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THE SARA AND DAN RIVER PEOPLES: SIOUAN COMMUNITIES IN NORTH CAROLINA'S INTERIOR PIEDMONT FROM A.D. 1000 TO A.D. 1700

by
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A dissertation submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Anthropology.

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ABSTRACT

JANE M. EASTMAN: The Sara and Dan River Peoples: Siouan Communities in North Carolina's Interior Piedmont from A.D. 1000 to A.D. 1700
(Under the direction of Vincas P. Steponaitis)

Seventeenth-century documents indicate that native communities of the North Carolina Piedmont experienced a great deal of change after European colonies were established along the Atlantic Coast. Some changes can be linked to participation in the deerskin trade, intensification of long-distance raiding and other forms of interregional hostilities, and the onset of epidemic disease. Several lines of evidence were examined to gauge the impact of these developments in the Dan River drainage. Analysis focused on mortuary behavior, community organization, and patterns of interregional interaction. These analyses indicate that the most significant changes occurred during the Late Contact period (A.D. 1670-1710).

This study indicates that communities built during the first half-century after Jamestown was settled exhibit only subtle changes from prehistoric communities in the area. Though there was continuation of basic prehistoric plan, Early and Middle Contact period villages (A.D. 1607-1670) exhibit greater differentiation of activity areas. A communal work area with large facilities for storage and food preparation was established. Several sites in the Piedmont provide evidence that communal feasting became increasingly important following contact.

Mortuary evidence indicates that epidemic diseases may have been introduced during this period. Initial responses to disease in the study area included premature abandonment of communities and flight from sites of outbreak.

Changes in mortuary items signal participation in the deerskin trade, with copper and/or brass beads, and later glass beads, replacing traditional shell beads. Prior to A.D. 1650, the Sara traded primarily with groups in southwestern Virginia for European goods coming through the Valley of Virginia. Later they began to trade with groups in the northeastern Piedmont who traded along the Occaneechi Trail from southeastern Virginia. By A.D. 1680, trade along the Occaneechi Trail eclipsed other sources of European goods.

During the Late Contact period several changes in community organization reflect the impact of epidemic disease and population decline. Houses and palisades were periodically dismantled and rebuilt, and segregated cemeteries were established. These changes are interpreted within the context of ritual protection from contagion through purification and renewal or spatial separation of disease victims.

ACKNOWLEDGEMENTS

Like most long-term projects, this one reflects the work of many individuals other than myself. The members of my graduate committee, Vin Steponaitis, Trawick Ward, Steve Davis, Clark Larsen, and Don Nonini, provided many stimulating suggestions along the way and helped me avoid many errors. Vin and Steve offered their ample editorial skills and greatly improved this manuscript from its initial draft. I am deeply appreciative of all their efforts. Trawick Ward and Steve Davis have been my mentors and friends since the day I first took a trowel in hand. I cannot adequately express how much their relationships have meant to me throughout my career and hope to never have to do without their wise counsel and kindness.

Several members of the archaeological community assisted me in the conduct of this research by making collections available. I would like to thank Keith Egloff, Tom Klatka, Michael B. Barber, Cliff Boyd, and Wallace Gusler for allowing me to look at site material from southwest Virginia. J. Ned Woodall allowed me to look at material from the Yadkin Valley. Assistance in identifying artifacts was provided by Jeffrey P. Brain, Margie Scarry, and Kittie Rainey. Outside the archaeological community, Alan Fedducia, Department of Biology, UNC Chapel Hill, and Roxie Laybourne, Bird Division, Smithsonian Institution, helped to identify a birdskin ornament, and Wenonah G. Haire, DMD, granted permission for the analysis.

I was assisted in the process of reconstructing pottery vessels from Upper Saratown by several members of the North Carolina Archaeological Society and students at UNC, including Robert (Whitey) Graham, Sarah Hopton, Tricia Samford, Annie Holm, and Ken Winter and his sons. Thank you for your interest and good company.

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Chapter I.

INTRODUCTION

During the second half of the seventeenth century, European explorers ventured for the first time into the piedmont of present-day North Carolina and Virginia. Some of these men left written descriptions of their interactions with native peoples in the region. Siouan-speaking groups living in the region at this time included the Sara, Tutelo, Saponi, Keyauwee, and Catawba. For more than fifty years scholars have sought to identify archaeological sites associated with these Siouan groups. Though longstanding, this archaeological and ethnohistoric scrutiny has been sporadic and was not formulated into a systematic research plan until the 1980s. Given that most of the archaeological research on North Carolina Siouan groups has consisted of individual projects and salvage excavations rather than an integrated research program, some basic questions remain unanswered.

Some of these basic questions include documenting the specific historic locations and movements of different ethnic groups around the Piedmont and tracing those groups into the prehistoric era. As it is often not possible to make any definite conclusions about the ethnic affiliation of an archaeological culture, many of these questions can not be approached at present. The staff and students of the Research Laboratories of Archaeology

(formerly known as the Research Laboratories of Anthropology) of the University of North Carolina at Chapel Hill (RLA) have gathered enough information to correlate some archaeological sites with individual historically-documented groups in the Haw, Eno, Dan, and Catawba drainages (Dickens et al. 1987; Moore 1999; Ward and Davis 1993; Wilson 1983). In many cases, however, only one site location has been identified for a given group, hampering studies of how communities changed during the Contact period.

The upper Dan drainage is an exception to this situation. Several sites have been investigated that appear to have been associated with the Sara, a Siouan tribe who occupied the upper Dan drainage when the area was first described by European explorers. The Sara were one of the larger Siouan tribes of the North Carolina and southern Virginia Piedmont and, by the last quarter of the seventeenth century, were actively involved in the deerskin trade with Virginia traders from the James River basin. Archaeological sites along the Dan River provide evidence for at least a dozen separate occupations that span the period A.D. 1000 to 1700. This study addresses questions of diachronic change in material culture, community patterns, mortuary practices, and regional interactions.

Refinements are made in regional pottery and clay pipe chronologies through seriation and absolute dating techniques. The regional chronology of Late Prehistoric and contact period sites in the study area is evaluated on the basis of these refined artifact chronologies and on the distribution of European-manufactured trade goods. This study provides new interpretations of the occupation spans for several of these sites and this altered chronology supports an alternative scenario for the development of the deerskin trade in the Dan River drainage than the one proposed by Ward and Davis (1993). This alternative scenario will be compared to Ward and Davis' (1993) reconstruction in the final chapter.

In addition to questions of site chronology, several analyses in this study explore the effects of changes in long-distance trade, the onset of epidemic disease, and subsequent population loss during the Contact period on gender- and age-based relations within Sara communities. Community organization and mortuary practices will be used to explore these issues from the Late Prehistoric through the Contact period.

My arguments regarding these issues will be presented in five chapters. Chapter 2 provides a spatial and temporal context for the study. Once my research questions have been described within a wider temporal and spatial setting, chronological analyses of archaeological assemblages from the upper Dan drainage are presented in Chapter 3. The results of these analyses will inform subsequent analyses in this study. The focus of the second half of this study is on interpreting political and social relations and gender- and age-based roles in the study area. Analyses of community organization and mortuary treatment in Chapters 4 and 5 respectively provide the basis for investigating these issues. The final chapter presents a historical sequence of long-distance trade relations in the area beginning in the Late Prehistoric and extending to the end of the Contact period. In this analysis, the Virginia-based fur trade is considered in context with other long-distance trade systems that the Sara were involved. Though the colonial fur trade is analyzed within a framework of inter-community exchange that is based on indigenous systems, I recognize the unprecedented demand-side characteristics of the fur and hide trade, and the unique health consequences of Native American-European contact. An alternative model of the development of long-distance exchange in the Dan River is proposed and this model is compared to current interpretations.

Chapter II.

ENVIRONMENTAL, ARCHAEOLOGICAL, AND HISTORICAL CONTEXT

The upper Dan drainage is located in the northern North Carolina and southern Virginia Piedmont. Its headwaters originate in the Blue Ridge region of western Virginia and flow into the Roanoke River in south-central Virginia near the town of Clarksville. Broad, fertile flood plains developed in many areas along the main channel of the Dan in northern North Carolina. Several villages were built on these flood plains between A.D. 1000 and 1700. Seventeenth and eighteenth century documents indicate that a Siouan group known as the Sara lived along the river in what is now Rockingham County, North Carolina. Place names on historic maps of the region indicate a possible second Sara town located in southeastern Stokes County upstream of the Rockingham County site. The Rockingham County site area is known as Lower Saratown and the Stokes County site area is known as Upper Saratown (Figure 1). These areas have been the focus of research at the RLA since 1938. A third site area of special interest here is the Madison site (31Rk6), which is located on the south side of the Dan just upstream from its confluence with the Mayo River. The Madison site is situated between the Upper and Lower Saratown localities (Figure 1).

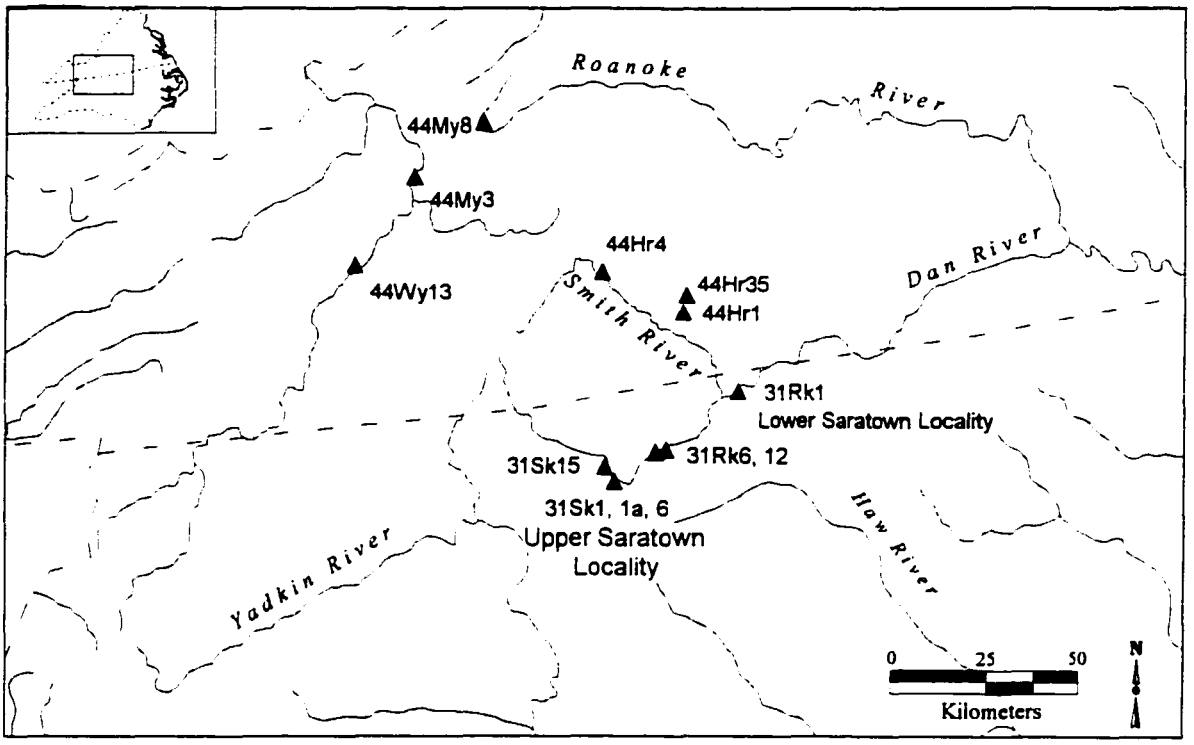

Figure 1. Selected archaeological sites in southern Virginia and the northwestern Piedmont of North Carolina.

The upper Dan River drainage is located on the western edge of the Piedmont Physiographic Province in an area with access to a wide range of geographic and cultural areas. The headwaters of the Dan provide access to the Ridge and Valley province and the Ohio Valley to the northwest. The Dan River joins the Roanoke River near the spot where an important trading path forded the river. This path was a prehistoric trail that became a main avenue of trade for the seventeenth- and early eighteenth-century deerskin trade out of the Virginia colony. The Roanoke River discharges into Albemarle Sound in what is now Bertie and Washington counties, North Carolina. In the seventeenth and early eighteenth centuries this region was the homeland of the Tuscarora. Trails provided access to the Appalachian

Summit and Lamar cultural area to the southwest, the Yadkin and Haw river valleys of the Piedmont to the south and east, and the Roanoke and James river valleys of the Virginia Piedmont and Coastal Plain to the north and northeast.

Physical Setting

Upper Saratown, Lower Saratown, and the Madison site are located in the Dan River Triassic Basin of the Piedmont Physiographic Province. The Piedmont is a region of northeast-trending metamorphic belts. Topographically, it is a subdued upland interrupted by isolated monadnocks with relief of up to several hundred meters (Feiss et al. 1990). The Sauratown Mountains, situated northwest of the study area, are a series of monadnocks that rise nearly 500 m above surrounding landforms. Within the Dan River Triassic Basin, the topography is generally 15 to 100 m lower than surrounding metamorphic terrain. Relief within the Dan River basin is high and characterized by linear strike ridges and narrow valleys (Olsen et al. 1990:144).

The Dan River basin is the southern part of the Dan River-Danville basin that extends from southern Stokes County to Appomattox County, Virginia, and is situated between the metamorphic Milton belt to the east and the Sauratown Mountains anticlinorium to the west. The width of the Dan River Triassic Basin is about 5 km at Upper Saratown (31Sk1a) and about 8 km around Madison (31Rk6) and Lower Saratown (31Rk1). The southeastern edge of the basin, in the vicinity of Lower Saratown and Madison, is an irregular contact between the Triassic sediments and metamorphic rocks of the Milton belt. This boundary is faulted in

places. The basin's northwestern boundary with the Sauratown Mountains anticlinorium is formed by a line of normal faults (Olsen et al. 1990:158).

The basin, like most of the eastern North American Newark Supergroup basins, is characterized by tripartite stratigraphy. The three rock formations in the basin consist of northeast-trending, downfaulted sedimentary shale, sandstones, mudstone, and siltstones. These rocks are relatively hard and brittle (Olsen et al. 1990:142-144). The adjacent Milton belt is characterized by foliated gneiss and schist, quartzite, and marble (Butler and Secor 1990:66). The Sauratown Mountains anticlinorium consists of stacked thrust sheets of gneisses, schist, with exposures of quartz, and quartzite (Butler and Secor 1991:36-42). Woodall (1984:8) reports that chalcedony, a micro-crystalline quartz sedimentary rock, occurs near a tributary of the Dan close to the town of Danbury, in Stokes County. Outcrops of medium and fine-grained metasedimentary tuffs occur within 50 km southeast of the basin in the Carolina Slate Belt. The Dan River basin is situated equidistant from outcrops of fine-grained rhyolitic tuffs in the Uwharrie Mountain portion of the Carolina Slate Belt and abundant chert sources in the Ridge and Valley Province (Carpenter 1982). Both source areas are located within 100 km of the Dan River basin.

The study area includes portions of Stokes and Rockingham counties and soil classifications differ in the two counties. Despite the differences in classification, soil descriptions and map unit delineations are consistent across county boundaries. Soils at Upper Saratown are part of the Riverview-Toccoa-Chewacla soil unit (Leab 1995), while the comparable soil units at Madison and Lower Saratown in Rockingham County are assigned to the Chewacla-Congaree-Wehadkee Association (Sherrill 1992). These soils occur along

the Dan River and major tributaries like Town Fork Creek and vary from well drained to somewhat poorly drained. They formed in recent alluvium and have loamy surface layers and subsoils.

Sites at Upper Saratown are situated on Riverview and Toccoa soils. Mapped units of this type usually contain narrow bands of both Riverview and Toccoa soils. Typically Toccoa soils are located closer to stream channels than Riverview soils. An extensive area of Dogue fine sandy loam is mapped on an older stream terrace west of the sites. This map unit has a subsurface zone of plastic clay that might have been a source of clay for manufacturing pottery at the sites.

Riverview loam is well drained and moderately permeable, while Toccoa loam is well to moderately well drained with moderately rapid permeability. Surface runoff is slow in both soils and the hazard of erosion is slight. Depth of the seasonal high water table varies from .75 to 1.5 m below surface. Riverview and Toccoa soils are rare in Stokes County, accounting for only 4.3% of the county's acreage. Most areas of Riverview and Toccoa soil are used as cropland, with the remainder in use as woodland or pasture. The main hazard to agricultural crops is flooding. Forested areas are dominated by American sycamore, green ash, sweetgum, yellow-poplar, and eastern cottonwood.

Lower Saratown and Madison are located within the Chewacla-Congaree-Wehadkee Association. These flood plain soils are nearly level, deep, and can vary from well to poorly drained. They are characterized by loamy surface layers and subsoils. This map unit is fairly uncommon in Rockingham County, accounting for only 6% of soils. Lower Saratown and Madison are situated on Congaree loam. In the Lower Saratown area some sandier spots are

mapped along the river's edge. Congaree loam formed in alluvium on broad flood plains and is found on slightly elevated positions and natural levees adjacent to major rivers and creeks. Slopes of landforms with Congaree loam range from 0-2%.

Bottomlands with this soil type are subject to frequent floods for brief periods in winter and spring, and the seasonal high water table is between .75 and 1.2 m below the surface. Congaree loam ranges from strongly to slightly acid, and most horizons are micaceous. Currently, areas of Congaree loam are used mainly as cropland. In forested areas, this soil type is characterized by Virginia pine, shortleaf pine, yellow-poplar, sweetgum, sycamore, walnut, persimmon, willow oak, black oak, post oak, southern red oak, crimson oak, beech, and river birch.

Summers in the upper Dan drainage are long and hot, while winters are cool, fairly short, and punctuated with brief cold periods of a few days duration. The average winter temperature in Stokes and Rockingham counties is 3°C (37°F) and the average daily minimum temperature is –3 °C (26°F). The average summer temperature is 23°C (74°F) and the average daily maximum temperature is 29°C (85°F). Precipitation is fairly heavy throughout the year and summer rainfall is adequate for all crops. The total annual precipitation is about 1 m, with over half of that total falling between April and September. The growing season of most crops falls within this five-month period. In summer the sun shines an average of 65% of daylight hours. This percentage falls to 55% during the winter (Leab 1995; Sherrill 1992).

Climatic conditions during the Protohistoric and Contact periods were somewhat cooler than current conditions as described above. Lamb (1963) estimates that on average

temperatures were more than 3°C (5°F) lower than at present from around A.D. 1430 to 1850. This period, known as the "Little Ice Age," was a time of more harsh winters and fewer frost-free days than current conditions. Thus, the growing season during the time the Saratown sites were occupied may have been slightly shorter than at present (Holm 1994).

In her analysis of aboriginal land management practices in Virginia, the Carolinas, and Georgia, Hammett (1992) stressed the dynamic relationship between humans, plants, animals, and the environment. This relationship renders inadequate any static description of "the natural environment" in which a site is located. She contended that immediately before European contact ecosystems in the southeastern United States consisted of a "shifting mosaic of patches." Patches are somewhat discrete areas with environmental characteristics different from those that surround it. Hammett (1992:3) added that patches are areas where specific resources are perceived to be concentrated. She argued that, through a combination of controlled burning and clearing, a "heterogeneous mosaic" of patches in various stages of ecological succession were initiated and/or maintained by native groups in the Southeast. Examples of such maintained patches include: cleared hunting camps within forested areas away from permanent settlements; fields and gardens near settlements; edge areas and meadow areas bordering habitation sites; old agricultural fields; parklands and orchards surrounding established settlements; wetlands, swamps, and marshes; and waterways (Hammett 1992:34). The maintenance of these varied, enriched microenvironments likewise increased the richness and productivity of many important animals and plant crops.

Plant remains recovered from Upper and Lower Saratown include nuts (hickory, acorn, walnut, chestnut, and hazelnut), cultigens (maize, common beans, gourd), seed plants

(chenopod, knotweed, little barley, and maygrass), and fruits (persimmon, grape, bramble, plum, maypops, watermelon, and peach) (Gremillion 1989, 1993). Faunal samples from Upper Saratown include mammals (white-tail deer, opposum, rabbit, woodchuck, squirrels, beaver, wolf/dog, foxes, black bear, raccoon, skunk, and mountain lion), birds (passenger pigeon, mallard, turkey vulture, hawk, grouse, and turkey), reptiles (several species of turtles, water snakes, and poisonous and non-poisonous snakes), amphibians (including frogs and toads), and fish (including many fresh water species and salt-water flounder). The most important food animals, as measured by biomass, were deer, box turtle, turkey, bear, squirrels, raccoons, and mud turtles (Holm 1994).

Land management, hunting, fishing, collecting, and gardening were accomplished within an annual cycle of activities. Hammett (1992) constructed a graph of seasonal activities based on observations by Captain John Smith of the Indians of southern coastal Virginia. She felt that this schedule of subsistence activities is applicable to the present research area. This annual cycle of activities includes: gardening and field cropping from late spring through fall; plant gathering from early spring to early winter; fishing from spring through late summer; and hunting from late fall through mid summer (see Figure 2). In egalitarian communities like those that characterized the North Carolina Piedmont, the assignment of specific tasks within this system was probably based on an individual's gender and age. This seasonal round of activities was combined with techniques of food preservation and storage to provide year-round sustenance. Spring was the leanest season and the time when stored foods were most important.

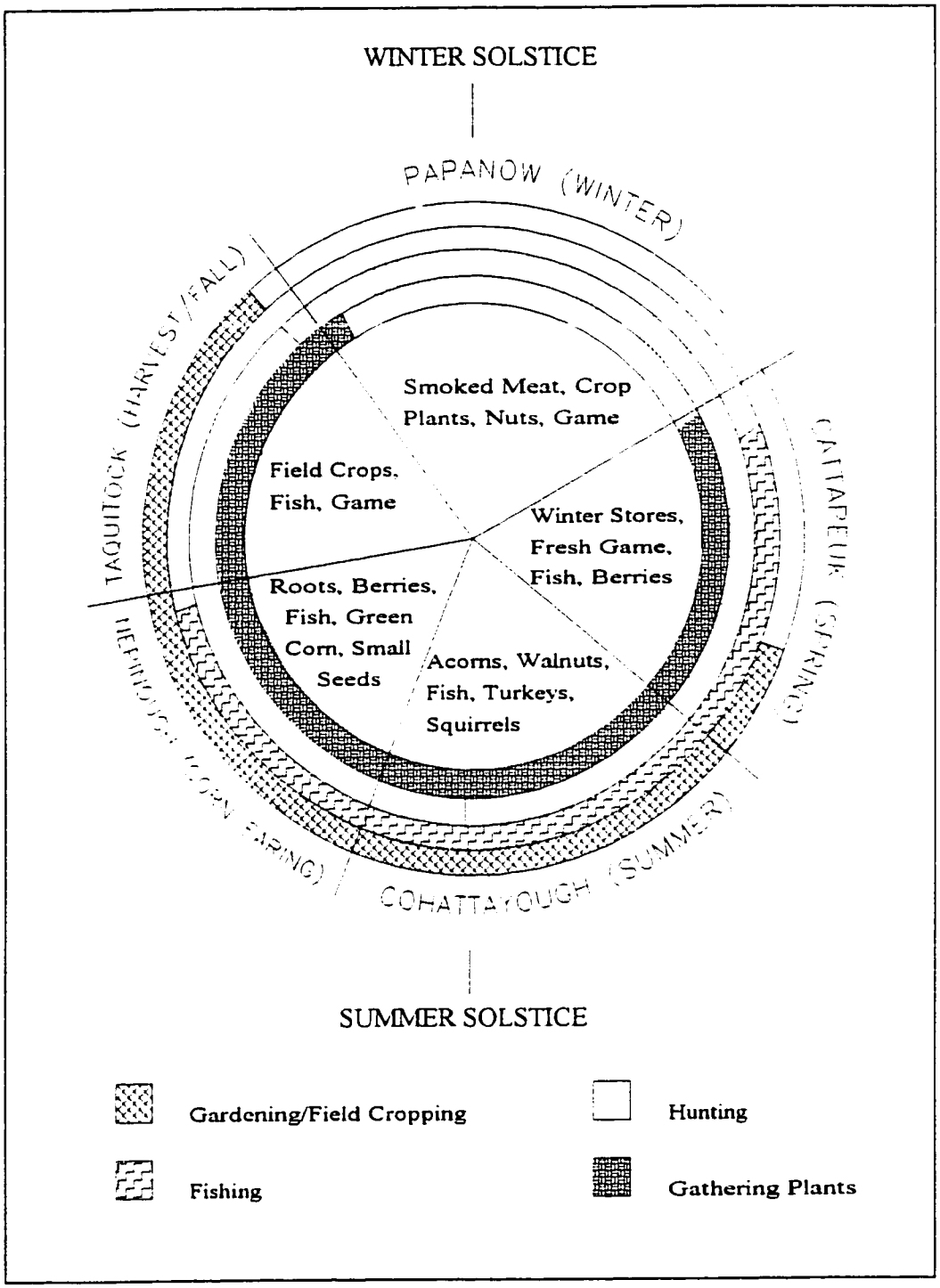

Figure 2. Annual round of subsistence activities (from Hammett 1992). Reprinted with permission from the North Carolina Archaeological Society.

Gremillion (1989) considered the effect of the colonial fur trade on this seasonal round of activities and found some evidence to suggest that, by the end of the seventeenth century, agricultural activities in the upper Dan drainage may have been disrupted. In her analysis of plant remains from Lower and Upper Saratown, she noted a decline in the relative frequency of cultigens from the first half to the second half of the seventeenth century. One possible explanation for this observed disruption would be the extension of the winter hunting season in an effort to procure more hides for the fur trade. Such an extention of the hunting season could have resulted in scheduling conflicts with spring planting. Gremillion (1993:456) proposed this as a likely scenario, but stressed the potential complexity of any explanation of the observed changes in the ethnobotanical record for the upper Dan drainage.

Archaeological Background

Ward and Davis (1993) developed a chronological framework for the Late Prehistoric and Contact periods in the study area. This framework established archaeological phases to describe the material culture patterns observed in the upper Dan Drainage from A.D. 1000 to 1710 (Table 1). My use of archaeological phases conforms to Ward and Davis' framework as it is presented below; however, I make reference to chronological periods as well. The chronological periods reflect more specific dates known from written documents. I use period designations as a basis for finer temporal divisions during the seventeenth century. Rather than the single archaeological phase proposed by Ward and Davis for the period between A.D. 1620-1670, I believe that sufficient differences are present in archaeological

assemblages from the Early and Middle Contact period to allow for this fine temporal distinction.

Table 1. Chronological Framework for the Upper Dan Drainage.

Chronological Period	Period Date Range	Archaeological Phase	Phase Date Range	Ceramic Series
Late Contact	AD 1670 – 1710	Late Saratown Phase	AD 1670 - 1710	Oldtown
Middle Contact	AD 1650 – 1670	Middle Saratown Phase	AD 1620 - 1670	Oldtown
Early Contact	AD 1607 – 1650			
Protohistoric	AD 1500 – 1607	Early Saratown Phase	AD 1450 - 1620	Oldtown
Late Prehistoric	AD 1000 – 1500	Dan River Phase	AD 1000 - 1450	Dan River
		Uwharrie Phase	AD 500 - 1200	Uwharrie

A number of archaeological sites will be discussed in this study. Following is an introduction to each site and a description of the excavations conducted there.

Upper Saratown site (31Sk1a)

As early as 1963, archaeologists at the RLA were aware of the location of a Contact period site on the west side of the Dan River near the town of Walnut Cove in Stokes County (Keel 1972:3). The site location was indicated by concentrations of artifacts in the south end of a large floodplain west of the river, north of its confluence with Town Fork Creek. The site was the focus of vigorous pothunting during the following years.

Intensive excavations were conducted by the RLA from 1972 to 1981 to salvage information being destroyed by this activity. Over 1,524 m^2 (16,400 ft^2) of the site area and a total of 225 pit features and 111 human burials were excavated (Figure 3). Thousands of postholes

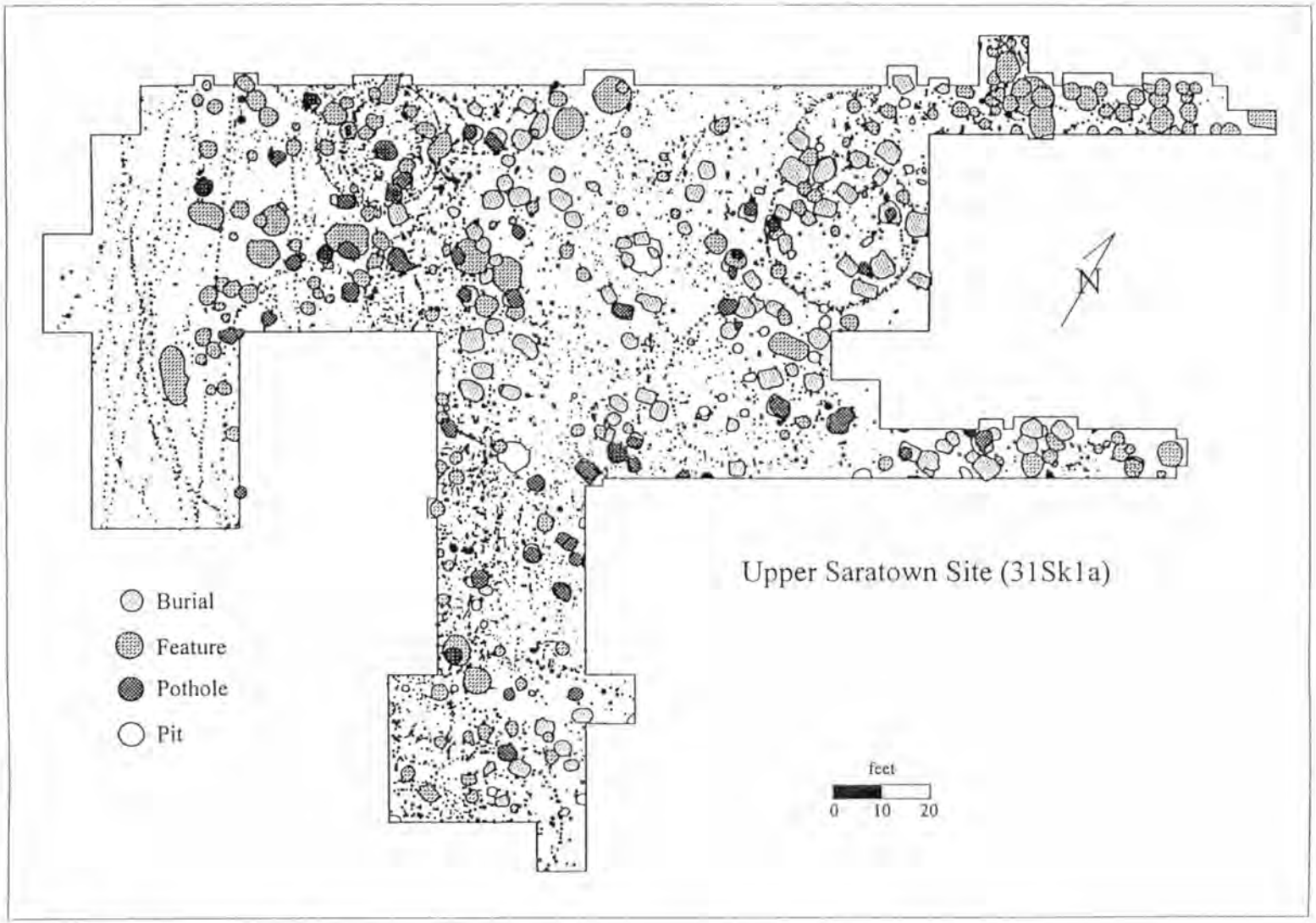

Figure 3. Plan of the Upper Saratown excavation block.

were mapped and approximately half were excavated and recorded. Wilson identified portions of at least four palisades and 13 circular structures in the excavation block (Wilson 1983:474). These excavations investigated approximately one-quarter of the site area and uncovered what was thought to be a late-seventeenth-century palisaded village site. The collections include a large quantity of trade items that indicate the site's occupants were heavily involved in the fur trade out of the Virginia colony.

Hairston site (31Sk1)[1]

Another concentration of artifacts just upstream from Upper Saratown and in the same field marked a second village site. Wilson (1983) noted that a ring of darker soil was visible there when the field was plowed. This site had been looted earlier than Upper Saratown and it was feared that it had been more thoroughly disturbed. During the summer of 1981 a test trench was excavated at this site by Jack Wilson and a field crew from the RLA. The goal of this exploration was to determine the site's chronological relationship to Upper Saratown and to evaluate the extent of pothunting.

The test trench was placed at the southeastern edge of the site area as indicated by the surface scatter of artifacts and discolored soil. This trench was 30.5 m (100 ft) long and exposed 116 m^2 (1,250 ft^2) of the site. Forty pit features and six human burials were excavated. Over one hundred postholes were mapped, and Wilson (1983:379) tentatively identified a palisade line and portions of two circular structures (Figure 4).

Few artifacts from excavated features were of non-aboriginal origin. Only one artifact included as a burial association may be of European origin, but it is very likely that this

[1] Wilson named this site Early Upper Saratown, but I use the property owner as of 1981 to identify the site.

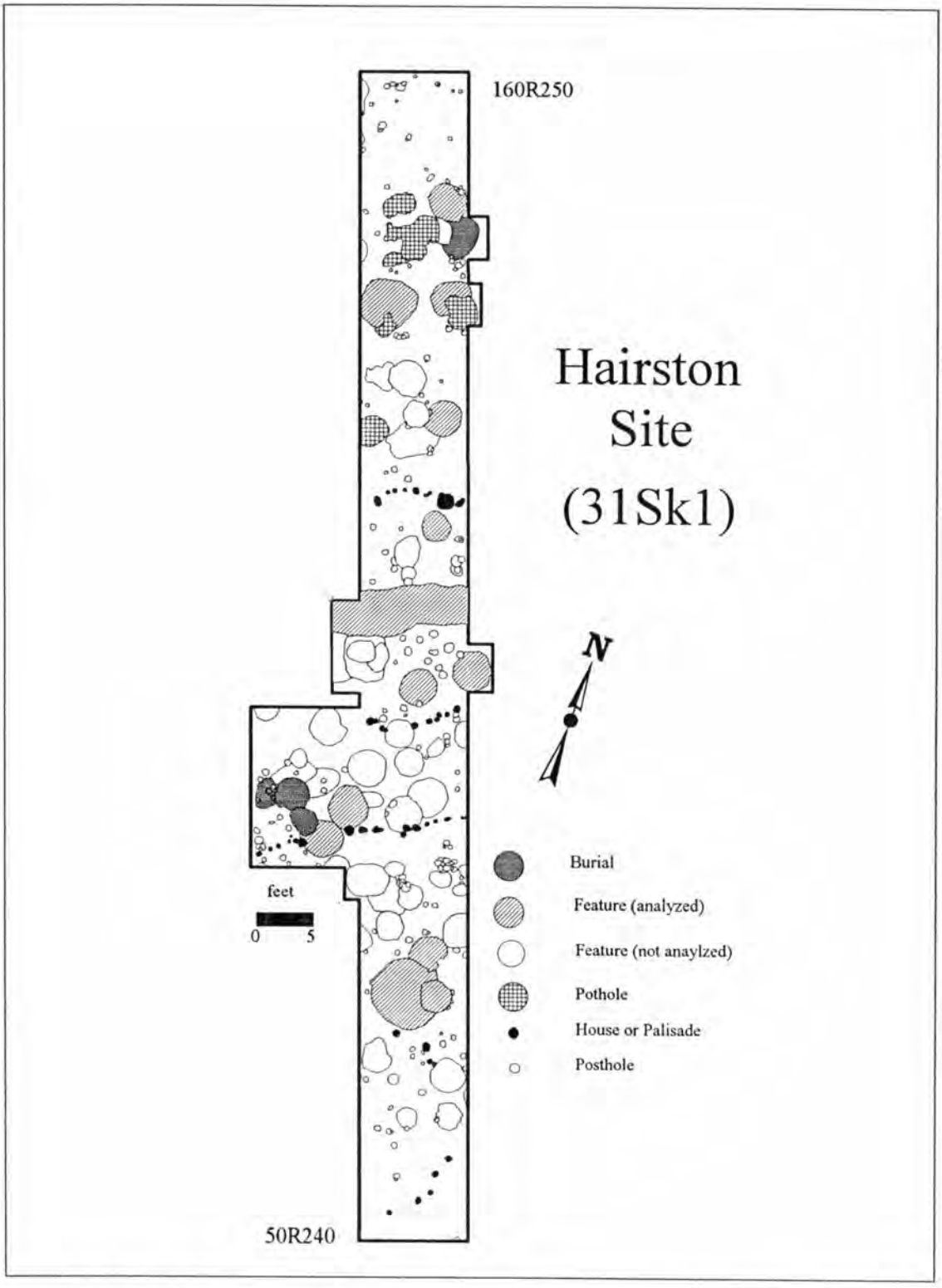

Figure 4. Plan of excavation trench at the Hairston site.

gorget is made of native copper rather than European copper alloy. Wilson (1983:385) concluded that the site was occupied during the late Protohistoric or early Contact period and he estimated a date of occupation around A.D. 1650.

Nifong site (31Sk15)

Salvage excavations were conducted at the Nifong site in the spring of 1997 by Coastal Carolina Research, Inc. (Eastman et al. 1997). This site is located just north of US Highway 311, approximately 300 m north of Hairston. Aboriginal pit features were identified in the walls of a ditch excavated as part of a project to replace the highway bridge over the Dan River. The North Carolina Department of Transportation (NCDOT) provided for archaeological documentation of the ditch walls and excavation of three blocks within the site. A 200 m section of the ditch walls were cleaned, mapped, and photographed. All cultural features disturbed by the ditch were later excavated. In addition, three excavation blocks were investigated exposing 66 m^2 of the undisturbed site area. Sixteen pit features and 44 aboriginal postholes were identified at the site (Figure 5). In addition, other subsoil stains, a modern posthole, and tree disturbances were recorded. One circular structure was identified at the site. The pit features represent shallow basins, storage pits, and refuse pits associated with this house. Ceramic analysis and two radiocarbon dates from the site indicate that the site was occupied during the Protohistoric period, probably during the sixteenth century (Eastman et al. 1997).

William Klutz site (31Sk6)

This site is also located in the vicinity of Upper Saratown. It is approximately 500 m southeast of the site and on the opposite side of a creek. Limited excavations were conducted at

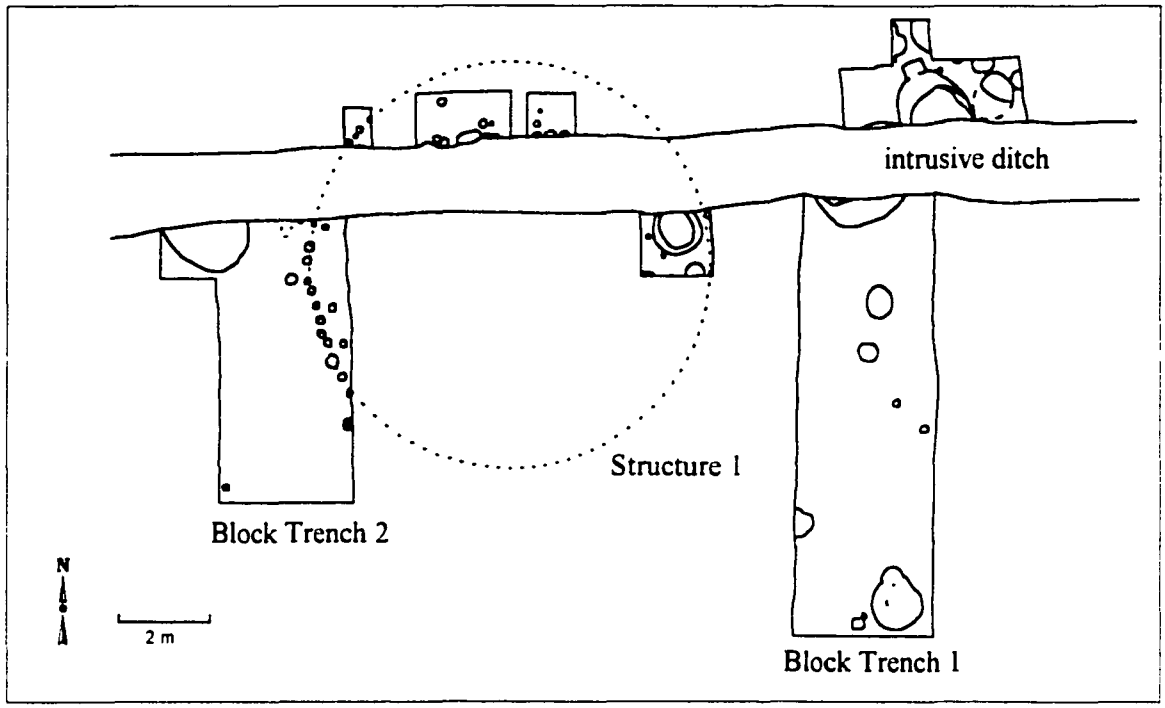

Figure 5. Plan of central excavation area at the Nifong site (map courtesy of NCDOT and

this site during the summer of 1988 by the RLA as part of the Siouan Project (Ward and Davis 1993). Like Upper Saratown, this site was also extensively looted during the 1960s and early 1970s. Numerous surface collections were made of this site by RLA archaeologists while excavations were being conducted at Upper Saratown, but it was never tested. Following intensive auger testing within a 1,370 m^2 (14,750 ft^2) area, three spatially segregated excavation blocks totaling 185 m^2 (2,000 ft^2) were investigated. Fifty-five features were identified in the excavation. Of these, 11 were potholes, 19 were probable burials that were not excavated, 12 were burials, and 11 were pit features (Figure 6).

Two occupations were identified within the excavation blocks. Six late prehistoric pit features dating to a thirteenth-century Dan River phase occupation were excavated. The Late

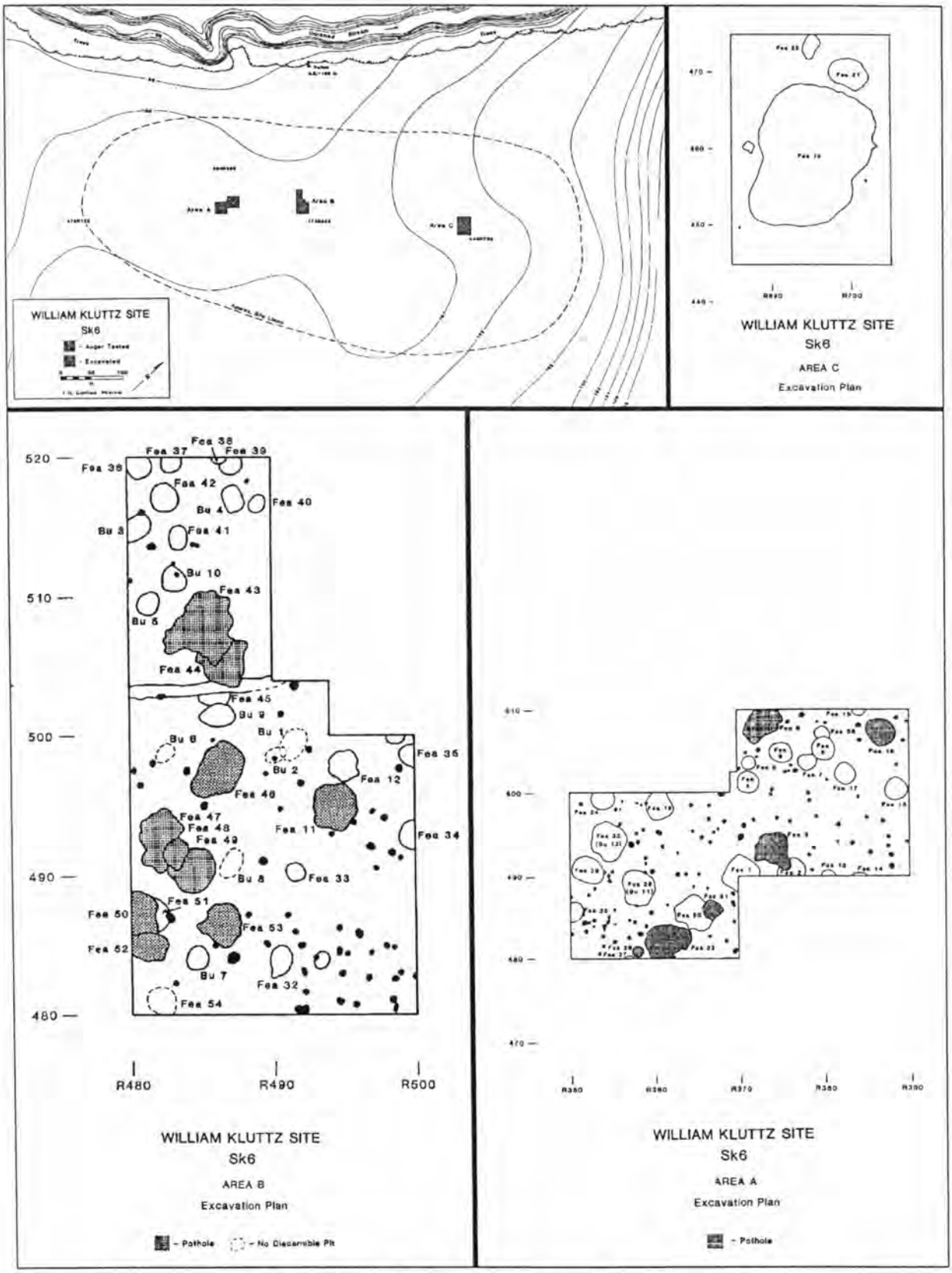

Figure 6. Plan view of block excavations at the William Kluttz site (map courtesy of RLA.

Saratown phase component consisted of three pit features and 12 human burials. Another 19 mapped pits that looked like burials were not excavated, but probably also date to the Late Contact period. Although nearly 200 postholes were mapped at the site, no clear architectural patterns were detected. The excavation blocks uncovered part of a Dan River habitation site and a Late Contact period component consisting of a cemetery and an area with large, artifact-rich basins. The large basins appear to have been located outside the Late Contact period habitation area (Ward and Davis 1993:285).

Lower Saratown (31Rk1)

This site is located on the south side of the Dan approximately 1.2 km east of the town of Eden, in Rockingham County. The Smith River joins the Dan about 5 km west of the site and a smaller tributary named Town Creek is just east of the site. Using ethnohistoric accounts, Douglas Rights concluded that a Sara village was located in this vicinity late in the seventeenth century (see Ward and Davis 1993:5-6). William Byrd's 1733 description and map indicated that an abandoned Sara village was located along the Dan River near Town Creek.

Following up on Rights's ethnohistoric research, Joffre L. Coe decided in 1938 to conduct excavations at this site, identified as Rk^{v}1. Following limited excavations (550 ft^2), the site was interpreted as the location of Lower Saratown. Ernest Lewis described these excavations in his 1951 Master's thesis at the University of North Carolina at Chapel Hill. He supported Coe's idea that Rk^{v}1 was the location of Lower Saratown and suggested that the Sara were living on the Dan by 1673 and perhaps earlier (Lewis 1951:27).

Additional archaeological work in the Dan drainage during the 1970s led to doubt about this site's chronological placement (see Gardner 1980). Though the location fit Byrd's

description, no historic artifacts were recovered from undisturbed contexts during the 1938 excavation. Additional excavations in 1988 uncovered evidence of a second village site (Figure 7) at the location that appears to date to about 1650 (Ward and Davis 1993). The historic village component uncovered by these excavations probably represents the remains of Lower Saratown mentioned in William Byrd's account. The site appears to have been occupied during the Early Contact period, prior to any of the recorded explorations of the area by Virginians. The 1988 excavation block revealed two superimposed house patterns, a portion of a palisade line, 47 pit features, and one human burial (Ward and Davis 1993:182).

Madison site (31Rk6).

In 1966 and 1967 another historic village site was investigated along the Dan River between Upper Saratown and Lower Saratown. This site was excavated by several people including amateur archaeologist R. P. Gravely, Jr., of Martinsville, Virginia. Most of the human remains, associated artifacts, and Gravely's site records were later donated to the RLA by him. Human remains from 45 of the 130 excavated burials and artifacts associated with 33 of those burials are currently housed at the RLA. All features and burial pits were mapped and associated artifacts were catalogued. Unfortunately, material from pit features was not kept separate by context.

Gravely (1969) referred to the site as a cemetery rather than a village because of the large number of burials he encountered. He felt that the village remains he uncovered were not substantial enough to account for the number of human burials (Figure 8). This site undoubtedly represents a village with a large number of associated burials, but no structures were identified during the excavation. Most of the 130 burials that were excavated contained

European trade goods. Gravely estimated that the site dated to the last quarter of the seventeenth century, thus making it roughly contemporaneous with the Upper Saratown site.

Aboriginal Settlement

In considering population density in the Haw, Eno, Flat, and upper Dan drainages of the North Carolina Piedmont from the Late Prehistoric through the Contact period, Simpkins (1992) found that the quantity of sites and projected total population was probably greatest in

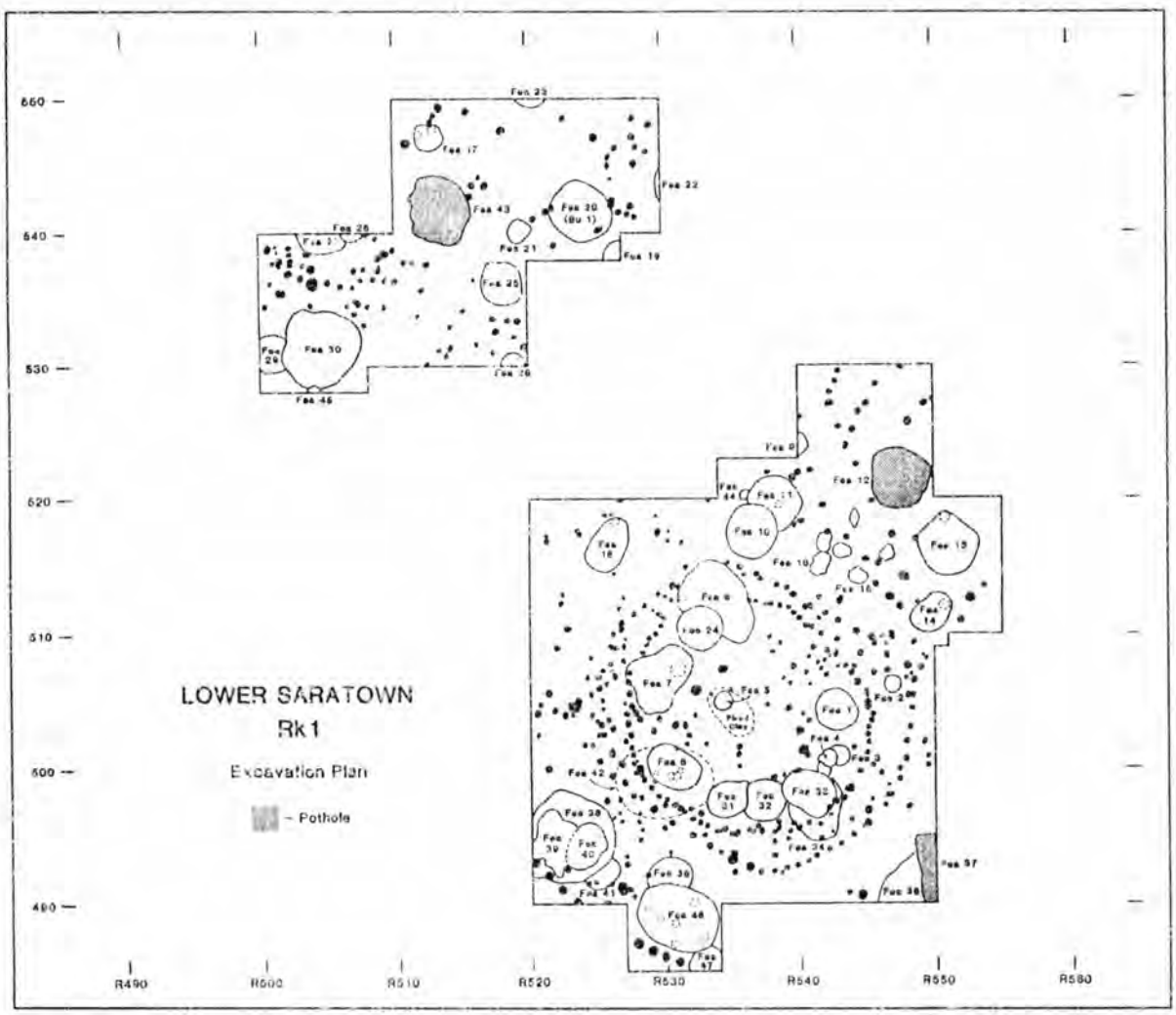

Figure 7. Plan of the excavation block at Lower Saratown (from Ward and Davis 1993).

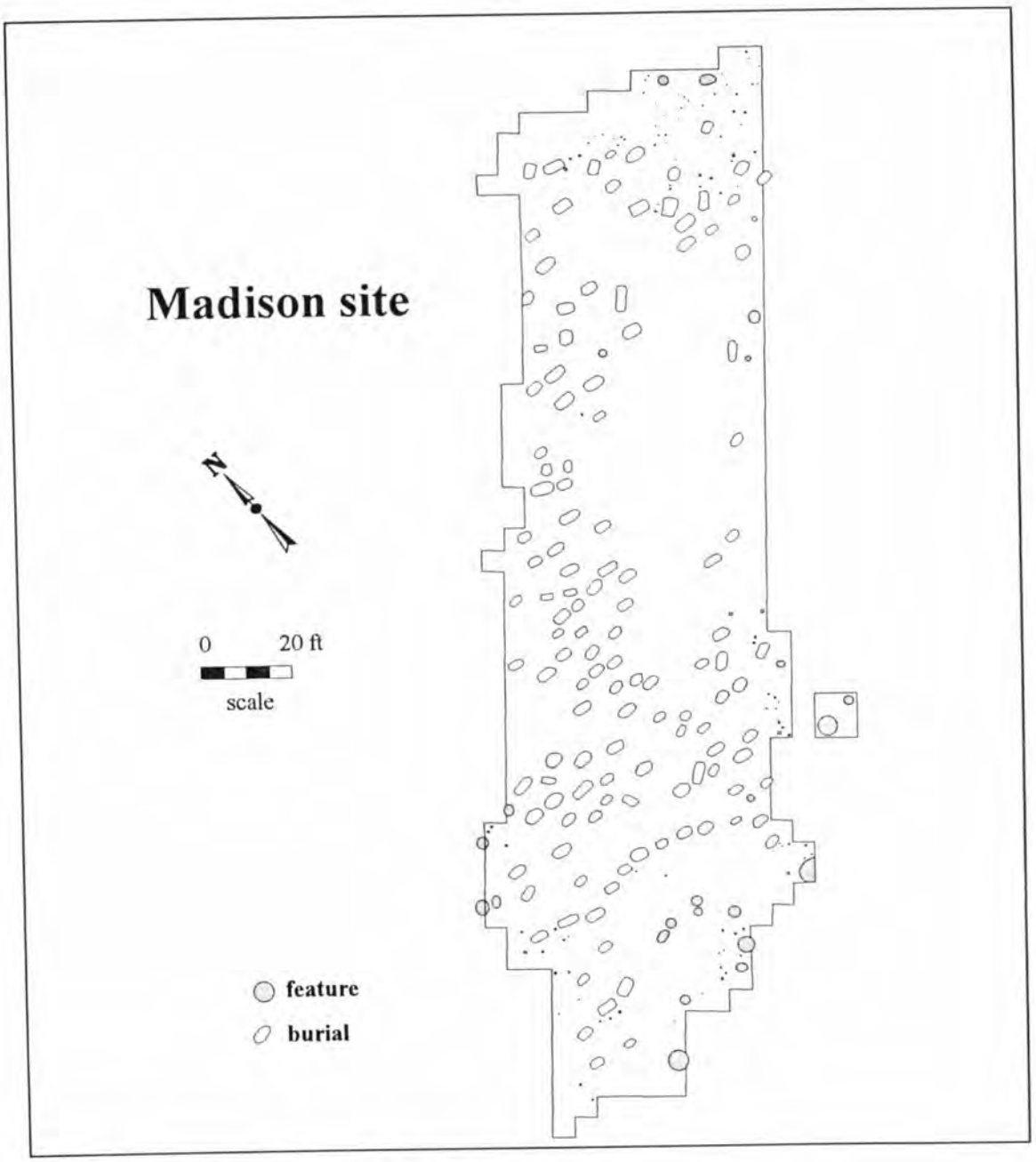

Figure 8. Plan of excavation at Madison.

the Dan drainage. He proposed that the high population in the upper Dan drainage may have been linked to the more extensive flood plains there relative to flood plains in the other piedmont drainages he considered.

Late Prehistoric period occupations in the upper Dan River drainage have been classified as either Uwharrie phase or Dan River phase. The Uwharrie phase appears to predate the Dan River phase, though some overlap occurs in the date ranges for the two phases as indicated by radiocarbon dating (Eastman 1994). Most Uwharrie and Dan River series pottery has exteriors with net impressions, but fabric impressed and brushed exteriors are much more common surface treatments in Uwharrie assemblages than in the Dan River series. Uwharrie and Dan River pottery are also distinguishable on the basis of vessel form and decoration (see Chapter III). The Dan River series is thought to have developed from the Uwharrie series (Coe and Lewis 1952).

Uwharrie pottery is found in a large area of the Piedmont, including the Dan, Yadkin, Catawba, northern Broad, Haw, and Eno river valleys. The Grayson series, defined in southwest Virginia, is comparable to the Uwharrie series. Very few Uwharrie phase sites have been intensively excavated and little is known about the range of settlement types. Some sites appear to represent compact settlements (Howell and Dearborn 1953; Keel 1972; Newkirk 1978) while others may represent dispersed households (Ward and Davis 1993). Nothing is known about the distribution of Uwharrie phase sites in the Dan River drainage.

In contrast to the dearth of information about the Uwharrie phase, Dan River phase settlement has been well documented within the drainage. Davis and Ward (1991) indicate that Dan River phase sites have been identified in most alluvial bottoms in the upper Dan

drainage. Early Dan River phase sites appear to lack formal internal arrangement and probably represent small clusters of circular and rectangular houses and associated subsurface features and burials. These types of settlements tend to be around one-half acre in size and are found along stream terraces (Simpkins 1992).

By A.D. 1300 or 1350, Dan River phase settlements became larger (one to two acres) and more formally organized. Late Dan River phase villages have between 15 and 25 houses surrounding a plaza and they are usually palisaded (Davis and Ward 1991:48). This change in site structure probably reflects an increase in population and appears to be associated with an intensification of maize agriculture (Davis and Ward 1991; Simpkins 1992; Ward and Davis 1993). Simpkins found no evidence for a settlement hierarchy among contemporaneous Dan River phase hamlets or villages in the study area.

The current understanding of the Protohistoric period in the Dan River drainage (A.D. 1500-1607) is based largely on excavations from Hairston. This site was thought to be a large, intensively occupied village approximately 2.5 acres in area. The site's large size, high density of pit features, and thick midden have led researchers to suggest that community size, social complexity, and agricultural intensification in the Dan drainage reached their apogee during the Protohistoric period. Exotic engraved marine shell gorgets in burials from this site have bolstered the interpretation that greater social stratification is represented by the mortuary practices at Hairston than by any earlier site in the area. Few protohistoric sites have been identified in the area, suggesting that the more numerous late prehistoric communities may have reorganized and formed larger communities or towns during the Protohistoric period. The Oldtown ceramic series supplants the Dan River series during the

Protohistoric period. Oldtown pottery retains many Dan River characteristics, but includes new vessel forms and exterior surface treatments and decoration. These changes reflect influences from the Lamar pottery region of the interior southeast and southern Appalachians. In addition, engraved shell gorget styles from Hairston are like those found throughout the southern Appalachian area and southwestern Virginia. This evidence suggests that the occupants of Hairston may have been organized within a dispersed regional system that included sites in several adjacent river drainages (Simpkins 1992:173).

Hudson (1990:91-94) proposed that during the sixteenth century the Sara may have been subject to the weakly organized chiefdom of Guatari, located to the south of the study area. The chief of Guatari, Guatari Mico, was a woman and Orata Chiquini, a lesser chief, was also a woman. No less than 39 villages were subject to Guatari. Hudson placed these affiliated towns on the Yadkin and its tributaries, though he does not rule out the possibility that towns in the upper Dan and Haw river drainages may have been within Guatari's chiefdom. Guatari Mico's town has not been identified archaeologically, but Hudson's reconstruction of Juan Pardo's route places it near Salisbury, North Carolina.

The possible connection between Hairston and Guatari is hinted at by an encounter Juan Pardo had at the town of Joara. Pardo was approached by a lesser chief, or Orata, from the town of Chara during his first expedition through North Carolina in 1566. Orata Chara asked Pardo for permission to change Chara's tributary relationship from Guatari to Joara, a chiefdom centered on the upper Catawba River. No information about Chara was recorded by the expedition, but *Chara* may well be a different spelling of *Sara* (Hudson 1990:90).

During the eighteenth century, similar spellings of Sara are used on maps and other documents, including *Charra*, *Charraw*, and *Cheraw* (Cumming 1998; Evans 1756).

Hudson (1990:94) thought that Guatari was a young chiefdom and that subject towns may have been small villages. He noted that there was no evidence for mounds in the Salisbury area and postulated that mound construction was a feature of older, established chiefdoms. Mound construction was one method of emphasizing elite status. Guatari Mico may have been in the process of building her chiefdom and consolidating her power during Juan Pardo's expeditions in the 1560s.

This proposed link between the Sara and a more socially complex society situated south of the Dan during the sixteenth century meshes well with the archaeological evidence recovered from the Protohistoric component at Hairston. I must stress, however, that very little archaeological work has been conducted at the site. The analyses presented in Chapter III will demonstrate that Hairston is a multi-component site. Given that the site represents three separate occupations that span the fourteenth through mid-seventeenth centuries, surface indications of site size and the density of pit features in the excavated portion of the site may not accurately reflect the intensity of activity at the site during the Protohistoric period.

Recently, salvage excavations were conducted at Nifong, another protohistoric site located just north of Hairston. The excavations uncovered part of a circular house and associated pit features (Eastman et al. 1997). This site represents a single occupation, and the density of postholes and pit features is much less than that encountered at Hairston. It is very likely that this excavation represents a household associated with, but situated outside the

main village at Hairston. The possible relationship between these two sites and the socio-cultural complexity represented by them is not well-defined at present and will require additional investigation of both sites.

All known contact-period sites associated with the Sara are located along the main channel of the Dan River, at or near confluences with major tributaries (Davis and Ward 1991; Simpkins 1992). Wilson (1983) and Simpkins (1985) argued that an east-west trending trading path ran along the Dan River during the seventeenth century. They proposed that this path diverged from the Occaneechi Trading Path at the Eno village, probably located in present-day Granville or Durham counties, North Carolina (Simpkins 1985) and ran west to the Cherokee towns in the Appalachians. It is likely that the seventeenth-century Sara villages were located along this path. A second path, the Saura-Saponi branch of the Great Warrior's Path, ran north-south through the upper Dan drainage, connecting it to the Roanoke and James rivers to the north and the Yadkin river to the south (Myer 1928).

Simpkins (1992:193) found that although trading paths were an important factor in determining where contact-period villages were located, another factor may have been equally important. As depopulation due to European-introduced epidemics progressed, sites become increasingly concentrated at areas that had been most favorable for occupation during the Late Prehistoric period. Physiographic characteristics of these "most favorable" areas include streams with high discharge, confluences with major tributaries, large river bends, and areas proximate to wide flood plains (Simpkins 1992:193). It seems that with fewer able-bodied people to clear land, old fields and abandoned village sites were frequently reused and reoccupied during the Contact period.

Contact-period sites were also located in areas that offered access to peoples and trade in a wide variety of cultural and geographic areas (Simpkins 1992). The Dan and its major tributaries, the Smith and Mayo rivers, have their headwaters in the Blue Ridge province of southwest Virginia. From its headwaters, the Dan flows southeast then turns abruptly and flows northeast. The Smith and Mayo also flow southeast from the Blue Ridge and join the Dan as it flows northeast back into Virginia. The headwaters of these rivers border on the New River basin in southwestern Virginia. The New River flows north and west through the Blue Ridge, Appalachian plateau, and Ridge and Valley into the Ohio valley. Therefore, contact-period sites in the Dan River drainage were situated along the main trunk of the river astride an east-west trading path in areas with the most direct access to the Blue Ridge Province, Ridge and Valley Province, and the Ohio valley to the north. Such access may have become particularly important during the contact period.

Cultural Setting

The upper Dan drainage is situated in the center of a large area (approximately 60 km radius) with similar late prehistoric adaptations and material culture. Most late prehistoric pottery within this region had net-impressed exteriors and sand or crushed-rock temper. Though pottery from this area displays many shared characteristics, including basic vessel form, decorative techniques, and exterior surface treatment, several ceramic series have been defined on the basis of distinctive regional developments. Differences in tempering agents, which roughly correspond with local variations in bedrock, factor heavily in the definition of these regional ceramic series.

The Dan River series is tempered with sand and subangular quartz. This pottery is found in the western Piedmont in central and northern North Carolina and southern Virginia. The distribution of sites with Dan River pottery includes most of the Dan River drainage. The eastern edge of the distribution is about 12 km upriver of the Dan's confluence with the Roanoke (Egloff et al. 1994). Dan River pottery is also found in the central and southern part of the Yadkin River drainage. The western edge of the distribution appears to be in eastern Wilkes County, North Carolina (Idol 1997). Sand-tempered Dan River pottery is also found along the headwaters of the Roanoke and upper James rivers in the Virginia Piedmont (Barber et al. 1996; Klein 1994; MacCord n.d.).

Similar late prehistoric pottery also is found in several adjacent river drainages in the Piedmont and Appalachian regions of Virginia and North Carolina during the Late Prehistoric period. Net-impressed pottery related to the Dan River series include: the feldspar-tempered Haw River series from the Haw and Eno drainages (Ward and Davis 1993); the sand-tempered Clarksville series from along the Roanoke River below its confluence with the Dan (Evans 1955); the limestone-tempered Radford series in the Roanoke, New, and Tennessee river drainages in southwest Virginia (Egloff 1987); and the sand-and-quartz-tempered Wythe variant of the Dan River series in the Clinch River drainage of southwestern Virginia (Egloff 1987).

Similarities indicative of shared ideas and contact within this wide area are not limited to pottery. Other material-culture items like clay tobacco pipes, triangular projectile points, bone tools, and shell tools are also similar throughout the region. In addition, the basic settlement pattern described for the late prehistoric upper Dan River is generally applicable to

the area where net-impressed pottery was made, except for the Haw and Eno drainages which exhibit a more dispersed settlement pattern (Ward and Davis 1993).

The original definition of the Dan River ceramic series, formulated by Coe and Lewis (1952), was based on pottery from Lower Saratown. In the northern area of its distribution along the Roanoke and James rivers, Dan River pottery was manufactured throughout the Contact period (Barber et al. 1996; Buchanan 1986; Klein 1994). However, Dan River pottery in the upper Dan River drainage began to change around A.D. 1400. By the sixteenth century, pots on sites occupied by descendants of the Dan River potters exhibit pastes, vessel forms, surface treatments, and decorations that are different enough from Dan River pottery to be defined as a different series. Wilson (1983) called this pottery the Oldtown series. The changes represented by the Oldtown series will be discussed in Chapter III and are indicative of influence from the Lamar region, probably the South Carolina or southern North Carolina Piedmont. This Lamar influence does not appear to have extended into the Roanoke or James river valleys.

The Oldtown series was manufactured throughout the Contact period and is diagnostic of Ward and Davis's (1993) Saratown phases. Though the Dan River series ceases to be the dominant form of pottery in the Dan drainage by the end of the fifteenth century, assemblages from protohistoric and contact-period sites typically contain one or more Dan River Net Impressed pots (Ward and Davis 1993).

Rivalries between European powers for colonial and commercial supremacy led to exploration and attempts to establish settlements in North America during the Renaissance. Spain, England, and France sent exploration parties and made attempts to settle the North

American Southeast during this period. Shortly after these initial European explorations and attempts at settlement, chiefly organization of Indian groups in the interior Southeast disintegrated and population declined. Smith (1987) identified European epidemic disease as the primary cause of culture change during this period. The complex chiefdoms observed by Spanish explorers in the fifteenth century were reorganized into smaller tribal societies by the seventeenth century. This period between the initial exploration and permanent settlement of North America is known as the Protohistoric period.

In his study of intersite settlement patterns during the Late Prehistoric and Contact periods, Simpkins (1992:28) argued that the Protohistoric period did not correspond with "major historical events and trends" in the upper Dan drainage. He felt that prehistoric lifeways continued largely unchanged into the Contact period; therefore, he did not recognize a Protohistoric period in the drainage. Though I agree with Simpkins's assessment of the "robusticity" of prehistoric patterns, I will present several lines of evidence that indicate life in the upper Dan drainage was affected by the events that define the Protohistoric period in the wider Southeast (see Chapter VI).

The Protohistoric period is marked by important changes in patterns of long-distance trade and cultural interaction in the upper Dan drainage and surrounding areas after A.D. 1400 (see Chapter VI). As described above, the Sara's sphere of interaction was very broad during the late prehistoric Dan River phase. The Sara were one of a group of closely-related Siouan communities that inhabited a large portion of the North Carolina and Virginia Piedmont. During the fifteenth and sixteenth centuries new influences were felt in the upper Dan River drainage. These influences originated in the Lamar region of the interior

Southeast. During the Protohistoric period, the Sara appear to have become involved in a different sphere of interaction and trade than during the preceding Late Prehistoric period. In recognition of these apparent changes, I think inclusion of the Protohistoric period as a separate chronological unit is justified. The Protohistoric period was one of significant change in the upper Dan drainage even though there may be few, if any, recognizable effects of indirect trade of European manufactured goods or European-introduced epidemic disease.

The first permanent settlement along the Atlantic coast at Jamestown, Virginia, in 1607, marked the beginning of the Contact period in the project area. The hopes of reaping quick profits from this colony were not realized by the English investors. In fact, no profits were made until the first harvest of tobacco was shipped to English markets in 1613 (Robert 1969:98). Excavations at Jamestown and at nearby contemporary Paspahegh village sites have revealed evidence that the colony manufactured copper gorgets and beads from sheets of European copper alloy that were imported specifically for trade with the Chesapeake Indians (Straube and Luccketti 1996). While there is good evidence for a colonial interest in trade, the amount of trade during the early years of the colony is difficult to determine. The primary concern of the colonists during the intermittent periods of hostility and warfare that characterized the early decades of seventeenth century appears to have been focused on establishing and maintaining a safe zone around their homes and farms rather than venturing out in search of opportunities for trade (Shea 1983).

The first indication of an interest on the part of the colonists in trade beyond the Tidewater and Chesapeake Bay was provided by the second act of the 1647 Colonial Assembly. Following the cessation of hostilities known as the Pamunkey Wars, a series of

forts situated along the fall line were turned over to commercial enterprise. Fort Henry, at the falls of the Appomattox River, was turned over to the proprietorship of Captain Abraham Wood (Hening 1823:326). From his position at Fort Henry, Captain Wood was a leader in the exploration of the North Carolina Piedmont and in establishing direct trade there. The first recorded explorations of the Piedmont southwest of Fort Henry occurred in 1650 (Alvord and Bidgood 1912:105-130). Abraham Wood and an English merchant named Edward Bland got as far as the falls of the Roanoke before they turned around in fear of meeting up with the Tuscarora who were rumored to be preparing for war. It is likely that prior to 1670, Virginia traders did not venture beyond the present state of Virginia, or west of the Appalachians (Phillips 1961:169). Trade between colonists in the Tidewater region of southern Virginia and Siouan groups in the North Carolina Piedmont did not reach a significant level until the early 1670s.

Ethnohistoric Evidence of the Sara

The earliest mention of the Sara following the settlement at Jamestown was made by John Lederer, a German physician, in 1670. Lederer made three attempts to find a route across the Appalachian Mountains and recorded his journeys in a small book titled *The Discoveries of John Lederer, In Three Several Marches from Virginia, To the West of Carolina*. The original text was written in Latin, translated into English by Sir William Talbot, and printed in London by Samuel Heyrick in 1672. Talbot was secretary of the province of Maryland, where Lederer lived and received citizenship before returning to Germany in 1675. Lederer's original Latin text has been lost.

John Lederer's text was the first written description of explorations in the Piedmont and Blue Ridge Mountains. Many of Lederer's descriptions of North Carolina's central and southern piedmont are inaccurate, but his observations of southern Virginia and northern North Carolina are consistent with those of later explorers and appear to be reliable. His first expedition began in March of 1669. He followed the Pamunkey River to the Blue Ridge Mountains near present-day Charlottesville, but could not find a passage over the mountains and returned because of winter weather. Lederer's second expedition was conducted in May and June of 1670. This exploration crossed the present study area and probably took Lederer as far south as the Catawba River. Lederer terminated this expedition because he feared encountering Spaniards and being captured or enslaved. Lederer's final journey in August of that year reached the Shenandoah Valley near Fort Royal, Virginia. He failed again to find a pass through the Blue Ridge Mountains.

Lederer gave the following description of the Sara village he visited during his second expedition:

> I departed from *Watary* the one and twentieth of *June*, and keeping a west-course for nearly thirty miles, I came to *Sara*: here I found the ways more level and easie. *Sara* is not far distant from the Mountains, which here lose their height, and change their course and name: for they run due West, and receive from the Spaniards the name of *Suala*. From these Mountains or Hills the Indians draw great quantities of *Cinabar*, with which beaten to powder they colour their faces: this Mineral is of a deeper Purple then *Vermilion*, and is the same which is in so much esteem amongst Physitians, being the first element of Quicksilver.
>
> I did likewise, to my no small admiration, find hard cakes of white Salt amongst them: but whether they were made of Sea-water, or taken out of Salt-pits, I know not: but am apt to believe the later, because the Sea is so remote from them. Many other rich Commodities and Minerals there are undoubtedly in these parts, which is possessed by an ingenious and industrious people, would be improved to vast advantages by Trade. But having tied my self up to things only that I have seen on my Travels, I will deliver no Conjectures [Lederer 1672:16].

Lederer noted cakes of salt in their village. Salt would not have been available locally and the presence of salt cakes indicates long-distance trade with either coastal groups or groups near interior salt springs, or long-distance travel to a salt-producing area.

Lederer mentions the Sara a second time in a controversial section of his journal. From the Sara village he supposedly traveled south into the Catawba homeland. His description of the general topography of the central and southern Piedmont is inaccurate, leading many scholars to question whether Lederer actually made this part of the journey. His account records a group of Sara trading in an Ushery (Catawba) village. In the early eighteenth century the Sara moved south to live near the Catawba. If Lederer's account of his time among the Ushery is accurate, then the close relationship between the Sara and the Catawba extended back into the seventeenth century. Lederer's account provides rare ethnohistoric evidence for some of the regional interaction the Sara may have been involved.

William Byrd II, a wealthy merchant planter from Westover on the James River, provides a clue to the Sara's trade relations with the Virginia colony as of May 1673. While surveying the dividing line between Virginia and Carolina in 1733, he recorded the following:

> A mile after that we forded another stream, which we called Hatcher Creek, from two Indian traders of that name who used formerly to carry goods to the Sauro Indians. Near the banks of this creek I found a large beech tree with the following inscription cut upon the bark of it, 'JH, HH, BB lay here the 24th of May 1673.' It was not difficult to fill up these initials with the following names, Joseph Hatcher, Henry Hatcher, and Benjamin Bullington, three indian traders [who] had lodged near that place sixty years before in their way to the Sauro town [Wright 1966:40].

From this entry, it is clear that by 1673 the Sara were directly involved in the fur trade out of Virginia. Byrd's comments indicate that a group of Virginia traders had regular trading relations with the Sara.

In September of that year, the Sara became enmeshed in intertribal hostilities that erupted as the Occaneechi attempted to retain their status as middlemen in the deerskin trade (Alvord and Bidgood 1912:209-226; Lederer 1672:14; Merrell 1989:40; Ward and Davis 1993:427-428). At that time the Occaneechi occupied a strategic point along the Great Trading Path from Tidewater Virginia to the interior. Their fortified village was located on an island in the Roanoke River where the Great Trading Path crossed the river. From this location the Occaneechi established themselves as middlemen in the deerskin trade. The Occaneechi reverted to violence to protect their status as Virginia traders and interior groups like the Sara were establishing direct trading relations in the 1670s (Alvord and Bidgood 1912:209-226; Lederer 1672:14). In 1676, the Occaneechi were routed by Nathaniel Bacon and his forces and their ability to control the flow of trade goods into the interior was broken (Merrell 1987:20). Shortly thereafter, the Occaneechi left their Roanoke River village and relocated to the Eno River near present-day Hillsborough, North Carolina (Dickens et al. 1987).

By the 1680s a distinct class of fur traders and frontiersmen developed in Virginia. This group consisted of merchant planters like Abraham Wood and William Byrd I, their agents and servants, and self-employed free traders like Joseph and Henry Hatcher (Wright 1966). Correspondence between William Byrd I and his London agent written in the 1680s refers several times to the tight competition between colonial traders for the fur trade (Tinling 1977). In the

diary William Byrd II kept during his survey of the dividing line between Virginia and North Carolina, he described the fur trade at its apogee, noting:

> The trading path above-mentioned receives its name from being the route the traders take with their caravans when they go to traffic with the Catawbas and other southern Indians. The Catawbas live about 250 miles beyond Roanoke River, and yet our traders find their account in transporting goods from Virginia to trade with them at their own town. The common method of carrying on this Indian commerce is as follows: gentlemen send for goods proper for such trade from England and then either venture them out at their own risk to the Indian towns or else credit some traders with them of substance and reputation, to be paid in skins at certain price agreed betweixt them. The goods for the Indian trade consist chiefly in guns, powder, shot, hatchets (which the Indians call tomahawks), kettles, red and blue planes [i.e., plain cloth], Duffields [coarse woolen cloth, named for the town of Duffels near Amsterdam], Stroudwater blankets [coarse woolen blankets, named for Stroud, Gloucestershire, on the Thames and Seven canal], and some cutlery wares, brass rings, and other trinkets.
>
> These wares are made up into packs and carried upon horses, each load being from 150 to 200 pounds, with which they are able to travel about twenty miles a day if forage happen to be plentiful. Formerly a hundred horses have been employed in one of these Indian caravans under the conduct of fifteen or sixteen persons only, but now the trade is much impaired, insomuch that they seldom go with half that number [Wright 1966:307-308].

The ebbing of the trade that William Byrd II laments was the result of several interrelated causes. First, direct trade brought European diseases into piedmont villages during the last quarter of the seventeenth century and native populations declined throughout the Piedmont. A second cause of distress for the interior Indians of the Piedmont was Seneca raiding parties. Byrd indicated that the Sara were constantly harassed by the Seneca. The fall of the Occaneechi and the Susquehannocks at the hands of Nathaniel Bacon may have opened the interior not only to trade, but also to disease and hostile northern agressors.

Between 1707 and 1711, the main body of the Sara left the upper Dan drainage and moved south to the lower Pee Dee River (Wilson 1983:128). Byrd indicated that this move was

brought about because of the Seneca raids (Wright 1966:398). By mid-century they were living on Sugar Creek, a tributary of the Catawba River (Evans 1756).

Place names often retain the association of a location to some event or person in the past. Such is the case for the Sara and the upper Dan drainage. Locations of historic communities of Sara Indians in the study area are indicated by place names like the Saratown Mountains, located in central Stokes County; and two creeks, Town Fork Creek and Town Creek, in both Rockingham and Stokes counties. A small Euroamerican community called Upper Sawra Town was established around the middle of the eighteenth century on the south side of the Dan, a few miles upstream of its confluence with Town Fork Creek. Upper Sawra Town maintained a post office until at least 1882 (Powell 1968:441). Euroamerican settlement also occurred near Town Creek in Rockingham County. Lower Sawra Town was not an organized community like Upper Sawra Town, and it never had a post office. These two former settlements are indicated on several maps published between 1751 and 1833 (Collet 1770; Fry and Jefferson 1751; MacRae-Brazier 1833; Mitchell 1755; Mouzon 1775; Price-Strother 1808).

Town Fork Creek and Town Creek flow into the Dan River near contact-period Sara village sites. These archaeological sites have been designated Upper Saratown and Lower Saratown, respectively, and there is good ethnohistoric and archaeological evidence to support the association between these sites and the seventeenth-century Sara.

No accurate maps of North Carolina's interior were made during the seventeenth century, and, by the time the first surveys were made in the eighteenth century, the only recognized Sara village was located on the east side of the Pee Dee River, south of the border between North and South Carolina. The Sara moved to this location sometime between 1707 and 1711 (see Merrell

1989:54; Wilson 1983:128). Several eighteenth-century maps indicate the location of a Sara village (usually spelled "Saraw" or "Saura") along the Pee Dee (Barnwell 1721; Bowen 1747; Mitchell 1755; Moseley 1733). Sometime around the middle of the eighteenth century, the Sara relocated to Sugar Creek, a tributary of the Catawba River and were often referred to as the Cheraw in their interactions with the Catawba (Evans 1756; Merrell 1989).

The only accurate description of the location of a Sara village is on a 1733 survey plat made of a 200,00 acre tract at the confluence of the Dan and Smith (Irvin) Rivers (Figures 9 and 10). This tract was purchased by William Byrd II and was referred to as the "Land of Eden." The plat was drawn by William Mayo in 1733 following a survey of the property by him, Byrd, and a small party of men (Wright 1966:413). Though the Sara had abandoned their village decades earlier, their agricultural fields were still apparent to the survey party. Byrd would have had much more than a passing knowledge of the Sara, as he had inherited the fur trade enterprise his father and great uncle had established. It is very likely that Byrd's agents had traded with the Sara when they lived along the Dan, and certainly his father and uncle had conducted trade with them. On the survey plat, Town Creek is called Sauro Creek.

Thus, in the Upper Dan drainage we have indirect evidence of the location of historic Sara villages in the form of early place names and a single map of one Sara village made approximately thirty years after the site had been abandoned. For over one hundred years, ethnohistorians and archaeologists have tried to learn more about the Sara and other Siouan tribes that once occupied the Piedmont of North Carolina and Virginia.

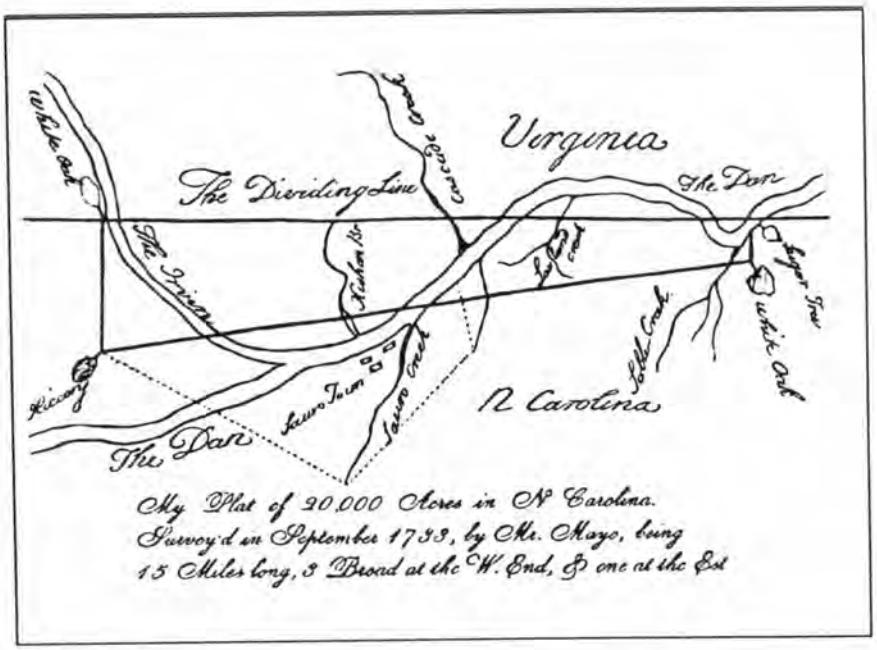

Figure 9. William Mayo's 1733 survey plat of Colonel William Byrd's "Land of Eden" (Reprinted with permission of the Publication Division of the North Carolina Department of Archives and History).

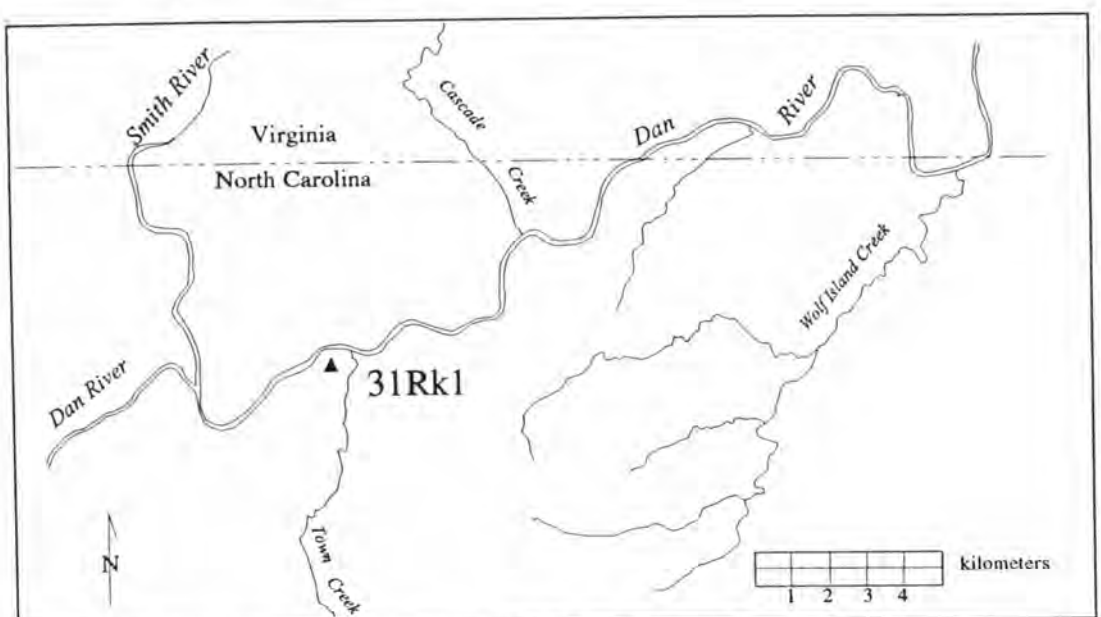

Figure 10. Location of Byrd's "Land of Eden" showing the Lower Saratown archaeological site (31Rk1).

James Mooney's (1894) ethnohistoric and linguistic study provides an early example of one such attempt. He remarked that the area comprising most of Virginia, North Carolina, and South Carolina was the least known ethnologically (Mooney 1894:6). No information exists about the Sara language, but based on their historically close association with the Catawba and the presence of the word *sara* in a Catawba vocabulary, Mooney concluded that they, like the Catawba, were a Siouan group. He also suggested that their location along the Dan was so far from general trade routes that the colonists and traders knew little of them. More recent archaeological and ethnohistoric research has demonstrated that the latter conclusion was premature.

In 1931, Douglas L. Rights published a paper that traced the route of the trading path, known as the Occaneechi Path, from Fort Henry, Virginia to the Catawba. He reconstructed the route from the descriptions of John Lederer's 1670 journey, Needham and Arthur's 1673 expedition, portions of John Lawson's 1701 travels, and a description of the trail made by William Byrd II in 1728. Rights assumed that Lederer, Needham and Arthur, and Lawson walked the same path in the northern piedmont. The Sara were visited by both Lederer and Needham and Arthur during the 1670s, but Lawson did not encounter the Sara during his 1701 journey. By placing all three parties on the same path, Rights suggested that the Sara village visited by Lederer and Needham and Arthur was located at the Trading Ford on the Yadkin River (Rights 1931). I suspect that these two parties diverged from the Occaneechi Path and followed a different trail than John Lawson's route across the northern Piedmont.

Wilson (1983:98) and Simpkins (1985) argue for the existence of an east-west oriented trading path between Eno Town, probably located on the Flat or Little rivers, and Upper

Saratown on the upper Dan River that continued west or southwest to the Cherokee towns in the Appalachian Summit area. This trail may have departed from the Occaneechi Trading Path at Eno Town and followed a western course through the Haw River valley to the Dan River, then continued southwest across the Yadkin River near the Great Bend area. This path would have crossed the Saura-Saponi Trail, which ran north-south and joined the Occaneechi Path at the Trading Ford on the Yadkin River. A westward path from Eno would have provided access to Cherokee territory for Needham and Arthur, and its intersection with the Saura-Saponi trail would have provided a route to the Catawba region for Lederer.

Swanton (1946:110) agreed with Rights that the Sara village visited by Lederer in 1670 was probably located on the Yadkin, but he concluded that by 1673 the Sara were located somewhere between the Yadkin and Cape Fear Rivers. Swanton did not place the Sara at Lower Saratown on the Dan River in Rockingham County until closer to 1700. He thought that Upper Saratown, in Stokes County, was occupied later than Lower Saratown. Archaeological investigations at Upper Saratown and Lower Saratown indicate the Sara were present in the area throughout the seventeenth century and that the main body of the tribe left the drainage during the early years of the eighteenth century.

Chapter III.

SITE CHRONOLOGY

The primary objective of this chapter is to explore site structure and chronology at Upper Saratown and Hairston. When initially described, Upper Saratown was interpreted to be a late-seventeenth-century village site and Hairston was thought to be a protohistoric or early historic site (Wilson 1983). These interpretations will be tested by examining pottery and other chronologically-sensitive artifacts from pit features and considering evidence for superposition of features, burials, and postholes at these sites. The pottery analysis will provide the single-most important line of evidence for identifying separate site occupations.

Following the determination of feature and burial chronology at these sites, I examine site records and artifact collections from Madison in an effort to identify site components there. This site was excavated by Richard P. Gravely (1969), an amateur archaeologist, and recovery techniques, excavation records, and management of the artifact collections were not conducive to precise chronological analysis of pit features or identification of architectural elements at the site.

Several methods of establishing chronology for archaeological remains are presented in this chapter. Relative chronology among pit features and among site components is established through seriation of pottery types. Seriation is the process of ordering groups of data units relative to some dimension of variation (Marquardt 1978; Spaulding 1978). In this

analysis I employ Gelfand's Method II (Marquardt 1978:269-270) to order pottery assemblages from pit features based on relative frequency of selected pottery types. This method is described in greater detail below. Steps are taken to reduce the effect of sources of variation other than temporal variation on the units being seriated. Additional information about the relative chronology of village components is acquired by examining clay tobacco pipes and by comparing certain aboriginal artifacts like shell gorgets and beads from sites in the upper Dan drainage with those from dated sites elsewhere in the Southeast.

Absolute dates for some site components are estimated through radiocarbon dating of charcoal samples from some of the pit features. Absolute date ranges are also established by examining the distribution in pit features and burials of European artifacts with known dates of manufacture.

Following a discussion of the theoretical and methodological issues associated with seriation, I will present the chronological findings and describe the cultural material from each archaeological component identified at Upper Saratown and Hairston. Ward and Davis (1993) present detailed descriptions of the site components and artifact assemblages from William Kluttz and Lower Saratown. The remains at Nifong have also been described in detail elsewhere (Eastman et al. 1997). These sites contain artifact assemblages that date to the Late Prehistoric, Protohistoric, Early Contact, and Late Contact periods. Pottery assemblages from these dated site components are examined and those pottery types that exhibit patterned change through time are used in the seriation of pit features from Upper Saratown and Hairston. These assemblages also provide very important comparative material from well-documented site contexts to aid in the assignment of features which could not be seriated (i.e.,

those features with fewer than 50 identified Oldtown sherds) to one of the identified site components at Upper Saratown and Hairston.

Theoretical and Methodological Issues

Concern about the relative chronological ordering of archaeological remains has been an important aspect of archaeology since the earliest systematic studies. Seriation and stratigraphy are the two most important methods of establishing relative chronology. While stratigraphy derives from the geological Law of Superposition, seriation has its theoretical roots in culture history (Willey and Sabloff 1974).

Rowe (1961:326) noted that similarity seriation is "based on the assumption that, within a given cultural tradition, change in culture in general and in style in particular are both usually gradual processes." This assumption translates into the expectation that objects or cultural units that are close together in time will resemble each other more, at least in certain features, than those that are further apart in time. Rowe recognized two situations in which this expectation would not hold: times when strong outside influence is suddenly felt and times when conscious decisions are made to imitate previous lifeways. He refers to this latter situation as cultural revivalism. The introduction of strong outside influence and periods of cultural revivalism can lead to sudden and/or time-transgressive cultural change and change in artifact style.

In regional material culture sequences, apparent sudden popularity of new styles or artifact types, and an equally sudden decline in an established style or type, may result from either the introduction of strong outside influences or temporal gaps in the archaeological

record. Seriation does not provide a theoretical basis for interpreting sudden changes in material culture (Rowe 1961), but Cowgill (1972:384) has argued that seriation can be useful as a basis of chronology as long as change is not so abrupt that a break occurs in the sequence of material culture. That is, seriation will fail only when later groups have no resemblance to earlier groups.

