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COASTAL PLAIN IROQUOIANS BEFORE AND AFTER EUROPEAN CONTACT: AN INTERPRETIVE STUDY OF CASHIE PHASE ARCHAEOLOGICAL RESEARCH IN NORTHEASTERN NORTH CAROLINA

Charles L. Heath

E. Clay Swindell

Numerous ethnological and ethnohistorical studies of eastern North Carolina's Contact and early Postcontact period American Indian societies were undertaken in the nineteenth and twentieth centuries.¹ Until the early 1970s, however, professional archaeological interest in the early Native inhabitants of the Coastal Plain region was modest.² With notable exceptions, such as pioneering research conducted by William G. Haag (1958), Lewis R. Binford (1964) and Robert G. H. Crawford (1966), little in the way of regionally systematic fieldwork, other than now obscure surface collecting forays (see e.g., Coe 1952; Evans 1955; Holmes 1903; Lewis 1952), or limited site testing (e.g., Mattson 1968; South 1962), was undertaken:

- 1) To address material life aspects and settlement distributions of historically recognized Carolina Algonkian or Coastal Plain Iroquoian peoples;
- 2) To study the diachronic development of their respective societies regionally;
- 3) To materially assess diachronic cultural transformations before, during and after the sustained European colonization of their Late Woodland through early Postcontact period homelands.

Despite limited professional interest through the 1960s, relics collectors were (and remain) especially active in the region (see e.g., Haag 1958; Phelps 1982b, 1983; Rights 1957; Rose 1960) and little is known of their activities; some collectors occasionally reported their dig finds (see e.g., Painter 1990). After passage of federal and state environmental compliance legislation in the 1960s and 1970s, cultural resource management (CRM) activities encouraged regional research and the partial preservation (site testing, data recovery) of a rapidly diminishing archaeological record. With the near contemporaneous establishment of academic archaeology programs at several state universities (Phelps 1983:11–13; Ward and Davis 1999:18–21), archaeologists initiated increasingly systematic and intensive investigations across the northern Coastal Plain—the sub-Fall Line region south of the North Carolina-Virginia state boundary and north of middle-lower Neuse River basin (Figure 10-1).³

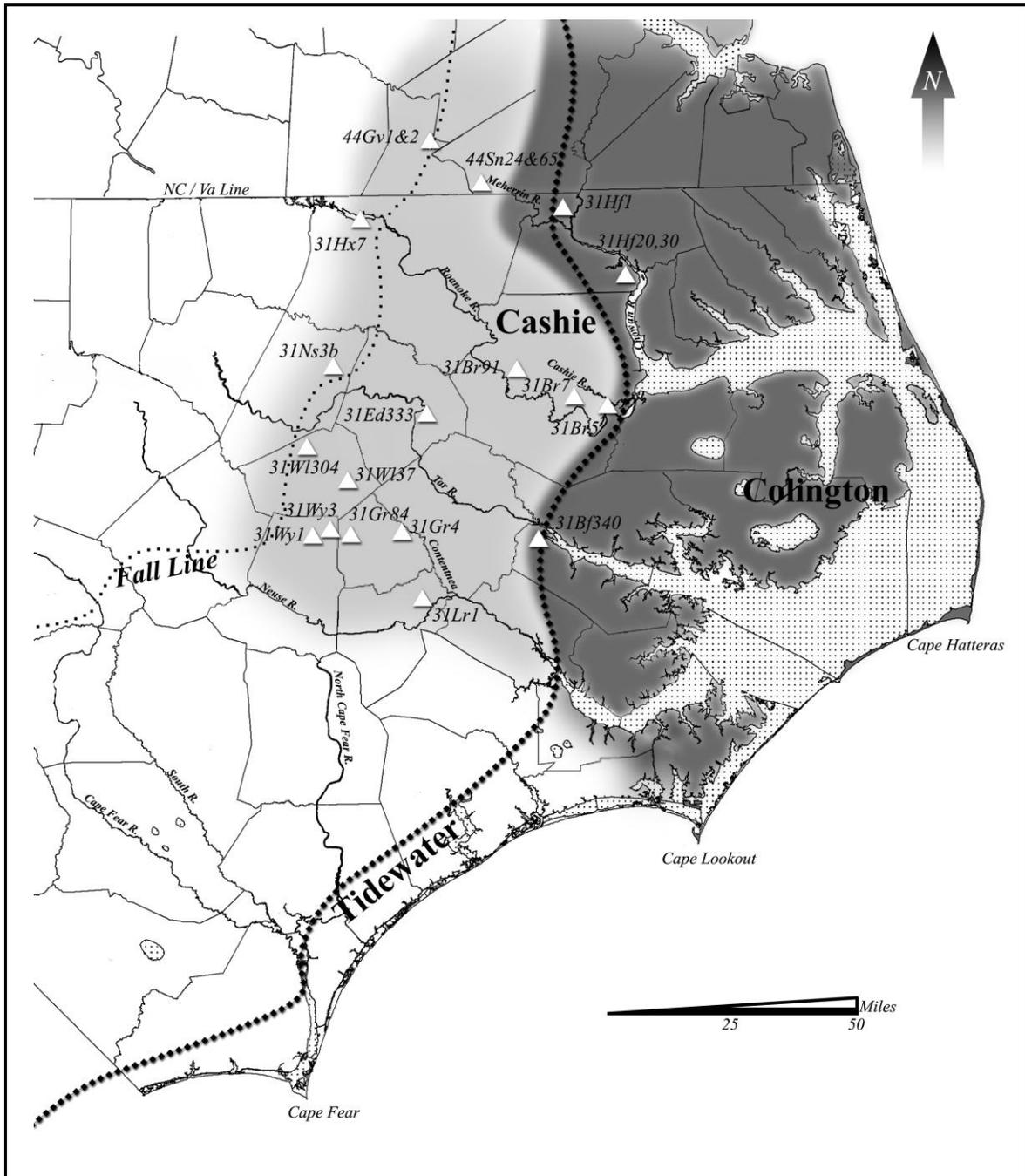


Figure 10-1. Map of eastern North Carolina and southeastern Virginia region showing approximate locations of key sites mentioned in the text. Major Coastal Plain province rivers and the Fall Line are indicated.

THE CASHIE PHASE (PHELPS 1983)

Based on the aggregated results of regional watershed survey and methodical site excavation projects launched in the early 1970s, David S. Phelps came to recognize and define the Cashie and Colington phases, the analytical correlates of two Late Woodland–Contact period archaeological cultures found in northeastern North Carolina (Phelps 1977, 1980a, 1980b, 1982a, 1982b, 1982c, 1983, 1984a, 1984b). Phelps (1983) summarized adaptive behavioral and material aspects of these phases in his seminal contribution to *The Prehistory of North Carolina* (Mathis and Crow 1983:1–51).⁴ Assessing regional intersite and intrasite evidence, as well as radiocarbon assays of Jordan’s Landing (31BR7) and Thorpe (31NS3b) sites botanical remains (see Eastman 1994b:33, 36–37), Phelps (1977, 1980a, 1980b, 1983) proposed that Cashie phase expressions represented the *principal* Late Woodland period archaeological culture of the northern Inner Coastal Plain, circa (ca.) A.D. 800–1650. Regional archaeological research results since the early 1980s, however, call for substantive refinements in the Cashie phase construct, while simultaneously supporting several essential assumptions regarding the phase model postulated by Phelps (1983).

Phelps (1980b:2–3, 1983:43–47), considered the Cashie phase as a temporally and spatially interrelated constellation of environmentally and culturally influenced adaptations and social behaviors, which include secondary inhumation mortuary practices, palisaded residential villages, seasonal hunting or fishing-shellfishing camps, loamy soil site settings, maize-bean-cucurbit focused horticulture and Cashie series ceramics. He (Phelps 1983:43) further hypothesized that the American Indian people most likely associated with the regional florescence of the Cashie phase were the late Precontact period ancestors of historically documented Tuscarora, Meherrin and Nottoway peoples.⁵ In the late seventeenth and early eighteenth centuries, the Tuscarora, Meherrin and Nottoway societies were predominantly composed of peoples who spoke Northern Iroquoian languages and originally inhabited easterly sections of Virginia and North Carolina (Binford 1991; Boyce 1978; Dawdy 1995; Rudes 1999a).

Many, but certainly not all, presently living descendants of the peoples who formed these societies as they existed in the early 1700s are now acknowledged as members of the Tuscarora Nation of New York (Lewiston, New York), and the Meherrin Indian Tribe (Ahoskie, North Carolina), respectively a federally recognized nation and a state recognized tribe. The Tuscarora Nation is the sixth nation of the *Haudenosaunee* (People of the Longhouse) or the Iroquois Confederacy, a status held since 1722 (Landy 1978:519). Tuscaroras who fought with British forces against rebel armies in the American Revolution resettled with Iroquois Loyalists in Canada in 1784–1785 (Weaver 1978:525). Their descendants are among the members of the Six Nations of the Grand River Territory (Ontario, Canada). Several state recognized American Indian descent groups in North Carolina or Virginia, as well as multiple non-state and non-federally recognized groups in the same region, claim Tuscarora, Meherrin or Nottoway ancestry (Heath 2007; North Carolina Commission of Indian Affairs [NCCIA] 1998; Oakley 2005; Stephenson 2003).

Building on earlier research by Haag (1958) and Binford (1964), Phelps discerned that the distribution of archaeological sites with Cashie phase occupations approximated the maximal distribution of Tuscarora and Meherrin settlements described in historical sources (see Boyce 1978:Figure 1; Phelps 1983:Figure 1.8). However, no known early Postcontact period, ca. 1650–1725, Tuscarora or Meherrin town sites in North Carolina had been systematically investigated by the early 1980s.⁶ While we concur with Phelps’s (1983) assumption of a substantive material

relationship between the Cashie phase and the residual material life of Coastal Plain Iroquoian peoples in northeastern North Carolina (see also Byrd 1991, 1997, 1998, 2001), both before and after European contact, the connections are not wholly seamless. Material evidence of a connection between the Cashie phase and the Nottoway people of the protohistoric era is more ambiguous.⁷ Although attempting to associate archaeological cultures with historically documented societies can be problematic, and sometimes impossible (see e.g., Willey and Phillips 1958:48–51; Terrell 2001a, 2001b), the interpretive challenge is not always insurmountable when employing *multiple* lines of evidence.⁸

Numerous historical and anthropological studies of North Carolina's indigenous populations partially illuminate the histories and daily lives of Tuscarora and Meherrin peoples who lived in eastern North Carolina between ca. 1650 and 1803 (e.g. Binford 1964, 1967, 1991; Boyce 1973, 1975, 1978, 1987; Crane 2006; Dawdy 1994, 1995; Edwards 1999; Feeley 2007; Gally 2002; Lee 1963; LeMaster 2006; McIlvanna 2009; Nixon 2000; Oakley 1996, 2005; Parramore 1982, 1987; Paschal 1953; Rountree 2002; Seamans 2001; Styryna 1990). Nevertheless, many facets of their respective lifeways and social histories, especially over the long span of archaeological time, can best be discerned through the lens of archaeology and its interrelated subfields. Aspects of colonial era Tuscarora and Meherrin life partially described or retrospectively inferred through the interpretation of historical documents (texts, maps, images) are ambiguous, contradictory, incomplete or colored by ethnocentric biases—the archaeological record and archaeological interpretations are undoubtedly and similarly hampered! Several exceptional studies (see above citations) have advanced contemporary knowledge of regional Tuscarora and Meherrin histories to an extent. Historically informed archaeological research, however, is needed to inform and explicate any retrospective understanding of past environmental adaptations, historical events or cultural and historical processes associated with the deep histories of these particular American Indian groups through time.

In this chapter, we examine the status of Cashie phase research, reassessing and summarizing what has been gleaned through regional archaeological investigations since the early 1980s. While strides have been made, diachronically comprehensive data on Precontact–Contact (A.D. 1200–1650) and early Postcontact (A.D. 1650–1725) period Tuscarora and Meherrin societies are largely deficient. Most research findings associated with Cashie phase research are found in numerous separate studies, but no comprehensive diachronic synthesis integrating multiple lines of evidence (archaeology, linguistics, ethnohistory, oral history) has been compiled since Phelps's (1983) initial phase summary and Byrd's (1991, 1995, 1996, 1997, 1998, 1999, 2001) later especially noteworthy contributions. For this study, we have attempted to integrate information culled from published sources, CRM reports, master's theses, doctoral dissertations, conference papers and other unpublished data made available to us by various colleagues. Where of utility, we further incorporate previously unpublished data from our individual or collective research endeavors. In some instances we critique and amend our past interpretations and working assumptions, recognizing that archaeological phase models, pottery series definitions or other heuristic devices employed for the organization and interpretation of archaeological data simply provide testable models of past human activities that will be supported, refined or discarded.⁹ While we cannot critically evaluate, uphold, refute or address every aspect of potential research interest found in the sources cited, our chapter references serve as a comprehensive foundation for future studies. Moreover, important collections recovered from archaeological sites with Cashie phase occupations, or regionally coeval components, remain unanalyzed, unreported or underreported. As such, analytically useful comparative

datasets remain untapped. In light of these issues, we incorporate within our thematically organized presentation observations on interpretive incongruities and critical data gaps.

Before delving deeply into the archaeological aspects of the discussion, we offer a cultural context overview for our region of concern, ca. 1520–1720. Given the geographic focus of this volume, as well as limitations inherent in the available archaeological datasets, we generally focus our overall presentation on Tuscaroras of the late Precontact–early Postcontact periods through the early 1710s. We also take an opportunity to integrate some particularly informative aspects of Tuscarora oral history and recent linguistic research results in our interpretations. For more detailed treatments of the Contact–early Postcontact period Meherrin people, refer to Binford (1967, 1991) or Dawdy (1994, 1995), and for the Nottoway people, Binford (1967, 1991), Rountree (1979, 1987) and Smith (1971).

NATIVE PEOPLES OF NORTHEASTERN NORTH CAROLINA, CIRCA 1520–1720

Sparsely documented contacts between Western Europeans and American Indians in present-day coastal North Carolina commenced in the mid-1520s (Cumming 1966, 1998; Lefler 1956; Rudes 2002b). Sailors and explorers from passing European ships made intermittent landfalls along the region’s outer coast to explore, to trade with Native peoples for provisions and other commodities, or to take on fresh water stores. Few details are known of these ephemeral cultural exchanges, or of the social and biological effects of such erratic contacts on coastal indigenous peoples. Although Spanish explorers led expeditions through the Piedmont and Blue Ridge provinces in the sixteenth century (Beck 1997; Beck et al. 2006; Hudson and Tesser 1994), the earliest direct Spanish interactions with Coastal Plain Natives were limited to a few coastal landings and elusively documented forays into the Carolina sounds and estuaries (Cumming 1966, 1998; Lefler and Powell 1973; Rudes 2002b). In the 1580s, however, interactions between Natives and newcomers intensified when seafarers, soldiers, explorers and colonizers from the British Isles undertook the so-called Roanoke Voyages (1584–1602), endeavoring to establish military garrisons, trade relationships and English colonies in the Carolina-Virginia Tidewater (Quinn 1955, 1970, 1985; Shields and Ewen 2003). While little is known of their activities, both Spanish traders operating from La Florida and English traders from the Virginia colony were active among Coastal Plain Native peoples by 1640–1645 (Cumming 1939; Bland 1966:3, 15 [1651]; Butler 1971; Rountree 2002; Yeardley 1911:27 [1654]).¹⁰

During the regional protohistoric era, ca. 1520–1670, northeastern North Carolina was *principally* inhabited by two American Indian macro-ethnic groups whose peoples respectively spoke languages and dialects related to the Northern Iroquoian and Eastern Algonquian language families (Goddard 1978; Lounsbury 1978).¹¹ Regional ethnohistorical studies retrospectively reveal that Northern Iroquoian language speakers inhabited the brown-water, black-water and flatwoods environments of the northern Inner (Upper) Coastal Plain in the protohistoric era (Binford 1991; Boyce 1978) (Figure 10-1). Eastern Algonquian language speakers inhabited the lowland estuarine and marine environments of the northern Outer (Lower) Coastal Plain (Binford 1991; Feest 1978a, 1978b) (Figure 10-1). Siouan-Catawba language groups were presumably settled across the south and south-central Coastal Plain, in both the lowland coastal (but see Loftfield 1990; Loftfield and Jones 1995) and upland interior regions south of, and within segments of, the lower Neuse and Cape Fear river basins (Irwin and Heath 2008; Martin 2004; Rudes 2002b, 2004; Rudes et al. 2004).

The peoples of these ethnolinguistically defined social entities differentially adapted, over the course of the Late Woodland period, to ecologically varied upland, riverine, estuarine or marine environmental niches (see e.g., Griffith and Omernik 2009; Bennet and Patton 2008). Nevertheless, some social, material and physical aspects of their respective societies were comparable historically (see e.g., Binford 1991; Boyce 1978; Feest 1978a, 1978b; Driver and Massey 1957). Recent bioarchaeological studies point to specific phenotypical similarities shared between Precontact–Contact period human skeletal elements recovered from burials distributed across Coastal Plain province, hence biological evidence for gene-flow between regional subpopulations as well (Hutchinson 2002; Kakaliouras 2002, 2003; Killgrove 2002, 2009). Using the same study sample of human skeletal remains, Kakaliouras (2002, 2003) assessed non-metric dental features and Killgrove (2002, 2009) compared non-metric cranial features. Both analysts concluded that there is no statistically significant biological distance (phenotypically expressed genetic differences) between peoples who once inhabited the ethnolinguistic subregions defined historically (Binford 1991; Boyce 1978; Feest 1978a) and generally substantiated archaeologically (Binford 1964; Byrd 1997; Dawdy 1994; Phelps 1983; Swindell 2010; Ward and Davis 1999).

The results of recent molecular studies, however, suggest that some ancient Algonkian, Iroquoian and Siouan proto-populations shared a remote common ancestry, the result of intermarriages several thousand years ago, sometime after ancestral Cherokees diverged from Proto-Iroquoian peoples, but before Proto-Algonkian peoples diverged and some groups colonized southward (Lawrence et al. 2010). As such, later Algonkian and Iroquoian descendant groups, such as those reported historically in eastern North Carolina, very likely shared some phenotypically expressed skeletal features. The seemingly limited biodistance between regional archaeological subpopulations, as reported by Kakaliouras (2003) and Killgrove (2002, 2009), imply that there were, as would be expected however (see e.g., Cameron 2008), long term social interactions (gene-flow) between peoples who spoke different languages historically and produced persistently contrastable elements of material culture within the context of the northern Coastal Plain.

The Precontact–Contact period Carolina Algonkian, Coastal Plain Iroquoian and Coastal Plain Siouan societies of eastern North Carolina nonetheless developed certain regionally distinctive social and material traditions. Perhaps as DeBoer (2008:251) asserted, in some cultural contexts, "...the more permeable cultural boundaries are to body flows [(i.e., gene-flow)], the sharper and more salient those cultural boundaries become in terms of material signs" (see also Fiedel and Anthony 2003). Moreover, bioarchaeological evidence of regionalized gene-flow between culturally discrete societies is not wholly surprising given precontact indigenous captive taking practices in eastern North America. Cameron (2008:5) has observed, "...wife capture was common in North America and may have been universal" among most Native societies before and long after European contact. In the Eastern Woodlands, female captives were habitually adopted as fictive kin members within their captors' societies. Such women, in terms of material culture and language, either introduced change or stylistic innovation as "active agents of cultural change," or in other social contexts, became meticulous replicators of a captor society's material culture and customs, hence "helping to fix the social boundaries they...crossed" (Cameron 2008:2, 12–16).

Although condensing non-state cultures, or by extension population level or individual social identities, to pottery types or material-behavioral trait lists is not especially fashionable in contemporary anthropological circles, culturally meaningful, non-random patterns corresponding

to past social boundaries or ethnic identities undoubtedly exist in the regional archaeological and ethnohistorical records. In this regard, John Lawson's (1967 [1709]) ca. 1701–1709 observations on regional American Indian societies are revealing. While certain individuals within these societies were undoubtedly multilingual, language served as a social boundary marker. Although his conclusions are indeed oversimplified, Lawson (1967:239) recognized a distinct relationship between ethnicity and language within his particular historical context, remarking, "It is wonderful, what has occasion'd so many different Speeches as the Savages have [,but]...this difference of Speech causes Jealousies and Fears amongst them, which brings Wars." Of Tuscaroras in particular, Lawson (1967:233) reported, "the *Tuskeruro*'s are most numerous in *North-Carolina*, therefore their Tongue is understood by some in every Town of all Indians near us...[and as] the most powerful Nation...scorns to treat or trade with any others (of fewer Number and less Power) in any other Tongue but their own, which serves for the *Lingua* of the Country."¹² On the materialization of ethnicity, Lawson (1967:201) further observed, "The Dresses of these People are so different, according to the Nation that they belong to." Regarding intersocietal variation in mortuary customs, he (Lawson 1967:189), noted, each nation "differ[s] some small matter in their Burials; some burying right upwards, and otherwise [(charnel houses, ossuaries, mounds, cairns)], as you are acquainted withal in my journal"—see e.g., Lawson (1967:28–29). In other instances, Lawson briefly remarked on intersocietal differences in architectural patterns and other cultural practices, but unfortunately glossed much of the variation he observed in his, "An Account of the Indians of North Carolina" chapter (1967:172–246).

Tuscaroras and Meherrins at and after European Contact

As witnessed and intriguingly represented in texts or wonderfully vibrant imagery by Thomas Hariot, John White and other colonial observers in the sixteenth century (see e.g., Hulton 1984), Carolina Algonkian societies differentially developed emergent or simple chiefdom level polities in the Tidewater by the 1580s (Binford 1991; Feest 1978a).¹³ To the west-northwest of the Tidewater (Figure 10-1), Iroquoian peoples inhabiting the Upper Coastal Plain and a similar geographic zone in southeastern Virginia established culturally, linguistically and biologically interrelated social entities (see Byrd 1998), which Binford (1964) characterized as ethnic groups, rather than tribes or chiefdoms. Analytically classifying protohistoric era or later Tuscarora or Meherrin sociopolitical systems at any point, ca. 1520–1720, is problematic and the exercise has challenged ethnologists (Hewitt 1910b), historians (Boyce 1973, 1975, 1978; Feeley 2007) and anthropologists (Binford 1967, 1991; Byrd 1997; Nixon 2000).¹⁴ The few ethnohistorical sources that include any fragmented descriptions of Tuscarora and Meherrin leaders, or their powers and societal roles, ca. 1650–1717, present conflicting information. In part, the inconsistencies relate to the fact that the various leaders or polities portrayed at points in time were experiencing continuous transformation in response to destabilizing aspects of regional and extra-regional European contact and colonization processes (e.g., trade, disease epidemics, Indian slave trade, land encroachment, warfare, incorporation)—see e.g., Ethridge and Hudson 2002; Ethridge and Shuck-Hall 2009; Gallay 2002; Pluckhahn and Ethridge 2006).

Boyce (1987:152) concluded that Tuscaroras, at least during the early eighteenth century, were part of an egalitarian society, loosely organized in a regional network of autonomous, but sometimes mutually cooperating village-centric communities, which never approached the political organization of a league or a confederacy (*contra* Cusick 1848 [1828]; Hewitt 1910b).

Byrd (1997:2–5), however, suggested that by the late seventeenth century “...at least some Tuscarora communities were experiencing political centralization that led to the more integrated sociopolitical elements ascribed to early [(i.e., nascent)] chiefdoms...[whereby] the leadership in a single village is able to achieve a degree of control over others.” Such internal political developments were undoubtedly manipulated or influenced by colonial officials (Feeley 2007), shaped by the regional escalation of the deerskin-peltry (Byrd 1997) or Indian slave trades (Gallay 2002), and wrought by the diplomatic roles key leaders came to play in negotiations with colonial administrators (*sensu* Lapham 2005). While Boyce (1975, 1987) and Feeley (2007) submitted carefully considered arguments against the notion of any centralized decision making systems among Tuscarora polities during the early Postcontact period, their analyses largely focused on the actions of leaders during the Tuscarora War (1711–1715). It may be, however, that population losses due to sporadic disease epidemics and warfare in the late sixteenth and seventeenth centuries had already led to profound transformations in prewar Tuscarora sociopolitical systems by 1710–1711 (see e.g., Ethridge 2003, 2006, 2009; Kelton 2002, 2007, 2009).

Even though Contact–early Postcontact period Tuscarora, Meherrin and Nottoway societies, were essentially tribal polities in the sense of Haas’s (1990) conception (see note no. 14), the Tuscaroras had developed a complex “intermediate society” (Arnold 1996; Byrd 1997:2–5) socially structured within the analytically blurry realm between egalitarian tribes and non-egalitarian chiefdoms (see Lewellen 2003).¹⁵ Based on documentary and ethnographic evidence, as well as Tuscarora oral histories, it appears that Contact–early Postcontact period Tuscarora society was further organized along matrilineal, clan-based kinship lines. Clan mothers and clan chiefs held hereditary, ascribed status positions (Nixon 2000:56–61; Wallace 1952). Given consistent mid-seventeenth and early eighteenth century reports of hereditary Tuscarora “emperors,” living at “chief towns” with their “queens,” exercising now nebulously understood levels of authority over hereditary “kings” (village headmen or clan chiefs) or lesser “queens,” some form of a stratified social structure existed among the Tuscaroras by the mid-1600s (see Bland 1966:13 [1651], Fox 1975:169 [1698]; Lederer 1966:19 [1672]; Yeardley 1911:27 [1654]).¹⁶ Of interest here is John Lawson’s (1967:233–239 [1709]) list of Tuscarora words and their English equivalents, where he recorded *Teetha* (Tuscarora) as the approximate equivalent of “A King” (English). Rudes (2002a:Table 3) noted that the literal translation of *Teetha*—in modern Tuscarora, *ratirher*—into English is “man exempt from work.” It is difficult to envision the formal cultural recognition and acceptance of such an evocative title, ascribed or achieved, in a supposedly egalitarian society (*sensu* Boyce 1987:152). Landy’s (1958) position on these matters merits careful consideration. He suggested that Lower Tuscaroras were in fact well-organized as a politically cohesive polity in the early 1700s:

...else it is doubtful that their northern kinsmen would have been willing to go to the *extraordinary length* of granting them status, however minor, as a new member [of the Iroquois Confederacy in 1722.]...Had they not possessed some modicum of political unity the Confederacy, or one or more of its member nations, would have absorbed the migrants as individuals or family groups, as they had for other groups previously (Landy 1958:264; emphasis added).

The Meherrin, Nottoway and Tuscarora languages are interrelated Northern Iroquoian languages, but they were not identical historically (Rudes 1981a, 1981b, 1999a, 2000, 2002b).

In the case of the Tuscarora language before ca. 1760–1800, at least two regionally distinct dialects were spoken by the end of the seventeenth century (Rudes 2000, 2002b).¹⁷ Moreover, the Tuscarora and Nottoway languages were probably “not mutually intelligible” historically (Rudes 1981a:45). Since few presumed Meherrin words survive in the historical record, little is known of the now extinct language, but Rudes’ (1981b, 1999a) analysis of surviving terms indicate that the Meherrin and Tuscarora languages likely shared more similarities than Nottoway and Tuscarora. The present linguistic evidence is suggestive of at least four discrete Coastal Plain Iroquoian social entities (see below), at least at a macro-level, geographically situated in the northeastern North Carolina-southeastern Virginia region during the protohistoric era.

European explorers, traders and officials undoubtedly discerned coarse-grained linguistic, cultural and sociopolitical differences between the Coastal Plain Iroquoian polities before ca. 1701–1711. Given early Western European perspectives on what constituted a nation, it is not curious that European colonizers simply reported, as “nations,” what anthropologists might variously recognize as tribes, chiefdoms, polities, societies or ethnic groups (see Hudson 2002:xix–xx)—see also Crane (2006). Tuscaroras of the late seventeenth–early eighteenth century were habitually considered as people of a single nation by outside observers (see Bland 1966:3 [1651]; Lawson (1967:242 [1709]; Lederer 1966:4 [1672]; Graffenried 1920:276 [1714]; Yeardley 1911:27 [1654]), but jointly, Tuscarora oral histories and linguistic evidence hint at something more nuanced. Tuscarora oral histories (e.g., Cusick 1848; Hewitt 1910b; Johnson 1881) first recorded in the nineteenth century may be problematic because of major mid-to-late eighteenth century social restructurings after Tuscaroras were adopted as the sixth nation of the *Haudenosaunee* Confederacy (Boyce 1978:283; Rudes 1998:2–3). Nonetheless, implications in these histories lead us to suggest that “Tuscarora” is an exonym (external appellation) derived by English speaking colonists to identify what were at least two distinct sociopolitical entities under a collective anglicized designator. David Cusick (1848:33), Tuscarora author, artist and soldier, and J. N. B. Hewitt (1910b:842), Tuscarora ethnologist and linguist, similarly stated that the Tuscarora Nation, when in North Carolina, was a league or confederacy composed of three “tribal constituents.” The peoples and polities of this league, perhaps individual tribes in a broad sense (see Haas 1990), likely occupied different sub-regional territories of northeastern North Carolina, loosely circumscribed by the river basin segments they inhabited before and after the regional Contact period.

