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The Cooper River Survey: An Underwater Reconnaissance of the West Branch

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Description

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Keywords

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Abstract

Local divers, under the direction Mr. Jimmy Moss from Abbeville, conducted a preliminary archaeolgical and historical survey the west branch of the Cooper River. Guidance and advice was provided by the Sport Diver Archaeology Management Program (SDAMP) of South Carolina Institute of Archaeology and Anthropology (SCIAA). The Cooper River is one of the most popular recreational diving areas in the state. The objectives of this project were two-fold. First, to involve divers in an avocational archaeology project with the idea of promoting diver education. Second, to systematically locate and assess the underwater cultural resources in this historically significant two mile stretch of river. These sites included prehistoric and historic artifact scatters, a dock structure, shipwrecks and a barge. The artifact scatters were sampled and initial documentation was undertaken on the structural remains. Participating divers were involved in a range of tasks which included historical research, maintaining field notebooks, plotting sites on topgraphy maps, cataloging and labelling artifacts, and compiling the final report.

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Table of Contents

List of Illustrations

Figures **Page**

Figures

Page

Introduction

The Cooper River in South Carolina has one of the richest histories on the eastern seaboard. Archival records indicate the use of the river by prehistoric native American peoples, early colonists, and colonial plantation owners. A number of vessels were also abandoned or scuttled there during the American Revolution and the Civil War. The Cooper River was a major historical waterway in the state.

The west branch of the Cooper River is also one of the most popular recreational areas for artifact and fossil collecting by sport divers. This activity, which was legalized by the Hobby Diver Program initiated by Alan Albright in the 1970s, allowed divers to recover and keep surface-collected artifacts in return for monthly written reports. Many of these reports were inadequate in terms of usable archaeological or historical information. Divers did not report the locations of sites accurately and often could not identify their finds. Exclusive licenses also permitted large sections of the west branch to be scoured for artifacts by salvors. These collecting activities have been documented in the state site files at the South Carolina Institute of Archaeology and Anthropology and in the extensive hobby report paperwork currently housed in the Underwater Archaeology Division's Charleston Field Office. This report represents one of the first attempts to conduct a preliminary assessment of these operations and the salvage collections recovered from this area.

In 1989 the new focus of the Sport Diver Archaeology Management Program, formerly the Hobby Diver Program, was to educate divers about the preservation of underwater cultural resources and simultaneously to upgrade the quality of the hobby diver reports (Harris 1991:2). This was to be achieved by means of fieldschools, newsletters, conferences, hobby diver surveys, and avocational archaeology projects. As the west branch of the Cooper River represented both a historically significant and a high impact recreational diving area, it was selected for this hobby diver survey project. The project was initiated and organized by Jimmy Moss, a SCIAA fieldschool graduate. Jimmy has a history of submitting detailed hobby reports, was interested in historical research and very familiar with sites in the Cooper River. The objective of this survey was to update the SCIAA site files, and locate and research any new sites found in a selected area of the west branch of the Cooper River. Samples of surface-collected artifacts recovered from the survey area would be retained by the project participants consistant with the South Carolina Underwater Antiquities Act of 1991 hobby diving licensing agreement. Guidance and advice in fieldwork methodology, cataloging the collection and report writing would be provided by SCIAA staff. Essentially, this was

the first effort by the State's hobby divers to make a worthwhile contribution to the preservation of their heritage instead of simply collecting mantle-piece mementoes.

Another goal of the project was the overview of past archaeological information on the two-mile project area. In 1980, a side scan sonar survey of the Cooper River was conducted by Albright and Wilbanks which included this survey area. These records have not yet been utilized by the current SCIAA underwater division staff and information about this survey has not been published. With the exception of a short article in the Conference in Underwater Archaeology Proceedings (Wilbanks 1972:151-157) on the Mepkin Abbey shipwreck (38BK48) in proximity to Mepkin Abbey plantation, there are no other published works on underwater archaeological activity within in the survey area designated by Jimmy Moss. Leslie Drucker conducted a survey of the inland area of the west bank which included the Pimlico land tract in 1981. Most of the testing was undertaken more than a mile inland. These sites are listed as 38 BK 249, 250, 251, 253, 255, and 256 in the SCIAA site files. This report includes useful historical information about these plantations and a copy of a plat from the McCrady collection (Drucker 1981). More extensive archaeological efforts have been devoted to terrestrial plantation archaeology projects on the east branch of the Cooper River, primarly by the Anthropology Department at the University of South Carolina (Ferguson 1986 & 1987). Published works on underwater archaeolgy surveys and projects undertaken elsewhere in the West Branch of Cooper River include the Santee Canal Report Part I (Simmons & Newell 1989) & Part 11 (Newell 1989) , and an article on the shipwrecks documented at Lewisfield Plantation (Thompson 1991: 125-131).

This study serves primarily to provide a compilation of baseline data for future researchers. The Cooper River has a great deal of potential for further archaeological and historical research, recreational, and educational projects. To manage this rich riverine archaeological resource base responsibly, it is critical not only to inventory the sites, but also to assess the present and past impacts of the dive community. Citizen participation and public outreach represents an primary part of this goal.

Project Location

The survey project on the west branch of the Cooper River extended approximately 2 miles as the fish swims from the Strawberry Trestle Bridge (UTM Easting 598660 Northing 36611880) to Mepkin Abbey Plantation (UTM Easting 597600 Northing 3664240). This area can be located on the Kittredge Topographical Quadrangle 7.5 minute series (Figure 1). Swim searches by divers were conducted

from the start of the bank to the channel and approximately 20 feet out into the channel. The extent of this search was determined by the topographic configuration of the river bottom -- at certain locations the bank was more or less extensive than other areas.

The project area included the known historical plantation sites bordering the river on the east bank -- Mepkin, Elwood, and Clermont. On the west bank were the plantations Point Comfort, Mepshaw House, Keklico, Pimlico, and the Bluff.

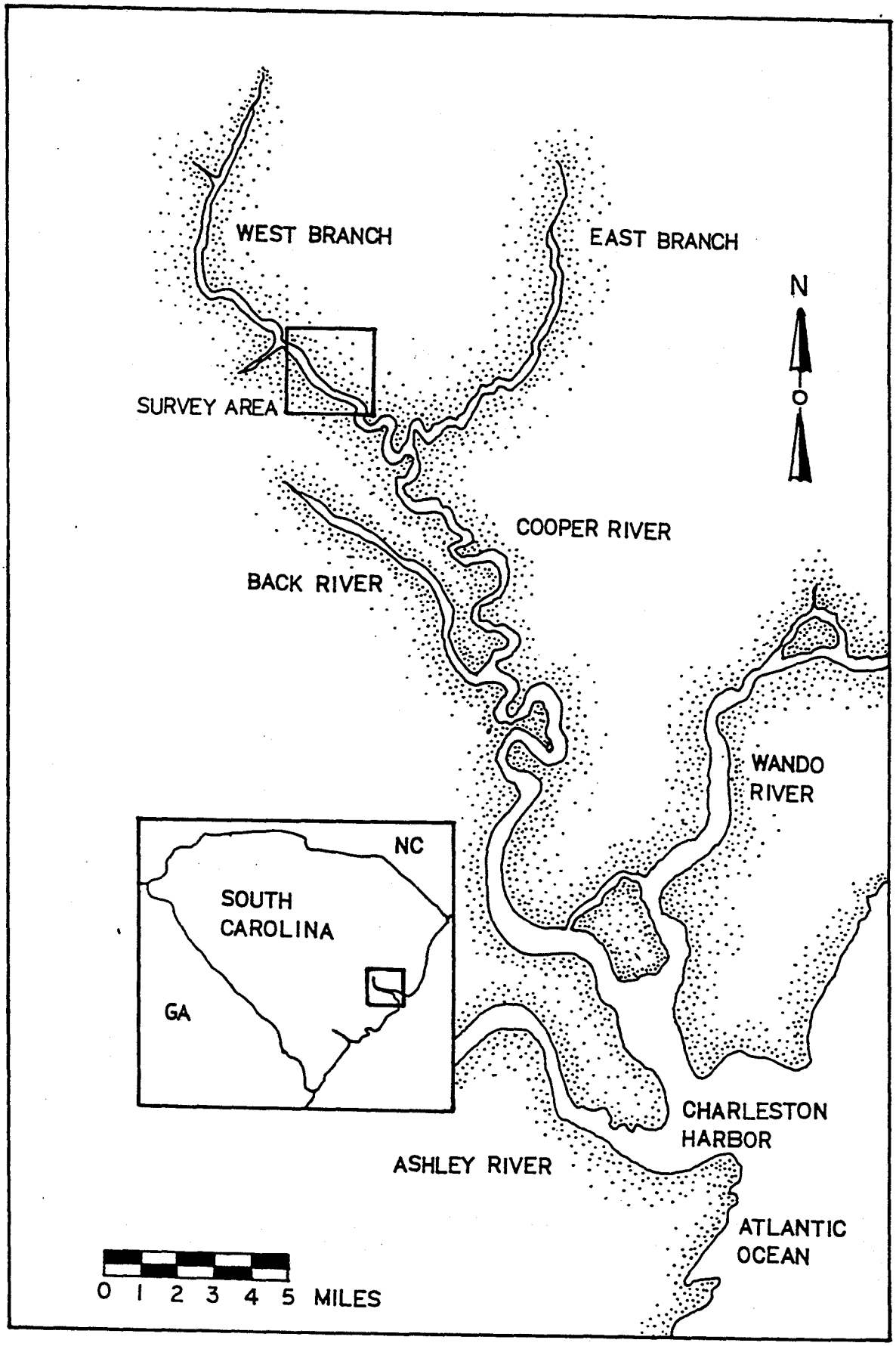


Figure 1. Project Location

Drawing by Scott Heavin

Environment and Geomorphology

The Cooper River, a Coastal Plain river, drains into Charleston Harbor. It comprises a tidal estuary extending approximately 48 miles northward from the outlet to 15 miles beyond the junction of its east and west branches. Approximately 20 miles further upstream the headwaters of these branches flow out of the marsh-like area of Berkeley County (U.S. Army Corps of Engineers 1984:4).

In the upper Cooper River near Goose Creek and upstream to the "Tee," where the east and west branches meet, brackish water becomes fresh. Marsh vegetation in this area changes from the saline to the fresh water type. Brackish water marshes in the Charleston area occupy a transitional zone between true salt marshes and the upper Cooper River fresh water marshes. While many salt marsh species occur in the area, there is a trend toward greater diversity including species such as cattail, bulrushes and giant cordgrass (U.S. Army Corps of Engineers 1976:47).

The Cooper River presently has a drainage area of 12,484 square miles due to the diverted flow of the Santee River through Pinopolis Dam and the Tailrace Canal. The stream flows from the west branch through a lock to Lake Moultrie. Before construction of this lake in 1941, the west branch headwaters were at Stony Landing near Monks Corner. Headwaters of the east branch of the Cooper River are located in Hellhole Bay, a large swamp area of Francis Marion National Forest in Berkeley County. The elevation of the river ranges from mean sea level at Charleston Harbor to approximately 5 feet above mean sea level upstream (U.S. Corps. of Engineers 1976:4)

Studies of shoreline change show that the Cooper River and South Carolina Coastal Zone were submerged during the Pleistocene. More recent shoreline erosion and well-documented destructive activities of modern storms suggest that material associated with both historic and prehistoric habitation of the Cooper River and Cooper River shoreline could have been redeposited in the harbor or in pockets and bends of the river. This does not necessarily mean that the integrity of the archaeological record associated with submerged cultural resources in the study areas would be completely destroyed (Watts 1986:6). Evidence from the inundated Karst formation sites in Sarasota County, Florida (Clausen 1975) in the Gulf of Mexico off Fort Meyers (Ruppe 1979), in Vancouver Harbor (Easton and Moore 1989; Easton 1992) confirm that the archaeological record associated with prehistoric sites is not always destroyed. Inundated historic sites have also yielded significant information such as Fort Niagara, New York (Knoerl 1991), and from a colonial port in North Carolina (Watts 1984).

The effect of fluvial processes on shipwrecks can be quite different than that of inundated artifact concentrations. In some cases, the remains of a shipwreck are not subject to innundation. Wrecks deposited in shallow-water areas can settle rapidly into the bottom sediment with the associated archaeological record intact (Watts 1986: 6). A few examples of this include the wreck of the Amsterdam (1747) grounded in the British Channel (Marsden 1972), the Spanish Plate fleet vessels on the Texas coast (Delgado 1985).

The Cooper River, was an extremely busy prehistoric and historic period waterway. Distribution of *in situ* cultural material is likely to be concentrated on river banks in the general vicinity of plantation sites, docks, or ferry landings. *In situ*, in this instance, is a relative concept as the majority of historic period artifacts found in the river are probably discarded items - trash - from people waiting at landings, on boats, or from plantations houses. Prehistoric artifacts may also have been discards or eroded out of a land sites on the river banks. Shipwrecks found in the in the Cooper River are likely to fall into a number catagories: watercraft lost by accident in hurricanes and storms, derelicts which were simply abandoned by the plantations or late nineteenth century riverine-based industries such as phosphate, or, alternatively, causalties of naval engagements during the Revolutionary and Civil Wars.

One of the objectives of this study is to test this predicted cultural distribution pattern and also to assess the effects of geomorphological conditions. The exact nature of innundation or redeposition depend on local conditions - often dictated by very site specific variables such as tidal effects, orientation of a shipwreck, vegetation deposits, riverine topography, erosion, and accretion. Human disturbance will also be considered - areas where divers conducted more intensive collecting activities,

Past History of Survey Area Projects

Salvage Activities

In May 1975 the Underwater Archaeology Division, then under the supervision of Alan Albright, issued four exclusive salvage licences to divers to recover artifacts and fossils in a large section of the Cooper River. The licensing agreement at that time allowed the licensee sole ownership of 75 percent of all submerged antiquities after the state had reasonable opportunity to study and evaluate the recovered objects. The state was entitled to 25 percent of the recovered objects and was the arbiter of the division of the objects. The license fee was $100. Divers were required to keep daily logs including lists of recoveries, sketches, photographs, and note any changes in personnel, equipment, or administration. The licensee also signed a contract stipulating the use of all

archaeological techniques available to him to accurately record the location of all items recovered (SCIAA files).

The area allocated to these salvors, assigned site number 38BK62 and 38BK48, overlaps the current survey area. Both sites were initially recorded by Karen Lindsay of the SCIAA staff. All recovered artifacts were labelled and cataloged with this number (SCIAA files). Lee Spence was the original informant of 38BK48 while no informant is listed for 38BK62 (Keith Derting, personal communication 1992). To be consistent with the policies of the SCIAA Information Management Division, these site numbers were maintained during the 1992 survey.

A major problem with th number designation system became apparent during the 1992 sport diver project. The original boundry delineations for both sites are highly questionable for several reasons. First, the areas delineated are too large to retain adaquate provenience control. Site 38BK48 is recorded as nearly one half mile corridor of the river, and 38BK62 is recorded as well over one mile in length (Figure 2 A). Multiple components were reported within each area at the time. Second, the site definitions were made without systematic survey or investigation to ascertain the true extent of archaeological deposits.

Salvage licenses issued to Kevin Rooney (#69), Wilson Jones (#70), and Wade Quattlebaum (#71) subsumed part of the area originally defined as 38BK62 and the area later defined as 38BK852 (Figure 2 B). Specifically, Salvage License #69 fell entirely within 38BK62, Salvage License #70 include the southeastern portion of 38BK62 plus the recently reported canoe site, 38BK852, and Salvage License #71was issued to the river corridor located on either side of the railroad trestle bridge at Strawberry Landing. Archaeological investigations during the 1992 project of the areas in question have revealed additional remains, as well as re-located some older, previously known components (Figure 2 C). These new discoveries have been incorporated into the records and site maps.

Conditions of the original salvage licenses allowed the divers the exclusive right to recover unlimited numbers of artifacts and fossils in this part of the river. Others divers could dive in the area, but were not allowed to do any collecting. Ralph Wilbanks, then on the staff of the Underwater Archaeology Division, was appointed in September 1975 as the monitoring field archaeologist for these license activities.The search area for the salvage activities covered the banks as well as the river channel. Hand-written field notes by Wilbanks indicate that the primary objective of the project participants was to collect fossils to be sold in Florida for monetary gain. Wilbanks writes: "I informed the crew that they could not just bring up sharks teeth. I told them that I would check into this deeper. I

personally believe that they are being selective in the artifacts that they bring up." (Field Report Notes, 19 September 1975) This concern was later translated into law with the South Carolina Underwater Antiquities Act of 1983, an amendment of the 1976 South Carolina code of laws, which states,

> A licensee shall not be be permitted to recover underwater antiquities selectively. The licensee shall not select only salable objects to recover nor only one kind object but shall recover all objects located including broken objects, pre-historic objects and other antiquities in his search area.
> (SC Underwater Antiquities Act 1985: 5)

It is somewhat surprising to find that the vast volume of cultural material recovered by these salvors was probably not the primary objective of their project, but rather a requirement of their licensing agreement. They semmed to be more interested in fossils, a more marketable item.

According to other documentation about this project, the salvors did not uphold the conditions of the license. Numerous violations of the licensing contract are listed, such as not having all the artifacts present for the division, destructive conservation techniques, mislabelled boxes of artifacts, unlabelled artifacts, inaccurate and inadequate maps to show the locations of finds, and changes of personnel without informing SCIAA. In November 1975, SCIAA officially revoked these licenses as a result of these repeated violations which it deemed would not be in the best interests of the state (SCIAA files).

Side Scan Sonar Survey

In 1980, a side scan sonar was conducted by the the personnel of Underwater Archaeology Division in the Ashepoo, Ashley, Edisto, Combahee, Cooper, Stono, and Wando RIvers. The unpublished manuscript on this survey is available from SCIAA's Underwater Archaeology Division (Albright, nd). Funding for this project was provided by the United States Department of Interior, Heritage Conservation and Recreation Service. The grant was administered by the South Carolina Department of Archives and History. The objectives of this survey were to update topographic maps and NOAA charts, to integrate submerged cultural site data into SCIAA's Statewide Site Inventory, and to submit information on fossil beds to the South Carolina Museum Commission.

The value of this survey was that it could potentially assist in identifying archaeologically sensitive areas for warterfront development mitigation purposes.

During this survey 15 targets were located in the west branch of the Cooper River. These targets included cultural remains, log jams, and geological features like marl outcrops. Only three of these targets fall within the current survey area. Namely the Mepkin Abbey Shipwreck 38BK48 (T15), a barge 38BK62 (T14), and a log jam and marl outcrop (T13). Both shipwreck sites had been reported to the Institute by sport divers prior to the 1980 survey.

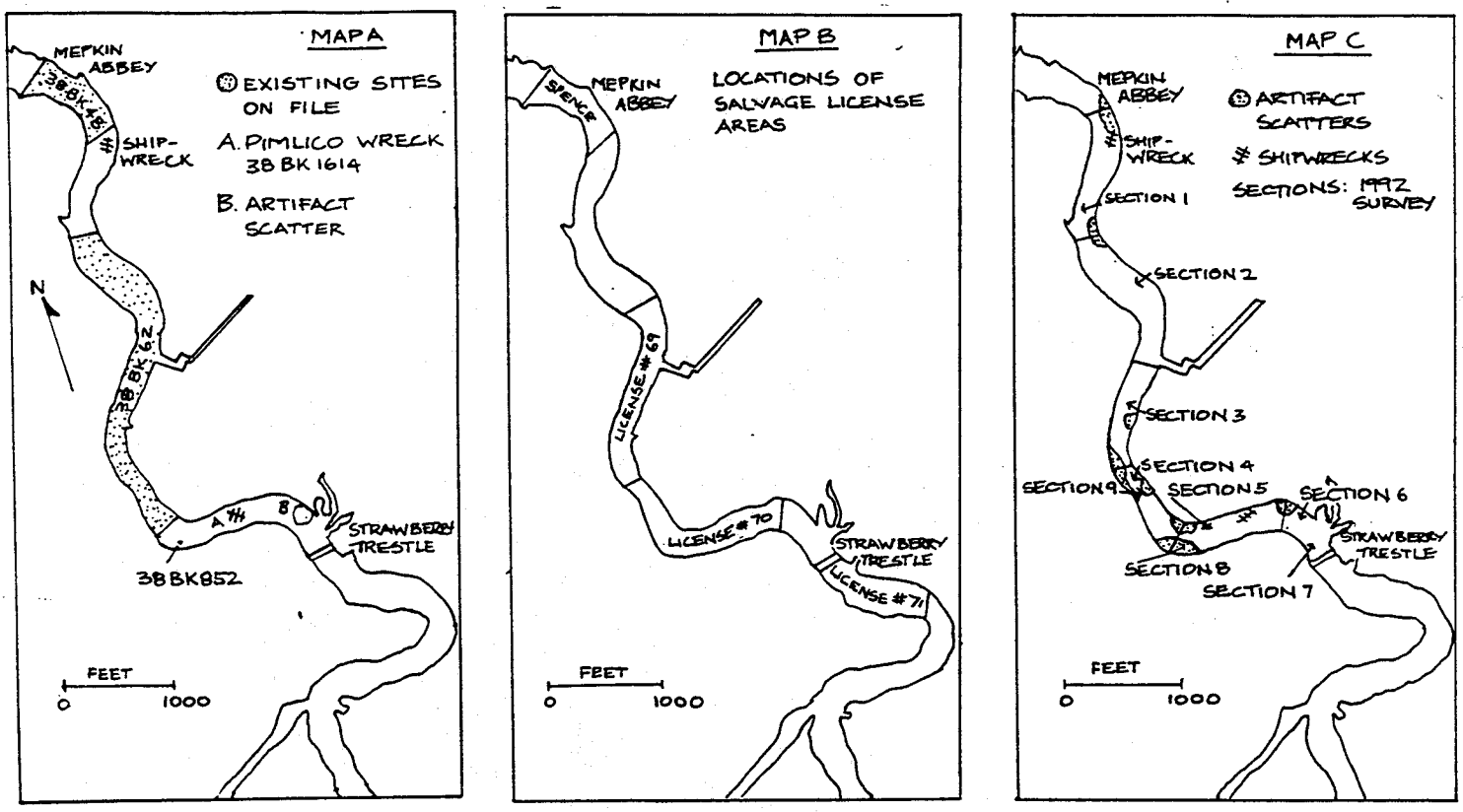


Figure 2. (A, B and C) Former Salvage License Areas.

Drawing by Lynn Harris

Figure 3. Seventeenth Century Bellarmine Salt Glazed Stoneware Jar with Seventeenth and Early Eighteenth Century Green Glass Bottles. Recovered During Cooper River Salvage Operations. *SCIAA Photo*

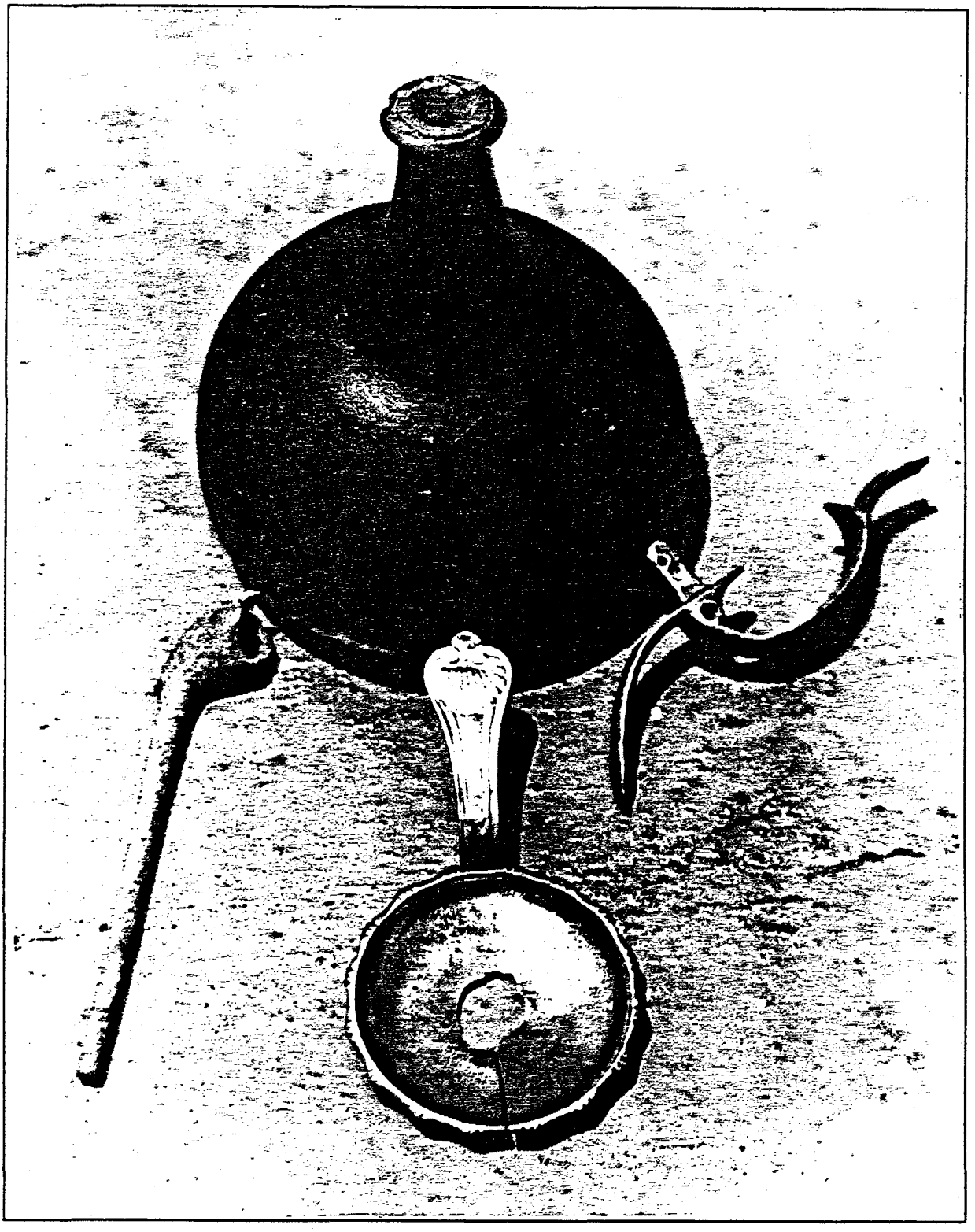


Figure 4. Clockwise: Seventeenth Century Green Glass "Onion" Bottle, Trigger Guard, Candlestick Hilder, and Clay Pipe. Recovered During Cooper River Salvage Operations. *SCIAA Photo*

Figure 5. Photograph Showing Range of Artifact Types Recovered During Cooper river Salvage Operations.