Seriation techniques used by archaeologists are based either on the occurrence or frequency of objects or styles. Occurrence seriation is based on the presence or absence of data units, while frequency seriation is based on the relative frequency of data units. Like Rowe, Dunnell (1970:308) identified the theoretical principle behind occurrence seriation as the assumption that "the distribution of any historical or temporal class is continuous through time." When considering frequency seriation, Dunnell (1970:309) added another stipulation that "the distribution of any historical or temporal class exhibits the form of a unimodal curve through time." The rationale for this additional assumption is that, following its invention or introduction, an idea or manifestation of an idea will generally rise in popularity to a peak, then decline in popularity to obscurity. The seriation method applied here is a frequency seriation.

Dunnell (1970:310) stressed that the ordering achieved through seriation must be interpreted and that only when the assumptions of the method hold and when the data units vary primarily through time (rather than other dimensions) can a seriation be inferred to be a chronology. Dunnell (1970:311), and Rouse (1967) before him, formalized a set of conditions that must be met in order to produce a chronological ordering through seriation. First, all groups included in a seriation must be of comparable duration. This condition assures that variation in the distribution of data units between groups is not a function of

differences in the duration of individual groups, but rather represents their position in time. The second condition stipulates that all groups in a seriation must belong to the same cultural tradition. This condition assures that variation in the distribution of data units between seriated groups does not result from different stylistic traditions. The final condition to ensure a chronological ordering of groups by seriation is that all groups must come from the same local area. If all groups are drawn from the same local area, then differences in the distribution of data units between groups is not a function of spatial variation.

In a frequency seriation the data units must be defined as mutually exclusive classes. As a matter of historical practice, pottery types have most often been used as data units in seriation studies in the eastern United States (Spaulding 1978). The use and definition of artifact types in archaeology and their use as a basis for seriation have been debated for decades. Recently, Duff (1996) evaluated these criticisms and specifically tested the utility of type frequency seriation. He noted that

> the primary reasons cited for rejecting typological data are that small pieces frequently cannot be assigned to type, resulting in loss of information, that type identification is too subjective and variable from person-to-person, that types were originally created to systematize (normative) time-space relationships, and that types obscure or homogenize variability [Duff 1996:89].

In his evaluation of these arguments, he noted that both attribute and type recording involved subjective elements. He found that types are often appropriate for temporal seriation because they were specifically designed to organize assemblages along a chronological dimension. Duff (1996:91) felt that the crucial question was whether "the homogenizing effect of typological analysis diminish[es] trend-sensitive information to the extent that it is incapable of informing upon fine-grained temporal variation?" In his

comparison of type and attribute frequency seriations of pottery from Pueblo de los Muertos, Duff found that typological seriation produced results that were as accurate as those from the attribute seriation reported by LeBlanc (1975).

Difficulties arise in trying to produce a fine-grained seriation, known as a microseriation, based on artifact types when sample size of typed artifacts within individual cultural units are small or when there are too few types to distinguish short time intervals (LeBlanc 1975). Small sample size is often a problem when attempting to produce a microseriation because the cultural units or groupings are usually small. For example, artifact groupings in a microseriation might be based on individual excavation levels, house floors, or pit features rather than whole site assemblages. Duff (1996) demonstrated that when adequate numbers of reasonably well-dated ceramic types occur in varying frequencies in excavated contexts from a single site, frequency seriation of pottery types can produce accurate, fine-grained chronologies.

Following a description of pottery types in the study area, I present a microseriation of pottery types from pit features from Upper Saratown and Hairston.

Ceramic Series in the Upper Dan Drainage

Three ceramic series account for most of the pottery from features at Upper Saratown and Hairston. Two late prehistoric pottery series, Uwharrie and Dan River, were recovered from several pit features at these sites. Protohistoric and contact-period Oldtown series pottery accounts for most of the pottery recovered in the excavations.

The Uwharrie Series

Uwharrie series pottery was identified in several features at Upper Saratown. This pottery is characterized by somewhat globular jars with conoidal or rounded bases. Jar forms usually have low, broad shoulders and slightly restricted necks. Rims tend to be tall and slightly everted or straight. Vessel necks and shoulders are often decorated with multiple parallel incised lines, brushed or scraped bands, or fingernail impressions oriented parallel or perpendicular to the vessel rim. Lips on Uwharrie jars are either flattened or rounded and are often notched. Most vessel interiors are scraped. Vessel walls tend to be rather thick, usually between 6 mm and 10 mm thick. Uwharrie sherds are usually tempered with angular quartz particles or coarse subangular quartz sand and have a rough and gritty feel. These tempering agents are sometimes mixed with other crushed minerals like feldspar or mica.

Uwharrie ceramics are found throughout the North Carolina Piedmont including the Dan, Yadkin, Catawba, Broad, Haw, and Eno drainages. The Grayson series, defined for southwestern Virginia, is comparable to the Uwharrie series. Uwharrie Net Impressed is the most common type in the series, accounting for between 50% and 90% of sherd collections. This pottery series is the definitive marker of the late prehistoric Uwharrie phase.

This pottery type was first recognized in a surface collection from a sandbar at the mouth of the Uwharrie River where it empties into Lake Tillery in Montgomery County, North Carolina. This site was called Uwharrie (31Mg14). No description of the site or its ceramics has been published, but the collection is housed in the RLA and was examined. The collection includes sherds from at least five vessels. The Uwharrie series was first described by Coe (1952:307-308) and a Uwharrie phase collection from the Trading Ford site (31Dv17) was described the next year by Howell and Dearborn (1953).

The estimated date range for the Uwharrie series is between A.D. 800 and 1200 (Ward and Davis 1999:100). Nine radiocarbon dates associated with Uwharrie series pottery have been collected and one date has been obtained for a feature with Grayson ceramics. Five of these dates fall within the A.D. 1000 to 1200 range, while two dates from the Yadkin River drainage fall between A.D. 1425 and 1625 (Eastman 1994:27). In most areas, Uwharrie and Grayson series pottery gave way to other late prehistoric wares, like the Dan River series, prior to the fifteenth century. The latter pair of radiocarbon dates post-date the period when Uwharrie vessels were the most common ware in production and the end of the Uwharrie phase around A.D. 1200 reflects this change in ceramic production.

The Dan River Series

Dan River series pottery is another kind of late prehistoric pottery found at Upper Saratown and Hairston. Dan River sherds are characterized by compact, sandy paste and are tempered with subangular quartz particles and fine to medium sand. Most Dan River vessels have exterior surfaces with impressions of knotted nets. In most cases vessel interiors have been scraped and subsequently smoothed. Temper particles do not usually protrude through vessel walls. Decoration on Dan River pottery is focused on the neck of jars and on the lip or lip/rim margin. Decorative elements include incised lines oriented parallel and oblique to the rim, brushed bands, fingernail impressions or pinches, and various punctations and notches. The Dan River series is thought to have developed out of the Uwharrie series.

This type of pottery is found throughout the western Piedmont in central and northern North Carolina and southern Virginia. Dan River pottery dominates late prehistoric assemblages in the Dan drainage west of the town of South Boston, Virginia (Egloff et al.

1994). This eastern boundary is located approximately 20 miles upriver from the Dan's confluence with the Roanoke. Dan River series pottery is also very common in the central and southern portions of the Yadkin River drainage (Idol 1997). The western edge of the area where Dan River pottery dominates in the Yadkin valley is in eastern Wilkes County about midway between the Great Bend area of the river and its headwaters. Dan River pottery has also been recovered from sites in the headwaters of the Roanoke and upper James rivers in Virginia (MacCord, n.d.). The Dan River series is one a several related wares characterized by net-impressed exteriors and mineral temper. Related wares include: the feldspar-tempered Haw River series from the Haw and Eno drainages (Ward and Davis 1993); the sand-tempered Clarksville series from the Roanoke River at and below its confluence with the Dan (Evans 1955); the limestone-tempered Radford series from the upper Roanoke, New, and Tennessee drainages in southwest Virginia (Egloff 1987); and the sand- and quartz-tempered Wythe variant from the Dan River series in the upper Clinch River drainage (Egloff 1987). These wares probably represent regional variants within a widespread prehistoric ceramic tradition characterized by net-impressed exteriors.

The Dan River series was originally defined by Coe and Lewis (1952) to describe an assemblage of pottery from Lower Saratown. At that time the Dan River series was thought to represent pottery made by the Sara during the Contact period, and its estimated date range was A.D. 1625 to 1675 (Coe and Lewis 1952). This assessment has since been reconsidered and a series of radiocarbon dates indicate that most Dan River phase sites were occupied between A.D. 1100 and 1450 (Dickens, et al. 1987; Eastman 1994; Ward and Davis 1993). This pottery is diagnostic of the late prehistoric Dan River phase (Ward and Davis 1993). The Dan River series continued as the dominant type of pottery later along the Roanoke and

James rivers than it did in the Dan River drainage proper. In the northern area of its distribution, along the Roanoke and upper James rivers, Dan River pottery was manufactured throughout the Contact period (Buchanan 1986; Klein 1994). However, in the upper Dan drainage, Dan River potters began to incorporate Lamar ceramic influences by around A.D. 1400 and were soon producing some new vessel shapes with new surface treatments and making adjustments to paste recipes. These changes have been recognized as the Oldtown series (Ward and Davis 1993; Wilson 1983). This type of pottery supplants the Dan River series in the Dan drainage during the sixteenth century. Though Dan River pots were no longer the most common pottery in the drainage by the Protohistoric period, a few Dan River Net Impressed pots continued to be made throughout the sixteenth and seventeenth centuries (Ward and Davis 1993).

The Oldtown Series

The Oldtown series was manufactured from the fifteenth through the beginning of the eighteenth century in the Dan River drainage. Some exterior surface treatments and decorative techniques were popular for only limited periods within the duration of the series. The Oldtown series is characterized by well-kneaded paste that is usually tempered with fine to very fine sand and feels smooth to the touch. Interior surfaces of Oldtown vessels are nearly always smoothed, but vessels with burnished exteriors are often also burnished on the interior. More than 90% of all Oldtown sherds from Upper Saratown are between 4 mm and 8 mm thick. The most common vessel type is a restricted neck jar with an everted rim. Other vessel forms include small cups, jars with recurved rims, hemispherical bowls, and restricted bowls with inverted or carinated rims, and very small hand-modeled pots.

The largest and best-known Oldtown ceramic collections are from Upper Saratown, Lower Saratown, William Kluttz, and Hairston. The Oldtown series was first described by Wilson (1983:616) following his analysis of small samples of the pottery from Upper Saratown and Hairston (then known as Early Upper Saratown). He did not define individual ceramic types at that time because he felt his analysis incorporated too small a portion of the sites' assemblages. Following his study of pottery collections from excavations at Lower Saratown and William Kluttz, Davis defined several Oldtown pottery types based on differences in exterior surface treatment. Davis's Oldtown series includes Plain, Brushed, Burnished, Simple Stamped, Check Stamped, Complicated Stamped, and Net Impressed types (Ward and Davis 1993). Both Davis and Wilson agree that the Oldtown series developed out of the Dan River series.

Chronology of Pits at Upper Saratown and Hairston

Uwharrie and Dan River phase features can be identified by the presence of the corresponding ceramic series and the absence of European trade goods and Oldtown series pottery. Uwharrie features were identified at Upper Saratown and Dan River phase features were identified at both Upper Saratown and Hairston. These late prehistoric features are described later in this chapter. Distinguishing between protohistoric and contact-period features was more difficult, because all these periods are characterized by Oldtown series pottery. A seriation based on the relative frequency of Oldtown pottery types in pit features from Upper Saratown and Hairston was performed to identify different protohistoric and contact-period occupations at the sites. In addition to pottery from features at Upper Saratown and Hairston pottery assemblages from previously-dated protohistoric and contact-

period sites in the study area were also included in the seriation. These latter assemblages were included to help evaluate the ordering produced by the seriation. This seriation provides a relative chronology for village occupations in the study area and also provides a basis for a regional ceramic chronology. Pottery assemblages from all features associated with identified site components are described following the seriation.

In an effort to establish independent lines of evidence about the chronology of features at the sites, artifact assemblages from previously-dated assemblages and from the seriated features at Upper Saratown and Hairston were examined to identify artifact classes other than pottery that may be useful temporal markers. Clay pipes and glass trade beads are two artifact classes that exhibit patterned distributions through time in the study area. These artifacts are used as additional lines of evidence for determining the chronological period for non-seriated features at Upper Saratown and Hairston.

Seriation of Pit Features from Upper Saratown and Hairston

The seriation presented here was based on the relative frequency of five Oldtown pottery types. These types were selected based on an examination of pottery assemblages from known protohistoric, early-contact, and late-contact sites in the study area, Nifong, Lower Saratown, and William Kluttz, respectively. These three assemblages could be differentiated by the relative frequency of Plain, Coarse Net Impressed, Fine Net Impressed, Brushed, and Check Stamped Oldtown pottery types. Given that the relative popularity of these five types of pottery varied from the Protohistoric through the Late Contact period, they were selected for use in the seriation of Upper Saratown and Hairston pit features. The assemblages from Nifong, Lower Saratown, and Wiiliam Kluttz were also included in the

seriation for comparative purposes. Only features from Upper Saratown and Hairston with at least 50 sherds of the five Oldtown types were seriated.

Thirty-one features from Upper Saratown and Hairston met these qualifications (Table 2) and were seriated using Gelfand's Method II (Marquardt 1978:269-271). All features in the seriation represent subsurface facilities refilled with secondary refuse, and all are thought to have been abandoned and refilled fairly rapidly (Ward 1980:187-207). This seriation of pottery types from pit features meets all the assumptions of frequency seriation and, considering Duff's results, it is anticipated that an accurate microseriation will be produced.

Gelfand's seriation method involves three steps. First, a dissimilarity matrix comparing percentages of the five Oldtown pottery types in each feature was created, using Euclidean distance as the measure of dissimilarity. Then an estimated order of features in each row of the matrix was constructed based on both the features' coefficient scores for that row and on how similar each feature was to ones that have already been placed in order (see Marquardt 1978 for specific details). In the final step of the seriation, the average rank of each feature was calculated by summing the feature's rank within each row's estimated order. The features were then arranged in ascending order based on their average rank, producing the final seriated order.

The results of the seriation are presented in Table 3. The method did not produce a perfect seriation; that is, the estimated order of features in each row was not identical. The order of features in the table should not be taken to represent the order in which these features were literally closed and abandoned, but rather provides a relative ordering by which groups of features from different site occupations can be identified.

Table 2. Percent of Five Oldtown Pottery Types in Seriated Contexts.

Site	Context	Coarse Net Impressed	Plain	Brushed	Fine Net Impressed	Check Stamped	Count
Nifong	protohistoric features	60.5	37.1	0	0	2.4	626
Lower Saratown	early-contact features	0	89.3	7.8	0	2.9	1003
William Kluttz	late-contact features	0	44.2	1.6	24.2	29.9	1415
Hairston	Fea. 5	84.9	15.1	0	0	0	86
Hairston	Fea. 12	14.8	55.6	0	7.4	22.2	54
Hairston	Fea. 14	34	34	24	2	6	50
Hairston	Fea. 16	14	55	3	15	13	100
Hairston	Fea. 17	25	70.2	1.2	3.6	0	84
Hairston	Fea. 27	86.9	11.9	0	0	1.2	84
Upper Saratown	Fea. 10	0	54.1	0	37.6	8.3	109
Upper Saratown	Fea. 11	0	75.5	3.6	13.6	7.3	110
Upper Saratown	Fea. 16	0	79.2	1	3	16.8	101
Upper Saratown	Fea. 31	0	73.4	0	13.3	13.3	90
Upper Saratown	Fea 36	0	56.4	0	16.3	27.3	55
Upper Saratown	Fea. 47	0	56.5	38.9	1	3.6	193
Upper Saratown	Fea. 53	0	86.3	5.7	5.7	1.8	53
Upper Saratown	Fea. 63	0	46.2	14	26.9	12.9	93
Upper Saratown	Fea. 101	0	40.3	2.1	21.6	36	139
Upper Saratown	Fea. 118	0	62.5	3.6	5.3	28.6	56
Upper Saratown	Fea. 120	0	90	6.7	0	3.3	120
Upper Saratown	Fea. 123	0	58.9	0	39.7	1.4	73
Upper Saratown	Fea. 126	0	64.6	6.9	6.2	12.3	65
Upper Saratown	Fea. 137	0	60.2	0	8.4	31.3	83
Upper Saratown	Fea. 144	0	77.9	12.3	3.3	6.6	122
Upper Saratown	Fea. 158	0	67	25.4	1.5	6.1	197
Upper Saratown	Fea. 160	0	88	0	3	9	67
Upper Saratown	Fea. 168	0	59.6	7.1	1	32.3	99
Upper Saratown	Fea. 170	0	33.3	2.1	16.8	47.8	291
Upper Saratown	Fea. 171	0	75.2	0	1.4	23.4	214
Upper Saratown	Fea. 172	0	74.2	3.2	2.5	22.6	62
Upper Saratown	Fea. 175	0	72	10	14	4	50
Upper Saratown	Fea. 180	0	66.7	2.1	2.5	28.7	282
Upper Saratown	Fea. 184	0	41	1.6	9.8	47.5	61
Upper Saratown	Fea. 195	0	38.3	0	0	61.7	60
Total							2,736

The final column in Table 3 lists the inferred archaeological period represented by each feature. The interpretation of each feature's chronological period was based on several lines of evidence including: (1) the results of the seriation, (2) evidence from other types of artifacts in the feature, (3) the superposition of the seriated feature and other pits, burials, and houses at the sites, (4) cross-mending sherds and pipe fragments between features, and (5) comparison of the pottery from each feature with previously-dated pottery assemblages from Nifong, Lower Saratown, and William Kluttz sites. Appendix 1 provides information on the superposition and cross-mends between features. A general interpretation of the seriation is that features with Oldtown ceramics from Upper Saratown and Hairston are associated with four different occupations at the sites. The interpretation of the seriation and the examination of other types of material evidence from the features indicates that Upper Saratown was occupied during the Middle Contact period and again during the Late Contact period. Hairston was occupied during the Protohistoric and Early Contact periods.

In all but two instances, there was agreement between the relative order produced by the seriation and my interpretation of the feature's chronological position based on all evidence considered. Two features that apparently date to Early Contact period occupations were placed among midde- and late-contact features in the seriated order. Each of these exceptions is discussed separately. Feature 12 at Hairston was placed in the 25th position in the seriation, in the midst of features associated with the Late Contact period occupation at Upper Saratown. Two other types of artifacts from the feature are more consistent with an Early Contact period designation for the feature than a Late Contact period association. The presence of several dozen glass beads in the fill of this pit verifies that it is a contact-

Table 3. Seriated Order of Features from Upper Saratown and Hairston Using Gelfand's Method II.

Site	Context	Sum of Ranks	Inferred Chronological Period
Hairston	Fea. 27	34	Protohistoric
Hairston	Fea. 5	68	Protohistoric
Nifong	protohistoric features	102	
Hairston	Fea. 14	303	Early Contact
Hairston	Fea. 17	337	Early Contact
Upper Saratown	Fea. 47	406	Middle Contact
Upper Saratown	Fea. 120	463	Middle Contact
Lower Saratown	early-contact features	482	
Upper Saratown	Fea. 53	503	Middle Contact
Upper Saratown	Fea. 160	523	Middle Contact
Upper Saratown	Fea. 144	538	Middle Contact
Hairston	Fea. 16	550	Early Contact
Upper Saratown	Fea. 158	560	Middle Contact
Upper Saratown	Fea. 16	608	Late Contact
Upper Saratown	Fea. 175	618	Middle Contact
Upper Saratown	Fea. 123	622	Late Contact
Upper Saratown	Fea. 172	631	Late Contact
Upper Saratown	Fea. 31	638	Late Contact
Upper Saratown	Fea. 168	639	Late Contact
Upper Saratown	Fea. 171	639	Late Contact
Upper Saratown	Fea. 11	641	Late Contact
Upper Saratown	Fea. 10	649	Late Contact
Upper Saratown	Fea. 118	655	Late Contact
Upper Saratown	Fea. 36	671	Late Contact
Hairston	Fea. 12	678	Early Contact
Upper Saratown	Fea. 180	684	Late Contact
Upper Saratown	Fea. 137	711	Late Contact
Upper Saratown	Fea. 126	715	Late Contact
Upper Saratown	Fea. 63	715	Late Contact
William Kluttz	late-contact component	832	
Upper Saratown	Fea. 101	911	Late Contact
Upper Saratown	Fea. 184	990	Late Contact
Upper Saratown	Fea. 170	1024	Late Contact
Upper Saratown	Fea. 195	1144	Late Contact

period feature, and among the seed beads are three compound white-over-clear beads. This type of bead is most common during the Early Contact period (see discussion of glass beads later in this chapter). A partially reconstructed clay pipe also indicates an earlier date for the feature. Pieces of a burnished clay elbow pipe decorated with geometric zones of punctations were recovered from Feature 12.[2] Pipes with this form of decoration are also most common during the Early Contact period (see discussion of decorated pipes later in this chapter). I think it is more likely that Feature 12 is contemporary with other early-contact-period features at Hairston, rather than to suggest that this feature represents a fourth occupation at the site that occurred during the Late Contact period. Excavation and analysis of more features from the site is required before the presence of a Late Contact period occupation can be either ruled out or confirmed, but at present, all contact-period features at Hairston are considered to be associated with the Early Contact period occupation of the site.

The other feature that may be misplaced in the seriation is Feature 101 from Upper Saratown. It was assigned the 31st position in the seriation, following the late-contact-period assemblage from William Kluttz. Other evidence related to the chronological position of this feature is available from superposition of pits and postholes with Feature 101 and ceramic cross-mends with other pits. Feature 101 is intruded by a burial that dates to the Late Contact period. Sherds from this feature cross-mend with sherds from a group of four other pits. Unfortunately, none of these other pits contained enough sherds to be included in the seriation. Feature 104 is one of the pits with cross-mends in Feature 101 and, as was the case with Feature 101, this feature is also intruded by late-contact burials. In addition to these intrusive

[2] Pieces that refit to the same pipe were also recovered from Fea. 6 at Hairston, indicating contemporaneity between these features.

burials, postmolds from a house that also dates to the Late Contact period intrude Feature 104. The location of this intrusive house suggests that it was constructed at the beginning of the Late Contact period occupation of the site (see discussion in Chapter IV). Given this information, Features 101, 104, and the three other contemporaneous pits (Features 69, 111, and 112) were probably constructed during the Middle Contact period, rather than late within the Late Contact period as is indicated in the seriation.

Regional Chronology of Site Components in the Upper Dan Drainage

The groups of late prehistoric, protohistoric, and contact-period features from Upper Saratown and Hairston can be integrated into a regional chronology for the upper Dan drainage by comparing them with dated pottery assemblages from other sites in the Dan River drainage analyzed by Davis (Ward and Davis 1993) and Eastman (Eastman et al. 1997). Figure 11 presents a seriation of pottery from feature groups identified in the seriation with assemblages from Late Prehistoric, Protohistoric, Early Contact period, and Late Contact period assemblages from Nifong, Lower Saratown, and William Kluttz. This comparison illustrates changes in the frequency of pottery types through time in the study area. This seriation chart is offered as a regional chronology for pottery change in the upper Dan drainage from the Late Prehistoric through the Contact period.

Late prehistoric assemblages are dominated by either Uwharrie or Dan River series pottery. Protohistoric pottery assemblages are characterized by high frequencies of Oldtown Coarse Net Impressed sherds and lesser amounts of Oldtown Complicated Stamped (filfot scroll), Oldtown Burnished (including cazuela bowls), and Oldtown Plain. These assemblages are further distinguished by high frequencies of folded rims, especially on vessels with net-

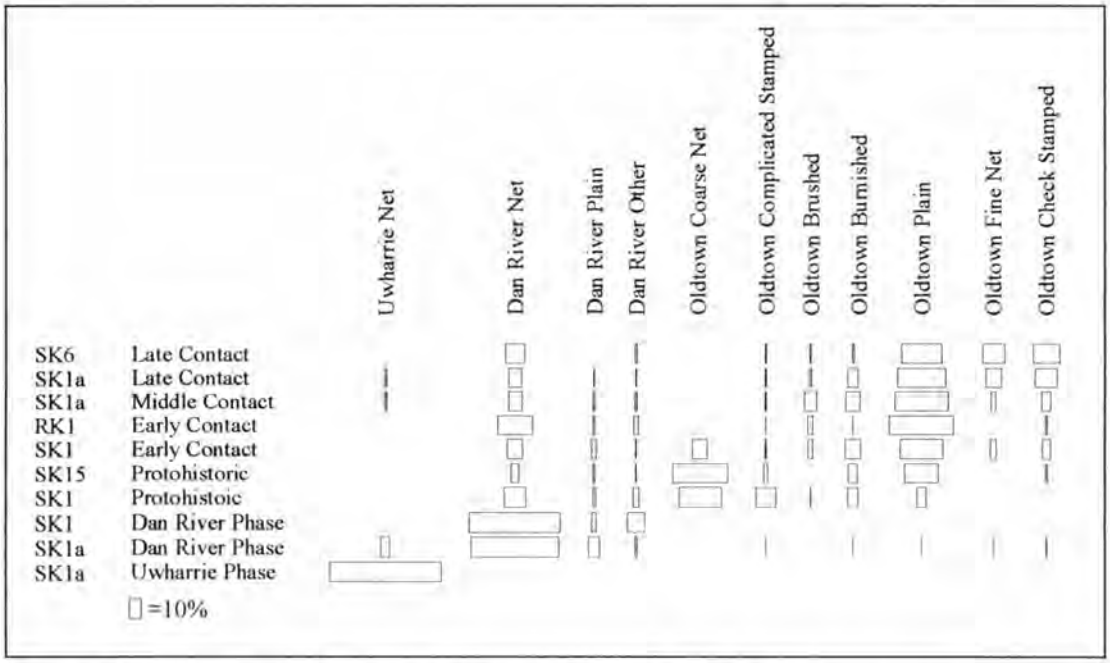

Figure 11. Pottery types from site components in the Dan River drainage.

impressed and complicated-stamped exteriors. All contact-period assemblages are dominated by Oldtown Plain pottery, but this type is most prevalent during the Early Contact period. Pottery assemblages from the Early and Middle Contact periods are distinguishable from later assemblages by relatively high frequencies of Oldtown Brushed sherds and relatively low frequencies of Oldtown Fine Net Impressed and Oldtown Check Stamped sherds. During the Late Contact period, the relative frequency of Oldtown Fine Net Impressed and Oldtown Check Stamped sherds increases as Oldtown Brushed declines markedly and Oldtown Plain begins to wane.

Using this chronology of ceramic change and information obtained from clay pipes, glass beads, corss-mends between features, and superposition of features, burials, and postholes, I was able to assign features from Upper Saratown and Hairston that could not

be seriated to one of the identified components at the sites. An additional 127 features from Upper Saratown could be assigned to either the Uwharrie phase, Dan River phase, Middle Contact period, or Late Contact period. Six additional features from Hairston could be assigned to either the Dan River phase, Protohistoric period, or Early Contact period. The pottery contained in each feature is presented in later sections of this chapter. Information on chronological designations, superposition of features, and cross-mending sherds between features is presented in Appendix 1.

I will now present information on the absolute dating of each of the components identified in the seriation.

Radiocarbon Age Estimates for Site Components

The relative chronology of components indicated by the pottery seriation is supported by a number of radiocarbon dates from the sites. A sample of 7.09g wood charcoal from Zones 5 and 6 of Feature 166 from Upper Saratown was submitted to Beta Analytic for radiocarbon dating. The charcoal was from oak and pine wood. This sample was given extended counting time because of its small size. The sample returned a conventional radiocarbon age of 850 ± 70 B.P. (Beta-105652; $\delta^{13}C$=-27.6‰). The calibrated intercept of the radiocarbon age is cal A.D. 1215 and its 2-sigma date range is cal A.D. 1025 to 1290 (see Appendix 2). This date is late within the estimated date range for the series, but is consistent with most dates associated with Uwharrie series pottery in North Carolina.

One radiocarbon date has been obtained from a charcoal sample from Feature 18 at Upper Saratown. The radiocarbon assay was 590 ± 60 BP (Beta-36089) and its calibrated intercept was cal A.D. 1398. The 2-sigma date range was cal A.D. 1286 to 1443 (Ward and

Davis 1993). This date falls within the latter half of the expected date range for the series. This Dan River phase occupation at Upper Saratown occurred at least a century later than the Uwharrie phase occupation at the site.

A radiocarbon date was obtained on a sample of 11.4 grams of wood charcoal from Zone 3 of Feature 22 at Hairston. The sample returned a conventional radiocarbon age of 570 ± 70 B.P. (Beta-105651; $\delta^{13}C$ = -27.0‰). The calibrated intercept of the radiocarbon age is cal A.D. 1405 and its 2-sigma date range is cal A.D. 1300 to 1435 (see Appendix 2). This date would place the prehistoric component at Hairston late in the Dan River phase. The Hairston site occupation probably occurred late in the date range indicted by the radiocarbon result and it probably postdates the Dan River phase occupation at Upper Saratown (see discussion below).

Ward and Davis (1993) submitted a sample of charcoal from Feature 2 at Hairston. This feature is part of the protohistoric component at the site. The age estimate for the sample is 600 ± 80 B.P. (Beta-36090). This radiocarbon age has multiple calibrated intercepts: cal A.D. 1328, 1333, and 1395. The 2-sigma range is cal A.D. 1276 to 1450. This estimated age predates the expected range for the Protohistoric period. Recently, two other radiocarbon dates were obtained for carbon samples from features at the neighboring protohistoric Nifong site (Eastman et al. 1997). Charcoal samples from two pit features at Nifong were submitted to Beta Analytic. Both features contained sherds from a small Oldtown Cob Impressed cup and, therefore, are probably contemporaneous. The 2-sigma ranges for the two samples overlap for the period cal A.D. 1515 to 1585 (Eastman et al. 1997:81-82). The pottery from this site was included in the seriation shown in Figure 11 and it compares well with that from the protohistoric component at Hairston. The

radiocarbon dates for Nifong are consistent with the expected date range for the Protohistoric period and a similar date is likely for the protohistoric occupation at Hairston. I have argued that the two sites were occupied at the same time and that Nifong may represent an isolated household associated with the nucleated village at Hairston (Eastman et al. 1997:119).

No radiocarbon samples have been submitted from contact-period features at Upper Saratown or Hairston. However, many of these features contain artifacts of European manufacture and also native-made artifacts that have limited temporal distributions on archaeological sites in eastern North America. Date ranges for these later occupations are estimated by reference to the dates of manufacture for some of the European trade goods and by the distribution of these and some native-made artifacts throughout eastern North America. The chronological information obtained from clay pipes, glass beads, and other European trade goods will be presented in later sections of this chapter.

Now that the radiocarbon dates have been presented to support my interpretations of the chronology of pit features at Upper Saratown and Hairston, I will describe pottery from each site component separately. The attribute coding format that was used to record attributes for the pottery is presented in Appendix 3. Descriptive terms like "medium quartz" used in the following discussion correspond to the size ranges listed in the attribute coding format.

Pottery Assemblages from Upper Saratown and Hairston

In this section, pottery from features associated with each site component at Upper Saratown and Hairston is described. The distribution of pottery types and selected attributes in

each pottery collection is presented. Then, the diagnostic pottery series for each component is described in detail. Profile drawings of each reconstructed vessel are presented in Appendix 4.

Uwharrie Phase - Upper Saratown Site

Seventeen features from Upper Saratown are associated with the Uwharrie phase occupation at the site. These features contained a total of 651 sherds. Of these, 328 were identifiable and were classified as Uwharrie series sherds. Table 4 presents the distribution of pottery types in Uwharrie phase pit features at the site. Table 5 presents the frequency of certain attributes by exterior surface treatment for these identifiable sherds.

More than 86% of the Uwharrie sherds are tempered with angular quartz particles of various sizes. Medium-sized quartz temper occurs in 117 (35.7%) sherds, 109 (33.2%) sherds have fine quartz temper particles, and coarse quartz particles are present in 58 (17.7%) sherds. Fine to coarse sand particles temper nearly 12% (N=39) of these sherds, while five sherds were tempered with unidentified crushed rock.

Impressions of knotted nets cover the exterior surface of most Uwharrie sherds in this assemblage, accounting for over 87% (N=288) of exterior surface treatments on identifiable sherds. Most impressions on these sherds reveal nets made of relatively thick cords with large knots spaced between 4 mm and 6 mm apart. Only three sherds in the assemblage were textured with nets made from fine cords. Figure 12 presents examples of decorated Uwharrie Net Impressed jars from Upper Saratown.

Twenty-two Uwharrie sherds were stamped with a wood paddle carved with a curvilinear complicated design. The design consists of opposing, stacked "U"s. The lands of the design are narrow, approximately 1 mm wide, similar to Pee Dee stamp designs, but

Table 4. Pottery Types in Uwharrie Phase Features at Upper Saratown

	Uwharrie Series						
Context	Net Impressed	Plain	Complicated Stamped	Cord Marked	Brushed	Indet.	Total
Fea. 6	13	2	12	-	-	46	73
Fea. 27	62	4	-	-	-	58	124
Fea. 44	10	-	-	-	-	24	34
Fea. 62	5	-	-	-	-	16	21
Fea. 64	5	-	-	-	-	16	21
Fea. 74	9	-	-	-	-	9	18
Fea. 84	1	-	-	-	-	9	10
Fea. 88	3	-	-	-	-	1	4
Fea. 89	1	-	-	-	-	12	13
Fea. 103	12	-	-	-	-	23	35
Fea. 115	8	-	-	1	-	1	10
Fea. 117	11	-	-	-	-	0	11
Fea. 122	71	2	-	-	1	30	104
Fea. 142	8	-	-	-	-	48	56
Fea. 166	66	2	10	3	-	15	96
Fea. 176	2	1	-	-	-	4	7
Fea. 194	2	1	-	-	-	11	14
Total	289	12	22	4	1	323	651
Percent	44.4	1.8	3.4	0.6	0.2	49.6	100.0

the design itself is not nearly as intricate or as precisely carved as Pee Dee complicated stamp designs. The complicated stamped sherds in the Uwharrie assemblage represent a minimum of two vessels and all sherds appear to have been stamped with the same carved paddle. One of the complicated stamped vessels and a reconstruction of the paddle design is presented in Figure 13.

Table 5. Attribute Analysis of Identifiable Pottery from Uwharrie Phase Features at Upper Saratown.

Attribute State	Net Impressed	Complicated Stamped	Rough-Smoothed	Cord Marked	Brushed	Total
Temper						
Quartz (med-coarse)	172	-	1	2	-	175
Quartz (fine)	91	12	4	2	-	109
Sand (coarse)	4	-	2	-	-	6
Sand (fine)	16	10	6	-	1	33
Crushed Rock	5	-	-	-	-	5
Subtotal	288	22	13	4	1	328
Interior Surface						
Scraped	257	22	8	4	1	292
Smoothed	26	-	5	-	-	31
Plain	4	-	-	-	-	4
Slipped	1	-	-	-	-	1
Subtotal	288	22	14	4	1	328
Wall Thickness						
4-6 mm	3	-	2	-	-	5
6-8 mm	120	4	8	2	1	135
8-10 mm	140	12	2	2	-	156
>10 mm	25	6	1	-	-	32
Subtotal	288	22	13	4	1	328

Thirteen Uwharrie sherds have roughly smoothed exterior surfaces. Four are marked with parallel impressions of plied cords that are 1 mm to 2 mm in diameter and are of both s- and z-twist structure. One sherd has a brushed exterior and may represent a sherd that was originally impressed with a net and subsequenctly scraped. Uwharrie Net Impressed sherds from other piedmont sites exhibit scraping that partially obliterates net impressions (see Ward and Davis 1993).

Most vessel interiors are scraped (N=292, 89.3%). Generally the tool strokes paralleled the vessel lip, but in some cases short strokes in random directions are evident. Just over 10% (N=35) of Uwharrie sherds have plain or smoothed interiors. Whether interiors were scraped or smoothed, temper particles often protrude through the interior wall. The interior of one sherd in the assemblage appears to have been covered with a clay slip and fired in an oxidized environment. The interior surface of this sherd is red.

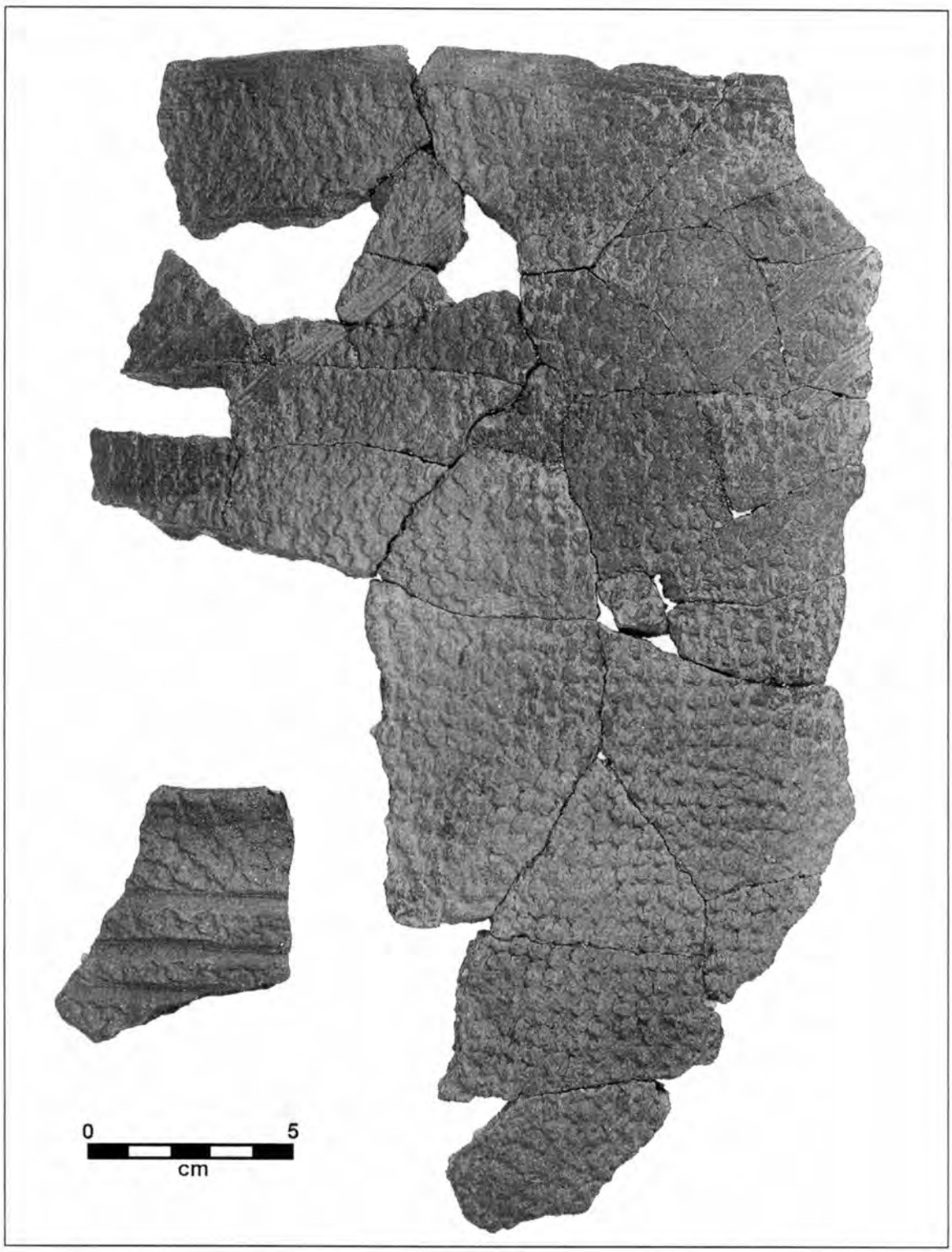

Figure 12. Decorated Uwharrie Net Impressed rim sherds from Feature 27, Upper Saratown.

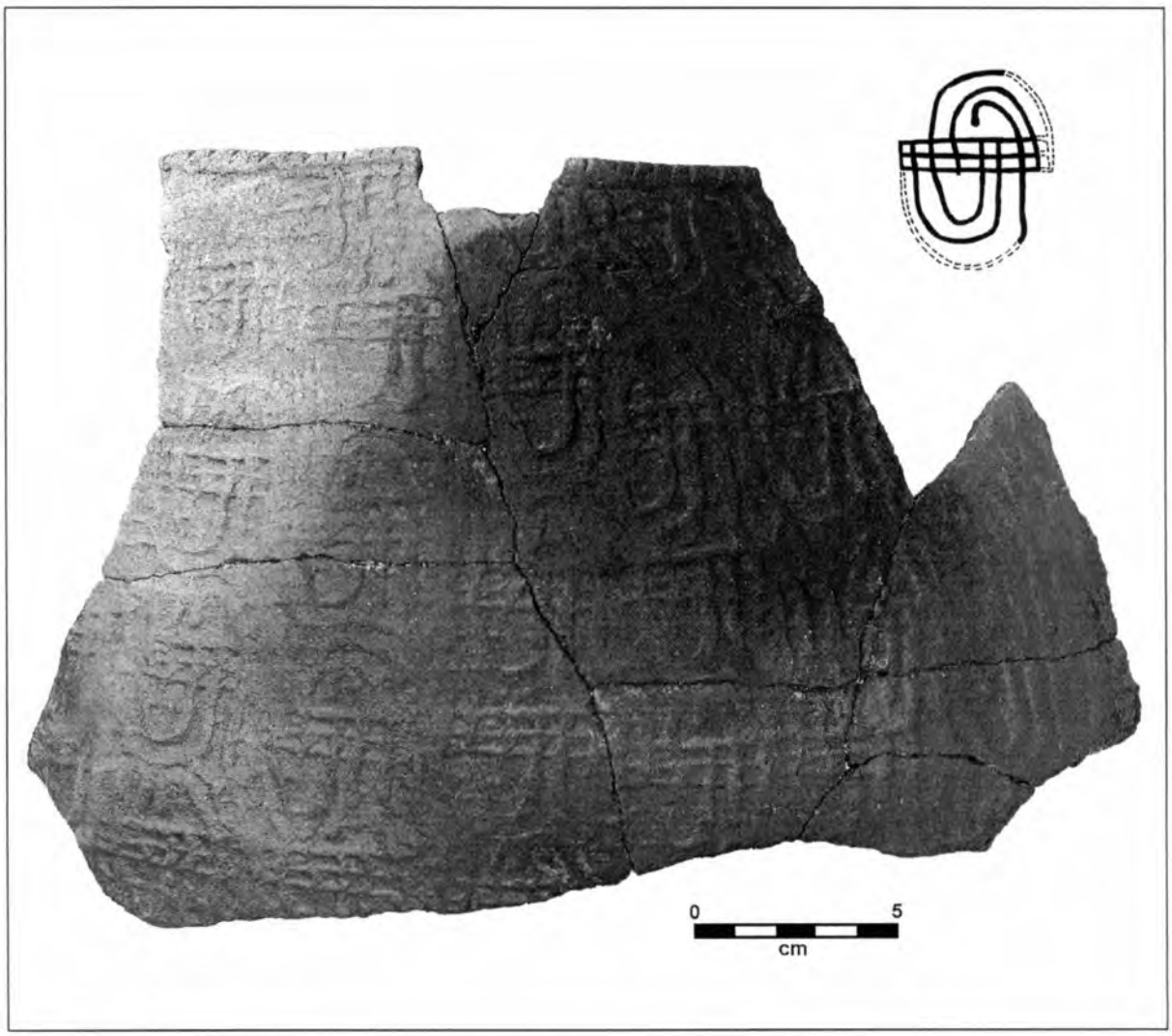

Figure 13. Curvilinear complicated stamped Uwharrie vessel from Feature 166, Upper Saratown (Vessel #99) and reconstruction of stamped design.

Vessel walls of these Uwharrie series sherds are rather thick, with just under half of the sherds measuring between 8 mm and 10 mm (N=156, 47.6%). Of the remaining sherds, 135 (41.2%) were between 6 mm and 8 mm thick, 32 sherds (9.8%) were greater than 10 mm thick, and only five sherds (1.5%) less than 6 mm thick.

The Uwharrie assemblage consists of 28 sherds with rims and 300 body sherds. Thirteen percent of these sherds are decorated. Of the 300 body sherds, only 16 are decorated. However, all but one of the 28 rim sherds are decorated and half of those rim sherds have modified lips. The most common locations for decoration on these Uwharrie sherds are the necks of jars (N=17), the lip or lip/rim margin (N=14), and the shoulder (N=12). In addition to these areas, five sherds have decorations located on the body below the shoulder and two have decorations on the rim.

Groups of parallel, incised lines are the most common decoration to occur on the neck of vessels. This type of decoration is illustrated in Figure 12. These incised lines are oriented either oblique (N=5) or parallel (N=5) to the rim. Other common neck decorations include smoothed or brushed bands and fingernail impressions oriented either parallel or perpendicular to the rim. Each of these neck decorations occurs on three vessels. One Uwharrie vessel has a fillet strip applied to the neck. Vessel shoulders are also frequently decorated. Twelve vessels exhibit a variety of shoulder decorations including oblique brushed bands (N=7), brushed bands parallel to the rim (N=1), multiple parallel incised lines (N=1), V-shaped notches (N=1), miscellaneous impressions (N=1), and a drilled hole. Brushed or scraped bands also occur on five body sherds.

One-half of the 28 Uwharrie rim sherds have modified lips. Lip decorations include V-shaped notches (N=10), U-shaped notches (N=3), and oblique incisions (N=1). Two vessel rims are decorated: one with U-shaped notches and the other with fingernail impressions.

Five large vessel sections could be reconstructed from this assemblage of Uwharrie sherds. Jars with restricted orifices are the only vessel form identified. The vessel profiles are presented in Appendix 4. Three of the vessel sections are from jars with everted rims and weak shoulders, one is from a large jar with a pronounced shoulder and a long inverted rim (Vessel 99), and the last vessel section is the lower body portion of a large jar (Vessel 83). All rim sherds in the assemblage are everted, except for the two large rim sherds that are part of Vessel 99. Of the 26 sherds with intact lips, 15 have rounded lips and 11 have flattened lips.

All vessels were formed by coiling and walls often broke along coil seams. Vessel 83 is the lower portion of a jar body. This vessel section provides interesting clues about the manufacturing process of the vessel. The vessel wall bulges outward at a certain point above the base. This characteristic was also observed in a completely reconstructed large Dan River jar from Hairston. This warping may have been caused by the weight of the upper body of the vessel as it dried. If this is the case, the vessel would have rested base-down while drying. The pronounced bulge could have resulted from the use of a form, like the base of another ceramic pot, to shape the base of the jar and as a support for the jar while it dried. The portion of the jar just above the top edge of the form would have borne the most weight and thus would have been most susceptible to warping during drying. If forms were used to shape and support the base of some Uwharrie and Dan River jars during the manufacturing process, nets may have been placed inside the form before the pot was built to provide a liner between the form and the new pot. A liner, like a net or pieces of cloth, would also have aided in removing the pot

from the form and may have been wrapped around the upper portions of the vessel to provide support while it dried. Large Oldtown jars do not exhibit similar bulges above the base and may have been manufactured by a different process.

Dan River Phase – Upper Saratown Site

Thirty-three features from Upper Saratown belong to the Dan River phase occupation at the site. Of the 1,771 sherds in these features, a total of 703 could be classified to type. Of these, 55 sherds are Uwharrie Net Impressed sherds and one is a Uwharrie Plain sherd. These probably represent sherds left at the site during the Uwharrie phase occupation that were subsequently re-deposited in Dan River phase features. In addition to these Uwharrie sherds, 17 sherds in Dan River phase features are classified as Oldtown series. The exterior of these sherds are check stamped, plain, complicated stamped, fine net impressed, and burnished. Most of these sherds were recovered from the uppermost zone of fill in features and they probably represent post-depositional contamination in the features. The rest of the identifiable sherds from these features are classified as Dan River series. Table 6 presents the distribution of pottery types from Dan River phase pit features at Upper Saratown. Table 7 presents the distribution of temper, interior surface treatment, and wall thickness by exterior surface treatment for all identified sherds in this assemblage.

When the distribution of attributes in this assemblage is compared to that of the Uwharrie assemblage, presented in Table 5, several differences become apparent. First, quartz temper is present in nearly 90% of all sherds in the Uwharrie assemblage, but it is found in only half of sherds in the Dan River collection. Sand temper increases in importance from only 12% in the Uwharrie assemblage to 46% in the Dan River assemblage. In addition, the

Table 6. Pottery Types in Dan River Phase Features at Upper Saratown.

		Dan River Series							
Context	Uwharrie Series	Cord Marked	Cob Impressed	Net Impressed	Plain	Brushed	Oldtown Series	Unidentified	Total
Fea. 5	1	-	-	28	2	-	-	49	80
Fea. 12	2	1	-	18	7	1	-	56	85
Fea. 15	2	-	-	51	16	-	-	89	158
Fea. 21	10	-	-	9	6	-	-	68	93
Fea. 28	-	-	-	5	-	-	1	6	12
Fea. 29	-	-	-	3	1	-	-	3	7
Fea. 30	1	1	-	3	-	-	1	33	39
Fea. 32	6	-	-	16	-	-	-	45	67
Fea. 35	-	-	-	2	-	-	-	14	16
Fea. 43	-	-	-	6	4	-	2	36	48
Fea. 55	-	1	-	1	3	-	1	23	29
Fea. 65	-	-	1	2	-	-	-	1	4
Fea. 78	-	-	-	1	1	-	-	1	3
Fea. 90	-	-	-	2	-	-	-	0	2
Fea. 91	-	-	-	4	-	-	-	5	9
Fea. 93	-	-	-	3	-	-	-	11	14
Fea. 94	-	-	-	7	-	-	1	20	28
Fea. 106	-	1	-	6	1	-	-	6	14
Fea. 138	-	-	-	1	-	-	-	5	6
Fea. 167	-	-	-	4	9	-	-	13	26
Fea. 177	5	1	-	31	-	1	1	88	127
Fea. 191	16	-	-	123	5	-	5	157	306
Fea. 192	1	-	3	27	3	1	-	48	83
Fea. 193	-	-	-	59	2	-	-	25	86
Fea. 194	-	-	-	2	1	-	-	11	14
Fea. 201	-	-	-	6	-	-	-	1	7
Fea. 203	-	-	-	9	-	-	-	9	18
Fea. 204	-	-	-	22	-	1	2	26	51
Fea. 205	6	-	-	49	5	-	1	83	144
Fea. 208	6	-	-	51	2	-	1	135	195
Total	56	5	4	551	68	4	16	1,067	1,771
Percent	3.2	0.3	0.2	31.1	3.8	0.2	0.9	60.2	100.0

relative frequency of scraped interior surfaces declines by about 13% from the Uwharrie phase to the Dan River phase. Also, fewer sherds in the Dan River assemblage have thick vessel walls. For example, 57% of sherds in the Uwharrie assemblage are greater than 8 mm thick, while only 34% of sherds in the Dan River assemblage have walls greater than 8 mm thick.

Most identified sherds in Dan River phase features at Upper Saratown are classified as Dan River series (N=632, 90%). These Dan River series sherds will now be described in detail. The most common type of Dan River series pottery is Dan River Net Impressed (N=551). It accounts for over three-fourths of sherds in the collection. Most exterior surfaces of these sherds have impressions of coarse knotted nets (N=457). Other Dan River Net Impressed sherds exhibit impressions of coarse looped nets (N=49), fine knotted nets (N=2), and unidentified nets (N=43).

The second-most-common pottery type in this collection is Dan River Plain. These sherds have both roughly smoothed exteriors (N=54, 9%) and plain smoothed exteriors (N=14, 2%). Other types of Dan River pottery that occur in small numbers in the assemblage are Dan River Cord Marked (N=5), Dan River Corncob Impressed (N=4), and Dan River Brushed (N=4).

Most interiors of Dan River sherds are scraped or brushed (N=423, 67%), while one-third are plain or smoothed (N=208, 33%). One sherd in the assemblage has a burnished interior. Vessel walls of the Dan River pottery are relatively thick with over half of the assemblage (N=359, 57%) measuring between 6 mm and 8 mm thick and over one-quarter (N=169, 27%) falling between 8 mm and 10 mm. Of the remainder, 10% (N=63) were thinner than 6 mm and about six percent were thicker than 10 mm.

Table 7. Attribute Analysis of Identifiable Pottery from Dan River Phase Features at Upper Saratown.

Attribute State	Net Impressed	Rough-Smoothed	Plain	Cord Marked	Corncob Impressed	Other	Total
Temper							
Quartz (med-coarse)	103	4	-	-	-	-	107
Quartz (fine)	228	7	3	2	1	5	246
Sand (coarse)	66	3	-	-	1	-	70
Sand (fine)	179	45	14	3	2	9	252
Crushed Rock	22	-	-	-	-	-	22
Other	6	-	-	-	-	-	6
Subtotal	604	59	17	5	4	14	703
Interior Surface							
Scraped	457	12	-	2	2	2	475
Smoothed	116	14	14	2	2	8	156
Plain	31	33	3	1	-	1	69
Burnished	-	-	-	-	-	3	3
Subtotal	604	59	17	5	4	14	703
Wall Thickness							
4-6 mm	37	28	3	-	1	1	70
6-8 mm	348	20	10	4	2	13	397
8-10 mm	183	5	4	1	-	-	193
>10 mm	36	2	-	-	1	-	39
Indeterminate	-	4	-	-	-	-	4
Subtotal	604	59	17	5	4	14	703

The paste of Dan River sherds is compact and sandy to the touch. In contrast to Uwharrie series pottery, temper particles are rarely visible on the interior of Dan River sherds. Fine subangular quartz particles (N=243, 38%) and coarse-to-fine sand (N=226, 36%) each account for over one-third of the recorded temper. Most other sherds are tempered with either medium-sized quartz particles (N=53, 8%), very fine sand (N=83, 13%), or miscellaneous crushed rock (N=21, 3%). A small number of sherds in this assemblage are tempered with coarse grit (N=2), steatite (N=1), mixed sand and steatite (N=1), and mixed quartz and feldspar (N=2).

Thirteen percent (N=80) of all Dan River series sherds are decorated and a total of 93 decorations are present on these 80 sherds. Figure 14 presents examples of decorated Dan River series rim sherds. Of the 113 sherds in this assemblage with intact neck sections, nearly half (N=49, 43%) have some sort of surface displacement decoration. Most decoration on jar

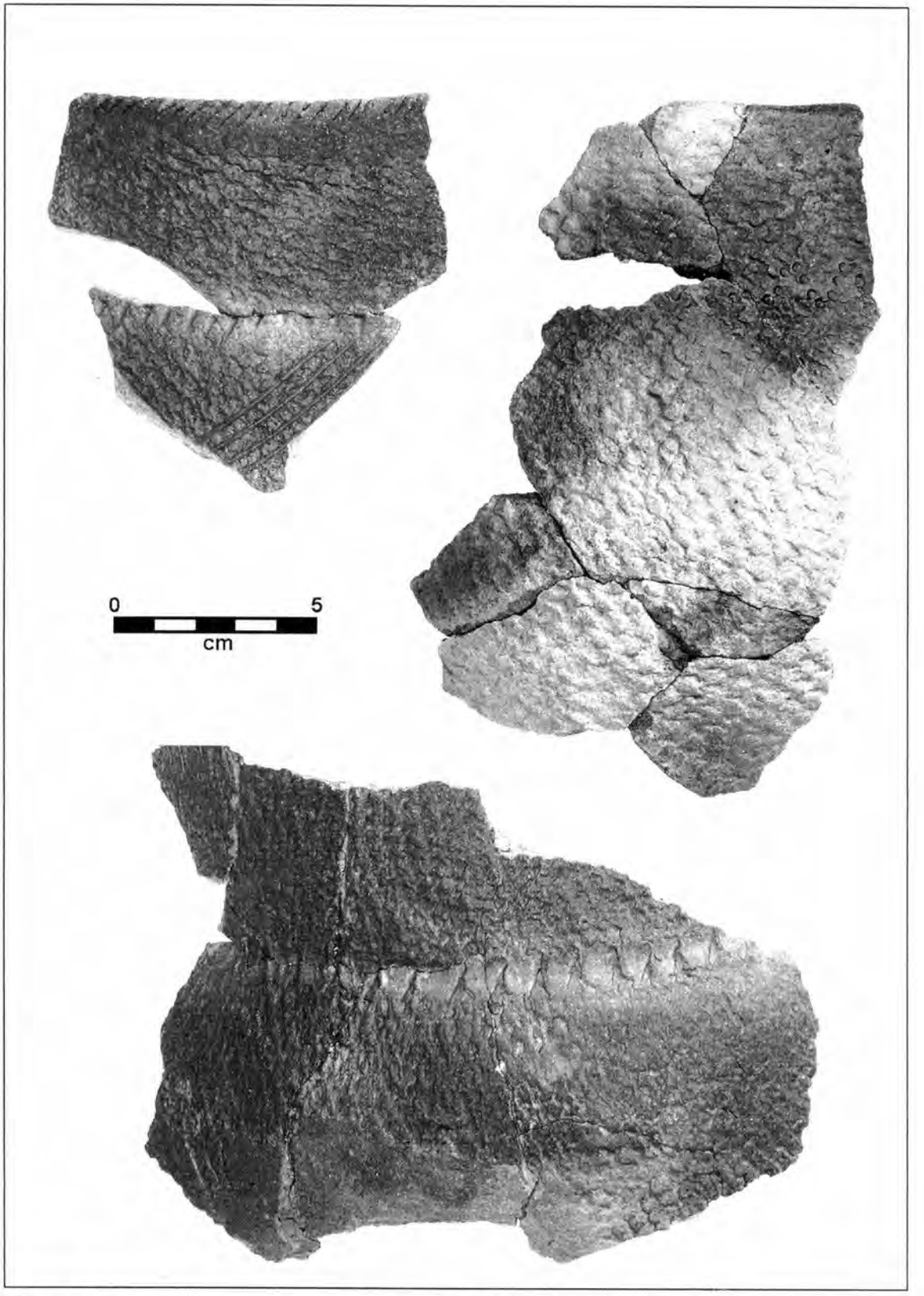

Figure 14. Decorated Dan River Net Impressed rim sherds from Upper Saratown.

necks consists of a horizontal band of punctations. Fingernail punctations are the most common type of decoration found on jar necks (N=21), followed by triangular or wedge-shaped punctations (N=9), circular reed punctations (N=5), incised horizontal lines (N=3), and horizontal brushed bands (N=2). Other neck decorations that occur on only a single sherd include: rectangular punctations, dowel impressions, incised inverted "V"s, applied nodes, short incised lines, miscellaneous incised lines, and miscellaneous impressions.

The second-most-common location for decoration on Dan River vessels is the lip or the margin between the lip and rim. Nearly one-third (N=23) of all rim sherds have modified lips. This area was decorated with V-shaped notches (N=11), U-shaped notches (N=5), parallel incisions (N=4), and other types of incisions or punctations (N=3).

Other less common locations for decoration on Dan River series vessels include the rim, shoulder, and body. Only 12% of all sherds with intact rim portions exhibit decoration in that area. Incised lines oriented parallel (N=4) or oblique (N=3) to the rim account for most decorations on vessel rims. Other rim decorations that occur on a small number of Dan River sherds include fingernail punctations, U-shaped punctations, and a drilled hole. The shoulder region of Dan River vessels was rarely decorated, and the body below the shoulder even less so. Decorations occur on nine percent of all vessel shoulders. This area was decorated with zones of circular reed punctations (N=3), incised arcs (N=2), and incised inverted "V"s. Brushed bands, incised oblique lines, and miscellaneous incised lines were observed on four body sherds.

Ten vessels were partially reconstructed from this assemblage of sherds. Eight are jars with restricted necks, one is a restricted neck cup or small jar, and the tenth is a miniature jar with a conical base (see Figure 15). Over 80% of sherds with identifiable rim forms in the

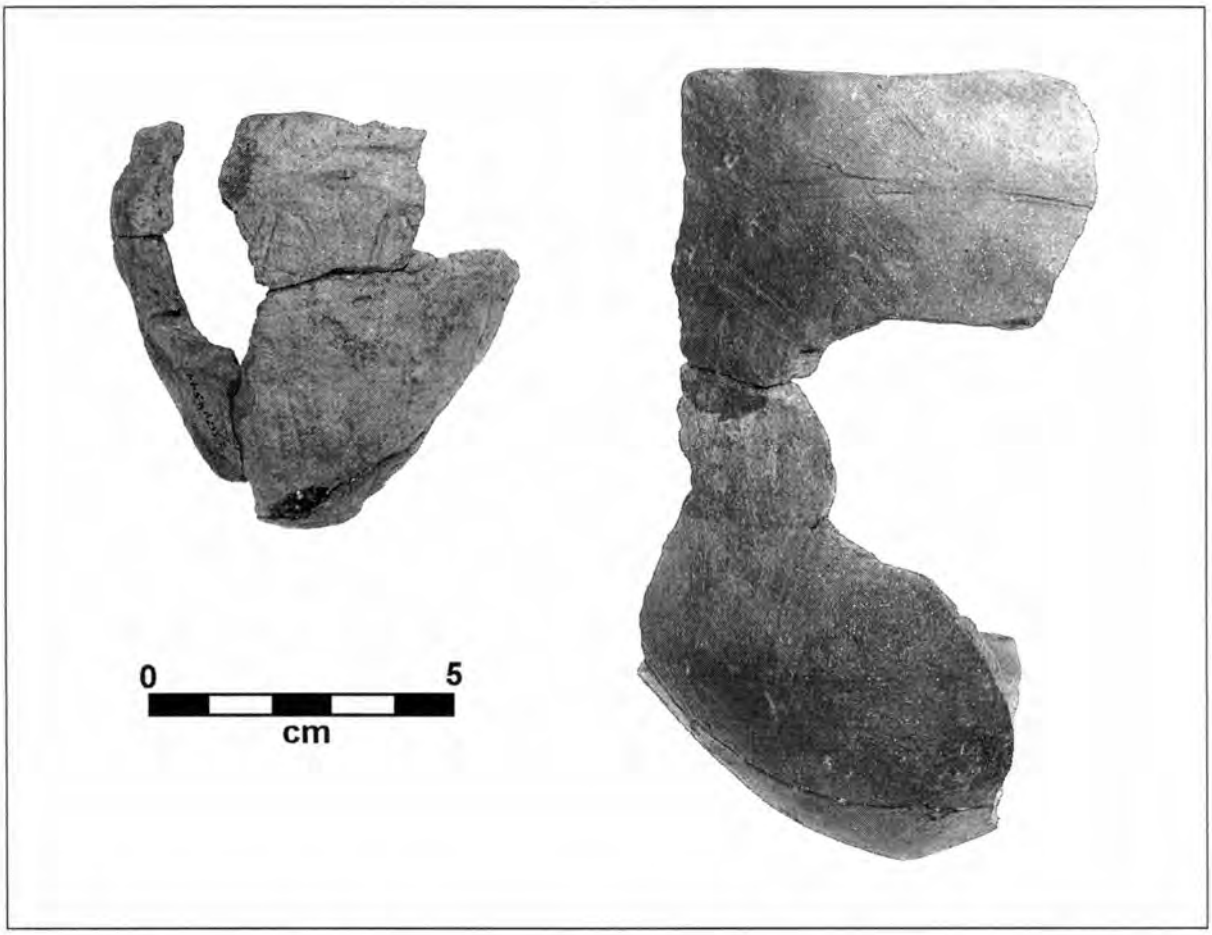

Figure 15. Miniature Dan River vessel (left) and small Dan River Plain jar or cup from Upper Saratown.

assemblage are from jars with restricted necks and everted rims (N=58). A few rim sherds are recurved (N=5), incurvate (N=5), or straight (N=4). Of the 79 Dan River sherds with intact lips, just over half (N=43, 54%) have rounded lips and most others (N=35, 44%) have flattened lips. One sherd has a pointed lip.

Of the reconstructed vessels, all eight larger jars have net-impressed exteriors. The two smaller reconstructed vessels have plain or roughly smoothed exteriors.

Late Dan River Phase - Hairston Site

The late prehistoric occupation at Hairston is represented by a large, stratified storage pit (Feature 22) and a shallow refuse pit (Feature 28). Though Feature 28 did not have enough sherds to be included in the pottery analysis, it contained a few large refitting sherds. These refitting sherds are from a large net impressed jar that is similar in form, exterior surface treatment, interior surface treatment, and temper to net-impressed pottery from Feature 22. I believe the two features are associated with the same late Dan River phase occupation at the site.

Pottery from Feature 22 was analyzed. This feature contained a total of 666 sherds, of which 300 were too small to be identified. Table 8 presents the results of the attribute analysis of identifiable pottery from Feature 22. Exterior surface treatments subsumed under the *Other* category in the table include corncob impressed (N=4), complicated stamped (N=3), burnished (N=1), and indeterminate (N=3).

A pothole had been dug in the south half of Feature 22 and it was excavated separately from the intact portion of the feature. There is good evidence, however, that during excavation some pothole fill was mixed in with intact fill from the upper zone of the feature. The feature context, *Zone 1, South Half,* contained 2 white glass seed beads (Kidd

Table 8. Attribute Analysis of Pottery from Feature 22 at Hairston by Exterior Surface Treatment.

Attribute State	Net Impressed	Cord Marked	Brushed	Plain	Simple Stamped	Other	Total
Temper							
Quartz (fine)	244	21	1	6	-	2	274
Quartz (medium)	16	6	-	-	-	-	22
Sand (fine)	23	-	-	3	-	8	34
Sand (coarse)	7	1	-	1	-	1	10
Quartz & Feldspar	1	-	13	1	10	-	25
Crushed Rock	-	-	-	1	-	-	1
Subtotal	291	28	14	12	10	11	366
Interior Surface							
Scraped	127	3	14	3	10	5	162
Plain	163	25	-	9	-	6	203
Indeterminate	1	-	-	-	-	-	1
Subtotal	291	28	14	12	10	11	366
Wall Thickness							
4-6 mm	8	-	-	-	-	5	13
6-8 mm	178	3	14	9	3	5	212
8-10 mm	96	20	-	3	7	1	127
> 10 mm	9	5	-	-	-	-	14
Subtotal	291	28	14	12	10	11	366

and Kidd's type IIa14) and most sherds in the *Other* category in Table 8 (Kidd and Kidd 1970). The three complicated stamped sherds in the assemblage, four of the five sherds that are between 4 mm and 6 mm thick, and half of the sherds with fine sand temper were recovered from this feature context. These sherds and the two glass beads should be considered contaminants from the intrusive pothole and are probably associated with later occupations at the site.

The classification of sherds from Feature 22 at Hairston is somewhat problematic. This pottery appears to be transitional between Dan River and Oldtown series. Most sherds in the Feature 22 assemblage have impressions of coarse knotted nets similar to Dan River Net Impressed pottery, but many other attributes like vessel form, some types of exterior surface treatment, and decoration differentiate it from most Dan River series collections.

Dan River assemblages are characterized by jars with everted rims, while most rim sherds in the Feature 22 assemblage have everted/folded rims (see Figures 16 and 17). In addition, one vessel from Feature 22 has a simple stamped exterior (see Figure17). This surface treatment is uncommon in Dan River phase assemblages. Overall, fewer sherds from Feature 22 are decorated than sherds in the Uwharrie or Dan River assemblages from Upper Saratown. Only 10% of the sherds from Feature 22 are decorated, compared to 13% in both late prehistoric assemblages from Upper Saratown. Also, most decoration on sherds from Feature 22 occurs on the lip or the lip/rim margin, while most decoration occurs on the neck of Uwharrie and Dan River vessels. Furthermore, incisions are the most common form of decoration in the Feature 22 assemblage, while punctations are the most common decorative technique on Dan River sherds.

In an effort to classify sherds from Feature 22, I examined the relative frequency of selected attributes from late prehistoric Uwharrie and Dan River phase pottery from Upper Saratown, Feature 22 pottery, and pottery from the protohistoric component at Hairston. This comparison is presented in Table 9. Based on the definitions of Uwharrie, Dan River, and Oldtown series the first three attributes listed in Table 9 decrease in frequency through time from the late Prehistoric period in the Dan River drainage (Coe 1952; Coe and Lewis 1952; Wilson 1983; Ward and Davis 1993).

When compared with the other assemblages, the percentage of sherds with net-impressed exteriors in Feature 22 is comparable to that in the two late prehistoric assemblages. Vessel wall thickness of sherds from Feature 22 is also comparable to that of pottery from the Dan River assemblage. In contrast, the percentage of scraped interiors in the Feature 22 assemblage is intermediate between the late prehistoric assemblages and the

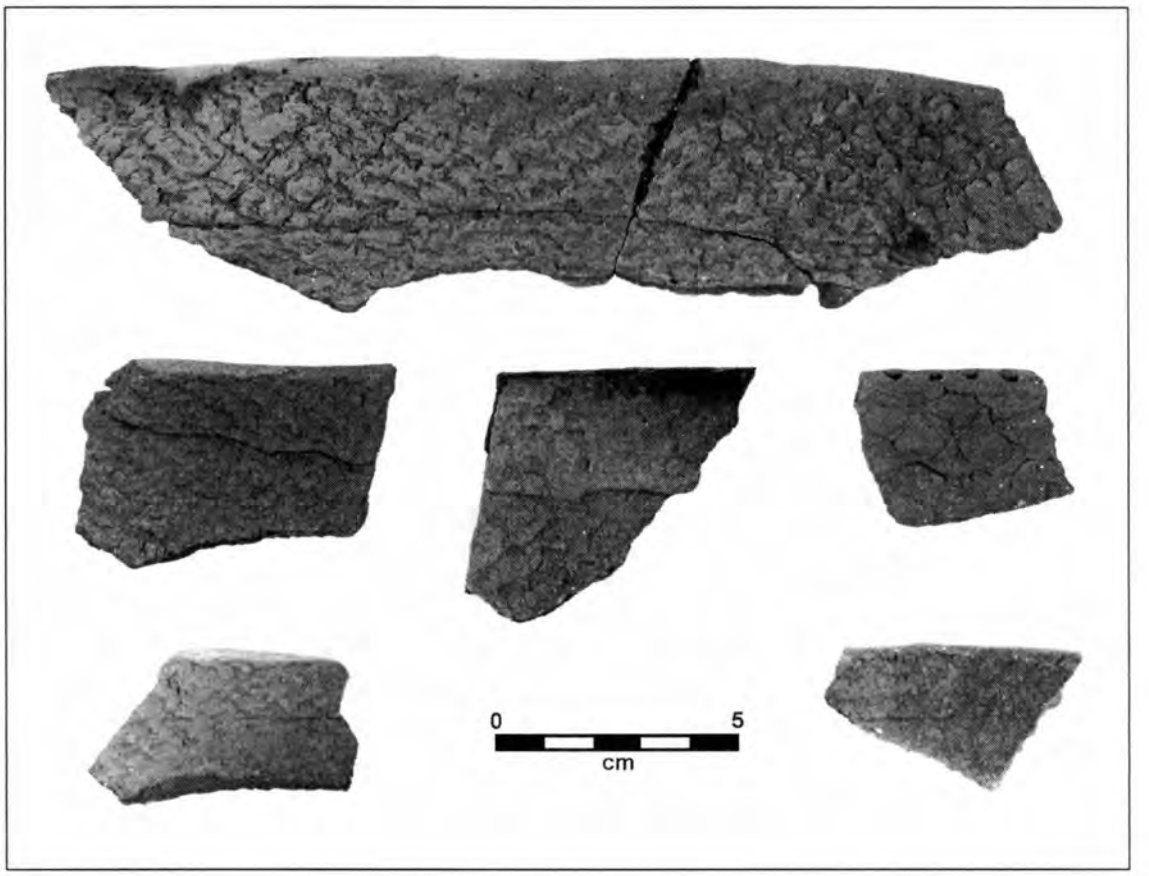

Figure 16. Net Impressed rim sherds from Feature 22, Hairston. Note that rims are folded.

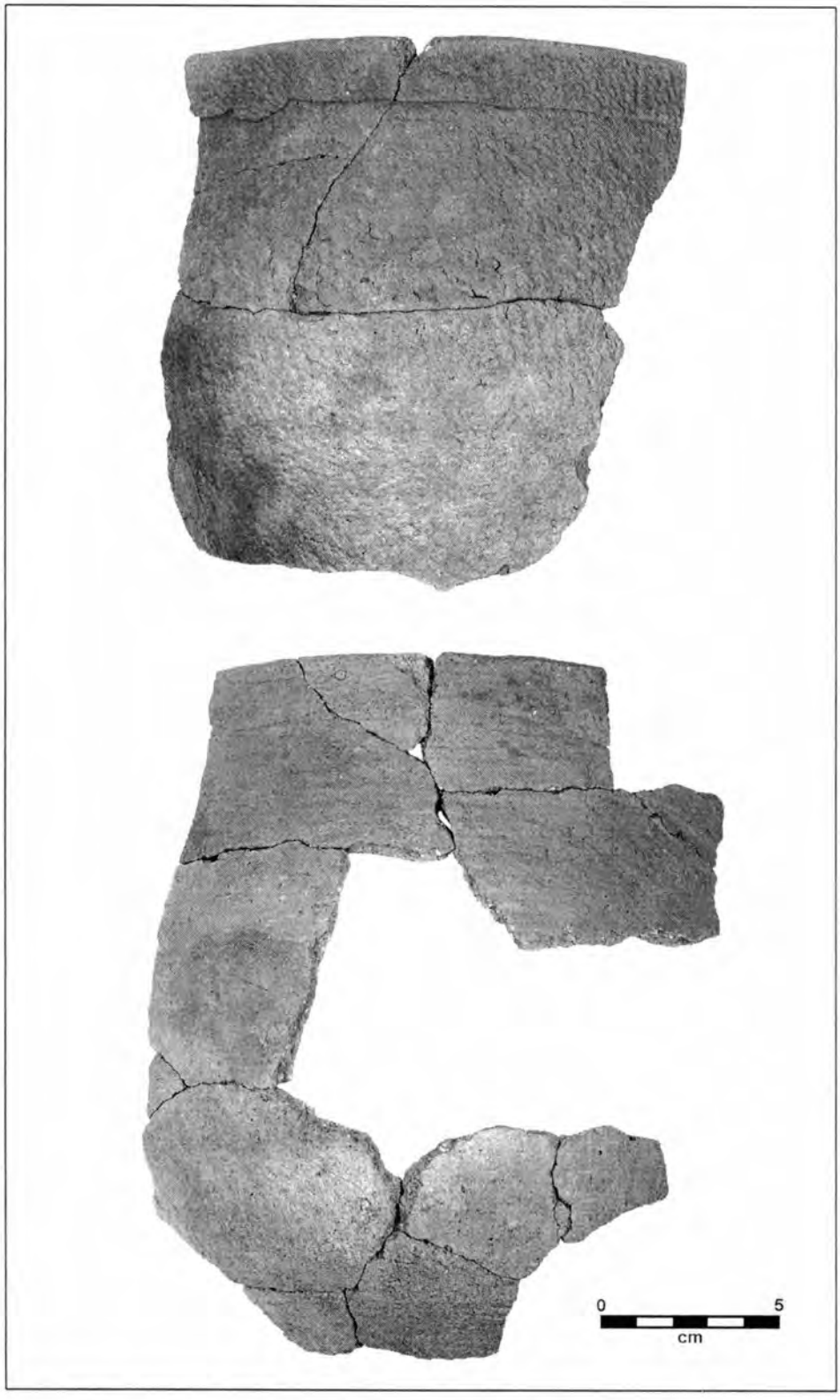

Figure 17. Partially reconstructed vessels from Feature 22, Hairston. Dan River Net Impressed jar (top) and simple stamped jar with crushed feldspar temper (bottom).

protohistoric assemblage, and rim form is comparable to early Oldtown series pottery in the protohistoric assemblage. Figure 16 presents a number of sherds from Feature 22 with folded rims and net impressed exteriors. These attributes indicate that pottery in Feature 22 is transitional between the Dan River series and early Oldtown series.

One attribute presented in Table 9 does not support this interpretation. A high percentage of sherds in Feature 22 are tempered with angular quartz particles. The percentage of quartz temper is comparable to that of sherds in the Uwharrie assemblage, but the temper particles in the assemblage from Feature 22 are more angular than those in the Uwharrie or Dan River sherds from Upper Saratown.

Table 9. Relative Frequency of Selected Attributes of Pottery Assemblages

Attribute	Uwharrie Phase 31Sk1a (%)	Dan River Phase 31Sk1a (%)	Fea. 22 Pottery 31Sk1 (%)	Protohistoric 31Sk1 (%)
Net Impressed Exterior	88	86	81	47
Scraped Interior Surface	89	67	44	17
Sherds > 8mm Thick	57	33	38	13
Folded Rims	0	4	54	40
Quartz Temper	87	47	82	10

In addition to sherds with quartz temper, two reconstructed vessels from Feature 22 have quartz and feldspar temper. One of these vessels is simple stamped and the other is brushed. Crushed feldspar is a common tempering agent in late prehistoric Haw River series and Hillsboro series pottery from the Haw and Eno drainages. The Hillsboro series includes a simple stamped type, but the vessels from Feature 22 with feldspar temper do not compare well with either the Haw River or Hillsboro series.

One recently described pottery assemblage with a majority of Dan River sherds compares well with the pottery in Feature 22. MacCord (1998) published a site report

detailing archaeological remains uncovered by construction-related disturbance and limited test excavations at the Martin site (44Wy13), located in the New River drainage in Wythe County, Virginia. Artifacts from the site indicate several occupations during the Archaic and Woodland periods, but the most intensive occupation appears to have been during the Dan River phase and may have extended into the Protohistoric period (MacCord 1998:199). The report included a brief description of the pottery assemblage recovered from the site. Sand-tempered Dan River series pottery dominates the assemblage, accounting for more than 92% of all sherds from the site. Other pottery series in the assemblage include, in order of frequency, Radford, New River, Grayson, and Smyth series. Although attributes for these sherds are not tabulated in the report, the four Dan River Net Impressed rim sherds that are illustrated all exhibit folded and everted rims and appear very similar to rim sherds from Feature 22.

Fortunately, a small collection of 22 sherds from the Martin site is housed at the RLA. This collection is comprised primarily of rim sherds and contains examples of all the series identified by MacCord, except for the Smyth series. The RLA collection from the Martin site includes six Dan River Net Impressed rim sherds. Five of these have folded and everted rims and compare very well with sherds from Feature 22 at Hairston. These Dan River Net Impressed sherds are tempered with mixed coarse sand and crushed quartz (N=3), medium sand (N=2), and crushed quartz (N=1). Similar to sherds in Feature 22, half of these sherds have scraped interiors and the rest are smoothed, and none of the rim sherds are decorated.

MacCord (1998:202) noted the likelihood that elements of the Martin site pottery assemblage represented influence from or migration of potters from the Carolina Piedmont.

The presence of burnished cazuela bowls and vessels with curvilinear complicated stamped (filfot scroll) exteriors provide the best evidence for this connection. Pottery that exhibits most of the characteristics MacCord cites as indicative of Lamar influence are found at Hairston, particularly in the protohistoric pottery assemblage.

The ceramic assemblages from Hairston and Martin indicate that during the late Dan River phase and into the Protohistoric period, potters from the sites interacted and shared ideas, if not residences. This interaction appears to have brought ceramic traits like sand tempering, burnished cazuela forms, and filfot scroll complicated stamped designs into the New River drainage. This interaction is evidenced in the Dan drainage by folded rims and the use of crushed rock temper during the late Dan River phase. These two traits characterize limestone-tempered Radford pottery manufactured in the New River drainage around the Martin site (Holland 1970:64-67).

Thus a comparison of the pottery from Feature 22 at Hairston with other late prehistoric wares in the region indicates this pottery may reflect influence from the New River drainage and that it may be transitional between Dan River series and early Oldtown series. The radiocarbon age estimate of A.D. 1300 to 1430 for Feature 22 supports the interpretation that this pottery represents a late Dan River series assemblage. This analysis indicates that pottery from Feature 22 postdates the Dan River phase assemblage from Upper Saratown. I believe the occupation represented by Feature 22 dates to the end of the date range indicated by the radiocarbon assay, probably to the first quarter of the fifteenth century.

Protohistoric Period – Hairston Site

Pottery from five pit features associated with the protohistoric component at Hairston were analyzed. Nearly half of the 1,139 sherds in these features were too small to be identified (N=560, 49.2%). New River, Dan River, and Oldtown series sherds are present in this assemblage. About one-fifth of all identified sherds are late prehistoric (either Dan River or New River series), while the other identified sherds are protohistoric Oldtown series. Table 10 presents the distribution of pottery types in these features.

I have defined a new Oldtown pottery type for this assemblage. Davis identified a net-impressed type for the Oldtown series when he described the Late Contact period assemblage at William Kluttz (Ward and Davis 1993). Davis's Oldtown Net Impressed is characterized "by the almost exclusive use of fine-to-very-fine sand temper, the presence of very fine net impressions on the exterior surface (in contrast to the relatively coarse netting used by Dan River potters), uniformly smoothed vessel interiors, and thin sherd or vessel walls (only eight basal sherds exceed 8 mm in thickness)" (Ward and Davis 1993:295). Most net-impressed sherds in Hairston's assemblage have Oldtown paste, but have impressions of nets with texture intermediate between those evident on Dan River Net Impressed and Davis's Oldtown Net Impressed types. I have defined the type *Oldtown Coarse Net Impressed* to describe these sherds and suggest that Davis's Oldtown Net Impressed be referred to as Oldtown Fine Net Impressed. Oldtown Coarse Net Impressed sherds generally exhibit clear impressions of nets with knots approximately 2.5 mm in diameter separated by about 5 mm. The cords used to make the nets usually between 0.5 mm and 1 mm in diameter. Figure 18 illustrates examples of this type of pottery. Very similar Oldtown Coarse Net Impressed vessels were recovered

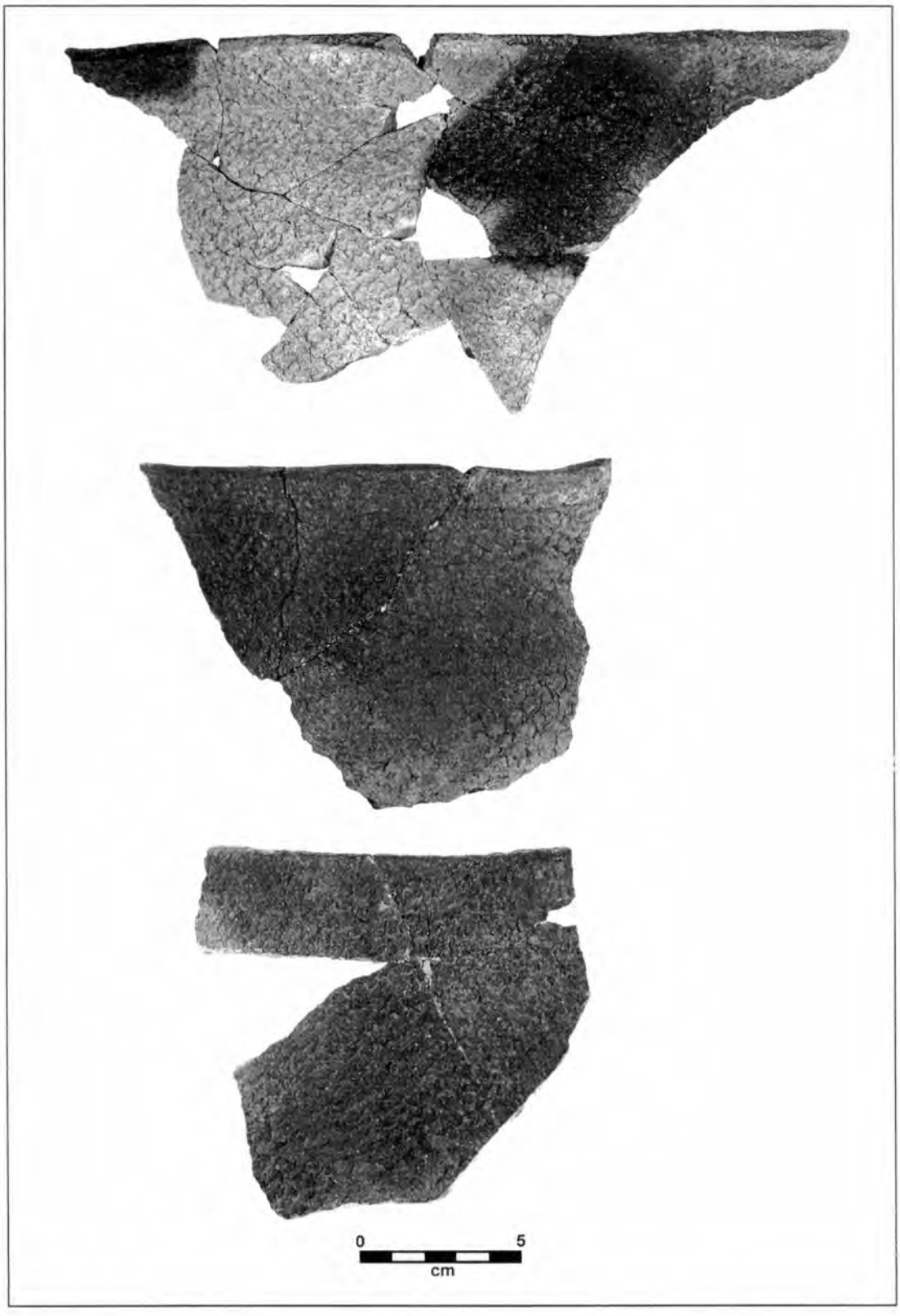

Figure 18. Examples of Oldtown Coarse Net Impressed vessels from Hairston. All rims are folded.

Table 10. Pottery in Protohistoric Features at Hairston.

Pottery Types	Fea. 2	Fea. 5	Fea. 27	Fea. 38	Total	Percent
New River Plain	-	1	-	-	1	0.1
Dan River Series						
Net Impressed	17	44	7	25	93	8.2
Plain	8	3	-	-	11	1.0
Corncob Impressed	16	1	-	-	17	1.5
Cord Marked	-	3	1	-	4	0.4
Brushed	1	-	-	1	2	0.2
Subtotal	42	51	8	26	127	11.2
Oldtown Series						
Coarse Net Impressed	15	73	73	17	178	15.6
Complicated Stamped	5	23	1	53	82	7.2
Simple Stamped	45	8	-	-	53	4.7
Burnished	2	23	18	1	44	3.9
Cord Marked	20	4	-	18	42	3.7
Plain	6	13	10	7	36	3.2
Brushed	-	3	-	-	3	0.3
Other	-	2	1	-	3	0.3
Subtotal	93	149	103	96	441	38.7
Other	9	1	-	-	10	0.9
Unidentified	180	315	36	29	560	49.2
Total	324	517	147	151	1139	100.0
Percent	28.4	45.4	12.9	13.3	100.0	

from the protohistoric Nifong site. This type of pottery may be limited to the Protohistoric and Early Contact periods.

Table 11 presents the distribution of several attributes recorded for all identified sherds from protohistoric features at Hairston. If this table is compared to attributes of Uwharrie and Dan River assemblages presented in Tables 5 and 7, several trends of change

Table 11. Attribute Analysis of Pottery from Protohistoric Features at Hairston.

Attribute State	Net Impressed	Cord Marked	Burnished	Plain	Simple Stamped	Complicated Stamped	Other	Total
Temper								
Quartz (fine)	56	5	3	17	-	8	1	90
Sand (very fine)	44	1	9	3	43	3	1	104
Sand (fine)	148	40	27	21	6	16	8	266
Sand (coarse)	19	-	4	6	1	54	23	107
Quartz&Feldspar	-	-	-	-	3	-	-	3
Crushed Rock	-	-	2	-	-	1	-	3
Other	4	-	-	1	-	-	1	6
Total	271	46	45	48	53	82	34	579
Interior Surface								
Scraped	100	3	13	11	-	34	6	167
Plain	171	43	10	35	50	45	28	382
Burnished	-	-	22	2	3	3	-	30
Total	271	46	45	48	53	82	34	579
Wall Thickness								
2-4 mm	-	-	-	1	-	1	-	2
4-6 mm	33	5	6	12	6	5	1	68
6-8 mm	158	38	37	26	46	69	31	405
8-10 mm	68	3	2	8	1	7	2	91
> 10 mm	12	-	-	1	-	-	-	13
Total	271	46	45	48	53	82	34	579
Rim Form								
Everted/Folded	22	4	-	-	-	5	-	31
Everted	3	3	1	5	13	2	13	40
Inverted	2	-	2	6	-	-	-	10
Carinated	-	-	2	3	-	-	-	5
Other	-	-	-	3	-	-	-	3
Total	27	7	5	17	13	7	13	89

through time become apparent. This protohistoric assemblage has a higher relative frequency of sand temper, and a correspondingly lower frequency of quartz temper, than the late prehistoric assemblages. This assemblage also has fewer sherds with scraped interiors than the other assemblages. Finally, when compared to either of the late prehistoric assemblages, fewer sherds in the protohistoric assemblage are thicker than 8 mm and a higher frequency of sherds are thinner than 4 mm thick. The trajectory of change in temper, interior surface treatment, and vessel wall thickness first noted between the late prehistoric Uwharrie and Dan River assemblages continues into the protohistoric Oldtown assemblage.

Having considered attributes of all identifiable sherds in this assemblage, I will now describe the protohistoric Oldtown series pottery in greater detail. The Oldtown series exhibits clear evidence that it is part of the same tradition as the preceding Dan River series. All exterior surface treatments found on Dan River series pottery were retained in the Oldtown series, but, in addition to these traditional exteriors, new surface treatments were added. Like the Dan River series, the most common exterior surface treatment in the Oldtown pottery from Hairston is net impressed (N=178, 40.4%). Other traditional surface treatments in this assemblage include cord marked (N=42, 9.5%), plain (N=36, 8.2%), brushed (N=3), and corncob impressed (N=1). New surface treatments include filfot scroll complicated stamped (N=82, 18.6%), simple stamped (over-stamped and spiraled) (N=82, 12.0%), and highly burnished (N=44, 9.9%). The curvilinear complicated stamping and highly burnished vessels reflect influences from outside the Dan River tradition. These exteriors occur for the first time in significant numbers in assemblages from the Dan River drainage during the Protohistoric period. Figures 19 through 21 illustrate examples of these Oldtown pottery types. The decorations shown in these figures are also atypical for the Dan River series.

Many attributes in this protohistoric ceramic assemblage, such as curvilinear complicated stamping, highly burnished cazuela bowls, and jars with folded/everted rims, reflect influence from the Lamar pottery region. Lamar pottery was made throughout Georgia, in eastern Alabama and Tennessee, southwestern North Carolina, west-central South Carolina, and a portion of northern Florida. While some Lamar influences can be seen in the protohistoric assemblage from Hairston, Lamar incised pottery and many Lamar

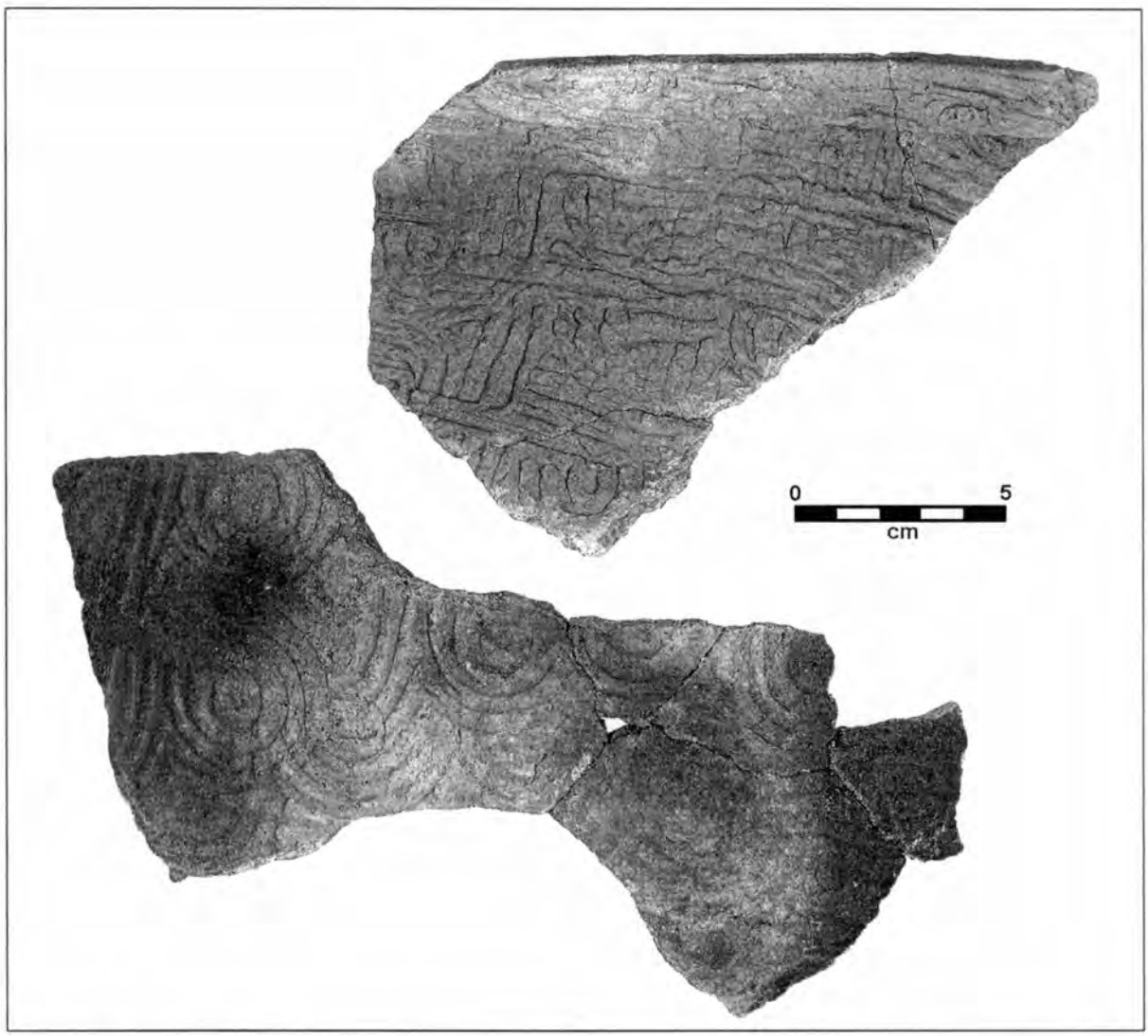

Figure 19. Oldtown Curvilinear Complicated Stamped vessel sections (filfot scroll design) from Hairston. Both vessels are large jars with everted/folded rims.

