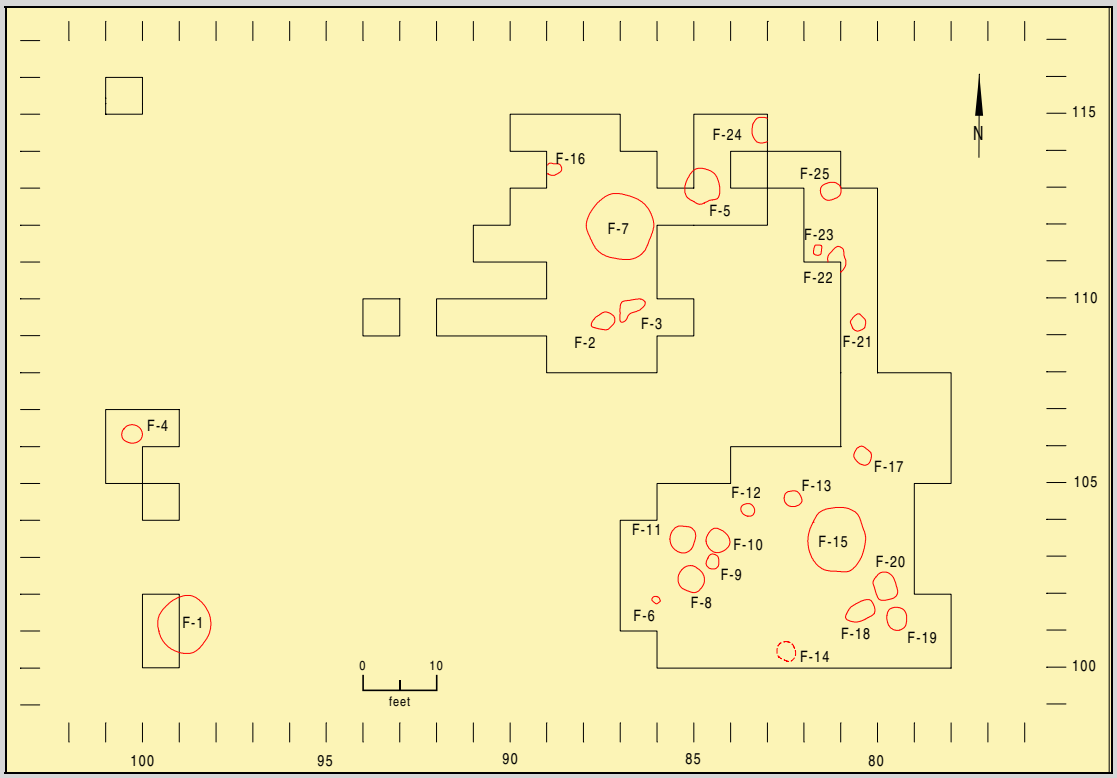
ARCHAEOLOGICAL INVESTIGATIONS AT THE WELLS SITE, HENRY COUNTY, VIRGINIA

R. P. Stephen Davis, Jr., Jane Eastman, Thomas O. Maher, and Richard P. Gravely, Jr.



Research Report No. 16
Research Laboratories of Archaeology
The University of North Carolina at Chapel Hill

1997

Archaeological Investigations at the Wells Site, Henry County, Virginia

by

R. P. Stephen Davis, Jr.
Jane Eastman
Thomas O. Maher
and
Richard P. Gravely, Jr.

Research Report No. 16
Research Laboratories of Archaeology
The University of North Carolina at Chapel Hill

1997

ACKNOWLEDGMENTS

The archaeological excavation of the Wells site was undertaken in 1971 and 1972, and was a collaborative effort by members of the Patrick-Henry Chapter of the Archeological Society of Virginia. The late Richard P. Gravely, Jr. of Martinsville, Virginia directed the excavations and took notes describing much of the work that was done, the archaeological features that were encountered, and the artifacts that were found. Robert J. Burns also kept notes and made drawings during the course of the fieldwork. These notes, as well as numerous artifacts, were subsequently transferred to Richard Gravely, who in 1983 donated them along with his notes and artifacts to the Research Laboratories of Archaeology at The University of North Carolina at Chapel Hill. While some artifacts probably were kept by the various excavators, the collection received by the Research Laboratories of Archaeology in 1983 is believed to be relatively complete. Richard Gravely is included posthumously as a co-author in recognition of his direction of the fieldwork and his contribution, largely through his field notes, to our understanding of the prehistoric community at Wells.

This site report was made possible because of a research grant from the Virginia Department of Cultural Resources. We want to thank Dr. Catherine Slusser and Mr. Keith Egloff of that office for supporting this project and also for recognizing the important contribution that extant collections from sites like Wells can make toward furthering our understanding of the past.

Several individuals besides the authors contributed indirectly to this report. First, we wish to acknowledge Brenda Moore of the Research Laboratories of Archaeology for her capable assistance in administering the grant. Bryan Shanks supervised the re-cleaning of artifact collections and also sorted, classified, and computer-coded all analyzed pottery from the site. Jessica LaMarro assisted with the pottery analysis, and Sarah Hopton and Katherine McGhee-Snow also assisted with some of the illustrations.

ABSTRACT

During 1971 and early 1972, members of the Patrick-Henry Chapter of the Archeological Society of Virginia conducted archaeological excavations at the Wells site (44Hr9), a small, late prehistoric site of the Dan River phase located on Smith River near Martinsville, Virginia. The site was estimated by the excavators to be approximately 175 ft in diameter, and there is no evidence to indicate that the settlements there were palisaded. Excavations exposed about 2,600 sq ft of the site, discovered 25 archaeological features, and recovered over 8,000 artifacts. Two radiocarbon dates indicate that the site was occupied at least twice between the late twelfth and early fifteenth centuries; however, artifact assemblages from the excavated features, including those that are radiocarbon-dated, are remarkably similar. This report summarizes the investigations conducted at the Wells site, describes the artifacts and contexts that were found, and considers the significance of the site to our understanding of the Dan River phase.

TABLE OF CONTENTS

INTRODUCTION

The Wells site (44Hr9), also known as the Wells #1 site, represents at least two small, late prehistoric Indian settlements of the Dan River phase. It is located on the right descending bank of the Smith River just south of the corporate limits of Martinsville, Henry County, Virginia, about 3.5 miles below the Martinsville power plant dam and U.S. 220 bridge and 0.4 mi below the mouth of Mulberry Creek (Figure 1). The roughly contemporary Box Plant (44Hr2) and Belmont (44Hr3) sites are located about 4.2 miles and 1.0 mile upstream, respectively. The site is on a large, 500-ft wide, well-drained alluvial terrace that is flanked to the southwest by steep-sided hills. The site is roughly circular and measures about 175 ft in diameter (or about 0.5 acres). The map on the site survey form suggests that site is about 100 ft back from the river bank (Figure 2). Unfortunately, no detailed map exists of the site vicinity.

The Wells site was excavated mostly on weekends between March 1971 and March 1972 by the Patrick-Henry Chapter of the Archeological Society of Virginia (ASV), under the direction of Richard P. Gravely, Jr. Five test pits also were dug at the site in 1965, and the site was occasionally looted prior to 1965 (Gravely 1973). Like the nearby Belmont site, which was extensively excavated by the Patrick-Henry Chapter during the mid-1960s, the Wells site was not immediately threatened by industrial development. The main impetus for investigating the site appears to have been simply to provide an opportunity for chapter members to participate in an archaeological dig.

Most of the artifacts recovered during the investigation of the Wells site, as well as all extant field notes, were kept by Richard Gravely and Robert Burns. In 1983, the collections and associated records were donated to the Research Laboratories of Archaeology at the University of North Carolina at Chapel Hill where they presently reside. The field notes, while relatively complete in what they describe, do not account for the entire period during which the site was excavated; however, they are sufficient to identify most excavated contexts and determine where most of the artifacts were found.

ENVIRONMENTAL SETTING

Physiography and Topography

Martinsville and Henry County are located in the western Piedmont of Virginia, in the rolling foothills that flank the eastern edge of the Blue Ridge. The Piedmont geomorphological province has been described as "broadly undulating or rolling topography whose relief is increased locally by low knobs or ridges and valleys 50 to 300 feet deep" (Thornbury 1965:88). The easternmost ridges of the Blue Ridge mountains, whose eastern flanks are drained by the headwaters of the Smith River, lie 25-30 mi to the north and west. The higher peaks along these ridges range from about 2,500 ft to 3,000 ft in elevation. Smith River flows generally from northwest to southeast through Martinsville and Henry County and empties into Dan River at Eden, North Carolina,

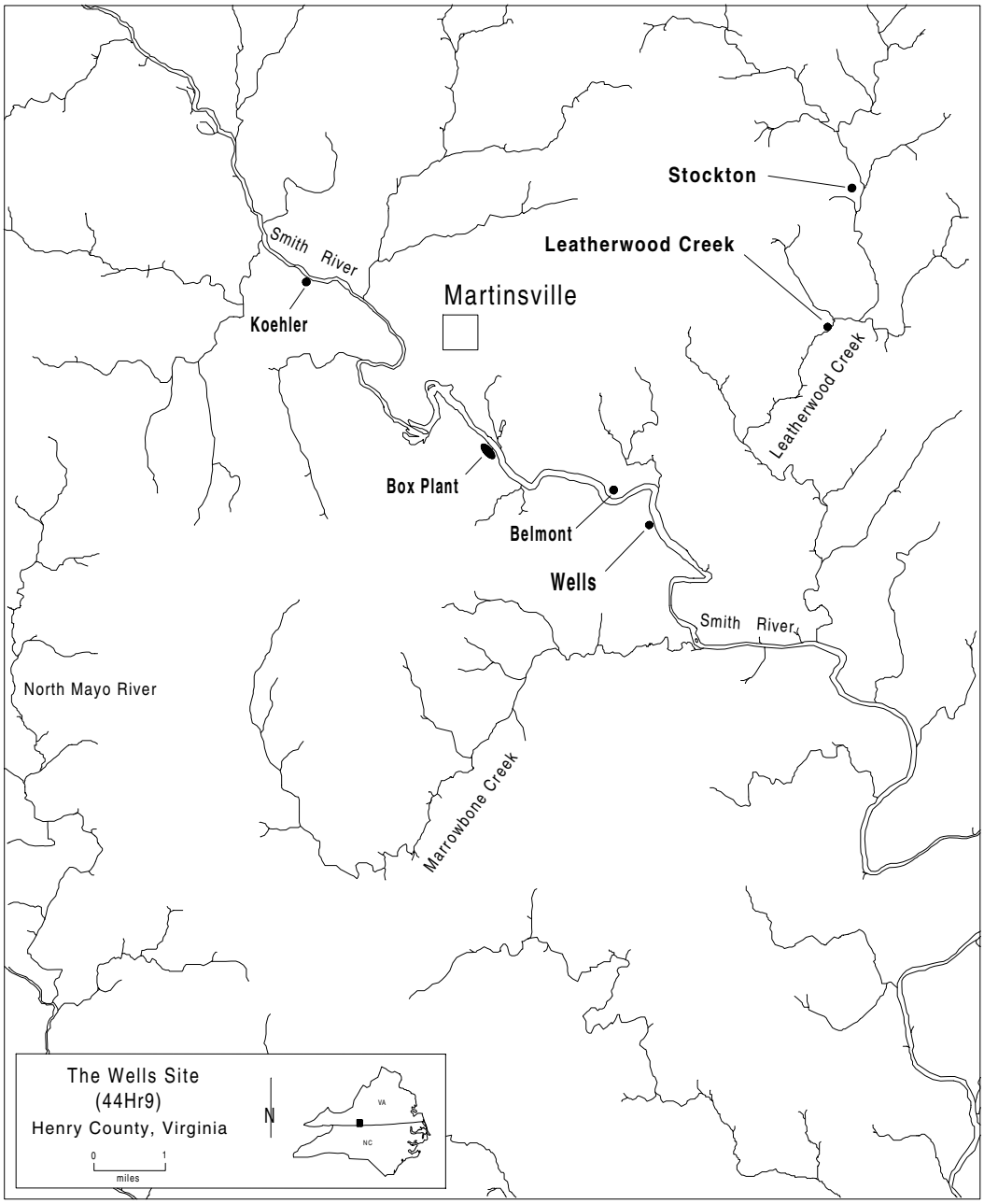


Figure 1. Map of the Smith River valley near Martinsville showing the location of the Wells site and other excavated Dan River phase villages (adapted from Martinsville, VA-NC 15-minute quadrangle, U.S. Army Corps of Engineers, 1944).

about 17 mi below the Wells site. The Dan River is a major tributary of the Roanoke River system. The area of Henry County just west of the Smith River valley is drained by the north and south forks of the Mayo River which also flow south into the Dan River at Mayodan, North Carolina. Major tributary streams of the Smith River are Town Creek, Reed Creek, Beaver Creek, Marrowbone Creek, Leatherwood Creek, and Mulberry Creek, which flows into the Smith River less than a half-mile above the Wells site.

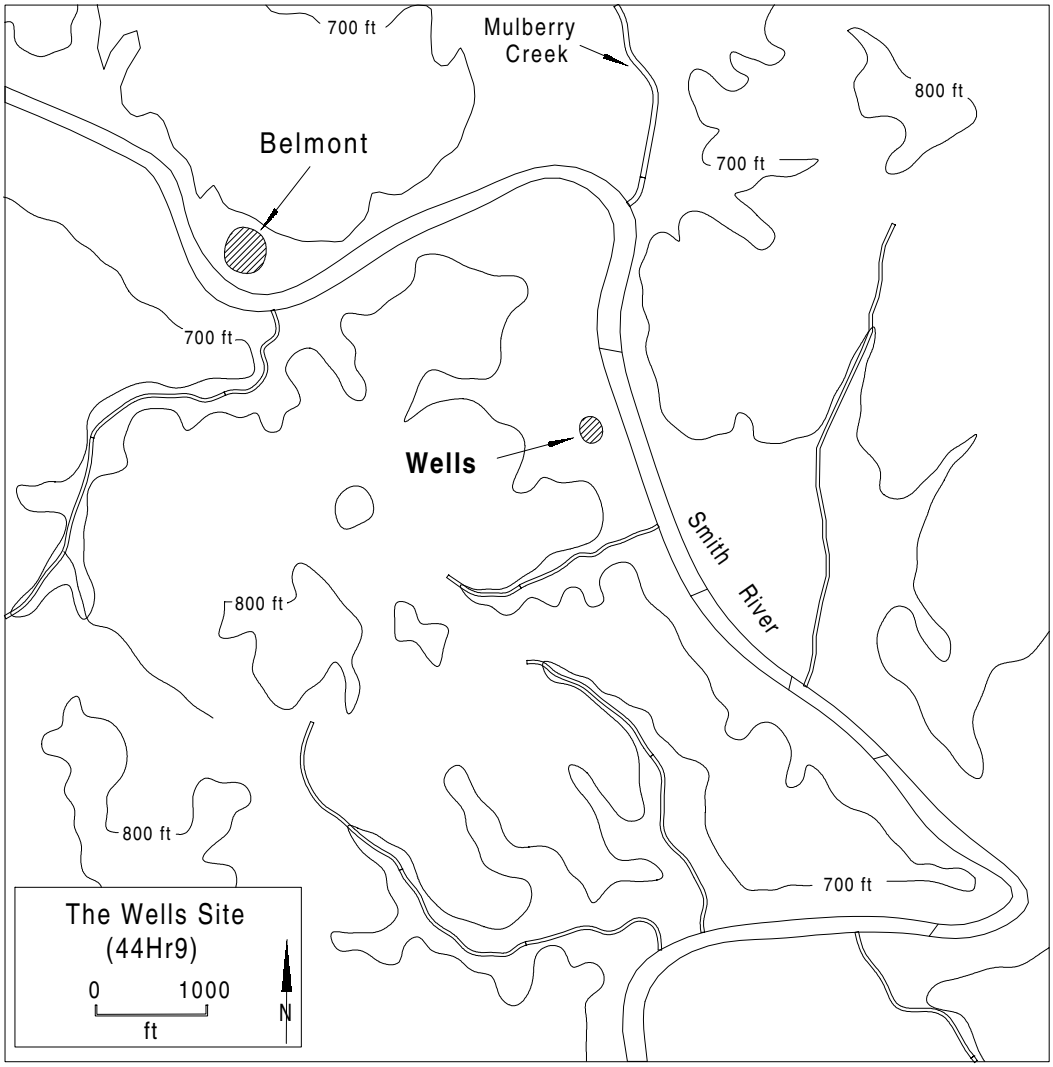


Figure 2. Map of the Wells site showing its location and approximate limits.