SCIAA Photo

Figure 6. Sherds From Green Glass Bottles, Salt Glazed Stoneware Jugs, Westerwald Gray Stoneware, Pearlware, Creamware, and Whitwares Ceramics Found During Cooper River Salvage Operations. *SCIAA Photo*

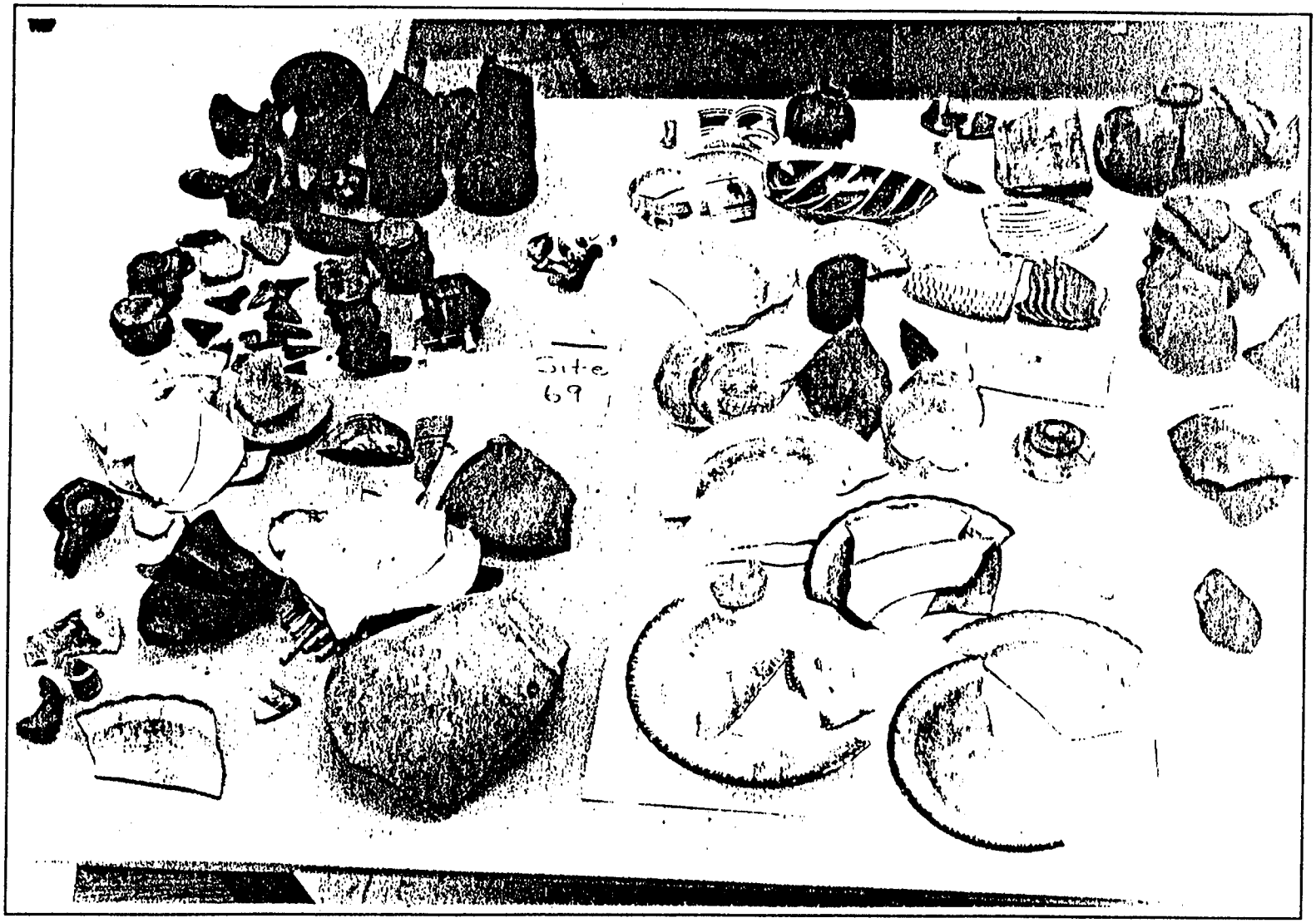


Figure 7. Sherds From Green Glass Bottles, Salt Glazed Stonware Jugs, Combed Slipware, Transfer Print and Shell-Edged Pearlware, and Prehistoric Ceramics Found During Cooper River Salvage Operations. *SCIAA Photo*

Historical Background

To the natives it was the Etiwan, this river that flowed from the heart of the land they called Chicora to the natural harbor formed by its convergence with two other rivers. Later, English settlers would rename this river the Cooper (Waddell 1988:41).

Following the settlement of Charlestowne, the colonists began settling in the colony's interior. The Cooper River, navigable for more than 30 miles, attracted a good portion of them, and before 1700 small settlements, farms, and plantations could be found on both sides of the river (Orvin 1973:17).

The settlers also sought new means of employment. For this they turned to trade with the native Indians. This trading proved extremely lucrative, and fortunes were made by exchanging a variety of goods for cured skins and furs. Items traded included rum, guns, gunpowder and shot, beads, and various trinkets (Orvin 1973:20). It is estimated that between 1699 and 1715 some 200 traders were sending an average of more than 53,000 skins per year to England (Weir 1983:143). By 1729 there were more than 300 men involved directly with the Indian trade (Meriwether 1940:15).

Another early trading commodity for the colonists was naval stores -- tar, pitch, and turpentine -- for which the abundant Southern longleaf pine, "the most prolific resin tree in North America," was an ideal source (Williams 1935:169). Taking advantage of England's shortage of these supplies the colonists were soon exporting more of these substances than all the other colonies combined, with annual shipments estimated in 1722 to average 60,000 to 70,000 barrels per year from South Carolina (Merrens 1977:69).

This valuable Indian and naval stores trade, along with the expansion of settlements and the development of rice culture, required a considerable movement of goods, and the Cooper River provided a reliable means of transportation.

Where Biggin Creek enters the west branch of the Cooper River, later to be known as Stone Landing or Stoney Landing, soon became a popular point of trade. "Early traders with [the] Indians took their furs, hides, and skins over Indian trails to a landing on Biggin Creek, . . . and from thence went in boats through this creek to the western branch of Cooper River and on to Charlestown." (Orvin 1973:59). The east side of the river, particularly the area around Fair Forest Swamp became an active area for the transhipment of naval stores. "On practically every plantation there was a cooperage for making barrels which, when filled with resin were hauled by oxen, first on wooden sleds and later in carts, to the nearest stream to be loaded on sloops and taken to Charlestown." A favorite landing site for these vessels was Wadboo Creek (Orvin 1973:58).

As the trade in naval stores and with the Indians declined, the use of the rivers for transportation certainly did not. In 1751 Governor James Glen, writing to the Lords Commissioners for Trade and Plantation in England, noted that the "Cooper River appears sometimes a kind of floating market, and we have numbers of canoes boats and pettyaguas that ply incessantly, bringing down the country produce to town, and returning with such necessarys as are wanted by the planters." (Merrens 1977:181).

Much of the river traffic was related to the transportation of rice and indigo from the plantations that came to dominate the upper reaches of the Cooper River, and the river soon became a highway for a variety of craft plying between the plantations and Charleston harbor. "Rice planters in the upper part of Berkeley County hauled their rice to Stone Landing to be loaded on flat boats or schooners and transported to Charlestown." (Orvin 1973:69). Henry Laurens, planter, merchant, and, subsequently, patriot, who owned two plantations on the upper reaches of the Cooper River -- Mepkin on the west branch and Wambaw on the south side of the Santee River -- was perhaps typical of the country planter of this time. To transport produce to Charleston and bring goods back to his plantations he owned two schooners; one, the *Baker,* plied between Charleston and Mepkin, and the other, the *Wambaw,* serviced Wambaw Plantation (Laurens 1978:610).

This lively plantation trade along the Cooper River was drastically interrupted by the American Revolution. As control over the South Carolina upcountry seesawed back and forth between the British and American forces, the plantations were essentially evacuated, and the river traffic centered on the transportation of military supplies. On an expedition to chase the British out of Moncks Corner during the summer of 1781, Col. Wade Hampton and his men, arriving at Strawberry Ferry on their way there, found four vessels loaded with supplies for the British. They promptly burned them. Continuing northward they came to Little Landing Plantation (later known as Lewisfield) were they stumbled upon a British detachment of about 100 men loading two boats with loot they had taken from nearby plantations. Surprising the British party, he captured 78 of them and burned the vessels and supplies. (Orvin 1973:101).

Following the end of the Revolution, with the rise in cotton as an export commodity and the building of the Santee Canal to increase the reach of waterborne transportation into the state's interior, commercial activity resumed along the Cooper.

Cotton was a bulky commodity which took up much cargo space. The six million pounds of it exported from South Carolina in the year between October 1, 1799 and September 30, 1800 certainly filled many ocean-going ships (Petit 1976:170). It also took a variety of smaller craft to bring this cargo to Charleston from the many cotton plantations. These included rafts, poleboats, and the ubiquitous barge-flat. Specially built

for hauling cotton were the "cotton boxes," or "box boats." These crudely built craft were often up to 60 feet long and 25 feet wide (Fleetwood,1982:87).

Cotton and other goods were transported through the Santee Canal, which opened for business in July 1800, in a boat that was considerably narrower. According to canal regulations, no boat could enter that was more than 9.5 feet wide, 56 feet long, or with more than 2.5 draft (Orvin 1973:152).

About this time another means of transportation came on the scene. Inland steamers were to be seen on all the state's navigable rivers by the early 1830s. These early river steamers were usually large vessels over 100 feet in length (Fleetwood 1982:93-94), and often carried passengers as well as cargo.

During the Civil War, to break the Union blockade of Charleston and the South Carolina coast, a new and innovative steamboat was constructed. The torpedo boat was designed to carry a spar torpedo against the hull of a Union warship. In 1863, the *David* was built at Stoney Landing. The *David,* 48.5 feet long, 5 feet in the beam, and shaped like a cigar, was designed to steam with most of its hull submerged (Fleetwood 1982:124). It must have been a strange sight indeed when the *David* was brought down the Cooper to have her engine installed at Charleston. Following this installation, the *David* made an attack on the powerful Union ship *New Ironsides.* Although the attack caused minimal damage, the *New Ironsides* eventually had to leave her station and return North for repairs to her hull and engines. The attack also resulted in increased security measures being taken by the blockading fleets putting additional burdens on their crews. In this respect the attack was successful and proved the viability of these unseemly craft (Coker 1987:257, 261-262).

After the end of the Civil War, a new industry sprang up that put the Cooper and other South Carolina rivers to a new use. This was phosphate mining. The rock, which supplied the main ingredient for fertilizer, was mined either near the rivers or dredged from the river bottom itself (Fleetwood 1982:129).

At the turn of the century another presence established itself on the Cooper River. The Charleston Navy Yard (north of the city of Charleston on property formerly known as Chicora Park, Marshlands Plantation, and Lawton Plantation) opened in 1902. The first vessels constructed at the yard were two snag boats built for the U.S. Army Corps of Engineers. The snagboats *Pee Dee* and *Wateree,* used to remove debris and obstuctions from South Carolina rivers, were launched in 1913. Thirty years later the navy yard employed 25,000 workers and was turning out a new vessel every week (McNeil 1985:1, 38-40, 47).

From Indian traders to navy destroyers, the Cooper River has played a vital part in the development of Charleston and South Carolina. Today, the Indians who called it the Etiwan would hardly recognize it.

Plantations on the West Branch

Mepkin Plantation

Mepkin Plantation is located on the eastern side of the Cooper River. This plantation is the largest plantation in the survey area and is where the survey began (Smith 1900:327-332).

Mepkin originally consisted of about 3,000 acres. It was granted along with other lands in the late 1600s to three brothers: Peter, Thomas, and James Colleton -- all sons of Sir John Colleton (Smith 1900:327-332).

James Colleton survived both his brothers and, according to the law regarding joint tenancies, became sole owner of all lands in the grant. This included Mepshaw which had 2,000 acres, Mepkin containing 3,000 acrea, a tract of land near the Ashley River, and land in Charleston (Smith 1900:327-332).

Upon James Colleton's death in 1706 he left Mepkin to his eldest son, John Colleton. In 1762 John Colleton sold Mepkin to Henry Laurens (Smith 1900:27-332).

Laurens (born in Charleston in 1724, died in 1792), was the first son of John Samuel Laurens. In 1744 Laurens was sent to London to obtain training as a merchant, and in 1746 he was instrumental in organizing the first fire insurance company in the United States. In 1749 he was made agent for the colony in England and held that position until 1750 (Leiding 1975:42-44).

Laurens was also a great leader and officer. In 1761, during the French and Indian War (right in the midst of his wealthy life), he accepted a commission to collect recruits and march into the Appalachian Mountains. He was elected to the House of Assembly in South Carolina in 1757 and was a member almost continuously until the Revolution. He was elected president of the first and second Councils of Safety (1775-1776), and president of the First Provincial Congress of South Carolina in 1775 (Leiding 1975:42-44).

On 1 November 1777, when John Hancock resigned the presidency of the Continental Congress, the position was given to Henry Laurens by unanimous vote. Laurens was also elected Minister Plenipotentiary to Holland in 1779, but was captured by the British on his way to Holland and held in the Tower of London for 14 months when he was exchanged for Lord Cornwallis (Leiding 1975:42-44).

A leading entrepreneur, Laurens was not only a merchant but a prominent planter, ship owner, slave trader, and owner of several plantations (Laurens 1978:609-613; Wallace 1915:47).

In July 1750 he married Eleanor Ball, daughter of Elias Ball (Leiding 1975:43). In 1760 their infant daughter, Martha, came down with small-pox and was pronounced dead. Her body was taken from the sick room and laid on an open window sill to be prepared for burial. Dr. Moultrie noticed movement, the fresh air apparently reviving the small baby, and Martha Laurens was saved from being buried alive. She later became the third wife of Dr. David Ramsay and mother to eleven children (Irving 1969:83-84).

Eleanor Ball Laurens died in April 1770 while giving birth to their twelfth child, a daughter named Mary Eleanor. She was buried in the northwest corner of St. Phillips Church yard. The grave was covered by a granite slab, and set on a brick foundation. She was survived by only four of her twelve children. They were John, Martha, Henry, and Mary Eleanor (Deas 1978:63).

When the Circular Church was converted into a store house by the British the grave marker was destroyed. This act of vandalism was in retaliation for the patriotic stand taken by her husband and son during the Revolution (Deas 1978:63).

Laurens returned from England in 1784 to find the plantation house also burned by the British for his patriotism. He moved into the overseer's cottage at Mepkin until another house could be built. Here Laurens spent the rest of his years until his death in 1792 (Wallace 1915:457-458).

Martha's narrow escape from being buried alive scared Henry Laurens so much that he left specific instructions for his remains. His final wish was that he be wrapped in 12 yards of tow cloth and burned until he was totally consumed. His bones were then to be deposited where his family thought proper. This wish was carried out at the Mepkin when slaves, family, and friends gathered around the iron coffin as it was set on fires. His ashes and bones were then collected and buried at Mepkin. This was said to be the first documented case of cremation in the nation with the exception of the native indians (Wallace 1915:457-458).

Mepkin today is known as Mepkin Abbey. It is a monestary run by Monks and is open to the public. Before exploring the grounds stop by the visitor center. Not all of Mepkin is open to the public. The plantation house is gone but the grounds are kept neat. There are paths leading through the old oak trees down to the river. Visitors can also tour the cemetery down near the bluff.

Elwood Plantation

This plantation is located on the eastern side of the Cooper River between Clermont and Mepkin plantations. The house was quaint in appearance with a large shed attached which gave it the appearance of an East Indian bungalow. This plantation was

originally owned by Alwyn Ball who was married early in life to Esther McClellan. Mr. Ball had a passion for deer hunting and a gift for music (Leiding 1975:45-46).

When he died in Charleston in 1835 at the early age of 28, he had a very dramatic funeral procession. The procession wound its way through the streets of Charleston to the wharf where a boat waited. First to be loaded aboard the boat was the hearse, followed by Josh, a faithful servant and huntsman, who was leading his master's hunting horse. Next to board the boat were Ball's favorite two deer hounds. This was followed by carriages of family members and mourners. The two deer hounds were said to have guarded the coffin on its trip up the river to the Strawberry Chapel where he was to be buried (Leiding 1975:45-46).

When they reached the chapel Josh carried out Ball's final wish as the coffin was lowered in the grave. He gave a loud blast of his master's hunting horn. He then tossed the horn into the young Mr. Ball's grave (Leiding 1975:45-46).

Elwood Plantation no longer exists. In 1930 it was included in the Mepkin tract (Irving 1969:37).

Clermont Plantation

Located on the eastern side of the Cooper River just after passing Strawberry Chapel, Clermont was the home of Augustus Taveau (Irving 1969:36-37).

Augustus's mother, Martha Carolina Swinton, was married to the first John Ball. She was a strong Presbyterian who lived at Edisto Island. Right in the midst of all the Episcopalians, this find lady built a church at Clermont to make sure the Lord's word would be preached in the area. This church in known as Taveau Church, and is now used by African Americans (Irving 1969:36-37).

Subsequently, Clermont became a part of Elwood Plantation, and later a part of Mepkin Plantation (Irving 1969:36-37).

Bluff Plantation

Located on the west side of the Cooper River just past Strawberry Landing, Bluff Plantation was built about 1790 by Major Isaac Child Harleston (Stoney 1989: 71). Strawberry Ferry, established in 1705, was located next to this plantation.

In the 1880's Isaac Ball, who was farming the Bluff, began repairing and remodelling the old overseer's house. Sealed in a hidden section of a closet were letters and documents which, when the walls were removed, were blown out over the yard and into the river. The workmen doing the repair work paid no attention to the papers, but as Mr. Ball returned the next day he was surprised to pick up a letter of Francis Marion's

lying on the ground. He immediately made a search of the grounds and the river, and was able to save a number of the papers, including Muster Rolls of Marion's command, and letters from General Moultrie and others addressed to Major Harleston during the Revolution (Irving 1969:44).

The original plantation house is no longer standing. It was completely destroyed by fire (personal communication Mr. Johhnie Flynn).

Pimlico Plantation

The Mepshaw tract of land was granted to the Colleton family in 1681. This land was confiscated by the state after the Revolution because of its "British ownership,"and was split up into six tracts of land and sold. Pimlico Plantation was one of these tracts (Waddell 1980:275).

Pimlico became the property of the Ball family, a prominent Cooper River family owning many plantations and tracts of land. Some of them were: Kecklico, Mepshew, Comingtree, Stoke, Strawberry, Limerick, Cypress, Cedar Hill, Cherry Hill, The Blessing, Quinby, Mepkin (owned by Eleanor Ball Laurens), and Pimlico. And that is only some of the plantations and land they owned (Irving 1969:177).

Pimlico was owned by Hugh Swinton Ball who married Anna Channing. They had several children all of whom died young. Mr. and Mrs. Ball both died in a fiery explosion aboard the steamer *Pulaski* on their way to Charleston from New York on June 14, 1838. A lawsuit was brought up about their properties, as the survivor was to inherit the bulk of the estate. The question was who was the survivor? This question was hard to decide in court because of the mass confusion and terror aboard the exploding steamer. It was said that the voice of Mrs. Ball was heard calling out to Mr. Ball. It was decided that had he been living he would have called back. From this information the court ruled in favor of Mrs. Ball's family (the Channings of Boston) who inherited all of her estate and more than half of his. Mr. Ball's intention was to leave the plantation to his nephew, Elias Nonus Ball, upon his coming of age, and Elias did receive a very comfortable portion of the property. The other part of the property and negroes had to be split up and sold. The people of the Cooper River were outraged and protested when, to make a greater profit, the Northerners who owned the land and negroes sold the negroes as individuals instead of following the gentlemen's custom of selling them by families (Leiding 1975:50-51).

Elias Octavus Ball, father of Elias N. Ball and the new owner of Pimlico Plantation, erected a machine on the plantation that was used to thrash rice -- one of the main crops of that time. It was said to be able to thrash 50 bushels of rice an hour when

well attended. The machine was run by the use of a water wheel shaft and not a pestle as was used in some of the machines (Irving 1969:163).

Pimlico Plantation is located on the west branch of the Cooper River. It is on the west side of the river just above the trestle bridge at Strawberry.

Mepshaw House Planation

Mepshaw Plantation is also located on the western side of the Cooper River between Pimlico and Point Comfort plantations. It was owned by James Colleton and contained more than 2,000 acres (Smith 1900:330).

The plantation was confiscated by the state after the Revolution because of Mr. Colleton's involvement with the Tories. It was later split into six tracts and sold by the state (Waddell 1980:275). The plantation and plantation house no longer exist (Personal Communication Johnnie Flynn)

Point Comfort Plantation

Located on the western side of the Cooper River next to Mepshew Plantation is the site of Point Comfort Plantation. The plantation house, an example of early American architecture at its best, was built by R. W. Roper and had two stories and an attic. The dwelling was constructed upon a knoll surrounded by oak trees draped with moss, giving the once busy plantation an archaic look, and was made of brick and conformed to the strictist architectural code of the day.

Under the house was a series of large arches acting as supports. A portion of these arches was enclosed to allow space for household offices and a basement.

The "grand stairway" was positioned over the middle front arch, fashioned after the French colonial houses, and had a central landing at the porch level descending on each side.

The lower floor had two big double windows made in the French fashion. They were placed on either side of the house, and led from the porch directly into two large front rooms. Inside these rooms were outstanding examples of paneling and woodwork (Leiding 1975:52-53).

Fieldwork

Methodology:

The fieldwork was undertaken one weekend a month from July to November. Divers paid all their expenses and provided their own boats and diving gear. Jimmy Moss played a leading role in directing and organizing the fieldwork. SCIAA staff participated on three weekends to advise divers about a survey strategy, using field notebooks, and setting up a cataloging system for recovered artifacts.

The river was divided into 12 designated sections starting with section 1 at Mepkin Abbey on the east bank. Each section represented a stretch of river between two bends.The last completed stretch, on the east bank before the bridge, was section 6. Similar searches were conducted along the east bank working from the bridge and swimming upstream. The survey for this season ended with section 9 on the west bank near Pimlico Plantation, opposite section 4 on the east bank. The survey of sections 10 to12 will be completed during the summer of 1993 (Figure 4).

When divers encountered artifacts, a shipwreck or structure, a buoy was secured approximately in the middle of the site. A sample of artifacts was recovered within a five foot radius of the float. Divers were advised not to collect artifacts according to preference or state of preservation -- rather a representatrive sample of the concentration in their estimation. Wood, metal, or composite items that required expensive or complicated conservation treatments were to be recorded, but recovery was avoided unless the divers were willing and able to undertake these procedures. Artifacts from a shipwreck site were not to be collected and Jimmy Moss or SCIAA staff had to be consulted about the recording methodology.

Aboard the dive boats, each bag of artifacts was labelled with appropriate locational information. The labelling system that was used included codes for the section of the river, eg. (S1), the diver's allocated number eg. (D8), the number of the buoy used eg. (B1), and the date of the dive. For example, S1/D7/B2 indicated that the artifacts were recovered in section 1, by diver No. 7 at the second buoy in that section. Jimmy Moss kept a list of the divers' numbers. Each diver was required to take compass bearings to three range marks from their floats. The divers were advised to write fieldnotes after each dive had been completed. Fieldnotes were to include sketch maps of the shoreline showing landscape and topographic features in relation to the floats and records of finds. Personal observations were also made about the site composition, diving conditions, and bottom substrate.

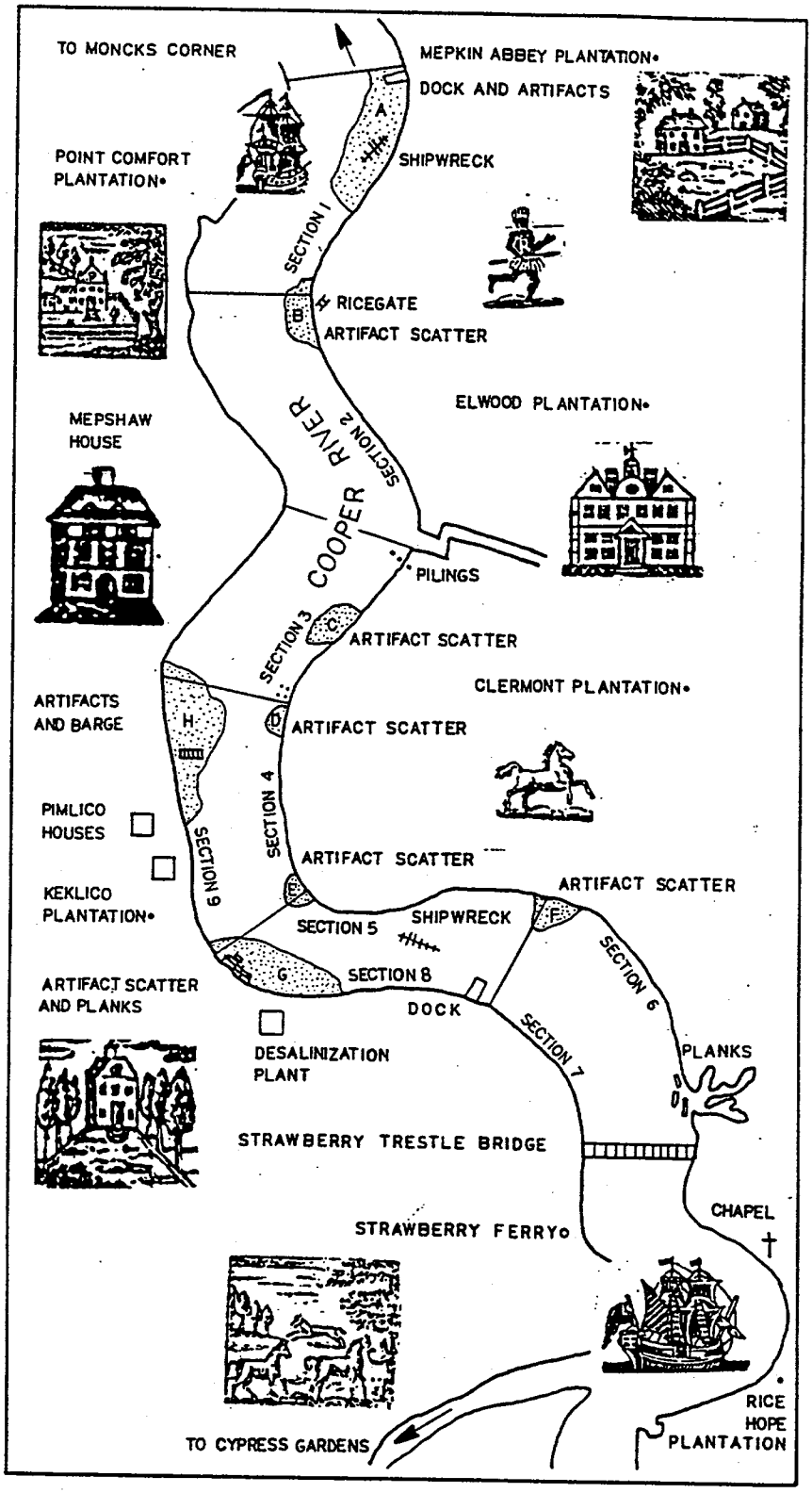


Figure 8. Survey Sections

Design by Lynn Harris, Carl Naylor and Jimmy Moss

Preliminary documentation was also undertaken by our staff on two shipwreck sites and a dock structure located within the survey area. Two of these wrecks, a barge and a large sailing vessel, were located in section 9 near Pimlico Plantation. The dock structure was situated at Mepkin Abbey, approximately fifty meters upstream of the Mepkin Abbey shipwreck.