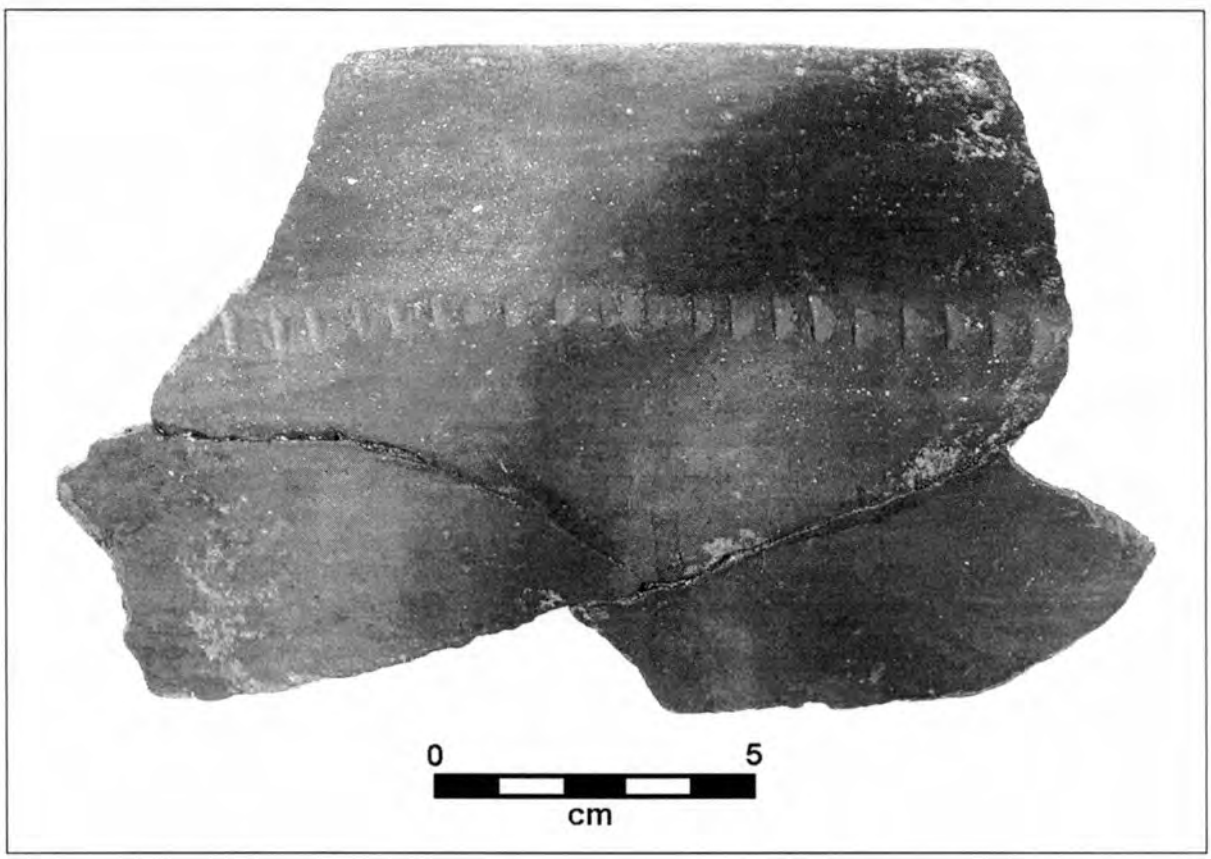

Figure 20. Oldtown Burnished cazuela bowl section from Hairston with nicks along the shoulder.

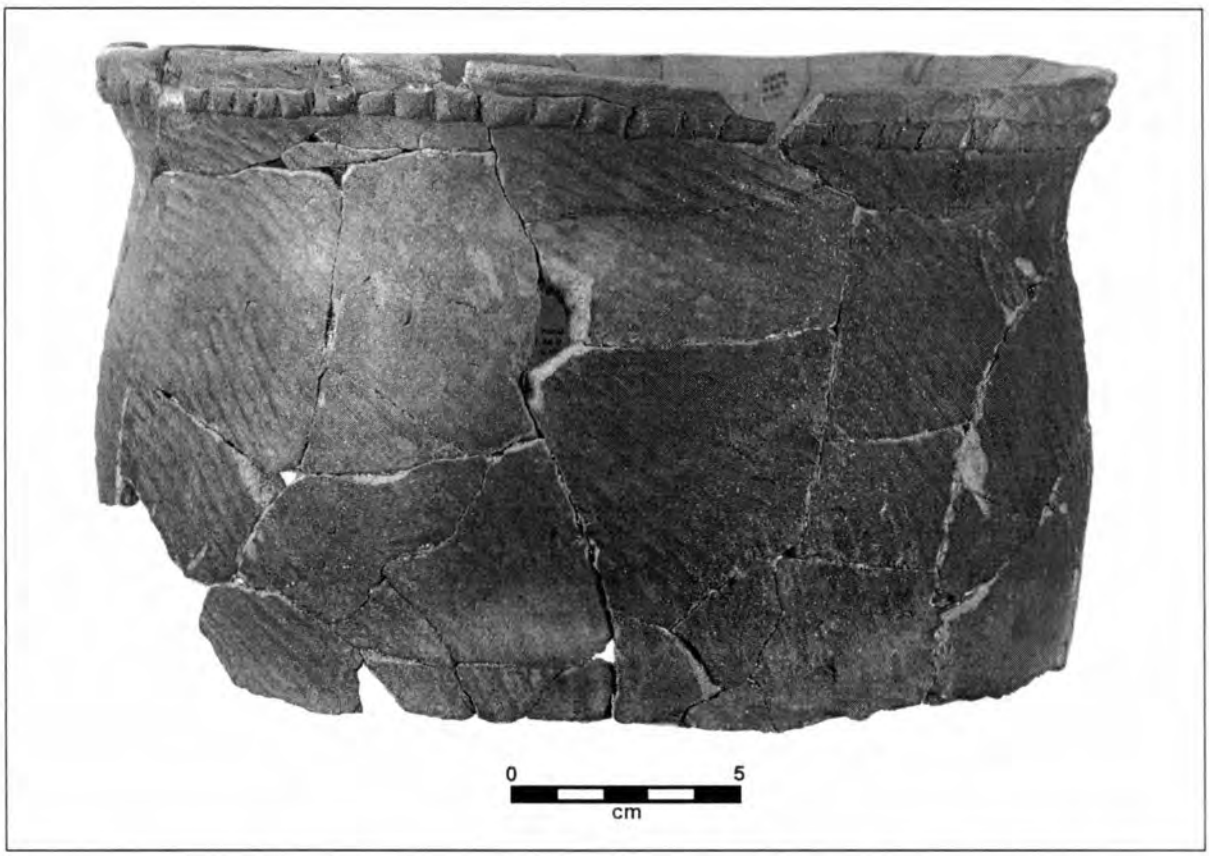

Figure 21. Oldtown Simple Stamped (spiralled) vessel section from Hairston with applied fillet on the rim.

decorations like pinching or punctations along the bottom of rim folds and applied clay pellets, nodes, or rosettes were not adopted by Oldtown potters.

Filfot scroll complicated stamping occurs for the first time in Oldtown assemblages during the Protohistoric period (see Figure 19). This style of stamping is much less common in the Southeast than filfot cross stamping which is found throughout the Lamar region and is very common on Pee Dee phase in the southern North Carolina Piedmont. Examples of both styles of stamping are presented in Figure 22. Filfot scroll stamping is present in the protohistoric and early-contact Caraway series from the central North Carolina Piedmont (Coe 1995:Figure 9.14H) and has been identified at the Contact period Belk Farm site (31Mk85) in Mecklenburg County (Wilson 1983:Plate LIII). It appears that filfot scroll stamping is later than Lamar filfot cross stamping and may be a protohistoric development that is most common in the North Carolina piedmont.

The interior surfaces of most Oldtown series sherds in the protohistoric assemblage from Hairston are smoothed (N=330, 74.8%). However, some are scraped (N=17, 3.9%) or smoothed-over-scraped (N=64, 14.5%). A small number of sherds have burnished interiors (N=30, 6.8%). Most sherds with burnished interiors also have burnished exteriors.

The paste of Oldtown series pottery is compact, generally micaceous, and smooth to the touch. Half of Oldtown sherds from Hairston are tempered with fine sand (N=220, 49.9%), a quarter more are tempered with very fine sand (N=102, 23.1%), and nearly 20% are tempered with coarse sand (N=79, 17.9%). A small number of sherds are tempered with fine quartz (N=34, 7.7%), a mixture of quartz and feldspar (N=3), and miscellaneous crushed rock (N=3).

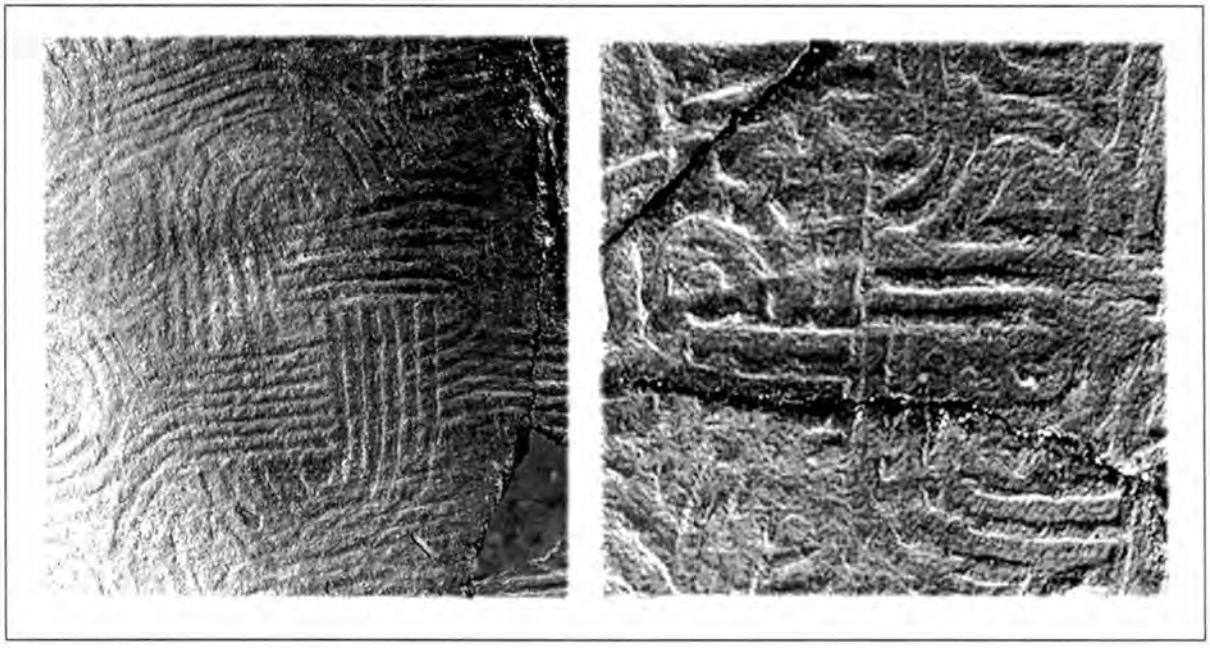

Figure 22. Examples of Pee Dee filfot cross (left) and Caraway filfot scroll (right) curvilinear complicated stamps. Examples are from Town Creek Mound (31Mg3).

Oldtown sherds are relatively thin. Most sherds in this assemblage (N=325, 73.7%) are between 6 mm and 8 mm thick, and a small number are less than 6 mm thick (N=61, 13.8%). Only about 12% of sherds are thicker than 8 mm, and fewer (N=48, 10.9%) are between 8 mm and 10 mm thick. Seven (1.6%) sherds are greater than 10 mm thick. The relative frequency of sherds that are 8 mm or more thick declines from 32.5% in the Dan River assemblage from Upper Saratown to 12.5% in this Oldtown assemblage.

When compared to that Dan River assemblage, these Oldtown sherds have fewer decorations, different types of decoration, and decorations on different portions of the vessel. Fewer than 10% (N=42) of sherds in this Oldtown assemblage are decorated, compared to 13% of sherds in the Dan River assemblage. The most common locations for decoration in this assemblage are the top of the lip (N=15), the rim (N=14), and the vessel shoulder (N=10), while the neck is the most commonly decorated portion of Dan River vessels. Only two of the Oldtown vessels in this assemblage have decorated necks. Further, while Dan River Net Impressed sherds are often decorated, very few Oldtown Coarse Net Impressed sherds are decorated.

The most common decoration on Oldtown Coarse Net Impressed sherds is limited to net impressions along the top of the lip (N=9). Other decorations on Oldtown sherds in this assemblage consist of reed punctations (N=6), fingernail punctations (N=1), and various notches (N=8) made along the shoulder and top of the lip of vessels. Twelve sherds from a single simple stamped vessel have an applied rim strip. Less common decorations include three sherds with brushed lips and two with small oblique incisions around the neck.

Jars with restricted necks and everted rims are the most common vessel form in this collection. Of the 72 identified rims, everted and folded rims are the most common form (N=29, 40.3%). Most rims of Oldtown Coarse Net Impressed and Complicated Stamped vessels are everted and folded. The second-most-common rim form is everted (N=27, 37.5%). Sherds with everted and folded or everted rims have either flat or round lips. Eight vessels in the assemblage have inverted rims and five have carinated rims. Most of these inverted or carinated rims are found on Oldtown Burnished and Oldtown Plain vessels. Two rim sherds in the assemblage are everted and flared, while one vessel has a straight rim.

Nine vessel sections were partially reconstructed from the protohistoric pottery at Hairston. Three of these are Oldtown Coarse Net Impressed jars and three others are Oldtown Complicated Stamped (filfot scroll) jars. An Oldtown Burnished cazuela bowl, an Oldtown Simple Stamped jar, and an Oldtown Cord Marked jar were also recovered.

Early Contact Period – Hairston Site

Six Early Contact period features were among the 11 features from Hairston selected for analysis. These six features contained 2,241 sherds, of which 1,669 were too small to be analyzed. Most of the 572 sherds that were analyzed are Oldtown series (N=433, 75%), but a fairly large number of Dan River series sherds are also present (N=89, 15.6%). Table 12 presents the distribution of pottery types in these Early Contact period features. Twenty-two sherds did not correspond to a regional classification and are listed as *Indeterminate* in Table12.

Twenty-eight sherds with crushed steatite temper could not be classified. Most of these have plain exteriors. Figure 23 illustrates one partially reconstructed jar with large pieces of steatite temper and a roughly smoothed exterior. Some of the steatite temper particles are up to 10 mm in diameter, and, in some instances, they protrude through both vessel walls. Similarly tempered pottery has been recovered from the Porter site (31Wk6) and other sites in the upper Yadkin River drainage (Rogers 1993:125). Rogers classified this pottery as Smyth series, which is most common in the Appalachian region of southwestern Virginia. Most of the steatite tempered pottery from Hairston fits the description for the Smyth series, but the Smyth series has been defined as a late prehistoric ware (Holland 1970:69). At this point I have not classified this group of pottery with steatite temper in Early Contact period features at Hairston, but feel it is probably related to

Table 12. Pottery in Early Contact Period Features at Hairston.

Pottery Types	Fea. 6	Fea. 12	Fea. 14	Fea. 15	Fea. 16	Fea. 17	Total	Percent
Steatite Tempered	3	22	3	-	-	-	28	1.2
Dan River Series								
Net Impressed	1	16	12	5	11	20	65	2.9
Plain	-	6	-	9	4	1	20	0.9
Other	-	1	-	-	2	-	3	0.1
Subtotal	1	23	12	14	17	21	88	3.9
Oldtown Series								
Plain	17	30	17	6	55	59	184	8.2
Coarse Net Impressed	2	8	17	1	14	21	63	2.8
Fine Net Impressed	4	4	1	-	15	3	27	1.2
Check Stamped	9	12	3	-	13	-	37	1.7
Burnished	20	8	19	-	9	10	66	2.9
Brushed	-	-	12	1	3	1	17	0.8
Cord Marked	-	-	2	1	5	3	11	0.5
Other	-	3	1	3	11	10	28	1.2
Subtotal	52	65	72	12	125	107	433	19.3
Other & Indeterminate	8	9	2	1	2	6	28	1.2
Unidentified	146	326	209	115	394	474	1664	74.3
Total	210	445	298	142	538	608	2241	99.9
Percent	9.4	19.9	13.3	6.3	24.0	27.1	100.0	

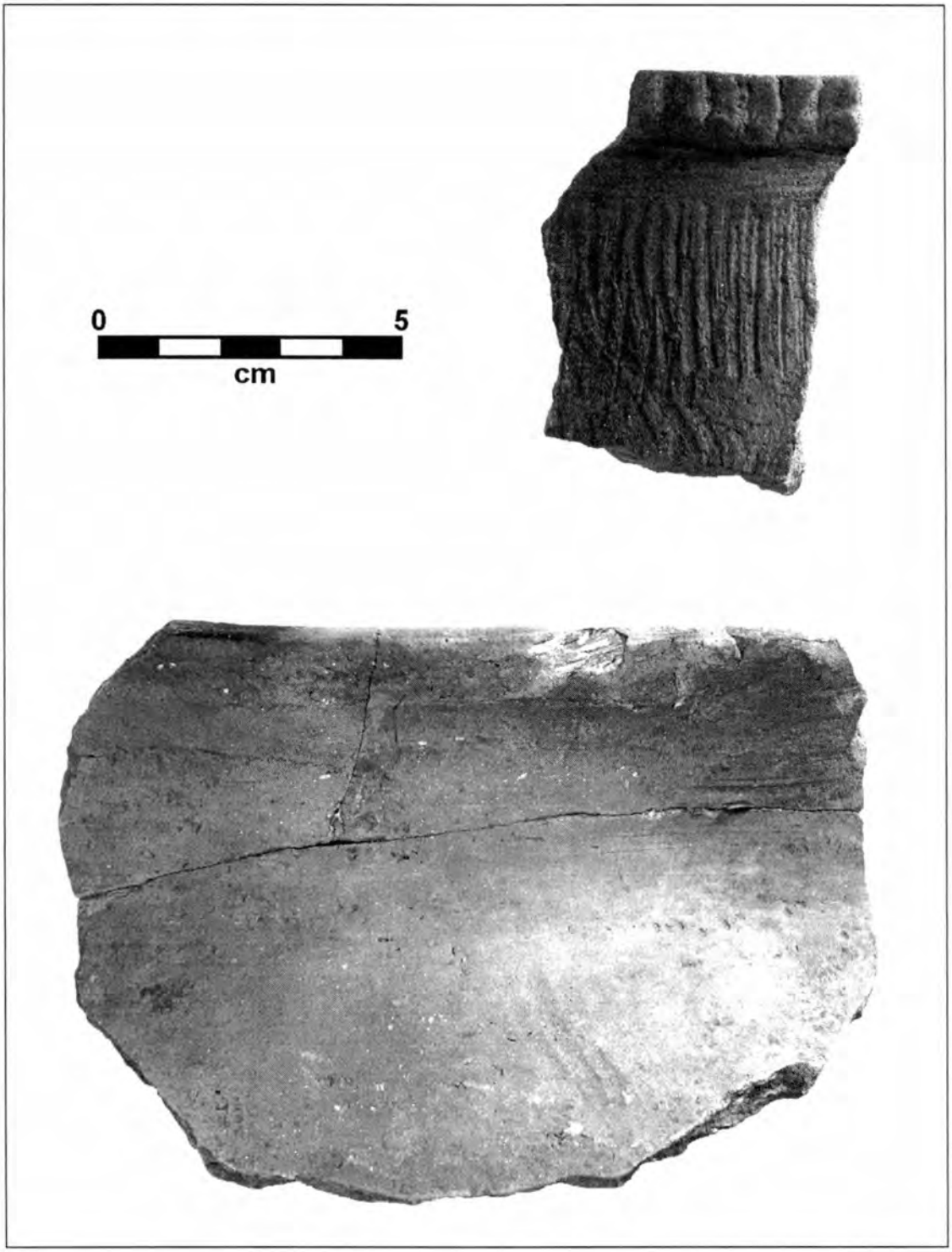

Figure 23. Unidentified sherds from the Early Contact period component at Hairston. Sherd with punctations along a narrow rim fold (top) and roughly smoothed rim sherd with steatite temper (bottom).

the plain and net impressed sherds with crushed steatite temper from the upper Yadkin valley.

The distribution of attributes for all pottery in the Early Contact period features from Hairston is presented in Table 13. As shown in Table 12, sand-tempered plain pottery with relatively thin vessel walls dominates this assemblage. These attributes are characteristic of Early Contact period Oldtown assemblages. The decline in net-impressed and complicated-stamped exteriors relative to plain exteriors distinguishes this assemblage from the protohistoric assemblage at the site. I will now describe the 433 Oldtown sherds in this Early Contact period assemblage in greater detail.

Table 13. Attribute Analysis of Pottery from Early Contact Period Features at Hairston.

Attribute State	Net Impressed	Cord Marked	Burnished	Plain	Brushed	Check Stamped	Other	Total
Temper								
Quartz (fine)	58	1	6	67	1	9	7	149
Sand (coarse)	3	-	2	23	1	2	6	37
Sand (fine)	90	10	52	110	14	31	17	324
Sand (v. fine)	4	1	7	11	1	2	7	33
Steatite	3	7	-	18	-	-	-	28
Other	1	-	-	-	-	-	-	1
Total	159	19	67	229	17	44	37	572
Interior Surface								
Scraped	59	2	14	31	3	14	8	131
Plain	94	10	22	192	13	26	22	379
Burnished	2	127	31	2	1	2	-	165
Painted	-	-	-	2	-	2	5	9
Indeterminate	4	-	-	2	-	-	2	8
Total	159	19	67	229	17	44	37	572
Wall Thickness								
2-4 mm	-	-	2	3	-	3	-	8
4-6 mm	21	2	42	73	13	18	5	174
6-8 mm	96	14	22	122	2	23	25	304
8-10 mm	39	3	1	27	2	-	4	76
>10 mm	2	-	-	2	-	-	1	5
Indeterminate	1	-	-	2	-	-	2	5
Total	159	19	67	229	17	44	37	572

Sherds with plain exteriors comprise nearly half of the Oldtown series assemblage (N=184, 42.5%) and most of these sherds have roughly smoothed exterior surfaces. The

second-most-common exterior surface treatment is net impressed (N=90, 20.8%). Both coarse and fine nets were used texture the exterior of these sherds. Over two-thirds of these sherds exhibit impressions of coarse nets, while the rest have impressions of fine nets. Burnishing (N=66, 15.2%) is also a common exterior surface treatment in this assemblage. Most of these sherds have highly polished surfaces, but nearly one-third are incompletely burnished and retain smoothed areas between burnishing marks. Other, less common, exterior surface treatments in this assemblage include check stamped (N=37), brushed (N=17), cord-marked (N=11), simple stamped (N=8), curvilinear complicated stamped (N=6), unidentified linear stamped (N=6), unidentified roughened (N=4), corncob impressed (N=3), and hand modeled (N=1).

The paste of these Oldtown sherds is compact and smooth-to-the-touch. Most sherds are tempered with fine sand (N=294, 67.9%). An additional 13% of sherds are tempered with either very fine sand (N=31) or coarse sand (N=25). Fine quartz temper is present in the rest of the assemblage (N=83, 19%). Most of the sherds with quartz temper have roughly smoothed exteriors.

Three-quarters of sherds in the assemblage have plain interiors (N=327), while nearly 10% (N=41) have interior surfaces that have been scraped then smoothed. Burnishing was observed on the interior surface of 39 (9%) sherds in the assemblage. Most sherds with burnished interiors also have burnished exteriors (N=31, 80%), but only 59% of all Oldtown Burnished sherds also have burnished interiors. A few sherds in the assemblage have scraped (N=16) or painted (N=9) interiors. The sherds with painted interiors have been painted with a fine slip that was oxidized to a bright reddish-orange color during firing.

Over 90% of the Oldtown sherds are less than 8 mm thick. Half the sherds are between 6 mm and 8 mm thick (N=231, 53.3%), 155 sherds (35.8%) between 4 mm and 6 mm thick, and eight sherds are between 2 mm and 4 mm thick. Of the nine percent that are thicker than 8 mm, 38 are between 8 mm and 10 mm, and one is greater than 10 mm.

Sixty-eight Oldtown sherds from Early Contact period features at Hairston have enough of the rim intact to identify rim form. The popularity of folded rims evident in the preceding late Dan River and protohistoric assemblages from this site declined sharply by the Early Contact period. Only nine percent (N=6) of Oldtown sherds in this assemblage have folded rims, compared to 54% and 40%, respectively, in the earlier assemblages. All sherds with everted and folded rims in this assemblage are Oldtown Coarse Net Impressed sherds. The most common rim form is everted and about half the rims in this assemblage have this type of rim (N=32). The second-most-common rim form is inverted, which accounts for 16% (N=11) of rim sherds. This assemblage has the highest relative frequency of sherds with carinated rims of any of the other Oldtown pottery collections described here. Ten percent of the rims are carinated (N=7). All carinated rim sherds, and all but one of the inverted rim sherds, have either burnished or plain exteriors. Other less common rim forms are recurved (N=4) and straight (N=1). The shape of three rim sherds could not be determined.

Less than five percent of all sherds in this collection were decorated (N=27). This is the lowest percentage of decoration for any of the pottery collections described here. The 27 decorated sherds have a total of 30 decorations. By far, the lip and lip/rim margin is the most common site for decoration on these Oldtown vessels. Most decoration in this region consists of punctations made with circular (N=4), rectangular (N=1), or U-shaped (N=2)

dowels or reeds. In one case punctations were made with a fingernail. Notches are also common forms of decoration of vessel lips. Both V-shaped (N=4) and U-shaped (N=2) notches are present. Incisions occur on the lips of two sherds and one has randomly oriented cord impressions. One sherd has small projections or castellations along the lip and the lip of one sherd has been ground.

Decorations also occur eight times on the rims of sherds. Two of these decorations consist of a series of incised inverted "V"s, one is an applied rim strip with fingernail impressions, and one consists of smoothed areas. In addition, two rims are perforated. One hole was made before the vessel was fired and the other was drilled into the rim after firing. In the first instance, the hole was probably used to suspend the vessel and, in the latter case, the hole was probably made to repair a crack. The final decoration consists of a series of fingernail punctations around the shoulder of a vessel.

Thirteen vessel sections were partially reconstructed from this collection of Oldtown sherds. Five of these vessels are bowls and eight are jars. Of the bowl forms, three have restricted orifices and either carinated (N=2) or incurvate (N=1) rims; one has an unrestricted orifice; and one has an unidentified rim. Of the five bowls, three have plain exteriors and two have burnished exteriors. All eight jars have restricted necks and everted rims. Two of these jars have rims that flare out. Six of the jars have plain exteriors, one is incompletely burnished, and one has a check-stamped exterior. The orifice diameter of these jars range from 18 cm to 33 cm.

Middle Contact Period – Upper Saratown Site

I have identified 48 features that date to the Middle Contact period component at Upper Saratown. A collection of 10,805 sherds was recovered from this group of features. Of this total, only 3,389 sherds (31.4%) were large enough to be analyzed. The assemblage contains sherds assigned to six ceramic series: Oldtown (N=2,739, 80%), Caraway (N=48, 1%), Dan River (N=464, 17%), New River (N=1), Uwharrie (N=56), and Yadkin (N=13). In addition, unclassified sherds in the assemblage include 38 sherds with exteriors that are fabric impressed and 30 sherds with steatite temper. The sherds with fabric-impressed exteriors are tempered with sand or fine crushed quartz, have plain interiors, and most have thin walls. These sherds exhibit characteristics consistent with the Oldtown series and may represent a minority type within the series, but, at present, no fabric-impressed type has been defined for the Oldtown series. Most of the unclassified sherds with steatite temper have exteriors that are coarse net impressed or plain and are probably related to similar pottery from the Upper Yadkin River drainage (see previous section for discussion). Table 14 presents the distribution of pottery types in features associated with the Middle Contact period occupation at Upper Saratown.

A tabulation of attributes for this collection of pottery is presented in Table 15. Nearly half of all sherds in the Middle Contact period assemblage have plain exteriors (N=1507, 44.1%). The second-most-common exterior surface treatment in this assemblage is net impressed (N=555, 17.8%). More than three-quarters of these sherds have impressions of coarse nets. Other common exterior surface treatments include burnished (N=389, 11.5%) and brushed (N=351, 10.4%). Carved-paddle-stamped exteriors with check, simple, and complicated designs account for a small percentage of pottery in this assemblage. The most

Table 14. Pottery in Middle Contact Period Features at Upper Saratown.

	Oldtown Series							
Context	Plain	Burnished	Brushed	Check Stamped	Fine Net Impressed	Cob Impressed	Other	Subtotal
Fea. 22	-	-	-	-	-	3	-	3
Fea. 26	17	1	2	4	-	-	1	25
Fea. 47	109	7	75	7	2	1	15	216
Fea. 48	33	2	1	1	1	1	1	40
Fea. 50	24	32	6	23	11	2	12	110
Fea. 51	11	6	2	1	-	-	1	21
Fea. 52	15	-	14	2	2	-	1	34
Fea. 53	46	3	3	1	3	-	4	60
Fea. 58	2	7	-	9	-	-	-	18
Fea. 60	36	4	3	8	-	1	-	52
Fea. 61	8	-	1	1	1	10	-	21
Fea. 67	43	1	-	-	-	1	-	45
Fea. 68	10	-	1	2	-	-	-	13
Fea. 69	24	42	-	-	1	-	8	75
Fea. 71	89	4	85	2	2	-	-	182
Fea. 76	36	59	9	10		67	8	189
Fea. 77	4	-	1	-	-	-	-	5
Fea. 95	2	-	-	3	-	-	-	5
Fea. 97	2	-	-	-	-	-	-	2
Fea. 98	2	-	-	1	-	-	-	3
Fea. 99	2	-	1	-	-	-	-	3
Fea. 101	56	6	3	50	30	1	9	155
Fea. 102	6	3	-	1	1	1	-	12
Fea. 104	26	4	-	8	8	1	5	52
Fea. 110	16	-	-	-	-	-	-	16
Fea. 111	13	6	1	2	23	-	34	79
Fea. 112	5	22	-	7	6	-	2	42
Fea. 120	108	-	8	4	-	1	4	125
Fea. 132	19	14	11	17	6	-	1	68
Fea. 133	7	1	10	4	-	1	0	23
Fea. 134	3	2	5	4	2	-	-	16
Fea. 135	66	31	4	14	4	-	2	121
Fea. 139	1	-	-	-	-	1	2	4
Fea. 144	95	8	15	8	4	2	-	132
Fea. 147	38	4	2	7	1	3	1	56
Fea. 155	38	13	5	2	-	6	-	64
Fea. 156	9	2	1	3	-	-	3	18
Fea. 158	132	16	50	12	3	2	1	216
Fea. 160	59	33	0	6	2	15	5	120
Fea. 161	18	4	-	-	-	-	2	24
Fea. 164	3	-	-	-	-	-	-	3
Fea. 174	32	9	1	5	1	1	2	51
Fea. 175	36	22	5	2	7	-	2	74
Fea. 183	2	-	-	-	-	-	-	2
Fea. 198	23	2	1	3	-	-	4	33
Fea. 202	28	5	2	3	-	-	3	41
Fea. 213	23	5	1	5	1	-	4	39
Fea. 221	20	1	-	7	-	1	2	31
Total	1,397	381	329	249	123	121	139	2,739
Percent	12.9	3.5	3.0	2.3	1.1	1.1	1.3	25.3

continued

Table 14. Continued.

Context	Caraway Plain	Dan River Series Net Impressed	Dan River Series Plain	Dan River Series Other	Uwharrie Series	Steatite Tempered	Other	Unidentified	Total
Fea. 22	-	-	-	-	-	-	-	3	6
Fea. 26	-	-	2	-	-	-	-	109	136
Fea. 47	-	7	3	11	6	-	2	535	780
Fea. 48	-	6	6	11	3	-	-	219	285
Fea. 50	-	47	4	1	13	2	4	571	752
Fea. 51	-	3	4	-	-	-	-	64	92
Fea. 52	-	5	1	-	4	-	-	145	189
Fea. 53	-	5	2	-	1	-	-	340	408
Fea. 58	-	1	-	-	-	-	2	9	30
Fea. 60	-	-	1	1	-	-	-	313	367
Fea. 61	-	2	-	-	1	-	-	67	91
Fea. 67	-	3	-	-	-	-	1	159	208
Fea. 68	-	-	-	-	-	-	-	31	44
Fea. 69	-	27	6	3	3	-	3	431	548
Fea. 71	-	-	3	1	-	-	-	310	496
Fea. 76	-	24	1	2	3	-	25	433	677
Fea. 77	-	1	-	1	1	-	-	41	49
Fea. 95	-	2	-	-	-	-	-	6	13
Fea. 97	-	2	-	-	-	-	-	14	18
Fea. 98	-	-	-	-	-	-	-	9	12
Fea. 99	-	2	-	-	-	-	-	33	38
Fea. 101	-	40	1	2	2	-	1	222	423
Fea. 102	-	1	-	-	-	-	-	39	52
Fea. 104	-	16	1	2	1	4	1	123	200
Fea. 110	-	-	-	-	-	-	-	0	16
Fea. 111	-	17	-	1	1	4	2	61	165
Fea. 112	-	5	-	-	-	4	-	23	74
Fea. 120	-	5	1	-	-	4	-	131	266
Fea. 132	-	2	-	-	-	-	1	80	151
Fea. 133	-	-	2	-	-	-	-	45	70
Fea. 134	-	11	-	-	13	-	1	84	125
Fea. 135	-	20	3	2	-	-	7	466	619
Fea. 139	-	1	1	-	-	1	-	4	11
Fea. 144	-	7	-	-	-	1	-	227	367
Fea. 147	-	13	1	-	1	1	-	90	162
Fea. 155	-	4	1	-	-	-	-	121	190
Fea. 156	-	5	-	2	-	1	1	76	103
Fea. 158	48	9	-	-	1	-	-	387	661
Fea. 160	-	14	1	1	-	-	6	342	484
Fea. 161	-	5	-	-	-	-	-	153	182
Fea. 164	-	5	6	-	1	-	-	40	55
Fea. 174	-	22	-	2	-	-	-	156	231
Fea. 175	-	7	-	-	-	-	-	189	270
Fea. 183	-	-	-	-	-	-	-	10	12
Fea. 198	-	1	-	3	-	-	-	61	98
Fea. 202	-	8	-	-	-	-	1	101	151
Fea. 213	-	3	-	1	-	-	-	134	177
Fea. 221	-	8	-	-	1	2	-	209	251
Total	48	366	51	47	56	24	58	7,416	10,805
Percent	0.4	3.4	0.5	0.4	0.5	0.2	0.5	68.6	100.0

Table 15. Attribute Analysis of Pottery from Middle Contact Period Features at Upper Saratown.

Attribute State	Net Impressed	Cob Impressed	Burnished	Plain	Brushed	Check Stamped	Other	Total
Temper								
Quartz (fine)	158	12	15	67	16	6	23	297
Sand (coarse)	58	36	63	314	131	25	54	681
Sand (fine)	228	40	187	794	100	170	101	1,620
Sand (v. fine)	38	45	115	308	100	52	19	677
Steatite	14	-	9	16	2	2	-	43
Other	59	-	-	8	2	-	2	71
Total	555	133	389	1,507	351	255	199	3,389
Interior Surface								
Scraped	205	13	79	153	69	21	46	586
Plain	342	110	257	1,275	275	225	145	2,629
Burnished	8	10	53	53	7	8	7	146
Painted	-	-	-	26	-	1	1	28
Total	555	133	389	1,507	351	255	199	3,389
Wall Thickness								
2-4 mm	2	3	10	18	3	2	1	39
4-6 mm	71	36	174	567	179	46	21	1,094
6-8 mm	344	80	192	773	153	186	147	1,875
8-10 mm	122	8	13	95	14	21	28	301
>10 mm	16	2	-	14	2	-	2	36
Indeterminate	-	4	-	40	-	-	-	44
Total	555	133	389	1,507	351	255	199	3,389

common stamped design is check stamped (N=255, 7.6%), followed by simple stamped (N=75). Though sherds with cob impressions are not very numerous (N=133), two large partially reconstructed vessels in the assemblage have this surface treatment.

Like other Oldtown assemblages, this one is characterized by sherds with smoothed interior surfaces. Most sherds with scraped interiors have net-impressed or plain exteriors and represent late prehistoric sherds classified as Dan River or Uwharrie series. Close to 90% of all sherds in this collection have walls that are less than 8 mm thick and, of these, one-third have walls less than 6 mm thick.

In general, the attributes of this pottery collection are very similar to those from the Early Contact period assemblage at Hairston (see Table 13). Aside from a decline in the frequency of burnished sherds and an increase in the frequency of ones with corncob impressions in the Upper Saratown assemblage, they compare quite well. I will now describe the Oldtown series pottery in this collection in more detail

Middle Contact period pit features at Upper Saratown contained a total of 2,739 Oldtown series sherds. Half of these sherds are classified as Oldtown Plain and have roughly smoothed (N=1,028, 37.5%) or plain smoothed (N=369, 13.4%) exterior surfaces. Figures 24 and 25 present illustrations of Oldtown Plain vessels with both plain smoothed and roughly smoothed exteriors. Burnishing (N=381, 13.7%) and brushing (N=329, 11.8%), are other common exterior surface treatments in this series. About 60% of the burnished sherds are incompletely burnished and have unpolished spaces between burnishing marks. Brushing, as an exterior surface treatment on Oldtown pottery, is most common during the Early and Middle Contact periods. Jars with vertical brushed lines running from below the lip down onto the lower body are characteristic of Oldtown Brushed pottery during these periods (see Figure 24). Check stamping is another popular method of surface finishing, accounting for nearly 10% of sherds (N=249) in this assemblage. The relative frequency of net-impressed sherds is lower during the Middle Contact period than at any other time considered here. Of Oldtown Net Impressed sherds (N=123) in this assemblage, only one was textured with a coarse net. A small number of sherds were stamped with curvilinear complicated designs (N=28). The filfot scroll design, common during the Protohistoric period, was replaced during the Middle Contact period by a design consisting of concentric circles. No sherds with filfot scroll stamped exteriors occur in this collection. Other minor surface treatments include

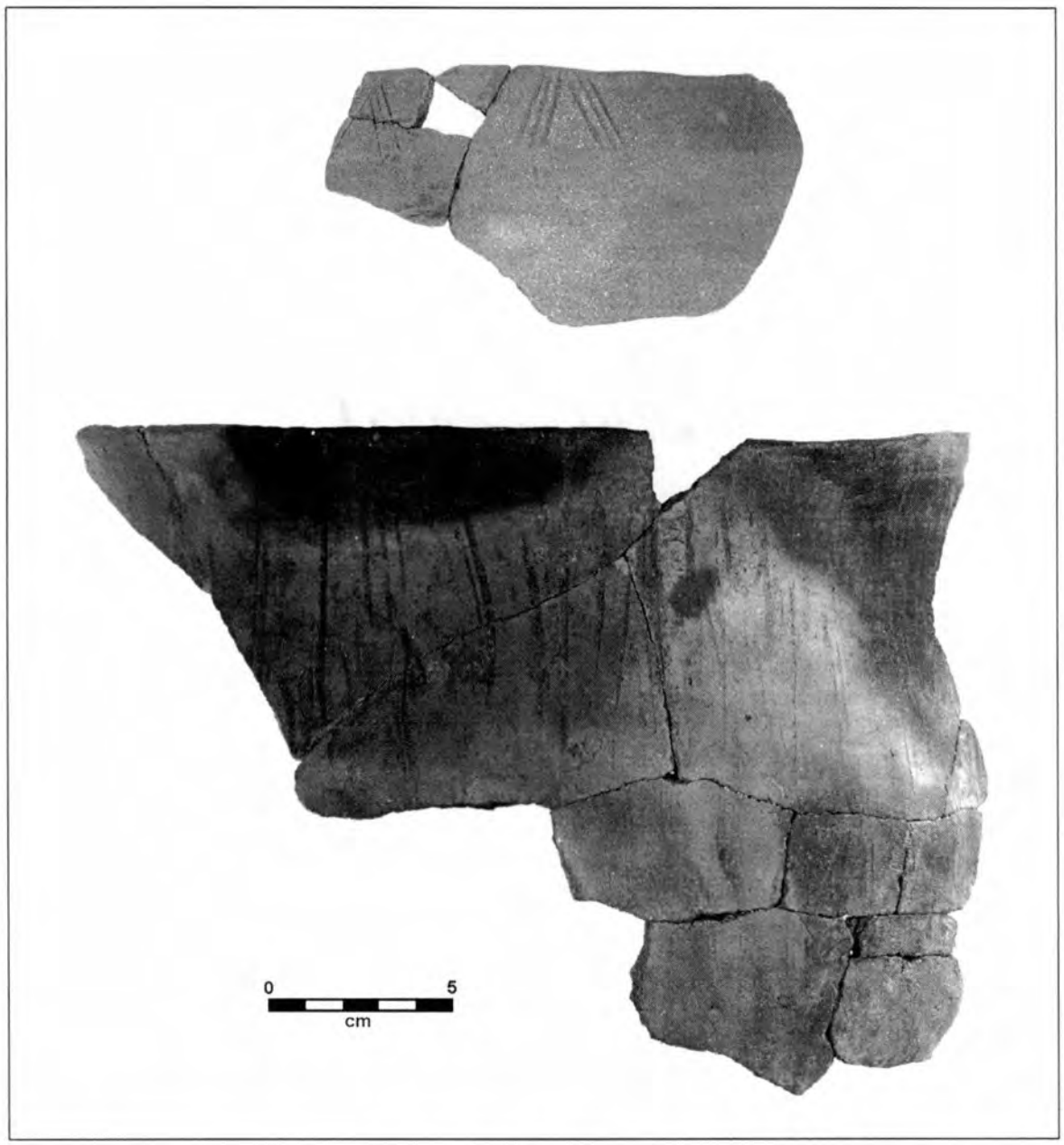

Figure 24. Oldtown Plain bowl rim and Oldtown Brushed jar rim from Middle Contact period features at Upper Saratown.

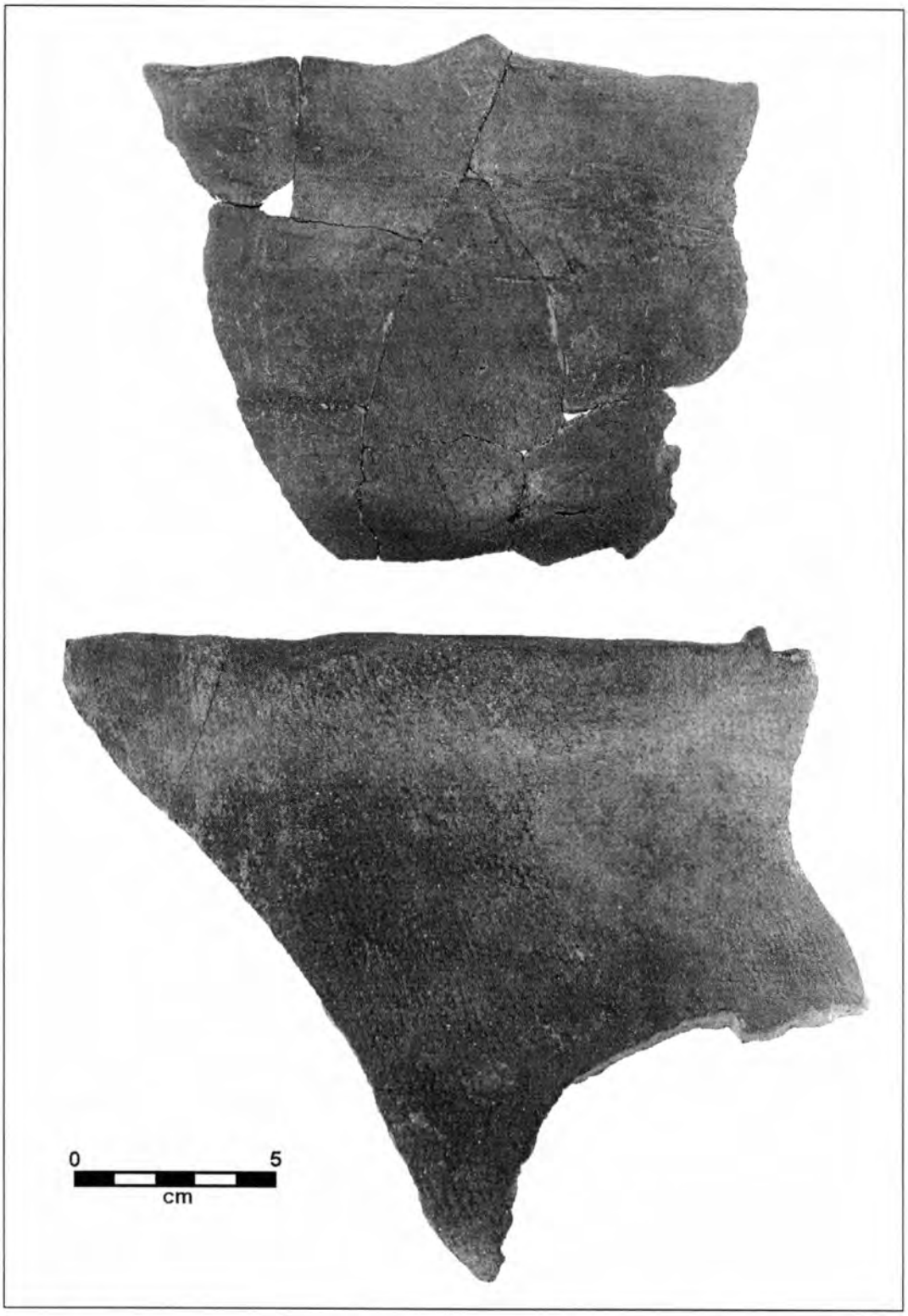

Figure 25. Oldtown Plain (roughly smoothed) and Oldtown Fine Net Impressed vessel sections from Middle Contact period features at Upper Saratown.

simple stamped (N=69), cord marked (N=30), scraped (N=11), and rectilinear complicated stamped (N=1).

Sand was used almost exclusively for temper in these sherds, accounting for 95% of all Oldtown sherds. Fine-to-very-fine sand was observed in three-quarters of the sherds (N=2,104, 75.4%), while coarse sand accounted for the remaining 20% of sand-tempered sherds (N=558). Fine quartz was used to temper 62 sherds (2.2%) and a mixture of sand and steatite occurred in 12 sherds. Two Oldtown sherds were tempered with miscellaneous crushed rock.

Over 80% of Oldtown sherds in this assemblage have plain interiors (N=2,281, 81.8%). Most Oldtown Plain sherds in this assemblage have carefully smoothed surfaces. Ten percent of the assemblage has interiors that are smoothed-over-scraped (N=273) and a small number are scraped (N=21). Burnished interiors are present on about five percent of these Oldtown sherds (N=135). Most sherds with burnished interiors have either burnished (N=53) or plain (N=48) exteriors. In addition, a small number of sherds with burnished interiors have carved-paddle-stamped (N=15) or smoothed-over-cob-impressed (N=9) exterior surfaces. The final method of interior surface finishing in this assemblage is painting or slipping (N=26, %=1). This uncommon treatment results in a bright reddish-orange interior surface. Sherds with painted or slipped interiors tend to have thicker walls, roughly smoothed exteriors, and coarse sand temper. All of these attributes are uncommon for the Oldtown series and these sherds may represent trade wares rather than Oldtown series pottery.

Vessel walls and sherds in this Middle Contact period assemblage are thin. More than 90% (N=2,521) of the Oldtown sherd walls are less than 8 mm thick. Of these, half

(N=1,500) are between 6 mm and 8 mm thick, and one-third (N=982) are between 4 mm and 6 mm thick. Less than one percent of the assemblage is greater than 10 mm thick.

Information about rim form was recorded for 421 sherds. Of the identified rims, over half are everted (N=249, 59.1%). Just over 20% (N=90) of sherds have inverted rims. Vessels with inverted rims tend to have plain (N=71) or burnished exteriors (N=15). Similarly, all carinated rims (N=30, 7.1%) in this assemblage have plain or burnished exteriors. Recurved rims account for 6.7% (N=28) of Oldtown rims. Though never very common, recurved rims are most common during the Middle Contact period.

About 10% (N=269) of sherds in this collection are decorated. These sherds exhibit a total of 286 decorations. The most common site for decoration in this Oldtown collection is the lip or margin of the lip and rim (N=199, 68.9%). Punctations and notches account for nearly all observed lip decorations. Most punctations were made with either hollow reeds (N=52), solid reeds or round dowels (N=25), or rectangular dowels (N=12), but a small number of punctations were also made with fingernails (N=11). Both V-shaped (N=52) and U-shaped (N=30) notches occur on the lips of vessels. In addition, a couple of sherds have lips decorated with incised lines. Four bowls in the assemblage have lug handles attached to the outside edge of the lip and eight jars have small castellations along the top of the lip (see Figure 25).

Decorations located on the rims of vessels are dominated by incised techniques. Incised lines (N=23) or series of inverted "V"s (N=6) account for most rim decorations in the collection (see Figure 24). A small number of punctations also occur as rim decorations. Two rims each are decorated with rectangular and fingernail punctations. Single examples of

brushed bands, finger pinching, and randomly oriented cord impressions are also present. The only applied decoration is a node. A mending hole was drilled into one rim.

Neck decorations consist primarily of brushed or smoothed bands (N=6) or zones of cob impressions (N=2) encircling the vessel. Incised inverted "V"s (N=3), incised lines (N=2), and miscellaneous notches (N=3) are also present on vessel necks. One vessel has a strap handle attached to the neck. Body and shoulder decorations are composed primarily of rows of punctations (N=5), incised lines (N=5), and brushed, smoothed, or cob-impressed bands (N=4). Strap handles are attached to the shoulder of two vessels.

Thirty-three vessels were partially reconstructed from this assemblage of sherds. One vessel is classified as Caraway Plain (smoothed-over-brushed) and the remainder are Oldtown series vessels. The Caraway jar is illustrated in Figure 26. All of the 23 reconstructed jars have restricted necks and everted rims. One of these jars has a folded rim. A variety of exterior surface treatments are present among the jars, including plain (N=7), brushed (N=4), roughly smoothed (N=2), burnished (N=3), net impressed (N=2), corncob impressed (N=2), simple stamped (N=2), and check stamped (N=1). The mouths of these jars range from 11 cm to 47 cm in diameter.

Nine reconstructed vessel sections are bowls. Most of the bowls have restricted orifices. Three restricted bowls have carinated rims and two have inverted rims. Bowls with carinated rims are larger (median shoulder diameter = 26 cm) than bowls with inverted rims (median shoulder diameter = 17 cm). Two of the bowls have unrestricted openings and two other lack identifiable rims. All of the bowls have either plain or burnished exterior surfaces.

In addition to jars and bowls one cup was partially reconstructed. This vessel is a plain, hand-modeled cup with an orifice diameter of 7 cm.

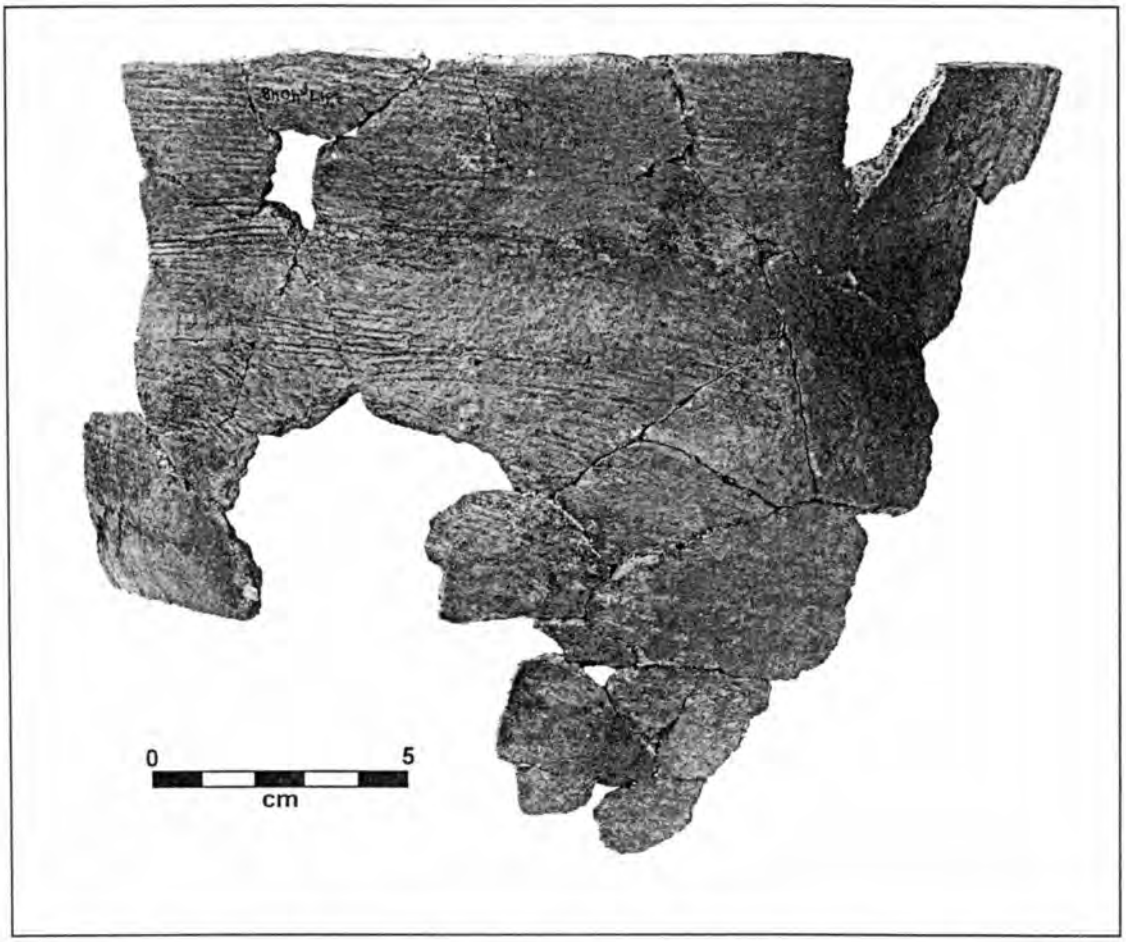

Figure 26. Caraway Plain jar (Vessel #97) with smoothed-over-scraped exterior surface treatment.

Late Contact Period – Upper Saratown Site

Though the types of vessels being manufactured during the Late Contact period are very similar to those produced during the preceding Middle Contact period, changes in the frequency of certain surface treatments allow for distinction between ceramic assemblages from the two periods. I have found that, although Oldtown pottery manufactured during the seventeenth century may not usually be sorted chronologically by comparing individual sherds, distinctions can be made at the assemblage level, even when relatively small collections are considered. I was able to identify 56 features at Upper Saratown that date to the Late Contact period. These features contained a total of 12,504 sherds, of which 8,308 (66.4%) were too small to be analyzed.

Of the 4,196 sherds that were analyzed, four ceramic series were identified: Oldtown (N=3,509, 83.6%), Yadkin (N=100, 2.4%), Uwharrie, (N=75, 1.8%), and Dan River (N=458, 11.4%). In addition to these classified sherds, a group of 33 sherds could not be assigned to a ceramic series. Twenty-nine sherds in this group are tempered with steatite. These sherds are characterized by plain, burnished, carved-paddle-stamped, and net-impressed exteriors. Three unclassified sherds are tempered with fine-to-very-fine sand and have fabric impressed exteriors, and one is tempered with grit and has a plain exterior. The distribution of pottery types in features is presented in Tables 16 and 17.

The distribution of selected attributes in the collection of 4,196 analyzed sherds is presented in Table 18. The most common exterior surface is plain, followed by net impressed, and check stamped. The assemblage is dominated by sherds with walls between 4 mm and 8 mm thick, fine-to-very-fine sand temper, and plain interiors. In comparison to the other contact-period collections described above, this collection has the highest relative

Table 16. Oldtown Series Pottery from Late Contact Period Features at Upper Saratown.

Context	Plain	Fine Net Impressed	Check Stamped	Burnished	Simple Stamped	Other	Total
Fea. 2	4	1	-	-	-	-	5
Fea. 7	21	23	-	1	-	-	45
Fea. 8	3	3	2	-	-	-	8
Fea. 9	7	1	2	-	1	2	13
Fea. 10	59	41	9	6	92	1	208
Fea. 11	83	15	8	6	-	5	117
Fea. 13	19	3	5	1	-	1	29
Fea. 16	80	3	17	12	7	21	140
Fea. 17	12	5	25	14	-	6	62
Fea. 19	32	3	6	6	-	15	62
Fea. 20	2	1	-	1	-	-	4
Fea. 23	27	13	4	14	4	9	71
Fea. 31	66	12	12	12	-	9	111
Fea. 33	22	-	7	2	18	2	51
Fea. 36	31	9	15	3	-	4	62
Fea. 57	16	10	9	3	-	-	38
Fea. 63	43	25	12	5	-	16	101
Fea. 66	5	-	4	-	-	-	9
Fea. 73	2	177	-	-	2	4	185
Fea. 79	-	-	1	-	-	-	1
Fea. 85	2	9	5	-	1	-	17
Fea. 92	9	6	13	12	-	4	44
Fea. 118	35	3	16	2	1	5	62
Fea. 121	3	-	3	1	-	1	8
Fea. 123	43	29	1	66	7	1	147
Fea. 124	8	-	2	-	2	1	13
Fea. 126	42	4	8	3	1	17	75
Fea. 127	7	2	7	1	1	-	18
Fea. 128	9	1	1	-	-	2	13
Fea. 137	50	7	26	19	3	3	108
Fea. 141	26	-	11	6	-	2	45
Fea. 143	17	2	4	5	-	8	36
Fea. 149	15	1	18	-	1	1	36
Fea. 157	14	-	2	3	-	1	20
Fea. 168	59	1	32	11	-	21	124
Fea. 169	7		21	-	1	-	29
Fea. 170	97	49	139	42	4	18	349
Fea. 171	161	3	50	29	4	4	251
Fea. 172	46	-	14	5	2	3	70
Fea. 179	12	4	9	1	-	1	27
Fea. 180	188	7	81	17	5	21	319
Fea. 181	4	-	2	1	-	-	7
Fea. 184	25	6	29	5	3	6	74
Fea. 185	24	3	1	1	-	2	31
Fea. 195	23	-	37	2	-	13	75
Fea. 196	5	1	6	-	2	-	14
Fea. 197	10	-	5	-	-	1	16
Fea. 199	27	3	6	4		5	45
Fea. 210	10	-	5	1	-	1	17
Fea. 211	-	-	1	-	-	-	1

continued

Table 16. Continued.

Context	Plain	Fine Net Impressed	Check Stamped	Burnished	Simple Stamped	Other	Total
Fea. 214	8	1	4	3	1	-	17
Fea. 218	18	4	18	3	-	-	43
Fea. 220	4	2	-	1	-	-	7
Fea. 222	2	-	1	-	-	-	3
Fea. 223	12	2	7	-	-	2	23
Fea. 224	3	-	-	-	-	-	3
Total	1,559	495	723	330	163	239	3,509
Percent	12.5	4.0	5.8	2.6	1.3	1.9	28.1

Table 17. All Pottery Types from Late Contact Period Features at Upper Saratown.

			Dan River			Oldtown		
Context	Yadkin	Uwharrie	Net Impressed	Other	Not Classified	Series Subtotal	Unidentified	Total
Fea. 2	-	-	-	-	-	5	24	29
Fea. 7	-	1	5	-	-	45	79	130
Fea. 8	-	-	2	-	-	8	22	32
Fea. 9	-	1	3	-	1	13	41	59
Fea. 10	-	3	3	2	-	208	297	513
Fea. 11	-	17	36	8	3	117	636	817
Fea. 13	-	-	5	1	-	29	119	154
Fea. 16	-	6	36	-	-	140	530	712
Fea. 17	-	3	4	-	-	62	210	279
Fea. 19	-	12	24	-	-	62	195	293
Fea. 20	-	-	-	-	-	4	23	27
Fea. 23	-	-	6	-	1	71	222	300
Fea. 31	-	5	21	-	-	111	328	465
Fea. 33	-	1	15	1	-	51	189	257
Fea. 36	83	16	22	5	-	62	311	499
Fea. 57	1	-	7	1	-	38	130	177
Fea. 63	1	-	5	5	6	101	364	482
Fea. 66	-	-	1	1	1	9	14	26
Fea. 73	-	-	-	-	-	185	49	234
Fea. 79	-	-	-	-	-	1	2	3
Fea. 85	-	-	3	-	1	17	53	74
Fea. 92	1	1	23	-	-	44	112	181
Fea. 118	5	1	8	2	-	62	219	297
Fea. 121	-	-	3	-	-	8	52	63
Fea. 123	-	1	11	1	1	147	62	223
Fea. 124	-	-	5	1	-	13	38	57
Fea. 126	-	-	10	8	1	75	165	259
Fea. 127	-	-	1	-	-	18	1	20
Fea. 128	-	-	5	-	-	13	27	45
Fea. 137	2	1	14	1	1	108	331	458
Fea. 141	-	-	3	-	-	45	76	124
Fea. 143	-	1	3			36	44	84
Fea. 149	-	-	4	1	-	36	42	83
Fea. 157	-	-	1	-	-	20	54	75

continued

Table 17. Continued.

Context	Yadkin	Uwharrie	Dan River Net Impressed	Dan River Other	Not Classified	Oldtown Series Subtotal	Unidentified	Total
Fea. 168	-	1	9	4	2	124	257	397
Fea. 169	-	-	2	-	1	29	53	85
Fea. 170	-	-	10	-	3	349	312	674
Fea. 171	5	-	8	2	-	251	313	579
Fea. 172	1	-	6	-	1	70	68	146
Fea. 179	-	-	1	1	1	27	35	65
Fea. 180	-	-	30	-	5	319	986	1340
Fea. 181	-	-	1	-	-	7	46	54
Fea. 184	-	3	16	-	4	74	318	415
Fea. 185	-	-	3	-	-	31	40	74
Fea. 195	-	-	21	-	-	75	169	265
Fea. 196	-	-	5	-	-	14	69	88
Fea. 197	-	-	8	1	-	16	117	142
Fea. 199	-	-	4	-	-	45	48	97
Fea. 210	-	-	4	-	-	17	54	75
Fea. 211	-	1	-	-	-	1	3	5
Fea. 214	-	-	4	-	-	17	101	122
Fea. 218	1	-	8	-	-	43	136	188
Fea. 220	-	-	-	-	-	7	14	21
Fea. 222	-	-	-	-	-	3	12	15
Fea. 223	-	-	4	-	-	23	90	117
Fea. 224	-	-	-	-	-	3	6	9
Total	100	75	433	46	33	3,509	8,308	12,504
Percent	0.8	0.6	3.5	0.4	0.3	28.1	66.4	100.0

frequency of sherds with this suite of attributes. A comparison of attribute frequencies for all Oldtown assemblages presented here indicates that the relative frequency of fine-to-very-fine sand temper, plain interiors, and walls between 4 mm and 6 mm thick increases through time.

I will now describe the Oldtown pottery in this collection in greater detail. Of the 3,509 Oldtown sherds, nearly half (N=1,559, 44.4%) are Oldtown Plain. Approximately equal numbers of sherds with roughly smoothed and carefully smoothed surfaces are present. The second-most-common exterior surface treatment in this assemblage is check stamped (N=723, 20.6%). Figure 27 presents examples of three different styles of Oldtown Check Stamped sherds from the collection. Oldtown Fine Net Impressed sherds are fairly

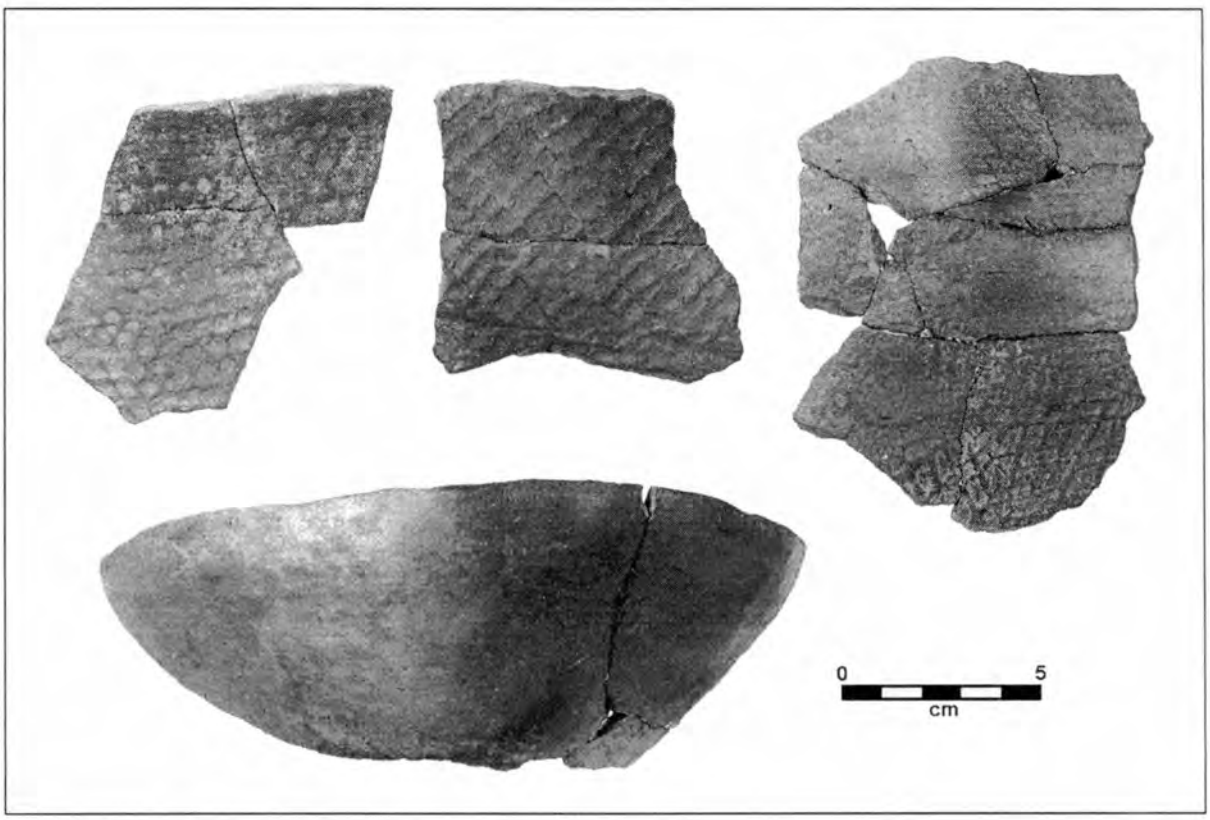

Figure 27. Examples of Oldtown Check Stamped and Oldtown Plain sherds in Late Contact period features at Upper Saratown.

well-represented in the assemblage (N=495, 13.6%), as are Oldtown Burnished sherds (N=330, 9.4%). An example of a partially reconstructed Oldtown Fine Net Impressed jar is presented in Figure 28. Minor exterior surface treatments in this Oldtown series collection include simple stamped (N=163), cob impressed (N=53), brushed (N=63), curvilinear complicated stamped (N=42), cord marked (N=41), scraped (N=24), coarse net impressed (N=15), and rectilinear complicated stamped (N=1).

This assemblage is tempered almost exclusively with sand (97.8%). Fine-to-very-fine sand accounts for over 85% (N=3,063) of temper in the sherds. Other tempering agents include fine quartz (N=51), a mixture of steatite and sand (N=22), fine feldspar (N=3), and miscellaneous crushed rock (N=1).

Table 18. Attribute Analysis of Pottery from Late Contact Period Features at Upper Saratown.

Attribute State	Net Impressed	Cob Impressed	Burnished	Plain	Simple Stamped	Check Stamped	Other	Total
Temper								
Quartz (fine)	99	3	4	58	1	96	16	277
Sand (coarse)	66	7	33	190	20	78	35	429
Sand (fine)	546	20	102	727	109	445	100	2049
Sand (v. fine)	220	26	188	588	34	198	38	1292
Steatite	1	-	8	25	-	10	6	50
Other	67	2	-	17	-	1	12	99
Total	999	58	335	1605	164	828	207	4196
Interior Surface								
Scraped	206	5	9	62	2	18	19	321
Plain	790	50	223	1415	162	689	172	3501
Burnished	3	3	103	86	-	106	13	314
Painted	-	-	-	42	-	15	3	60
Total	999	58	335	1605	164	828	207	4196
Wall Thickness								
2-4 mm	1	-	15	19	-	16	-	51
4-6 mm	364	26	194	551	46	224	43	1448
6-8 mm	517	26	118	853	105	516	144	2279
8-10 mm	104	5	7	159	13	70	20	378
>10 mm	13	1	1	23	-	2	-	40
Total	999	58	335	1605	164	828	207	4196

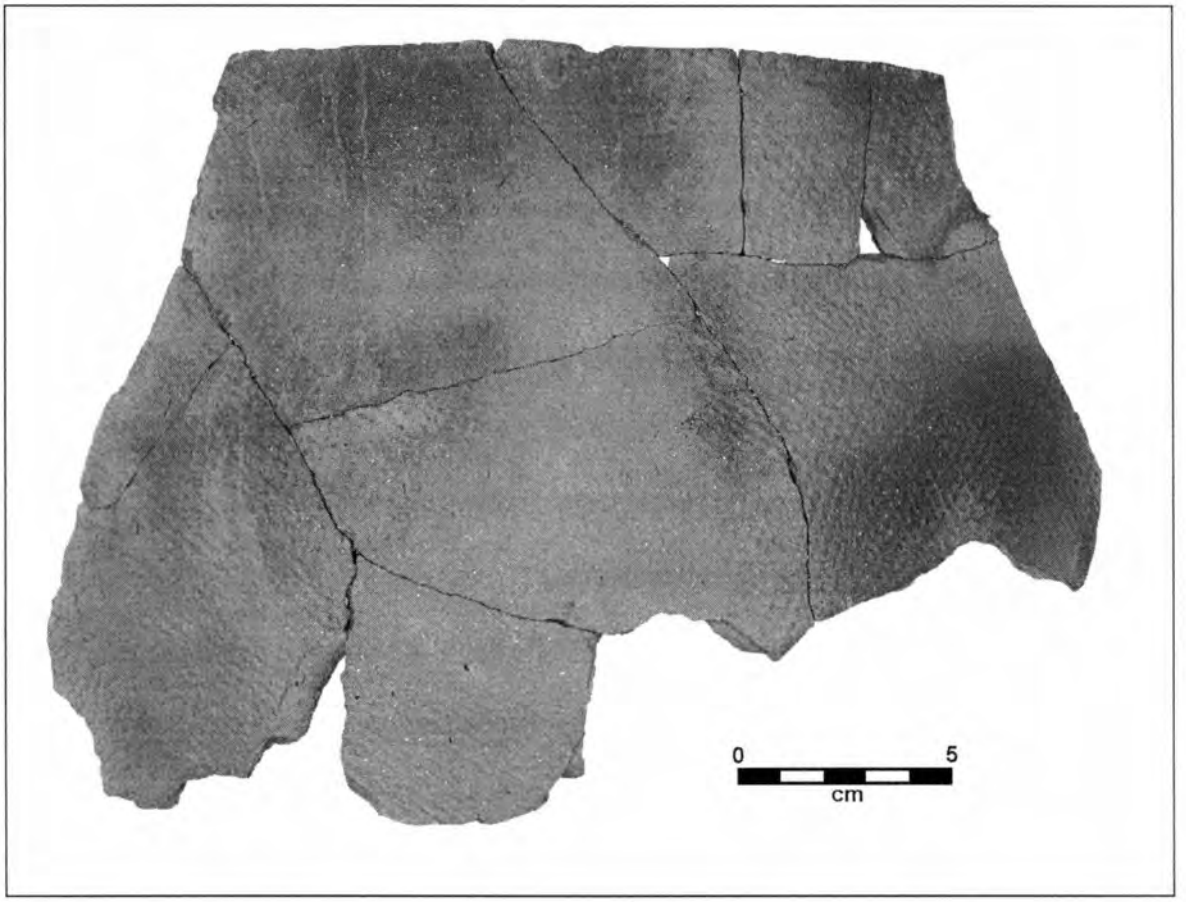

Figure 28. Oldtown fine Net Impressed vessel section from the Late Contact period component at Upper Saratown.

Nearly 90% of these Oldtown sherds have plain interiors (N=3,118, 88.4%). Burnished interiors were observed on 225 sherds (6.4%) and, as with other Oldtown assemblages, most sherds with burnished interiors have burnished (N=102) or plain (N=85) exteriors. Notwithstanding, several carved-paddle-stamped sherds (N=27) and cob-impressed sherds (N=13) in this assemblage also have burnished interiors. Only a few sherds have scraped or smoothed-over-scraped interiors (N=111, 3.2%). Finally, a small group of sherds (N=58, 1.7%) in this assemblage has interiors that were been painted with a fine clay slip before being fired.

Oldtown sherds in this collection have thin walls. Nearly 40% are between 4 mm and 6 mm thick (N=1,344) and a few (N=47) are thinner than 4 mm. Most sherds (N=1,833, 52.2%) are between 6 mm and 8 mm thick. Fewer than 10% (N=184, 5.2%) of Oldtown sherds in this Late Contact period collection have walls greater than 8 mm thick.

Information on rim form was collected for 636 sherds. Of these, 616 are rim sherds with intact lips. Most sherds in this assemblage have everted rims (N=393, 61.8%). Inverted (N=113, 17.8%) and carinated (N=14) rims account for 20% of the collection. As in other Oldtown assemblages, the association of inverted and carinated rims with plain and burnished exteriors holds for this assemblage as well. All carinated rims and 84% of inverted rims are found on Oldtown Plain or Burnished vessels. Other rim forms include recurved (N=33), straight (N=11), everted/flared (N=9), and everted/folded (N=5).

Eight percent of sherds in this assemblage are decorated (N=304). A total of 285 decorations were observed on these sherds. The distribution and types of decorations in this collection is very similar to that in the Late Contact period assemblage from the site. The most common vessel portion to be decorated is the lip and margin of the lip and rim. One-

third of all rims have decorated lips. Notches are the most common kinds of lip decoration. Both V-shaped (N=70) and U-shaped (N=46) notches are present. Punctations were made with round dowels (N=14), fingernails (N=15), and rectangular dowels (N=14). Small castellations were applied to the lips of 13 sherds and lug handles were observed on two vessels. Thirteen rim sherds with check-stamped exteriors have check stamping along the top of the lip. The lip of one rim sherd is marked with a corncob. Miscellaneous notches, punctations, and incised lines are also present.

Ten percent of decorations in this assemblage are located on the rim of vessels. Punctations made with fingernails, dowels and reeds are the most common form of rim decoration (N=12). Ten sherds have incised decorations on the rim including incised inverted "V"s, multiple parallel lines, and curvilinear and rectilinear complicated designs. U-shaped notches are present on seven sherds. Two rims have strap handles, one has a lug handle, and one rim has a drilled hole.

Incised inverted "V"s and unidentified incised curvilinear lines are the most common types of neck decoration (N=5). Brushed bands, cob marked bands, and oval punctations are also present on vessel necks. Six sherds have holes drilled into the neck. A range of punctations (N=5), curvilinear incised lines (N=4), and incised inverted "V"s (N=1) occur on vessel shoulders. The shoulder region of two sherds is brushed. Brushed bands and brushed areas are the most common type decoration on the body of vessels. Two holes are drilled into the body of sherds.

Fifty-seven vessel sections could be reconstructed from the Oldtown sherds in this collection. Forty-five of these are jars, 11 are bowls, and one is a cup. A wide range of exterior surface treatments are represented among the jars including: plain (N=14), net

impressed (N=12), check stamped (N=8), simple stamped (N=6), and single examples of brushed, complicated curvilinear stamped, scraped, smoothed-over-net, and one was unidentifiable. All jars have restricted necks and everted rims. One rim in the assemblage is folded. Orifice diameter of these jars varies from 10 cm to 39 cm.

The bowls in this collection have either plain or burnished exteriors. Five of the bowls have unrestricted openings, four are restricted, and two lack identifiable rims. Open bowls in this collection have orifice diameters that range from 13 cm to 42 cm and the median orifice diameter of the group is 23 cm. The orifice diameter of only three of the restricted bowls could be estimated. One of the restricted bowls has an inverted rim and a orifice that is13 cm in diameter. The other two restricted bowls have carinated rims and are larger. They have orifice diameters of 18 cm and 30 cm.

Overview of Ceramic Change in the Dan Drainage

A comparison of the Uwharrie, Dan River, and Oldtown series pottery from Upper Saratown and Hairston reveals several chronological trends that began in the Late Prehistoric period and continued until the end of the Contact period. Table 19 presents summary statistics for several key attributes in Uwharrie, Dan River, protohistoric, and contact-period pottery assemblages from Upper Saratown and Hairston. One chronological trend indicated by this table is that sand temper increased through time relative to quartz temper. Also, the relative frequency of fine-to-very-fine sand temper increased through time.

A further examination of Table 19 reveals that sherd wall thickness declined from the Late Prehistoric through the Contact period. Though all assemblages have high

frequencies of sherds that are between 6 mm and 8 mm thick, there was a decline through time in the percentage of sherds greater than 8 mm thick. Also, there ws a corresponding increase through time in the frequency of sherds less than 6 mm thick.

A third trend in ceramic change is evident from Table 19. The ratio of plain or smoothed interiors relative to scraped interiors increased through time.

Table 19. Relative Frequency (Percent) of Selected Attributes in Assemblages from Upper Saratown and Hairston.

Attribute	Uwharrie Phase	Dan River Phase	Protohistoric	Middle Contact Period	Late Contact Period
Ratio of sand to quartz temper	0.1 : 1	1 : 1	5 : 1	10 : 1	14 : 1
Percent of fine-to-very-fine sand temper	10	36	64	68	79
Percent of sherds < 4 mm thick	2	10	12	33	36
Percent of sherds > 8 mm thick	57	33	18	10	10
Ratio of plain to scraped interior surfaces	0.1 : 1	0.5 : 1	2 :1	4 : 1	12 : 1

This trajectory of ceramic change (increase in the use of sand temper, decrease in wall thickness, and increase in the frequency of smoothed interiors) was first recognized by Coe and Lewis (1952) when they compared Uwharrie and Dan River series pottery. The present study demonstrates that the trends of ceramic change that began during the Late Prehistoric period continued uninterrupted through the Contact period. This pattern lends more support to the interpretation that the Uwharrie, Dan River, and Oldtown series represent a single cultural sequence. Though a continuous cultural sequence is represented, I think that the distinction of the three series within this sequence is valid.

As I have described above, distinct paste and exterior surface treatments characterize the three series. In addition, exterior surface decoration also differs between

the series. Overall, Uwharrie and Dan River pottery are more often decorated than Oldtown pottery. Thirteen percent of Uwharrie and Dan River sherds are decorated, compared to Oldtown sherds of which between 8% and 10% are decorated. In all three series the lip and the margin between the lip and rim is most often decorated. Generally speaking, between 40% and 50% of all lips are decorated in Uwharrie, Dan River, and Oldtown collections. There is significant difference, however, in the relative frequency of sherds with neck decorations. The neck area of Uwharrie and Dan River series sherds is the most common site of decoration. Nearly half of all Uwharrie and Dan River sherds with intact neck sections are decorated. In contrast, neck decorations occur on only 2% to 3% percent of Oldtown neck sherds. Thus, there is an overall decrease in decoration, and a decline in neck decoration in particular, following the Late Prehistoric period.

Three basic vessel forms are present in pottery assemblages from Upper Saratown and Hairston. Jars, bowls, and cups are the primary vessel forms. All jars have restricted necks, but several different rim forms are present, as noted in the previous section. I compared the size of jars (as measured by orifice diameter) and found no statistically significant differences between Dan River series, late Dan River (transitional) series, and Oldtown series jars from protohistoric, Middle Contact period, and Late Contact period occupations. Box plots of the orifice diameter of these jars are presented in Figure 29. Though there is slight overlap between the distributions, more large jars were discarded in Late Contact period features than in Middle Contact period features at Upper Saratown. This characteristic may be linked to changes in ritual discussed in Chapter IV.

Bowl forms are more common in the Oldtown series than either the Uwharrie or Dan River series. Both restricted and open bowls are present in the Oldtown assemblages.

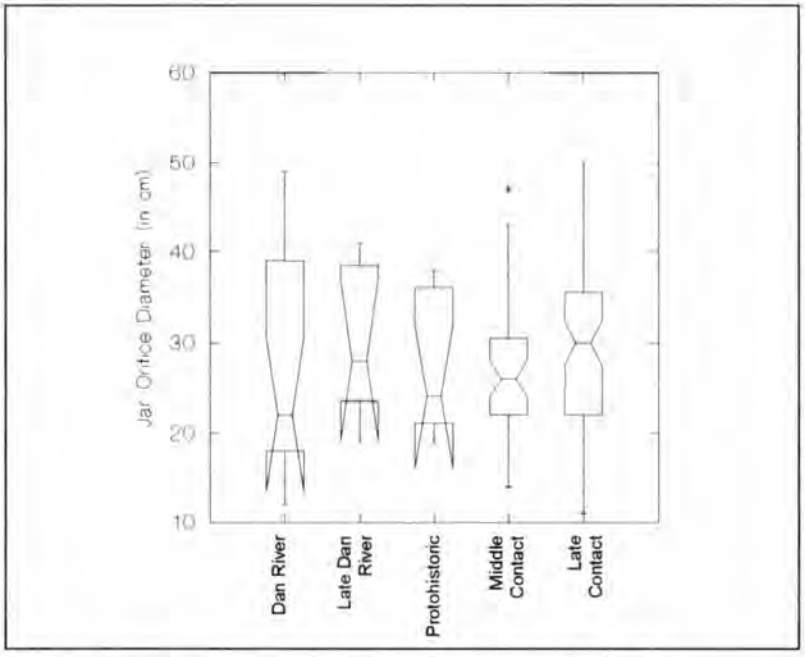

Figure 29. Box plot of jar orifice diameters from Late Prehistoric, Protohistoric, and Contact-period assemblages.

Restricted Oldtown bowls have either simple, inverted rims or carinated rims. In the previous section, associations between certain vessel forms, interior surface treatments, and exterior surface treatments were noted for several of the Oldtown pottery collections. While jars exhibit the full range of exterior surface treatments, bowls and cups tend to have plain or burnished exteriors. Bowls with a particular suite of attributes may represent a specialized vessel form. Burnishing is an uncommon surface treatment within the Oldtown series and this exterior surface treatment is strongly associated with bowl forms, especially restricted and carinated bowls. All 67 Oldtown sherds from restricted and carinated bowls with burnished or smoothed interiors also have highly burnished or plain smoothed exteriors. These plain and burnished carinated bowls may represent specialized vessels used primarily for heating and serving food. Hally (1986:288-289) found that similar carinated bowls from the sixteenth-

century King and Little Egypt sites in northwestern Georgia were probably used to heat and serve liquid foods. This conclusion was based on an analysis of vessel form, use-wear, and ethnohistoric and ethnographic observations of Southeastern Indian foodways. This vessel form first occurs in the study area late in the Dan River phase, but highly burnished bowls with carinated rims do not occur until the Protohistoric period. As was the case in the Georgia assemblages, these burnished cazuela bowls in the Dan drainage lacked soot deposits on the exterior surface and tended to be dark in color and without fire-clouding. These characteristics are inconsistent with use of the bowls for cooking in open flames and are more consistent with serving. This vessel form may represent changes introduced during the Protohistoric period in the consumption and presentation of some cooked foods.

Clay Smoking Pipes as Chronological Markers

In addition to ceramic evidence, other artifacts in features may provide useful clues about site chronology. Two artifact classes recovered from features, clay smoking pipes and glass beads, also occur frequently as burial associations. If reliable chronologies can be developed for these artifact classes based on their distribution at dated sites in the region or in features at sites in the study area, these artifacts can provide important clues for dating burials at Upper Saratown and Hairston. Several glass bead chronologies have been proposed for archaeological contexts in eastern North America. These chronologies will be compared to the distribution of beads in the study area to determine if similar patterns of distribution are present. Likewise, clay smoking pipes in archaeological collections from sites in the Mid-Atlantic region and in the Southeast also are examined and compared to similar forms in the study area in an effort to refine the chronology of the occupations at

Upper Saratown and Hairston. The distribution of these artifacts at other sites is also used later in discussions of regional interactions (see Chapter VI).

Clay smoking pipes from features at Upper Saratown and Hairston were analyzed and compared to pipe assemblages from other sites in the region to develop a chronology of pipe styles. The analysis recorded both qualitative and quantitative information for pipes and pipe fragments. Qualitative observations include pipe form, decoration, exterior surface treatment, and temper. Quantitative observations include bowl-to-stem angle, bowl length, stem length, maximum stem diameter, and bowl wall thickness. The coding format for the clay pipe analysis is presented in Appendix 5.

Clay pipes from features at Upper Saratown and Hairston were grouped by archaeological period. I found that certain combinations of attributes of the clay pipes, like form, surface treatment, and decoration, could be used to distinguish each of the archaeological periods. This analysis of clay pipes from features provides additional support for the feature chronology established by the pottery seriation. Pipes from each period are described below and a regional chronology is presented. Pipes from Upper Saratown and Hairston also are compared to pipes from other sites in the region with similar occupation spans.

Uwharrie Phase Clay Pipes

Two Uwharrie phase pit features from Upper Saratown contained clay pipes. One specimen was a complete pipe, while the other was fragmentary. Both were undecorated, cigar-shaped pipes with plain exterior surfaces (see Figure 30). One was tempered with crushed rock, while the other was tempered with medium sand. Similar cigar-shaped

Figure 30. Late prehistoric clay pipes: Uwharrie phase cigar-shaped pipe from Feature 44, Upper Saratown (left); Dan River phase embellished elbow pipes from Feature 22, Hairston (center) and Feature 192, Upper Saratown (right).

Figure 31. Protohistoric stub-stemmed smoking pipe from Feature 2 at Hairston.

tubular pipes have been recovered from other Uwharrie phase sites in the North Carolina including the Trading Ford site (31Rw17) in Rowan County (Howell and Dearborn 1952:10) and the Forbush Creek site (31Yd1) in Yadkin County. Uwharrie phase assemblages from other sites in North Carolina, including the Parker site (31Dv25) in Davie County (Newkirk 1978), the Donnaha site (31Yd9) in Yadkin County (Woodall 1984), and site 31Dh7 in Durham County (McCollough et al. 1980) did not contain identifiable clay pipes.

Dan River Phase Clay Pipes

Two pipe bowl fragments were recovered from the Dan River phase feature at Hairston. One complete pipe, two bowl fragments, and two stem fragments were recovered from Dan River phase features at Upper Saratown. All the pipe bowls and the complete pipe were obtuse-angle elbow pipes. Elbow pipes remained the most common form of native smoking pipe from the Dan River phase through the contact era, but specific characteristics of the pipes changed through time. Dan River phase elbow pipes usually do not have exterior surface modifications like incising or punctations, but quite often the form of the pipe is elaborated in decorative ways. For example, bit areas of pipe stems and the lips of pipe bowls are often embellished with squared flanges or are flared or thickened (see Davis et al. 1997). Very similar elbow pipes with identical bit and rim embellishments have been recovered from Dan River phase sites throughout northern North Carolina and southern Virginia (Benthall 1969; Coleman and Gravely 1992; Davis et al. 1996, 1997). In addition, some pipes in Dan River phase assemblages have elaborately modeled stems and bowls. Examples of embellished elbow pipe are presented in Figure 30.

Protohistoric Clay Pipes

One whole pipe and a pipe stem fragment were recovered from the protohistoric component at Hairston. The stem fragment has a plain exterior and is tempered with fine sand. The complete specimen is a stub-stemmed elbow pipe that may have had a reed inserted in the stem when it was smoked. This pipe is shown in Figure 31. It has a plain exterior with incised concentric circles on either side near the elbow. Incised lines radiate out from the inner circle to the outer circle. Both the bowl rim and distal end of the stem are thickened with a flat flange and have a line incised around the flange. This pipe is tempered with a mixture of fine sand and crushed rock and the walls of the pipe are thick (8 mm). No stub-stemmed pipes were recovered from the contemporaneous Nifong site. Pipes from that site consist of undecorated elbow pipes with plain and burnished exteriors. Fine-crafted and elaborately decorated and modeled stub-stemmed pipes have been recovered from Mississippian contexts (see Brain and Phillips 1996:137) across the Southeast and from Pee Dee and Pisgah phase contexts in North Carolina (Coe 1995:Figure 11.2; Dickens 1976:Figure 46). Though the general form of the pipes are similar, the specimen from Hairston bears little resemblance to the Mississippian examples and is probably not related to this earlier pipe-making tradition. I have been unable to locate this form of pipe in other protohistoric sites in the region.

Early and Middle Contact Period Clay Pipes

Native clay pipes manufactured during the Early and Middle Contact period share many attributes and will be discussed together. Four pipe fragments and two complete pipes were recovered from the Early Contact period features at Hairston. Seven complete

pipes, 21 bowl fragments, and 23 stems were recovered from Middle Contact period features at Upper Saratown. These pipes exhibit an array of decoration not seen in earlier clay smoking pipes. The impetus for this increase in decoration appears to have come from the Chesapeake region where similar, highly decorated clay pipes occur on seventeenth-century English and Native American settlements. These Chesapeake elbow pipes lack temper and are decorated with geometric, running-deer, and star motifs. Potter (1993:226) noted that these decorative motifs were created with circular punctations made from solid- and hollow-point reeds, plied cords, and the serrated edges of shells or fossil shark's teeth. I examined an assemblage of decorated pipes from the Camden site (44CE3), a seventeenth-century native settlement in Caroline County, Virginia, and observed that the circular punctations on these pipes had actually been made with the spiraled tip of a seashell, not a hollow-point reed. The impressions were not continuous circles, but rather small spirals with over-lapping edges. Though decorative techniques like these had been applied to clay pipes in Virginia since at least the thirteenth century A.D. (Mouer 1993; Mouer et al. n.d.; Potter 1993), they do not become common until the seventeenth century and have not been recovered from late prehistoric or protohistoric sites in the Dan drainage.

In comparing decorated elbow pipes from the Middle Contact period component at Upper Saratown with those from Camden, I noted that some of the pipes from the Dan drainage were probably trade pipes from the Chesapeake, while others were probably made locally. Two pipes from Middle Contact period features at Upper Saratown were decorated with a technique often referred to as "rouletting." Potter (1993:228) demonstrated that the closely spaced, rectangular punctations described as rouletting was probably made with the edge of serrated shells or fossil shark's teeth. These rouletted designs were often in-filled with

white clay. Pipes with this type of decoration were very common on colonial and Indian settlements in the Chesapeake by the middle of the seventeenth century (Mouer et al. n.d.). The two rouletted pipes from Middle Contact period contexts at Upper Saratown are probably trade pipes from Tidewater Virginia. Five other pipes from these features and one pipe from Early Contact period features at Hairston were decorated with closely-spaced punctations and incisions in a style imitative of these rouletted pipes. Examples of each decorative technique are presented in Figure 32. These pipes decorated with individual punctations are probably locally-made copies of Chesapeake pipes. I suggest that demand for decorated pipes from the Chesapeake was not being met by the trade available to interior groups, like the Sara, prior to the last quarter of the seventeenth century. The pipes decorated with punctations indicate that local producers attempted to meet the demand for this style of elbow pipe.

A specific form of large, undecorated elbow pipe is also common on Early and Middle Contact period sites in the Dan drainage. These pipes are larger than Dan River phase and protohistoric elbow pipes and they have relatively thick walls with a median thickness of 4 mm. The bowl of these pipes bulges back toward the smoker and the elbow is emphasized with a small protuberance or spur. Often the bit of the pipe stem and the lip of the pipe bowl flares slightly. These pipes are usually well-made, though some examples are less so, and the clay is usually tempered with fine sand. Figure 33 presents examples of this type of pipe from Middle Contact period features at Upper Saratown (Figure 33a) and Early Contact period features at Lower Saratown (Figure 33b). Three examples of this pipe form were recovered from Middle Contact period features at Upper Saratown.