The exonym, Tuscarora, is closely related to a modern Tuscarora word, *skarure*, likely meaning “hemp [*Apocynum* sp.] gatherers” in English (Hewitt 1910b:842; Rudes 1999a:417–418), but alternative translations exist (e.g., Greene 1969). Based on our etic interpretation of the linguistic, oral history and documentary evidence, it is probable that *Skarure* was the endonym (self-appellation) of the Coastal Plain Iroquoians who inhabited the lower Roanoke River basin during the protohistoric era. The *Skarure* were encountered in that specific locality and identified as the “Tuskarood” in 1650 (Bland 1966:3), the “Tuskarorawes” in 1653 (Yeardley 1911:27) or the “Toskiroro’s” in 1670 (Lederer 1966:19). The Tuscarora people of the middle Neuse River basin were later reported in Tuscarora oral histories as the *Kau-ta-noh/Kautanohakau* (Cusick 1848:21, 33) or *Katenuaka* (Hewitt 1910b:842). These appellations are all variations of a modern Tuscarora word, *kahtehnu* (“submerged loblolly pine” [Rudes 2000:6]), which was anglicized by eighteenth century observers to identify specifically both the people and the place of Catechna (Hancock’s Town) originally situated several miles above the mouth of Contentnea Creek (see Byrd and Heath 2004:Table 5.1). Contentnea Creek is a major

tributary, essentially a small river, within the Neuse River basin.¹⁸ The place name Contentnea Creek was also derived by colonial surveyors and cartographers from *kahtehnu*, or a linguistically similar variant; some colonial documents refer to Catechna (Catece, Conneghta, Cotechney) Creek (e.g., Barnwell 1908:35; Saunders 1968:I–II; Rudes 2000:1, 6) and the Tuscaroras in this locality were sometimes referred to as the “Cotechneys” in documents related to the Tuscarora War period (e.g., Saunders 1968:I–II).¹⁹

A third Tuscarora “tribe” reported by Hewitt (1910b:842) as the *Akawentcaka*, or more correctly *Akawecaka* (Rudes 1981b:33), was previously listed by Cusick (1848:33) as the *Kauwetseka*; *Akawecaka* apparently defies translation into English (Rudes 1981b:32). Although we initially considered *Akawecaka* as a possible endonym for the Tuscarora people who were settled in the middle Tar-Pamlico River basin in the protohistoric era, this does not seem to be the case. Relying on exonyms provided by Virginia Algonkian guides and interpreters, early English observers apparently failed to report or routinely use the respective endonyms of the Meherrin and Nottoway societies, but Rudes’ (1981b:33) subsequent linguistic analysis suggests (*contra* Boyce 1978:283), that *Akawecaka* was probably the protohistoric era endonym of the Meherrins. A modern subjective translation of “Meherrin” into English is, “people of the muddy water” (North Carolina Commission of Indian Affairs 1998; Stephenson 2003). In the case of the Nottoways, James Tresevant later recorded that their endonym was *Cherohakah* (Mithun 1979:140); the translation into English has not been objectively confirmed (Rudes 1981a:27). Virginia colonists, however, ostensibly applied a Coastal Algonkian exonym, *Natowewa* (Nottoway), loosely translating into English as “speaker[s] of a foreign language” or “people of an alien tribe” (Parks and DeMallie 1992:234; citing Goddard 1984).²⁰

In the mid-to-late seventeenth century, Meherrin and Nottoway Indian settlements were principally found within the two upper Chowan river basin watersheds that respectively bear their historical tribal names in southeastern Virginia (Binford 1967; Dawdy 1995). At times during the early Postcontact period, both Meherrin and Nottoway settlements extended at least as far north as the upper Blackwater River. By the end of the seventeenth century, however, that portion of the Meherrin population which remained a cohesive independent polity came to occupy sections of the lower Chowan River basin in North Carolina. Successively establishing and abandoning at least three villages in Virginia (upper Meherrin River drainage) between ca. 1660 and 1692, most Meherrins removed to the Parker’s Ferry-Potecasi Creek locality (31HF1)—“Meherrin Neck”—east of Murfreesboro, North Carolina (Binford 1964; Dawdy 1994; Stanard 1900a, 1900b). The travails and often wholesale population movements of Meherrin and Nottoway peoples during and after the mid-1600s are discussed and summarized in varying degrees of detail in several sources (Binford 1967, 1991; Boyce 1978; Dawdy 1994, 1995; Rountree 1979, 1987, 2002; Smith 1971), but comprehensive historical anthropological treatments of these Coastal Plain Iroquoian groups are needed.

As noted, there were at least two regionally distinct dialects of the Tuscarora language historically (Rudes 2000, 2002b), and the peoples who spoke these dialects operated within more-or-less independent polities during the Tuscarora War. Assessments of historically reported political differences (see Graffenried 1968 [1714], 1920 [1714]; Parramore 1982; Saunders 1968:I–II), and the more recent unequivocal linguistic analysis (Rudes 2000, 2002b), supports the hypothesis that Tuscaroras of the early eighteenth century were essentially divided along sociopolitical and linguistic lines into two macro-polities of a sort, the Upper Tuscaroras and the Lower Tuscaroras. By 1711–1712, King Tom Blunt and King Hancock respectively attempted to forge, or perhaps reforge, these communities into nascent chiefdoms (Byrd 1997:2–

5), with King Blunt asserting some degree of leadership over several Tar-Pamlico and Roanoke river towns of the Upper Tuscaroras, the *Skarure*.²¹ To some extent, King Hancock exercised influence over the Contentnea Creek towns of the Lower Tuscaroras, the *Kahtehnu*, but his apparent efforts to rise above a hereditary status as the chiefly leader of Catechna ended with his capture and abrupt execution as a principal of the anti-colonial faction in November–December 1712 (Saunders 1968:I:890–891).

In the first months of the Tuscarora War, King Hancock ostensibly directed warriors of an anti-colonial alliance—Lower Tuscaroras and warriors from several Carolina Algonkian and Coastal Plain Siouan polities—in concerted attacks on colonial plantations and villages in the lower Tar-Pamlico and lower Neuse river basins (Feeley 2007; Lee 1963; Parramore 1982; Paschal 1953).²² It is important to note, however, that most Lower Tuscarora communities, save for Catechna, eventually broke away from the multiethnic alliance to seek a diplomatic end to hostilities. After decisively delivering what was likely considered a disciplinary or corrective action (*sensu* Gleach 1997) to the impertinent and sometimes abusive colonists in the Tuscarora borderlands, most warring Lower Tuscaroras entered into diplomatic negotiations to end the war (see also Feeley 2007). The notion of a corrective action follows Parramore’s (1980:11; emphasis in original) observation, “It was the English who remained at the pleasure of the Tuscaroras, and not *vice versa*,” at least until 1713. While Catechna and some allied non-Tuscarora communities remained at war, the breakaway Lower Tuscarora communities, despite three treaties (Barnwell 1908; McIlwaine 1925; John Devereux Papers 1712–1892) superficially brokered by colonial officials, were attacked, re-attacked and dispersed by colonial forces between 1711 and 1715.

Largely due to the leadership, or perhaps overt political coercion of King Blunt and his supporters, the Upper Tuscarora communities remained at times ambivalently neutral, or at other times allied in nebulous fashion with the Carolina and Virginia colonies. The ambivalence exhibited by Blunt and the Upper Tuscaroras during the war, at least in terms of willingly and persistently attacking Lower Tuscaroras, possibly relates to a social fact that like other Northern Iroquoian groups, clan memberships among Tuscarora peoples often cut across different regional communities (Nixon 2000:56–59). Rewarded for efforts directed at keeping Upper Tuscarora warriors from campaigning *en masse* against the colonials, administrators of the North Carolina and Virginia colonies officially recognized Blunt as “King of the Tuscaroras” (Saunders 1968:II:37–38) shortly after the crushing Lower Tuscarora defeat at the Neoheroka Fort (March 23, 1713 [Barnwell 1909]). Upper and Lower Tuscarora peoples who refused to recognize Blunt’s authority were deemed enemies of the English colonies and henceforth, legitimate targets for slavers or scalp bounty hunters (Boyce 1987; Feeley 2007; Paschal 1953).

Compounding the complexities of any retrospective understanding of early Postcontact period Tuscarora social identities or sociopolitical organization is the issue of coalescence (*sensu* Kowalewski 2006). By the mid-1670s, the Upper and Lower Tuscaroras had strategically positioned themselves as trade middlemen and predatory slavers within the colonial world system (Barnwell 1908:35; Ethridge 2009:34–35; Gally 2002; Lawson 1967:64, 225, 232–233 [1709]; Parramore 1982).²³ The negative impacts of Old World disease epidemics on the greater Tuscarora population increased with the permanent settlement of the Carolina Tidewater in the mid-seventeenth century (Parramore 1982; Thornton 2004; Wood 1989), but the full extent of such impacts is poorly understood (see e.g., Kelton 2007, 2009). With the rapid fluorescence of the Indian slave trade after the founding of Charles Town, South Carolina in 1670 (Gally 2002), regional Indian population losses gradually mounted, irrespective of community or nation. By

the early 1700s, the Carolina Algonkian population in the Tidewater region was dramatically reduced from disease, slaving and warfare (Feest 1978a; Gallay 2002; Lawson 1967:232; Thornton 2004; Wood 1989). Assessments of ethnohistorical and archaeological data, however, suggest that the total Upper and Lower Tuscarora population was still regionally formidable in the early 1700s, probably on the order of 6,000–8,000 persons, but market slaving and intertribal captive raiding losses increased throughout this perilous period.²⁴

The societal breakdowns experienced by multiple Carolina-Virginia Indian polities during the Third Anglo-Powhatan (1644–1646), Bacon’s Rebellion (1675–1676), Chowanoke (1675–1677), and Coree (Coree-Nynee [Coranine]) (1706–1708) wars (see e.g., Lee 1963; Saunders 1968) led the remnants of some shattered or intensively pressured groups to seek protection among Upper or Lower Tuscaroras, Meherrins and Nottoways. Some groups sought mutual alliances, but others may have been indirectly coerced, coalescing to avoid population predation at the hands of wide ranging Tuscarora slavers. Responding to life within a shatter zone (*sensu* Ethridge 2009), Upper and Lower Tuscaroras, albeit with their own historically contingent distinctions on the pattern, followed the respective and strategic paths of the Westos, Occaneechis, Yamasees and Catawbas, groups which waxed and waned as militaristic slaving societies, ca. 1650–1725 (Ethridge 2003, 2006, 2009; Gallay 2002; Heath 2004). Meherrin and Weyanoke splinter bands or town units, originally occupying sections of present-day southeastern Virginia in the Contact period, variously relocated near Upper Tuscarora settlements (Binford 1967; Stanard 1897), while Coree (Core, Coranine, Waccon, Woccon) and Sissipahaw (Saxapahaw) splinter groups resettled near Lower Tuscarora communities (Barnwell 1908; Graffenried 1920 [1714]; Lawson 1967:xxxviii; 1708 Lawson map) at different times. Pressured by colonial encroachment, we suspect that the people of some Coree communities fled their Tidewater towns in the aftermath of the scantily documented Coree War to their ca. 1708–1713 settlement locations reported or mapped by several observers (Barnwell 1908; Graffenried 1920 [1714]; Lawson 1967 [1709]; Parramore 1987:119; ca. 1716 Graffenried map). These ethnolinguistically diverse groups were primarily seeking protection from hostile colonists, *Haudenosaunee* Confederacy raiders, marauding English and Indian slavers, or from the Tuscaroras themselves. With the exception of the Meherrins and presumably the Corees, it seems that the Upper and Lower Tuscaroras eventually turned on their hapless allies, in due course driving the Weyanokes back into southern Virginia (Binford 1967) and the Sissipahaws, first to Waccamaw towns near Cape Fear (Barnwell 1908), and later to Catawba towns in South Carolina (Merrell 1989). In 1711, Francis Le Jau, an Anglican missionary, understood the Tuscaroras to be composed of multiple “nations” (Klingberg 1956:161), perhaps recognizing a Tuscarora League structure (*sensu* Cusick 1848; Hewitt 1910b), but Le Jau’s observation may refer to a Postcontact period coalescence process that is not well understood historically.

CORROBORATION, REINTERPRETATION AND REDIRECTION

Since the early 1980s, regional archaeological survey and site investigation results, extant collections analyses and ethnohistorical studies collectively contribute to an expansion of historical and anthropological knowledge relevant to Cashie phase culture history.²⁵ We note, however, that relatively few sites with notable Contact–Postcontact period Cashie phase occupations have been intensively investigated to date. Research results associated with excavations at the 1712–1713 Neoheroke Fort (31GR4) (Byrd et al. 2009; Heath and Phelps 1998), Mabrey Bridge (31ED333) (Bamann 2006), Contentnea Creek (31WL37) (Millis 2001,

2003, 2009), Maple Branch (31BF340) (Tippett et al. 2009) and 31GR118/31GR206 (Webb and Olson 2010) sites are, however, especially significant (Figure 10-1).²⁶ Salvage investigations at other sites (31BR91, 44SN65) with relevant Cashie phase occupations (Mathis 1990; Phelps 2008; Phelps and Jones 1996), and research specific, county or multi-county watershed surveys (Beaman 2008; Byrd 1996; Byrd and Heath 1997; Swindell 1999) contribute as well. Original analyses or reassessments of datasets from earlier Coastal Plain survey and site excavation projects, ca. 1950–1985 (e.g., Binford 1964; Byrd 1995, 1996, 1997; Crawford 1966; Heath 2003; Hutchinson 2002; Phelps 1980a), further supplement our discussion. Our geographic focus is North Carolina’s northern Inner Coastal Plain, but ancient social boundaries, ephemeral as they are archaeologically, rarely coincide with modern political boundaries. As such, we briefly touch on Virginia sites data as they might relate to Precontact or early Postcontact period Meherrin site occupations in the Upper Chowan River basin. In some instances, recent excavation results or data reassessments, answer old questions (e.g., Phelps (1983:43–47, 50–51), but in other instances, recent investigations raise questions and interpretive conundrums well beyond the scope of this chapter.

Tuscarora and Meherrin Archaeological Connections

Demonstrating relationships between ancient or protohistoric era, ethnolinguistically defined groups and material or behavioral patterns in the archaeological record are admittedly problematic, and in many cases impossible. Terrell (2001a:7; emphasis added) noted, “Language, culture and biology *always* vary independently of one another *except* under specific circumstances.” Numerous ethnographic and archaeological studies consider or demonstrate the futility of analysts’ attempts at making social identity–material life connections in many contexts (e.g., Deitler and Herbich 1994; Derks and Roymans 2009; Shennan 1994; Stark 1998; Terrell 2001a). There are, however, notable ethnographic and archaeological studies which ably validate the potential for identifying social identity–material life interrelationships in some historically informed contexts, particularly in the case of non-state societies (e.g., Bowser 2000; Derks and Roymans 2009; Foster 2004; Gosselain 1998, 2000; Johnson et al. 2008; Stark 1998).²⁷ As Evison (2001:175) pointed out, “...there is no fundamental reason why a fixed set of gene frequencies, language and cultural traits must be transmitted together from one generation to the next in any community. Equally, however, there is no reason why they should not. It depends on history.”

In retrospect, Phelps’s (1977, 1980b, 1983) proposed relationship between historically documented Coastal Plain Iroquoians in eastern North Carolina, or southeastern Virginia, and the archaeological culture represented by the Cashie phase was not well rooted in a rigorous application of the Direct Historical Approach (Steward 1942).²⁸ Prior to Phelps’s investigations, however, Binford (1964, 1965) attempted to tackle the problem of identifying archaeologically, among other regional indigenous settlements, historically known Meherrin and Nottoway towns in the Meherrin and Nottoway river watersheds (Chowan River basin, North Carolina and Virginia), and within the Ahoskie Swamp locale in Hertford County (North Carolina).²⁹ Binford (1964) specifically approached his fieldwork from the perspective of the Direct Historical Approach, but interpretations of the resulting archaeological dataset were constrained by a lack of both chronological and systematic excavation data associated with the recovered ceramics and other contextually associated artifacts. Deriving from his ceramic seriation results, which he compared against existing regional typologies (Coe 1952, Evans 1955, Haag 1958, Schmitt

1952), Binford (1964) proposed that the producers of his Branchville series ceramics were protohistoric era Meherrin and Nottoway Indians.³⁰ He further noted that Branchville simple-stamped ceramics from early Postcontact period Meherrin settlement sites were essentially synonymous with a collection of simple-stamped sherds, presumed early eighteenth century Lower Tuscarora pottery, previously collected by John W. Witthoft and Margaret C. Blaker from the Neoheroke Fort site locality (31GR1, 31GR4) in 1951 (Binford 1964:416).³¹ In retrospect, the Branchville series simple-stamped, plain and fabric-impressed types, as originally described by Binford (1964), are essentially synonymous with Phelps's (1983) equivalent Cashie series types, and we analytically subsume these specific Branchville types within the Cashie series.³²

Research by Haag (1958), Binford (1964) and Coe (1964), as well as Crawford (1966) to some extent, collectively provided the initial foundation for the northern Coastal Plain cultural sequence later proposed by Phelps (1983:Figure 1.2). Phelps's subsequent watershed surveys (e.g., 1978, 1981, 1982a, 1982b) and site excavations (e.g., 1977, 1980a, 1982c, 1984a, 1984b), however, yielded more archaeologically comprehensive datasets crucial to the construction of his hypothesized regional and subregional phase models (Phelps 1980b, 1983). Based on the results of Binford's (1964) and Phelps's (1983) independent investigations, a provisional link between Cashie phase material manifestations and Tuscarora or Meherrin peoples historically documented in the early Postcontact period remained a viable working assumption through the 1980s. Integrating earlier archaeological datasets with more recent site excavation and watershed survey or analysis results (Byrd 1996; Byrd and Heath 1997; Byrd et al. 2009; Dawdy 1994; Heath 2002; MacCord 1993; Millis 2001; Swindell 1999), a relationship between the material life and adaptive strategies of the protohistoric era Tuscarora and Meherrin peoples with the Cashie phase archaeological culture is reasonably established.³³

Interpretations of archaeological datasets from the middle James River basin in Virginia, however, suggest the possibility, at least in terms of ceramic series but not well defined phases per se, that some Virginia Algonkian groups within the Powhatan chiefdom were also producing "Cashie-like" ceramics during the protohistoric era (e.g., Mouer 1985; Turner 1992, 1993, 2004). Recognizing two shared attributes (i.e., lithic tempering and simple-stamping) between the Branchville (Binford 1964), Cashie (Phelps 1977, 1983) and Gaston (Coe 1964; South 1959) series, several investigators subsumed such ceramics—largely in the absence of systematic comparative study (see e.g., Mouer 1985:6, 8)—as "Gaston-Cashie" or "Gaston" wares. Gaston wares, so-defined, retroactively subsume simple-stamped Branchville, Cashie, Gaston and Sturgeon Head, as well as Albemarle and Stony Creek (*sensu* Evans 1955), ceramics under a collective typological construct (see Virginia Department of Historic Resources [VDHR] 2009). We hesitate to explore this problem, not having conducted a hands-on comparative study, but discussions on the purported relationship between Cashie and Gaston ceramics figure prominently in the Virginia literature.

While Phelps (1983:44) considered the Gaston simple-stamped type as "equivalent" to the Cashie simple-stamped type (but see Phelps and Heath 1998:1–2), notable stylistic differences between the two series may be more culturally significant than the congruence of certain shared attributes. Nevertheless, some Gaston phase traits, at least based on South's (1959, 2005) work, are similar to those of the coeval Cashie phase (palisaded villages, primary and secondary burial practices), and the Gaston site locality is on the extreme western edge of the known Cashie phase sites distribution (Figure 10-1). Although Gaston series ceramics from sites 31HX7 (Gaston site) and 31HX8 (Thelma site), painstakingly described and gratifyingly illustrated by South (2005:28–35), share some attributes with Cashie series ceramics from Coastal Plain contexts,

marked differences between the series are sufficient to support their continued typological segregation. In North Carolina, the spatial distribution of Gaston series ceramics seems to be limited to the Fall Line zone of the Roanoke River basin (Bamann et al. 2008; Coe 1964; R. P. Stephen Davis, personal communication 2009; South 1959, 2005). Phelps (1983:44) originally stated, “The Gaston Simple Stamped type (Coe 1964:105–106) is equivalent to Cashie Simple Stamped, but the latter’s late temporal position and existence as the sole type in the Gaston series raises many questions.” This assertion, with Phelps’ nebulous caveat, presumably contributed to the rationale behind the “Gaston-Cashie ware” construct (Turner 1992, 1993, 2004), more recently redesignated as “Gaston ware” (VDHR 2009).

Gaston series attributes, as originally described by South (1959, 2005), and Cashie I and II series attributes (see below) overlap in the sense that most vessels analytically included within both series are often carved-paddle simple-stamped on their exterior surfaces, and folded rims with long flap folds are common. Some basic decorative treatments overlap as well, but multiple decorative treatments and incising motifs found on Gaston series ceramics recovered from the Gaston and Thelma sites (South 1959, 2005), are not reported for Cashie series ceramics (see e.g., Bamann 2006; Millis 2001; Heath 2002; Phelps and Heath 1998; Phelps 1983; Tippet et al. 2009). Shared decorative treatments include solid or hollow tool punctations and simple line incising, but the fingernail punctated lips, notched lips or rim edges and the more elaborate incised designs reported for the Gaston series (South 2005:31–35) have not been similarly encountered in Cashie series assemblages we have evaluated. Some Gaston series incising motifs are similar to those found on Cashie series vessels, but several designs illustrated by South (2005:Plate 6 and Figures 3–4) have not been observed in Cashie series assemblages from eastern North Carolina sites. South’s (2005:30) observation that Gaston series ceramics share numerous stylistic treatments with Dan River series ceramics is highly significant since most of the above referenced decorative treatments, as well as crushed quartz-tempering (South 2005:28), are not shared with Cashie series ceramics. Given these observations, the “Gaston-Cashie”/“Gaston ware” typological umbrella is of nebulous analytical value; “similarities” between Cashie and Gaston series ceramics do not constitute “sameness.” Future systematic analyses will be required to address the relationships (or non-relationships) between Cashie, Gaston and other similarly described ceramic series (e.g., Santee [Anderson et al. 1982; Cable 2002], Sturgeon Head [Smith 1984]), their respective archaeological contexts, associated phases, and possibly the social identities of their producers.

Cashie Phase Chronology and Subphases

In a broadly conceived cultural chronology, the temporal position of the Cashie phase falls within the regional Late Woodland–Contact (A.D. 800–1650) and early Postcontact (A.D. 1650–1725) periods, but the genesis of the phase was likely some four centuries later than the ca. A.D. 800 inception date proposed by Phelps (1983:17, 43). The regional emergence of Cashie phase archaeological manifestations varied over space and time across the Inner Coastal Plain regions of northeastern North Carolina and southeastern Virginia, but currently available radiometric data allow for no more than rough generalization at this time. Assessing archaeologically and historically recognized cultural changes, we presently subdivide the Cashie phase into three subphases (Table 10-1): Cashie I (A.D.1200–1650); Cashie II (A.D.1650–1717); Cashie III (A.D. 1717–1803). This scheme is a modified version of that first proposed by Phelps and Heath (1998) and future research will certainly lead to further refinements, particularly with the

provisional Cashie III subphase, which presently covers the entire post-Tuscarora War, Tuscarora and Meherrin reservation periods.

In the decades after the Tuscarora War, most remaining North Carolina Tuscaroras ceded their prewar lands and lived within the limits of the Bertie County reservation known as “Indian Woods.” Portions of this tract were leased or sold over the course of several decades and the regional Tuscarora population gradually diminished as some groups diverged and resettled among the *Haudenosaunee* or in other colonies. The last cohesive group of Tuscaroras living at Indian Woods abandoned the reservation and immigrated to New York in June 1803 (Boyce 1978, 1987; Feeley 2007; Landy 1978; Paschal 1953).³⁴ Although Meherrins were initially assigned a reservation by Virginia’s colonial authorities in 1705, a reservation tract at the confluence of the Blackwater, Meherrin and Nottoway rivers was located in what is now North Carolina. After the decades-long boundary dispute between the two colonies was resolved (see Boyd 1929), North Carolina’s colonial administrators first reduced the Meherrin Reservation area in 1726, but shortly thereafter, shifted and expanded its boundaries in 1729 (Dawdy 1995:411; 1705–1729 reservations map). Despite the “official” reserve bounds at Meherrin Neck, Meherrins struggled to hold their lands against inexorable colonial encroachment, eventually abandoning their town and resettling in dispersed communities in-and-around the Meherrin Neck and Ahoskie Swamp localities. During the American Revolution, local rebels illegally seized reservation lands, but officials with the State of North Carolina later refused to recognize the Meherrin Nation or the reservation as legal entities after the war (Boyce 1978; Dawdy 1994, 1995).

A modest array of radiocarbon dates associated with Cashie phase occupation features at archaeological sites distributed southward from the upper Chowan River basin in southeastern Virginia to the middle Neuse River basin in northeastern North Carolina have been sporadically accumulated since the 1970s (Table 10-2 and Figure 10-2). Contrary to past Cashie phase chronologies (see e.g., Byrd and Heath 2004; Phelps 1983:Figure 1.2; Phelps and Heath 1998; Ward and Davis 1999:Figure 1.5), the radiocarbon dates we believe best associated with Cashie I subphase occupations, namely assays of carbonized botanical matter recovered from reasonably firm contexts (Table 10-2), range from cal intercept A.D. 1240 to cal intercept A.D. 1640. Cashie II–III subphase calendric dates (post-1650) for historically reported Upper and Lower Tuscarora or Meherrin settlements vary between and within the major river basins, and are contingent upon socially transformative processes initiated after the sustained European colonization of eastern North America (see Binford 1991; Boyce 1987; Dawdy 1995; Edwards 1999; Feeley 2007; Paschal 1953; Parramore 1982; Rountree 1987).

At present, we consider the radiocarbon data included in Table 10-2 as contextually valid for Cashie phase occupations at the sites indicated. We have eliminated other previously published dates where we, after a judicious review of the respective proveniences, retrospectively consider the carbon sample contexts too problematic, and the associated radiocarbon assay dates invalid for the Cashie phase.³⁵ While the calibrated intercept dates included in Table 10-2 are not precise measures of time, radiometric data from acceptable contexts suggest to us that Cashie I subphase occupations in eastern North Carolina do not predate ca. 1200.³⁶ Phelps (1983, 1995) considered the 1000 ± 70 B.P. date—cal intercept A.D. 1022—for Thorpe site Feature 137 as the earliest valid Cashie phase radiometric date (Eastman 1994b:36). We note, however, that Feature 137 contained no Cashie series ceramics. The only temporally diagnostic artifacts recovered from Feature 137 were Small Roanoke type projectile points and Middle-to-early Late Woodland period, Clements series pottery sherds (Phelps 1980a:72). Occurrences of Small Roanoke type points are also well associated with both late Middle Woodland and early Late Woodland period Clements and Mount Pleasant phase

Table 10-1. Ceramic types.

Date	Period	Phase	Sub-phase	Ceramic Types	Comments
AD 1803	Late Postcontact	Cashie	Cashie III	Cashie Simple-Stamped Cashie Plain Courtland plain Euro-American ceramics	Continued social transformations and dramatic reduction of former territories. Gradual, but dramatic reduction of North Carolina Tuscarora population with repeated out-migrations through 1803. Some social coalescence with remaining Tidewater and northeastern Piedmont Indian bands. Cashie series ceramics continue to be produced early in the sub-phase (terminal date unknown). Pre-1750 Meherrin associated artifact assemblages also include Courtland ceramics. Most North Carolina Tuscaroras consolidate at the Indian Woods Reservation in 1717; Tuscarora Reservation period ends in 1803. Meherrin Reservation at Meherrin Neck reduced in area (1726) and later expanded (1729); Meherrin Reservation period ends ca. 1770. Key sites: Indian Woods Reservation (Bertie County), Parker’s Ferry (31HF1).
AD 1717					Period of initial modern world-system incorporation. Population decrease and significant social transformations. Intensification of Indian-European deerskin-peltry trade and Indian slave trade. Tuscarora War (1711–1715) and loss of Lower Tuscarora lands, ca. 1713. Meherrins gradually move southward, resettling abandoned Chowanoke lands, ca. 1677–1692. Generalized regional use of European-origin trade goods. Settlement patterns similar to previous subphase, but with addition of fortifications near dispersed settlements for communal defense during Tuscarora War. Primary inhumation mortuary practices (no known ossuaries). Simple-stamping becomes dominant Cashie series type, while fabric-impressing declines and disappears in some localities. Reduction in vessel form diversity; incised or punctated vessels rare. Meherrin sites assemblages include some Courtland ceramics. Key sites: Neoheroke Fort (31GR4), Contentnea Creek (31WL37), Mount Pleasant (31HF20B), Parker’s Ferry (31HF1), John Green (44GV1).
AD 1650	Early Postcontact	Cashie	Cashie II	Cashie Simple Stamped Cashie Fabric Impressed Cashie Plain Courtland plain (Meherrin)	Precontact–Contact period regional development of Tuscarora and Meherrin societies. Palisaded villages (Roanoke Basin), dispersed communities (Neuse Basin), fall-winter hunting-nut processing camps, seasonal fishing-shellfishing camps. Secondary inhumation mortuary practices (bundle burial ossuaries) common, but some primary inhumations. Cashie series ceramic assemblages with fabric-impressed (rarely decorated), simple-stamped and plain (often decorated with punctations around rim/neck) types. Simple incised line designs, generally on rim/neck, infrequent on all types and fully incised vessels very rare. Full range of vessel forms (beakers, bowls, handled dippers, restricted jars, unrestricted pots, pouring vessels (“gravy bowls”). Devil’s Gut series ceramics, ca. 1400–1500, in Roanoke Basin assemblages (temperless/fine-sand tempered pastes) with plain or burnished bowl and unrestricted pot forms. Key sites: Jordan’s Landing (31BR7), San Souci East (31BR5), Thorpe (31NS3b), Ellis A/B (44SN24/65).
AD 1200	Contact Late Woodland				Cashie I

Table 10-2. Radiocarbon Dates associated with Cashie I and Cashie II subphase features or burials.^a

Lab Number	Site Name	Site Number	Provenience (Material)	River Basin (Drainage)	Conventional C14 Age B.P.	Intercept Cal A.D.	2 Sigma Cal A.D.	Reference(s)
Beta-76688	Ellis B Site	44SN65	Burial 1 (human bone) ^b	Meherrin	500±50	1425	1319–1351 (16%) 1390–1455 (84%)	Phelps 2008; Phelps and Heath 1998
Beta-73742	Jordan's Landing	31BR7	Feature 41 (wood charcoal)	Roanoke	720±60	1280	1214–1321 (80%) 1349–1391 (20%)	Phelps and Heath 1998
UGa-1086	Jordan's Landing	31BR7	Feature 21 (wood charcoal)	Roanoke	525±70	1420	1292–1468 (100%)	Phelps 1983; Eastman 1994a, 1994b
UGa-3143	Thorpe	31NS3b	Feature 135 (hickory nutshell)	Tar	800±65	1240	1047–1088 (8%) 1122–1139 (2%) 1149–1292 (90%)	Phelps 1980a, 1983; Eastman 1994a, 1994b
Beta-178119	Mabry Bridge	31ED333	Feature 32B Zone IB (hickory nutshell)	Tar (Fishing Cr.)	510±30	1420	1399–1443 (100%)	Bamann et al. 2006
Beta-178118	Mabry Bridge	31ED333	Feature 32A Zone IA (hickory nutshell)	Tar (Fishing Cr.)	290±60	1640	1450–1679 (92%) 1764–1773 (1%) 1776–1800 (5%)	Bamann et al. 2006
UGa-R03432 ^c	Nooherooka Road	31GR206	Feature 6 (wood charcoal)	Neuse (Contentnea Cr.)	424±36	1450	1426–1512 (93%) 1601–1616 (7%)	Webb and Olson 2010
Beta-132253	Contentnea Creek	31WL37	Feature 1715 Zone B (wood charcoal)	Neuse (Contentnea Cr.)	300±50	1640	1453–1667 (97%) 1782–1797 (3%)	Millis 2001, 2003
Beta-136679	Contentnea Creek	31WL37	Feature 324 (wood charcoal)	Neuse (Contentnea Cr.)	210±70	1665	1494–1509 (1%) 1511–1601 (11%) 1615–1953 (88%)	Millis 2001, 2003

^aRecalibration of carbon sample assays was performed using the program Oxcal, v4.1 (Bronk Ramsey 2009), against the IntCal04 atmospheric curve (Reimer et al. 2004), using the maximum intercept method (Stuiver and Reimer 1986), with a resolution of two and then rounded. Date ranges depicted diagrammatically in Figure 2 are more accurate representations in that they represent a samples probability distribution along the calibration curve.

