4.0 REGIONAL PREHISTORY

Current interpretation of the American Indian past in Delaware is based on the organization of material culture into temporal sequences, and with specific chronologies of site occupation developed from this ordering. The prehistory of the region is thus conventionally divided into three general periods, which are seen as reflections of widespread technological and societal developments that were roughly coincident with changing environmental conditions. Following Griffin's (1967) chronology for eastern North America, these periods are referred to as the Paleoindian (ca. 12,000-8000 BC), the Archaic (ca. 8000-1000 BC), and the Woodland (ca. 1000 BC-AD 1600). The latter two periods are typically subdivided into early, middle, and late sub-periods.

An alternative chronology has been proposed by Custer (1984, 1989) for the Delmarva Peninsula, focused more on evidence for changes in adaptive strategies than solely on diagnostic artifacts. Much of the existing published database for Delmarva, as well as various settlement pattern models derived from that data, result from work conducted by Custer and his associates (e.g., Custer 1984; Custer and Bachman 1986a; Custer and DeSantis 1985; Custer and Cunningham 1986), and regional interpretations are typically referenced to this chronology. Thus, while the conventional eastern North American model is the main organizational framework used the present study, the regional Delmarva chronology is cross-referenced when necessary for comparative purposes. The Delmarva chronology defines the Paleoindian period to have extended from 12,000-6500 BC and the Archaic period from 6500-3000 BC. Two later periods are recognized: Woodland I, from 3000 BC to AD 1000; and Woodland II, from AD 1000 to 1600. Figure 4-1 summarizes the correspondence between the two chronologies, along with their relationships to the climatic periods discussed earlier.

The discussion that follows summarizes the current understanding of these chronologies to provide a context for interpreting the archaeological remains at the Frederick Lodge Site Complex. While all of the temporal periods are noted in the discussion, particular emphasis is paid to those with components occurring at the Frederick Lodge Site Complex.

4.1 Early American Indian Inhabitants of the Region

4.1.1 Paleoindian and Early Archaic

The undisputed record of human habitation in the Middle Atlantic begins approximately 14,000 years ago near the end of the cool and relatively wet Late Wisconsin Glacial period, although evidence for an even earlier human presence in Eastern North America is slowly mounting (Dixon 1999; Fagundes et al. 2008; Goodyear 2005). As previously detailed, the retreat of the glaciers brought a fairly rapid warming trend throughout the Middle Atlantic, a phenomenon directly reflected in the replacement of northern plant and animal species by southern types. Like much of the region, New Castle County was characterized by a relatively complex set of overlapping environments, providing a variety of subsistence resources for people living in the region (Wesler et al. 1981; Meltzer 1988; Custer 1989; Dent 1995:75-82, 106, 128; Lowery 2009:15). Relatively few Paleoindian sites have been reported throughout the Middle Atlantic, and no direct evidence was observed of people living at the Frederick Lodge sites this early.

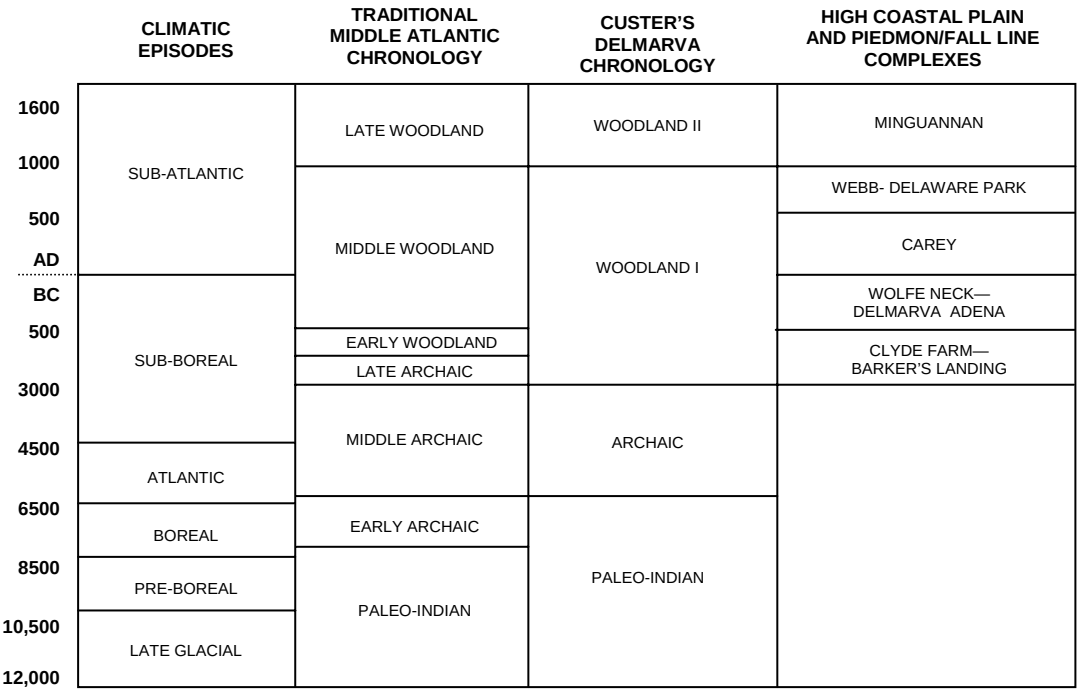

Figure 4-1. Comparison of Prehistoric Chronologies with Climatic Episodes.
(adapted from Custer 1984; note that the chronological scale is not proportionate)