The Wells site is located on the south side of the Smith River on a wide, well-drained alluvial terrace. This terrace extends about 2,200 ft upstream and 800 ft downstream from the site, and covers about 35 acres (Figure 3). The southwestern edge of this terrace is flanked by relatively steep hills that rise about 80 ft to the adjacent upland.

Geological Resources

The drainage in the Piedmont province is not generally dictated by its underlying lithic structure, but there are localized exceptions (Thornbury 1965:88). Much of Henry County appears to be underlain by metamorphosed sedimentary rocks (e.g., schist, gneiss, etc.) of an uncertain age (Calver and Hobbs 1963). In the Martinsville area there are also

Figure 3. General view of the Wells site showing piles of backdirt.

outcrops of hornblende, gabbro, gneiss (e.g., amphibole chlorite schist, chlorite hornblende gneiss, etc.), and Leatherwood granite (biotite muscovite granite). The headwaters of the Smith River, which drain the eastern flank of the Blue Ridge, extend north and west into the Lynchburg formation, which is characterized by phyllite, quartzite, quartz graywacke, and conglomerate. Although specific sources have not been identified, much of the quartz, quartzite, and granitic stone used for lithic tools at the Wells site could have been collected from the nearby river bed or along the Blue Ridge escarpment to the west. Most of the metavolcanic rock (including rhyolite), used in making many of the chipped-stone tools found at the site, probably came from sources to the south in piedmont North Carolina (see Daniel and Butler 1996). Chert-bearing limestone formations are found west of the Blue Ridge escarpment in the Ridge-and-Valley province of Virginia and Tennessee (Thornbury 1965:113).

Floral and Faunal Resources

The Wells site lies in Shelford's (1963:19, 56-62) Temperate Deciduous Biome of the southern region of North America and Braun's (1950:259-267) Atlantic slope section of the Oak-Pine forest region. However, as Holm (1994:34, 172) has pointed out, the typical description of the Piedmont as covered in climax oak-hickory forests during prehistory does not take into account that Native Americans were actively modifying their environment. In particular, Native Americans used fire both to clear fields and to increase browse areas for their primary mammalian prey, white-tailed deer. In light of

research by Gremillion (1989:131-141), Holm (1994) has presented a partial reconstruction of the faunal resources that would have been available in the upper Dan River drainage during the late prehistoric and early contact periods.

By late prehistoric times (after about A.D. 1000), most Indians living along the major tributaries of the Dan River were active agriculturists. They prepared fields where they planted maize, squash, gourd, and beans. They also continued an earlier tradition of using indigenous cultigens such as sunflower, goosefoot, sumpweed, and maygrass. Once the fields were harvested, mice and moles frequented the fallow fields. As broomsedge became common, rats, shrews, cottontail rabbits, and bobcats took up residence (Holm 1994:36). In scrub communities (consisting of mixed pine and hardwood forests but lacking a canopy layer), one would find "short-tailed shrews, white-footed mice, gray squirrels, southern flying squirrels, eastern chipmunks, gray foxes and raccoons" (Holm 1994:36). Beavers, muskrats, minks, and river otters preferred floodplain forests which were characterized by tree canopies of "swamp chestnut oak, overcup oak, willow oak, swamp Spanish oak, sweet gum, swamp red oak, hickory, and elm" (Holm 1994:36-37). Other species, such as opossum, raccoons, weasels, and white-tailed deer, would have preferred primarily upland mixed hardwood forests but also pine forests (Holm 1994:37). With the exception of some species such as wolf, bear, and passenger pigeon, which are either extinct or drastically reduced in number, the same diversity of animal species found today were exploited in late prehistory. The location of the Wells site along the Smith River obviously meant that aquatic resources, such as fresh-water fish, turtle, amphibians, and shellfish, were available to the residents. In fact, shellfish are still common along the shoals in the river near the site.

Gremillion's (1989:148) research into floral resources of the Piedmont, including the Smith River drainage, indicates that mature Oak-Hickory-Pine forests probably were the least productive in terms of plant-food resources for late prehistoric and historic Indian living in this area. She argues that, in addition to the aforementioned cultivated plants, there is evidence for arboriculture among southeastern Native American groups. Ethnohistoric sources indicate that species such as persimmon, honey locust, Chickasaw plum, red mulberry, shellbark hickory, and black walnut may have been intentionally cultivated. In general, Gremillion believes that edge environments and intentionally disturbed areas were intensively exploited by Native American peoples. When these disturbed habitats were not naturally available, Native Americans created them using fire or other clearing methods (Gremillion 1989:166-167). Although there was seasonal variation in resource availability, the Piedmont region in both Virginia and North Carolina was characterized by a diversity of plant and animal foods that could be exploited year-round.

SITE HISTORY AND RESEARCH OBJECTIVES

The Wells site was officially recorded as 44Hy9 (44Hr9) in the Virginia site files by Howard MacCord in 1965; this file was updated by Richard Gravely in 1973. At the time of excavation, the site was referred to by the landowner—Carter Estates, Inc.—as the "Wells tract." While there is no information as to when or how the site was first

discovered, the site survey form does indicate that there was "occasional potholing by local collectors prior to 1965" (Gravely 1973).

The Wells site was one of more than a dozen sites to be excavated by the Patrick-Henry Chapter of the Archeological Society of Virginia between 1964 and the mid-1970s. Fieldwork began in late March, 1971, and continued almost every weekend and some evenings until the middle of July. After a one-month hiatus, work resumed in mid-August but on a much more sporadic basis. Most of the excavation was completed by early December; however, two additional days were spent digging at the site in March, 1972. Although over one dozen individuals participated in the excavation, including at least two weekend visits by members of the Roanoke Valley Chapter of the ASV, most of the work during this entire period was done by Richard Gravely and Robert Burns.

There does not appear to have been a research objective or rationale for excavating the site beyond providing an opportunity for chapter members to participate in an archaeological excavation and to learn more about the late prehistory of the region. By the time that the Wells site was excavated, numerous other sites in the Martinsville area had already been dug, including Leatherwood Creek (44Hr1), Box Plant (44Hr2), Belmont (44Hr3), Koehler (44Hr6), and Gravely (44Hr29). General questions that the excavators tried to address at all these sites included the following: (1) What was the extent and duration of a site's occupation?; (2) When was the site occupied?; (3) What were their houses like and how were they arranged?; (4) What were their burial customs like?; and (5) What was the material culture of the site's inhabitants like?

FIELD AND LABORATORY METHODS

Excavations were controlled by a grid of 5x5-ft units. The grid was oriented along a north-south axis and work began near the 100N100E stake, which appears to have been located near the site's center. While there are no detailed descriptions in the field notes about excavation methods, the procedure followed by the Patrick-Henry Chapter on other sites was to remove the soil from each 5x5-ft unit using shovels until subsoil was reached. The backdirt removed from a unit usually was shoveled into an adjacent, previously excavated unit. At the Wells site, subsoil was overlain by a zone of plowed soil and an underlying midden. Artifacts encountered during excavation were collected; however, none of the soil was systematically screened. In rare instances, artifacts found in the plowzone were kept separate from those found within the midden. The final field map, dated December 23, 1971, indicates that 103 5x5-ft units were excavated at the Wells site (Figure 4).

If a feature was identified at the top-of-subsoil level, it was mapped and then excavated with shovels or smaller tools. Artifacts from each feature were bagged separately. Twenty-five features—mostly refuse-filled pits and basins—were found during the Wells site excavation.

Field notes were kept in diary form, noting who excavated a particular unit or feature. Features sometimes were described in greater detail, with remarks about general fill content, dimensions, and pit morphology. Many of the 5x5-ft units also are

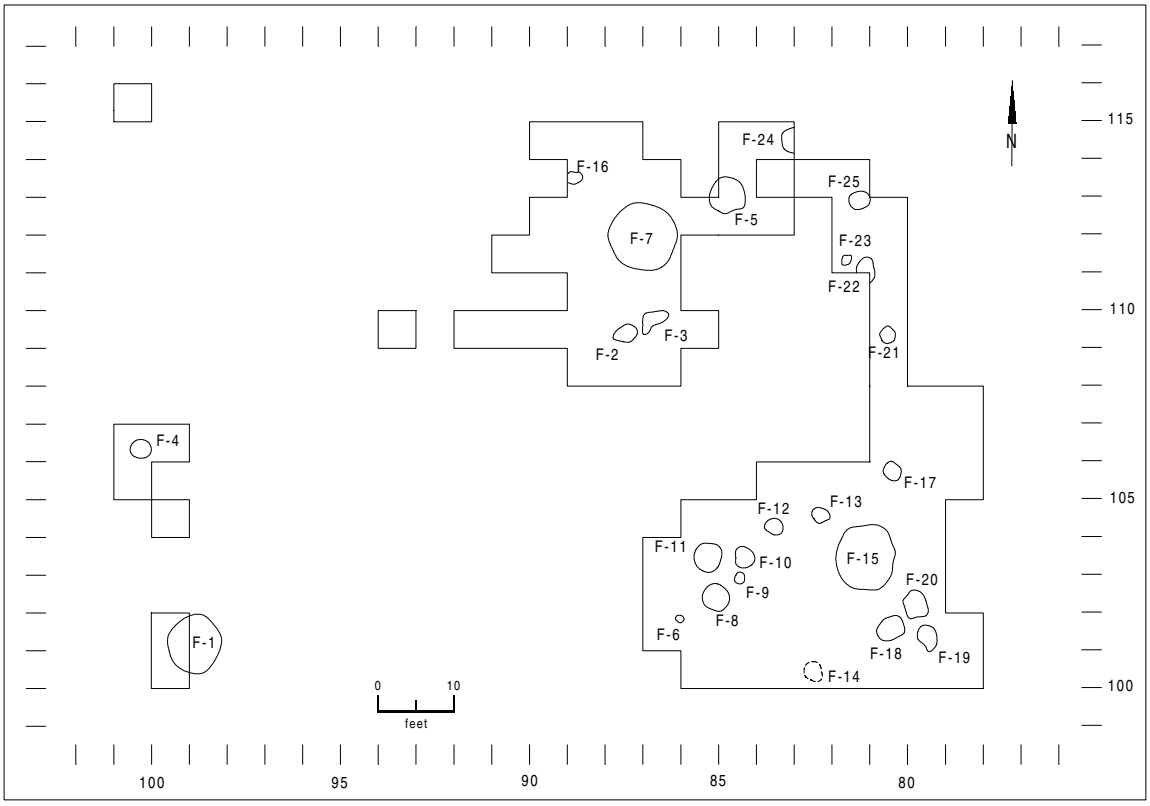


Figure 4. Map of the Wells site excavation.

accompanied by standardized excavation forms. Unfortunately, only 10 photographs of the excavation exist and many of these are poorly exposed.

EXCAVATION RESULTS

Site Stratigraphy

Soil stratigraphy was recorded by the excavators for most excavated units. The soil in the vicinity of the Wells site has been classified as Buckhall sandy loam, a very deep, well-drained, clayey-textured soil with fine micaceous inclusions that occurs along the Smith River floodplain (USDA, Natural Resources Conservation Service n.d.). The uppermost 0.7-1.0 ft of soil at the site comprised a light brown plowzone which had been disturbed and mixed by cultivation (Figure 5). Artifacts do not appear to have been particularly abundant within the plowed soil. Beneath the plowed soil was a dark layer of midden that varied from about 0.2 ft to 0.5 ft in thickness. Portions of the midden contained rich deposits of mussel shell and periwinkle shell; however, other areas contained very few artifacts. Most of the features at the site appear to have originated within this midden. Beneath the midden was a light-colored, sandy subsoil of unknown depth. Features usually were not isolated or mapped until the excavators had reached this soil zone. The low density of artifacts within the plowzone and the presence of a midden

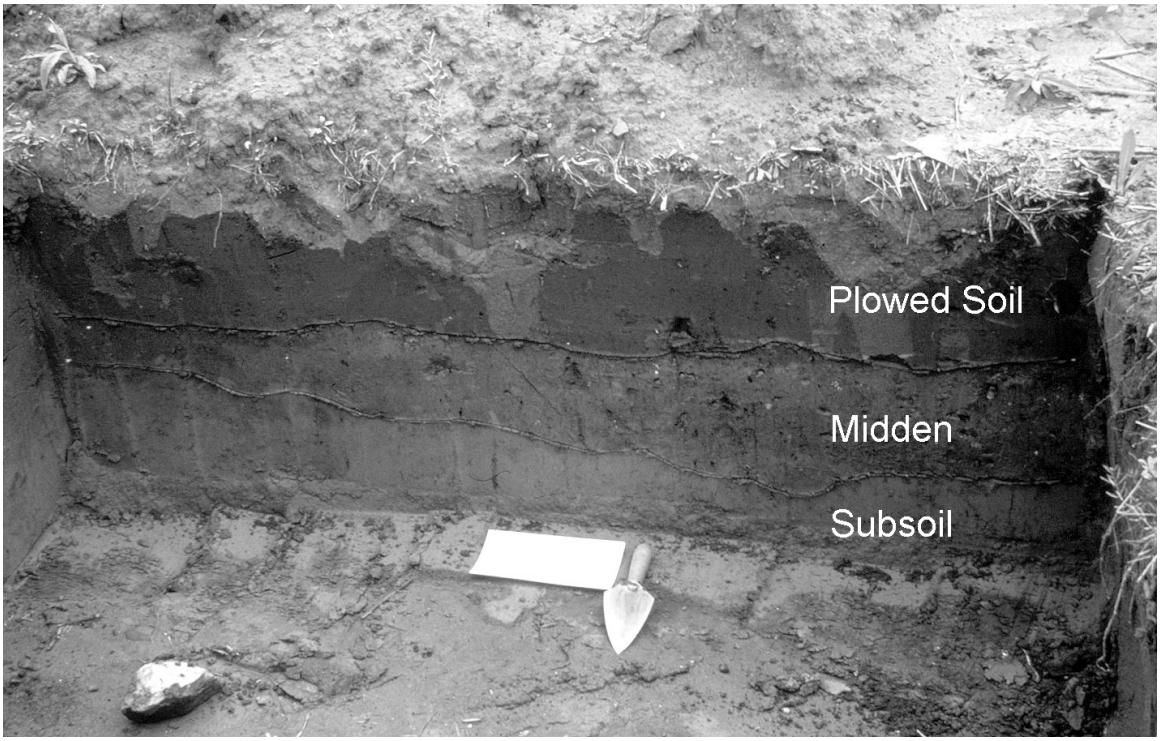


Figure 5. Soil profile at the Wells site, showing plowed soil, midden, and subsoil.

suggest that the site's surface probably built up as a result of flood deposition after the site was abandoned.

Site Structure

We know comparatively little about the internal structure of the Wells site. Unlike other sites excavated by the Patrick-Henry Chapter in the Martinsville area where circular arrangements of pits, site size, and the presence of perimeter ditches or other archaeological features indicate enclosed, nucleated settlements, too little of the Wells site was excavated and mapped to provide much information about what the settlement may have looked like. The fact that the Wells site is considerably smaller than other roughly contemporary sites, such as Box Plant, Belmont, and Koehler, suggests that it also may have had a different internal structure.

Several postholes were observed during excavations at the Wells site; however, they were not systematically mapped. In addition, numerous small clusters of rocks were found in the midden which the excavators interpreted as in situ "chocking" stones that were placed around posts within postholes (Figure 6). None of these formed alignments that could be interpreted as either house walls or palisade lines.

Figure 6. Cluster of rocks interpreted by the excavators as in situ "chocking" stones.

Description of Features

Twenty-five archaeological features were excavated at the Wells site. They can be divided into eight groups based on morphology, content, and probable function. Features 8, 10, 11, 13, and 24 were large, relatively deep, cylindrical or bell-shaped pits and probably were used for storage (Figure 7). Features 4, 12, 17, and 19 were smaller pits that could have been used for storage, but they also may have been used for other purposes. Features 1, 5, 7, and 15 were very large, circular, shallow pits that are morphologically similar to features interpreted at other Siouan sites as communal roasting pits (Eastman 1996); however, none of these contained the rich deposits of food remains and other refuse typically found in such facilities. Consequently, their function is uncertain. Only one feature—Feature 22—is interpreted as a cooking facility. Features 3, 6, 9, 18, and 25 were low depressions at the base of the midden which had been intentionally filled with refuse, and Features 16 and 21 were concentrations of artifacts within the midden. Finally, Feature 23 is interpreted as a modern disturbance, and Features 2, 14, and 20 lacked sufficient information to determine their probable functions.

Each feature is described below. Unless otherwise noted, all feature depths are measured from the base of the midden (about 1.5 ft below the ground surface). A majority of the artifacts from feature contexts came from Features 5, 8, 18, 22, and 25.

Feature 1. Feature 1 was a large, shallow, bowl-shaped depression that measured 6.2 ft in diameter and less than 0.5 ft deep. The black, midden-like fill contained charcoal, a few stone flakes, fragments of animal bone, a moderate amount of pottery, and large quantities of mussel and periwinkle shell. These artifacts are missing from the collection.