^b“Permission to use human bone for analysis was unanimously granted by the Meherrin Tribal Council in 1993” (Phelps 2008:2).

^cThis “recent” (2008) assay was recalibrated to maintain resolution and curve consistency within this specific dataset.

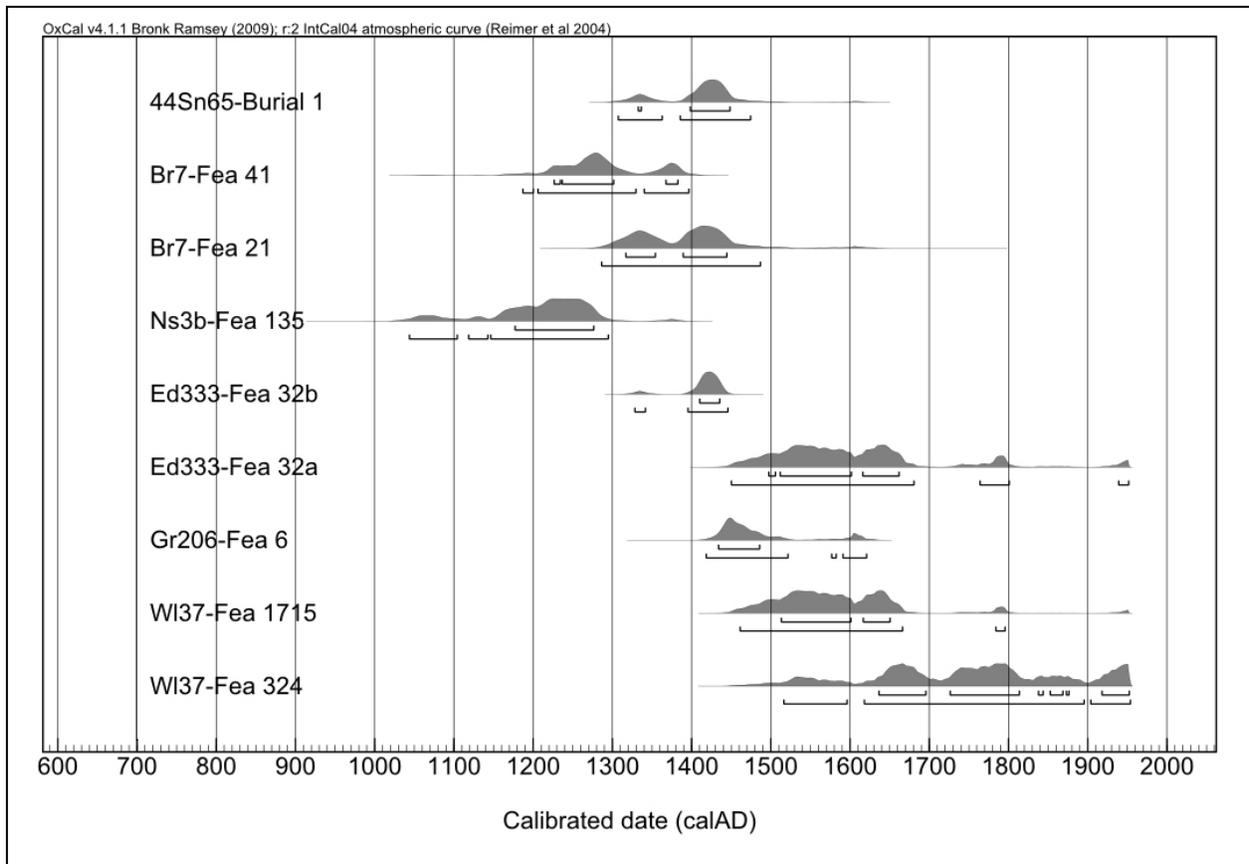


Figure 10-2. Radiocarbon probability curves for recalibrated Cashie phase dates included in Table 2. Samples are grouped in relation to their respective river basin contexts.

artifact assemblages and burials (see Bamann 2006; Heath 2003; Millis 2003, 2009; Phelps 1983; South 1959, 2005). As such, we believe that the small triangular points recovered from Feature 137 were not contextually or temporally related to Cashie I occupations at site 31NS3b.³⁷

The earliest calibrated intercept dates associated with Cashie I subphase occupations in the lower Roanoke and middle Tar-Pamlico river basins are roughly contemporaneous, respectively cal intercept A.D. 1280 and 1240 (Table 10-2). The Table 10-2 data suggest to us that Cashie I occupations initially occurred around and after ca. A.D. 1200 in the Roanoke and Tar-Pamlico river basins. Cashie I occupations potentially occurred much later, around and after ca. 1450, in the middle Neuse River basin.³⁸ Radiocarbon data associated with a Cashie phase ossuary in southeastern Virginia are limited to a human bone assay from the Ellis B site (44SN65), which is located on the Meherrin River (Phelps 2008; Phelps and Heath 1998) (Figure 10-1). It is difficult to address when ancestral Meherrins first settled in the upper Chowan River basin, but it was presumably as early as ca. 1400–1450, assuming that the single absolute date for Burial 1 at site 44SN65 is a reasonable measure.³⁹ Calibrated intercept date ranges for Cashie I–II subphase features spatially distributed by state and river basin from north-to-south are:

Virginia—Chowan River basin:	cal intercept A.D. 1425
North Carolina—Roanoke River basin:	cal intercept A.D. 1280–1420

North Carolina—Tar-Pamlico River basin:	cal intercept A.D. 1240–1640
North Carolina—Neuse River basin:	cal intercept A.D. 1450–1665

Since the Lower Tuscarora dialect distinctly differed from the Upper Tuscarora dialect (Rudes 2000, 2002b), there may have been multiple proto- or ancestral Tuscarora migration events. This is a reasonable processual expectation given highly varied migration or colonization processes reported cross-culturally in Rockman and Steele (2003), but dialect differentiation may or may not signal population migration breaks (Potter 1994:3).⁴⁰ Perhaps the earliest ancestral Tuscaroras first settled in the lower Roanoke and middle Tar-Pamlico River basins, ca. 1200, and much later expanded *permanent* settlements into the Contentnea Creek watershed or middle Neuse River basin locality in the mid-to-late fifteenth century. Of interest here is Rudes' (2002b:11) conclusion that the Upper Tuscarora dialect is the older of the two seventeenth–eighteenth century Tuscarora language dialects; the Lower Tuscarora dialect being relatively more recent. Similarities between Cashie I subphase lifeways, both material culture and behavioral adaptations, in the historically known Upper and Lower Tuscarora localities do suggest robust social connections through time, ca. 1200–1650. Some material culture variation (see below), as well as known political differences between the two localities, ca. 1650–1715, however, may be indicative of sociocultural differences further manifested by the historically known linguistic variance (see below).

The hypothesized later arrival of ancestral Lower Tuscaroras in the middle Neuse River basin is further supported by archaeological data from the Contentnea Creek site (31WL37) where Millis (2003, 2009) reported on pre-Cashie phase site occupations, ca. 1300–1400, materially associated with her Untyped Series 1 and Untyped Series 2 ceramics. Millis's (2003, 2009) Untyped Series 1 and Untyped Series 2 ceramics share more stylistic characteristics with the site's earlier dated, Mount Pleasant phase ceramic assemblage than with contemporaneous extra-local (i.e., Roanoke River basin, Tar-Pamlico River basin) Cashie I subphase ceramics, or protohistoric era Cashie I–II subphase ceramics from the Contentnea Creek watershed. Ceramics reportedly similar to Millis's (2003, 2009) two untyped series were also recovered through burial salvage excavations at the Kearney site (31GR84) in 1992, which is also located in the upper Contentnea Creek watershed. Phelps (David S. Phelps, personal communication 2008) recognized sand-tempered ceramics, an engraved shell gorget, a tubular stone pipe and burial patterns at the Kearney site that were not within the range of variation expected for either northern Coastal Plain, Mount Pleasant or Cashie phase mortuary patterns. Based on his preliminary data assessment, Phelps suggested the possibility of a Precontact period, Coastal Plain “Siouan site with a later Tuscarora overlay” (Faris 1992:14). Since no formal comparative analyses have been undertaken, systematically comparing and contrasting the site 31GR84 and site 31WL37 datasets against protohistoric era Carolina Siouan sites data from the neighboring Piedmont province (e.g., Dickens et al. 1987; Ward and Davis 1993, 1999), or the lower Cape Fear River basin (e.g., Wetmore 1978), Phelps's hypothesis regarding the patterns observed at site 31GR84 remains testable.

In our estimation, the constellation of Cashie I subphase cultural traits (e.g., bundle burial ossuaries, palisaded villages, Cashie series simple-stamped pottery) that emerged in the lower Roanoke River basin by A.D. 1200 appear to be a temporally and culturally related aggregation of regionally intrusive practices. Similarities in ceramic temper material and interior finishing treatments shared between Cashie series ceramics and some early Late Woodland Mount Pleasant phase assemblages—Green's (1986) provisional Liberty Hill series—have been submitted as evidence for an in situ, “Proto-Cashie” phase development (Bamann 2006; Green 1986; Millis 2001). Such interpretations, however, ignore other significant stylistic attributes

that Cashie series ceramics do not generally share with earlier or later coeval regional ceramic types.⁴¹ Concomitant behavioral patterns associated with the Cashie I subphase, further include regionally distinctive settlement (Byrd 1995, 1996; Byrd and Heath 2004) and mortuary (Heath 2003; Hutchinson 2002; Phelps 1983) pattern differences, which are collectively indicative of culturally differential subsistence or settlement systems and ritual practices that did not simply develop out of the *more geographically broader* Mount Pleasant phase tradition.⁴²

Coastal Plain Iroquoian Origins

Given the probable relationship between the Cashie phase archaeological culture and Tuscarora and Meherrin peoples portrayed in historical documents, one has to consider ancient connections between the Coastal Plain Iroquoians and other Iroquoian language groups once disjointedly distributed across the Eastern Woodlands from present-day southeastern Canada to northwestern Georgia (see e.g., Byrd 1998; Fogelson 2004; Trigger 1978; Whyte 2007). Although other long term social processes might account for these Contact-to-early Postcontact period ethnolinguistic distributions, Byrd (1998:2) astutely observed, “The quilt-like appearance of the language map indicates that migrations have been an important part of the histories of many eastern tribes.”⁴³ It is probable that the genesis of the Cashie phase in northeastern North Carolina corresponded with presumed core population splinterings and chronologically punctuated out-migrations of ancient, Proto-Iroquoian speaking peoples from a Proto-Iroquois core region somewhere in the Eastern Woodlands (see e.g. Kerber 2007; Martin 2008; Whyte 2007).⁴⁴

Snow (1995a, 1995b, 1996) proposed an initial radiation of Iroquoian speaking peoples out of south-central Appalachia, possibly western Pennsylvania, by A.D. 600, but the validity of his most current Iroquoian expansion model is either contested (see Martin 2008) or supported with caveats (see Whyte 2007).⁴⁵ Following Byrd (1997, 1998), we have suggested elsewhere (e.g., Heath 2007; Heath and Phelps 1998) that Phelps’s (1983) proposed inception date for the Cashie phase at ca. A.D. 800 compares more agreeably with Snow’s (1995a, 1995b, 1996) “intrusion hypothesis,” rather than more amenably with competing “modified in situ” development hypotheses (see e.g., Martin 2008). Despite noted problematic issues with Snow’s Iroquois origins hypothesis (Martin 2008:450–453), and arguments against *any* corresponding relationships between language, culture and genes (e.g., Terrell 2001a, 2001b), Whyte (2007) recently pointed to several archaeogenetic studies of particular interest, including Bolnick and Smith (2003) and Malhi et al. (2001). Genetic studies results support the hypothesis that Iroquoian and Algonkian languages speaking populations, among others, historically and respectively *differed* genetically (Malhi et al. 2001). Moreover, the “Genetic evidence is consistent with archaeological evidence of a cultural intrusion [(*sensu* Snow 1996)] into the Northeast by ancient Iroquoians” (Malhi et al. 2001:42). In this regard, Byrd’s (1998) earlier quantitative analyses of anthropometric and linguistic data, are worthy of note. He concluded, “The Tuscarora and Seneca are both linguistically and anthropometrically close, suggesting a [population] split in the relatively recent past... This interpretation is supported by Tuscarora [and other Iroquois] traditions which claim recent common ancestry with the Northern Iroquois” (Byrd 1998:25). These study results potentially relate to a sociobiological pattern, whereby “...phylogenetically related tribes can be recognized by similar languages, cultural systemic patterns, and biological attributes because they are descended from a small proto-group with a proto-culture at some point in the past” (Byrd 1998:9).

In consideration of the modified Cashie phase chronology we propose, however, it appears that ancestral Tuscaroras either out-migrated from a Proto-Iroquois core region much later than A.D.

600, or initially resettled and occupied some other region(s) of the Eastern Woodlands, ca. A.D. 600–1200. When and where ancestral Tuscaroras, as well as ancestral Meherrin and Nottoway peoples, first lived and later migrated in an implicit series of chronologically intermittent population movements, which eventually led them into northeastern North Carolina or southeastern Virginia, is unknown. Previous archaeological and linguistic studies, however, provide clues. In the case of Proto-Iroquois population fissions and migratory resettlements, ca. A.D. 600–900, Snow (2001:22; emphasis added) surmised, “Initial community movements occurred in leaps of *up to* 200 kilometers.” If this was indeed the case, ancient Tuscarora peoples initially, and presumably temporarily, resettled in other regions of northeastern or southeastern North America long before ultimately resettling in the lower Roanoke River basin around A.D. 1200–1250. Cashie I subphase material culture elements share relatively few stylistic similarities with Middle (A.D. 1300–1400) or Late (A.D. 1400–1650) Iroquoian period material culture elements (see e.g., Engelbrecht 2003; Hayes 1980; Kerber 2007; Pratt 1976; Trigger 1987).⁴⁶ As such, the geographic distance between the Proto-Iroquois subpopulations, as their societies differentially developed into the historically recognizable ethnolinguistic entities known at and after European contact, must have been significant. Historical studies are revealing as well. When Lower Tuscarora refugees were initially taken in by the Five Nations peoples in the mid-1710s and early 1720s, their hosts reportedly observed that their distantly related brethren were “... ‘poor relations’ and ‘somewhat queer’ in speech and custom as judged by usual Iroquoian standards” (Wallace 1952:6; emphases in original).

Most linguists accept that ancestral Cherokees diverged from a core Proto-Iroquois population long before ancestral Tuscaroras, because the Cherokee language is significantly more divergent or innovative, hence of greater antiquity relative to Proto-Iroquoian (PI), than Tuscarora (Lounsbury 1978; Mithun 1984). Linguists originally held that the Tuscarora-Meherrin-Nottoway language group represented the second oldest departure from PI (Lounsbury 1961), but Chafe and Foster’s (1981) comparative studies revealed a closer relationship between Tuscarora and Cayuga, as well as Huron, than between Tuscarora and other Proto-Northern Iroquoian (PNI) languages (Cayuga, Huron, Mohawk, Oneida, Onondaga, Seneca, Susquehannock, Wyandot).⁴⁷ This relationship is suggestive of a “...migration away from the homeland area of a single group of people who later themselves divided to become the ancestors of both the Tuscarora and the Cayuga” (Chafe and Foster 1981:47).⁴⁸ Little is known of the Meherrin language, other than that it was a Northern Iroquoian language related to Tuscarora (Rudes 1981a, 1981b, 1999a), and likely more similar to the Tuscarora dialects than Nottoway (Rudes 1981b; Rudes, personal communication 2003); analyses provide no specific clues as to the timing of its origins. Nottoway, however, is less divergent or more conservative than Tuscarora when compared against other relatively more recent Northern Iroquoian languages (Lounsbury 1978), potentially indicating a slightly later split than Tuscarora from the PNI language base.

These linguistic patterns suggest that initial ancestral Nottoway, and perhaps ancestral Meherrin, occupations in the upper Chowan River basin were potentially later than the earliest Tuscarora occupations in the lower Roanoke River basin. The current suite of Cashie I subphase radiocarbon dates from acceptable contexts (Table 10-2) lend some credence to these admittedly tenuous interpretations, but more absolute dates from suitable contexts are needed to support or discount these hypotheses. The motivations or instigators behind the movements of ancient Iroquoian peoples into the Middle Atlantic subarea are unknown. Nevertheless, push-pull factors (see Rockman and Steele 2003)—population pressure, warfare or climate change in the Northeast, or conducive social connections and resettlement opportunities in the Middle

Atlantic—apparently stimulated a core Proto-Iroquoian population radiation and territorial expansion during the Middle Woodland period. Some archaeological evidence, however, suggests a much earlier Proto-Iroquoian divergence some 3,500–4,000 years ago (see Whyte 2007).⁴⁹

Iroquois oral histories may shed light on these ancient population dynamics. Long held traditions state that ancestral Tuscaroras departed from Northern Iroquois peoples settled south of Lake Ontario—those who later formed the *Haudenosaunee* Confederacy—many centuries before European contact. In relative terms, this population divergence occurred sometime before the formation of the *Haudenosaunee* Confederacy in or around A.D. 1142 (Mann and Fields 1997), shortly after ancestral Wyandots (Hurons) and related groups migrated northward, but long after ancestral Cherokees migrated further south and west (George-Kanentiio 2007:394). Of note in this discussion is information provided in Tuscarora oral histories.⁵⁰ When ancestral Tuscaroras first branched out from the ancestors of the *Haudenosaunee* Confederacy:

Ta-ren-ya-wa-go (Holder of the Heavens), who was the patron of the five home bands, did not fail...to direct them their way also...he guided their footsteps in their journeys, south and east, until they had crossed the Alleghany Mountains, and with some wanderings they finally reached the shores of the sea, on the coast which is now called the Carolinas. By this time their language was changed. They were directed to fix their residence on the banks of the Gow-ta-no [(Contentnea)]...now Neuse River, in North Carolina [Johnson 1881:45].⁵¹

When Lower Tuscarora refugees initially sought sanctuary among the *Haudenosaunee*, fleeing ethnocide or enslavement during and after the Tuscarora War, an Onondaga diplomat deftly countered protests lodged by Governor Robert Hunter of the New York colony. The diplomat stated, “These Indians [(i.e., Lower Tuscaroras)] went out heretofore from us, and have settled themselves there [(North Carolina)]; now they have got into war, and are dispersed...They have abandoned their Castles [(forts)] and are scattered hither and thither; let that suffice” (O’Callaghan 1855:376 [1713]).

That the earliest Tuscaroras in North Carolina initially resettled in the Neuse River basin (Johnson 1881:45) is obviously contrary to our hypothesis that ancestral Tuscaroras first colonized the lower Roanoke River basin. Nevertheless, Rudes’ (2000, 2002b) crucial linguistic analysis corresponds with the archaeological evidence. Since the Upper Tuscarora dialect was relatively more ancient than the Lower Tuscarora dialect, the earliest Tuscaroras in North Carolina probably settled first in the Roanoke River valley, the *Skarure* or Upper Tuscarora locality in the seventeenth and eighteenth centuries. It may be that our interpretations, based on our understanding of the Cashie phase, the extant radiocarbon data and the linguistics, are wholly incorrect. However, we believe that the oral histories reported by Cusick (1848) and Johnson (1881) were indelibly shaped by the first North Carolina Tuscarora refugees to reach the *Haudenosaunee* during and immediately after the Tuscarora War, ca. 1713–1723. Most, if not all, of these people were from the *Kahtehnu* (Contentnea) communities in the middle Neuse River basin. The majority of the Upper Tuscaroras remained, along with some Lower Tuscarora bands, in eastern North Carolina for several decades before the first substantial bands, perhaps clans, migrated northward to Pennsylvania and New York (Boyce 1978, 1987; Feeley 2007; Landy 1978; Paschal 1953).⁵²

These historical and social facts lead us to believe that some intentional obfuscation occurred as different dislocated groups attempted to integrate into a new set of social circumstances and forge a new or modified sense of ethnic identity in the wake of a disastrous wartime defeat, subsequent decades of oppression and traumatic social transformations. Later tensions between Upper and Lower Tuscarora descendants among the *Haudenosaunee* were especially amplified by Elias Johnson (1881:61–62) who asserted that Lower Tuscaroras previously settled in the Contentnea Creek locality in 1700–1715, were not, in fact, “the real Tuscaroras.” The alleged “real Tuscaroras,” at least according to Johnson, were those who remained neutral during the Tuscarora War, ostensibly the *Skarure* or Upper Tuscarora people of the Tar-Pamlico and Roanoke rivers communities. The *Haudenosaunee*, however, adopted both Lower and Upper Tuscaroras as a single nation, the sixth nation of the league, not discriminating between the two social entities in 1722 (Landy 1958, 1978).

Cashie Phase Landscapes and Settlement Patterns

There is geographic and diachronic variation in Cashie phase land use and settlement patterns, but substantially more research will be required to illuminate ecologically adaptive or historically contingent variations through time. Following Trigger’s (1968) settlement pattern analysis scheme (see also Byrd and Heath 2004:104–108), we now reexamine the distribution of settlements and resource exploitation sites across a regional landscape, the spatial arrangement of habitation and defensive structures, and structural architecture. In northeastern North Carolina, Precontact–early Postcontact period Tuscarora settlement distributions fluctuated over time and space. As such, the Cashie phase site distributions discussed here in some detail should be considered approximations at any given point between ca. 1200 and 1717. As their community populations waned, the cumulative result of intensified Postcontact era warfare, slaving and disease impacts (see e.g., Ethridge 2009; Feeley 2007; Gally 2002; Thornton 2004; Wood 1989), the geographic distributions of Upper and Lower Tuscarora settlements, as well as the independent distributions of Meherrin settlements, shrank significantly before, during and after the Tuscarora War.

As noted, the Cashie III subphase is associated with Tuscaroras and Meherrins who remained in eastern North Carolina after the Tuscarora War, most of whom relocated to circumscribed reservation lands designated for their respective nations by North Carolina’s colonial administrators (Binford 1967, 1991; Boyce 1978, 1987; Dawdy 1994, 1995; Davis 2002; Feeley 2007). Cashie III subphase settlement patterns potentially differ from earlier norms, but landform-specific site distributional data do not presently exist for the latter subphase. Cashie phase settlement patterns, at least through 1711–1717, are indicative of subsistence regimes associated with natural resources exploitation in multiple microenvironments (see Byrd 1995, 1996, 1997; Phelps 1983). Regional site locational data, however, indicate that Cashie I–II subphase habitation sites were selectively chosen to exploit localized soils most naturally suitable for intensive horticultural practices, while simultaneously providing reasonably efficient access to canoe-navigable streams and a diversity of consumable aquatic resources. In contrast, habitation site microenvironments associated with occupations by Late Archaic, Early Woodland and Middle Woodland period peoples across northeastern North Carolina generally exhibit a much greater degree of locational diversity (Byrd 1995, 1996).

By 1700, if not well before, the Upper and Lower Tuscaroras held some concept of a collective "national" territory (Wallace 1949).⁵³ For this reason, among other vital issues, many

Lower Tuscaroras were willing to go to war, along with their Native allies, against the Carolina colonists in September 1711. Lower Tuscarora statements recorded during the war (e.g., Graffenried 1920 [1714], 1969 [1714]), as well as later Tuscarora oral histories (Johnson 1881; Wallace 1952), are revealing. Tuscarora perspectives collectively suggest that European settlement encroachment of Lower Tuscarora "hunting lands" was one of several factors shaping their decision to form military alliances with displaced coastal Indian groups and attack colonial farmsteads, plantations and villages in the Tidewater. The necessity of acquiring substantial quantities of deerskins and other pelts for exchange with European traders in return for muskets, ammunition, iron tools and other manufactured products, especially after about 1660–1665, required extensive hunting territories (see e.g., Haan 1981; Lapham 2005). Since many imperial or colonial officials, as well as local colonizers, readily believed they could simply claim, resettle and fence off what were often long inhabited or perpetually utilized Indian hunting, fishing and foraging tracts, one can readily comprehend the problem.⁵⁴

Region. To reevaluate the approximate maximal distribution of sites with Cashie I or II subphase occupations, and the distribution of regional sites with limited occurrences of Cashie series ceramics, we conducted a systematic, county-by-county review of archaeological survey and site testing reports, as well as unreported site data. We consulted source materials readily available at the North Carolina Office of State Archaeology (NCOSA), the David S. Phelps Archaeology Laboratory, East Carolina University (ECU) and the Fort Bragg Cultural Resources Management Program (FBCRMP) as of October 1, 2008. For southeastern Virginia, we relied on previously published data (e.g., Binford 1964; Dawdy 1994; Egloff and Potter 1983; Hodges 1993; MacCord 1993; Smith 1984; Turner 1992, 1993; VDHR 2009). For North Carolina, our assessment of reported investigation results, ca. 1970–2008, over a 50 county region encompassing all Coastal Plain and eastern Piedmont counties, reinforces Phelps's (1983) earlier reported distribution of sites with Cashie phase occupations. The spatial distribution is robust, with no Cashie phase occupations or incidental Cashie series pottery occurrences reported, or otherwise discerned through our careful study of state site files, south of the middle-lower Neuse River basin or west of the Fall Line zone (Figure 10-1). Figure 10-1 depicts the approximate maximal distribution of regional sites with known Cashie I–III subphase occupations, a presence-absence model that does not reflect either historically known or expected diachronic change (e.g., expansions, contractions, fragmentation).

In North Carolina, Cashie phase habitation (semi-permanent, permanent) and seasonal resource exploitation (temporary, ephemeral) sites are situated from the Fall Line zone along the westerly edge of the Coastal Plain province to the upper estuary zones of the great Albemarle-Pamlico drainage system.⁵⁵ The southerly, easterly and westerly distributions of sites with archaeologically discernable Cashie phase occupations are reasonably well delineated. Although Cashie series ceramic sherds, and occasionally reconstructable vessels, do occur in Colington phase artifact assemblages recovered from Outer Coastal Plain contexts, sites with definitive Cashie I subphase occupations rarely occur east of the Chowan River. Along the Tar-Pamlico and Neuse rivers, there are no documented Cashie I or Cashie II subphase settlement sites respectively east of the present-day towns of Bath or New Bern. The presence of Cashie series vessels found in otherwise Carolina Algonkian contexts (and vice-versa) have been interpreted as evidence of routine trade activities (e.g., Phelps 1983, 1982b, 1984b), but other factors (e.g., seasonal hunting or shellfishing camps, intermarriage, fluctuating territorial bounds) must be considered. Pierce (2010), for example, recently suggested that incidental occurrences of Cashie series pottery at sites 31WH12 and

31WH13, the Phelps Lake sites, are likely associated with past seasonal fish or shellfish harvesting activities pursued by Cashie phase peoples at the lake.

Tuscarora warriors were reportedly involved in frequent armed conflicts with Carolina and Virginia Algonkian groups in the sixteenth and seventeenth centuries (Bland 1966 [1651]; Binford 1967; Hariot 1972 [1590]; Parramore 1982). Even so, low frequency occurrences of Cashie series pottery found in association with Carolina Algonkian (Colington phase) site occupations in the Tidewater (and vice-versa) generally reflect an overtly coastal focused trade and social interaction sphere (Phelps 1983:37–39). This interaction sphere undoubtedly existed well before and long after European contact, a cultural pattern further substantiated by the results of recent bioarchaeological studies (e.g., Killgrove 2009). The Tuscaroras' historically known position as middlemen in the mountains-to-the-coast, macro-regional trade network (Lawson 1967 [1709]; Lederer 1966 [1672]; Yearley 1911 [1654]) was a later manifestation of an ancient pattern. Moreover, the material evidence for such a long term coastal interaction sphere informs any retrospective understanding of the processes behind wartime alliance formations between Lower Tuscarora, Carolina Algonkian and Coastal Plain Siouan polities during the Tuscarora War. Nevertheless, other cultural processes, not necessarily intra-regional or inter-regional trade, might account for some aspects of the regional ceramics distribution patterns.

Parramore (1982) suggested that Upper and Lower Tuscarora communities sought to expand their political influence and hunting territories eastward as Carolina Algonkian groups waned in population and martial strength over the course of the seventeenth century. As Carolina Algonkian populations diminished in number, as early as the 1580s (see Hariot 1973 [1590]) and throughout the 1600s (Feest 1978a; Lawson 1967 [1709]; Wood 1989), Tuscarora land use for hunting or other seasonal resource exploitation purposes, edged eastward. In the mid-1600s, this territorial expansion led to clashes with European colonizers, who retaliated by unleashing drafted militia troops on Tuscarora settlements bordering the Tidewater in a ca. 1665–1667 war that was negligibly documented (Stanard 1900a:345–348). Similarly, Meherrin groups displaced from southeastern Virginia in the wake of Bacon's Rebellion moved south and east in the late 1670s or early 1680s to reoccupy lower Chowan River habitation areas abandoned by the Chowanokes after the Chowanoke War (1675–1677). Sites with early Postcontact period Meherrin occupations are found in some Gates and Chowan county areas east of the Chowan River (Binford 1964, 1967, 1991; Dawdy 1994, 1995; Phelps 1982a, 1982b, 1984; Swindell 1999). Given these historically contingent settlement dynamics, sites with Cashie II subphase occupations, including Meherrin occupation sites and Upper or Lower Tuscarora hunting quarters or fishing-shellfishing sites, while minimally known archaeologically, further account for low frequency occurrences of Cashie series pottery in some contexts well east of the Chowan River.

