# ARCHAEOLOGICAL INVESTIGATIONS AT THE GRAVELY SITE, HENRY COUNTY, VIRGINIA

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



Research Report No. 17 Research Laboratories of Archaeology The University of North Carolina at Chapel Hill

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by

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1997

#### ACKNOWLEDGMENTS

Two archaeological excavations were undertaken at the Gravely site. The site was first excavated in 1969 by the late Richard P. Gravely, Jr. of Martinsville, Virginia. Although one or more members of the Patrick-Henry Chapter of the Archeological Society of Virginia (ASV) occasionally helped with the work, it was not conducted as a chapter project. The second excavation took place in 1991 and was undertaken by the Research Laboratories of Archaeology (RLA) at the University of North Carolina, Chapel Hill, as an archaeological field school. This excavation was supervised by the late Timothy P. Mooney, under the direction of H. Trawick Ward and R. P. Stephen Davis, Jr., and was made possible by a generous bequest from Dick Gravely. We wish to thank Dr. Max F. Wingett, President of Patrick Henry Community College, for his gracious hospitality in allowing the UNC field school to "set up camp" in the college's gymnasium, and to acknowledge the assistance provided by Mr. Colin Ferguson, Mr. Jimmie Hood, and Mr. Fred Zeigler of the college. Our excavations would not have been possible without their help. A field school always benefits when there is a close friend in the community who is willing to help out, and we were fortunate to have such a friend. Ann Carter Gravely, wife of Richard Gravely, did innumerable things "behind the scenes" to insure that our project was a success, including hosting the media and visitors to the excavation and preparing a wonderful meal at her home for our field school students.

In 1983, Gravely donated his field notes, maps, photographs, and artifact collections from the site to the Research Laboratories of Archaeology. All artifacts and records associated with the 1991 excavation also are curated at the RLA. Richard Gravely is included posthumously as a co-author in recognition of his work at the site and his contribution, largely through his field notes, to our understanding of the late prehistory of the Mayo River Valley.

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 the completion of this and other reports on archaeological excavations undertaken by Richard Gravely and the Patrick-Henry Chapter of the ASV in Henry County, Virginia.

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 recleaning 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 the spring of 1969, Richard Gravely conducted archaeological excavations at the Gravely site (44Hr29), a small, late prehistoric site of the Dan River phase located on the North Mayo River near the town of Spencer in western Henry County, Virginia. These excavations exposed about 1,600 sq ft of the site, discovered 18 archaeological features, and recovered about 7,700 artifacts. Gravely also determined that the site measured about 200 ft by 250 ft and covered about one acre. When Richard Gravely died in 1988, he bequeathed a sum of money to the Research Laboratories of Archaeology at the University of North Carolina, Chapel Hill, to support an additional investigation at the site. This excavation was undertaken as an archaeological field school during the summer of 1991. It exposed an additional 2,800 sq ft of the site, revealed 23 additional features of which 18 were excavated, and mapped numerous postholes. By employing systematic screening of all excavated soils, waterscreening of all feature fill, and flotation of selected feature soils to obtain ethnobotanical data, the 1991 fieldwork generated a collection of over 33,000 artifacts. These investigations also located the earlier excavations and constructed an overall map of the site. Although both investigations recovered artifacts that can be attributed to earlier cultural components at the Gravely site, two radiocarbon dates place the primary occupation, and the one responsible for most of the excavated archaeological features, in the early fifteenth century. Artifacts found in these features are stylistically similar to those found at other late Dan River phase sites in Henry County. This report describes the archaeology of the Gravely site and provides a basis for understanding the late prehistory of the Mayo River valley.

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#### **INTRODUCTION**

The Gravely site (44Hr29), also known as the Rea Upper or Holland site, represents a small, late prehistoric Indian village of the late Dan River phase. It is located on the left descending bank of the North Mayo River about one-half mile below the U.S. 58 bridge near the town of Spencer, Henry County, Virginia (Figure 1). Radiocarbon dates indicate that the site's primary occupation is roughly contemporaneous with occupations at several other Dan River phase sites in Henry County, including Leatherwood Creek (44Hr1), Box Plant (44Hr2), Belmont (44Hr3), Koehler (44Hr6), Wells (44Hr9), and Dallas Hylton (44Hr20).

The site is situated approximately 200 ft back from the river on an elevated remnant of the second alluvial terrace. The northern, western, and southern edges of the site have been truncated by recent scouring and soil erosion; consequently, the site is presently elevated about two feet above the surrounding bottomland. Based on surface collections made by Richard Gravely before the bottoms were heavily scoured, the site was estimated to cover a one-acre area measuring about 200 ft (E-W) by 250 ft (N-S) (Figure 2). The fact that the site area coincides well with the elevated terrace remnant is a result of the site remaining fallow, and thus protected by vegetation, during periods of major flooding (such as Hurricane Agnes in June, 1972).

The Gravely site was excavated twice: once by Richard Gravely in 1969 and again by the University of North Carolina's archaeological field school in 1991. Both excavations were relatively brief and sampled the northern half of the site. Gravely excavated along an east-west transect close to the site's center, whereas the UNC excavation exposed a block near the northwest edge of the site. Both excavations uncovered numerous features and recovered a substantial quantity of artifacts. Unlike most other archaeological sites excavated in Henry County under Richard Gravely's direction, the Gravely site was not dug under the auspices of the Patrick-Henry Chapter of the Archeological Society of Virginia (ASV); instead, it was largely a personal endeavor.

All collections and records associated with these excavations are curated by the Research Laboratories of Archaeology.

## **ENVIRONMENTAL SETTING**

#### **Physiography and Topography**

Henry County is 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

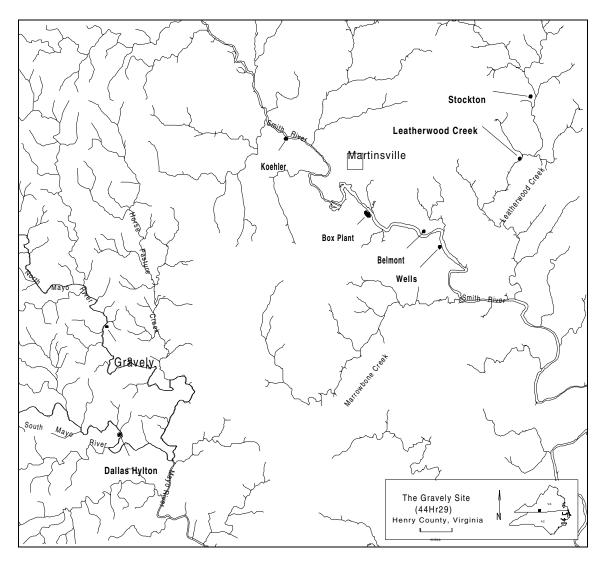


Figure 1. Map of the Smith and Mayo river valleys near Martinsville showing the location of the Gravely site and other excavated Dan River phase villages (adapted from Martinsville, VA-NC 15-minute quadrangle, U.S. Army Corps of Engineers, 1944).

drained by the headwaters of the Smith and Mayo rivers, lie only about 10-15 mi northwest of the Gravely site. The higher peaks along these ridges range from about 2,500 ft to 3,000 ft in elevation. The North Mayo River flows generally from northwest to southeast through eastern Patrick and western Henry counties, joining the South Mayo River just south of the Virginia-North Carolina state line to form the Mayo River. The Mayo River empties into the Dan River at Mayodan, North Carolina, about 18 mi below the Gravely site. The Dan River is a major tributary of the Roanoke River system. The area of Henry County just east of the Mayo River valley is drained by the Smith River which also flows south into the Dan River at Eden, North Carolina. Horsepasture Creek, a major tributary stream of the North Mayo River, drains the uplands just east of the Gravely site. The North Mayo Valley in the vicinity of the Gravely site is relatively

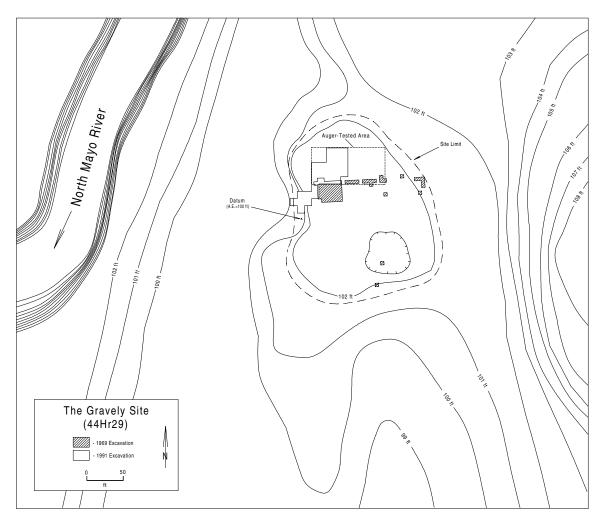


Figure 2. Map of the Gravely site showing its location, approximate limits, and areas investigated in 1969 and 1991.

wide. The bottomland surrounding the Gravely site reaches 1,000-1,500 ft back from both sides of the river and extends about 2,500 ft along the east side of the North Mayo River. It covers approximately 45 acres. The preserved soils at the site suggest that the surrounding soils were once deep, fertile, and well-drained. At the eastern edge of the river bottom, the land rises abruptly about 80 ft to the surrounding upland (Figure 3).

### **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 outcrops of hornblende, gabbro, gneiss (e.g., amphibole chlorite schist, chlorite



Figure 3. View of the Gravely site in 1969, looking toward the northwest from the adjacent uplands. The site is the dark, fallow area near the center of the photograph. The Blue Ridge is visible in the background to the left.

hornblende gneiss, etc.), and Leatherwood granite (biotite muscovite granite). The headwaters of the Smith and Mayo rivers, 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 Gravely site could have been collected from the nearby river bed or along the Blue Ridge escarpment to the northwest. 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). Chertbearing limestone formations are found west of the Blue Ridge escarpment in the Ridgeand-Valley province of Virginia and Tennessee (Thornbury 1965:113).

### **Floral and Faunal Resources**

The Gravely 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. By late prehistoric times (after about A.D. 1000), most Indians living along the major tributaries of the Dan River, including the Mayo 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 chip monks, 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. Aquatic resources, such as fresh-water fish, turtle, amphibians, and shellfish, were available to the Gravely site residents from the nearby Mayo River.

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 Indians living in this area. She has argued 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 Americans created them using fire or other clearing methods (Gremillion 1989:166-167). Although there were seasonal variations 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 Gravely site was first recorded by Richard Gravely in 1967. At the time, it was named the Holland site after Raleigh Parrish Holland, who lived just southeast of the site and owned the access road to it. Before 1968, the site was owned by Gilbert Rea, and it is often referred to in the field notes as "Rea Upper" to differentiate it from another prominent site—the Gilbert Rea site or 44Hr18—located about one mile downstream on the Rea property. In October, 1968, the property on which the site is located was sold to Benedict Inc. of Martinsville, Virginia. This corporation, owned by Richard Gravely and his first wife, retained ownership of the site until 1991 when it was sold by Gravely's estate. The site had been looted by relic collectors during the mid-1960s, and Gravely's intent when he purchased the property was to protect it from further destruction.

Accordingly, he removed from cultivation an area about 200 ft by 250 ft where the site was located (see Figure 3). Leaving the site uncultivated saved it from severe flooding in the 1970s and 1980s.

Gravely considered the site significant because he thought that it dated to the contact period. This assessment was based on the discovery in 1963–1964 of several burials at the Gilbert Rea site that contained European trade artifacts. These burials were excavated by Gravely and other members of the Patrick Henry Chapter, and at least two contained rolled copper beads and a long piece of iron thought to be a ramrod. Because of the Gravely site's proximity to the Gilbert Rea site, Gravely thought that it might represent a contemporary, contact-period settlement.

The first systematic excavation of the Gravely site occurred between March and May, 1969. Richard Gravely, with occasional help from Bob Burns and his family, established a grid of 5-ft by 5-ft squares within the area removed from cultivation and excavated 64 squares (1,600 sq ft) in the north half of the site. The results of this work, including the discovery of numerous undisturbed features and areas that appeared to contain stratified archaeological deposits, generally confirmed Gravely's suspicion that the site was important. However, the excavation failed to provide evidence that the site was occupied during the contact period. In 1979, charcoal from one of the excavated features (TP-2) was submitted to the University of Georgia's Geochronology Lab for radiocarbon dating. This resulted in an uncorrected date of A.D.  $1720 \pm 70$ , which Gravely took as evidence the site was indeed late. It now appears that the charcoal sample was contaminated and that the resulting date is erroneous.

Although Gravely did not undertake additional excavations at the site, he protected the site from vandalism and sought to have it studied further by professional archaeologists. In his will, he bequeathed a modest sum of money to the Research Laboratories of Archaeology to be used to excavate the site. After Richard Gravely's sudden death in 1988, the RLA formulated plans to conduct further investigations at the site. These investigations were undertaken in May and June, 1991, as an archaeological field school directed by H. Trawick Ward, R. P. Stephen Davis, Jr., and Timothy P. Mooney. The field school excavated 28 10-ft by 10-ft squares (2,800 sq ft) and revealed 23 additional features, of which 18 were excavated. The principal goals of this work were: (1) to determine the site's age and ascertain whether it represented a single village or multiple settlements; (2) locate the original excavation and construct an accurate map of the entire site; and (3) to obtain archaeological data using fine-scale recovery techniques that could be used to reconstruct past lifeways at the site and evaluate potential biases in the artifact collection from the earlier excavation. All of these goals were met.

#### FIELD AND LABORATORY METHODS

#### **1969 Excavations**

Before beginning his excavation, Gravely established a grid of 25-ft squares over the entire 200-ft by 250-ft site area. This grid was aligned along a north-south axis and provided a series of control points for subsequent excavation. Each square was then divided into 5-ft by 5-ft excavation units. Using a method common to other site excavations undertaken by Gravely, each square was designated by its position (in terms of number of squares) north and west of a hypothetical "0N0W" square.

Digging began along an east-west line just north of the site's center, between squares 90N56W and 90N87W (see Figure 2). Backdirt removed from each unit was shoveled into an adjacent, previously excavated unit. Twenty-one squares were excavated along this line. A cluster of features was found at the west end of the east-west transect, and this area was expanded into a block excavation of 44 5-ft by 5-ft squares. Squares were excavated using shovels and the fill was not screened. The base of the plowed soil was shovel skimmed but not troweled, and this probably explains why postholes generally were not identified nor mapped. Archaeological features, indicated by dark organic soil stains at the base of plow zone, were excavated using shovels and trowels. After excavation, their locations were recorded on an overall site map (Figure 4).

Artifacts, when encountered during excavation, were bagged by provenience (i.e., square or feature). Because there was no method for systematically recovering artifacts, the resulting collection cannot be regarded as a representative sample. Small-sized artifacts, in particular, are underrepresented, and fragile subsistence remains, such as animal bone, shell, carbonized plants, were only selectively collected.

Field notes were kept in diary form. Features sometimes were described in greater detail, with remarks about general fill content, dimensions, and pit morphology. Only three photographs exist for the 1969 excavation.

#### **1991 Excavations**

The 1991 excavation was preceded by a survey of the site to try and locate the earlier excavation. The survey involved random auger testing using an Oakfield soil sampling tool to isolate previously excavated soils. This strategy identified a few undisturbed features but failed to locate the old excavation. Next, a 50-ft by 50-ft block near the northern edge of the site was systematically augered at 2.5-ft intervals to locate archaeological features and select an area to excavate. (A second 50-ft by 50-ft block just east of the first one was auger tested once excavations began.) In addition to identifying numerous intact features, including some with relatively rich fill, evidence of the earlier excavation also was found near the south edge of the augering block (see Figure 2).

The excavation grid consisted of 10-ft by 10-ft squares and was laid out using a transit and measuring tapes. These squares formed a block contiguous to and slightly overlapping Gravely's earlier excavation block (Figures 5 and 6). Each square was dug using shovels and all plowed soil was sifted through 1/2-inch screens to recover artifacts (Figure 7). The subsoil surface at the base of plow zone was carefully troweled and photographed in color and black-and-white. Soil stains representing pits, postholes, and other disturbances were then outlined and mapped using a plotting frame and cross-section paper.

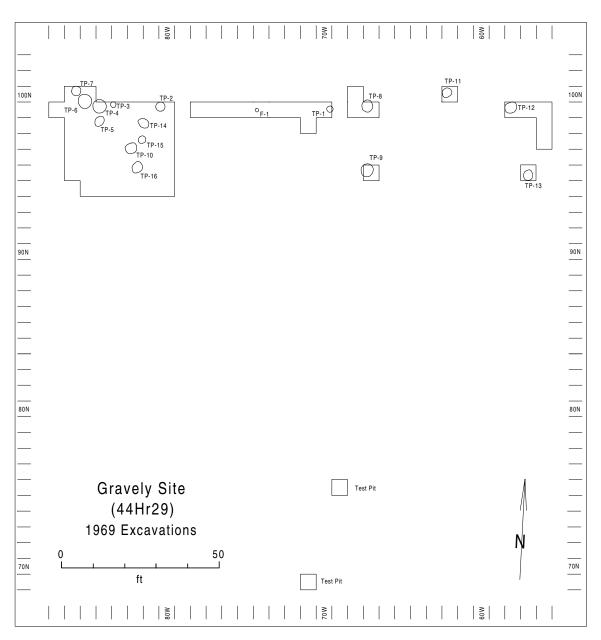


Figure 4. Map of the 1969 excavation at the Gravely site.

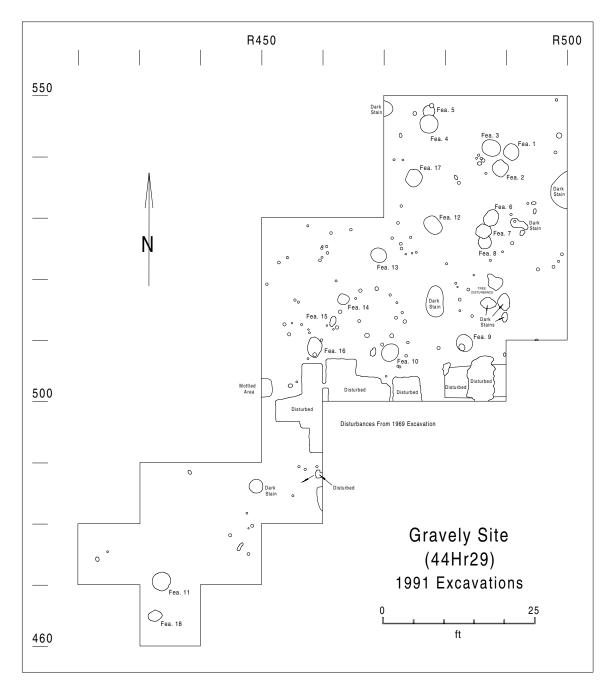


Figure 5. Map of the 1991 excavation at the Gravely site.

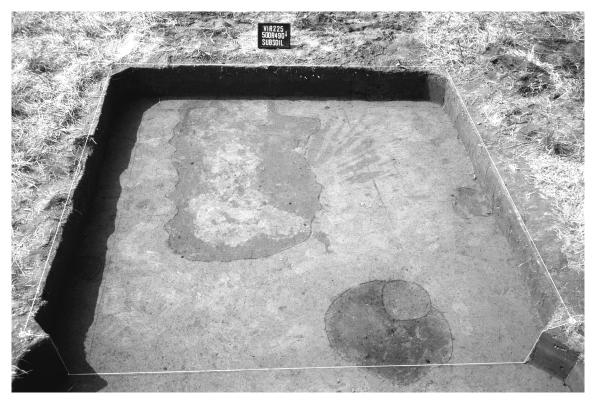


Figure 6. View of Square 500R490 at top of subsoil (facing south). The disturbed area at the top of the photograph is from Gravely's excavation of TP-2. In the foreground is Feature 9, intruded by a small, shovel-sized test pit.

The excavation of each feature proceeded as follows (Figure 8). First, the top of the feature was re-troweled, photographed, and re-mapped. Next, top elevations were recorded using a transit and leveling rod. Features were dug by natural zones using trowels, and recovered soils were kept separate by zone. Standard-sized soil samples and flotation samples were taken from each zone, and the remaining soil was washed through a series of 1/2-inch, 1/4-inch, and 1/16-inch screens to retrieve artifacts. Flotation samples were processed using a flotation tank with water pumped from the nearby river.

All aspects of the excavation were recorded on standard forms. In addition, each field school student kept a journal of his/her daily activities and observations at the site. Finally, an overall topographic map of the site and its immediate vicinity was constructed using a plane table and alidade, and a transit and stadia rod.

## **EXCAVATION RESULTS**

#### Site Stratigraphy

In 1969, Richard Gravely bisected the site both north-south and east-west with lines of shovel-sized test pits to determine the site's stratigraphy. In most areas of the



Figure 7. View of the 1991 excavation, facing north. Students in the center and left of the photograph are excavating plowed soil from 10-ft by 10-ft squares. The two students under the sun shade at right are excavating a feature. The area in the foreground is where Gravely's 1969 block excavation was located.



Figure 8. A student excavating Feature 11, a bell-shaped storage pit. The large potsherds on the tray at right were found near the bottom of the pit.

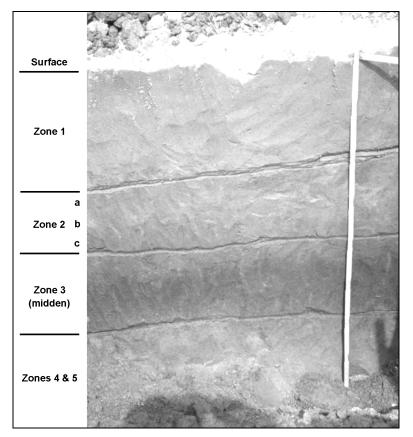


Figure 9. Stratigraphic profile observed by Gravely in Square 69N71W.

site, he found the plowed soil to be 0.8-1.0 ft thick and comprised of a gray-brown sandy loam. In some areas this plowed soil was underlain by a thin layer of dark, clayey, midden-like soil; in others it was underlain by a stiff, yellow, clay subsoil.