Figure 7. View of Feature 8, a cylindrical storage pit, following excavation and heavy rain.

Feature 2. This feature was described in the field notes as containing a black, ashy soil full of potsherds, shell, and "other debris." It measured about 2.3 ft by 3.3 ft; depth was not recorded.

Feature 3. Feature 3 was described as a "midden-filled depression." When first encountered it was thought to be part of a perimeter ditch similar to ones found at the nearby Belmont site. It was about 3 ft by 5 ft wide and extended about 0.5 ft into subsoil. The midden-like fill contained numerous potsherds, shell, and charcoal. These artifacts are missing from the collection.

Feature 4. This feature was described as a shallow pit 2.5 ft in diameter and 0.7 ft deep. There are no artifacts from Feature 4 in the collection.

Feature 5. Feature 5 was a large, basin-shaped pit that measured 4.8 ft in diameter and 2.2 ft deep. The fill contained numerous potsherds, animal bone, two projectile points, and a clay spoon.

Feature 6. Feature 6 was a small, shallow, bowl-shaped depression that contained black ash and sand. It measured about 1.0 ft in diameter and 0.5 ft deep. There are no artifacts from Feature 6 in the collection.

Feature 7. Feature 7 was a wide, shallow, circular pit that measured about 9.0 ft in diameter and 0.7 ft deep from the base of plowzone. Field notes indicate that it

appeared as a very heavy shell, ash, and charcoal concentration within the midden. Only a few potsherds, shell, animal bone, and a chipped hoe fragment were recovered from this feature.

Feature 8. Feature 8 was a circular, refuse-filled storage pit that measured 2.7 ft in diameter and 1.1 ft deep (below the base of midden) (see Figure 7). It was one of the richest features at the site and contained large quantities of periwinkle shell, a few mussel shells, charcoal, and much animal bone. Charcoal was particularly abundant near the top of the pit. Other artifacts from the fill include numerous potsherds, a bone fishhook, two other pieces of worked bone, a hammerstone, and a retouched flake.

Forty-two grams of wood charcoal from Feature 8 were submitted for radiocarbon assay and yielded an uncorrected date of A.D. 1130 ± 60 (Beta-109073).

Feature 9. Feature 9 was a shallow, refuse-filled depression at the base of the midden. It was overlain by reddish soil within the midden, and it measured about 1.7 ft in diameter and only 0.3 ft deep. This feature contained six large quartz cobbles, lots of shell (of which only a few specimens were saved), and small amounts of animal bone and pottery.

Feature 10. Feature 10 was a refuse-filled storage pit that was shaped like an inverted bell (i.e., inward-sloping walls and a rounded bottom). It was 3.5 ft in diameter at top of subsoil, 2.8 ft in diameter at the bottom, and 2.6 ft deep. The fill was described as an ashy, black, sandy soil that contained pottery and some animal bone, mussel shell, and periwinkle shell. Other artifacts from the pit included a deer-tine projectile point, a well-made triangular stone projectile point, worked bone, and a handle fragment from a fired-clay spoon or ladle. Unfortunately, none of these artifacts are present in the Wells site collection.

Feature 11. Feature 11 is described in the field notes as a refuse-filled storage pit similar in shape to Feature 10. It measured 3.8 ft in diameter at the top, 3.0 ft in diameter at the bottom, and 2.7 ft in depth. It contained a mass of charred wood approximately 0.8 ft above the pit floor, but only a few animal bones and shells. Numerous potsherds also were found, including some very large sherds. None of these artifacts are present in the Wells site collection.

Feature 12. Feature 12 was a small pit about 1.3 ft in diameter and 1.3 ft deep. As with Feature 9, it was overlain by reddish soil within the midden. Although very little pottery or animal bones were found (and none are in the collection), the excavators reported finding much ash, lumps of fired clay, charcoal, and a few mussel and periwinkle shells.

Feature 13. Feature 13 was a trash-filled storage pit. It has straight sides, and it measured 2.2 ft in diameter and extended 1.5 ft into the subsoil. The fill contained much ash and charcoal and some pottery, animal bone, shell, and daub.

Feature 14. The field notes contain no information about this feature except its location at the southern edge of the excavation. Several potsherds and animal bones were excavated from this context.

Feature 15. Feature 15 was a large, shallow pit similar to Feature 7. It measured about 7.5 ft by 8.5 ft at the top and was about 0.8 ft deep below the base of midden. It contained large amounts of ash and charcoal but only a small quantity of pottery. The excavators also reported finding several projectile points but these are now missing from the collection.

Wood charcoal from Feature 15 was submitted for radiocarbon assay by Richard Gravely in 1979 and yielded an uncorrected date of A.D. 1380 ± 55 (UGa-2831).

Feature 16. This feature was a concentrated deposit within the midden of mussel shells. Small numbers of periwinkle shells, animal bones, and potsherds also were found. Feature 16 measured about 1.0 ft by 1.7 ft and was 0.3-0.5 ft thick.

Feature 17. Feature 17 was a small pit that measured almost 2.0 ft in diameter and 1.5 ft deep. The fill contained some charcoal but only a small number of animal bones and potsherds. A hammerstone also was recovered from the fill.

Feature 18. Feature 18 was an elongated, refuse-filled depression of unspecified dimension. It extended about 0.8 ft below the midden and contained numerous potsherds, animal bones, and a few stone flakes.

Feature 19. Feature 19 was a bowl-shaped pit that measured 2.6 ft in diameter and 0.6 ft deep. At the bottom of the pit was a mass of large burned-clay chunks, possibly the redeposited remnants of a clay hearth. There are no artifacts from this feature in the collection.

Feature 20. Feature 20 is shown on the site map as an oblong pit about 3.0 ft by 3.8 ft in size; however, it is not mentioned in the field notes, and there are no artifacts from this feature in the collection.

Feature 21. Feature 21 is described in the field notes as a concentration of large stones within the midden. The excavators noted that it probably did not represent a hearth since there was no charcoal, ash, or burned clay associated with it.

Feature 22. Feature 22 was an irregularly-shaped pit that measured roughly 2.2 ft in diameter and extended 1.2 ft below the base of midden. It was interpreted as a probable fire pit. The fill was a very dark, midden-like soil that contained considerable amounts of charcoal and fire-cracked rocks, as well as large numbers of potsherds, animal bones, mussel shells, and periwinkle shells. Feature 22 also contained several stone flakes and two clay handle fragments.

Feature 23. Feature 23 was a rectangular disturbance, measuring 1.0 ft by 1.5 ft and 1.3 ft deep below the surface, that intruded the midden. It contained mostly clean subsoil that was discolored near the bottom. The excavators interpreted this pit as a latrine that probably post-dated the Indian occupation of the site.

Feature 24. Feature 24 was a large, deep, slightly bell-shaped storage pit. It measured about 3.6 ft in diameter at the top, and 3.8 ft in diameter at its widest point, and it extended almost 2.0 ft below the midden. The field notes indicate that numerous potsherds, animal bones, and shells were found in the fill; however, only 57 potsherds and five animal bones are in the collection.

Feature 25. Feature 25 is described in the field notes as a deep area of midden that contained a dense concentration of animal bone, pottery, shell, charcoal, and other artifacts. Whether or not it represents a distinct pit is unclear. Among the animal bones were the disarticulated and partially articulated remains of a butchered deer. These remains were kept separate and designated Feature 25A.

POTTERY

Nearly all potsherds and vessels recovered from the Wells site are classified as late prehistoric Dan River series. Most vessels in this ceramic series are jars with net impressed exteriors and sand or quartz temper. Dan River pottery is found throughout 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 and the central and southern part of the Yadkin River drainage. The eastern edge of the distribution is about 20–30 miles above the Dan River's confluence with the Roanoke, between Danville and South Boston, Virginia (Egloff et al. 1994). The western edge of the distribution along the Yadkin River falls roughly at the midpoint between the Great Bend area and its headwaters, in eastern Wilkes County, North Carolina (Idol 1997). Dan River phase sites are also found along the headwaters of the Roanoke and upper James rivers in Virginia (MacCord n.d.).

Similar late prehistoric pottery stamped with net-impressed exteriors also occurs in several adjacent river drainages in the piedmont and Blue Ridge regions of Virginia and North Carolina. These predominantly net-impressed pottery series are clearly related to the Dan River series and probably represent regional variations within a widespread late prehistoric ceramic tradition. Tempering agents, certain vessel forms, and decorative attributes distinguish these pottery series. Pottery series similar 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 upper Tennessee river drainages in southwest Virginia (Egloff 1987); and the sand-and-quartz-tempered Wythe variant of the Dan River series in the New and upper Tennessee river drainages (Egloff 1987).

The Dan River series was originally defined by Coe and Lewis (1952) and was based on pottery from the Lower Saratown site (31Rk1). Lower Saratown is located along the Dan River just downstream of its confluence with the Smith River in Rockingham County, North Carolina. The late prehistoric cultural complex associated with this pottery is called the Dan River phase (Ward and Davis 1993). A series of radiocarbon dates indicate that most Dan River phase sites were occupied between A.D. 1000 and A.D. 1450 (Eastman 1994). In the northern area of its occurrence, Dan River pottery was manufactured throughout the Contact period (Buchanan 1986; Klein 1994). However, in the upper Dan River drainage, Dan River potters incorporated new surface treatments and vessels forms, and made changes in paste recipes after A.D. 1400. These changes have been recognized as the Oldtown series (Ward and Davis 1993; Wilson 1983). The Oldtown series was produced throughout the Contact period in the upper Dan drainage, though a small number of Dan River Net Impressed pots continued to be made in the region as late as the beginning of the eighteenth century (Ward and Davis 1993).

Richard Gravely and members of the Archaeological Society of Virginia recovered 5,453 sherds from excavations and surface collections at the Wells site. Of this total, 4,049 sherds, or about 74%, were analyzed. The remaining 1,404 sherds were too small (i.e., <2 mm in diameter) to be reliably classified. Attributes recorded for each of the analyzed potsherds include: temper type, exterior surface treatment, interior surface treatment, portion of vessel represented, decoration type (if present), and type of lip treatment (for rim sherds only). Sherds from 18 subsurface features, 84 5-ft-by-5-ft excavation units, and general excavation and surface contexts were analyzed. The most common pottery type in the collection is Dan River Net Impressed, which accounts for more than half of all identifiable sherds in the assemblage. About one-fifth of the analyzed sherds were classified as Dan River Roughly Smoothed and over eight percent were classified as Dan River Plain. Seventeen rim sherds and vessel sections were large enough to determine rim orientation and diameter, and these were assigned unique vessel numbers. These vessels are described in Appendix 4, and their rim profiles are illustrated in Appendix 5. Jars with straight to slightly everted rims are the most common vessel type found at the Wells site.

Descriptions of each type of pottery in the Wells site assemblage are presented below. Table 1 shows the distribution of these types by context.

Dan River Net Impressed (Coe and Lewis 1952)

Sample Size. N=2,393 potsherds.

Temper. Nearly three-quarters (n=1,769, 73.9%) of Dan River Net Impressed sherds from the Wells site are tempered with a mixture of sand and crushed quartz. One-quarter (n=611) are tempered with sand alone, while a few sherds (n=13) have quartz and feldspar mixed in the paste. The paste of Dan River series pottery is generally well-kneaded, hard, and compact. The sandiness of the paste makes most sherds fairly rough to the touch.

Table 1. Distribution of pottery at the Wells site.

Context	Dan River Net Impressed	Dan River Roughly Smoothed	Dan River Plain	Dan River Cord Marked	Dan River Corncob Impressed	Dan River Brushed
Surface	144	72	37	12	1	-
Plowzone	1,314	476	194	98	38	1
Midden	71	16	10	7	1	-
Feature 2	5	3	1	2	-	-
Feature 5	55	31	10	3	1	-
Feature 7	2	2	1	-	-	-
Feature 8	91	24	1	-	-	-
Feature 9	4	-	-	-	-	-
Feature 10	42	22	10	1	1	-
Feature 11	58	7	8	1	1	-
Feature 13	17	1	-	1	1	-
Feature 14	29	6	4	-	-	-
Feature 15	17	5	1	-	-	-
Features 15 & 16	9	3	-	-	-	-
Feature 17	10	1	-	-	1	-
Feature 18	48	15	20	2	1	-
Feature 22	61	14	6	1	2	-
Feature 24	27	10	2	-	-	1
Feature 24, Potted Fill	10	-	2	-	-	-
Feature 25	117	31	19	7	-	-
Feature ?	146	9	5	-	-	-
General Excavation	78	26	4	1	4	-
Unprovenienced	38	9	10	1	-	-
Total	2,393	783	345	137	52	2
Percent	59.10	19.34	8.52	3.38	1.28	0.05

Exterior Surface Finish. Exterior surfaces exhibit impressions of mostly coarse, knotted nets. No attempt has been made to distinguish between specific types of netting.

Interior Surface Finish. Interior surfaces of vessels were thinned with a serrated tool and three-quarters (n=1815, 75.8%) were smoothed after thinning. Nearly all of the remaining Dan River Net Impressed sherds retain evidence of this wall thinning in the form of parallel grooves, though the interior surface finish on a small number of sherds (n=16) could not be determined.

Decoration. Only a small percentage of these sherds are decorated (n=137, 5.7%) and most (n=116, 84.1%) of these have a single row of fingernail pinches encircling the neck or shoulder of the vessel (Figure 8*b-d*). Two sherds have a horizontal row of fingernail pinches under a series of inverted Vs that also were created by pinching. Ten sherds are decorated with a horizontal band of punctations or incisions, and seven of these have a band of triangle-shaped punctations, probably formed with the corner of a

Table 1 continued.

Context	Fabric Impressed	Burnished Exterior	Indeterminate	Total Analyzed	Not Analyzed	Total
Surface	-	-	68	334	-	334
Plowzone	2	5	78	2,206	1,232	3,438
Midden	-	-	1	106	53	159
Feature 2	-	-	1	12	10	22
Feature 5	-	1	-	101	49	150
Feature 7	-	-	-	5	-	5
Feature 8	-	-	27	143	-	143
Feature 9	-	-	3	7	-	7
Feature 10	1	-	6	83	28	111
Feature 11	-	-	-	75	-	75
Feature 13	-	-	4	24	-	24
Feature 14	-	-	4	43	2	45
Feature 15	-	-	-	23	2	25
Feature 15/16	-	-	3	15	-	15
Feature 17	-	-	-	12	-	12
Feature 18	-	-	12	98	2	100
Feature 22	-	-	30	114	-	114
Feature 24	-	-	2	42	-	42
Feature 24, Potted Fill	-	-	3	15	1	16
Feature 25	-	2	39	215	-	215
Feature ?	-	-	15	175	1	176
General Excavation	-	1	21	135	24	159
Unprovenienced	-	-	8	66	-	66
Total	3	9	325	4,049	1,404	5,453
Percent	0.07	0.22	8.03	99.99		

square dowel. One sherd has a band of circular reed punctations, while another has two parallel rows of reed punctations. The final sherd in this group has a series of short incised lines encircling the neck. Two sherds are decorated with a horizontal line of raised clay produced by scraping up small bits of clay with a fingernail. The small mounds of clay were left at the bottom of each fingernail groove, creating a raised line. One sherd has a series of horizontal incised lines that encircle the vessel neck. Corncob impressions occur on the neck of one sherd, and miscellaneous incised lines, representing portions of unidentifiable, complex, incised designs, occur on five sherds (Figure 9*a-b,e,g*).

One sherd has a hole near the rim that was made prior to firing. This hole may have been cut to accommodate a rivet for attaching a handle, or it may have been intended to allow suspension of the pot. Two sherds in this assemblage have strap handles that terminate in notched rim peaks (Figure 10*b*). Another sherd has a notched rim peak, but no evidence of a handle.

More than half of all rim sherds in the assemblage have modified lips (n=120, 53.8%) (Figure 11*a-d*). Two-thirds of lip decorations are made across the top of the lip.