From north-to-south, Cashie phase sites most generally fall between the upper Cashie and middle Neuse rivers in northeastern North Carolina, and between the Nottoway and Meherrin rivers in southeastern Virginia.⁵⁶ In their quest for deerskins, Indian slaves and lucrative trade outlets, especially with the expansion of Carolina colony settlements in the Tidewater, ca. 1650–1710, Upper and Lower Tuscarora hunters and traders ranged as far north as the Rappahannock River in Virginia (Boyce 1987:152), and at least as far south as the Cape Fear River in North Carolina (see Barnwell 1908). A few archaeological sites with presumably Precontact–Contact period Cashie I subphase occupations are documented along the north and south banks of the Neuse River, roughly falling between (west-to-east) the modern towns of Goldsboro and Cove City (see Crawford 1966).⁵⁷ Although macro-scale regional survey data are limited between the middle Neuse and the lower Cape Fear river basins, a continuing problematic issue noted by Phelps (1983)

and Ward and Davis (1999), there is no present indication that Cashie phase settlements ever existed any significant distance south of the middle Neuse River basin in the Precontact or early Postcontact periods. To date, compliance-driven archaeological surveys and other studies have not revealed the presence of sites with Cashie phase occupations in southern Craven, Duplin, Jones, Onslow, Sampson or southern Pamlico counties. Similarly, locality intensive archaeological surveys in the Carolina Sandhills have yielded absolutely no material evidence associated with land use (e.g., hunting quarters) by Precontact–Contact or early Postcontact period Tuscarora groups, or material evidence of other social interactions (e.g., diplomatic relations, trade), in Cumberland, Harnett, Hoke, Lee, Moore, Richmond or Scotland counties. By the early 1700s, however, routine Lower Tuscarora land use apparently extended southward into the Cape Fear River basin, well south of their Contentnea Creek towns, at least for slave raiding or seasonal hunting purposes during the heyday of the colonial deerskin-peltry and Indian slave trades in the Carolinas (see Barnwell 1908).⁵⁸ As such, seasonally occupied, Cashie II subphase sites, well south of the Neuse River, may yet be discovered.

For the lower Roanoke, middle Tar-Pamlico and middle Neuse river basins, current archaeological data indicate that land use by Cashie phase peoples within or adjacent to the Fall Line zone was generally seasonal. This cyclical land use pattern, related to a farming-foraging-fishing-hunting, seasonal round regimen (Byrd 1997; Heath 1997), was primarily for late fall-winter season deer hunting and nut collecting-processing forays, and spring anadromous fishing or floral resources collecting activities (see e.g., Bamann 2006; Bland 1966 [1651]; Byrd 1997; Lawson 1967 [1709]; Millis 2001; Phelps 1980a, 1983). In 1701, John Lawson (1967:35 [1709]) observed that Tuscarora towns were situated east of the Fall Line, in the ecoregion where “long Moss” (Spanish Moss [*Tillandsia usneoides*]) was found. The Fall Line zone seems to have been, at times, both a social buffer zone and a seasonal resource exploitation niche collectively utilized by many upper Coastal Plain and eastern Piedmont peoples in North Carolina and Virginia before and after European contact. At other times, this zone appears to have been hotly contested, with different polities clashing and vying for control of either natural resources or trading paths following or radiating out from the Fall Line (see e.g., Bland 1966 [1651]); Mook 1944; Robinson 1959). In the 1650s, Upper Tuscaroras were apparently fighting with Piedmont Siouan groups to control the Roanoke River falls zone and the important northeast-to-southwest trading path found there (see Cumming 1998:Plate 50A; 1733 Moseley map) in the seventeenth century (Yearley 1911 [1654]).

Cashie I subphase occupations at the Mabry Bridge site on Fishing Creek in Edgecombe County appear to have been seasonal, a late fall-winter land use area off the eastern fringe of the Fall Line zone (Bamann 2006). This site is contextually similar to the Thorpe and Contentnea Creek sites where combined faunal and floral datasets suggest that these three sites served as cool season deer hunting and nut collecting-processing camps repetitively used by Cashie phase peoples over several centuries (Byrd 1997; Bamann 2006; Millis 2003, 2009; Phelps 1980a, 1983). While the number of well-documented, seasonal resource exploitation sites is limited, the perpetual reuse of such sites appears to span the Cashie I–II subphase continuum, ca. 1200–1717. Byrd’s (1997:64–65) interpretation, however, suggests that wholesale village population movements to historically documented winter hunting quarters (Dawdy 1995; Lawson 1967 [1709]) may have been the end result of significant ecosystem impacts related to the regional zenith of the deerskin-peltry trade, ca. 1675–1725.

The maximal northern distribution of Cashie phase settlement sites is presently more difficult to ascertain. Phelps (1983) originally considered the Nottoway-Blackwater rivers locality as the approximate northern limit, roughly coinciding with the geographic distribution of Contact–early

Postcontact period Nottoway Indian towns (see Boyce 1978:Figure 1). Sites with presumed Precontact–Contact and early Postcontact period Cashie phase occupations—sites with occupations contextually associated with Branchville, Cashie or Gaston series ceramic assemblages—reportedly occur in Greensville, Prince George, Southampton and Sussex counties, Virginia (see e.g., Binford 1964; Egloff 1985; Egloff and Potter 1982; Gallivan 2003; Hodges 1993; Mouer 1985; MacCord 1970; Phelps 2008; Smith 1984; VDHR 2009). The Fall Line zone roughly coincides with the westerly limits of the Cashie phase sites distribution in both northeastern North Carolina and southeastern Virginia. Since the relationships (or non-relationships) between Cashie series ceramics and “Gaston wares,” *as well as the associated phase characteristics and chronologies*, are poorly compared-contrasted and synthesized (see above), we cannot argue for or against the inclusion of James River basin sites where purported Gaston wares have been recovered in Virginia (see e.g., Mouer 1985; Turner 1992, 1993, VDHR 2009).

Communities. Moving from a broad regional scale to a drainage specific scale, Byrd and Heath (1997, 2004) reported the results of survey efforts to relocate sites associated with the Lower Tuscarora towns and forts sacked and destroyed during the Tuscarora War (Barnwell 1908, 1909). Earlier archaeological survey efforts to this particular end are also summarized in several sources (Beaman 2008; Gardner 1991; Lautzenheiser and Eastman 1992; Paschal 1953; Rose 1960). The later and more comprehensive regional survey, which relied on Byrd’s (1996) systematically field tested, site predictive model, resulted in the relocation of sites with Cashie I and II subphase occupations likely associated with six of eight historically documented Lower Tuscarora towns. From west-to-east, the rediscovered communities are Torhunta, Kenta, Neoheroke, Innenitts, Caunookehoe and Catechna (Byrd and Heath 2004:Figure 5.8). Several sites thought to be associated with Toisnot (Tosneoc), the westernmost Lower Tuscarora town mentioned by Lawson (1967 [1709]) and mapped ca. 1711–1716 (Parramore 1987:119; ca. 1716 Graffenried map), have been documented in Wilson County (Beaman 2008; Gardner 1991; Millis 1998, 2001). Data recovery excavations directed by Heather Millis (2001, 2003, 2009) at the Contentnea Creek site (31WL37) documented a probable Lower Tuscarora fall-winter hunting quarter, ca. 1640–1665 (Table 10-2) possibly associated with either Toisnot or Kenta. Other Toisnot locality sites, including site 31WL304, have been recently tested by Beaman (2008) with promising results. Although relatively little is known of another historically reported community, the southernmost documented Lower Tuscarora settlement was the town of Haruta (Lawson 1967 [1709]), which was situated along the north bank of the Neuse River (Parramore 1987:119; 1711 Graffenried map).⁵⁹ Even though no Contact–early Postcontact period trade goods were recovered by Crawford (1966) at the Tower Hill site (31LR1), it may be archaeologically associated with Haruta.

One significant result of the Contentnea Creek watershed surveys (Beaman 2008; Byrd 1996, 2001; Byrd and Heath 2004; Gardner 1991; Millis 1998) is the plausible confirmation that Lower Tuscarora towns through time were not nucleated entities. Nucleated settlements are somewhat implied by the designation of Lower Tuscarora communities as “towns” by Lawson (1967 [1709]), or “villages” by other colonial observers (Graffenried (1920 [1714])). Moreover, there is no current evidence from block (e.g., 31GR84, 31LR1, 31WL37) or test unit (e.g., 31WL304; 31WY1, 31WY3) excavations that either Precontact–Contact or early Postcontact period palisaded villages were constructed in the Lower Tuscarora locality (see Beaman 2008; Crawford 1966; Millis 2003, 2009; David S. Phelps, personal communication 2008; South 1962). It remains possible that palisaded villages, similar to the Jordan’s Landing village, were

constructed by ancestral Lower Tuscaroras in precontact times. Nevertheless, the present data, as well as ethnohistorical studies results (e.g., Binford 1964; Boyce 1978; Paschal 1953; Lee 2004), support the conclusion that Lower Tuscarora towns over time were loosely arranged clusters of multi-family hamlets, or extended family farmstead compounds, situated on elevated loamy soil landforms along second and third order tributaries of Contentnea Creek. In some cases, sites spatially associated with the proposed community clusters of Toisnot, Neoheroka and Catechna are also located on the terraces above Contentnea Creek (Beaman 2008; Byrd and Heath 1997, 2004; Millis 1998).

Dispersed settlements are more difficult to defend from sustained attacks by concentrated and mobile military forces. As such, the Lower Tuscaroras' settlement pattern directly influenced their strategic decision to erect a watershed-wide chain of palisaded forts and blockhouses near primary habitation areas for communal defensive needs during the Tuscarora War (Byrd 2001; Byrd and Heath 1997, 2004; Heath and Phelps 1998; Lee 2004). The dispersed community pattern further suggests to us that Lower Tuscaroras may not have been as perpetually plagued by regional intertribal raids, as were many neighboring Piedmont Siouan groups sadly described as living huddled in fortified villages (Lawson 1967 [1709]; Merrell 1987, 1989) during the early eighteenth century. One possible explanation for the Lower Tuscarora settlement posture is that minimally populated, intertribal buffer zones (*sensu* Milner et al. 2001:14–15) existed south of the middle Neuse River basin and west of the upper reaches of Contentnea Creek, at least during the ca. 1600–1700 period and perhaps much earlier.⁶⁰

A potentially problematic issue with the Contentnea Creek survey studies (e.g., Beaman 2008; Byrd 1996; Byrd and Heath 1997, 2004) is that all archaeological sites yielding Cashie series ceramics were analytically aggregated under the working assumption that the individual sites in each proposed community cluster were individually part of the historically known early eighteenth century Lower Tuscarora towns. Since the people associated with the Cashie I subphase, presumably ancestral Lower Tuscaroras, first permanently settled in the Contentnea Creek drainage around 1450–1500, some individual sites reported by Byrd (1996), Byrd and Heath (1997) or Beaman (2008) potentially date to the Precontact period; this issue was initially noted by Millis (2001). Some ten middle Neuse River basin sites with probable Cashie I or Cashie II subphase occupations, including the Tower Hill site (31LR1), are situated either along the main trunk of the Neuse River or at the confluences of Neuse River tributaries other than Contentnea Creek (Bear, Falling, Southwest creeks)—see Crawford (1966). These sites are both outside and just south of the Contentnea Creek watershed and do not spatially fit within the rediscovered Contentnea Creek town clusters (see Beaman 2008; Byrd and Heath 2004).

The Cashie I–II subphase settlement patterns within the Contentnea Creek drainage are nonetheless robust, with only a few sites, presumably late Precontact or early Postcontact era farmsteads, or seasonal extraction sites (e.g., deer hunting, anadromous fishing, shellfish collecting sites), falling outside the historic town site clusters proposed by Byrd and Heath (1997, 2004). The site location and radiometric data suggest that the habitation area abandonments and resettlements within the same historically known community locales essentially occurred along the same tributary streams over the course of several centuries, ca. 1450–1711. The site density within the Torhunta and Kenta community localities is much higher than the site densities within the other five Contentnea Creek community clusters (Beaman 2008:Figures 1 and 3; Byrd and Heath 2004:Figure 5.8). Although the early Postcontact period populations of Torhunta and Kenta may have been greater than the other town populations, hence the higher site densities, the pattern may reflect a greater time depth of Lower Tuscarora

land use in the Nahunta Swamp section of the watershed (Byrd and Heath 2004:122); an alternate explanation, however, is survey bias. Not all landowners allowed access to their properties for survey purposes (Byrd and Heath 1997:37).

The middle Tar-Pamlico and lower Roanoke river basins have not been specifically surveyed to relocate protohistoric era Upper Tuscarora town sites, but cultural resource management surveys, along with some site-specific investigations, provide uneven settlement pattern data for some segments of these basins. Given current archaeological data, combined with inferences from historical sources, it appears that some Precontact–Contact and early Postcontact period Upper Tuscarora communities in the lower Roanoke River basin were nucleated and palisaded, a community level settlement pattern unlike that determined archaeologically for the middle Neuse River basin. Examples of such fortified settlements include the precontact Jordan’s Landing site, occupied ca. 1250–1450 (Byrd 1997; Phelps 1983), and the early eighteenth century town of Tasky (Pasqui, Tasqui) reported by Graffenried (1920 [1714]); Tasky has not been relocated archaeologically (Byrd and Heath 2004). In the absence of more definitive Upper Tuscarora locality data, these fortified village examples, if generally representative of ca. 1450–1717, Cashie I–II subphase community arrangements in the Roanoke River basin, suggest that historically documented conflicts between the Upper Tuscaroras and neighboring polities had deep precontact roots (see e.g., Bland 1966 [1651]; Parramore 1982; Yeardley 1911 [1654]).

Limited details known from historical documents (Barnwell 1908; Lawson 1967 [1709]) seem to indicate that Upper Tuscarora communities in the middle Tar-Pamlico River basin may have been dispersed settlements as well, at least in the early 1700s. William Gale (Clark 1907:734), however, reported that the Indians he traded with in 1702–1703, including the “Tuscaroorays,” inhabited “...small Townes and barke Cabbins, pallisado’d in w’th 2 Or 3 Rows of Stakes [pales].” Since Gale lived on the Perquimans River, his observations may more generally relate to settlements occupied by Carolina Algonkian groups living in the Tidewater. Nevertheless, Gale’s letter specifies that he ranged well beyond the Carolina Sounds in his trading forays, traveling by shallop up the Cape Fear River and overland to the Appalachian Mountains (Clark 1907:732–735). Immediately after the Tuscarora War, the Upper Tuscaroras, as well as the remaining Lower Tuscaroras who did not flee eastern North Carolina, eventually resettled in either dispersed communities or nucleated, but not initially fortified, villages in the lower Roanoke River basin (Boyce 1987; Feeley 2007; Saunders 1968:I–II). In time, most of the North Carolina Tuscaroras ceded their remaining lands and lived within the limits of the Indian Woods Reservation through 1803 (Boyce 1978, 1987; Feeley 2007; Landy 1978).

By the late 1600s, both Upper and Lower Tuscarora communities incorporated lands held in common by members of each community, such as ceremonial plazas (Graffenried 1920 [1714]) and foraging areas where diverse raw materials (e.g., firewood, river cane for mats, fibrous plants for mats or baskets, wood for house frames or carving) could be gleaned from the land (Byrd and Heath 1997, 2004). Such lands were probably divided into tracts used by particular clans or extended family units—usufruct land ownership. This pattern was the case among several Iroquoian nations in the Northeast subarea (see Driver and Massey 1957). Beyond community controlled lands were peripheral hinterland, hunting, fishing, shellfishing and gathering territories likely considered more-or-less as exclusive “national” use lands (Wallace 1952). Like Northern Iroquoian peoples, it is likely that fish or shellfish harvesting sites were restricted access areas, seasonally used by particular clans or by the separate town communities.

Alternately, parcels of horticultural lands were probably managed and used exclusively by interrelated extended family households (see Driver and Massey 1957; Nixon 2000).

Structures. We know relatively little of Cashie I subphase habitation structures from an archaeological perspective and largely rely on ethnohistorical sources for retrospective interpretations of Precontact–Contact period household architecture (see e.g., Byrd and Heath 2004), which is problematic for obvious reasons. Phelps (personal communication 2008) recognized partial rectilinear house wall patterns at the Jordan’s Landing site, but due to postmold “noise” from repetitive site re-occupations or individual structure rebuilding episodes, could discern no complete structure patterns at the site.⁶¹ In the early 1700s, Lower Tuscarora houses were built with rectilinear floor plans (Byrd and Heath 2004), similar in size and form to Carolina Algonkian “longhouses” reported or illustrated in the late sixteenth (Harriot 1973 [1590]; Hulton 1984) and early seventeenth centuries (Hinke 1916). Lower Tuscarora hunting quarter houses were built in a distinctly different fashion (Lawson 1967 [1709]), presumably due to their temporary, seasonal use nature, and likely resembled, except with enclosed walls, temperate season hunting camp structures illustrated by Von Reck in the 1730s (see Hvidt 1980). For the Meherrin River locality in southeastern Virginia, Meherrin house plans may have been circular in the seventeenth century, but it is not readily apparent that the circular postmold patterns (i.e., Features 25 and 28 arc segments) mapped at the multi-component John Green site (44GV1) were temporally associated with the site’s ca. 1680–1710 Meherrin occupation (see MacCord 1970:121–122).

It is presently assumed, given these tenuous observations, that rectilinear habitation structures were the norm for both Upper and Lower Tuscarora nucleated villages and dispersed farmsteads, both in the Precontact–Contact and early Postcontact periods. Such structures were probably similar in plan to the precontact, coastal longhouses reported by Heather Millis (this volume). Franz Louis Michel sketched the only known depiction of Lower Tuscarora habitation and storage (possible granaries) structures, which are illustrated in an intriguing drawing depicting the John Lawson-Christoph von Graffenried trial at Catechna in 1711 (see Parramore 1982:322). The house-bunkers documented inside the palisade trace of the Neoheroke Fort (Figure 10-6) were semi-subterranean defensive structures specifically engineered by Lower Tuscaroras to protect their people from artillery delivered ordnance, exploding grenadoe shrapnel and small arms fire (Heath and Phelps 1998). Hard tactical lessons learned from Barnwell’s (1908) 1712 siege of the neighboring Catechna Fort were innovatively applied in the design, construction and defense of the Neoheroke Fort in 1712–1713. Architectural features of the Neoheroke Fort are variously described in several sources (Byrd 2001; Byrd et al. 2009; Barnwell 1909; Heath and Phelps 1998).

We have discovered little specific historical information on post-1717, Cashie III subphase architectural patterns, but fully expect that Upper Tuscaroras and Meherrins eventually shifted from Coastal Plain longhouses (*sensu* Gardner 1990; Loftfield and Jones 1995; Millis, this volume) to log construction dwellings sometime in the late eighteenth century. By the mid-1730s, Brickell (1969:291 [1737]) observed that the coastal region’s “civilized Kings” and their families, specifically alluding to the leaders of the tributary Tuscarora, Chowanoke and Yeopim reservation communities, lived in houses built similar to those of Carolina colonists, presumably post-in-ground frame or stacked log construction (see Lounsbury (1994:216–218, 288–289) buildings. The “commoners,” on the other hand, apparently continued to dwell in “wigwams” according to Brickell (1969:290)—presumably coastal longhouse style structures. Among Upper

and Lower Tuscaroras who resettled in New York, or their descendants, Wallace (1952:18) indicated that log construction houses were "...favored after 1800, following the decline of the bark house" (i.e., longhouse).

Cashie Phase Mortuary Customs

During the Late Woodland period, mortuary practices across the northern Inner Coastal Plain, and by inference funerary rituals, underwent a significant and temporally rapid transformation concomitant with the florescence of the Cashie phase. At present, there is no evidence to suggest that Middle or early Late Woodland period, Mount Pleasant phase peoples practiced the protracted processes and interment rights associated with ossuary burial customs (see e.g., Hutchinson and Aragon 2002). Their burial practices included primary burial and cremation inhumations, typically the mortal remains of single individuals (Heath 2003; Phelps 1983). Ancestral Tuscarora peoples, as early as ca. 1200 and at least as late as ca. 1550, typically interred the carefully processed and curated skeletal remains of their dead in small ossuaries located inside dwellings or adjacent to their primary habitation areas (Heath 2003). Cashie I subphase single bundle and individual primary interments, typically extended or slightly flexed supine burials, have been described as well (Byrd 1997; Heath 2003; Hutchinson 2002; Mathis 1990; Phelps 1977, 1983, 2008). A number of such primary inhumations, however, were subadult burials (Heath 2003). Cross-culturally, however, infants and children often receive differential mortuary treatments (Hutchinson and Aragon 2002). Middle Woodland and early Late Woodland period mortuary patterns associated with Mount Pleasant phase peoples likely reflect individualistic or immediate household focused rituals (see e.g., Cannon 2002). Late Woodland period mortuary patterns associated with Cashie phase peoples, however, represent more ritually complex, extended family, kin group (clan) or community focused rituals (see e.g., Cannon 2002), which were more similar to those practiced by neighboring Carolina Algonkian peoples in the Tidewater (Heath 2003; Hutchinson and Aragon 2002; Phelps 1983, 1984a).

Cashie I subphase mortuary patterns. The few definitive, Cashie I subphase burials documented in northeastern North Carolina or southeastern Virginia since the early 1980s were salvage excavated after human skeletal remains were exposed in agricultural fields during seasonal plowing episodes (Phelps 2008), or uncovered through mechanized grading operations in advance of sand mining projects (Hutchinson 2002; Mathis 1990). Overall, most reported Cashie I subphase burials, including those excavated at the Jordan's Landing and San Souci East (31BR5) sites before the early 1980s, have been found in the lower Roanoke or upper Chowan river basins. Nothing is known archaeologically of Precontact–Contact period, Cashie I subphase burial patterns in the middle Tar-Pamlico or middle Neuse river basins.⁶² There are, however, both similarities and peculiar variations between Cashie I subphase ossuaries at the Dickerson (31BR91), Ellis B, Jordan's Landing and San Souci East sites (Heath 2003; Mathis 1990; Phelps 1977, 1983, 2008). Although we do not synthesize their findings, bioarchaeological studies completed since the early 1980s report on osteological or bone chemistry data for skeletal remains associated with Cashie phase or regionally coeval burial features (e.g., Bogden and Weaver 1992; Byrd 1999; Farnum 2001; Higginbotham 1999; Hutchinson 1993, 2002; Jones 1989; Kakaliouras 2002, 2003; Killgrove 2002, 2009; Norr 2001, 2002; Reichs 1986; Weaver 2001).⁶³

The differential Cashie phase mortuary patterns potentially represent subtle shifts in funerary rituals over a span of time greater than that represented by the three Cashie phase

radiocarbon dates from the Jordan's Landing and Ellis B sites (Table 10-2). Alternately, the mortuary pattern variations may simply represent idiosyncratic customs between different loosely associated communities. Moreover, the Cashie I subphase primary burials at site 31BR7, and an unusual primary inhumation at site 31BR5, suggest that differing mortuary rituals were observed for different people in the two communities (Heath 2003; Phelps 1983). With the exception of the Ellis B site ossuary, Cashie I subphase ossuaries generally incorporated the disarticulated, cleaned and bundled skeletal remains of two-to-ten individuals in each secondary burial pit; the Ellis B site ossuary pit held the remains of 31–39 individuals (Heath 2003; Hutchinson 1993, 2002; Jones 1989; Jones and Hutchinson 1995; Mathis 1990; Phelps 1977, 1983, 2008; Reichs 1986).

Cashie phase ossuary pits are typically ovoid or sub-rounded in plan, with cardinal orientations (long axes) tending toward a northwest-to-southeast direction. The processed skeletal remains secondarily reinterred in ossuary pits at the Jordan's Landing and San Souci East sites were typically arranged in discrete bundles, representing two or more individuals, with the crania placed immediately adjacent to the associated post-cranial bone bundles (Heath 2003; Phelps 1983:Figure 1.13). At the Ellis B site, however, seven discrete bone clusters composed of the crania and post-cranial skeletal remains of two-to-six individuals in each cluster were salvaged from the plow disturbed ossuary (Phelps 2008). This Cashie I subphase burial, while dating to the mid-fifteenth century (Table 10-2), was regionally located where Meherrin peoples were first historically documented in the mid-seventeenth century (Bland 1966 [1651]). In the case of the Dickerson site ossuary, a different ossuary interment pattern was observed. The post-cranial skeletal remains were found in the central section of a large pit with the individual crania intentionally placed around the outer perimeter of the feature (Hutchinson 2002:Figure 2.17; Mathis 1990). Unfortunately, the Dickerson and Ellis B sites ossuaries were all significantly plow or grader damaged, and the recovered skeletal remains were found fragmented and in poor states of preservation (Mathis 1990; Phelps 2008).

Fourteen of the seventeen Cashie phase ossuary interments at the four sites considered here included funerary objects, primarily perforated *Marginella* shell beads, but some individual bone bundles within the ossuaries appeared to have no specifically associated burial goods. Where encountered, the frequency of *Marginella* beads varies between burials, from a minimum of two recovered beads, to a maximum of some 2,000 recovered beads, per individual bone bundle or grouped skeletal element bundles (Heath 2003; Phelps 1977, 1983). The Dickerson and Ellis B site ossuaries, as well as one individual bundle burial at the Jordan's Landing site, contained no *Marginella* beads or other obvious funerary goods (Heath 2003; Mathis 1990; Phelps 2008). At the Jordan's Landing site, fabric-impressed bowls were found in three ossuaries, contextually associated with adult female skeletal remains (Heath 2003). In some cases, funerary objects such as polished or incised bone pins, antler or bone awls and bone needles were found in contextual relation to particular individuals, most often, but not exclusively, females at the Jordan's Landing and San Souci East sites (Heath 2003). Some variation observed between Cashie I subphase burials relate to temporal trends over several centuries, but other differences may indicate ascribed or achieved social statuses of either the deceased (Heath 2003; Phelps 1983) or the familial survivors responsible for interring the dead (see e.g., Hutchinson and Aragon 2002).

Given a possible nascent relationship between historically described "Feast of the Dead" rituals and early secondary burial customs of some Proto-Iroquois societies, ca. A.D. 1000–1100 (Trigger 1987:128, 138), ancestral Tuscarora peoples may have continued similar customs once resettled in eastern North Carolina. Since ossuary burial traditions developed in the Southeast

subarea around the same time frame (Hutchinson and Aragon 2002:44), however, the practice among Cashie phase peoples may represent the adoption and modification of interment rituals performed by neighboring peoples in the Tidewater. Carolina Algonkian mortuary customs are well documented, both archaeologically and ethnohistorically (Curry 1999; Hutchinson 2002; Hutchinson and Aragon 2002; Phelps 1983, 1984a). These hypotheses may be interrelated, but perhaps future excavation findings, finer grained chronological data and further mortuary pattern studies will eventually inform these ponderings.

Even though Cashie I subphase ossuaries were located in the “residential area” at the Jordan’s Landing site, no ossuaries were significantly disturbed by other Cashie phase features or postholes, despite ample evidence for multiple rebuilding episodes around the burial pits (Heath 2003). Postholes/post molds and other Cashie I subphase occupation features, however, disturbed chronologically earlier, non-Cashie phase burials at both the Jordan’s Landing and Kearney sites. In the case of one Mount Pleasant phase burial at Jordan’s Landing, a large post was driven through the cranium of the interred by the site’s later inhabitants (Heath 2003). The intrasite patterns at the Jordan’s Landing and San Souci East sites suggest that Cashie I subphase ossuaries were carefully preserved and were a material manifestation of communal social memory. Since the ossuaries were found spatially associated with household living areas, the perpetual presence of ancestral remains and burials was a daily facet of life for the people who lived in the villages. The close association between living areas and mortuary areas effectively integrated the places and spaces of death with those of the living community (see e.g., Cannon 2002). As such, the communities of the living and the dead were perpetually intertwined in a manner somewhat alien to our own postmodern society, where we typically impose sharp spatial boundaries between the living and the dead. The ossuary burials in Cashie I subphase villages may represent the blending of familial and communal desires to maintain both personal and abstract knowledge of the dead. The spatial placement of the dead inside or adjacent to a house likely served the function of family level social memory maintenance for the immediate kin group, while community rituals associated with secondary burial practices, served the function of abstract social memory maintenance for the greater community (Heath 2003)—see also Cannon (2002) and Hutchinson and Aragon (2002).

Cashie II subphase mortuary patterns. At present, there are no mortuary pattern data from the Lower Tuscarora locality for the Cashie I subphase. By ca. 1600–1650, however, it appears that Lower Tuscaroras interred their deceased in spatially segregated cemetery areas generally composed of individual primary inhumations, such as those reported by Millis (2003, 2009) at the Contentnea Creek site. Based on her assessment of intrasite feature relationships, Millis (2001:429) suggested that the late Cashie I–early Cashie II subphase burials were located in a “designated cemetery,” adjacent to, or perhaps some distance away from, contemporaneous habitation areas. To date, no Cashie II subphase burials have been professionally documented in the lower Roanoke or middle Tar-Pamlico river basins, hence no reliable archaeological data are known to exist for the Upper Tuscarora locality in the protohistoric era.⁶⁴ MacCord (1970), however, reported on the primary burial (Burial 3) of a possible Meherrin child (1–2 years old) interred at the John Green site in Virginia.⁶⁵ European and Native made funerary items associated with this burial included a woolen blanket, a superbly woven textile belt, a brass kettle with gourd cup and brass spoon, glass and shell beads, a fragmented pewter smoking pipe, a white clay pipe bowl, several copper or copper alloy objects (button, finger ring, “tinkler” cones, straight pins, perforated disc), a bone handled iron knife and iron scissors (MacCord 1970:111–

112). If MacCord's (1970:121–122 and Figure 2) interpretations are correct, this burial, probably dating to ca. 1680–1710, was positioned adjacent to a circular house structure presumably inhabited at the time of the interment.⁶⁶

There are striking differences between the modal burial patterns observed at the Contentnea Creek site (primary inhumations) and the modal burial patterns associated with Precontact period, Cashie I subphase occupations at the Dickerson, Jordan's Landing and San Souci East sites, which were mostly secondary inhumations. The Contentnea Creek site's protohistoric era burial patterns, presumably terminal Cashie I–early Cashie II subphase, are more reminiscent of roughly contemporaneous Carolina Siouan burial patterns in the neighboring Piedmont province (see e.g., Davis et al. 1998; Dickens et al. 1987; Eastman 1999; Ward and Davis 1993, 1999). The conclusion that the mid-seventeenth century burials at site 31WL37 are associated with repeated Lower Tuscarora site occupations, however, is well supported by the spatially and temporally associated presence of Cashie II subphase ceramics in site features (but not burials) with carbonized plant remains radiocarbon dated to cal intercept A.D. 1640 and cal intercept A.D. 1665 (Table 10-2). These radiocarbon data are comparable to the combined popular use date ranges, ca. 1625–1675, of the glass trade beads found in several site 31WL37 burials—see Millis (2001:Appendix 7).