However, one of his 5-ft by 5-ft test pits—Square 69N71W—located at the south edge of the site revealed a somewhat different stratigraphic profile (see Figure 2). Here, he observed a 1.0-ft thick plow zone of gray-brown sandy loam (Zone 1) that was underlain by a 1.5-ft thick gray-brown clay loam that was darker at the top and the bottom (designated Zone 2a, 2b, and 2c). Beneath this clay loam was a black, ashy midden about 0.75-ft thick (Zone 3). This midden rested upon a 1.0-ft thick layer of light brown-yellow clay (Zone 4), and the clay layer was atop a yellowish sandy clay (Zone 5) (Figure 9). Although 18 potsherds were recovered from this test pit, it is unclear if they came from the buried midden or the overlying plow zone. They are similar to sherds found elsewhere at the site and therefore do not appear to represent a substantially earlier occupation.

The stratigraphy observed in 1991 was similar to what Gravely observed, with two differences. Between 1969 and 1991, substantial flooding of the North Mayo River scoured portions of the river bottom surrounding the site and deposited a 0.5-ft thick layer of clean yellow sand over much of the site. This sand was encountered in every square

excavated, and it consistently contained no artifacts. Beneath it was a layer of plowdisturbed soil, about 0.6-0.8 ft in thickness, that contained numerous artifacts. This plow zone rested upon a stiff, sterile, clay subsoil that was intruded by pits, postholes, and other disturbances.

## Site Structure

Because only limited excavations were undertaken at the Gravely site, we know comparatively little about its internal structure. The distribution of features excavated and identified through auger testing suggest that the village may have consisted of a ring of houses surrounding an open central area. Numerous postholes were mapped in 1991 and some of these form curved alignments that may represent house walls; however, no structures were clearly identified. Likewise, no evidence of a palisade was found; but such negative evidence is not too convincing given the small size of the excavations.

## **Description of Features**

Eighteen archaeological features were excavated during the 1969 fieldwork at the Gravely site, and an additional 18 features were excavated in 1991. Sixteen of the features found in 1969 were given "TP" designations, meaning "trash pit" or "trash-filled pit." The other two—a possible posthole or animal burrow and a buried midden layer—were described as features and given "F" designations. The 18 pits excavated in 1991 were designated Feature 1 through Feature 18. The six other unexcavated soil stains found in 1991 were not assigned feature numbers.

Depth measurements recorded for features excavated in 1969 were generally taken from the ground surface, which Gravely estimated to be about 0.8-1.0 ft above the top of subsoil. In 1991, all depth measurements were calculated from the top of subsoil, which occurred about 0.6-0.8 ft below the surface (excluding the 0.5-ft thick deposit of recent flood sand).

TP-1. TP-1 was a small, shallow pit located in Square 99N71W. It was filled with a black, ashy soil that contained a small number of potsherds and a chipped-stone projectile point. No dimensions were recorded for this feature.

*TP-2.* TP-2 was a large, deep, refuse-filled pit located in Squares 99N80W and 99N81W. The dark, ashy fill contained charcoal, animal bones, mussel and periwinkle shells, and numerous Dan River series potsherds. A thick layer of charred plant matter, composed of tree bark, wood, hickory nutshells, corn kernels, beans, and honey locust seeds, was found at the bottom of the pit. As with TP-1, no dimensions were recorded for this feature. The remains of TP-2 were identified during the 1991 excavation in Square 500R490 (see Figure 6).

A radiocarbon sample was taken from the charcoal layer near the pit bottom and submitted for dating in 1979 by Richard Gravely. This sample yielded an uncorrected

date of A.D.  $1720 \pm 70$ , which is considered much too recent for the artifacts associated with it (see Chronology).

*TP-3*. TP-3 was found in Square 99N83W. It was described as a faintly defined trash pit containing charcoal flecks, several small stones, two potsherds, several poorly preserved fragments of deer bone, and traces of shell. The pit was roughly circular, measured about 1.5 ft in diameter, and extended about 3.0 ft below the surface.

*TP-4*. TP-4 was a large, slightly bowl-shaped pit located in Square 99N84W that had been partially dug by a relic hunter. The undisturbed fill along the pit edges and bottom contained numerous Dan River potsherds, animal bone, charcoal, and several stone flakes. Upon completion, the pit measured 4.2 ft in diameter and 2.3 ft deep (below the surface).

*TP-5.* This feature was a small, round, bowl-shaped pit located in Square 98N84W. It measured 2.5 ft in diameter and extended 1.7 ft below the surface. It contained three chipped-stone artifacts and 17 Dan River series potsherds.

*TP-6.* TP-6 was a large, bell-shaped storage pit located in Squares 99N85W and 100N85W. At the base of plow zone, it measured 3.3 ft in diameter. It expanded to 4.0 ft in diameter at about 2.5 ft below the surface, or about 0.5 ft above the pit bottom. Its maximum depth below the ground surface was about 3.0 ft. The fill was a black, sandy soil that contained a large number of Dan River series potsherds (including rim sections of Vessels 1, 2, 3, and 4), a whole clay pipe, another clay pipe fragment, several stone tools, considerable charcoal, several badly decomposed animal bones, and one or two mussel shells. Twelve potsherds conform typologically to the early Late Woodland Uwharrie series; the remainder (including all of the vessel sections) are Dan River series sherds.

*TP-7.* TP-7 was a small, straight-sided pit located in Square 100N86W. It contained two distinct fill zones. The upper fill was dark humic soil that extended 1.6 ft below the surface and contained several potsherds and a few chipped-stone artifacts. At the dish-shaped bottom of this fill was a thin lens of brown sand. The fill zone beneath this lens extended almost 1.0 ft to a flat pit bottom and contained only three potsherds. Whereas the upper fill appears to be a deposit of refuse, the lower zone probably represents intentional filling of the pit when it was abandoned.

*TP-8.* TP-8 was a bowl-shaped basin located in Square 98N67W. It measured about 3.0 ft in diameter and was 1.7 ft deep below the surface. TP-8 contained several potsherds, including some earlier sherds of the Uwharrie or Yadkin series, and it also contained a stone core and numerous flakes.

*TP-9.* TP-9 was located in Square 95N67W. It was a straight-sided pit with a slightly concave bottom, and it was 3.0 ft in diameter and 3.0 ft deep (below the surface). Upon discovery, TP-9 appeared to have been previously dug. According to Gravely's

field notes, the pit "contained gray ash, much black, sandy, ashy soil, light loose soil with high humus content, a few mussel shells, several dozen periwinkle shells, a fair amount of pottery [Dan River series, including a rim section from Vessel 5], and numerous brown or black-brown stained deer and other animal bone." Several stone flakes also were found and some of the bones had butchering marks. Near the pit bottom were two very large, flat stones; these probably were milling stones and were not collected. This pit appears similar to Feature 11, a storage pit excavated in 1991. Feature 11 also contained strata of very loose, ashy fill near the bottom that could easily be mistaken for recently disturbed soil.

*TP-10.* TP-10 was a small, bowl-shaped basin in Square 97N82W. The fill was a ashy black, sandy soil that contained several Dan River series potsherds, flakes, and charcoal. This feature was 2.7 ft in diameter at the top and extended 1.5 ft below the surface.

*TP-11.* TP-11 also was a small, bowl-shaped basin. It measured 2.5 ft in diameter by 1.5 ft deep (below the surface) and was located in Square 100N62W. Twelve Dan River potsherds were recovered from the fill.

*TP-12.* TP-12 was a large, deep storage pit in Square 99N58W that had been dug previously by relic collectors. Although the original size and fill characteristics are unknown, when re-excavated it measured 3.5 ft in diameter and 4.7 ft deep and had straight sides and bottom. The fill was a very black, ashy soil that contained only three or four small potsherds which were not kept.

*TP-13.* TP-13 was a straight-sided storage pit located in Square 95N57W. It was 2.5 ft in diameter and 2.3 ft deep (below the surface), and it had a flat bottom. The fill was a black, sandy soil that contained much ash and charcoal, as well as several Dan River series potsherds, a stone axe, and two pieces of burnt animal bone. Most of the potsherds have a fine sand-tempered paste and some have burnished surfaces, indicating that they may post-date the primary site occupation.

*TP-14.* TP-14 was a shallow, bowl-shaped basin located in Square 98N81W. It was oval in outline, measuring 3.2 ft by 2.9 ft, and was 1.7 ft deep below the surface. The fill contained a several Dan River series potsherds, a chipped-stone projectile point, four flakes, and a small number of animal bones.

*TP-15.* TP-15 was a bell-shaped storage pit located in Square 97N82W. It was slightly oval at the base of plowzone, measuring 2.2 ft by 2.7 ft, and it extended 2.5 ft below the surface. Near the bottom, the pit diameter expanded to 3.4 ft. According to Gravely's field notes, it contained "very black, ashy soil with very few soft deer bones, flecks of charcoal, some broken stones, and sherds of pottery." TP-15 also contained a clay pipe stem and several stone flakes.

*TP-16.* TP-16 was a bell-shaped storage pit located in Square 95N82W. It measured 2.8 ft in diameter at the base of plowzone and expanded to 3.5 ft near the bottom. TP-16 was just over 3.0 ft deep (below the surface). Like most other pits, the fill consisted of black, sandy soil with large amounts of ash and charcoal. Numerous Dan River series potsherds were found, including a rim section from Vessel 6 (a Dan River Net Impressed jar). Only a few animal bones were recovered, and no shell was found. Other artifacts from TP-16 include a triangular projectile point, a biface, a drill, a chipped-stone hoe fragment, two hammerstone fragments, and several stone flakes.

F-1. This feature was a small posthole or animal burrow located in Square 99N74W. It measured about 0.8 ft in diameter and extended about 2.0 ft below the surface. Nineteen potsherds were recovered from the fill. All of them contain crushed quartz temper, have scraped interiors, and are from thick-walled vessels with coarse net-impressed or cord-marked exteriors. These sherds are typologically similar to pottery of the Uwharrie series and appear to represent an earlier Woodland component at the site.

F-2. This feature designation was given to the buried, ashy brown midden found in Square 69N71W. It was 0.75 ft thick and was identified about 2.5 ft below the surface. Eighteen potsherds, one piece of animal bone, and one flake were recovered from this 5-ft by 5-ft square; however, it is uncertain if any of them came from F-2. All of the potsherds conform to the Dan River series.

*Feature 1.* Feature 1 was a small, circular, bowl-shaped basin located in Square 540R500 (1991 excavations). It measured 2.5 ft in diameter at the base of plowzone and extended 0.65 ft into subsoil. Two fill zones were present. The uppermost, and most recent, zone was a 0.15-ft thick deposit of charcoal, fired clay, and animal bone mixed within a dark brown (Munsell: 10YR 3/3) sandy loam. Designated Zone 1, this deposit likely represents hearth cleanings. Beneath Zone 1 was a dark yellowish brown (10YR 4/4), mottled soil, designated Zone 2, that filled the remainder of the pit. This soil does not appear to represent a deposit of refuse. Both zones produced only small numbers of Dan River series potsherds and stone flakes.

*Feature 2.* Feature 2 was a circular pit located in Square 530R490 (Figure 10). It measured 2.7 ft in diameter and extended 0.8 ft into subsoil. The pit walls sloped inward and the bottom was flat. A single fill zone, designated Zone 1, was present and contained charcoal, small numbers of animal bone, bits of fired clay, flakes, fire-cracked rocks, and numerous Dan River series potsherds. The soil matrix was a very dark brown (10YR 2/2) sandy loam. The pit's morphology and fill characteristics suggest that Feature 2 was a storage pit that was filled with general village refuse.

*Feature 3*. Feature 3 was a very shallow, oval depression located near Features 1 and 2 in Square 540R490. It was 2.6 ft by 3.1 ft in outline at the base of plowzone, 0.5 ft deep, and had a flat bottom. The fill was a dark yellowish brown (10YR 3/6) loam that contained bits of charcoal and fired clay but almost no other artifacts. The function of this feature is unknown.

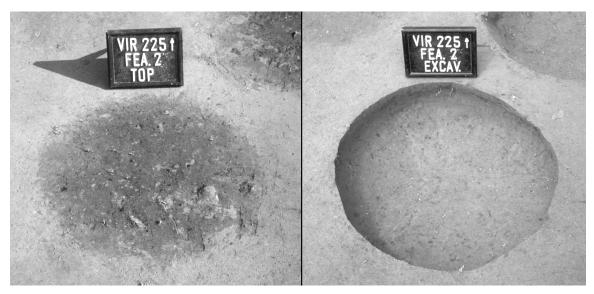


Figure 10. Views of Feature 2 before (left) and after (right) excavation.

*Feature 4*. Feature 4 was a straight-sided, circular storage pit located in Square 490R480. It was 3.0 ft in diameter and extended 1.4 ft into the subsoil clay, intruding the south edge of Feature 5. The fill was homogeneous throughout and consisted of a dark yellowish brown (10YR 3/4) loam mottled with clumps of light brown clay and bits of fired clay and charcoal. Several small, Dan River series potsherds were recovered from the fill along with a pottery disk a few stone flakes. The fill characteristics suggest that this pit was filled with general soil from the village following abandonment.

*Feature 5*. This feature was partially intruded by Feature 4. It measured about 1.8 ft in diameter and extended 1.9 ft to a pointed bottom. The soil in the feature was dark grayish brown (10YR 4/2) and contained very few artifacts other than charcoal and rocks. Feature 5 is interpreted as a tree disturbance.

*Feature 6*. Feature 6 was an oval pit with inward-sloping edges. It was located in Square 520R490 and intruded the northern edge of Feature 7. It was about 2.3 ft by 2.6 ft in plan view and 1.3 ft deep. The fill was a homogeneous, very dark grayish brown (10YR 3/2) sandy loam that contained charcoal and bits of fired clay but only a few other artifacts, including a rim section of a Dan River Net Impressed jar (Vessel 7). The function of this pit is unclear.

*Feature* 7. Feature 7 was a bell-shaped storage pit located in Square 520R490 (Figure 11). It was intruded by Feature 6 and intruded the northern edge of Feature 8. Feature 7 was about 2.7 ft in diameter at the base of plowzone, extended 2.1 ft into subsoil, and contained three fill zones. The upper, and most recent, fill zone (designated Zone 1) was a dark brown (7.5YR 3/2) sandy loam that was about 0.6 ft thick and contained a pocket of clay, charcoal, fired clay, a few animal bones, a small number of potsherds, several flakes, and two projectile points.

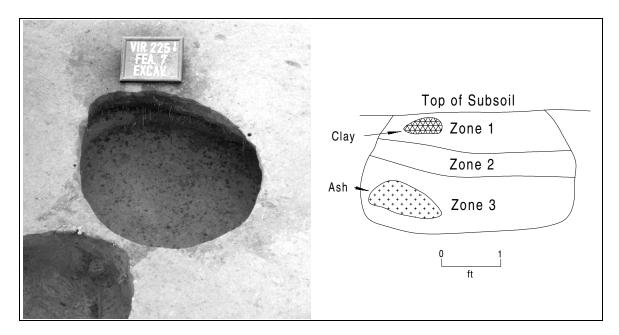


Figure 11. Photograph of Feature 7, a bell-shaped storage pit, after excavation, and a drawing of the fill profile.

Zone 1 was underlain by a 0.5-ft thick deposit of dark yellowish brown (10YR 4/6) soil. This fill contained a similar range and density of artifacts, including a large rim section from a Dan River Net Impressed jar (Vessel 8). This vessel is very similar to one found in Feature 8.

Unlike the upper two zones, the bottom fill zone contained a very rich deposit of discarded refuse. It was almost 1.0 ft thick and consisted of a black (10YR 2/1) loam with abundant quantities of charcoal and fired clay. This zone also contained a large, dark gray (5YR 4/1) pocket of wood ash, probably from a cleaned-out hearth. Several hundred large potsherds were recovered, including those from an almost fully reconstructed Dan River Net Impressed pot. Other artifacts found in this zone include 11 projectile points, a chipped hoe fragment, a hammerstone, two clay pipe stems, a retouched flake, almost 200 flakes, and numerous animal bones.

Sixty-three grams of wood charcoal from Zone 3 were submitted for radiocarbon assay and yielded an uncorrected date of A.D.  $1430 \pm 60$  (see Chronology).

*Feature 8.* Feature 8 was shallow, circular pit located in Square 520R490 and intruded by Feature 7. It was about 2.0 ft in diameter at the base of plowzone and extended almost 1.0 ft into subsoil. The fill was a black (10YR 2/1) sandy loam mottled with charcoal and bits of fired clay. Only a few artifacts, including part of a Dan River Net Impressed jar (Vessel 9), were recovered. Feature 8 appears to represent a storage pit that was filled mostly with midden-like soil.

*Feature 9.* Feature 9 was a circular, straight-sided storage pit located in Square 500R490. A very small, shallow pit or posthole intruded its southwest edge. Feature 9

was about 2.6 ft in diameter, 1.1 ft deep below the base of plowzone, and contained two fill zones. The uppermost zone, Zone 1, was a dark brown (10YR 3/3) sandy loam that contained charcoal, bits of fired clay, several animal bones, mussel shells, periwinkle shells, Dan River series potsherds, and numerous stone flakes. It was about 0.8 ft thick.

Zone 2 was a 0.3-ft thick deposit of dark yellowish brown (10YR 3/6) mottled loam that contained the same kinds of artifacts found in Zone 1 but in smaller quantities. Both zones appear to represent disposed refuse.

*Feature 10.* Feature 10 was a circular, straight-sided storage pit located in Square 500R480. It was 2.6 ft in diameter and extended 1.1 ft into subsoil. The fill was a very dark brown (10YR 2/2) sandy loam mottled with charcoal and fired clay. A 0.2-ft thick pocket of ash was present at the top of the undisturbed fill. Artifacts recovered from Feature 10 include several Dan River series potsherds, numerous animal bones, stone flakes, periwinkle shells, and mussel shells. Fill characteristics suggest that this pit was partially filled with food scraps and other refuse, and then topped off with hearth cleanings.

*Feature 11.* Feature 11 was a large, bell-shaped storage pit located at the southwest end of the 1991 excavation, in Square 470R440 (Figure 12). It was roughly oval in outline at the base of plowzone, measuring 2.5 ft by 2.9 ft, and it extended 2.6 ft into subsoil. Near the bottom, the pit's diameter was 3.8 ft. The uppermost fill zone, designated Zone 1, was a very dark grayish brown (10YR 3/2) sandy loam that contained wood charcoal, charred nut fragments, animal bones, numerous fragments of fired clay, and Dan River series potsherds. It was about 1.1 ft thick.

Beneath Zone 1 was Zone 2, a 1.0-ft thick deposit of dark yellowish brown (10YR 3/4) sandy loam. Zone 2 contained the same range of artifacts found in Zone 1 but in much greater quantities. Several projectile points, clay pipe fragments, other fired-clay objects, and fire-cracked rocks also were recovered. The potsherds from Zone 2 include large rim sections of five Dan River Net Impressed jars (Vessels 11, 12, 13, 14, and 20), one Dan River Cob Impressed miniature jar (Vessel 15), and one Dan River Plain Bowl (Vessel 16). Sixty-six grams of wood charcoal from Zone 2 were submitted for radiocarbon assay and yielded an uncorrected date of A.D.  $1410 \pm 60$  (see Chronology).

Zone 3 was a 0.5-ft thick deposit of loosely compacted, dark reddish brown (5YR 3/3) fill that lay on the pit floor. This fill contained chunks of fired clay and daub, and large quantities of charred plant matter. Numerous Dan River series potsherds and animal bones also were recovered. Portions of four Dan River vessels (Vessels 12, 14, 15, and 16) found in Zone 2 also were recovered from Zone 3.

The fill from Feature 11, as indicated by differences in soil color and artifact density, represents three distinct episodes of refuse disposal. Each of these episodes appears related to the disposal of cooking and hearth debris. The inclusion of conjoining vessel fragments in Zones 2 and 3 indicates that the pit was filled fairly quickly and that at least some of the contents from separate fill zones came from the same source.

*Feature 12.* Feature 12 was a roughly oval, bowl-shaped basin located in Square 520R480. At the base of plowzone, it measured 2.6 ft by 3.3 ft, and it extended 1.2 ft into

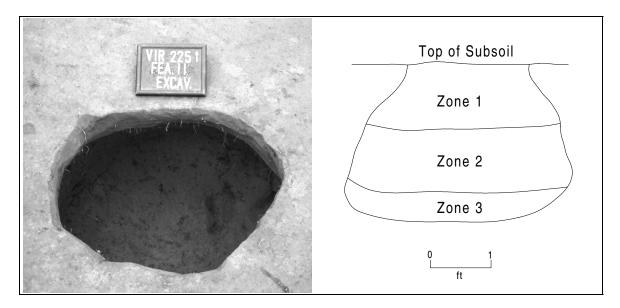


Figure 12. Photograph of Feature 11, a bell-shaped storage pit, after excavation, and a drawing of the fill profile.

subsoil. It was filled with a dark reddish brown (5YR3/2), sandy loam that contained bits of fired clay and charcoal, mostly small Dan River series potsherds, a projectile point, three cores, and several stone flakes. The fill represents general, midden-like soil; however, the function of Feature 12 is unclear.

*Feature 13.* Feature 13 was an oval pit in Square 520R470 which had been partially disturbed by a pothole. It measured 2.1 ft by 2.6 ft at the base of plowzone, and it extended 1.8 ft into subsoil. The pit walls sloped inward and the bottom was rounded. The undisturbed fill was a gray (5YR 5/1) sandy loam that contained very few artifacts. The function of this feature is unclear.

*Feature 14.* Feature 14 was a small, shallow, circular basin located in Square 510R470. It was 1.8 ft in diameter and 0.4 ft deep, and the fill was a dark yellowish brown (10YR 4/4) sandy loam mottled with charcoal and fired clay. It contained several animal bones but only a few Dan River series potsherds.

