being raised annually, mostly in the southeastern portion of the county in the vicinity of Millsboro and Selbyville. By 1969 Sussex farmers were deriving over 80 million dollars per year income from this source, and its associated agricultural jobs of soybean and feed production (Hancock 1976:99-101). "Thanks to broilers, Sussex became one of the richest agricultural counties in the eastern United States" (Munroe 1984:216).

In 1939, less than 40% of the land in Sussex County was farmed. The acreage of land in farms had declined by nearly one-quarter since 1880, and the number of farms in the county had decreased by 15.3% between 1910 and 1940. Both of these trends were largely the result of changing economic conditions and the difficulties in farming marginal lands (Bausman 1941:4,7). At that time, one of the major problems confronting Sussex farmers was drainage, which today has been largely solved through the construction of a vast network of drainage ditches and channelized streams. The growth of corn and soybeans as cash crops in the county has allowed the reclaimation of over 35,000 acres of land from swamp and brush to tillable acreage in the last forty years (Hancock 1976:100).

Grain farming in the late 1930s was spread fairly evenly across the county, with slightly heavy concentrations of farms in Northwest Fork Hundred and in the southeastern portion of the county. Cannery crops, such as lima beans, tomatoes, and string beans were grown mostly in Broadkill, Cedar creek, and Lewes and Rehoboth hundreds, while truck crops and fruit crops were mostly produced in the fertile western hundreds. Timber lands, brushlands and open untillable lands were the dominate landform in 1941, and covered large portions of the central part of Sussex (Bausman 1941:16-21). Significantly, the farmers of Sussex were characterized in 1941 as being more closely tied to the land than the farmers of New Castle or Kent Counties. There were few foreign born inhabitants in Sussex, and the vast majority were native Delawareans; "in fact, most of the farmers of Sussex County were born and reared in Sussex County" (Bausman 1941:61).

Internal transportation and inter-regional routes continued to develop and connect Sussex more fully with the Mid-Atlanitc region. By 1910 Maryland, Delaware, and Virginia Railroad extended from Lewes to Love Point, a ferry landing on the Chesapeake Bay, providing easier access for the people of the western shore of Maryland to the Delaware beaches. Prior to 1917, Sussex had less than 35 miles of macadam roads in the county, but in that year the first twenty miles of Coleman Du Pont's revolutionary concrete highway was completed, connecting Selbyville with Georgetown. By 1924, the Du Pont highway (present-day Route 113) ran the length of the state (Rae 1975; LeeDecker et al. 1989). By the early 1960s, several state-

maintained highways (Route 13, Route 1) made travel both into and out of the County easier. The improvements in regional transportation in turn stimulated continued tourism growth along the beaches, as witnessed by the establishment of Dewey Beach in 1898, and Bethany a few miles south in 1901 (Hancock 1976:90). Presently, tourism is a powerful economic force in the county, dominating the eastern portions of Sussex for much of any given year. Industry in Sussex is represented by the presence of a major Du Pont nylon plant in Seaford (built in 1939), and other facilities like Nanticoke Homes of Greenwood, and Vlasic Foods at Millsboro (Munroe 1984:189; Hancock 1976:103). Overall, there are over 100 firms in Sussex, employing over 12,000 people, and seven of these, including five food processing plants, one chemical company, and an instrument manufacturer, employ over 250 persons (Hancock 1976:103).

The population of Sussex at the start of this period was over 36,000, making it larger than Kent County, but smaller than the City of Wilmington and New Castle County (Table 4). Throughout this period, the population of the county has grown steadily, spurred by the growth of the broiler industry, the reclaimation of land, and the arrival of light industry to the area. As of 1980, over 98,000 people make their homes in the County (Munroe 1984:269), and this total swells tremendously during the summer season. Inspite of this growth, Sussex is still overwhelmingly rural and agricultural, though intensive suburban and resort development in the last decade are dramatically altering the landscape of the eastern part of the County.

TABLE 4

DELAWARE POPULATION OF NEW CASTLE, KENT AND SUSSEX COUNTIES 1790-1980

Census Year	Population Total	New Castle	Kent	Sussex	Wilmington
1790	59,096	19,688	18,920	20,488	.....
1800	64,273	25,361	19,554	19,358	.....
1810	72,674	24,429	20,495	27,750	.....
1820	72,749	27,899	20,793	24,057	.....
1830	76,748	29,720	19,913	27,115	.....
1840	78,085	33,120	19,872	25,093	8,367
1850	91,532	42,780	22,816	25,936	13,979
1860	112,216	54,797	27,804	29,615	21,258
1870	125,015	63,515	29,804	31,696	30,841
1880	146,608	77,716	32,874	36,018	42,478
1890	168,493	97,182	32,664	38,647	61,431
1900	184,735	109,697	32,762	42,276	76,508
1910	202,322	123,188	32,721	46,413	87,411
1920	223,003	148,239	31,023	43,741	110,168
1930	238,380	161,032	31,841	45,507	106,597
1940	266,505	179,562	34,441	52,502	112,504
1950	318,085	218,879	37,870	61,336	110,356
1960	446,292	307,446	65,651	73,195	95,827
1970	548,104	385,856	81,892	80,356	80,386
1980	594,338	398,115	98,219	98,004	70,195

Source: United States Census figures