While it is remotely possible that the Contentnea Creek site burials held the mortal remains of non-Tuscarora peoples who lived in a historically undocumented Coastal Plain Siouan community, temporally rapid and materially radical shifts in mortuary practices have been documented elsewhere regionally (e.g., Phelps 1984a:3–4, 17–18). Pronounced shifts in mortuary practices sometimes quickly evolved as a societal response to profound socioeconomic and demographic changes after the founding of European settlements in northeastern North America, concurrent with the inexorable spread of deadly disease epidemics and the escalation of the animal peltry trades in the seventeenth century (see e.g., Ethridge and Shuck-Hall 2009; Ethridge and Hudson 2002; Pluckhahn and Ethridge 2006). Native societal transformations occurred earlier in some regions of the Southeast subarea where Native peoples were negatively impacted by early Spanish *Entradas* and the colonization of La Florida (Ethridge and Hudson 2002). In terms of non-Lower Tuscarora communities in the Contentnea Creek locality, Barnwell (1908) reported the presence of an abandoned Sissipahaw settlement west-southwest of the Lower Tuscarora town of Torhunta. He noted that Lower Tuscaroras had driven the Sissipahaw group out of the region in 1711, sometime after they refused to ally themselves with the Lower Tuscaroras in the Tuscarora War. This possibility acknowledged, there is no material evidence of a non-Lower Tuscarora site occupation during the time frame most of the deceased were interred at site 31WL37, ca. 1640–1665 (Millis 2003, 2009).

With the exception of the few primary inhumation burials documented at the Jordan's Landing site (Byrd 1997; Heath 2003; Phelps 1977, 1983), Precontact period, Cashie I subphase mortuary practices most generally involved complex skeletal preparations and extended ritual processes associated with ossuary or secondary burial customs. Ossuary interment customs appear to have been commonly practiced into the early protohistoric era, but there is no present evidence to suggest that the tradition continued into the seventeenth century. The majority of the Lower Tuscarora burials removed from the Contentnea Creek site in advance of highway construction were primary single inhumations, many of which included varying quantities of associated Native and European produced funerary goods (Millis 2003, 2009). Although there were some specific cases outside the modal pattern, the 38 individuals most likely associated with the site's Cashie II subphase occupations were found interred in semi-flexed or fully flexed

burial positions with their heads oriented to the west. Sixteen of these deceased persons were interred with varying types and quantities of mortuary goods. The site's burial goods assemblage includes straight-stemmed smoking pipes, cut shell beads, copper ornaments and drawn glass beads dating to the early-to-mid seventeenth century (Millis 2003, 2009).

Neoheroka Fort site—the exigencies of war. Despite the substantial number of people reportedly killed-in-action defending the Neoheroka Fort in February–March, 1713—558 people by Colonel James Moore's count (Barnwell 1909:39)—relatively few formal or informal burials have been encountered archaeologically inside the trace of the palisade (Figure 10-6). In his after-action-report Moore (Barnwell 1909:39) pithily conveyed to his superiors, “Prisoners 392, Scolps 192, out of ye sd: fort—& att Least 200 Kill'd & Burnt In ye fort—& 166 Kill'd & taken out on ye Fort on ye Scout.” Some combat casualties were expediently buried by family members or friends under house-bunker floors during the siege, but others were apparently buried by survivors or enemy forces after the final battle. In a few cases, some individuals were not intentionally buried. Their bodies were either left inside destroyed house-bunkers or inadvertently covered by above-ground structural debris when the fort was razed and burned (Byrd 1999, 2001). Burials encountered during the intensive investigation of the Neoheroka Fort site were all found as single interments, but the specific patterns varied for both formally and informally buried battle casualties (Byrd et al. 2009; Byrd 1999, 2001; Heath and Phelps 1998). Since the fort context is unique, our only archaeological knowledge of Contact–early Postcontact period Upper or Lower Tuscarora burial practices comes from site 31WL37 (Millis 2003, 2009). Some additional evidence can be gleaned from the patchy and generally confusing eyewitness accounts reported by the few colonial observers (Graffenried 1920 [1714]; Lawson 1967 [1709]) who bothered to document what they saw as culturally alien and bizarre funerary practices.

Cashie Phase Subsistence Practices

Both before and after European Contact, Cashie phase peoples perpetually utilized some of the most ecologically diverse land areas in North Carolina. Coastal Plain resources exploitable for a mixed subsistence economy during the Late Woodland and early Postcontact periods include nut bearing deciduous trees, a variety of fruit bearing species, and other edible plant resources. The qualitative assessments of botanical and faunal remains from Cashie phase contexts point to the exploitation of a broad range of plant and animal species, as well as plant husbandry, namely the cultivation of maize and several varieties of beans and cucurbits (gourds, melons, squashes). Moreover, the northeastern Coastal Plain's watershed systems provide varied aquatic habitats suitable for a range of readily harvestable freshwater flora and fauna (Binford 1964, 1991; Heath 1997; Byrd 1997; Phelps 1983; Whyte 2008).

Cashie I and II subphase settlement patterns provide further clues to the subsistence strategies employed by ancestral Upper and Lower Tuscarora communities. The locations of Cashie phase habitation sites (nucleated villages, dispersed village hamlets, farmsteads) were selected as a component of an adaptive strategy focused on the localized exploitation of aquatic resources while perpetually occupying and tilling landforms that remain among the naturally richest agricultural lands in North Carolina. These landforms are often situated adjacent locally navigable tributary streams, or along the main channels of several major rivers, and are typically bordered by extensive tracts of swampy wetlands (Byrd 1996, 1997; Byrd and Heath 1997, 2004; Phelps 1983). Cashie phase peoples intensively exploited the biomass associated with riverine

and peripheral wetland settings, routinely harvesting fish, turtles and mussels. Large fauna, such as white-tailed deer and black bear, were typically hunted during the fall and winter months when such efforts did not interfere with horticultural, fishing or gathering efforts in milder seasons (Byrd 1997). At present, the available floral and faunal data are not sufficient to address specific subphase variation or diachronic change during the Cashie I or Cashie II subphases, ca. 1200–1717.

Hunting, fishing and shellfishing. Expanding on the sketches of Cashie I subphase subsistence patterns originally reported by Phelps (1980a, 1980b, 1983), Byrd (1991, 1997) combined ethnohistorical information (e.g., Lawson 1967 [1709]) and faunal data from the Jordan's Landing site in his synthesis of Cashie phase subsistence patterns. Recent, compliance driven data recovery projects have provided additional datasets of interest (e.g., Bamann 2006; Millis 2003, 2009). In addition to deer, black bear and small-to-medium mammals (opossum, raccoon, squirrel), freshwater mussels, turtles (box turtle, snapper), anadromous fish (river herrings, shads, striped bass) and a variety of freshwater fish species (bowfin, gar, bullhead, sturgeon, white perch) contributed to the mix of protein rich resources targeted as food sources (Byrd 1997:Tables 2.1 and 2.2; Phelps 1980a, 1983). Where seasonal anadromous fish runs were abundant, fresh and smoke cured river herrings and shads provided reliable sources of storable protein and fats throughout the year (Byrd 1997; Heath 1997). Wild turkey remains are well represented in the Jordan's Landing faunal assemblage, but the remains of other expected avian species, especially waterfowl, are surprisingly minimal (Byrd 1997:65–66).

Several zooarchaeological studies (Andrews 2003; Byrd 1991, 1997; Lapham 2001; Phelps 1980a) indicate that deer hunting, as one intuitively expects, was an important component of Cashie phase subsistence practices. The year-round and seasonally specific exploitation of aquatic species, however, may have been equally as significant as deer, in terms of overall protein contribution to individual diets, before European colonization and the escalation of the deerskin trade (Byrd 1997). Human bone chemistry studies complement the results of floral and faunal remains analyses. Based partially on the stable carbon and nitrogen isotope analysis (Norr 2002) of Cashie I subphase skeletal remains recovered from the Dickerson site (Mathis 1990), Hutchinson (2002:152) concluded, "The diet of Late Woodland inner coastal populations was focused on freshwater fish and a C₄ plant, presumably maize." In terms of exploiting predictable protein rich resources, domesticated animal husbandry was not practiced before European colonization, but Tuscarora and Meherrin hunters later raided colonial farmsteads for pigs and other livestock. These groups later raised some domesticated animals within their settlements, primarily during their respective reservation periods (Boyce 1978; Dawdy 1994, 1995; Feeley 2007).⁶⁷

Farming and gathering. Absolute dates associated with ethnobotanical remains indicate that maize horticulture was already practiced across the Inner Coastal Plain before the beginning of the Cashie phase, but human bone stable isotope data suggest that reliance on maize as a principal element of regional subsistence regimes was probably modest until the sixteenth or seventeenth centuries (Hutchinson 2002; Millis 2003, 2009; Norr 2002). Maize no doubt contributed to the mix of wild and domesticated seeds consumed by Coastal Plain Iroquoians over the course of the Late Woodland and early Postcontact periods, but the volume of maize remains recovered from Precontact period occupational features (e.g., 31BR7) is substantially lower than volumes recovered from Contact–early Postcontact period sites with Cashie phase

occupations (e.g., 31ED333, 31GR4, 31WL37). While these generalized patterns are certainly influenced by differential preservation and excavation sampling biases, one has a sense that maize, and perhaps other domesticated crops as well, gradually became more important in the dietary mix after about A.D. 1500 (see also Hutchinson 2002). Although small quantities of maize fragments (cobs, cupules, kernels) were recovered from the Jordan's Landing (Byrd 1997; Phelps 1983) and Contentnea Creek (Millis 2003, 2009) sites, more substantial quantities of maize cupules and kernels were recovered from the Mabry Bridge site (Bamann 2006). The quantities of shelled maize kernels, as well as beans and cucurbit seeds, recovered through the flotation or fine screening of feature fill from the Neoheroke Fort house-bunkers are simply stunning (Byrd 1997; Byrd et al. 2009), but the systematic analysis of the botanicals from the site has not yet been completed. Most of the botanical remains from site 31GR4 are carbonized, but some specimens were preserved in situ because of their close contextual proximity to copper alloy and lead objects (Figure 10-7). Other recovered Cashie phase cultigens, or suspected cultigens, are typical of those described from roughly contemporaneous sites across the Coastal Plain and Piedmont provinces (see Scarry and Scarry 1997), including, maize, common beans, squashes and seed bearing species such as sunflower, goosefoot, amaranth and sumpweed (Bamann 2006; Byrd 1997; Millis 2003, 2009; Phelps 1980a, 1983; Ward and Davis 1999).

Domesticated fruit orchards ("apple," "peach," "quince") were described in the Lower Tuscarora locality by John Barnwell (1908) in 1712, and an abundance of dried peaches and peach pits were recovered from the Neoheroke Fort site (Byrd et al. 2009; Byrd 1997). It is possible that Spanish traders reported by Yeadley (Yeadley 1911 [1654]) introduced peaches, and potentially other domesticated fruit species, to the region sometime in the mid-1600s, but such domesticates may have been introduced from La Florida, via the indigenous trade network, in the sixteenth century. Gathered wild plant remains (carbonized seeds, nutshell, cupules) recovered from Cashie phase occupation features at various sites include whole or fragmented acorns, hickory nuts and black walnuts, as well as persimmon and grape seeds (Bamann 2006; Byrd 1997; Millis 2003, 2009; Phelps 1980a, 1983). Unfortunately, there are no archaeological data on any number of the routinely consumed leafy greens or herbs described by John Lawson (1967 [1709]). Based on historical accounts and the cursory inspection of botanical remains from the Neoheroke Fort site, it is evident that the regular exploitation of at least some wild plant resources (acorns, hickory nuts) continued well into the early Postcontact period. The general subsistence focus on farming and fishing in a Coastal Plain environment rich in faunal and floral food resources certainly enhanced and sustained the development of a nearly sedentary society with a ranked social structure well before the Upper or Lower Tuscarora were visited by Virginia colony explorers and traders in the early-to-mid seventeenth century. Despite the presently broad understanding of Cashie phase subsistence economies, we know little about spatial and temporal variation within and between the subphases; based on his research, Byrd (1997) proposed a number of related hypotheses that remain to be tested. More detailed floral and faunal analyses associated with Cashie I or II subphase occupations are reported in Bamann (2006), Byrd (1997), Millis (2003, 2009) and Hutchison et al., this volume.

Cashie Phase Material Culture

The overview of Cashie phase material culture summarized by Phelps (1983:43–45) remains generally valid, particularly for the Cashie I subphase. Studies of extant collections since the 1980s, and analyses of materials more recently recovered from sites with Cashie I or II subphase

occupations, nonetheless provide a greater degree of detail for some artifact classes, particularly ceramics. For a general overview of Upper and Lower Tuscarora material life in the Postcontact period, see Boyce (1978). Lawson (1967 [1709]), despite his ethnocentric biases and “melting pot” summary, remains the best single primary source for the ca. 1700–1710 period.

Ceramic Technologies. Cashie series ceramics were initially defined under the specific series name and described in varying degrees of detail by Phelps (1977, 1980a, 1980b, 1983) and Green (1986). Binford’s (1964) Branchville series, Crawford’s (1966) Tower Hill series and Smith’s (1984) Sturgeon Head series, at least in terms of their respective simple-stamped, fabric-impressed and plain types, are probable equivalents despite some incongruities between their respective type descriptions as reported in various sources. Studies completed since the early 1990s collectively and substantively contribute to more refined, yet incomplete, perspectives on the Cashie series in general, its expected range of variation and aspects of temporal change (see e.g., Bamann 2006; Heath 2002; Millis 2003, 2009; Phelps and Heath 1998; Tippet et al. 2009).

While there is diachronic variation in site assemblages, particularly with ceramics assemblages produced after ca. 1650, and possible geospatially related variation (paste clays, temper characteristics) between ceramic assemblages recovered in different river basins, Cashie series ceramics are recognized by a core suite of attributes that remained generally consistent over space and time, ca. 1200–1717. The observations presented in this section are gleaned and synthesized from artifact descriptions found in several relevant studies, as well as from the authors’ analyses of sherd or reconstructed vessel samples from sites with Cashie I or Cashie II subphase occupations. There are undoubted outlier variations in ceramic attributes over the 400 or so years represented by the Cashie I subphase, but the observed attributes exhibit modal ranges, and we generally base our series and type descriptions on vessels and sherds that exhibit attributes within these modal ranges. Since substantial quantities of Cashie series ceramics, especially from the Jordan’s Landing and Neoheroka Fort sites among others, remain unanalyzed, future studies will lead to further refinement of the necessarily broad synthesis presented here. Moreover, we do not believe that the present sample of Cashie phase site assemblages is sufficient to adequately parse either geospatially related variation or diachronic stylistic change within the series.

Phelps (1983:43; emphasis added) originally reported, “Cashie ware is *primarily* tempered with small pebble-sized particles...[and] sand tempering is *often* used in thin wall vessels.” This statement remains justifiable in a generalizing sense, but we have found that finer sand tempering is not necessarily restricted to thin wall vessels. In the broader scheme of geologic terminologies, Cashie series vessels are gravel-tempered wares (see Udden 1914). More specifically, following Wentworth (1922), Cashie series paste tempering clasts range from coarse-to-very coarse sands *and/or* granules *and/or* fine pebbles. A few Cashie series specimens might be considered very fine sand-tempered, or even temperless, hence solely focusing on temper as a crucial diagnostic attribute for sorting purposes is especially problematic.⁶⁸ This is a typological issue routinely encountered in the analysis of what can be broadly classified as sand, grit or sand-and-grit-tempered wares.⁶⁹ Although further subdividing sand and grit-tempered ceramics by series and types based on the assessment of exterior surface treatments typically provides a degree of chronological refinement, assuming such attributes are in fact temporally sensitive, there are still significant problems with this binomial taxonomic system when dealing with essentially a macro-regional, sand-tempered ceramics tradition that exhibits great temporal depth (see e.g., Herbert 2009:28–29; Herbert, this volume). The identification of Cashie series ceramics is, therefore, best accomplished through the

recognition of four, preferably more, congruent attributes that exhibit a limited range of variation when compared against other regional ceramic series.⁷⁰

After comparing samples of early Postcontact period Lower Tuscarora pottery from the Neoheroka Fort site with Precontact period Cashie series ceramic assemblages from a suite of North Carolina sites, Phelps and Heath (1998) subdivided the series, proposing the recognition of Cashie I (A.D. 800–1650) and Cashie II (A.D. 1650–1715) series ceramics. In light of more recent comparative study results, these series, vis-à-vis Phelps and Heath (1998), require modification. Some differences initially recognized in the ca. 1712–1713 Neoheroka Fort assemblage, such as temper clast size ranges and paste clay characteristics, most likely reflect geospatially related variation in the series. These characteristics are due to localized differences in geologic deposits (e.g., clays, fluvial sands or gravels) available to Lower Tuscarora potters, rather than overarching temporal trends, or event-specific (i.e., Tuscarora War) variation influences. On the other hand, some qualitative differences in the fort's ceramic assemblage (e.g., sloppy finishing, poor firing control, no decorative treatments) seem to be the materialized result of intensified regional conflicts due to chronic slave raiding and warfare, ca. 1700–1713.

Assessments of mid-seventeenth century Cashie series ceramics from the Contentnea Creek site, however, more concretely reveal what appear to be chronologically related changes within the series, such as minimal decorative treatments (e.g., punctations, incising) and higher proportions of simple-stamp finished vessels, when compared against mid-fifteenth century assemblages recovered from the Jordan's Landing and Mabry Bridge sites. Such stylistic change over time is similar to diachronic patterns observed in Carolina Algonkian (Swindell 2010) and Piedmont Siouan (Dickens et al. 1987; Ward and Davis 1993, 1999) ceramic assemblages concurrently produced in neighboring regions of North Carolina. To some extent, this trend is evident in protohistoric era ceramic assemblages recovered in eastern Virginia as well (see e.g., Hodges 1993). It is important to note that surface treatments, vessel forms and vessel forming techniques did not radically change during the Cashie II subphase. It appears that new vessel forms and surface treatments, however, were not integrated within the tradition, and certain surface treatments and vessel forms were no longer produced after ca. 1650 (Figures 10-3 and 10-4). Limited innovation or adoption occurred in the form of simple loop handles on small Cashie II series vessels (Phelps and Heath 1998).

While observed attribute continuities lead us to consider early Postcontact period Tuscarora ceramics as part-and-parcel of the Cashie series typological construct, one question is, how to best capture, and perhaps parse out, patterned variations of potential cultural significance? Smith (1984) attempted to deal with this problem by subdividing Binford's (1964) Branchville series into two chronologically distinct series, Branchville and Sturgeon Head. He (Smith 1984) then further subdivided these two series into three geospatially related varieties (Upper Chowan River, Meherrin River, Nottoway River), leaving future analysts to deal with essentially six ceramic series, which further included three or four types within each series. This taxonomic scheme is attractive in some respects—principally capturing temper variation—but it proves most unwieldy in practice.⁷¹ At present, we continue to follow the Cashie I–III subphases and ceramic series subdivisions proposed by Phelps and Heath (1998), with some minor adjustments, but also recognize that there is material overlap between these arbitrary analytical subdivisions, as well as some potential variation that will be lost in the exercise.

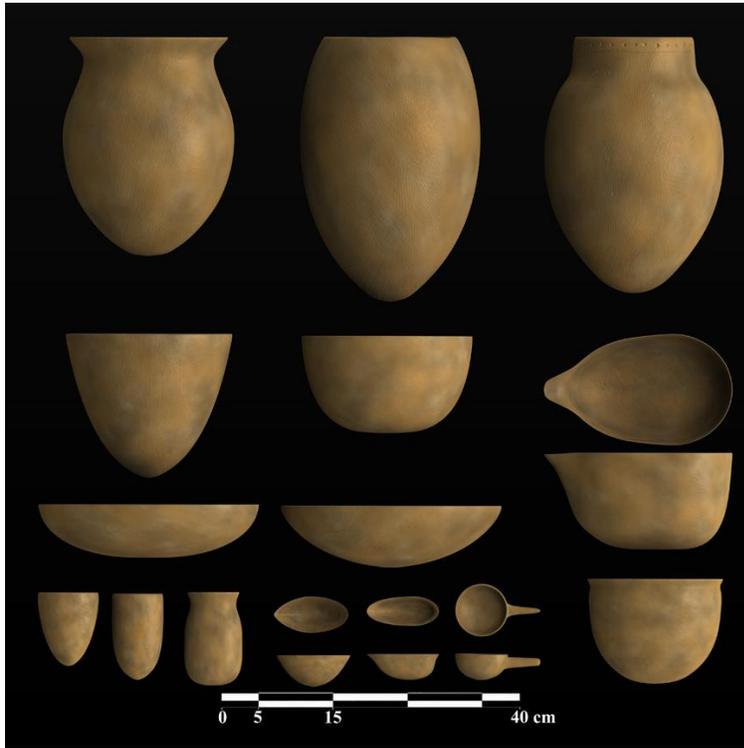


Figure 10-3. Digital rendering of presently known Cashie I series vessel forms represented in Cashie I subphase ceramic assemblages recovered from regional sites.

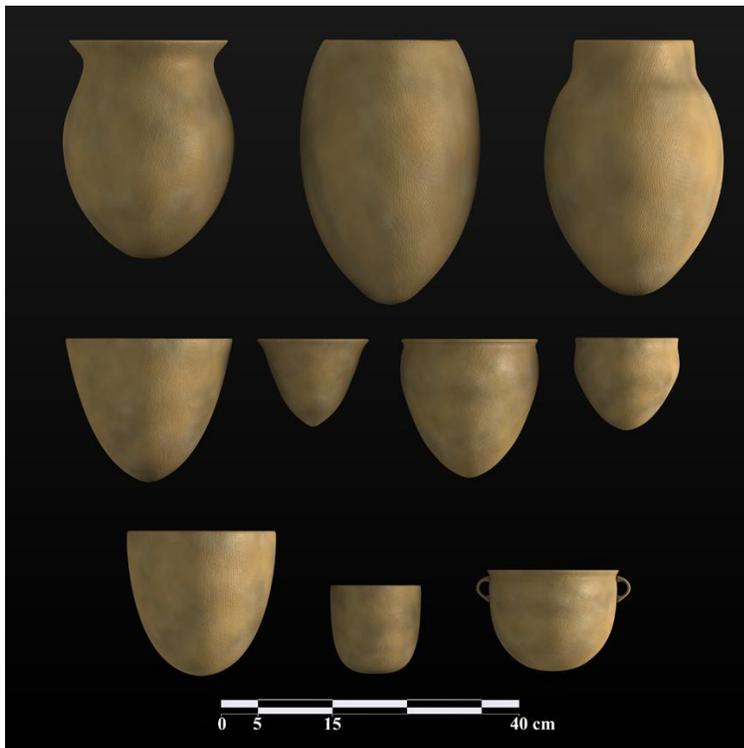


Figure 10-4. Digital rendering of presently known Cashie II series vessel forms represented in Cashie II subphase ceramic assemblages recovered from regional sites.



Figure 10-5. Cashie I series rim sherds and reconstructed vessel sections from the Jordan's Landing site. Fabric-impressed unrestricted pot section with straight rim and rounded lip (A); simple-stamped restricted jar section with everted rim and flat lip (B); simple-stamped folded rims from restricted orifice jars (C–D); simple-stamped straight rim with single-line “zig-zag” incising and flat lip (E); simple-stamped folded rims with solid tool punctations (F–H); simple-stamped and folded rim with fold edge notches (I); temperless paste ladle fragment with plain finish (j); simple-stamped unrestricted pot section with slightly everted rim and flat lip (K); plain finished bowl section with zoned punctate design and flat lip (L).

Following the proposed subphase breakdown, the currently suggested ceramic series divisions are as follows: Cashie I (A.D.1200–1650); Cashie II (A.D.1650–1717); Cashie III (1717–1803). The Cashie III series represents ceramics associated with the post-1717 Tuscarora and Meherrin reservation periods of which little is known archaeologically. Swindell (1999) conducted a survey of ca. 1680–1750 Meherrin settlement locales in the lower Chowan River basin. Survey recovered Cashie I–III series sherds exhibit attributes most similar to Precontact period Cashie I series materials, suggestive of a somewhat greater degree of continuity than that observed in the case of the stylistically “debased” Neoheroke Fort assemblage.⁷² Cashie series ceramics associated with a late seventeenth-to-early eighteenth century Meherrin occupation at site 31HF20B are also more similar to Cashie I examples from the lower Roanoke River basin. By way of contrast, however, Binford (1964, 1965) reported and defined Courtland series ceramics, ca. 1660–1760, recovered from late seventeenth through mid-eighteenth century Meherrin, Nottoway and Weyanoke occupation sites in southeastern Virginia. These finer paste,

plain and burnished exterior, “Colono-Indian wares” (Binford 1964, 1965; Hodges 1993; VDHR 2009), are quite unlike Cashie I–II series ceramics from either northeastern North Carolina or southeastern Virginia.

In Virginia, Courtland series ceramics tend to co-occur contextually in late seventeenth and early eighteenth century assemblages which reportedly include coeval simple-stamped Cashie series ceramics (Binford 1964, 1965; MacCord 1970; Virginia Historic Landmarks Commission [VHLC] 1983). Binford (1967:167) suggested that Nottoway potters, in particular, initiated production of Courtland series vessels with English made pottery attributes as trade wares when their communities became marginalized participants in the Indian-European deerskin-peltry trade, ca. 1670s. The Upper and Lower Tuscaroras were not so marginalized until well after the Tuscarora War, but Courtland series ceramics have been recovered in spatial context with Cashie II series materials associated with a ca. 1680s–1690s Meherrin occupation area at site 31HF20B (Green 1986). About 1705, most of the Meherrins resettled in the lower Chowan basin moved several miles north to the Meherrin Neck area where the Virginia colony originally established the first Meherrin reservation (1705–1726) in a borderlands area disputed over by North Carolina and Virginia governors during a protracted boundary squabble (Dawdy 1994, 1995). Contrary to Binford’s (1964) reporting, MacCord’s (1993) resurvey of probable, ca. 1650–1680 Meherrin sites in the upper Chowan river basin resulted in the recovery of the expected Cashie I–II series sherds from surface contexts, but not Courtland series materials. Interestingly, some Courtland series vessel fragments are comparable, at least in terms of general paste and surface treatment characteristics, to Devil’s Gut series specimens dating to the circa A.D. 1250–1450 era in the lower Roanoke River basin.⁷³ A systematic restudy of Courtland series samples from reasonably well-dated contexts is needed, but most such recovered wares are from surface collections at multi-component sites.

Cashie I–II series vessels vary in shape, volume and function, but conoidal and sub-conoidal base cooking and storage containers in the form of either everted rim restricted jars or straight (self rim unrestricted pots are most frequently documented (Bamann 2006; Heath 2002; Millis 2003, 2009; Phelps 1980a, 1983; Phelps and Heath 1998) (Figures 10-3–10-5). Some beaker and bowl forms have flat or nearly flat bases, while jar and pot forms exhibit a limited range of basal shapes (conoidal, sub-conoidal, globular, rounded). Several bowl forms (hemispherical, simple, spouted with ovate or trianguloid orifices), along with beaker, ladle and dipper forms, are commonly encountered, particularly in pre-1600 contexts, but are less prevalent in their respective frequencies than restricted jars and unrestricted pot forms. This overall ceramics production pattern may reflect John Lawson’s (1967 [1709]) observation that by the early eighteenth century, both Upper and Lower Tuscaroras were regionally renowned carvers of wood spoons, ladles and bowls. Since wood containers and implements are rarely recovered from archaeological sites in northeastern North Carolina, it is difficult to assess the importance of their place within the suite of containers and implements used by Cashie phase peoples, but the low frequency of bowl forms in Cashie I–II series ceramic assemblages, especially those post-dating ca. 1600–1650, is suggestive.

Most Cashie series jar (restricted orifice), pot (unrestricted orifice), beaker and bowl forms were coil-built. Paddle-and-anvil finishing techniques were typically used to maleate coils and thin vessel walls. Cashie I series dippers and some smaller Cashie I–II series vessel forms (e.g., simple bowls) appear to have been hand-modeled (Heath 2002; Phelps and Heath 1998).⁷⁴ While vessels with direct rims (without folds) are prevalent within the two series, folded rims (long and short fold) are common in Precontact period assemblages, as well as those dating through the later 1600s (Bamann 2006; Millis 2003, 2009; Phelps 1983; Phelps and Heath 1998) (Figures 10-2 and

10-5). Folded rims appear to be limited to larger jar and pot forms, and folded rims are noticeably absent in the ca. 1712–1713 Neoheroke Fort assemblage (Heath 2002; Phelps and Heath 1998).⁷⁵ Among other regionally recognized ceramic series recovered at sites across the North Carolina Coastal Plain, folded rim vessels with long folds do not occur in assemblages we have studied. Folded rims with long folds, however, are commonly observed in Gaston series assemblages from the Fall Line zone of the Roanoke River (South 1959, 2005).