*Feature 15.* Feature 15 was a small, shallow, oval basin located just south of Feature 14 in Square 510R470. It measured 1.9 ft by 0.9 ft in plan view, and it was only 0.2 ft deep. The fill consisted of a dark grayish brown (10YR 4/2) sandy loam that contained small bits of bone, charcoal, and fired clay, but few other artifacts.

*Feature 16.* Feature 16 was an oval, straight-sided pit located in Square 500R460, just north of Gravely's 1969 excavation. The pit outline measured 2.4 ft by 3.4 ft at the base of plowzone and it extended 1.4 ft into subsoil. A posthole intruded the south edge of the pit and was excavated separately. The fill was a dark reddish brown (5YR3/2) sandy loam mottled with bits of charcoal, fired clay, and burnt animal bone, and it

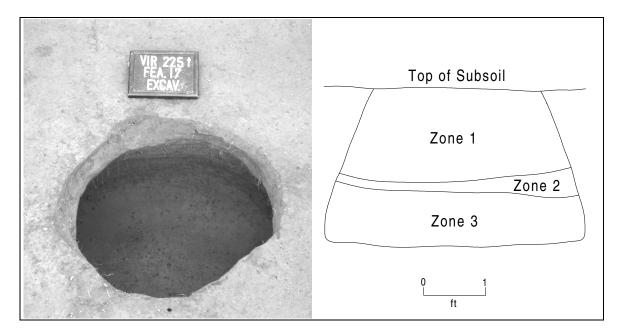


Figure 13. Photograph of Feature 17, a bell-shaped storage pit, after excavation, and a drawing of the fill profile.

contained only a few Dan River series potsherds, animal bones, and a projectile point. Feature 16 appears to represent a storage pit that was filled with midden-like soil after it was abandoned.

*Feature 17.* Feature 17 was a large, bell-shaped storage pit located in Square 530R480 (Figure 13). It was 2.7 ft in diameter at the base of plowzone, expanded to 4.3 ft in diameter at the base, and was 2.6 ft deep. Like the other two bell-shaped storage pits excavated in 1991 (i.e., Features 7 and 11), it had three artifact-rich fill zones. The uppermost zone, Zone 1, was 1.5 ft thick and consisted of a black (10YR 2/1) sandy loam mottled with large amounts of fired clay and charcoal. It also contained several Dan River series potsherds, a projectile point, a stone graver, a clay pipe stem, a carved soapstone disk, and numerous stone flakes.

Beneath Zone 1 was Zone 2, a thin (0.2–0.4 ft) lens of dark yellowish brown (10YR 3/4) fill containing fired clay, fire-cracked rocks, and a small number of potsherds and animal bones. The fill at the bottom of Feature 17 (Zone 3) was a 0.9-ft thick deposit of yellowish brown (10YR 5/6) sandy loam that contained pockets of charcoal and fired clay. Numerous Dan River series potsherds, including reconstructed rim sections of three Dan River Net Impressed jars (Vessels 17, 18, and 19), were recovered from this zone. A clay disk and numerous stone flakes also were found in Zone 3.

*Feature 18.* Feature 18 was an oval, cone-shaped soil disturbance located just south of Feature 11 in Square 460R440. It measured 1.6 ft by 2.5 ft at the base of plowzone and extended 2.0 ft into subsoil. The fill was a very dark grayish brown (2.5Y 3/2) sandy loam mottled with bits of clay and charcoal, and it contained only three very small fragments of animal bone. This feature most likely represents a tree disturbance.

*Discussion.* The 36 features excavated at the Gravely site can be placed into six groups based on morphology, content, and probable function. Six features (TP- 6, 15, and 16; and Features 7, 11, and 17) are clearly recognizable as bell-shaped storage pits. Most contained stratified fill zones that contained large numbers of artifacts. All were more than 2.0 ft in diameter, and all but one extended more that 2.0 ft into subsoil.

Thirteen other straight-sided pits were excavated, and many of these probably also represent storage facilities. This feature category includes: TP- 1, 2, 3, 7, 9, 12, and 13; and Features 2, 4, 8, 9, 10, and 16. With few exceptions, these features did not extend more than 1.5 ft into subsoil, and they usually contained a single zone of fill.

The 13 features comprising the third category—bowl-shaped basins—are more difficult to interpret. They include: TP- 4, 5, 8, 10, 11, and 14; and Features 1, 3, 6, 12, 13, 14, and 15. With three exceptions, all were dug less than 1.0 ft into subsoil, and only one contained more than a single zone of fill. While some of these features may represent shallow pits facilities with rounded bottoms, most do not appear to be storage facilities. Some may have been dug to obtain clay for architectural purposes or as shallow pit hearths that were not used intensively; others may simply represent depressions that were filled in the refuse.

The remaining four features represent two probable tree disturbances (Features 5 and 18), a probable posthole or animal burrow (F-1), and an area of buried midden (F-2).

#### POTTERY

Four ceramic series were identified in the assemblage of pottery from the Gravely site. Most potsherds and vessels were classified as late prehistoric Dan River series; however, a few potsherds in the collection were classified as late prehistoric Uwharrie and New River series, and three potsherds were classified as Middle Woodland Yadkin series. Most vessels in the assemblage are jars with net-impressed exteriors and tempered with sand or crushed quartz.

Dan River pottery was manufactured throughout the western Piedmont in central and northern North Carolina and southern Virginia during the Late Prehistoric period. Sites with Dan River pottery are distributed throughout most of the Dan River drainage from its headwaters along the eastern flank of the Blue Ridge to about 20–30 miles above the Dan River's confluence with the Roanoke, between Danville and South Boston, Virginia (Egloff et al. 1994). Sites with Dan River pottery also occur in the central and southern part of the Yadkin River drainage. Sites with a majority of Dan River pottery are distributed westward along the Yadkin River to about 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.).

Coe and Lewis (1952) first defined the Dan River series while describing 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). However, in the northern area of the distribution, Dan River pottery was manufactured throughout the Contact period (Buchanan 1986; Klein 1994). Along the upper Dan River, Dan River potters incorporated new surface treatments and vessels forms, and made changes in paste recipes after about A.D. 1450. 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).

The Dan River series is one of several related late prehistoric wares characterized by net-impressed exteriors and mineral temper. This broad pottery tradition incorporates several adjacent river drainages in the Piedmont and Blue Ridge provinces of Virginia and North Carolina. Tempering agents, certain vessel forms, and decorative attributes distinguish the pottery series within this broad tradition. These series include the feldspar-tempered Haw River series from the Haw and Eno drainages (Ward and Davis 1993); the sand-tempered Clarksville series from along the Roanoke River below its confluence with the Dan (Evans 1955); the limestone-tempered Radford series in the Roanoke, New, and Tennessee drainages in southwest Virginia (Egloff 1987); and the sand-and-quartz-tempered Wythe variant of the Dan River series in the Clinch River drainage (Egloff 1987).

The 1969 investigations at the Gravely site recovered 6,126 potsherds. Analysis was limited to all sherds from excavated features and decorated sherds from the plowzone and surface. Analyzed sherds represent about 22% (n=1,328) of the total sample. A much larger pottery sample of 20,973 sherds (greater than 1/2-inch in diameter) was recovered in 1991, not including an additional 1,012 sherds (less than 1/2-in diameter) retrieved from waterscreening. The 1991 analyzed sample represents about 9% (n=1,858) of all recovered sherds, but almost 94% of sherds from features. Potsherds from the plowzone were not analyzed.

Attributes recorded for each analyzed potsherd include: temper type, exterior surface treatment, interior surface treatment, portion of vessel represented, vessel decoration (if present), and lip modification (for rim sherds). The most common pottery type in the collection is Dan River Net Impressed, which accounts for more than two-thirds of all identifiable potsherds in the assemblage. Just less than 15% of identifiable sherds are Dan River Roughly Smoothed and nearly nine percent are Dan River Plain. Twenty partially reconstructed vessels (designated Vessels 1–20) are present in the collection. Vessel shape, rim diameter, and vessel profile were determined for all of these vessels (see Appendixes 4 and 5). Most of the vessels found at the Gravely site are jars with straight to slightly everted rims.

A description of each pottery type represented in the assemblage follows. Table 1 presents the distribution of these types by excavated context.

	Dan River Net	Dan River Roughly	Dan River	Dan River Cord	Dan River Corncob	Dan River	New River	Yadkin Cord
Context	Impressed	Smoothed	Plain	Marked	Impressed	Brushed	Plain	Marked
1969 Excava	tions							
F-1	-	_	-	_	_	_	_	_
TP-1	7	_	2	1	_	_	_	_
TP-2	, 90	17	3	2	10	_	_	_
TP-3	2	-	-	-	-	_	_	_
TP-4	24	4	3	3	1	_	_	_
TP-5	10	1	1	1	-	_	_	_
TP-6	125	18	9	2	1	_	_	_
TP-7	24	-	4	1	-	_	_	_
TP-8	24	13	1	5	_	_	2	3
TP-9	23 57	11	1	5	_	_	-	-
TP-10	24	4	1	_	_		_	
TP-11	8	4	1	_	_		_	
TP-13	29		- 1	-	- 1	-	-	-
TP-14	29 7	8	3	-	1	-	-	-
TP-15	92	21	6	3	- 1	-	-	-
TP-16	153	35	2	4	2	1	-	-
Plowzone	29	6	-	+	2	1	-	-
Surface	104	60	13	2	-	- 1	-	-
Sulface Sub-total	810	210	13 50	24	16	1 2	2	3
Sub-total	810	210	50	24	10	2	2	3
1991 Excava	itions							
Feature 1	5	1	1	-	12	-	-	-
Feature 2	55	9	3	-	4	-	-	-
Feature 3	-	-	-	-	-	-	-	-
Feature 4	23	2	1	-	-	-	-	-
Feature 5	-	-	-	-	-	-	-	-
Feature 6	6	1	-	-	-	-	-	-
Feature 7	232	41	18	1	1	3	-	-
Features 7/8	4	3	-	1	-	-	-	-
Feature 8	16	2	1	1	-	-	-	-
Feature 9	35	8	2	-	-	-	-	-
Feature 10	20	7	14	1	-	-	-	-
Feature 11	329	44	123	24	13	-	-	-
Feature 12	37	6	3	-	-	-	-	-
Feature 13	21	5	1	-	-	-	-	-
Feature 14	12	-	-	-	-	-	-	-
Feature 15	-	-	-	-	-	-	-	-
Feature 16	56	6	2	-	-	-	-	-
Feature 17	200	40	16	57	1	-	-	-
Plowzone	-	-	-	-	-	-	-	-
Sub-total	1,051	175	185	85	31	3	0	0
Total	1,861	385	235	109	47	5	2	3
Total Percent	58.41			3.42				
reiceilt	30.41	12.08	7.38	3.42	1.48	0.16	0.06	0.09

Table 1. Distribution of pottery at the Gravely site.

	Uwharrie Net	Uwharrie Cord	Uwharrie Indeter-	Burnished	Indeter-	Total	Not	
Context	Impressed	Marked	minate	Exterior	minate	Analyzed	Analyzed	Total
1969 Excav	ations							
F-1	12	7	-	-	-	19	0	19
TP-1	-	-	-	-	1	11	0	11
TP-2	-	-	-	-	24	146	0	146
TP-3	-	-	-	-	-	2	0	2
TP-4	-	-	-	-	10	45	0	45
TP-5	-	-	-	-	4	17	0	17
TP-6	6	4	2	-	22	189	0	189
TP-7	-	-	_	-	7	36	0	36
TP-8	3	-	-	-	-	52	0	52
TP-9	-	-	-	-	3	72	0	72
TP-10	-	-	-	-	4	33	0	33
TP-11	_	_	_	-	-	12	0	12
TP-13	-	_	_	2	2	43	0	43
TP-14	_	_	_	-	- 7	25	0	25
TP-15	-	_	_	_	17	140	0	140
TP-16	_	_	_	-	27	224	0	224
Plowzone	_	_	_	-	3	38	0	38
Surface	-	_	_	-	44	224	4,798	5,022
Sub-total	21	11	2	2	175	1,328	4,798	6,126
Sub total	21	11	2	2	175	1,520	4,790	0,120
1991 Excav	ations				_			•
Feature 1	-	-	-	-	5	24	6	30
Feature 2	-	-	-	-	25	96	27	123
Feature 3	-	-	-	-	1	1	0	1
Feature 4	-	-	-	-	4	30	2	32
Feature 5	-	-	-	-	1	1	0	1
Feature 6	-	-	-	-	10	17	0	17
Feature 7	-	-	-	-	47	343	20	363
Features 7/8	-	-	-	-	4	12	0	12
Feature 8	-	-	-	-	-	20	3	23
Feature 9	-	-	-	-	10	55	14	69
Feature 10	-	-	-	-	8	50	4	54
Feature 11	-	-	-	-	109	642	35	677
Feature 12	-	-	-	-	12	58	1	59
Feature 13	-	-	-	-	5	32	1	33
Feature 14	-	-	-	-	-	12	0	12
Feature 15	-	-	-	-	1	1	0	1
Feature 16	-	-	-	-	7	71	0	71
Feature 17	-	-	-	-	79	393	7	400
Plowzone	-	-	-	-	-	-	18,995	18,995
Sub-total	0	0	0	0	328	1,858	19,115	20,973
Total	21	11	2	2	503	3,186	23,913	27,099
Percent	0.66	0.35	0.06	0.06	15.79	100	,_ 10	,0//

Table 1 continued.

#### Dan River Net Impressed (Coe and Lewis 1952)

Sample Size. N=1,861 potsherds.

*Temper*. Nearly three-quarters (n=1,361,73.1%) of Dan River Net Impressed potsherds from the Gravely site are tempered with a mixture of sand and crushed quartz. The remainder (n=499) are tempered with only sand except for a single sherd that is tempered with a mixture of quartz and feldspar. The sand temper is somewhat coarse, and it makes most sherds fairly rough to the touch. As a general rule, the paste of Dan River series pottery is hard and compact, and the temper has been thoroughly mixed into the paste.

*Exterior Surface Finish.* The exterior surface of this type of pottery has impressions of nets made from plied cordage. In most cases impressions of coarse knots are visible, though in some cases the net may have been woven rather than knotted. No attempt was made to determine specific types of netting.

Interior Surface Finish. The interior surface of Dan River Net Impressed vessels were thinned with a serrated tool. Nearly half (n=764, 41.1%) of the potsherds retain evidence of this wall thinning in the form of parallel striations, while 58.2% (n=1,083) were smoothed after thinning. The interior surface treatment on 14 sherds could not be determined.

Decoration. Fewer than ten percent (n=151, %=8.2) of Dan River Net Impressed potsherds are decorated (excluding lip modification). One or more horizontal rows or bands of punctations, fingernail pinches, or incised lines around the neck or shoulder are the most common forms of exterior surface modification, and they account for 65.5% of all decorations (Figures 14–17). More than one-quarter (n=41, 27.9%) of decorated sherds have a single row of fingernail pinches. Horizontal bands of punctations made with dowels and hollow reeds are also present. These include single (n=23) and double (n=3) rows of wedge-shaped punctations, a single row of circular reed punctations (n=9), and a single row of punctations made with the edge of a hollow reed (n=2). Ten sherds have a horizontal band of parallel incised lines. Six sherds are decorated with a horizontal incised line or band of punctations above a series of incised triangular or geometric design elements. Five sherds are decorated with groups of parallel diagonal lines that encircle the vessel neck or shoulder. Eleven sherds have decorations that include a zigzag line or a series of Vs or inverted Vs (Figure 18b). Four of these have a simple incised zigzag line around the vessel neck; four have a series of inverted Vs above a horizontal band composed of circular reed punctations; and three have a series of stacked incised Vs below a horizontal band of fingernail pinches. Ten sherds have decorations that include a block design element. One of these consists of an incised rectangle filled with small punctations. The other nine sherds are from a single vessel (Vessel 19). This vessel was decorated with a series of diagonally oriented incised rectangles interspersed with groups of short, diagonal-incised lines (Figure 18a). These decorations form a band around the

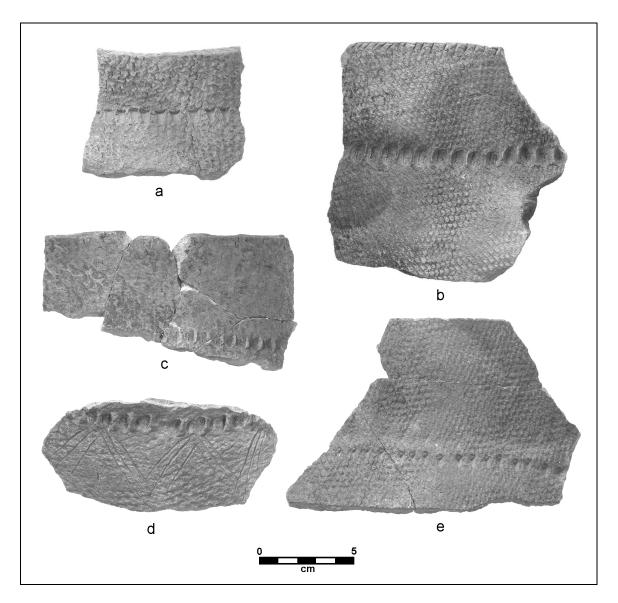


Figure 14. Dan River Net Impressed vessel sections and decorated sherds from the Gravely site: section of Vessel 4 (with decoration I-A-3) from TP-6 (*a*); large rim sherd (with decoration I-A-1) from TP-16 (*b*); section of Vessel 20 (with decoration I-A-1) from Feature 11 (*c*); neck sherd (with decoration III-D-5) from Feature 16 (*d*); and reconstructed rim sherd (with decoration I-A-3) from Feature 2 (*e*).

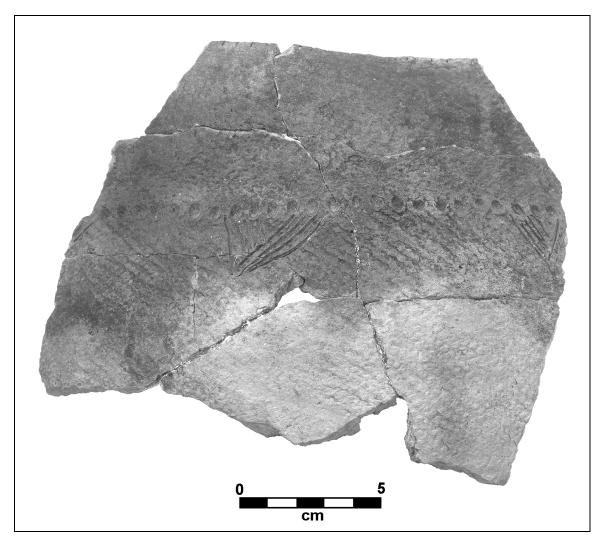


Figure 15. Rim section of Vessel 2, a Dan River Net Impressed jar with an incised and punctated design (decoration I-E-4) from TP-6 at the Gravely site.

vessel neck. The remaining 16 decorations consist of miscellaneous incised lines that represent portions of unidentifiable incised designs.

In addition to these exterior surface decorations, five sherds have fingernail punctations on the interior surface. These punctations are oriented perpendicular to the rim and are positioned just below the lip.

One sherd has a hole made prior to firing. This hole may have been cut to accommodate a rivet for attaching a handle or may also have been intended to allow suspension of the pot. Two sherds have applied nodes: one is a split node and the other is a simple, round node. A rectangular bump of clay was formed on one sherd by scraping up peels of clay from four opposing directions.

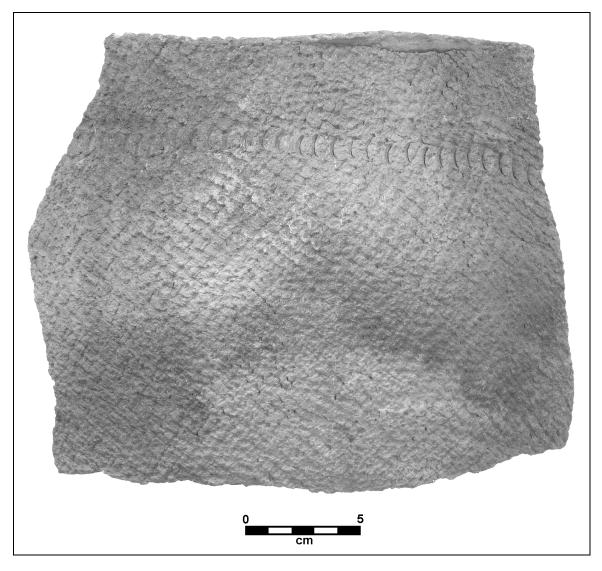


Figure 16. Very large Dan River Net Impressed rim sherd (Vessel 13) with decoration I-A-1 from Feature 11 at the Gravely site.

Half of all rim sherds in this assemblage were modified (n=94, 50.3%). Most modified rim sherds have incisions or notches across the lip or on the exterior margin of the lip, but one rim sherd has circular reed punctations along the top of the lip. The most common form of lip modification consists of parallel incisions or notches oriented diagonally across the lip (n=37). Short, diagonal incisions or notches along the exterior margin of the lip constitute the second-most common form of lip modification (n=32). Parallel incisions straight across the lip or along the exterior margin of the lip account for about one-quarter of all lip modifications (n=21). Finally, three rim sherds have incisions or notches that form a zigzag pattern across the top of the lip.