One pipe of this style has also been found at the Trigg site (44My3), in the New River drainage of southwestern Virginia (Buchanan 1986:Figure 5). When the Trigg site was first

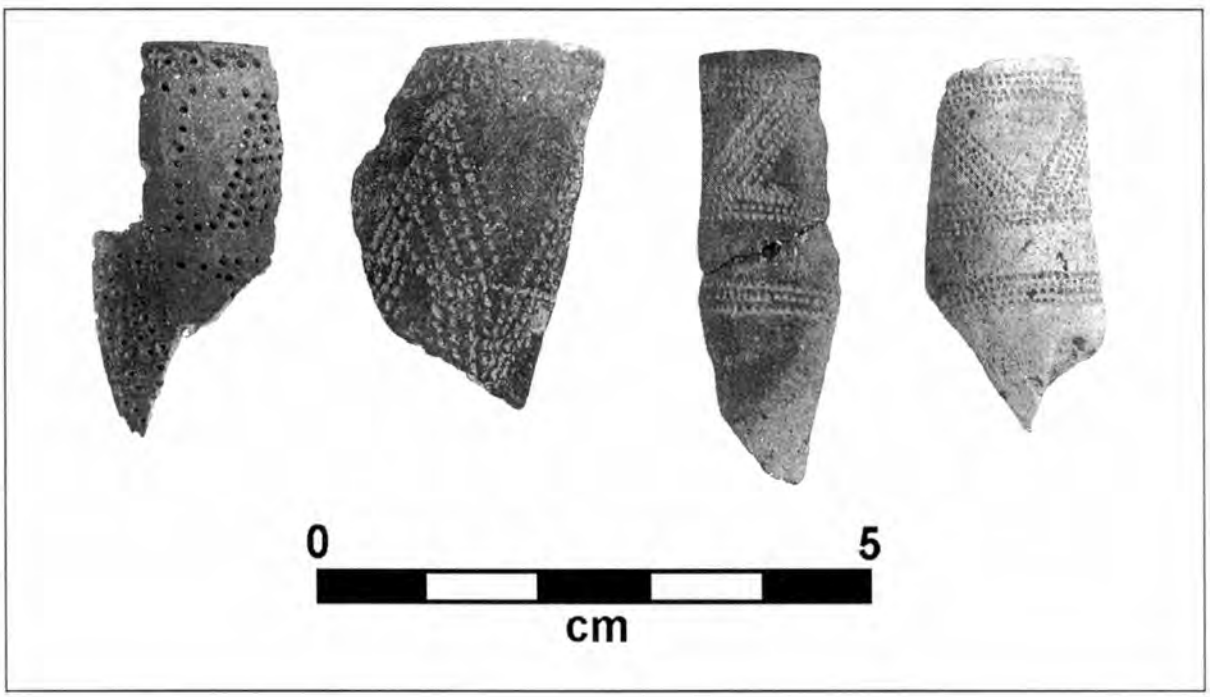

Figure 32. Decorated elbow pipes: locally-made pipe with individual punctations from Feature 6, Hairston (left); trade pipes from the Tidewater recovered from Middle Contact period features at Upper Saratown (center and right).

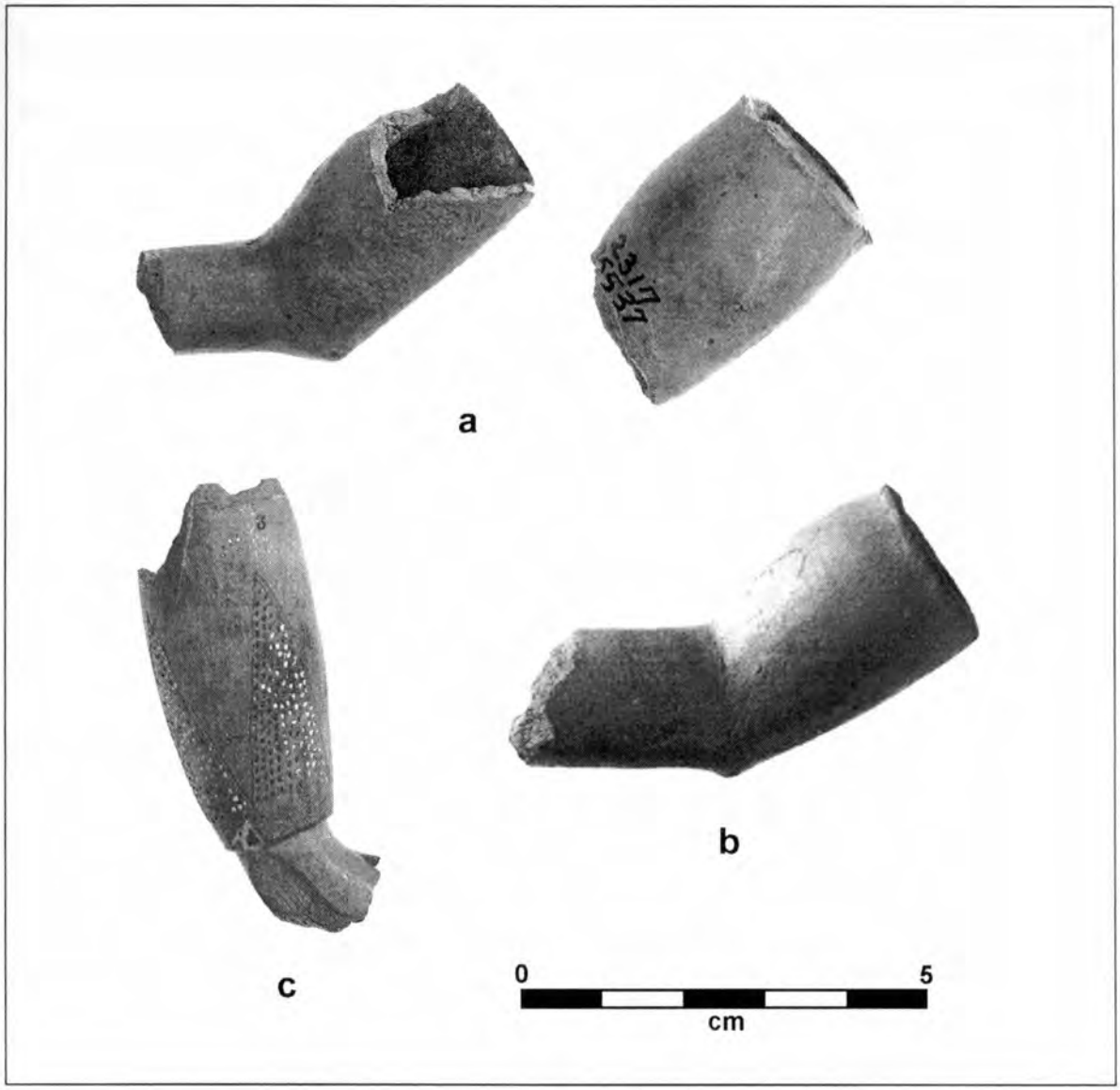

Figure 33. Early and Middle Contact period pipes: large, plain elbow pipes from Upper Saratown (a); large, plain elbow pipe from Lower Saratown (b); and rouletted tulip-shaped pipe with curved stem from Upper Saratown (c). Notice the white in-filling on rouletted pipe.

described the estimated date range for its main occupation was A.D. 1600 to 1635 (Buchanan 1986:415). This estimate was based largely on an analysis of glass trade beads from the site. Boyd (1993) recently reassessed the site and revised the date range for the occupation to between A.D. 1630 and 1670. Boyd's analysis indicates that the Trigg site occupation may have extended into the Middle Contact period and my comparison of European trade goods from the site and Middle Contact period sites in the Dan drainage supports Boyd's estimate. I think the large elbow pipe from the Trigg site may be a trade pipe that was manufactured by the Sara during the Early or Middle Contact period.

Ward and Davis (1993) identified two other styles of clay smoking pipes from seventeenth-century sites in the North Carolina Piedmont that were also recovered from Middle Contact period features at Upper Saratown. These seventeenth-century pipes include onion-form tubular pipes that terminate in a distinct bulbous bowl, and pipes with narrow, round stems that curve to form a right angle and terminate in a tulip-shaped bowl (Figure 33c). One fragment of each pipe type was recovered from Upper Saratown features. Pipes with narrow, curved stems similar to the one from Upper Saratown are common on mid-seventeenth-century Strickler Period Susquehanna sites in southern Pennsylvania (Kent 1984:149).

Late Contact Period Clay Pipes

Most pipe forms found on Middle Contact period sites also occur on Late Contact period sites, except for the large, undecorated elbow pipes. These pipes appear to have been manufactured around the middle of the seventeenth century and may be a marker for that period.

Despite the similarities between pipes from Middle and Late Contact period assemblages, two characteristics can be used to distinguish between assemblages of pipes from the two periods. First, rouletting, punctation, and other forms of decoration are much less common on Late Contact period elbow pipes than on those from Middle Contact period sites. A second distinguishing characteristic is that most Late Contact period pipes have burnished exteriors rather than plain smoothed exteriors. In addition, Piedmont sites occupied after 1680 usually have European kaolin pipes as well.

The combinations of pipe form and decoration that vary through time are presented in Figure 34 as an occurrence seriation. This chart may serve as a regional chronology of aboriginal clay pipes. Assemblages that only have unidentifiable pipe fragments may be sorted chronologically by the ratio of plain to burnished pipes. Uwharrie, Dan River, protohistoric assemblages have more plain than burnished pipes; Early and Middle Contact period assemblages have about equal numbers of plain and burnished pipes; and Late Contact period assemblages have more burnished than plain pipes.

Glass Beads as Chronological Markers

Glass trade beads are by far the most common artifact class recovered from contact-period burials at Upper Saratown. Chronological trends in the distribution of glass beads could provide very useful information for determining the chronology of burials at the site. Several glass bead chronologies have been developed for seventeenth-century archaeological assemblages in several regions of eastern North America (Bennett 1983; Fogleman 1991; Huey 1983; Karklins 1974, 1983; Kent 1983, 1984; Kenyon and Kenyon 1983; Miller et al. 1983; Smith 1983, 1987; Wray 1983). Within eastern North America,

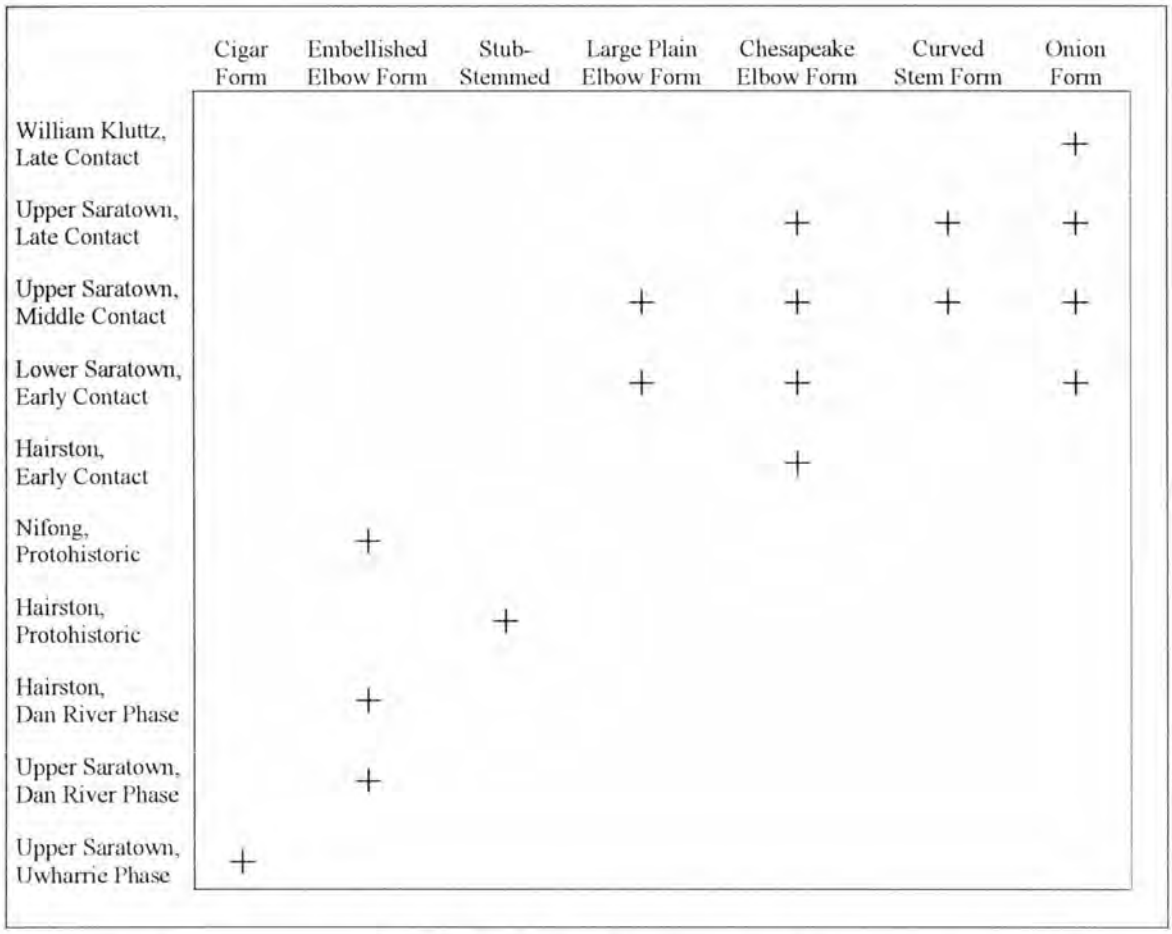

Figure 34. Occurrence seriation of aboriginal clay pipes from site components in the upper Dan drainage.

the Northeast, Canada, and the interior Southeast have the most thoroughly studied glass bead chronologies. Unfortunately, the only systematic study of glass beads imported and distributed by the Virginia colony focuses on beads from English domestic sites, not aboriginal contact-period sites (Miller et al. 1983). I have used these published bead studies to develop expectations about the distribution of glass beads in Early Contact period, Middle Contact period, and Late Contact period assemblages. These expectations will be compared to glass trade beads recovered from dated pit features at several contact period

sites in the Dan River drainage to evaluate the usefulness of trade beads as chronological markers in the study area.

Most glass trade beads found on North American sites are either drawn or wound. Drawn beads are manufactured by drawing out a bubble of molten or viscid glass into a tube and then breaking the tube into segments (Kidd and Kidd 1970). Wound beads are manufactured by winding threads of molten glass around a wire. Stone (1974) suggested that drawn beads should be divided into four classes based on structure. These structural classes are illustrated in Figure 35. *Simple* beads are monochrome (Figure 35a), while *compound* beads have two or more layers of different colored glass (Figure 35c). Simple beads with decorations are *complex* (Figure 35b) and compound beads with decorations are *composite* beads (Figure 35d). Small circular drawn beads (usually less than 5 mm in diameter) are referred to as seed beads. I have used these divisions in my analysis of glass trade beads from the Dan River drainage.

Certain types of glass beads from Upper Saratown and Hairston have limited temporal distributions in other regions of North America. One such bead type is a Flush Eye bead (Kidd and Kidd's Type IIg and IIh). This type of opaque, complex bead has circular insets, or "eyes," of different colored glass imbedded in the bead's surface. Several studies indicate that this type of bead is found most often on sites that predate A.D. 1650 (Deagan 1987; Fenstermaker 1974; Fogleman 1991; Huey 1983; Kent 1983, 1984; Smith 1983, 1987; Wray 1983). Beads with eight different "eye" styles have been reported from sites in the Southeast (Smith 1982). Only two "eye" styles occur in the Dan River drainage: plain dots and compound red sunbursts on white dots. The most common bead with plain dots is a round or oval opaque white bead with three or four blue dots (see Figure 36, top

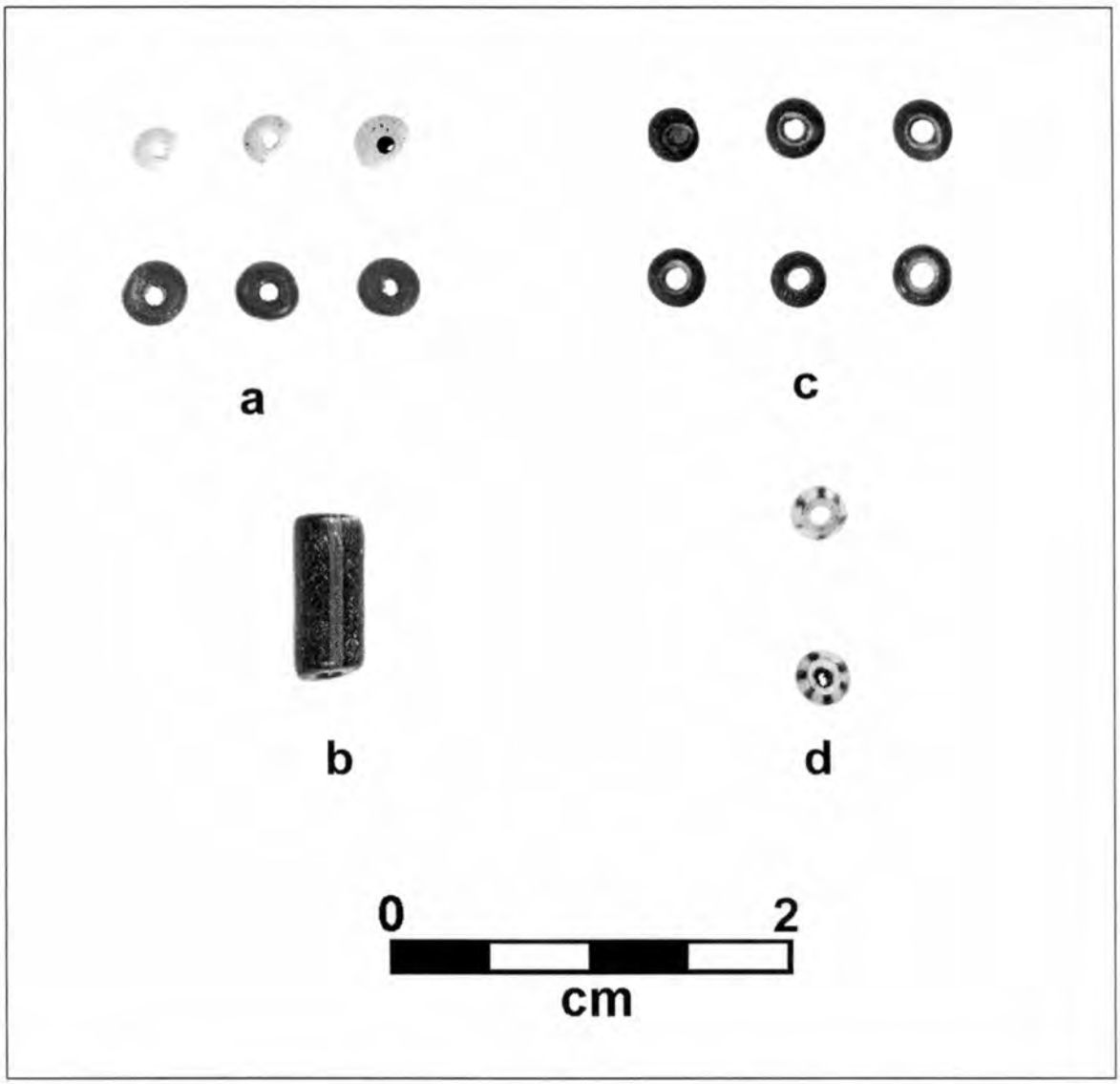

Figure 35. Drawn glass bead types from Upper Saratown: simple seed beads (a); complex cane bead with inlaid compound stripe (b); coumpound seed beads (c); composite seed beads with simple stripes (d).

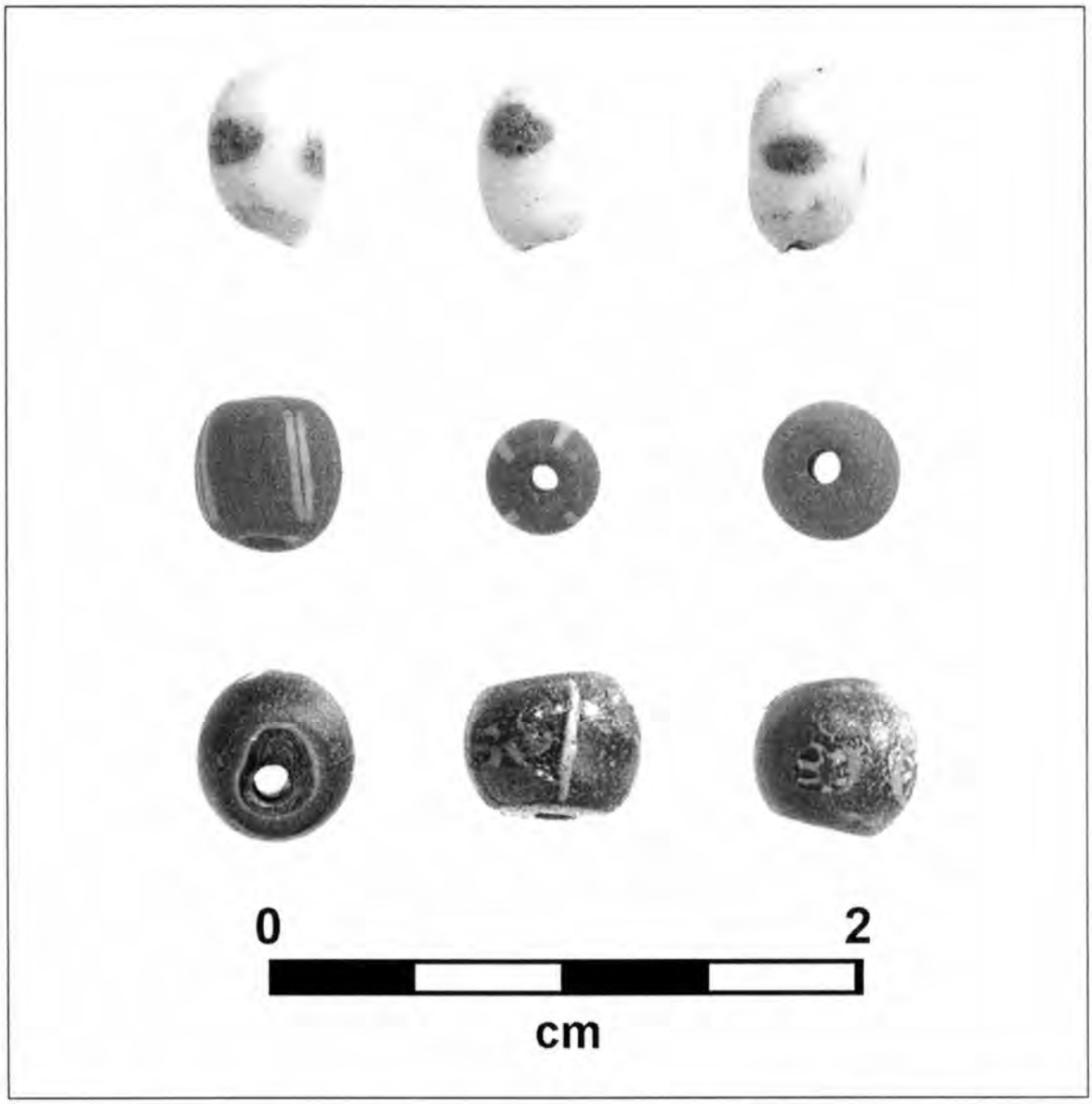

Figure 36. Large complex and composite drawn beads from Upper Saratown: complex white beads with blue plain dot "eyes" (top); complex blue beads with simple white stripes (middle left and center); simple blue bead (middle right); composite blue bead with red-on-white sunburst "eyes" (lower left); complex blue bead with red-on-white sunburst "eyes" and simple white stripes (lower center); and complex blue bead with red-on-white sunburst "eyes" (lower right). Top two rows are from Middle Contact period contexts and lower row is from a Late Contact period feature.

row). A few opaque black beads with plain white dots are also present. Sunburst "eyes" occur on simple turquoise and shadow blue beads and on compound beads that consist of turquoise-white-turquoise layers (Figure 36, bottom row). Some of the sunburst "eye" beads also have white stripes positioned between the "eyes." Smith (1982) found no chronological significance to the different "eye" motifs, but the two styles may be distributed differently among Middle and Late Contact period contexts in the Dan River drainage.

A second type of complex bead found in several sites in the Dan River drainage may also date to the first half of the seventeenth century. Tumbled, opaque blue beads with three or four white stripes (Kidd and Kidd's IIb56) are one of the bead types diagnostic of the period A.D. 1600-1630 in the interior Southeast (Smith 1987:33). Figure 36 presents examples of this type of bead (middle row). Deagan (1987:175), however, reports that this type of bead was common on Spanish colonial sites throughout the seventeenth century. Polhemus (1983, 1985) suggests that most beads of this type that predate A.D. 1650 are spherical, while most beads of this type from the latter half of the century are more elongated and barrel-shaped. Karklins (1974:71) found this type of bead in a deposit of beads from a Dutch glass house that dates to the early or middle of the seventeenth century.

Compound seed beads (Kidd and Kidd's Type IVa) also appear to predate A.D. 1650 in many parts of eastern North America. This type of bead is found on early seventeenth-century archaeological sites in the Northeast (Bennett 1983:53; Fogleman 1991) and in the interior Southeast (Smith 1987:33). This type of bead has also been recovered from a deposit associated with an early seventeenth-century Dutch glass house (Baart 1988:73). Composite white-over-clear seed beads with six red stripes have been

recovered from a site in the Chesapeake that dates to the first half of the seventeenth century (Miller et al. 1983:138-140).

Smith (1987:33) suggests that no particular types of glass beads are diagnostic of the period between A.D. 1630 and 1670, though he suggests seed beads are the most common types of beads during this period. A letter written by Virginia merchant trader William Byrd I in July 1686 to his London agent indicated that the "beads you sent mee large white instead of small. I can be no means put them of, pray (if its not too late) send mee none but small white this year, all others a drug." (Tinling 1977:64). This correspondence attests to the lack of demand for large beads during the last quarter of the seventeenth century in the study area.

Wound beads do not appear on archaeological sites until the last quarter of the seventeenth century in the Northeast (Kent 1984:214-215; Wray 1983:45) and Chesapeake (Miller et al. 1983:153) regions. Deagan (1987:175) reports that wire-wound beads become much more common on Spanish colonial sites in Florida after A.D. 1650.

The distribution of glass trade beads from dated pit features at Hairston, Upper Saratown, Lower Saratown, and William Kluttz are presented in Table 20. These bead assemblages are then compared to the expected distribution based on published bead chronologies for eastern North America to evaluate the effectiveness of glass beads as chronological markers in the study area.

One general trend in the distribution of glass beads from features at these sites in the Dan River drainage is that large drawn beads are more common during the Middle Contact period than during any other period. Two types of large beads are most common during the Middle Contact period: simple opaque beads and complex, striped beads. In

contrast, Table 20 indicates that large translucent beads only occur in Late Contact period features. Elsewhere in the North Carolina Piedmont, large compound beads with an opaque red layer over transparent green or blue interiors, known as Cornaline de Allepo beads, are found only on sites that postdate A.D. 1670. No large Cornaline de Allepo beads were recovered from features at sites listed in Table 20.

This distribution of large drawn beads deviates from some of the patterns found in published bead chronologies for eastern North America. First, complex Flush Eye beads were recovered from both Middle Contact period and Late Contact period features, rather than being limited to the early decades of the seventeenth century. There does appear to be a chronological trend in the distribution of these beads in the Dan drainage. The Flush Eye bead from a Middle Contact period context is a simple bead with plain dot "eyes." Flush Eye beads from Late Contact period features are turquoise beads with sunburst "eyes." One of the beads with sunburst "eyes" is of compound construction and a second turquoise bead has white stripes in addition to the sunburst "eyes" (see Figure 36). It is possible that Flush Eye beads of simple construction with plain dots date to the Middle Contact period, while simple or compound beads with sunburst eyes date to the Late Contact period.

Another type of large complex bead may be useful in determining chronology. Sixteen large blue beads decorated with four white stripes were recovered from Middle Contact period features. Also, one composite bead made of white opaque glass over a pale blue core with six blue inlaid stripes was also recovered from a Middle Contact period feature. Only one complex striped bead was recovered from a Late Contact period feature. This spherical bead is black with three or four white stripes. Large beads with simple stripes, especially opaque blue beads with white stripes, are most common during the

Table 20. Frequency of Gass Beads from Contact Period Features at Upper Saratown, Hairston, and Other Sites in the Dan Drainage.

Bead Type	Hairston, Early Contact	Lower Saratown, Early Contact	Upper Saratown, Middle Contact	Upper Saratown, Late Contact	W. Kluttz, Late Contact
Large Drawn Beads					
Simple, Opaque	-	8	26	33	3
Simple, Translucent	-	-	-	11	-
Compound	-	-	-	1	-
Complex, Striped	-	-	16	1	-
Complex, Eye Beads	-	-	1	3	-
Composite	-	-	-	1	
Subtotal	0	8	43	50	3
Percent	0	13.8	3.2	2.0	0.2
Seed Beads					
Simple, Opaque	109	6	1,388	2,150	1,332
Simple, Translucent	10	1	210	316	92
Compound	13	42	11	14	22
Composite	1	1	-	-	1
Subtotal	133	58	1,609	*2,480	1,450
Tubular Cane Beads	-	-	-	1	3
Total	133	58	1,652	2,531	1,453

* approximately 630 seed beads listed in the catalogue from the Late Contact period Fea. 36 at Upper Saratown could not be located for analysis and are not included in this table.

Middle Contact period. The relative chronology of this bead type is consistent with that reported by Smith (1987) for the interior Southeast, but there appears to be a time lag of 20 or 30 years in the Dan drainage.

The distribution of seed beads in features from sites in the study area does not conform to published chronologies. As discussed above, the published chronologies indicate that compound seed beads are generally limited to sites occupied during the first half of the seventeenth century. Within the Dan River drainage, compound beads, and a few composite seed beads, were most common during the Early Contact period, but were also recovered from both Middle Contact and Late Contact period features.

Very few tubular or cane beads have been recovered from archaeological sites in the study area. At William Kluttz a burial and one feature that date to the end of the seventeenth or early eighteenth century contained tubular glass beads. One tubular bead was recovered from a Late Contact period feature at Upper Saratown. No wire wound beads were recovered from features at Upper Saratown.

Chronology of Burials at Upper Saratown and Hairston

I will now turn to the task of determining the chronology of burials at Upper Saratown and Hairston. Relative chronological information will be gleaned from the superimposition of burial pits and dated pit features. The pottery seriation will be used to sort sherds in burial slump, burial pit fill, and associated vessels by period. Although the distribution of glass beads in features at these sites did not conform well with chronological trends in the distribution of glass beads in other regions of eastern North America, an attempt is made to use these established bead chronologies to sort out the chronology of burials from Upper Saratown and Hairston with associated beads. The types of clay smoking pipes that proved to have temporally-significant distributions in features at these sites will also be used to sort out the chronology of the burials. Other potentially diagnostic artifacts in the burials will be compared to similar artifacts from other sites in eastern North America in an effort to establish the temporal and spatial distribution of these artifacts. Mortuary practices are discussed in more detail in Chapter V.

More than one hundred burials were excavated at Upper Saratown during the 10 field seasons of work conducted by the RLA. Only six burials were identified at Hairston during the 1981 field season, but another six burials were excavated at Hairston by Richard

P. Gravely, Jr. All but seventeen of these burials could be assigned to one of the site components identified during the ceramic analysis. Appendix 6 lists information for all burials from Upper Saratown including estimated age and sex as determined by Lambert (Davis et al. 1996). Burials associated with each site component are presented below. Diagnostic artifacts in burials from each phase are described separately.

Uwharrie Phase Burials – Upper Saratown Site

Three adult burials at Upper Saratown appear to be associated with the Uwharrie occupation at the site (see Table 21). No associated artifacts were recovered from the burials and the chronological identification of the burials is based on the presence of quartz-tempered Uwharrie series pottery in the burial fill. One of the burials, Burial 4, also has a fragment of a Uwharrie phase cigar-shaped clay pipe in the fill. The chronological assignment of these burials is further supported by the lack of glass beads or other European trade goods in the fill of these burials. One of the Uwharrie burials is that of an adult male and two individuals of indeterminate sex were in their later teens when they died. The pits of two of the burials are shaft-and-central-chamber, while the third was so heavily disturbed by looting that the original pit shape could not be determined. Neither of the intact burials had organically-enriched slump in the upper portions of the pit.

Table 21. Probable Uwharrie Phase Burials from Upper Saratown.

Burial	Comment	Age	Sex	Pit Form
Bu. 21	-	16.5 ± 3 years	Indeterminate	Looted
Bu. 4	Intruded by Fea. 14	34 ± 5 years	Male	Shaft and central chamber
Bu. 7	-	>18 years	Indeterminate	Shaft and central chamber
Bu. 79	U or DR phase	>30 years	Female	Shaft and side chamber
Bu. 90	U or DR phase	6 ± 2 years	Unknown	Looted

Two additional late prehistoric burials listed in Table 21 (Burial 79 and Burial 90) are associated with either the Uwharrie or Dan River occupations at the site. A stone end scraper was interred with one of these burials, that of an older adult female. This female was buried in a shaft-and-side-chamber pit. The other late prehistoric burial has no associated artifacts and the pit was disturbed by pot hunting. Both of these burials pits have organic soil in the top of the burial pit.

Dan River Phase Burials – Upper Saratown Site

Seven burials at Upper Saratown are associated with the Dan River phase component (see Table 22). Associated objects were recovered from three of these burials. These include a greenstone celt, a hammerstone, a conch shell earpin and hairpin, a small rolled copper bead, and clumps of red ochre. Greenstone celts are common artifacts on Dan River phase sites in the Dan drainage (Davis et al 1997a, 1997b, 1997c). The shell earpin from Burial 16 is of the knobbed type. Brain and Phillips (1996) report that across the Southeast knobbed earpins originated late in the prehistoric period (after A.D. 1400), became most popular during the Protohistoric period, and continued to be used into the historic period. The distribution map presented by Brain and Phillips (1996:360) indicates that sites with knobbed earpins are widespread in the Southeast, but are concentrated in the southern Appalachians of Tennessee, Georgia, South Carolina, and Alabama. More locally, marine shell earpins have been recovered from a burial at Stockton (44Hr35), a fourteenth-century Dan River phase village site located in Henry County, Virginia (Davis et al. 1997c). Shell earpins have also been recovered from Pisgah and Qualla phase burials in western North Carolina, and Pee Dee phase burials at Town Creek Indian Mound (31Mg3).

Table 22. Dan River Phase Burials from Upper Saratown.

Burial	Comment	Age	Sex	Pit Shape
Bu. 16	-	15 ± 3 years	Unknown	shaft and side chamber
Bu. 20	-	21 ± 3 years	Indeterminate	shaft and central chamber
Bu. 26	-	1 month	Unknown	shallow basin
Bu. 37	-	>18 years	Indeterminate	shaft and central chamber
Bu. 60	no remains, intruded by Fea. 113	-	-	simple pit
Bu. 105	intruded by Fea. 189	22 ± 4 years	Female	simple pit
Bu. 110	intruded by Bu. 109	40 ± 5 years	Male	shaft and central chamber

These sites span the late prehistoric to the Early Contact period. In the study are, knobbed earpins began to be used as grave offerings in the thirteenth and fourteenth centuries, earlier than the beginning date suggested by Brain and Phillips (1996) for their distribution in the greater Southeast.

The sex of two of the seven Dan River phase burials could be determined. One was a young adult female and the other was an older adult male. Ochre was recovered from the burial of the older adult male. The other associated artifacts were interred with individuals in their middle to late teens. Dan River phase burial pit forms include simple shafts, shaft-and-central-chamber, shaft-and-side-chamber, and shallow basins. Three of these pits have organically enriched fill in the top of the pit, and one also has lots of artifacts in this zone.

Late Dan RiverPhase Burials – Hairston Site

Four of the 12 burials from Hairston are associated with the late prehistoric occupation represented by Features 22 and 28 (see Table 23). Two of these burials are of young adults, one is a subadult, and the last burial is that of a young child. One of the adults was determined to be female. The biological sex of the other three burials could not be determined.

Diagnostic artifacts in these burials include: small, Lick Creek style engraved rattlesnake gorgets; oval cut mica disks; a large runtee shell bead; and bone beads made from turkey distal phalanges and rabbit innominates. Figure 37 presents examples of a small Lick Creek style gorget, rabbit innominate beads, and turkey distal phalange beads.

Lick Creek style gorgets are the earliest type of engraved "rattlesnake" gorget. This type of gorget has been recovered from late Pisgah phase components in western North Carolina (Dickens 1976:164-168; Keel 1976:151), Dallas phase sites in eastern Tennessee (Muller 1966, 1997; Polhemus 1987), and other late prehistoric contexts in north Georgia, South Carolina, and southwestern Virginia (Brain and Phillips 1996:83-85; MacCord 1998; Stuart 1970:78). The Toqua site, located in southeastern Tennessee, is thought to be a production center for this type of gorget (Brain and Phillips 1996:85). Site contexts with Lick Creek style gorgets fall between A.D. 1200 and 1500.

Cut mica discs have been recovered from late Mississippian and late prehistoric contexts in the southern Appalachians and Piedmont of east Tennessee, western North Carolina, and northern South Carolina. Dickens (1976:144) reports that burials with cut mica discs have been found at late Pisgah phase sites including Warren Wilson (31Bn29) and Garden Creek (31Hw2); at Pee Dee phase sites including Town Creek (31Mg2) and the McCollum Mound site (38Cs2) in Chester County, South Carolina; at the Dallas phase site at Hiwassee Island (40Mg31); and at the Qualla phase Cullowee Mound site (31Jk2).

Table 23. Late Dan River Phase Burials from Hairston.

Burial	Comment	Age	Sex	Pit Shape	Slump
Bu. 3	Intruded by Bu. 2	19±2 years	Female	Shaft - side chamber	Present
Bu. 4	Intruded by Bu. 3	9±2 years	Indeterminate	Shaft - side chamber	Absent
Bu. 6	Intruded by Fea. 25	4±1 years	Indeterminate	Shaft - side chamber	Present
Bu. 1/Gravely	-	>21 years	Indeterminate	Simple pit?	-

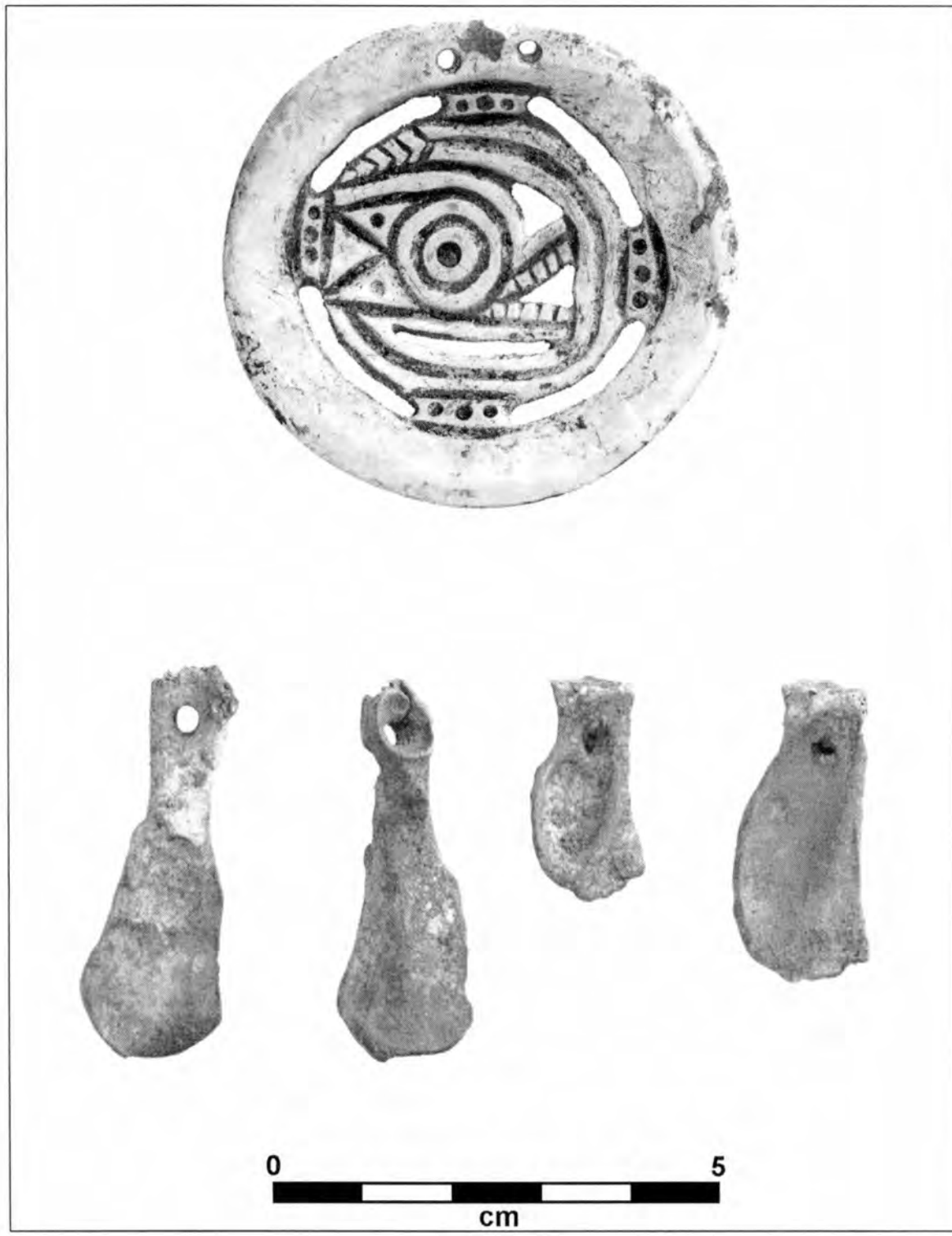

Figure 37. Associated artifacts from Burial 6 at the Hairston site: small Lick Creek style rattlesnake gorget (top); rabbit innominate beads (lower left); and turkey phalange beads (lower right).

A runtee is large, flat squared disk of conch shell that is drilled longitudinally. Runtees have been recovered from late-contact burials at Fredricks (31Or231) and William Kluttz, and have also been reported from the late prehistoric Dan River phase Belmont site (Davis et al. 1997b), in Henry County, Virginia.

Bone beads made from the distal phalange of turkey wings and rabbit innominates have been recovered from late prehistoric sites in North Carolina and Virginia and one protohistoric site in North Carolina. These types of beads have been recovered from burials from several Dan River phase sites (Benthall 1969; Buchanan 1986; Davis et al. 1997a, 1997b; Segall and MacCord n.d.), from the late Pisgah phase Warren Wilson site (Dickens 1976), from McLean Mound in Cumberland County (MacCord 1966), and from a protohistoric burial at the Keyauwee site in Randolph County (Wilson 1983).

Other associated artifacts in late Dan River phase burials at Hairston include a plain cazuela bowl, a lanceolate-shaped copper gorget, two drilled pearl beads, conch shell earpins, hundreds of columella segment and barrel beads, tubular beads made from conch columella, marginella beads, bone disk beads, beads made from squirrel mandibles, bone awls and needles, and two stone flakes. The association of these burials with the site occupation represented by Features 22 and 28 is further supported by the recovery from the fill of these burials of sherds similar to those found in the features.

Protohistoric Burials – Hairston Site

One burial from Hairston, Burial 2, dates to the protohistoric occupation. This burial intrudes the pit for Burial 3, which dates to the late Dan River phase. Burial 2 also intrudes Feature 27, which dates to the Protohistoric period. Burial 2 is that of an infant

aged 1.5 years ± 6 months. The burial pit is a shaft and side-chamber. Associated with the burial is a Saltville style engraved rattlesnake gorget and eight long rolled copper beads (see Figure 38).

Muller (1966a:162) and Brain and Phillips (1996) think that the Saltville style is derived from the Lick Creek style. Saltville style gorgets have a much smaller distribution than Lick Creek gorgets and appear to be limited to southwest Virginia and the North Carolina Piedmont. Sites with this type of gorget cluster on the northeastern periphery of the area where "rattlesnake" gorgets occur. Brain and Phillips (1996:102) suggest that these gorgets "were a regional development as local artisans created a new style from Lick Creek prototypes."

Early Contact Period Burials – Hairston Site

None of the six burials from the 1981 RLA excavation at Hairston appear to be associated with the Early Contact period occupation. However, two burials from Richard Gravely's earlier excavation date to this occupation. Gravely's Burial 2 was that of a child aged 4 ± 1 years, and Gravely's Burial 5 is that of a young adult female aged 19 ± 3 years. Large, round, blue glass beads are associated with both burials, and Burial 5 also has other large beads and a few seed beads. Other associated artifacts include rolled copper or brass beads and columella segment beads.

Middle Contact Period Burials – Upper Saratown Site

Forty-seven burials from Upper Saratown have been identified with the Middle Contact period occupation at the site. Several of these burials pits have a zone of artifact-

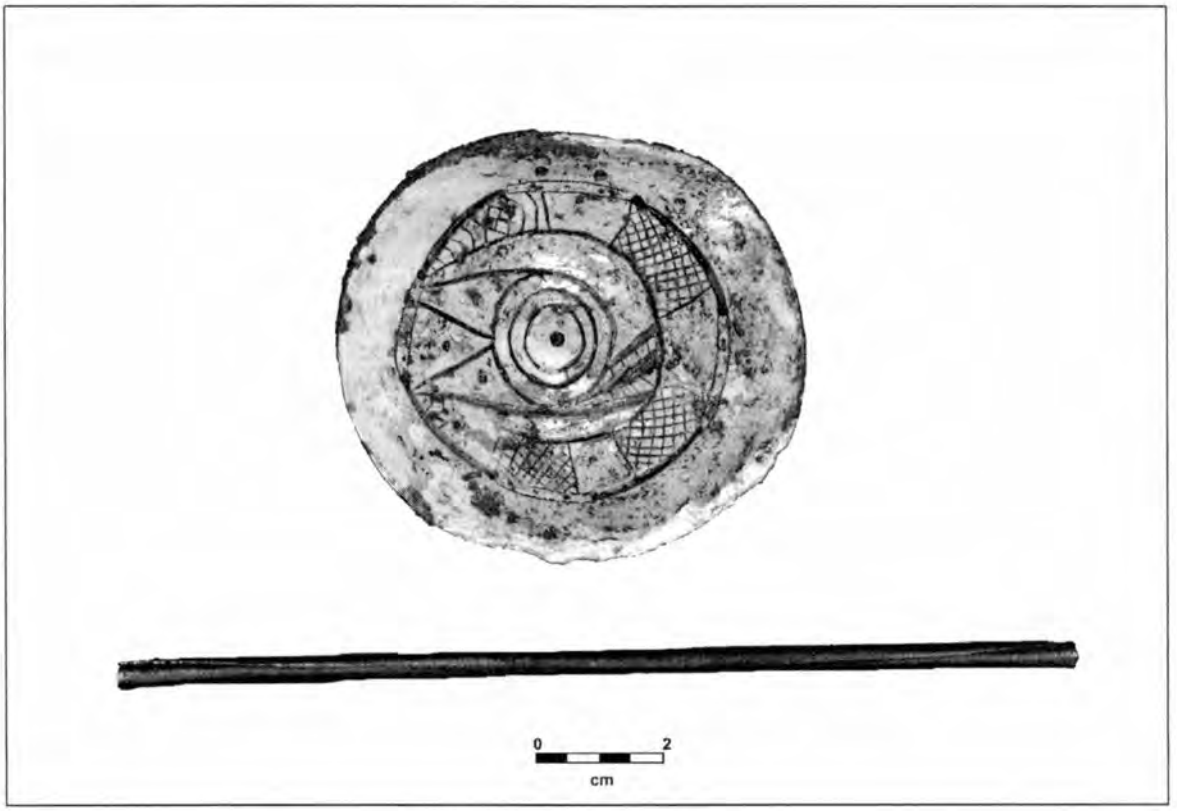

Figure 38. Associated artifacts with protohistoric Burial 2 at Hairston: Saltville style engraved shell rattlesnake gorget and long rolled copper alloy bead.

rich fill at the base of plow zone. Ten burials have small collections of potsherds from this rich zone or pit fill that are consistent with the Middle Contact period assemblage from the site. In addition, one burial contains an Oldtown Plain pottery vessel with a roughly smoothed exterior that is characteristic of the Middle Contact period.

Five burials from the site contain large, undecorated, elbow smoking pipes that are diagnostic of the Middle Contact period. Figure 39 presents two examples of these associated pipes. A sixth burial has an associated pipe that can also be assigned to the Middle Contact period. This pipe (RLA specimen no. 2270a1712) has a large flat heel and "belly bowl" or "tulip bowl" typical of early seventeenth-century European ball clay pipes (see Figure 39c). This pipe is nicely burnished and strongly resembles some of the earliest, locally-made, Chesapeake pipes found in colonial Virginia. Mouer (1993:Figure 3) illustrates similar pipes from the Jordan's Point site (44Pg1), which was occupied ca. A.D. 1620-1635, and Curles Plantation site, in Henrico County, Virginia. Mouer indicates that by mid-century these European-like forms had declined in popularity (Mouer 1993:129). In addition to these diagnostic pipes, one Middle Contact period burial has an associated onion-form pipe (Figure 39d) and two burials have non-diagnostic elbow pipes.

Two burials from the site have associated artifacts that are found on early seventeenth-century sites throughout a wide region of the Southeast. One of these artifacts is a Citico-style engraved shell gorget. Figure 40 shows this poorly preserved gorget. Citico gorgets are the most numerous of all rattlesnake styles and have the widest distribution. Brain and Phillips (1996:95) suggest that many Citico style gorgets were made in a single workshop by a small number of specialists at the Williams Island site in Hamilton County, Tennessee.

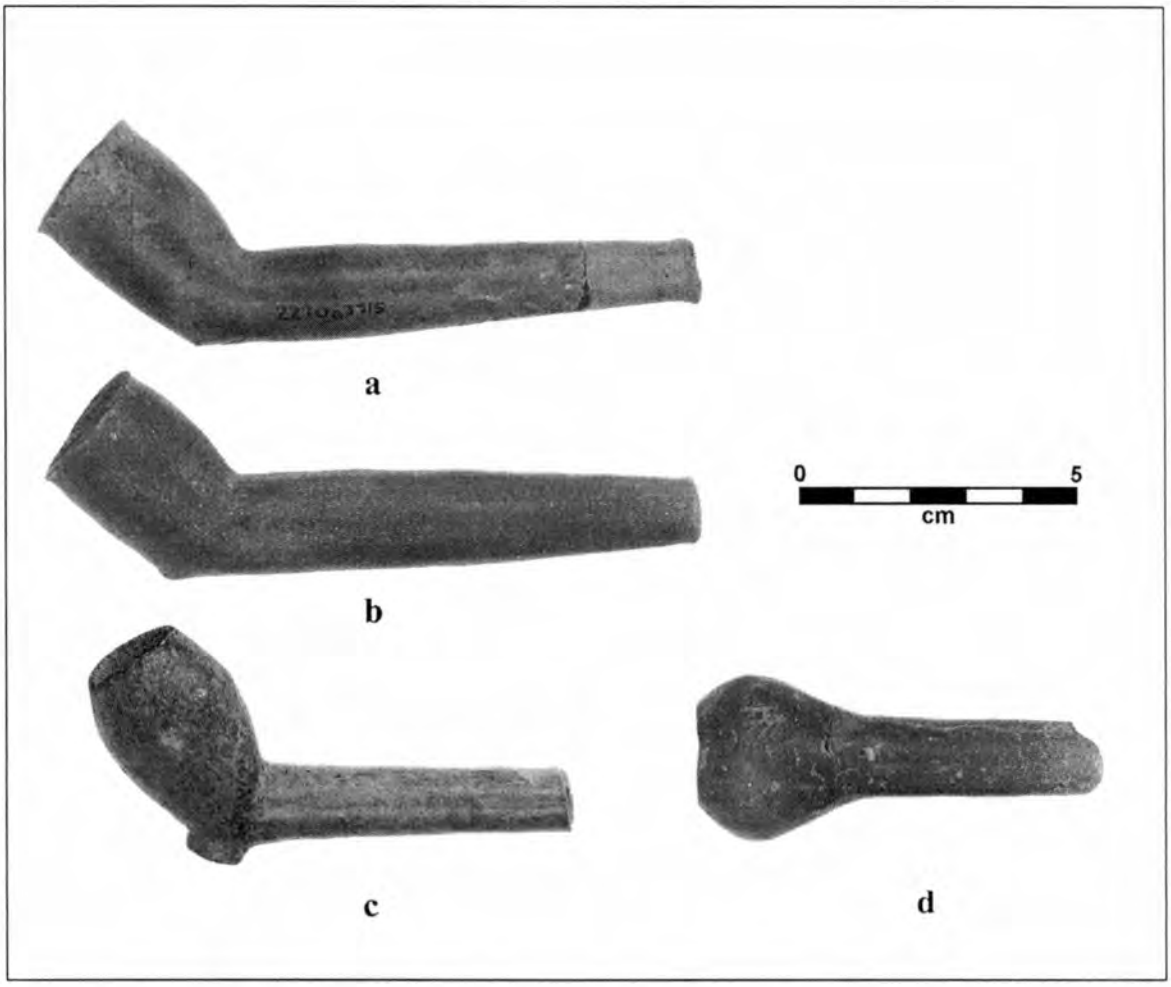

Figure 39. Clay pipes from Middle Saratown phase burials at Upper Saratown: large, plain elbow pipes (a-b); and burnished Euopean-like pipe form with oval foot and tulip-shaped bowl (c). The burnished pipe was made in a mold.

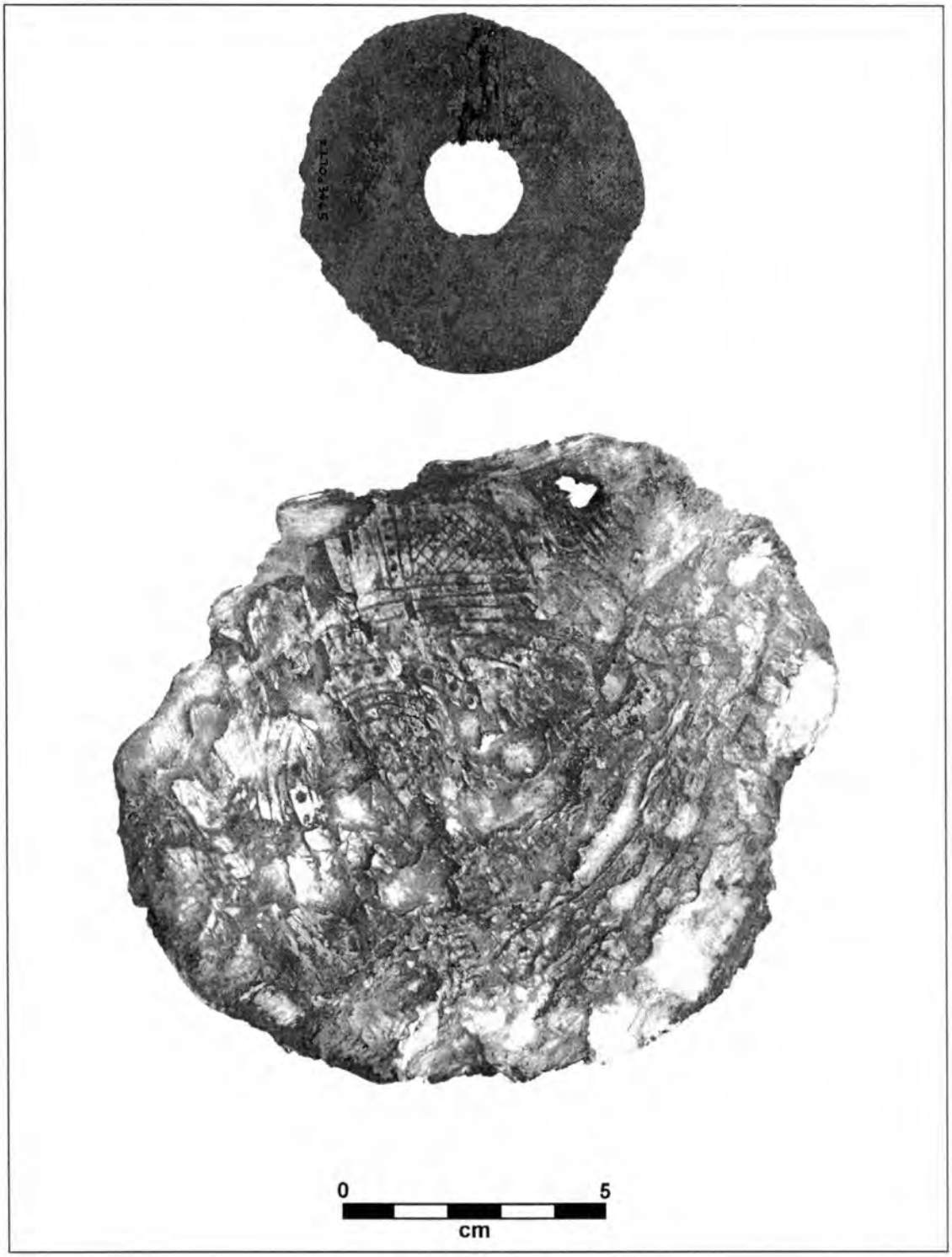

Figure 40. Middle Contact period copper alloy disk gorget with large central hole (top) and Citico-style engraved shell rattlesnake gorget (lower).

Most Citico-style gorgets occur on sites in the interior Southeast that were occupied between A.D. 1565 and 1630. This date range is a few decades earlier than the proposed Middle Contact period occupation at Upper Saratown

Another type of gorget from Upper Saratown also dates to the first half of the seventeenth century. This gorget is also illustrated in Figure 40. Waselkov (1989:123) indicates that circular copper or brass gorgets with central perforations greater than 1 cm in diameter are found on sites in the interior Southeast that were occupied between A.D. 1580 and 1650. The specimen from Upper Saratown is very similar to one illustrated by Waselkov (1989: Figure 1a). The gorget from Upper Saratown has intact thongs that were used to suspend it. These thongs were tied in the same manner as the gorget Waselkov illustrates.

Most contact-period burials from Upper Saratown contained glass beads. The analysis of glass beads from pit features indicated that assemblages from the Middle Contact period have higher relative frequencies of large drawn beads. Large beads most common during this period were opaque drawn beads of simple or complex construction. The most common complex beads during the Middle Contact period are blue beads with simple white stripes and Flush Eye beads with plain dot "eyes." These observations about the distribution of glass beads in Middle Contact period features proved very helpful in identifying burials associated with that site occupation.

In addition to chronological evidence from pottery in the fill of burial pits and associated artifacts, evidence from the superimposition of other pits and postholes was considered when assigning a temporal phase to contact-period burials at Upper Saratown.

Burials associated with the Middle Contact period occupation at Upper Saratown are presented in Table 24.

Other non-diagnostic artifacts recovered from these burials include triangular projectile points, a chipped stone drill, a ceramic dipper, conch columella beads, bird long-bone beads, clumps of red ochre, rolled copper and brass beads, copper and brass tinkling cones, flushloop bells, and lead shot.

Late Contact Period Burials – Upper Saratown Site

Thirty-eight burials from Upper Saratown are associated with the Late Contact period occupation of the site. These burials are listed in Table 25. Twelve burials in this group have small pottery assemblages from artifact-rich pit fill zones that indicate an association with the Late Contact period occupation. In addition to this ceramic evidence, glass beads and other associated artifacts were instrumental in linking this group of 38 burials to the Late Contact period occupation at the site. The chronological evidence will be reviewed below.

Glass bead collections from Late Contact period features at the site have fewer large drawn beads and a higher relative frequency of seed beads than collections from Middle Contact period features. The analysis of beads in Late Contact period features indicates that large beads popular during this phase include some of the same simple opaque beads that were common during the Middle Contact period. Some types of large beads that were absent from Middle Contact period features were present in Late Contact period features. These later large, drawn bead types include colored beads of translucent glass, compound beads, and blue Flush Eye beads with sunburst "eyes."

Table 24. Middle Contact Period Burials from Upper Saratown.

Burial	Comment	Age	Sex	Pit Shape
Bu. 3		>40 years	Indeterminate	shaft – central chamber
Bu. 6		33 ± 6 years	Indeterminate	shaft – central chamber
Bu. 8	potted	2.5 years ± 10 mo.	Unknown	Potted
Bu. 9		9.5 ± 2.5 years	Unknown	simple pit
Bu. 11	Intruded by Bu. 10	9 ± 2 years	Unknown	shaft – central chamber
Bu. 12	intrudes Fea. 15	>21 years	Indeterminate	simple pit
Bu. 13		30 ± 10 years	Indeterminate	shaft – central chamber
Bu. 15	Ledges	3 ± 1 years	Unknown	shaft – central chamber
Bu. 18		37 ± 5 years	Female	shaft – central chamber
Bu. 19		>30 years	Female	simple pit
Bu. 24		30 ± 9 years	Male	simple pit
Bu. 27		25 ± 5 years	Indeterminate	shaft – central chamber
Bu. 29		>21 years	Indeterminate	shaft – central chamber
Bu. 30	intruded by Fea. 48	9 ± 2 years	Unknown	simple pit
Bu. 31	potted	No remains	-	shaft – central chamber
Bu. 34	potted	>10 years	Indeterminate	simple pit
Bu. 35	intrudes Fea. 35	2 years ± 8 mo.	Unknown	shaft - side chamber
Bu. 38	intrudes Structure 2	22 ± 4 years?	Indeterminate	shaft – central chamber
Bu. 40	Fea. 147 slump?	3 ± 1 years	Unknown	square-sided pit
Bu. 41	Fea. 42 slump, assoc. w/ Structure 1	>18 years	Indeterminate	square-sided pit
Bu. 42	potted	>18 years	Indeterminate	shaft – central chamber
Bu. 43	intrudes Structure 2	6±2 years	unknown	shaft – central chamber
Bu. 44	intrudes Fea. 37	>10 years	Indeterminate	simple pit
Bu. 45a	intruded by Fea. 36, intrudes Structure 1	>21 years	unknown	shaft – central chamber
Bu. 45b	intruded by Fea. 36, intrudes Structure 1	15 ± 3 years	unknown	shaft – central chamber
Bu. 46	intrudes Structure 2	Indeterminate	Indeterminate	shaft – central chamber
Bu. 47	assoc. w/ Structure 1	8 ± 2 years	unknown	simple pit
Bu. 48	intrusive into Fea. 52	10.5 ± 2.5 years	Unknown	domestic feature
Bu. 49		>21 years	Indeterminate	shaft – central chamber
Bu. 50		>21 years	Female?	shaft – central chamber
Bu. 61		<10 years	Unknown	shaft - side chamber
Bu. 65	Fea. 108 slump	25 ± 5 years	Female	shaft – central chamber
Bu. 66		>30 years	Female?	shaft – central chamber
Bu. 76		4 ± 1 years	Unknown	simple pit
Bu. 77		32 ± 7 years	Female	shaft – central chamber
Bu. 78		2.5 years ± 10 mo.	Unknown	shaft – central chamber
Bu. 80		3.5 ± 1 years	Unknown	shaft – central chamber
Bu. 81	potted	>21 years	Indeterminate	simple pit
Bu. 84	intrudes Fea. 142	Subadult	Unknown	simple pit
Bu. 87		>30 years	Female	shaft – central chamber
Bu. 91	potted	25 ± 4 years	Female	shaft – central chamber
Bu. 95	potted	17 ± 3 years	Female	domestic feature
Bu. 98	pit has ledges	6 ± 2 years	Unknown	shaft – central chamber
Bu. 99	intruded by Fea. 175	4 ± 1 years	Unknown	-
Bu. 102	intruded by Bu. 103	1.75 years ± 7 mo.	Unknown	shaft – central chamber
Bu. 104	intrudes Fea. 191	>30 years	Male	shaft – central chamber
Bu. 107	cradle board	1.5 ± 0.5 years	Unknown	simple pit
Bu. 109	intrudes Fea. 203	25 ± 5 years	Female	shaft - side chamber

Table 25. Late Contact Period Burials from Upper Saratown.

Burial	Comment	Age	Sex	Pit shape
Bu. 1		17 ± 3 years	Female	shaft – central chamber
Bu. 2	Log covering	23 ± 3 years	Male	shaft – central chamber
Bu. 5	Log covering	3 ± 1 years	Unknown	simple pit
Bu. 10	Intrudes Bu. 11	21+ years	Indeterminate	shaft – central chamber
Bu. 14	Log covering	>21 years	Female	shaft – central chamber
Bu. 17		>30 years	Female?	shaft - side chamber
Bu. 22		18 ± 3 years	Female?	potted
Bu. 23	Cradle board	Neonate	Unknown	shaft – central chamber
Bu. 25		>30 years	Indeterminate	shaft – central chamber
Bu. 28		>21 years	Indeterminate	shaft – central chamber
Bu. 36		>21 years	Indeterminate	shaft – central chamber
Bu. 39		>18 years	Indeterminate	shaft – central chamber
Bu. 51		42 ± 5 years	Female	simple pit
Bu. 52		10 ± 2.5 years	Unknown	potted
Bu. 53	Cradle board?	3 ± 1 years	Unknown	shaft – central chamber
Bu. 54	Cradle board	2 years ± 8 mo.	Unknown	shaft – central chamber
Bu. 55	Cradle board	2 years ± 8 mo.	Unknown	shaft – central chamber
Bu. 56		33 ± 5 years	Female	potted
Bu. 57	Cradle board	9 months ± 3 mo.	Unknown	simple pit
Bu. 58		>21 years	Female	shaft – central chamber
Bu. 59		>15 years	Indeterminate	potted
Bu. 62		29 ± 10 years	Male	potted
Bu. 63		2 years ± 8 mo.	Unknown	shaft – central chamber
Bu. 64		<10 years	Unknown	simple pit
Bu. 68	Intrudes Fea. 112	>21 years	Male	simple pit
Bu. 69		6 ± 2 years	Unknown	shaft – central chamber
Bu. 71				simple pit
Bu. 73		46 ± 9 years	Male	shaft – central chamber
Bu. 74		35 ± 5 years	Male	potted
Bu. 75		39 ± 9 years	Male?	potted
Bu. 85		3±1 years	Unknown	simple pit
Bu. 92				simple pit
Bu. 100	Intrudes Bu. 98	35 ± 5 years	Male	shaft – central chamber
Bu. 101	No remains			
Bu. 103	Intrudes Bu. 102	6 ± 2 years	Unknown	simple pit
Bu. 106		>21 years	Indeterminate	potted
Bu. 108	Intrudes Fea. 204	>21 years	Male	shaft - side chamber
Bu. 111		3 ± 1 years	Unknown	simple pit

Late Contact period burials have a higher relative frequency of seed beads than Middle Contact period burials. Large drawn beads from Late Contact period burials consist primarily of simple beads. Ten percent of these simple beads are translucent, while only five percent of

simple beads in Early Contact period burials are translucent. Very few large complex beads were recovered from Late Contact period burials. Though large compound beads and blue Flush Eye beads with sunburst "eyes" were recovered from Late Contact period features at the site, none of these types of beads were associated with burials. Table 26 presents a comparison of glass trade beads from burials at Upper Saratown.

In addition to glass beads, one burial at the site contained wampum. One hundred and eighty-one beads of both white and purple wampum were present in Burial 1. Wampum is rare on archaeological sites in the North Carolina Piedmont. It has been recovered from William Klutz and Fredricks (31Or231); both sites date to the last decades of the seventeenth century.

Table 26. Distribution of Glass Beads from Middle and Late Contact Period Burials at Upper Saratown.

	Middle Contact period		Late Contact period	
Bead Type	Frequency	Percent	Frequency	Percent
Large Drawn Beads				
Simple, Opaque	1,885	55.2	276	87.6
Simple, Translucent	119	3.5	34	0.8
Compound	8	0.2	-	-
Complex, Striped	1,190	34.8	5	1.6
Complex, Eyes	213	6.2	-	-
Subtotal	3,415	100.0	315	100.0
Subtotal Percent		1.8		0.1
Seed Beads				
Simple, Opaque	186,644	97.7	205,226	97.1
Simple, Translucent	1,042	0.5	4,952	2.3
Compound	3,343	1.7	1,052	0.5
Composite, Striped	12	0.0	40	0.0
Subtotal	191,041		211,270	
Subtotal Percent		98.2		99.8
Tubular Cane Beads	-	-	3	0.0
Wire Wound Beads	-	-	-	-
Total Frequency	194,456		211,588	

Several types of brass or copper artifacts recovered from Late Contact burials at Upper Saratown indicate a late seventeenth-century designation for the burials. Four Late Contact period burials contain brass or copper circular gorgets with small central perforations. Two of these gorgets are illustrated in Figure 41. Waselkov (1989:123) found that circular brass or copper gorgets with central perforations less than 7 mm in diameter are found on sites in the interior Southeast that date to the period A.D. 1630 to 1700. One Late Contact period burial had an animal effigy pendant cut from a sheet of brass. Similar effigy pendants have been recovered from sites in the Southeast that date to the period A.D. 1630 to 1700. Finger rings made from strips of brass or copper are another type of artifact that is found only in Late Contact period burials at the site. These rings are crudely fashioned strips of copper or brass formed into a loop. The strips have been slightly bent lengthwise, forming a concave upper surface. The ends of the strip generally overlap.

Brass bells were much more common in burials during the Late Contact period than during the preceding period. More than 200 sheet brass bells were recovered from eight Late Contact period burials. Both flush-edged flushloop bells and flanged-edged Saturn bells were recovered from these burials (see Figure 42). Flushloop bells from Late Contact period burials are smaller than flushloop bells from Middle Contact period burials. The diameter of flushloop bells from Middle Contact period burials range from 22.5 mm to 28.5 mm and the median diameter is 23.2 mm. The diameter of flushloop bells from Late Contact period burials range from 12.5 mm to 21 mm and have a median diameter of 16 mm. Several of the smaller flushloop bells have maker's marks stamped into the bottom of the bells. None of the larger bells are stamped. Figure 42 illustrates flushloop bells from

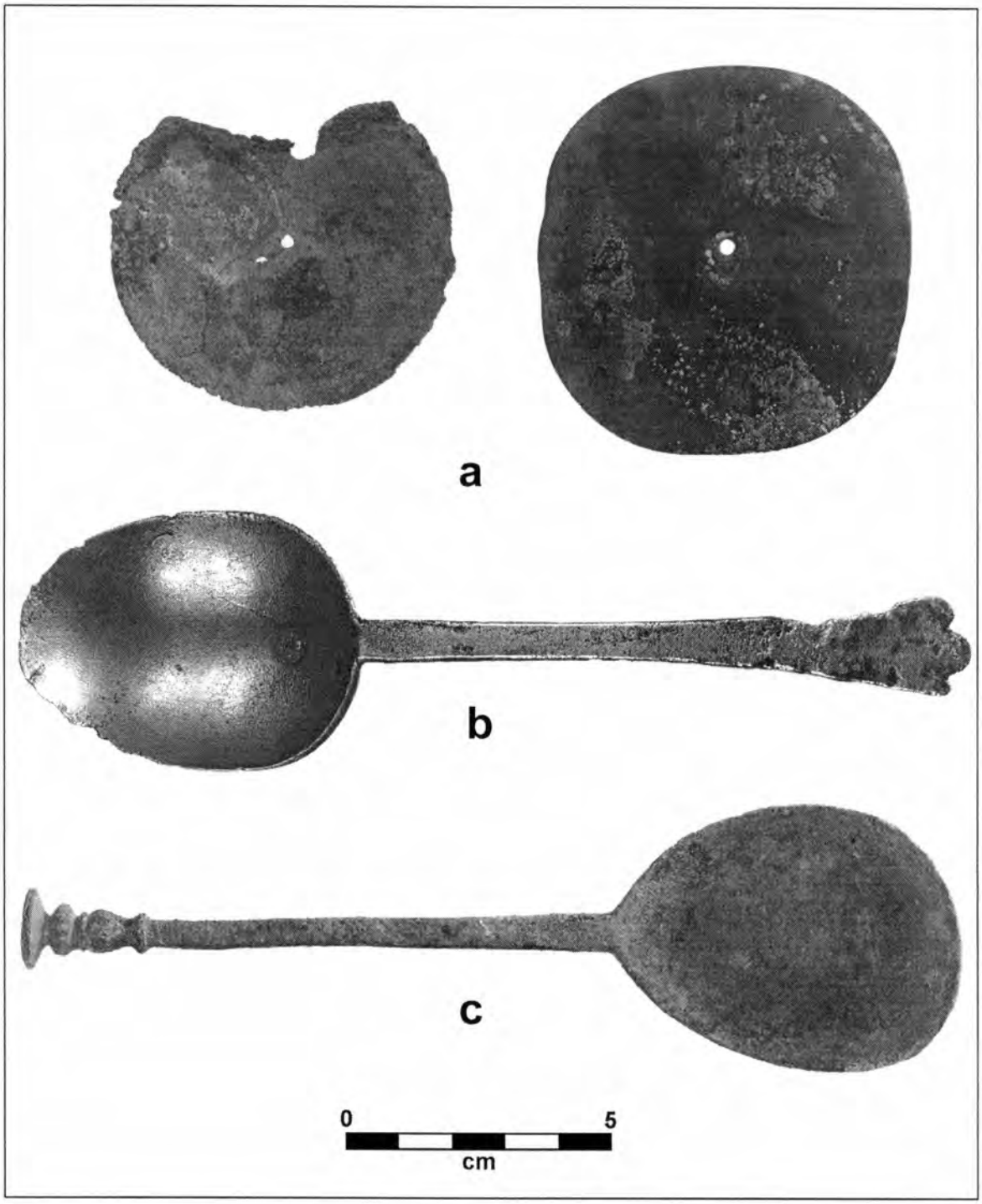

Figure 41. Late Contact period copper alloy disk gorgets with small central holes (a); tin-plated spoon with trifid handle terminal (b); latten spoon with seal top finial (c).

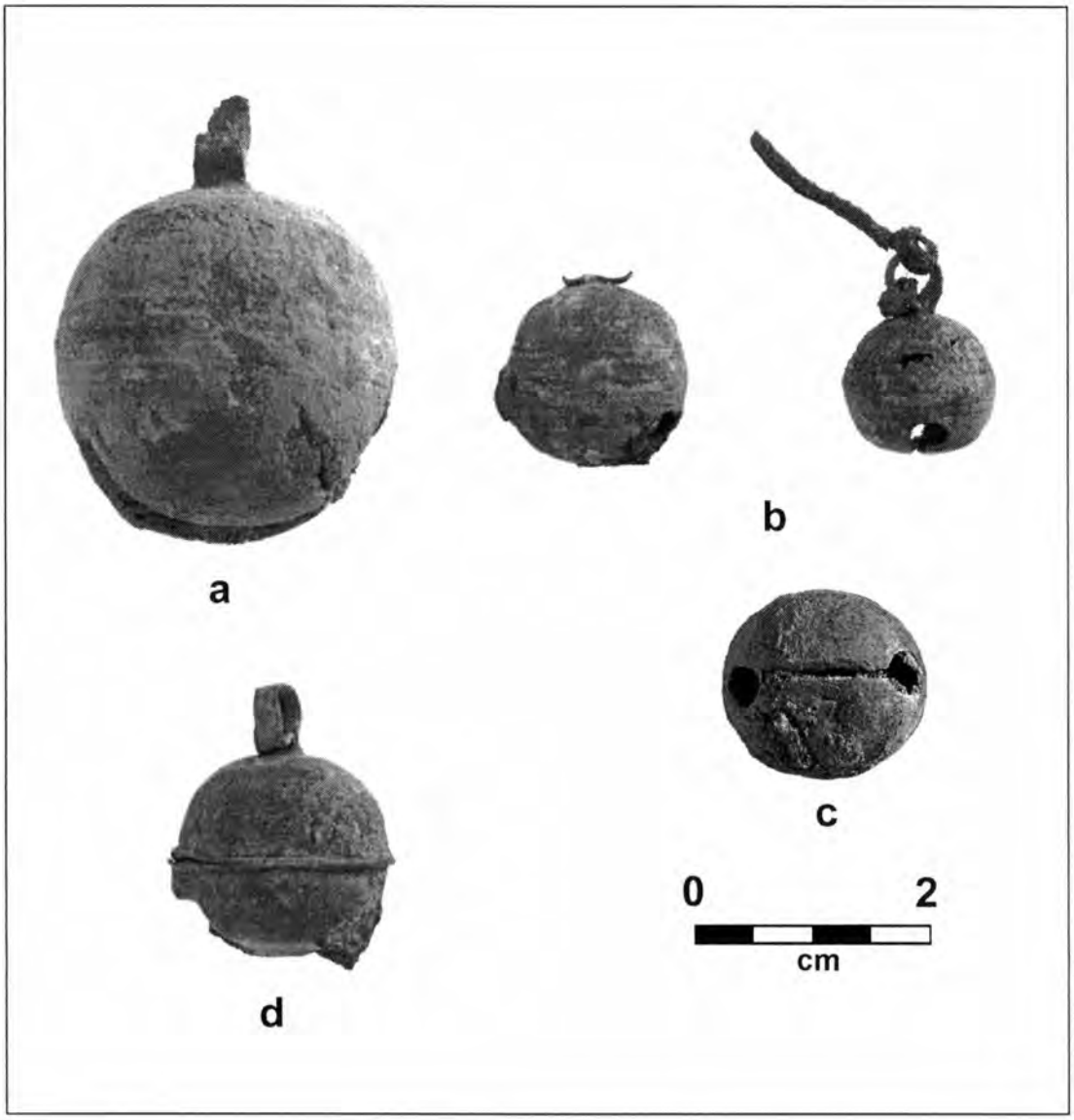

Figure 42. Flush-edged flushloop and flanged-edged Saturn bells from burials at Upper Saratown: large diameter flushloop bell from a Middle Contact period burial (a); small diameter flushloop bells from a Late Contact period burial (b); maker's mark on the bottom of a Late Contact period flushloop bell (c); a Saturn variety flanged-edged bell from a Late Contact period burial (d).

Middle and Late Contact period burials, a maker's marks on the bottom of a flushloop bell, and a Saturn variety, flanged-edged bell.

Saturn bells were recovered from two Late Contact period burials. The seam between the two hemispheres of Saturn bells is flanged, creating a projecting band around the bell's midsection. Brain (1979:202) indicates that Saturn bells have been recovered from late seventeenth- and early eighteenth-century sites in eastern North America. More locally, the only other site in the North Carolina Piedmont with Saturn bells is Fredricks, whose occupation falls between A.D. 1680 and 1710. Small flushloop bells were also recovered from Fredricks.

Two Late Contact period burials at Upper Saratown contained metal spoons. One was a tin-plated copper spoon with a trifid spatulate handle terminal (see Figure 41b). A maker's mark consisting of three spoons (two with the bowl pointed down and one with the bowl pointed up) with the initials NI on either side. The spoons and initials are encircled by a rope. Spoons with trifid spatulate handles date to the second half of the seventeenth century (Noël Hume 1970:183). The other spoon is latten (a copper, zinc, and iron alloy) and its handle terminates in a "seal-top" finial (Figure 41c). This spoon also has a maker's mark, but its details are not distinguishable. Seal-top spoons were manufactured throughout the sixteenth and seventeenth century, but latten spoons date to the second half of the seventeenth century. A very similar latten spoon was recovered from a burial at Fredricks.

Iron or steel implements (scissors, bone handled knives, spikes and nails) and farm tools (hoe) were recovered from four Late Contact period burials. Figure 43 illustrates several of these implements. The scissors from Upper Saratown are similar in form to mid-seventeenth-century scissors from colonial Virginia (Noël Hume 1970:268). The case

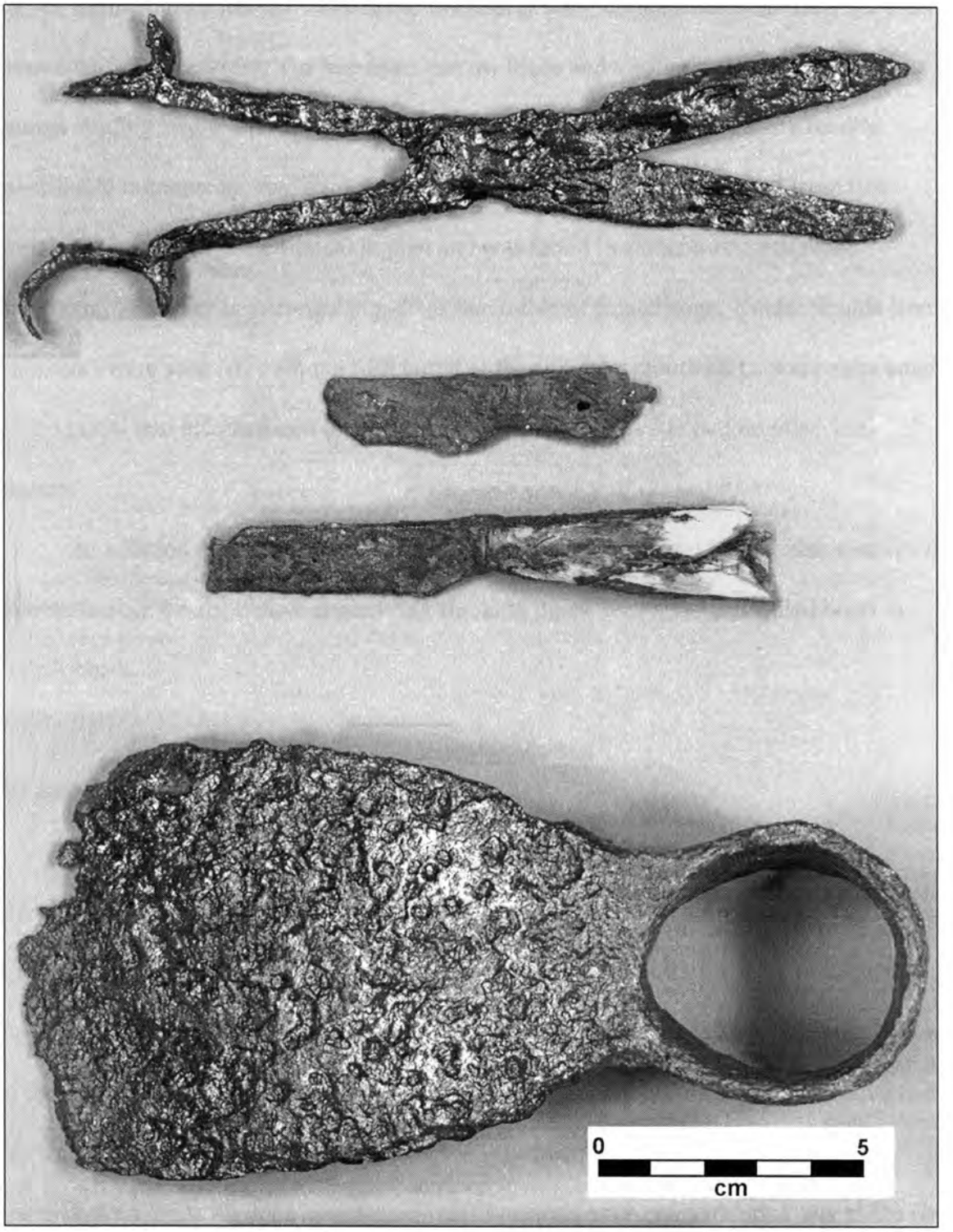

Figure 43. Iron implements from Late Contact period burials at Upper Saratown: scissors (top); bone handled case knives (center); narrow hoe blade with circular haft (lower).

knives from Upper Saratown have round bolsters and angled heels. Similar knives were recovered from Fredricks. The hoe has a narrow blade and a cylindrical haft. A similar, though slightly larger hoe was recovered from Fredricks. In addition to these readily identifiable implements, two unidentified, flat iron artifacts were recovered from two burials at the site. One is elliptical in plan and was found in association with wood fragments. The other is rectangular and has one rolled or folded edge. Unidentifiable iron fragments were recovered from a fifth burial at the site. Iron mouth harps were associated with a burial that also had iron implements and another burial that had no other iron objects.

In addition to these diagnostic artifacts, Late Contact period burials also contained columella shell beads, obtuse-angled clay smoking pipes, lead shot, and rolled brass or copper beads.

Burials Not Assigned to a Site Component

Fourteen burials at Upper Saratown could not be assigned to one of the four identified occupations. Eight of these were severely disturbed by pothunters and all artifacts recovered during excavation were from the disturbed backfill. Five of these did have glass beads in the pothole fill, but no assumptions can be made about the association of these beads with the burial. Three Upper Saratown burials had no associated artifacts nor any artifacts in the pit fill. The last three unassigned burials had only non-diagnostic associated artifacts. As none of latter six these burials intersected with other pits at the site, no relative chronological information was available from the superposition of these pits with dated pits.

Two burials from the RLA excavation at Hairston and three excavated by Richard Gravely could not be assigned to one of the site's identified occupations. One of the burials from the RLA excavation had no associated artifacts and the other had only non-diagnostic columella segment beads. Burial forms recorded by Richard Gravely for the burials he excavated at Hairston indicate that they contained only non-diagnostic artifacts. None of these artifacts are in the possession of the RLA.

Chronology at the Madison Site

As a result of the recovery methods and incomplete cataloging of artifacts, very little can be determined about the chronology of Madison. Given that all other excavated contact-period village sites in the Dan drainage are multicomponent sites, it is likely that Madison is also a multicomponent site. Unfortunately, artifacts and other materials from pit features were not kept separate by context. With a mixed sample of materials recovered from all features, it is very difficult to say anything definite about the chronology of pit features at the site. In addition, very few postholes were identified during fieldwork, so there is little opportunity to explore internal site structure.

The mixed collection of 799 potsherds from the site was analyzed. Of this total, 697 sherds were identifiable. The pottery collection from Madison is described in a series of tables. First, the distribution of ceramic attributes for the identifiable sherds is presented in Table 27. Then the distribution of ceramic types in the assemblage is presented in Table 28. Finally, Table 29 compares the relative frequency of selected Dan River and Oldtown pottery types from the Madison site to those from Early Contact, Middle Contact, and Late

Table 27. Distribution of Ceramic Attributes from Madison.

Attribute State	Net Impressed	Cord Marked	Burnished	Plain	Brushed	Check Stamped	Other	Total
Temper								
Quartz (fine)	47	9	-	3	1	-	2	62
Sand (coarse)	19	2	2	52	1	16	2	94
Sand (fine)	101	5	14	125	11	38	42	336
Sand (v. fine)	27	-	11	51	3	6	10	108
Steatite	11	-	1	8	-	2	4	26
Other	51	-	-	-	-	20	-	71
Total	256	16	28	239	16	82	60	697
Interior Surface								
Scraped	65	5	-	4	3	1	2	80
Plain	187	11	21	231	12	80	57	599
Burnished	3	-	7	3	-	1	1	15
Indeterminate	1	-	-	1	1	-	-	3
Total	256	16	28	239	16	82	60	697
Wall Thickness								
1-2 mm	-	-	1	2	-	-	1	4
2-4 mm	34	2	14	60	4	20	7	141
4-6 mm	146	4	13	158	11	36	45	413
6-8 mm	34	7	-	17	-	4	6	68
8-10 mm	7	3	-	1	-	2	1	14
>10 mm	35	-	-	1	1	20	-	57
Total	256	16	28	239	16	82	60	697

Contact period pottery assemblages from Hairston and Upper Saratown. This last table provides some evidence that Madison may be a multicomponent site.

Table 29 indicates that the distribution of pottery types from Madison is most similar to that from the Early Contact period assemblage at Hairston. Though the assemblages are similar, there are some important differences. There is a higher percentage of Dan River Net Impressed sherds in the Madison assemblage than in any of the other assemblages. This may indicate that a Dan River phase component is present at the site. Another difference between the Madison site pottery assemblage and that from the Early Contact period component at Hairston is the frequency of check stamped sherds. The

Table 28. Distribution of Pottery Types from Madison.

Ceramic Type	Frequency	Percent
Dan River series		
Net Impressed	116	16.7
Plain	6	0.9
Other	12	1.7
Steatite Tempered	26	3.7
Oldtown series		
Plain	227	32.7
Coarse Net Impressed	83	11.9
Check Stamped	80	11.5
Fine Net Impressed	46	6.6
Simple Stamped	38	5.5
Burnished	27	3.9
Brushed	15	2.2
Complicated Stamped	10	1.4
Cord Marked	6	0.9
Cob Impressed	3	0.4
Total	697	100.0

Table 29. Relative Frequency of Selected Pottery Types from Madison and Contact Period Components at Upper Saratown and Hairston.

Pottery Type	Madison	Hairston Early Contact period	Upper Saratown Middle Contact period	Upper Saratown Late Contact period
Dan River Net Impressed	18.7	13.3	13.4	11.4
Steatite Tempered	4.2	5.7	0.9	0.6
Oldtown series				
Plain	36.6	37.8	48.3	43.2
Coarse Net Impressed	13.4	12.9	0	0.4
Check Stamped	12.9	7.6	8.8	19.7
Fine Net Impressed	7.4	5.5	4.7	13.2
Burnished	4.4	13.6	12.3	9.8
Brushed	2.4	3.5	11.6	1.7
Total	100.0	99.9	100.0	100.0

presence of a relatively large number of Oldtown Check Stamped sherds at Madison indicates a Late Contact period component at the site. Thus, the distribution of pottery types in the collection from Madison indicates that three components may be present within the excavated portion of the site. The site may include a Dan River phase component, a component that dates to the Early Contact period, and a Late Contact period component. I will now examine artifacts associated with burials from the site to compile additional information about the site's chronology.

Artifacts associated with burials at the Madison site were catalogued separately by burial number, but there is no record of pottery or other artifacts from the burial fill. The RLA has skeletal remains for only 45 of the 130 recorded burials from the site. Artifacts from 33 of these burials are housed at the RLA. Biological information and associated artifacts for all burials housed in the RLA are presented in Table 30.

Of the 33 burials with associated artifacts, six contained only non-diagnostic artifacts of native manufacture. Another eight burials contained shell beads and artifacts made from copper alloy, such as tubular rolled beads, a square gorget, and a tinkling cone. These copper alloy artifacts may be of native or European manufacture. Eight burials date to the Contact period, but contain only non-diagnostic glass beads and copper alloy beads and ornaments.

Six burials from the site may date to the Early Contact or Middle periods. Associated with these burials are large simple beads, a few large complex beads, and compound seed beads. Most of the compound seed beads in these burials are white-over-clear or white-over-light aqua, but copan-over-clear beads are also present. In addition to glass beads, three of the burials have beads or pendants made from copper alloy.

Table 30. Burials from Madison.

Burial	(Period)	Associated Artifacts	Age	Sex
Bu. 3		rolled bead, tinkling cone, shell bead	2.5 ± 1 years	Unknown
Bu. 4		rolled bead	30 ± 5 years	Indeterminate
Bu. 5		rolled bead, shell bead	>30 years	Indeterminate
Bu. 6		rolled bead, tinkling cone	7 ± 2 years	Unknown
Bu. 7				
Bu. 8			6 ± 2 years	Unknown
Bu. 9	(LC)	rolled bead, tinkling cone, iron axe or adze	3 ± 1 years	Unknown
Bu. 15			25 ± 5 years	Indeterminate
Bu. 16	(LC)	wooden-handled iron awl		
Bu. 18			20 ± 5 years	Indeterminate
Bu. 31		glass bead fragment		
Bu. 32	(LC)	chlorite pipe with copper bands, sunburst "eye" bead		
Bu. 33	(LC)	small-hole gorget, gun silde-plate?, glass seed beads, Cornaline de Allepo beads	>10 years	Indeterminate
Bu. 34			18 ± 3 years	Indeterminate
Bu. 36			3 ± 1 years	Unknown
Bu. 37			21 ± 5 years?	Indeterminate
Bu. 38				
Bu. 39			Indeterminate	Indeterminate
Bu. 41			>30 years	Indeterminate
Bu. 42		round and oval glass bead, rolled bead	2.5 years ± 10 mo.	Unknown
Bu. 43		square copper gorget	>18 years	Indeterminate
Bu. 44			4 ± 2 years	Unknown
Bu. 45			9 ± 2 years	Unknown
Bu. 46			25 ± 5 years	Indeterminate
Bu. 46a			21 ± 5 years	Indeterminate
Bu. 51		rolled bead	30 ± 5 years	Female?
Bu. 52		rolled bead	30 ± 5 years	Indeterminate
Bu. 54		clay pipe		
Bu. 55			21 ± 5 years	Indeterminate
Bu. 58			4 ± 1 years	Unknown
Bu. 61			>18 years	Indeterminate
Bu. 62		rolled bead, round glass bead	21 ± 4 years	Indeterminate
Bu. 65	(EC or MC)	striped turquois beads, sunburst "eye" bead, compound seed bead, rectangular gorget	25 ± 5 years	Male?
Bu. 79			35 ± 7 years	Male
Bu. 80		Oldtown Plain bowl		
Bu. 81			3 ± 1 years	Unknown
Bu. 82			2.5 years ± 10 mo.	Unknown
Bu. 83	(LC)	wire-wound bead, copper alloy pendant	2 years ± 8 mo.	Unknown
Bu. 84		rolled bead, round glass bead	4 ± 1 years	Unknown
Bu. 89		small steatite cup		
Bu. 90	(EC or MC)	simple round beads	23 ± 5 years	Male
Bu. 92			18 ± 3 years	Indeterminate

continued

Table 30. Continued

Burial (Period)	Associated Artifacts	Age	Sex
Bu. 93 (EC or MC)	striped turquoise beads, simple round beads, compound seed beads	<1 year	Unknown
Bu. 94		6 ± 2 years	Unknown
Bu. 95 (LC)	facetted wound bead, rolled bead, stone disk		
Bu. 97		>21 years	Indeterminate
Bu. 105	split cane matting	>18 years	Indeterminate
Bu. 107	clay pipe	30 ± 5 years	Indeterminate
Bu. 108	oval glass bead, birdskin & copper ornament	30 ± 5 years?	Indeterminate
Bu. 109 (EC or MC)	simple round beads, seed beads, copper pendant, rolled bead		
Bu. 111	compound seed bead		
Bu. 112 (EC or MC)	compound seed beads, round simple beads	>12 years	Unknown
Bu. 113	Net Impressed jar		
Bu. 119	glass seed beads		
Bu. ?	round beads, rolled beads	>18 years	Indeterminate
Unprovenienced		39 ± 9 years	Female

The final group of five burials from the site date to the Late Contact period. Three of these burials have iron implements that include an axe or adze, a wooden-handled awl, and what may be a sideplate from a gun. One of these also has a copper alloy disk gorget with a small central perforation. This burial also has a large assortment of glass beads including about 2,000 compound seed beads. Though most of these compound seed beads are white-over-clear, about one-third of the beads are colored including shadow blue-over-clear, copan-over-clear, aqua-over-clear, turquoise-over-clear, and redwood-over-green. Among the large beads in this burial are Cornaline de Allepo beads. Two of the remaining six burials have wire-wound beads. Two of the wire-wound beads are spherical and the other is faceted.