Despite our obvious hesitancy to focus overtly on temper characteristics within the Cashie I–II series, we offer these observations. The majority, but certainly not all, ceramic sherds or reconstructed vessels we have typed as Cashie I–II series pottery in our analyses, tend to exhibit temper grain size modal ranges reflecting either temporally or geospatially related trends within the series. Cashie I–II series pastes are most often tempered with coarser sands and gravels variously composed of angular, sub-angular and sub-rounded quartz grains. Usually random, but sometimes frequent, very angular, rounded or well-rounded quartz grains or other lithic materials may occur in any given vessel fragment. Moreover, the sands, granules, gravels and pebbles collected and used by Cashie I–II subphase potters range from well-sorted to very poorly-sorted, but poorly-to-moderately sorted grains are most commonly observed, typically fluvial origin materials originally extracted from stream channel deposits (see Prothero and Schwab 2003). Although some sherds exhibit varying quantities of very angular grains (low sphericity) intermixed with angular or sub-angular clasts, there is little evidence to suggest that most Cashie I–II series vessels were intentionally tempered with crushed quartz, or other purposefully crushed or ground lithic materials. In the main, the more jagged tempering elements appear to be angular (low-to-high sphericity) or sub-angular (low-to-high sphericity) grains, but nonetheless fluvial in origin (Burrus 1996; Phelps and Heath 1998).⁷⁶

Temper grains observed in Cashie I–II series vessel pastes are usually semi-translucent or crystal quartz materials with varying frequencies of smoky, rosy (reds, pinks) or milky (opaque white) quartz grains. Binford (1964) and Green (1986) respectively reported the presence of chert or feldspar and hornblende granule or pebble size temper grains, but monocrystalline common quartz grains are by far the most routinely observed tempering materials.⁷⁷ Temper grain sizes in any given vessel fragment most generally *range* from about .50–5.5 mm (coarse sand-to-pebble), but the *modal range* is about 1.0–4.0 mm (very coarse sand-to-pebble).⁷⁸ Larger, fine pebbles (4.0–8.0 mm) may be randomly distributed in the pastes of coarser tempered examples and the modal ranges observed tend vary contextually between river basin segments (Table 10-3). Temper grain density widely varies as well, ranging from 5 percent or less to in excess of 50 percent, but 10–40 percent is the more typically reported range (see e.g., Bamann 2006; Binford 1964; Green 1986; Millis 2001; Tippett et al. 2009). There appear to be no obvious temper density variations potentially indicative of either geospatially or temporally related patterns and interobserver bias makes site-by-site comparisons difficult.

In a generalizing sense, temper clast size ranges, as well as modal ranges, are more-or-less similar for Cashie I–II series materials recovered within the four river basin segments (lower Chowan, lower Roanoke, middle Tar-Pamlico, middle Neuse) where sites with Cashie phase occupations occur. Based on our assessment of sherd grab samples culled from multiple site assemblages recovered within these basin sections, temper grain size ranges and modal ranges, however, exhibit a tendency to decrease slightly as one moves geospatially from north-to-south (Table 10-3). We have also qualitatively observed that temper clasts tend to be more angular in sherds or reconstructed vessel sections recovered from some middle Neuse River basin sites (e.g., 31WY1, 31WY3, 31GR84). In such cases, certain pastes appear, at least to the unaided

Table 10-3. Paste temper grain size ranges and modal ranges by river basin segment (north-to-south) for Cashie I–II series ceramics sample.

River Basin Segment	Grain Size Range (mm) ^a	Grain Size Modal Range (mm)
Lower Chowan	0.50–7.0	1.5–4.0
Lower Roanoke	0.50–8.0	1.5–4.0
Middle Tar-Pamlico	0.25–6.0	1.5–3.0
Middle Neuse	0.25–5.5	1.0–3.0

^aRandom, presumably incidental, pebbles in the 8.0–9.5 mm range occur in some Cashie series pottery sherds and reconstructed vessels.

eye, to contain crushed quartz, but low-power microscopic inspections of individual temper grains carefully extracted from sample sherds typically exhibit a water worn surface opposite the fractured facet. The fractured grains, if observed in a given sherd, are invariably intermingled with intact water tumbled clasts. This pattern suggests that Tuscarora potters in some localities were extracting fluvial sands and gravels from bar deposits originally subjected to high-energy stream tumbling (Christopher R. Moore, personal communication 2009). On the other hand, several analysts report recoveries of ostensibly Cashie I or II series materials with crushed quartz tempering (Binford 1964; Millis 2001, 2009; Smith 1984). This issue requires comparative studies that would likely be resolved through the petrographic study of sherd thin sections from a range of contexts.⁷⁹

Depending on the type of clay(s) originally selected for a particular Cashie series vessel, other paste inclusions (e.g., mica, silt, black hematite, brown hematite, fine sands, ferruginous clay nodules), presumably naturally occurring minerals in the clay deposits, may be evident as well.⁸⁰ Pastes made with moderately to highly micaceous clays are common, especially in the cases of vessels or sherds recovered from Roanoke River basin sites.⁸¹ Although the mica particles observed in the pastes of many Cashie I–II series vessels are not purposefully added tempering agents, naturally occurring mica can act as a temper additive.⁸² Less micaceous clays were used as well, particularly in the Neuse River basin. Some vessel bodies are composed of fine clays, with finer silts, but others are slightly coarser with presumably naturally occurring coarser silts or very fine–fine sands, resulting in surface textures that range from very smooth to lightly sandy to the touch (see also Green 1986; Millis 2003, 2009).⁸³

Based on ceramic analysis data from site excavations with a high degree of contextual integrity, it is evident that Cashie I–II series ceramics were predominately produced with three types of exterior surface treatments, plain, fabric-impressed and simple-stamped. Phelps (1983) recognized an incised type, but punctated or incised decorative zones can be found on Precontact period Cashie series vessels in combination with any of the three abovementioned exterior surface treatments. The decorative treatments that do occur on Cashie I–II series vessels are rather basic and artistically conservative in nature, especially when compared against more elaborately incised specimens found within contemporaneous Colington I–II series assemblages from the Tidewater (Swindell 2010). Incising, though present as a decorative element in Cashie I–II rim sherd assemblages, is not necessarily rare, but the occurrence frequency in any given assemblage is generally low (< one percent). Punctate decorated rims and necks are far more common on jar forms made before about 1600 or so, but this form of decorative treatment, along with incising, was utilized to a lesser extent into the mid-to-late 1600s (Bamann 2006; Millis 2003, 2009; Phelps 1983; Phelps and Heath 1998).

Punctations, usually over the primary surface treatment, were made using a variety of punches with hollow (river cane, reed) or solid tips of various shapes and sizes. While there are a few examples of zoned punctate designs on the bodies of plain finished bowls, most punctations, like incised lines, generally occur around the exterior rim area below the lip, or on rim folds. In some cases, deeply driven, folded rim punctations were both decorative and functional, serving as a method to tack down folded rim flaps.

Some analysts (Bamann 2006; Millis 2001, 2009) report the incidental occurrence of—or specifically define (Binford 1964; Eastman et al. 1997; Smith 1984)—a cord-marked type within the Cashie series, but the contextual and material evidence required for the formal inclusion of a cord-marked type within the Cashie I–II series definitions remains debatable. The same can be said for earlier reported incidences of cob-marked examples (Phelps 1980a).⁸⁴ We have also observed reconstructed, fabric-impressed vessel sections that occasionally exhibit patches of what appear to be cord-marking impressions, but such impressions were made by poorly woven, loose or unraveled fabrics.⁸⁵ While it is possible that definitive Cashie series vessels with cord-marked exteriors will be recovered in the future, unequivocal evidence is presently negligible. In the past, we have aggregated a variety of surface finishes (e.g., well-smoothed, lightly burnished, burnished, smeared over simple-stamped, simple-stamped and smoothed) under the type designation, “plain” (e.g., Phelps and Heath 1998; Phelps 1983), but there may be some utility in recognizing the variation potentially masked within this broad classification.⁸⁶ Such variations may exhibit temporal patterning useful to understanding site occupation date ranges derived from analyses of surface collected or excavated ceramic assemblages recovered in the absence of radiocarbon dates or other temporally diagnostic artifacts.

In terms of Cashie I–II series surface treatments it is evident that simple-stamping, while distinctively present at the inception of the phase (e.g., 31BR7, Feature 41; 31NS3B, Feature 135A [see Table 10-2]), increased in frequency as the preferred surface treatment over time. Alternately, the frequency of fabric-impressed vessels proportionately decreased over time. Plain finished vessels were produced in far lower proportions, generally accounting for less than one percent of a given site assemblage, until the early 1700s, by which time, fabric-impressing virtually disappeared and was superseded by much higher frequencies of plain finished vessels. At the Precontact period Jordan’s Landing site for example, fabric-impressed sherds account for approximately 65 percent of the Cashie I series sherds recovered from the deepest levels (Levels 5–6) of site excavation units inside the village palisade trace. Inversely, simple-stamped sherds account for approximately 80 percent of the sherds recovered from the upper levels (Levels 1–2) of the same units; mid-levels (Levels 3–4) simple-stamped and fabric-impressed percentages are roughly equal, with plain finished sherds accounting for one percent or less of the sherd totals in all levels.⁸⁷

Only two radiocarbon dates—cal intercept A.D.1280 and cal intercept A.D.1420—are associated with Cashie I subphase occupations at the Jordan’s Landing site, and both radiometric dates are for pit features (Feature 21 and 41) (Table 10-2). Since these features incorporated a mix of simple-stamped and fabric-impressed sherds, little can be said regarding the timing (i.e., absolute dates) of the stratigraphically recognized shifts in surface treatment popularity.⁸⁸ Given the present suite of radiocarbon dates associated with Late Woodland period simple-stamped ceramics from the North Carolina Coastal Plain and Piedmont provinces (e.g., Bamann 2006; Boudreaux 2007; Dickens et al. 1987; Eastman 1994a, 1994b, 1999; Herbert 2003, 2009; Swindell 2010; Millis 2003, 2009; Ward and Davis 1993, 1999), it presently appears that narrow land-and-groove, carved-paddle simple-stamping may have been first regionally introduced, by Cashie I phase potters around A.D. 1200. Absolute dates associated with carved-paddle simple-stamped types within other

regional ceramic series are at least a century or more later in time.⁸⁹ Since a wide variety of surface finishing methods were available to American Indian potters, it seems that the specific surface treatment styles selected by a community of potters relate to a limited suite of culturally acceptable styles that sometimes reflect group identity, ideology or aesthetics (Holmes 1903:51–52), concurrent with underlying notions of appropriate functionality. As Braun (1983:113), in reference to ceramic vessel styles, stated, “...their decoration and details of shape carry communicative effect, and are constrained by the social and symbolic environment of the potter.”

Given the present material evidence, namely Cashie phase radiocarbon dates and ceramic assemblages from the Jordan’s Landing, Mabry Bridge, Contentnea Creek and Neoheroke Fort sites, it seems that fabric-impressing as a surface treatment technique used by Tuscarora potters was well on the wane by about 1500. In the Contentnea Creek site ceramic assemblage, ca. 1640–1665, approximately 79 percent of the recovered Cashie series sherds are simple-stamped and 17 percent are fabric-impressed, while the remainder are plain finished (Millis 2001:271). These percentages are similar to those determined for upper unit level ceramic assemblages from the Jordan’s Landing site, suggesting a relative degree of stability in the choice of surface treatments selected by both Upper and Lower Tuscarora potters over the course of about two centuries, ca. 1450–1650. In contrast, all Cashie series sherds or reconstructed vessels in the ca. 1712–1713 Neoheroke Fort site ceramic assemblage are either plain finished or simple-stamped. No fabric-impressed sherds or vessels have been observed in fort occupation period assemblages from multiple contemporaneous features. Since both sites 31GR4 and 31WL37 are situated in the same watershed, the Contentnea Creek drainage, the patterns may represent localized preferences, but there seems to be a temporal trend.⁹⁰ Since fabric-impressed Cashie series sherds are found in surface collections recovered from early Postcontact period Meherrin occupation sites (Binford 1964; Swindell 1999), the terminal date for the type remains uncertain.⁹¹ Nonetheless, a somewhat similar pattern is also noted for Coastal Algonkian sites (e.g., 31DR1, 31HY43) in the Tidewater, where simple-stamped sherds typically account for 55–75 percent of the ceramic assemblages from post-1650 contexts (Colington II subphase); plain, fabric-impressed and incised types combine for the minority (see e.g., Gardner 1990). Inversely, fabric-impressed sherds from Precontact–Contact period, Colington I subphase sites typically account for 65–90 percent of site assemblage totals (see e.g., Swindell 2010).

Interior vessel finishing techniques used by Cashie I–II phase potters varied, but vessels produced from ca. 1200–1700 often exhibit characteristics associated with wiped, wiped-and-rubbed or floated interior surfaces. Shepard (1995:186–193 [1957]) described the various techniques and processes required to produce such interior finishes.⁹² These three interior finishing techniques were purposefully employed by potters to subdue evidence of the larger temper particles that protrude from vessel interior surfaces, and the three finishes often obscure or nearly obscure coarser temper clasts with a film or thin layer (.25–1.0 mm) of finer clays.⁹³ Since paste temper clasts are often less visible on *exterior* vessel surfaces, considerably greater finishing effort must have been expended in wiping, rubbing, floating or self-slipping exterior surfaces before the paddle-and-anvil finishing process was undertaken. Temper clasts are often observed well-worked down into the paste on vessel exteriors, and further obscured by the various exterior surface treatments discussed above.

Where vessel interiors were carefully wiped smooth by hand or with a soft tool while the pastes remained in a plastic state, but were not subsequently rubbed or floated, the temper clasts are not pressed level with the interior surface. In such cases, the temper clasts protrude accordingly, despite the presence of a complete or partial clay film coating. These interiors are usually lumpy in

appearance, as well as to the touch, and often exhibit fine wiping striations or faint groove patterns, usually in an annular or horizontal pattern relative to the vessel rim. Shepard (1995:188–189 [1957]) associated this pattern with soft tool wiping or finger stroking. Leveling of the larger temper clasts was apparently achieved in many Cashie I–II series vessel interiors by first wiping the surfaces while in a plastic state, and by subsequently rubbing the wiped surfaces with a hard tool when the vessels were somewhat drier, but in a yielding state before drying to a leather-hard state. Interiors finished in this multi-step manner are less lumpy in appearance and feel, but the process exposed some leveled grains (see Shepard 1995:186–193 [1957]). As such, floating, or possibly slipping with a self-slip, would have been required to achieve the well-smoothed interior finishing observed on some Cashie I–II vessels.

Some Cashie I–II series specimens, particularly examples from the lower Chowan and lower Roanoke river basins, exhibit characteristics associated with the interior floating process, which involves the working and reworking of rewetted interior vessel surfaces to redistribute coarser paste particles deeper into the body, while simultaneously coercing fines to the surface (Shepard 1995:191 [1957]). The floated or well-wiped interior finishes, if originally present on archaeological sherds, may not be immediately evident if the interior surfaces were worn away through vessel use alteration (e.g., abrasion, pitting, chemical corrosion) or by post-depositional weathering processes.⁹⁴ Larger temper clasts, which often protrude from vessel interiors that were wiped-and-rubbed or floated, are often surrounded by fine paste cracks because of clay shrinkage during the air drying or firing processes. In some cases, the thin clay layers over the larger protruding clasts spalled away during the firing stage, but in other cases, the finished layers appear worn away from use-wear abrasion. Both wiped and floated interiors on Cashie I–II series sherds often feel very smooth, slick or waxy to the touch, but other examples feel slightly sandy where paste clays naturally include coarser silts or very fine sand. Some well-wiped or floated interiors appear polished as well. Other vessel interiors, those not wiped or floated, may exhibit evidence of scraping and smoothing with hard tools, but deep scraping lines, such as those produced with serrated bivalve shells, are rare. Temper particles are usually exposed in vessels with scraped or poorly smoothed interiors and the clasts may slightly project from interior surfaces, giving such interior vessel surfaces the texture of very coarse sand paper.

Table 10-4. Vessel interior surface treatment percentages by river basin segment (north-to-south) for Cashie I–II series ceramics sample.

River Basin Segment	Well-Wiped or Floated	Exposed Grains (Leveled or Proud)
Lower Chowan	65%	35%
Lower Roanoke	63%	37%
Middle Tar-Pamlico	45%	55%
Middle Neuse	18%	82%

Based on our examination of Cashie I–II series, sherd grab samples selected from site assemblages recovered within four regional river basin segments, we observed a north-to-south geospatial trend in the frequencies of the interior finishing techniques described above (Table 10-4). Higher frequencies of wiped or floated examples occur in the lower Chowan river and lower Roanoke river basin assemblages, but examples with exposed and leveled temper grains more frequently occur in the middle Tar-Pamlico river and middle Neuse River basin assemblages.

Studying this aspect of Cashie I–II series ceramics is problematic. Different analysts use different terminologies in their analyses and interobserver bias makes site-by-site comparisons difficult. Although there are no radiometric dates associated with most of the sherd samples assessed, there may be a temporal aspect to these patterns, a hypothesis originally proffered by Phelps and Heath (1998).

Numerous examples of punctated rim sherds, along with a few incised specimens, were recovered from the Jordan's Landing site (Phelps 1983; Phelps and Heath 1998) (Figure 10-5). Other similarly decorated specimens were found at the Mabry Bridge site (Bamann 2006); including two examples from a feature (Feature 35A) with an associated radiocarbon date of cal intercept A.D. 1640 (Table 10-2). Although portions of a ca. 1640–1665 punctate decorated jar were recovered from the Contentnea Creek site, ca. 1712–1713 reconstructed vessels and rim sherds from the Neoheroke Fort site exhibit no decorative treatments (punctations, incising). Although incised vessel fragments occur in Cashie I subphase contexts, incised vessels, much like punctated vessels, rarely occur in Cashie II subphase assemblages. When observed, incised lines over the primary surface treatments (plain, fabric-impressed, simple-stamped) occur in the form of single-line, horizontally repeating chevrons (open hanging triangles) around the rim just below the lip, or as single-line and multi-line annular bands just below the lip. In other instances the lines are simply incised on rim exteriors or rim folds as a series of dash-like lines incised perpendicular, or slightly diagonal, to rim lips. Incision lines may be paralleled with corresponding lines of punctations as well. Vessel bodies are very rarely decorated with incised motifs as they are usually simple-stamped or fabric-impressed. A fine, but unusual example of a plain-finished and lavishly incised Cashie I series beaker was recovered at the Precontact period Shipyard Landing site (31BR1). This fine paste specimen has complex geometric designs and it is quite atypical. These data collectively suggest that vessel decorative treatments in the form of punctations or incising were well on the wane by the early-to-mid-1600s.

While our observations on Cashie II subphase ceramics are not entirely based on the attributes exhibited in the Neoheroke Fort site assemblage, the fort site's pottery collection is, at present, one key period assemblage. The fort site's pottery assemblage, nevertheless, appears "debased" when compared against other late seventeenth or early eighteenth century Cashie II series vessel and sherd samples. As such, the site 31GR4 pottery assemblage likely represents an event-specific collection that is not wholly representative of Upper and Lower Tuscarora, or Meherrin, pottery produced regionally during the early 1700s. As noted, the small samples of pottery recovered from ca. 1705–1750 Meherrin reservation sites (Swindell 1999) are more comparable to both Contentnea Creek site and earlier Cashie I subphase materials. Shatterzone processes (see e.g., Heath 2010) potentially account for some variation observed in the Neoheroke Fort vessel assemblage. Among Tuscaroras, repercussions of the Tuscarora War were most acutely felt in the Lower Tuscarora communities found in the Contentnea Creek drainage. In 1712, Colonel John Barnwell (Barnwell 1908) led forces that systematically destroyed the community infrastructure in every Lower Tuscarora town his expeditionary army passed through. His troops attempted to kill or enslave for market resale every Lower Tuscarora man, woman and child they encountered. The combined effects of disease, slaving and warfare in the early 1700s reduced not only the adult population of the Contentnea Creek communities, but also eliminated a vast pool of cultural knowledge. Given this grim situation, and the indisputable historical knowledge that Barnwell's men systematically destroyed every Lower Tuscarora house they found in 1712, Heath (2002, 2005) proposed that many of the vessels in the Cashie series ceramic assemblage from the Neoheroke Fort represent a wartime replacement

assemblage. With the loss of many adult women, typically the most experienced American Indian potters in the Carolinas historically (see Herbert 2009:xiii–xiv), and the concurrent loss of cultural knowledge during this crucial period of Tuscarora history, Heath (2002) further suggested that such losses are directly reflected in the fit and finish of most Cashie vessels in the Neoheroke Fort assemblage. This hypothesis cannot be definitively rejected or supported until other prewar and postwar, Lower Tuscarora sites occupied during the early 1700s are investigated. Such period sites have been tentatively identified (Beaman 2008; Byrd 1996; Byrd and Heath 1997, 2004), but none have yet been systematically excavated.

In the realm of ceramic technologies, Magoon (1998, 1999) undertook a comparative study of smoking pipes and pipe fragments from the Jordan's Landing, Neoheroke Fort and Cape Creek sites. His analysis results indicate that "small, obtuse-angle pipes with plain [exterior], basket-shaped bowls" were the most common form of Precontact–Contact period Cashie phase pipes (Magoon 1999:111), a stylistic pattern more generally noted by Phelps (1983). Magoon (1998, 1999) found that the majority of the presumed Tuscarora made pipes recovered from house-bunkers inside the Neoheroke Fort were essentially the same basic form (Figure 10-7). Fragments of a few straight-stemmed or monitor-base clay pipes were observed in the Jordan's Landing assemblage, but the forms are considered minority styles. These minority forms also occur in low frequencies in the Neoheroke Fort assemblage. Most pipe bowls (90 percent) from Jordan's Landing are undecorated, but a few examples (10 percent) are decorated (dentate-stamped, incised), and approximately half of the pipe stems (46 percent) are decorated (dentate-stamped, incised, punctated). Pipe bowl decoration is observed more frequently (46 percent) on the Neoheroke Fort pipes, some of which further integrate "European belly bowls" and flat-heel features common to mid-to-late seventeenth century European made pipes (see e.g., Hume 1991). Magoon (1998, 1999) found no evidence of mold seams on the stems and bowls of the Native crafted pipes from the Neoheroke Fort collection, indicating that the specimens were all hand made in a manner similar to all Precontact–Contact period Tuscarora made pipes. In terms of their basic form, Magoon (1999:117) noted: "...the differences in overall pipe form between the two periods (i.e., from Precontact period forms to later European-influenced forms) are essentially minimal."

We also note that evidence of Lower Tuscarora prewar trade or wartime alliance relationships are possibly materialized in the Neoheroke Fort artifact assemblage as well. Although the material evidence is sparse, at least two house-bunkers inside the fort contained a few Colington I–II series shell-tempered vessels from the Carolina Algonkian sub-region of the Coastal Plain, the northern Tidewater. The fort's smoking pipe assemblage further includes two examples "reminiscent of [Northern] Iroquoian forms from the northeastern United States" (Magoon 1999:113). While Magoon (1998, 1999) suggested that the Neoheroke Fort pipes with straight-stems and onion bowls might be indicative of trade or other social relationships with Piedmont Siouan groups, four such pipes were found in the Contact–early Postcontact period (ca. 1640–1665) burials at the Contentnea Creek site. Similarly, straight-stemmed tubular pipes were found in association with either Weyanoke (ca. 1660–1670) or Meherrin (ca. 1670–1685) Indian burials at the John Green site in southeastern Virginia (MacCord 1970:102 and Figure 4). Straight-stemmed onion bowl pipes are found from the Piedmont to the Outer Banks of North Carolina, in both Precontact–Contact and early Postcontact period contexts (see e.g., Coe 1964; Dickens et al. 1987; Magoon 1998, 1999; Phelps 1983; David S. Phelps, personal communication 2008; Ward and Davis 1993, 1999). As such, some pan-regional pipe forms are

chronologically diagnostic in a broad sense, but not necessarily attributable to a specific archaeological culture or historically identifiable ethnolinguistic group.

Lithic Technologies. Cashie phase lithic artifact assemblages are generally similar, in terms of common tool types, to Middle and Late Woodland period toolkit arrays recovered from the neighboring Piedmont and Tidewater regions. Stone tool assemblages from Cashie I and II subphase contexts include a range of formal, informal and expedient tools produced from locally available stone, principally different varieties of quartz and quartzite. Quartz and quartzite tools or debitage usually account for the greatest proportion (\approx 50-to-90 percent) of most Cashie phase lithic assemblages that have been quantified, but other less frequently utilized lithic materials variously include, rhyolite, greenstone, siltstone, argillite, chert, mudstone, chlorite schist and jasper (e.g., Bamann 2006; Millis 2003, 2009; Phelps 1980a, 1983). Even though some vein quartz was certainly utilized, water-worn pebbles and cobbles were most often employed for stone tool production, an observation supported by the common occurrence of corticated primary reduction flakes, tested pebbles/cobbles and pebble/cobble caches in period lithic assemblages associated with Cashie I–II subphase contexts.

At a macro-regional level, this generalized material use pattern has been recognized across the entirety of the North Carolina Coastal Plain, throughout the Middle and Late Woodland periods (see e.g., McReynolds 2005). We tend to see, however, higher proportions of locally available jasper pebble tools and debitage in Late Woodland and Contact–early Postcontact period assemblages from contemporaneous Colington phase sites in the Tidewater (e.g., Gardner 1990; Green 1986; Phelps 1981, 1984a). No specific studies have been undertaken to determine if Carolina Slate Belt materials, “rhyolites” (see Steponaitis et al. 2006), were traded by Piedmont groups in the form of blanks or performs to Coastal Plain peoples, or if such materials were locally collected wash redeposit pebbles-cobbles from stream or river channels, beaches and banks. Although quartz and quartzite tools are most prevalent, metavolcanic projectile points and debitage are routinely observed in Cashie I and II subphase lithic assemblages.

Small bifacial blades and bifacial triangular form projectile points and drills are commonly recovered along with expedient projectile points and other cutting or scraping tools made from unifacially or bifacially retouched decortication and core reduction flakes. Other tools encountered include small ground stone axe heads and adze bits (“celts”), hammerstones, abraders and other formally modified or expediently modified food and raw material processing tools (e.g., manos, metates, cobble choppers, anvil stones, mortar stones, pestles) (Bamann 2006; Millis 2003, 2009; Phelps 1980a, 1983). There is no material evidence for polished stone smoking pipe production. Small-to-medium sized triangular projectile points—Roanoke Large-Roanoke Small-Clarksville type continuum (Coe 1964; Phelps 1983; Oliver 1998; South 1959, 2005)—in the form of either isosceles or equilateral triangles are variously associated with reported Cashie phase lithic assemblages. While most Precontact–Contact and early Postcontact period points are well made, some examples were expediently worked from core reduction flakes and either unifacially or bifacially retouched. Point basal configurations vary from straight, to slightly concave, to markedly concave, and most point bases are thinned to some extent. Point blade edges tend to be straight and non-serrated, but some forms have either concave or convex sides, while other examples are finely serrated. As in the neighboring Piedmont (Coe 1964) and Tidewater (Phelps 1983, 1984a) regions, projectile point sizes tend to decrease over time, with smaller varieties gradually superseding larger varieties by the end of the Cashie I subphase (Bamann 2006; Millis 2003, 2009; Phelps 1980a, 1983). Since large and small triangular point

varieties were concurrently produced over much of the Middle-to-Late Woodland period, there may have been functional differences between the two varieties.

With the regional introduction of European glass containers in the seventeenth century, Tuscarora and Meherrin toolmakers began producing some projectile points and expedient tools, such as bifacially and unifacially worked scrapers and small blades from bottle glass shards. Several examples are represented in the Neoheroke Fort site artifact assemblage, but stone was by no means replaced by glass as the preferred material for projectile points. One house-bunker (Feature 51) inside the Neoheroke Fort appears to have served as a field expedient, weapons production workshop. In addition to ceramic vessels and other materials, artifacts recovered from the floor of this structure include, cobble hammerstones, quartz biface cores, quartz triangular points, one glass triangular point and over 200 pieces of quartz and dark green glass debitage (glass shards, glass and quartz reduction flakes, quartz core shatter) (Heath 2002).

A few Meherrin Indian allies and profit-driven Virginia traders interested in eliminating the Carolina completion illicitly provided ammunition to the Lower Tuscaroras in return for deerskins in 1711–1712 (Barnwell 1908; Dawdy 1995), but the defenders of the Neoheroke Fort may have exhausted their gunpowder stocks in the last days of the three week siege. During the first phase of the Tuscarora War, John Barnwell (1908:30–32) reported that part of his force was composed of “bowmen,” rather than gunmen, and that the cohort of Lower Tuscarora women defending the Torhunta blockhouses shot arrows at his attacking forces until the unfortunates were “put to the sword.” Even though Indian men came to prefer the trade musket as the weapon of choice for deer hunting and warfare, defensive or offensive, bows and arrows were regularly used for taking small and medium size mammal hunting, and as a back-up weapons system in warfare well into the early 1700s (Lawson 1967 [1709]). The well-crafted triangular projectile points and associated knapping debris from the Neoheroke Fort site provide ample evidence that the craft of stone (or glass) tool-production was not eclipsed because of the wide-spread use of firearms among various Native peoples after the mid-1600s.

Organic Materials Technologies. A variety of implements, ornaments and other personal use objects made from processed organic materials are associated with Cashie phase artifact assemblages. For the early Postcontact period, additional information on such material culture can be gleaned from ethnohistorical sources, sometimes in significant detail (e.g., Brickell 1968 [1737]; Lawson 1967 [1709]; Graffenried 1920 [1714]). As is common across North Carolina (see e.g., Dickens et al. 1987; Eastman 1999; Mathis and Crow 1983; Ward and Davis 1993, 1999), bone and shell artifacts more commonly survive archaeologically than objects made of wood, plant fiber, leather or other organic materials, but localized acidic soils can accelerate the decay of such objects. This is the case at the Neoheroke Fort site, where organic ecofact and artifact preservation is especially poor (Byrd, et al. 2009). Nevertheless, bits of perishable organic materials found in specific microenvironments conducive to preservation, such as fragments immediately adjacent to, or surrounded by, copper, copper alloy or lead objects, have been recovered from the Contentnea Creek and Neoheroke Fort sites. Some such materials likely originated from Europe (trade fabrics), but others are of local origin.