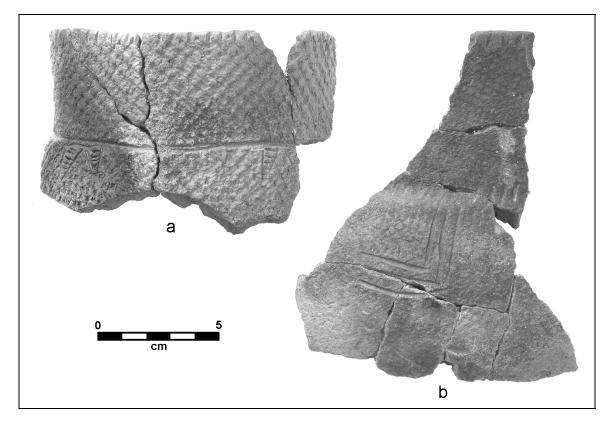


Figure 17. Dan River Net Impressed vessel sections from the Gravely site: a reconstructed section of Vessel 9 (with decoration I-F-2) from Feature 8 (a); and a reconstructed section of a jar (with decoration I-F-1) from TP-15 (b).

*Form.* Eighteen partially reconstructed Dan River Net Impressed vessels are present in the sample. All are jars with everted or straight rims. Six of these jars have intact shoulders. Five of the six jars have shoulders that exceed the diameter of the orifice. Rim diameters of all Dan River Net Impressed jars vary between 12 cm to 32 cm, and have a median diameter of 20 cm. Only one of the 187 rim sherds in the assemblage is folded.

## **Dan River Roughly Smoothed**

Sample Size. N=385 potsherds.

*Temper.* Just more than half (n=218, 59.7%) of Dan River Roughly Smoothed potsherds are tempered with a mixture of sand and quartz. Most of the other sherds are tempered with sand (n=161, 41.8%), except for six potsherds that have a mixture of feldspar and quartz temper.

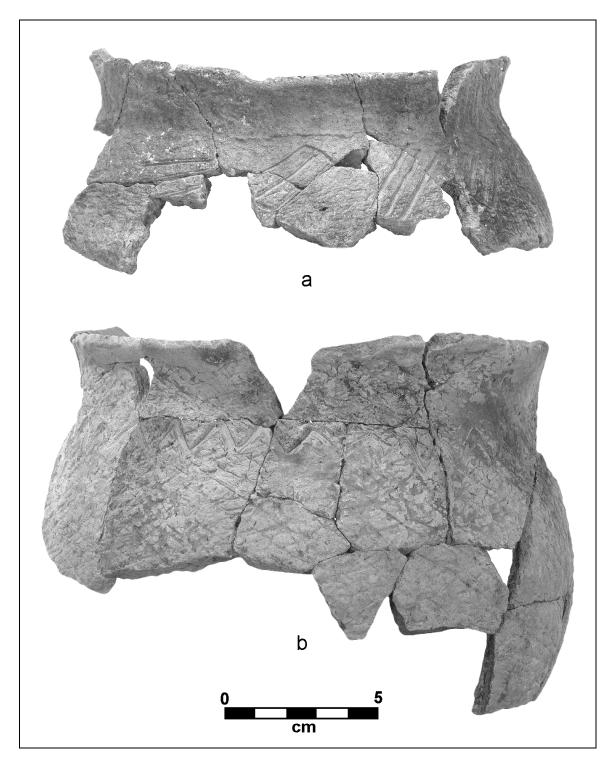


Figure 18. Dan River Net Impressed vessel sections from the Gravely site: a reconstructed section of Vessel 19 (a jar with incised decoration IV-C-1) from Feature 17 (*a*); and a reconstructed section of Vessel 14 (a jar with incised decoration III-A-2) from Feature 11 (*b*).

*Exterior Surface Finish.* Dan River Roughly Smoothed potsherds have incompletely smoothed exteriors that may have been textured with a net or cord-wrapped paddle and then partially smoothed before firing.

*Interior Surface Finish.* Almost two-thirds (n=241, 62.6%) of Dan River Roughly Smoothed potsherds have smoothed interiors. The remainder (except for five indeterminate sherds) have scraped interiors.

*Decoration.* About seven percent of Dan River Roughly Smoothed potsherds have decorations other than lip modifications (n=24). All identifiable exterior surface decorations consist of one or more rows of fingernail pinches or punctations that encircle the neck or shoulder of the vessel. Fingernail pinches account for about one-third (n=7), while wedge-shaped (n=6) or circular reed (n=4) punctations account for the remainder. Six sherds have unrecognizable decorations composed of incised lines.

Forty percent of the rim sherds (n=16, 41.0%) are modified. Most lip modification consists of notches or incisions along the top of the lip (n=13). Seven of these are oriented straight across the lip and six are oriented diagonally. Three rim sherds have notches or incisions along the exterior margin of the lip. In two cases, these notches or incisions are oriented diagonally; in the third instance, they are oriented perpendicular to the lip.

One Dan River Roughly Smoothed sherd has a small loop handle that terminates in a notched rim peak. Finally, Two sherds have fingernail punctations on the interior surface.

*Form.* Although no partially reconstructed vessel sections were assembled from the Dan River Roughly Smoothed potsherds, most rim sherds are from jars. None of the 39 rim sherds in the sample is folded.

## Dan River Plain (Coe and Lewis 1952)

Sample Size. N=235 potsherds.

*Temper.* More than half (n=126, 53.6%) of Dan River Plain potsherds are tempered with a mixture of sand and crushed quartz. The remainder (n=109) are tempered with sand.

*Exterior Surface Finish.* All of these potsherds are from vessels that were carefully and uniformly smoothed on the exterior surface.

*Interior Surface Finish.* Less than three quarters of Dan River Plain potsherds have plain, smoothed interior surfaces (n=170, 72.3%), while about one quarter (n=57) have scraped interiors. The interior surface treatment of eight sherds could not be determined.

*Decoration.* About eight percent of the Dan River Plain potsherds have exterior surface decorations. Six sherds from a small bowl (Vessel 16) have a band of horizontal incised lines below the rim (Figure 19b). Five other conjoining sherds have a row of circular reed punctations with an incised geometric design below it. One sherd has a band of multiple parallel incised lines with a series of incised Vs below. The incised Vs are filled with small punctations.

Just over one quarter (n=11) of all rim sherds have decorated lips. Six of these have diagonally oriented incisions or notches along the top of the lip, and three have notches or incisions straight across the lip. One sherd has groups of straight incisions or notches separated by undecorated spaces. The final decorated rim sherd has small incisions or notches along the exterior margin of the lip.

No Dan River Plain potsherds have applied decorations; however, two sherds that may be from the same vessel have fingernail punctations on the interior surface.

*Form.* Dan River Plain sherds represent both jar and bowl forms. The only partially reconstructed vessel in the sample (Vessel 16) is a small bowl with a slightly inverted rim. The orifice diameter of this bowl is 8 cm. No Dan River Plain rim sherds are folded.

## Dan River Cord Marked (Coe and Lewis 1952)

Sample Size. N=109 potsherds.

*Temper.* Eighty-three (76.1%) potsherds are tempered with a mixture of sand and quartz, and 25 potsherds are tempered with sand. One sherd's temper could not be determined.

*Exterior Surface Finish.* Dan River Cord-Marked sherds are from vessels whose exterior surfaces were stamped with a cord-wrapped malleating paddle. Typically, the cord impressions are oriented perpendicular to the vessel rim, although sometimes they are oriented obliquely. No attempt was made to differentiate the types of cordage twist.

*Interior Surface Finish.* Eight-six (78.9%) of the Dan River Cord-Marked sherds have plain, smoothed interiors. Of the remaining sherds, 21 were scraped and two could not be identified.

*Decoration.* Only two Dan River Cord Marked sherds have exterior surface decorations. Both sherds have a horizontal band of punctations that encircles the vessel neck or shoulder. One sherd has wedge-shaped punctations, and the other has circular reed punctations.

One rim sherd has been modified by applying notches or incisions straight across the top of the lip. No decorative appendages are present.

*Form.* Although no vessel could be reconstructed from this group of potsherds, rim sherds indicate that this ceramic type represents mostly jar forms.

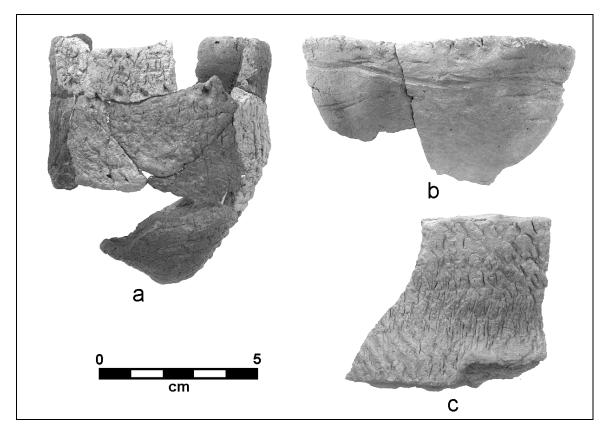


Figure 19. Dan River Cob Impressed and Dan River Plain vessel sections and rimsherd from the Gravely site: miniature cob-impressed jar (Vessel 15) from Feature 11 (a); plain bowl (Vessel 16) from Feature 11 (b); and cob-impressed rimsherd from Feature 17 (c).

## Dan River Corncob Impressed (Coe and Lewis 1952)

Sample Size. N=47 potsherds.

*Temper.* All but five of these sherds (89.4%) are tempered with sand. The other sherds are tempered with a mixture of sand and quartz.

*Exterior Surface Finish.* These potsherds represent vessels whose exterior surfaces were textured with a dry corncob. The one reconstructed Dan River Corncob Impressed miniature jar (Vessel 15) has cob impressions over the entire exterior of the vessel (Figure 19*a*).

*Interior Surface Finish.* Most sherds in this assemblage have plain interiors (n=34, 72.3%), while 11 have scraped interiors. The interior surfaces of two sherds could not be determined.

*Decoration.* The miniature jar was reconstructed from eight sherds. It is decorated with wedge-shaped punctations around the rim. One sherd from another vessel also has the same kind of decoration. No handles or other appendages were observed on Dan River Corncob Impressed sherds.

*Form.* One miniature jar with a straight rim was reconstructed from Dan River Corncob Impressed sherds. The orifice diameter of this small vessel is 6 cm.

## **Dan River Brushed**

Sample Size. N=5 potsherds.

*Temper.* Three sherds have sand temper, and two 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. All of these sherds have scraped interiors.

Decoration. All potsherds are undecorated body sherds.

Form. No information was obtained regarding vessel form.

New River Plain (Evans 1955; Holland 1970)

Sample Size. N=2 potsherds.

*Temper.* These sherds have lenticular voids left by the leaching of crushed mussel-shell temper.

*Exterior Surface Finish.* These sherds have a roughly smoothed exterior and may have been cord-marked prior to smoothing.

Interior Surface Finish. Both sherds have plain interiors.

Decoration. Neither of these body sherds is decorated.

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

## Yadkin Cord-Marked (Coe 1964)

Sample Size. N=3 potsherds.

*Temper.* All the sherds are tempered with a mixture of sand and quartz.

*Exterior Surface Finish.* These potsherds are from vessels whose exterior surfaces were textured with a cord-wrapped malleating paddle.

*Interior Surface Finish.* Two sherds have plain interiors; the other sherd has a scraped interior.

Decoration. None of these body sherds is decorated.

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

#### Uwharrie Net Impressed (see Coe 1952)

Sample Size. N=21 potsherds.

*Temper.* Ten of these sherds are tempered with a mixture of quartz and feldspar, and 11 are tempered with a mixture of sand and quartz.

*Exterior Surface Finish.* These potsherds are from vessels whose exterior surfaces were textured with a coarse, knotted net (Figure 20*c*-*d*).

*Interior Surface Finish.* Eighteen of these are scraped on the interior, and three sherds have plain interiors.

*Decoration.* None of the 20 body sherds is decorated, but the one rim sherd has diagonally oriented notches or incisions across the top of the lip.

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

#### Uwharrie Cord Marked (see Coe 1952)

Sample Size. N=11 potsherds.

*Temper*. Eight of these potsherds are tempered with a mixture of sand and quartz, and three are tempered with a mixture of quartz and feldspar.

*Exterior Surface Finish.* These potsherds are from vessels whose exterior surfaces were textured with a malleating paddle wrapped with coarse plied cords (Figure 20*a-b*).

Interior Surface Finish. All of these sherds have scraped interior surfaces.

Decoration. None of these body sherds is decorated.

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

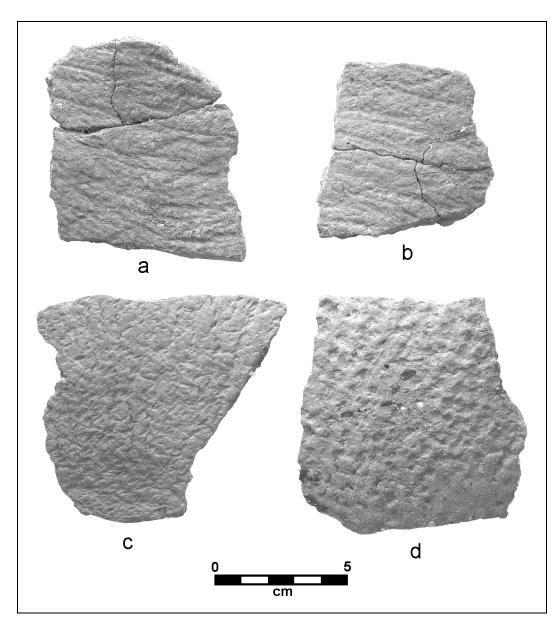


Figure 20. Uwharrie Cordmarked (*a-b*) and Uwharrie Net Impressed (*c-d*) sherds from F-1 at the Gravely site.

# **Uwharrie Series (Indeterminate)**

Sample Size. N=2 potsherds.

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

*Exterior Surface Finish.* The exterior surfaces of these sherds are eroded and the treatment could not be identified.

Interior Surface Finish. Both sherds have plain interiors.

Decoration. Neither of these body sherds is decorated.

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

## **Burnished Exterior**

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 carefully burnished or polished with a smooth stone or tool.

*Interior Surface Finish.* The interior surfaces of both burnished sherds are scraped.

Decoration. Both of the burnished sherds are undecorated body sherds.

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

## Discussion

Over 80 percent of all analyzed sherds from the Gravely site have been classified as Dan River series pottery. These Dan River sherds have surface treatments, temper, decoration, and vessel form that are consistent with 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; Davis et al. 1997a, 197b, 1997c, 1997d; Holland 1970; Ward and Davis 1993).

Table 2 presents a cross tabulation of exterior surface treatment and selected ceramic attributes recorded during the analysis of pottery from the Gravely site. Two-thirds of the assemblage is tempered with a mixture of sand and quartz, and most of the remainder are tempered with sand. Almost two-thirds of the assemblage has plain interiors and just over one-third has scraped interiors.

## **Pottery Decoration**

Nearly 200 potsherds in the Gravely site pottery assemblage have surfacedisplacement decorations on the exterior surface. These exterior surface decorations have been classified using a system developed for Dan River phase pottery in the upper Dan drainage (Davis et al. 1997a). Aside from the classified decorations, four sherds have other kinds of exterior surface-displacement decorations: one sherd has a hole that was cut through the wall before it was fired; one has a rectangular, node-like decoration created by scraping up bits of clay; and two other sherds have unidentified punctations.

	Net	Roughly		Cord	Corncob			
Attribute	Impressed	Smoothed	Plain	Marked	Impressed	Brushed	Total	Percent
Temper								
Sand & Quartz	1,361	218	126	83	5	2	1,795	67.9
Sand	499	161	109	25	42	3	839	31.8
Quartz & Feldspar	· 1	6	-	-	-	-	7	0.3
Indeterminate	-	-	-	1	-	-	1	0.0
Total	1,861	385	235	109	47	5	2,642	100.0
Interior Surface								
Plain	1,083	241	170	86	34	-	1,614	61.1
Scraped	764	139	57	21	11	5	997	37.7
Indeterminate	14	5	8	2	2	-	31	1.2
Total	1,861	385	235	109	47	5	2,642	100.0
Decoration								
Class I	105	18	13	2	9	-	147	69.0
Class II	5	-	-	-	-	-	5	2.3
Class III	11	-	1	-	-	-	12	5.6
Class IV	10	-	-	-	-	-	10	4.7
Class VI	16	6	1	-	-	-	23	10.8
Other	9	4	3	-	-	-	16	7.5
Total	156	28	18	2	9	0	213	99.9

Table 2. Frequency distribution of ceramic attributes by Dan River series types at the Gravely Site.

Nine sherds have surface-displacement decorations on the interior of the rim. These consist of a row of vertical fingernail impressions. Three sherds have applied appendages: one loop handle and two nodes. In addition, one detached strap handle with three rows of punctations was recovered. The following is a description of the basic design elements that comprise the exterior surface decorations and a discussion of those decorations.

## **Design Elements**

*Surface-Displacement Decoration.* Six decorative elements were identified on the 197 decorated sherds from the Gravely site. The most common decorative element is a horizontal band of punctations or fingernail pinches. This element is found in threequarters (n=150, 76.1%) of all exterior surface decorations. Fingernail pinches are present in 57 decorations. Punctations also were made with the edge of a squared dowel (n=54), fingernail (n=1), a triangular-shaped dowel (n=1), and a hollow reed (n=25). The bands of punctations occur singly and in pairs. In most cases, this design element occurs as the only decoration on a vessel, but these horizontal bands also occur in combination with incised Vs and triangles, block elements, and geometric designs. Another common decorative element in the Gravely site assemblage is a horizontal band of parallel, incised lines (n=19, 9.6%). This element occurs as the only decoration and also in combination with nodes, incised Vs, and geometric elements.

Zigzag lines, or a series of Vs or inverted Vs, is the third design element found in decorations in this assemblage. This type of decorative element is found on 14 sherds.

Groups of diagonal, incised lines are found on five sherds. This design element does not occur in combination with other elements in this assemblage.

Block designs, filled triangles, and geometric designs are also found in decorations in this assemblage. Nineteen sherds have decorations that include this kind of design element.

The final basic design element consists of miscellaneous incised lines. This category includes incomplete incised designs and designs which do not conform to a recognizable pattern. Miscellaneous incised lines occur on 28 sherds (14.2%).

*Appendages.* Handles and nodes are the only two types of appendages that were observed on pottery from the Gravely site. A single example of an attached loop handle was found. It terminates in a notched rim peak. A detached strap handle also was found, and it is decorated with three rows of punctations. Finally, two sherds have nodes.

#### **Classification of Exterior Surface Decorations**

Exterior surface-displacement decorations on Gravely site pottery have been described using a classification scheme first developed for the Dan River series pottery assemblage from the Box Plant site (Davis et al. 1997a). This classification scheme has been expanded to include decorations from other sites in the upper Dan drainage (Davis et al. 1997b, 1997c, 1997d) and has been further expanded here to include decorations unique to the Gravely site. 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. Subgroups consist of similar designs formed by different techniques. The type category consists of individual pottery decorations. Appendix 3 presents the distribution of decoration types by pottery type for the Gravely site assemblage.

Class I. The most common class of decoration on Dan River pottery from the Gravely site is horizontal bands of finger pinches or punctations that encircle the neck or shoulder of jars (Figure 22). Four subgroups of decorations within Class I have been identified. Decorations in Subgroup A consist of a single band of punctations (Figures 14a-c,e and 16). Subgroup B consists of decorations with two or more parallel bands of punctations or horizontal incised lines. Subgroup E is composed of decorations with one or more horizontal bands and one or more triangular design elements (Figures 15 and 21a). The final subgroup, Subgroup F, is composed of one or more horizontal bands and a repeated geometric design element (Figures 17 and 21f). Subgroups C and D were not represented at the Gravely site.

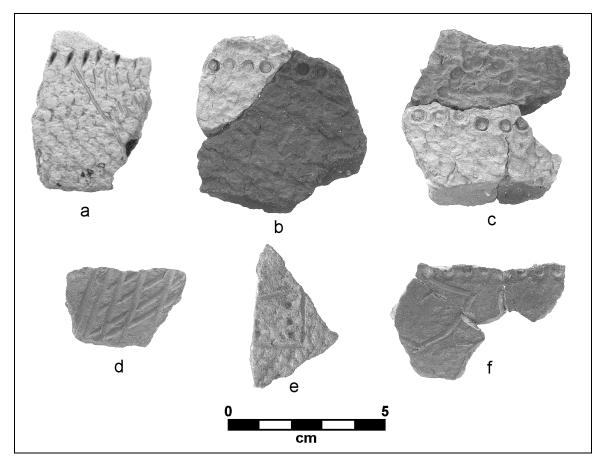


Figure 22. Decorated Dan River series sherds from the Gravely site: net-impressed neck sherd (from TP-6) with decoration I-E-3 (*a*); net-impressed neck sherds (from Feature 11) with decoration III-B-4 (*b*-*c*); plain sherd (from Feature 17) with miscellaneous incisions (decoration VI-A-1) (*d*); net-impressed sherd (from Feature 7) with decoration IV-A-3 (*e*); and plain neck sherd (from Feature 7) with decoration I-F-3 (*f*).

*Class II.* Class II decorations are characterized by groups of diagonal, incised lines that encircle the neck or shoulder of a vessel (Figure 23). Subgroup A decorations, composed of only this basic design element, are the only type of Class II decoration in the assemblage.

*Class III.* Horizontal, incised zigzag lines or a series of Vs characterize decorations in this class (Figure 23). Three subgroups in this class of decoration have been identified at the Gravely site. The Subgroup A decoration consists of an incised zigzag line (Figure 18*b*). The Subgroup B decoration consists of a series of inverted Vs created by punctations positioned above a horizontal band of punctations (Figure 21*b*-*c*). The final subgroup in this class—Subgroup D—has two decorations that consist of a horizontal band of punctations with incised Vs below (Figure 14*d*).