The types of glass beads found in burials at Madison are quite different from those found in burials at Upper Saratown. More than 97% of seed beads from Madison are of compound construction, compared to less than one percent of the beads from burials at

Upper Saratown. Seed beads of compound construction are more common at Early Contact period components at Hairston and Lower Saratown. The near absence of simple seed beads at Madison may reflect differences in sources of supply or perhaps demand. The distribution of simple and compound seed beads at Madison does not seem to reflect chronological change.

Thus, artifacts in burials are consistent with the interpretation that Madison is a multicomponent site. Some of the burials may date to the late prehistoric Dan River phase, though it is not known whether glass beads were present in the fill of these burials. A group of contact-period burials has only glass beads and copper alloy artifacts. These burials have large beads, some of which are complex blue beads with white stripes that are diagnostic of the Middle Contact period. Another group of burials is characterized by iron implements, wound beads, and lots of seed beads. This latter group of associated artifacts is usually limited to sites that were occupied during the last quarter of the seventeenth century or early eighteenth century.

In this chapter I have presented evidence for the chronology of pit features and burials at Hairston, Upper Saratown, and Madison. A summary of site components at these sites is provided in Table 31. In addition to identifying separate site occupations, I have evaluated the usefulness of certain artifact classes as chronological markers in the study area. The chronology of pit features and burials at the sites will now be used as a basis for investigating spatial patterning and site structure.

Table 31. Site Chronology for the Upper Dan Drainage.

Period	Date Range	Sites with Component
Late Contact period	1670 – 1710	William Kluttz Upper Saratown Madison
Middle Contact period	1650 – 1670	Upper Saratown Madison?
Early Contact period	1607 – 1650	Madison? Lower Saratown Hairston
Protohistoric	1450 – 1607	Hairston Nifong
Dan River phase	1100 – 1450	Hairston Upper Saratown Wiiliam Kluttz Lower Saratown Madison?
Uwharrie phase	800 – 1200	Upper Saratown

CHAPTER IV.

VILLAGE ORGANIZATION

This chapter builds upon the chronology of pit features and burials presented in the previous chapter to consider site structure and the internal organization of the communities represented by the archaeological components. An analysis of the structure and chronology of Upper Saratown and more limited discussions of Hairston and Madison are presented below. Most of this chapter focuses on archaeological remains at Upper Saratown, as the limited investigations at Hairston reveal little about site structure and the recovery methods employed at Madison were such that very few postholes were documented.

Initial analysis of site structure at Upper Saratown and Hairston focuses on associating houses, other structures, and palisade lines with the pit features and burials that represent separate site occupations. The superimposition of these features and burials with postholes comprising structures and palisade lines is used to establish temporal relationships between dated pits and architectural elements (see Appendix 7).

After village components have been identified, community organization is scrutinized. Aspects of community organization considered here include the configuration of related houses, palisades, pit features, burials, and open spaces. The analysis focuses on identifying activity areas within villages. Ward (1980) developed a functional typology of pit features at Upper Saratown. This functional typology is an integral part of the analysis of activity areas

activity areas within villages. Ward (1980) developed a functional typology of pit features at Upper Saratown. This functional typology is an integral part of the analysis of activity areas and Ward's feature types are reviewed below. Additional features excavated after Ward's study have been classified according to this typology.

In the final section of this chapter, comparisons are made between community organization at Upper Saratown, Hairston, and Madison, and seven archaeological sites in the upper Dan Drainage that have been analyzed previously. These seven sites have late prehistoric, protohistoric, and contact-period components. Ward and Davis (1993) presented evidence for site structure at William Kluttz, Powerplant (31Rk5), and Lower Saratown. The structure of Leggett (44Ha23) was explored by Egloff et al. (1994). At Nifong, a house and related pit features were documented by Eastman et al. (1997). Davis et al. (1997b, 1998) described site structure at Dallas Hylton (44Hr20) and Belmont (44Hr3). The following analysis will focus on identifying changes in site structure from the Late Prehistoric through the Late Contact period.

Identification of Village Components at Upper Saratown

The distribution of features and burials associated with each site component is compared to the location of houses and palisade lines as a first step in the process of identifying village components.

Houses are represented by circular alignments of closely-spaced postholes. Seven structures identified during excavation of the site were given individual structure numbers. During the first several field seasons all postholes were excavated and artifacts from

individual postholes were catalogued separately. Later, only postholes associated with identified structures were excavated. Consequently, not all postholes associated with the structures I have identified were excavated. Ward (1980) described 10 circular structures, designated "H-A" through "H-J," and a three-sided rectangular structure. In his dissertation, Wilson (1983:474) reported that 13 circular houses and four palisade lines were present at the site, but he did not identify these individual architectural elements.

Figure 44 shows these previously-identified architectural features, and additional structures and palisade lines I identified in this study. I identified three additional palisades, 11 additional circular posthole patterns (Structures 11-21), and two additional three-sided rectangular structures. The circular structures represent houses and the rectangular structures may represent sheds, smoking racks, pens, or other utility structures (see Ward 1980:186). Figure 45 shows the posthole patterns representing structures and palisades with an overlay of circles to more clearly identify the 21 houses that will be considered in the analysis of site structure. As is apparent in this figure, some of the posthole patterns are better defined than others. Some of the patterns at the edges of the excavation area are particularly suspect. Nevertheless, the house patterns illustrated in Figures 44 and 45 represent my best interpretation of the location of houses within the bounds of the current excavation block at Upper Saratown.

As an initial analysis of site structure, the distribution of houses by size is explored to segregate groups of similar houses. A histogram of house diameters is presented in Figure 46. At a bar width of 1.4 ft, the distribution of house diameters has four modes. Houses in the first group range between 20 ft and 23 ft in diameter. This group includes Structures 9,

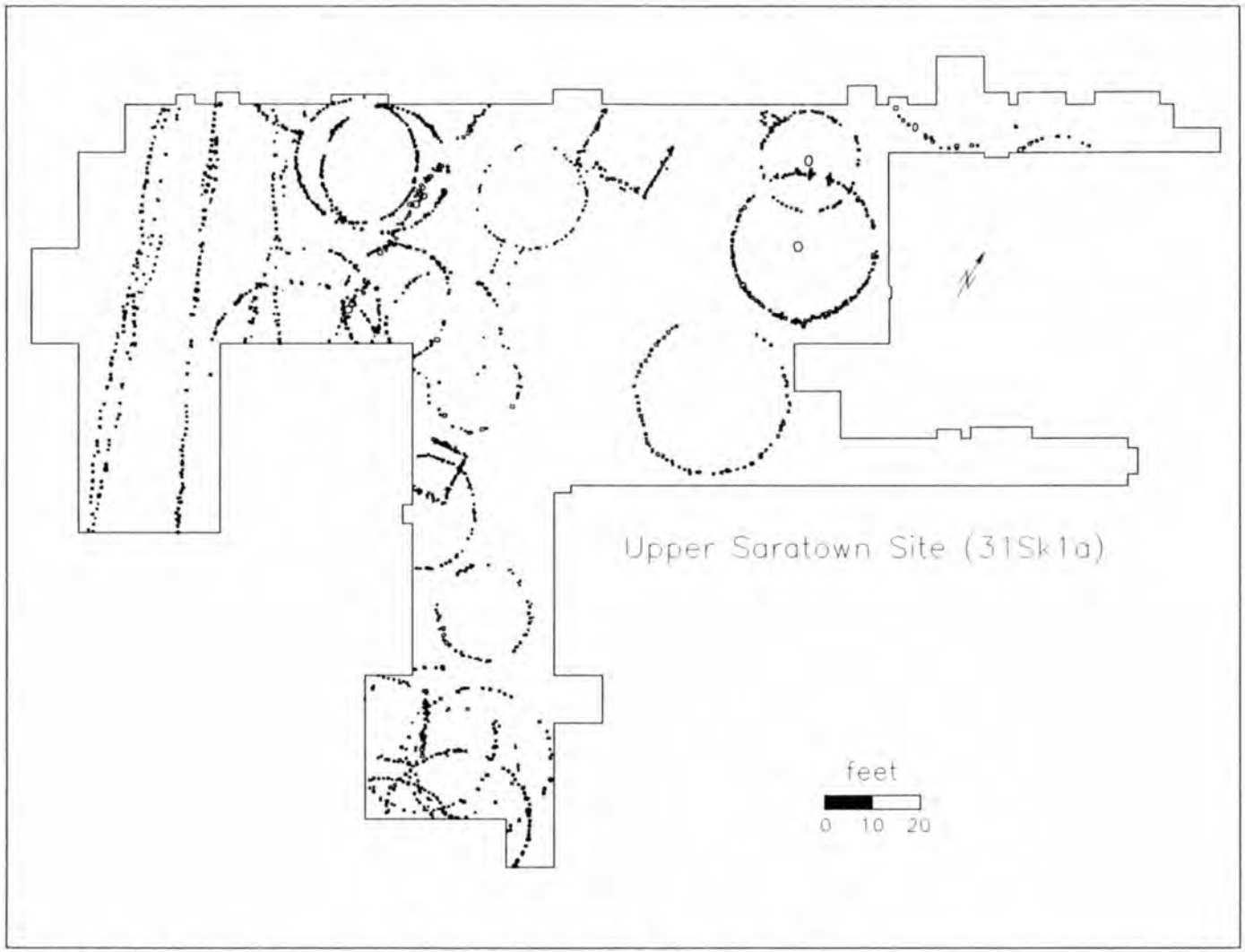

Figure 44. Plan of Upper Saratown showing all structures and palisade lines.

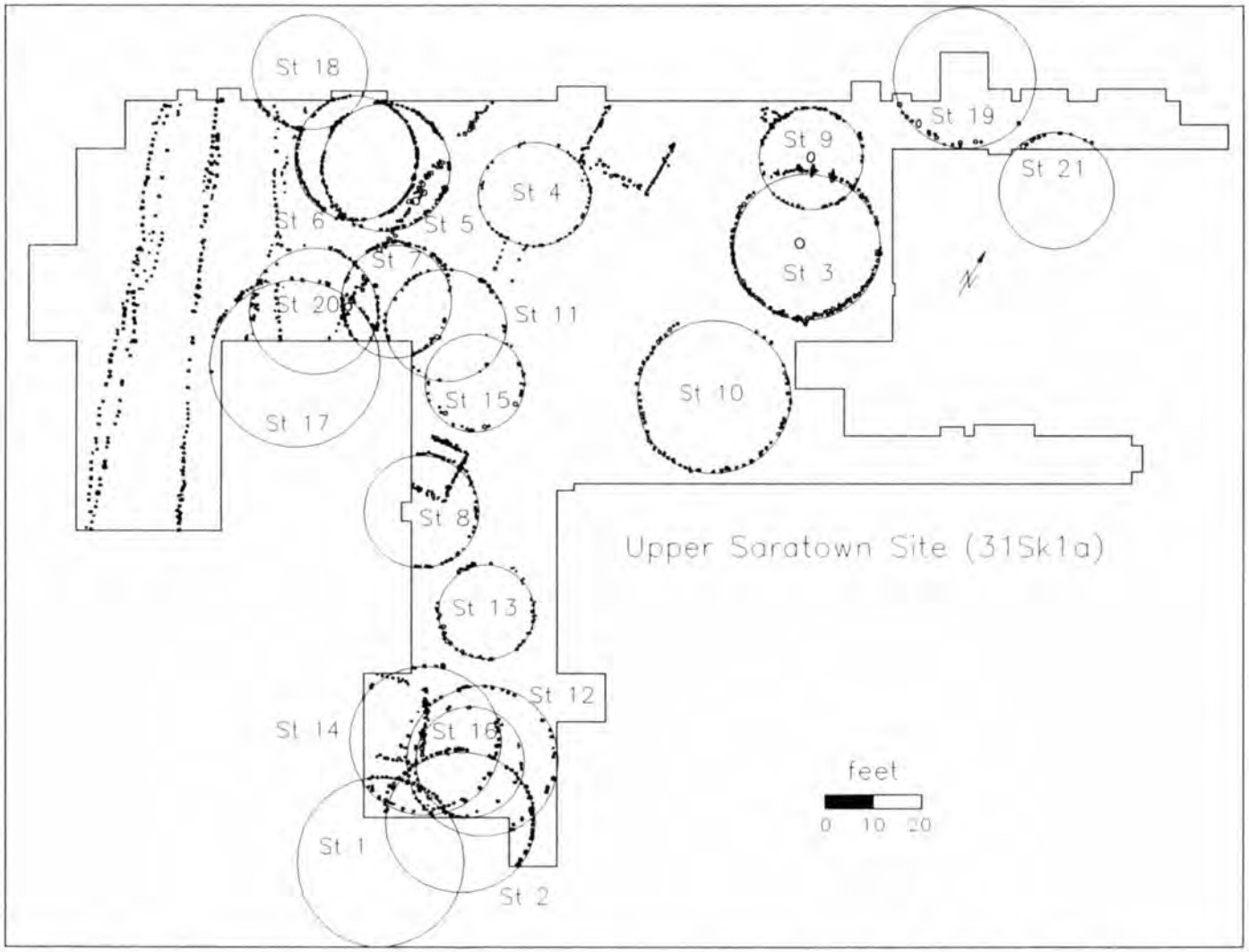

Figure 45. Plan of Upper Saratown with circles over house patterns and labels for Structures 1-21.

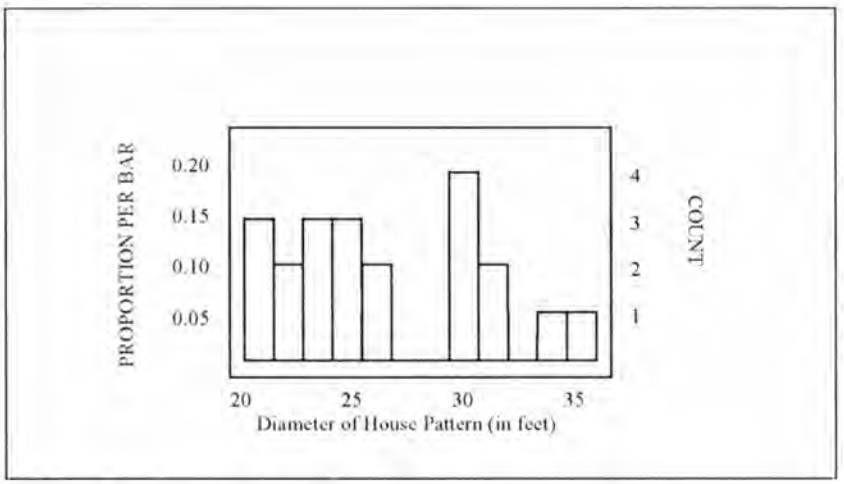

Figure 46. Histogram of house size at Upper Saratown.

13, 15, 16, and 21. These smallest structures are located in an arc that extends from the northeastern excavation trench through the center of the main excavation block to the southeastern area of the excavation. Houses in this group intersect with Structures 1, 2, 3, 11, 12, and 14. Structure 16 also intersects with one of the rectangular structures.

The second mode consists of eight houses including Structures 4, 5, 6, 7, 8, 11, 18, and 20. The diameters of this group of houses vary from 23 ft to 27 ft. These houses are located on the west half of the site and form a row of overlapping structures that runs northwest to southeast. Structure 8 intersects with one of the three-sided rectangular structures.

The third mode in the histogram includes six houses with diameters between 30 ft and 33 ft. This group includes Structures 2, 3, 10, 12, 14, and 19. The houses in this group form a line oriented north to south. The northern three houses in this group do not overlap, while all three houses in the southern area of the excavation overlap. One palisade line parallels this

line of houses. This palisade intersects many of the medium-sized houses that comprise the second mode of the histogram.

The fourth group includes two large circular structures: Structutre 1 (35 ft diameter) and Structure17 (36 ft diameter). These very large structures lie along the edge of the excavated area and the diameter of each is extrapolated from the section exposed in the excavation. This extrapolation may have introduced error into the diameter estimate. These very large structures are located along the southwestern edge of the excavation area and they intersect with houses in the second and third modes.

The next step in this analysis is to determine which structures are contemporaneous with the features and burials from each occupation at the site. This is done by comparing the distribution of dated features and burials to the houses, rectangular structures, and palisade lines.

Figures 47 and 48 show plan views of structures at Upper Saratown and the distribution of features and burials associated with the Uwharrie and Dan River phase occupations, respectively. In general, the highest density of these late prehistoric features and burials occurs in the eastern edge of the excavation area, closest to the river. Two excavation trenches extend from the main excavation block eastward toward the Dan River, which flows southeastward by the site. The northern of the two eastern trenches terminates at the bank of the river. A concentration of Uwharrie features is present in the northern of the two eastern excavation trenches. The highest density of Dan River phase features occurs in the southern of the two eastern excavation trenches.

Figure 49 presents Middle Contact period features and burials and the architectural elements at Upper Saratown. Most Middle Contact period features and burials are located in

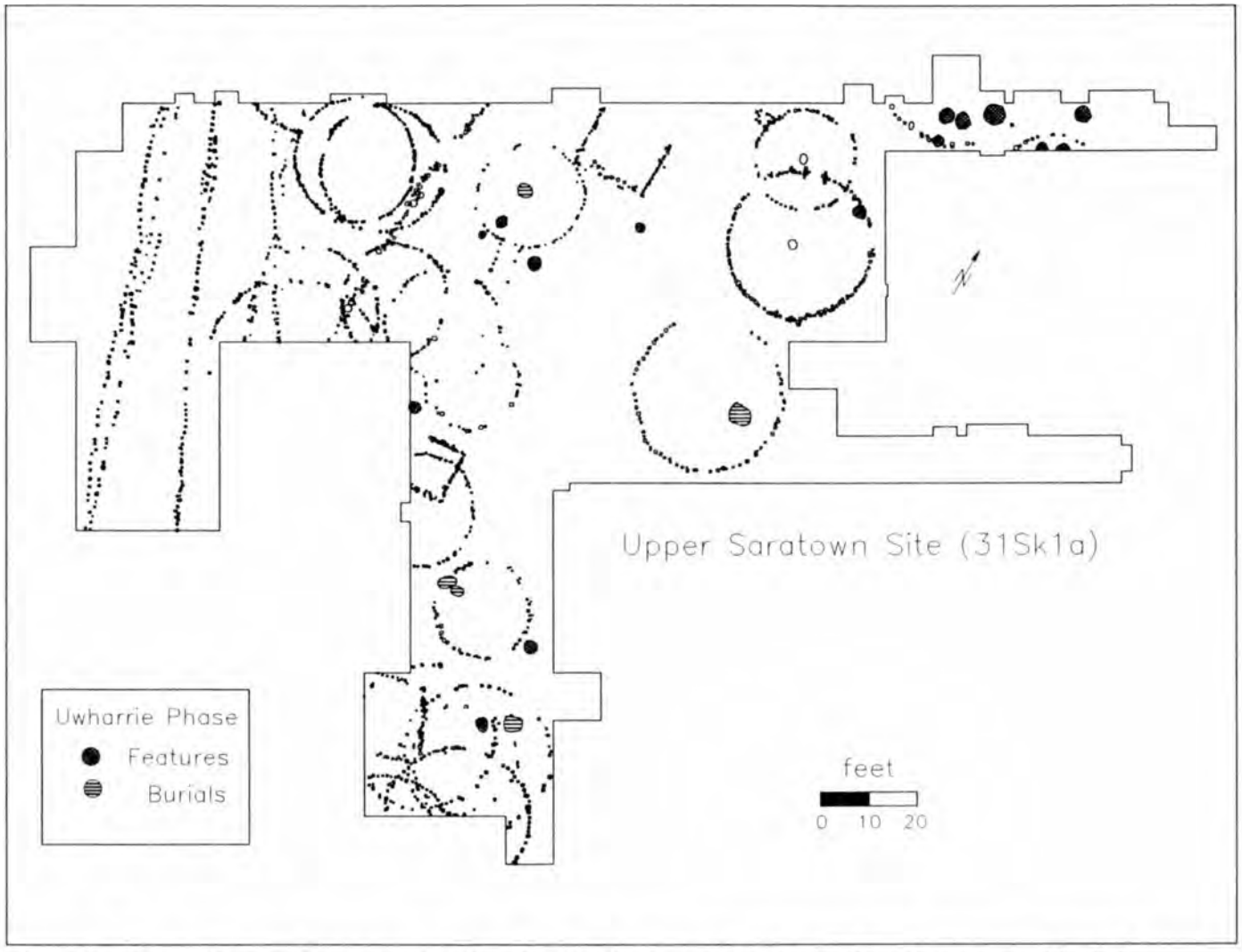

Figure 47. Plan of Upper Saratown showing the distribution of Uwharrie phase features and burials.

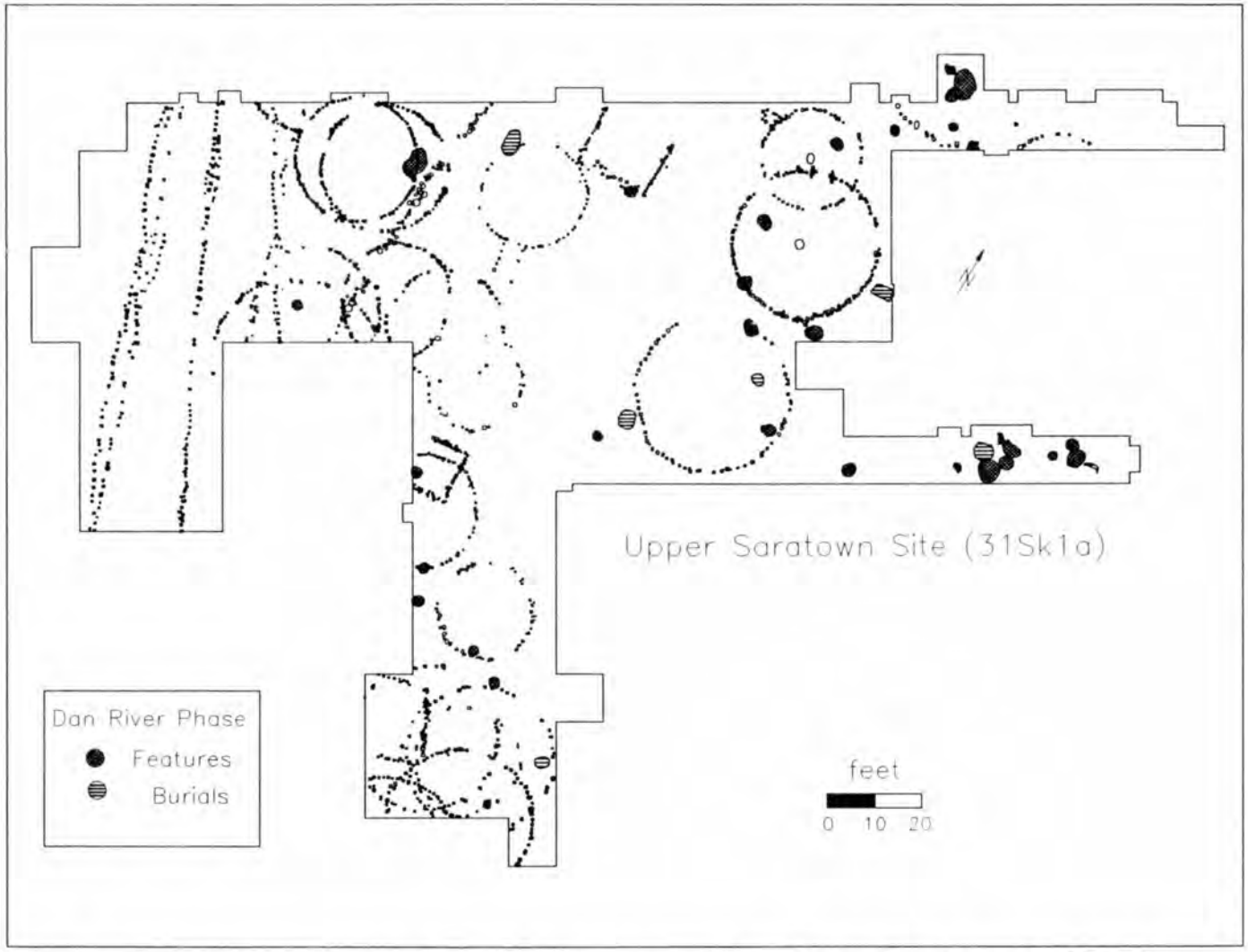

Figure 48. Plan of Upper Saratown showing the distribution of Dan River phase features and burials.

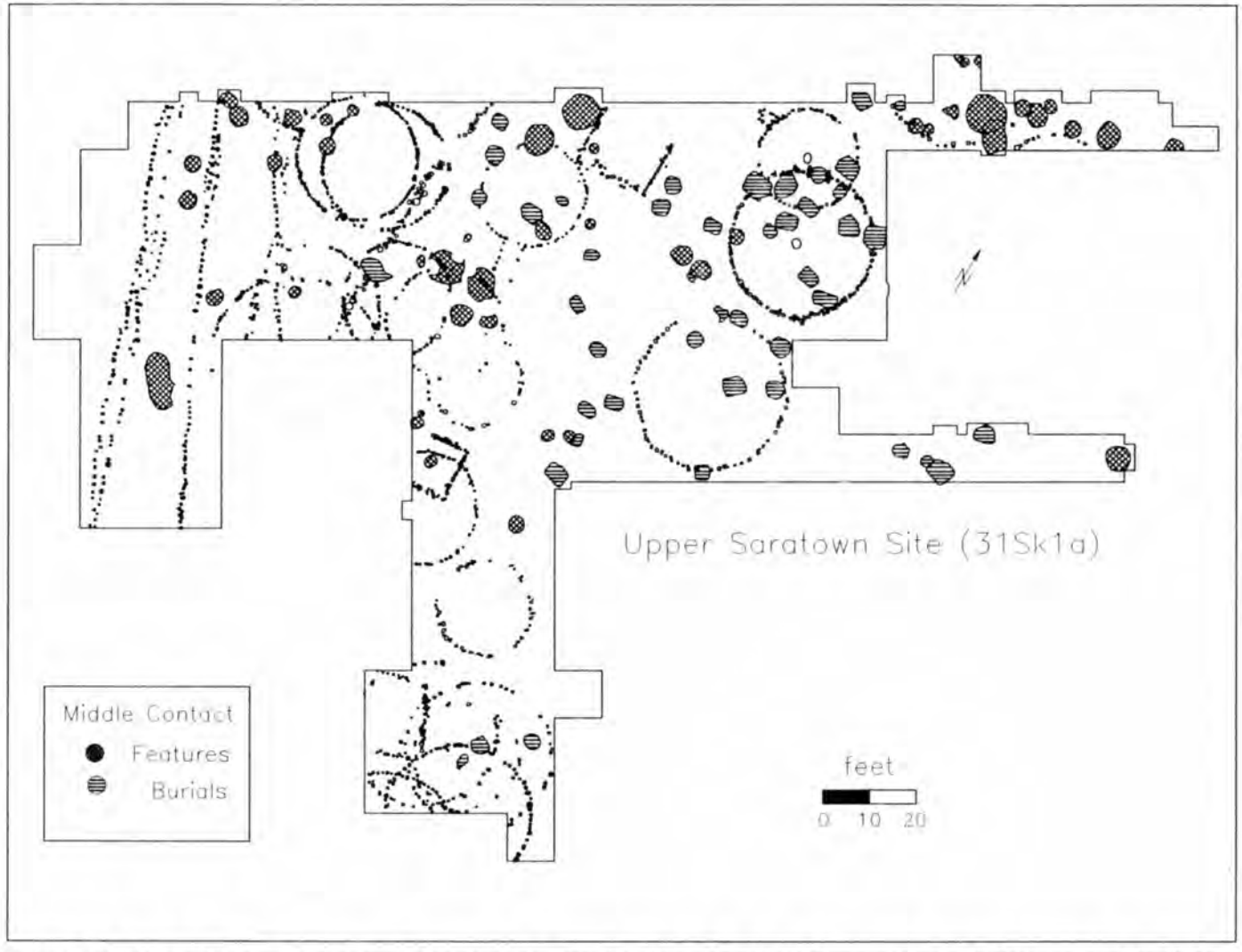

Figure 49. Plan of Upper Saratown showing the distribution of Middle Contact period features and burials.

the central and eastern portions of the excavation area. The highest density of Middle Contact period burials occurs in and around Structures 3, 10, and 19. This distribution suggests an association between these pits and houses. These large structures belong to the third group of houses that were identified in the analysis of house sizes. The other three houses in this group (Structures 2, 12, and 14) overlap one another in the southern edge of the excavation block. Only two small Middle Contact period burials are present in this area of the excavation. This distribution indicates that the latter three houses in the third group may not have been contemporaneous with Structures 3, 10, and 19.

Figure 50 shows the distribution of Late Contact period burials and features with the architectural elements at Upper Saratown. Most Late Contact period features and burials are located on the western half of the excavation area. The highest density of these is located in and around the row of medium-sized houses (second mode in Figure 46). In addition to this row of medium-sized houses, the concentration of Late Contact period features and burials corresponds with the three large overlapping houses (Structures 2, 12, and 14) in the southern end of the excavation. This suggests that the medium-sized houses, and the three large houses in the southern edge of the excavation area, may have stood during the Late Contact period.

To further test these proposed associations, the superimposition of dated features and burials with each structure will be described below. The houses will be discussed in order of the groupings based on house diameter.

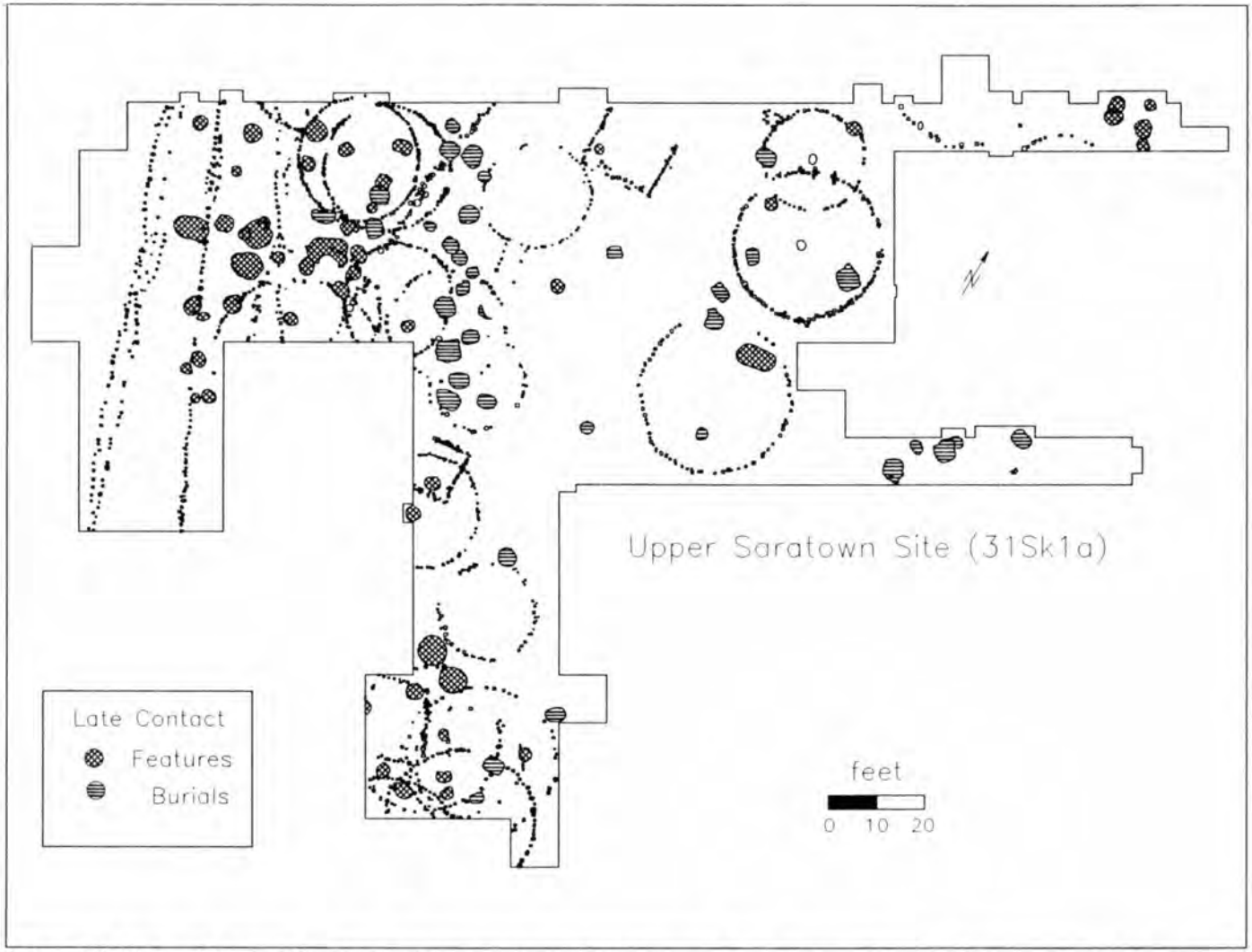

Figure 50. Plan of Upper Saratown showing the distribution of Late Contact period features and burials.

Group 1: Small Houses

Five houses at Upper Saratown fall within this first group (Structures 9,13, 15, 16, and 21). Structure 9 is located in the northeast corner of the main excavation block and it intersects with Structure 3. The circular posthole pattern of Structure 9 is intruded by four Middle Contact period burials. A Late Contact period burial and feature also intrude this structure. This structure appears to predate the Middle Contact period occupation at the site.

Structure 15 is the second-smallest house in this group. This house pattern is intruded by two Late Contact period burials and appears to predate that occupation.

Though the posthole pattern that represents Structure 16 is not dense, it is clearly intruded by a Late Contact period feature. The wall of the structure would have run between a Uwharrie phase feature and burial, but it is unclear whether the wall would have intersected either of the pits. This structure predates the Late Contact period.

Two structures in this group, Structures 16 and 21, do not intersect with any of the dated features or burials.

No definite association can be determined between these houses and any of the dated features or burials at the site. The small structures appear to predate the contact-period occupations at the site. The distribution of late prehistoric features and burials offers no direct evidence about their association with this group of structures. The postholes that comprise these structures are more shallow than postholes associated with the larger structures at the site. Postholes in Structures 9, 15, 16, and 21 were excavated and their profiles recorded. Very few of these postholes exceeded a depth of 0.5 ft below the top of subsoil. In contrast, nearly all of the excavated postholes associated with Structures 3 and 10 extended more than 0.75 ft deep below the top of subsoil.

Group II: Medium-Sized Houses

All of the houses in this group are located in the western half of the excavation area. Late Contact period burials and features are concentrated in and around these structures. Many of medium-sized houses overlap with other medium-sized structures.

The northern-most group of three overlapping medium-sized houses includes Structures 5, 6, and 18. Structure 5 intrudes a Middle Contact period feature and a Late Contact period feature. The house wall is intruded by one and perhaps two Late Contact period burials. Structure 6 intrudes a Dan River phase feature and appears to intrude a Late Contact period burial that intrudes Structure 5. There is one piece of contradictory evidence in the superimposition of postholes that form Structure 6 and dated features. One Middle Contact period feature (Feature 133) and a large unexcavated soil discoloration appear to intrude the wall of this house. Given that the wall of this house intrudes a Late Contact period feature, I am unable to explain this apparent disparity. It is possible that Feature 133 dates to the Late Contact period rather than the Middle Contact period, or perhaps field observations about the presence or absence of intrusive postholes were incorrect. Despite this contradictory evidence, all other evidence is consistent with Structure 6 dating to the Late Contact period. Structure 18 is intruded by one Late Contact period feature.

This analysis indicates that this first group of medium-sized houses may have stood during the Late Contact period occupation at the site. Structure 6 was probably built after Structure 5 was no longer standing.

The second group of overlapping medium-sized houses consists of Structures 7, 11, and 20. Structures 7 and 11 intrude two Middle Contact period features and both houses are, in turn, intruded by Late Contact period burials. Both Structures 7 and 20 intrude Late

Contact period features. None of the dated features or burials intrude Structure 20. This evidence suggests that these structures stood during the Late Contact period and that Structure 20 may have been built later than the other two houses in this group.

Structure 8 is a medium-sized house that is partially exposed in the excavation block. The exposed portion of this house does not overlap with any other houses I have identified. The house does intersect with one of the rectangular structures. This house intrudes a Dan River phase feature and, therefore, it may postdate the Dan River phase occupation at the site, but was abandoned before the rectangular structure was built.

Structure 4 is the last of the medium-sized houses. This house is one of the smaller structures in this group, and it does not overlap with any of the other medium-sized houses. One Late Contact period burial intrudes this house pattern. Structure 4 is also intruded by one Middle Contact period feature and two Middle Contact period burials. It is also intruded by a Dan River phase burial. This distribution indicates that Structure 4 was standing during or before the Dan River phase. Therefore, Structure 4 is not part of the same occupation as the other medium-sized houses at the site.

Group III: Large Houses

The third group consists of large houses with diameters that exceed 30 ft. This group includes Structures 2, 3, 10, 19, 12, and 14. Structure 3 intrudes both a Uwharrie phase feature and Dan River phase feature. Postholes associated with this structure also intrude on the edge of three Middle Contact period burials, including one burial that may be positioned in an entryway into the structure. This house pattern is, in turn, intruded by two other Middle Contact period burials. The wall of this structure does not intersect with any Late Contact

period burials or features. This distribution indicates that Structure 3 stood during the Middle Contact period occupation at the site.

Some postholes that form Structure 10 intrude two Middle Contact period burials, while others are intruded by Middle Contact period burials. Structure 10 also apparently intrudes a Dan River phase burial (Burial 12). The original plan map for excavation unit 210R160 included postholes aligned with the house pattern that intruded this burial. These postholes were later discounted, but given that the house intrudes burials that are later than Burial 12, the original unit map showing intrusive postholes was correct. One Late Contact period burial intrudes the house pattern. This distribution indicates that Structure 10 is associated with the Middle Contact period occupation at the site.

Structure 19 is located on the edge of the excavation block and only a portion of this house pattern is exposed. The circular pattern is not well defined within the excavation block and its identification as a house is not certain. The posthole pattern is intruded by a Middle Contact period feature and burial. Postholes that form part of Structure 19 also intrude the edges of a Middle Contact period burial and feature. This distribution indicates that this house stood during the Middle Contact period occupation of the site.

The other three large structures, Structures 2, 12, and 14, are located in the southern area of the excavation. These structures overlap in a manner similar to the medium-sized houses. Structure 2 may intrude the edge of one Late Contact period burial. Structure 12 intrudes a Dan River phase feature and it also intrudes the edge of a Late Contact period feature. This structure also overlaps with one of the rectangular structures. Structure 14 intersects with two burials and one feature that date to the Late Contact period. The feature is adjacent to the wall of the house and the two burials probably intrude the wall. These three

large houses probably stood during the Late Contact period and are associated with the row of medium-sized structures.

Group IV: Very Large Structures

Structure 17 is intruded by a Late Contact period feature and some of its postholes intrude a second Late Contact period feature. The wall of the other very large structure, Structure 1, is adjacent to two Late Contact period features. It is difficult to interpret from the field records which of these is intrusive, and it is possible that the structure is contemporaneous with the features. Both of these structures appear to date to the Late Contact period, but their relationship with the medium-sized houses, which also date to this period, is unclear. The function of these large structures is not known.

Rectangular Structures and Palisades

Two of the three-sided rectangular structures at Upper Saratown intersect Late Contact period houses, and therefore, are not contemporaneous with them. The third rectangular structure intrudes a Dan River phase feature. Based on this evidence, these structures probably date to the Middle Contact period occupation at the site.

One palisade line parallels the row of large houses and the rectangular structures. This line is intruded by one Late Contact period burial. This palisade is probably associated with the Middle Contact period occupation at the site.

Two palisade lines are intruded by Late Contact period features and also intersect with several of the medium-sized houses. It is possible that these palisades are associated with the small prehistoric houses.

Three parallel palisade lines are located on the western edge of the excavation. One of these intrudes features that date to the Middle and Late Contact periods. This line also appears to be intruded by two Late Contact period features. These palisades are probably associated with the Late Contact period houses.

Summary of Architectural Evidence

In summary, the superimposition of dated features and burials with architectural elements at the site indicates that the five smallest houses at the site and one of the medium-sized houses probably date to one of the late prehistoric occupations at the site. These houses are distinguished from those of the contact-period components in several ways. Not only are the diameters of these houses smaller than contact-period houses, but individual postholes from these proposed prehistoric structures are also smaller and more shallow than those that comprise contact-period houses. Finally, an examination of color slides from the excavation reveals that some of the postholes that comprise the prehistoric houses appear less distinct from the surrounding subsoil than those of contact-period structures. A set of intersecting palisade lines may be associated with these houses.

The comparison of dated features and burials with house patterns also indicates that three of the large houses and the rectangular structures date to the Middle Contact period. One palisade line appears to be associated with these structures. Seven of the medium-sized houses and three of the larger houses date to the Late Contact period occupation. The two largest structures also appear to date to the Late Contact period, but the relationship between these structures and the other Late Contact period houses is unclear. A group of three palisade lines dates to the Late Contact period.

Description of Village Components at Upper Saratown

The study of village structure has two primary goals. First, the village plan of each component will be identified, and the plans are compared to similarly dated sites in the region, in an effort to determine the likely configuration of the village outside the excavated area. Second, activity areas within village components are identified and compared.

In this analysis, the interpretation of village plans is enhanced by consideration of the manner in which pits may have been used. The identification of activity areas relies heavily on functional classification of pit features. The typology applied here considers pit shape and size, the composition and structure of pit fill, and pit contents. Aside from burials, Ward (1980:187) identified six functional classes of features at Upper Saratown: storage pits, roasting pits, borrow pits, burials without human bone, clay hearths, and refuse pits. Each feature category will be described below.

Storage Pits. Several key characteristics are used to identify storage pits. They tend to be circular in plan and either cylindrical or bell-shaped in profile. At the top of subsoil, storage pits range from 2 ft to 4.5 ft in diameter. The depth that these pits were excavated into subsoil varies from 1 ft to 4 ft. Ward noted that most storage pits at Upper Saratown had been refilled with refuse and that the fill in these pits was often stratified. Stratified fill indicates that refilling involved several episodes of dumping. Often, the upper zones of fill in storage pits are more organically rich and contain a greater density of refuse than the lower zones. Storage pits occur both inside and outside structures.

Borrow Pits or Shallow Basins. Borrow pits are also very common features at Upper Saratown, and Ward (1980:194) indicates that in some ways this category is a catch-all class. Pits in this class vary in size and shape and may represent areas where clayey soil was mined. These pits contain very little cultural material and are usually less regular in shape than other types of features at the site. The fill in borrow pits tends to be homogenous, and Ward thinks it may represent village surface soils rather than refuse deposits. Ward found no patterning in the distribution of borrow pits at Upper Saratown.

Roasting Pits or Earth Ovens. These features are circular or oval in plan and basin-shaped in profile. They are usually large, often exceeding 5 ft in diameter, and shallow, usually less than a foot deep. The fill in these pits is very distinctive in that it contains large amounts of carbonized plant remains, animal bone, wood charcoal, and numerous potsherds. Fire-cracked rocks occur throughout the fill and sometimes lenses of wood charcoal and ash are present. Some of these basins have a layer of clay covering the pit bottom. They are thought to have been used as earth ovens for roasting large quantities of plant and animal foods, perhaps in the context of community-wide feasting (Eastman 1996; Ward 1980:198, 1993). The fill in these pits represents secondary deposition (i.e., refilling), but the fill may be directly associated with the primary use of the pit.

Refuse Pits. A few pits at Upper Saratown have been designated refuse pits. These pits are usually circular in plan and cylindrical to slightly conical in profile. Though the shape of these pits is similar to storage pits, refuse pits tend to be smaller in diameter and more shallow. Very few refuse pits exceed one foot in depth below the base of plow zone. The fill in these pits is usually homogenous and rich in food remains. Ward (1980:203) speculated

that this fill represents a single episode of dumping, and that these pits may have been dug for the purpose of refuse disposal. Most of these pits are located within structures.

Burials without Human Bone. Three pits at Upper Saratown appear to have been originally excavated for use as burials, but no skeletal remains or associated artifacts were recovered during fieldwork. These pits had shelves along the sidewalls like shaft-and-chamber burial pits. It is probable that these pits were used for burial and the skeletal remains and associations were not preserved.

Clay Hearths. A small number of soil disturbances may indicate the location of hearths at Upper Saratown. Due to sustained plowing at the site, no intact hearths are preserved, but circular burned areas indicate their location. Remnants of a clay-collared basin were preserved in Feature 40. This feature is located in the center of Structure 9. No intact cultural remains are associated with these features.

Each feature from Upper Saratown and Hairston was classified according to this typology. The study of village structure is based on examining the distribution of these types of features in each component. Activity areas are identified by the location of different feature types in relation to other features and the location of structures, open spaces, palisades and other architectural features of the villages. Activity areas within these components are compared to those from other village sites associated with the Sara, in an effort to identify changes in village structure through time.

The evidence presented in the previous section will be used to reconstruct village components at Upper Saratown. A component consists of related domestic features, human burials, houses, palisades, and other structures. The previous analysis indicates that a series

of small houses at Upper Saratown predate the contact-period occupations at the site. Unfortunately, it was not possible to positively associate these houses with either the Uwharrie or the Dan River phase occupations. The structure of each component is discussed below. These prehistoric houses are discussed along with the features and burials from the two prehistoric site occupations. A series of houses and palisade lines are associated with each of the contact-period occupations. These will be discussed separately.

Late Prehistoric Occupations

Seventeen pit features and five human burials within the main excavation block at Upper Saratown date to the late prehistoric Uwharrie phase. Twenty-three pit features and five burials at the site date to the Dan River phase. Figures 51 and 52 show these pits in relation to the six prehistoric circular house patterns and two palisade lines that may be associated with them.

If all of the small houses are contemporaneous, they form an arc with 10-30 ft separating each house. This pattern is consistent with a common Siouan community plan that includes nucleated villages with houses arranged in a circular pattern around an open plaza. In addition to these nucleated villages, late prehistoric settlements in the Dan River drainage are often internally dispersed. These latter settlements consist of households scattered along major rivers. Internally dispersed settlements are common throughout the Dan River phase, and nucleated villages are thought to have developed late in the phase. Both types of settlements are found after about A.D. 1350.

In general, the distribution of Uwharrie phase pit features closely follows that of the prehistoric houses at the site. Each house has one or more Uwharrie phase storage pits within or adjacent to it. No Uwharrie phase pit features are located further than 15 ft from one of

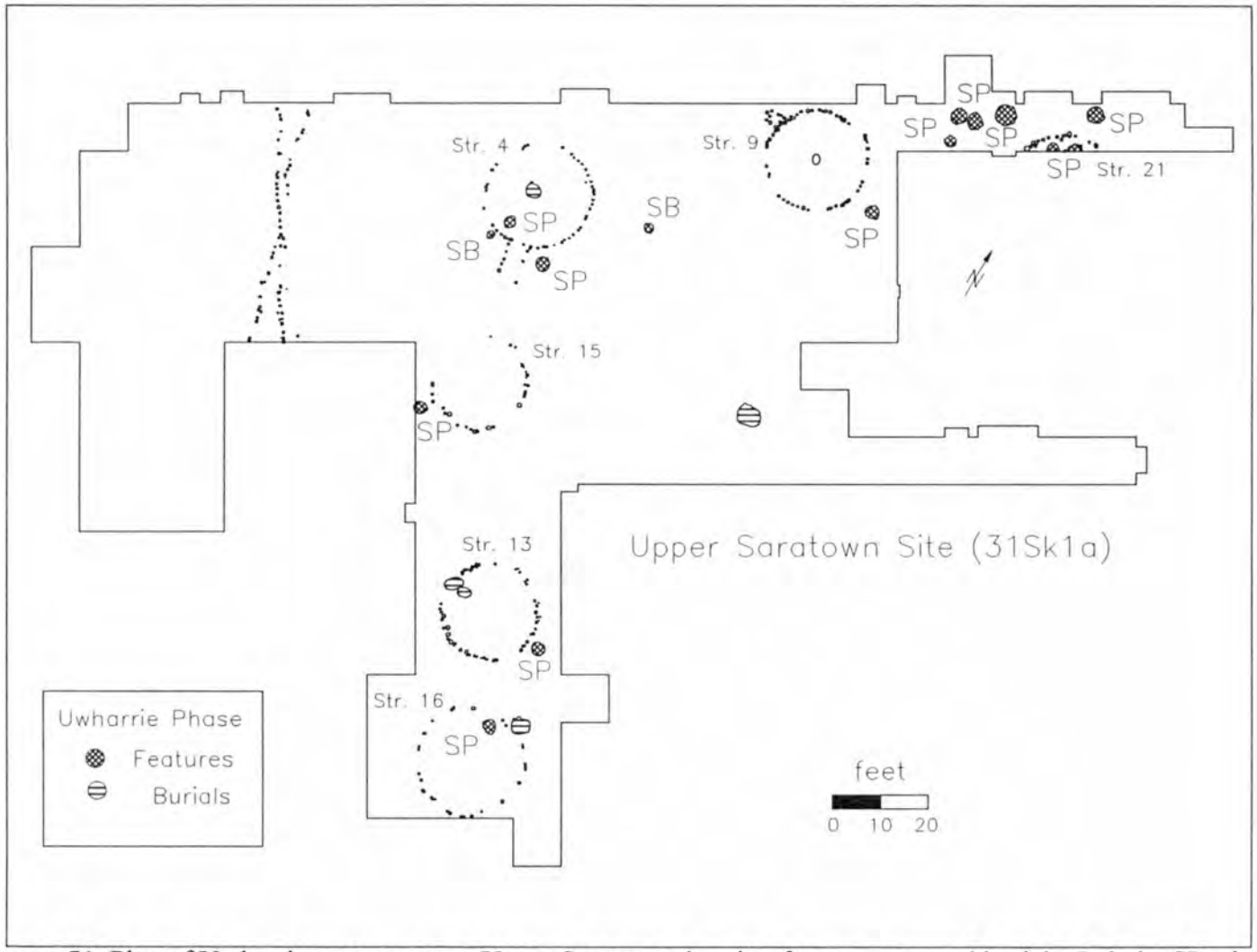

Figure 51. Plan of Uwharrie component at Upper Saratown showing feature types and burials. Labels: SB, shallow basin; SP, storage pit.

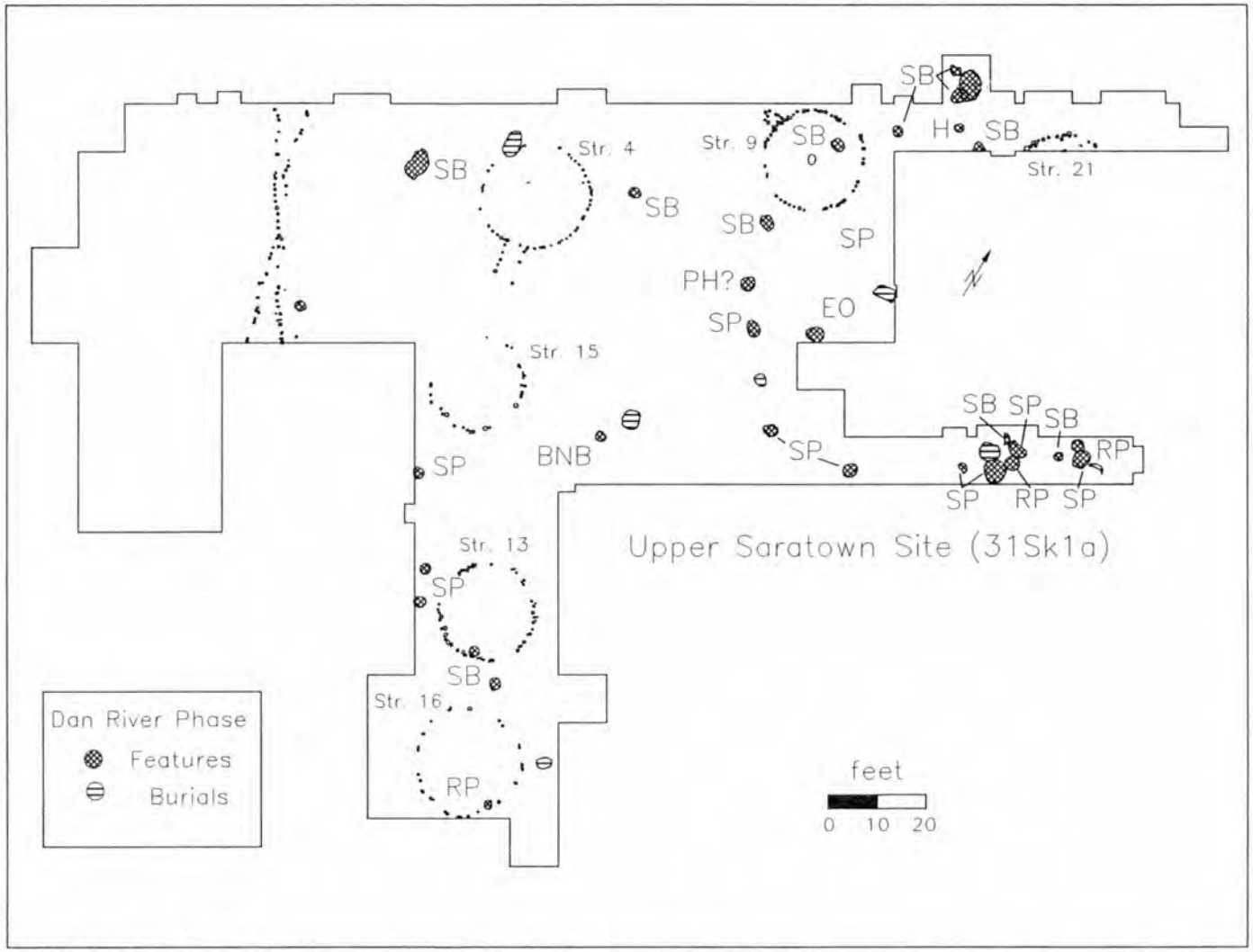

Figure 52. Plan of Dan River component at Upper Saratown showing feature types and burials. Labels: SB, shallow basin; SP, storage pit; RP, refuse pit; H, hearth; BNB, burial with no bone; EO, earth oven; PH, posthole.

the structures. Four of the five possible Uwharrie phase burials are located within or adjacent to one of the houses. Structure 4 has two storage pits, two shallow basins, and a possible Uwharrie phase burial in or adjacent to it.

Uwharrie features found at Upper Saratown are limited to fairly small storage pits and two small, shallow basins or borrow pits. Though most Uwharrie features are dispersed, a cluster of four Uwharrie phase storage pits is located in the northeastern excavation trench, between Structures 9 and 21. As mentioned previously, this area is close to the current location of the riverbank, and it is possible that the concentration of storage pits reflects an area of domestic activity focused on the river and its resources.

The distribution of Dan River phase features does not correspond well with the location of the prehistoric houses. The highest density of Dan River phase features and burials is in the eastern half of the excavation, within 100 ft of the present location of the river. Concentrations of Dan River phase features, including refuse pits, storage pits, and shallow basins, are located close to the river. One concentration consists of three shallow basins and a possible hearth area.

A variety of Dan River phase features occurs in and around the prehistoric houses. One refuse pit is located within Structure 16. Structure 13 has a shallow basin within its walls and another basin and two storage pits adjacent to it. One shallow basin is located within Structure 9 and two basins are adjacent to it. No Dan River phase features occur inside Structures 4 or 15, nor are there any within the exposed portion of Structure 21. Even though no Dan River phase features are inside these houses, a storage pit is located within 15 ft of Structure 15, and Dan River phase shallow basins are within 15 ft of both Structures 4 and 21. Other Dan River phase features and burials occur throughout the eastern half of the

excavation block where no houses have been identified. If a nucleated village is represented by the arc of prehistoric houses, this concentration of Dan River features would be located in the plaza of the village. Generally speaking, few pit features are present in plazas.

In addition to cylindrical storage pits and shallow basins, which were also common types of features during the preceding Uwharrie phase, a wider range of pit features is found in the Dan River phase component. Deep, bell-shaped storage pits were constructed during the Dan River phase. A few cylindrical pits associated with this component may have been used primarily for refuse disposal. One straight-sided pit may have been dug as a burial pit, but no human bone was recovered. In addition, a deep, rock-lined posthole may date to the Dan River phase. This posthole has a diameter of 3.25 ft and a depth of 5.01 ft. It is much larger than any post associated with any house or palisade at the site. It may represent a ceremonial post, such as a gaming pole. The chronological placement of this feature is in doubt, because it was intruded by a wall post from Structure 3. This intrusion was not recognized in time to segregate the intrusive fill from the original pit fill. No large, rock-lined post holes like this one have been reported for other Dan River phase sites in the region.

No definitive statement can be made about the cultural affiliation of the six small houses at Upper Saratown. However, their distribution more closely matches the distribution of Uwharrie phase features and burials than the distribution of Dan River features and burials. This provides tentative support for a Uwharrie phase designation, but at this time this affiliation remains unproven. The distribution of Dan River phase features appears to be more consistent with an internally dispersed settlement aligned parallel to the Dan River. Again, these interpretations should be considered tentative given the circumstantial nature of the evidence and the limited excavation area along the river's edge.

Middle Contact Period

Forty-eight features and 48 burials at Upper Saratown date to the Middle Contact period. These subsurface pits are illustrated in Figure 53 with the three large houses, the three rectangular structures, and the palisade that is probably associated with these structures. Figure 54 shows the same map with labels indicating feature function and hypothesized activity areas. The plan of this component consists of a row of closely spaced circular houses. The configuration of the village may represent a complete circle of houses, or a half circle with the open side next to the Dan River. If this component represents a circular arrangement of houses, then I estimate that at least one-quarter of the site area has been eroded by the Dan River. Due to mining of sand on the opposite (east) bank of the river, it is likely that the Dan River is encroaching on the floodplain in the site area. The aerial photograph in Figure 55 provides evidence for an abandoned channel of the Dan River about 500 ft east of its present location. Exactly when the Dan occupied this earlier channel is not known. If the villages at Upper Saratown were once circular in plan, rather than semi-circular, I estimate that the river would have had to encroach on the floodplain at least 100 ft since the time the villages were occupied. The question of how much the channel has migrated west since the seventeenth century remains unanswered and, likewise, whether the villages were circular or semicircular in plan can not be determined.

A second line of evidence may indicate that the Dan River was in its current location during the seventeenth century. The northern of the two excavation trenches extends to the current river bank. The excavation exposed a thick overbank deposit in this area and a feature. The feature was identified as a refuse-filled washout along the riverbank. If this interpretaion is correct, the riverbank was at least close to its present location in the

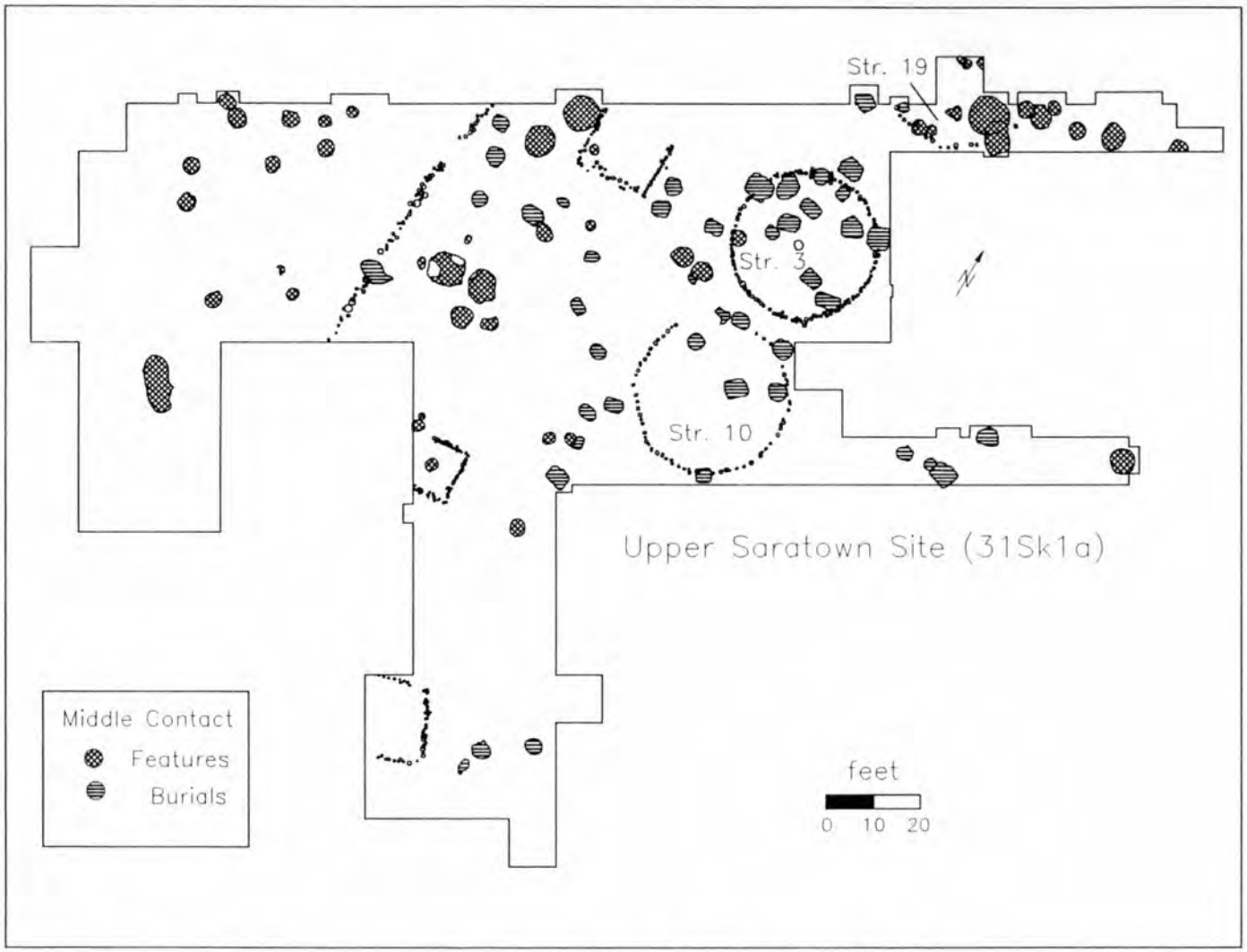

Figure 53. Plan of Middle Contact component at Upper Saratown showing houses.

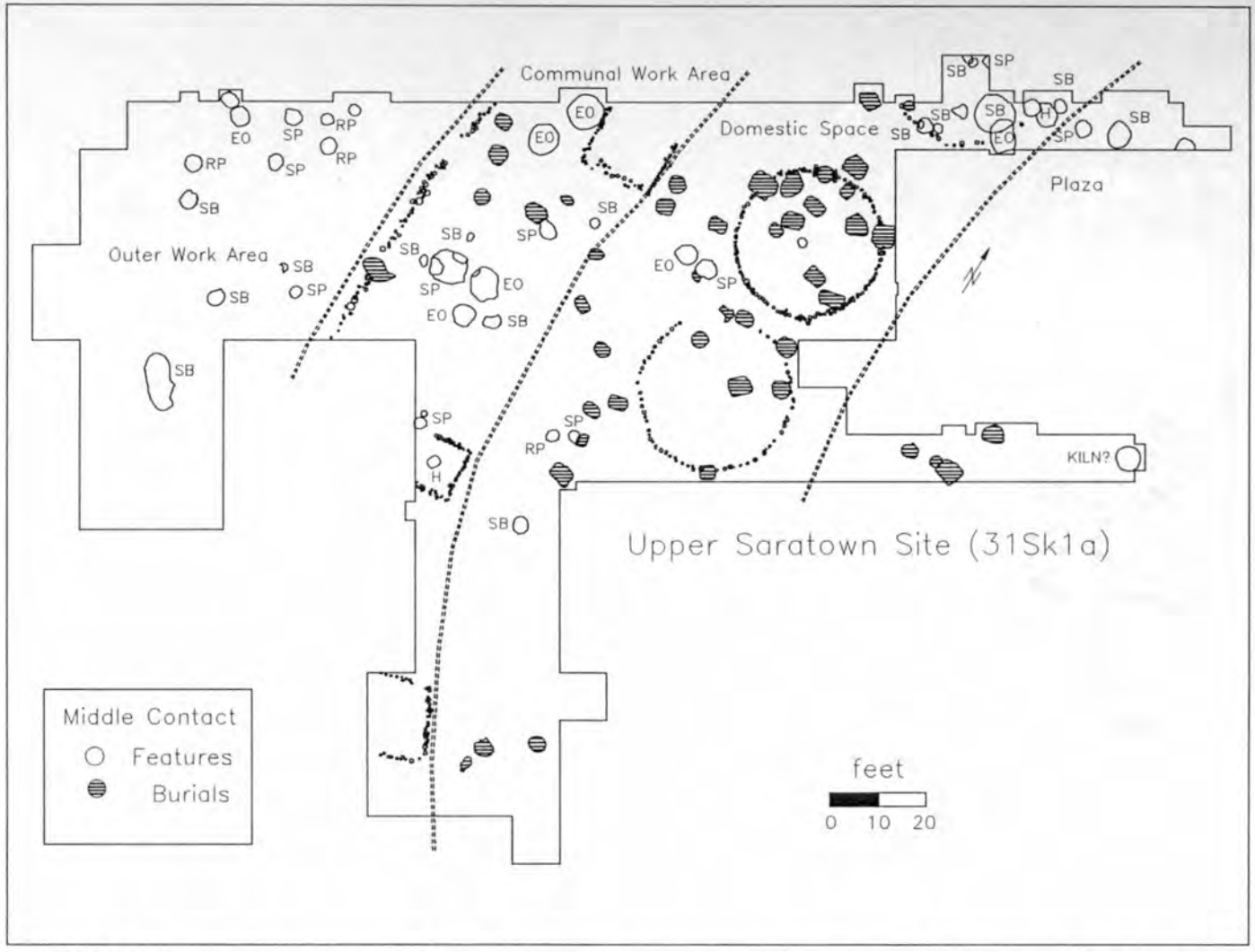

Figure 54. Plan of Middle Contact component at Upper Saratown showing activity areas and feature type. Labels: SB, shallow basin; SP, storage pit; RP, refuse pit; H, hearth; EO, earth oven.

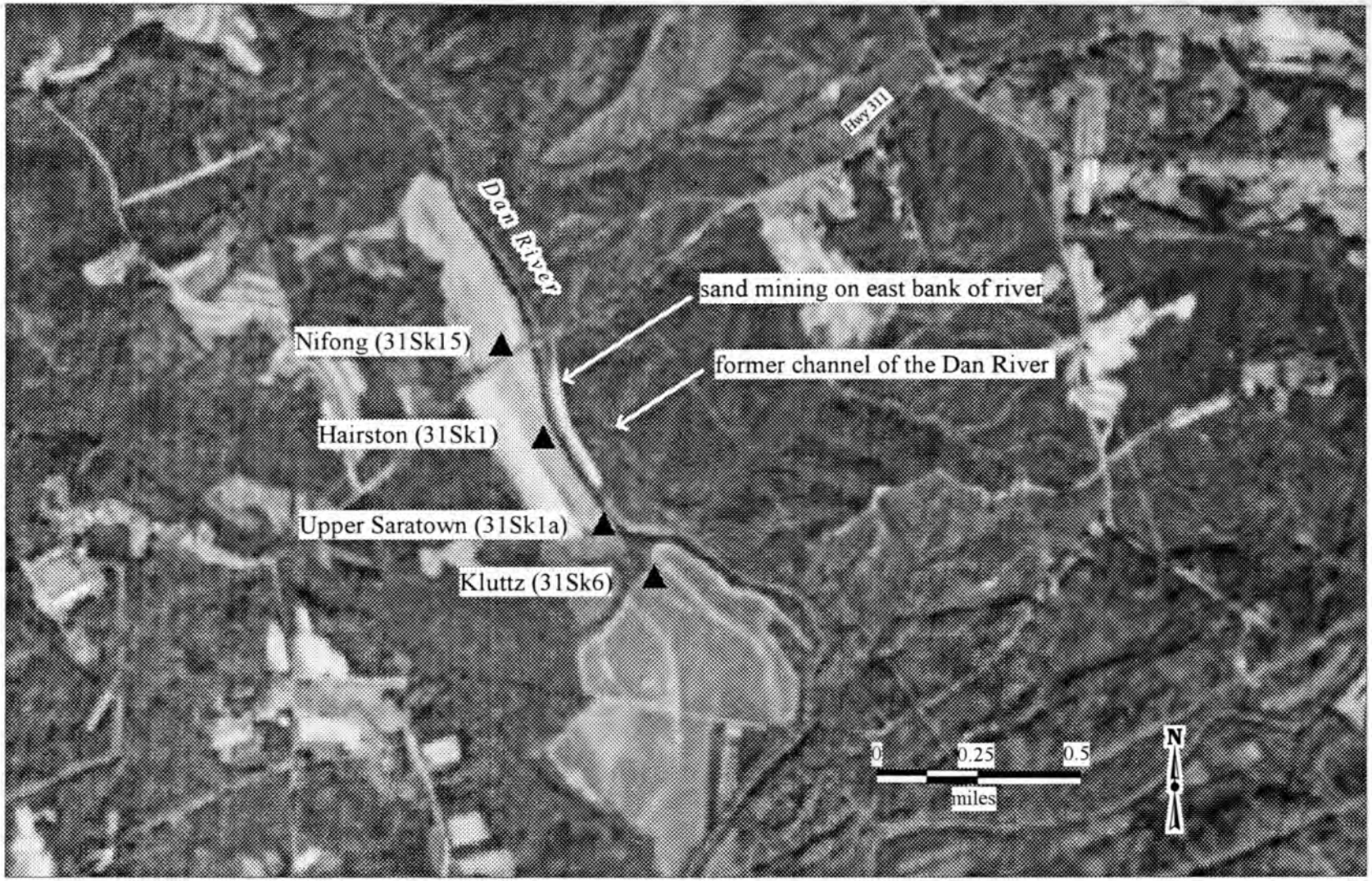

Figure 55. Topographical features that indicate the location of a former channel of the Dan River in the Upper Saratown Archaeological District.

seventeenth century and that the Middle and Late Contact period villages were semi-circular in plan. After examining the field records, it seems equally likely that the feature represents the base of a pit feature that has been heavily eroded by the encroachment of the river, rather than a prehistoric wash-out along the river bank, and on final determination can be made.

The basic village structure, as it is represented within the excavation block, consists of three different activity areas that form bands around a central area. The central area contains a few burials and one feature that the excavators thought might represent a pit for firing pottery. This central area may be a plaza.

Adjacent to this central area is a row of large circular houses. These houses and a 20-ft-wide area beyond the houses comprise the domestic space within the village. More than three-quarters of all burials are found within this domestic space. Half of the burials are located in the floor of Structure 3. A few storage pits, shallow basins, hearths, and two earth ovens are located in this domestic zone. A concentration of domestic features is located around Structure 19. Several shallow basins, a storage pit, an earth oven, and a hearth intrude on this house pattern. This area may represent a special food preparation area located on the spot where a house once stood.

In the 30-ft-wide band between the domestic area and the palisade are sheds or outbuildings, and special communal food preparation areas characterized by large earth ovens, storage pits, and shallow basins. A few burials are also located in this area.

Outside the palisade, a variety of features are present. These features appear to be limited to an area within about 45 ft of the palisade. Shallow basins, refuse pits, storage pits, and a small earth oven are located outside the palisade. All Middle Contact period refuse pits

are located in this outer work area beyond the palisade. No Middle Contact period burials are located outside the palisade.

Late Contact Period

The Late Contact period village component at Upper Saratown is organized in a manner similar to the Middle Contact period village. Figure 56 presents a plan view of the Late Contact period component. Figure 57 shows the same map with labels indicating feature function and different activity areas.

This village also has a central plaza area in which few domestic-related features occur. This area contains four storage pits and a number of burials. The burials are not evenly distributed throughout the plaza. They occur singly or in groups of three or five. Spatial patterning in the distribution of burials will be explored in Chapter V.

Around the plaza is a band of houses with associated domestic features. Because these Late Contact period structures occur as groups of overlapping house patterns, it is impossible to determine which features and burials are associated with any given house. Storage pits and shallow basins are the most common types of domestic feature found in and around houses. In addition to these, a few refuse pits and earth ovens are located inside or just outside these houses. In the far northeast corner of the excavation there is a concentration of Late Contact period storage pits, shallow basins, and a hearth. If the village is arranged in a circular form, this concentration of features could be associated with the domestic area on the eastern half of the site.

Most of the Late Contact period burials are located near houses in the domestic area of the village. Middle Contact period burials were interred in and around houses and, in some instances, may even have been integrated into doorways of houses. In contrast, most Late

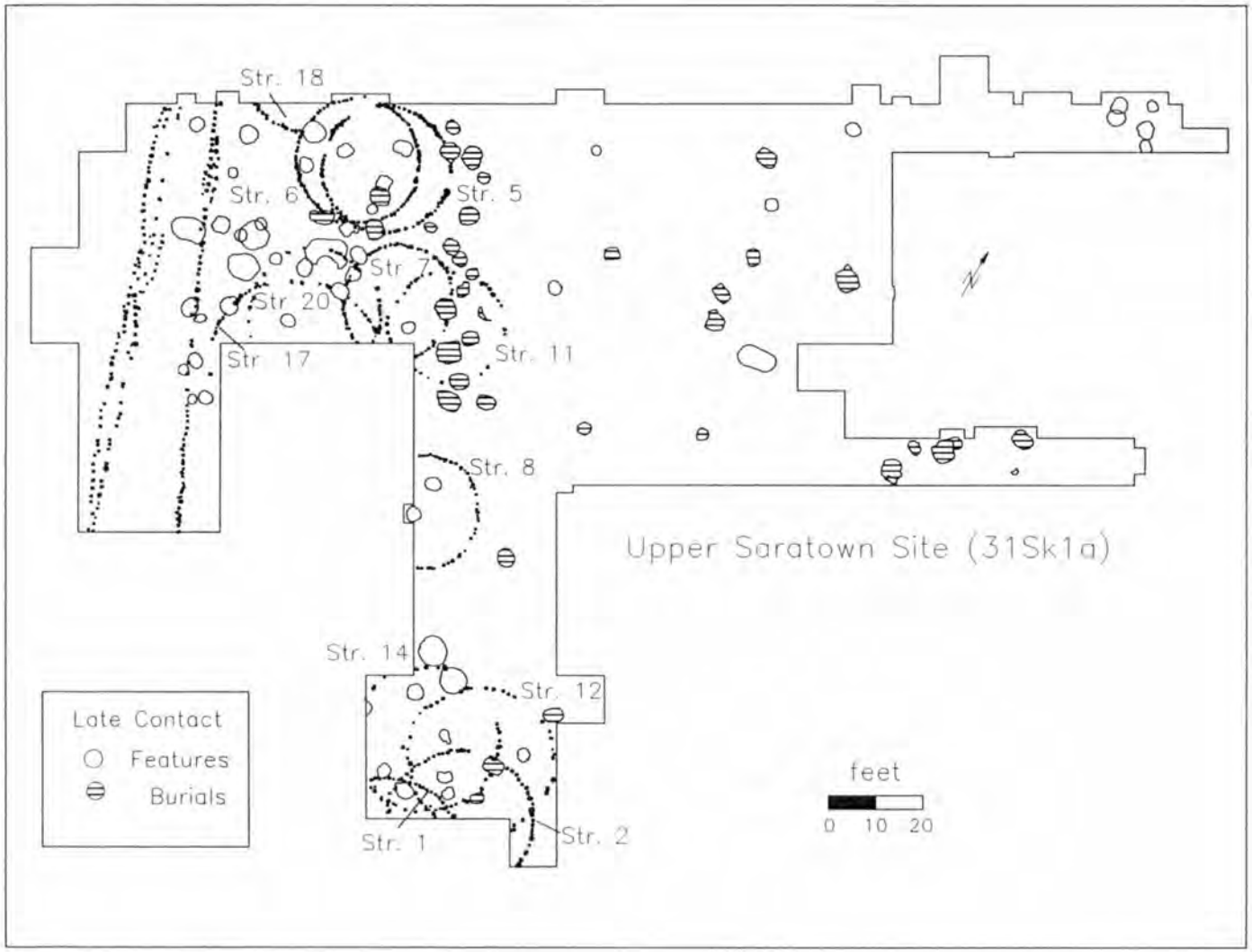

Figure 56. Plan of the Late Contact component at Upper Saratown showing houses.

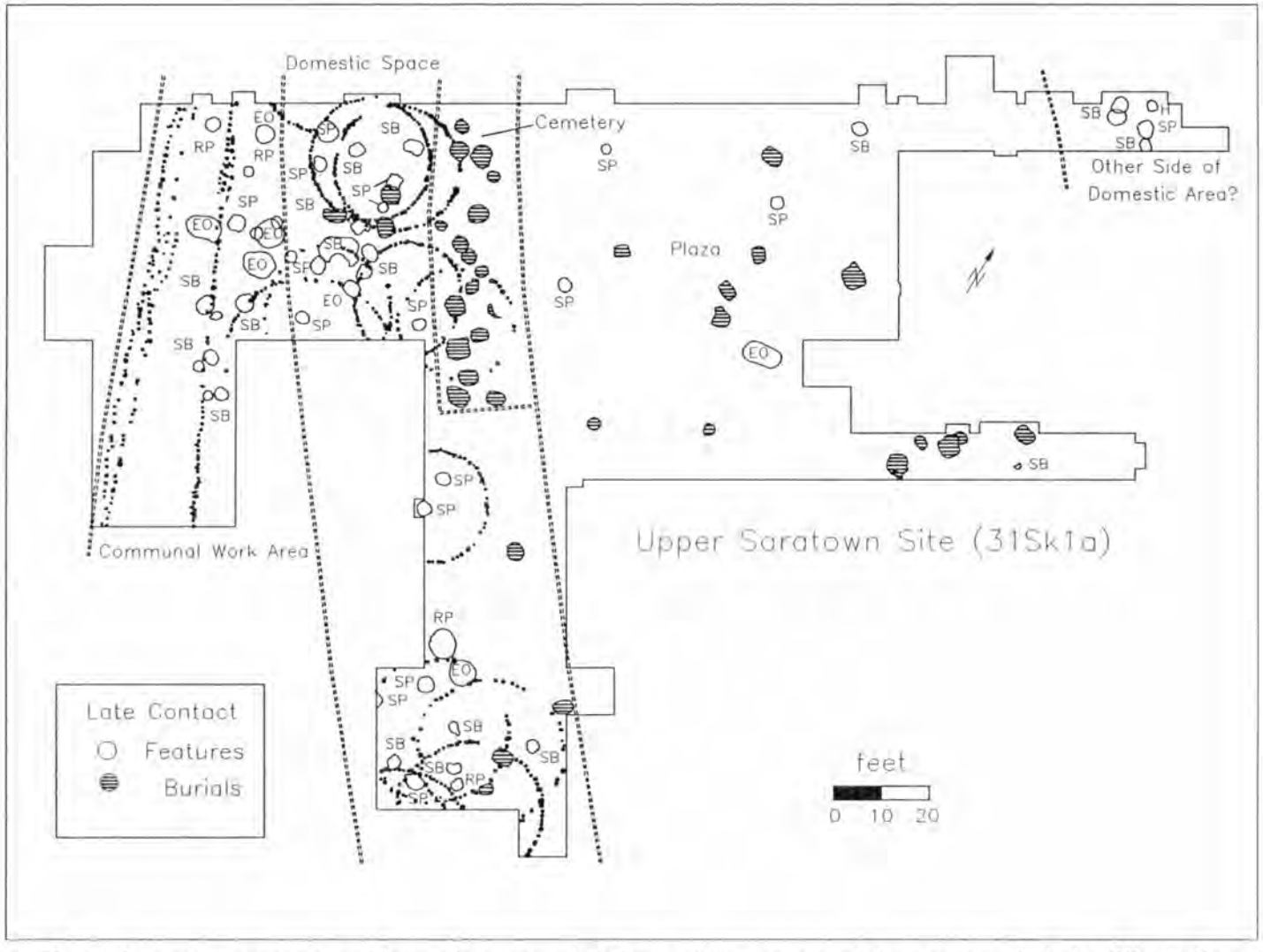

Figure 57. Plan of Late Contact component at Upper Saratown showing activity areas and feature type. Labels: SB, shallow basin; SP, storage pit; RP, refuse pit; H, hearth; EO, earth oven.

Contact period burials interred in the domestic area of the site were situated in a cemetery area. This cemetery is 60 ft long and 10 ft wide. It intrudes into the earliest of the Late Contact period houses. Forty-five percent of all Late Contact burials are located in this cemetery.

Like the Middle Contact period component, a communal work area, characterized by large earth ovens, shallow basins, and storage pits is situated between the domestic area and the palisades. This area also contains refuse pits. It appears that the area outside the palisade was no longer regularly used for domestic-related tasks. No Late Contact period features are located in the excavated area outside the palisade lines.

Identification of Village Components at Hairston

Only a single exploratory trench was excavated at Hairston. This excavation trench was 100 ft long and 10 ft wide in most places. A total of 1250 ft^2 of the site area was exposed. The excavation trench was positioned in the southeastern corner of the distribution of artifacts and enriched soil visible on the ground surface. Wilson (1983:379) identified two possible circular-house patterns and a section of a palisade situated approximately 10 ft south of Structure 1. Given the limits of the excavated area, the identification of these architectural elements must be considered tentative. I analyzed pottery from 13 of the 40 pit features in the excavation trench and examined artifacts associated with all six of the excavated burials. Figure 58 is a map of the excavation trench with the analyzed features and burials shaded. The postholes associated with the houses and palisade identified by Wilson are also shaded. The houses are about 19 ft to 21 ft in diameter, making them comparable in size to the

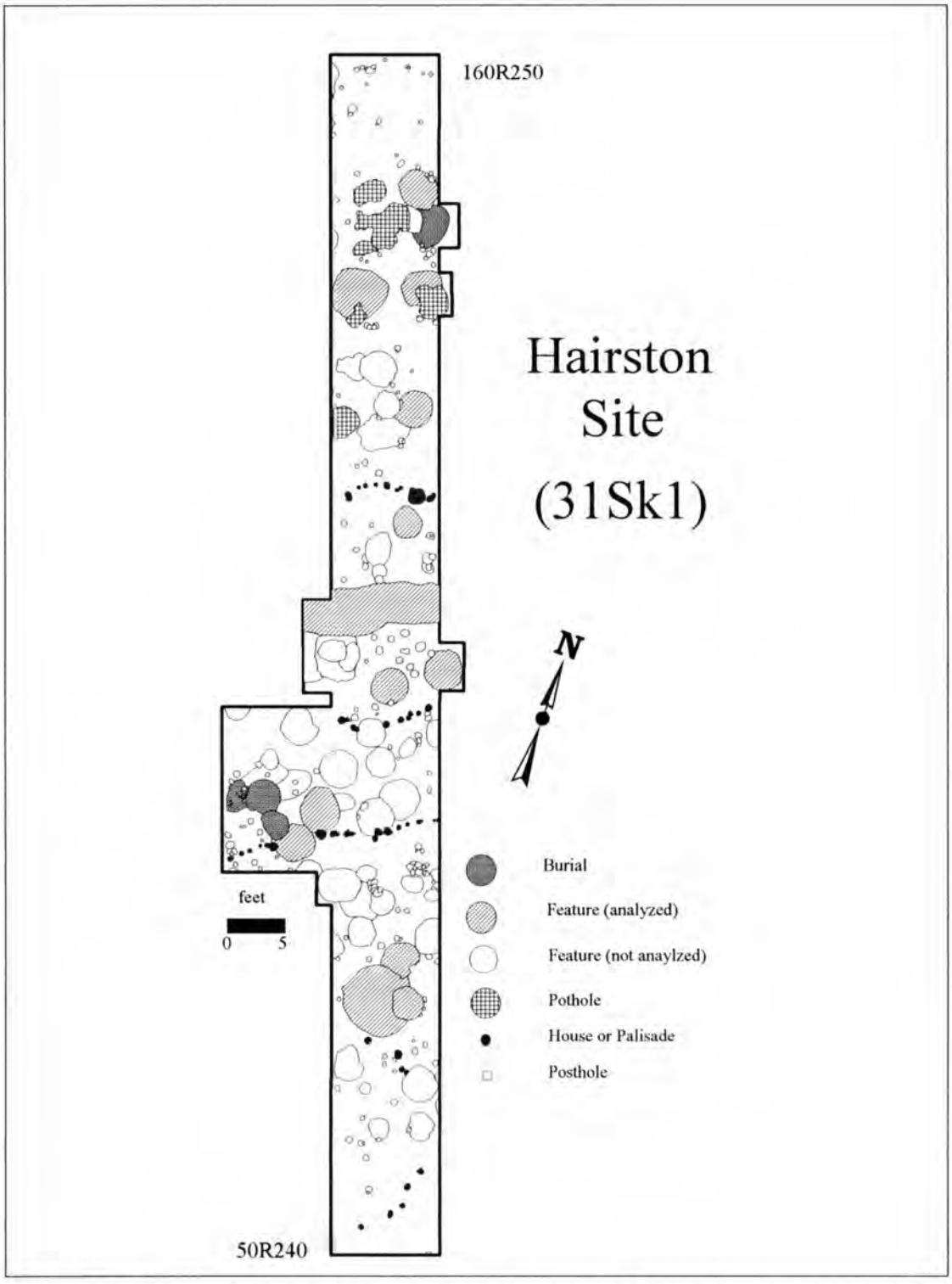

Figure 58. Plan of the Hairston site showing features and burials that were analyzed (shaded).

prehistoric houses at Upper Saratown. The protohistoric house documented at Nifong is larger than these houses (29.5 ft in diameter) (Eastman et al. 1997).

Because none of the analyzed features intersect with the either of the house walls, no information on the chronology of the houses was gained from the analysis of pit features. The location of dated pit features relative to the houses and palisade provides indirect evidence for associating one of the houses with the Early Contact period features. There is too little information to suggest any association between protohistoric or late Dan River phase features and any of the architectural elements at the site.

Features and burials from Hairston that date to the Dan River phase and the Protohistoric period are presented in Figures 59 and 60. These maps also include the second house pattern and the palisade line identified during excavations at the site. The distributions of these dated features and burials does not correspond very well with either of the architectural elements and no clear patterns indicating potential activity areas are discernable. It is not possible to offer an interpretation of the structure of either of these components.

Figure 61 shows the Early Contact period features and the circular house pattern that may be associated with this component. The site plan indicated by these features corresponds well with the organization of the contact-period components at Upper Saratown. At Hairston, three Early Contact period storage pits are located in the floor of Structure 1. This may indicate an association between the house and the storage pits.

About 20 ft south of this house is a cluster of feature that includes a large earth oven, a storage pit, and a shallow basin. Clusters of these types of features characterize the communal work area in the two contact-period components at Upper Saratown. The communal work areas at these villages were situated between the houses and palisades. At

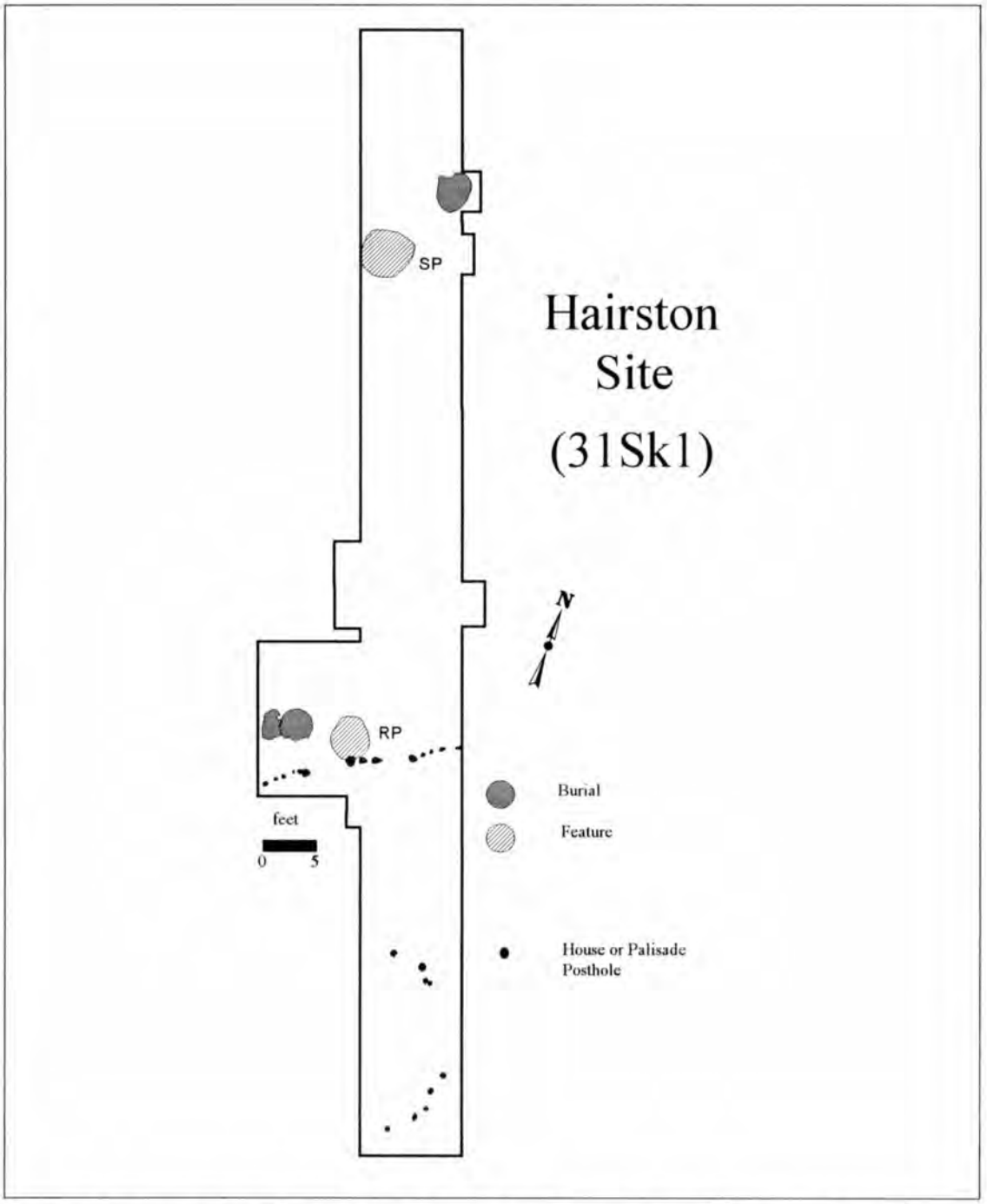

Figure 59. Plan of the Hairston site showing Dan River phase features and burials and possible palisade and structure.

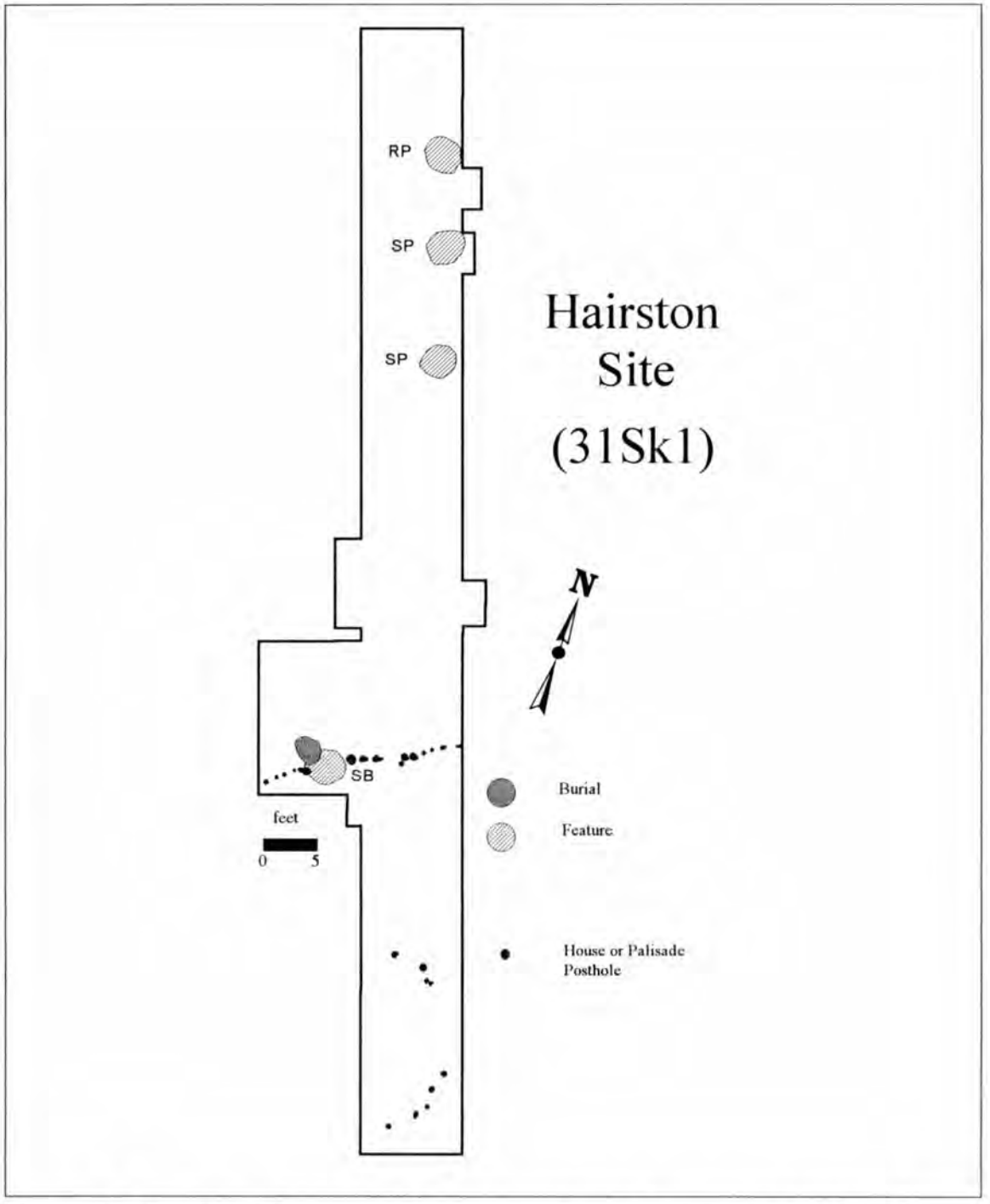

Figure 60. Plan of the Hairston site showing protohistoric features and burials and possible palisade and structure.