Kuttruff (2001) analyzed textile fragments recovered from early Cashie II subphase burials at the Contentnea Creek site (see also Millis 2003, 2009). Twines associated with shell or copper bead necklaces were all 2-ply, medium final Z-twist cordage fragments in the .7–2.5 mm diameter—some yarn components are composed of S-spun, “highly processed bast fiber” (Kuttruff 2001:3). Most of the fabric fragments from site 31WL37 are plain weave (1/1

interlacing), weft faced fabrics (2-ply, medium Z-twist warp yarns and unspun single weft yarns). Warp yarn components are presumably plant bast (stem) fibers, while weft components are generally minimally twisted or untwisted, flat fibrous strips, possibly bark, river cane or leaves. One weft faced fabric sample, however, is composed of 2-strand twining with an S-twining twist (2-ply, medium Z-twist warp and weft yarns) (Kuttruff 2001:2–4). These types of textile structures were commonly produced by Native peoples across eastern North America during the late Precontact–Contact period (Kuttruff 2001:4). It is interesting to note, however, that modern Tuscarora tradition suggests that the exonym, “Tuscarora,” alludes to the Contact period Tuscarora peoples’ propensity for wearing long fabric tunics (Nixon 2000; Printup and Patterson 2007), perhaps made from the silky Indian hemp/Dogbane (*Apocynum* sp.) bast fibers (Anderson 2006).

An array of split bone and worked antler tools (awls, needles, perforators) and personal ornaments (clothing pins or hair pins) were recovered in association with Cashie I subphase burials and other habitation area features at the Jordan’s Landing and San Souci East village sites (Heath 2003; Hutchinson 2002; Phelps 1983). Antler pressure flakers, bone fishhooks and other bone tools associated with burial and non-burial features at these two sites were recovered as well (Phelps 1983), but similar objects were not found at what were likely repetitive use, seasonally occupied, fall-winter hunting and nut processing sites (see e.g., Bamann 2006; Millis 2003, 2009; Phelps 1980a). Although bone “beamers,” modified deer bone hide scrapers, are not reported in the archaeological literature, relic collectors anecdotally report their recovery of such objects from probable Cashie I subphase sites. Lawson (1967 [1709]), however, noted the widespread use of steel draw knives for the removal of excess tissue and hair from deerskins and other hides, perhaps an indication that bone beamers were regionally replaced by readily obtained and potentially more efficient, iron hide processing tools by the late 1600s.

Cut or modified shell objects, particularly cut marine shell and modified *Marginella* shell beads, are most often recovered from Cashie phase human burial contexts. Commonly reported bead types include large and medium columella segment, flat discoidal, short or long barrel (cylindrical) and long columella tube beads (Heath 2003; Hutchinson 2002; Millis 2003, 2009; Phelps 1983). A few small, flat (square) or convex face (round) pendants or pendant fragments have been recovered in association with Cashie I subphase contexts (Heath 2003; Phelps 1983). *Ronoak*, *Peak* (*Wampum*) and *Runtee* type beads (Lawson 1967:203–204 [1709]) are represented in the Neoheroke Fort site collections (Figure 10-7).⁹⁵ *Peak* beads, Lawson (1967:203) noted, were the regional equivalent of the small, tubular *Wampum* beads from the Northeast subarea, while *Ronoak* beads were smaller disc beads or shorter tubular beads (1967:204). The *Runtees*, which generally date to ca. 1650–1700 in the Northeast subarea (Esarey 2007:9; Sempowski 1989:88), were probably acquired through interactions with traders or diplomats from *Haudenosaunee* Confederacy nations, such as the Seneca representatives encountered by John Barnwell (1908:35) in 1712. Even though Precontact–early Postcontact period Tuscarora artisans undoubtedly cut and worked several types of marine and freshwater shells to produce ornaments and tools, only minimal evidence of the expected production residues associated with such work have been discerned archaeologically.⁹⁶ A whole lightning whelk (*Busycon sinistrum*) shell blank (rough cut) and a fragmented whelk shell blank were recovered from the Neoheroke Fort site. Such items were most likely acquired by Lower Tuscarora traders for localized cutting and finishing as gorgets or disc beads.

Many marine shell objects recovered in association with Cashie phase occupation deposits may have been partially or completely finished by Coastal Algonkian artisans and exchanged

inland in return for Tuscarora acquired or Tuscarora produced items (see below). Although the popular use of *Marginella* shell beads, especially after the widespread introduction of European glass beads in the mid-to-late seventeenth century, diminished among Indian peoples in the neighboring Piedmont province (Hammett and Sizemore 1989), several artifact collections recovered from the Neoheroke Fort site contain numerous modified *Marginella* shell beads, presumably the remains of necklaces or clothing ornamentation. Phelps (personal communication 2003) noted that one Cashie I subphase ossuary at the Jordan's Landing site included a worked shell (*Busycon*) dipper. Unmodified freshwater mussel shells (*Elliptio* sp.) were found, carefully arranged around the deceased in one Precontact period Cashie phase burial at the San Souci East site, but among Cashie phase peoples, unmodified shells were not typically used as funerary objects (Heath 2003).

In the early 1700s, John Lawson (1967 [1709]) observed that Upper and Lower Tuscarora woodcarvers traded their wares (bowls, platters, ladles, spoons) for deerskins and other goods from the Piedmont, and perhaps shell blanks, shell beads and yaupon leaves from the Tidewater. Worked wood, unless carbonized or perpetually waterlogged, rarely survives archaeologically in eastern North Carolina, so we know very little about Cashie phase woodworking traditions beyond what is specifically mentioned in ethnohistorical sources. A carbonized and fragmented wood spatula, *sans* handle, was recovered from the Neoheroke Fort site, but no known examples of bowls or other implements are known to have survived archaeologically. The dugout canoe was certainly a significant component of the Cashie phase, material culture suite. Despite their prevalence in the ethnohistorical record (e.g., Barnwell 1908; Lawson 1967 [1709]), as well as in the regional Precontact period archaeological record (Phelps 1989; Ward and Davis 1999), no known examples of such Tuscarora or Meherrin made boats have been documented. Regionally recovered or documented dugout canoes predate ca. A.D.1450 and the extant Late Woodland period examples were probably hewn by Carolina Algonkians (Phelps 1989).

European Trade Goods. If the European trade goods recovered from the Contentnea Creek site (Millis 2003, 2009) are generally representative of the Lower Tuscaroras' adoption and integration of European produced tools as replacements for implements locally made from wood, bone, shell or stone, then iron tools were of minor importance at least as late as ca. 1665. By the early 1700s, however, iron tools appear to have made obvious inroads on the regular production and use of locally made implements such as stone axes, adzes, drills, blades and scrapers. Iron hoes, axes and knives, as well as wrought nails and spikes for architectural purposes, or reuse as drills, awls and punches, are well represented in the Neoheroke Fort site collections. Carolina Algonkian and Piedmont Siouan groups made a similar transition, adopting an array of European produced iron tools or modifying nails and spikes into punches, awls, etc., by the late seventeenth century (see e.g., Dickens et al. 1987; Heath 2008; Ward and Davis 1993). Although firearms were potentially introduced to Upper and Lower Tuscaroras by European traders before ca. 1650, no trade gun parts, gunspalls, gunflints, lead projectiles or obvious firearms parts were recovered at the Contentnea Creek site, which appears to have been used by Lower Tuscaroras as a fall-winter hunting quarter through ca. 1665 (Millis 2003, 2009)—see Table 10-2. The only definitive European trade goods from the site are drawn glass beads, but most, if not all of the copper-copper alloy beads associated with the site's Cashie II subphase burials were either made in Europe or produced locally from European source metals (Millis 2003:346–347 and Figure 130). The site's limited assemblage of European trade goods is comparable to similar assemblages recovered from other pre-1665–1670 Indian occupation sites



Figure 10-7. Pre-conservation treatment artifact sample from a cache of personal items recovered from a wall niche inside Feature 16 (semi-subterranean house-bunker) at the Neoheroke Fort site. The array includes: red drawn glass beads (restrung); molded lead musket shot; preserved cucurbit seeds; copper alloy bracelets and perforated discs; brass buttons, bell, buckles, spoon and nested weight; Tuscarora-made smoking pipes; *Runtee, Peak* and *Ronoak* beads; retooled English gunspall (Courtesy of David S. Phelps).

European produced cloth, like firearms, expendable ammunition and rum, was a significant component of the deerskin-peltry and Indian slave trade exchange system of the late seventeenth and early eighteenth centuries (see e.g., Ethridge 2006, 2009). Like other organic materials, cloth rarely survives archaeologically in terrestrial site deposits except in unique micro-environments. Small remnants of cloth were found adhered to the backs of copper alloy buttons and other objects at the Neoheroke Fort site, but the fabrics have not been analyzed by a textiles specialist. Similarly, some copper alloy buckles from the site appear to retain bits of preserved leather. Lead bale seals, more stable artifacts associated with the cloth trade, were often used to mark bales of cloth or other market goods inspected and taxed for export from England and other European countries (Hume 1991 [1969]). Such seals have been recovered at some period sites regionally (e.g., Heath 2008), but not at the Contentnea Creek (Millis 2003, 2009) or Neoheroke Fort sites.⁹⁷ European origin trade goods from sites with colonial era Meherrin occupations are comparatively few, at least in terms of what has been reported to date; MacCord (1970) reported an interesting array of items from the John Green site in southeastern Virginia and a few period objects were reported by Binford (1964).

SUMMARY

In view of regional archaeological research undertaken since the early 1980s, we have re-examined the Cashie phase archaeological culture and its plausible relationship with Coastal Plain Iroquoian peoples of the Precontact–early Postcontact periods in eastern North Carolina, ca. A.D. 1200–1803. Through this exercise, we have summarized the history of Cashie phase

research and discussed phase related chronologies, landscapes, mortuary customs, subsistence patterns and material culture. We have assessed evidence for both continuity and change within the phase, and based on that assessment, proposed a new subphase model. While recognizing and stressing a number of research problems and hypotheses needing further study, we integrated facets of archaeological, ethnohistorical, linguistic and oral history evidence to illuminate the interrelated histories of Tuscarora and Meherrin peoples who lived in North Carolina through the early 1800s. Regarding the Tuscarora and Meherrin peoples of the Contact and early Postcontact periods, several important studies have been published over the past decade or more (e.g., Dawdy 1994, 1995; Edwards 1999; Feeley 2007; Gallay 2002; Lee 2004; McIlvenna 2009; Nixon 2000). These document-based studies have proven and will yet prove useful in the reanalysis of existing archaeological data associated with the Cashie phase. In the future, the thoughtful and systematic integration of documentary and material based studies should ultimately lead to a more complete, social and processual history of past, and possibly present, Coastal Plain Iroquoian peoples in northeastern North Carolina and southeastern Virginia through time.

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NOTES

1. The greater part of this chapter was excerpted directly from Heath (2010), which further draws from data and analyses summarized by Heath et al. (2008).

“Eastern North Carolina” refers to the greater North Carolina Coastal Plain province, including the Inner (Upper) Coastal Plain and Outer (Lower) Coastal Plain subprovinces. The Inner Coastal Plain projects eastward from the Fall Line to the estuaries of the greater Albemarle-Pamlico sounds system. The term “Tidewater” refers to the Outer Coastal Plain subprovince (Figure 1). By “northern Coastal Plain,” “northeastern North Carolina” or “North Coastal region,” we mean the region encompassing the lower Roanoke, middle-lower Tar-Pamlico, middle-lower Neuse, Pasquotank and lower Chowan river basins from the Fall Line to the Outer Banks. “Southeastern Coastal Plain,” “southeastern North Carolina” or “South Coastal region” are all general references to the lowlands landmass south of Cape Lookout, including the Sandhills sub-province and the White Oak, middle-lower Cape Fear and Lumber river basins from the Fall Line to Cape Fear. “Southeastern Virginia” is a general reference for the southern Coastal Plain region of Virginia within the upper Chowan River basin.

While there is documentary evidence of contacts between Europeans and the indigenous peoples of the North Carolina Coastal Plain from the 1520s through the early 1580s, we use the term “Precontact period” to designate the time before the 1584–1602 Roanoke Voyages. We use the term “Contact period” in reference to the 1584-to-1650 period. Although European traders were operating across the northeastern Coastal Plain at least as early as 1640–1645 (see e.g., Bland 1966 [1651]); Yearley 1911 [1654]), we select 1650 as the beginning of the regional Postcontact period since there is only ephemeral documentary information on Tuscarora or Meherrin Indian interactions with Virginia or North Carolina colonizers before that year. This is in keeping with Phelps’s (1983:Figure 1.2) proposed cultural sequence model for the North Carolina Coastal Plain. Our use of the phrase “early Postcontact period” refers to the first period of sustained interaction between indigenous Coastal Plain peoples and invading colonists, circa 1650–1725. In the context of this chapter, “protohistoric era” refers to a broader and more nebulously defined period between circa 1520 and 1670.

2. J. C. “Pinky” Harrington (1948, 1962, 1966, 1984) reported on artifacts and features associated with Precontact-Contact period Indian occupations at the Fort Raleigh National Historic site and was among the first to describe Late Woodland period shell-tempered ceramics from sites in the Tidewater (Blaker 1952; Harrington 1949). Joffre Coe, among others, surface collected several coastal sites and conducted limited test excavations on the Outer Banks (Coe 1952; Haag 1958). Relic collectors liberally dug several sites in North Coastal region, but published information on these excursions is difficult to integrate analytically, and most collected artifact and human skeletal remains, with a few exceptions (e.g., Prescott 1974), cannot be located for reanalysis or repatriation (see e.g., Painter 1990; Rights 1957). Before about 1970, much of the reported professional archaeological survey and excavation work was conducted in the Carolina Sandhills—see summaries in Phelps (1983) and Irwin et al. (1999).

3. In addition to academic research or cultural resources compliance investigations undertaken or directed by Phelps (Phelps 1983; Archaeological Site Files, David S. Phelps Archaeology Laboratory, East Carolina University), several projects were completed by other investigators (e.g., Claassen 1980; Mathis 1979; Wilson 1977).

4. Before Phelps implemented his region-specific research on the systematic study of the Precontact–Contact period history of the North Coast region, other researchers, largely based on ceramic seriation results, recognized both geographically and in relative chronological terms, what Phelps later defined as Cashie series ceramics contextually associated with the Cashie phase. Binford (1964) and Crawford (1966) respectively identified Branchville and Tower Hill series ceramics as associated with terminal Late Woodland period archaeological cultures. For the Outer Coastal Plain, Harrington (1948) first reported the recovery of simple-stamped sherds with “crushed-stone” tempering on Roanoke Island. He later reported excavating two simple-stamped, “grit-tempered” vessels from the “fort moat,” noting that the vessels post-dated the fort’s supposed sixteenth century occupation by English colonists (Harrington 1962). Haag (1958) also recognized simple-stamped and grit-tempered ceramics at several coastal sites, particularly concentrated in the Tar-Pamlico River locality of Bath, North Carolina, but like Harrington (1948, 1962), considered the materials to be associated with Coastal Algonkian occupations. South (1959), followed by Coe (1964), defined the Gaston phase and the associated Gaston series ceramics as representative of post-A.D.1700 Native occupations, probably “Siouan,” along the Fall Line in the middle Roanoke River basin. Subsequent reanalyses and comparative studies suggest that the Gaston site was occupied no later than the mid-to-late sixteenth century (i.e., no European trade goods) and that the ethnic identity of producers of Gaston pottery is ambiguous, possibly Coastal Plain Iroquoian, possibly Piedmont Siouan (Davis 2005; Ward and Davis 1999).

5. The phase name, Cashie, is associated with the Cashie River (Phelps 1983:43), a southeasterly flowing tributary of the lower Roanoke River, which roughly approximates the northeastern geographic range of seventeenth century Tuscarora communities (see Binford 1964:Figure 7; Boyce 1978:Figure 1).

6. In the late 1950s, Binford (1964) opened a single test unit to excavate a plow exposed feature at the Parker's Ferry site (31HF1), the location of Meherrin "Old Town," ca. 1691–1727. The feature yielded "...kaolin pipe fragments and nine sherds which have been called 'Branchville simple-stamped'" (Binford 1964:258–261, 411). MacCord (1970) later reported on a probable Meherrin burial (Burial 3) and protohistoric era Meherrin pottery (Branchville series) at the John Green site (44GV1) in Virginia.

7. Unfortunately, little in the way of substantive archaeological field research has been conducted in the historically documented Meherrin or Nottoway settlements localities in southeastern Virginia areas since the late 1960s (see e.g., Hodges 1993, 2004; Turner 1992, 2004)—(Wayne C. J. Boyko, Fort Pickett Cultural Resources Program, personal communication 2008; Dane T. Magoon, Cultural Resources, Inc. [CRI], personal communication 2008). See note no. 29.

8. In the absence of mass-media and written language, cultural knowledge and ethnic identities, the essential ways of living on a day-to-day basis, are most readily transmitted through the interrelated vehicles of language and personal imitation, not human genes. In non-state societies, more often than not, however, genes are shared and biologically transmitted to the next generation, in a given community, by numerous couples who respectively share the same language, ethnic identity and cultural knowledge. There are most assuredly exceptions to this exceedingly simplified pattern and process, but macro-level norms or modalities are what we most often discern archaeologically, or even historically. As materialized lifeways, archaeological cultures represent, in an incomplete and poorly nuanced manner, the lived modalities of the past. Yes, we certainly observe idiosyncratic variations that contradict normative behaviors in a given cultural context, but in the main, societal norms most often eclipse comparatively minor behavioral variations of life lived by any one idiosyncratic individual, or even small groups of individuals, in a given society. For a far more nuanced discussion, see e.g., Herbert (2009:14–21).

9. For issues with regional pottery taxonomies, see e.g., Herbert (2009:5–6, 21–23).

10. Spanish traders were possibly operating among the Tuscarora communities situated in the Roanoke River basin as early as 1610–1611 (see Arber 1895:508).

11. At and after European Contact, peoples of the Coastal Algonkian societies in the Tidewater spoke "Carolina Algonquian," which is related to, but distinctive from, other Proto-Eastern Algonquian languages (Goddard 1978).

12. This observation suggests the possibility a regional trade language or contact jargon (Martin 2004:80–81), similar to the Mobilian Jargon of the lower Mississippi River valley, but based on the Tuscarora language.

13. If the earliest Colington I subphase occupations in the Tidewater represent initial Coastal Algonkian colonization events, then ancestral Carolina Algonkians colonized the region in the early Late Woodland period. In northeastern North Carolina, Colington phase occupations (A.D. 800–1750) are primarily found in the Tidewater region north of Cape Lookout (Phelps 1983, 1984a, 1984b; Swindell 2010).

14. Despite long-standing arguments that social type classifications (bands, tribes, chiefdoms, states [*sensu* Service 1962]), should not be used by anthropologists eschewing notions of cultural evolution or classifiable social types, the analytical alternatives offered are equally problematic. As Ethridge (2009:43–44; n.5) recently concluded, such models "serve as a useful shorthand" for cross-cultural comparative purposes. Haas (1990:172) defined a tribe as "a bounded network of communities united by social and political ties and generally [, but not necessarily,] sharing the same language, ideology and material culture." On the other hand, chiefdoms have been described as a "regionally organized societies with a centralized decision-making hierarchy coordinating activities among several village communities" (Earle 1987:288). It is critical to recognize, however, that sociopolitical types, such as those defined by Service (1962), represent reference points along an analytical continuum (Byrd 1997:3).

15. Hudson (2002:xi) described polities as "clusters of communities of people who were politically aligned with each other, and who might, in turn, have been aligned against other such clusters."

16. Tuscarora emperors, kings and queens of the seventeenth century were variously documented as personally owning lands with the right to transfer parcels to individuals or polities (see e.g., Stanard 1900a, 1900b).

17. In the late nineteenth century, two Tuscarora dialects emerged, eastern and western Tuscarora, but these later dialects resulted from lingual influences of other Northern Iroquoian languages speakers on Tuscaroras who migrated northward during and after the Tuscarora War (Rudes 1999b, 2002a).

18. Graffenried (1968:923 [1714]) referred to Contentnea Creek as the "Upper [Neuse] River."

19. Although Blair Rudes reported that Contentnea was derived from *keji nye*, a Tuscarora word meaning "fish going by" (Bright 2004:120), we suggest that "Contentnea" was actually derived by English speakers from "Contah-

nah,” one of the alternate town names for Catechna (Byrd and Heath 2004:Table 5.1; Rudes 2000), which was first reported by Lawson (1967:242 [1709]). On his 1733 map, Edward Moseley (Cumming 1998:Plate 50A) incorrectly indicated “Conneghta Fort” as the place name for a Lower Tuscarora town and fort more correctly identified as Kenta or Kentanuska—see Byrd and Heath (2004:Table 5.1; Rudes 2000). Conneghta is more closely associated linguistically with Contah-nah or Cauteghnah (Rudes 2000), both anglicized appellations for Catechna (Byrd and Heath 2004:Table 5.1), which Moseley indicated as “Handcocks Town” (Cumming 1998:Plate 50A). The modern-day town of Conetoe, North Carolina is named for the Conneghta Fort, but the original Lower Tuscarora town (and fort) was located some 35–40 kilometers from its namesake (Byrd and Heath 2004:Figure 5.8).

20. These more recently offered translations (see Parks and DeMallie 1992:234) are contrary to earlier interpretations, which suggested that *natowewa* translates into English as “adder,” “rattlesnake,” “snake” or similar terms (see e.g., Hewitt 1910a; Mooney 1910; Rudes 1981a). Depending upon the context, however, *natowewa* may have been used by various Algonkian groups as a derogatory exonym for “the other.”

21. Graffenried (1920:276 [1714]) reported that Blunt exercised some degree of influence over the people of seven towns as early as September 1711—“Yes, when it was argued with regard to me, [King Blunt] spoke as best he could for my rescue.”

22. Some Upper Tuscaroras and Meherrins militarily assisted the Lower Tuscaroras (Dawdy 1995; Feeley 2007).

23. It is reasonably well-documented that the Indian slave trade affected both the Upper and Lower Tuscarora polities by the 1690s. Lawson (1967:174, 187, 209, 210, 225 [1709]) cited the routine taking and selling of Indian captives by Upper or Lower Tuscaroras, as well as other coastal Indian peoples, ca. 1701–1709. Although Indian men were sometimes taken, women and children were the primary targets of opportunity (Gallay 2002). Lawson (1967:209 [1709]) described the taking and selling of Coree captives by Machapunga (Mattamuskeet) warriors before either group had acquired firearms; the captives were sold to English traders sometime between 1645 and 1665. In 1712, Barnwell (1908:35) mentioned that “Seneca” (Iroquois Confederacy) representatives chided Lower Tuscaroras for slaving in return for trade goods and other provisions. Although Tuscarora warriors were actively conducting their own slave raids (Ethridge 2009; Gallay 2002), Tuscarora communities were subject to retaliatory raids conducted by other Indian groups, as well as by European colonists settled in the Tidewater (Graffenried 1920 [1714]; Lawson 1967 [1709]). Feeley (2007) also discusses “Mourning War” captive losses in the early 1700s.

24. This population range estimate for ca. 1709–1711 is based on the historically reported number of “bowmen” or “gunmen” (i.e., males fit for combat) multiplied by a total population factor of 4.0 (see Wood 1989:41). In 1709, Lawson (1969:242 [1709]) reported the total number of Upper and Lower Tuscarora “fighting men” at 1,200, while Virginia Governor Alexander Spotswood’s intelligence sources estimated the total number of Upper and Lower Tuscarora warriors at 2,000 in 1711 (Boyce 1978:Table 3). In 1712, Barnwell (1908:34) estimated the Lower Tuscarora fighting strength alone at no less than 1,200–1,400, which did not include Upper Tuscaroras. If the 1709–1711 population range estimates are reasonably accurate, then the Precontact period Tuscarora population in ca. 1500 would have been approximately 10,000–16,000 people. Given that approximation, the Contact period Tuscarora population in ca. 1600 would have been 7,700–12,300 people. These population estimates are based on a population decline model for the Southeast subarea proposed by Ubelaker (1988:Table 2)—see Thornton (2004:51).

25. Phelps informally instituted the “Tuscarora Project” and the “Algonkian Project.” Goals for the Algonkian Project were outlined by Phelps (1980c:6–7; 1982a:47, 1984a:1). Although never formally stated, broadly conceived goals for the Tuscarora Project were outlined by Phelps (1980c:6–7, 1983:50–51) as well.

26. While we use the more generally known site name, Neoheroka Fort site, the Tuscarora word is more correctly, *Neyuheruke* (“forked field”) (Rudes 1998:2).

27. While there are caveats and contextual complexities that we cannot cover here, we note the findings of two ceramics studies by Bowser (2000) and Gosselain (2000). Bowser (2000:238) found among Achuar and Quichua peoples—small-scale segmental societies—“The test of ability to distinguish chichi bowls as Quichua or Achuar indicates that women accurately perceive cues to political group membership in other women’s pottery... On average, women were correct in 68 percent of their judgments, and their accuracy is significantly greater than that predicted by chance... [However,] If each bowl is coded by according to the ethnicity of the potter, then the average accuracy of judgment drops to 62 percent... On average, these scores are significantly greater than that predicted by chance.” Gosselain (2000:208; emphasis added) reported on hand-built pottery from sub-Saharan Africa, noting, “...the striking correspondence between pottery fashioning techniques *and* some of the most pervasive and enduring forms of social groups... patterns in the distribution of the fashioning step in the chaîne opératoire do broadly match social boundaries such as language divisions... and even gender... all categories of social group membership that usually constitute the core of people’s identity, that part... most difficult to mask or erase.” Interestingly, Gosselain

(2000:198, 200) found that *decorative treatments*, specifically rouletting tools and the associated designs, occur “independent of cultural variations such as language, social organization, and economy, corresponding to no other boundaries than natural ones... Thus, the distribution of rouletting tools may be generalized to a corridor of geographically contiguous... communities through which diverse cultural traits may have diffused.”

28. Galloway (1992) offered a generalized critique of the Direct Historical Approach within the context of Southeastern archaeology.

29. Binford’s (1964, 1965) 1950s research was later followed by a similar regional survey project conducted by Gerald P. Smith in the 1960s (Smith 1971, 1984).

30. Binford (1964) relied on extra-local typologies for his initial ceramics seriation, but also described previously unrecognized types.

31. Witthoft’s reconnaissance of the Neoheroke Fort site locality is discussed in Byrd et al. (2009).

32. Our systematic comparison of Branchville simple-stamped sherds (site revisit collections) from sites 31HF1, 31HF12 and 44SN24—sites originally sampled by Binford (1964)—against Cashie series simple-stamped sherds from sites 31HF20B, 31BR7 and 31GR4 confirm this conclusion. All specimens fall within the expected range of variation for the Cashie series—see also Owens (1993). In terms of precedence, one could argue for renaming the Cashie series and the Cashie phase, “Branchville,” but the redesignation would lead to more confusion given the preponderance of existing literature citing, contesting or otherwise embracing Phelps’s (1983) regional sequence.

33. Our review of Smith’s (1984) investigation results, despite problematic issues with his data and interpretations, generally support Binford’s (1964) conclusion that Nottoway potters likely produced Branchville series ceramics in the late sixteenth and early seventeenth centuries. Although Smith’s (1984) ceramic typologies are convoluted and appear to inconsistently mix, typologically and chronologically, different series within his Sturgeon Head series definition, the Sturgeon Head simple-stamped, plain and fabric-impressed type descriptions are more-or-less synonymous with Branchville (Binford 1964) and Cashie (Phelps 1983) type equivalents.

34. The Indian Woods reservation lands, composed of subdivided parcels leased both before and after June 1803, were sold after a series of complex legal negotiations in November 1831 (see Paschal 1953:137–148).

35. Absolute dates that we do not consider contextually valid for the Cashie I–II subphase occupation features they purportedly date are for the following sites and proveniences: 31NS3b, Feature 137 (Eastman 1994a, 1994b; Phelps 1980a); 31LR1, Feature 20 (Eastman 1994a, 1994b; Eastman et al. 1997); 31WL37, Feature 2294 (Millis 2003, 2009); 31ED333, Feature 34 (Bamann 2006); 31WL304, Feature 4B (Thomas Beaman, personal communication 2008).

36. In the recent past, individually or collectively, we have variously followed Phelps’s (1983) proposed A.D. 800–1650 date range for the Cashie phase (see e.g., Byrd and Heath 2004; Heath 2007; Phelps and Heath 1998).

37. The cal intercept A.D. 1022 date for Feature 137, which we suggest is an early Late Woodland period Clements phase feature, is in keeping with the Clements phase chronology of A.D. 300–1000 proposed by Ward and Davis (1999:Figure 1.5). More recently, Bamann et al. (2008:20) reported a cal intercept A.D. 1290 date for a feature (Feature 27) with Clements series pottery at the Mush Island site (31HX250).

38. Radiocarbon dates associated with any archaeological deposit simply reflect what is known at a moment in time, not necessarily the entire time range for whatever phenomena they date.

39. A “Gaston ware” simple-stamped vessel section was recovered from the upper level of a human burial pit feature at site 44PG302, which is located on the James River in Virginia (Prince George County). Wood charcoal from the lower pit fill dates to the mid-thirteenth century. Given the intrasite patterns at site 44PG302, however, Doug C. McLearn (principal investigator) considered the assay date “200–300 years early” (Klein 1994:22).

40. For the Middle Atlantic Coastal Plain, Potter (1993:3) discussed linguistic evidence for “population ‘cells’ of Algonquian speaking peoples migrating into the subarea in successive waves.