Results

Section 1 (38 BK48)

Date: July 25, 1992

Start location : Kittredge Quad, UTM Easting 597530, Northing 3664300. This section started at Mepkin Abbey on the west bank and ended at the next downstream river bend.

Diving conditions: Strong outgoing current. The water temperature was 80°F and visibility was approximately 10 feet. Maximum depth was 22 feet.

Bottom Substrate: Marl, sand, and logs.

Flora and Fauna: Catfish, flounder, bream, eel, a 3-foot alligator, and blue crabs.

Artifacts: Prehistoric pottery, historic ceramics, pipes, coins, jewelry, buttons, and nails.

Shipwrecks and Structures: The Mepkin Abbey Shipwreck, discovered by Bob Densler, had already been recorded by SCIAA in 1970 as site 38BK48 (Kittredge Quad. UTM Easting 597600 Northing 3664100). During the 1992 survey this vessel was revisited. The wreck lies against the river bank on the port side and the starboard side is exposed on a hard marl bottom close to the edge of the channel. The stem post is still present and is orientated in an upstream direction (Figure 10). The separate mast step, which was originally fitted over the keelson, was disarticulated and lay off the site on the port side. The stem assembly which was recovered in 1981, is currently housed in the SCIAA storage facility on the USC Campus (Figure11).

An article about the wreck was published in the Twelth CUA proceedings (Watts 1986). This flat bottomed riverine vessel was approximately 48 feet in length with an 11 foot beam. The floor timbers and futtocks are oak, the keelson and planking are Southern Yellow Pine, and the treenails are made from bald cypress. The wreck has a keel which is 12 inches sided and 10 inches moulded. The keelson is 35 feet long and consists of two pieces of pine scarfed together and double bolted just aft of the mast step. Eighteen floor timbers are extant.

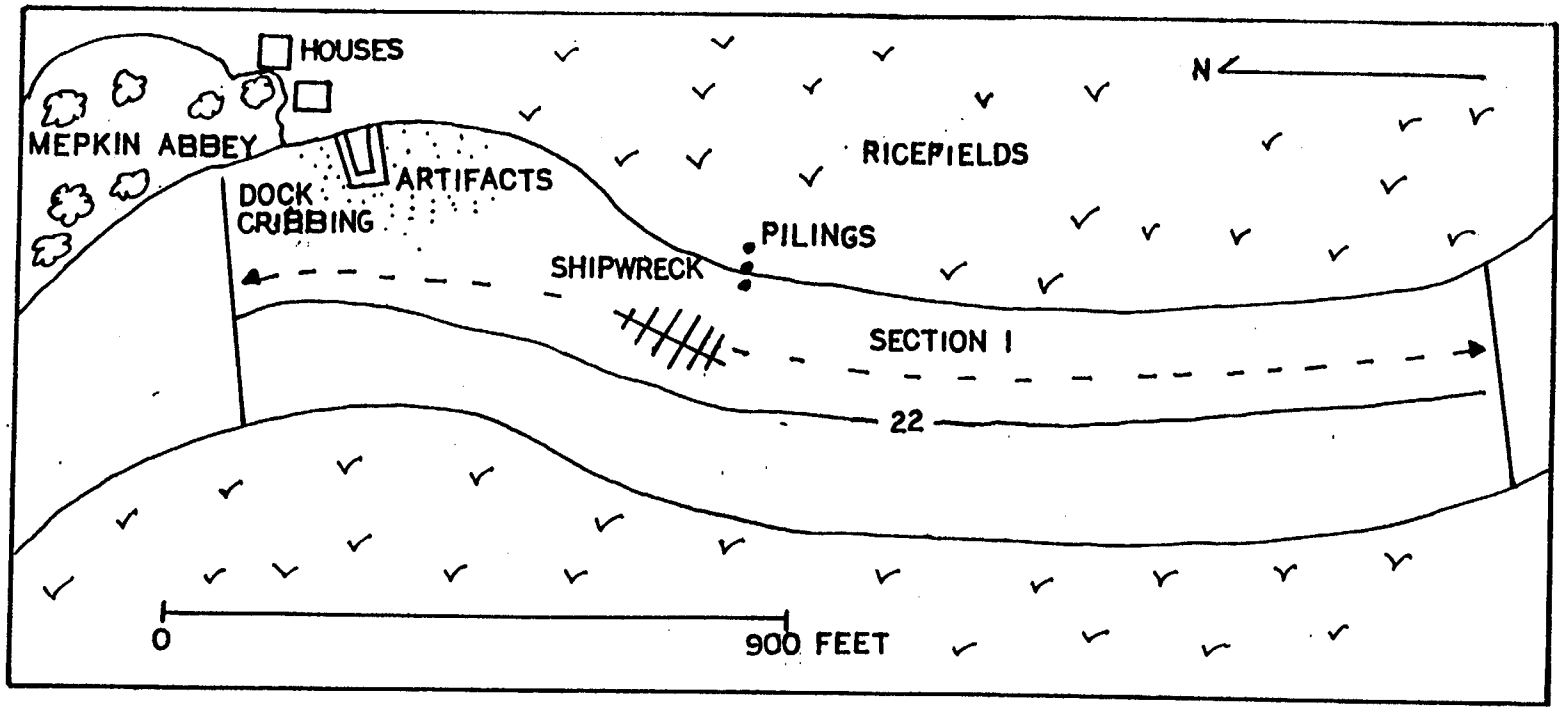


Figure 9. Section 1

Drawing by Lynn Harris

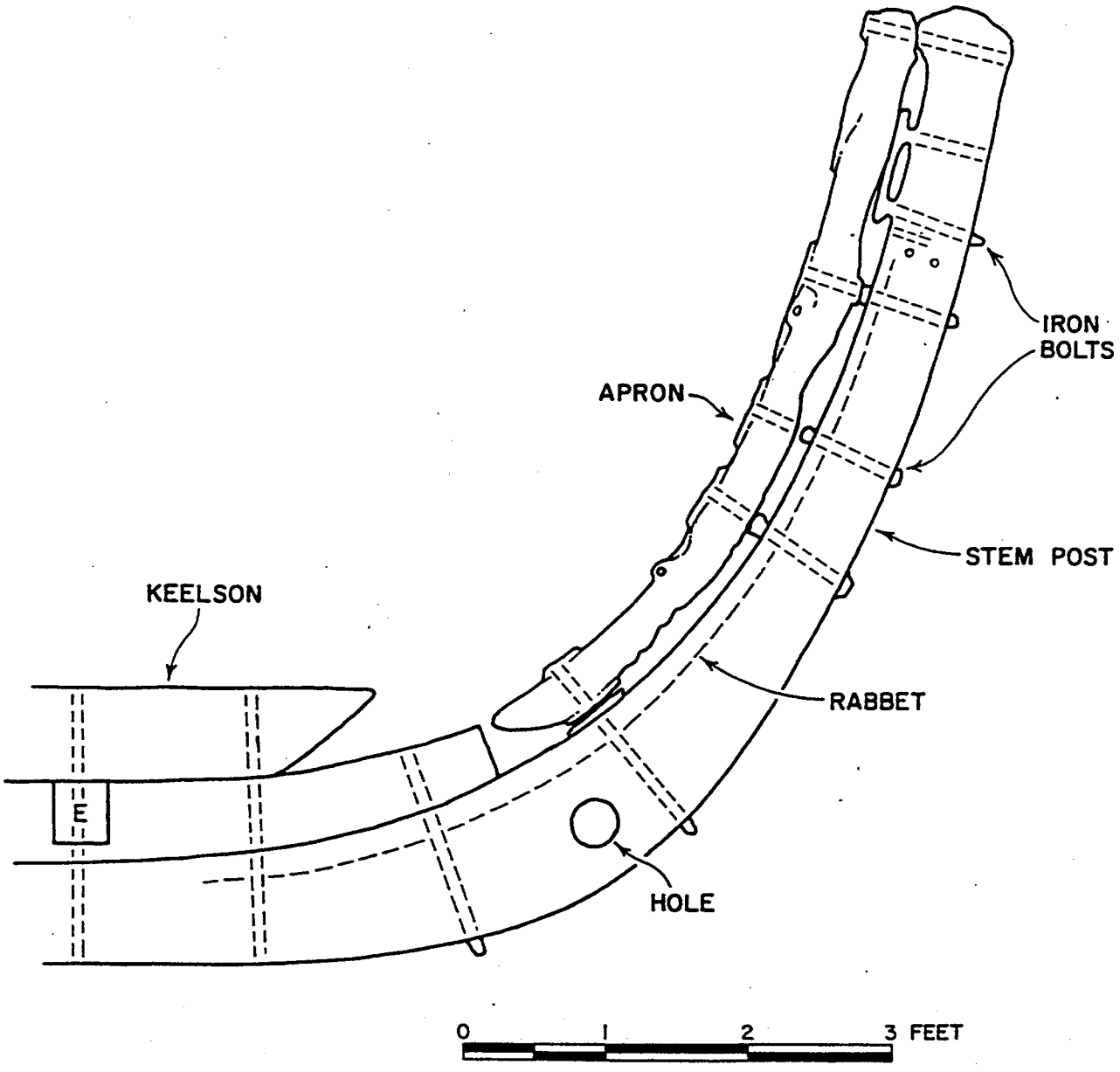


Figure 10. Stempost of the Mepkin Abbey Shipwreck (38BK48)

Drawing by Derby Erd

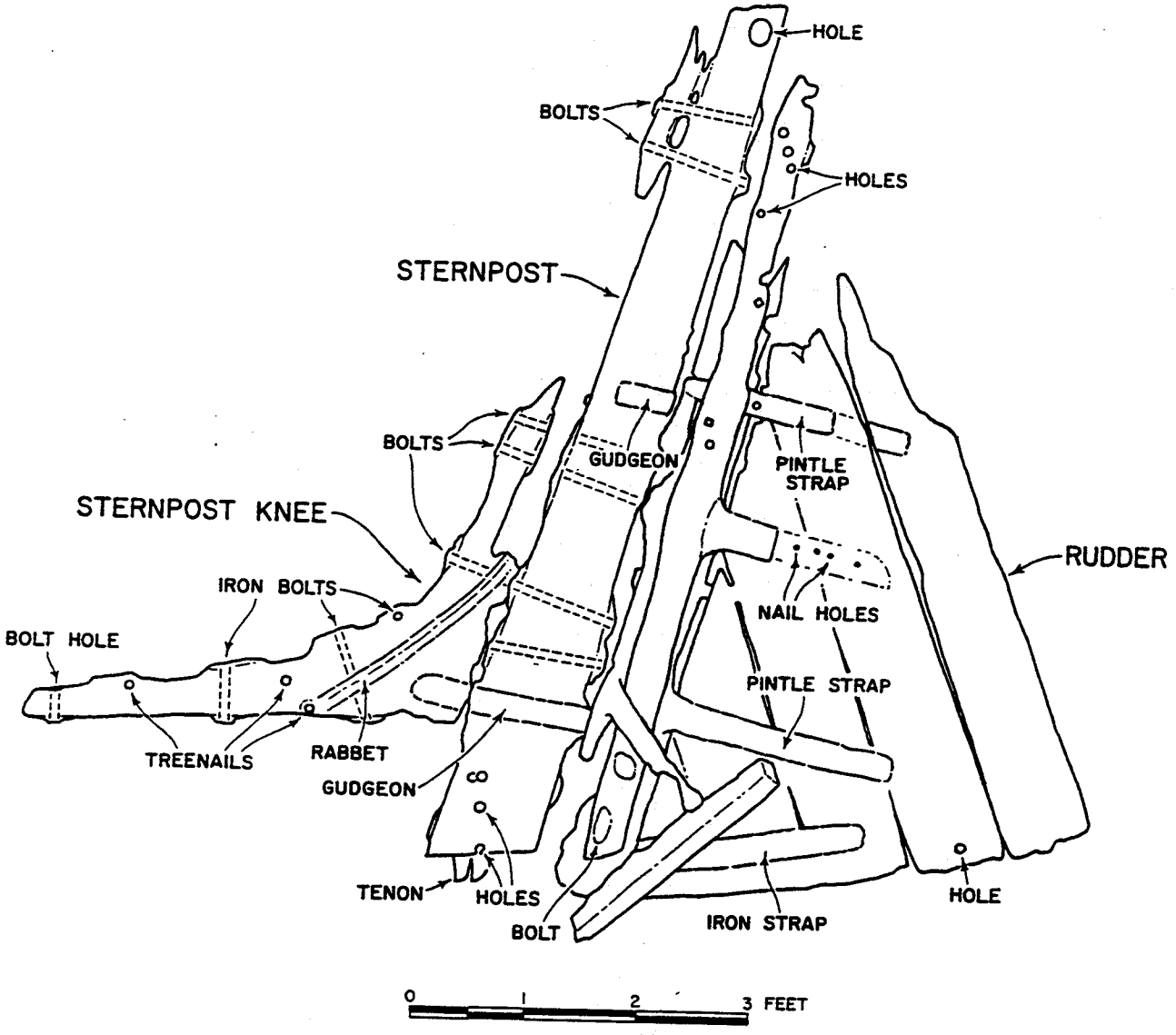


Figure 11. Sternpost of the Mepkin Abbey Shipwreck (38BK48)

Drawing by Derby Erd

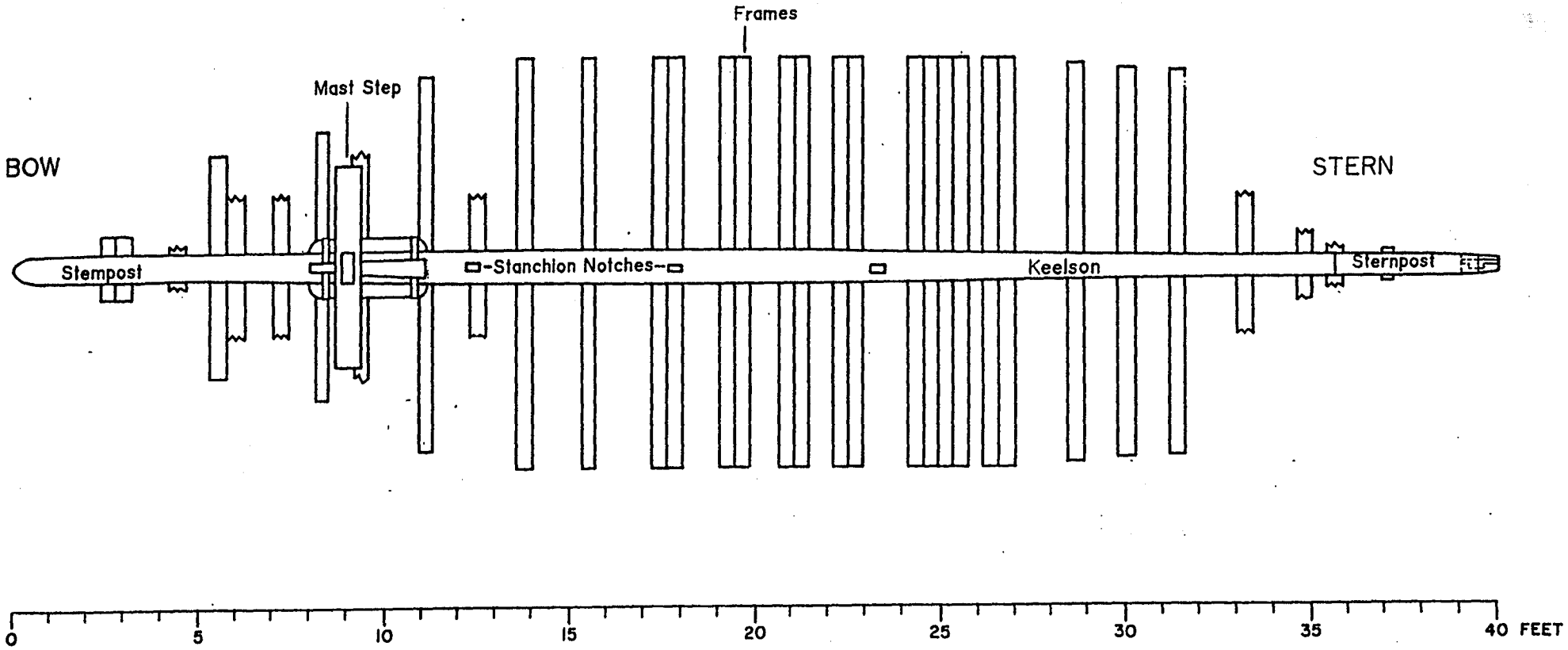


Figure 12. Mepkin Abbey Site Plan (38BK48)

SCIAA Drawing

To be Sold,

A TRACT of land, containing 93 acres, near *Charles-Town*, adjoining *William Simpson*, Esqr's. Mr. *Barnard Elliott's*, and *Cummins's* creek, very convenient for planting or pasturage. Whoever has a mind to purchase the same, may treat with Mr. *Thomas Farr*, jun. merchant in *Charles-Town*, or the subscriber on his plantation at *Stono*.

THOMAS FARR.

To be Sold

AN extraordinary good tract of land in St. *John's* parish, about 29 or 30 miles from *Charles-Town*, commonly called

MEPKIN,

containing 3000 acres old measure, situated on the north side of *Cooper*-river, near to *Strawberry*, whereon is a very high and pleasant bluff close to the river, and also a good landing place: Any vessel that comes here may go to said landing and load.

Also several thousand acres of

WATBOO Barony,

which said barony is now compleatly surveyed by Mr. *Owen Bowen*, deputy-surveyor. For further particulars enquire of Mr. *Swainston* at *Watboo*, or me in *Charles-Town*.

ROBERT RAPER.

N. B. The above lands pay only one shilling sterling quit-rent for each hundred acres.

IMPORTED BY

GEORGE BEDON,

AND TO BE SOLD

At his Store, next to Mr. SAMPSON NEYLE's, on the BAY.

CHOICE new flour at 4 *l.* 10 *s.* per 100 lb. butter bisket at 2 *l.* 15 *s.* per keg, ship bread at 4 *l.* 10 *s.* per 100 lb. strong beer at 9 *l.* per barrel, and double refined sugar.

He has likewise to sell reasonable, choice old *Barbados*, *Antigua*, *St. Kitt's*, and *Jamaica* RUM.

THE creditors of *Mackenzie* and *Roche*, and of *John Mackenzie*, who are willing to accept a dividend of their estate and effects, are desired to send in an accompt of their debts and demands, upon oath to the trustees, before the

Figure 13. Newspaper Advertisement for Mepkin Abbey

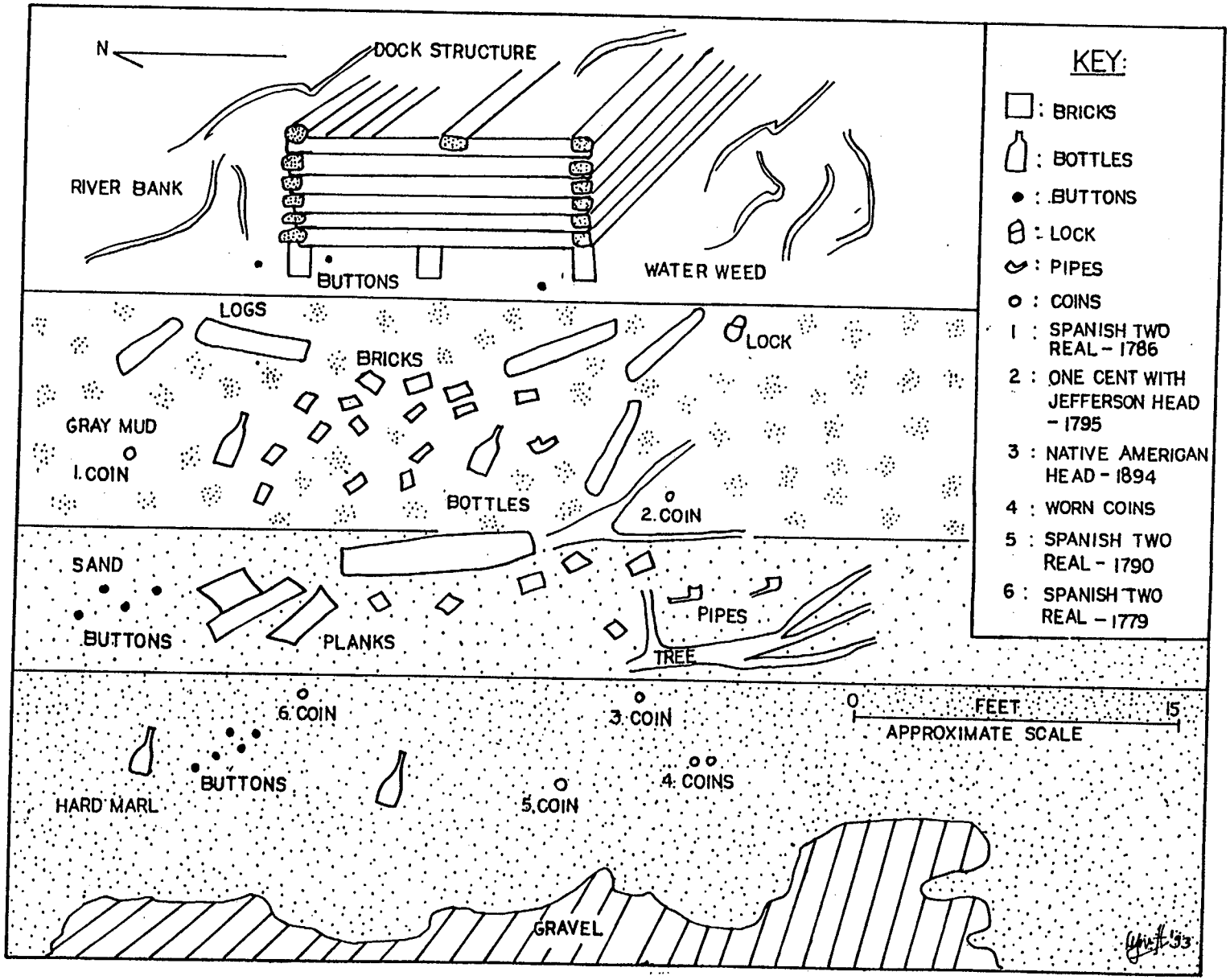


Figure 14. Artifact Distribution Pattern in Proximity to Mepkin Abbey Dock (38BK48)

Drawing by Jimmy Moss

Distinctive to this vessel are construction features such as a separate mast step notched to fit over the keelson and held in place by iron straps, small notches in the keelson possibly for stanchions to support a tarp used to cover the cargo area, and a large hole at the base of the stem possibly for hauling the boat onto beaches for loading and careening. The framing arrangement, stem and stern post configuration are discussed in detail in the published article by Wilbanks and therefore will not be covered extensively here (Wilbanks 1972:151-157). The site plan and a few other drawings were not included. To make this information more accessible for future research, this information has been compiled (Figures 10, 11, and 12).

Mepkin Abbey Dock (38BK48)

The Mepkin Abbey Dock structure, located at UTM Easting 597600 Northing 3664240, is made out of log cribbing extending approximately 13 meters from the shoreline bluff at the abbey. The dock is 10 meters wide. In the middle, at 4.50 meters, central cribbing provides additional support. The logs used to build the dock range in size from 14 to 20 cm in diameter. The six logs, forming both sides of the side cribbing structure, are notched for the placement of the front logs which are spiked with treenails.

The interior of the cribbing is filled with sediment. Artifacts are concentrated around the dock structure. This waterfront area was probably a convenient disposal area for the plantation inhabitants and the site of much activity .

To date, little research has been devoted to dock construction and fill, a typical riverine archaeological feature in South Carolina. A preliminary proposal for a study of this kind was published in the 1991 CUA Proceedings by David Beard. This paper "*Causeways and Cribbing: Now you can get There from Here,*" makes some interesting observations and suggestions for future research directions.

Section 2

Date: July 25, 1992

Start location: Kittredge Quad, UTM Easting 597500, Northing 3663650. Started at the rice gate on the east bank and continue to the next downstream bend. Rice fields border this section of the east bank.

Diving Conditions: Outgoing current. The water temperature was 80°F and visibility was approximately 10 feet. Maximum depth was approximately 20 feet

Bottom Substrate: Thick sand until the end of the section where it started thinning and changed to gravel. The gravel area is a fossil bed. A steep river bank runs alongside the gravel.

Flora and Fauna: Catfish, flounder, bream, and blue crabs.

Artifacts: Many metal concretions and twentieth century bottles.

Section 3 (38BK62)

Date: July 26, 1992

Start location: Kittredge Quad, UTM Easting 597840, Northing 3662940 .

Diving Conditions: Strong outgoing current. The water temperature was 80°F and visibility was approximately 5 feet. The maximum depth was approximately 30 feet.

Bottom Substrate: Logs and mud along the bank. The silt on the bank stirred up easily. Gravel and marl in the channel. Fossil bed continued to follow the gravel substrate.

Flora and Fauna: Flounder, bream, bluecrab, and bass.

Artifacts: Shoe buckle, bricks, glass sherds, pipe fragments, one projectile point, and many modern fishing weights.

Section 4 (38BK62))

Date: August 15, 1992.

Start Location: Kittredge Quad, Easting 597700, Northing 3662600. Started at the extant posts of a rice gate.

Diving Conditions: Incoming tide. The water temperature was 80°F and visibility was approximately 8 feet. The maximum depth was around 32 feet.

Bottom Substrate: Very sandy from the bank to approximately the middle of the river.

Flora and Fauna: Flounder, bream, bluecrab, and catfish.

Artifacts: Low quantity of artifacts at the beginning of this section. A few pipe fragments and one pottery sherd. At the end of the section the quantity seemed to increase. More pottery, a wine glass stem, and a projectile point.