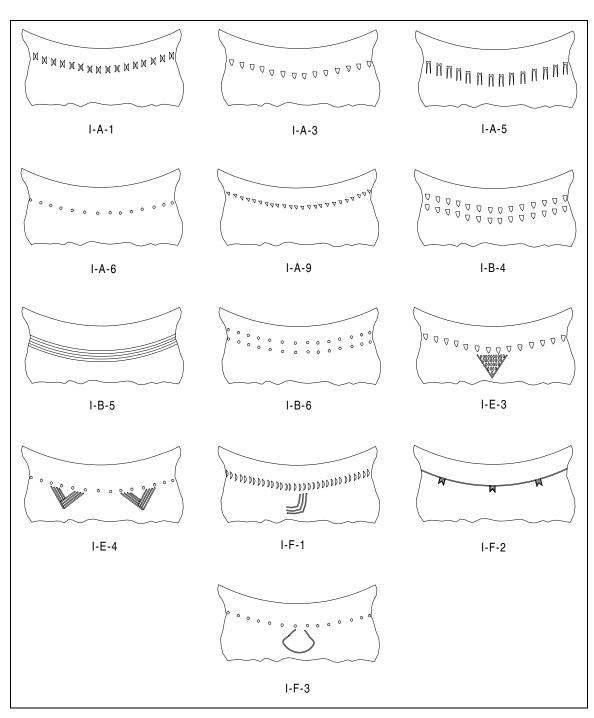


Figure 22. Class I pottery decorations found at the Gravely site.

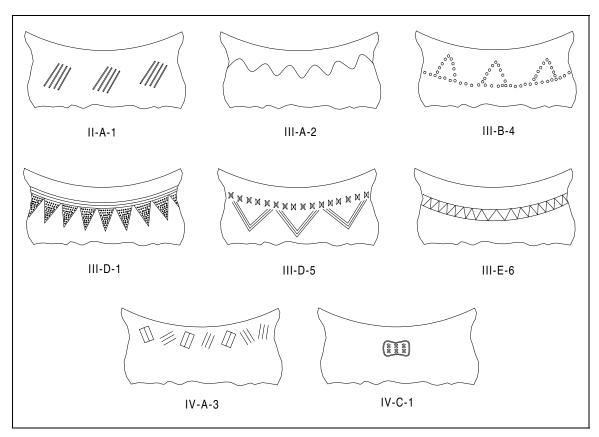


Figure 23. Class II, II, and IV pottery decorations found at the Gravely site.

*Class IV.* This class of decoration is characterized by individual block designs (Figure 23). Two subgroups are present within this class. Subgroup A consists of a free-standing, filled-block design (Figure 21*e*). Subgroup C is composed of a series of filled-block designs that form a horizontal band (Figure 18*a*).

*Class VI*. This final class of decoration includes miscellaneous incised lines (Figure 21*d*). 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 on the potsherd.

## **OTHER CLAY ARTIFACTS**

## **Clay Pipes**

One complete pipe, three pipes with broken stems, four pipe-bowl fragments, four elbow fragments, and 13 pipe-stem fragments were recovered from the Gravely site (Figure 24*a*-*d*). The complete pipe, recovered from TP-6, is a small, plain elbow pipe. It is 74 mm long, has a 20-mm diameter cylindrical bowl, and has a stem that tapers from

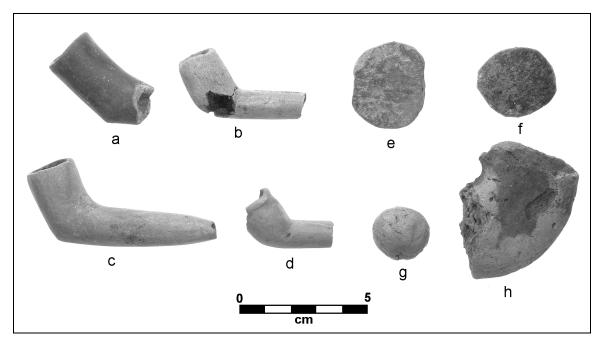


Figure 24. Other clay artifacts from the Gravely site: clay pipes from TP-6 (a, c), Feature 11 (b), and the surface (d); pottery disks from Feature 4 (e) and Feature 17 (f); clay ball from Feature 11 (g); and fragment of a large, perforated clay disk from Feature 11 (h).

16 mm to 8 mm in diameter at the bit. This pipe is made of fine, micaceous clay and may be partially burnished in some areas. All three pipes with broken stems are made from similar fine, micaceous clay. One of these pipes (from Feature 11) is a small elbow pipe with a cylindrical bowl. Although the lip of the bowl is eroded, remnants of incisions or notches across the top of the lip are visible. The bowl of this pipe has a maximum diameter of 18 mm. The stem appears to be straight and has a diameter of 12 mm. The exterior of the bowl is plain, but the stem is burnished. The second pipe with a broken stem came from the surface and is also a small elbow pipe, but it has a squared flange along the top of the bowl. The pipe bowl has a diameter of 17 mm and the maximum diameter of the stem is 12 mm. The stem appears to taper slightly toward the bit. Pipes like this one are commonly found on late Dan River phase sites in the region. The third pipe with a broken stem came from TP-6 and is larger than the other two. It has a long, cylindrical bowl that is 22 mm in diameter, and the bowl is separated from the stem by a point at the elbow.

Of the more fragmentary pipes, three pipe bowls appear to be cylindrical and one is bulbous. The pipe with the bulbous bowl is made from more sandy paste than the other pipes. The four elbow sections are also made of sandy paste, and all appear to be from pipes with round stems. Seven of the pipe-stem fragments are round in cross section and taper toward the bit. The shapes of the other four are indeterminate. Six of the pipe stems have intact bits: three of the bits are plain, two terminate in round flanges, and two taper as if they have been whittled down. One large pipe stem is bi-convex in cross section and is made from sandy paste; one of the stems is decorated with two modeled projections and a circular punctation, and one small stem appears to be square in cross section. Two of the pipe stems are burnished.

#### **Miscellaneous Clay Artifacts**

Two objects from Feature 11, catalogued as clay artifacts, appear to be a rim and neck fragment of a small, coil-built cup or miniature jar. The clay is untempered and the exterior surface of the vessel is very roughly smoothed and decorated with thick scraped lines. Another fragment of temperless clay may be either part of a notched lug handle or a clay spoon (or ladle).

Two pottery disks made from Dan River Net Impressed sherds were recovered from the Gravely site (Figure 24*e-f*). One of these came from Feature 4 and is between 20 and 40 mm in diameter. The second pottery disk came from Feature 17 and is 32 mm by 30 mm in diameter.

In addition to disks made from potsherds, two disks from the site are modeled. One large specimen with a central perforation has a diameter of about 90 mm and a maximum thickness of 22 mm (Figure 24*h*). It came from Feature 11. Five other modeled clay disks may be represented by small fragments. Two of these fragments appear to be incised with cross-hatched lines.

Other clay artifacts include 10 pottery coil fragments, a crudely-modeled ball (with a diameter of 23 mm), and two unidentified pieces of modeled clay (Figure 24g).

#### **CHIPPED-STONE ARTIFACTS**

The artifact collections from the 1969 and 1991 excavations at the Gravely site contain 3,754 small chipped-stone and five large chipped-stone tools (Tables 3 and 4). Almost 30% (n=1,111) were recovered from features; the remainder (n=2,648) came from the plowzone or the surface. Unmodified flakes account for over 85% of all chipped-stone artifacts. The most common artifact classes are: projectile points (n=260), worked flakes (n=150), cores (n=65), bifaces (n=22), preforms, (n=8), and perforators (n=6). Although most of these artifacts can be attributed to the Dan River phase occupation of the site, some are associated with earlier cultural components.

Most chipped-stone artifacts are made of metavolcanic rock, which includes both aphyric and porphyritic rhyolitic flows and tuffs. Sources for this material are found primarily in the North Carolina Piedmont, and some of the chipped-stone artifacts at Gravely may be derived from specific quarries in the Uwharrie Mountains (Daniel and Butler 1994). Other rock types used by flintknappers at the Gravely site include locally derived vein quartz and quartz crystal, jasper (probably also derived from nearby sources), and various cherts from the Ridge-and-Valley physiographic province just west of the Blue Ridge.

	Projectile							Worked		
Context	Point	Preform	Biface	Core	Scraper	Perforator	Graver	Flake	Flake	Total
10 <b>60</b> E-1000	4									
<b>1969 Excava</b> TP-1	utions 0							-	3	3
TP-2	1	-	-	-	-	-	-	-	11	12
TP-3	-	_	-	-	_	_	-	-	1	12
TP-4	2		_	1	_	_	_	1	11	15
TP-5	-		_	-	_	_	_	2	1	3
TP-6	3	_	_	-	_	_	_	2	15	20
TP-7	-	_	_	_	_	_	_	-	3	3
TP-8	-	_	_	1	_	_	_	_	10	11
TP-9	1	-	-	-	_	-	-	_	13	14
TP-10	-	-	-	-	_	-	-	1	4	5
TP-13	_	-	-	_	-	-	-	-	6	6
TP-14	1	-	-	_	-	-	-	1	3	5
TP-15	-	-	2	_	-	-	-	-	9	11
TP-16	1	-	1	-	-	1	-	-	18	21
Plowzone	-	-	-	1	-	-	-	-	5	6
Surface	97	-	2	13	-	2	-	7	923	1,044
Sub-total	106	0	5	16	0	3	0	14	1,036	1,180
1991 Excava	ations									
Feature 1	-	-	-	-	-	-	-	-	8	8
Feature 2	-	-	-	1	-	-	-	-	31	32
Feature 3	-	-	-	-	-	-	-	-	1	1
Feature 4	1	-	-	-	-	-	-	-	22	23
Feature 5	-	-	-	-	-	-	-	-	1	1
Feature 6	-	-	-	-	-	-	-	-	9	9
Feature 7	13	-	-	2	-	-	-	1	244	260
Feature 8	-	-	-	-	-	-	-	-	17	17
Feature 9	1	-	-	-	-	-	-	-	71	72
Feature 10	-	-	-	-	-	-	-	-	69	69
Feature 11	9	-	1	-	-	-	-	2	207	219
Feature 12	1	-	-	1	-	-	-	-	43	45
Feature 13	-	-	1	-	-	-	-	-	28	29
Feature 14	-	-	-	-	-	-	-	-	2	2
Feature 15	1	-	-	-	-	-	-	-	1	2
Feature 16	1	-	-	-	-	-	-	-	23	24
Feature 17	2	-	1	1	-	-	-	1	158	163
Plowzone	125	8	14	44	2	3	2	132	1,268	1,598
Sub-total	154	8	17	49	2	3	2	136	2,203	2,574
Total	260	8	22	65	2	6	2	150	3,239	3,754

Table 3. Distribution of small chipped-stone artifacts found at the Gravely site.

Context	Chipped Axe	Chipped Hoe	Disk	Anvil	Hammerstone	Total
1969 Excavations						
TP-13	1	-	-	-	-	1
TP-16	-	1	-	-	-	1
Surface	1	1	1	1	-	4
Sub-total	2	2	1	1	0	6
1991 Excavations						
Feature 7	-	1	-	-	1	2
Feature 17	-	-	1	-	-	1
Plowzone	-	1	1	-	1	3
Sub-total	0	2	2	0	2	6
Total	2	4	3	1	2	12

Table 4. Distribution of large chipped-stone and ground-stone artifacts found at the Gravely site.

## **Projectile Points**

Two hundred and sixty whole or partial chipped-stone projectile points were recovered from the Gravely site (Table 5). Most of these are small, triangular arrow points associated with the Dan River phase; however, several Archaic and earlier Woodland types also are represented.

*Early Archaic Types.* Two reworked projectile points and two basal fragments were classified as Kirk Corner-Notched (Figure 25*a*). Coe (1964:69) describes the Kirk Corner-Notched type as having "a large triangular blade with a straight base, corner-notches, and serrated edges." This is a predominant type of the Early Archaic period and has been radiocarbon-dated at several deeply stratified sites in the lower Little Tennessee River valley to between 8,000 B.C. and 6,800 B.C. (Davis 1990:57). These specimens, made of rhyolite (n=2) and chert (n=2), were recovered from TP-16, Feature 7, and the surface (n=2).

Two projectile points from the plowzone were tentatively classified as Kirk Stemmed points (Figure 25*b*). Coe (1964:70) describes this projectile point type as having "a long daggerlike blade with deep serrations and a broad stem." This type is similar to the Kirk Serrated type and probably dates to the late Early Archaic period (ca. 6,000 B.C.). Both specimens from the Gravely site are made of rhyolite, broken at midsection, and lack serrations along the lateral margins.

*Middle Archaic Types.* Two broken Morrow Mountain II projectile points were recovered from the surface and plowzone (Figure 25*c*). The Morrow Mountain II type is defined by a long, narrow blade and a tapered stem (Coe 1964:37). This projectile point type is associated with the Middle Archaic period (ca. 5,500–5,000 B.C.) and has been recovered in stratified context from the Doerschuk site in piedmont North Carolina (Coe 1964), and at the Icehouse Bottom and Howard sites in southeast Tennessee (Chapman

Projectile Point Type	TP-2	TP-4	TP-6	TP-9	TP-14	TP-16	Fea. 4	Fea. 7	Fea. 9
Kirk Corner-Notched	-	-	-	-	-	1	-	1	-
Kirk Stemmed	-	-	-	-	-	-	-	-	-
Morrow Mountain II Stemmed	-	-	-	-	-	-	-	-	-
Guilford Lanceolate	-	-	-	-	-	-	-	-	-
Halifax Side-Notched	-	-	-	-	-	-	-	-	-
Savannah River Stemmed	-	-	-	-	-	-	-	-	-
Small Lanceolate	-	-	-	-	-	-	-	-	-
Small Stemmed	-	1	1	-	-	-	-	-	-
Fragments (Archaic)	-	-	1	-	-	-	-	-	-
Yadkin Large Triangular	-	-	-	-	-	-	-	-	-
Yadkin (eared variety)	-	-	-	-	-	-	-	1	-
Pee Dee Pentagonal	-	-	-	-	-	-	-	-	-
Randolph Stemmed	-	-	-	-	-	-	-	-	-
Caraway Triangular	1	1	1	-	1	-	1	10	1
Fragments (Woodland)	-	-	-	1	-	-	-	1	-
Total	1	2	3	1	1	1	1	13	1

Table 5.	Distribution	of pi	rojectile	points	from	the	Gravely	site.

# Table 5 continued.

Projectile Point Type	Fea. 11	Fea. 12	Fea. 15	Fea. 16	Fea. 17	PZ	Surface	Total
Kirk Corner-Notched	-	-	-	-	-	-	2	4
Kirk Stemmed	-	-	-	-	-	2	-	2
Morrow Mountain II Stemmed	-	-	-	-	-	1	1	2
Guilford Lanceolate	-	-	-	-	-	1	1	2
Halifax Side-Notched	-	-	-	-	-	-	1	1
Savannah River Stemmed	-	-	-	-	-	-	1	1
Small Lanceolate	-	-	-	-	-	2	1	3
Small Stemmed	-	-	-	-	-	4	2	8
Fragments (Archaic)	1	-	-	-	-	14	5	21
Yadkin Large Triangular	1	-	-	-	-	7	6	14
Yadkin (eared variety)	-	-	-	-	-	1	-	2
Pee Dee Pentagonal	-	-	-	-	-	1	-	1
Randolph Stemmed	-	-	-	-	-	2	1	3
Caraway Triangular	6	1	1	1	2	86	64	177
Fragments (Woodland)	1	-	-	-	-	4	12	19
Total	9	1	1	1	2	125	97	260

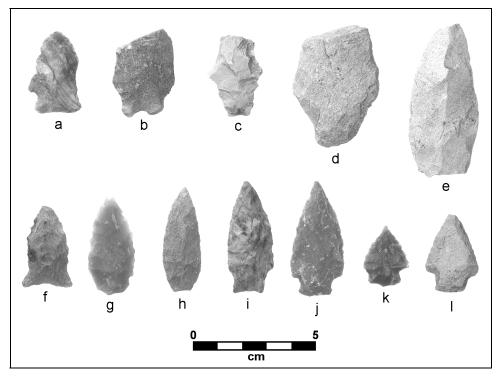


Figure 25. Archaic projectile points from the Gravely site: Kirk Corner-Notched (*a*); Kirk Stemmed (*b*); Morrow Mountain II (*c*); Savannah River Stemmed (*d*); Guilford Lanceolate (*e*); Halifax Side-Notched (*f*); small lanceolate (*g*-*h*); and small stemmed (*i*-*l*).

1977, 1979). Both specimens are made of metavolcanic stone and conform closely to this type.

Two Guilford Lanceolate points also were recovered from the surface and plowzone (Figure 25*e*). This projectile point type is defined by "a long, slender, but thick blade with straight, rounded, or concave base" (Coe 1964:43). Coe (1964:44, 118), based upon excavations at the Doerschuk and Gaston sites in North Carolina, has suggested that *Guilford Lanceolate* is a Middle Archaic type that dates from about 5,000–4,000 B.C. One of the specimens is heavily weathered and was crudely chipped from metavolcanic rock. The other specimen is made of quartz and has a slight, weak-shouldered stem and a concave base. It is 60 mm long, 23 mm wide, and 11 mm thick.

One unbroken, side-notched point was classified as Halifax Side-Notched (Figure 25*f*). Coe (1964:108) describes this projectile point type as having a "slender blade with slightly restricted base. Shallow side-notches. Base and side-notches were usually ground. The material most frequently used was vein quartz." The specimen from the Gravely site was recovered from the surface and corresponds well to Coe's type description except that it is made of a banded metavolcanic rock instead of quartz. It is 31 mm long, 21 mm wide, and 7 mm thick. The stratigraphic position of Halifax materials between Guilford and Late Archaic Savannah River strata at the Gaston site indicate a late Middle Archaic temporal association (Coe 1964:118).

*Late Archaic Type.* One projectile point fragment from the surface was classified as Savannah River Stemmed (Figure 25*d*). Coe (1964:44) describes this point type as having "a large, heavy, triangular blade with a broad stem." Savannah River Stemmed projectile points were recovered in stratified context at the Doerschuk site (Coe 1964) and have been radiocarbon dated to ca. 3,000–1,800 B.C. at the Bacon Bend site in southeast Tennessee (Chapman 1981). The specimen from the Gravely site has weak shoulders and was crudely chipped from a coarse-grained metavolcanic rock.

**Probable Archaic Points.** Numerous other projectile points and point fragments were found that probably also date to the Archaic period. These include three small lanceolate points, eight small stemmed points, and 21 unclassifiable point fragments. The small lanceolate points were found on the surface and in the plowzone and resemble the Middle Archaic Guilford Lanceolate type except that they are much smaller and are finely chipped (Figure 25g-h). Two of these points are made of metavolcanic stone and have slightly tapered stems and squared bases. The larger specimen is 43 mm long, 16 mm wide, and 6 mm thick; the smaller one is 34 mm long, 13 mm wide, and 6 mm thick. The third lanceolate point is made of chert and has a broken base.

The eight unclassified stemmed points were recovered from TP-4, TP-6, the surface (n=2) and the plowzone (n=4). Seven are made of metavolcanic rock; the eighth is made of chert. The specimens from TP-4 (49 mm long, 20 mm wide, and 8 mm thick) and TP-6 (49 mm long, 22 mm wide, and 8 mm thick) are very similar to one another and have long, excurvate blades and short, straight bases (Figure 25i-j). Three other points, including the chert specimen, have short, triangular blades and short, squared bases. Two of these are complete and have the following measurements: 33 mm long, 21 mm wide, and 5 mm thick; and 26 mm long, 19 mm wide, and 5 mm thick (Figure 25k-l). The final three specimens are unidentifiable fragments of small stemmed points. All of the projectile points probably date to the terminal Archaic or Early Woodland periods.

Finally, 21 unidentifiable fragments of large stemmed or notched projectile points were recovered from TP-6, Feature 11, the surface (n=5), and the plowzone (n=14). All of these likely date to the Archaic period. Three of these are made of jasper, three are quartz specimens, and the remainder are made of metavolcanic rock.

*Early and Middle Woodland Types.* Fourteen Yadkin Large Triangular projectile points were found at the Gravely site (Figure 26*a-e*). All but one of these came from the plowzone or surface. The Yadkin type is described by Coe (1964:45) as "a large, symmetrical, and well-made triangular point" that usually has a concave base. Yadkin Large Triangular points are associated with the Early-Middle Woodland Yadkin phase in piedmont North Carolina and also appear to be associated with the same time period in southern Virginia. Ten of the specimens are made of rhyolite; the remainder are made of jasper (n=2), quartz, and chert. Six have concave bases and the others have flat bases. These points range from 40–52 mm in length (mean= 46.3, standard deviation =4.92, n=3), 22–33 mm in width (mean=26.0, standard deviation=2.88, n=14), and 4–10 mm in thickness (mean=7.2, standard deviation =1.47, n=14).

Two other large triangular points from Feature 7 and the plowzone were classified as "pointed ear" variants of the Yadkin Large Triangular type (see Coe 1964:47, 49)

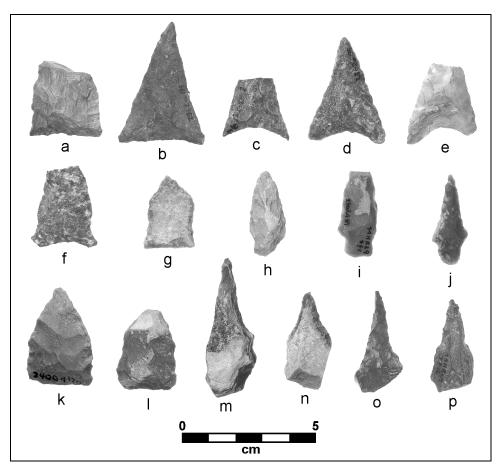


Figure 26. Early-Middle Woodland projectile points and other chipped-stone artifacts from the Gravely site: Yadkin Large Triangular (*a-e*); Yadkin Large Triangular (eared variety) (f); Pee Dee Pentagonal (g); Randolph Stemmed (h-j); Woodland point preforms (k-l); and perforators (m-p).

(Figure 26*f*). This variant is thought to be temporally and culturally related to the Yadkin type. Both specimens are made of rhyolite and are similar in size to the other Yadkin points found at the site.