The traditional Middle Atlantic chronology describes a break in cultural patterns around 8000 BC, approximately corresponding with a warming trend that signaled the Boreal climatic episode. The new pattern, referred to terminologically as Archaic, is usually recognized as ranging temporally from ca. 8000 BC to 1000 BC, during a period in which the physical environment became increasingly like that of the present (Joyce 1988). Major sub-periods are recognized within the Archaic, referred to as Early, Middle, and Late Archaic.

The transition from Paleoindian to Early Archaic has often been viewed as a cultural continuum rather than a break, at least in terms of evidence for socio-economic activities (Gardner 1978:47; Custer 1989; 1990 but contra, Parker 1990, Dent 1995, Lowery 2009). Following Gardner's (1974) lead, Custer (1984, 1989) took the further step of combining the two periods in Delmarva under the single rubric of Paleoindian. Direct physical evidence from this period is slight at the Frederick Lodge Site Complex, occurring in the form of an AMS date on charcoal from a sediment level in Block D; no corroborating artifacts were recovered from the deposit or elsewhere on the site.

Residential mobility and a varied subsistence base were typical throughout the Early Archaic period in Delmarva, which ranged from about 8000 BC to about 6500 BC. Intensive foraging has been assumed from the transitory use of resource areas that is suggested by the presence of many small sites. Most Middle Atlantic archaeologists agree that the record suggests similar adaptation in the Paleoindian and the Early Archaic periods, emphasizing continuity between the periods (Gardner 1974; Johnson 1986; Custer 1990). Following Gardner's lead, Custer (1984, 1989) has taken the further step of combining the two periods in Delmarva under the single rubric of Paleoindian. Among the cultural diagnostics of the

period are the corner-notched Palmer and Amos points and the slightly later Kirk types. A change is also noted in lithic raw material use, with a preference for chert or jasper in the manufacture of earlier types, and a markedly greater incidence of materials such as rhyolite and argillite in later points (Custer 1986b). Use of non-cryptocrystalline materials continued to grow significantly throughout the rest of the period, to approximately 6500 BC.

4.1.2 Middle Archaic

Middle Archaic bifurcate points and Morrow Mountain II points were recovered at the Frederick Lodge Site Complex. The Middle Archaic was a largely undifferentiated interval of adaptation extending from ca. 6500 to 2500 BC, corresponding roughly with the period noted in the Delmarva chronology as simply the Archaic (ca. 6500-3000 BC). By this time, local populations were exploiting the new floral and faunal resources appearing with the transformation of the mixed pine-oak forest to a temperate oak-hemlock deciduous forest. Although generalized foraging is assumed as the main resource procurement strategy, seasonally specialized, transient procurement stations have been noted, that have been proposed as support facilities for estuarine base camps (Gardner 1978; Custer 1986a).

One of the most important environmental changes affecting prehistoric populations throughout the Middle Atlantic region during the entire Archaic period was the gradual rise in sea level accompanying the retreat of the continental ice sheets. Beginning during the Paleoindian period, the Holocene marine transgression, as it is often referred to, led to rising sea levels and widespread lowland flooding of coastal areas. This flooding extended up many Pleistocene valleys, including those of the Delaware and Susquehanna rivers (Stuiver and Daddario 1963). Among the effects of the inundation were marked rises in local water tables, an increase in shoreline complexity associated with estuary development, and a consequent increase in floral and faunal resources in newly formed marsh or wetland areas (Potter 1982). Large marshes and swamps became important points of focus for settlement-subsistence during the period (Gardner 1978).