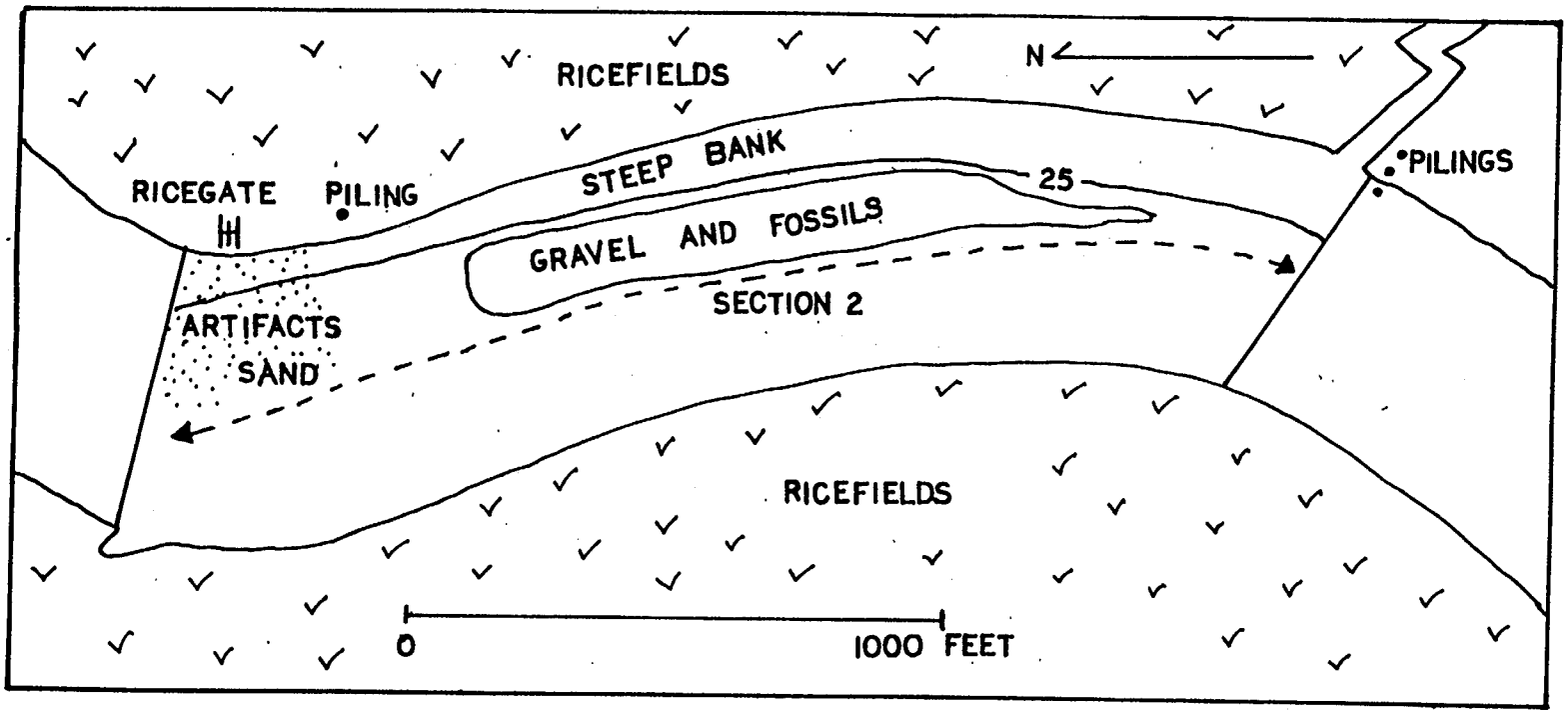


Figure 15. Section 2 (38BK62)

Drawing by Lynn Harris

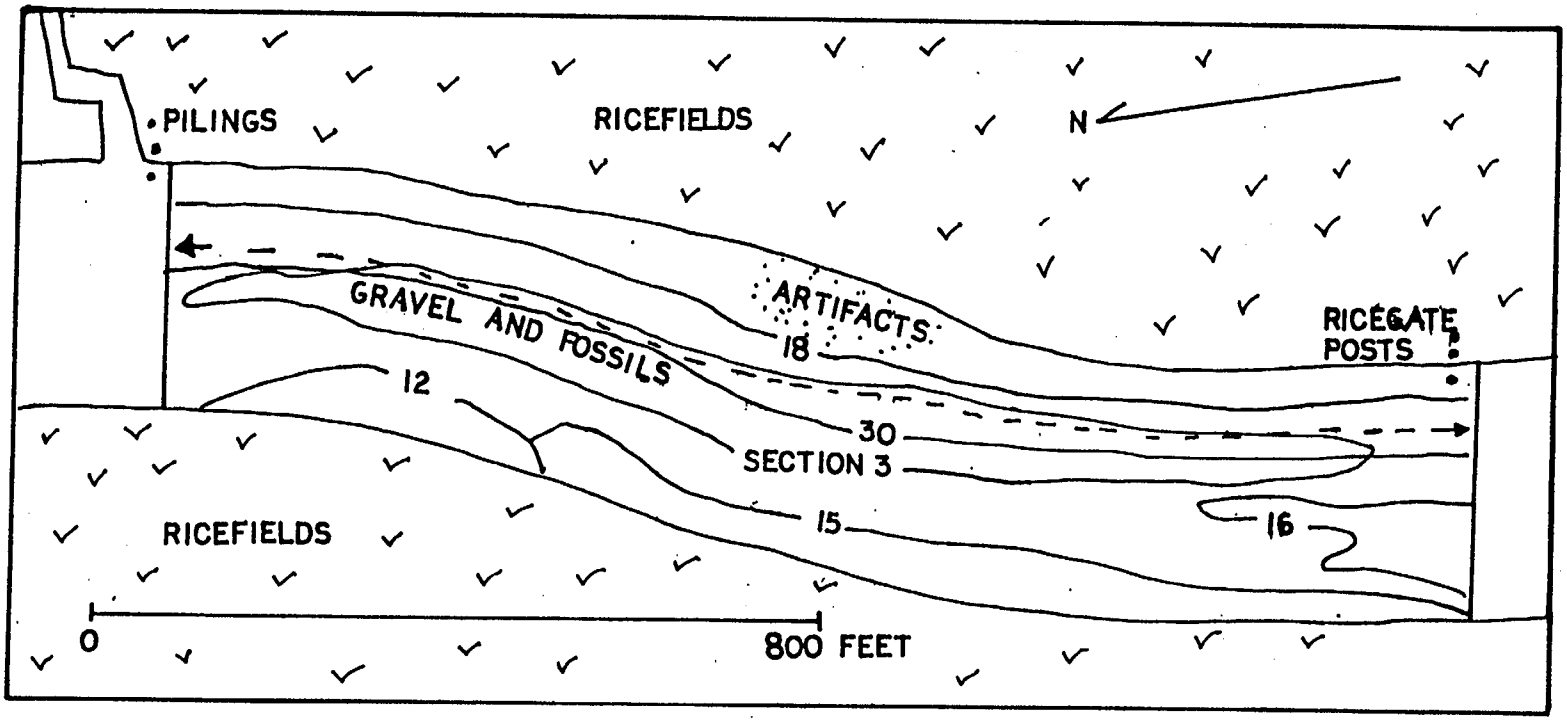


Figure 16. Section 3 (38BK62)

Drawing by Lynn Harris

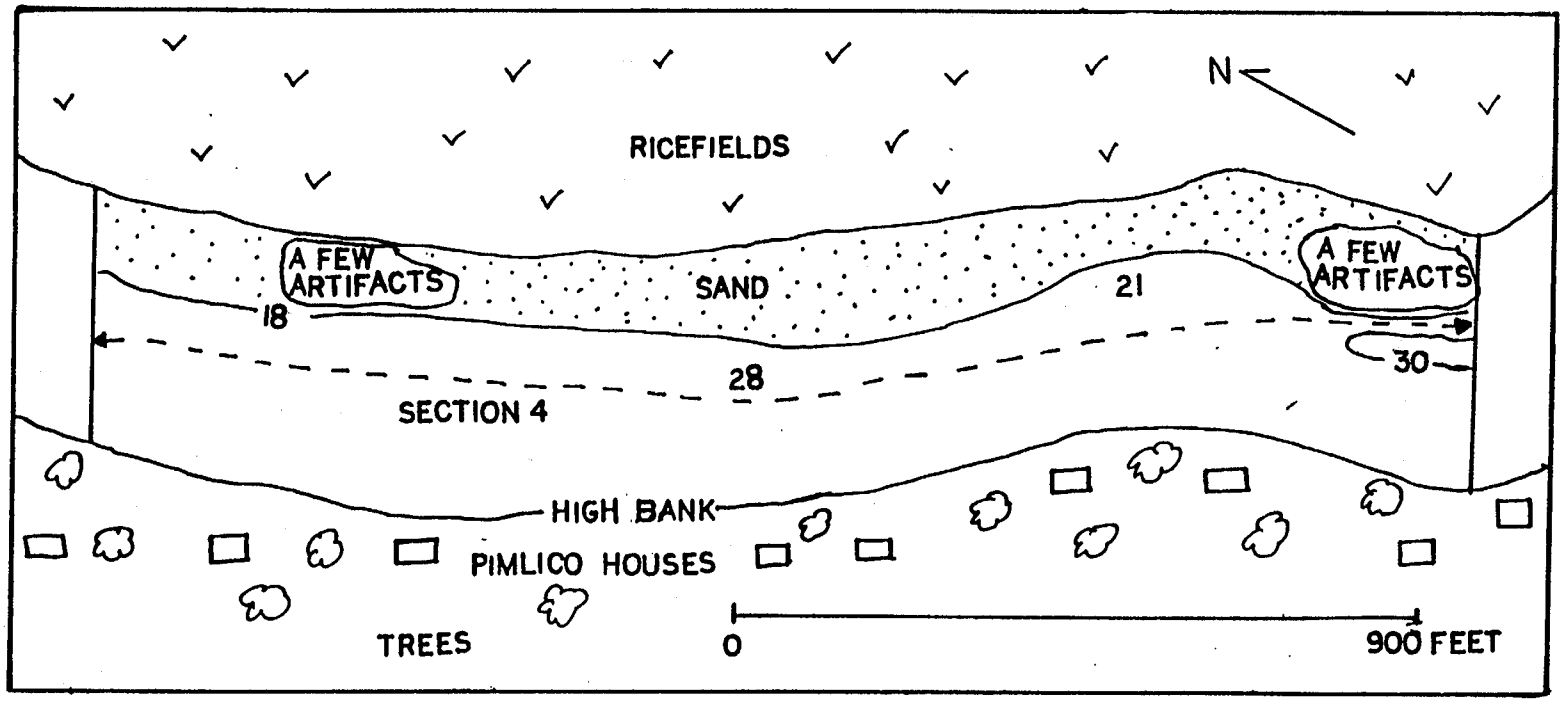


Figure 17. Section 4 (38BK62)

Drawing by Lynn Harris

Section 5

Date: August 16, 1992

Start Location: Kittredge Quad, UTM Easting 598000, Northing 3662040. This section started opposite the houses of Pimlico development.

Diving Conditions: Incoming current. The water temperature was 80°F and visibility was approximately 5 feet. The maximum depth was approximately 35 feet.

Bottom Substrate: Hummocks of white sand. In the channel the bottom substrate is gravel and marl.

Flora and Fauna: Bream, catfish, crabs, and bass.

Artifacts: High concentrations of glassware, historic and prehistoric pottery in the marl area of the river.

Shipwreck: The Pimlico Wreck, reported by Jimmy Moss, was recorded by SCIAA staff in 1993 as site 38BK62 (Kittredge Quad UTM Easting 598180, Northing 3662180). This was the original number assigned to the the two mile area in which this site was located in 1972. The vessel is located upriver of the Strawberry Trestle Bridge opposite the present day Pimlico development. It lies directly off a small island near the west bank. The wreck lies in 25 to 30 feet of water in a sandy substrate with the bow facing upriver. The starboard side, which is more intact than the port side, rests against the sandy bank. The vessel lists to port and a large hole has been scoured out at the stern and filled with logs and other debris. Artifacts observed on the timbers were dark green bottle bases, grey stoneware, and creamware. These items have not yet been recovered.

The wreck appears to be periodically exposed and covered by sand. By keeping records of tidal action when the site was visited by divers and SCIAA staff, it became apparent that sediment accumulated on the wreck during the outgoing tide and was removed during the incoming tide. On one occasion during an outgoing tide, the divers could not locate the wreck at all, and it is possible that it had become completely buried.

Very preliminary documentation has been conducted on this shipwreck (Figure 19). The keelson, which is exposed, 21.5 meters from fore to aft. The stem and disarticulated apron lie offset to the starboard side of the wreck. Two disarticulated mast steps on separate timbers lie on the port side of the keelson. The frames are 17 cm moulded at the head and 20 cm moulded at the heel.The outer hull planks are 3 cm thick and 29 cm wide. The inner hull ceiling planks are 3 cm thick and 34 cm wide. The wood of these planks is in poor condition.The keelson at midships is 30 cm sided and 27

cm moulded. Towards the stern end two loose cant frames are located. Wood samples were taken, but have not yet been identified.

The large dimensions of the vessel and robust scantlings, such as frames and planking, suggest that the owner may have intended for the vessel to operate offshore rather than on inland waterways. In construction it is dissimilar to other South Carolina vessels such as Browns Ferry Vessel (38GE57), Mepkin Abbey (38BK48), or the Malcolm Boat (38CH803). It has greater similarity to the Freeda Wyley (38HR301), an offshore lumber carrier, wrecked at Myrtle Beach. The other possibility is that it is an ocean-going vessel, for commerce or even warfare, sailing upstream to the "freshes" as a protective measure to prevent the marine organisms that attacked the bottoms of wooden ships in salt water (Weir 1893:39).

Section 6

Date: September 26, 1992

Start Location: Kittredge Quad, UTM Easting 597440, Northing 3662210. This is the last section of survey on the east bank which ends at the Strawberry Trestle Bridge.

Diving Conditions: Incoming current. The water temperature was 72°F and visibility was approximately 4 feet. The maximum depth was approximately 33 feet.

Bottom Substrate: Hard marl. A few fosssils on the marl. Many logs and trees lying along the bank.

Flora and Fauna: Bass, crabs, catfish, and eels.

Artifacts: Low concentrations of artifacts -- mainly twentieth century bottles and a -colonoware sherd.

Shipwrecks or Structures: Planking with treenails and cut notches. A single knee. Possibly associated with a barge or shipwreck.

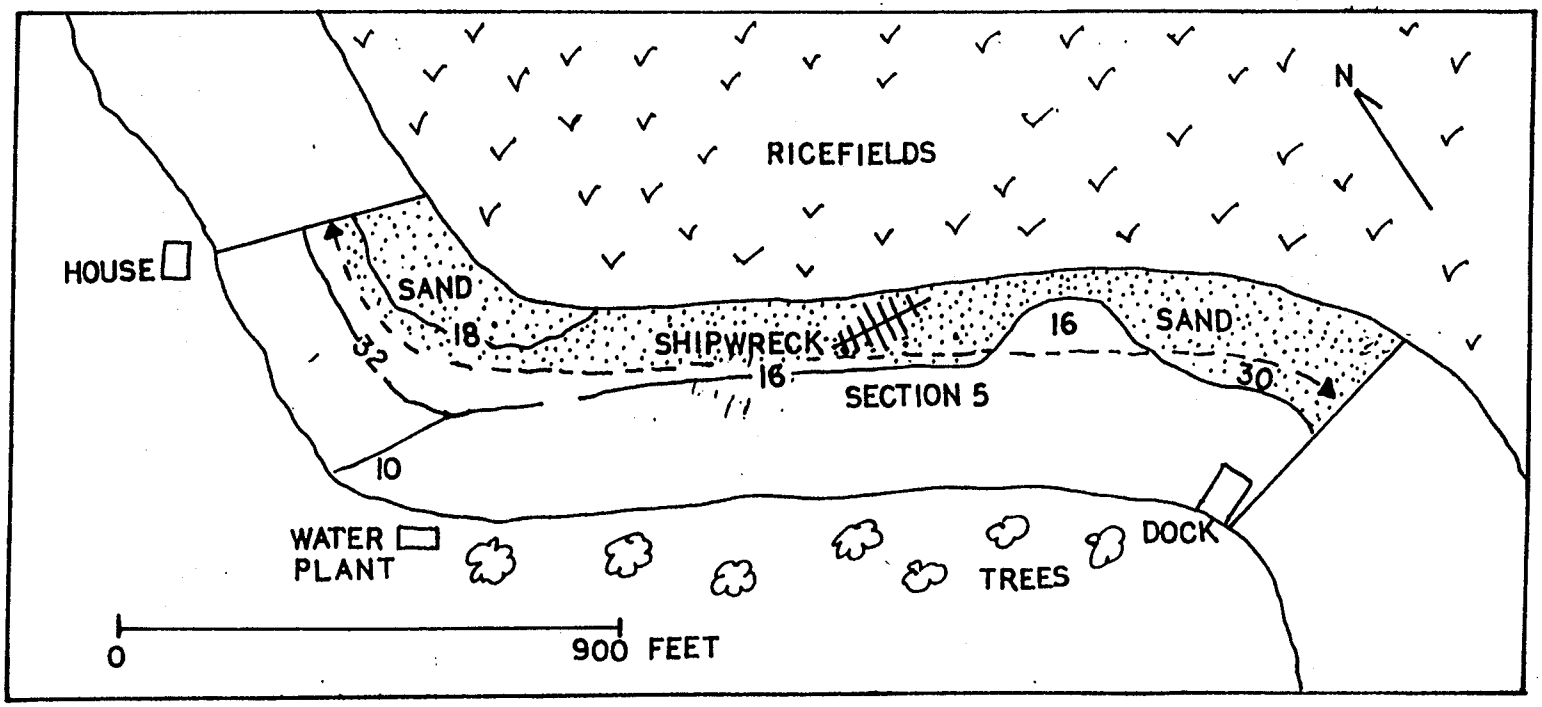


Figure 18. Section 5 (38BK1614)

Drawing by Lynn Harris

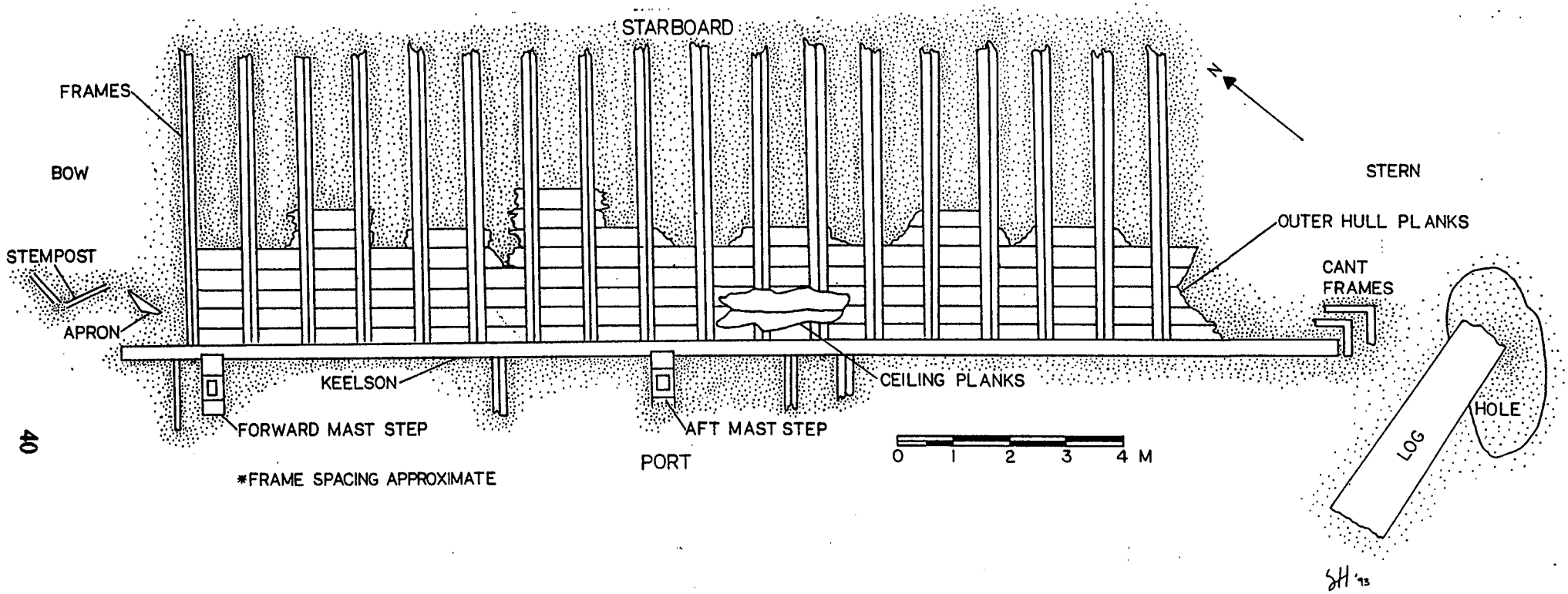


Figure 19. Site Plan of the Pimlico Shipwreck (38BK1614)

Drawing by Scott Heavin

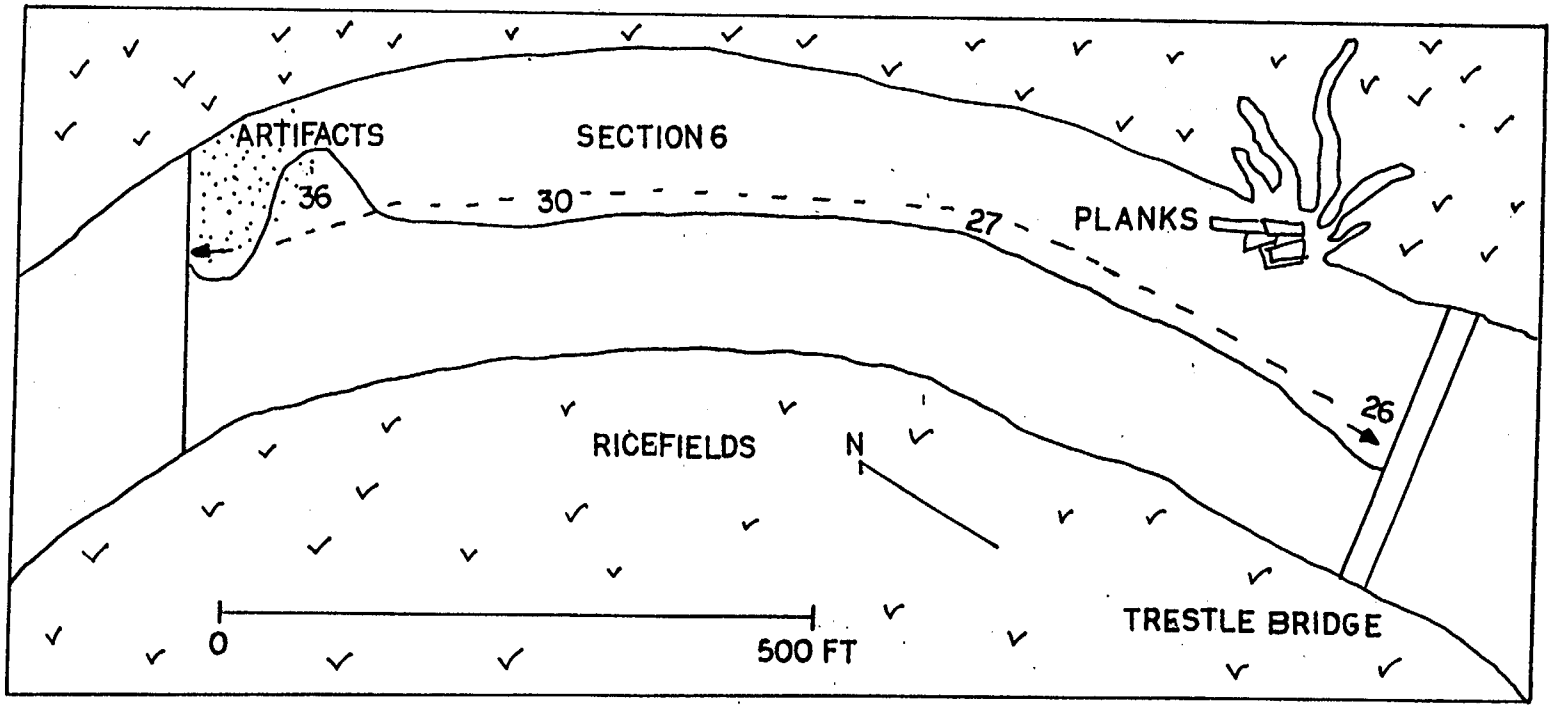


Figure 20. Section 6

Drawing by Lynn Harris

Section 7

Date: September 26,1992

Start Location: Kittredge Quad, UTM Easting 598660, Northing 3661880. This is the first section of survey on the west bank which starts at the Strawberry Trestle Bridge.

Diving Conditions: Outgoing current. The water temperature was 72°F and visibility was approximately 5 feet. The maximum depth was approximately 33 feet.

Bottom substrate: Sandy hummocks.

Flora and Fauna: Blue crabs, catfish, and eels.

Artifacts: No artifacts.

Section 8 (38BK852)

Date: September 27, 1992

Start Location: Kittredge Quad, UTM Easting 598440, Northing 3662100. This is the west bank of section 5.

Diving Conditions: Outgoing current. The water temperature was 68°F and visibility was approximately 5 feet. The maximum depth was approximately 20 feet.

Bottom Substrate: Mud, logs, and sand.

Flora and Fauna: Blue crabs, catfish, bream, flounder, and eels.

Artifacts: High concentrations of artifacts including prehistoric and historic pottery, bottles, bricks, planks, and hardware. A particularly high number and variety of bottles (Figure 39, 40, 44 & 49) .

Section 9 (38BK62)

Date: October 17, 1992

Start Location: Kittredge Quad, UTM Easting 597960, Northing 3661920. This is the west bank of section 4.

Diving Conditions: Outgoing current. The water temperature was 72°F and visibility was approximately 3 feet. The maximum depth was approximately 25 feet.

Bottom Substrate: Sand and gravel.

Flora and Fauna: Blue crabs, catfish, bream, and eels. A large catfish appears to live under the barge located in this section.

Artifacts: Low concentrations of artifacts at the start of this section including prehistoric and historic pottery, bricks, and glass sherds (Figure 45). Towards the end of the section the divers encountered a higher concentration of artifacts which included historic

ceramics, numerous pipe fragments, marbles, buttons, ballast stones, and a pile of cut lumber.

Shipwrecks: The "Houk" barge was located towards the end of this section. This vessel was reported by Tony Houk in 1992 on the west bank of the Cooper River off Pimlico development (Kittredge Quad, UTM Easting 597580, Northing 3662580). In 1975, a barge was recorded during the salvage activities of license No. 70 in the general vicinity which could possibly be the same vessel. This barge was described as turned upside down. There is a possibility that the barge reported by Tony Houk was the same vessel that was reported in 1975 and had since rolled over or was turned over by divers. It currently lies loosely on a hard marl bottom.