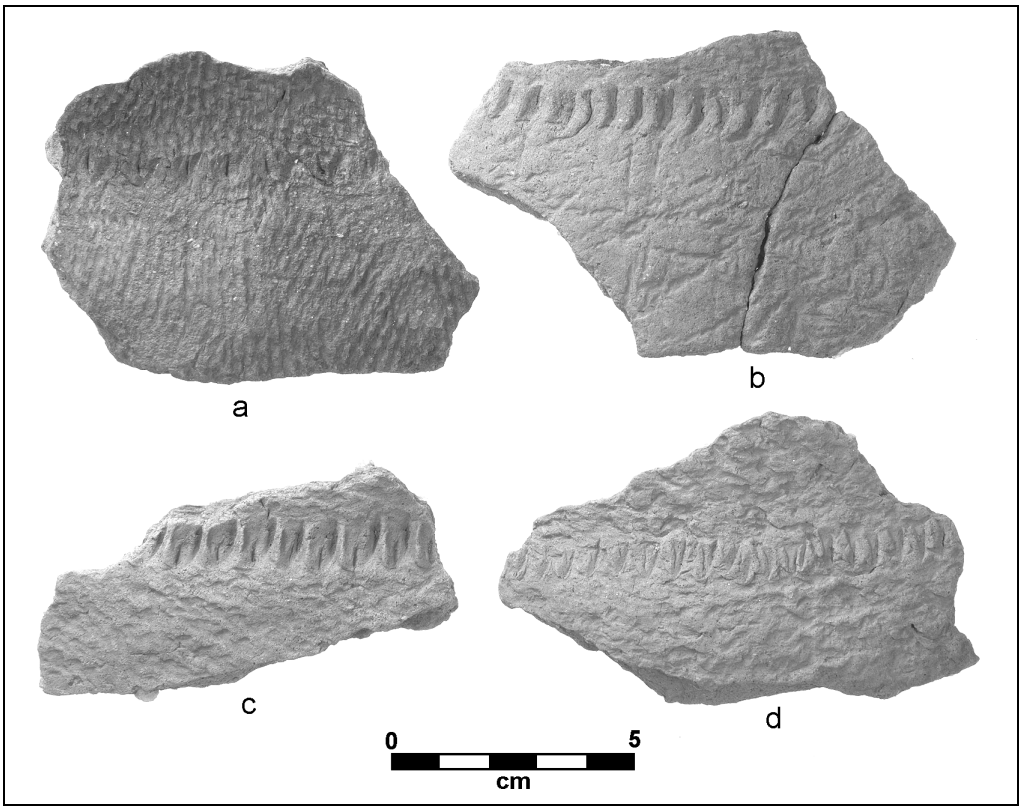


Figure 8. Dan River Net Impressed (*b-d*) and Dan River Cord Marked (*a*) neck sherds from vessels decorated with a horizontal band of fingernail punctations (decoration type I-A-1).

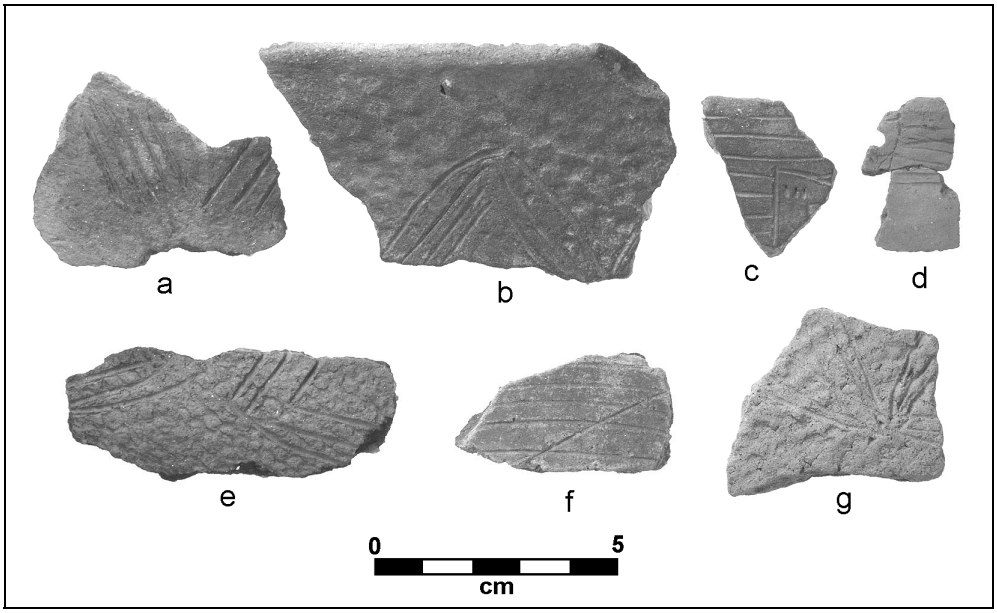


Figure 9. Dan River Net Impressed (*a-b,e,g*) and Dan River Plain (*c-d,f*) sherds decorated with miscellaneous incised lines (decoration type VI-A-1).

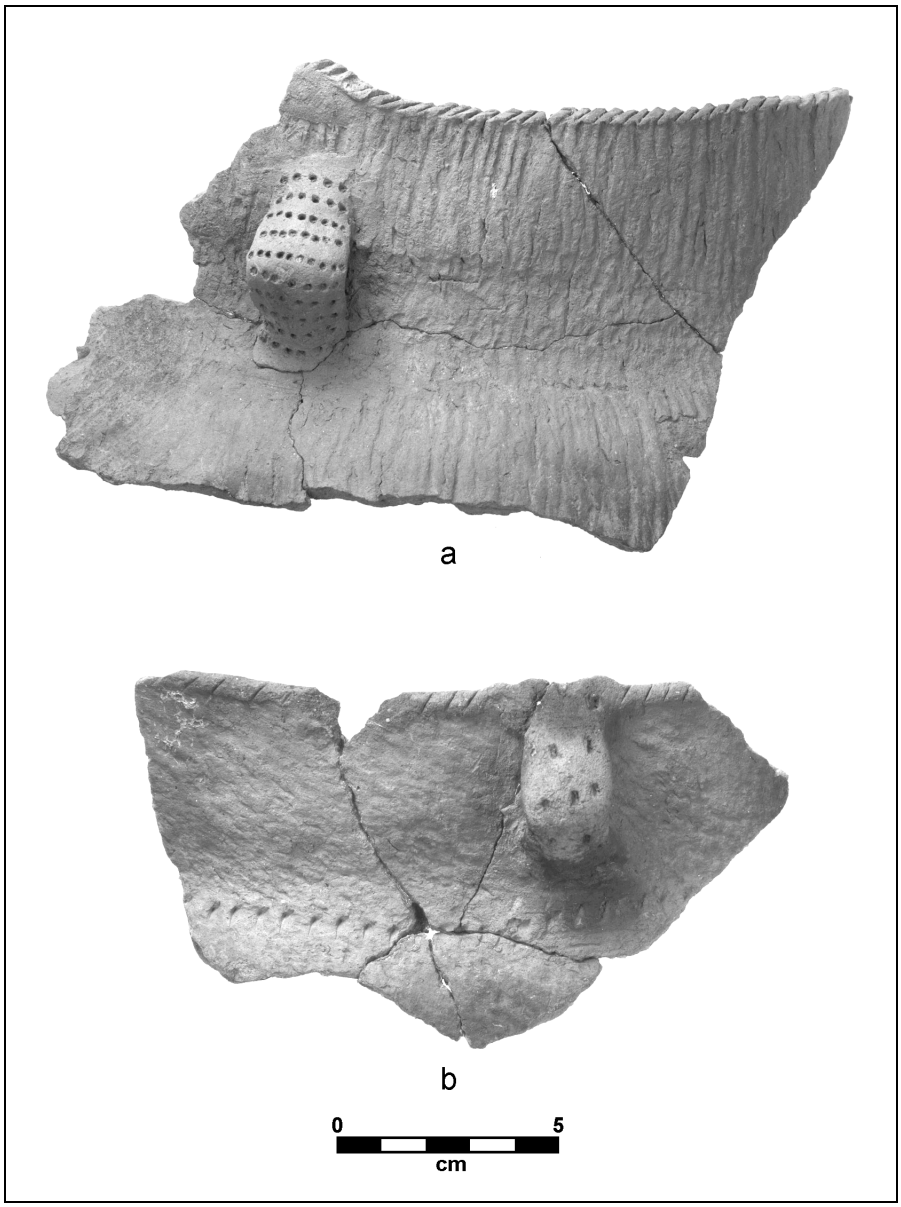


Figure 10. Dan River Cord Marked (*a*) and Dan River Net Impressed (*b*) vessel rim sections with punctated strap handles.

These modifications consist of parallel incisions or notches oriented diagonally or straight across the lip. One lip has groups of diagonal incisions or notches. The remaining third of lip modifications are located on the exterior margin of the lip. These decorations also consist of parallel incisions or notches, oriented diagonally (oblique) or perpendicular to the lip. Two rim sherds have V-shaped notches along the exterior margin of the lip.

Form. Twelve partially reconstructed vessels were among the Dan River Net Impressed sherds recovered from the Wells site. Eleven of the vessels are jars, while one is an unrestricted bowl. Five jars have portions of the shoulder present and in all cases the shoulder diameter exceeds that of the orifice. Rims tend to be either straight or

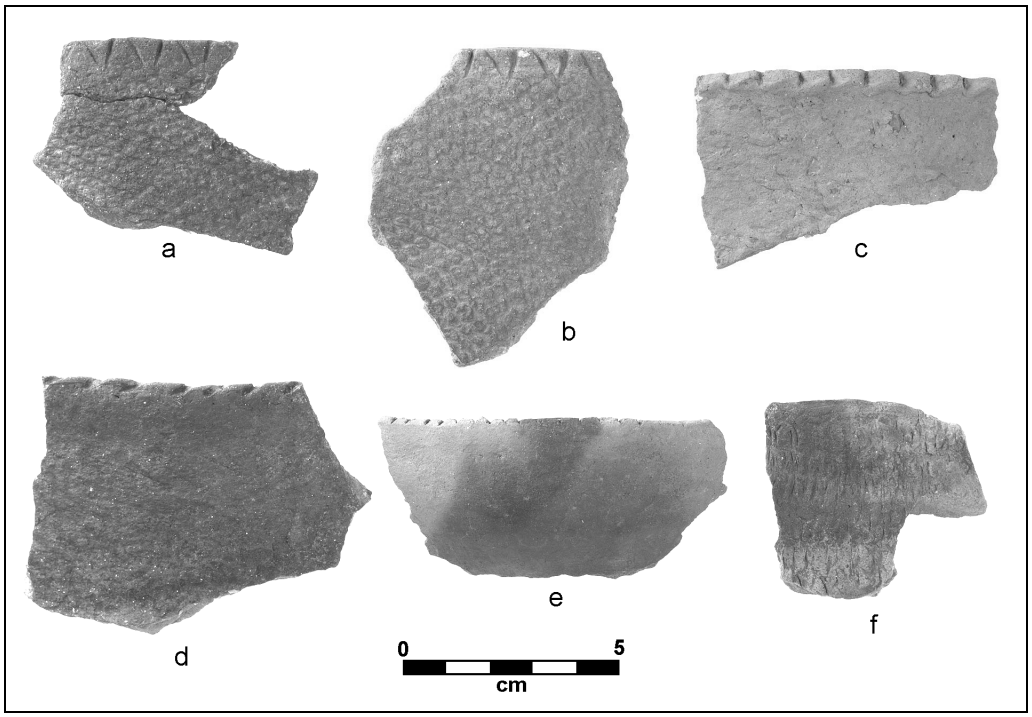


Figure 11. Selected lip treatments on Dan River series vessels: net-impressed rim sherds with V-shaped notches along the exterior lip margin (Type 3b) (*a*-*b*); net-impressed rim sherd with perpendicular notches (Type 2) (*c*); net-impressed rim sherd with oblique notches (Type 3) (*d*); plain rim sherd with perpendicular notches (Type 2) (*e*); and unmodified cob-impressed rim sherd (*f*).

everted. Rim diameters of all Dan River Net Impressed jars vary from 14 cm to 26 cm, with a median diameter of 20 cm. Two of the 223 rim sherds in the assemblage are folded.

Dan River Roughly Smoothed

Sample Size. N=783 potsherds.

Temper. Dan River Roughly Smoothed sherds are tempered like Dan River Net Impressed sherds. Most (n=569, 72.7%) contain a mixture of sand and quartz. Sand was observed in just over a quarter of the sherds (n=210, 26.8%), and four sherds contained mixtures of feldspar and either quartz or sand.

Exterior Surface Finish. Sherds within this type category have exterior surfaces that were partially smoothed before firing. Many of these likely represent vessels that were initially stamped with cord-wrapped or net-wrapped paddles.

Interior Surface Finish. Most sherds have interiors that have been thinned and smoothed (n=651, 83.1%); only a few sherds (n=120, %=15.3) have interiors that retain

evidence of scraping. The interior surface finish of 12 Dan River Rough Plain sherds could not be determined.

Decoration. Just over half of all rim sherds (n=54, 51.9%) are notched, with notches occurring either on top of the lip (n=34) or on the exterior margin of the lip (n=20). Most of the notches on top of the lip are oriented straight across the lip (n=18), while the notches on the exterior margin of the lip are split evenly between diagonal and perpendicular orientations.

A few sherds (n=28, 3.6%) are from vessels that were decorated more extensively. The most common type of decoration consists of one band of fingernail pinches (n=21), accounting for three-quarters of decorations. Other neck decorations include a row of circular reed punctations (n=1) and a raised line of clay (n=2) like that observed on two net-impressed sherds from the site. One sherd from the neck of a jar has a band of stacked, incised Vs. Three other Dan River Rough Smoothed sherds are decorated with miscellaneous incised lines.

One sherd exhibits a hole that was created prior to firing that may represent a handle attachment or hole to allow suspension of the vessel. Another sherd has a handle attachment, but the handle is broken and missing. Finally, one sherd has a strap handle that terminates in a notched rim peak.

Form. No partially reconstructed vessel sections could be assembled from the Dan River Roughly Smoothed sherds. Most rim sherds are from jar forms, but one small pinch pot was also noted during analysis. Only one of the 104 rim sherds in the assemblage is folded.

Dan River Plain (Coe and Lewis 1952)

Sample Size. N=345 potsherds.

Temper. More than half of these sherds are tempered with a mixture of sand and crushed quartz (n=203, 58.8%), and more than one-third of the rest are tempered with only sand (n=134, 38.8%). Of the remaining eight sherds three are tempered with a mixture of quartz and feldspar, one is tempered with a mixture of sand and feldspar, and four sherds are unidentified.

Exterior Surface Finish. The exterior surface of these sherds has been carefully and uniformly smoothed.

Interior Surface Finish. Most Dan River Plain sherds have plain, smoothed interior surfaces (n=296, 85.8%), but nearly 10 percent (n=34) have scraped interiors. The interior surface finish of the remaining 15 sherds could not be determined (n=15).

Decoration. Nearly 20 percent (n=20) of the 104 rim sherds were modified. The distribution of lip decoration types on Dan River Plain sherds is similar to that for sherds

with net impressed and roughly smoothed exteriors. For sherds with notched lips, two-thirds have notches located on the top of the lip and the remainder have notches located on the outside edge of the lip. These notches are oriented both perpendicular and oblique to the lip (Figure 11*e*).

Aside from lip modification, few Dan River Plain sherds (n=26, 7.5%) exhibit any type of exterior surface decoration. The most common method of decoration on these sherds is incising. Fifteen sherds are decorated with a band of multiple, parallel-incised lines encircling the vessel neck and another nine sherds have miscellaneous incised lines (Figure 9*c-d,f*). Two other sherds are decorated with a band of finger pinches, and one has two horizontal rows of reed punctations around the neck or shoulder.

Two Dan River Plain sherds from the Wells site have applied decorations. One of these has a loop handle that is decorated with incised lines; the other has a split node. Finally, suspension holes had been cut into the rims of two jars before they were fired.

Form. Two restricted bowls and one tall bowl or jar with an inverted rim were partially reconstructed from Dan River Plain sherds. The rim diameters of these vessels range from 14 cm to 16 cm. Jar forms with everted or straight rims are represented among the rim sherds with plain exteriors, but these sherds were too small to determine vessel profiles or orifice diameters. None of the Dan River Plain sherds represent vessels with folded rims.

Dan River Cord Marked (Coe and Lewis 1952)

Sample Size. N=137 potsherds.

Temper. A mixture of sand and quartz was used to temper more than two-thirds of these sherds (n=93, 67.9%), while sand was added to the remaining third (n=44).

Exterior Surface Finish. The exterior surfaces of Dan River Cord Marked sherds were stamped with a cord-wrapped malleating paddle. Typically, the cord impressions are oriented perpendicular to the vessel rim, though sometimes they are oriented obliquely. No attempt was made to differentiate the types of cordage twist, but most cords varied from 1.5 mm to 3 mm in diameter.

Interior Surface Finish. Most sherds have plain, smoothed interiors (n=115, 83.9%). Twenty-one sherds have scraped interiors, and the interior of one sherd could not be determined.

Decoration. All but three of the 24 Dan River Cord Marked rim sherds from the Wells site have modified lips. Eight of these have oblique notches on the top of the lip and six have parallel notches oriented straight across the lip. Seven sherds have notches on the outside lip edge. Six of these are oriented oblique to the lip and one is oriented perpendicular to the lip.