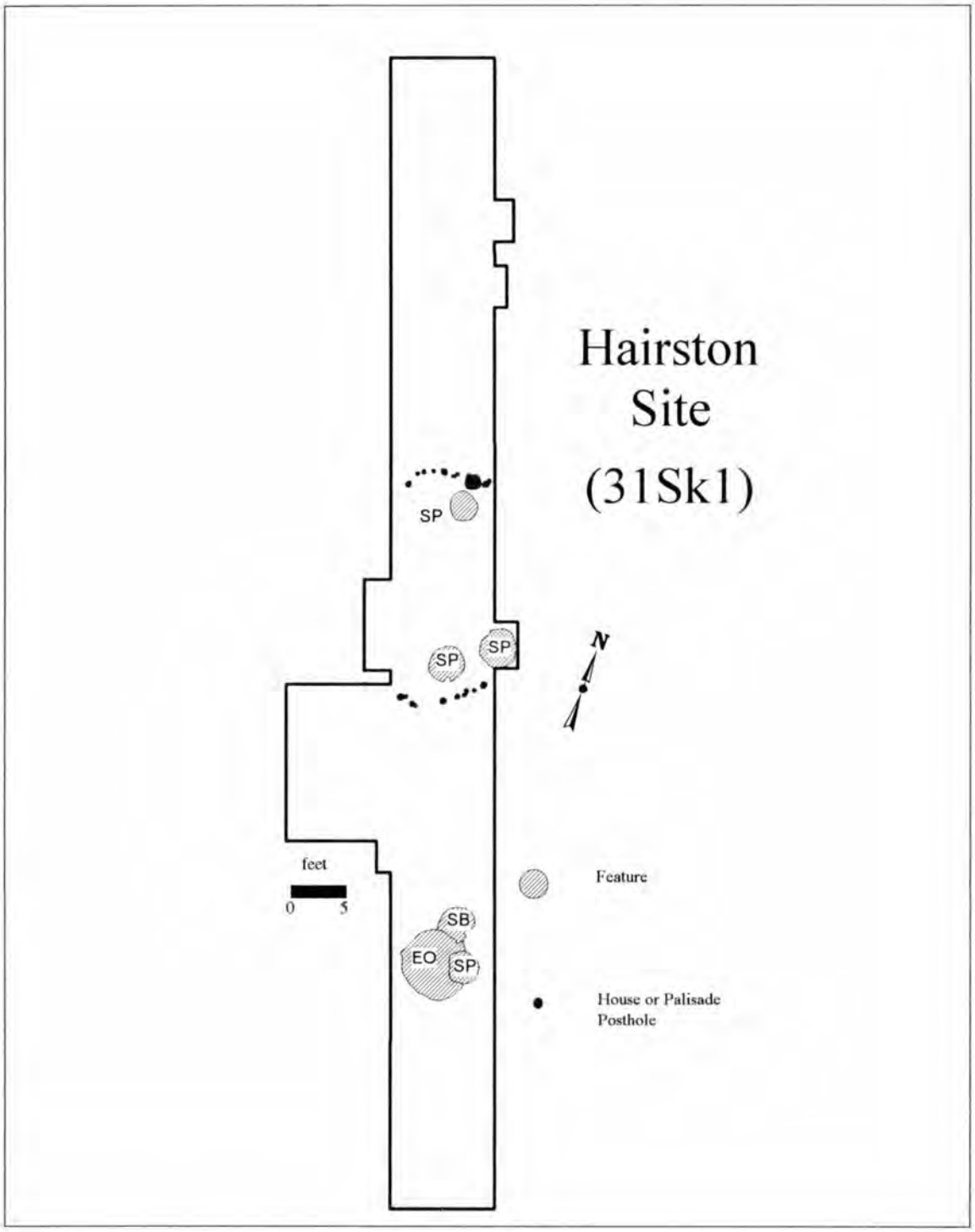

Figure 61. Plan of the Hairston site showing Early Contact period features and Structure 1.

Hairston, the cluster of Early Contact period features south of Structure 1 may be located in the communal work area of that village.

If this interpretation of the Early Contact period component at Hairston is correct, then the structure of that village represented in the excavation trench can be interpreted. The northern end of the excavation trench would be located in the plaza area of the village. The house and storage pits would be in the domestic zone of the village. Domestic zones, comprised of houses and associated domestic pit features and burials, usually surround central plazas. The cluster of Early Contact period features in the southern end of the excavation trench would be in the communal work area of the village. Palisades usually surround communal work areas. If this scheme is correct, a palisade should be located south of the feature cluster.

Comparison of Village Structure

Very little is known about the internal organization of Uwharrie phase settlements. The Uwharrie phase component at Upper Saratown consists of small clusters of relatively shallow, cylindrical storage pits. In addition to Uwharrie phase storage pits, a couple of small basins and a few burials were identified at the site. The distribution of these pits matches an arc of small circular houses that dates to either the Uwharrie or Dan River phase.

Early Dan River phase sites appear to represent internally dispersed settlements that consist of scattered houses. Later in the Dan River phase, some nucleated village sites with palisades or ditch enclosures have been identified (Davis et al. 1997b, Ward and Davis 1993).

Both internally dispersed settlements and nucleated village sites were occupied during the Dan River phase (Egloff et al. 1994).

As might be expected, dispersed Dan River settlements do not have well defined internal structures. Powerplant (31Rk5), located in Rockingham County, North Carolina, and Leggett (44Ha23), located in Halifax County, Virginia, are two examples of this type of settlement in the Dan River drainage. Powerplant dates to the early part of the Dan River phase (Ward and Davis 1993) and Leggett probably dates to the latter part of the Dan River phase (Egloff et al. 1994). Both of these settlements appear to represent linear patterns of households distributed along the Dan River. No clear house patterns were identified at either site, and both consist of concentrations of pit features and a few human burials along levees adjacent to the river. Cylindrical and bell-shaped storage pits, shallow basins, and possible earth ovens are present at these internally dispersed Dan River phase sites.

Belmont (44Hr3) and Dallas Hylton (44Hr20), located in Henry County, Virginia, are good examples of nucleated Dan River villages that have been extensively excavated (Davis et al. 1997b, 1998). These settlements were laid out in a circular or oval configuration. The Belmont site is almost 300 ft in diameter and has two perimeter ditches encircling the village. Only a few features and burials were found outside these ditches. Several rock hearths and burials are situated in and around these ditches. The excavations at Dallas Hylton focused on salvaging intact pit features and, consequently, no postholes were recorded. The features are arranged in an oval pattern, roughly 200 ft long (paralleling the river) by 150 ft across the terrace. A palisade probably encircled this settlement.

The types of features found at Dan River villages are more diverse than what is usually identified at Uwharrie phase sites. Domestic areas of villages consist of clusters of

cylindrical and bell-shaped storage pits, refuse pits, earth ovens, and shallow basins. These pits form a circular or oval band. At Belmont, most of these are found within 75 ft of the perimeter ditches (Davis et al. 1997b). Rock hearths were also present in and around the perimeter ditches at Dallas Hylton. The band of domestic features at Dallas Hylton is about 50 ft wide. In contrast to the contact-period sites, the basins at Dallas Hylton that appear to have functioned as earth ovens or barbeque pits are located in the domestic area of the site. One is even located near the center of the plaza. Though no clear house patterns are present at Belmont, incomplete circular alignments of postholes indicate that houses were probably about 20 ft in diameter. Few features were present in the center of either village and this area is thought to represent an open, public plaza (Davis et al. 1997b:13-15, 1998:9).

The distribution of Dan River pit features and burials at Upper Saratown is most similar to that found at internally dispersed settlements like Powerplant and Leggett.

Within the study area, protohistoric components have been identified at Hairston and Nifong. Due to the limited nature of the excavations at Hairston and the fact that it is a multi-component site, very little can be said about any of the components there. Nifong offers a view, though a limited one, of a protohistoric house site. Only a portion of a single house and a series of associated pit features are represented in the excavation blocks at the site. Nifong is unique among sites in the Upper Saratown Archaeological District, in that only a single component is represented in the main excavated portion of the site. All pit features situated in and around the circular house date to the Protohistoric period. The estimated size of the house is about 30 ft in diameter. This house is half-again as large as any of the prehistoric houses identified in the Dan drainage. Within the house and adjacent to it are shallow basins and storage pits. No palisade was identified in the excavated area at the site.

The house at Nifong may be part of a larger village complex or it may represent an isolated household situated near the nucleated village site represented by Hairston (Eastman et al. 1997). Pottery assemblages from the two sites are very similar, and I think it likely that Nifong and Hairston were contemporaneous. These two sites may represent different settlement types within a settlement system of nucleated villages and outlying houses.

The structure of the settlements revealed at Hairston and Nifong is limited by the extent of the excavations and by the fact that Hairston is a multi-component site. However, taking these factors into consideration, the density of pit features in and around the house at Nifong is probably at least as dense as that found at the protohistoric occupation at Hairston. The houses at Hairston are only about 70% as large as the house at Nifong. It is unclear whether either of the houses at Hairston dates to the protohistoric occupation there, and I argued above that one is probably associated with the Early Contact period occupation. Additional fieldwork must be done at each site to provide a basis for more thorough examination and comparison of site structure within what may be a complex settlement system.

Information is available about the structure of two Early Contact period villages in the study area. Early Contact period village components have been identified at Hairston and Lower Saratown. While, the excavation area at both sites is limited, both present similar site structures. Houses associated with each occupation are relatively small: the round or oval structures at both sites are about 20 ft in diameter and the subrectangular house at Lower Saratown is 25 ft by 17.5 ft. Storage pits are located in the floors of these structures. Shallow basins are also located within the structures at Lower Saratown.

The village structure at Lower Saratown consists of a palisade located within about 10 ft of the houses. Large earth ovens are positioned between the houses and the palisade. Smaller earth ovens are situated on the opposite side of the houses. The overall configuration of the Early Contact period village at Lower Saratown is not known, but given the location of the palisade line and the distribution of artifacts on the ground surface, the village was probably oval and about 200 ft long by 150 ft wide. The portion of the site revealed in the excavation blocks is consistent with a domestic zone of houses and associated storage pits, shallow basins, and small earth ovens. Between this area and the palisade is a narrow communal work zone with large earth ovens. Neither the area immediately outside the palisade nor the interior of the village are within the limits of the excavation.

The Early Contact period component at Hairston displays a similar, though more spacious structure. Storage pits are located within the floor of a circular house. A cluster of features including a storage pit, a shallow basin, and a large earth oven are located within 20 ft of the house. This feature cluster may represent a communal work area. No palisade was identified within the limits of the excavation, which extends an additional 15 ft beyond the feature cluster. These sites provide the earliest tentative evidence of specialized communal cooking areas. This development appears to coincide with an intensification of ritual feasting. Earth ovens are larger and more numerous on sites occupied during the contact-period than on earlier sites.

Two sites that may have been occupied during the Middle Contact period have been identified in the drainage. The Middle Contact period village component at Upper Saratown provides a clear idea of site structure, while the structure of the Early or Middle Contact period component at Madison is unknown due to the recovery techniques employed at the

site. The structure of the Middle Contact component at Upper Saratown is similar to that of the two Early Contact period components described above, except that there is more clear segregation of activity areas at this site. The area within the palisade can be divided into three concentric zones on the basis of pits and above-ground structures. A few human burials are located in the plaza, but no structures are present there. The domestic area has large circular houses with numerous burials and some domestic features are situated inside and around them. The number of burials associated with these houses greatly exceeds that at any earlier site in the drainage. The communal work area, situated between the domestic area and the palisade, contains three-sided sheds or utility structures, large earth ovens, large storage pits, and a few small basins. This part of the village appears to have developed into a specialized work area primarily focused on communal storage and the preparation of communal meals or feasts. The area outside the palisade is characterized by smaller storage pits, a small earth oven, and several small basins and refuse pits.

A similar pattern of site use is presented by a contemporary village in the Eno drainage. The Jenrette site (31Or231a), located on the Eno River in Orange County, North Carolina, was probably contemporaneous with the Middle Contact period occupation at Upper Saratown. This nucleated village site has been extensively excavated by RLA archaeologists and students (Ward and Davis 1993). Large earth ovens, similar to the ones from contact-period sites in the Dan drainage, are situated just outside the palisade or between the houses and the palisade. Most of these features cluster in groups of two or three very much like they do in the Dan drainage. The primary difference between these features and the ones at the Saratown sites is that storage pits are not found clustered with the earth

ovens at Jenrette. These village components provide evidence of increased community-based feasting.

Three Late Contact period components have been identified in the Dan drainage. These are found at Madison, Upper Saratown, and William Kluttz. Upper Saratown is the only one of these sites with a clearly defined village structure. Several characteristics distinguish the domestic area in the Late Contact period component at Upper Saratown from that in the Middle Contact period component at the site. First, the later houses are 20% smaller than those in the earlier village component. Secondly, these later houses have an average of 2.5 domestic features dug into the floors, while the two clear Middle Contact period houses have only one sub-floor pit feature between them. In addition, most Late Contact period house patterns occur in groups of three overlapping structures and the palisade may also have been rebuilt several times. The location of some human burials in Late Contact component differs from the pattern evident in the Middle Contact period component. In the Middle Contact period village, most burials were situated in the domestic area of the community and many were placed in the floors of houses. The Late Contact component appears to have a cemetery and comparatively few burials were placed inside houses.

It appears that the work performed outside the palisade in the Middle Contact period component was relocated inside the palisade during the Late Contact period. No Late Contact period features have been identified outside the palisades. Thus, the communal work area of the Late Contact period component has the kinds of features found in both the communal and outer work areas at the earlier component. The later communal work area also lacks any utility structures.

Though the structure of the domestic area of William Kluttz is not known, excavations at the site revealed a large cemetery area that contained as many as 31 burials. Ten of these were very shallow burials that have been largely disturbed by plowing. This cemetery appears to be spatially segregated from the habitation area of the site.

Discussion of Intrasite Patterning

These changes in settlement systems and site structure may be linked causally to several cultural and historical developments. Ward and Davis (1991, 1993) have proposed a number of factors that may have precipitated the appearance of palisades in the Piedmont. The construction of some nucleated villages during the late Dan River phase is thought to reflect increased population density associated with agricultural intensification. Concomitantly, increased population and increased labor-investment in agricultural lands may have led to increased intertribal hostility. In addition, long-distance raiding, especially by northern Iroquoian groups, may have begun as early as the Late Prehistoric period. Raiding parties from the Northeast were a common irritant to the Sara during the Contact period. Frequent raids may have precipitated the movement of most domestic activity to the area enclosed by the palisade during the Late Contact period occupation at Upper Saratown.

Participation in the Virginia-based fur trade may have effected community organization in several ways. First, direct trading relations with colonial fur traders and, especially trade within Sara communities, may have required the accommodation of Virginia colonists at villages, perhaps for prolonged periods. At some seventeenth- and eighteenth-century native villages in the Southeast, a Euro-American presence is evidenced by

blockhouses or storerooms for trade goods in native villages. Neither of these types of structures are evident in the Dan drainage, but given the limited nature of the excavations at Middle and Late Contact period sites, the possibility of their presence can not be ruled out. Also, during the fur trade era, it was not uncommon for Euro-American traders to become incorporated into Native communities through marriage with Indian women. Any prolonged Euro-American presence in a Native community may have resulted in recognizable differences in structures, pit features, or in the distribution of European trade goods or utilitarian objects within villages. There are no obvious examples of this phenomenon in the Dan drainage, and it is possible that this type of sustained Euro-American presence was never maintained at Sara villages.

In her survey of the social responses to epidemic disease in The Human Relations Area File, McGrath (1991:409) found that the most common responses to epidemic disease are: (1) flight or migration from the location; (2) extraordinary preventative or therapeutic measures; (3) scapegoating; (4) resignation or acceptance; (5) ostracism of the ill or potentially ill; and (5) intra-group conflict. These are listed in order of frequency from most to least common responses.

Flight may take the form of population movements or abandonment of houses or entire communities. Rapid flight from disease areas and relocation and coalescence of formerly separate communities into refuge communities, are ethnographically and historically documented responses to epidemic disease in the Southeast (Dobyns 1983; Lefler 1967). It is possible to interpret the abandonment of several villages in the Dan River drainage within the context of flight from loci of epidemic disease.

Perhaps the earliest example of flight from a disease event is found in the Middle Contact component at Upper Saratown. Recall that the two distinct house patterns at the site have numerous burials in their floors and one that appears to be located in an entrance to Structure 3 (see Figure 54). Twelve Middle Contact period burials are located within the floor of this one house. Another four burials are located adjacent to this house. The individuals buried within the house floors include three children, four adolescents, and five young adults. If one uses Naroll's (1962) population estimate of one person per 10 m^2 of house floor area, approximately seven people would have occupied this house at one time. There are more than twice as many burials as the estimated number of individuals who may have occupied this house at one time. The high number of burials and the presence of a multiple burial are suggestive of rapid population loss. This archaeological evidence is consistent with a household in which all or most of its members died. The high number of adolescents (6-15 years) buried in this house floor, and in the Middle Contact period component in general, is consistent with a population under extraordinary stress (see the following chapter). In populations that are not stressed there is a decline in mortality following childhood and before high-risk activities of childbearing, warfare, and the like during young adulthood (Droessler 1981; Weiss 1973). The members of this household may possibly have fallen victim to a contagious disease.

Because none of the houses in this component were repaired or rebuilt, it can be assumed that the Middle Contact period occupation of the site was short lived. This settlement may have been abandoned after the initial onset of epidemic disease in the drainage. McGrath (1991:410-411) found that acute epidemics with extremely high rates of

morbidity and mortality cause more alarm than less explosive outbreaks. This effect is compounded if the disease is an unfamiliar one.

Further evidence of abandonment of houses is provided by the Late Contact period occupation at Upper Saratown. The houses and palisade in this component were rebuilt a number of times. This pattern provides an interesting challenge for interpretation. Given that this village component was probably occupied for only 10 or 20 years, it is unlikely that in addition to replacing individual rotted posts, houses would have required rebuilding twice because of decay or natural attrition. Rebuilding a house on approximately the same location often occurs when a structure burns and neighboring houses are left intact. However, no evidence was recovered during fieldwork to suggest that any of the earlier houses had burned. I think that the reason for replacing these structures may reside in ritual action, rather than the structural soundness of the buildings themselves. I think it is possible that during the Late Contact period, houses and possibly palisades were being purposely demolished and rebuilt.

This removal and rebuilding of houses may also be understood within the context or extraordinary preventative or therapeutic measures in response to epidemic disease. Within this class of responses, McGrath includes individual treatments or medications, prayers, sacrifices, and ceremonies that focus on group-level activities. McGrath (1991:410-411) explains that ceremonial responses to epidemic disease "may center on activities that disinfect items or villages or that destroy items that are considered to be contaminated."

Destroying and rebuilding communal structures was a common feature of renewal activities associated with Green Corn ceremonies in many native cultures of the Southeast from the Mississippian period into the Historic era. Ward and I (Eastman 1996; Ward 1993;

Ward and Davis 1993) have argued elsewhere that communal ritual activity focused on renewal may have become intensified in the North Carolina Piedmont during the Contact period. I think it is likely that the pattern of house and palisade rebuilding during the Late Contact period may best be understood within the context of this type of ritual activity, especially in the wake of infectious disease events.

The development of spatially-segregated cemetery areas at Late Contact period village sites may also be correlated with epidemic disease. Cemetery areas are documented for a few late seventeenth or early eighteenth century villages in the North Carolina Piedmont. The Fredricks site has a series of small cemeteries situated outside the palisaded village area. These cemeteries may represent ethnic or lineage divisions within the Occaneechi community (Ward et al. 1996).

In the study area, cemeteries have been identified at two sites. The Late Contact period component at Upper Saratown may have a cemetery within the domestic space of the village. This cemetery consists of 17 burials. The cemetery at William Kluttz includes 10 shallow burials of subadults and children. In addition to these shallow burials, 11 probable burials in this cemetery were recorded but not excavated. These unexcavated pits may represent burials placed in deeper pits. Additional pits that may represent burials were identified in auger testing outside the excavation block. The cemetery area at William Kluttz is spatially segregated from the habitation area. Both the Fredricks site and the William Kluttz site are thought to represent communities affected by epidemic disease and occupied sometime after A.D. 1680.

Though it is not possible to reconstruct past motives with any degree of certainty, the establishment of cemeteries outside houses and, eventually, outside the domestic area of

villages, may reflect a desire to separate living households from deceased family members or from disease victims. This change from burial within house floors to burials in segregated cemeteries could be viewed as response based on the fear of contagion or as a means of emotional separation between the living and the dead in an era of rapid population loss.

Chapter V.

MORTUARY PRACTICES OF THE SARA, DAN RIVER PEOPLES, AND THEIR NEIGHBORS

Analyses of mortuary practices and skeletal remains are important sources of information archaeologists use to interpret past social structure (Beck 1995; Binford 1971; Braun 1979; Brown 1971; Carr 1995; Chapman and Randsborg 1981; Goldstein 1979; Hatch 1975, 1976; Hatch and Willey 1974; O'Shea 1984; Peebles and Kus 1977; Saxe 1970; Tainter 1977, 1978). Differences that are emphasized in mortuary ritual do not necessarily directly reflect lived social divisions, but instead may be an idealized expression of lived relationships (Hodder 1982; McGuire 1988; Pearson 1982). Mortuary ritual, as ideology, may mask, mark, or naturalize lived social differences. To interpret the ideological aspects of mortuary ritual, a mortuary program must be analyzed within the larger context of community life. The archaeological remains of houses, overall community plans, and regional settlement systems provide other lines of evidence for social structure that may be compared with mortuary data. Comparison between the levels of inequality presented by these independent lines of evidence help determine whether mortuary ritual reflects or misrepresents lived relationships.

In the present case, there is no evidence for a distinct hierarchy of late prehistoric or contact-period settlement types in the region. There is no evidence of distinct socioeconomic

divisions in the internal organization of communities. Nor were there any major differences between the construction or size of individual houses within any of the village components at Upper Saratown. In the absence of marked social inequality or a stable privileged subgroup in the community, it is less likely that mortuary ritual would have been employed as a masking or naturalizing ideology. In egalitarian societies, like Siouan communities in the North Carolina and Virginia Piedmont, lived differences are more likely to have been accurately represented in the mortuary program.

This does not deny the existence of inequality in Sara communities in the study area, but rather indicates that overt hierarchical differences between segments of the community may have been absent. Daily interactions throughout the study area were likely governed by heterarchical or complementary relations rather than hierarchical ones. This is not to say that all community members had equal control over their own time and activities, or that each individual, at all points in his/her life, had equal access to opportunities for enhancing their social positions or that of their kinship group. Inequalities probably existed between age groups or solidarities, gender groups, households, or larger kinship groups like lineages.

This analysis focuses on identifying gender- and age-based differences in the distribution of mortuary items in burials associated with village sites occupied from the Late Prehistoric through the Contact period. The goal is to document changes in the way gender and age were employed as organizing principles in mortuary behavior and, thereby, document changes in the way these principles organized social interactions from the Late Prehistoric through the Contact period. Over the last few decades, many studies have documented changes in gender roles and relations following culture contact and as a result of the North American fur trade (Albers 1987; Gonzalez 1982; Hatley 1989; Klein 1983; Leacock 1978;

Levy and Claassen 1992; Mason 1963; Williams and Bendremer 1997), and isolating changes in gender roles and relations is one of the primary goals of the present analysis. Anticipated sources of change in gender roles and relations in the study area during the seventeenth century include: (1) epidemic disease and rapid population decline; (2) increased intertribal hostilities and raiding (as documented historically); and (3) potential disruption caused by participation in the Virginia-based fur trade and incorporation of European-made items into ritual and daily activities.

This analysis begins with an examination of mortuary practices in the Dan and Roanoke valleys during the Late Prehistoric and Protohistoric periods. Mortuary data from seven late prehistoric and protohistoric village sites form the basis for this study and I have attempted to characterize the nature of gender differences in these tribal communities (see Figure 1).[3] Gender differences are explored by comparing the distribution of grave goods associated with children, adolescents, and adult males and females of different ages. The distribution of mortuary items in these burials is then compared to that of the seventeenth-century Upper Saratown components to identify changes in mortuary practices during the Contact period.

The Relationship between Gender and Biological Sex and Age

The use of the terms gender role and gender identity in this study is consistent with Spector and Whelan's (1989:69) definitions. *Gender role* refers to "what men and women actually do," including their activity patterns, social relations, and behaviors. *Gender identity*

[3] Late prehistoric and protohistoric sites in this study include: Hairston (31Sk1), Sharp (31Rk12), Upper Saratown (31Sk1a), Leatherwood Creek (44Hr1), Philpott (44Hr4), Stockton (44Hr35), and Shannon (44My8).

concerns an individual's own sense of their gender. *Gender representation* includes the material clues that are used to mark gender identities. *Lifecycle* refers to culturally-recognized stages in the process of physiological growth, development, and aging with special reference to changes in productive and reproductive capacity.

Gender as a cultural process has the potential to change throughout one's life course and gender as a social status may take on different levels of significance during different stages of life. It is these aspects of gender that are explored below.

Many ethnographic, ethnohistoric, and archaeological studies indicate that gender roles and identities change during an individual's lifecycle (Brown 1985; Brumbach and Jarvenpa 1997; Crown and Fish 1996; Derenvinski 1997; Ginn and Arber 1995; Hudson 1976; Joyce and Claassen 1997; Lesick 1997; Rubinstein 1990). From this perspective, gender is viewed as a process that unfolds throughout one's lifetime, and gender roles, relations, and identities may be subject to reinterpretation and change as one progresses through different stages of physiological development and through different social age classes. These studies also reveal that these gender changes are often experienced differently by men and women.

Derevenski (1997:876) noted that stages within the lifecycle may be demarcated as bodies grow and age, and as reproductive capacity changes. Changes in gender roles throughout the lifecycle may be represented by changes in dress, in expectations about appropriate behavior, and in the division of labor. Lifecycle changes that involve relinquishing one role and assuming another are often marked by social ceremonies (rites of passage) (Hudson 1976; Silverman 1975). This type of cultural demarcation provides the opportunity for archaeologists to reconstruct patterns of gender difference in the past.

These studies also reveal that these types of gender changes are often experienced differently by men and women. The present study indicates that this may well have been the case in late prehistoric Siouan communities of the western Piedmont and, based on the present study, I suggest that older women experienced more profound changes in their gender roles and identities than did aging males.

To study gender differences during the lifecycle of individuals using archaeological evidence from my study area, I have subdivided the burial populations into groups that best represent what may have been potentially important gender groups within the living communities. These divisions are based on differences in sex and age at death. The burial populations from the study area have been divided into five age groups, and adults have been further divided into males and females. Age and sex estimates for the skeltal population from the Shannon site (44My8) were made by Homes Hogue (1988), and skeletal remains from the other six sites included in this study were identified by Patricia Lambert (Davis et al. 1996). Using Hogue's and Lambert's identifications, subadults have been classified as children (0-5 years) and adolescents (6-15 years). Adults have been classified as either males or females and further divided by age at death into young (16-25 years), mature (26-34 years), or older (35 and over) adult categories.

These eight subdivisions are thought to represent potentially important gender divisions in the communities. Children up to five years comprise the youngest age group, and it is anticipated that during these first years of development mothers in the study area were primarily responsible for the care of both boy and girl children (Hudson 1976:323). Childhood is often considered to be a time when gender differences are absent or ambiguous (Lesick

1997; Schildkrout 1978) and gender may not have played a profound role in determining the activities and experiences of very young children in Siouan communities.

As children developed and began to learn subsistence skills, gender differences likely took on greater significance. Young girls would have probably remained with their mothers to be trained by her and her female kin, while young boys most likely left their natal household and were taught important life skills by their mother's brothers. The *adolescent* age group (6 to 15 years) represents the age class when gender roles and subsistence skills were instilled and when young people likely began to make economic contributions to their households (Cain 1977:212; Claassen 1992:5; Derevenski 1997:887). Most individuals at the older end of this age group (15 years of age) would have reached sexual maturity and been able to take on adult roles and responsibilities.

Adulthood (16 years and over) has been subdivided into three age groups: young, mature, and old. These subdivisions are intended to represent both potential differences in the productive and reproductive capacities of adults and different stages in the growth and development of households and families. The young adult class (16-25 years) incorporates the early childbearing years for women and those in which their child-rearing responsibilities may have been greatest because they would not have been able to enlist the help of older children. Early adulthood for males in native tribal societies probably would have been marked by efforts to achieve social recognition for individual skills in hunting or warfare, or diplomacy. Mature adults (between ages 26 and 35 years) were likely to be at the height of their productive and reproductive lives and, by this time, their older children would be contributing significantly to the household economy. The older adult category (over 36 years) incorporates the period within the lifecycle when reproductive and productive capacities decline and some

capacities may cease altogether. During the later stage of life new avenues for exerting influence would have to be pursued as physical capacities declined. Advanced age itself may have brought older adults respect, veneration, and decision-making power within Siouan communities (Lefler 1967:43). Lesick (1997) indicates that gender differences may assume less importance in structuring the lives and activities of older adults and gender differences may become especially ambiguous for women after they have reached menopause.

Categorizing individuals by sex and age at death, I will explore mortuary patterns for evidence of changing gender roles, relations, and representation throughout the lifecycle of men and women in Siouan communities of the western piedmont in North Carolina and Virginia.

Mortuary Practices during the Late Prehistoric and Protohistoric Periods

Archaeological research on fifteenth- and sixteenth-century village sites in the study area has recovered evidence of mortuary behavior prior to any sustained contact or trade with European colonists and exposure to Old World epidemic disease. Unfortunately, there is no single site from this period in the study area with a large excavated burial population, so information from six sites in the Dan drainage and one large site along the upper Roanoke River was compiled to create a large sample of prehistoric burials. The combined sample includes 54 burials from sites in the Dan drainage and 96 burials from the site along the Roanoke. All subadult burials with an estimate for age at death and all adults for which age at death and sex could be estimated were selected for study. Roughly half of these pre-contact burials (N=73) have associated artifacts and the distribution of those mortuary items is of primary concern in this analysis (see Table 32). When the number of burials with grave goods

Table 32. Distribution of Mortuary Items in Burials from Late Prehistoric and Protohistoric Archaeological Sites in the Dan and Roanoke Drainages.

Class	Site*	Burial	Associated Artifacts
Child [burials without associated artifacts (N=16), total number of burials (N=40)]			
	44Hr1	Bu. 5	27 columella beads, 4 drilled elk incisor beads
	44Hr4	Bu. 5	58 marginella beads
	44Hr4	Bu. 8	1 conical shell gorget, 2 perforated shell disks, 2 triangular shell pendants, 7 tubular collumella beads
	44Hr35	Bu. 2	527 shell disc beads
	44Hr35	Bu. 11	1 circular shell pendant
	44Hr35	Bu. 22	232 marginella beads, 1+ tubular columella bead, >11 columella beads
	31Sk1	Bu. 2	1 columella bead, 1 'rattlesnake' shell gorget, 8 copper tube beads
	31Sk1	Bu. 5	5 columella beads
	31Sk1	Bu. 6	1 ceramic vessel, 1 copper bar gorget, 1 'rattlesnake' shell gorget, 1478 shell disc beads, 477 marginella beads, 5 columella beads, 1 serrated mussel shell, 2 pearl beads, 411 turkey wingtip beads, 47 rabbit innominate beads, 3 squirrel mandible beads, 1 turkey tarsometatarsus awl
	44My8	Bu. 6	6 columella beads, 4 bone beads
	44My8	Bu. 12	959 marginella beads
	44My8	Bu. 17	90 marginella beads
	44My8	Bu. 26	15 columella beads, 1 bone bead
	44My8	Bu. 48	2 tubular columella beads, 1 marine shell pendant
	44My8	Bu. 51	61 marginella beads, 2 columella beads
	44My8	Bu. 59	4 shell pendants, 26 columella beads, 423 marginella beads
	44My8	Bu. 86	1 shell pendant, 27 turkey wingtip beads, 255 marginella beads
	44My8	Bu. 74	384 marginella beads
	44My8	Bu. 94	103 marginella beads
	44My8	Bu. 73	12 columella beads
	44My8	Bu. 37	2 columella beads, 4 bear canine beads
	44My8	Bu. 99	1669 disc beads, 3 bear canines
	44My8	Bu. 72	2 mountain lion claws
	44My8	Bu. 77	2 projectile points
Adolescent: [burials without associated artifacts (N=3), total number of burials (N=12)]			
	44Hr1	Bu. 1	11 olive beads
	31Sk1	Bu. 4	12 columella beads, 779 shell disc beads
	44My8	Bu. 5	1 shell gorget
	44My8	Bu. 34	26 olive beads, 7 mountain lion claws, 6 projectile points
	44My8	Bu. 52	555 marginella beads, 68 columella beads, 4 wolf canines, 2 quartz crystals
	44My8	Bu. 41	1 bone bead
	44My8	Bu. 43	1 ceramic vessel
	44My8	Bu. 95	2 projectile point, 4 columella beads
	44My8	Bu. 98	1 hammerstone

Table 32. Continued

Class	Site	Burial	Associated Artifacts
Young Adult Females: [burials without associated objects (N=16), total number of burials (N=26)]			
	44Hr1	Bu. 3	3 ceramic vessels, 1 miniature vessel, 6 plain shell gorgets, 4 tubular columella beads, 33 drilled columella beads, 1948 marginella beads
	44Hr1	Bu. 9	6 drilled columella beads
	44Hr35	Bu. 6	342 marginella beads
	31Rk 12	Bu. 3	3 ceramic vessels, 1 shell gorget blank, 900+ columella beads, 118 shell disk beads, 400+ turkey wingtip beads, 231 ground bone beads, 75 bird longbone beads, 39 rabbit innominate beads
	31Sk1	Bu. 3	1 'rattlesnake' shell gorget, 2 columella earpins, 1100+ columella beads, 72 shell disk beads, 4 columella tubular beads, 1 marginella bead, 1 turkey tarsometatarsus awl, 2 bone splinter awls, 50 pebbles (part of a turtle shell rattle), 3 quartz flakes, 2 mussel shells, 11 bird longbone beads, 100+ turkey wingtip beads
	44My8	Bu. 11	300 marginella beads, 39 disc beads, 20 columella beads
	44My8	Bu. 20	330 marginella beads, 2 columella beads
	44My8	Bu. 75	2 columella beads, 1 bone hairpin
	44My8	Bu. 22	1 turtle carapace cup
	44My8	Bu. 29	1 bone bead
Mature Adult Females: [burials without associated objects (N=3), total number of burials (N=6)]			
	31Sk1a	Bu. 79	chipped stone end scraper
	44My8	Bu. 16	245 marginella beads
	44My8	Bu. 68	1296 marginella beads, 48 disc beads, 18 columella beads, 37 turkey wingtip beads
Old Adult Females: [burials without associated artifacts (N=10), total number of burials (N=18)]			
	44Hr35	Bu. 12	1 turkey tarsometatarsus awl
	31Rk 12	Bu. 1	1 chipped stone hoe
	44Hr35	Bu. 3	2 columella earpins, 106 columella beads, 2 columella tubular beads, 551 marginella beads
	44My8	Bu. 1	7400 marginella beads, 52 columella beads
	44My8	Bu. 8	126 disc beads, 15 columella beads
	44My8	Bu. 63	7 columella beads
	44My8	Bu. 46	1 celt
	44My8	Bu. 60	1 celt, 9 bone beads

Table 32. Continued

Class	Site	Burial	Associated Artifacts
Young Adult Males: [burials without associated artifacts (N=4), total number of burials (N=5)]			
	44My8	Bu. 15	30 marginella beads, 42 tubular columella beads
Mature Adult Males: [burials without associated artifacts (N=2), total number of burials (N=3)]			
	44My8	Bu. 58	193 columella beads, 1 projectile point
Old Adult Males: [burials without associated objects (N=16), total number of burials (N=33)]			
	44Hr4	Bu. 16	1 clay pipe
	44Hr35	Bu. 1	2 deer ulna awls, bone tool, fish hook blanks
	44Hr35	Bu. 8	1 clay pipe, 3 deer ulna awls
	44Hr35	Bu. 13	1 fish hook, 3 bone splinter awls
	44Hr35	Bu. 15	1 clay pipe
	31Sk1a	Bu. 110	ochre
	44My8	Bu. 61	2 fish hooks
	44My8	Bu. 82	1 clay pipe, 1 turkey tarsometatarsus awl
	44My8	Bu. 18	1 turtle shell cups, 1 turkey tarsometatarsus awl
	44My8	Bu. 45	2 bone chisels, 3 turkey tarsometatarsus awls, 1 polished stone celt, 7 projectile points, 2 chipped stone drills, 1 stone abrader, 2 bone flakers, 3 beaver incisors, 5 columella beads, 2 copper fragments
	44My8	Bu. 4	2 turtle carapace cups, 2 elk tooth, 1 eagle talon, 1 amethyst crystal, 1 end scraper, 2 bone awls, 1 bone tube made from a human humerus, 1 turkey longbone bead
	44My8	Bu. 25	5 bear canine beads
	44My8	Bu. 56	2 bear canine beads, bear mandible
	44My8	Bu. 65	5 mountain lion claws
	44My8	Bu. 92	1 chipped stone knife
	44My8	Bu. 10	56 marginella beads
	44My8	Bu. 97	46 columella beads

*sites included in this analysis are Upper Saratown (31Sk1a), Hairston (31Sk1), Sharp (31Rk12), Leatherwood Creek (44Hr1), Philpott (44Hr4), Stockton (44Hr35), and Shannon (44My8)

Table 33. Distribution of Graves with Mortuary Items in Late Prehistoric Burials.

Gender Class	Present	Absent	Total	Percent with Mortuary Items
Children	24	16	40	60
Adolescents	9	3	12	75
Total Subadults	**33**	**19**	**52**	**63**
Young Adult Females	10	16	26	39
Mature Adult Females	3	3	6	50
Older Adult Females	8	10	18	45
Total Females	**21**	**29**	**50**	**42**
Young Adult Males	1	4	5	20
Mature Adult Males	1	2	3	33
Older Adult Males	17	16	33	48
Total Males	**19**	**22**	**41**	**47**
Total Adults	**40**	**51**	**91**	**44**

Table 34. Distribution of Gender-Specific Mortuary Items in Late Prehistoric Burials.

Gender Class	Present	Absent	Total	Percent with Gender-Specific Mortuary Items
Children	13	11	24	55
Adolescents	6	3	9	66
Total Subadults	**19**	**14**	**33**	**58**
Young Adult Females	5	5	10	50
Mature Adult Females	1	2	3	33
Older Adult Females	1	7	8	13
Total Females	**7**	**14**	**21**	**33**
Young Adult Males	1	0	1	100
Mature Adult Males	0	1	1	0
Older Adult Males	13	4	17	76
Total Males	**14**	**5**	**19**	**74**
Total Adults	**21**	**19**	**40**	**53**
Grand Total	**40**	**33**	**73**	**56**

is compared to those without grave goods, no significant differences are present between different gender groups (see Table 33). Therefore, all gender groups were given recognition in mortuary ritual as measured by offerings of grave goods. The remainder of the analysis will focus on the distribution of mortuary items in the 73 burials with intact grave goods.

Distribution of Mortuary Items

Just over half (56%) of the late prehistoric and protohistoric burials with associated mortuary items include items that have gender-specific distributions (see Table 33). That is, more than half of the burials have artifacts that are found exclusively in burials of either females or males, but not both. Mortuary items found only with females include bone beads made from rabbit innominates and turkey phalanges, hairpins and earpins made from conch columella and bone, and gorgets, pendants, and disc beads made from the outer whorl of conch shells. In addition to these ornamental items, pottery vessels are also associated with females but not males. Mortuary items found only with males include animal teeth and claws, projectile points, crystals, clay pipes, bone fishhooks, and ochre (Table 35).

These grave goods with gender-specific distributions may have been used to represent gender differences in Siouan communities in the study area. To explore this possibility, the strength of the association between each of these items and sex of the individual was measured. Contingency tables were constructed and two measures were used to evaluate the association: the phi coefficient (Wilkinson et al. 1992) and Cole's (1949) Coefficient of Association (Cole's C^7) which is equivalent to phi/phi_{max} (Table 36). The value of each measure varies between +1 and −1, with 0 indicating no association. Using phi a perfect association is achieved only when both cells b and c or cells a and d of the contingency table have a value of 0. This goal model for perfect association is theoretically unlikely. Cole's C^7

uses a less stringent goal model for perfect association. A perfect positive association is achieved with Cole's C^7 if either cells b or c of the contingency table have a value of 0, and a perfect negative association is achieved if either cells a or d equal 0. Table 36 indicates that Cole's coefficient measures a perfect association between sex and the gender-specific artifacts, while the phi coefficient indicates that even though these artifacts were interred exclusively

Table 35. Distribution of Certain Mortuary Items at Late Prehistoric and Protohistoric Components in the Dan and Roanoke Drainages.

		Adole-	Adult Females			Adult Males		
Mortuary Item	Children	scents	Young	Mature	Old	Young	Mature	Old
Gender-specific Items:								
plain gorgets/pendants	+	+	+	-	-	-	-	-
'rattlesnake' gorgets	+	-	+	-	-	-	-	-
hairpins or earpins	-	-	+	-	+	-	-	-
disc beads	+	+	+	+	-	-	-	-
turkey phalange beads	+	-	+	+	-	-	-	-
rabbit innominate beads	+	-	+	-	-	-	-	-
ceramic pot	+	+	+	-	-	-	-	-
Gender-specific Items:								
projectile points	+	+	-	-	-	-	+	+
crystals	-	+	-	-	-	-	-	+
animal teeth/claws	+	+	-	-	-	-	-	+
clay pipe	-	-	-	-	-	-	-	+
ochre	-	-	-	-	-	-	-	+
Age-specific Items:								
large formalized tools	-	-	-	-	+	-	-	+
Non-specific Items:								
carapace cup	-	-	+	-	-	-	-	+
small flake tools	-	+	+	+	-	-	-	+
bone tool	+	-	+	-	+	-	-	+
tubular beads	+	-	+	-	+	+	-	-
columella segment beads	+	+	+	+	+	-	+	+
marginella beads	+	+	+	+	+	+	-	+

Table 36. Frequency of Pre-Contact Burials with Certain Mortuary Items by Sex.

	Male		Female		Phi	Cole's C'
Mortuary Item	Present	Absent	Present	Absent	Coefficient*	phi/phi$_{max}$
Shell Gorget	0	19	3	18	-0.271	-1
Earpin/Hairpin	0	19	3	18	-0.271	-1
Bone Beads**	0	19	3	18	-0.271	-1
Columella Beads	4	15	12	9	-0.368	-0.47
Marginella Beads	2	17	9	12	-0.362	-0.62
Clay Pipe	4	15	0	21	0.350	+1
Projectile Point	2	17	0	21	0.219	+1
Fishhook	3	16	0	21	0.299	+1
Teeth/Claws	4	15	0	21	0.350	+1
Bone Awls	7	12	2	19	0.327	0.06

* measuring strength of association between mortuary items and males
**rabbit innominate beads and turkey wingtip beads

with females or males, but not both, the association between each of these mortuary items and sex is weak.

The lack of a strong association (as measured by the Phi coefficient) between the gender-specific mortuary items and sex is due in part to the rarity of these artifacts. Only a few females and males in the sample were interred with one of these items. In other words, none of these items was used in a general way to distinguish males from females in burial practices, and none of these items appears to have marked gender in exclusion of other statuses. Only a few females or males in the sample were interred with any of these gender-specific objects and this distribution leads to the conclusion that they signify other social differences in addition to gender. Vertical social status or horizontal statuses like kinship or cohort affiliation may also have determined which men or women within the communities would have been buried with these mortuary items.

Though these items were not used in a general way to mark gender differences, their distribution among children and adolescents provides support for the interpretation that two

distinct sets of mortuary items are present. The two groups of gender-specific mortuary items are mutually exclusive even when interred with children and adolescents. When any of these items was interred with a child or adolescent, either female- or male-specific items were present, but not both. There is only one exception to this rule. An infant burial at Shannon (44My8, Bu. 99) was interred with both disc shell beads and bear canines. What can be concluded from the distribution of mortuary items at late prehistoric and protohistoric sites is that certain objects mark opposing statuses. Within the study area these opposed statuses were recognized from childhood and continued to be recognized in consistent ways in mortuary ritual into adulthood. That is, the same mortuary items were used in similar ways in mortuary rituals for children and adolescents as they were used in adult burials. Given that these items have gender-specific distributions among adults, gender appears to have been one of the statuses that was commonly marked in mortuary ritual for all age groups. Though gender may not have been as important a status for children as it is for sexually mature individuals, the mourners responsible for the burial of children appear to have recognized gender as one basis for selecting appropriate mortuary items for inclusion with children.

In order for any object to effectively signify *female* or *male* in mortuary ritual, it would have to have gender-specific associations in daily life as well. In most cases, the gender-specific mortuary items at prehistoric sites in the study area are consistent with our understanding of a division of labor based on gender in many historic native cultures of eastern North America. For example, fishhooks, projectile points, ochre, and the teeth or claws of mountain lion, bear, wolf, and elk are male-related mortuary items. These items probably relate to men's habitual activities like hunting, warfare, and fishing. Female-related mortuary items like ceramic vessels and miniature clay vessels may refer to women's pottery

making or cooking and possibly salt production (see Brown 1980). The types of bone beads interred only with females include those made from turkey and rabbit bones. This may indicate that Siouan women hunted or trapped small mammals and turkeys. The ethnographic literature provides several examples of women hunters and trappers that focus on small prey animals (Brumbach and Jarvenpa 1997; Estioko-Griffin and Griffin 1997; Nelson 1997:92-93). If women did not acquire these animals themselves, they likely would have processed and cooked them. These bone beads may have served as charms, trophies, or amulets in a fashion similar to that of the teeth and claws of large mammals found in male burials. Mortuary items made from marine shell, especially gorgets and pendants, probably related to women's roles in reproduction. Shell had, and still has, a symbolic link to the creation of life and the continuity of life among many native groups in eastern North America (see Hamell 1983). This association between shell gorgets and pendants and reproduction is further supported by the fact that they are found only with young adult females of prime child-bearing age and young children and infants (girls?).

Other items made from marine shell, especially beads made from conch columella and marginella shells, are more widely distributed among late prehistoric burials. Nearly 60% of all burials in this sample with mortuary items had columella or marginella beads. These types of beads were buried with members of all age and gender groups. In her analysis of marine shell beads in the North Carolina and Virginia Piedmont, Thomas (1996:36) found that "shell beads were used in the same way by women and men" in terms of the type of beads, their placement in burials, and the frequency of beads in burials. Shell was an important item in social negotiation among fellow community members. In many Southeastern cultures shell beads were exchanged as wealth items and used for payment of social debts like bridewealth or

reparation (Lefler 1967:204; Moore 1988:45; Thomas 1996). Its use as an important medium of exchange combined with the symbolic importance of shell probably accounts for its widespread use in mortuary ritual.

Several common mortuary items are not distributed differentially among different gender groups. These include small flake tools and bone awls. The presence of bone awls and flake tools with children and both male and female adults of all ages may indicate a lack of technological specialization in the production of these items and reflect their widespread use by most members of the community.

Gender and the Lifecycle

Age is intricately linked to gender identities and roles, and I will now consider how age and sex together influenced the structure of mortuary behavior. Older women were more likely to have stone or bone tools buried with them than were young women. These older women were also less often buried with gender-specific shell items. Of the eight older females in this sample, only two were buried with female-related shell items, while four were interred with formalized stone or bone tools. These older adult female burials with tools lacked any items made from shell. This suggests that the qualities selected for representation in mortuary ritual may have changed throughout a woman's life. During the prime child-bearing years of early adulthood, a woman's status as reproducer was commonly marked in mortuary ritual, but following menopause, work-related items more often marked a woman's status and achievements as producer. The work-related tools interred with older females do not have gender-specific distributions.

Other archaeological and ethnographic work supports this interpretation of changing gender roles of postmenopausal women. In his review of the changes in the lives of older

women, Rubinstein (1990:117) noted that aging women often experience a degree of inner freedom that accompanies the lessening of domestic responsibilities associated with raising young children. He suggests that the role of work becomes a more significant factor in the lives of older women and that in traditional societies older women may assume roles as ritual leaders. Other studies also suggest that postmenopausal women are often free to take up activities that are normally reserved for males or to assume special roles as ritual leaders or the like (Brumbach and Jarvenpa 1997; Crown and Fish 1996; Lesick 1997:35; Moore 1997). This type of life change may have been experienced by older Siouan women during the Late Prehistoric period.

This database is a poor one to use to explore status changes during the life of men, because of the small number of males in the sample younger than 35 years at death. Eighty percent of adult males in this sample were over 35 years at death (see Table 37). Stockton and Shannon have the largest number of identifiable male skeletons and both are characterized by males over 35 years at death. This distribution could indicate several things: (1) a low mortality rate for males between the ages of 16 and 35; (2) mortuary treatment other than burial within the village for young adult males (perhaps because they were often away from the village on extended hunting trips or raids); (3) an analytical bias toward identification of older males in the analysis of the skeletal material; (4) a sampling bias based on incomplete excavation of the archaeological sites; or (5) low fertility in the population which would result in fewer younger individuals in a cemetery population (Larson, personal communication 1999). Of the seven sites included in this study, Shannon was the only site where skeletons of males under 35 years at death were identified. However, even at this site, only eight of 29 males were less than 35 years at death. Given that all males at Stockton are over 35 years at

Table 37. Frequency of Males in Late Prehistoric Sample by Age Group.

Site	Males < 35 years at death	Males > 35 years at death	Total
Leatherwood Creek (44Hr1)	0	1	1
Philpott (44Hr4)	0	2	2
Stockton (44Hr35)	0	7	7
Upper Saratown (31Sk1a)	0	1	1
Hairston (31Sk1)	0	1	1
Shannon (44My8)	8	21	29
Total	8	33	41
Percent	19.5	80.5	

death, some weak support is provided for an explanation based on either low mortality of young males or differential mortuary treatment for younger males.

Despite the small number of adult males in the sample that were less than 35 years at death, one observation about the distribution of mortuary items can be made. Both of the younger males in the sample with associated mortuary items were interred with marine shell beads, while only three of the 17 older adult males were buried with marine shell beads. This distribution mirrors that of shell bead use with females in this sample and indicates that older males are less likely to be buried with shell beads than younger males. Younger males, like younger females, may have been more concerned with reproduction and/or longevity than those over 35 years.

In contrast to the pattern observed for females in this sample for a decline with age in the use of gender-specific items in mortuary ritual, three-quarters of older males have gender-specific mortuary items (Table 38). This may indicate that the basis for men to achieve status throughout their lifetime was more consistent than that of women. What I suggest is that as males aged, their identification with activities habitually performed by men may not have

Table 38. Gender-Specific Mortuary Items in Adult Burials.

	Present		Absent		
Age and Sex Group	Count	Percent	Count	Percent	Total
Females (<35 years)	6	46	7	54	13
Females (>35 years)	2	25	6	75	8
Males (<35 years)	1	50	1	50	2
Males (>35 years)	13	76.5	4	23.5	17

diminished, while the opposite may have been true for women. The avenues for men to achieve status may not have changed throughout their lifetime as drastically as those of women whose prominent role as a reproducer ended with menopause. For example, the presence of fishhooks and fishhook blanks in several burials of older males indicates that fishing may have been an important productive activity that males undertook as their skills in hunting and warfare declined. The presence of large mammal incisors and claws with older males points to their continued identification with hunting or hunting rituals, even if they may not have been actively hunting in their later years.

As the above discussion indicates, age and sex are often intricately woven together to form the basis for status during life and for the distribution of many mortuary items after death. The distribution of some mortuary items, however, seems to be associated more directly to age of the individual without regard to sex. I have already discussed evidence that indicates shell beads may have been used in similar ways by men and women. I would now like to examine the distribution of shell among individuals who died at different stages in the lifecycle. The distribution of shell items is not even across all age groups in this study. Table 39 lists shell artifacts from burials in different adult age groups, allowing comparisons of the associations of beads with adults younger than 35 years at death or older than 35 years at

Table 39. Frequency of Pre-Contact Burials with Certain Mortuary Items by Age Group.

	Adults < 35 years		Adults > 35 years		Phi	Cole's C[7]
Mortuary Item	Present	Absent	Present	Absent	Coefficient*	phi/phi$_{max}$
Columella Beads	10	5	6	19	0.422	0.44
Marginella Beads	10	5	3	22	0.565	0.63
All Shell Artifacts	12	3	7	18	0.504	0.62

* measuring association between mortuary items and young and mature adults (<35 years old)

death. The table indicates that shell artifacts, as a whole, and certain common types of shell beads are distributed differently between younger and older adults. Marginella beads and columella segment beads are found more often with younger adults than with older adults. Perhaps shell, with its symbolic link to reproduction and continuity of life. was a more important item for young adults to possess and display. Older adults may have been less concerned about fertility than younger adults and therefore less attracted to shell items. Similarly, the death of an older adult may have had less effect on the reproduction and physical continuity of the kin group than the loss of a younger adult and, therefore, the mourners responsible for burying older people may not have felt that shell items adequately expressed the loss of these individuals to the community.

The use of large formalized stone tools as mortuary items appears to have been related primarily to age. Tools like ground-stone celts occur only with older men and women. Similarly, the only chipped-stone hoe in the sample was interred with an older female. It may only have been during the later years of life that age, as a status separate from gender, was signified in mortuary ritual by non-gender-specific productive implements.

Late Prehistoric and Protohistoric Mortuary Practices

This study indicates that during the fifteenth and sixteenth centuries the Sara and neighboring Siouan groups marked gender identities through mortuary rituals by burying certain kinds of artifacts with members of different gender groups. More than half of all infants and adolescents were buried with items that were interred with either males or females, but not both; this pattern likely reflects the prospective gender identities of these young people. The association of gender-specific items with young adult women in burials is more pronounced than their association with women who died at an older age. A different pattern is present for males. Although the sample of males is heavily skewed toward older individuals, gender-specific mortuary items were more often interred with older males than any other segment of the burial population. This may indicate differences in the importance of gender as a recognized social status and identity for older men and women. For both males and females, the likelihood of being buried with a bone or stone tool instead of shell beads or other shell ornaments increased with age, and I think this reflects two interrelated aspects of aging. First, shell may have been symbolically linked to reproduction and may, therefore, have been more often interred with burials of young adults and subadults. Second, the frequency of stone and bone tools in burials of older people may indicate that elders spent more time making implements following the cessation of their involvement in other activities or perhaps that they spent more time using these implements in productive craft activities than did younger individuals.

This analysis of mortuary items from seven sites in the Dan and Roanoke drainages has resulted in several interpretations about the importance of gender differences in the region during the Late Prehistoric and Protohistoric periods. I will now use this analysis as a basis for

comparison with the seventeenth-century mortuary programs at Upper Saratown. The goal of this comparison is to identify changes in mortuary practices that may be associated with participation in the fur trade, increased intertribal hostilities, or population decline due to epidemic disease.

Early Contact Period Mortuary Practices

Four archaeological sites in the Dan River drainage with excavated burials can be assigned to Early Contact period (A.D. 1607-1650). Small excavation areas have been explored at Hairston, Philpott (44Hr4), and Lower Saratown. Eight burials that date to the Early Contact period were recovered from these sites. A larger area was excavated at Madison, and more than one hundred burials were excavated by Richard Gravely and others at the site. Unfortunately, only 26 of these burials had enough intact bone to allow for age or sex identification. Of the burials with identifiable skeletal remains only four could be securely dated to the Early Contact period occupation at the site. Thus, the mortuary record for the Early Contact period in the Dan River drainage consists of only 21 individuals. The distribution of mortuary items in these burials is presented in Table 40.

Given the small sample size and the very small number of adults whose sex is known, I will attempt only a general discussion of mortuary practices for this period. Nearly half of these Early Contact period burials contained mortuary items. Thus the relative frequency of burials with mortuary items was consistent with what it had been during the Late Prehistoric period. One striking aspect of this assemblage is that mortuary items made from copper alloy occur in seven of nine burials with grave goods. This is a very large increase in the occurrence of copper artifacts in burials from the immediate pre-contact period. Only three late

Table 40. Distribution of Mortuary Items in Early Contact Period Burials from Several Sites in the Dan River Drainage.

Class	Site	Burial	Associated Artifacts
Children: [burials without associated artifacts (N=7), total number of burials (N=9)]			
	31Sk1	Bu. 2(G)	8 rolled copper beads, 1 glass bead
	31Rk6	Bu. 93	copper tinkling cones, 2 rolled copper beads, 53 glass beads
Adolescents: [burials without associated artifacts (N=3), total number of burials (N=7)			
	31Rk1	Bu. 1	7 rolled copper beads, 5 columella beads
	44Hr4	Bu. A	1 circular copper gorget, 1 copper tinkling cone, 4 rolled copper beads, 24 glass beads
	44Hr4	Bu. B*	1 clay pipe, 180 glass beads, 14 rolled copper beads
	31Rk6	Bu. 112	1600+ glass beads
Adult Females: [burials without associated artifacts (N=1), total number of burials (N=2)]			
	31Sk1	Bu. 5(G)	19 columella beads, 17 glass beads
Adult Males: [burials without associated artifacts (N=1), total number of burials (N=3)]			
	31Rk6	Bu. 65	1 rectangular copper breastplate, 41 rolled copper beads, 300 glass beads
	31Rk6	Bu. 90	15 copper tube beads or hairpipres, 32 glass beads

*44Hr4, Bu. B may be a multiple burial. Burials B-1 and B-2 are subadults and Burial B-3 is a young adult of indeterminate sex. The clay pipe is probably associated with Burial B-3.

prehistoric or protohistoric burials (4%) contained copper alloy objects. When use of copper mortuary items during the Late Prehistoric period is compared to that during the Early Contact period, there is a strong association between the use of copper and the Early Contact period (ϕ=0.704).

Recent archaeological and metallurgical research at Jamestown, Virginia, has determined that the colonists brought copper plates with them for the purpose of making

rolled beads and pendants to trade with native groups in the Chesapeake (Straube and Luccketti 1996). Most of the copper beads from Governor's Land, a contemporaneous Paspahegh village site in the vicinity of the Jamestown settlement, were made from imported, European-smelted copper. Work at other early-seventeenth-century native sites in Virginia's interior indicates that the trade of these copper items may have extended beyond the Chesapeake. Some copper artifacts from two early-seventeenth-century sites in the Virginia Piedmont, Hurt Power Plant (44Py144) and Thomas Sawyer (44Rn39), have been identified as European copper and brass (Barber et al. 1996).

Although none of the Early Contact period copper mortuary items from the Dan River sites have been analyzed for elemental content, two copper artifacts from features of this period at Hairston have recently been analyzed. Dr. Larry Toburen (personal communication, 1999), of the Physics Department at East Carolina University, conducted PIXE analysis on a small rolled bead and an unidentified strip of sheet copper from Early Contact period pit features at the site. The copper content of the metal is between 95% and 97% with about 1% iron and lead. In addition, trace amounts of tin and arsenic were detected. These results compare well with what has been identified by Jamestown researchers as copper imported from Europe. Artifacts from Governor's Land that are fashioned from native copper contain less than 0.04% lead and 10 of 12 samples had greater than 98% copper content (Straube and Luccketti 1996:50). The lead content of the Hairston artifacts seems much too great for the samples to represent native copper.

It is tempting to suggest that the dramatic increase of copper alloy items in the Dan drainage during the first half of the seventeenth century is linked to an influx of European copper into the Chesapeake. The analysis of two copper artifacts from features at Hairston

supports this hypothesis, but metallurgical analysis of additional artifacts from Dan River sites is needed to adequately evaluate trade patterns during the Early Contact period. However, it seems likely that documented manufacturing of copper trade items at Jamestown is related to a marked increase in the presence of copper items in the Carolina interior and to the presence of European-derived copper artifacts in the interior of Virginia and North Carolina.

A second point that can be made about the distribution of mortuary items in Early Contact period burials is the dearth of shell artifacts. Only two individuals were interred with shell beads and these burials contained a total of only 24 columella segment beads. No marginella or olive beads are present, nor are disc or tubular varieties of conch shell beads. Sizemore (1984) noted a similar pattern when she compared shell beads from the prehistoric Wall site (31Or11) to those from the contact-period Fredricks site (31Or231), both located in the North Carolina Piedmont. To interpret this change, Sizemore used the native range of marginella shells to hypothesize that the focus of trade in the North Carolina interior moved from the southern coast to the Chesapeake during the third quarter of the seventeenth century.

Common Atlantic Marginella (*Marginella apicina*) is not found in waters north of Cape Hatteras, North Carolina (Porter 1981). Segment and tubular beads are made from the columella of large conch shells. Three species of conch large enough for use in bead-making are available along the Atlantic coast. The largest of these, the Lightning whelk (*Busycon perversum*) is found on the southern coast from North Carolina to Florida and also along the Gulf Coast. Two smaller species, the Channeled whelk (*B. canaliculatum*) and the Knobbed whelk (*B. caricum*), are present along the Atlantic Coast from Massachusetts to north Florida (Gosner 1979). Therefore, all of these would have been available on the North Carolina

coast, but marginella and the largest of the whelk shells would not have been available north of the Carolina Coast.

Sizemore (1984) linked the decline in the use of marginella beads and the introduction of wampum into the North Carolina Piedmont during the last quarter of the seventeenth century to a re-orientation of piedmont trade. She proposed that during the Late Prehistoric period, trade in the Piedmont was directed to the southern Carolina coast or further south, but that during the last quarter of the seventeenth century, this trade was directed more toward the north to the Chesapeake region. The absence of marginella beads and the presence of wampum at the late-seventeenth-century Fredricks site, led Sizemore to conclude that the site's occupants were trading with groups that lived north of Cape Hatteras, beyond the natural range of Common Atlantic Marginella. Traders in the Virginia tidewater would have provided access to European goods and wampum from the mid-Atlantic region. A similar decline in conch shell beads during the seventeenth century would add support to this interpretation if Lightning Whelk, the largest of the Atlantic Coast species, had been used exclusively for bead production. Unfortunately, it is not possible to determine which Atlantic whelk species was used in bead production.

The distribution of mortuary items in burials that date to the Early Contact period in the Dan drainage indicates that a similar re-orientation of trade may have occurred in the Dan drainage as early as the first quarter of the seventeenth century. Although wampum does not appear to have been available in the area until after 1670, copper beads and pendants, probably originating from the Chesapeake, were the most common items included with Early Contact period burials. Beads made from copper, probably imported through the Chesapeake,

appears to have replaced shell beads made from marginella and olive shells, available from the southern Carolina coast.

Thus the most striking changes in mortuary behavior during the first decades following the permanent settlement of Virginia were a marked increase in the use of copper items as grave goods and a decline in the use of certain marine-shell beads from the southern Atlantic coast. The sample of Early Contact period burials is not sufficiently large to allow for further investigation of gender differences in mortuary treatment.

Middle Contact Period Mortuary Practices

A sample of 46 burials from the Middle Contact period occupation at Upper Saratown has been analyzed (Table 41). Unfortunately, sex could be estimated for only half of the adults in this sample. Of the 12 adults for which sex could be determined, only two are males. For this reason, discussion of mortuary patterning based on gender for this sample will necessarily be limited.

When the distribution of mortuary items in this sample is compared to that from the late prehistoric and earlier contact period samples, one clear change in mortuary practices is evident. The relative frequency of burials with mortuary items was greater during the Middle Contact period. There is a statistically significant increase in the occurrence of mortuary items in Middle Contact period burials relative to late prehistoric burials (see Table 42) and Early Contact period burials (see Table 43). Of the 46 burials interred during the Middle Contact period occupation at Upper Saratown, 91% have associated artifacts.[4] This, represents an

[4] Only three of the undisturbed burials at Upper Saratown that could not be assigned to one of the components lacked associated artifacts.

Table 41. Mortuary Items in Middle Contact Period Burials from Upper Saratown.

Class	Burial	Associated Artifacts
Children: [burials without associated artifacts (N=0), total number of burials (N=11)]		
	Bu. 8	5 columella beads, 7 glass beads, 4 long copper tube beads
	Bu. 15	2 columella segment beads, 17 disk beads, 1 turtle carapace cup, 34 bird longbone beads, 27 brass tinkling cones, bark
	Bu. 35	1,468 glass beads
	Bu. 40	26 glass beads
	Bu. 43	2,062 glass beads, 13 brass hairpipes, 4 copper rolled beads, 1 copper disk gorget, 1 flushloop bell, 1 unidentified metal object
	Bu. 76	82 glass beads
	Bu. 78	2 glass beads, 21 diamond-shaped pendants, bark and can matting
	Bu. 80	1 ceramic dipper, 1 discoidal/hammerstone, 1 battered cobble, 1 glass bead
	Bu. 99	1 glass bead
	Bu. 102	1 glass bead
	Bu. 107	8,998 glass beads, 9 flushloop bells, cane matting
Adolescents: [burials without associated artifacts (N=3), total number of burials (N=11)]		
	Bu. 9	215 glass beads
	Bu. 44	1 clay pipe, 1 pottery vessel, 1 projectile point, 1 chipped stone drill, 1 columella pin?, rolled copper beads
	Bu. 45b	1 clay pipe, 1 projectile point, ochre
	Bu. 47	5,040 glass beads
	Bu. 48	581 glass beads, 1 lead shot
	Bu. 61	6 glass beads, 3 sheet brass or copper fragments
	Bu. 84	1 claw effigy copper pendant, 251 glass beads, cane matting
	Bu. 98	9 glass beads
Young Adult Females: [burials without associated artifacts (N=0), total number of burials (N=5)]		
	Bu. 50	15,919 glass beads
	Bu. 65	18,917 glass beads
	Bu. 91	1 Citico style 'rattlesnake' gorget, 1 glass bead, 7 rolled copper beads
	Bu. 95	1 columella segment bead, 1 columella barel bead, 531 glass beads
	Bu. 109	9 columella segment beads, 2 columella barrel beads, 55,854 glass beads
Mature Adult Females: [burials without associated artifacts (N=0), total number of burials (N=4)]		
	Bu. 19	1,197 glass beads, 17 rolled copper beads, bark and cane matting
	Bu. 66	30 glass beads
	Bu. 77	16 glass beads, 1 rolled copper beads
	Bu. 87	1 clay pipe
Older Adult Females: [burials without associated artifacts (N=0), total number of burials (N=1)]		
	Bu. 18	2 columella segment beads, 2 glass beads

Table 41. Continued.

Class	Burial	Associated Artifacts
Mature Adult Males: [burials without associated artifacts (N=0), total number of burials (N=2)]		
	Bu. 24	97 glass beads
	Bu. 104	1 clay pipe, ochre
Young Adult, ? Sex: [burials without associated artifacts (N=1), total number of burials (N=9)]		
	Bu. 27	5 glass beads
	Bu. 29	2 clay pipes
	Bu. 38	17,513 glass beads
	Bu. 41	13,963 glass beads, 3 rolled copper or brass beads
	Bu. 42	1 clay pipe, 22,794 glass beads
	Bu. 45a	1 projectile point, ochre
	Bu. 49	1 clay pipe, 9 rolled copper beads
	Bu. 81	231 glass beads
Mature Adult, ? Sex: [burials without associated artifacts (N=0), total number of burials (N=2)]		
	Bu. 6	5,521 glass beads
	Bu. 13	5,529 glass beads
Old Adult, ? Sex: [burials without associated artifacts (N=0), total number of burials (N=1)]		
	Bu. 3	1 clay pipe, 10,911 glass beads, 1 epaulet?

Table 42. Chi-Square Test Comparing Occurrence of Mortuary Items in Burials from the Late Prehistoric and Middle Contact Periods.

	Present		Absent		
Time Period	O_i	E_i	O_i	E_i	Total
Late Prehistoric	73	88	77	62	150
Middle Contact	42	27	4	19	46
Total	115		81		196

$x^2=26.35$; df=1; $x^2_{0.01}=6.63$

Table 43. Chi-Square Test Comparing Occurrence of Mortuary Items in Burials from the Early Contact and Middle Contact Periods.

	Present		Absent		
Time Period	O_i	E_i	O_i	E_i	Total
Early Contact	9	16	12	5	21
Middle Contact	42	35	4	11	46
Total	51		16		67

$x^2=18.71$; df=1; $x^2_{0.01}=6.63$

increase of roughly 40% in the practice of interring non-perishable objects in burials during the Middle Contact period.

I will now consider the types of items placed in burials during the Middle Contact period. Twenty-three different kinds of items were recovered from these burials and 56% (N=13) of those items are aboriginal objects. Although only 10 classes of European trade goods were used as mortuary items, these items were used more frequently than aboriginal objects as mortuary items, accounting for two-thirds of all associated objects.

Glass Beads as Mortuary Items

Over 80% of burials with mortuary items include European trade goods and the most common mortuary items are glass trade beads. Thirty-two burials contain strands of glass beads and 13 individuals were interred with over 1,000 beads each. Five young adults in this latter group were interred with more than 10,000 beads each. Three of these were young adult females while the sex of the other two could not be determined. The mean number of glass beads interred with young adult females was 18,244. This measure is 15 times larger than the mean frequency of beads interred with any other gender group (see Table 44). In addition to these young adult females, one infant (Bu. 107) was interred with an unusually large number of beads (N=8,998). Large numbers of glass beads in burials likely represent beaded garments, rather than strands of beads worn as individual ornaments. In the case of infants it is likely that beaded cradleboards or carrying baskets are represented by the presence of glass beads and other ornaments with brass bells, tinkling cones, or copper alloy pendants and beads.

Marine-shell beads were ubiquitous in late prehistoric burials. Similarly, copper alloy beads occurred in nearly all Early Contact period burials with mortuary items. During the Middle Contact period, glass beads became the most common type of mortuary item. Thus

Table 44. Frequency of Glass Beads with Gender Groups from Middle Contact Period Component.

Gender group	Number of Burials*	Bead Count	Mean
Children	11	12,648	1,149
Adolescent	8	6,096	762
Young Adult Female	5	91,222	18,249
Mature Adult Female	4	1,243	310
Older Adult Female	1	2	2
Mature Adult Male	2	97	49
Total	31	111,308	364

* Includes only burials with mortuary items.

beads, in some form, remained the most common type of mortuary item in burials from the Late Prehistoric through the Middle Contact period.

Aboriginal Objects as Mortuary Items

Although most Middle Contact period burials include some glass beads, seven adolescents and adults were buried without any European trade goods. Instead, these individuals were interred with a suite of aboriginal mortuary items. This suite of artifacts includes clay smoking pipes, ochre, and chipped stone projectile points. During the Late Prehistoric period these mortuary items were found only in burials of males and some subadults (boys?). During the Late Contact period occupation at Upper Saratown, both individuals interred with clay smoking pipes were adult males. The sex of five of the seven Middle Contact period burials could not be determined from the skeletal remains. It is likely that the individuals whose sex is not known, but who were interred with pipes, ochre, and chipped stone projectile points during the Middle Contact period are also males. In an earlier analysis of the skeletal remains from Upper Saratown, four of these five unsexed individuals were identified as males (Hogue 1988).

The distribution of clay smoking pipes in Middle Contact period burials at the site is particularly interesting. Individuals interred with clay pipes tend not to have any European trade goods as mortuary items. There is a strong negative association between glass beads and clay pipes in Middle Contact period burials (ϕ=-0.69). Five burials (Burials 29, 44, 45b, 49, and 104) contained distinctive large, plain elbow pipes like those described in Chapter III. These pipes are similar enough in form and execution to have been made by a single individual. Although glass beads were present in pit fill of three of these burials, none of them was buried wearing glass bead necklaces, beaded garments, or was accompanied by other European-derived items.[5] Given how common glass beads were at this time, it seems likely that the absence of bead necklaces or beaded garments in these burials was the result of a conscious decision and not coincidence. The mortuary items associated with this group of individuals excluded items obtained through the Virginia-based fur trade and, on the contrary, consisted of aboriginal items that had been used as mortuary offerings since the Late Prehistoric period, like ochre, projectile points, and pottery vessels.

If these large, plain elbow pipes signified a group of individuals that either did not or could not participate in the fur trade, or simply preferred traditional objects to European-derived items, what can be said about the other individuals at the site who were buried with clay smoking pipes? One pipe, a more gracile style of elbow pipe, was interred with a female (Burial 87). This is the only clay pipe found in association with a female in this study. No other mortuary items were present in this burial. Thus, aside from the identification of this burial as a female, nothing else distinguishes it from the burials with the large, plain elbow

[5] Burials 44, 45, and 98 had glass beads in the pit fill. Burial 104 was heavily disturbed by pothunting and glass beads were recovered from the pothole fill. No glass beads were recovered from undisturbed pit fill in this burial.

pipes. Two other adults at the site (Burials 3 and 42) were buried with clay smoking pipes. In contrast to the other burials with clay pipes, both of these individuals were interred wearing garments decorated with hundreds of glass beads. As a further distinction, the pipes interred with these latter individuals are not traditional forms. The pipe interred with Burial 3, was a European form made in a mold, probably in the Chesapeake region, and was probably attained through the fur trade (see Figure 39, Chapter III). The smoking pipe in Burial 42 is not an elbow pipe, but is a straight, onion-form pipe. This type of pipe may have been manufactured locally, but was not a common form until around the middle of the seventeenth century in the study area. In the Eno River valley, this form of pipe occurs as early as the Protohistoric period. Thus, both the pipe forms and the presence of European trade goods in these latter burials distinguishes them from the group of six burials with more traditional mortuary items and makes them more like other burials at the site.

Besides clay smoking pipes, projectile points, and ochre, only a few other traditional objects were used as mortuary items. Ceramic vessels were present in three Middle Contact period burials. These vessels were interred with a child, an adolescent, and an adult. The sex of none of these individuals could be determined based on skeletal evidence, but the adolescent and adult burials also contain clay pipes. In the Late Prehistoric period, ceramic vessels were interred with females and subadults, while pipes were found with males and subadults. These two mortuary items had mutually exclusive distributions prior to contact. This relationship is clearly not the case during the Middle Contact period. Given the uncertainty about the sex of the Middle Contact burials and the small number of burials with ceramic vessels in both this and the prehistoric sample, it is not possible to make any definite comments about the use of clay pots as mortuary items.

One engraved Citico-style "rattlesnake" gorget, made from the outer whorl of a conch shell, was recovered from the site. This object, like those in prehistoric burials in this study, was interred with a young adult female (Burial 91). Thus, its use represents a continuation of a prehistoric mortuary pattern. One other gorget was present in this assemblage. A circular copper alloy gorget with a central perforation was recovered from a child's burial (Burial 43). Though this gorget may be made of imported material, its form is very similar to prehistoric shell gorgets and its interment with a child is also consistent with prehistoric mortuary patterns.

Summary of Middle Contact Mortuary Practices

The Middle Contact component at Upper Saratown includes some burials that exhibit traditional mortuary patterns which can be traced back at least two hundred years, while other burials contain only European trade goods. This contrast between use of traditional mortuary items and European-derived mortuary items may signify conflict within the community over participation in the Virginia-based fur trade. This analysis suggests some intriguing possibilities about a group of young individuals (mostly males?) who may have: (1) been members of a conservative social or political group that emphasized traditional mortuary treatment; (2) been opposed to participation in the fur trade, or (3) been denied access to fur trade exchanges.

Overall, there was an increase in the number of individuals with nonperishable mortuary items in this assemblage as compared to earlier assemblages. Over 90% of Middle Contact period burials contained mortuary items, most of which were strands of glass beads. Glass trade beads are the most common mortuary item in this assemblage, occurring in close to three-quarters of burials. Copper alloy beads, which were so common during the preceding

period, are found in fewer than one-quarter of burials. Columella segment beads were present in only five burials. Strands of glass beads were more common during this period than strands of shell beads had been prior to contact. This may indicate that glass beads were more easily attained and accessible to a larger segment of the population than shell beads had been prior to contact. There is no evidence to suggest that glass beads were ever used as media of exchange or as wealth items in the fashion of shell or copper appears to have been prior to contact.

Late Contact Period Mortuary Practices

Thirty-seven burials at Upper Saratown date to the Late Contact period occupation at Upper Saratown. Like Middle Contact period burials, a very high percentage of these burials

Table 45. Mortuary Items from Late Contact Period Burials at Upper Saratown.

Class	Burial	Associated Artifacts
Children: [burials without associated artifacts (N=2), total number of burials (N=12)]		
	Bu. 5	1 ceramic vessel, 1 brass disk gorget, 20 rolled copper beads, 46 glass beads
	Bu. 23	1,323 glass beads, 2 flushloop bells
	Bu. 53	85 columella segment bead, 20,419 glass beads, 23 flushloop bells, 1 wire fastener (tin?), bark and cane matting
	Bu. 54	8,080 glass beads, 1 brass disk gorget, 1 brass spoon, 3 flushloop bells, 7 Saturn bells, cane matting
	Bu. 55	10,814 glass beads
	Bu. 57	24,256 glass beads, 16 flushloop bells, 2 triangular brass pendants, bark and cane matting
	Bu. 63	1,902 glass beads
	Bu. 71	1,173 glass beads
	Bu. 85	3,260 glass beads, 5 copper fragments, 5 iron fragments, bark and cane matting
	Bu. 103	5,218 glass beads, 1 brass animal effigy
Adolescents: [burials without associated artifacts (N=0), total number of burials (N=4)]		
	Bu. 52	4,258 glass beads, 1 copper ring
	Bu. 59	1,135 glass beads
	Bu. 64	8,158 glass beads, 3 flushloop bells, 1 triangular pendant
	Bu. 69	1 columella segment bead, 7,328 glass beads, 13 flushloop bells

Table 45. Continued

Class	Burial	Associated Artifacts
Young Adult Females: [burials without associated artifacts (N=0), total number of burials (N=3)]		
	Bu. 1	142 columella segment beads, 2 columella barrel beads, 9 disk beads, 24 purple wampum, 157 white wampum, 43,804 glass beads, 136 brass flushloop bells, 1 Saturn bell, 1 brass disk gorget, 15 triangular brass pendants, 2 copper tinkling cones, 339 rolled copper beads, 1 mouth harp, 2 pairs of scissors, 1 tin-plated copper spoon, 2 elk astraguli, bark and cane matting
	Bu. 22	29 glass beads, 3 rolled brass beads
	Bu. 58	5,427 glass beads
Mature Adult Females: [burials without associated artifacts (N=1), total number of burials (N=2)]		
	Bu. 17	5 columella segment beads, 4 disk beads, 22,658 glass beads, 28 brass rings, 1 brass wire coil, 1 copper disk gorget, 2 bone handled knives, 1 hoe blade, 1 wraught iron nail
Older Adult Females: [burials without associated artifacts (N=0), total number of burials (N=2)]		
	Bu. 51	1 columella segment bead, 1 unidentified worked bone, 386 glass beads, 1 brass ring, 1 cast brass button, 15 flushloop bells
	Bu. 56	9,002 glass beads
Young Adult Males: [burials without associated artifacts (N=0), total number of burials (N=3)]		
	Bu. 2	2 columella segment beads, 11 glass beads
	Bu. 68	3,406 glass beads
	Bu. 108	1 clay pipe
Mature Adult Males: [burials without associated artifacts (N=0), total number of burials (N=1)]		
	Bu. 62	2,168 glass beads
Older Adult Males: [burials without associated artifacts (N=0), total number of burials (N=4)]		
	Bu. 73	1 clay pipe, 424 glass beads
	Bu. 74	111 glass beads
	Bu. 75	1,155 glass beads
	Bu. 100	1 columella segment bead, 22,121 glass beads
Young Adult, ? Sex: [burials without associated artifacts (N=0), total number of burials (N=5)]		
	Bu. 10	1,861 glass beads
	Bu. 28	7 glass beads, 2 rolled copper beads, 1 unidentified iron object
	Bu. 36	1,252 glass beads, 22 rolled copper beads, 1 unidentified iron object
	Bu. 39	328 glass beads, 1 rolled copper bead
	Bu. 106	191 glass beads, 11 rolled brass beads
Mature Adult, ? Sex: [burials without associated artifacts (N=1), total number of burials (N=1)]		

(86%) contain nonperishable mortuary items. If the different kinds of mortuary items in each burial is tabulated,[6] these burials contain a total of 90 mortuary items (see Table 45). Twenty-five different kinds of objects were used as mortuary items and only five of these were aboriginal items: clay smoking pipes, columella beads (segment and disk varieties), ceramic vessels, worked animal bone, and unworked animal bone. Clay pipes occur in two burials and columella beads occur in seven burials. The other aboriginal items were found in only one burial each. The use of aboriginal objects as mortuary items declined between Middle Contact period and Late Contact period (see Table 46). This decline is statistically significant (x^2=10.39, df=1, $x^2_{0.01}$=6.63). Nearly 85% of all mortuary items in the latter assemblage are European trade goods. Only one burial in this assemblage lacks European trade goods.

Table 46. Chi-Square Test Comparing European-Derived and Aboriginal Mortuary Items in Burials from the Middle Contact and Late Contact Periods.

	European		Aboriginal		
Time Period	O_i	E_i	O_i	E_i	Total
Middle Contact	53	62.3	31	21.7	84
Late Contact	76	66.7	14	23.3	90
Total	129		45		174

x^2=10.39; df=1; $x^2_{0.01}$=6.63

Despite the widespread use of European trade goods as mortuary items, some Late Contact period mortuary practices conform to patterns established by the Late Prehistoric period. The distribution of two mortuary items in this assemblage occur in the same contexts as similar prehistoric objects: clay smoking pipes are found only with adult males and copper alloy disc gorgets, like shell disc gorgets, are found only with younger females and children.

[6] multiple examples of a single type of item are counted as one item (e.g., 200 columella beads equals 1 item).

Clay pipes were recovered from two Late Contact burials, one of a young adult male and one of an older adult male. This distribution provides evidence that the prehistoric association of clay smoking pipes with males remained intact throughout the contact period. Burial 108, the young adult male, was interred with an obtuse-angle elbow smoking pipe. This is the only burial at the site that lacks European trade goods. The other burial with a clay pipe was interred with several hundred glass beads. Thus, the pattern noted during the Middle Contact period for burials with traditional forms of clay pipes to include no European trade goods is not evident during the Late Contact period.

Five copper alloy disc gorgets were recovered from Late Contact period burials. Two gorgets were interred with females less than 35 years at death and three were interred with children aged three years or less at death. Copper alloy disc gorgets were used in mortuary ritual like shell disc gorgets and pendants had been during late prehistory. These gorgets, like shell gorgets, may have had a similar association with reproduction and the continuity of life. Despite the introduction and incorporation of many European trade goods into mortuary ritual, some mortuary patterns remained unchanged.

One difference between Late Prehistoric and Late Contact period mortuary ritual is that age differences were not as clearly marked by mortuary ritual in the latter. In the Late Prehistoric sample the use of shell beads declined with age, and the likelihood of being interred with tools increased with age. No similar pattern is evident in the Late Contact period. There is no difference between the types of artifacts interred with older males and those interred with younger males. Besides pipes, the only other mortuary items recovered from male burials are glass beads and columella segment beads. No adult male burial in this

sample lacked mortuary items, but no burial contained more than two kinds of mortuary items (see Table 45).

In contrast to the similarity of items interred with most males and the evenness of that distribution for males of all ages, there is a great deal of variation between the number and kinds of artifacts interred with adult females. Two of the seven female burials contained no mortuary goods, while two others (Burials 1 and 17) contained eight and ten types of mortuary items. These latter burials included not only many different kinds of mortuary items, but also rare metal tools and implements (steel knives, scissors, a hoe, a spoon, a mouth harp, and an iron spike), copper alloy ornaments (disc gorgets, pendants, and finger rings), and tens of thousands of glass beads each. An older adult female (Burial 51) was interred with five kinds of mortuary items, including a pair of very large, multi-layered, Dutch chevron beads (Kidd and Kidd type IVnn4) which, though common on Iroquois sites in the Northeast, are rarely found on archaeological sites in the Southeast (Smith 1987:141). Columella segment beads were also interred with all three of these females. One of these three, Burial 1, is the only individual at the site to be interred with wampum. A much greater diversity and quantity of items, especially rare items, was interred with these three females than with all adult male burials in the sample combined. These females were buried within ten feet of one another, in the southern end of the cemetery (Figure 62). Perhaps these women were distinguished members of an elite kin group. They, or their kin, may have had better access to European trade than other members of the community and were able to acquire rare types of trade goods. These women were valued enough by surviving kin or other community members to inspire more elaborate mortuary treatment than any other burials documented at the site.

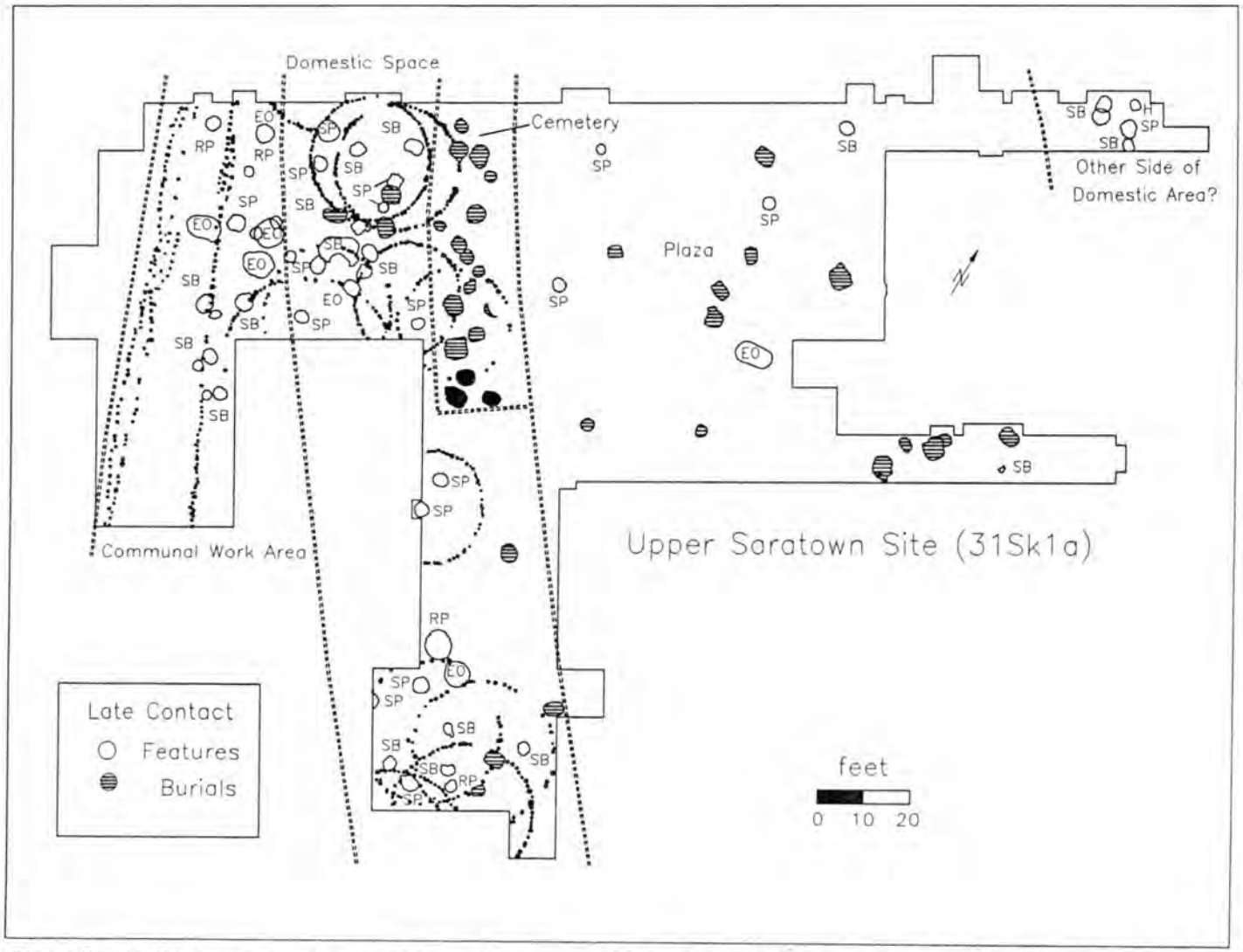

Figure 63. Plan of Late Contact component at Upper Saratown with burials of three distinguished females showing in black.

In addition, some rare trade items were also interred with a few children at the site. Three infant burials have thousands of glass beads, brass bells, and rare trade items like copper alloy disc gorgets, a latten spoon, a mouth harp, and a copper or brass wire fastener. Like the three distinguished females, these burials are situated in the cemetery area, but they are separated from these adults by at least 15 ft. The spatial arrangement of the cemetery does not provide evidence that clarifies the relationship, if any, between these infants and the females with similar suites of mortuary items.

Though some traditional mortuary patterns recognized in the Late Prehistoric period were still evident during the Late Contact period, gender and age differences do not appear to be as clearly marked in the later mortuary program. Some individuals in every age group were given more elaborate mortuary treatment, as evidenced in the frequency and type of mortuary items. These more elaborate burials cluster near one another in the cemetery area and this spatial configuration may indicate kinship. If this interpretation is correct, then these burials provide evidence for greater inequality among individuals or, more likely, between kin groups than was evident in the preceding period.

With the present sample of burials from the Late Contact component at Upper Saratown there is evidence of a clear difference between the mortuary treatment of females and males. The three elaborate female burials have no counterpart among male burials. None of the male burials in the excavated portion of the sites had elaborate arrays of mortuary items. There is very little variation between males in terms of the number or type of mortuary items interred with them, while there is much greater variation among female burials. Without a larger sample of adult burials whose sex is known it is not possible to make any definitive statements about the relative status of males and females at Upper Saratown during the Late

Contact period. However, there can be little doubt that some females were provided more elaborate mortuary treatment than other females and also more elaborate treatment than any of the males in the sample.

I noted in the previous chapter that the development of a segregated cemetery during the Late Contact period was one of the more important changes in village structure during the Late Contact period. At Upper Saratown, only about 45% of individuals who died during that occupation of the site were interred in the cemetery. I will now compare those individuals in the cemetery to those buried in other parts of the village. On a very general level, all individuals buried in the cemetery were interred with at least one kind of mortuary item, while one-quarter of burials in the plaza and domestic areas had no mortuary items. On average, cemetery burials had twice the number of mortuary items as burials in the rest of the village. Burials with several types of mortuary items (four or more items) were interred more often in the cemetery than in other village areas. There is a weak association between these burials and location within the cemetery (ϕ=0.438).

When the type of mortuary item is considered a pattern emerges in which European trade goods, especially rare items, occur more often in cemetery burials than in village burials. Brass bells, copper alloy disc gorgets, metal implements, and beaded garments occur in both cemetery and village burials, but are more common in cemetery burials. Though aboriginal items are uncommon, both burials with clay smoking pipes and the only burial with a ceramic vessel are located in the village. Columella segment beads are the most common type of aboriginal object in these burials and they occur in more cemetery burials than village burials. Table 47 presents the distribution of these items in burials from the cemetery and village areas.

Table 47. Comparison of Mortuary Items in Cemetery Burials and Village Burials.