The overall length of the vessel is 12 meters with a beam of 4.50 meters. The sides are planked, and the assembly of the two ramps consists of a logs with two upper planks. At either end are two large rings. The floor consists of two layers of planking. The interior planks run transversely and the exterior planks run longitudinally. Thick planks, approximately 1.20 meters apart, are used as futtocks. The side planking is attached to the end planking with mortise and tennon joints. The barge is fastened with metal drifts

To date, this may be the first barge of this construction found in South Carolina. Unusual features include the lack of stringers and the logs at the bow and stern instead of the chine logs along the side of the vessel. As this appears to be a towing barge, the end logs may have been more necessary for reinforcing in these areas of stress. The absence of stringers is unusual as these components would seem to be integral for structural strengthening (Figure 24). It has also been suggested that there may be or stringers concealed below the intact ceiling planks (Newell 1993: personal communication). This could be investigated during the next fieldwork season by removing a small section of planking to detemine whether this is the case.

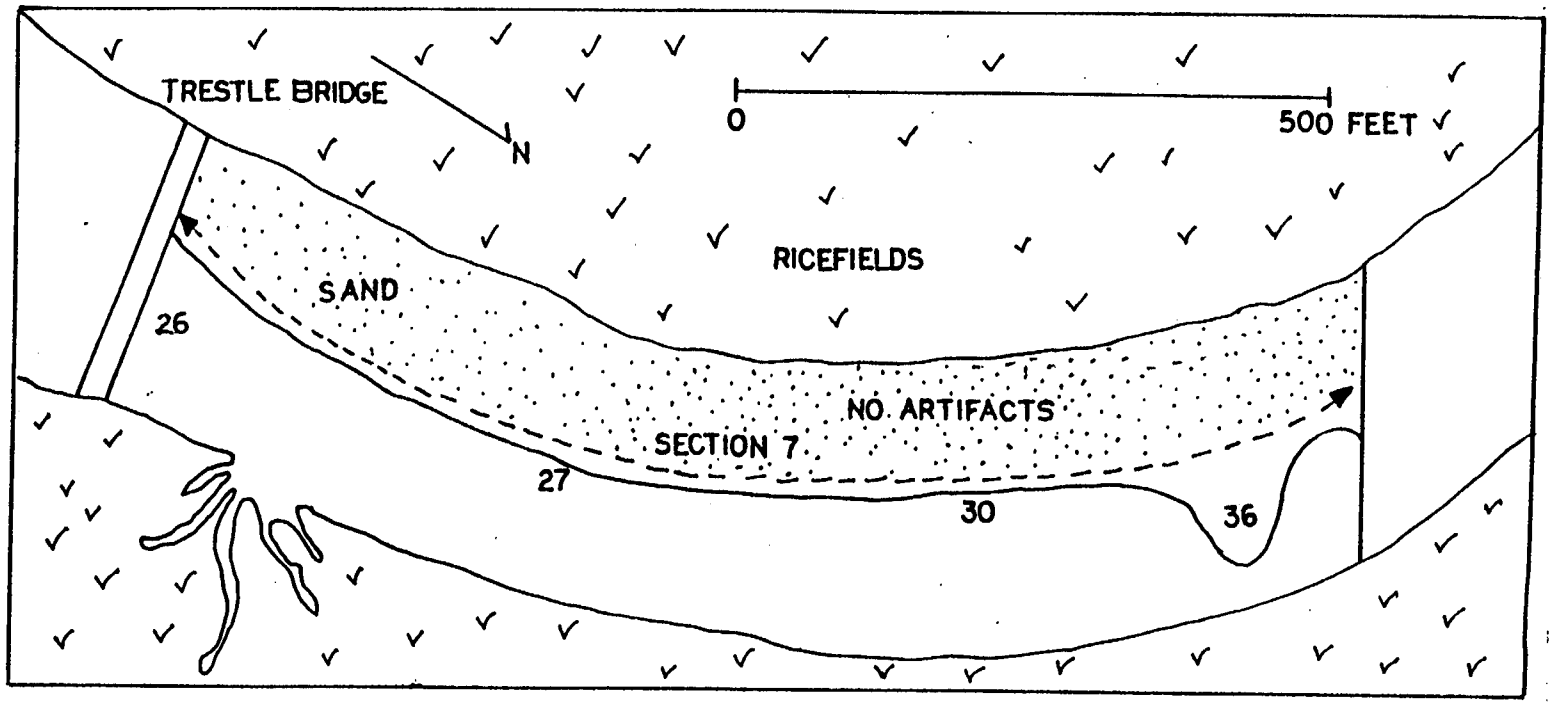


Figure 21. Section 7

Drawing by Lynn Harris

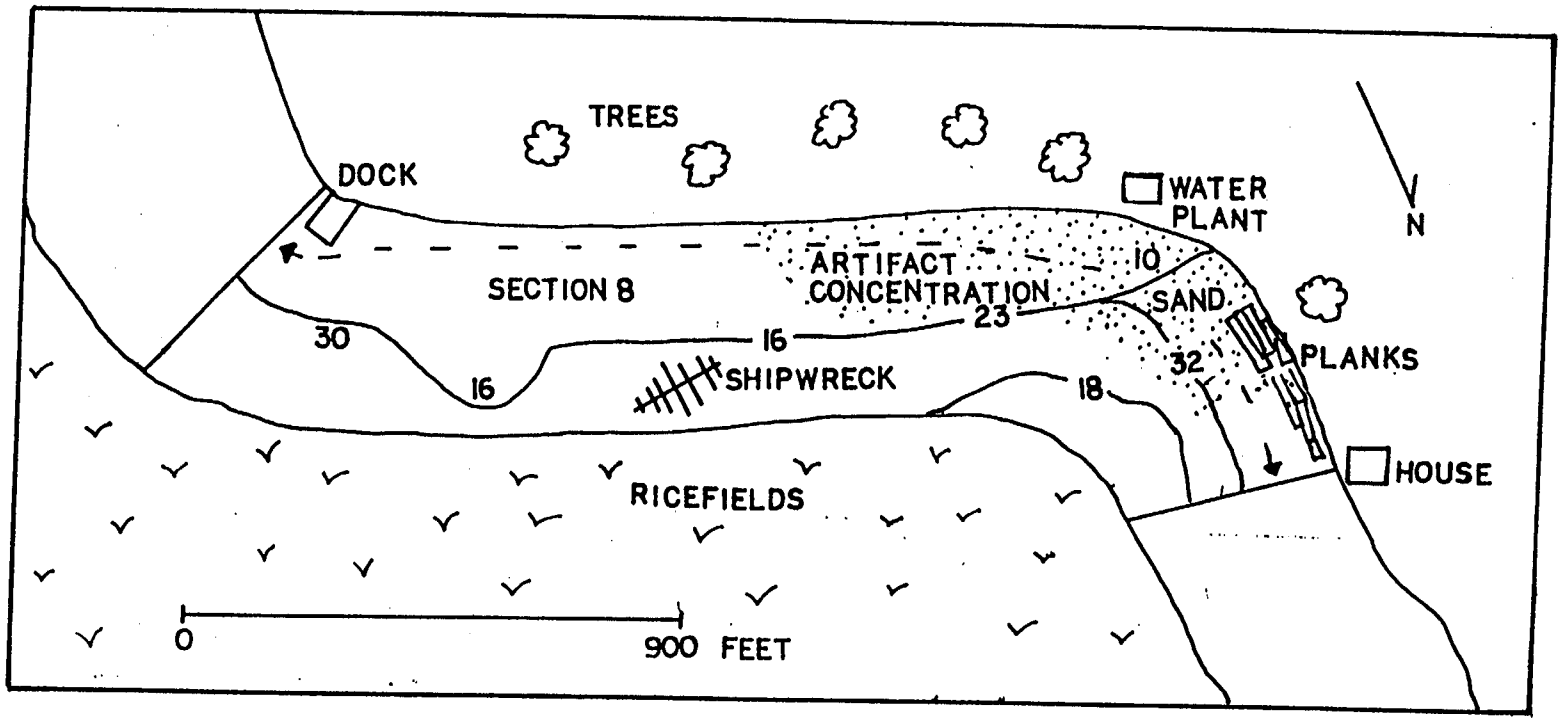


Figure 22. Section 8 (38BK852)

Drawing by Lynn Harris

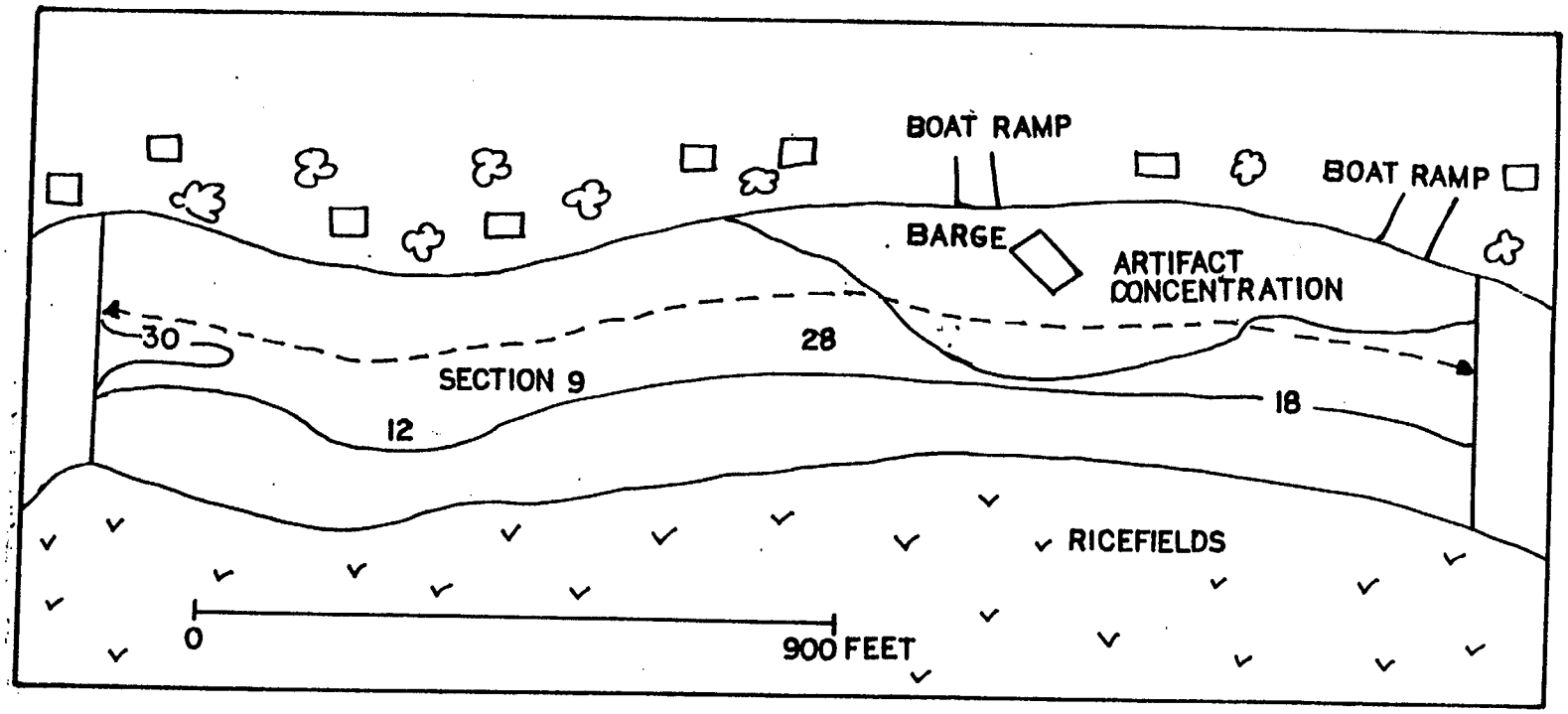


Figure 23. Section 9 (38BK62)

Drawing by Lynn Harris

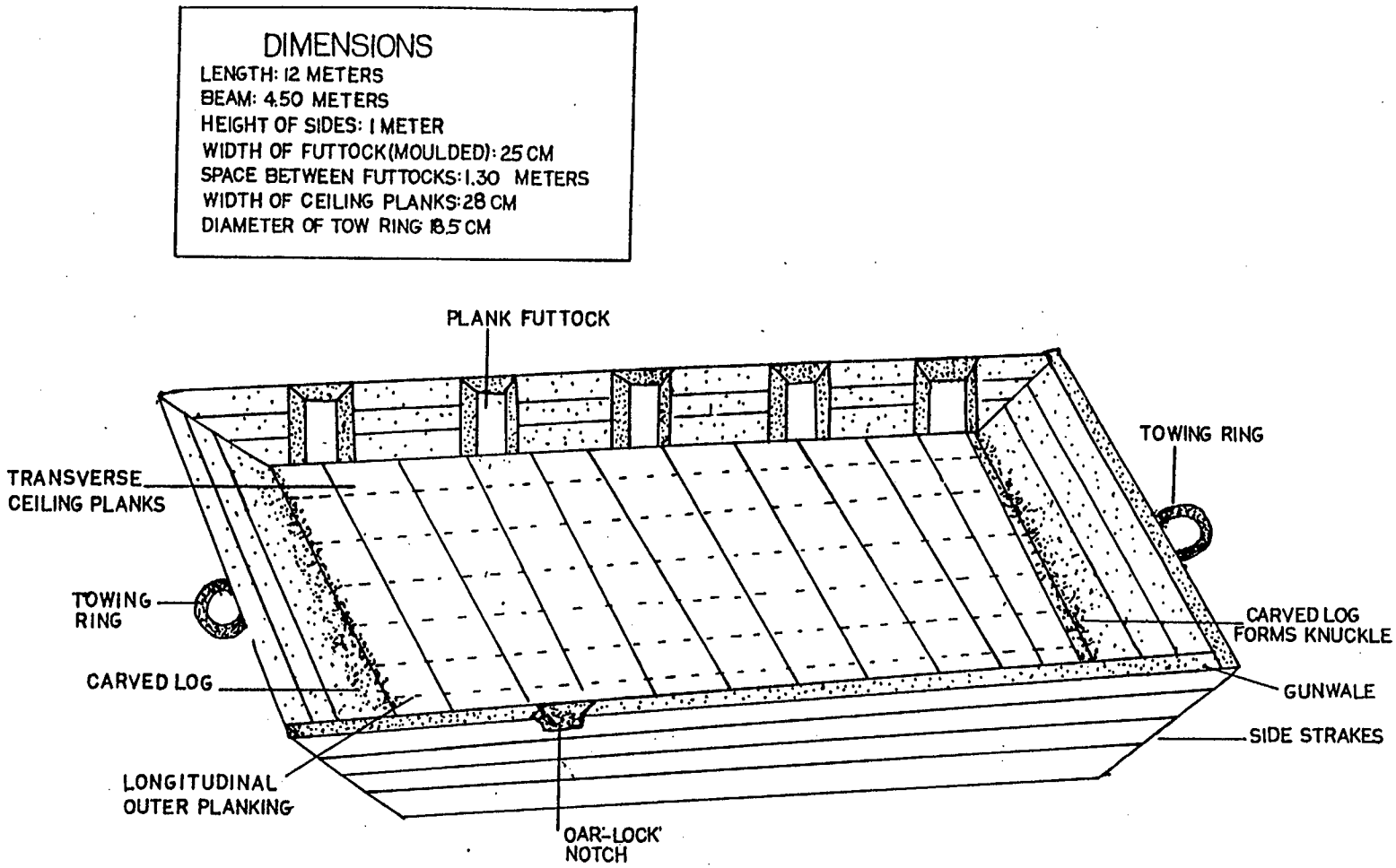


Figure 24. Pimlico Barge (38BK62)

Drawing by Lynn Harris

Artifacts Analysis:

All artifacts recovered during the project were inventoried during a group workshop at SCIAA. Divers were taught basic practical artifact identification and labelling skills. As artifacts were not intended to be curated or retained by the state, an artifact numbering method to match the field survey system was devised. For example: CR (Cooper River) S1 (Section 1) G (Site G) D2 (Diver number 2) 93 (1993) 1 (Artifact number 1) -- CR/S1/G/ D2/93/1.

The highest concentrations of artifacts came from sections 1 (56 %), 8 (21%), and 9 (14%). This section is associated with known sites such as 38BK48 in section 1, 38BK62 in section 9, and 38BK852 in section 8. It is interesting to note that these higher densities came from areas of the river adjacent to higher ground or bluffs (Figure 25). The other sections constitute less than 10 percent of the total . These artifact scatters, rather than concentrations, would seem to represent secondary deposition in river bends. In all of the sections historic period, rather than prehistoric period, artifacts were predominant (Figure 26). No artifacts were found at all in section 7. A total number of 590 artifacts were recovered from the nine sections, with pipe bowls and stem fragments representing almost half of the total.

In the assemblage from section 1, the most notably recovered items were pipe fragments (62%) and buttons (18%). A few artifacts which were absent in the other sections were found here, such as ordnance-associated items -- musket balls and a trigger guard -- and coins (Figure 27).

Historic ceramics were the highest category of artifacts in sections 8 and 4 (Figures 28 and 29). Glass sherds and liquor, pharmaceutical, and soda bottles were also present in more substantial quantities in both section 8 and 9 compared to section 1, where glass only constitutes one percent of the total. Some interesting artifacts were found in section 8 such as a razor and a hip flask with Isaac Ball's name inscribed on it (Figures 39 and 40).

In section 9 pipe fragments represent 43 percent of the total. Historic ceramic sherds and bottle glass are present in approximately the same percentages as section 8. Miscellaneous items such as a pewter spoon, marbles, and a button were included in this assemblage (Figure 30).

Noticeably fewer pipes were found in section 4 than sections 8 or 9. This scatter, in section 4, is likely to be an area of secondary desposition rather than a primary concentration associated with a plantation site on the adjacent river bank.

Artifact Distribution in Survey Area

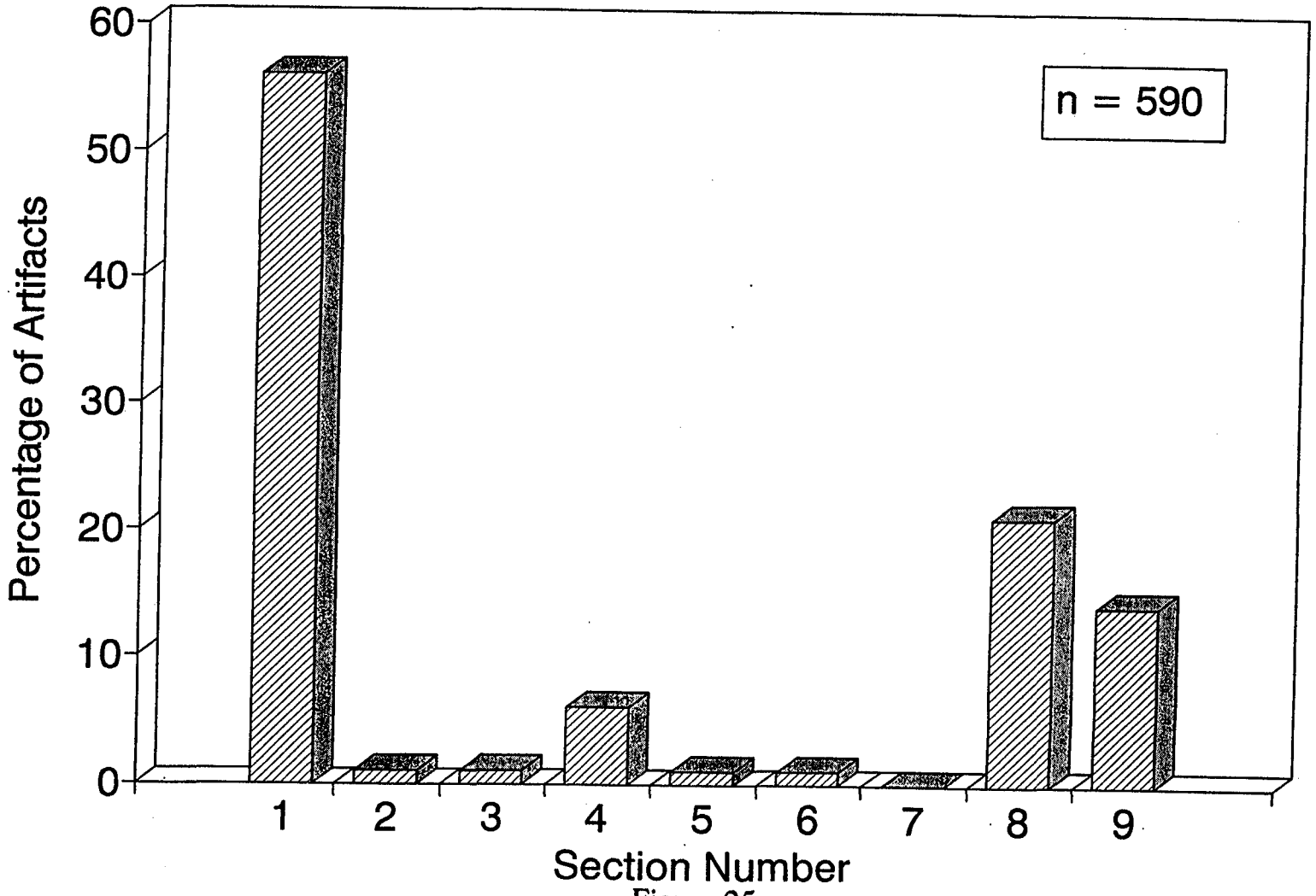


Figure 25

Historic period ceramics recovered in sections 4, 8, and 9 display an interesting trend. High numbers of blue and white transferprinted whiteware and pearlware sherds were present in both section 8 and 9. Section 4, in contrast, had no transferprinted sherds at all -- possibly another reflection of a secondary deposit. Lead glazed slipware is also absent from section 4 (Figures 31-34). In section 1 the most prevalent ceramic type was colonoware. This might be consistent with historical information in the form of correspondence from Henry Laurens instructing the plantation overseers that seemed to indicate that Mepkin Abbey was inhabited primarily by plantation slaves. The Laurens family lived in Charleston (Laurens 1976).

High numbers of salt glazed stoneware sherds were found in all four sections- 1, 4, 8, and 9 - and plain yellow ware and creamware are uniformly prevalent in low quantities. Porcelain is most abundant in section 4, but is likely to have come from the same ceramic vessel. There is no pearlware or porcelain in section 9. A far higher concentration of whiteware sherds was present in section 8 than the other two sections.

The prehistoric component in all sections primarily includes potttery sherds and a very small number of projectile points -- Archaic and Woodland points. The total number of points and sherds in each section were too small to assess each section as a unit. The majority of pot sherds (43%) for all sections were plain. There were a higher number of punctate and linear punctate sherds (26%) than any other surface design. Other designs present in small quantities (lower than 5%) were fabric impressed, cord marked, simple stamped, incised, rectilinear complicated stamped, and burnished. Colonoware sherds were generally indentified as smoother surfaced plain sherds and it is possible that some may have been mis-identified as prehistoric plain sherds and vice versa.

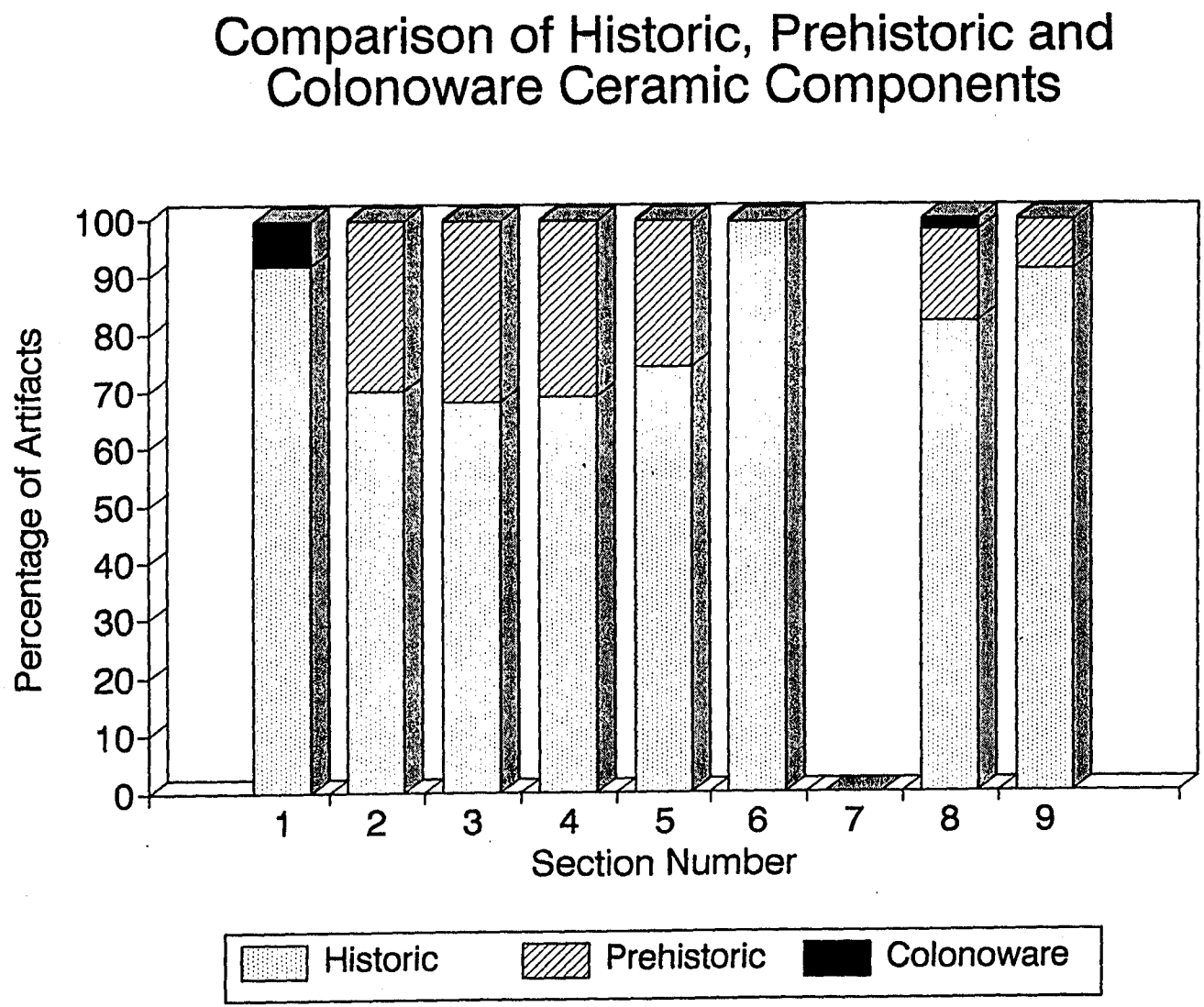

Comparison of Historic, Prehistoric and Colonoware Ceramic Components
Percentage of Artifacts
100
90
80
70
60
50
40
30
20
10
0
1
2
3
4
5
6
7
8
9
Section Number
Historic
Prehistoric
Colonoware