Late Prehistoric Types. Three projectile point types that occur during the Late Prehistoric period (after A.D. 1000)—Pee Dee Pentagonal, Randolph Stemmed, and Caraway Triangular—were found at the Gravely site. A single pentagonal point was recovered from the plowzone (Figure 26g). It was crudely chipped from a rhyolite flake and matches Coe's (1964:49) description of the Pee Dee Pentagonal type as being "a small asymmetrical and carelessly made point. . . . Pentagonal in form, usually asymmetrical." Although this type is associated largely with the late prehistoric Pee Dee phase in the southern North Carolina Piedmont, such points also occur infrequently on late prehistoric and historic sites elsewhere in the Piedmont.

Measurement	Range	Mean	Standard Deviation	N
Length	14.6–41.0 mm	26.7 mm	5.94 mm	60
Width	7.9–27.0 mm	18.0 mm	3.04 mm	141
Thickness	2.3–9.5 mm	4.9 mm	1.37 mm	153
Weight	0.3–5.3 g	1.8 g	1.10 g	48

Table 6. Summary of measurements for Caraway Triangular projectile points.

Three points from the plowzone and surface were classified as Randolph Stemmed (Figure 26*h-j*). Two were made of metavolcanic rock and the third was made of chert. According to Coe (1964:50), projectile points of this type "looked like crude miniature versions of the old Morrow Mountain II type. They had a roughly tapered stem, and they were narrow and thick. The chipping was exceedingly rough and crude, and most of the flakes were irregular and poorly controlled. In many instances this produced a saw-toothed edge." Although this type was attributed by Coe to "destitute bands" of the eighteenth century, they rarely occur at Piedmont sites that have produced historic trade artifacts. Consequently, their presence at Gravely and other late prehistoric village sites in Henry County is not viewed as evidence for contact-period components at these sites.

Two-thirds (n=177) of all projectile points found at the Gravely site were small triangular arrow points that conform to the Caraway Triangular type (Figure 27). All of these artifacts are attributed to the Dan River phase occupation of the site. This type is a small, straight-sided or slightly incurvate-sided, isosceles-triangular point with a straight or slightly incurvate base (Coe 1964:49). While there is some variety in the quality of workmanship, most are thin, symmetrical, and finely chipped. At least eight were made from much older flakes and exhibit patinated surfaces of the parent flake. Such evidence of recycling is common at late prehistoric village sites in piedmont North Carolina and southern Virginia. Over three-fourths (n=136) of the specimens were chipped from metavolcanic rock (mostly fine-grained rhyolite). The other points were made from jasper (n=23), vein quartz (n=11), chert (n=5), and quartz crystal (n=2). Measurements of Clarksville Triangular points from the Gravely are summarized in Table 6 and listed in Appendix 6.

Finally, 19 unidentifiable fragments of Woodland triangular projectile points were recovered from TP-9, Feature 7, Feature 11, the plowzone (n=4), and the surface (n=12). Most of these probably are from Caraway Triangular points.

## **Other Small Chipped-Stone Artifacts**

*Preforms*. Eight bifaces were recovered from the plowzone that likely represent discarded preforms for manufacturing Woodland projectile points (Figure 26*k*-*l*). All are triangular in form but are incompletely shaped and thinned. Three of these specimens are made of jasper; the others are metavolcanic.

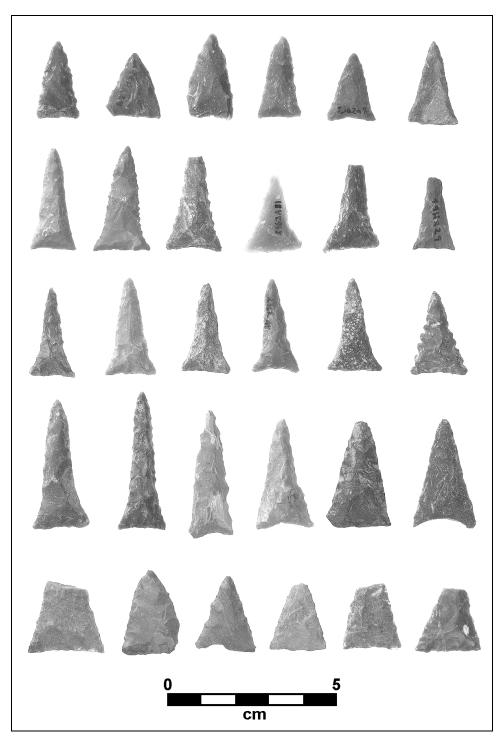


Figure 27. Caraway Triangular projectile points from the Gravely site.

*Bifaces*. Twenty-two amorphous bifaces and bifacially worked flakes were recovered from the Gravely site. Most of these artifacts appear to represent unfinished chipped-stone tools, probably projectile points, that were aborted during manufacture. Sixteen are made of aphyric or porphyritic rhyolite, and two each are made of jasper, quartz, and chert.

*Cores.* Sixty-five artifacts from the Gravely site were classified as cores. Cores are defined as masses of knappable stone from which one or more flakes have been detached, and they represent the parent material from which chipped-stone tools were made. They represent all major classes of rock that were used to make chipped-stone tools, and all exhibit amorphous shapes and non-regular flaking patterns. Forty-three of the cores are vein quartz, reflecting the local availability of this resource. Of the remaining 22 specimens, nine are metavolcanic rock, six are jasper, four are quartz crystal, and three are chert.

*Scrapers*. Scrapers are chipped-stone tools that exhibit steep, continuous retouch along one or more edges. Retouch is usually unifacial, and the steep edge angle suggests use in scraping tasks such as hideworking. Two such artifacts were found in the plowzone. One is a piece of an elongate, blade-like, rhyolite flake that has been steeply retouched along both lateral margins. The other is a large, thick quartz flake that has been steeply retouched along its broad distal edge.

*Perforators.* A perforator is a flake tool that has been finely retouched to produce a long, pointed bit (Figure 26m-p). Perforators usually are made on thick, elongate flakes and are thought to have been used primarily in hideworking. Six such artifacts were recovered from TP-16, the plowzone (n=3), and the surface (n=2). Five are made of metavolcanic rock, and one if made of quartz.

*Gravers*. A graver is defined as any flake or biface that possesses fine retouch along the margin, producing a small, sharp, triangular projection. Gravers are interpreted as implements used to engrave or score dense materials such as wood, bone, or antler. Two gravers made of jasper and vein quartz were recovered from the plowzone.

*Worked Flakes.* One hundred and fifty stone flakes from the Gravely site exhibit evidence along one or more edges of retouch or damage resulting from use. Many of these specimens probably represent expedient cutting tools.

*Flakes.* Three thousand two hundred and thirty-nine stone flakes were recovered from almost every excavated context at the Gravely site. These artifacts are the primary byproduct of chipped-stone tool manufacture, and they reflect the importance of tool production, refurbishing, and use at the site. Most probably are associated with the Dan River phase occupation.

#### Large Chipped-Stone Tools

*Chipped Axes.* Two chipped-stone axes were recovered from TP-13 and the surface (Figure 28*a-b*). The axe from TP-13 is complete and measures 119 mm long, 79 mm wide at the bit end, 54 mm wide at the poll end, and 21 mm thick. It was made from a flat, irregular spall of light-colored metavolcanic rock, and it was shaped by roughly chipping the lateral edges and poll end and grinding the bit to create a sharp, symmetrical edge. The other axe appears to have been fashioned from the broken bit of a chipped hoe and has been lightly ground along the bit. It is roughly rectangular in shape and is 85 mm long, 55 mm wide, and 21 mm thick.

*Chipped Hoes.* Four fragments of chipped-stone hoes were recovered from TP-16, Feature 7, the plowzone, and the surface (Figure 28*c*). Three of the specimens are made of metavolcanic rock, and the fourth is made of metasandstone. Two exhibit extensive soil polish along the bit edge. Similar artifacts have been recovered at other Dan River phase village sites in Henry County (Davis et al. 1997a, 1997c) and are thought to have been used both for cultivating agricultural fields and for general-purpose digging.

## **GROUND-STONE ARTIFACTS**

*Disks*. Three ground-stone disks were found. One of these came from the plowzone and was a flat, roughly circular, gneiss cobble that has been ground along the edges to produce a circular disk. It is 58 mm in diameter and 20 mm thick. The other two specimens—a disk fragment from the surface and a complete disk from Feature 17—are made of a pink-colored soapstone. The fragment is from the edge of a large, bi-concave (and probably centrally perforated) disk about 90 mm in diameter and 25 mm thick at the outer edge. The complete specimen is somewhat smaller, measuring 67 mm in diameter and 13 mm in thickness at the outer edge (Figure 29). It too has a bi-concave cross-section, as well as a hole in the center that was 20 mm in diameter. Both face have designs that were created by engraving straight lines into the stone. On one face, these lines radiate from the central perforation to the outer edge (Figure 29, left). The other face contains triangles that are filled with parallel engraved lines (Figure 29, right). The meaning of these designs and the function of these artifacts are not known; however, stone disks usually are thought to be items that were used in games.

*Anvil.* One anvil stone was surface collected from the site. It is a fist-sized, tabular piece of metasandstone that has a shallow, 30-35-cm diameter concavity pecked into each face. It appears to have been used as working surface for bipolar lithic reduction.

*Hammerstones*. Two hammerstones were recovered from Feature 7 and the plowzone. The specimen from Feature 7 was a fragment of a water-polished, fine-grained igneous cobble with edge damage resulting from use as a flintknapping

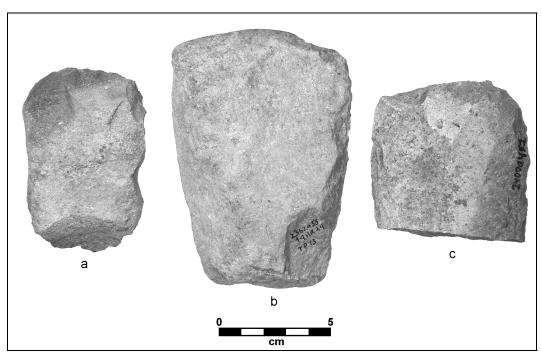


Figure 28. Chipped axes and hoe from the Gravely site: axe from the surface (a); axe from TP-13 (b); and hoe from Feature 7 (c).

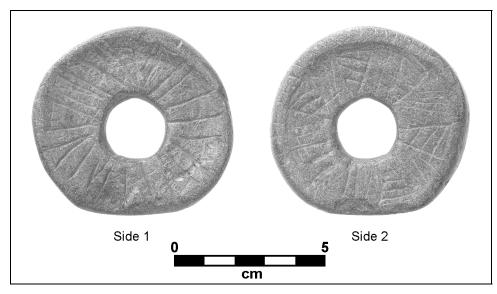


Figure 29. Two views of the perforated soapstone disk from Feature 17 at the Gravely site.

percussor. The other specimen was a fist-sized quartz river cobble with facets at one end produced by repeated battering. This artifact also is interpreted as a flintknapping tool.

#### **BONE ARTIFACT**

Only one piece of worked animal bone was found at the Gravely site. This specimen is a polished, barrel-shaped bead that appears to be made of deer antler, and it came from Feature 11. It is 15 mm long, 8 mm in diameter at midsection, and 5 mm in diameter at each end. The hole that runs longitudinally through the bead is 1.5 mm in diameter.

Although beads made of large bird and small mammal long bones often are found at Dan River phase sites, beads made of antler are uncommon. Also, most of the other Dan River sites investigated by Richard Gravely and the Patrick-Henry Chapter of the ASV produced numerous worked-bone ornaments and implements. Their near absence at the Gravely site does not appear to be a consequence of poor preservation since numerous unmodified animal bones were found. While a case could be made that bone-working was on the wane by the time the Gravely site was occupied, later Saratown phase sites in the region such as Early Upper Saratown (31Sk1) and Lower Saratown (31Rk1) have produced numerous bone artifacts (Ward and Davis 1993).

#### SUBSISTENCE REMAINS

Three classes of subsistence remains—animal bone, shell, and charcoal—were recovered from the Gravely site. Although most excavated features contained varying quantities of bone and charcoal, shell was recovered from only a few features. Discrepancies between quantities of bone, shell, and charcoal found in the 1969 collections and descriptions of feature fill from the field notes indicate that these remains were not systematically retrieved. Instead, shell and bone appear to have been collected only when they occurred in substantial quantities, and charcoal was collected primarily as samples for radiocarbon dating.

Subsistence remains obtained during the 1991 excavations can be regarded as representative, since all feature fill was waterscreened through 1/16-inch mesh. Moreover, 10-liter flotation samples were collected and processed for all excavated features except Feature 12. Multiple samples were taken from features with more than one fill zone. Fourteen of the 21 flotation samples were studied by Katherine M. Roberts in 1992, and her results are described below. This analysis in important in that it represents the only detailed description of systematically collected plant food remains from a Dan River phase site in Henry County.

The Gravely site collection contains over 2,600 pieces of animal bone from 24 features, the plowzone, and the surface (Table 7). The largest quantities came from TP-9 and Features 7, 9, 10, and 11. All of these are interpreted as refuse-filled storage pits. These remains have not been analyzed; however, it is expected that they represent the general range of species that were identified by Waselkov (1977) at the Belmont site.

The Belmont faunal assemblage contained a variety of species that were exploited by the site's 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.

Interestingly, the same storage pits that contained the most animal bone were the only ones from which shell was collected, and almost three-fourths of all shell came from Feature 9 (Table 8). The paucity of mussel shell and periwinkle shell at the site stands in stark contrast to other excavated Dan River villages along the nearby Smith River and its tributaries which contained large quantities of shell, and it suggests that shellfish played a far less important role in the diet of those who lived at the Gravely site (see Coleman and Gravely 1992; Davis et al. 1997a, 1997b, 1997c, 1997d).

During the 1969 excavations, small quantities of charcoal were collected from TP-7 and TP-15, and much larger samples were taken from TP-2 and TP-16. Most of the charcoal from TP-2 was used for radiocarbon dating. In 1991, charcoal was recovered from all excavated features, and charcoal was obtained by flotation from all but one feature.

Flotation samples from Features 1 to 11 were analyzed by Roberts (1992). Her method of analysis followed Yarnell (1974) and was as follows. First, each sample was weighed and sifted through a series of U.S. standard geological sieves that ranged in size from 6.35 mm to 0.21 mm. Carbonized plant material retained in screens with a mesh of 2.00 mm or larger was completely sorted. Material less than 2.00 mm was scanned, and only seeds and previously unrepresented items were extracted.

Results of Roberts' analysis are presented in Tables 9, 10, 11, and 12. Ubiquity calculations were based on Popper (1988), with ubiquity being defined as the percentage of samples in which taxon occurs (see Table 12).

Evidence for 13 different plant food taxa were identified. As expected, hickory nuts, acorns, and corn kernels, cupules, or glumes were recovered from most samples and indicate their importance to the plant-based diet. Other arboreal taxa identified in several samples include walnut and butternut. Besides corn, which was the predominant crop grown, two other tropical domesticates—common bean and cucurbit (or squash)—also were identified. Probable domesticates that are indigenous to the Southeast include sunflower and sumpweed. Of these, only sunflower was identified in several samples. Other plant food taxa reported by Roberts are honey locust, bedstraw, grape, and persimmon. These plant food remains are consistent with assemblages identified at other late prehistoric sites in the upper Dan River drainage and reflect a mixed economy based on growing tropical and native domesticates and collecting on a seasonal basis a variety of arboreal nuts, seeds, and fruits (see Ward and Davis 1993:213, 249-256, 314). Corn agriculture undoubtedly was a very important constituent of Dan River phase economy; however, it was heavily supplemented by species that had been exploited for several millennia.

		Recovery Screen	Size		
Context	1/2" Mesh	1/4" Mesh	1/16" Mesh	Not Screened	Total
TP-2	-	-	-	68	68
TP-3	-	-	-	3	3
TP-4	-	-	-	8	8
TP-6	-	-	-	6	6
TP-9	-	-	-	105	105
TP-13	-	-	-	2	2
TP-14	-	-	-	6	6
TP-15	-	-	-	77	77
TP-16	-	-	-	5	5
Feature 1	-	5	-	-	5
Feature 2	-	9	-	-	9
Feature 6	-	4	-	-	4
Feature 7	124	317	35	-	476
Feature 8	9	17	-	-	26
Feature 9	17	132	25	22	196
Feature 10	22	253	-	-	275
Feature 11	373	532	77	36	1,018
Feature 12	-	2	-	-	2
Feature 13	2	34	-	-	36
Feature 14	62	20	-	-	82
Feature 15	-	-	-	2	2
Feature 16	16	59	30	-	105
Feature 17	1	48	2	-	51
Feature 18	-	3	-	-	3
Plowzone	51	-	-	1	52
Surface	-	-	-	45	45
Total	677	1,435	169	386	2,667

Table 7. Summary of animal bone recovered from the Gravely site.

	Musse	el Shell	Snail S	Shell		
Context	1/2" Mesh	1/4" Mesh	1/2" Mesh	1/4" Mesh	Total	
TP-9	9	-	37	-	46	
Feature 7	-	2	-	-	2	
Feature 9	16	201	12	26	255	
Feature 10	8	24	-	3	35	
Feature 11	4	-	-	-	4	
Surface	-	-	3	-	3	
Total	37	227	52	29	345	

Table 8. Summary of shell recovered from the Gravely site.

Table 9. Summary of plant remains from analyzed feature contexts at the Gravely site (weights in grams).

Context	Total Sample	Wood Charcoal	Unknown Plants	Plant Food Remains
Feature 1 (Zone 1)	119.55	10.55	0.03	0.58
Feature 1 (Zone 2)	33.34	2.40	Х	0.20
Feature 2 (Zone 1)	69.68	11.02	0.03	0.36
Feature 3 (Zone 1)	20.54	0.17	0.05	Х
Feature 4 (Zone 1)	46.78	0.94	0.03	0.17
Feature 5 (Zone 1)	34.93	7.04	0.17	0.1 0
Feature 6 (Zone 1)	60.37	3.30	0.22	1.22
Feature 7 (Zone 1)	40.63	3.62	0.12	0.57
Feature 8 (Zone 1)	17.53	2.07	0.07	0.32
Feature 9 (Zone 1)	61.40	5.85	0.31	1.31
Feature 9 (Zone 2)	84.04	2.66	0.17	0.96
Feature 10 (Zone 1)	52.02	0.11	Х	0.96
Feature 11 (Zone 1)	41.04	2.75	0.07	0.36
Feature 11 (Zone 2)	238.10	63.98	0.38	2.63

Note: A single unidentified rhizome was found in the sample from Feature 1 (Zone 2) and an unidentified tuber was found in the sample from Feature 9 (Zone 1).

Context	Common Name	Taxonomic Name	Part	Count	Weight (g)
Feature 1 (Zone 1)	Sunflower family	Asteraceae	capitulum	1	х
	Hickory	<i>Carya</i> sp.	nutshell	32	0.37
	Honey Locust	Gleditsia sp.	seed coat	2	0.01
	Walnut	Juglans sp.	nutshell	6	0.07
	Acorn	Quercus sp.	nutshell	4	0.01
	Corn	Zea mays	kernel	12	0.12
			cupule	3	х
			glume	1	х
Feature 1 (Zone 2)	Hickory	Carya sp.	nutshell	19	0.20
Feature 2 (Zone 1)	Sunflower family	Asteraceae	capitulum	1	0.01
	Hickory	<i>Carya</i> sp.	nutshell	11	0.11
	Cucurbit	Cucurbita pepo	rind	7	0.02
	Butternut	Juglans cinerea	nutshell	2	0.02
	Walnut	Juglans sp.	nutshell	2	0.03
	Acorn	Quercus sp.	nutshell	23	0.10
	Corn	Zea mays	cupule	4	0.04
			glume	1	Х
Feature 3 (Zone 1)	Butternut	Juglans cinerea	nutshell	1	x
Feature 4 (Zone 1)	Hickory	<i>Carya</i> sp.	nutshell	4	0.16
	Acorn	Quercus sp.	nutshell	3	0.01
Feature 5 (Zone 1)	Sunflower family	Asteraceae	capitulum	1	х
	Hickory	<i>Carya</i> sp.	nutshell	11	0.05
	Cucurbit (?)	Cucurbita pepo	rind	1	Х
	Common Bean	Phaseolus vulgaris	cotyledon	1	0.05
	Acorn	Quercus sp.	nutshell	3	Х
	Corn	Zea mays	cupule	1	Х
Feature 6 (Zone 1)	Hickory	Carya sp.	nutshell	86	1.08
	Sumpweed	Iva annua	seed	1	Х
	Walnut	Juglans sp.	nutshell	4	0.09
	Acorn	Quercus sp.	nutshell	6	0.02
	Corn	Zea mays	kernel	2	0.01
			cupule	4	0.02
Feature 7 (Zone 1)	Hickory	Carya sp.	nutshell	31	0.34
	Honey Locust	<i>Gleditsia</i> sp.	seed coat	1	0.01
	Butternut	Juglans cinerea	nutshell	1	0.02
	Walnut	Juglans sp.	nutshell	5	0.09
	Common Bean	Phaseolus vulgaris	seed coat	1	0.03
	Acorn	Quercus sp.	nutshell	10	0.03
	Corn	Zea mays	kernel	8	0.02
			cupule	7	0.03
			glume	1	X

Table 10. Carbonized plant food remains from analyzed feature contexts.