The Middle Archaic period artifact assemblages at these sites included projectile point forms such as several bifurcate types—St. Albans, LeCroy, and Kanawha (Broyles 1971)—along with the stemmed types, Stanly or Neville. Early long- or broad-bladed forms, such as Guilford and Morrow Mountain, and the later, side-notched Halifax point, are also recognized in various regions (Coe 1964). Custer (1989:123-4) contends that only the bifurcated points have sufficiently unambiguous date ranges to be chronologically diagnostic for the period in Delmarva. The lithic tool kit during this period was further marked by the appearance of groundstone tools—the first artifactual evidence of extensive plant processing. Many Coastal Plain sites in the central part of the state, such as the Snapp site (7NC-G-101) (Custer and Silber 1995), the Leipsic site (7K-C-194A) (Custer et al. 1996a), or Carey Farm (7K-D-3) (Custer et al. 1995b), are reported with diagnostic artifacts from the Middle Archaic period. At most of these sites, the temporal components were mixed and the artifacts recovered from plow zone contexts. Among the few sites with reported stratigraphic contexts from the middle part of the Archaic period is Blueberry Hill (7NC-K-107), at which Palmer and bifurcate points were recovered in levels at the base of a soil profile characterized by aeolian deposits (Heite and Blume 1995:53).

4.2 Later American Indian Inhabitants of the Region and the Frederick Lodge Site Complex

4.2.1 Late Archaic

People who lived in the Middle Atlantic region during the entire Archaic period witnessed the gradual rise in sea level accompanying the retreat of the continental ice sheets. Often referred to formally as the Holocene marine transgression, sea level rise began very gradually during the Paleoindian period as meltwater from the glaciers flowed into the oceans and lead to widespread lowland flooding of coastal areas. This flooding extended up many Pleistocene river valleys, including the Delaware and Susquehanna (Stuiver and Daddario 1963). At least one recent study has estimated that more than 40 percent of the Delmarva landmass was lost to rising sea levels in the last 13,000 years (Lowery 2009:5). Among the effects of the inundation were marked rises in local water tables, an increase in shoreline complexity associated with development of estuaries (transition zones between fresh and salt water), and an accompanying increase in floral and faunal resources in newly formed marsh or wetland areas (Potter 1982). Large marshes and swamps became important points of focus for settlement-subsistence during the period (Gardner 1978).

As noted above, the earliest definitive American Indian presence at the Frederick Lodge Site Complex dates to the Middle Archaic period, as indicated by the occurrence of bifurcate and Morrow Mountain projectile points recovered from surface contexts and from excavations in Blocks D and I. American Indians left tangible traces of their use of the Frederic Lodge landscape during the Late Archaic period in the form of Bare Island, Fishtail, and Lackawaxen points. Regionally, the lithic tool kit during this period was marked by the appearance of groundstone tools—the first artifactual evidence of extensive plant processing. The presence of Middle Archaic artifacts in buried contexts at Frederick Lodge is significant since many Coastal Plain sites in the central part of the state, such as the Snapp site (7NC-G-101) (Custer and Silber 1995), the Leipsic site (7K-C-194A) (Custer et al. 1996a), or Carey Farm (7K-D-3) (Custer et al. 1995b), are reported with diagnostic artifacts from this period, yet the temporal components were usually mixed, with the artifacts recovered from plow zone contexts. Among the few sites with reported stratigraphic contexts from the middle part of the Archaic period is Blueberry Hill (7NC-K-107), at which Palmer and bifurcate points were recovered in levels at the base of a soil profile characterized by aeolian deposits (Heite and Blume 1995:53), and the Beech Ridge site in Dover, with a stratigraphic sequence reportedly extending from the Middle Archaic through the Late-Paleoindian period (Barse and Marston 2007).

People lived near the bay/basin features at the Frederick Lodge Site Complex throughout the ensuing Late Archaic period, as indicated by the occurrence of Bare Island and Fishtail projectile points recovered from surface and buried contexts. Although use of the Frederick Lodge Site Complex did not appear to have been considerably greater than in the Middle Archaic, the occupations did correspond with a marked increase in site frequency throughout the region during the early portions of the Late Archaic, suggesting both an overall population increase and movement into new parts of the landscape (Turner 1978). Traditional Middle Atlantic chronologies recognize the Late Archaic period as extending from ca. 2500 BC to 1000 BC. Regional environments during the Late Archaic were initially characterized by extensive oak-hickory forests. The rate of sea level rise had slowed by this point, allowing

more stable riverine and estuarine environments to form that, in larger streams, could support significant populations of shellfish and anadromous fish, the latter being marine species that return to freshwater to spawn. Some researchers have suggested that the focus of settlement shifted early the period to take advantage of the increasingly predictable fish and shellfish resources in these areas (Custer 1978; Gardner 1978). For inland Delmarva, a pattern of warmer and drier climatic conditions occurred during the period that is often referred to as the mid-postglacial xerothermic. Less vegetation and drier soils led to the relatively rapid burial of certain landscapes through aeolian or windblown deposition. The process has been observed in association with dry or xeric soils throughout the Lower Coastal Plain and the Upper Coastal Plain (Curry 1980, 1992; Ward and Bachman 1987; Curry and Ebright 1989; Daniel 1993; Heite and Blume 1995).