The focus of decoration in this assemblage was on the lips of vessels; only six sherds (4.4%) had any other type of exterior surface decoration. As with most Dan River pottery types, the most common kind of decoration was a band of fingernail pinches around the vessel neck (Figure 8*a*). This type of decoration occurs on five sherds. The only other decorated sherd has miscellaneous incised lines.

Two handles are the only appendages present in the Dan River Cord Marked assemblage. One of these is a punctated strap handle that terminates below a rim peak (Figure 10*a*), while the other is represented by a broken handle attachment.

Form. One jar was partially reconstructed from this group of sherds. This jar has a wide shoulder, straight rim, and a 24-cm diameter orifice. This jar also has a strap handle (Figure 10*a*). Only one of the 24 Dan River Cord Marked rim sherds is folded.

Dan River Corncob Impressed (Coe and Lewis 1952)

Sample Size. N=52 potsherds.

Temper. Approximately equal numbers of sherds have sand (n=29, 55.8%) and a mixture of sand and quartz (n=23) temper.

Exterior Surface Finish. These sherds are from vessels with exterior surfaces that have been textured with a dry corncob. This surface treatment extends over the whole body of the vessel.

Interior Surface Finish. Most sherds in this assemblage have plain interiors (n=43, 82.7%), while eight have scraped interiors and one is indeterminate.

Decoration. Notching occurs on four rim sherds and is limited to the top of the lip. These notches are oriented oblique to the lip on two sherds and perpendicular to the lip on two other sherds.

Only four corncob-impressed sherds are decorated. A single band of finger pinches was observed on three sherds and another has miscellaneous punctations.

No handles or other appendages were present on Dan River Corncob Impressed sherds.

Form. No cob-impressed vessels could be sufficiently reconstructed to determine overall vessel shape or size; however, most rim sherds represent small jars or cups.

Dan River Brushed

Sample Size. N=2 potsherds.

Temper. Both sherds are tempered with a mixture of sand and quartz.

Exterior Surface Finish. The exterior surfaces of these sherds have been brushed or scraped, probably with a stiff twig brush.

Interior Surface Finish. One sherd had a plain interior, while the other bore evidence of scraping.

Decoration. One of the sherds is an undecorated rim and the other is an undecorated body sherd.

Form. The rim sherd is from a jar.

Burnished Exterior

Sample Size. N=9 potsherds.

Temper. Five sherds are tempered with sand; the remainder contain a mixture of sand and quartz.

Exterior Surface Finish. The exterior surfaces of these sherds have been carefully burnished or polished with a smooth stone or tool.

Interior Surface Finish. The interior surfaces of seven burnished sherds are plain; the other two scraped interiors.

Decoration. Two of the nine burnished sherds from the Wells site are decorated. One had multiple horizontal incised lines and the has a single row of finger pinches.

Form. One rim sherd may be from a carinated bowl.

Fabric Impressed Exterior

Sample Size. N=3 potsherds.

Temper. Two of the sherds are tempered with sand and one is tempered with a mixture of sand and quartz.

Exterior Surface Finish. Woven fabric was applied to the wet clay surface of a clay pot; then the fabric was malleated into the surface with a paddle.

Table 2. Attribute analysis of Dan River pottery by exterior surface treatment from the Wells site.

Attribute	Net Impressed	Roughly Smoothed	Plain	Cord Marked	Corncob Impressed	Other	Indet.	Total	Percent
Temper									
Sand & Quartz	1,769	569	203	93	23	7	84	2,748	67.84
Sand	611	210	134	44	29	7	52	1,087	26.83
Sand & Feldspar	-	2	1	-	-	-	-	3	0.07
Quartz & Feldspar	13	2	3	-	-	-	-	18	0.44
Indeterminate	-	-	4	-	-	-	191	195	4.81
Total	2,393	783	345	137	52	14	327	4,051	100.00
Interior Surface									
Plain	1,815	651	296	115	43	10	104	3,034	74.90
Scraped	562	120	34	21	8	4	17	766	18.90
Indeterminate	16	12	15	1	1	-	206	251	6.20
Total	2,393	783	345	137	52	14	327	4,051	100.00
Decoration									
Class I	128	24	18	5	3	2	12	192	88.48
Class III	2	-	-	-	-	-	-	2	0.92
Class V	-	1	-	-	-	-	-	1	0.46
Class VI	5	3	8	1	-	-	2	19	8.76
Other	2	-	-	-	1	-	-	3	1.38
Total	137	28	26	6	4	2	14	217	100.00

Interior Surface Finish. Two sherds have plain interiors and one has a scraped interior.

Decoration. Neither of these body sherds is decorated.

Form. No information on vessel form was obtained from these sherds.

Discussion

Over 99 percent of all analyzed sherds from the Wells site have been classified as Dan River series pottery. Surface treatments, tempers, decorations, and vessel forms in this assemblage are consistent with published descriptions of other late prehistoric Dan River series assemblages from central Virginia and North Carolina (Abbott et al. 1986; Benthall 1969; Coe and Lewis 1952; Coleman and Gravely 1992; Holland 1970; Ward and Davis 1993). Table 2 presents a cross tabulation of exterior surface treatment and selected attributes recorded during the analysis of pottery from the Wells site.

Pottery Decoration

Decoration on Dan River series pottery at the Wells site is limited to surface displacement techniques involving incision and punctation, and the attachment of appendages like strap handles and nodes. Many vessels were decorated with a combination of these techniques. Exterior surface decorations within the Wells site pottery assemblage have been classified using a system developed for Dan River phase pottery in the upper Dan drainage (Davis et al. 1997a). The following is a description of the basic design elements and a discussion of the exterior surface decorations that occur at the Wells site.

Design Elements

Surface Displacement Decoration. Five decorative elements were identified in the 217 decorated sherds in the Wells site assemblage. The most common decorative element is a horizontal band of punctations or short incised lines. This element is found in nearly three-fourths (n=173, 80.2%) of all exterior surface decorations. Punctations were made with fingernail pinches (n=158), triangular-shaped dowels (n=7), and hollow reeds (n=5). A horizontal band of short incised lines occurs on one sherd. A similar decorative horizontal band, created by a line of raised clay, occurs on four sherds. These bands of punctations occur singly or in pairs. In most cases, this design element occurs as the only decoration on a vessel, but on two sherds this elements is found in combination with a band of punctations forming Vs.

Another common decorative element in the Wells site assemblage is a horizontal band of incised parallel lines (n=17, 7.8%). This element is found most often on Dan River Plain pottery and does not occur in combination with another decorative element.

Two sherds have a band of Vs created with fingernail pinches. This design element occurs in combination with a horizontal band of similar punctations.

One decorated sherd has repeated, stacked, incised Vs. This design element forms the only decoration on this sherd.

The final basic design element is miscellaneous incised lines. This category includes incomplete incised designs and designs that do not conform to a recognizable pattern. Miscellaneous incised lines occur on 19 (8.8%) of the decorated sherds found at the Wells site.

Three sherds exhibit non-classified decorations, including corncob impressions and miscellaneous punctations.

Appendages. Four types of appendages are present in the pottery assemblage from the Wells site. The most common type is the strap handle. Five handles and two broken handle attachments were found. One of these handles terminates in a notched rim peak and another is decorated with incisions. One rim peak that does not appear to be associated with a strap handle also was observed. Finally, a pair of vertically-oriented nodes are present on one sherd.

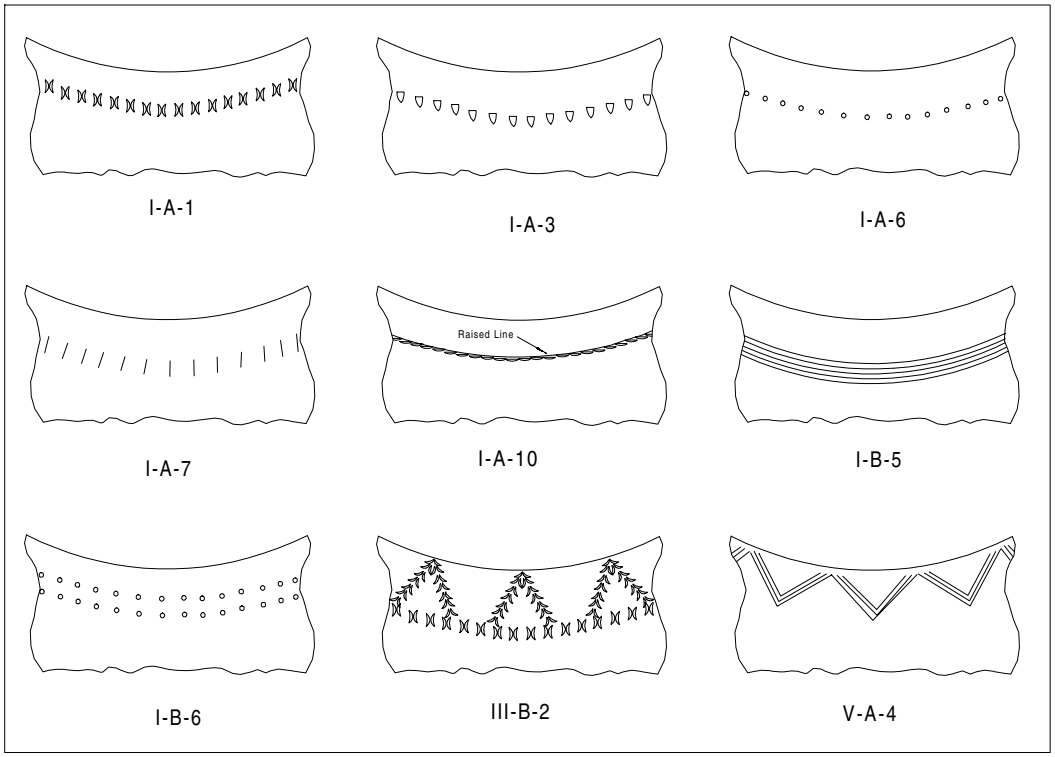


Figure 12. Pottery decorations found at the Wells site (excluding miscellaneous incised lines and punctations).

Classification of Exterior Surface Decorations

Recently, a classification scheme was developed for describing Dan River series pottery decorations at the Box Plant site (Davis et al. 1997a). This scheme was subsequently expanded to incorporate additional decoration types found at the nearby Stockton and Belmont sites (Davis et al. 1997b, 1997c). The decorations observed on potsherds from the Wells site have been described using this scheme. The classification is hierarchical and consists of three categories: class, subgroup, and type. The decorative element that forms the central theme of the decoration determines the decoration's class. Although six distinct classes have been identified from earlier pottery studies (see above), only four of these are represented at the Wells site. Subgroups consist of similar designs formed by different techniques. The type category consists of individual pottery decorations. Decoration types found at the Wells site are illustrated in Figure 12. Appendix 3 presents the distribution of decoration types by pottery type.

Class I. This is the most common class of decorations found on Dan River pottery from the Wells site and consists of horizontal bands of punctations or short incised lines that encircle the neck or shoulder of jars. Two Class I subgroups were identified. Subgroup A consists of decorations created by a single band of punctations; Subgroup B consists of decorations created by two or more parallel bands of punctations or horizontal incised lines.

Class III. This class consists of decorations that incorporate horizontal bands of incised zigzag lines or a band of Vs created by incision or punctation. One Class III subgroup was identified at the Wells site. It consists of a series of Vs created by finger punctations positioned above a horizontal band of finger punctations.

Class V. This class of decoration is characterized by repeated, stacked, incised designs. The sole Class V design in the Wells site assemblage consists of stacked, incised Vs.

Class VI. The final class of decoration includes miscellaneous incised lines. Decorations in this class are those that do not conform to a recognizable pattern due to the intrinsic nature of the design or because only a portion of the design was represented in the given potsherd.

OTHER CLAY ARTIFACTS

Clay Pipes

Five fragments of clay tobacco pipes were recovered from the Wells site. These consist of two incomplete pipe bowls with partial stems and three stem fragments. Two of the more complete specimens are elbow pipes with pronounced heels and are illustrated in Figure 13. One pipe is tempered with very fine sand and is burnished (Figure 13*b*). The other elbow pipe has crushed-quartz temper and a plain exterior (Figure 13*c*). The orifice diameter of this plain pipe is 21 mm and the height of the bowl from heel to lip is 26 mm. These elbow pipes are similar in form to pipes from other Dan River phase and Radford phase sites in the region (Coleman and Gravely 1992; Benthall 1969; Davis, et al. 1997a, 1997b, 1997c).

Three clay pipe stems also were recovered from the site. One stem is biconvex in cross-section. It has a plain exterior and is tempered with coarse sand. Another plain stem is round and tapers toward the bit. The bit appears to have been whittled. This stem is tempered with fine sand. The final pipe stem may be from a cigar-shaped pipe (Figure 13*a*). The stem is thicker and more crudely made than the other stems. This pipe has fine sand temper and a plain exterior.

Ladles

One fragmented ladle with a broken bowl and handle was identified in the Wells site assemblage (Figure 13*d*). This ladle is crudely modeled and the poorly kneaded paste appears to contain no temper. Fragments of four plain ladle bowls also were found.

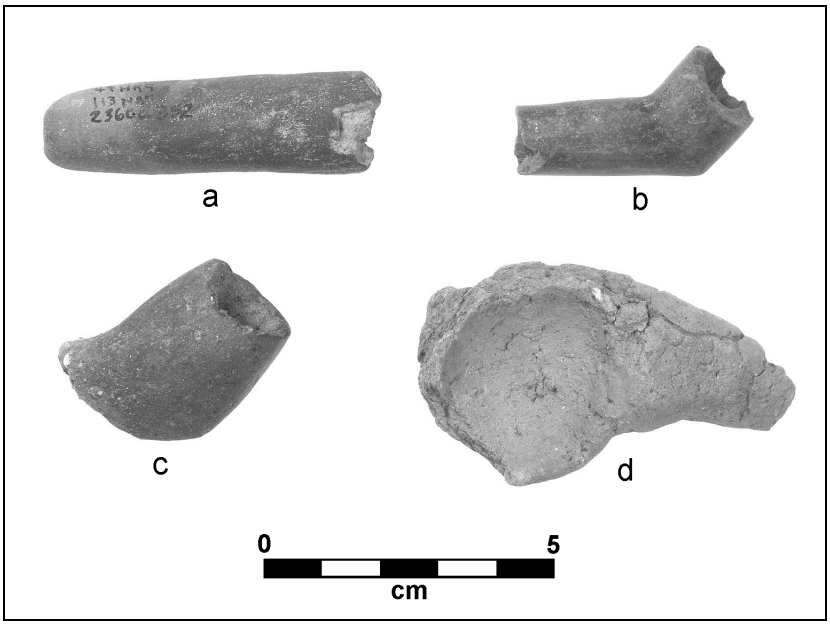


Figure 13. Clay pipe fragments (a-c) and a clay ladle (d) from the Wells site.

Finally, three ceramic artifacts that likely represent ladle handles were found. Two of these are flattened and the other is round.

Disk

One clay disk was recovered from the Wells site. It is modeled and has a small central perforation. This disk, which is broken in half, has a 26-mm radius and is 10 mm thick.

Other Ceramic Artifacts

Three ceramic rim fragments may represent either ladle bowls or miniature modeled bowls. Two of these contain no temper and the other is tempered with sand. All are plain. In addition, one pottery coil was recovered, and an unidentified, sand-tempered ceramic object was found which may be a fragment of a large pipe bowl.

STONE ARTIFACTS

The artifact collection from the Wells site contains 298 stone artifacts (Table 3). Two hundred and twenty-five of these are unmodified flakes that were generated in the production of stone tools. The most common artifact classes represented in the collection

Table 3. Stone artifacts from the Wells site.

Context	Projectile Points	Bifaces	Cores	Used Flakes	Flakes	Chipped Hoe	Celt	Hammer-stones	Total
Surface	5	-	1	3	11	-	-	-	20
Plowzone	8	2	6	5	173	-	1	2	197
Midden	1	-	-	-	2	-	-	-	3
Feature 2	1	-	-	-	-	-	-	-	1
Feature 5	2	-	-	-	4	-	-	-	6
Feature 7	-	-	-	-	-	1	-	-	1
Feature 8	-	-	-	1	-	-	-	-	1
Feature 9	-	-	5	-	-	-	-	-	5
Feature 10	2	-	-	-	2	-	-	-	4
Feature 13	-	-	-	-	1	-	-	-	1
Feature 17	-	-	-	-	-	-	-	1	1
Feature 18	-	-	-	-	4	-	-	-	4
Feature 22	-	-	-	1	12	-	-	-	13
Feature 24	-	-	1	-	-	-	-	-	1
Feature 25	1	-	1	-	8	-	-	-	10
Unprovenienced	17	-	1	3	8	1	-	-	30
Total	37	2	15	13	225	2	1	3	298

are: projectile points (n=37), cores (n=15), and used flakes (n=13). Other artifacts include bifaces, battered cobbles, a chipped hoe, a crude chipped tool, and a celt. The small number of stone artifacts in the collection probably reflects artifact-recovery techniques rather than a paucity of stone tools and tool-making at the site.