Figure 26

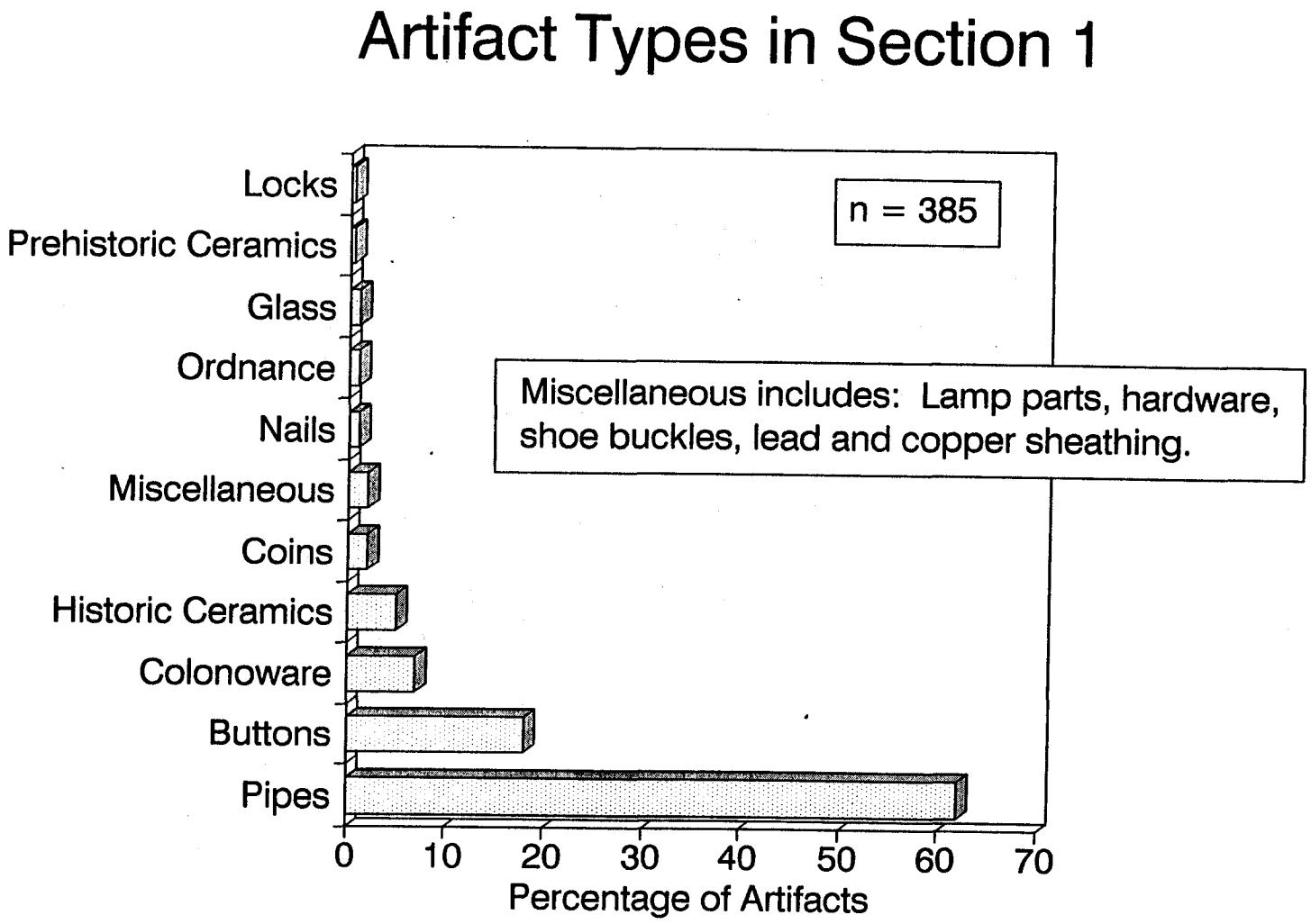

Artifact Types in Section 1
Locks
Prehistoric Ceramics
Glass
Ordnance
Nails
Miscellaneous
Coins
Historic Ceramics
Colonoware
Buttons
Pipes
n = 385
Miscellaneous includes: Lamp parts, hardware, shoe buckles, lead and copper sheathing.
0
10
20
30
40
50
60
70
Percentage of Artifacts

Figure 27

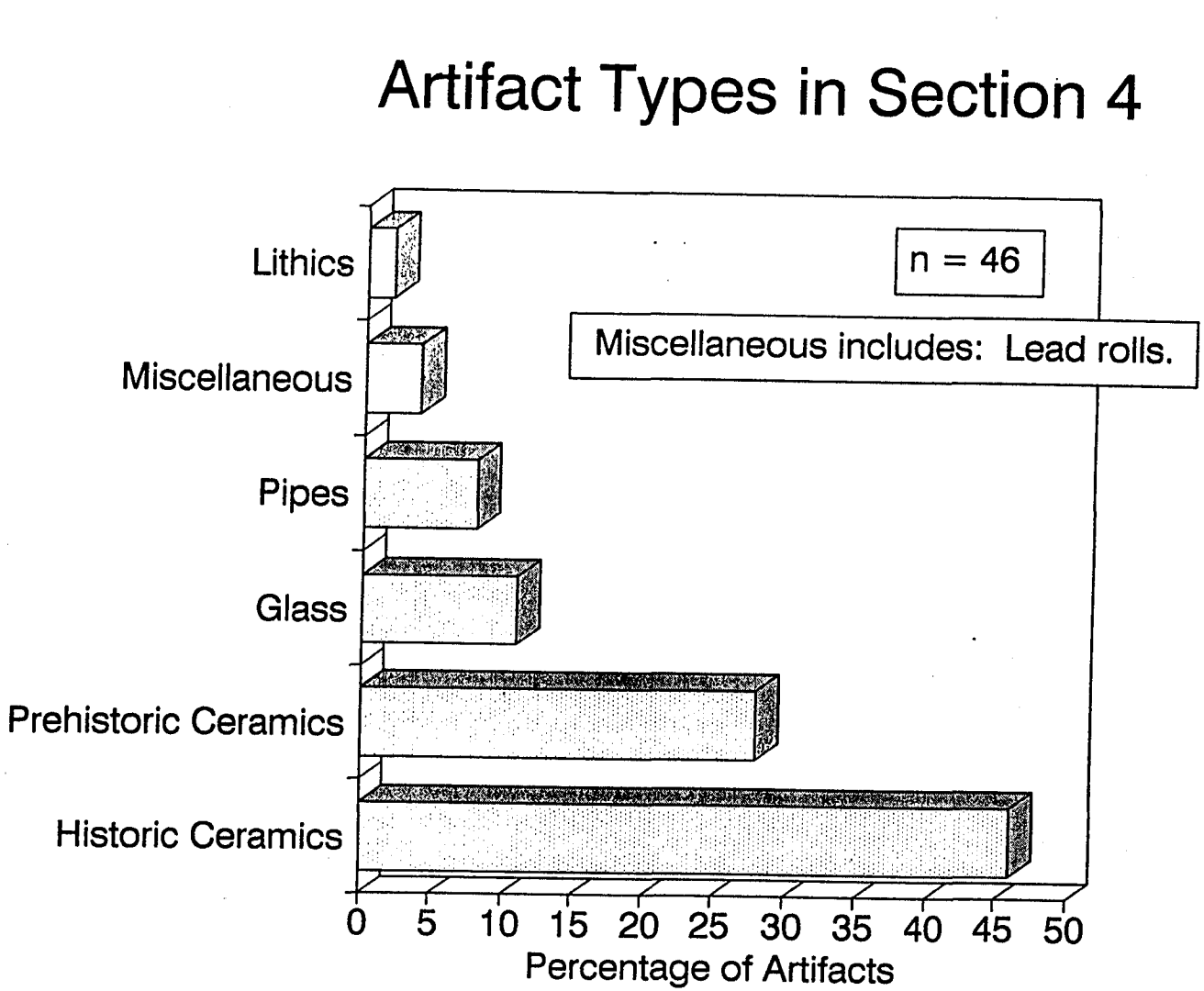

Artifact Types in Section 4
n = 46
Miscellaneous includes: Lead rolls.
Lithics
Miscellaneous
Pipes
Glass
Prehistoric Ceramics
Historic Ceramics
0 5 10 15 20 25 30 35 40 45 50
Percentage of Artifacts

Figure 28

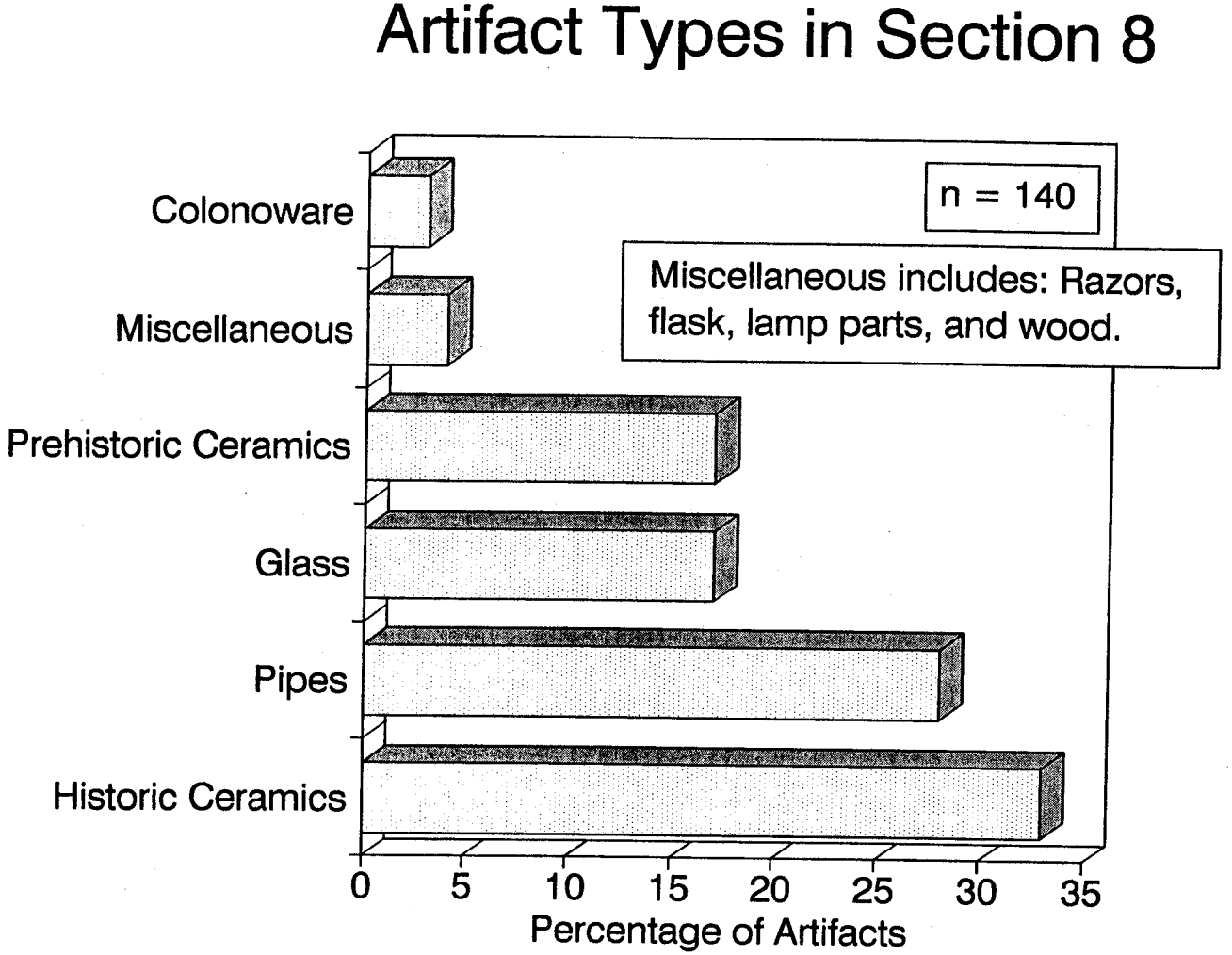

Artifact Types in Section 8
n = 140
Miscellaneous includes: Razors, flask, lamp parts, and wood.
Colonoware
Miscellaneous
Prehistoric Ceramics
Glass
Pipes
Historic Ceramics
0
5
10
15
20
25
30
35
Percentage of Artifacts

Figure 29

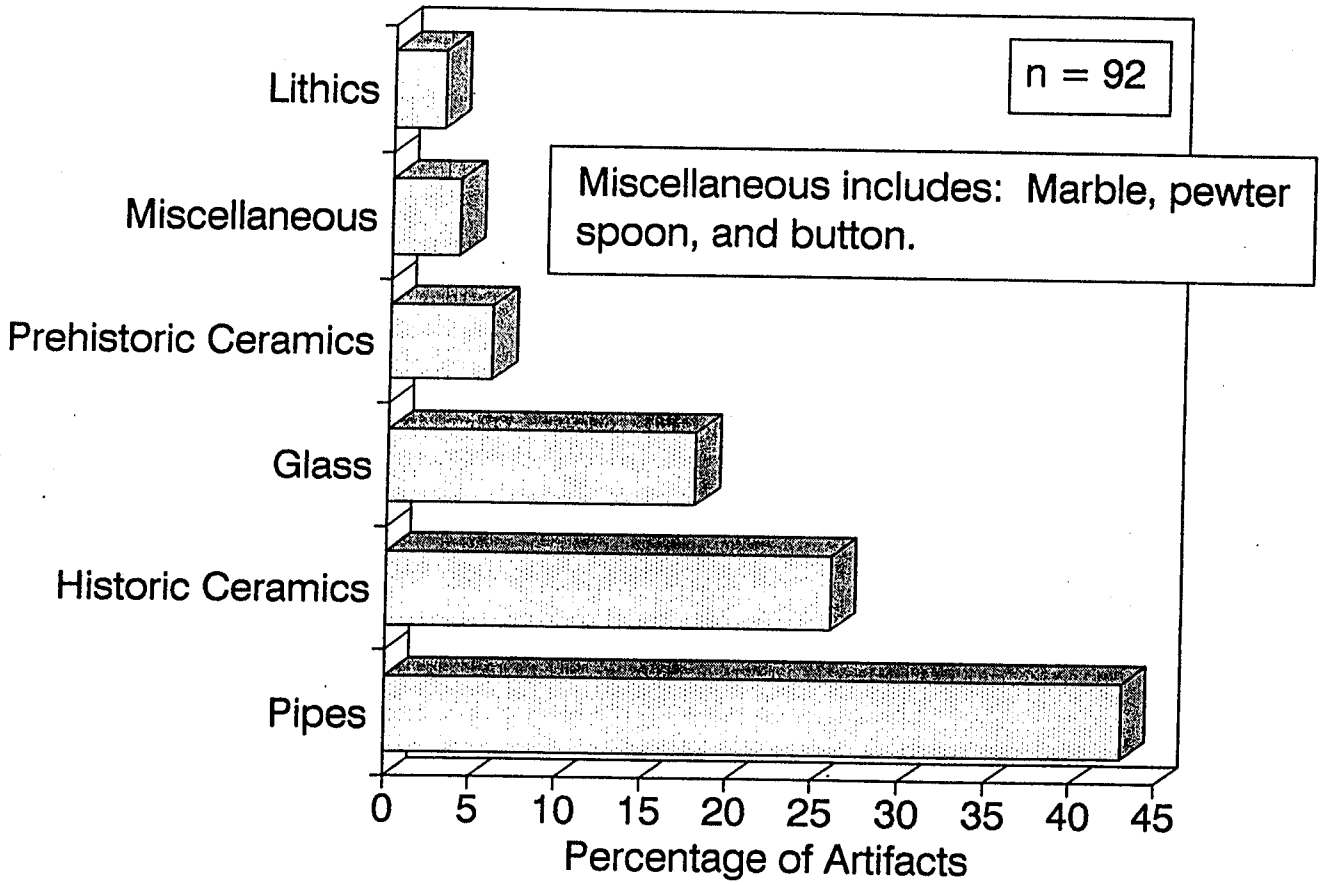

Artifact Types in Section 9
n = 92
Miscellaneous includes: Marble, pewter spoon, and button.
Lithics
Miscellaneous
Prehistoric Ceramics
Glass
Historic Ceramics
Pipes
0
5
10
15
20
25
30
35
40
45
Percentage of Artifacts

Figure 30

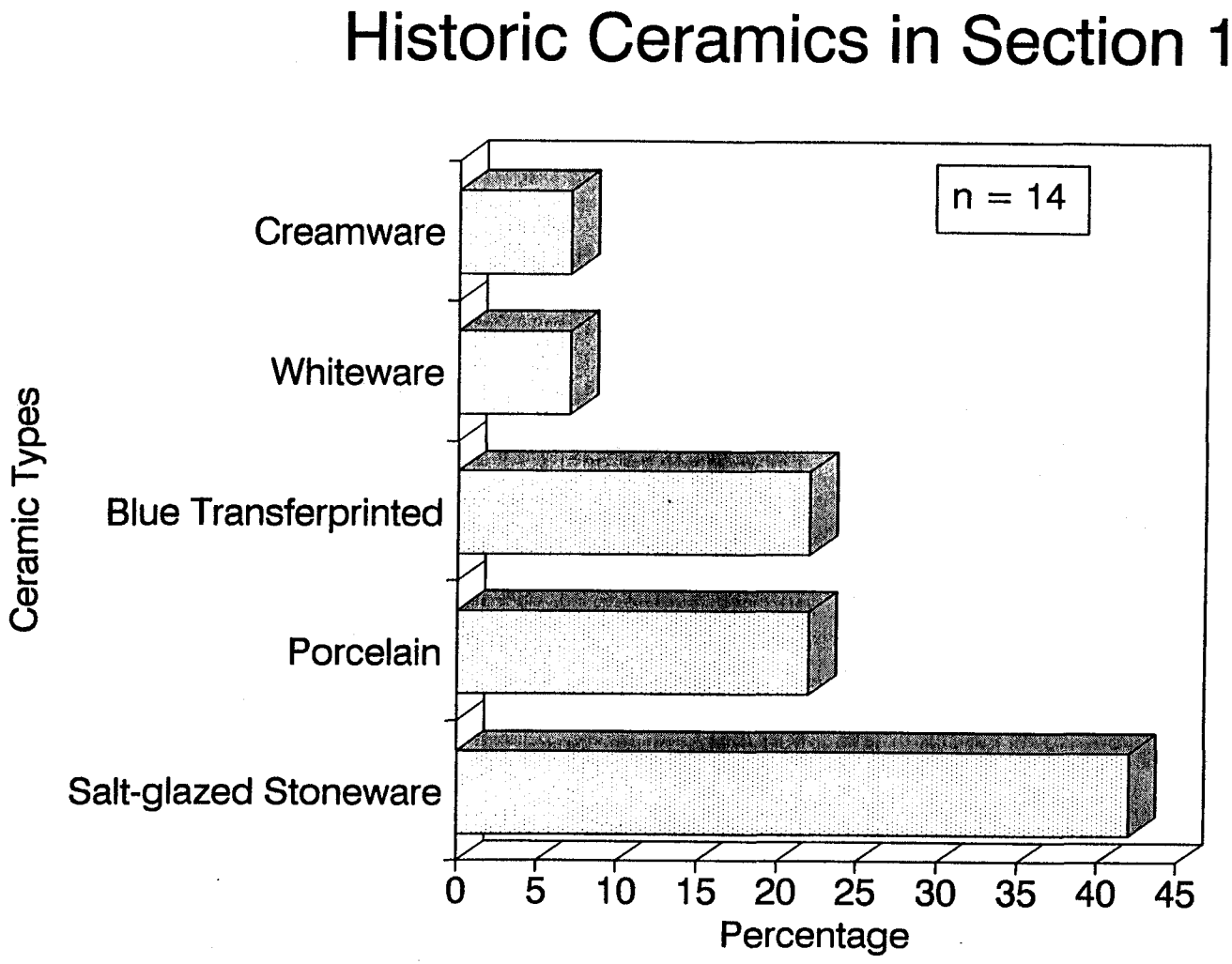

Historic Ceramics in Section 1
n = 14
Creamware
Whiteware
Blue Transferprinted
Porcelain
Salt-glazed Stoneware
Ceramic Types
0
5
10
15
20
25
30
35
40
45
Percentage

Figure 31

Historic Ceramics in Section 4

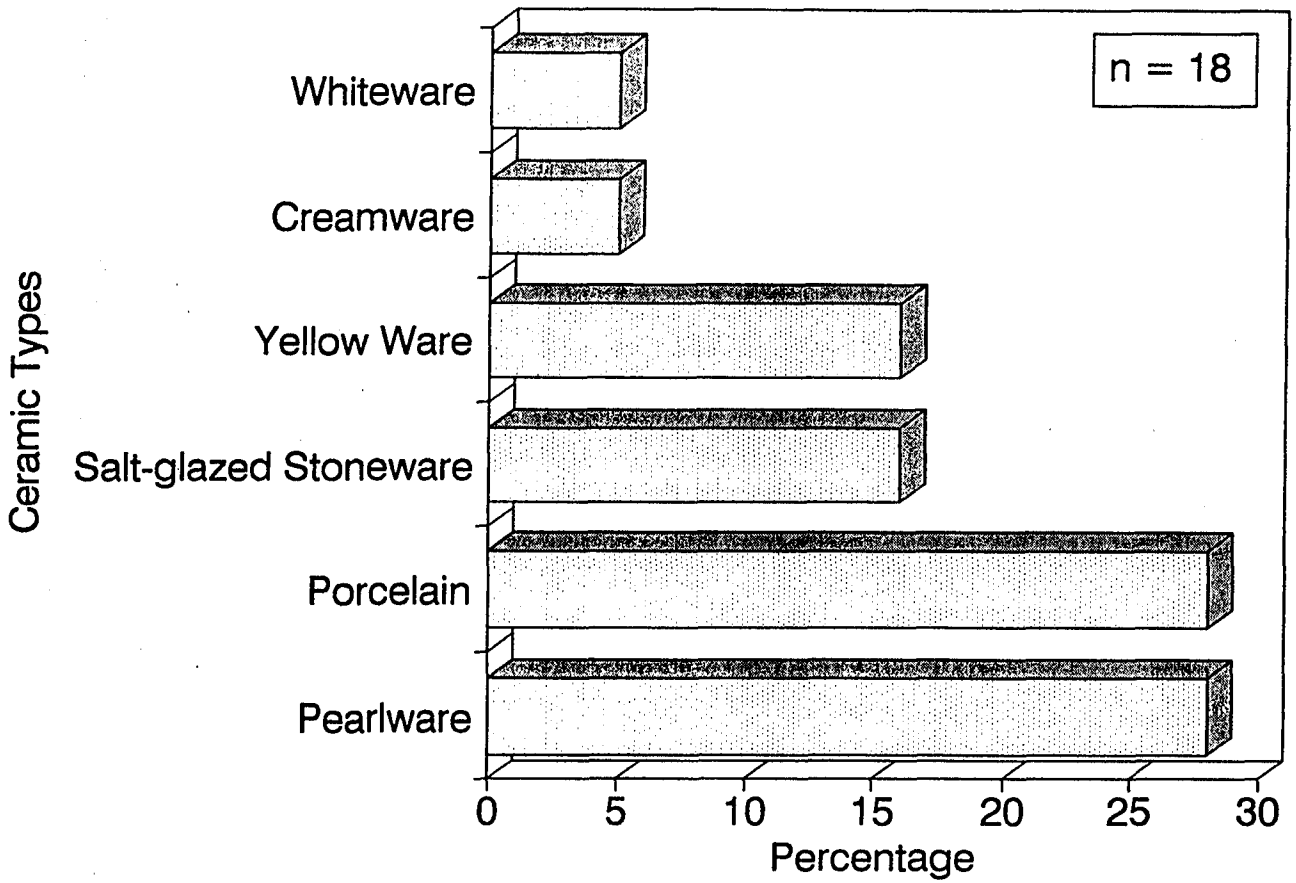


Figure 32

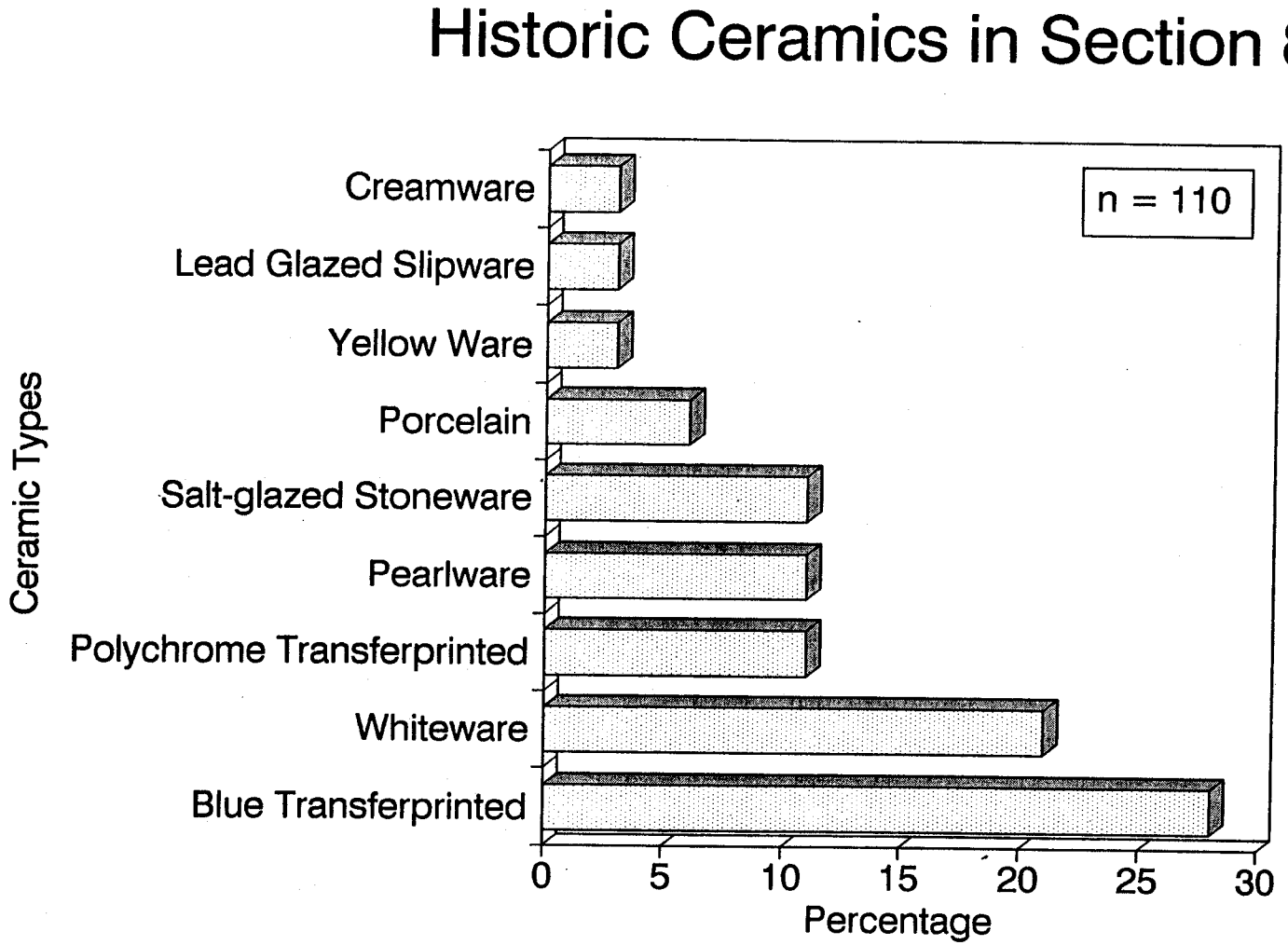

Historic Ceramics in Section 8
n = 110
Creamware
Lead Glazed Slipware
Yellow Ware
Porcelain
Salt-glazed Stoneware
Pearlware
Polychrome Transferprinted
Whiteware
Blue Transferprinted
Ceramic Types
0
5
10
15
20
25
30
Percentage