Context	Common Name	Taxonomic Name	Part	Count	Weight (g)
Feature 8 (Zone 1)	Hickory	<i>Carya</i> sp.	nutshell	17	0.18
reature o (Lone r)	Bedstraw	Galium sp.	seed	1	0.10 X
	Acorn	Quercus sp.	nutshell	15	0.04
	Corn	Zea mays	kernel	5	0.08
			cupule	4	0.02
Feature 9 (Zone 1)	Hickory	<i>Carya</i> sp.	nutshell	61	0.64
	Persimmon	Diospyros virginiana	cotyledon	5	0.06
	Walnut	Juglans sp.	nutshell	12	0.30
	Common Bean	Phaseolus vulgaris	cotyledon	1	0.03
	Grape	Vitis sp.	seed	2	0.01
	Acorn	Quercus sp.	nutshell	31	0.10
	Corn	Zea mays	kernel	12	0.10
			cupule	10	0.04
			glume	1	Х
Feature 9 (Zone 2)	Sunflower family	Asteraceae	capitulum	1	0.01
	Hickory	<i>Carya</i> sp.	nutshell	40	0.55
			meat	1	0.08
	Bedstraw	Galium sp.	seed	1	Х
	Walnut	Juglans sp.	nutshell	5	0.11
	Acorn	Quercus sp.	nutshell	16	0.06
	Corn	Zea mays	kernel	8	0.08
			cupule	12	0.07
Feature 10 (Zone 1)	Hickory	Carya sp.	nutshell	51	0.94
	Acorn	Quercus sp.	nutshell	15	0.02
Feature 11 (Zone 1)	Sunflower family	Asteraceae	capitulum	2	х
	Hickory	Carya sp.	nutshell	21	0.23
	Honey Locust	<i>Gleditsia</i> sp.	seed coat	1	Х
	Acorn	Quercus sp.	nutshell	6	0.02
	Corn	Zea mays	kernel	3	0.02
			cupule	3	0.02
Feature 11 (Zone 2)	Sunflower family	Asteraceae	capitulum	1	0.01
	Hickory	Carya sp.	nutshell	82	2.27
	Honey Locust (?)	<i>Gleditsia</i> sp.	seed coat	1	х
	Butternut (?)	Juglans cinerea	nutshell	1	0.01
	Common Bean (?)	Phaseolus vulgaris	cotyledon	1	0.02
	Acorn	Quercus sp.	nutshell	53	0.16
	Corn	Zea mays	kernel	13	0.08
			cupule	1	X

Table 10 continued.

"X" signifies item(s) which registered less than 0.005 grams. "?" signifies probable identification.

	Feature 1	Feature 1	Feature 2	Feature 3	Feature 4	Feature 5	Feature 6
Taxon	Zone 1	Zone 2	Zone 1				
Diospyros virginiana	-	-	-	-	-	-	-
Galium sp.	-	-	-	-	-	-	-
Gleditsia sp.	2	-	-	-	-	-	-
Iva annua	-	-	-	-	-	-	1
Phaseolus vulgaris	-	-	-	-	-	1	-
Vitis sp.	-	-	-	-	-	-	-
Zea mays kernel	12	-	-	-	-	-	2
Zea mays cupule	3	-	4	-	-	1	4
Unidentified	-	-	-	-	-	3	-

# Table 11. Seed counts from analyzed feature contexts at the Gravely site.

## Table 11 continued.

	Feature 7	Feature 8	Feature 9	Feature 9	Feature 10	Feature 11	Feature 11
Taxon	Zone 1	Zone 1	Zone 1	Zone 2	Zone 1	Zone 1	Zone 2
Diospyros virginiana	-	-	5	-	-	-	-
Galium sp.	-	1	-	1	-	1	-
Gleditsia sp.	1	-	-	-	-	-	1
Iva annua	-	-	-	-	-	-	-
Phaseolus vulgaris	1	-	1	-	-	-	1
Vitis sp.	-	-	2	-	-	-	-
Zea mays kernel	8	5	12	8	-	3	13
Zea mays cupule	7	4	10	12	-	3	1
Unidentified	-	-	1	2	-	3	7

Note: The term "counts" refers to both pieces of seed and whole seeds retrieved. No systematic attempt to construct figures for "theoretical whole seeds" was made. Both probable and positive identifications are included.

Table 12. Ubiquity of plant foods from analyzed feature contexts (n=14) at the Gravely site.

Common Name	Taxonomic Name	Number of Samples	Percent
Hickory	<i>Carya</i> sp.	13	92.86
Acorn	Quercus sp.	12	85.71
Corn	Zea mays	10	71.43
Walnut	<i>Juglans</i> sp.	6	42.86
Sunflower family	Asteraceae	6	42.86
Butternut	Juglans cinerea	4	28.57
Common Bean	Phaseolus vulgaris	4	28.57
Honey Locust	Gleditsia sp.	4	28.57
Cucurbit	Cucurbita pepo	2	14.29
Bedstraw	Galium sp.	2	14.29
Grape	Vitis sp.	1	7.14
Sumpweed	Iva annua	1	7.14
Persimmon	Diospyros virginiana	1	7.14

#### CHRONOLOGY

Artifacts recovered from the Gravely site indicate that it was occupied on several occasions prior to the late prehistoric Dan River phase. At least five Archaic-period cultural components are represented by the occurrence of typologically distinct projectile points. These components date to the Kirk (8,000–6,800 B.C.), Morrow Mountain (5,500–5,000 B.C.), Guilford (5,000–4,000 B.C.), Halifax (ca. 4,000–3,000 B.C.), and Savannah River (3,000–1,800 B.C.) phases. None of these occupations appear to have been very substantial.

The Gravely site was occupied at least twice between the Early Woodland and early Late Woodland periods. The first of these occupations was during the Yadkin phase and is represented by the presence of numerous Yadkin Large Triangular points and a small number of Yadkin series potsherds. It is likely that several of the potsherds that could not be classified, as well as some unanalyzed sherds from the plow zone, also are associated with this occupation. Available radiocarbon dates for Yadkin series pottery suggest that this cultural component probably dates between about 400 B.C. and A.D. 1 (Eastman 1994).

The site was occupied again during the early Late Woodland Uwharrie phase. Evidence of this occupation consists of Uwharrie Net Impressed, Uwharrie Cord Marked, and Uwharrie Indeterminate potsherds, and F-1, a small posthole or animal burrow that contained most of the Uwharrie series sherds. Because the small triangular arrow points used during the Uwharrie phase cannot be readily distinguished from those used during the subsequent Dan River phase, it seems likely that some of the larger points classified as Caraway Triangular also are associated with this earlier cultural component. Although the Uwharrie phase has never been clearly defined since it was first described (see Coe 1952), radiocarbon dates from North Carolina sites that contain Uwharrie series pottery suggest that this phase likely dates between A.D. 800 and A.D. 1200 (Eastman 1994).

Most of the artifacts and all of the excavated archaeological features except F-1 date to the late Dan River phase (ca. A.D. 1250–1450). Stylistically, these artifacts are very similar to those recovered from late Dan River phase contexts at other sites in the nearby Smith River valley, including Koehler, Box Plant, Belmont, Wells, Stockton, and Leatherwood Creek (Coleman and Gravely 1992; Davis et al. 1997a, 1997b, 1997c, 1997d; Gallivan 1997).

Three radiocarbon dates were obtained for the Gravely site. The first of these dates was run on charcoal collected from TP-2 and was submitted by Richard Gravely in 1979. The charcoal came from near the bottom of a deep, refuse-filled pit and produced an uncorrected date of  $230 \pm 70$  B.P. (A.D.  $1720 \pm 70$  (UGa-2832). Tree-ring calibration of this assay produces a mean date of cal A.D. 1663, a one-sigma range of cal A.D. 1639 to cal A.D. 1954, and a two-sigma range of cal A.D. 1480 to cal A.D. 1955 (Calibrated with the program CALIB 3.0.3c [Stuiver and Reimer 1993]).

Two additional radiocarbon dates were obtained for features excavated in 1991. The first of these was Feature 7, a bell-shaped storage pit. Sixty-three grams of wood charcoal from Zone 3, near the bottom of the pit, were submitted for radiocarbon dating

<b>Radiocarbon Data</b> Calibrated Mean Date				
Calibrated Mean Date				
	A.D. 1663	A.D. 1421	A.D. 1410	
Calibrated One-Sigma Range	A.D. 1639–1954	A.D. 1400–1441	A.D. 1327–1436	
Calibrated Two-Sigma Range	A.D. 1480–1955	A.D. 1307–1474	A.D. 1302–1455	
Pottery Type				
Dan River Net Impressed	73.8 %	78.4 %	61.7 %	
Dan River Roughly Smoothed	13.9 %	13.9 %	8.3 %	
Dan River Plain	2.5 %	6.1 %	23.1 %	
Dan River Cord Marked	1.6 %	0.3 %	4.5 %	
Dan River Corncob Impressed	8.2 %	0.3 %	2.4 %	
Dan River Brushed	0.0~%	1.0 %	0.0~%	
Total	122	296	533	
Temper Type				
Sand	42.1 %	42.3 %	24.8 %	
Sand and Quartz	57.9 %	57.7 %	75.2 %	
Total	133	343	624	
Interior Surface Type				
Plain	57.9 %	72.4 %	58.2 %	
Scraped	42.1 %	27.6 %	41.8 %	
Total	133	323	594	

Table 13. Comparison of pottery data for the three radiocarbon-dated features.

and yielded an uncorrected date of  $520 \pm 60$  B.P. (A.D.  $1430 \pm 60$  (Beta-109075). Treering calibration of this assay produces a mean date of cal A.D. 1421, a one-sigma range of cal A.D. 1400 to cal A.D. 1441, and a two-sigma range of cal A.D. 1307 to cal A.D. 1474 (Calibrated with the program CALIB 3.0.3c [Stuiver and Reimer 1993]).

The second radiocarbon-dated feature from the 1991 excavations was Feature 11, another large, bell-shaped storage pit. Almost 66 grams of wood charcoal from Zone 3 at the bottom of the pit were submitted for radiocarbon dating and yielded an uncorrected date of  $540 \pm 60$  B.P. (A.D.  $1410 \pm 60$  (Beta-109076). Tree-ring calibration of this assay produces a mean date of cal A.D. 1410, a one-sigma range of cal A.D. 1327 to cal A.D. 1436, and a two-sigma range of cal A.D. 1302 to cal A.D. 1455 (Calibrated with the program CALIB 3.0.3c [Stuiver and Reimer 1993]).

While the radiocarbon dates for Features 7 and 11 are very close, the date for TP-2 is too recent. Even its two-sigma range does not overlap with those of the other dates. A comparison of ceramic data for the three features suggests that they are associated with the same occupation, though they are not similar with respect to all pottery attributes (Table 13). For example, TP-2 and Feature 7 have similar relative-frequency distributions for pottery types and temper types while TP-2 and Feature 11 are most similar in terms of interior surface types. The pottery assemblages from Features 7 and 11 reflected the same range of decorations, and the following decorative types occurred in

the same order of relative frequency: I-A-3, I-A-1, I-B-5, VI-A-1, and I-A-6. Of the four decorated sherds found in TP-4, three were I-A-3, I-A-1, and VI-A-1.

Given these results, and the lack of any European trade artifacts at the site that would indicate the site was occupied during the seventeenth-century, it is reasonable to conclude that the TP-2 radiocarbon date is in error, probably a consequence of sample contamination. Based on the acceptable dates from Features 7 and 11, the primary Dan River phase occupation of the site can be placed between about A.D. 1350 and A.D. 1450, and probably occurred during the first half of the fifteenth century. The duration of that occupation is not known; however, the density of archaeological features suggests that it was likely substantial.

## CONCLUSIONS

The Gravely site is one of two late prehistoric archaeological sites that were extensively excavated during the late 1960s and early 1970s by Richard Gravely and members of the Patrick-Henry Chapter of the ASV within the Mayo River valley of western Henry County. The other is the Dallas Hylton site (44Hr20) located along the South Mayo River, and together they provide our only detailed archaeological evidence for the Dan River phase within this river drainage. The Gravely site also was investigated more recently by archaeologists from the University of North Carolina, and this research, reported herein, has helped to clarify and amplify Gravely's initial findings.

Throughout his many investigations of Henry County's archaeological resources, Richard Gravely was particularly interested in the late seventeenth century when many Piedmont tribes were engaged in trade with the English, and he sought to discover sites that dated to the contact period. This interest was fueled by his deep interest in the early history of the region, as well as his own investigations at contact-period sites in the Upper Saratown vicinity of Stokes County, North Carolina, just a few miles south of Henry County. He discovered that, while there was ample evidence for Indian–European contact along the Dan River in North Carolina, such evidence was exceedingly rare along the Smith and Mayo rivers—its major tributaries. In fact, what he regarded as his best evidence of contact—a large pit at the Koehler site (44Hr6) that contained several European- or Euroamerican-made artifacts-now appears to substantially post-date, and therefore not be associated with, the Dan River phase village at the site (Coleman and Gravely 1992). Prior to his discovery in the mid-1980s of contact-period burials at the Philpott site (44Hr4), the only other site in Henry County to produce clear archaeological evidence for a seventeenth-century occupation was the Gilbert Rea site, located just downstream from the Gravely site. Because of the close proximity of the two sites and the fact that Gilbert Rea was no longer accessible for study due to landowner concerns about the earlier digging, the Gravely site was considered a prime candidate for representing a contact-period village.

The two investigations described in this report failed to identify any archaeological contexts that could be shown, by artifact associations, to date to the seventeenth century. And, the initial, uncorrected radiocarbon date of A.D.  $1720 \pm 70$  from TP-2 can now be regarded as erroneous. While there may still be a minor,

undetected, contact-period component at the site, its primary occupation, and the one that resulted in most all of the archaeological features and artifacts found, was during the latter half of the late prehistoric Dan River phase (A.D. 1350–1450).

This Dan River phase village was fairly typical of others investigated by the Patrick-Henry Chapter of the ASV. It was a roughly circular settlement about one acre in size, situated on an elevated terrace adjacent to a substantial stream, and surrounded by fertile bottomland. The village appears to have consisted of a ring of houses around an open central area. The material remains, including artifacts, archaeological features, and food remains, also reflect those found at other Dan River sites. The pottery in particular shows strong stylistic similarity to ceramic assemblages from other late Dan River phase sites in the region (Coleman and Gravely 1992; Davis 1997a, 1997b, 1997c, 19997d; Gallivan 1997).

Because the Smith and Mayo rivers are situated near the geographical center of the distribution of Dan River phase sites, the Gravely site and others excavated by Richard Gravely and the Patrick-Henry Chapter are important to our understanding of both the spatial and temporal dimensions of this archaeological phase. These sites share specific traits that place them securely within Coe's original definition of the Dan River focus (see Coe 1952; Coe and Lewis 1952) and at the same time distinguish them from closely related yet distinct archaeological phases, foci, and cultures such as Intermontaine, Clarksville, Uwharrie, Haw River, Hillsboro, and Saratown (MacCord 1996; Miller 1962; Ward and Davis 1993). It is expected that, once the analyses of these sites have been completed, they will permit a much more detailed definition of the Dan River phase and its place in the late prehistoric cultural geography of the Virginia and North Carolina Piedmont.

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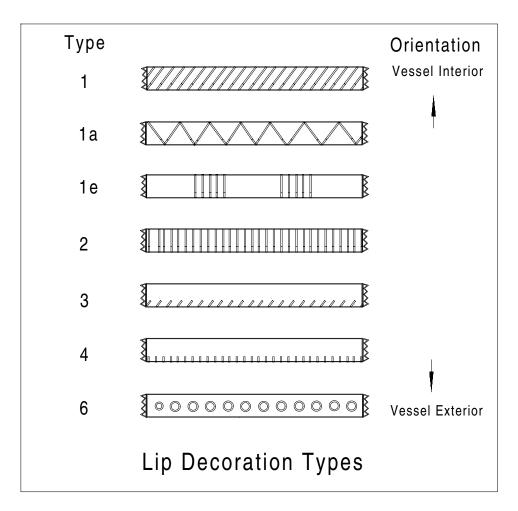
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APPENDIXES



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

	Туре	Туре			Туре		Туре		
Pottery Type	1	1a	1e	2	3	4	6	None	Total
Dan River Net Impressed	37	3	-	9	32	13	1	80	175
Dan River Roughly Smoothed	6	-	-	7	2	1	-	15	31
Dan River Plain	6	-	1	3	-	1	-	31	42
Dan River Cord Marked	-	-	-	1	-	-	-	1	2
Dan River Corncob Impressed	1	-	-	3	-	1	-	7	12
Uwharrie Net Impressed	1	-	-	-	-	-	-	-	1
Indeterminate	4	-	-	2	7	4	-	12	29
Total	55	3	1	25	41	20	1	146	292
Percent	18.84	1.03	0.34	8.56	14.04	6.85	0.34	50.00	100.00

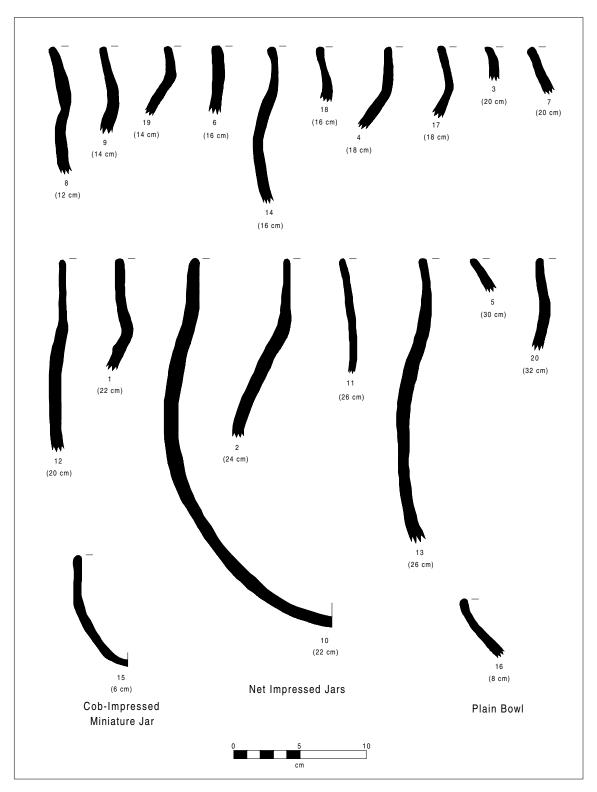
Appendix 2. Distribution of lip decorations by pottery type at the Gravely site.

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

	Dan River	Dan River		Dan River	Dan River		<u> </u>
Decoration	Net	Roughly	Dan River	Cord	Cob		
Туре	Impressed	Smoothed	Plain	Marked	Impressed	Indet.	Total
I-A-1	40	7	2	-	-	4	53
I-A-3	34	6	-	1	9	2	52
I-A-5	2	-	-	-	-	-	2
I-A-6	9	3	-	-	1	1	14
I-A-9	-	-	-	-	-	1	1
I-B-4	3	-	-	-	-	-	3
I-B-5	10	-	6	-	-	-	16
I-B-6	-	2	-	-	-	1	3
I-E-3	1	-	-	-	-	-	1
I-E-4	2	-	-	-	-	-	2
I-F-1	1	-	-	-	-	-	1
I-F-2	2	-	-	-	-	-	2
I-F-3	-	-	5	-	-	-	5
II-A-1	5	-	-	-	-	-	5
III-A-2	4	-	-	-	-	-	4
III-B-4	4	-	-	-	-	-	4
III-D-1	-	-	1	-	-	-	1
III-D-5	3	-	-	-	-	-	3
IV-A-3	1	-	-	-	-	-	1
IV-C-1	9	-	-	-	-	-	9
VI-A-1	16	6	1	-	-	5	28
Misc.	1	1	1	-	-	2	5
Total	147	25	16	1	10	16	215

						Decora-		
No.	Context	Туре	Temper	Interior	Lip	tion	Form	Diameter
1	TP-6	Dan River Net Impressed	Sand & Quartz	Scraped	None	I-E-4	Jar	22 cm
2	TP-6	Dan River Net Impressed	Sand & Quartz	Scraped	Type 2	I-E-4	Jar	24 cm
3	TP-6	Dan River Net Impressed	Sand	Plain	None		Jar	20 cm
4	TP-6	Dan River Net Impressed	Sand	Scraped	Type 1	I-A-3	Jar	18 cm
5	TP-9	Dan River Net Impressed	Sand & Quartz	Scraped	Type 1		Jar	30 cm
6	TP-16	Dan River Net Impressed	Sand & Quartz	Scraped	Type 3	I-A-1	Jar	16 cm
7	Fea. 6	Dan River Net Impressed	Sand & Quartz	Scraped	None		Jar	20 cm
8	Fea. 7	Dan River Net Impressed	Sand & Quartz	Scraped	Type 3	I-B-5	Jar	12 cm
9	Fea. 8	Dan River Net Impressed	Sand & Quartz	Scraped	Type 4	I-F-2	Jar	14 cm
10	Fea. 7	Dan River Net Impressed	Sand & Quartz	Plain	None		Jar	22 cm
11	Fea. 11	Dan River Net Impressed	Sand & Quartz	Scraped	None		Jar	26 cm
12	Fea. 11	Dan River Net Impressed	Sand & Quartz	Scraped	None	I-B-5	Jar	20 cm
13	Fea. 11	Dan River Net Impressed	Sand & Quartz	Scraped	Type 1		Jar	26 cm
14	Fea. 11	Dan River Net Impressed	Sand & Quartz	Plain	Type 3	III-A-2	Jar	16 cm
15	Fea. 11	Dan River Cob Impressed	Sand	Plain	None	I-A-3	Miniature	6 cm
							Jar	
16	Fea. 11	Dan River Plain	Sand	Scraped	Type 1	I-B-5	Bowl	8 cm
17	Fea. 17	Dan River Net Impressed	Sand & Quartz	Scraped	Type 1	I-A-6	Jar	18 cm
18	Fea. 17	Dan River Net Impressed	Sand & Quartz	Plain	Type 1	I-A-3	Jar	16 cm
19	Fea. 17	Dan River Net Impressed	Sand & Quartz	Plain	Type 1	IV-C-1	Jar	14 cm
20	Fea. 11	Dan River Net Impressed	Sand & Quartz	Plain	None	I-A-1	Jar	32 cm