Most of these arifacts are made of metavolcanic stone (e.g., rhyolite) or vein quartz; however, chert, chalcedony, and crystal quartz were occasionally used.

Projectile Points

Thirty-seven whole or partial projectile points are in the Wells site collection. These mostly consist of small triangular arrow points that date to the late prehistoric Dan River phase; however, notched and stemmed spear-point types that date to the Early Archaic and Middle Archaic periods also are represented. All but six specimens are unprovenienced, or they were recovered from general excavation of the plowzone and midden, or from the surface (Table 4).

Kirk Corner-Notched Type. Three Kirk Corner-Notched projectile points are present in the collection. This type is described by Coe (1964:69) as having "a large triangular blade with a straight base, corner notches, and serrated edges," and it is a predominant type of the Early Archaic period (ca. 8,000-6,000 B.C.). One metavolcanic example was recovered from Square 111N89. Although broken, it has distinct corner notches (Figure 14*g*). The two remaining examples are unprovenienced. One was made

Table 4. Projectile Points from the Wells site.

Type	Feature 2	Feature 5	Feature 10	Feature. 25	Plowzone or Midden	Surface or Unprovenienced	Total
Kirk Corner-Notched	-	-	-	-	1	2	3
Stanly Stemmed	-	-	-	-	-	1	1
Morrow Mountain II	-	-	1	-	1	2	4
Unknown Corner-Notched	-	-	-	-	-	1	1
Small Lanceolate	-	-	-	-	1	-	1
Fragments (Archaic?)	-	-	-	-	2	-	2
Small Triangular	1	2	1	1	3	17	25
Total	1	2	2	1	8	23	37

from quartz and the other from metavolcanic rock. The unprovenienced metavolcanic specimen has been extensively resharpened, resulting in a point with small shoulders and a narrow blade (Figure 14*c*). The quartz example has also been resharpened, but retains a shape typical of this type. It is small, with a length of 60.7 mm and maximum thickness of 8.7 mm. Its width cannot be reliably measured.

Stanly Stemmed Type. One Stanly Stemmed point made from metavolcanic rock is present in this collection (Figure 14*d*). Unfortunately, it is unprovenienced. The Stanly Stemmed type dates to the early Middle Archaic period (ca. 6,000-5,500 B.C.) and is characterized by Coe (1964:35) as having a broad, triangular blade and a small, squared stem with an indented base. The Wells site specimen is a large point with a length of 84.7 mm, a maximum width at the shoulder of 29.9 mm, and maximum thickness (also at shoulder) of 8.3 mm. Its shape conforms well to Coe's original type description.

Morrow Mountain II Stemmed Type. Four projectile points were classified as Morrow Mountain II (Figure 14*b,e-f*). This type is characterized by a long, narrow blade and a tapered stem and is thought to date between about 5,500 B.C. and 5,000 B.C. (Coe 1964:37). All of these projectile points were made from metavolcanic rock. One was recovered from Feature 10, one came from Square 106N80, and two were unprovenienced. Two of these specimens have long, pointed stems that are characteristic of Morrow Mountain II points; the other two have damaged bases but still conform to this type.

Unidentified Archaic (?) Points. Four projectile points in the collection appear to be Archaic-period spear points, but do not conform to a recognized type. One of these is a small, corner-notched point made of rhyolite that superficially resembles the Palmer Corner-Notched type (Coe 1964); however, it is crudely made and not basally ground. Another projectile point resembles the Middle Archaic Guilford Lanceolate point type (Coe 1964), but it is much smaller than what is typical for this type and has a small, contracting stem (Figure 14*a*). This point also is made of rhyolite and was found in

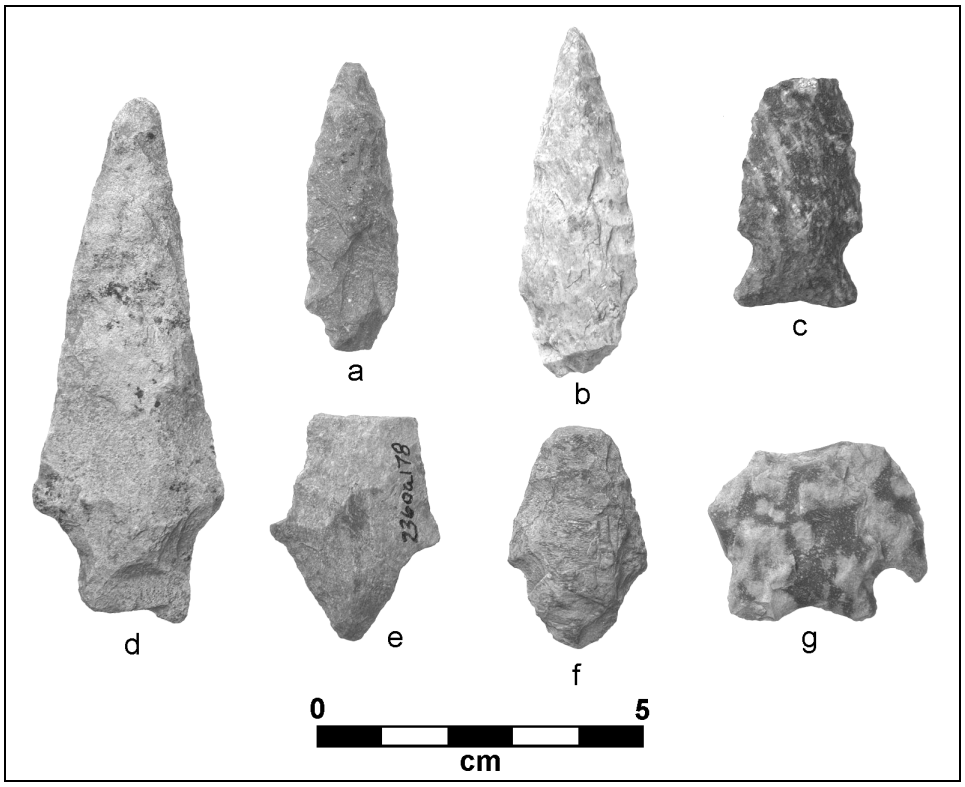


Figure 14. Archaic spear points found at the Wells site: Kirk Corner-Notched (*c,g*); Stanly Stemmed (*d*); Morrow Mountain II Stemmed (*b,e-f*); and untyped small, lanceolate point (*a*).

Square 110N80. It has a maximum length of 46.7 mm, a width of 14.5 mm, and a thickness of 7.9 mm. It is uncertain whether this specimen dates to the Archaic or subsequent Woodland period. Two other projectile point fragments, both made of quartz, probably represent Archaic-period types but are too incomplete to be classified.

Small Triangular Projectile Points. Twenty-five small, triangular, arrow points are present in collection and are associated with the late prehistoric occupations at the Wells site; however, most are unprovenienced (Figure 15). Five specimens were recovered from Features 2, 5, 10, and 25. These points were made mostly from flakes of metavolcanic stone, but a few also were made of quartz, chert, and chalcedony. They generally conform to several point types in use during the late prehistoric and contact periods, including Caraway Triangular or Clarksville Small Triangular (Coe 1964:49, 112). These small triangular points strongly resemble those found at other late prehistoric sites in the Martinsville area (e.g., Box Plant, Stockton, and Belmont).

The metric attributes of these points are presented in Appendix 6 and can be summarized as follows. Lengths range from 18.2 mm to 32.3 mm. The difference between the mean length (24.5 mm) and the median length (25.3 mm) reflects the multi-modal nature of the distribution of length values (Figure 16). There are six small points with lengths in the 15.5-to-22.5-mm range. A second, stronger mode encompasses points

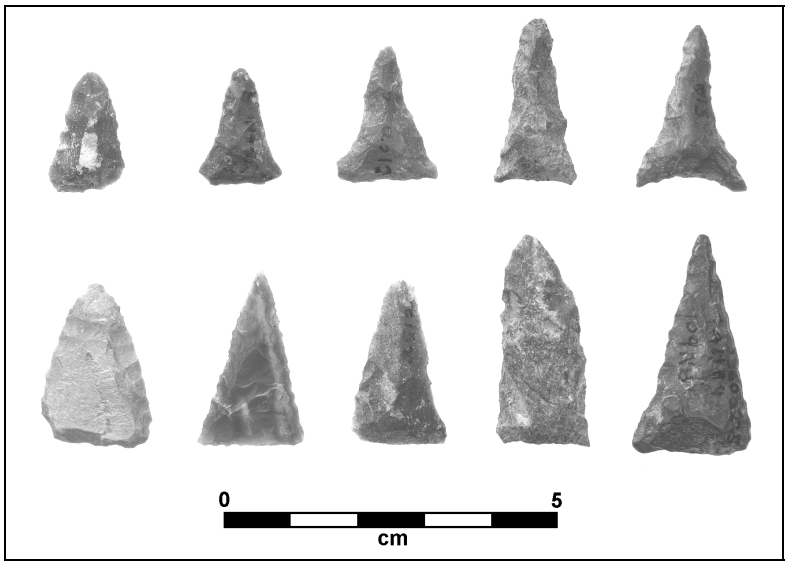


Figure 15. Small triangular projectile points from the Wells site.

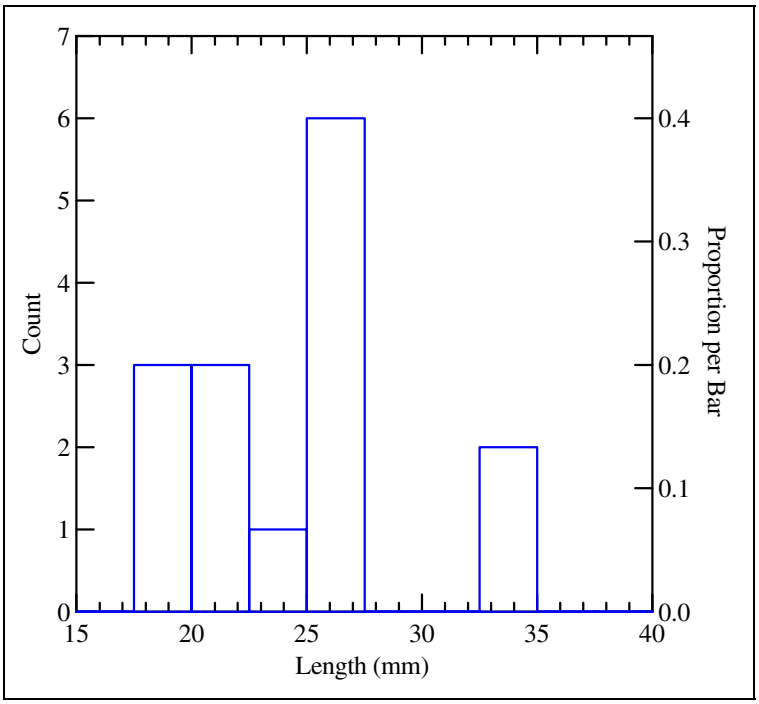


Figure 16. Distribution of length values for triangular points.

with lengths ranging from 25.0 mm to 27.5 mm. Finally, two long points have lengths of 32.5 mm and 35 mm. Widths range from 10.0 mm to 22.6 mm. This is a more regular distribution with a mean of 15.1 mm and median length of 14.9 mm. Thickness ranges from 2.4 mm to 6.5 mm with a mean and median thickness of 4.7 mm.

Other Chipped-Stone Artifacts

Bifaces. Two fragments of bifacially flaked artifacts are in the collection, and all were recovered from the plowzone. The probably represent unfinished or broken chipped-stone tools. One of these was made from a heat-treated, jasper-like material and may have been part of a large projectile point or knife. The second specimen, made from a gray, banded, metavolcanic rock, appears to be the proximal (i.e., haft) end of a bifacially chipped drill.

Cores. Fifteen cores or core fragments were found at the Wells site. Most of these are made of quartz, a raw material that probably was readily available to the site's inhabitants as stream cobbles. Cores represent the parent material from which flakes were detached to create chipped-stone tools. All of these specimens were randomly flaked.

Used Flakes. Thirteen stone flakes were recovered that have been retouched along one or more edges, or exhibit edge damage that presumably resulted from use. The artifacts are interpreted as expedient cutting tools.

Flakes. Two hundred and twenty-five unmodified flakes were recovered from the Wells site. A majority of these came from the plowzone and are made of mostly quartz and metavolcanic rock. Flakes are the primary byproduct of chipped-stone tool manufacture.

Large Chipped-Stone and Ground-Stone Artifacts

Chipped Hoes. Two fragments of large chipped-stone hoes are present in the collection. The poll, or butt, end of one hoe was recovered from Feature 7. This hoe, which was created from a granitic rock, has a plano-convex cross section. There is substantial battering on the proximal edges. The lateral edges and particularly the dorsal surface is very smooth, with some evidence of soil polishing.

The central portion of what probably was a chipped-stone hoe was recovered from an unprovenienced context. It too was made from a granitic rock with a granular texture and a tabular structure. This rock appears to have had a natural plano-plano cross section that required no modification to the dorsal and ventral surfaces other than rough chipping of the lateral edges.

Celt. One complete chipped-and-ground-stone celt was recovered from the plowzone of Square 102N79 (Figure 17). Created from a metavolcanic rock with a platy structure, it has been flaked primarily on one surface to create a plano-convex cross section. The lateral edges of this woodworking tool have been chipped and pecked, and one side of the bit edge has been heavily ground. This specimen is 102.0 mm long, 27.8

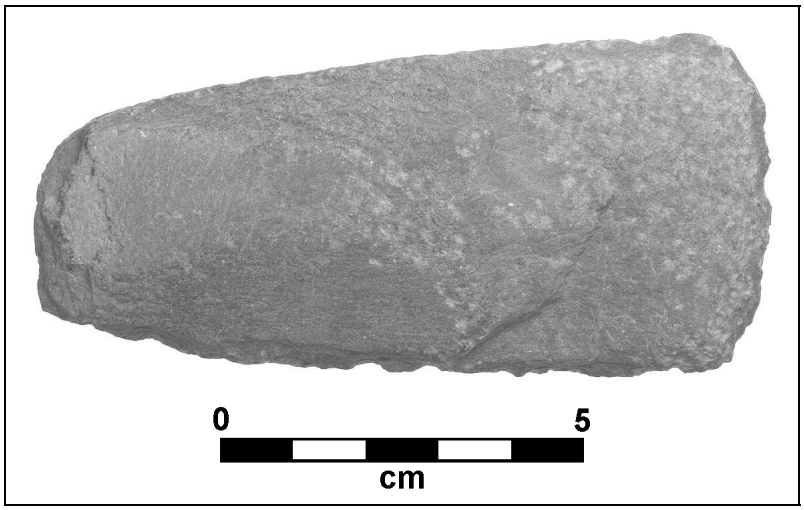


Figure 17. Chipped-and-ground-stone celt from the Wells site.

mm wide at the poll end, 47.3 mm wide at the bit end, and has a maximum thickness of 18.0 mm.

Hammerstones. Three hammerstones were recovered from the Wells site. An oval (disk) hammerstone made from metasandstone was found in the plowzone of Square 102N85. In addition to some battering around the circumference of this tool, one side has a distinct pecked depression, suggesting that it also may have been used as an anvil in bipolar lithic reduction. A rounded, quartz-cobble hammerstone was recovered from the plowzone in Square 102N80. This tool has been battered around the lateral edges. Finally, a quartz hammerstone was found in Feature 17. This tool has been battered on multiple surfaces, and it also has a flat surface that was pecked, suggesting that it also was used as an anvil stone.

BONE AND ANTLER ARTIFACTS

The collection of artifacts from the Wells site contains 13 pieces of modified animal bone and antler. These include three awls, one projectile point, one fish hook, two pieces of fish-hook production debris, and six unidentifiable specimens.