Figure 33

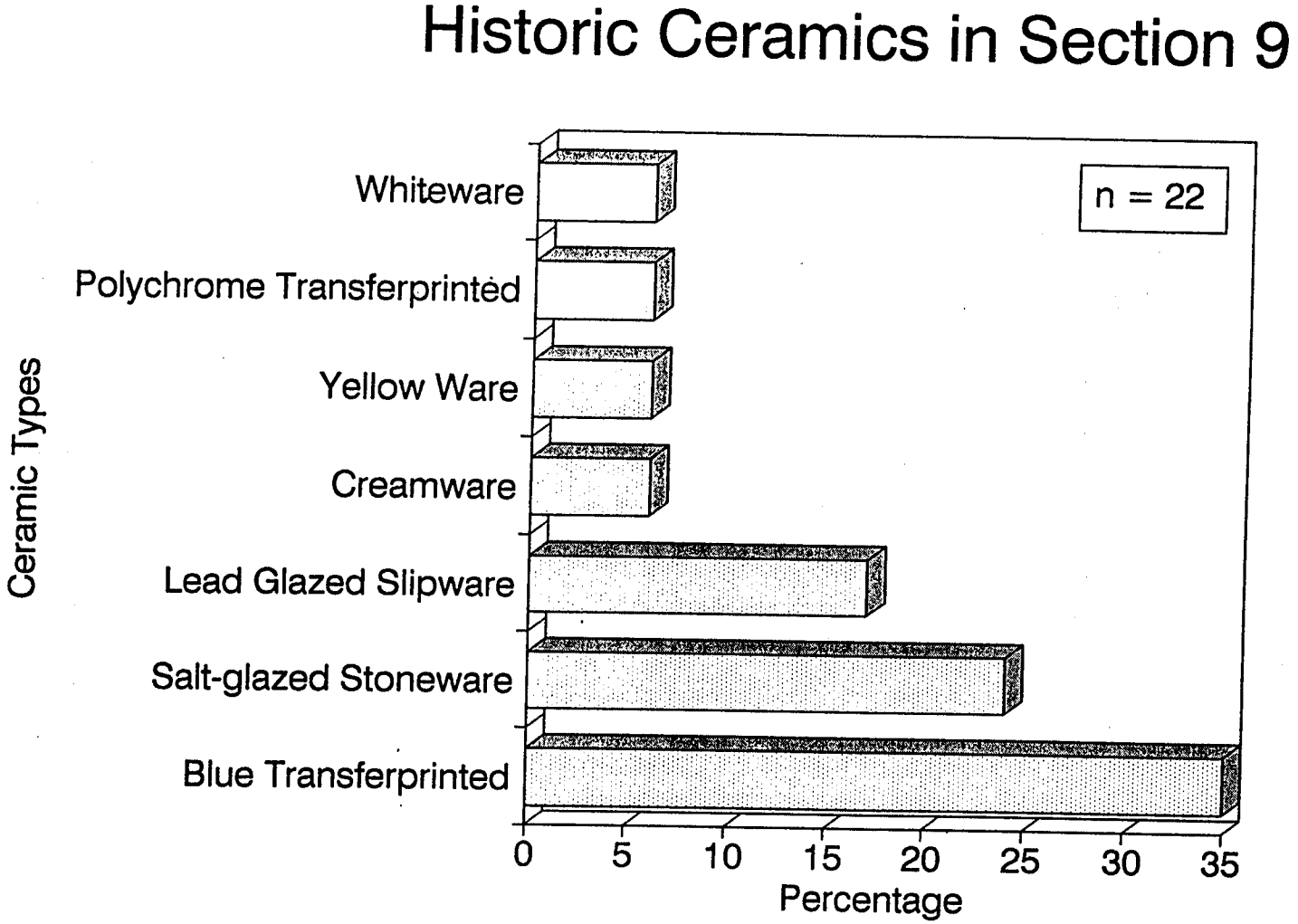

Historic Ceramics in Section 9
n = 22
Ceramic Types
Whiteware
Polychrome Transferprinted
Yellow Ware
Creamware
Lead Glazed Slipware
Salt-glazed Stoneware
Blue Transferprinted
0
5
10
15
20
25
30
35
Percentage

Figure 34

Discussion and Conclusions

The survey of the west branch of the Cooper River highlighted a number of important resource management issues for the Underwater Archaeology Division. An assessment of past archaeological and SCIAA-sanctioned salvage activities in the survey area made it apparent that there are difficulties in using this information as a comparative database. A study of the records of the remote sensing survey conducted by the Underwater Archaeology Division in the 1980's did not provide any new information about shipwrecks or structures in the area. Neither could it definitively yield information about artifact scatters -- a typical archaeological feature in the Cooper River. Many targets were natural features of no archaeological significance. The former salvage licensing and site file system did not give accurate proveniences for the artifacts recovered by the salvors. Furthermore, these collections have a dubious status for certain research purposes since records indicate that much confusion occurred in boxing and labelling artifacts.

More useful information was provided by the Underwater Division's "submerged vessel synopsis," compiled primarily by Ralph Wilbanks from hobby reports. These files contain basic observations about shipwrecks, preliminary measurements, and often wood sample identifications. The Mepkin Abbey wreck (38BK48), Pimlico barge (38BK62), and four canoes (38BK852) were included in this compilation. These records assisted in comparing the current conditions of the Mepkin Abbey Shipwreck and made it evident that it is important to follow-up site visitations to wrecks that may "dissappear." after several years. For example, the four canoes (32BK52) reported by Steve Lowe could not be relocated and have either been covered by sediment or illegally recovered.

The Hook Barge appears to be in the identical location to an overturned barge recorded by Wilbanks in the 1970's (38BK62). There is a possibility that wrecks move or tumble in rivers contrary to rather general notions that shallow-water wrecks settle and become imbedded in bottom substrates. In contrast, the Pimlico Shipwreck (38BK1614) seems to be subject to a pattern of tidal sediment accumulation and scouring. Although these two wrecks are in relatively close proximity, a determining factor in natural site transformation processes is likely to be associated with the type of bottom substrate. The barge lies upon a hard marl bottom, whereas the Pimlico Wreck is partially buried in sand. Other important factors are the orientation of the wreck site to the current -- especially the stronger outgoing current, the location of the wreck either in a channel or embedded in the riverbank, the topography of the river (eg. a bend or straight part of the

river), and the particular vessel's structural configuraton. A relatively intact square barge presents a greater surface area to an oncoming current than the skeletal structure of a plank and frame vessel. The latter is more likely to lose individual components like planking, knees, and frames instead of being moved or overturned as a whole.

The 1992 fieldwork yielded some interesting results. The small artifact scatters, B to E, recorded on the east bank are all located in river bends and probably represent secondary deposition by the current. Artifact concentrations A, G, and H appear to be more directly related to plantation sites on the adjacent river bank. It is evident from historical maps that plantation sites border both sides of the west branch. The difference is that Pimlico and Mepkin are situated on bluffs in contrast to the properties of the other plantations which lay behind ricefields and marshes. With the compilation of more data, this might represent a predicative model for underwater disposal patterns based on a plantation's local topographic situation. For example, it would be more convenient for bluff plantation inhabitants to throw trash into the nearby river than for inhabitants of the marshbound plantations who would have to negotiate a long dock or causeway and might elect instead to bury the trash on land. Bluffs and deeper water adjacent to a plantation also facilitate vessel landing and loading. This situation would be associated with social gathering at the loading site and disposal of artifacts. The high percentage of pipe components at both the bluff sites are perhaps testimony to activity on the river bank.

An interesting comparative study might be undertaken by comparing relative artifact type percentages recovered from a bluff underwater site and the adjoining terrestial plantation site. For example, the high percentage of colonoware from the underwater site around Mepkin Abbey (38BK48) and blue and white transferprinted ceramics and bottles at Pimlico might be comparable with the results of a land archaeology project. Information from the projects already conducted by the Anthropology Department at University of South Carolina on plantations on the east branch of the Cooper might be used to compare with new data from the underwater component. Riverine archaeological sites in South Carolina do not exist in a cultural vacuum and can be more accurately studied by utilizing as much local land archaeology data as is available.

Cooper River artifact collections belonging to sport divers, and even the earlier salvors, could be of some potential use to future archaeological research, although somewhat limited in exact locational information. Many of the colonoware specimens used by Leland Ferguson for his book *Uncommon Ground* were part of hobby diver and salvage collections at SCIAA (Ferguson 1992:126). The 1992 survey collection can be studied by contacting the participating divers listed in the appendix (Appendix A).

One of the public outreach benefits of this survey was that many sport divers were involved in all stages of the project not only fieldwork, but also artifact identification and cataloging, historical research, report writing, artifact photography, and drawing. The participating divers learnt an an obvious lesson - the more artifacts that are collected, the more follow-up paperwork is required. It was also important to demonstrate a difference between licensed hobby diving in South Carolina, where artifacts are collected recreationally in a random and often selective manner, and a survey which requires more comprehensive, organized coverage of an area. Not only is it significant that an area is artifact rich, but also if it is sterile.

A dive club group or dive buddies who want to become involved in a group-orientated activity that extends beyond the initial physical challenge of river diving and collecting, might find participation in a survey of this nature to be more rewarding. Not only is a planned survey an alternative and more rewarding approach to recreational diving, but also contributes to a better archaeological and historical understanding of our underwater heritage. The Cooper River Survey represents the first concerted effort by hobby divers in South Carolina to conduct a planned survey with recreational, educational, and research motives rather than commercial gain.

Appendix A

List of divers

Jimmy Moss -- Diver No. 1
P.O. Box 594
Abbeville, SC 29620
(803) 446-3868

Emory Vaughn -- Diver No. 2
Rt. 2, Bricklevel Rd.
Greenwood, SC 29649
(803) 223-1495

Darryl Boyd -- Diver No. 3
1985 Ascauga Lake Rd.
N. Augusta, SC 29841
(803) 278-4184

Dean Bowman -- Diver No. 4
1009 Bransome Blvd.
Aiken, SC 29803
(803) 648-1809

John Cercopely -- Diver No. 5
260 Amy Drive
Goose Creek, SC 29445
(803) 572-5582

Patrick Harris -- Diver No. 7
886 Evans Rd.
Charleston, SC 29412
(803) 795-7934

Jerry Latham -- Diver No. 8
114 Wilde Wood Road
Abbeville, SC 29620
(803) 459-5987

Tony Houk -- Diver No. 9
7925 Saint Ives Rd.
N. Charleston, SC 29418

Richard Burdine -- Diver No. 12
203 Mountain Chase
Taylors, SC 29687
(803) 244-6508

Doug Boehme -- Diver No. 13
102 Iron Court
Summerville, SC 29483
(803) 875-5006

Heath Blumer -- Diver No. 14
4740-B Franchise St.
Charleston Heights, SC 29413

Mike Robertson -- Diver No. 15
(803) 836-8241

Mack Allen -- Diver No. 16
(803) 268-1678

Elizabeth Beasley -- Diver No. 17
761 Old Dibble Rd.
Aiken, SC 29803
(803) 649-0077

Keith Taylor -- Diver No. 18
156 Hoover Ct.
Moncks Corner, SC29461
(803) 648-1754

Mark Taylor -- Diver No. 19
(803) 244-1713

Johnny Peace -- Diver No. 20
206 Melbourne Lane
Greenville, SC 29615
(803) 268-2753

Avery Curry Jr.
2311 Wade Hampton
Greenville, SC 29615
(803) 292-29615

Appendix B

Directions To Plantation Sites

Pimlico

Leaving Moncks Corner on secondary road 791 go 8 miles. You will come to a flashing yellow light. Turn left. You will no be on secondary road 9. Go 1.2 miles on this road. Turn left onto secondary road 260. Go 2.7 miles on this road. You will run directly into the plantation. There are signs at each turn marking the way. This is the only plantation house in the survey area still standing.

Strawberry Chapel (38BK64)

Driving northeast on U.S. 52 (17-A) out of Moncks Corner you will come to the Dennis Bishop Bridge over the tail race canal. Three tenths of a mile beyond the bridge you will come to a traffic light. Turn right on a ramp approach onto Route 402. Stay on 402 about 2 miles until you get to Wadboo Creek. After crossing Wadboo, turn right. You are now on River Road. Stay on River Road (about 7, miles) until you come to the railroad tracks. After crossing the railroad tracks take the first right. Go to the end of the pavement (about one-half mile). On the right will be Strawberry Chapel. Located to the

left of the chapel are the Ball family graves. Many other plantation owners and their families are buried here, including the Harlestons of the Bluff Plantation.

Mepkin

Driving northeast on U.S. 52 (17-A) out of Moncks Corner, you will come to the Dennis Bishop Bridge over the tail race canal. Three tenths of a mile beyond the bridge, you will come to a traffic light. Turn right on a ramp approach onto route 402. Stay on 402 about 2 miles until you get to Wadboo Creek. After crossing Wadboo turn right. You are now on River Road. Follow this road for 6 miles. You will be at the Mepkin Abbey entrance. Turn right and follow the oak-lined land to the reception center. The Guest Master at the center will be glad to give you directions and information about the grounds. Some areas of the abbey are off limits. You will definitely need directions to the Laurens family graveyard, as it is almost impossible to find the graveyard without them.

Taveau Church

Driving northeast on U.S. 52 (17-A) out of Moncks Corner you will come to the Dennis Bishop Bridge over the tail race canal. Three tenths of a mile beyond the bridge you will come to a traffic light. Turn right on a ramp approach onto route 402. Stay on 402 about 2 miles until you get to Wadboo Creek. After crossing Wadboo turn right. You are now on River Road. Follow this road for 6.5 miles. On the left will be Taveau Church. There is a fence across the front of the property that is locked. The land is also posted "No Trespassing."

Figure 35. Mepkin Abbey Gardens

Photo by Jimmy Moss

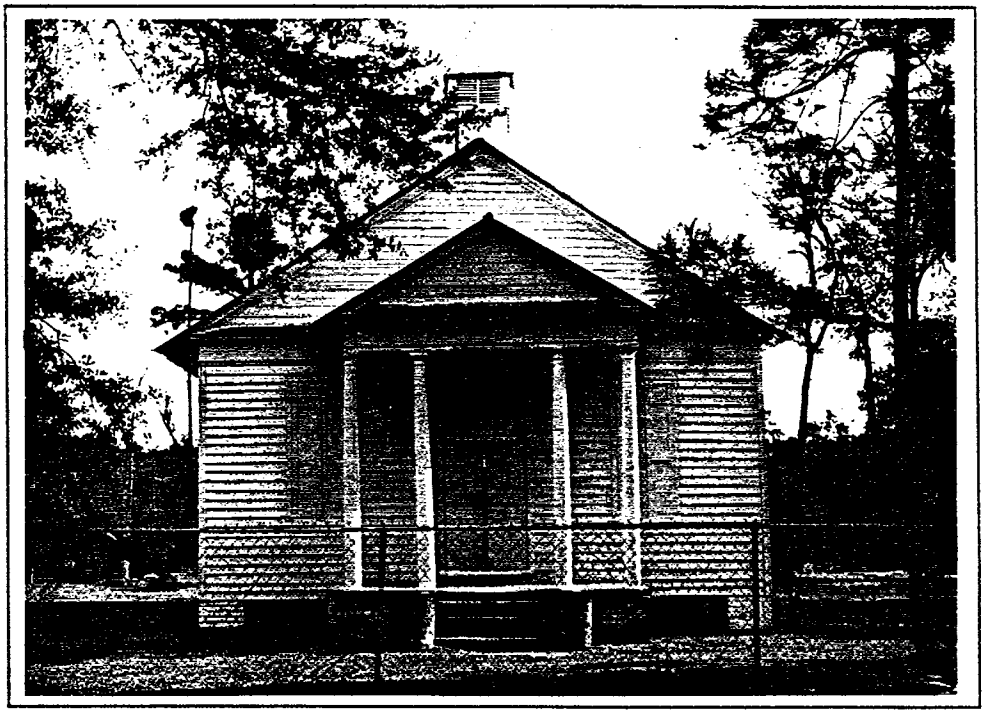


Figure 36. Taveau Church, Clermont Plantation

Photo by Jimmy Moss

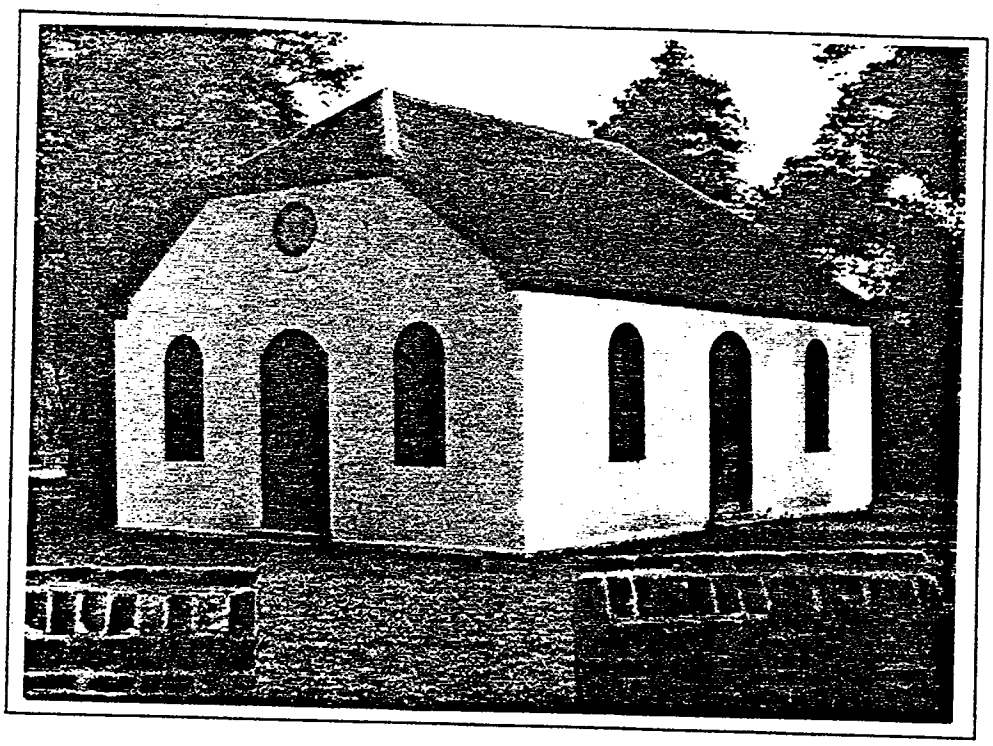


Figure 37. Strawberry Chapel (38BK62)

Photo by Jimmy Moss

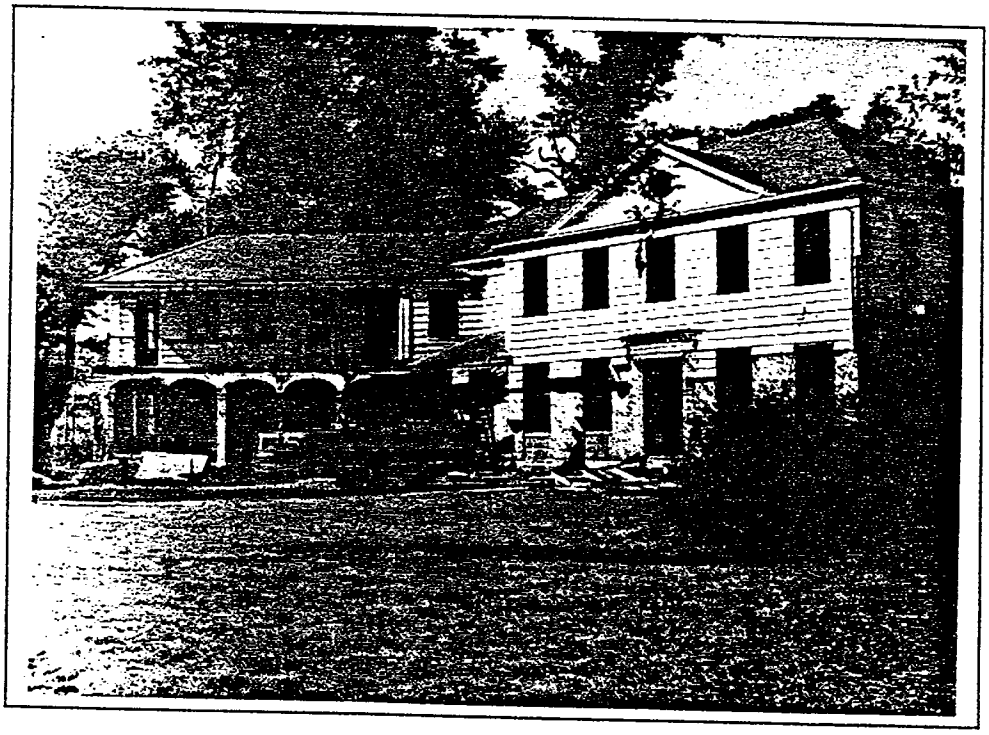


Figure 38. Pimlico Plantation House (38BK862)

Photo by Jimmy Moss

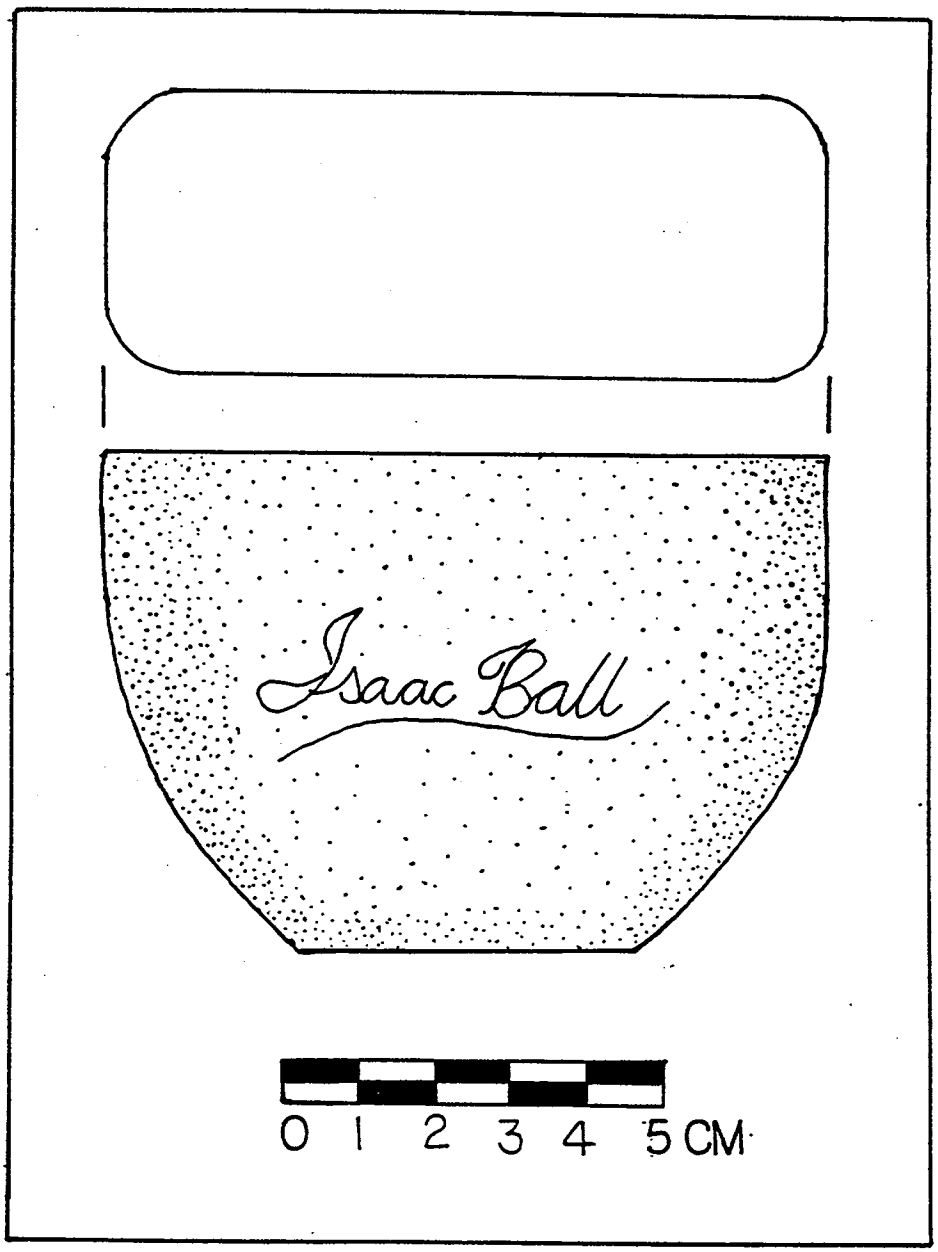


Figure 39. Isaac Ball's Hip Flask (38BK852)

Drawing by Darryl Boyd

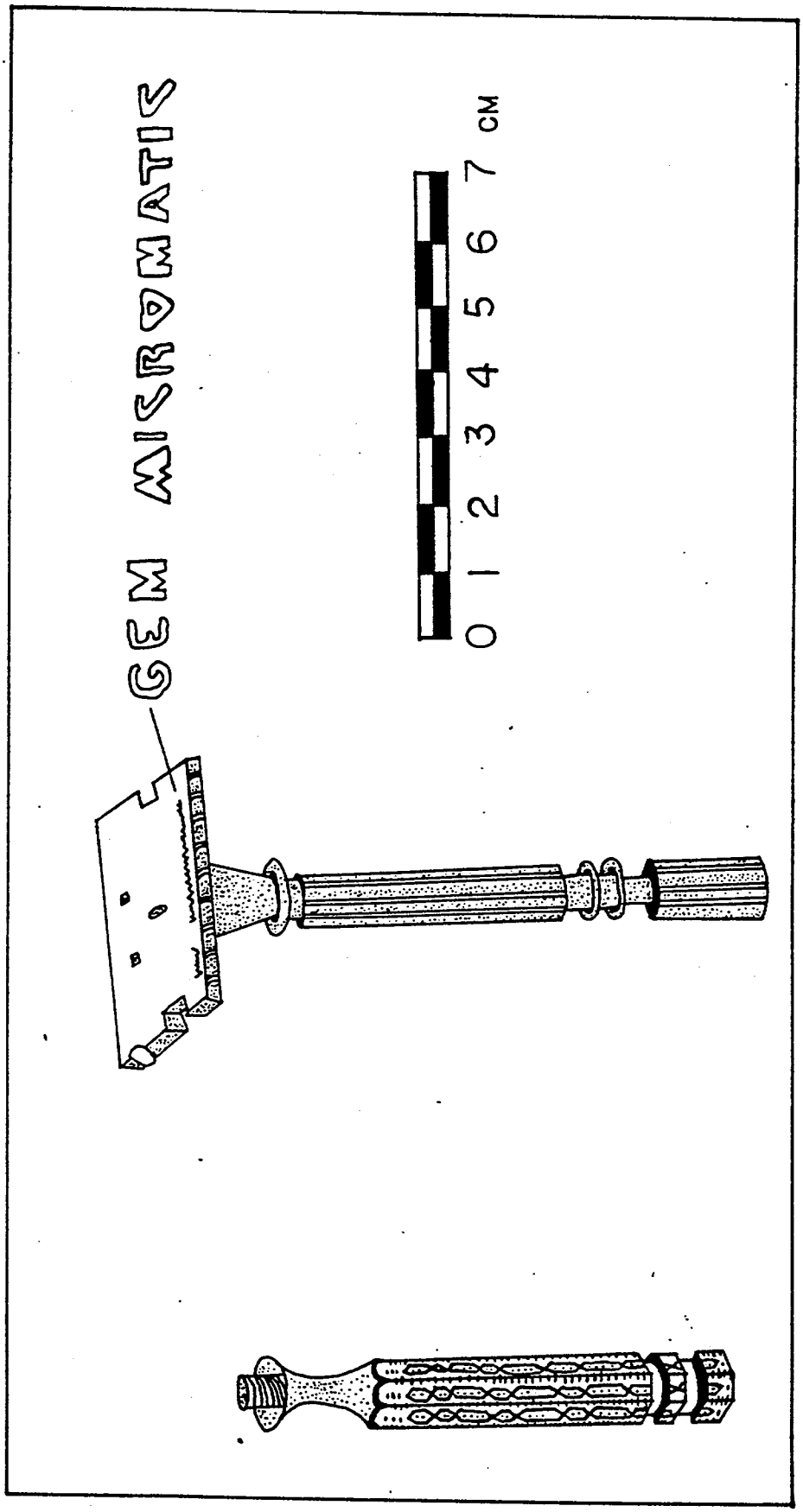


Figure 40. Razors from Section 8 (38BK852)

Drawing by Scott Heavin.