41. Simple-stamping, the exterior surface treatment most commonly observed on Cashie series vessels, may have been regionally reintroduced, after a long hiatus following the Deep Creek phase (Phelps 1983), by Cashie phase potters around A.D. 1200—see note no. 89. Simple-stamping patterns on Cashie series vessels differ from preceding periods in that most appear to have been executed using carved paddles with narrow, evenly spaced lands and grooves. While this surface treatment was subsequently adopted by potters from other ethnolinguistic groups in the neighboring Piedmont and Outer Coastal Plain provinces during the Late Woodland period, simple-stamping is not found on Mount Pleasant series, or Mount Pleasant varieties (Classic, Liberty Hill, Middletown) and other synonymous “series” (Lenoir), specimens pre-dating or post-dating ca. A.D. 1200. Other ceramic attributes commonly associated with Precontact period Cashie series ceramics that are wholly absent or less common before the regional emergence of the Cashie phase are wiped-and-rubbed or floated vessel interiors and folded rims with

long folds. Green (1986) suggested that his provisionally defined Liberty Hill series ceramics might represent a direct precursor to Cashie series ceramics, possibly indicative of an in situ development of the Cashie phase. We note, however, that Liberty Hill variety ceramics share far more functional and stylistic attributes with other coeval Mount Pleasant varieties than with roughly contemporaneous (ca. A.D. 1200–1300) or later (A.D. 1300–1650) Cashie series materials—see e.g., Millis (2001:262–279). Moreover, ceramics consistent with Green’s (1986) Liberty Hill description, like the Mount Pleasant series itself, are not exclusive to the northern Inner Coastal Plain. Their presence and typical contextual co-occurrence with Mount Pleasant series ceramics, but not Cashie ceramics, have been noted throughout the North Coastal Region (e.g., Jacobsen et al. 2008; Swindell et al. 2009). Importantly, and in contrast against Cashie series examples, Mount Pleasant series vessels, including the Liberty Hill variety, do not exhibit long-fold folded rims or simple-stamped exteriors. Moreover, there is minimal overlap in vessel forms and decorative treatments between the two series (see e.g., Green 1986; Jorgenson 2001; Millis 2009; Phelps 1983). The interior rim stamping treatments (fabric-impressed, cord-marked), commonly observed on Mount Pleasant series ceramics, including Liberty Hill examples, do not occur within the Cashie series (see e.g., Millis 2001:262). Forming techniques also differed in some fashion as did firing techniques between the two series. Cashie series vessels *tend* to exhibit greater hardness (fired at higher temperatures) with *generally* less frequent clean coil breaks, except where everted rims were applied to jar or beaker bodies. Many Cashie series vessels we have reassembled exhibit sherds with irregular breakage patterns, whereas clean coil breaks are more commonly observed on Mount Pleasant series sherds, a pattern that suggests subtle differences in the body forming or finishing techniques respectively employed by Cashie and Mount Pleasant potters. Liberty Hill variety ceramics, perhaps influenced by Cashie potters in the lower Roanoke River basin sub-region, likely represent the end of the Mount Pleasant series continuum, dating to ca. A.D. 800–1300. The present data on the two phases suggest to us that Mount Pleasant phase peoples were gradually pushed south and west as ancestral Cashie phase peoples took up residence in the lower Roanoke River basin and expanded their territory over the course of several centuries. We note that Late Woodland period dates, ca. A.D. 800–1300 associated with Mount Pleasant phase occupations (e.g., Herbert 2009; Herbert, this volume; Millis 2003, 2009) are found well south of the Roanoke River basin and along the western fringes of the middle Tar-Pamlico and middle Neuse river basins, an expected temporal pattern, given the Cashie phase expansion model we propose.

42. Mount Pleasant phase burials found on the Inner and Outer Coastal Plain are most often encountered as primary interments, most typically fully flexed or semi-flexed single inhumations, or secondary burial cremations (Heath 2003; Phelps 1983). Although primary inhumation customs were practiced under some circumstances by Cashie phase peoples before European contact, the more general practice of ossuary burial customs, at least through ca. 1500–1550, suggests quite different belief systems than those practiced by peoples associated with the Mount Pleasant phase (Heath 2003 [*sensu* Hutchinson and Aragon 2002]). While Cashie phase settlement patterns include a range of site types, from seasonal resource exploitation camps, to dispersed farmstead hamlets, to nucleated palisaded villages, Mount Pleasant phase settlement patterns were fundamentally different. There is no present evidence for late Mount Pleasant phase nucleated villages, or habitation site clusters indicative of populous dispersed village communities. Beyond such differences in the arrangement of settlements across the landscape, Cashie phase habitation sites are more commonly found on locally higher elevation landforms with sandy loam or loamy sand soils. While Mount Pleasant phase occupations are often found in spatial, but not temporal, conjunction with Cashie phase occupations at many sites, single component Mount Pleasant phase sites, including those with Liberty Hill variety ceramics (see note no. 41), are found more randomly distributed, in relation to various geographical variables, across the regional landscape (Byrd 1995, 1996; Byrd and Heath 1997, 2004).

43. Byrd (1998) summarizes complex issues between genes, language and culture, as well as how different languages might come to be spoken in a particular region, the nuances of which are beyond the scope of this chapter.

44. We use the term Proto-Iroquoians in the sense of Mithun (1984:259), “the common ancestors of all modern Iroquoian peoples.”

45. Glottochronologies for Northern and Southern Iroquoian languages are seemingly at odds with the archaeological evidence (but see Whyte 2007), suggesting an initial Proto-Iroquoian population divergence around 4,000–3,500 years ago (Lounsbury 1961, 1978; Rudes 1999a). Rudes’ (1999a:xv) lexicostatistical studies suggest that Tuscarora and Nottoway developed from a shared dialect that diverged from a parent Proto-Northern Iroquoian language about 100 B.C. Historical linguistics can provide highly relative information on interrelated languages, such as which languages in a given family are earlier or later in time, but glottochronology, a now discounted method for estimating calendric dates associated with divergences of more recent languages from a protolanguage are not reliable (see Potter 1993:2–3).

46. Fenton (1940) drew a similar conclusion based on his assessment of ethnohistorical evidence.

47. See also Mithun (1984:Figure 15.2).

48. While ancestral Tuscaroras apparently moved south and well away from the habitual linguistic influences of other Iroquoian groups on their slowly diverging language, ancestral Cayugas remained in, or returned to, the Great Lakes region. Over time the Tuscarora language continued to diverge from the PNI language base, but the Cayuga language assumed more characteristics shared between languages of the Five Nations (Chafe and Foster 1981).

49. Rockman (2003:9) defined push-pull factors as follows: “Push factors are those conditions experienced by a given population that make occupation of a different area more attractive than staying as part of the originating population” (e.g., resource depletion, social constraints, negative environmental change, warfare). “Pull factors are the conditions that make particular migration and colonization destinations viable options” (e.g., knowledge of destination environment or resources, costs of transport, preexisting social connections) (Rockman 2003:9).

50. Analyses of American Indian oral histories suggest that “origin myths can maintain memories of place over potentially several thousand years and thousands of miles... This evidence is important for the archaeology of colonization as it highlights the point that in order to arrive at a new point, a colonizer must have come from somewhere else” (Rockman 2003:18)—see also George-Kanentiio (2007).

51. “Gow-ta-no” is a variant of *kahtehnu* (“submerged loblolly pine” [Rudes 2000:6]), which was generally anglicized both as Catechna or Contentnea. Johnson (1881) restated the Tuscarora origins story originally included in Cusick (1848:21, 33); Cusick (1848:21) referred to *kahtehnu* as, “Cau-tan-oh, i.e., pine in water.”

52. During the Yamasee War (1715–1717), a contingent of Tuscarora warriors resettled at Port Royal, South Carolina. They later relocated their families to the same area where they lived through 1730s (see Milling 1940)—see Feeley (2007) for discussions of Tuscarora societal fragmentation and population dispersals after 1713–1715.

53. Landy (1958:251) preferred the term “tribalism” over “nationalism,” with tribalism meaning “...the self-identification of a group or society with a common territory, common traditions, and common values and interests... Nationalism, however, tends to be more dynamic, to be directed toward enhancement of a society’s power and prestige vis-vis other societies with which it feels itself in competition or otherwise at a disadvantage.” Given Parramore’s (1982) thesis of a “Tuscarora Ascendancy” in the seventeenth century, however, the tandem concepts of “national” or “nationalism” in the case of early Postcontact period Tuscaroras are viable analogs.

54. There were some exceptions to this insidious invasion pattern. Graffenried entered into painstaking land purchase negotiations with the King of Chatooka, a Neuse Indian town, when he found the lands previously sold to him by John Lawson for the New Bern colony were still occupied by Neuse in 1710 (Graffenried 1920 [1714]).

55. Cashie I and II subphase sites are found within four North Carolina ecoregions: 63e, 63n, 65m and 65p, which are environmental zones within the Middle Atlantic Coastal Plain ecoregion (Griffith and Omernik 2009). Griffith and Omernik (2009) categorize these as: 63e, Mid-Atlantic Flatwoods; 63n, Mid-Atlantic Floodplains and Low Terraces; 65m, Dissected Rolling Coastal Plain; 65p, Southeastern Floodplains and Low Terraces.

56. For the Meherrin and Nottoway river drainages, distributions of presumed protohistoric era Meherrin or Nottoway occupation sites are variously reported in Binford (1964), Dawdy (1994), MacCord (1993), Phelps (1982b) and Smith (1984).

57. In his Lenoir County survey, Robert G. H. Crawford (1966) surface collected over 60 sites in the middle Neuse River basin, roughly between present-day Cove City to the east and Seven Springs to the west. Based on a pottery seriation derived through excavations conducted at the Tower Hill (31LR1) and Hardy (31LR11) sites, Crawford proposed four ceramic series, Lenoir, Grifton, Tower Hill and Type I. Given Crawford’s original series definitions, as well as descriptions later reported in Eastman et al. (1997), it is evident that his Tower Hill simple-stamped type is equivalent to the Cashie simple-stamped type; this conclusion was recognized by Eastman et al. (1997). It is also apparent, however, that Crawford’s Tower Hill fabric-impressed type description was based on a mixed assemblage of Mount Pleasant fabric-impressed and Cashie fabric-impressed materials. Unfortunately, Eastman et al. (1997) further confused the issue by concluding that Crawford’s Lenoir and Tower Hill series should be subsumed within the Cashie series. Moreover, it is doubtful that the cal intercept A.D. 786 date obtained by Eastman et al. (1997)—carbonized hickory nutshell recovered from 31LR1, Feature 20—is valid for the Cashie series or the Cashie phase. There are several contextual problems with the Feature 20 carbon sample assayed in 1991. First, careful study of Crawford’s field report (1966:102–12) strongly suggests that Feature 20 was a Mount Pleasant phase (Lenoir series period) feature, a probable cooking or nut roasting pit, dug through and disturbed sometime later in the Cashie phase (Tower Hill series period) to create a storage cache. The large pit (Feature 20) included nine triangular projectile points, ten bone awls, a conch shell blank and 177 sherds, primarily Tower Hill fabric-impressed sherds (n=152). Other Feature 20 sherds include Lenoir (n=5) and Grifton series (n=4) types, as well as five shell-tempered and six “plain” sherds not assigned to a particular series (Crawford 1966:Table 4). It is

likely that the shell-tempered sherds are Late Woodland period Colington series (A.D. 800–1750) materials from a vessel, obtained along with the conch shell blank, through trade with Algonkian groups in the Tidewater. Secondly, it is evident on Crawford's (1966:Figure 19) plan view drawings of features at 31LR1 that Feature 20 intruded into an earlier feature, which was truncated along the west wall of Feature 20. Additionally, the east side of Feature 20 overlapped with Feature 19, and possibly with Feature 21 on the northeast. This evidence suggest that Feature 20 was disturbed and potentially contaminated, at least in the prehistoric past, with fill materials from multiple adjacent features. Moreover, it appears that the cooking or nut roasting activity associated with the carbonized nutshell submitted for assay likely occurred before the pit was reused as a cache to store tools (projectile points) and valued commodities (marine shell). The cal intercept A.D. 786 date is four centuries earlier than any other absolute date associated with Cashie series ceramics where there are no such questionable contextual issues.

58. During the 1712 armistice treaty negotiations between John Bamwell and Lower Tuscarora leaders at Catechna, Bamwell (1908) specified that Tuscarora hunting parties could no longer venture south of the Cape Fear River. We believe this requirement was inserted to protect Indians allied with South Carolina's colonial regime, some of whom were frequent targets of Tuscarora slave raiding parties before and after the Tuscarora War (Gallay 2002; Heath 2004).

59. Byrd and Heath (2004) considered Haruta to be a Coree town, but Haruta consistently appears, under slightly different appellations, in treaty negotiations and other documents as one of the Lower Tuscarora communities.

60. South of the middle Neuse River basin, regional survey and site testing data from western Cumberland, Harnett, Hoke, Lee, Moore and Scotland counties suggest that no village size sites existed in most areas of the Carolina Sandhills (ECU site files; Fort Bragg CRMP site files; Herbert 2009:3–4; NCOSA site files). Although village size communities existed along the middle Cape Fear (e.g., MacCord 1966) and Deep (Boudreaux 2007) rivers in the late Precontact period, there is no present archaeological evidence for such populous communities in the Sandhills sub-province after ca. A.D. 1600–1650. Similarly, there are no current data (ECU site files; NCOSA site files; Simpkins 1992; Ward and Davis 1999) to suggest that there were non-Lower Tuscarora, village size communities between the westerly Tuscarora towns of Toisnot and Torhunta and the documented eastern Piedmont Siouan settlements associated with Caraway, Fredricks, Hillsboro, Jenrette or Mitchum phase occupations (see e.g., Davis 2002; Dickens et al. 1987; Simpkins 1992; Ward and Davis 1993, 1999).

61. Crawford (1966:Figure 19) illustrated what may be the corner of a rectilinear plan structure at the Tower Hill site, which may be associated with a Cashie I subphase (Tower Hill period) occupation at the site.

62. David Phelps and John Byrd directed the salvage recovery of three plow damaged ossuaries at the Kearney site (31GR84), located in the Nahunta Swamp section of the Contentnea Creek drainage (Farris 1992; 31GR84 site files, East Carolina University). These burials were unusual in that one ossuary (Burial 1) contained both cremation burials and disarticulated skeletal remains of multiple individuals in the upper level of the burial pit, and at least three primary inhumations in the lower level of the same pit. Two other ossuaries at the site were positioned directly above flexed primary burials in the same pits (Burial 2 and 3). A fourth burial (Burial 4) held the remains of a flexed primary burial with two intrusive postholes that disturbed the older skeletal remains. Dislodged human bone fragments from the primary burial were recovered from intrusive postmold fill deposits associated with the site's later Cashie phase occupation. One individual (flexed primary burial) in Burial 1 was interred with a steatite tubular pipe (incised), and one individual (secondary bundle burial) in Burial 3 was interred with an engraved shell gorget and some unidentified shell objects (highly fragmented-decayed). No obvious funerary artifacts were recovered in association with any other individuals in Burials 1–4 (31GR84 site files, East Carolina University). Since these mortuary patterns were not within the range of expected variation for Cashie I subphase interments, and due to the regionally anomalous presence of the pipe and gorget, Phelps (personal communication 2008) considered the site 31GR84 burials to be something other than Cashie phase inhumations, possibly late Precontact period, Coastal Plain Siouan burials. The presence of a partial house pattern (Feature 1), originally constructed with a subsurface floor area, at the site, along with the recovery of burial fill pottery sherds, similar to Millis's (2003, 2009) Untyped Series I and Untyped Series II wares (ca. A.D. 1300–1400), lend some credence to Phelps's tentative interpretation.

63. The authors of several studies aggregated both Middle and Late Woodland period skeletal remains and bone samples for their analyses. Due to such contextual problems, their study results and conclusions are problematic.

64. On bluffs along the lower Chowan River, several primary inhumation burials were reportedly plowed out in the 1970s. The burials were located in a late seventeenth century Meherrin occupation area at site 31HF20B, but the reports were not professionally verified (David S. Phelps, personal communication 2008).

65. Relic collectors dug many areas of the John Green site, removing at least 35 burials and their associated funerary objects, sometime before 1968. Some of their dig finds are described in MacCord (1970) and Painter (1963, 1964a, 1964b).

66. It is possible that the house patterns described by MacCord (1970:121) were not associated with the site's late seventeenth–early eighteenth century Meherrin occupation. Only one (Feature 12) of the 23 non-burial features and one (Burial 3) of the six burials reported by MacCord (1970:103–112) contained European-made artifacts.

67. Before the Tuscarora War, Chowanokes living on the Bennett's Creek Reservation tended fruit orchards and raised both pigs and horses (Saunders 1968:II:140–141), while the Pasquotanks notably raised Cattle and made butter (Lawson 1967:200 [1709]).

68. Millis (2009) elaborates on this point in her discussion of Cashie series ceramics from the Contentnea Creek site. South (1959) reported the same issue with Gaston series ceramics recovered from the Gaston and Thelma sites.

69. As Phelps (personal communication 2007) informally observed, "Somehow, archaeologists always want to describe temper types as being mutually exclusive, and except for things like fiber, [added] clay lumps [or grog], and [crushed] shell, it is nearly impossible to accurately classify each sherd."

70. Although it is subjective to some extent, and not especially appetizing, it sometimes helps to further sort sherds into their respective series by employing the individually subjective "sticks to the tongue – does not stick to the tongue" test to tactilely assess the relative firing hardness and interior surface treatment of a given sherd (see e.g., Carnes-McNaughton 2008). This somewhat arcane method, liberally borrowed from historical archaeologists who apparently do not fear tongue testing whiteware sherds from privies and such, can prove useful—e.g., Cashie I series sherds less frequently "stick," while Mount Pleasant series sherds more frequently "stick"). Our efforts to determine relative hardness using the Moh's scale method have not proven especially useful, perhaps due to the abundance of lithic tempering clasts in the pastes of tested sherds.

71. See note no. 33.

72. Presumably late seventeenth-to-early eighteenth century Meherrin pottery sherds (n=1480) recovered from the John Green site (44GV1) were typed by MacCord (1970:116) as Branchville ware. MacCord (1970:116–117) described these ceramics as "sand-tempered... well-made, [and] hard-fired," with multiple surface treatments (cord-marked, fabric-impressed, plain, simple-stamped). A partially reconstructed, Branchville fabric-impressed vessel from the site (MacCord 1970:Figure 3) exhibits a form and rim treatment (long-fold folded rim) similar to known Cashie I and Cashie II series examples from North Carolina contexts

73. We provisionally define the Devil's Gut series based on an assemblage of vessel fragments recovered from excavation units and Late Woodland period features at the Jordan's Landing site. Devil's Gut swamp is located across the Roanoke River from site 31BR7. These vessels (MNI=10) were made with very fine-to-slightly silty micaceous clays, similar to many Cashie I series vessels and sherds recovered from lower Roanoke River basin sites. Although some vessel pastes include very fine sand (sub-rounded and sub-angular quartz grains), the pastes are essentially temperless and the vessels were hard-fired at relatively high temperatures; several sherds exhibit random grains of coarse sand (.50–1.0 mm). Very fine or fine sand grains in the few sandier paste examples are exposed and the finished surfaces are slightly sandy to the touch, but most specimens feel very smooth or slick to the touch. Body sherd thicknesses range from 2.7 mm-to-6.6 mm, but the average body sherd thickness is only 4.5 mm. Devil's Gut series vessel exteriors are plain finished, either well-smoothed or burnished, but the finishes are not especially lustrous on most examples. A well-executed vessel section from site Feature 41 was originally burnished, smudged and polished; a similarly finished sherd was recovered from Feature 1, the village palisade ditch. The Feature 41 specimen has a lustrous sheen on both the interior and exterior surfaces. A few sherds exhibit ephemeral fabric or simple-stamping impressions not completely smoothed out, a characteristic of paddle-and-anvil formed vessels. Rim lips are generally flat, but one specimen has a rounded lip. Vessel forms, based on assessments of basal and rim sherds, suggest that Devil's Gut vessels were small-to-medium size forms, generally unrestricted orifice pots and simple bowl forms with straight (self) rims. The simple bowl forms have flattened bases, similar to Cashie I series simple bowl forms recovered at the Jordan's Landing site (Figure 3).

The Devil's Gut series sherds and vessel sections were all recovered in association with Cashie I series materials. Based on the intrasite contexts, the series appears coeval with the Cashie I series, as well as made with locally available micaceous clays. Feature 41 is dated at cal intercept A.D. 1280 (Table 2). Since specimens associated with the series were also recovered in stratigraphic association with Cashie I series materials in upper excavation unit levels, anthropogenic deposits related to Cashie I subphase occupations, we assume that the Devil's Gut series dates to the ca. A.D. 1250–1450 period. Phelps (1983:39) briefly mentioned the occurrence of these ceramics as "trade" wares sometimes found in Colington phase contexts. He later considered such "temperless smooth wares" as a variety of the Cashie series (David S. Phelps, personal communication 2008; Phelps 1995). The Devil's Gut series may be coeval with the Swansboro series, a shell-tempered pottery with plain and burnished exteriors typically found in low-frequencies along the outer coastal margins (Herbert 2009:184–187). The fine, hard-fired

pastes and well-smoothed or burnished surface treatments are somewhat reminiscent of so-called Colono-wares, such as the Courtland (Binford 1964, 1965) and Brunswick (South 1976) series ceramics dating to the post-1650s era. The Devil's Gut examples, however, exhibit no features mimicking European forms or decorative motifs, patterns typical of most Colono-ware assemblages (Carnes-McNaughton and Beaman 2005; Herbert 2009; Linda Carnes-McNaughton, personal communication 2010). Although the Jordan Plantation was established in the locality of site 31BR7 in the mid-eighteenth century, the present contextual evidence strongly suggests that the Devil's Gut ceramics are not associated with any post-1700 site area occupations.

74. Although Phelps and Heath (1998) suggested the possibility that such vessels may have been shaped over forms—manually molded—Christopher T. Espenshade (New South Associates, personal communication 2011) considers this method unlikely, at least based on his study of ethnographic sources on hand-built ceramics production.

75. Green (1986) reported no long-fold folded rims in the Cashie series assemblages recovered from the Chowanoke sites complex (31HF20A–B, 31HF30A–G). Most Cashie series ceramics from the Chowanoke sites are likely associated with a late seventeenth–early eighteenth century Meherrin occupation (Cashie II subphase) at site 31HF20B.

76. Millis (2001:381) suggested that the angular temper clasts observed in Cashie series sherds from the Contentnea Creek site potentially indicate some degree of temper preparation (e.g., partial crushing), a possibility initially broached by Phelps and Heath (1998).

77. Chert, feldspar and hornblende clasts are most likely incidental, naturally occurring particles, naturally co-occurring in either the clay or temper sources selected by Cashie potters. Particles of such rocks and minerals, along with quartz sands or gravels and other materials (e.g., silts, hematite), commonly occur in varying densities in most North Carolina Coastal Plain clays (Clark et al. 1912).

78. Modal range in this instant is the most frequent temper grain size *range* observed on a sherd-by-herd basis in a given sample of sherds.

79. Herbert (2009:28) also noted, “Angular grains of quartz ranging in size from fine sand to pebbles can be created by the natural weathering of quartzite. Handfuls of sharply angular small bits of quartz may be found throughout the eastern Piedmont where quartz veins in residual clay are freshly exposed by erosion.”

80. Although similar inclusions appear to be natural to the clays tapped and used to make Cashie II vessels, random lumps of soft (chalky texture) salmon-pink, off-white or strong brown clays in the 1.0–4.0 mm size range can be seen on the exterior surfaces of some vessels or in fresh sherd break cores. These inclusions appear random and not purposefully included as tempering in the same sense that grog (i.e., crushed sherds) or dried/fired clay lumps were added as tempering elements to Middle and Late Woodland period Hanover series ceramics (Herbert 2003, 2009, this volume). One particular Neoheroke Fort site vessel from Feature 16 is “shot through” with tiny (.50–1.0 mm) iron rich clay lumps that are reddish orange-to-strong brown in color, but the nodules appear to be a natural constituent of the clay selected for the jar.

81. Although all regional clays contain some percentage of mica, so-called “micaceous clays” contain a greater abundance of mica flakes easily visible to the unaided eye. On the North Carolina Coastal Plain, highly micaceous clay deposits are most commonly associated with the Miocene Epoch St. Mary's formation (Clark et al. 1912), but no studies have been conducted to determine if these particular clays are suitable for forming coil-built pottery.

82. The purposeful selection of mica rich clays by Tuscarora potters potentially served functional purposes. Micaceous clay pastes vitrify at lower firing temperatures and fired vessels are more resistant mechanical and thermal shock. Micaceous paste vessels heat more rapidly and retain heat longer than comparable non-micaceous paste vessels (Eiselt 2005). Since mica absorbs thermal shock, the potentials for production firing cracks and spalls are less likely, and use-life is extended for vessels used for cooking or other food processing purposes requiring the application of heat. Micaceous clays improve vessel performance and initial firing success, but an additional drying step (low heat drying) is required during the production process (Eiselt 2005; Ortega 2007).

83. Depending on the specific soil series, most North Carolina clays generally contain some quantity (5–75 percent) of free sand (Ries 1897).

84. Binford's (1964) Branchville series definition includes fabric-impressed, plain, simple-stamped and cord-marked types. Millis (2001:271) and Bamann et al. (2006:Table 10) reported *single* occurrences of cord-marked sherds that otherwise exhibited the range of attribute variation associated with Cashie series ceramic assemblages recovered at sites 31WL37 and 31ED333. We have observed at least two cord-marked rim sherds with paste, temper and interior finishing characteristics, similar to contextually associated Cashie I series examples, in the Jordan's Landing site collection. At the Thorpe site (31NS3b), Phelps (1980:76) noted the recovery of “[a]...few

sherds with cob marked (corn cob impressed) surfaces on ‘Cashie paste.’” Subsequent re-examination of the “cob marked” sherds suggests that the impressions were actually made by very coarse warp and very fine weft fabrics.

85. In our analysis of Cashie ceramics assemblages we occasionally see what at first glance appears to be cord-marking, but we typically find that such sherds often match or mend with sherds from fabric-impressed vessels. What often appears to be cord-marking on single sherds can be the result of the loosening or unraveling of non-cordage warp fabrics, where the weft cordage was woven around wood or river cane dowels to produce a paddle like tool. As Haag (1958:74) reported for some fabric-impressed sherds collected in his survey of coastal North Carolina, “Sometimes the weft elements have parted or slipped along this stick (?) or reed (?) and its bare impression may be seen among the cords.”

86. Some “plain” vessels in the Neoheroika Fort site assemblage exhibit evidence that they were simple-stamped and scraped before the pieces were smoothed over to produce otherwise plain finished vessels (Heath 2002).

87. Percentages based on analysis of six 2-x-2-m excavation unit (Sq. 0, Sq. 0, R2, Sq. 0, L2, Sq. -5, L7, -10, R32) assemblages from site 31BR7.

88. Except for surface collection units and a single feature (Feature 135A), Phelps (1980a) did not report the surface treatment proportions for Cashie series sherds recovered at the Thorpe site (31NS3b). The surface treatment proportions, however, appear to be in keeping with the site’s only radiocarbon date (cal intercept A.D.1240) firmly associated with a Cashie phase feature (Feature 135A). Phelps (1980a:76) noted, “[Cashie series] surface finishes, in order of popularity, are fabric impressing, simple stamping, plain surfaces, and incising.”

89. For the North Carolina Coastal Plain, Colington series (shell-tempered) simple-stamped pottery appears to post-date A.D. 1350–1400, at least based on current radiocarbon data (Herbert 2009; Swindell 2010). Simple-stamped pottery types from the neighboring Piedmont province also post-date A.D. 1300–1350 (Boudreaux 2007; Dickens et al. 1987; Eastman 1999; Ward and Davis 1993, 1999; Wilson 1983). The currently known radiocarbon dates from reliable contexts suggest that carved-paddle simple-stamped (narrow land-and-groove) ceramics were not produced by potters of the eastern Piedmont or Coastal Plain regions except for those presently defined as Cashie series ceramics before ca. A.D. 1350. This approximate date is approximately one century later than the earliest Cashie series simple-stamped sherd assemblage from site 31NS3b, which dates to cal intercept A.D. 1240 (Table 2). Further systematic study of this hypothesis is needed.

90. Ceramics from Contentnea Creek survey sites (Byrd 1996, Byrd and Heath 1997) include simple-stamped, fabric-impressed and plain finished Cashie I–II series sherds. Although ostensibly associated with late seventeenth or early eighteenth century Lower Tuscarora towns, we cannot readily assess occupational time depth at any particular site since none have been investigated beyond the survey level.

91. Although the proportion of fabric-impressed sherds (70.7 percent) is greater than simple-stamped (13.6 percent) or “other” (15.7 percent [cord-marked, plain, unidentified]) sherds, at least based on MacCord’s (1970:116) original analysis, the time-depth of the Branchville phase occupation at site 44GV1 is uncertain. See note no. 72.

92. Green (1986) and Phelps and Heath (1998) overemphasized well-wiped or floated interior finishing as a wholly unique and consistently diagnostic characteristic of Cashie I series pottery, which subsequently caused some analysts confusion (e.g., Millis 2009).

93. In some instances, vessel interiors appear to have been covered with a thin (.50–1.0 mm) layer of slip before firing. While the observed patterns may be a function of the floating process, the interior surfaces of some sherds are slightly softer than the exterior surfaces or the inner cores of the same sherds, and there may be a distinct color difference between such thin interior surface layers and the remainder of the sherd. The color differences noted for such well-finished sherds are readily visible, even to the unaided eye, when one closely studies fresh sherd breaks. It may be that these sherds were simply very well-floated. Sherd thin section examinations or replication experiments are needed to clarify this peculiar phenomenon.

94. Owens (1993) reported that highly weathered surface collection sherds may or may not exhibit evidence of interior floating or smoothing. Heath (2002) noted that some Cashie II series vessels exhibit extreme interior surface use-wear, probably from the manipulation of contents (e.g., stirring, grinding, crushing, pounding, scraping). Such use-wear obliterates original interior surfaces, fully exposing paste temper clasts, giving vessels in this category an interior surface texture akin to very coarse sand paper. Hally (1983, 1986) discussed pottery use alteration and the potential for chemically induced corrosion of vessel interiors associated with hominy (lye solution) or hickory nut oil (tannic acid) processing.

95. Interestingly, the terms (*Peak*, *Ronoak*, *Wampum*) documented by Lawson (1969:203–204, 235 [1709]) were commonly known terms, probably trade jargon, adopted by English speaking traders, but the regional Carolina Algonkian (Pampticough), Tuscarora and Coree (Woccon) language terms differ (Lawson 1967:235).

96. In contrast, examples of shell bead production debitage were recovered from ca. 1650–1725 midden deposits at the Cape Creek site (31DR1), which was occupied by Croatoan Indians in that period (Heath 2008).

97. Hundreds of melted lead objects are found in the Neoheroka Fort site artifact assemblage. While most such specimens are probably melted pieces musket shot or ball, it is possible that some of the objects are bale seals.