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



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

			Weight	Length	Width	Thickness	
Context	Raw Material	Condition	(g)	(mm)	(mm)	(mm)	Comments
			(8)	()	()	()	
1969 Exca	vations						
TP-2	Metavolcanic	Broken	-	-	16.2	-	
TP-4	Metavolcanic	Whole	1.7	26.5	15.8	5.1	Made from an old flake
TP-6	Metavolcanic	Whole	1.3	31.2	17.5	3.2	
TP-14	Quartz	Broken	-	-	14.2	5.6	
Surface	Chert	Broken	-	-	26.9	-	Medium gray
Surface	Chert	Broken	-	-	13.7	3.3	Dark gray
Surface	Chert	Whole	4.1	29.5	23.6	6.0	Dark gray
Surface	Jasper	Broken	-	25.2	-	4.1	
Surface	Jasper	Broken	-	-	-	5.2	Mottled
Surface	Jasper	Broken	-	-	17.9	4.8	
Surface	Jasper	Broken	-	31.3	-	6.2	
Surface	Jasper	Broken	-	-	22.1	4.3	
Surface	Jasper	Broken	-	-	22.3	3.7	Heat treated
Surface	Jasper	Whole	1.4	22.3	18.9	4.4	
Surface	Jasper	Whole	3.5	33.6	22.3	5.8	
Surface	Metavolcanic	Broken	-	-	16.2	3.2	
Surface	Metavolcanic	Broken	-	-	16.2	-	Made from an old flake
Surface	Metavolcanic	Broken	-	-	14.6	3.9	
Surface	Metavolcanic	Broken	-	-	-	5.4	
Surface	Metavolcanic	Broken	-	-	16.2	5.3	
Surface	Metavolcanic	Broken	-	-	-	4.1	
Surface	Metavolcanic	Broken	-	-	17.2	5.0	
Surface	Metavolcanic	Broken	-	-	17.9	3.6	
Surface	Metavolcanic	Broken	-	-	17.1	6.5	
Surface	Metavolcanic	Broken	-	-	13.4	3.6	
Surface	Metavolcanic	Broken	-	-	16.7	3.4	
Surface	Metavolcanic	Broken	-	-	17.8	3.8	
Surface	Metavolcanic	Broken	-	-	14.5	3.4	Made from an old flake
Surface	Metavolcanic	Broken	-	-	-	3.8	
Surface	Metavolcanic	Broken	-	-	15.0	5.8	
Surface	Metavolcanic	Broken	-	-	17.2	-	Made from an old flake
Surface	Metavolcanic	Broken	-	-	16.9	-	
Surface	Metavolcanic	Broken	-	-	16.7	-	Made from an old flake
Surface	Metavolcanic	Broken	-	-	27.0	-	
Surface	Metavolcanic	Broken	-	-	-	4.7	
Surface	Metavolcanic	Broken	-	-	15.2	4.6	
Surface	Metavolcanic	Broken	-	-	16.6	-	
Surface	Metavolcanic	Broken	-	-	-	3.2	
Surface	Metavolcanic	Broken	-	17.5	-	3.4	
Surface	Metavolcanic	Broken	-	-	17.9	4.7	
Surface	Metavolcanic	Broken	-	29.4	-	6.0	
Surface	Metavolcanic	Broken	-	24.0	-	4.7	
Surface	Metavolcanic	Broken	-	-	-	7.9	
Surface	Metavolcanic	Broken	-	-	18.5	5.8	
Surface	Metavolcanic	Broken	-	-	-	6.9	
Surface	Metavolcanic	Broken	-	-	17.5	4.4	

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

			Weight	Length	Width	Thickness	
Context	Raw Material	Condition	(g)	(mm)	(mm)	(mm)	Comments
			(C)	· · ·	<u>```</u>		
Surface	Metavolcanic	Broken	-	-	20.3	5.3	
Surface	Metavolcanic	Broken	-	28.8	-	4.9	
Surface	Metavolcanic	Whole	1.1	25.0	15.7	3.3	
Surface	Metavolcanic	Whole	1.0	23.0	13.2	3.6	
Surface	Metavolcanic	Whole	0.9	20.2	15.0	3.8	
Surface	Metavolcanic	Whole	1.4	30.1	14.2	4.4	
Surface	Metavolcanic	Whole	4.9	40.3	20.4	9.5	
Surface	Metavolcanic	Whole	1.1	19.3	17.1	3.7	
Surface	Metavolcanic	Whole	1.2	27.8	14.5	4.9	
Surface	Metavolcanic	Whole	0.5	18.1	7.9	3.4	
Surface	Metavolcanic	Whole	0.9	17.3	18.8	3.9	
Surface	Metavolcanic	Whole	5.3	33.9	23.9	8.8	
Surface	Metavolcanic	Whole	1.0	24.3	13.3	3.1	
Surface	Metavolcanic	Whole	1.9	25.7	14.7	5.1	
Surface	Metavolcanic	Whole	1.0	24.4	18.3	3.8	
Surface	Metavolcanic	Whole	1.5	22.9	13.0	4.8	
Surface	Quartz	Broken	-	-	17.9	8.0	
Surface	Quartz	Broken	-	21.4	-	4.5	
Surface	Quartz	Broken	-	-	17.7	9.4	
Surface	Quartz	Broken	-	-	18.4	7.4	
Surface	Quartz	Broken	-	-	22.8	6.7	
Surface	Quartz	Whole	1.1	19.1	16.0	4.2	
1001 E							
<b>1991 Exca</b> Feature 4	Metavolcanic	Broken			16.7		
Feature 7	Metavolcanic	Whole	0.6	19.8	16.9	2.3	Serrated edges
Feature 7	Metavolcanic	Whole	0.0	19.8	10.9	2.3	Serrated edges
Feature 7	Jasper	Broken	- 0.5	- 14.0	10.9	2.4 5.3	
Feature 7	Jasper	Broken	-	-	- 17.4	3.1	
Feature 7	Metavolcanic	Broken	-	-	17.4	6.0	
Feature 7	Metavolcanic	Broken	-	-	17.6	5.2	
Feature 7	Metavolcanic	Broken	-	-	14.6	4.2	
Feature 7	Metavolcanic	Broken		_	16.6	3.7	
Feature 7	Metavolcanic	Whole	1.0	26.6	15.1	4.3	
Feature 7	Quartz	Broken	1.0	20.0	22.0	4.6	
Feature 9	Quartz	Broken	_	_	17.1	3.9	
Feature 11	Chert	Broken	_	18.5		3.7	Dark gray color
Feature 11	Metavolcanic	Broken	_	- 10.5	-	5.7	Dark gray color
Feature 11	Metavolcanic	Broken	_	-	23.0	_	
Feature 11	Metavolcanic	Whole	1.2	21.5	16.0	4.4	
Feature 11	Metavolcanic	Broken	- 1.2	21.J -	20.8	4.4 6.9	
Feature 11	Metavolcanic	Broken	-	-	16.8	3.5	
Feature 12	Metavolcanic	Broken	-	-	18.4	5.8	Made from an old flake
Feature 15		Whole	- 1.4	25.2	16.7	5.8 4.9	Made nom an olu nake
Feature 16		Broken	- 1.4	- 23.2	18.5	4.9	
Feature 17		Whole	1.1	25.2	13.3	4.7	
Feature 17		Broken	-		16.7	4.6	
1 cature 17		DIOROII			10.7	т.0	

# Appendix 6 continued.

ContextRaw MaterialCondition( $p$ )(nm)(nm)(nm)CommentsPlowzoneMetavolcanicBroken19.64.99PlowzoneMagerBroken-20.1-Heat reatedPlowzoneMetavolcanicBroken-19.16.56.5PlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBroken20.66.0PlowzoneMetavolcanicBroken20.66.0PlowzoneMetavolcanicBroken8.06.5PlowzoneMetavolcanicBroken18.06.5PlowzoneMetavolcanicBroken19.74.3PlowzoneMetavolcanicBroken19.74.3PlowzoneMetavolcanicBroken19.74.3PlowzoneMetavolcanicBroken20.66.0PlowzoneMetavolcanicBroken18.06.5PlowzoneMetavolcanicBroken18.06.5PlowzoneMetavolcanicBroken19.74.3PlowzoneMetavolcanicBroken19.74.3Pl				Weight	Length	Width	Thickness	
PlowzoneMetavolcanicWhole4.230.318.08.4Cortex presentPlowzoneJasperBroken20.1-Heat treatedPlowzoneMetavolcanicBroken-19.16.5PlowzoneMetavolcanicBrokenPlowzoneMetavolcanicWhole1.326.613.14.4PlowzoneMetavolcanicBroken20.35.8PlowzoneMetavolcanicBroken6.0PlowzoneMetavolcanicBroken6.0PlowzoneMetavolcanicBroken6.0PlowzoneMetavolcanicBroken6.0PlowzoneMetavolcanicBroken18.34.9PlowzoneMetavolcanicBroken18.66.5PlowzoneMetavolcanicBroken19.34.4PlowzoneMetavolcanicBroken19.34.4PlowzoneMetavolcanicBroken20.85.3PlowzoneMetavolcanicBroken20.56.5PlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneMetavolcanic<	Context	Raw Material	Condition	(g)	(mm)	(mm)	(mm)	Comments
PlowzoneMetavolcanicWhole4.230.318.08.4Cortex presentPlowzoneJasperBroken20.1-Heat treatedPlowzoneMetavolcanicBroken-19.16.5PlowzoneMetavolcanicBrokenPlowzoneMetavolcanicWhole1.326.613.14.4PlowzoneMetavolcanicBroken20.35.8PlowzoneMetavolcanicBroken6.0PlowzoneMetavolcanicBroken6.0PlowzoneMetavolcanicBroken6.0PlowzoneMetavolcanicBroken6.0PlowzoneMetavolcanicBroken18.34.9PlowzoneMetavolcanicBroken18.66.5PlowzoneMetavolcanicBroken19.34.4PlowzoneMetavolcanicBroken19.34.4PlowzoneMetavolcanicBroken20.85.3PlowzoneMetavolcanicBroken20.56.5PlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneMetavolcanic<								
PlowzoneJasperBroken20.1-Heat treatedPlowzoneMetavolcanicBroken19.16.5PlowzoneMetavolcanicBroken17.83.7PlowzoneMetavolcanicWhole2.531.520.34.6PlowzoneMetavolcanicWhole2.531.520.44.4PlowzoneMetavolcanicBroken20.66.0PlowzoneMetavolcanicBroken18.34.9PlowzoneMetavolcanicBroken6.0PlowzoneMetavolcanicBroken18.66.5PlowzoneMetavolcanicBroken19.34.4PlowzoneMetavolcanicBroken19.74.3PlowzoneMetavolcanicBroken19.74.3PlowzoneMetavolcanicBroken20.85.3PlowzoneMetavolcanicBroken20.65PlowzoneMetavolcanicBroken20.44.0PlowzoneMetavolcanicBroken19.74.3PlowzoneMetavolcanicBroken20.65PlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBroken20.65 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>~</td></td<>								~
Plowzone   Metavolcanic   Broken   -   -   19.1   6.5     Plowzone   Metavolcanic   Broken   -   -   -     Plowzone   Metavolcanic   Broken   -   -   -     Plowzone   Metavolcanic   Whole   2.5   31.5   20.3   4.6     Plowzone   Metavolcanic   Broken   -   20.6   6.0     Plowzone   Metavolcanic   Broken   -   -   6.0     Plowzone   Metavolcanic   Broken   -   -   6.0     Plowzone   Metavolcanic   Broken   -   -   18.6   6.8     Plowzone   Metavolcanic   Broken   -   19.3   4.4     Plowzone   Metavolcanic   Broken   -   19.7   4.3     Plowzone   Metavolcanic   Broken   -   19.7   4.4     Plowzone   Metavolcanic   Broken   -   20.5   6.5     Plowzone   Metavolcanic								-
Plowzone   Metavolcanic   Broken   -    Plowzone   Meta		-						Heat treated
Plowzone Metavolcanic Broken - - - -   Plowzone Metavolcanic Whole 2.5 31.5 20.3 4.6   Plowzone Metavolcanic Broken - 20.6 6.0   Plowzone Metavolcanic Broken - 20.3 5.8   Plowzone Metavolcanic Broken - 18.3 4.9   Plowzone Metavolcanic Broken - - 6.0   Plowzone Metavolcanic Broken - 18.6 6.8   Plowzone Metavolcanic Broken - 18.6 6.8   Plowzone Metavolcanic Broken - 19.3 4.4   Plowzone Metavolcanic Broken - 15.0 4.7   Plowzone Metavolcanic Broken - 20.8 5.3   Plowzone Metavolcanic Broken - 20.5 6.5   Plowzone Metavolcanic Broken - - -   Plowzone Metavolcanic								
Plowzone   Metavolcanic   Whole   2.5   31.5   20.3   4.6     Plowzone   Metavolcanic   Whole   1.3   26.6   13.1   4.4     Plowzone   Metavolcanic   Broken   -   20.3   5.8     Plowzone   Metavolcanic   Broken   -   -   6.0     Plowzone   Metavolcanic   Broken   -   -   18.0   6.5     Plowzone   Metavolcanic   Broken   -   -   18.6   6.8     Plowzone   Metavolcanic   Broken   -   -   19.3   4.4     Plowzone   Metavolcanic   Broken   -   -   19.3   4.0     Plowzone   Metavolcanic   Broken   -   -   10.7   4.3     Plowzone   Metavolcanic   Broken   -   -   20.8   5.3     Plowzone   Metavolcanic   Broken   -   -   -   -     Plowzone   Metavolcanic   Broken   -							3.7	
Plowzone   Metavolcanic   Whole   1.3   26.6   13.1   4.4     Plowzone   Metavolcanic   Broken   -   -   20.3   5.8     Plowzone   Metavolcanic   Broken   -   -   18.3   4.9     Plowzone   Metavolcanic   Broken   -   -   6.0     Plowzone   Metavolcanic   Broken   -   -   6.0     Plowzone   Metavolcanic   Broken   -   -   18.0   6.5     Plowzone   Metavolcanic   Broken   -   -   19.3   4.4     Plowzone   Metavolcanic   Broken   -   -   19.7   4.3     Plowzone   Metavolcanic   Broken   -   -   20.8   5.3     Plowzone   Metavolcanic   Broken   -   -   20.5   6.5     Plowzone   Metavolcanic   Broken   -   -   -   -     Plowzone   Metavolcanic   Broken   -							-	
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Plowzone Jasper Broken 17.8 4.1 Heat treated Plowzone Metavolcanic Broken - 17.9 6.4 Plowzone Metavolcanic Broken - 17.9 6.4 Plowzone Metavolcanic Broken - 17.5 3.8 Plowzone Metavolcanic Whole 2.4 41.0 15.1 5.9 Drill-like Plowzone Metavolcanic Whole 2.4 41.0 15.1 5.9 Drill-like Plowzone Metavolcanic Broken - 19.5 4.8 Plowzone Metavolcanic Broken - 19.5 4.8 Plowzone Metavolcanic Broken - 34.3 - 6.0 Plowzone Metavolcanic Broken - 34.3 - 6.0 Plowzone Metavolcanic Broken - 23.6 4.1 Plowzone Jasper Broken - 23.6 4.1 Plowzone Jasper Broken - 23.6 4.1 Plowzone Jasper Broken - 18.9 - Plowzone Metavolcanic Broken - 14.2 8.2 Cortex present Plowzone Metavolcanic Broken - 21.0 3.8 Plowzone Metavolcanic Whole 1.3 26.4 14.3 3.3 Plowzone Metavolcanic Broken - 21.0 3.8 Plowzone Metavolcanic Broken - 21.0 3.8 Plowzone Metavolcanic Broken - 17.5 6.5 Plowzone Metavolcanic Broken - 21.0 3.8 Plowzone Metavolcanic Broken - 21.0 3.8 Plowzone Metavolcanic Broken - 17.5 6.5 Plowzone Metavolcanic Broken - 17.5 6.5 Plowzone Metavolcanic Broken - 21.0 3.8 Plowzone Metavolcanic Broken - 20.2 3.5 Plowzone Metavolcanic Broken -	Plowzone	Metavolcanic	Whole	0.8	20.7	12.7	3.5	
PlowzoneJaserBroken17.84.1Heat treatedPlowzoneMetavolcanicBroken17.96.4PlowzoneMetavolcanicBroken18.04.0PlowzoneMetavolcanicWhole2.441.015.15.9Drill-likePlowzoneMetavolcanicWhole1.326.614.84.5PlowzoneMetavolcanicBroken3.9Heat treatedPlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneJasperBrokenPlowzoneJasperBrokenPlowzoneJasperBroken18.0-PlowzoneMetavolcanicBroken14.28.2Cortex presentPlowzoneMetavolcanicBroken14.28.2Cortex presentPlowzoneMetavolcanicBroken14.28.2Cortex presentPlowzoneMetavolcanicBroken14.28.2Cortex presentPlowzoneM	Plowzone	Metavolcanic	Whole	1.9	28.5	22.0	4.3	Heavy patination
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PlowzoneMetavolcanicBroken18.04.0PlowzoneMetavolcanicWhole2.441.015.15.9Drill-likePlowzoneMetavolcanicBroken19.54.8PlowzoneJasperBroken3.9Heat treatedPlowzoneMetavolcanicBroken3.9Heat treatedPlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneJasperBrokenPlowzoneJasperBrokenPlowzoneJasperBrokenPlowzoneJasperBroken23.64.1PlowzoneJasperBroken20.24.1PlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBroken18.9-PlowzoneMetavolcanicBroken17.56.5PlowzoneMetavolcanicBroken17.56.5PlowzoneMetavolcanicBroken17.25.0PlowzoneMetavolcanicBroken19.87.6PlowzoneMetavolcanicBroken18.9-PlowzoneMetavolcanic	Plowzone	Metavolcanic	Broken	-	-	17.9	6.4	
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PlowzoneMetavolcanicWhole1.326.614.84.5PlowzoneJasperBroken19.54.8PlowzoneJasperBroken3.9Heat treatedPlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneMetavolcanicBrokenPlowzoneJasperBroken18.03.9PlowzoneJasperBroken23.64.1PlowzoneJasperBrokenPlowzoneJasperBroken20.24.1PlowzoneMetavolcanicBroken18.9-PlowzoneMetavolcanicBroken14.28.2Cortex presentPlowzoneMetavolcanicWhole1.326.414.33.3-PlowzoneMetavolcanicBroken14.28.2Cortex presentPlowzoneMetavolcanicBroken17.56.5-PlowzoneMetavolcanicBroken17.25.0PlowzoneMetavolcanicBroken-17.25.0-PlowzoneMetavolcanicBroken-19.87.6PlowzoneQuartzBroken-19.87.6 <td< td=""><td>Plowzone</td><td>Metavolcanic</td><td>Broken</td><td>-</td><td>-</td><td>18.0</td><td>4.0</td><td></td></td<>	Plowzone	Metavolcanic	Broken	-	-	18.0	4.0	
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PlowzoneMetavolcanicBroken-34.3-6.0PlowzoneMetavolcanicBrokenPlowzoneJasperBroken18.03.9PlowzoneJasperBroken23.64.1PlowzoneJasperBrokenPlowzoneJasperBroken20.24.1PlowzoneMetavolcanicBroken18.9-PlowzoneMetavolcanicBroken14.28.2Cortex presentPlowzoneMetavolcanicWhole1.326.414.33.3PlowzoneMetavolcanicWhole1.622.218.36.0PlowzoneMetavolcanicBroken21.03.8PlowzoneMetavolcanicBroken17.56.5PlowzoneMetavolcanicBroken17.25.0PlowzoneMetavolcanicBroken19.87.6PlowzoneQuartzBroken18.9-PlowzoneMetavolcanicBroken19.87.6PlowzoneMetavolcanicBroken18.9-PlowzoneMetavolcanicBroken19.87.6PlowzoneMetavolcanicBroken18.9-PlowzoneMetavol	Plowzone	Metavolcanic	Broken	-	-	19.5	4.8	
PlowzoneMetavolcanicBroken-34.3-6.0PlowzoneMetavolcanicBrokenPlowzoneJasperBroken18.03.9PlowzoneJasperBroken23.64.1PlowzoneJasperBrokenPlowzoneJasperBroken20.24.1PlowzoneMetavolcanicBroken18.9-PlowzoneMetavolcanicBroken14.28.2Cortex presentPlowzoneMetavolcanicWhole1.326.414.33.3PlowzoneMetavolcanicWhole1.622.218.36.0PlowzoneMetavolcanicBroken17.56.5PlowzoneMetavolcanicBroken17.55.0PlowzoneMetavolcanicBroken17.25.0PlowzoneMetavolcanicBroken19.87.6PlowzoneQuartzBroken18.9-PlowzoneMetavolcanicBroken17.25.0PlowzoneMetavolcanicBroken18.9-PlowzoneMetavolcanicBroken18.9-PlowzoneMetavolcanicBroken19.87.6PlowzoneMetavol	Plowzone	Jasper	Broken	-	-	-	3.9	Heat treated
PlowzoneJasperBroken18.03.9PlowzoneJasperBroken23.64.1PlowzoneJasperBrokenPlowzoneJasperBroken20.24.1PlowzoneMetavolcanicBroken18.9-PlowzoneMetavolcanicBroken14.28.2Cortex presentPlowzoneMetavolcanicWhole1.326.414.33.3PlowzoneMetavolcanicWhole1.622.218.36.0PlowzoneJasperBroken21.03.8PlowzoneMetavolcanicBroken17.56.5PlowzoneMetavolcanicBroken17.25.0PlowzoneMetavolcanicBroken19.87.6PlowzoneQuartzBroken18.9-PlowzoneQuartz CrystalBroken19.87.6PlowzoneMetavolcanicBroken18.9-PlowzoneMetavolcanicBroken18.9-PlowzoneMetavolcanicBroken18.9-PlowzoneMetavolcanicBroken24.24.2PlowzoneMetavolcanicBroken22.84.1	Plowzone	-	Broken	-	34.3	-	6.0	
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# Appendix 6 continued.