Split-Bone Awls

Three fragments of split mammalian long bone (probably deer) were found that have been ground to a point (Figure 18*a-c*). These likely were used as awls or general-purpose perforators. The largest specimen was recovered from Square 101N84. One end was ground to a sharp point, and the tip is polished, suggesting that it was used on relatively soft material such as animal skin. The smallest awl, which also has a polished

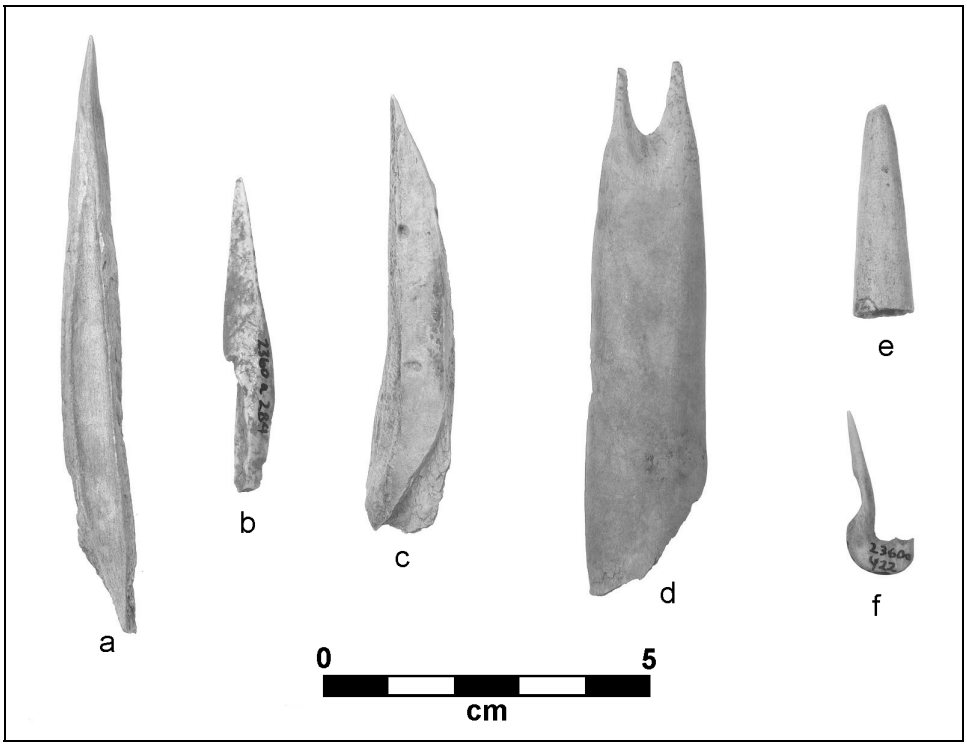


Figure 18. Bone and antler artifacts from the Wells site: split-bone awls (*a-c*); fish hook manufacturing debris (*d*); antler projectile point (*e*); and fish hook fragment (*f*).

point, was found in Square 111N81. The third awl was recovered from Square 113N88. The end of this specimen was in the early stages of being ground to a rounded tip.

Fish Hook and Manufacturing Debris

A piece of a bone fish hook was recovered from Feature 8 (Figure 18*f*). Although the shank is missing, it appears to have been made from a deer phalanx. Similarly manufactured hooks have been found at several other Dan River phase sites along the Smith River and its tributaries.

Two split fragments of mammalian long bones which appear to represent debris from fish-hook production were recovered from Square 112N88 and Feature 10. Both have been cut, ground, and snapped in a manner similar to that observed in the bone artifact collections from the Box Plant, Stockton, and Belmont sites (Davis et al. 1997a, 1997b, 1997c). They indicate a manufacturing sequence whereby the flat portion of a deer tibia or radius was cut and ground to form a long, oval cavity surrounded on three sides by a narrow loop of bone. Next, this loop was grooved and snapped to create a U-shaped blank. Finally, this blank was ground and polished to form a sharp fish hook. The residue of this process is a piece of split long bone that has two tapered projections at one end (Figure 18*d*).

Projectile Point

A single projectile point made from the tip of a deer antler tine was found in Feature 10 (Figure 18*e*). It is shaped like a long cone, its external surface has been ground smooth, and the tip has been sharpened. The interior cavity has also been excised and ground to produce a hollow socket. It is assumed that this was used as a socketed projectile point.

Other Modified Bone

Two bone splinters from Feature 8 have reworked by drilling and grinding. The larger fragment, from what appears to the a turkey long bone, may have had holes drilled into it. This specimen resembles an artifact from the Stockton site that has been interpreted as a bone "flute" (Davis et al. 1997b). The other bone artifact from Feature 8 resembles fish-hook manufacturing debris, but it is too small for a specific identification.

Another piece of modified bone was recovered from Feature 10. At one end there are shallow incisions perpendicular to the long axis of the bone. One end appears to have been ground, but most is missing from a recent break. Its function is unknown.

Finally, three bones are present in the collection that have been grooved and snapped. These specimens came from Squares 101N83 and 110N87 and Feature 10. At least one of these probably represents the residue of bone bead manufacture.

SUBSISTENCE REMAINS

The Wells site collection contains over 1,200 pieces of animal bone, almost half of which are from excavated features (Table 5). Although these remains have not been analyzed, it is expected that they represent the general range of species that were identified by Waselkov (1977) at the nearby, and roughly contemporary, Belmont site. The Belmont faunal assemblage indicates that a diverse array of species were exploited by Dan River phase peoples, including: white-tailed deer, fox squirrel, beaver, raccoon, cottontail, opossum, striped skunk, gray squirrel, woodchuck, muskrat, gray fox, black bear, wild turkey, passenger pigeon, box turtle, painted turtle, catfish, yellow perch, and silver redhorse.

The field notes from the Wells site indicate that many trash-filled pits contained discarded periwinkle and mussel shells. While shells sometimes occurred in very large quantities, they were not systematically collected. The presence of shell in most archaeological deposits at the site suggests that shellfish was important to the overall diet.

As with shell, charcoal appears to have been inconsistently recovered from excavated contexts. Concentrations of charcoal (usually wood charcoal) sometimes were collected for radiocarbon dating; however, no effort was made to obtain charred plant remains in a systematic fashion that would permit meaningful paleoethnobotanical study. Because of this, an analysis of the charcoal likely would not provide much information

Table 5. Summary of animal bone, shell, and charcoal recovered from the Wells site.

Context	Animal Bone N	Animal Bone Wt. (g)	Mussel Shell N	Snail Shell N	Charcoal N	Charcoal Wt. (g)
Surface	12	19	1 bag	189	-	-
Plowzone	602	1,037	79 (+7 bags)	398	12 bags	176.5
Midden	45	78	1	3	-	-
Feature 2	6	1	2	12	-	-
Feature 5	14	37	-	-	1 vial	4
Feature 7	7	9	-	2	-	-
Feature 8	109	55	1 bag	105	1 vial	4
Feature 8 (C-14)	-	-	-	-	1 bag	47
Feature 9	8	4	1	2	-	-
Feature 10	72	56	1	-	-	-
Feature 11	10	22	1	-	1 bag	25
Feature 13	35	29	1 bag	1	1 bag	17
Feature 14	13	47	-	-	-	-
Feature 18	56	41	-	-	-	-
Feature 22	90	98	1 bag	27	1 bag	59
Feature 24	5	7	-	-	-	-
Feature 25	59	59	2 bags	22	1 vial	3.5
Feature 25A	63	618	-	-	-	-
Unprovenienced	57	199	1 bag	121 (+1 bag)	1 bag	31
Total	1,263	2,416	85 (+14 bags)	761 (+1 bag)	20 bags	367

about diet. We do know, from the indirect evidence of corncob impressions on the pottery, that maize was grown. Assuming that the inhabitants of the Wells site followed subsistence practices similar to those of other Dan River phase peoples, they would have relied on the cultivation of additional crops such as squash, gourd, beans, sunflower, goosefoot, sumpweed, and maygrass, as well as the collection of various arboreal nuts, fruits, and seeds. In a study of botanical remains from features excavated at the Gravely site (44Hr29), a Dan River phase site located nearby on the North Mayo River, Roberts (1992) identified seeds, nuts, and pits from the following plants: maize, bean, squash, sumpweed, hickory, walnut, butternut, oak, persimmon, honey locust, grape, and bedstraw.

CHRONOLOGY

Chipped-stone spear points found at the Wells site indicate that it was occupied first during the Kirk phase (8,000-6,500 B.C.) of the Early Archaic period and at least twice during the Stanly (6,000-5,500 B.C.) and Morrow Mountain (5,500-5,000 B.C.) phases of the Middle Archaic period. The few Archaic artifacts found suggest that these occupations were both sporadic and brief in duration. Correspondingly, the occurrence of

three potsherds with fabric-impressed exteriors also suggests that the site may have been briefly occupied sometime during the Early Woodland or Middle Woodland periods (between about 1,000 B.C. and A.D. 1000).

Most of the artifacts and all of the excavated archaeological features at the Wells site are associated with one or more settlements that were established during the Dan River phase of the Late Prehistoric period (ca. A.D. 1000-1450). The age of this occupation is based on two radiocarbon-dated features and stylistic similarities between the Wells pottery collection and pottery from other Dan River phase sites that have been radiocarbon dated.

The first radiocarbon-dated context was Feature 15, a large, shallow, refuse-filled pit. An unknown quantity of datable material (presumably wood charcoal) was submitted by Richard Gravely in 1978 and produced an uncorrected date of 570 ± 55 B.P. (A.D. 1380 ± 55 (UGa-2831). Tree-ring calibration of this assay produces a mean date of cal A.D. 1403, a one-sigma range of cal A.D. 1312 to cal A.D. 1424, and a two-sigma range of cal A.D. 1297 to cal A.D. 1442 (Calibrated with the program CALIB 3.0.3c [Stuiver and Reimer 1993]).

The second radiocarbon-dated feature was Feature 8, a circular, refuse-filled pit located about 20 ft southwest of Feature 15. Forty-two grams of wood charcoal from near the top of the undisturbed fill were submitted for radiocarbon dating and yielded an uncorrected date of 820 ± 60 B.P. (A.D. 1130 ± 60 (Beta-109073). Tree-ring calibration of this assay produces a mean date of cal A.D. 1229, a one-sigma range of cal A.D. 1174 to cal A.D. 1280, and a two-sigma range of cal A.D. 1046 to cal A.D. 1293 (Calibrated with the program CALIB 3.0.3c [Stuiver and Reimer 1993]).

Despite the proximity of these features to one another, the two-sigma ranges of these dates do not overlap. Assuming that neither sample is contaminated, these data suggest that the Wells site was occupied at least twice during the Dan River phase, perhaps about 170 years apart.

An examination of the pottery samples from the two features revealed no substantial differences; in fact, the two samples are remarkably similar. About three-quarters of all sherds are Dan River Net Impressed (78% in Feature 8 and 74% in Feature 15); the other two types that occur in each feature are Dan River Roughly Smoothed (21% in Feature 8 and 22% in Feature 15) and Dan River Plain (1% in Feature 8 and 4% in Feature 15). Relative frequencies of other ceramic attributes, including interior surface finish, temper, and vessel decoration, also are essentially the same. Almost three-quarters of the pottery in each feature had smoothed interiors (the remaining 25% were scraped); three-quarters of all sherds were tempered with a mixture of crushed quartz and sand (with the rest tempered with sand); and about 40% of the rim and neck sherds in each feature were from vessels decorated with a band of fingernail punctations (decoration type I-A-1).

This pattern of similar ceramic assemblages from features with divergent radiocarbon dates also was observed at the Belmont site (Davis 1997c), where two features dated 150 years apart (i.e., cal A.D. 1288 and cal A.D. 1338) contained indistinguishable pottery. One implication of this pattern is that pottery-making may have been a relatively stable and conservative craft throughout much of the Dan River phase, with only minor chronological variation in ceramic technology and vessel style.

CONCLUSIONS

The Wells site was one of more than a dozen sites excavated by the Patrick-Henry Chapter of the Archeological Society of Virginia between 1964 and the mid-1970s. Although chapter members dug on weekends, evenings, and holidays for almost a year during 1971 and early 1972, the Wells site excavation was one of their lesser efforts. The primary purposes for excavating the site were simply to provide an opportunity for chapter members to participate in an archaeological excavation and to learn more about the late prehistory of the region. Because much had already been learned from earlier excavations at sites such as Leatherwood Creek (44Hr1), Box Plant (44Hr2), Belmont (44Hr3), Koehler (44Hr6), and Gravely (44Hr29), the excavators sought to address questions that were specific to the Wells site, such as: (1) What was the extent and duration of a site's occupation?; (2) When was the site occupied?; (3) What was the material culture of the site's inhabitants like? (4) What were their houses like and how were they arranged?; and (5) What were their burial customs like?

Sufficient information was obtained to answer all but the last two questions. No clear architectural evidence was identified, probably because postholes could not be identified easily within the dark midden, and the excavation does not appear to have been extensive enough to locate a palisade (if one or more were present). Because no burials were found, nothing was learned about mortuary customs.

When the Wells site was first excavated, it was assumed to represent a single Dan River phase village. This appears to have been an operating assumption for most of the chapter's excavations. While the overall character of the artifact collection from the site and homogeneity among the artifact samples retrieved from individual features support such an interpretation, the radiocarbon data do not. Instead, they indicate that the site was occupied at least twice during the Dan River phase. Radiocarbon dates from other late prehistoric sites in the Martinsville area, such as Belmont (Davis et al. 1997c), Stockton (Davis et al. 1997b), and Leatherwood Creek (Gallivan 1997), suggest that they too were occupied more than once by Dan River peoples. And, the spatial distribution of archaeological features at Koehler (Coleman and Gravely 1992), Box Plant (Davis et al. 1997a), and Philpott (RLA site files) suggest that these village sites also experienced multiple occupations.

Given that the Wells site is smaller and not as "rich" in artifacts or features (despite the presence of a midden), it probably represents a type of settlement different from sites such as Belmont, Koehler, and Stockton, which have been interpreted as nucleated, palisaded villages. Furthermore, the site's size, age, and location suggest a model of Dan River phase settlement comprised of large, palisaded villages *and* smaller associated hamlets scattered upstream and downstream from these larger communities. If such a model is valid, then the Wells site probably represents a satellite community of the larger and much more densely occupied Belmont site, located just one mile upstream.

The Wells site is one of about 80 sites that were recorded in Henry County, Virginia, by Richard Gravely and members of the Patrick-Henry Chapter of the ASV (RLA files). Many of these represent settlements that were occupied during the Dan

River phase, and several undoubtedly are similar to the Wells site. Numerous additional Dan River sites have been recorded to the south in Stokes and Rockingham counties, North Carolina (Simpkins 1985; Simpkins and Petherick 1986). Together, these sites provide a sizable body of survey data that should help us to understand better the placement of the Wells site within the broader Dan River phase settlement system.

REFERENCES CITED

Abbott, Lawrence E., Jr., Erica E. Sanborn, Michele N. Vacca, David C. Crass, Elizabeth Dull, J. Ned Woodall, and Alan N. Snavely

1986 *Archaeological Survey of the Proposed Charity Lake Hydroelectric Project, Upper Smith River Basin, Patrick and Franklin Counties, Virginia*. Report prepared in partial fulfillment of contract DACW54-84-c-0038, U.S. Army Corps of Engineers, Wilmington District.

Benthall, Joseph L.

1969 *Archeological Investigation of the Shannon Site, Montgomery County, Virginia*. The Virginia State Library, Richmond.

Braun, E. Lucy

1950 *Deciduous Forests of Eastern North America*. Hafner Publishing Company, New York.

Buchanan, William T., Jr.

1986 *The Trigg Site, Montgomery Co., Va.* Special Publication No. 14. Archeological Society of Virginia.

Calver, James L., and C. R. B. Hobbs, Jr. (editors)

1963 *Geologic Map of Virginia.* Virginia Division of Mineral Resources, Charlottesville.

Coe, Joffre L.

1964 *The Formative Cultures of the Carolina Piedmont*. Transactions of the American Philosophical Society (n.s.) 54(5). Philadelphia.

Coe, Joffre L., and Ernest Lewis

1952 Dan River Series Statement. In *Prehistoric Pottery of the Eastern United States*, edited by James B. Griffin, Museum of Anthropology, University of Michigan, Ann Arbor.

Coleman, Gary N., and Richard P. Gravely, Jr.

1992 Archaeological Investigations at the Koehler Site (44Hr6). *Quarterly Bulletin of the Archeological Society of Virginia* 47:1-41.

Daniel, I. Randolph, Jr., and J. Robert Butler

1996 An Archaeological Survey and Petrographic Description of Rhyolite Sources in the Uwharrie Mountains, North Carolina. *Southern Indian Studies* 45:1-37.

Davis, R. P. Stephen, Jr., Jane Eastman, Thomas O. Maher, and Richard P. Gravely, Jr.

1997a *Archaeological Investigations at the Box Plant Site, Henry County, Virginia*. Research Report 13. Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.

1997b *Archaeological Investigations at the Stockton Site, Henry County, Virginia*. Research Report 14. Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.

1997c *Archaeological Investigations at the Belmont Site, Henry County, Virginia*. Research Report 15. Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.

Eastman, Jane M.