Custer (1989) cited a pronounced change in lifeways on the Delmarva Peninsula at the end of the Middle Archaic. This change was marked by: increasing sedentism; the use of less portable storage technologies; larger population aggregates; the rise of elaborate exchange systems; and, the development of complex burial patterns. These factors collectively form the basis of the cultural period referred to as Woodland I, that incorporates most of the conventional Late Archaic, Early Woodland, and Middle Woodland subperiods (Custer 1996: 142-144). Previous work in New Castle County, much of it associated with the SR1 project, has resulted in a considerable body of knowledge concerning this time period. Many sites from the period, such as those at Pollack, Leipsic, Carey Farm, Hickory Bluff (Petraglia et al. 2005), and Puncheon Run (LeeDecker et al. 2005), have been characterized as base camps of one form or another. The Frederick Lodge Site Complex offered the opportunity to assess the base-camp model through a study smaller, seemingly shorter-duration occupations located in interior upland areas.

The pattern of more settled occupation that developed in the Late Archaic out of the generalized foraging pattern of the Middle Archaic forms the basis for the segregation of the traditional periods in the Delmarva chronology (Figure 4-1 (p. 4-2)). In the Delmarva model, the Middle Archaic is referred to simply as the Archaic, while the Late Archaic is combined with the initial two sub-periods (Early and Middle) of the subsequent Woodland period. The resulting cultural period is referred to in Delmarva as the Woodland I (ca. 3000 BC-AD 1000), recognizing an extended interval of continuity in settlement systems and social organization (Custer1989:141-2).

4.2.2 Woodland Period

Around 1000 BC, techniques for pottery manufacture were introduced across the region. This innovation has traditionally defined the beginning of the Woodland period in the Middle Atlantic. From an analytical standpoint, issues in clearly defining projectile point types with good temporal associations from the end of the Archaic persist into the Woodland period. Ceramics, which tend to have somewhat more discretely bounded typological attributes and time ranges during this time span, have become the primary temporal indices. The Woodland period is traditionally divided into the Early Woodland, Middle Woodland, and Late Woodland. Because these periods are only sparsely represented at the Frederick Lodge Site Complex, they are only briefly addressed here.

Evidence has been documented for an increase in sedentism as the people living in the region displayed growing efficiency in exploiting available resources. The appearance of greater numbers of storage features at sites such as Leipsic, Clyde Farm (7NC-E-6A) (Custer et al. 1985; 1986), or Pollack (7K-C-203) (Custer et al. 1995a) during this period, has been assumed to represent archaeological evidence of a trend toward more organized subsistence rounds and more sedentary settlement patterns.

The excavations at the Frederick Lodge Site Complex revealed little ceramic evidence. The only sherd recovered was from a relatively thick ceramic ware known as Wolfe Neck. The ware gives rise to the name for an associated cultural complex, the Wolfe Neck Complex, in the Lower Coastal Plain and in the Piedmont/Fall Line regions during the early part of the Woodland, specifically the late Early Woodland period. Wolfe Neck vessels were tempered with crushed quartz and had cord-marked or net-impressed exteriors. Radiocarbon dates for Wolfe Neck range from 505 BC, at the type site at Wolfe Neck Farm (7S-D-10), to 380 BC, at Dill Farm (7K-E-12) (Griffith 1982). While no specific projectile point types have been documented in association with these ceramics, a series of small, stemmed points made on locally available pebble materials frequently occur on sites with occupations from the early part of the Woodland period, particularly on the Coastal Plain (LeeDecker et al. 2005; Petraglia et al. 2005). Examples of these small stemmed points were common in the Frederick Lodge occupations.

Additional evidence of Woodland period use of the Frederick Lodge Site Complex consisted of several small triangular points. While there are indications of triangular points from Archaic contexts, the sites generally occur in New Jersey and northward. For example, Wall et al. (1996:60-61) and Stewart and Cavallo (1991:26) note triangles in Late-to-Middle Archaic contexts at the Area D Site (28Me1-D) at Abbott Farm. Wall et al. (1996: 9) further note Archaic period triangles at several other Abbott Farm sites including White Horse West, Abbott's Lane, and Bordentown Waterworks. Lothrop and Koldehoff (1994:107) report Archaic triangles at 28GL210 in the Lower Delaware Valley (Gloucester County, New Jersey), while Custer et al. (1996b) report them at the West Water Street Site (36CN175), Lock Haven (Clinton County, Pennsylvania). Also known are types such as Beekman Triangle and Squibnocket (Ritchie 1971 – 2500-1500 BC), but both of these types are firmly located in the Northeast. In terms of formal details, the size ranges of Archaic period triangles vary but they tend to be on average larger than Woodland period forms. Additional information has recently been presented of a substantial deposit of triangles in deeply stratified Archaic period contexts at the Pig Point site (18AN50), on the Patuxent River in Maryland (Luckenbach 2010).