	Cemetery Burials				Village Burials				
	Item Present		Item Absent		Item Present		Item Absent		
Mortuary Item	O_i	E_i	O_i	E_i	O_i	E_i	O_i	E_i	x^2
Disc gorget	3	1.8	14	15.2	1	2.2	19	17.8	1.62
Brass bells	6	3.2	11	13.8	1	3.8	19	16.2	5.56
Iron or steel objects	4	2.3	13	14.7	1	2.7	19	17.3	2.70
Beaded garments	15	8.7	2	8.3	4	10.3	16	9.7	17.28
Columella beads	5	3.2	12	13.8	2	3.8	18	16.2	2.29
Clay smoking pipes	0	1	17	16	2	1	18	19	2.11

df=1; $x^2_{0.01}$=6.63

Of these items, the distribution of beaded garments is the only one that exhibits a statistically significant difference between the two burial areas (x_c^2=14.5, df=1, $x^2_{0.01}$=6.63).[7] This analysis indicates that cemetery burials tend to have more mortuary items than burials in other areas of the village. Individuals buried in beaded garments were usually interred in the cemetery and rare trade goods occur more often in burials in the cemetery than in the village. This may suggest that individuals buried in the cemetery, or their kin, had better access to trade goods than individuals buried in other parts of the village. Or perhaps for some reason, European trade items were more appropriate or desirable mortuary accompaniments for individuals buried in the cemetery. Based on the superposition of some of the burials in the cemetery and some of the houses at the site, it is likely that the cemetery area was not defined until close to the end of the occupation. Thus, the cemetery burials may be later than most of the village burials. Some of the differences between the cemetery and village burials may be linked to a temporal difference between when the areas were used.

One other documented Sara cemetery in the Dan drainage is at William Kluttz (Ward and Davis 1993). This site was occupied shortly after Upper Saratown was abandoned. The

[7] The chi-square value has been corrected using Yates' Correction for Continuity (Thomas 1986:279).

similarity between the pottery made and used at each site indicates that the people who had lived at Upper Saratown also occupied William Kluttz. I will now compare the mortuary practices at the Late Contact period occupation at Upper Saratown with that at the neighboring William Kluttz site.

The location of burials relative to habitation areas is often linked to the social classification of the deceased relative to his or her circumstances of death (Carr 1995:183). The cemetery at William Kluttz is thought to have been established during an epidemic (Ward and Davis 1993:285). The mortuary treatment of individuals in the cemetery at William Kluttz stands in stark contrast to those interred in the cemetery at Upper Saratown. A total of 29 burials and probable burials were identified in the cemetery area and 10 of those were excavated. The excavated burials in the cemetery at William Kluttz had been placed in very shallow pits and few of these contained any mortuary items. Nineteen probable burial pits in the cemetery area were mapped but not excavated. These unexcavated features may represent more traditional, interments in deeper pits, but the pit outlines suggest they are similar, small pits (Davis, personal communication 1999). Regardless of the characteristics of the unexcavated features, a large segment of the cemetery population at William Kluttz was interred in a manner that diverged from mortuary patterns present at late prehistoric or earlier contact period sites in the Dan drainage. While individuals buried in the cemetery at Upper Saratown were provided more elaborate mortuary ritual than burials in other village areas, the opposite seems to have been the case for cemetery burials at William Kluttz. If the establishment of segregated cemetery areas at village sites is a response to epidemic disease, then there appears to have been a shift in the ritual treatment of disease victims from the Middle to the Late Contact period.

In her survey of the Human Relations Area File, McGrath (1991:410) found that populations experiencing epidemic disease often adapt and intensify existing ceremonies and rituals to achieve purification and prevent further death. Perhaps the establishment of a cemetery area and an elaboration of mortuary treatment during the Late Contact period occupation at Upper Saratown can be interpreted within the context of an initial response to epidemic disease. Analysis of roasting pits at the site provides a second line of evidence that ceremonies involving feasting were altered to include ritual destruction of household items during this occupation. This activity is interpreted in the context of removing contagions to combat epidemic disease (see Chapter IV).

If those who died from epidemic disease were initially given more elaborate mortuary ritual, that particular kind of ritual response was short-lived. Disease victims buried in the cemetery at William Kluttz were not provided elaborate mortuary ritual. Their method of burial is more consistent with a goal of minimum effort and perhaps a desire for physical separation of the dead from the living and working spaces of the village. This change in ritual may signal a change in attitude toward disease or toward disease victims during the latter years of the Late Contact period.

Summary of Mortuary Practices in the Dan River drainage

This examination of mortuary ritual from the Late Prehistoric through the Late Contact period has demonstrated that during the Late Prehistoric period, only about half of individuals were interred with nonperishable items. The most common mortuary items were marginella and columella beads. These beads occurred most often with people who were less than 35 years old, and may be associated symbolically with reproduction and longevity. Two

groups of mutually exclusive mortuary items appear to have been used to mark gender differences. Mortuary items found only with females include pottery vessels, bone beads made from rabbit innominates and turkey phalanges, hairpins and earpins made from conch columella, and gorgets, pendants, and disk beads made from the outer whorl of conch shells. Mortuary items found only with males include animal teeth, projectile points, crystals, clay pipes, bone fishhooks, and ochre. These items were not common at the sites, and therefore marked not only gender differences, but probably vertical social status as well. That is, these gender-specific items may have only been included in the burials of distinguished individuals. Burials of older adult females were less likely to contain gender-specific mortuary items than those of younger females or older adult males.

A few mortuary items that had gender-specific associations during the Late Prehistoric period retained those associations throughout the Contact period. Clay smoking pipes are consistently associated with adult males and disc gorgets of shell and later copper alloy are associated with young females and children. The ritual use of copper disc gorgets appears to have been the same as that of shell gorgets. Besides copper disc gorgets, it is unclear whether any other European trade goods were so directly incorporated into Native categories in place of a similar native object.

Copper alloy beads and pendants, and later glass beads, largely supplanted shell beads during the Contact period. Glass beads occur in about 90% of all burials during the Middle and Late Contact periods. Glass beads were much more common during the Contact period than shell beads were during the Late Prehistoric period. While shell beads were more often interred with younger individuals, glass beads were ubiquitous. There is no clear evidence from this burial data that glass beads shared shell's symbolic link to reproduction.

Garments decorated with thousands of glass beads occur most often in cemetery burials during the Late Contact period occupation at Upper Saratown. I and others have argued that Late Contact period burials in cemeteries may represent victims of epidemic disease. The strong association of beaded garments with cemetery burials may indicate a link between death from epidemic disease and burial in beaded garments during the early decades of the Late Contact period.

Age and gender differences were not marked as distinctly in mortuary ritual during the seventeenth century as they had been prior to contact. The most clearly marked distinctions during the Late Contact period appear to have been between cemetery occupants and those buried in other parts of the village. If victims of epidemic disease were buried in cemetery areas rather than in common village contexts, disease victims at Upper Saratown were initially given more elaborate mortuary ritual than the rest of the population. However, by the end of the seventeenth century, individuals buried in cemetery areas were provided less elaborate burials than others and cemetery areas were spatially separated from habitation areas. This change in mortuary treatment may reflect a change in attitude toward disease victims or possibly a cessation of attempts to combat the effects and spread of disease through mortuary practices.

Chapter VI.

The Dan River Drainage in Regional Context: Changing Patterns of Long-Distance Exchange and Interaction

The goal of this chapter is to lay out archaeological and ethnohistorical evidence for changing patterns of interaction between the Dan River peoples and Sara and groups located outside the study area from A.D. 1200 to 1700. European travelers of the late seventeenth-century found the Sara among the Catawba on trading excursions and in possession of cakes of salt from some unknown source. The ethnohistoric record also documents that the Sara were visited regularly by Virginia traders, harassed by Seneca raiding parties, and embroiled in regional struggles for control of the deerskin trade out of Fort Henry (Alvord and Bidgood 1912; Lederer 1672; Wright 1966). It is very likely that the Sara's relations with their neighbors were as dynamic and complicated during prehistory (for a discussion of prehistoric interaction in the Southeast see Nassaney and Sassaman 1995). My goal in this chapter is to place the Dan River peoples and Sara within the context of their regional interrelationships from the Late Prehistoric period through the Contact period.

Communities do not exist in isolation from neighbors, and are often affected in significant ways by the actions of persons from very distant communities. Members of small-scale communities rely on neighboring communities for material goods not available locally, for marriage partners, and for essential social relationships that extend

beyond their immediate kin groups. Intercommunity social relationships are often developed and maintained within a context of material goods exchange. Brown et al. (1990:251) emphasize that exchange is the primary means that small-scale societies "conduct external relations." Along these lines, Stewart (1994:89) notes that exchanges between groups occur within social contexts that "promote intergroup communications, reduce the potential for conflict or mitigate actual conflict, and establish an individual's, family's, or group's access to resources or hospitality beyond their home territories." Exchange and alliance is only one potential relationship that may exist at any time between different communities. Communities may also interact in hostile or aggressive ways. Brown et al. (1990:253) emphasize that warfare is to be anticipated as an alternative form of external relationship between communities engaged in exchange and alliance. Also, as regional settlement patterns evolve through time, relationships between communities may wax, wane, or cease altogether, and new relationships may eclipse formerly important ones.

Alliance, maintained through exchange and cooperative social interaction, and warfare are two extremes in the continuum of external relationships between communities. It may be possible to identify these extremes of interaction in the archaeological record. Evidence for long-distance exchange of material goods and diffusion of ideas about manufacturing techniques or decorative styles may indicate close social ties between communities. Diachronic studies may produce evidence for changes in regional affiliations by documenting the cessation of exchanges of material goods or ideas between communities in different regions. Diachronic studies may also be able to document the onset of new alliances between communities. Changes in regional

affiliations may also be indicated when communities re-locate to areas closer to important trade routes or to important regional centers as settlement systems change (Ward and Davis 1991, 1993). Hostile interactions may not be documented with such direct evidence. Indirect evidence of hostile external relationships include changes in community patterns, like the development of nucleated villages and construction of palisades, and wholesale population movements to avoid hostile contacts (MacCord 1989; Milner 1995; Ward and Davis 1991, 1993; Wright 1966).

Tracking evidence for exchange or conflict between contemporaneous communities in a region, while also identifying contemporaneous communities that exhibit no evidence for contact, provides a useful means of reconstructing regional networks of interaction. This approach is applied to the Piedmont and Appalachian regions of North Carolina, Virginia, and Tennessee in an attempt to identify the Dan River people's and Sara's network of interactions from A.D. 1200 to 1700.

Archaeological Evidence and Interrelationships between Communities in the Past

Three data sets are considered in this study. These data sets provide information about close social ties between communities and long-distance exchanges between communities that probably did not interact regularly. First, pottery assemblages from the Dan drainage are examined for evidence of stylistic and technological influences from other regions and, likewise, evidence influence from the study area is sought in ceramic assemblages from neighboring regions. The diffusion of ceramic styles provides valuable information about communities that interacted regularly with the Sara and Dan River peoples. Second, copper and marine shell artifacts provide clues about long-distance ties. Artifacts made from marine shell and copper had been exchanged long distances across

eastern North American since the Archaic period (Goad 1978; Muller 1983). By examining the regional distribution of types of marine shell and copper and copper alloy artifacts found in burials, I attempt to reconstruct regional spheres of interaction that included the Sara and Dan River peoples. Finally, glass trade beads and other European-manufactured goods from sites in the Dan River drainage are compared to those from contemporary sites in other drainages to reconstruct changes in trading partners during the Contact period. In the final section of this chapter, I explore the manner in which the movements of some Indian communities and the actions of Indians and Europeans in eastern North America may be causally linked to changes in regional interactions.

Evidence for Regional Interaction

The descriptions of ceramic assemblages presented in Chapter III form the basis for this discussion of changing pottery styles. There is a clear long-term trajectory of changes in ceramic production from the Late Prehistoric through the Contact period (e.g., decline in net-impressed exteriors and increase in plain exteriors, selection of finer temper, decrease in vessel wall thickness, and decline in scraped interiors). These long-term trends represent a local evolution of ceramic production and are not representative of stylistic changes attributable to the diffusion of ideas via contact with other regions. Stylistic changes that factor into the present discussion include short-lived variations that are usually present on only a minority of sherds in assemblages. These variations in pottery form and style appear to reflect diffusion of ideas about ceramic production or, in some cases, exchange of vessels from areas outside the Dan River drainage where these styles are common.

This discussion focuses on ceramic styles and forms that may have been introduced from outside the Dan River drainage, and on identifying potential source areas for these influences. It also includes a consideration of influence of local potters on ceramic production outside the Dan River drainage. Items acquired through long-distance exchange provide a second line of evidence about the Sara's regional interaction. Nonlocal native- and European-manufactured items recovered from burial contexts are also discussed in this section.

The Uwharrie Phase

Only one Uwharrie phase occupation was identified at the sites in my study area. This occupation at Upper Saratown was contemporaneous with South Appalachian Mississippian Pee Dee occupations in the southern Piedmont including that at Town Creek site (31Mg3). Pee Dee influence in the Uwharrie assemblage from Upper Saratown can be seen in a small number of Uwharrie vessels with curvilinear complicated stamped exteriors. The vessel form and decoration of these vessels with stamped exteriors are typical of the Uwharrie series, but the carved paddle stamping is atypical for the series. The paddle design is not a Pee Dee design, but the narrowness of the ridges and their arrangement in parallel arcs or lobes is reminiscent of Pee Dee designs. Coe (1995) identified a small number of Uwharrie sherds at Town Creek, providing additional evidence for at least limited contact between the central and southern Piedmont during this period.

A recent pottery study of Uwharrie series pottery from Forbush Creek (31YD1), located in the neighboring Yadkin River drainage, also documented evidence of Mississippian influence during this phase. In addition to a small number of complicated

stamped sherds, McGhee-Snow (1998) identified Uwharrie series vessels with crushed shell temper at Forbush Creek. This temper selection was thought to represent influence from Mississippian potters in the Ridge and Valley Province of southwest Virginia; however, Egloff (1992) thinks that shell-tempered wares in southwest Virginia post date A.D. 1300, which is later than the proposed date range for the Uwharrie series. The precise chronology of occupations at Forbush Creek have not been established, including the age of the shell-tempered pottery. Shell-tempered pottery was manufactured by Mississippian groups in east Tennessee as early as A.D. 1000, and crushed shell had been used as a pottery temper in the Mid-Atlantic region since the latter half of the Middle Woodland period (Blanton 1992:73). The idea of using shell as temper may have been acquired by Forbush Creek potters from any of these areas.

Uwharrie series pottery from Upper Saratown exhibits attributes characteristic of the Piedmont (i.e., net impressing, cord marking, and fabric impressing) with minor influences from Mississippian potters, most likely Pee Dee potters from the southern Piedmont.

Only three burials could be confidently associated with the Uwharrie phase occupation at Upper Saratown. None of these burials contained any grave goods and none of the Uwharrie features contained identifiable nonlocal artifacts. This absence of nonlocal artifacts may very likely reflect sampling error. Uwharrie phase burials in adjacent river drainages, such as those at the Hunting Creek site in Randolph County, contain marine shell and mica ornaments (John Davis, personal communication 1998).

Dan River Phase

Dan River series pottery is found in the western Piedmont of central and northern North Carolina and southern Virginia. This series is one of a number of related wares in the Eastern Woodland Tradition characterized by mineral temper and net-impressed exteriors that have been identified in the North Carolina and Virginia Piedmont and the Appalachian region of southwestern Virginia, including Dan River, Haw River, Clarksville, Radford, and Wythe (Egloff 1992). These shared ceramic characteristics provide evidence for regular communication and interaction between communities (see Figures 63 and 64) (Egloff et al. 1994; Gardner 1980).

Some jars in the Dan River series and related series, have decorated strap handles. Coe and Lewis (1952) proposed that incised strap handles on Dan River jars were influences from Fort Ancient potters of the Ohio River valley. They also felt that certain influences from the Dan River area could be seen in Fort Ancient pottery assemblages.

Seven Dan River phase burials were identified at Upper Saratown. Nonlocal mortuary items recovered from these burials include a marine shell earpin (knobbed form) and hairpin, a small rolled copper bead, and a greenstone celt. Knobbed shell earpins have been recovered from another Dan River phase burial in the study area (44Hr35) and also from contemporaneous Pee Dee phase burials at Town Creek in the southern Piedmont and Pisgah phase burials from the Appalachian region of western North Carolina. These artifacts were exchanged widely over the interior Southeast beginning about A.D. 1400 (Steponaitis, personal communication 1999) and their greatest concentration was in the southern Appalachians. Ground celts of greenstone are common artifacts on Dan River phase archaeological sites. This stone outcrops in the

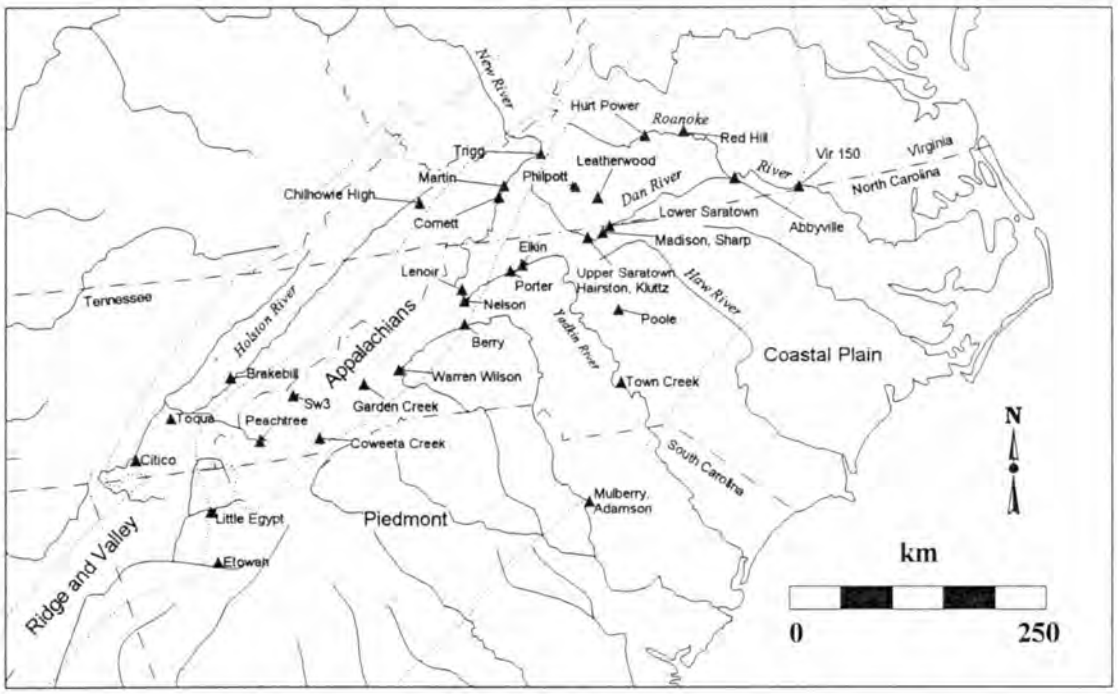

Figure 63. Archaeological sites mentioned in discussion of regional interaction.

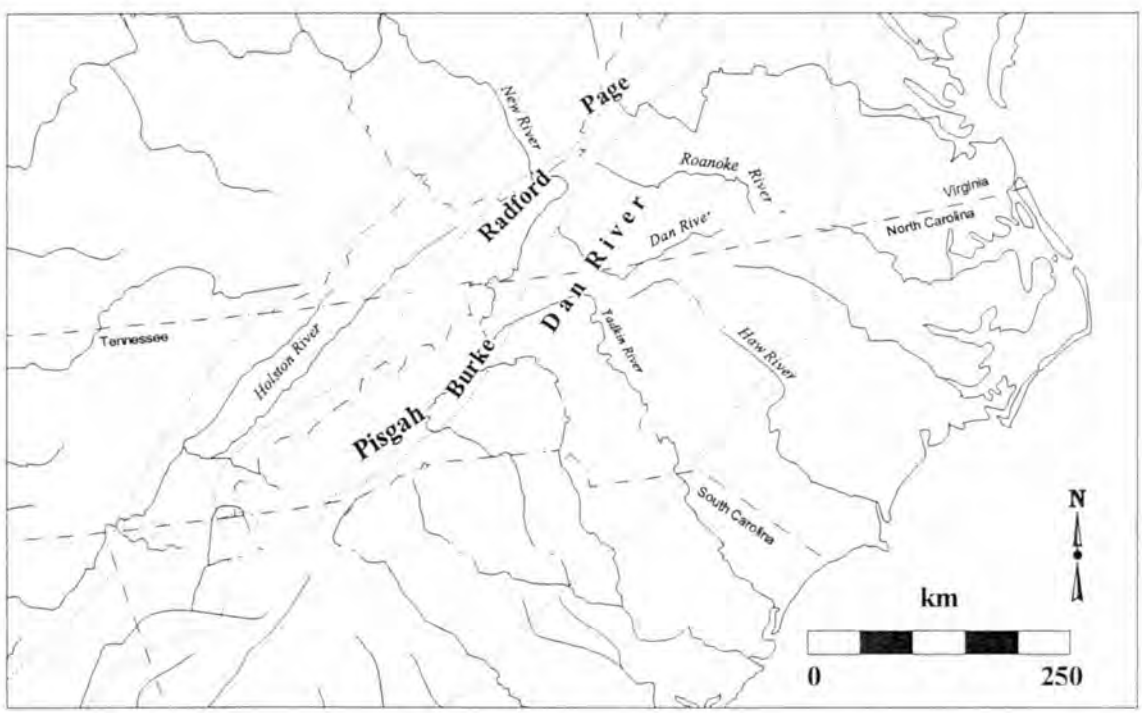

Figure 64. Pottery series produced in the Piedmont and Appalachian regions of North Carolina and Virginia around A.D. 1400.

Appalachians and Uwharrie Mountains of the southern Piedmont and was apparently regularly accessible to piedmont groups. Copper artifacts are not common on late prehistoric sites in the study area. The analysis of mortuary objects associated with 150 burials from seven late prehistoric sites in the Dan and Roanoke drainages (see Chapter V) revealed that only two of the burials contained copper. Besides the one Upper Saratown burial with a single copper bead, one other burial in the sample contained copper fragments. Benthall (1969:93) suggests that the copper from this burial at Shannon (44My8) may reflect interaction with Fort Ancient peoples. Native copper in sheet form was recovered from Pee Dee phase burials at Town Creek, offering another potential avenue for the Dan River peoples to acquire copper during this period.

This examination of Dan River phase pottery and mortuary items indicates that Dan River peoples maintained regular interaction with other tribal groups occupying most of the North Carolina and Virginia Piedmont and the Appalachian region of southwestern Virginia including most of the Dan River valley, the upper portions of the Roanoke and James River valleys, and the middle section of the Yadkin River valley. Limited interaction may also be indicated with Fort Ancient cultures of the Ohio River valley and Mississippian peoples like the Pee Dee in the southern Piedmont, and Pisgah groups in the Appalachian region.

Although no marine shell beads were present in the seven Dan River phase burials at Upper Saratown, marginella beads were often used as grave offerings during the Dan River phase in the study area. Beads made from marginella shells are also commonly found in Pisgah phase burials (Dickens 1976; Keel 1976) in the Appalachian region of North Carolina, at sites in the Ridge and Valley area of southern Virginia, and at Town

Creek (Benthall 1969; Buchanan 1986; Coe 1995). Common Atlantic Marginella (*Marginella apicina*) occurs along the Atlantic shore from North Carolina to Brazil but some species of marginella can be found as far north as Massachusetts (Porter and Tyler 1981). Although not as common, olive beads are also present in a few burials at Dan River phase sites (see Chapter V) and from a few sites in the Piedmont outside the study area (Coe 1995; John Davis, personal communication 1998). Olive shell beads are more common on late prehistoric sites in the Appalachian and Ridge and Valley regions than in the Piedmont. Lettered Olive (*Oliva sayana*), the most common olive species, is native to the shoreline from North Carolina to Florida and along the Gulf States and in the Caribbean (Porter and Tyler 1981). Late prehistoric exchange systems moved shell from the southern coast to the Piedmont and further to the Appalachians and Ridge and Valley.

Late Dan River Phase and Protohistoric Period

The present study indicates that during the late Dan River phase and Protohistoric period close interaction occurred between occupants of the Dan River drainage and the New River drainage, a tributary of the Ohio that flows north from northwestern North Carolina, through southwestern Virginia, and into the Ohio River valley. Pottery assemblages from Hairston in the Dan River drainage and Martin (44WY13) in the New River drainage share many distinctive characteristics (MacCord 1998). I feel these shared characteristics are unique enough to indicate close contact and perhaps a shared ceramic tradition at these sites. The Martin site ceramic assemblage exhibits attributes that are transitional between those in the late Dan River phase and Protohistoric assemblages at Hairston. All the assemblages contain very similar jars with quartz and sand temper, net-impressed exteriors, and everted/folded rims. In contrast to the rarity of folded rims on

Dan River Net Impressed jars (<10% of rims) (Davis et al. 1997a, 1997b, 1998), about half of the rims on net-impressed jars from Hairston and Martin have folded rims. In addition to these jars, the protohistoric assemblage from Hairston and the assemblage from Martin include sand-tempered jars with filfot scroll curvilinear complicated stamping and cazuela bowls with burnished surfaces and nicked shoulders.

These latter ceramic traits reflect influences from Mississippian Lamar cultures in the southern Piedmont and Fall Line areas of South Carolina and Georgia (Hally 1994; DePratter and Judge 1990). Only selected Lamar-like traits are found in ceramic assemblages in the upper Dan drainage and it is very likely that these ideas reached the Sara indirectly through contemporaneous Caraway, Burke, and Cowan's Ford potters who occupied the southern North Carolina piedmont. Moore (1999:Appendix C) noted influences from the Dan River ceramic tradition in minority types within the Burke series. These influences appear to have been transmitted northward by Dan River potters to the central New River valley during the Late Prehistoric and Protohistoric periods.

The earliest type of engraved "rattlesnake" gorget, the Lick Creek style, was recovered from late Dan River phase burials at Hairston and from a burial at Martin (MacCord 1998). This type of gorget has also been recovered from late Pisgah phase components in western North Carolina (Dickens 1976; Keel 1976), Dallas phase sites in eastern Tennessee (Polhemus 1987), and other late prehistoric contexts in north Georgia, South Carolina, and southwestern Virginia (Brain and Phillips 1996; Stuart 1970) (see Figure 65). Other nonlocal artifacts from contemporaneous burials at Hairston include shell ear pins, a lanceolate-shaped copper gorget, two pearl beads, marginella beads, and hundreds of columella beads.

Other artifacts from a late Dan River phase burial at Hairston that are of local manufacture but have limited regional distributions include bone beads made from rabbit innominates and squirrel mandibles. Beads made from rabbit innominates have also been recovered from the protohistoric Poole site (Coe 1937; Wilson 1983:323), the late Pisgah phase Warren Wilson site (Dickens 1976), the late Dan River phase Sharp site (31Rk12), the Dan River phase Red Hill site (44Ch7) in Charlotte County, Virginia (Segall and MacCord n.d.), and an undocumented burial at Leatherwood Creek (44Hr1), in Henry County, Virginia (Gallivan 1997). Rabbit innominate beads were also recovered from the McLean Mound (31Cd7) in Cumberland County, North Carolina, but this site was occupied during the Middle Woodland period and predates the others by several centuries (MacCord 1966). A drilled squirrel mandible bead was recovered from the Martin site in Wythe County Virginia (MacCord 1998). These sites are located in the central and western Piedmont and eastern Appalachians of North Carolina and Virginia.

The third rattlesnake gorget from Hairston is of the Saltville style. This gorget was recovered from a burial associated with the protohistoric occupation at the site. A collector from Stokes County has three more engraved gorgets that probably came from Hairston: two Saltville style gorgets and one that appears to be transitional between the Lick Creek and Saltville style (Brain and Phillips 1996). Muller (1966a:162) and Brain and Phillips (1996) think the Saltville style developed from the Lick Creek style. Saltville style gorgets have a much smaller distribution than Lick Creek gorgets (see Figure 66). Sites with this type of gorget cluster in southwestern Virginia and northwestern North Carolina on the northeastern periphery of the area where "rattlesnake" gorgets occur, and Brain and Phillips (1996:102) suggest that these gorgets "were a regional development as

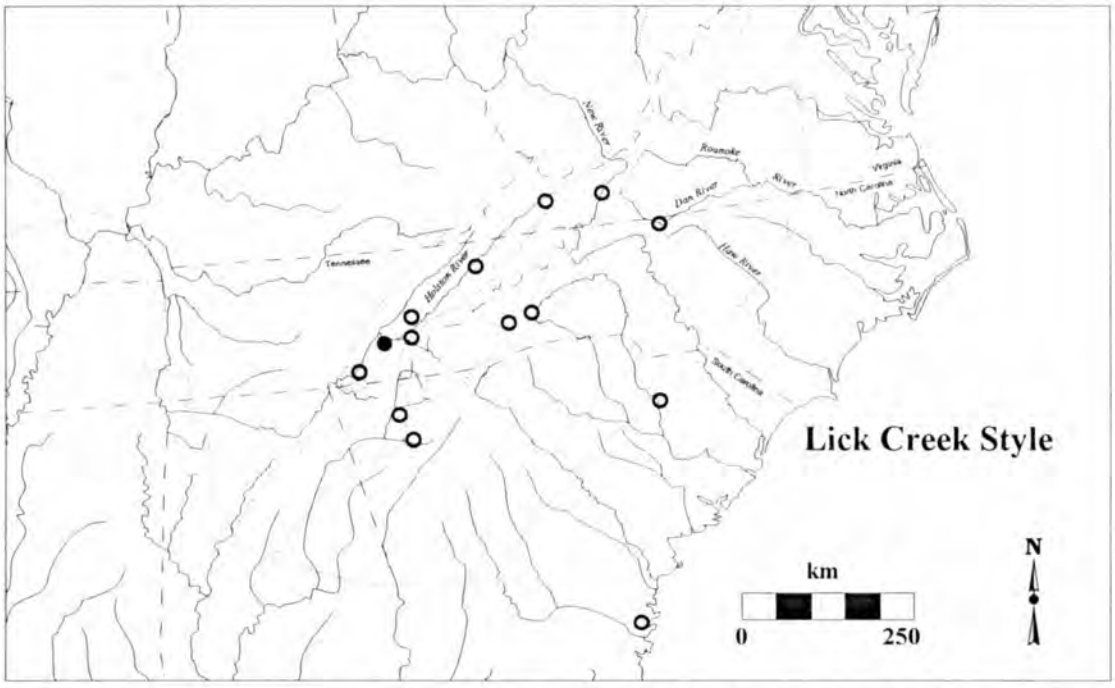

Figure 65. Distribution of archaeological sites with Lick Creek style rattlesnake gorgets.

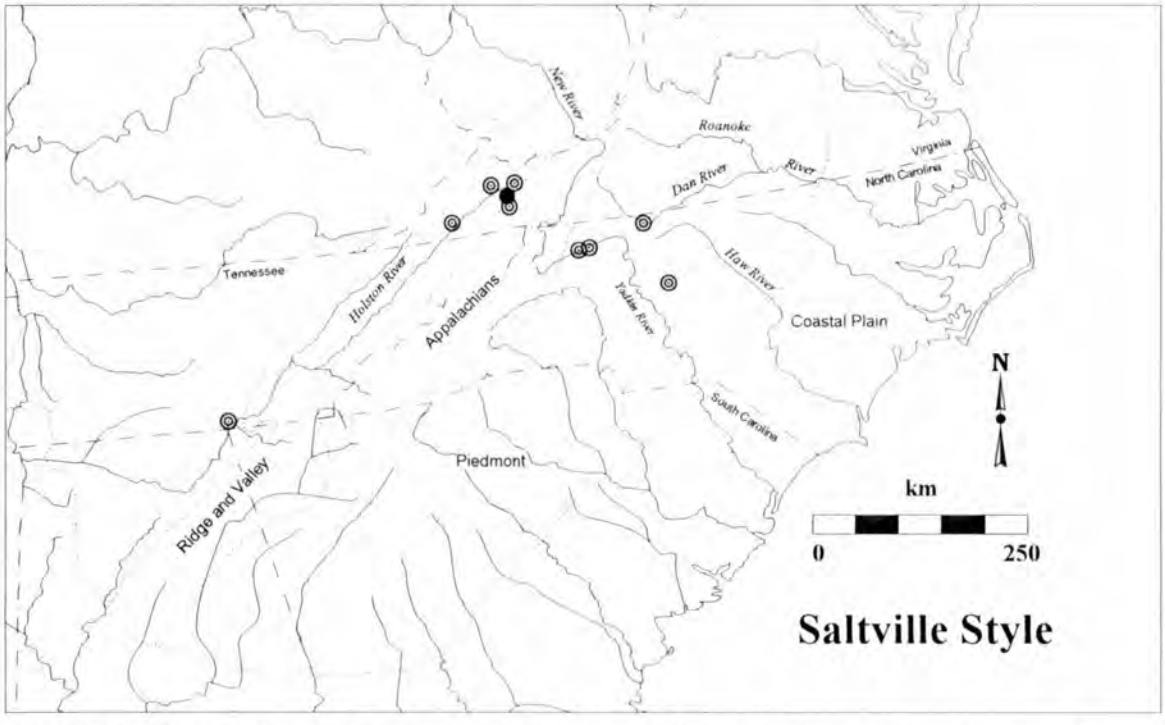

Figure 66. Distribution of archaeological sites with Saltville style rattlesnake gorgets.

local artisans created a new style from Lick Creek prototypes." Within North Carolina, Saltville style rattlesnake gorgets have been recovered from the Caraway phase Poole site (31Rd1) in Randolph County (Coe 1937) and from two sites in the upper Yadkin River valley, Porter (31Wk6) in Wilkes County (Rogers 1993) and a site east of the town of Elkin, possibly 31Sr8 in Surry County (Idol 1997). The Saltville style is thought to have originated in the area of Smyth and Washington counties in southwestern Virginia, near the Saltville saline. The saline may have been an important motivation for the Sara and other Siouan groups in the western Piedmont to maintain long-distance ties with groups in this region. Lederer (1672) noted cakes of salt in Sara village in 1670, but did not know its source. The presence of Saltville gorgets in the western Piedmont provides evidence for interaction between the study area and the area around the saline near present-day Saltville, Virginia, during the Protohistoric period. The Saltville saline may well have been the source area for the salt Lederer observed in 1670.

The distribution of pottery attributes, engraved gorgets, and certain bone beads in the region during the late Dan River phase and Protohistoric period indicates that interaction and communication may have declined somewhat between the upper Dan and communities in the upper Roanoke and James river valleys. Lamar influences that are apparent in ceramic assemblages in the Dan drainage are not as pronounced in the latter areas. Lamar influence in the Dan drainage is reflected in the identification of the Oldtown series during the Protohistoric period, while Dan River pottery continued to dominate in the latter areas. Regular interaction is indicated between the occupants of Hairston and Martin in the New River valley in southwestern Virginia. More limited interaction and exchange may have taken place with Lamar cultures in the Appalachian

region of western North Carolina and the Piedmont of South Carolina and southern North Carolina. Some items found on late prehistoric and protohistoric sites in the western Piedmont were exchanged up and down the Ridge and Valley Province. These items, like rattlesnake gorgets, were probably acquired by the Sara and Dan River peoples through long-distance exchange with groups in the Ridge and Valley Province of eastern Tennessee and southwestern Virginia. These objects may also have been traded down-the-line from southwestern Virginia.

Early Contact Period

During the Early Contact period plain pottery dominated assemblages in the Dan River drainage and many influences from the Lamar area persisted. Burnished cazuela bowls remained popular and a small number of jars continued to be stamped with curvilinear complicated carved paddles. Filfot scroll designs were replaced by concentric-circle and bull's-eye designs and these latter designs are also found on Caraway, Burke, and Cowan's Ford pottery.

Glass bead collections from Early Contact period sites in the study area are characterized by compound seed beads (circular) and larger round and oval simple beads (Table 47). These beads also dominate assemblages at Trigg (44My3) (Buchanan 1986) and Hurt Power Plant (44Py144) (Barber et al. 1996; Lapham 1998), contemporaneous sites in the James and Roanoke valleys of western Virginia. A similar array of beads was also recovered from a contact-period disturbance in the top of the mound at Town Creek in the southern North Carolina Piedmont. Surveys in the Haw and Eno valleys by RLA archaeologists associated with the multi-year Siouan Project did not identify any villages with evidence of European trade goods diagnostic of the first half of the seventeenth

century. Mitchum (31Ch452) is earliest site with European trade goods identified during the project. This site appears to postdate A.D. 1650, and none of the more than 2,000 glass seed beads from the site are of compound construction. Ward and Davis (1993) have argued that there was very little trade between the Piedmont Siouans of North Carolina and Europeans before A.D. 1650. The lack early seventeenth-century sites with trade goods in the eastern Piedmont supports this assertion. This raises the possibility that during the Early Contact period Siouans in the western Piedmont may have acquired European trade goods through a route other than the Great Trading Path from Fort Henry through the northeastern Piedmont. I discuss this in more detail below, but an alternative route may have been the Saura-Saponi branch of the Warrior's Path, later known as the Great Wagon Road, that ran through the Valley of Virginia into the western Piedmont of North Carolina (Myer 1971). This western route may account for similarities in bead assemblages between sites in the western Piedmont of Virginia and North Carolina and a lack of evidence for European trade goods during this early period in the eastern Piedmont (see Latham 1998).

Table 48. Distribution of Certain Types of Glass Beads at Early Contact Period Sites in the Dan Drainage.

Kidd and Kidd Type	Description	Lower Saratown	Madison	Philpott
IIa10/15	medium, oval, opaque white	1	11	-
IIa13	medium, round, opaque white	1	17	-
IIa40/44	round, opaque medium blue	1	5	9
IVa11	circular, clear-white-clear	31	2007	97
IVa12	circular, clear-navy blue-clear	4	-	2
IVa15	cicular, clear-white-apple green	3	149	28
IVa17	cicular, ultramarine-white-ultramarine	-	209	2
IVb13	circular, clear-white-clear with 6 red stripes	1	15	9

Besides glass beads, copper or copper alloy ornaments and marine shell beads are the only other nonlocal artifacts on Early Contact period sites in the study area. Copper or brass ornaments were present in most Early Contact burials and these included several types of beads and pendants, such as rolled beads and hairpipes, tinkling cones, a disk gorget with central perforation, and a rectangular breast plate. None of these grave goods have been subjected to metallurgical analysis, but the marked increase in copper artifacts during this period was probably linked to an infusion of copper into the region by Virginia colonists (see also Straube and Luccketti 1996).

The evidence reviewed here indicates that during the Early Contact period the direction of the Sara's most intense interaction was north-south and incorporated the western Piedmont and Appalachian regions of Virginia and southern Piedmont of North Carolina.

Middle Contact Period

Vessels made by Sara potters begin to exhibit evidence of influence from the eastern Piedmont during the Middle Contact period. This influence is revealed in the increasing popularity of vessels with check-stamped exteriors. Check stamping is the dominant surface treatment on Occaneechi pots during the last decades of the seventeenth century and it gained in popularity in the Dan drainage during the Middle and Late Contact periods. The Occaneechi were middlemen in the deerskin trade that was conducted from Fort Henry, located in present-day Petersburg, Virginia. This trade followed the Great Trading Path from Fort Henry, at the Fall Line in southern Virginia, southwest into the interior. The Occaneechi exerted influence on this trade first from their

fort on an island in the Roanoke River and later, to a lesser extent, from their village along the Eno River. The higher frequency of check-stamped pottery on Sara sites may indicate a re-orientation of their trade toward the trade along the Great Trading Path and may reveal the influence of the Occaneechi in that regional interaction.

European trade goods, like glass beads, from Middle Contact period contexts at Upper Saratown provide evidence for this transition from a north-south focus of interaction to a more east-west focus. Some types of compound seed beads and medium-sized simple and complex beads (Kidd and Kidd's types IIa10/15, IIa13, IIa44, and IIb56) noted on Early Contact period sites in the study area are also present in Middle Contact periods contexts at Upper Saratown. As these bead types are not found at Mitchum, the only contemporaneous site known from the eastern Piedmont (Carnes 1987), they provide evidence that the Sara continued to trade with groups living in southwestern Virginia into the Middle Contact period. However, most Middle Contact period beads at Upper Saratown are simple seed beads, like those found at Mitchum, indicating that trade through the eastern Piedmont may have been initiated during this period.

Several other types of artifacts in the collection provide evidence for continued connections with southwestern Virginia and perhaps with groups in the Ridge and Valley regions of Tennessee or Alabama. Copper alloy disk gorgets with large central perforations are present in several Middle Contact period burials at Upper Saratown. These gorgets are most common in Lamar sites in the southern Ridge and Valley Province (Smith 1987). Sites with this type of gorget tend to cluster (see Figure 67) and these site clusters may represent several centers of production in the Lamar region and

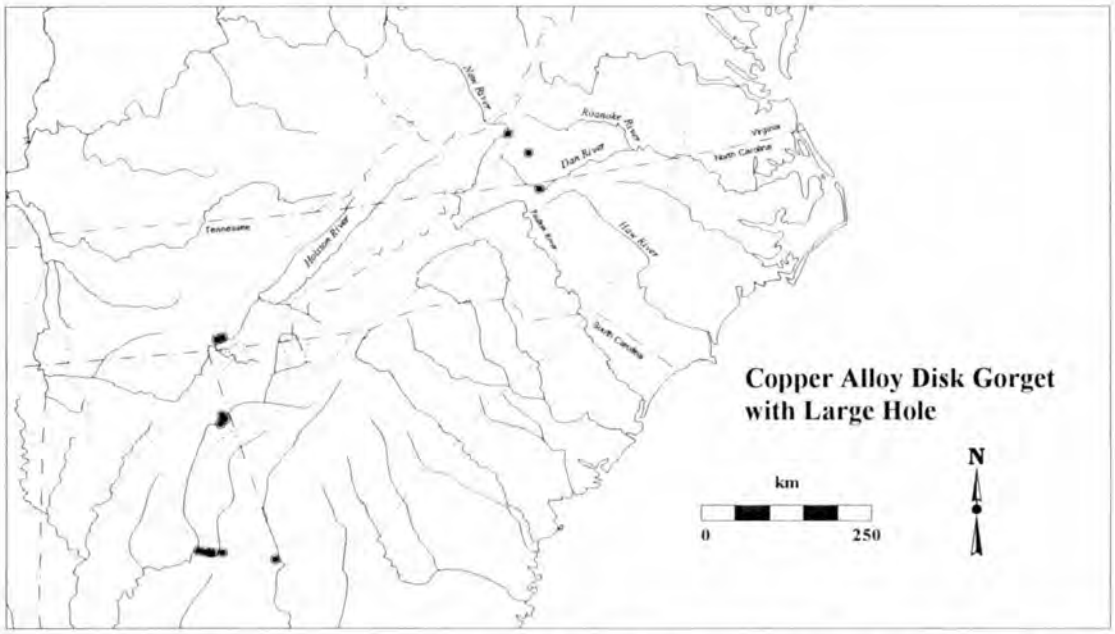

Figure 67. Distribution of archaeological sites with copper alloy disk gorgets with large central holes.

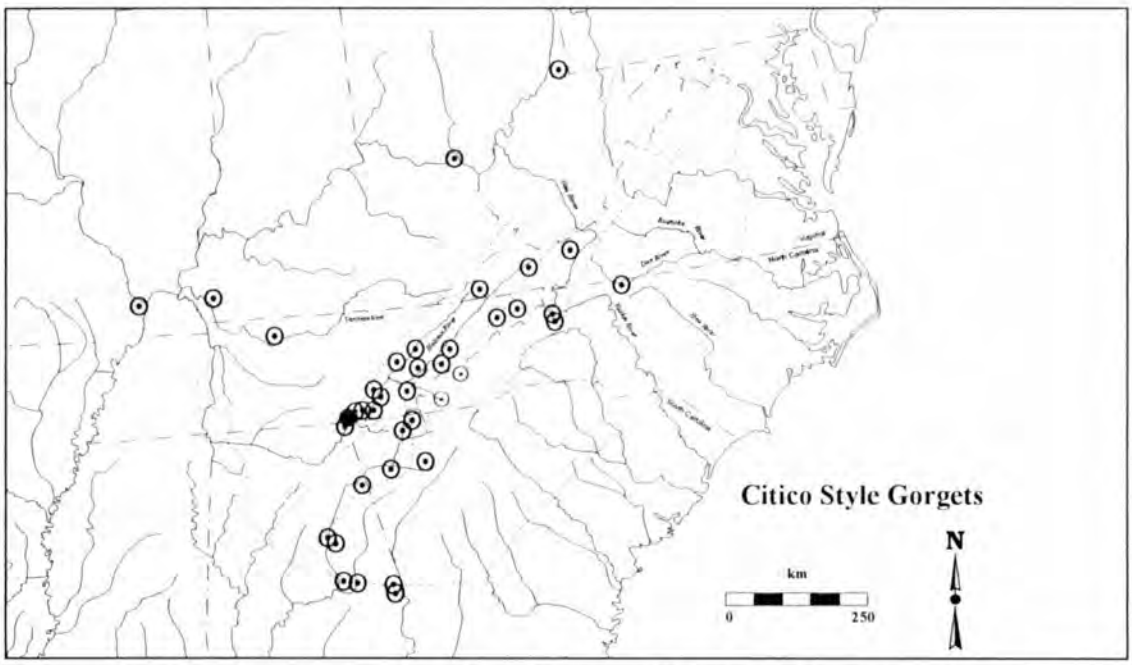

Figure 68. Distribution of archaeological sites with Citico style rattlesnake gorgets.

perhaps in the Chesapeake as well (Potter 1993). Gorgets like those at Upper Saratown have also been recovered from Philpott and Trigg in the western Piedmont and Blue Ridge of Virginia.

In addition to the copper alloy disk gorgets, one engraved marine shell gorget was recovered from this component at Upper Saratown. This poorly-preserved rattlesnake gorget is of the Citico style. Most Citico-style gorgets occur on sites in the Ridge and Valley Province (see Figure 68), and most of these sites were occupied before A.D. 1630. This terminal date for Citico gorgets in the interior is a few decades earlier than the estimated date for the Middle Contact period component at Upper Saratown, which raises the question as to whether this artifact is an hierloom of some earlier interaction. Citico gorgets are the most numerous of all styles of rattlesnake gorgets, and have the widest distribution in the Southeast. This gorget is the only Citico-style rattlesnake gorget from an archaeological site in the North Carolina Piedmont.

The large, plain elbow smoking pipes described in Chapter III provide evidence for a continued connection between the study area and western Virginia. A very similar pipe was recovered from Trigg, in Montgomery County, Virginia.

Thus, artifacts recovered from the Middle Contact period component at Upper Saratown provide evidence for continued ties with southwestern Virginia and perhaps indirect ties with Lamar cultures of the Ridge and Valley Province of Tennessee, Georgia, or Alabama. Pottery and glass beads also indicate that the Sara may have traded along the Great Trading Path through the eastern Piedmont during this period.

Late Contact Period

In the years following 1670, the Dan drainage and other areas to the south and west became well-known to Virginia traders. There are several published accounts of expeditions into the Dan drainage by Europeans interested in establishing trade relations beginning with John Lederer in 1670. Letters from William Byrd I to his London agents indicate that only 15 years after Lederer's journey the deerskin trade was a thriving and competitive venture with Virginia traders vying with one another to attract native trade partners in the interior (Tinling 1977:37, 57, 58). The deerskin trade developed rapidly after A.D. 1670, especially after the regional control of the Occaneechi was impaired in A.D. 1676 by Nathaniel Bacon and his rebel militia. Bacon's attack on the Occaneechi in their Roanoke River fort led to their eventual move south to the Eno River (Fredricks site). The lessening of the Occaneechi's control over movements along the Great Trading Path may also have led to increased opportunities for trade for groups in the interior like the Sara. Even if there was an increase in the opportunities for groups in the interior to trade during the Late Contact period, Ward and Davis (1993) demonstrated that the Occaneechi were still able to restrict the types of trade goods that were available to these groups. Items like firearms and ammunition, metal implements, and kaolin pipes are less common at Late Contact period sites in the Dan drainage than at Occaneechi Town (Fredricks site).

Many of the trade goods from the Late Contact period occupation at Upper Saratown are also present at Fredricks and may have been acquired through the same traders. Mouth harps, Saturn bells, steel case knives, and latten spoons with "seal-top" finials have been recovered from both sites. Similar narrow-bladed hoes and scissors

were also present at each site. These two sites are the only ones in the Piedmont with burials that have wampum as grave goods. Glass beads at Upper Saratown are more similar to those recovered from Jenrette, located next to Occaneechi Town and occupied slightly earlier, possibly during the 1670s. The Late Contact period occupation at Upper Saratown most likely occurred during the later years that the Jenrette site was occupied and into the early years of the Occaneechi occupation.

Unlike Fredricks, a few burials at Upper Saratown contain copper alloy disk gorgets. These gorgets have small central perforations. Similar gorgets have been recovered from site Vir150 located near the Fall Line of the Roanoke River, at Madison located downstream from Upper Saratown at the confluence of the Dan and the Mayo rivers, at Philpott along the Smith River in Henry County Virginia, and at Town Creek in the southern North Carolina Piedmont. Potter (1993) also reports very similar gorgets from the Chesapeake region of Maryland. Gorgets like these also have been found on Lamar sites in the southern Ridge and Valley Province of Tennessee and Alabama and near the Fall Line of Alabama and Georgia. The distribution of these copper alloy gorgets is similar to the distribution of earlier gorgets with large central perforations except that sites with the later gorgets are less tightly clustered. This seems to indicate a continuation of Middle Contact production and/or distribution. It is likely that separate northern and southern trade systems are represented by this distribution (see Figure 69). These gorgets may not have been obtained through the Great Trading Path trade system, and may represent vestiges of the proposed trade through the Valley of Virginia via the Great Warrior's Path.

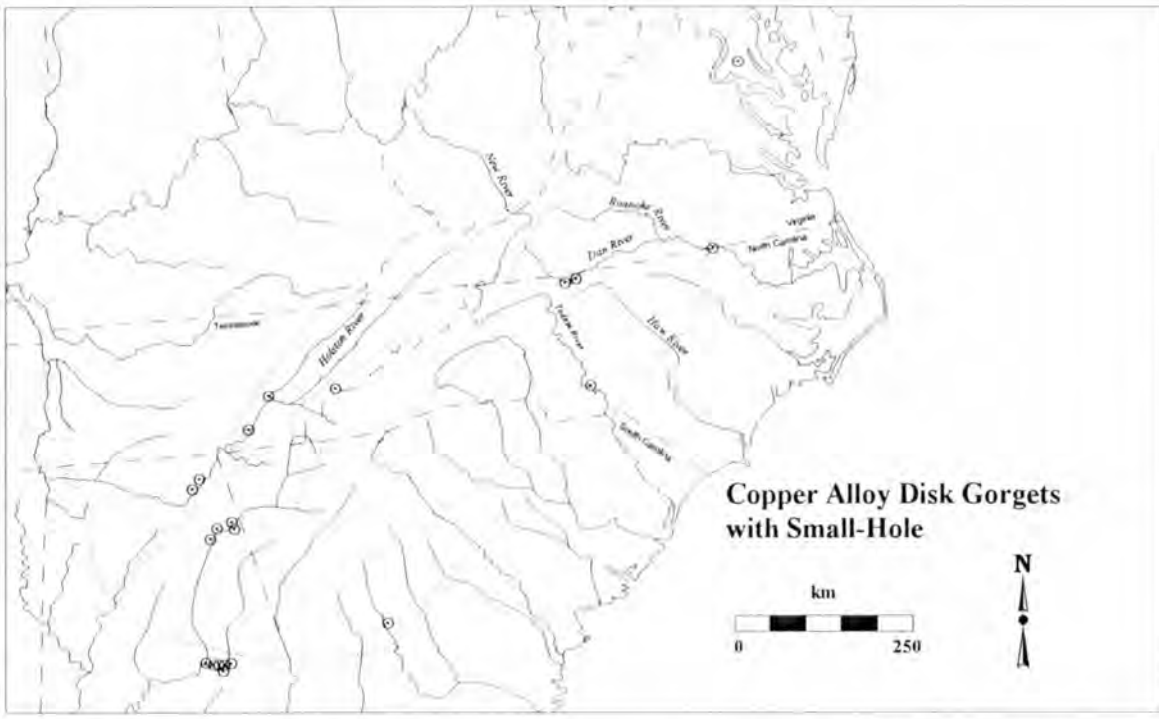

Figure 69. Distribution of archearological sites with copper alloy disk gorgets with small central holes.

Thus the pottery and most trade artifacts from Upper Saratown indicate increasing interaction along the Great Trading Path and, in particular, with the Occaneechi during the Late Contact period. Ward and Davis (1993:294) note some particularly strong evidence for interaction between the Sara and the Occaneechi in the pottery assemblage from William Kluttz.

Seneca Interaction

In addition to this artifactual support for the claim that a re-orientation of trade occurred during the Middle Contact period, there is other ethnohistorical and archaeological evidence to indicate that any trade through the western Piedmont of Virginia may have been disrupted during the last quarter of the seventeenth century.

These other lines of evidence can be linked to a single historical development – the intensification of Seneca raiding along the Great Warrior's Path toward the end of the seventeenth century. This avenue that may have provided trade opportunities for Siouans in the western Piedmont of North Carolina and Virginia before any were possible through the eastern Piedmont, also provided Iroquoian raiding parties easy access to the area. William Byrd I noted that the Sara abandoned the Dan drainage because of the persistence of Seneca raiding (Wright 1966:398). In a similar vein, MacCord (1989) has argued that the Tutelo and Saponi moved away from the area of Virginia near the Great Warrior's Path for the same reason, leaving the Valley of Virginia unpopulated during the last decades of the seventeenth century (see also Davis 1999). Incursions of Iroquoian raiding parties and population movements from southern Virginia would have encouraged the Sara to turn their attention more fully to activity and peoples along the Great Trading Path.

This study provides evidence that beginning at least as early as the Dan River phase the focus of the Dan River people's regional exchange efforts extended along a north-south axis to areas in southwest Virginia and the southern North Carolina Piedmont. This exchange provided them with access to a limited number of exotic items that were exchanged north and south along the Ridge and Valley Province. Beginning in the Middle Contact period, the focus of exchange began to shift to the Great Trading Path that ran from the northeastern Piedmont to the southwestern interior. This change can be linked to increasingly hostile relationships with Iroquois groups from the Northeast and associated population movements out of southwestern Virginia during the last quarter of the seventeenth century.

Chapter VII.

Summary and Conclusions

The goal of this study was to illuminate changes in Sara community life associated with changes in long-distance exchange and participation in the European deerskin trade, intensification of long-distance raiding and other forms of interregional hostilities, and the onset of epidemic disease and population loss. These historical developments became most apparent in the study area during the last decades of the seventeenth century, which corresponds with the Late Contact period in the regional chronology. Analyses presented here focused on mortuary behavior, community organization, and interregional interactions, and several cultural changes were apparent by the Late Contact period. Following is a summary of the most important findings of this study.

Prior to Contact

Late prehistoric and protohistoric Siouan community patterns at Upper Saratown, Hairston, and Nifong appear to be consistent with more extensively excavated sites in other areas of the Dan drainage. Within the study area two settlement types have been recognized during the latter half of the late prehistoric Dan River phase: nucleated villages and internally-dispersed settlements. The Uwharrie component at Upper Saratown appears to correspond to the former settlement type and the Dan River phase component to the latter. The single house and associated features identified at Nifong were constructed in a manner consistent with prehistoric houses in the region. Dan River

phase and protohistoric settlements are characterized by a greater diversity of pit features than earlier Uwharrie phase sites. This may indicate a shift toward greater specialization of tasks that required more specialized pit facilities late in the prehistoric era.

The distribution of some types of mortuary goods in late prehistoric and protohistoric burials indicates that opposed statuses corresponding to gender differences were recognized among both subadults and adults. Social factors other than gender, such as kinship or vertical social status, determined which males and females were buried with these mortuary goods.

The distribution of shell objects indicates that Siouan communities also consistently recognized differences based on age. Shell objects were less often interred with adults older than 35 years at death, and this distribution may reflect changes in reproductive capacities or productive roles of older adults. My analysis indicates that women may have experienced more dramatic changes in social status as they aged than males did as they aged.

Pottery and other material culture associated with Uwharrie and Dan River phase cultures of the western North Carolina Piedmont indicate that these peoples interacted regularly with other groups who lived in the Virginia and North Carolina Piedmont, and also some groups in the Blue Ridge area of Virginia. More limited interaction is indicated between Dan River peoples and Mississippian cultures who lived in the southern Piedmont, and in the Appalachian region and Ridge and Valley Province of Virginia, North Carolina, and eastern Tennessee. Limited interaction is also indicated between the them and Fort Ancient cultural groups of the Ohio River valley. The analysis of pottery in the study area revealed evidence for the diffusion of ceramic technology and styles along

a north-south corridor from the Lamar (Mississippian) ceramic area, through the western Piedmont, into southwestern Virginia. Dan River peoples appear to have introduced certain Lamar-influenced pottery styles into the central New River valley. These influences are less apparent in the upper Roanoke and James River valleys in western Virginia. This close interaction between the study area and southwestern Virginia continued to be important during the Protohistoric period.

The Early Decades of the Deerskin Trade

During the Early and Middle Contact periods (A.D. 1607–1670), there is evidence for subtle changes in community organization and mortuary behavior at Sara village sites. Pottery and nonlocal artifacts from these sites also indicate that the Sara's long-distance relationships were undergoing change as well during these periods. I have linked these changes to wider regional developments like the burgeoning deerskin trade out of Tidewater Virginia and the subsequent introduction of epidemic disease into the interior of North Carolina. Most of these effects were not felt until after mid-century. These changes are summarized below.

Communities built during the Early and Middle Contact period exhibit greater differentiation of activity areas, than was evident in late prehistoric villages, although there was continuity of the basic plan of nucleated villages from prehistory into the Contact period. Villages constructed during the latter period include a separate work area between the houses and the surrounding palisade. This space, designated the communal work area, was characterized by large earth ovens, deep storage pits, and basins. A similar communal work area has been identified at a contemporaneous site in the Eno drainage (Jenrette). These areas are thought to have functioned as communal storage and

food preparation areas. The increase in the size and number of large earth ovens at these sites has led to the interpretation that feasting became increasingly important during the Contact period. I have further interpreted this behavioral change within the context of ritual purification and cleansing, similar to Green Corn ceremonialism. The increase in feasting and ritual purification is seen as an initial ritual response to epidemic disease.

The Middle Contact period component at Upper Saratown may provide the earliest evidence for population loss due to epidemic disease in the study area. One house (Structure 3) has 12 individuals buried under its floor. The burials are of children, adolescents, and young adults. The unusually large number of adolescents in this group, and in the Middle Contact period component as a whole, may indicate that the village population was experiencing stress. A likely source of this stress would be epidemic disease. As none of the houses used during this occupation show evidence of repair, I proposed that the occupation was short-lived. Flight from an area is a common response to unfamiliar diseases and this village may have been abandoned prematurely after such an outbreak.

The impact of participation in the deerskin trade is most apparent in the type of objects used as grave goods. During the early decades of the deerskin trade copper and/or copper alloy ornaments became popular. Soon glass beads largely supplanted the use of copper and native shell beads as grave offerings. By the Middle Contact period more than 80% of burials with grave goods included European trade items. The mortuary analysis revealed some evidence for the presence of a group within the community that may either have opposed participation in the deerskin trade or were prevented from participating in it. In contrast to this general pattern, this group was characterized by traditional mortuary

goods, like clay pipes and projectile points, and lacked any associated items of European manufacture, even glass beads. This group was composed primarily of adolescents and young adults.

During the Early Contact period the Sara engaged in trade for European items with Siouan communities in western Virginia. This trade was most likely part of a larger system of exchange that was conducted through the Valley of Virginia along the Great Warrior's Path. The Sara's involvement in the trade during this period was probably limited to indirect trade with resident Siouan communities in western and southwestern Virginia, the Susquehanna, or other groups traveling down the Great Warrior's Path from the northern Chesapeake or Northeastern United States.

The evidence considered here indicates that it was during the Middle Contact period that the Sara first engaged in the deerskin trade with Siouan communities in the northeastern North Carolina Piedmont. Check-stamped pottery occurs for the first time in appreciable numbers during this period. The growing popularity of check-stamped pottery reflects the increased interaction with the Occaneechi whose pottery is dominated by this type of surface treatment. During this period the Occaneechi were powerful middlemen in the deerskin trade out of the southern Virginia Tidewater. Artifact assemblages from sites in the study area provide evidence for a wide range of long-distance exchanges, but by the close of the Middle Contact period, trade was directed toward the northeastern Piedmont. The earlier trade through the Valley of Virginia became less viable as raiding along the Great Warrior's Path increased during the second half of the century. Raiding along the path may even have driven Siouan communities in western Virginia from their homelands.

Many of the plain and burnished pots in Sara assemblages from contact-period sites reflect Lamar influences transmitted from potters in the southern Piedmont or further in the interior. These ties to the Catawba and other groups to the south of the study area remained strong as other trading partnerships fluctuated.

The Late Contact Period

Most of the changes in settlement organization and mortuary behavior during the Late Contact period seem to be linked to epidemic disease and its impact on the community. In sharp contrast to the pattern during the Middle Contact period, houses and palisade lines in the Late Contact period component at Upper Saratown were rebuilt a number of times. The evidence for rebuilding is not associated with a longer occupation span in which houses would have required repair or replacement, nor does it appear to have been required because the houses burned. The removal and rebuilding of these houses may be explained within the context of ritual cleansing and purification. Annual renewal ceremonies were common in the Southeast during the historic era and have been documented at prehistoric sites as well. These renewal ceremonies often involved the destruction and rebuilding of communal structures and refurbishing of private houses. It is this sort of ritual activity that may have been amplified during the Late Contact period when epidemic diseases became a serious problem for Siouan communities throughout the Piedmont.

A second change in the organization of settlements in the study area is linked more directly to population decline. Spatially-segregated cemeteries are present at both Late Contact period sites in the study area. The cemetery at Upper Saratown is situated adjacent to the domestic zone of the village, while the one at William Kluttz is apparently

removed from the area where houses were located. This spatial separation of burials and houses is a departure from earlier burial patterns.

Initially, individuals buried in cemeteries appeared to have received more elaborate mortuary treatment (as measured by associated objects) than burials in other areas. At Upper Saratown, cemetery burials tended to be interred with more associated objects than village burials. Individuals buried in the cemetery were often interred in garments decorated with several hundred to several thousand glass beads. In contrast, the cemetery burials at William Kluttz were provided less elaborate facilities and interred with fewer grave goods than the two burials located outside the cemetery. By the end of the Late Contact period, individuals in cemeteries were no longer afforded special treatment at burial, and, instead, were buried in a manner consistent with little expenditure of effort or ceremony.

Both the pottery assemblages and collections of European trade goods from Upper Saratown and William Kluttz indicate increased trade with the Occaneechi during this period. Though Oldtown Plain pottery continues to be the most common type in these assemblages, check stamping is an increasingly popular surface finish for pots in the study area. While Oldtown Check Stamped pots point to the influence of the Occaneechi, some of the Oldtown Plain pots provide equally strong evidence for the continuing interaction with and influence of the Catawba and their neighbors of the southern Piedmont.

This study has illuminated many ways the Sara altered their material culture, the organization of their communities, their ties to other communities, and their ritual practices from the Late Prehistoric through the Contact period. These changes may have

been linked to a number of related developments in the region, but overall the one with the greatest impact appears to have been population loss associated with epidemic disease.

Appendix 1. Feature Descriptions from Upper Saratown

Context	Featype	Phase	Length	Width	Depth	Planview	Profile	Comment
Fea. 1	SB		2.30	2.20	0.62	C	B	depth measured from top of midden
Fea. 10	SP	LS	3.30	3.10	2.71	C	C	contained lots of bone and charcoal - stratified fill
Fea. 101	EO	MS	4.70	4.40	0.25	C	B	intruded by Bu. 52; x-mends w/ Fea. 104
Fea. 102	SB	MS	2.65	1.43	0.13	O	B	intruded by PHs
Fea. 103	SP	U	3.10	3.50	1.35	C	C	fill is homogeneous, intruded by Fea. 58 and PHs
Fea. 104	SP	MS	7.60	7.30	1.05	C	SS	bear mandible; intruded by Bu. 54, Bu. 55, and PHs; x-mends w/ Fea. 101, 111
Fea. 106	SB	DR	6.10	3.60	0.50	O	B	intruded by PH line
Fea. 108	Burial Slump	MS			1.40			contained copper pendant; slump overlying Bu. 65
Fea. 11	EO	LS	8.20	4.30	0.70	O	B	corn, peach (276 whole, 186 frag) pits, hickory nut
Fea. 110	SB	MS	1.60	1.40	0.12	C	B	intrusive into PH1
Fea. 111	EO	MS	6.90	6.00	0.67	0	B	intruded by Bu. 63, Bu. 68; x-mends w/ Fea. 69, Fea. 104
Fea. 112	SB	MS	3.65	2.85	0.15	C	B	intrusive into Fea. 120; intruded by Bu. 68; sherds identical to Fea. 101
Fea. 113	SB		2.10	1.82	0.58	O	B	intrusive into Bu. 60 - for shape see form for Bu. 60
Fea. 114	Pothole							
Fea. 115	SB	U	1.55	1.51	0.66	C	SS	observed at top of midden
Fea. 117	SP	U	2.30	2.60	0.91	C	C	intruded by PH
Fea. 118	SP	LS	4.75	4.50	2.60	C	C	intrusive into Fea. 120
Fea. 119	SB		3.70	3.50	0.23	C	B	intrusive into Fea. 124
Fea. 12	SP	DR	3.00	2.40	1.29	C	C	turtle carapace, animal bone, and charcoal noted
Fea. 120	RP	MS	2.50	2.65	1.19	C	C	intruded by Fea. 118, contained lots of eb material - 3 turtle carapaces

Appendix 1. Feature Descriptions from Upper Saratown

Context	Featype	Phase	Length	Width	Depth	Planview	Profile	Comment
Fea. 121	SB	LS	3.85	3.35	0.05	O	B	intuded by PH and intrusive into PH
Fea. 122	SP	U	3.11	2.90	1.60	C	C	intruded by 2 PH
Fea. 123	SP	LS	3.56	3.28	3.01	C	C	
Fea. 124	SB	LS	3.40	2.80	0.40	O	B	intruded by Fea. 119
Fea. 126	SP	LS	3.45	2.75	1.86	C	C	
Fea. 127	SB	LS	3.40	2.80				feature largely potted
Fea. 128	SP - potted	LS						feature nearly completely potted
Fea. 129	SB		1.50	1.45	0.25	C	B	intrusive into PH
Fea. 13	SP	LS	3.10	2.70	2.18	C	C	large amount of ash, animal bone, and eb. material in fill - stratified
Fea. 130	SB		2.10	2.50	0.20	C	B	intruded by Fea. 131 (postholes concen.) intrusive into PH 42 and PH 43
Fea. 132	RP	MS	3.60	3.60	0.62	C	B	
Fea. 133	RP	MS	2.50	2.35	0.85	C	C	intrusive into Fea.
Fea. 134	SP	MS	4.80	3.30	3.75	C	C	partially potted
Fea. 135	SP	LS	3.37	3.50	2.22	C	C	clay pipe - complete
Fea. 136	SP - potted		4.35	3.50	3.75	C	C	potted - couldn't distinguish disturbed from undisturbed
Fea. 137	SP	LS	3.00	2.93	2.89	C	C	intruded by PH 1
Fea. 138	SB	DR	2.41	2.30	0.80	C	SS	intruded by PHs
Fea. 139	SB	MS	2.18	2.04	0.46	C	B	
Fea. 14	SB		1.80	1.70	4.10	C	B	fill is rich, intrusive into Bu. 14
Fea. 140	SB		1.75	1.60	0.43	C	SS	
Fea. 141	SP	LS						

Appendix 1. Feature Descriptions from Upper Saratown

Context	Featype	Phase	Length	Width	Depth	Planview	Profile	Comment
Fea. 142	Treeroot		9.50	8.75	2.18	A	A	intruded by Bu. 83, Bu. 86, Bu. 85; may be Dan River phase?
Fea. 143	EO	LS	4.55	4.52	0.46	C	SS	intruded by Fea. 144
Fea. 144	EO	MS	4.02	3.83	0.64	C	SS	intrusive into Fea. 143
Fea. 145	SB	U	2.03	1.87	0.77	C	SS	
Fea. 147	EO	MS	4.40	4.20	0.75	C	B	may represent burial slump for Bu. 40
Fea. 149	RP	LS	2.93	3.07	0.65	C	C	
Fea. 15	SP	DR	3.30	1.80	1.80	C	BS	upper fill contained lots of daub, intruded by Bu. 12
Fea. 151	SB		2.08	1.64	0.41	O	B	
Fea. 152	Pothole							potted
Fea. 153	SB		2.55	2.08	0.40	O	B	
Fea. 155	Pit	MS	3.38	2.85	0.97	R	SS	intrusive into Fea. 156, may be a burial pit
Fea. 156	SB	MS	3.70	3.60	0.22	C	B	
Fea. 157	RP	LS	2.31	2.28	0.80	C	C	
Fea. 158	RP	MS	3.61	3.62	1.75	C	C	
Fea. 159	Pothole							
Fea. 16	RP	LS	3.40	2.90	0.60	O	B	fill contained lots of charcaol, deer bone, pottery, projectile points
Fea. 160	SP	LS	3.51	3.10	2.97	C	BS	
Fea. 161	RP?	MS	2.63	2.96	2.73	C	C	
Fea. 162	SP		2.68	2.48	2.59	C	BS	intrusive into Fea. 165; intruded by PHs
Fea. 163	Pothole							
Fea. 164	SB	MS	3.50	3.11	0.23	C	B	intrusive into PHs - says trade beads were found
Fea. 165	Tree Stump							

Appendix 1. Feature Descriptions from Upper Saratown

Context	Featype	Phase	Length	Width	Depth	Planview	Profile	Comment
Fea. 166	SP	U	2.91	2.82	1.70	C	C	
Fea. 167	SB	DR	2.20	2.00	0.90	C	B	intruded by PHs
Fea. 168	SP	LS	4.00	4.00	2.40	C	C	largely potted, intrusive into PHs
Fea. 169	SB	LS	2.60	1.90	0.85	O	B	intrusive into Fea. 170
Fea. 17	SP	LS	3.40	3.10	2.30	C	C	fill had an ash lens, but little charcoal - bird effigy pipe
Fea. 170	EO	LS	6.03	5.90	1.16	O	B	x-mends with Fea. 180, Fea. 172; intruded by Fea. 169 and Fea. 172
Fea. 171	EO	LS	7.50	4.75	0.50	O	B	
Fea. 172	SP	LS	2.48	2.51	1.36	C	C	x-mends with Fea. 170; confusion in field as to which came first - mixing??
Fea. 173	SP		3.36	3.21	2.99	C	C	almost completely potted
Fea. 174	SB	MS	4.09	3.12	0.71	O	B	
Fea. 175	SP	MS	2.40	2.60	2.98	C	BS	intruded Bu. 99
Fea. 176	RP		1.96	1.94	0.94	C	C	
Fea. 177	SP	DR	3.00	2.75	1.82	C	C	
Fea. 178	Pothole							
Fea. 179	SB	LS	3.75	2.51	0.30	O	B	
Fea. 18	SB	DR	2.50	2.20	1.00	O	B	had a concentration of kaolin clay - pit has constricting walls
Fea. 180	EO	LS	5.50	6.30	1.81	O	?	heavily potted; acorn, corn cob and corn kernal
Fea. 181	SB	LS	2.38	2.51	0.10	C	B	
Fea. 182	Pothole							
Fea. 183	SB	MS	1.65	1.45	0.40	O	B	
Fea. 184	SB	LS	8.62	5.82	0.40	O	B	intruded by PHs

Appendix 1. Feature Descriptions from Upper Saratown

Context	Featype	Phase	Length	Width	Depth	Planview	Profile	Comment
Fea. 185	SP - potted	LS			3.00		C	2/3 of pit was potted, intrusive into Fea. 186
Fea. 186	SB		2.05	1.70	0.13	O	B	intruded by Fea. 185
Fea. 187	SB		2.02	1.82	0.11	C	B	intruded by PHs
Fea. 188	SB		1.68	1.60	0.18	C	B	
Fea. 189	SSP/B		3.75	3.74	0.88	C	C	intruded by PH
Fea. 19	EO	LS	5.70	5.40	0.53	C	B	
Fea. 190	SB		1.83	1.70	0.28	C	B	
Fea. 191	SP	DR	2.75	2.25	1.88	C	BS	intruded by Bu. 104
Fea. 192	SP	DR	3.72	3.19	2.32	C	C	intruded by Fea. 190
Fea. 193	RP	DR	2.47	2.46	0.92	C	C	intruded by Fea. 192
Fea. 194	SB	U	1.80	1.90	0.47	C	SS	
Fea. 195	SP	LS	2.85	2.72	1.05	C	C	intruded by PHs
Fea. 196	Pothole	LS						
Fea. 197	EO	LS	3.90	3.10	0.28	O	B	
Fea. 198	SP	MS	2.53	2.25	0.72	C	C	
Fea. 199	SP	LS	2.90	2.91	1.00	C	C	
Fea. 2	SB	LS	3.70	2.40	0.61	O	B	depth measured from top of midden
Fea. 20	SB	LS	2.90	2.50	0.49	C	B	
Fea. 200	SB		1.70	1.75	0.45	C	SS	
Fea. 201	SP	DR	2.15	2.15	1.97	C	C	
Fea. 202	Kiln??	MS	5.90	5.10	2.04	C	C	fired clay and charcoal on pit floor - clay rim
Fea. 203	SB	DR		2.45	0.26		B	intruded by Bu. 109
Fea. 204	SP	DR			2.33	C	BS	intruded by Bu. 108 and pothole

Appendix 1. Feature Descriptions from Upper Saratown

Context	Featype	Phase	Length	Width	Depth	Planview	Profile	Comment
Fea. 205	RP	DR	2.90	3.60	1.58	C	C	intruded by Fea. 211 and PHs
Fea. 206	SB		2.30	2.32	0.30	C	B	
Fea. 207	SB		1.71	1.92	0.20	C	B	
Fea. 208	SP	DR	4.90	4.55	2.30	C	C	
Fea. 209	Pothole							
Fea. 21	SP	DR	2.30	2.30	1.48	C	BS	pit bells out slightly
Fea. 210	SB	LS	3.70	3.90	0.20	C	B	intruded by PHs
Fea. 211	SB	LS		1.45	0.46		B	intrusive into Fea. 205
Fea. 213	SB	MS	3.15	3.47	0.32	O	B	intrusive into Fea. 215
Fea. 214	SB	LS	3.90	3.50	0.23	O	B	intrusive into Fea. 215 and 2 PHs; intruded by PH
Fea. 215	SB		3.00	2.60	0.47	O	B	intruded by Fea. 213 and Fea. 214
Fea. 216	SB		1.70	1.80	0.10	A	B	
Fea. 217	SB		3.35	3.05	0.12	C	B	
Fea. 218	SB	LS	3.30	3.10	0.19	C	B	
Fea. 219	SB		2.98	2.71	0.45	O	B	
Fea. 22	H	MS	2.70	2.70	0.17	C	B	reddish clay fill
Fea. 220	SB	LS	2.30	2.40	0.17	C	B	
Fea. 221	SB	MS	11.75	5.25	0.49	O	B	
Fea. 222	SB	LS	1.60	1.90	0.09	O	B	
Fea. 223	SB	LS	2.90	3.00	0.46	C	B	
Fea. 224	SB	LS	2.10	2.00	0.18	C	B	
Fea. 23	SP	LS	3.40	2.60	3.75	C	C	fill is stratified - large amounts of shell and bone in fill

Appendix 1. Feature Descriptions from Upper Saratown

Context	Featype	Phase	Length	Width	Depth	Planview	Profile	Comment
Fea. 24	SP - potted	MS						
Fea. 25	SB		1.45	1.40	0.32	C	B	fill contained daub with straw impressions
Fea. 26	SP	MS	2.50	2.50	2.24	C	C	
Fea. 27	SP	U	2.20	2.20	1.83	C	C	
Fea. 28	SP	DR	2.15	2.15	1.17	C	C	
Fea. 29	BNB	DR	2.20	1.90	1.50	R	SS	fill consisted of yellow clay and looks as if it were dug for infant burial
Fea. 3	SB		3.50	3.40	0.45	O	B	depth measured from top of midden
Fea. 30	SP	DR	2.25	2.25	1.10	C	C	
Fea. 31	SP	LS	3.14	3.20	3.24	C	C	bird effigy pipe, celt
Fea. 32	SB	DR	3.90	3.20	0.44	O	B	deer bone, peach pits
Fea. 33	BNB	LS	5.00	4.75	1.25	C	SS	intrusive into top of Bu. 39 - maybe midden-rich top of burial
Fea. 35	BNB	DR	2.90	2.78	1.52	C	SS	intruded by Bu. 35 - very little material
Fea. 36	SP	LS	2.50	2.50	1.10	C	BS	inside structure 3 - slightly bell-shaped intrusive into Fea. 37 and Bu. 45
Fea. 37	SP		2.94	2.75	1.65	C	C	intruded by Fea. 36 and Bu. 44 - fill has charcoal, bone, pottery
Fea. 40	H		1.75	1.60	0.30	C	B	associated with structure 4, contained within midden level
Fea. 41	H		1.50	1.50				associated with structure 3, observed as stain at top of subsoil
Fea. 42	Pothole		2.20	1.90	1.00			probable pothole into the top of Burial 41
Fea. 43	SB	DR	3.80	3.80	0.70	O	SS	intruded by Bu. 45
Fea. 44	SP	U	3.00	2.75	1.24	C	C	lower portion of fill contained burned sand and clay nodules
Fea. 45	SP - pothole	MS	3.10	3.10	1.85	C	C	intrusive into Fea. 46; feature was potted

Appendix 1. Feature Descriptions from Upper Saratown

Context	Featype	Phase	Length	Width	Depth	Planview	Profile	Comment
Fea. 46	SB		4.75	2.50	0.88	O	B	described as a slight stain in the subsoil with a minimum of artifacts
Fea. 47	EO	MS	5.80	4.00	0.46	O	B	corn, peach pits, seeds, nuts, daub; intrusive into Fea. 50
Fea. 48	SP	MS	4.30	3.75	1.75	O	SS	intrusive into Bu. 30
Fea. 49	PH	DR?	3.25	3.00	5.01	C	C	intruded by Structure 3, lined with rocks with postmold in center
Fea. 5	RP	DR	1.80	1.50	0.47	C	B	
Fea. 50	SB	MS	8.10	8.00	0.80	C	B	intruded by Fea. 47; intrusive into Fea. 54, Fea. 74, Fea. 84; x-mends v-55
Fea. 51	SP	MS	3.61	3.44	2.15	C	C	intrusive into Fea. 52, stratified w/ corncobs, nuts, seeds - human remains
Fea. 52	H	MS	5.03	4.24	0.19	O	B	intruded by Fea. 51, contained bone, seeds, corncobs, f-c rocks, charcoal
Fea. 53	SP	MS	3.50	3.32	2.40	C	C	
Fea. 54	SP		3.50	3.50	2.10	C	C	intruded by Fea. 50, very little material in homogeneous fill
Fea. 55	SB	DR		2.25	0.15	O	B	only north half of feature was excavated
Fea. 56	SP		2.50	2.70	0.94	C	C	field identification as a storage pit - maybe shallow basin
Fea. 57	SB	LS	3.70	3.60	0.49	C	B	intrusive into Fea. 80, contained an iron fragment
Fea. 58	SB	MS	3.50	2.70	0.25	O	B	intrusive into Fea. 103, x-mends with Fea. 50 (V# 55); lots of organics
Fea. 59	SB	LS?	2.55	2.78	0.61	O	B	
Fea. 6	SP	U	1.80	1.50	1.30	C	C	
Fea. 60	P	MS			1.08			described as a washout along the riverbank, only partially excavated
Fea. 61	P	MS			0.97			described as a washout along the riverbank, check x-mends with Fea. 45
Fea. 62	SP	U	2.10	1.80	1.00	C	C	

Appendix 1. Feature Descriptions from Upper Saratown

Context	Featype	Phase	Length	Width	Depth	Planview	Profile	Comment
Fea. 63	SP	LS	3.53	3.55	2.35	C	C	stratified fill, intusive into Fea. 81, x-mends with Fea. 71 (v-63)
Fea. 64	SP	U	3.28	3.25	1.19	C	C	homogeneous fill
Fea. 65	H	DR	2.00	1.90	0.30	C	B	intrusive into Fea. 103?
Fea. 66	H	LS	2.75	2.20	0.53	O	B	
Fea. 67	SB	MS	2.73	2.45	0.53	C	B	homogeneous fill, intruded by Fea. 68
Fea. 68	H	MS	3.22	2.20	0.56	O	B	charcoal-rich top layer; intrusive into Fea. 67
Fea. 69	EO	MS	7.40	7.60	0.70	C	B	intrusive into Fea. 96; x-mends w/ Fea. 111, Fea. 19?
Fea. 7	EO	LS	2.60	2.30	0.40	O	B	persimmon and hickory nut recovered; evidence of firing
Fea. 70	SP		3.30	2.95	1.44	C	C	feature almost completely potted, but most of original walls were intact
Fea. 71	SB	MS	4.90	5.30	0.57	O	B	stratified fill; intrusive into Fea. 73, Fea. 79; x-mends w/ Fea. 63 (V# 63)
Fea. 73	SP	LS	3.30	3.35	1.23	C	C	homogeneous fill
Fea. 74	SP	U	4.50	4.30	1.70	C	C	relatively strerile fill, intruded by Fea. 50
Fea. 75	SB		3.20	3.10	0.70	C	B	
Fea. 76	EO	MS	6.25	6.20	0.94	C	B	contained ash lens and clay lining
Fea. 77	SB	MS	3.60	3.15	0.56	O	B	
Fea. 78	SB	DR	2.45	2.30	0.44	C	B	
Fea. 79	SB	LS	3.05	2.95	0.35	C	B	intruded by Fea. 57, Fea. 71, Fea. 80
Fea. 8	SB	LS	3.00	2.00	0.36	O	B	
Fea. 80	U							intruded by Fea. 57; intrusive into Fea. 79
Fea. 81	U		2.20	1.80	0.19			intruded by Fea. 63, Fea. 82, Fea. 66
Fea. 82	U		2.80	2.90	0.44			intruded by Fea. 66; intrusive into Fea. 81

Appendix 1. Feature Descriptions from Upper Saratown

Context	Featype	Phase	Length	Width	Depth	Planview	Profile	Comment
Fea. 83	U			1.55	0.25			not completely excavated
Fea. 84	SP	U	3.30	2.70	1.60	C	C	described as being intrusive into Fea. 50???
Fea. 85	SB	LS		2.63	0.23	O	B	
Fea. 85	SB	LS		2.63	0.23	O	B	
Fea. 86	SB			2.30	0.37		B	only partially excavated
Fea. 87	SB			1.75	0.20			only partially excavated
Fea. 88	SP	U	2.80		1.34	C	C	only north half of feature was excavated; fairly homogeneous fill
Fea. 89	SP	U	2.75		1.22		C	only north half of feature was excavated; homogeneous fill
Fea. 9	SB	LS	3.20	2.75	0.30	O	B	
Fea. 90	SB	DR	2.67	1.90	0.27	O	B	intruded by PH?; first observed within midden
Fea. 91	SB	DR	2.35	1.75	0.41	O	B	intrusive into Fea. 93
Fea. 92	SP	LS	2.29	2.05	1.71	C	C	stratified fill
Fea. 93	SB	DR	3.30	2.40	0.31	O	B	intrusive into Fea. 94, homogeneous fill
Fea. 94	SB	DR	5.60	4.55	0.40	O	B	bottom lined with clay, intrusive into Fea. 95 and PHs, intruded by Fea. 93
Fea. 95	SB	MS	1.85	1.85	0.24	C	B	fill contained daub/charcoal, intrusive into Fea. 98; x-mends with Fea. 98
Fea. 96	SB		2.58	2.73	0.43	C	B	intruded by Fea. 69
Fea. 97	U	MS						posthole cluster
Fea. 98	SB	MS		1.70	0.25	O	B	observed at top of midden; intruded by Fea. 95; x-mends with Fea. 95
Fea. 99	SP	MS	2.10		1.84	C	C	only west half of feature was excavated; homogeneous fill with daub

Appendix 1. Codes:

Featype:	SB - shallow basin
	SP - storage pit
	EO - earth oven
	RP - refuse pit
	SSP/B - straight-sided pit, possible burial
	BNB - burial no bone
	PH - posthole
	H - hearth
	U - unidentified
Phase:	LS - Late Saratown phase (Late Contact Period)
	MS - Middle Saratown phase (Middle Contact Period)
	DR - Dan River phase
	U - Uwharrie phase
Planview:	C - cicular
	O - oval
	R - rectangular
	A - amorphous
Profile:	B - basin
	C - cylindrical (usually deep)
	SS - straigh-sided (usually shallow)
	BS - bell-shaped
	A - amorphous

Appendix 2. Radiocarbon Analysis Sheets.

BETA ANALYTIC INC.

DR. M.A. TAMERS and MR. D.G. HOOD

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REPORT OF RADIOCARBON DATING ANALYSES

FOR: Ms. Jane M. Eastman
University of North Carolina

DATE RECEIVED: May 16, 1997
DATE REPORTED: June 23, 1997

Sample Data	Measured C14 Age	C13/C12 Ratio	Conventional C14 Age (*)
Beta-105651	600 +/- 50 BP	-27.0 o/oo	570 +/- 50 BP

SAMPLE #: SK1-F22
ANALYSIS: radiometric-standard
MATERIAL/PRETREATMENT:(charred material): acid/alkali/acid

Beta-105652	890 +/- 70 BP	-27.6 o/oo	850 +/- 70 BP

SAMPLE #: SK1a-F166
ANALYSIS: radiometric-standard
MATERIAL/PRETREATMENT:(charred material): acid/alkali/acid
COMMENT: the small sample was given extended counting time

NOTE: It is important to read the calendar calibration information and to use the calendar calibrated results (reported separately) when interpreting these results in AD/BC terms.

Dates are reported as RCYBP (radiocarbon years before present, "present" = 1950A.D.). By international convention, the modern reference standard was 95% of the C14 content of the National Bureau of Standards' Oxalic Acid & calculated using the Libby C14 half life (5568 years). Quoted errors represent 1 standard deviation statistics (68% probability) & are based on combined measurements of the sample, background, and modern reference standards.

Measured C13/C12 ratios were calculated relative to the PDB-1 international standard and the RCYBP ages were normalized to -25 per mil. If the ratio and age are accompanied by an (*), then the C13/C12 value was estimated, based on values typical of the material type. The quoted results are NOT calibrated to calendar years. Calibration to calendar years should be calculated using the Conventional C14 age.

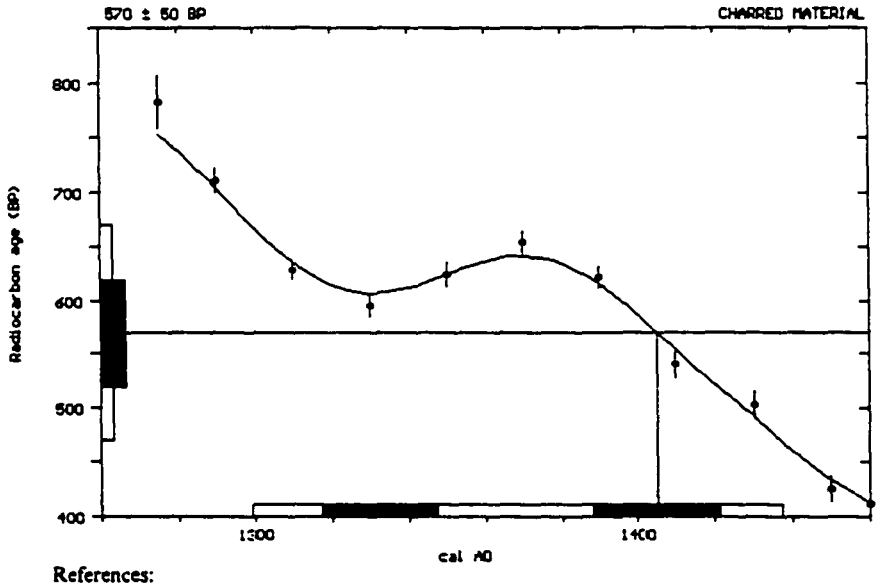
CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables:C13/C12=-27:lab mult.=1)

Laboratory Number:	Beta-105651
Conventional radiocarbon age:	**570 ± 50 BP**
Calibrated results: (2 sigma, 95% probability)	**cal AD 1300 to 1435**

Intercept data:

Intercept of radiocarbon age with calibration curve:	cal AD 1405
1 sigma calibrated results: (68% probability)	cal AD 1315 to 1345 and cal AD 1390 to 1420



References:

Pretoria Calibration Curve for Short Lived Samples
Vogel, J. C., Fuls, A., Visser, E. and Becker, B., 1993, Radiocarbon 35(1), p73-86
A Simplified Approach to Calibrating C14 Dates
Talma, A. S. and Vogel, J. C., 1993, Radiocarbon 35(2), p317-322
Calibration - 1993
Stuiver, M., Long, A., Kra, R. S. and Devine, J. M., 1993, Radiocarbon 35(1)

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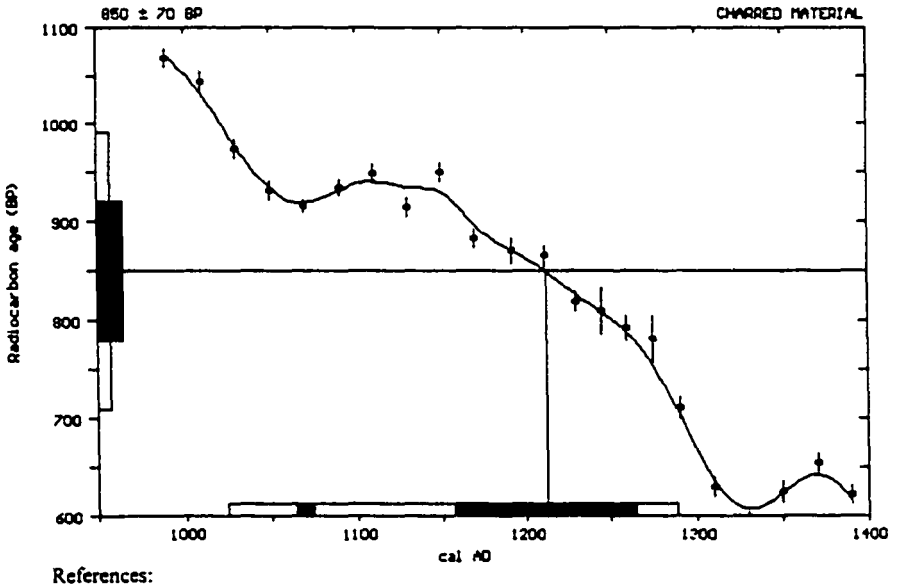
CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables:C13/C12=-27.6:lab mult.=1)

Laboratory Number:	Beta-105652
Conventional radiocarbon age:	**850 ± 70 BP**
Calibrated results: (2 sigma, 95% probability)	**cal AD 1025 to 1290**

Intercept data:

Intercept of radiocarbon age with calibration curve:	cal AD 1215
1 sigma calibrated results: (68% probability)	cal AD 1065 to 1075 and cal AD 1155 to 1265



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Appendix 3. Ceramic coding sheet.

Portion	P	Temper	T	Surface1	S1	Surface2	S2
1	Body	1	Indeterminate	1	Indeterminate	1	Indeterminate
2	Conical Base	2	Sand (Coarse)	2	Smoothed-Plain	2	Plain
3	Shoulder	3	Sand (Fine)	3	Smoothed-Rough	3	Smoothed
4	Flat Base	4	Quartz (Coarse)	4	Smoothed-Burnish	4	Scraped
10	Neck	5	Quartz (Medium)	5	Net (Crse)	5	Smooth/Scraped
11	Neck-Body	6	Quartz (Fine)	6	Net (Crse-Knot)	6	Burnished
100	Rim	7	Feldspar(Coarse)	7	Net (Crse-Loop)	7	Painted
101	Rim-Body	8	Feldspar (Fine)	8	Cord Marked	8	Fabric Marked
110	Rim-Neck	9	Grit (Coarse)	9	Cord Marked (S)	9	Striated Smooth
111	Rim-Neck-Body	10	Grit (Fine)	10	Cord Marked (Z)	0	
555	Vessel	11	Steatite	11	Cob Impressed	.	
0		12	Shell	12	Fabric Marked		
.		13	Sand (Very Fine)	13	Fabric Marked		
		14	Qtz & Feldspar	14	Brushed		
		15	Gneiss	15	Brushed		
		16	Limestone	16	Simple Stamped		
		17	Misc. Crushed Rock	17	Check Stamped		
		0		18	Comp. Stpd. (Curv)		
		.		19	Comp. Stpd. (Rect)		
				20	Net (Crse)		
				21	Fabric Marked		
				22	Cob Impressed		
				23	Plaited Quill		
				24	Net (Fine-Loop)		
				25	Net (Fine-Knot)		
				26	Net (Fine)		
				27	Painted		
				28	Check Stamped		
				29	Woven Cane		
				30	Scraped		
				31	Woven Cord		
				32	Diamond Check St.		
				33	Sim. Stmp/Smoothed		
				34	Cob Impressed Over _		

Appendix 3. continued.

Portion	P	Temper	T	Surface1	S1	Surface2	S2
				35	Curv Comp Stmp (CC)		
				36	Smoothed Over _		
				37	Burnishing Marks		
				38	Fine Cord Marked-Ind		
				39	Fine Cord Marked-S		
				40	Fine Cord Marked-Z		
				41	Burnished Ov. Check		
				42	Sm Over Fine Net (L)		
				43	Sm Over Fine Net (K)		
				44	Sm. Ov. Co. Net (K)		
				45	Sm. Ov. Co. Net (In)		
				46	Unid. Roughened		
				47	Brushed (Horizontal)		
				48	Sm Over Check Stmp		
				49	Brushed (Horizontal)		
				0			
				.			