1994 The North Carolina Radiocarbon Date Study (2 parts). *Southern Indian Studies* 42-43.

1996 Searching for Ritual: A Contextual Study of Roasting Pits at Upper Saratown (Abstract). *Southeastern Archaeological Conference Bulletin* 39:26.

Egloff, Keith T.
1987 *Ceramic Study of Woodland Occupation Along the Clinch and Powell Rivers in Southwest Virginia*. Research Report Series 3. Virginia Department of Historic Resources, Richmond.

Egloff, Keith T., Michael B. Barber, Celia Reed, and Thomas R. Whyte
1994 Leggett Site (44HA23, Halifax County): A Dan River Agricultural/Riverine Community. *Quarterly Bulletin of the Archeological Society of Virginia* 49(3):89-120.

Evans, Clifford
1955 *A Ceramic Study of Virginia Archeology*. Bulletin 160. Bureau of American Ethnology, Smithsonian Institution, Washington.

Gallivan, Martin
1997 *Archaeological Excavations at the Leatherwood Creek Site, Henry County, Virginia*. Ms. on file. Virginia Department of Historic Resources, Richmond.

Gravely, Richard P., Jr.
1973 Archeological Survey - Site Record for 44Hr9. Ms. on file. Research Laboratories of Archaeology, University of North Carolina, Chapel Hill.

Gremillion, Kristin J.
1989 *Late Prehistoric and Historic Period Paleoethnobotany of the North Carolina Piedmont*. Unpublished Ph.D. dissertation, Department of Anthropology, University of North Carolina, Chapel Hill.

Holland, C. G.
1970 *An Archeological Survey of Southwest Virginia*. Smithsonian Contributions to Anthropology 12. Smithsonian Institution, Washington.

Holm, Mary Ann
1994 *Continuity and Change: The Zooarchaeology of Aboriginal Sites in the North Carolina Piedmont*. Unpublished Ph.D. dissertation, Department of Anthropology, University of North Carolina, Chapel Hill.

Idol, Bruce S.
1997 *The Upper Yadkin Valley, North Carolina: A.D. 1450-1600*. Unpublished Master's thesis, Department of Anthropology, Wake Forest University, Winston-Salem, North Carolina.

Klein, Michael J.
1994 Preliminary Analysis of Ceramics from the Graham-White Site, 11RN21. Ms. in possession of the author.

MacCord, Howard A., Sr.
n.d. Dan River Culture and Its Expansion West of the Blue Ridge. Ms. in possession of the author, Richmond, Virginia.

Roberts, Katherine M.
1992 Gravely Site Plant Remains. Ms. on file, Research Laboratories of Archaeology, University of North Carolina, Chapel Hill.

Shelford, Victor E.
1963 *The Ecology of North America*. University of Illinois Press, Urbana.

Simpkins, Daniel L.
1985 *First Phase Investigations of Late Aboriginal Settlement Systems in the Eno, Haw, and Dan River Drainages, North Carolina*. Research Report 3. Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.

Simpkins, Daniel L., and Gary L. Petherick
1986 *Second Phase Investigations of Late Aboriginal Settlement Systems in the Eno, Haw, and Dan River Drainages, North Carolina*. Research Report 6. Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.

Stuiver, M., and P. J. Reimer
1993 Extended ^{14}C Database and Revised CALIB Radiocarbon Calibration Program. *Radiocarbon* 35:215-230.

Thornbury, William D.
1965 *Regional Geomorphology of the United States*. John Wiley and Sons, Inc., New York.

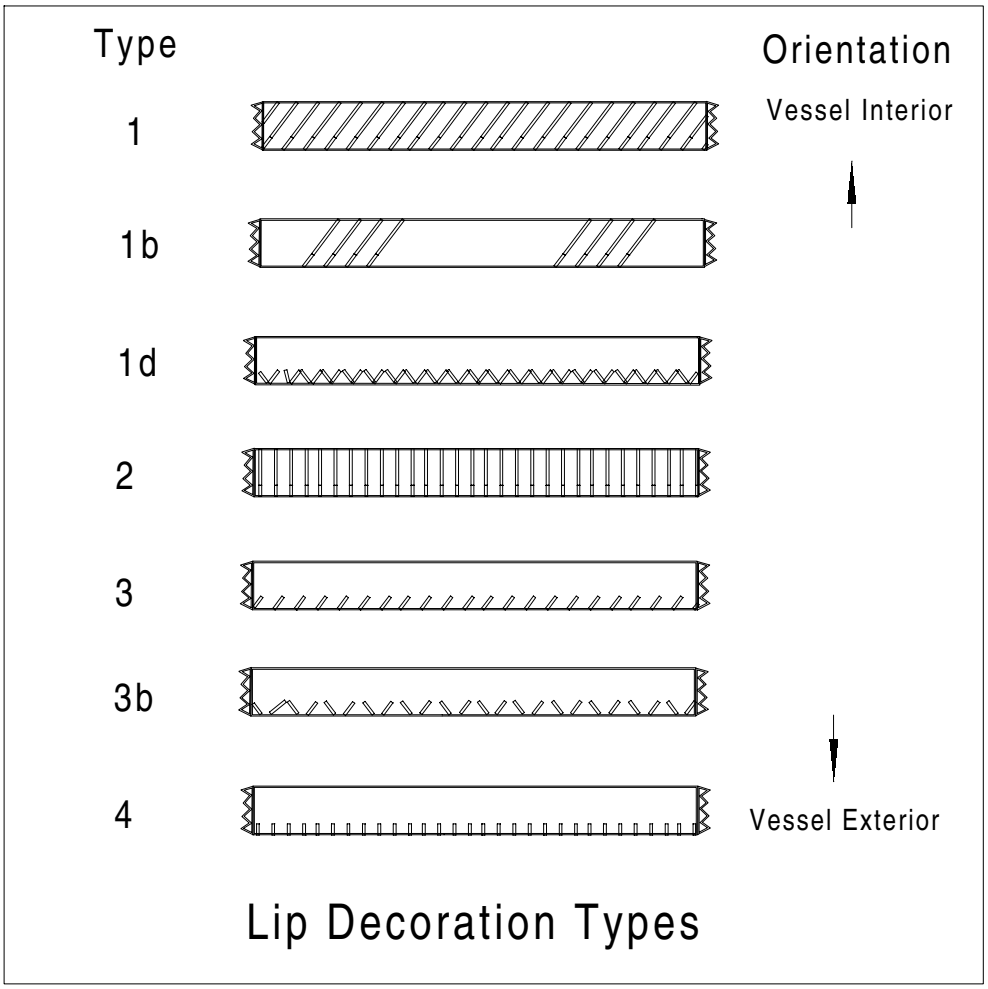
USDA, Natural Resources Conservation Service
n.d. Henry County Soil Maps and Descriptions. Unpublished documents on file at the USDA, Natural Resources Conservation Service, Rocky Mount, Virginia.

Ward, H. Trawick, and R. P. Stephen Davis, Jr.
1993 *Indian Communities on the North Carolina Piedmont, A.D. 1000 to 1700*. Monograph 2. Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.

Waselkov, Gregory A.
1977 *Prehistoric Dan River Hunting Strategies*. Unpublished Master's thesis. Department of Anthropology, University of North Carolina, Chapel Hill.

Wilson, Jack H., Jr.
1983 *A Study of Late Prehistoric, Protohistoric, and Historic Indians of the Carolina and Virginia Piedmont: Structure, Process, and Ecology*. Unpublished Ph.D. dissertation, Department of Anthropology, University of North Carolina, Chapel Hill.

APPENDIXES



Appendix 1. Types of lip decoration found on Dan River series vessels.

Appendix 2. Distribution of lip decorations by pottery type at the Wells site.

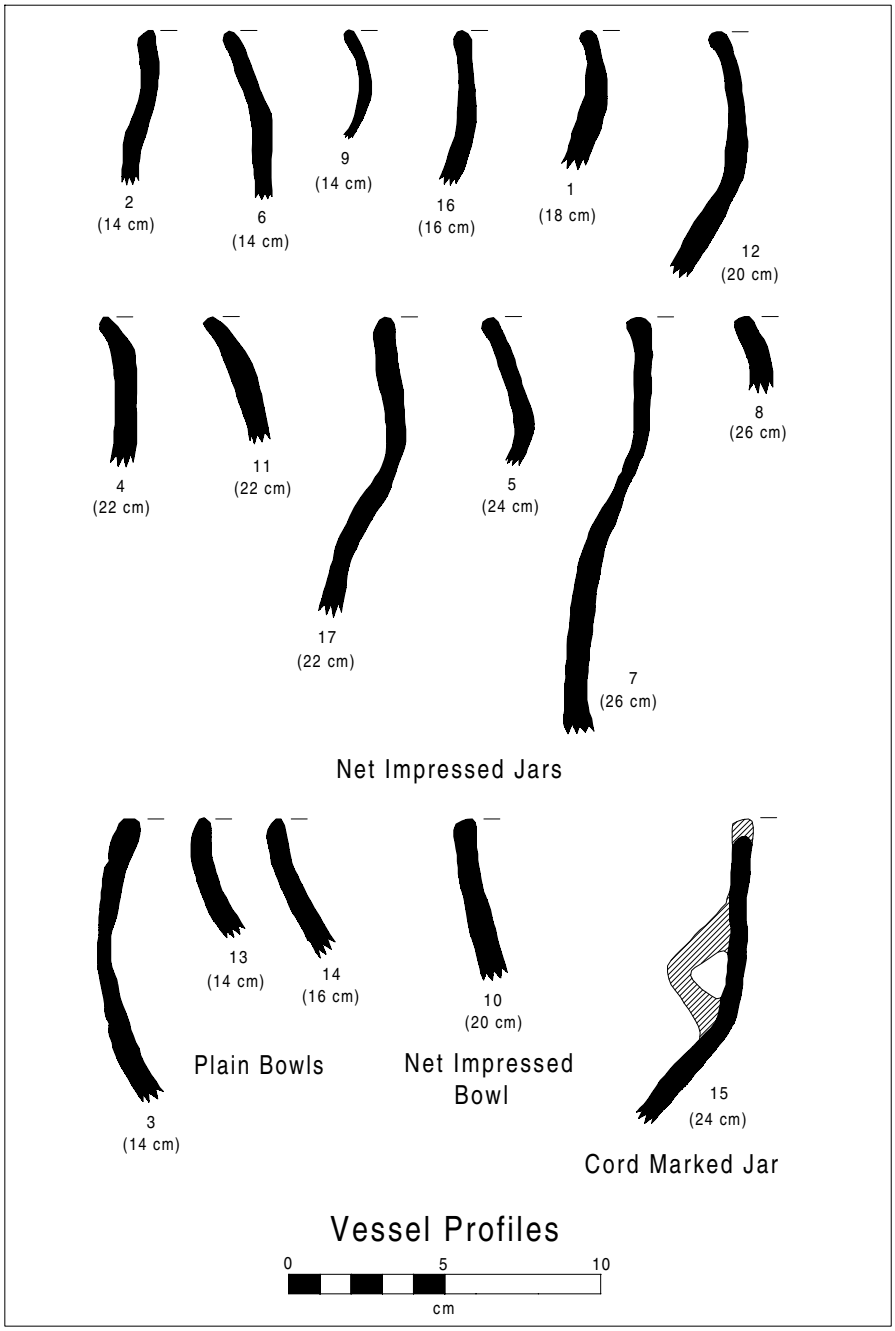
Pottery Type	Type 1b	Type 1d	Type 2	Type 3	Type 3b	Type 4	None	Total
Dan River Net Impressed	1	1	34	33	1	9	99	219
Dan River Roughly Smoothed	-	-	18	10	-	10	45	103
Dan River Plain	-	-	7	7	-	-	85	105
Dan River Cord Marked	-	-	6	6	-	1	3	24
Dan River Corncob Impressed	-	-	2	-	-	-	8	12
Dan River Brushed	-	-	-	-	-	-	1	1
Burnished Exterior	-	-	-	-	-	-	1	1
Indeterminate	-	-	1	3	-	3	15	26
Total	1	1	68	59	1	23	257	491
Percent	0.2	0.2	13.85	12.02	0.2	4.68	52.34	99.99

Appendix 3. Distribution of vessel decoration types by pottery types at the Wells site.

Decoration Type	Dan River Net Impressed	Dan River Roughly Smoothed	Dan River Plain	Dan River Cord Marked	Dan River Cob Impressed	Burnished Exterior	Indet.	Total
I-A-1	116	21	2	5	3	1	10	158
I-A-3	7	-	-	-	-	-	-	7
I-A-6	1	1	-	-	-	-	2	4
I-A-7	1	-	-	-	-	-	-	1
I-A-10	2	2	-	-	-	-	-	4
I-B-5	1	-	15	-	-	1	-	17
I-B-6	-	-	1	-	-	-	-	1
III-B-2	2	-	-	-	-	-	-	2
V-A-4	-	1	-	-	-	-	-	1
VI-A-1	5	3	8	1	-	-	2	19
Misc.	2	-	-	-	1	-	-	3
Total	137	28	26	6	4	2	14	217

Appendix 4. Description of individually numbered vessels from the Wells site.

No.	Type	Temper	Interior	Lip	Decoration/Other	Form	Diameter
1	Dan River Net Impressed	Sand	Scraped	None		Jar	18 cm
2	Dan River Net Impressed	Sand	Plain	None		Jar	14 cm
3	Dan River Plain	Sand & Quartz	Plain	None		Bowl	14 cm
4	Dan River Net Impressed	Sand & Quartz	Plain	Type 1b	VI-A-1	Jar	22 cm
5	Dan River Net Impressed	Sand & Quartz	Scraped	None		Jar	24 cm
6	Dan River Net Impressed	Sand & Quartz	Scraped	Type 2		Jar	14 cm
7	Dan River Net Impressed	Sand	Plain	None		Jar	26 cm
8	Dan River Net Impressed	Sand & Quartz	Plain	Type 2	I-A-1	Jar	26 cm
9	Dan River Net Impressed	Sand & Quartz	Scraped	Type 2		Jar	14 cm
10	Dan River Net Impressed	Sand & Quartz	Plain	None		Bowl	20 cm
11	Dan River Net Impressed	Sand & Quartz	Plain	Type 2		Jar	22 cm
12	Dan River Net Impressed	Sand & Quartz	Plain	Type 1	I-A-1	Jar	20 cm
13	Dan River Plain	Sand & Quartz	Plain	Type 1		Bowl	14 cm
14	Dan River Plain	Sand & Quartz	Plain	None		Bowl	16 cm
15	Dan River Cord Marked	Sand	Scraped	Type 1	Strap Handle	Jar	24 cm
16	Dan River Net Impressed	Sand & Quartz	Scraped	None		Jar	16 cm
17	Dan River Net Impressed	Sand & Quartz	Scraped	None		Jar	22 cm



Appendix 5. Profiles of individually numbered vessels from the Wells site.

Appendix 6. Description of small triangular projectile points from the Wells site.

Context	Raw Material	Condition	Weight (g)	Length (mm)	Width (mm)	Thickness (mm)	Comments
Surface	Chert	Whole	0.5	20.4	10.0	2.4	Dark gray
Surface	Quartz	Broken	-	-	-	-	
Surface	Quartz	Broken	-	-	-	-	
Surface	Quartz	Broken	-	-	-	-	
Sq. 107N80	Metavolcanic	Whole	1.9	25.3	16.6	3.8	Old flake
Sq. 108N86	Quartz	Broken	-	19.8	-	4.0	
Sq. 108N87	Quartz	Broken	-	-	-	-	
Sq. 109N80	Metavolcanic	Whole	2.9	34.3	18.6	6.0	
Feature 2	Metavolcanic	Broken	-	-	16.5	-	
Feature 10	Chert	Whole	1.2	27.3	16.0	3.1	Dark gray
Feature 25	Metavolcanic	Whole	1.0	18.9	11.7	4.6	Old flake
Unprovenienced	Chalcedony	Whole	2.7	26.2	22.6	6.5	
Unprovenienced	Metavolcanic	Whole	1.2	25.8	12.4	4.3	
Unprovenienced	Metavolcanic	Whole	1.1	21.0	15.0	5.0	
Unprovenienced	Metavolcanic	Whole	1.0	21.8	13.5	5.3	
Unprovenienced	Metavolcanic	Whole	0.6	18.2	12.6	3.7	
Unprovenienced	Metavolcanic	Whole	2.5	32.6	14.1	5.3	
Unprovenienced	Metavolcanic	Broken	-	-	13.9	4.7	
Unprovenienced	Metavolcanic	Broken	-	-	17.1	4.4	
Unprovenienced	Metavolcanic	Whole	1.3	26.0	16.7	6.0	
Unprovenienced	Metavolcanic	Whole	1.7	25.7	14.7	6.0	
Unprovenienced	Quartz	Broken	-	23.9	-	4.7	
Unprovenienced	Quartz	Broken	-	-	-	-	