Appendix 3. continued.

Size	S	Thick	Th	Rim	R	Lip	L	Decor	D
1	<2 cm	1	2-4 mm	1	Indeterminate	1	Indeterminate	1	None
2	2-4 cm	2	4-6 mm	2	Everted	2	Flat	2	Notches (V)
3	4-6 cm	3	6-8 mm	3	Everted/Flaring	3	Thickened Flat	3	Notches (F.tip)
4	6-8 cm	4	8-10 mm	4	Everted/Folded	4	Round	4	Inc.Line (Par.)
5	8-10 cm	5	>10 mm	5	Straight	5	Thickened Roun	5	F.Tip Impr.(Par)
6	>10 cm	6	Indeterminate	6	Inverted	6	Pointed	6	FNail Impr.(P/O)
7	Indeterminate	0		7	Carinated	7	Beveled	7	Inc.Lines (Par.)
0		.		8	Everted/Rolled	99	N/A	8	Inc.Lines (Perp)
.				9	Inverted/Flared	0	N/A	9	Inc. Inv. "V"
				10	Recurved	.	N/A	10	Sm.Bands (Par.)
				99	N/A			11	Br.Bands (Par.)
				0	N/A			12	Punct. (C. Reed)
				.	N/A			13	Punct. (Circ.)
								14	Punct. (Oblong)
								15	Punct. (Rect.)
								16	Punct. (U-shape)
								17	Inc.Lines (Curv)
								18	Inc.Lines (Rect)
								19	Loop Handle
								20	Strap Handle
								21	Lug Handle
								22	Drill Hole
								23	Notches (Inc/Ob)
								24	Pode
								25	Smoothed
								26	Inc.Lines(P/Obl)
								27	Disk (Ground)
								28	Disk (Chipped)
								29	Inc.Lines (Misc)
								30	F.Tip Impr.(Per)
								31	FNail Impr.(Par)
								32	Cob Marked
								33	Fillet Strip
								34	Pinched
								35	Rim Castellation
								36	Node
								37	Notches (U)

Appendix 3. continued.

Size	S	Thick	Th	Rim	R	Lip	L	Decor	D
								38	Punct.(Mult.Row)
								39	Cd. Impr. (Par.)
								40	Cd. Impr. (Perp)
								41	Cd. Impr. (Rand)
								42	Simple Stamped
								43	Punct. (Jab/Drg)
								44	Br/Scr Bands
								45	Punct. (Triang.)
								46	Fing.Pinch(Perp)
								47	Punct. (Ob.Reed)
								48	Notches (Misc)
								49	Punct. (Wedge)
								50	Net Impressed
								51	Inc.Lines(M.Par)
								52	Punct & Inc (Vs)
								53	Node
								54	Check Stamped
								55	Punct. (Misc)
								56	Fabric Mkd (Crs)
								57	Notched Fillet
								58	Brushed
								59	Painted
								60	Scalloped Edge
								61	Inc.Lines (Arcs)
								62	Br. Bands (Perp)
								63	Ground Edges
								64	Punct. (Oblique)
								65	Plain Appl. Strip
								66	Cord Imp.(Oblique)
								67	Br. Bands (Obliq)
								68	Leaf Impression
								69	Hole - Not Drilled
								70	Clay Patch
								71	Misc. Impressions
								0	
								.	

Appendix 3. continued.

Decloc	DI
1	Lip
2	Lip/Rim
3	Rim
4	Neck
5	Neck/Shoulder
6	Shoulder
7	Body
8	Rim Fold Edge
9	Indeterminate
10	Rim Fold
11	Rim/Neck
12	Lip/Rim Interior
13	Base
14	Interior Surface
99	N/A
0	
.	

Appendix 4. Vessel Descriptions.

Site	Access	Spec	Phase	Ves No	Rim	Lip	Base	% Orif.	Orif. Diam	Neck Diam	Sho Diam	Lip-Neck	Lip-Sho	Ves Height	Wall Thick	Comment
Sk 1a	2270	p1368	DR	1	2	2	1	13.0	22.00	21.00	23.0	4.00	8.00	22.00	7.00	Dan River jar
Sk 1a	2270	p1388	LS	2	1	1	4	0.00							7.00	Oldtown Plain bowl
Sk 1a	2270	p1388	LS	3	2	1	1	0.00		39.00	41.0				7.00	Oldtown Fine Net jar
Sk 1a	2270	p1388	LS	4	0	2	1	26.0	32.00	31.00	35.0	5.00	10.0	31.00	6.00	Oldtown Fine Net jar
Sk 1a	2270	p1423	LS	5	6	4	1	39.0	19.00	19.00				8.00	6.00	Oldtown Plain open bowl
Sk 1a	2270	p1423	LS	6	1	1	4	0.00			22.0				5.00	Oldtown Plain restricted bowl
Sk 1a	2270	p1423	LS	7	2	2	1	65.0	29.00	26.00	27.0	4.00	9.00		6.00	Oldtown Simple Stamped med jar
Sk 1a	2270	p1423	LS	8	2	2	1	6.00	18.00	17.00	18.0	4.00	8.00		6.00	Oldtown Plain sm jar
Sk 1a	2270	p1458	DR	9	4	2	3	18.0	12.00	11.00	11.0	2.00	5.00	12.00	3.00	Dan River Plain v sm jar
Sk 1a	2270	p1481	DR	10	2	4	1	18.0	18.00	17.00	21.0	3.00	8.00	15.00	7.00	Dan River Net Impressed sm jar
Sk 1a	2270	p1481	DR	11	5	2	1	10.0	22.00	22.00	27.0	5.00	10.0		7.00	Dan River Net Impressed sm jar
Sk 1a	2270	p1496	LS	12	2	4	1	16.0	22.00	18.00		4.00			7.00	Oldtown Plain sm jar
Sk 1a	2270	p1496	LS	13	2	2	1	17.0	20.00	18.00		3.00			7.00	Oldtown Plain sm jar
Sk 1a	2270	p1496	LS	14	2	2	1	19.0	18.00	16.00	18.0	4.00	6.00		7.00	Oldtown Simple Stamped sm jar
Sk 1a	2270	p1496	LS	15	2	4	1	13.0	30.00	28.00		4.00			7.00	Oldtown Scraped med jar
Sk 1a	2270	p1517	LS	16	2	4	1	12.0	11.00	10.00	11.0	1.00	3.00	9.00	4.00	Oldtown Plain v sm jar
Sk 1a	2270	p1539	LS	17	7	4	1	7.00	30.00		33.0		2.00		7.00	Oldtown Plain restricted bowl
Sk 1a	2270	p1539	LS	18	6	4	1	10.0	32.00					7.00	5.00	Oldtown Plain open bowl
Sk 1a	2270	p1539	LS	19	6	4	1	33.0	23.00					8.00	6.00	Oldtown Plain open bowl
Sk 1a	2270	p1623	MS	20	0	2	1	29.0	17.00	15.00	16.0	3.00	5.00		5.00	Oldtown Plain sm jar
Sk 1a	2270	p1651	U	21	2	4	1	10.0	49.00			3.00	11.0		10.0	Uwharrie Net Impressed v lg jar

Appendix 4. Vessel Descriptions.

Site	Access	Spec	Phase	Ves No	Rim	Lip	Base	% Orif.	Orif. Diam	Neck Diam	Sho Diam	Lip-Neck	Lip-Sho	Ves Height	Wall Thick	Comment
Sk 1a	2270	p1681	LS	22	2	2	1	11.0	32.00	28.00	30.0	5.00	11.0		7.00	Oldtown Fine Net Impressed med jar
Sk 1a	2270	p1681	LS	23	0	2	1	17.0	22.00	20.00	21.0	3.00	6.00		7.00	Oldtown Plain sm jar
Sk 1a	2270	p1681	LS	24	5	4	2	20.0	13.00					6.00	5.00	Oldtown Plain open bowl
Sk 1a	2270	p1681	LS	25	7	2	1	13.0	18.00		20.0		3.00		6.00	Oldtown Plain resticted bowl
Sk 1a	2270	p1681	LS	26	2	4	1	13.0	18.00	17.00	21.0	2.00	6.00		6.00	Oldtown Complicated Stamped sm jar
Sk 1a	2270	p1740	LS	27	2	2	1	7.00	28.00	12.00	12.0	5.00	9.00		8.00	Oldtown Check Stamped med jar
Sk 1a	2270	p1740	LS	28	1	1	4	0.00							5.00	Oldtown Plain bowl
Sk 1a	2270	p1733	LS	29	5	2	3	100.	11.00					6.00	6.00	Oldtown Coarse Net v sm jar
Sk 1a	2270	p1829	LS	30	2	2	1	17.0	29.00	28.00		4.00			7.00	Oldtown Simple Stamped med jar
Sk 1a	2270	p1829	LS	31	7	2	1	14.0	28.00		32.0		6.00		5.00	Oldtown Plain carinated bowl
Sk 1a	2270	p1846	LS	32	2	2	1	12.0	30.00	28.00	28.0	4.00	7.00		7.00	Oldtown Fine Net Impressed med jar
Sk 1a	2270	p1852	LS	33	2	2	1	11.0	28.00	24.00	26.0	5.00	9.00		6.00	Oldtown Plain med jar
Sk 1a	2270	p1862	LS	34	2	2	1	25.0	25.00	22.00	24.0	4.00	9.00		6.00	Oldtown Scraped med jar
Sk 1a	2270	p1904	DR	35	2	6	1	8.00	30.00	27.00	38.0	4.00	19.0		6.00	Dan River Net Impressed med jar
Sk 1a	2270	p3367	LS	36	2	4	1	23.0	28.00	22.00	23.0	7.00	10.0		7.00	Oldtown Coarse Net Impressed med jar
Sk 1a	2270	p3367	LS	37	2	2	1	30.0	39.00	36.00	40.0	7.00	16.0		9.00	Oldtown Simple Stamped lg jar
Sk 1a	2270	p3367	LS	38	2	4	1	10.0	38.00	32.00	36.0	5.00	13.0		7.00	Oldtown Simple Stamped lg jar
Sk 1a	2270	p3367	LS	39	2	2	1	11.0	30.00	25.00		5.00			7.00	Oldtown Check Stamped med jar

Appendix 4. Vessel Descriptions.

Site	Access	Spec	Phase	Ves No	Rim	Lip	Base	% Orif.	Orif. Diam	Neck Diam	Sho Diam	Lip-Neck	Lip-Sho	Ves Height	Wall Thick	Comment
Sk 1a	2270	p3386	LS	40	2	2	1	11.0	31.00	30.00		4.00			8.00	Oldtown Coarse Net Impressed med jar
Sk 1a	2270	p3386	LS	41	6	2	1	5.00	42.00						4.00	Oldtown Burnished open bowl
Sk 1a	2270	p3386	LS	42	2	4	1	20.0	16.00	15.00	16.0	2.00	4.00		5.00	Oldtown Unidentifed sm jar
Sk 1a	2270	p3386	LS	43	2	2	1	16.0	22.00	20.00	21.0	3.00	5.00		6.00	Oldtown Coarse Net sm jar
Sk 1a	2270	p3386	LS	44	2	4	1	14.0	20.00	19.00	19.0	3.00	5.00		7.00	Oldtown Fine Net sm jar
Sk 1a	2270	p1858	LS	45	2	2	4	100.	13.00	11.00	12.0	2.00	5.00	9.00	5.00	Oldtown Burnished v sm jar
Sk 1a	2270	p3395		46	5	4	3	80.0	6.00					3.00	6.00	Oldtown Hand-Modeled cup
Sk 1a	2270	p3433	U	47	8	4	1	10.0	16.00	15.00		2.00			7.00	Uwharrie Net Impressed sm jar
Sk 1a	2270	p3466	MS	48	2	2	1	100.	29.00	27.00	28.0	5.00	11.0		7.00	Oldtown Plain med jar
Sk 1a	2270	p3466	MS	49	2	2	1	8.00	37.00	35.00	39.0	5.00	21.0		7.00	Oldtown Brushed lg jar
Sk 1a	2270	p3481	MS	50	2	2	1	15.0	22.00	19.00	20.0	4.00	9.00		6.00	Oldtown Plain sm jar
Sk 1a	2270	p3690		51	2	2	3	100.	18.00	16.00	17.0	3.00	4.00	14.00	6.00	Oldtown Plain sm jar
Sk 1a	2270	p4703	MS	52	7	2	1	28.0	17.00		20.0		2.00		6.00	Oldtown Plain carinated bowl
Sk 1a	2270	p4703	DR	53	2	2	1	14.0	41.00	40.00	43.0	8.00	16.0		8.00	Dan River Net Impressed lg jar
Sk 1a	2270	p4703	MS	54	1	1	4	0.00							5.00	Oldtown Burnished bowl
Sk 1a	2270	p4857	MS	55	2	2	1	33.0	18.00	17.00	18.0	4.00	7.00		6.00	Oldtown Check Stamped sm jar
Sk 1a	2270	p4760	MS	56	2	2	1	32.0	30.00	28.00	30.0	4.00	12.0		6.00	Oldtown Brushed med jar
Sk 1a	2270	p4864	LS	57	4	2	1	31.0	19.00	18.00	20.0	3.00	8.00		5.00	Oldtown Simple Stamped sm jar
Sk 1a	2270	p4954	LS	58	2	2	1	18.0	39.00	36.00	38.0	6.00	12.0		7.00	Oldtown Brushed lg jar
Sk 1a	2270	p4954	LS	59	2	2	1	31.0	28.00	26.00	30.0	5.00	14.0		5.00	Oldtown Fine Net Impressed med jar
Sk 1a	2270	p4985	MS	60	2	6	1	16.0	14.00	13.00	14.0	1.00	3.00		7.00	Oldtown Plain v sm jar

Appendix 4. Vessel Descriptions.

Site	Access	Spec	Phase	Ves No	Rim	Lip	Base	% Orif.	Orif. Diam	Neck Diam	Sho Diam	Lip-Neck	Lip-Sho	Ves Height	Wall Thick	Comment
Sk 1a	2270	p5020	MS	61	2	2	1	7.00	47.00	43.00		6.00			6.00	Oldtown Simple Stamped v lg jar
Sk 1a	2270	p5020	MS	62	2	2	1	22.0	32.00	29.00	30.0	4.00	6.00		6.00	Oldtown Burnished med jar
Sk 1a	2270	p5053	MS	63	2	2	1	30.0	36.00	33.00	36.0	4.00	9.00		4.00	Oldtown Brushed lg jar
Sk 1a	2270	p5062	LS	64	0	2	1	60.0	39.00	37.00	42.0	5.00	22.0		6.00	Oldtown Fine Net Impressed lg jar
Sk 1a	2270	p5062	LS	65	2	2	1	90.0	31.00	27.00	29.0	6.00	10.0	36.00	6.00	Oldtown Fine Net Impressed med jar
Sk 1a	2270	p5088	MS	66	6	2	1	50.0	23.00					12.00	6.00	Oldtown Burnished open bowl
Sk 1a	2270	p5088	MS	67	2	2	4	57.0	26.00	24.00	27.0	3.00	7.00	19.00	5.00	Oldtown Burnished med jar
Sk 1a	2270	p5088	MS	68	2	2	1	31.0	25.00	23.00	24.0	6.00	9.00		6.00	Oldtown Corncob Impressed med jar
Sk 1a	2270	p5088	MS	69	6	4	4	22.0	7.00					3.00	4.00	Oldtown Hand-Modeled cup
Sk 1a	2270	p5100	MS	70	4	2	1	22.0	39.00	36.00	40.0	3.00	14.0		6.00	Oldtown Corncob Impressed lg jar
Sk 1a	2270	p5116	MS	71	2	2	1	5.00	16.00	15.00	17.0	3.00	7.00		4.00	Oldtown Brushed sm jar
Sk 1a	2270	p5199	LS	72	2	2	4	89.0	17.00	15.00	15.0	2.00	4.00	13.00	7.00	Oldtown Burnished sm jar
Sk 1a	2270	p5199	DR	73	6	2	4	66.0	10.00		12.0		3.00	12.00	6.00	Dan River Net Impressed v sm jar
Sk 1a	2270	p5199	LS	74	2	2	1	29.0	23.00	22.00	26.0	3.00	8.00		5.00	Oldtown Fine Net Impressed med jar
Sk 1a	2270	p6199	MS	75	2	2	4	100.	16.00	14.00	14.0	2.00	5.00	14.00	4.00	Oldtown Complicated Stamped sm jar
Sk 1a	2270	p7248	MS	76	6	4	4	33.0	16.00					6.00	6.00	Oldtown Smoothed-over-F Net bowl
Sk 1a	2270	p7292	MS	77	6	2	4	21.0	24.00					10.00	6.00	Oldtown Plain open bowl
Sk 1a	2270	p7298	MS	78	1	1	3	0.00							6.00	Oldtown Fine Net Impressed jar

Appendix 4. Vessel Descriptions.

Site	Access	Spec	Phase	Ves No	Rim	Lip	Base	% Orif.	Orif. Diam	Neck Diam	Sho Diam	Lip-Neck	Lip-Sho	Ves Height	Wall Thick	Comment
Sk 1a	2270	p7298	MS	79	0	2	1	69.0	26.00	25.00	25.0	4.00	6.00		7.00	Oldtown Simple Stamped med jar
Sk 1a	2317	p809	MS	80	6	4	4	20.0	16.00		17.0		2.00	8.00	5.00	Oldtown Plain restricted bowl
Sk 1a	2317	p809	MS	81	6	2	4	53.0	15.00		17.0		5.00	13.00	5.00	Oldtown Plain restricted bowl
Sk 1a	2317	p809	MS	82	2	2	1	73.0	15.00	14.00	14.0	2.00	4.00	10.00	6.00	Oldtown Plain sm jar
Sk 1a	2317	p843	U	83	1	1	3	0.00							6.00	Uwharrie Net Impressed jar
Sk 1a	2317	p967	LS	87	6	8	4	20.0	6.00		8.00		3.00	8.00	8.00	Oldtown Burnished cup
Sk 1a	2317	p967	LS	88	2	2	3	67.0	11.00	10.00	11.0	1.00	3.00	9.00	9.00	Oldtown Plain unrestricted v sm jar
Sk 1a	2317	p967	LS	89	2	2		27.0	36.00	30.00	32.0	6.00	7.00		7.00	Oldtown Plain lg jar
Sk 1a	2317	p896	LS	84	2	2	4	26.0	31.00	26.00	32.0	4.00	10.0	23.00	4.00	Oldtown Plain/Burnished med jar
Sk 1a	2317	p896	LS	85	5	2	1	29.0	17.00						6.00	Oldtown Plain sm jar
Sk 1a	2317	p896	LS	86	2	2	2	31.0	13.00	10.00	11.0	4.00	7.00	13.00	8.00	Oldtown Check Stamped sm jar
Sk 1a	2317	p1139	MS	90	7	2	1	27.0	23.00		26.0		2.00		6.00	Oldtown Burnished carinated bowl
Sk 1a	2317	p1139	DR	91	2	2	1		38.00	37.00	39.0	7.00	16.0		6.00	Dan River Net Impressed lg jar
Sk 1a	2317	p1281	MS	92	2	2	1		42.00	40.00	42.0	5.00	13.0		7.00	Oldtown Check Stamped lg jar
Sk 1a	2317	p2826	LS	93	2	2	1	38.0	25.00	23.00		4.00			7.00	Oldtown Check Stamped med jar
Sk 1a	2317	p3002	MS	94	6	2	1	34.0	17.00		18.0		1.00		5.00	Oldtown Burnished carinated bowl
Sk 1a	2317	p3133	MS	95	2	2	1	27.0	27.00	25.00	26.0	4.00	7.00		5.00	Oldtown Coarse Net Impressed med jar
Sk 1a	2317	p3987	MS	96	2	2	2	42.0	29.00	27.00	30.0	4.00	9.00		5.00	Oldtown Smoothed-over-F Net med jar

Appendix 4. Vessel Descriptions.

Site	Access	Spec	Phase	Ves No	Rim	Lip	Base	% Orif.	Orif. Diam	Neck Diam	Sho Diam	Lip-Neck	Lip-Sho	Ves Height	Wall Thick	Comment
Sk 1a	2317	p3987	MS	97	2	2	1	34.0	22.00	19.00	20.0	4.00	8.00	20.00	6.00	Oldtown Smoothed-over-? sm jar
Sk 1a	2317	p4179	LS	98	2	2	1	21.0	32.00	31.00	33.0	5.00	11.0		7.00	Oldtown Plain med jar
Sk 1a	2317	p4515	U	99	6	2	1	16.0	33.00		40.0		16.0		8.00	Uwharrie Complicated Stamped med jar
Sk 1a	2317	p4574	LS	100	3	2	1	25.0	25.00	24.00	25.0	1.00	5.00		6.00	Oldtown Plain med jar
Sk 1a	2270	p1420	LS	101	2	2	2	70.0	35.00	31.00	33.0	5.00	11.0	39.00	7.00	Oldtown Simple Stamped lg jar
Sk 1a	2317	p4697	LS	102	0	2	1	24.0	31.00	30.00	30.0	4.00	6.00		5.00	Oldtown Check Stamped med jar
Sk 1a	2317	p4742	LS	103	0	4	1	48.0	12.00	11.00	11.0	3.00	5.00	10.00	6.00	Oldtown Plain v sm jar
Sk 1a	2317	p4785	LS	104	2	4	1	26.0	25.00	24.00	25.0	3.00	7.00		5.00	Oldtown Coarse Net Impressed med jar
Sk 1a	2317	p4697	LS	105	2	2	1	37.0	20.00	17.00	18.0	4.00	7.00		5.00	Oldtown Check Stamped sm jar
Sk 1a	2317	p4742	LS	106	2	2	1	30.0	39.00	35.00	36.0	6.00	11.0		7.00	Oldtown Check Stamped lg jar
Sk 1a	2317	p4686	LS	107	2	2	1	9.00	35.00	31.00	34.0	7.00	13.0		6.00	Oldtown Check Stamped lg jar
Sk 1a	2317	p6116	LS	108	6	2	4	37.0	13.00		15.0		2.00	6.00	6.00	Oldtown Burnished restircted bowl
Sk 1a	2317	p6348	LS	109	0	2	1	18.0	28.00	27.00	28.0	5.00	9.00		6.00	Oldtown Plain med jar
Sk 1a	2317	p5673	MS	110	7	2	1	8.00	25.00		30.0		5.00		6.00	Oldtown Burnished cazuela bowl
Sk 1a	2317	p8085	DR	111	2	4	2	14.0	18.00	16.00	17.0	4.00	8.00	18.00	8.00	Dan River Net Impressed sm jar
Sk 1a	2317	p8806	MS	112	2	2	1	75.0	41.00	37.00	40.0	6.00	13.0		8.00	Oldtown Plain lg jar
Sk 1a	2317	p8349	DR	113	2	1	1	15.0	21.00	19.00	21.0	5.00	10.0		8.00	Dan River Net Impressed sm jar

Appendix 4. Vessel Descriptions.

Site	Access	Spec	Phase	Ves No	Rim	Lip	Base	% Orif.	Orif. Diam	Neck Diam	Sho Diam	Lip-Neck	Lip-Sho	Ves Height	Wall Thick	Comment
Sk 1a	2317	p8349	DR	114	2	1	1	0.00							8.00	Dan River Net Impressed jar
Sk 1a	2317	p8369	DR	115	2	2	1	6.00	49.00	46.00	47.0	5.00	11.0		8.00	Dan River Net Impressed v lg jar
Sk 1a	2317	p8675	LS	116	2	2	1	21.0	26.00	24.00	26.0	3.00	7.00		7.00	Oldtown Plain med jar
Sk 1a	2317	p8646	DR	117	5	2	1	19.0	40.00	40.00	45.0	6.00	13.0		8.00	Dan River Net Impressed lg jar
Sk 1a	2270	p7281	MS	118	2	4	1	18.0	25.00	24.00	26.0	3.00	8.00	25.00	7.00	Oldtown Plain med jar
Sk 1a	2317	p4826	LS	119	2	2	1	27.0	39.00	35.00	35.0	4.00	6.00		8.00	Oldtown Check Stamped lg jar
Sk 1a	2317	p4771	LS	120	6	2	1	8.00	30.00						6.00	Oldtown Smoothed-over-C Net bowl
Sk 1a	2317	p4771	LS	121	2	2	1	88.0	23.00	20.00	22.0	4.00	9.00		7.00	Oldtown Plain med jar
Sk 1a	2317	p4048	MS	122	6	2	1	26.0	11.00		11.0		2.00		8.00	Oldtown Plain v sm jar
Sk 1	2342	p884	DR	1	2	2	1	39.0	16.00	16.00	18.0	3.00	7.00		6.00	Dan River Unidentified sm jar
Sk 1	2342	p884	ES	2	2	2	1	100.	24.00	21.00	24.0	3.00	10.0		6.00	Oldtown Simple Stamped med jar
Sk 1	2342	p884	ES	3	4	2	1	46.0	24.00	22.00	26.0	3.00	13.0		7.00	Oldtown Unidentified med jar
Sk 1	2342	p884	DR	4	2	2	1	46.0	18.00	16.00	19.0	2.00	7.00		9.00	Dan River Corncob Impressed sm jar
Sk 1	2342	p1140	ES	5	7	4	1	11.0	31.00		37.0		5.00		9.00	Oldtown Burnished cazuela bowl
Sk 1	2342	p884	ES	6	4	2	1	14.0	38.00	34.00		5.00			7.00	Oldtown Complicated Stamped med jar
Sk 1	2342	p1140	ES	7	4	4	1	40.0	21.00	20.00	22.0	4.00	9.00		6.00	Oldtown Coarse Net Impressed sm jar
Sk 1	2342	p1197	MS	8	3	4	1	26.0	19.00	13.00	13.0	3.00	5.00		5.00	Oldtown Plain sm jar
Sk 1	2342	p1240	MS	9	1	1	4	0.00							4.00	Oldtown Burnished bowl
Sk 1	2342	p1240	MS	10	3	2	1	0.00				4.00			7.00	Oldtown Burnished jar

Appendix 4. Vessel Descriptions.

Site	Access	Spec	Phase	Ves No	Rim	Lip	Base	% Orif.	Orif. Diam	Neck Diam	Sho Diam	Lip-Neck	Lip-Sho	Ves Height	Wall Thick	Comment
Sk 1	2342	p1674	MS	11	2	2	1	16.0	26.00	24.00	27.0	3.00	7.00		5.00	Oldtown Plain med jar
Sk 1	2342	p1667	MS	12	2	2	1	19.0	23.00	20.00	22.0	5.00	10.0		5.00	Oldtown Check Stamped med jar
Sk 1	2342	p1634	MS	13	2	2	1	11.0	26.00	24.00	25.0	5.00	8.00		7.00	Oldtown Plain med jar
Sk 1	2342	p1634	MS	14	2	2	1	7.00	33.00	33.00	38.0	4.00	12.0		5.00	Oldtown Plain med jar
Sk 1	2342	p1752	MS	15	7	1	4	0.00			29.0				4.00	Oldtown Burnished restricted bowl
Sk 1	2342	p1812	MS	16	6	4	1	34.0	16.00		20.0		4.00		5.00	Oldtown Plain restricted bowl
Sk 1	2342	p1771	MS	17	7	4	1	50.0	11.00		14.0		3.00		6.00	Oldtown Plain restricted bowl
Sk 1	2342	p1950	MS	18	2	4	1	16.0	18.00	17.00	20.0	3.00	7.00		6.00	Oldtown Plain sm jar
Sk 1	2342	p1975	MS	19	6	4	1	32.0	15.00						7.00	Oldtown Plain open bowl
Sk 1	2342	p2047	MS	20	0	2	1	18.0	27.00	26.00	28.0	5.00	10.0		6.00	Oldtown Plain med jar
Sk 1	2342	p2231	LDR	21	4	2	1	29.0	19.00	17.00	19.0	2.00	7.00		7.00	Dan River Net Impressed sm jar
Sk 1	2342	p2264	LDR	22	2	2	1	24.0	28.00	28.00	33.0	3.00	16.0		8.00	Cord-Marked med jar
Sk 1	2342	p2281	LDR	23	2	4	1	25.0	25.00	24.00	29.0	3.00	11.0		7.00	Brushed med jar
Sk 1	2342	p2264	LDR	24	4	2	1	23.0	38.00	34.00	35.0	8.00	15.0		8.00	Net Impressed lg jar
Sk 1	2342	p2281	LDR	25	2	2	1	75.0	39.00	35.00	37.0	10.0	20.0		8.00	Net Impressed lg jar
Sk 1	2342	p2308	LDR	26	4	4	1	17.0	22.00	21.00	23.0	3.00	11.0		7.00	Simple Stamped med jar
Sk 1	2342	p2500	ES	27	4	2	1	21.0	19.00	19.00		3.00			6.00	Oldtown Coarse Net Impressed sm jar
Sk 1	2342	p2500	ES	28	4	2	1	25.0	36.00	35.00	38.0	3.00	12.0		7.00	Oldtown Coarse Net Impressed lg jar
Sk 1	2342	p2805	ES	29	2	2	1	22.0	37.00	35.00	38.0	5.00	16.0		6.00	Oldtown Complicated Stamped lg jar
Sk 1	2342	p2805	ES	30	4	2	1	20.0	36.00	32.00	36.0	7.00	20.0		7.00	Oldtown Complicated Stamped lg jar

Appendix 4. Vessel Descriptions.

Site	Access	Spec	Phase	Ves No	Rim	Lip	Base	% Orif.	Orif. Diam	Neck Diam	Sho Diam	Lip-Neck	Lip-Sho	Ves Height	Wall Thick	Comment
Sk 1	2342	p2381	ES	31	4	2	3	56.0	20.00	28.00	20.0	4.00	10.0	21.00	7.00	Oldtown Coarse Net Impressed sm jar
Sk 1	2342	p2322	LS	32	6	2	1	35.0	11.00					6.00	6.00	Oldtown Plain open bowl
Sk 1	2342	p2566	LDR	33	4	2	1	33.0	41.00	39.00	43.0	6.00	20.0		8.00	Net Impressed lg jar
Sk 6	2388	p636	LS	1	6	4	3		22.00		26.0		5.00	19.00	7.00	Oldtown Plain restricted bowl
Sk 6	2388	p733	LS	3	6	4	1		10.00					6.00	5.00	Oldtown Plain open bowl
Sk 6	2388	p659	LS	5	6	4	2		9.00					4.00	7.00	Oldtown Plain cup
Sk 6	2388	p875	LS	6	2	2	1		8.00	7.00	8.00	2.00	4.00		4.00	Oldtown Plain cup
Sk 6	2388	p875	LS	7	6	2	1		21.00					10.00	6.00	Oldtown Plain restricted bowl
Sk 6	2388	p1026	LS	8	2	4	1		17.00	14.00	15.0	3.00	5.00		4.00	Oldtown Plain sm jar
Sk 6	2388	p1050	LS	9	2	2	1		21.00	19.00		4.00			5.00	Oldtown Plain flared rim bowl
Sk 6	2388	p636	LS	10	2	2	1		35.00	34.00		6.00			7.00	Oldtown Plain lg jar
Sk 6	2388	p636	LS	11	2	4	1		36.00	31.00	34.0	3.00	6.00		7.00	Oldtown Plain lg jar
Sk 6	2388	p733	LS	12	2	4	1		39.00	34.00	35.0	6.00	12.0		6.00	Oldtown Plain lg jar
Sk 6	2388	p758	LS	20	2	4	1		32.00	28.00	34.0	4.00	14.0		6.00	Oldtown Plain lg jar
Sk 6	2388	p658	LS	21	7	4	1		26.00		31.0		4.00		7.00	Oldtown Burnished cazuela bowl
Sk 6	2388	p758	LS	22	2	4	1		30.00	26.00	28.0	7.00	14.0		6.00	Oldtown Plain med jar
Sk 6	2388	p636	LS	23	2	4	1		35.00	29.00	32.0	5.00	13.0		6.00	Oldtown Plain lg jar
Sk 6	2388	p733	LS	24	2	4	1		30.00	27.00	29.0	4.00	10.0		8.00	Oldtown Plain med jar
Sk 6	2388	p636	LS	25	2	5	1		39.00	34.00	38.0	6.00	9.00		8.00	Oldtown Plain lg jar
Sk 6	2388	p733	LS	26	2	3	1		38.00	33.00		4.00			7.00	Oldtown Plain lg jar
Sk 6	2388	p661	LS	27	2	2	3	100.	11.00	9.00	10.0	2.00	5.00	12.00	4.00	Oldtown Check Stamped v sm jar
Sk 6	2388	p1050	LS	28	2	2	3	100.	37.00	33.00	35.0	3.00	6.00	42.00		Oldtown Check Stamped lg jar

Appendix 4. Vessel Descriptions.

Site	Access	Spec	Phase	Ves No	Rim	Lip	Base	% Orif.	Orif. Diam	Neck Diam	Sho Diam	Lip-Neck	Lip-Sho	Ves Height	Wall Thick	Comment
Sk 6	2388	p840	LS	33	2	2	1		38.00	35.00	36.0	3.00	5.00		8.00	Oldtown Check Stamped lg jar
Sk 6	2388	p641	LS	34	2	4	1		30.00	28.00	30.0	4.00	8.00		7.00	Oldtown Check Stamped med jar
Sk 6	2388	p645	LS	35	2	2	1		31.00	28.00	30.0	4.00	11.0		7.00	Oldtown Check Stamped med jar
Sk 6	2388	p1043	LS	36	2	4	1		36.00	31.00	32.0	7.00	15.0		7.00	Oldtown Simple Stamped lg jar
Sk 6	2388	p1183	LS	37	2	4	1		33.00	28.00	33.0	5.00	17.0		6.00	Oldtown Simple Stamped med jar
Sk 6	2388	p636	LS	38	2	3	1		44.00	38.00	42.0	5.00	11.0		7.00	Oldtown Simple Stamped lg jar
Sk 6	2388	p1050	LS	39	2	4	1		16.00	15.00	17.0	3.00	7.00		7.00	Oldtown Scraped sm jar
Sk 6	2388	p637	LS	40	2	4	1					4.00	7.00		7.00	Oldtown Complicated Stamped jar
Sk 6	2388	p759	LS	41	1	1	2								8.00	Oldtown Fine Net Impressed jar
Sk 6	2388	p639	DR	42	1	1	1								7.00	Dan River Net Impressed jar?
Sk 6	2388	p633	DR	43	1	1	3								7.00	Dan River Net Impressed jar?
Sk 6	2388	p658	DR	44	2	2	1		27.00	25.00	26.0	4.00	9.00		7.00	Dan River Net Impressed med jar
Sk 6	2388	p658	DR	45	2	2	1		45.00	41.00	44.0	4.00	7.00		7.00	Dan River Net Impressed lg jar
Sk 6	2388	p905	LS	46	2	4	1		35.00	33.00	35.0	6.00	14.0		8.00	Oldtown Fine Net Impressed lg jar
Sk 6	2388	p636	LS	47	2	3	1		40.00	35.00	36.0	7.00	9.00		6.00	Oldtown Fine Net Impressed lg jar
Sk 6	2388	p768	LS	48	2	2	1		25.00	21.00	24.0	4.00	11.0		6.00	Oldtown Fine Net Impressed med jar

Appendix 4. Vessel Descriptions.

Site	Access	Spec	Phase	Ves No	Rim	Lip	Base	% Orif.	Orif. Diam	Neck Diam	Sho Diam	Lip-Neck	Lip-Sho	Ves Height	Wall Thick	Comment
Sk 6	2388	p658	LS	50	4	2	1		42.00	36.00	37.0	8.00	13.0		7.00	Oldtown Fine Net Impressed lg jar
Sk 6	2388	p658	LS	51	2	2	1		39.00	36.00	41.0	6.00	14.0		6.00	Oldtown Fine Net Impressed lg jar
Sk 6	2388	p1026	LS	52	2	2	2		50.00	48.00	49.0	4.00	9.00	48.00	7.00	Oldtown Fine Net Impressed v lg jar
Sk 6	2388	p637	LS	4	1	1	2								7.00	Oldtown Plain cup
Sk 6	2388	p660	LS	13	7	1					13.0				7.00	Oldtown Plain cazuela bowl
Sk 6	2388	p1050	LS	14	1	1	4								6.00	Oldtown Plain bowl
Sk 6	2388	p1050	LS	15	1	1	3								6.00	Oldtown Plain jar?
Sk 6	2388	p784	LS	16	1	1	4								11.0	Oldtown Plain jar?
Sk 6	2388	p905	LS	19	1	1	4								9.00	Oldtown Plain bowl
Sk 6	2388	p658	LS	29	1	1	3								10.0	Oldtown Check Stamped jar?
Rk 1	2389	p643	MS	2	1	1	1	0.00		14.00					7.00	Oldtown Plain jar
Rk 1	2389	p643	MS	3	2	4	1		16.00	15.00	17.0	3.00	6.00		6.00	Oldtown Plain sm jar
Rk 1	2389	p818	MS	4	2	4	2		23.00	21.00	22.0	2.00	3.00	15.00	6.00	Oldtown Plain med jar
Rk 1	2389	p774	MS	5	2	4	1		27.00	12.00	14.0	4.00	8.00		7.00	Oldtown Plain med jar
Rk 1	2389	p774	MS	6	0	4	1		43.00	42.00	43.0	4.00	8.00		6.00	Oldtown Plain lg jar
Rk 1	2389	p1269	MS	9	2	4	1		31.00	28.00	30.0	4.00	8.00		6.00	Oldtown Plain med jar
Rk 1	2389	p145	MS	1	2	4	1	16.0	30.00	29.00		5.00			7.00	Oldtown Plain med jar
Rk 1	2389	p1072	MS	7	2	2	1	8.00	27.00	26.00	27.0	5.00	9.00		6.00	Oldtown Plain med jar
Rk 1	2389	p1161	MS	8												Oldtown Brushed jar
Rk 1	2389	p1269	MS	10	2	2	1	17.0	25.00	21.00		6.00			6.00	Oldtown Plain med jar
Rk 1	2389	p1300	MS	11	2	4	1	14.0	28.00	26.00		5.00			7.00	Oldtown Plain med jar
Rk 1	2389	p1387	MS	12	2	4	1	13.0	26.00	23.00		4.00			6.00	Oldtown Corncob Impressed med jar
Rk 1	2389	p1387	MS	13	6	4	1				17.0				4.00	Oldtown Plain bowl

Appendix 4. Vessel Descriptions.

Site	Access	Spec	Phase	Ves No	Rim	Lip	Base	% Orif.	Orif. Diam	Neck Diam	Sho Diam	Lip-Neck	Lip-Sho	Ves Height	Wall Thick	Comment
Rk 1	2389	p1387	MS	14	6	4	1				32.0				7.00	Oldtown Plain bowl
Rk 6	2366	p172		2	2	2	3	37.0	35.00	32.00	34.0	5.00	11.0	35.00	5.00	Oldtown Plain lg jar
Rk 6	2366	p172		1	3	6	1	15.0	22.00	20.00	23.0	2.00	5.00		6.00	Oldtown Simple Stamped sm jar
Rk 6	2366	p206		3	0	2	2	100.	15.00	14.00	13.0	3.00	4.00	11.00	6.00	Oldtown Coarse Net Impressed v sm jar
Rk 6	2366	p72		4	6	4	2	65.0	15.00					5.00	6.00	Oldtown Hand-Modeled bowl

Appendix 5. Clay Pipe Coding Sheet.

Clay Pipe Coding Format

Attribute

Stem to Bowl Angle:	_____ °	
Stem Diameter:	_____ mm	
Bowl Shape:	1	Tubular, Onion
	2	Elbow, Trumpet-Shaped Bowl
	3	Elbow, Large Plain
	4	Elbow, Regular
	5	Tubular, Cigar-Shaped
	6	Curved Stem, Tulip Bowl
	7	Tubular, Flared
	8	Stub-Stemmed
	9	Elbow, Square Flange
Decoration:	1	Heel
	2	Heel Spur
	3	Inlaid Copper/Brass Bands
	4	Incised Lines
	5	Punctations – Circular
	6	Punctations – Rectangular
	7	Rouletting
	8	Punctations with Incisions
	9	Squared Flange on Stem Bit
	10	Ribbed
Stem Length:	_____ mm	
Bowl Length:	_____ mm	
Exterior Surface:	1	Burnished
	2	Plain
Min. # Pipes Represented:	_____	
Pipe Segment:	B	Bowl
	S	Stem
	W	Whole
Bowl Wall Thickness:	_____ mm	

Comments:

Appendix 6. Burial Information from Upper Saratown.

Burial	Phase	Comment	Age	Sex	Pit	Slump
Bu. 1	LS		17 ± 3 years	Female	SCC	P
Bu. 10	LS	intrudes Bu. 11	21+ years	Indeterminate	SCC	A
Bu. 100	LS	intrudes Bu. 98	35 ± 5 years	Male	SCC	A
Bu. 101	LS	no remains				
Bu. 102	MS	intruded by B103	1.75 years ± 7 months	Unknown	SCC	P
Bu. 103	LS	intrudes Bu. 102	6 ± 2 years	Unknown	SP	P
Bu. 104	MS	intrudes F. 191	>30 years	Male	SCC	A
Bu. 105	DR	Intruded by F189	22 ± 4 years	Female	SP	A
Bu. 106	LS?		>21 years	Indeterminate	potted	A
Bu. 107	MS?	cradle board	1.5 ± 0.5 years	Unknown	SP	A
Bu. 108	LS?	intrudes F. 204	>21 years	Male	SCS	P
Bu. 109	MS	intrudes F. 203	25 ± 5 years	Female	SCS	P
Bu. 11	MS		9 ± 2 years	Unknown	SCC	A
Bu. 110	DR	intruded by B109	40 ± 5 years	Male	SCC	A
Bu. 111	LS?		3 ± 1 years	Unknown	SP	P
Bu. 12	MS?	intrudes Fea. 15	>21 years	Indeterminate	SP	A
Bu. 13	MS		30 ± 10 years	Indeterminate	SCC	A
Bu. 14	LS	ledges/wood cov.	>21 years	Female	SCC	PR
Bu. 15	LS	ledges	3 ± 1 years	Unknown	SCC	PR
Bu. 16	DR		15 ± 3 years	Unknown	SCS	PR
Bu. 17	LS		>30 years	Female?	SCS	P
Bu. 18	MS		37 ± 5 years	Female	SCC	PR
Bu. 19	MS		>30 years	Female	SP	P
Bu. 2	LS	log covering	23 ± 3 years	Male	SCC	A
Bu. 20	DR?		21 ± 3 years	Indeterminate	SCC	P
Bu. 21	U?		16.5 ± 3 years	Indeterminate	potted	A
Bu. 22	LS		18 ± 3 years	Female?	potted	A
Bu. 23	LS	cradle board	Neonate	Unknown	SCC	A
Bu. 24	MS		30 ± 9 years	Male	SP	A
Bu. 25	LS?		>30 years	Indeterminate	SCC	A
Bu. 26	DR		1 month	Unknown	SB	A
Bu. 27	MS		25 ± 5 years	Indeterminate	SCC	A
Bu. 28	LS		>21 years	Indeterminate	SCC	P
Bu. 29	MS		>21 years	Indeterminate	SCC	PR

Appendix 6. continued.

Burial	Phase	Comment	Age	Sex	Pit	Slump
Bu. 3	MS		>40 years	Indeterminate	SCC	PR
Bu. 30	MS	intruded by F48	9 ± 2 years	Unknown	SP	P
Bu. 31	MS?	potted			SCC	
Bu. 32					SP	
Bu. 33			11 ± 2.5 years	Unknown	SCC	P
Bu. 34	MS		>10 years	Indeterminate	SP	A
Bu. 35	MS	intrudes Fea. 35	2 years ± 8 months	Unknown	SCS	P
Bu. 36	LS		>21 years	Indeterminate	SCC	A
Bu. 37	DR		>18 years	Indeterminate	SCC	P
Bu. 38	MS		22 ± 4 years?	Indeterminate	SCC	
Bu. 39	LS		>18 years	Indeterminate	SCC	
Bu. 4	U		34 ± 5 years	Male	SCC	A
Bu. 40	MS	F147 may be slmp	3 ± 1 years	Unknown	SQ	
Bu. 41	MS		>18 years	Indeterminate	SQ	PR
Bu. 42	MS		>18 years	Indeterminate	SCC	A
Bu. 43	MS		6±2 years	unknown	SCC	
Bu. 44	MS		>10 years	Indeterminate	SP	P
Bu. 45	MS		>21 years/15 ± 3 years	unknown	SCC	P
Bu. 46	MS?		Indeterminate	Indeterminate	SCC	P
Bu. 47	MS?		8 ± 2 years	unknown	SP	P
Bu. 48	MS		10.5 ± 2.5 years	Unknown	PIT	A
Bu. 49	MS		>21 years	Indeterminate	SCC	P
Bu. 5	LS	log cover	3 ± 1 years	Unknown	SP	A
Bu. 50	MS		>21 years	Female?	SCC	P
Bu. 51	LS		42 ± 5 years	Female	SP	A
Bu. 52	LS		10 ± 2.5 years	Unknown	potted	A
Bu. 53	LS	cradle board?	3 ± 1 years	Unknown	SCC	P
Bu. 54	LS	cradle board	2 years ± 8 months	Unknown	SCC	P
Bu. 55	LS	cradle board	2 years ± 8 months	Unknown	SCC	A
Bu. 56	LS		33 ± 5 years	Female	potted	P
Bu. 57	LS	cradle board	9 months ± 3 months	Unknown	SP	A
Bu. 58	LS		>21 years	Female	SCC	P
Bu. 59	LS		>15 years	Indeterminate	potted	P
Bu. 6	MS?		33 ± 6 years	Indeterminate	SCC	P

Appendix 6. continued.

Burial	Phase	Comment	Age	Sex	Pit	Slump
Bu. 60	DR				SP	
Bu. 61	MS		<10 years	Unknown	SCS	A
Bu. 62	LS		29 ± 10 years	Male	potted	A
Bu. 63	LS		2 years ± 8 months	Unknown	SCC	P
Bu. 64	LS		<10 years	Unknown	SP	A
Bu. 65	MS		25 ± 5 years	Female	SCC	PR
Bu. 66	MS?		>30 years	Female?	SCC	PR
Bu. 67			>30 years	Male	SP	P
Bu. 68	LS	intrudes F. 112	>21 years	Male	SP	P
Bu. 69	LS		6 ± 2 years	Unknown	SCC	P
Bu. 7	U		>18 years	Indeterminate	SCC	A
Bu. 70			19 ± 3 years	Male?	potted	A
Bu. 71	LS?				SP	A
Bu. 72			18+ years	Indeterminate	SCC	A
Bu. 73	LS		46 ± 9 years	Male	SCC	A
Bu. 74	LS?		35 ± 5 years	Male	potted	A
Bu. 75	LS?		39 ± 9 years	Male?	potted	A
Bu. 76	MS		4 ± 1 years	Unknown	SP	P
Bu. 77	MS		32 ± 7 years	Female	SCC	P
Bu. 78	MS?		2.5 years ± 10 months	Unknown	SCC	P
Bu. 79	U/DR		>30 years	Female	SCS	P
Bu. 8	MS??	potted	2.5 years ± 10 months	Unknown	potted	A
Bu. 80	MS?		3.5 ± 1 years	Unknown	SCC	PR
Bu. 81	MS		>21 years	Indeterminate	SP	A
Bu. 82			>30 years	Female?	potted	PR
Bu. 83			5.5 years ±20 months	unknown	SP	P
Bu. 84	MS		subadult	Unknown	SP	P
Bu. 85	LS		3±1 years	Unknown	SP	A
Bu. 86			8±2 years	Unknown	SP	P
Bu. 87	MS		>30 years	Female	SCC	PR
Bu. 88		possible ledge	8 ± 2 years	Unknown		P
Bu. 89			3 ± 1 years	Unknown	potted	A
Bu. 9	MS?		9.5 ± 2.5 years	Unknown	SP	A
Bu. 90	U/DR		6 ± 2 years	Unknown	potted	P

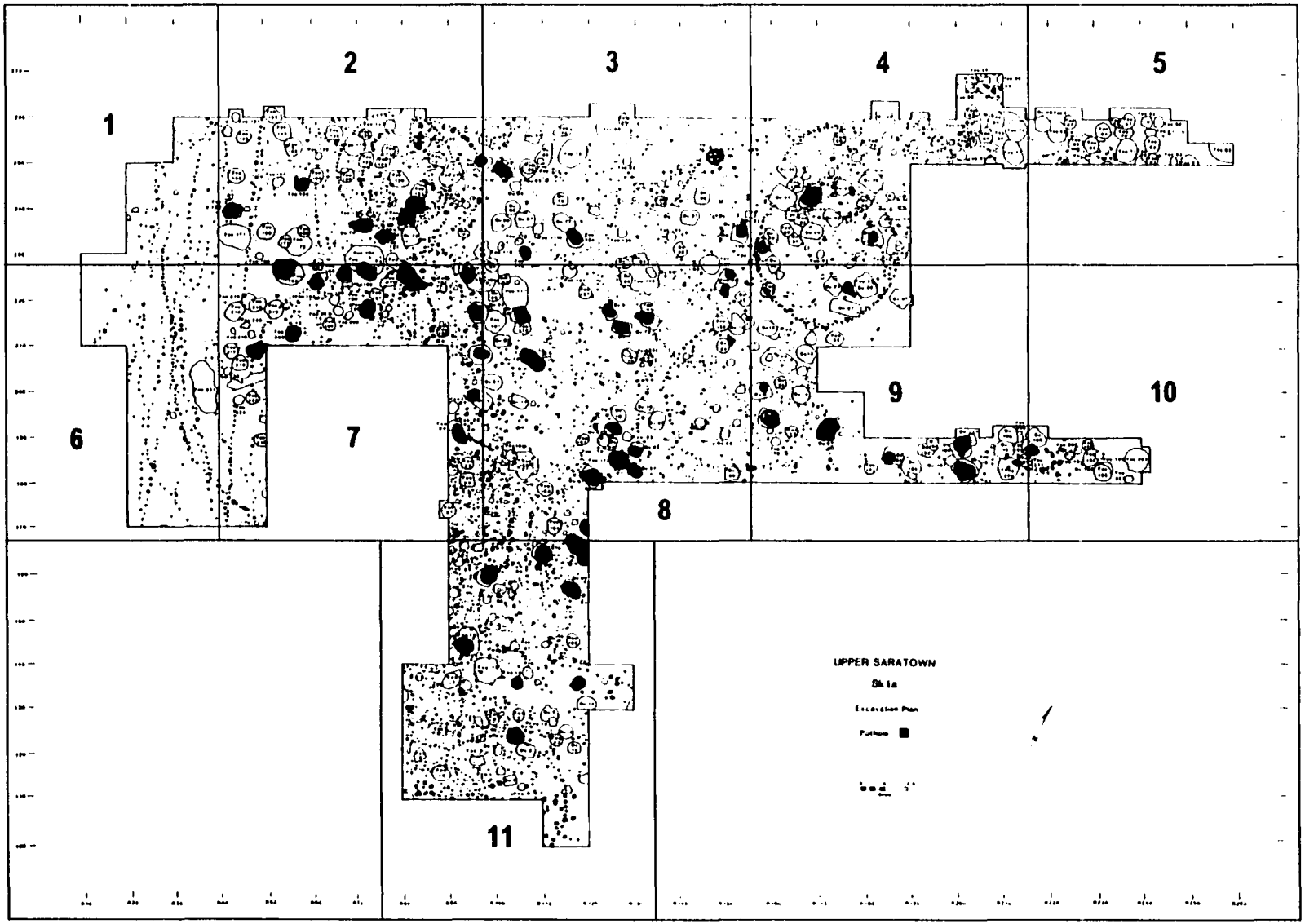
Appendix 6. continued.

Burial	Phase	Comment	Age	Sex	Pit	Slump
Bu. 91	MS		25 ± 4 years	Female	SCC	A
Bu. 92	LS?				SP	
Bu. 93			5 years ± 16 months	Unknown	SCC	A
Bu. 94			9 ± 2 years	Unknown	SCC	A
Bu. 95	MS		17 ± 3 years	Female	PIT	A
Bu. 96			>30 years	Male	SCC	P
Bu. 97					potted	
Bu. 98	MS	ledges	6 ± 2 years	Unknown	SCC	A
Bu. 99	MS	intruded by F175	4 ± 1 years	Unknown		

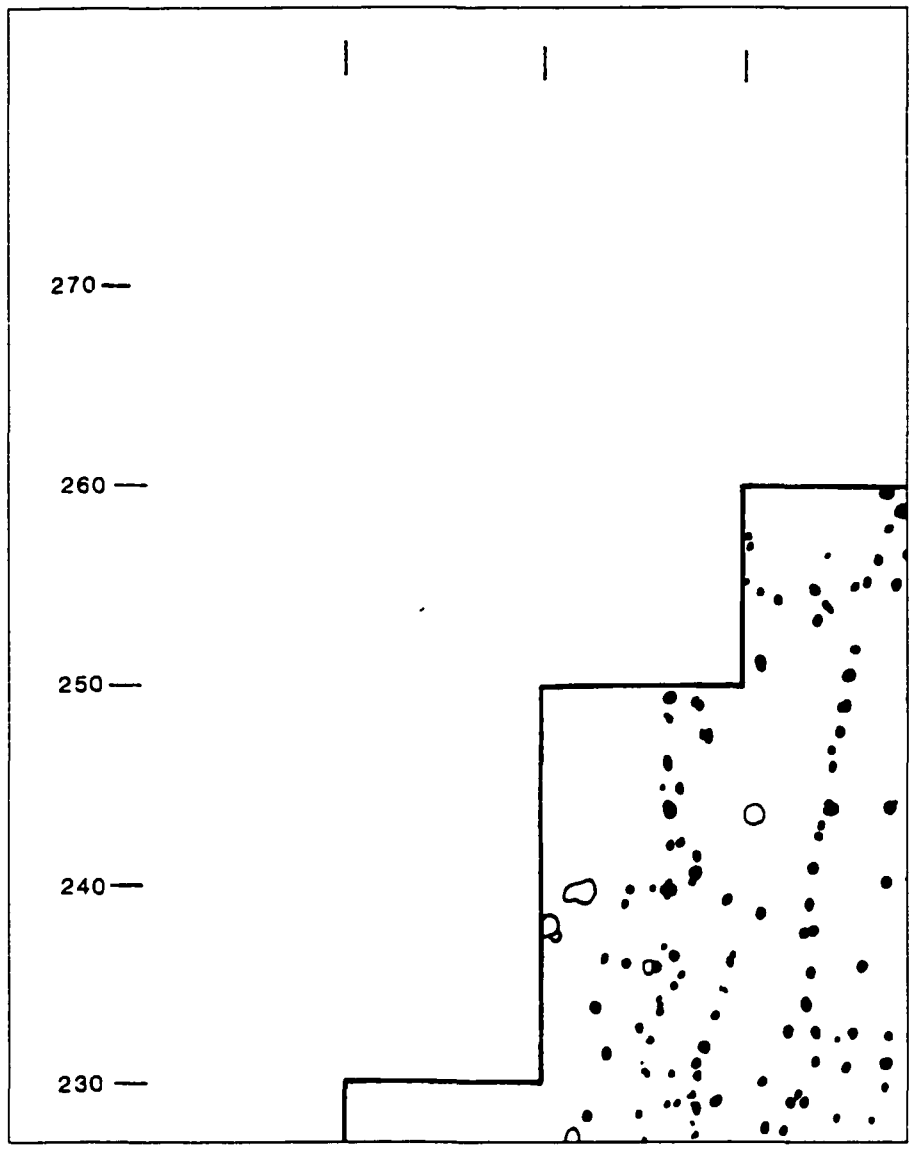
Appendix 6. Codes:

Phase:	LS - Late Saratown phase (Late Contact Period) MS - Middle Saratown phase (Middle Contact Period) DR - Dan River phase U - Uwharrie phase
Pit Shape:	SCC - shaft and central chamber SP - simple shaft SCS - shaft and side chamber PIT - domestic feature SQ - square-sided pit
Slump:	P - organically-enriched slump present PR - artifact-rich slump present A - organically-enriched slump absent

Appendix 7. Detail Map of Upper Saratown Site.



Map Section 1



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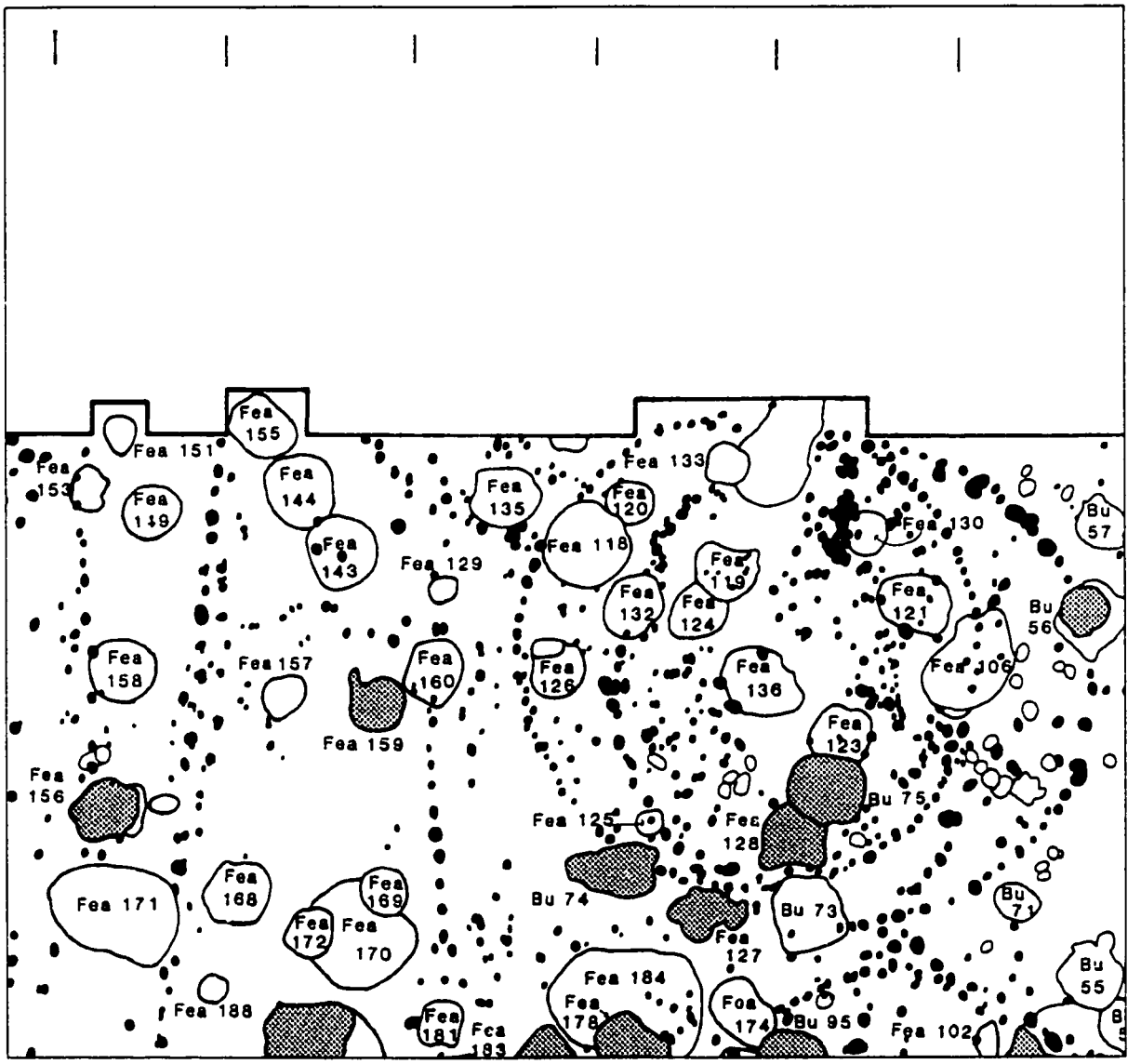

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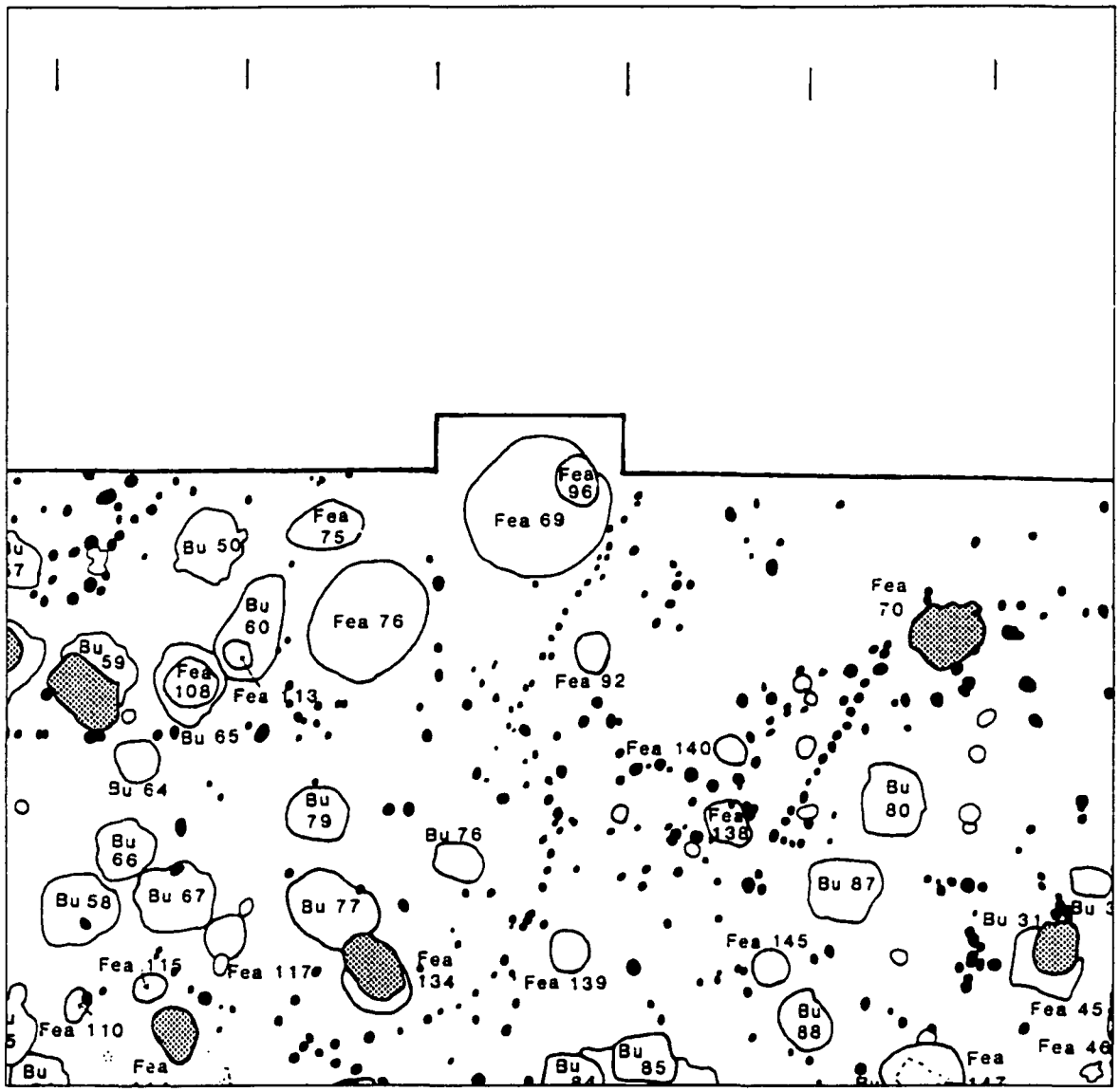

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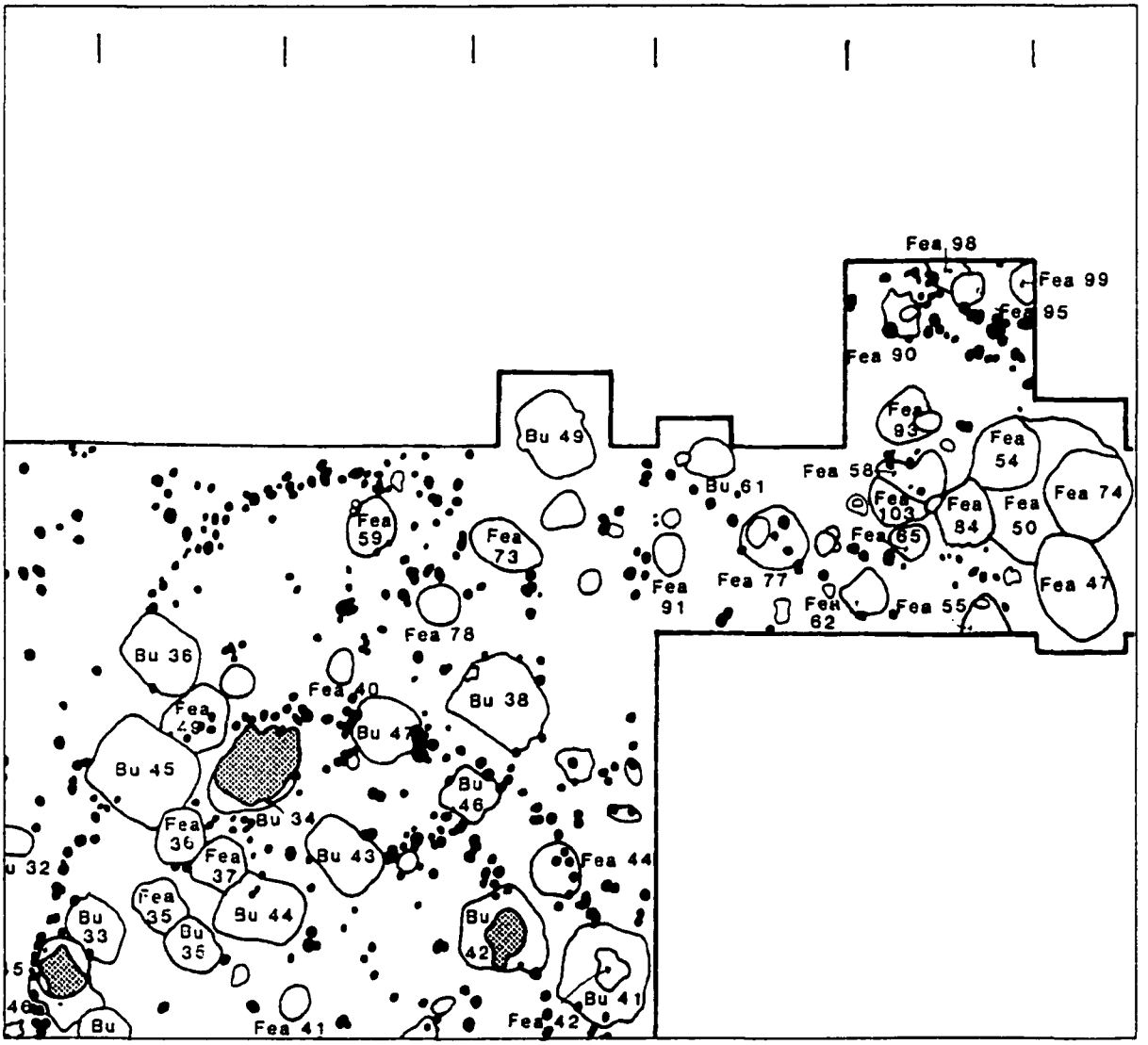

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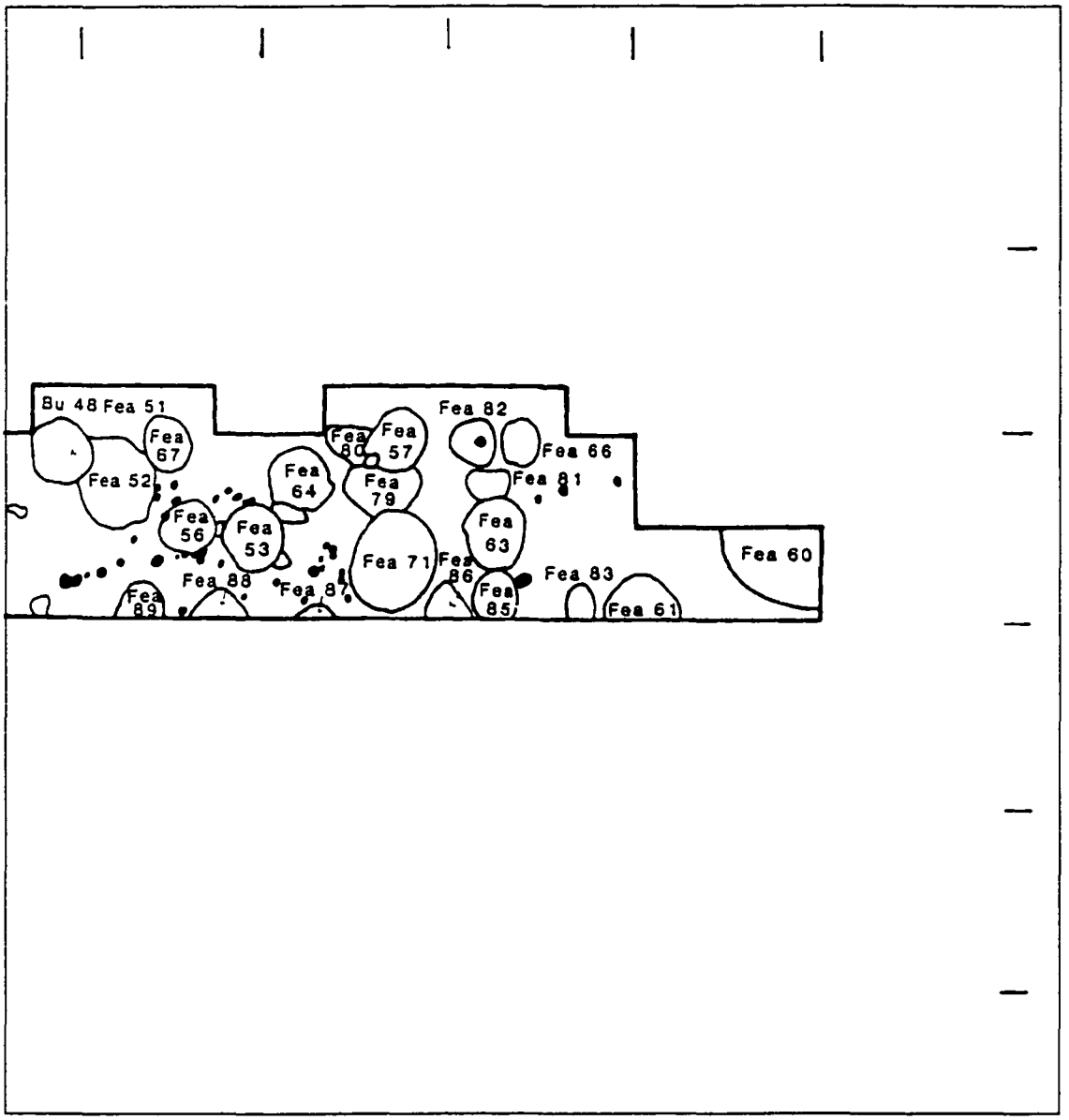

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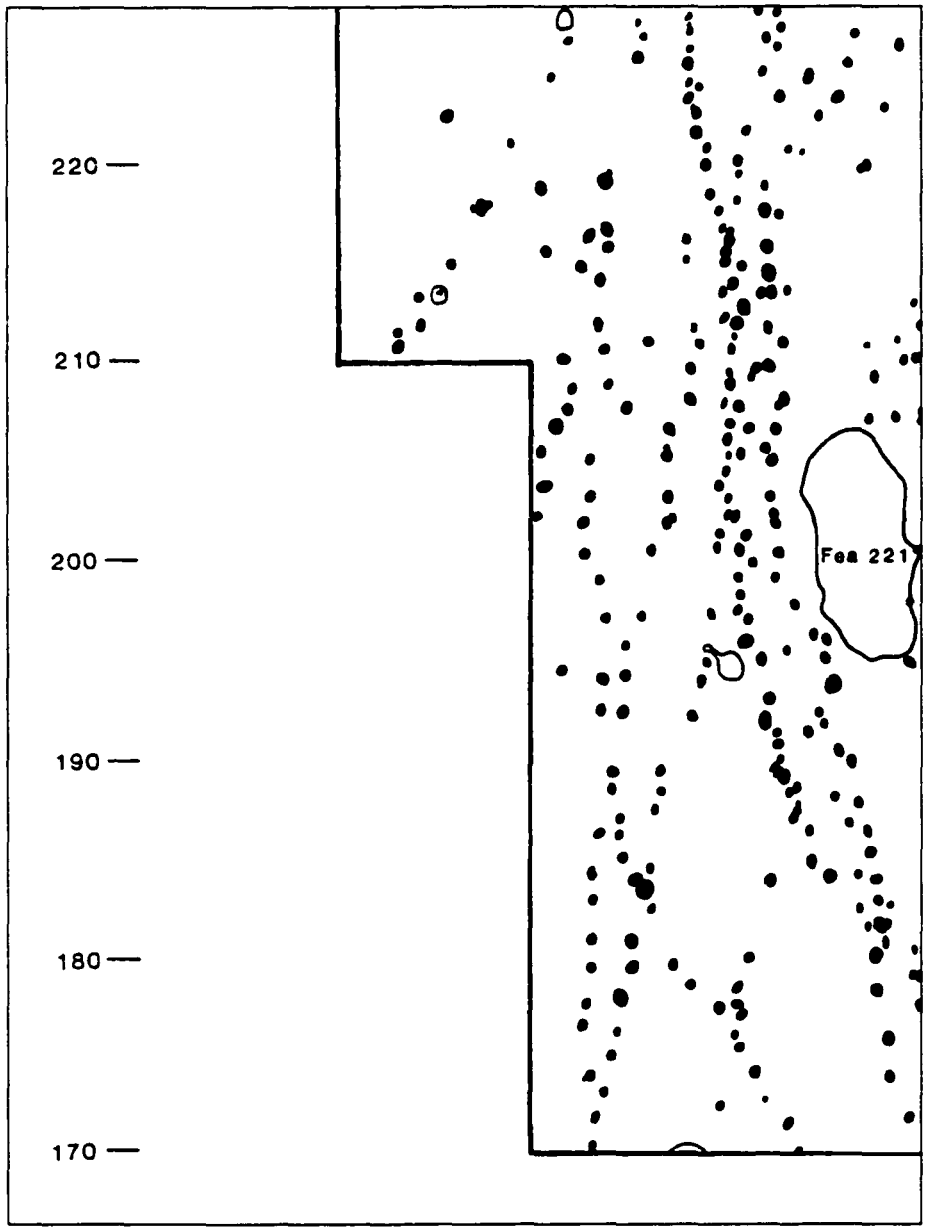

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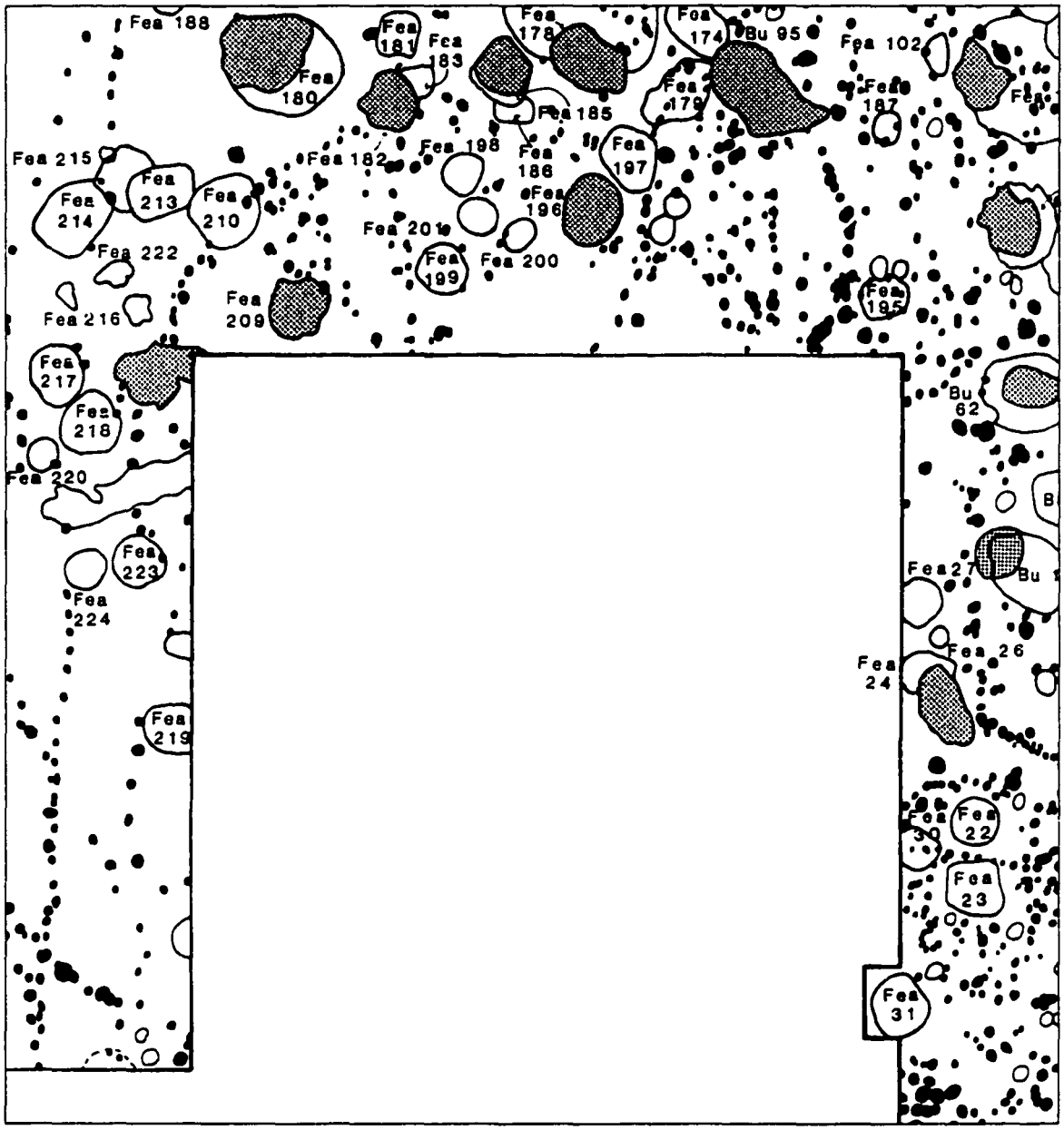

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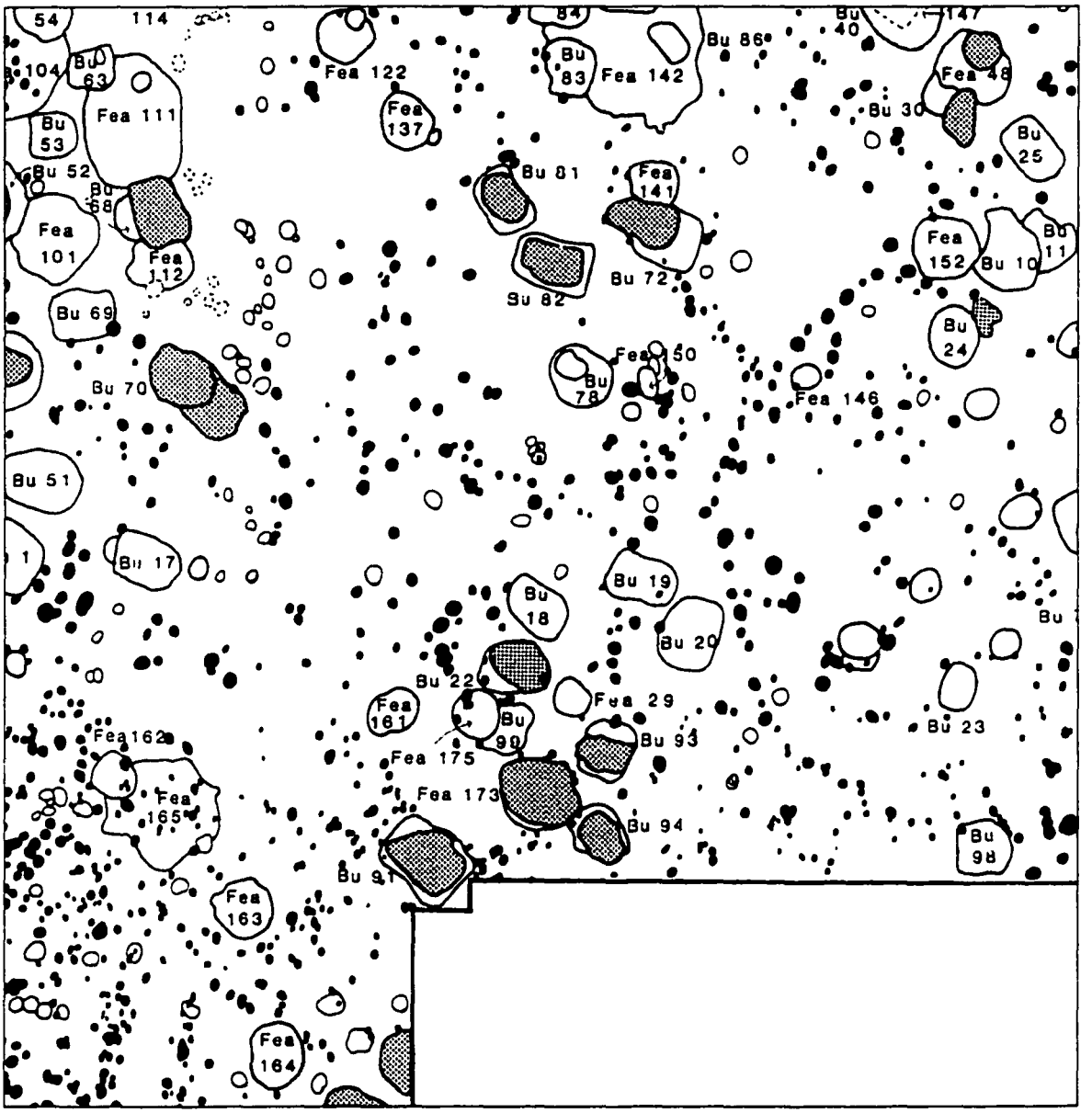

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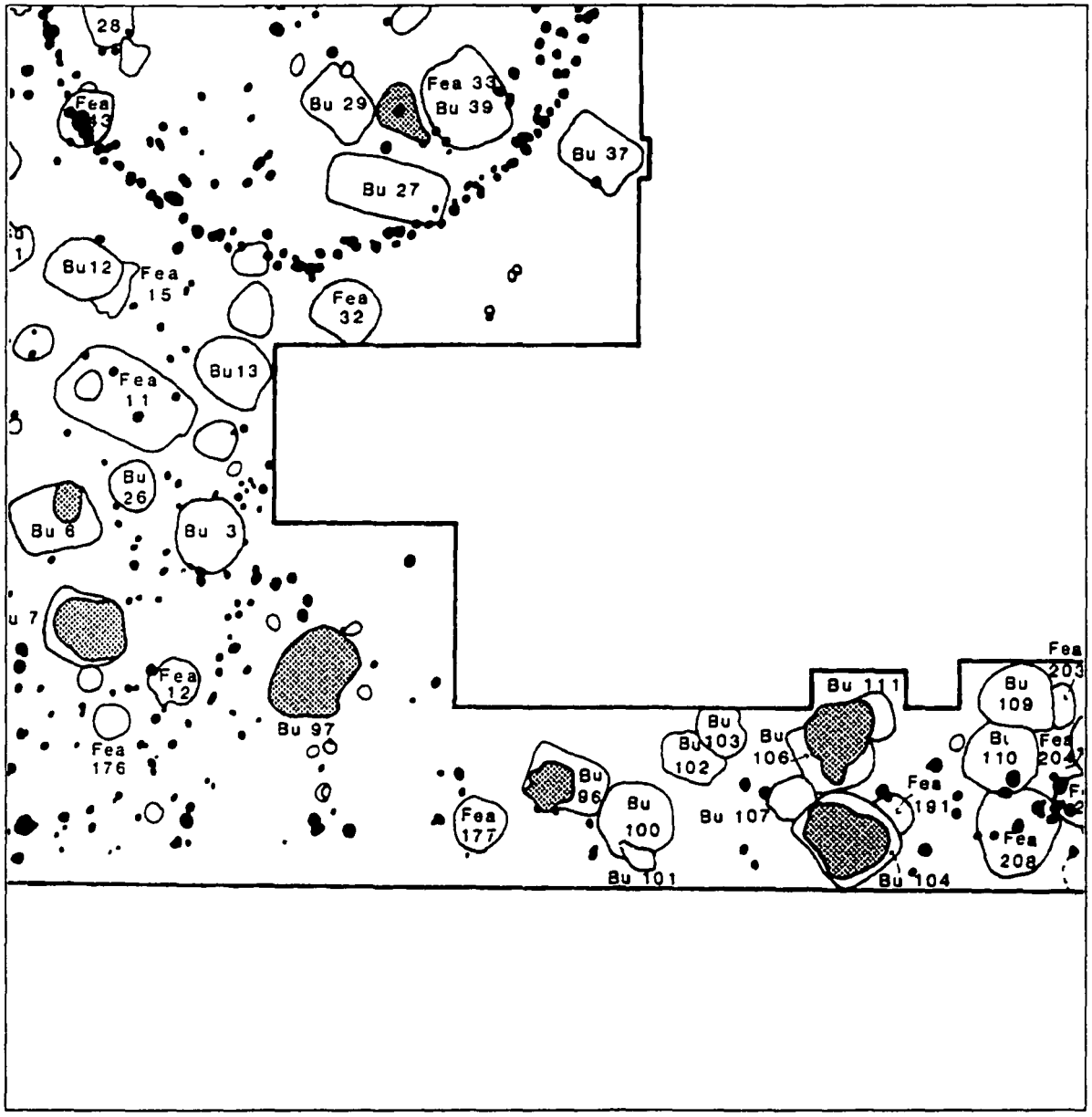

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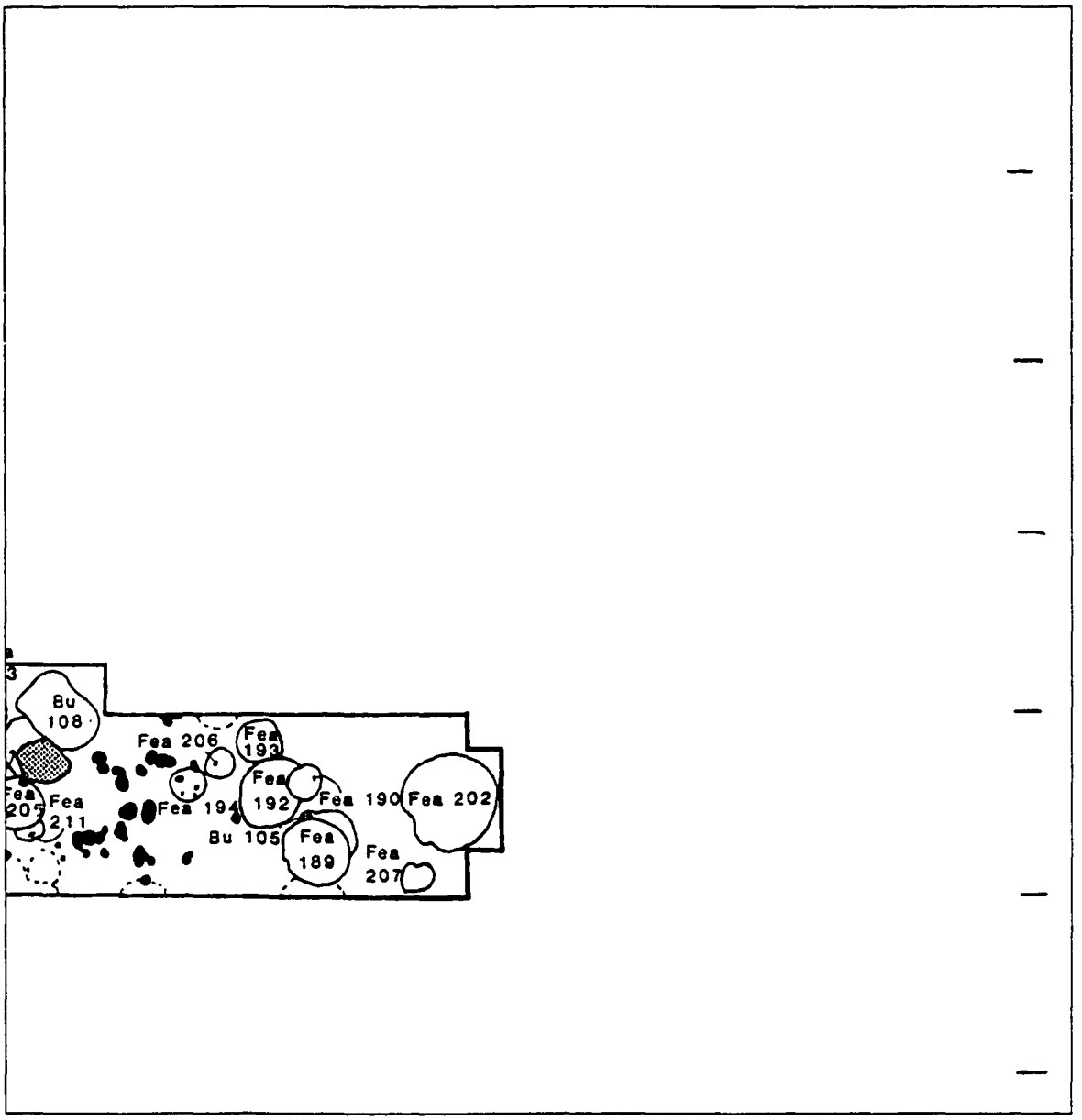

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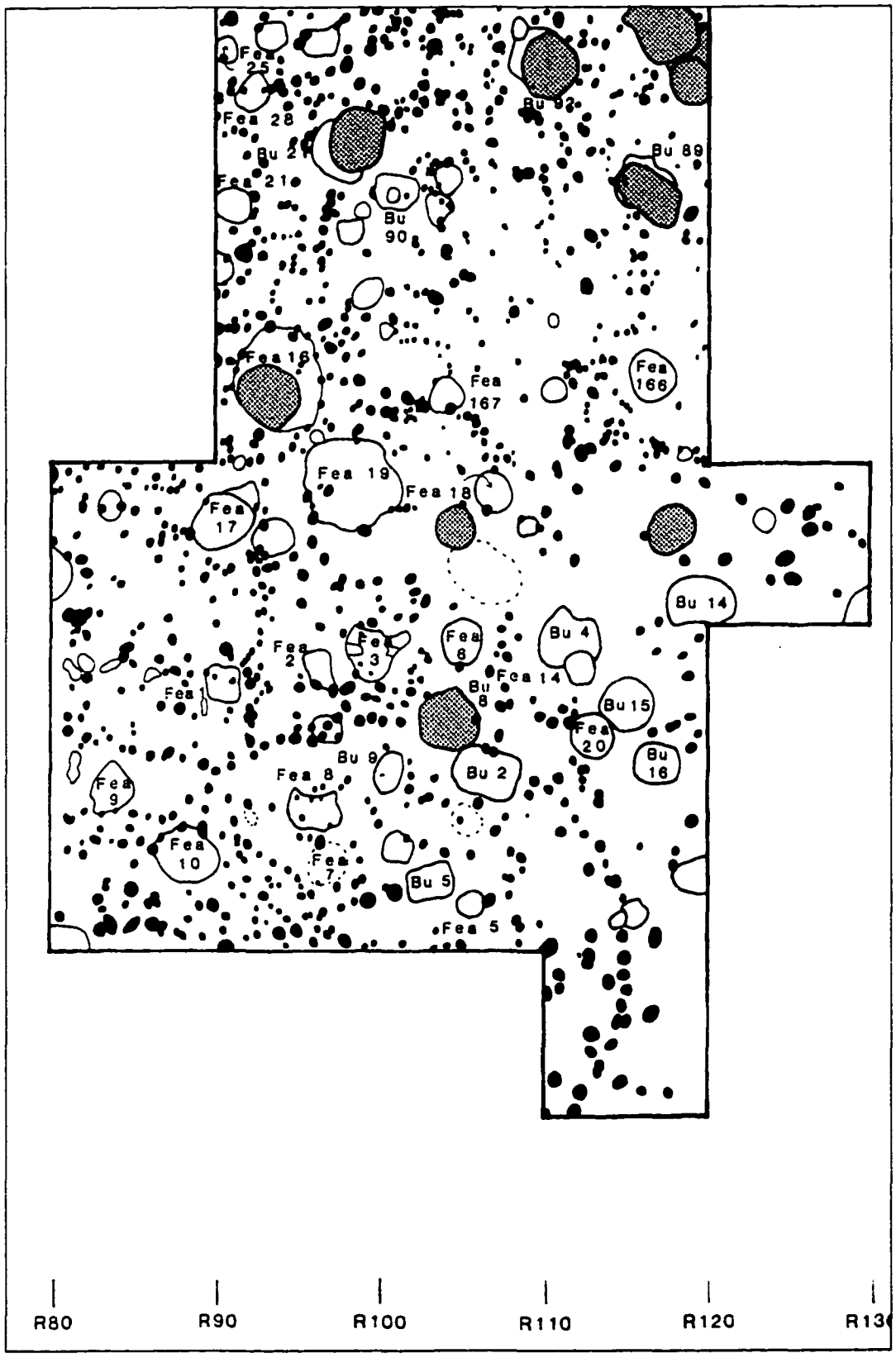

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