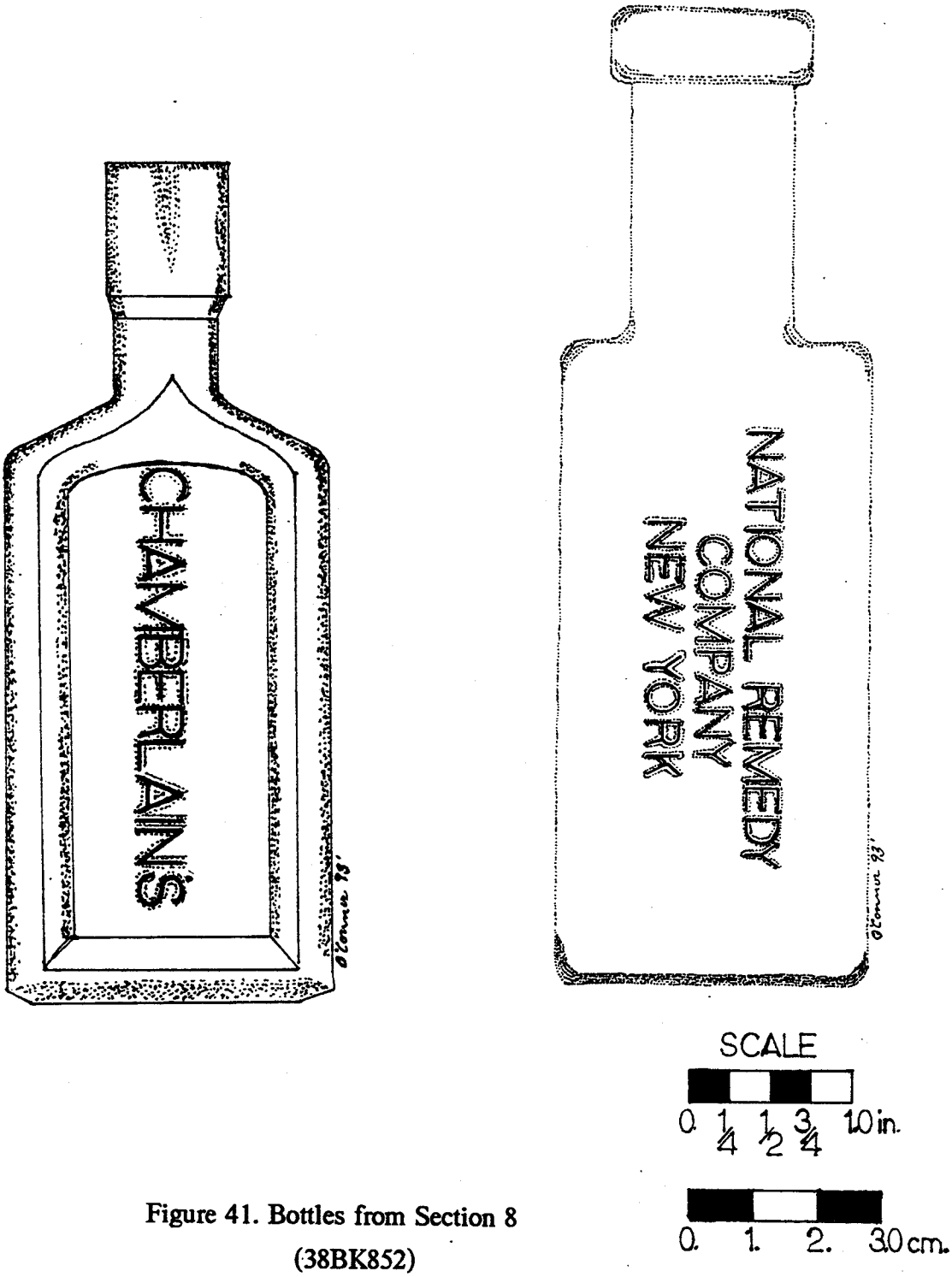


Figure 41. Bottles from Section 8
(38BK852)

Drawing by Rod O' Connor

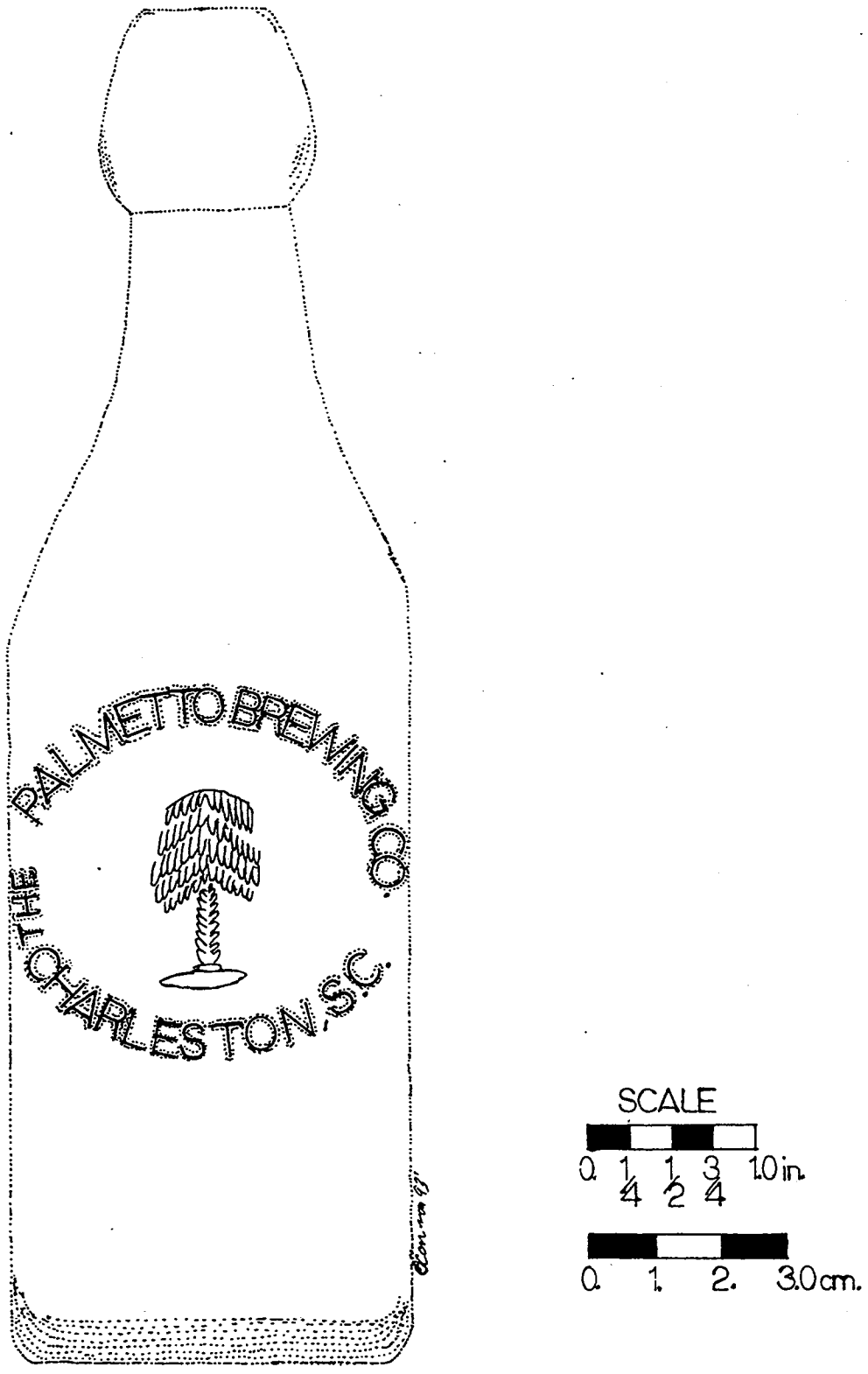


Figure 42. Palmetto Brewing Co. Beer Bottle from Section 2 (38BK62) *Drawing by Rod O' Connor*

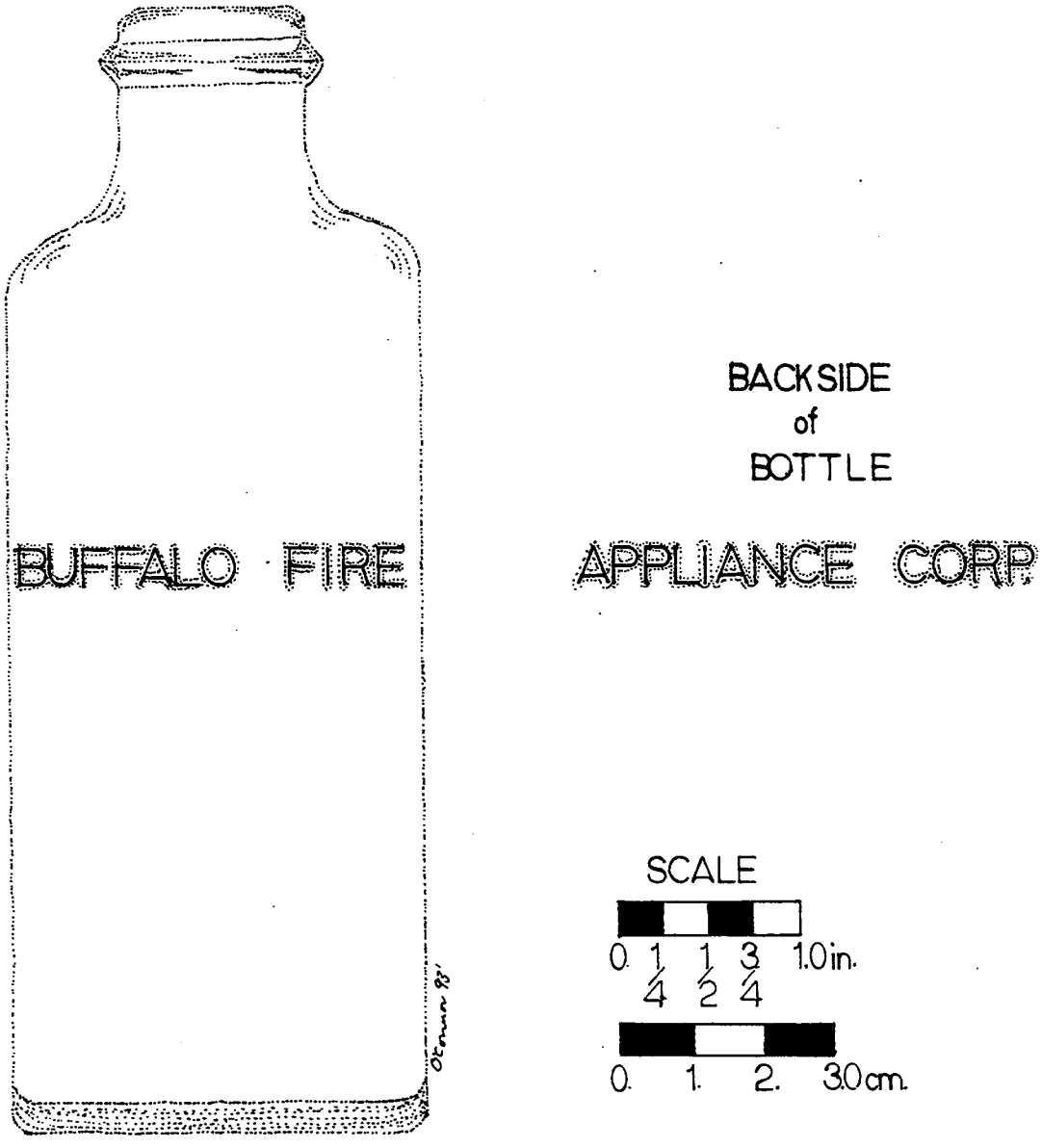


Figure 43. Bottle from Section 9 (38BK62)

Drawing by Rod O' Connor

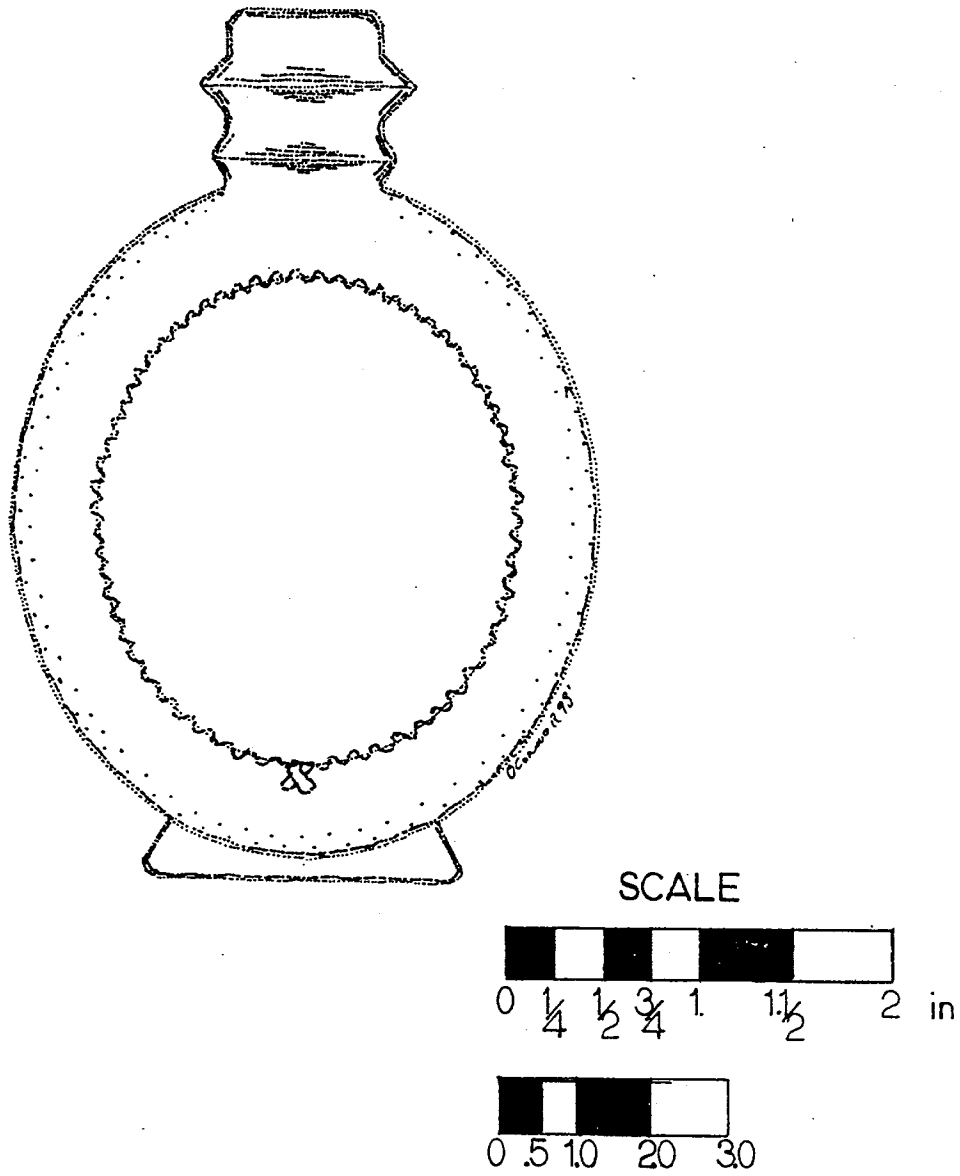


Figure 44. Perfume Bottle From Section 8 (38BK852)

Drawing by Rod O' Connor

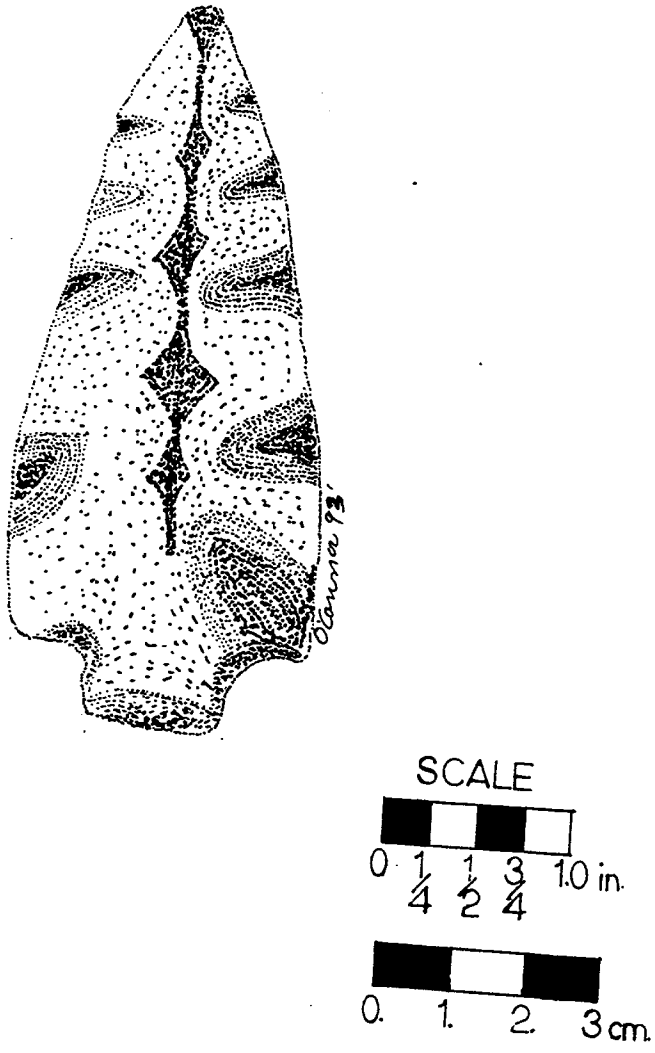


Figure 45. Archaic Point from Section 9 (38BK62)

Drawing by Rod O' Connor

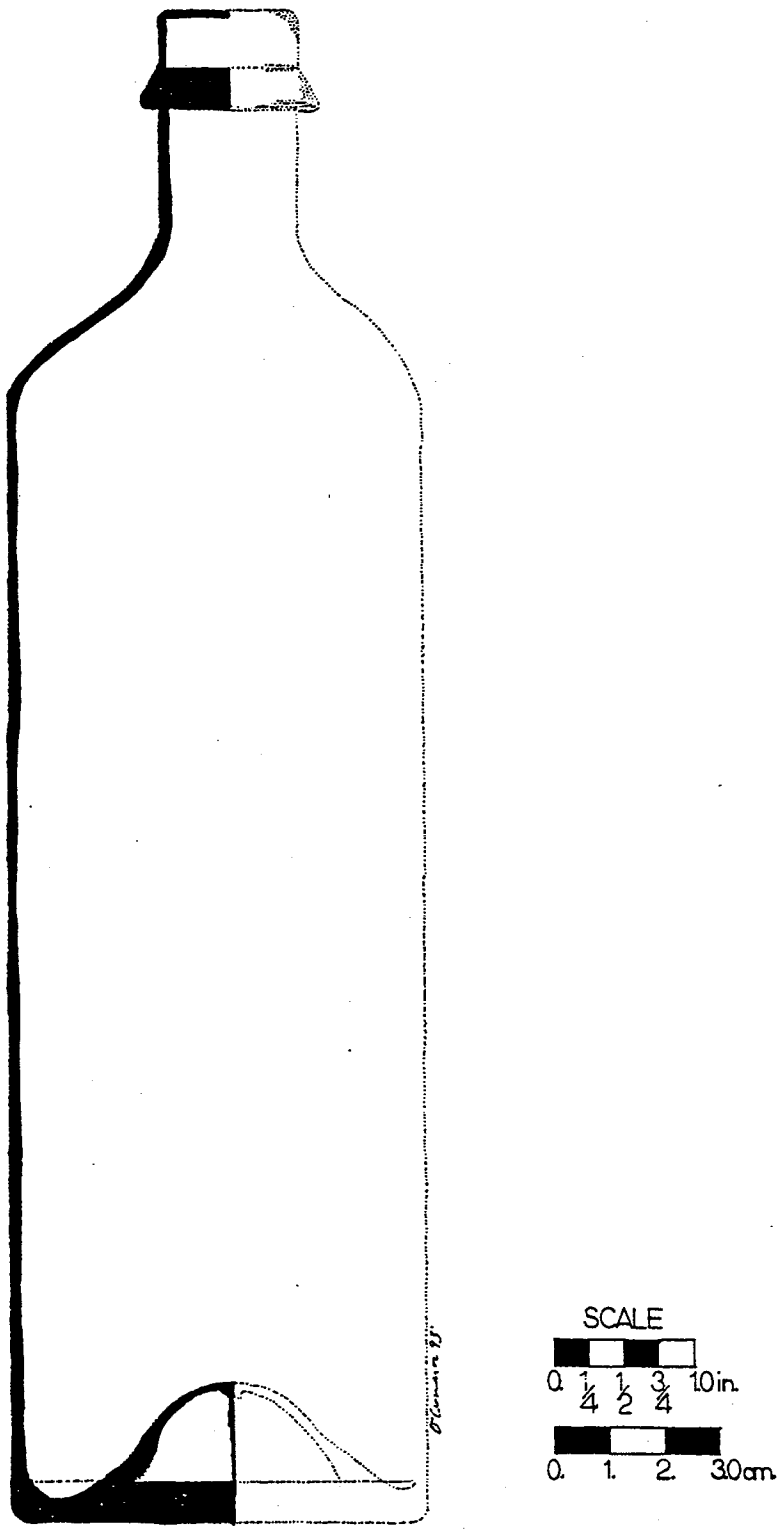


Figure 46. Liquor Bottle from Section 8 (39BK852)

Drawing by Rod O' Connor

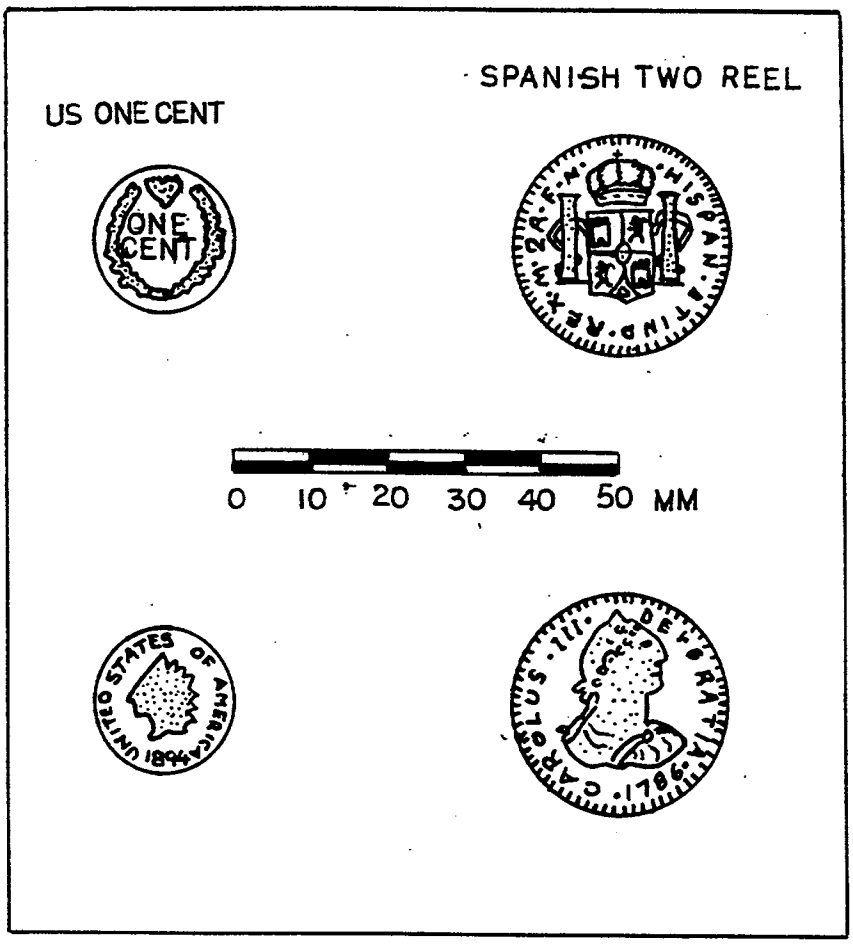


Figure 47.Coins from Section 1 (38BK48)

Drawing by Doug Boehme

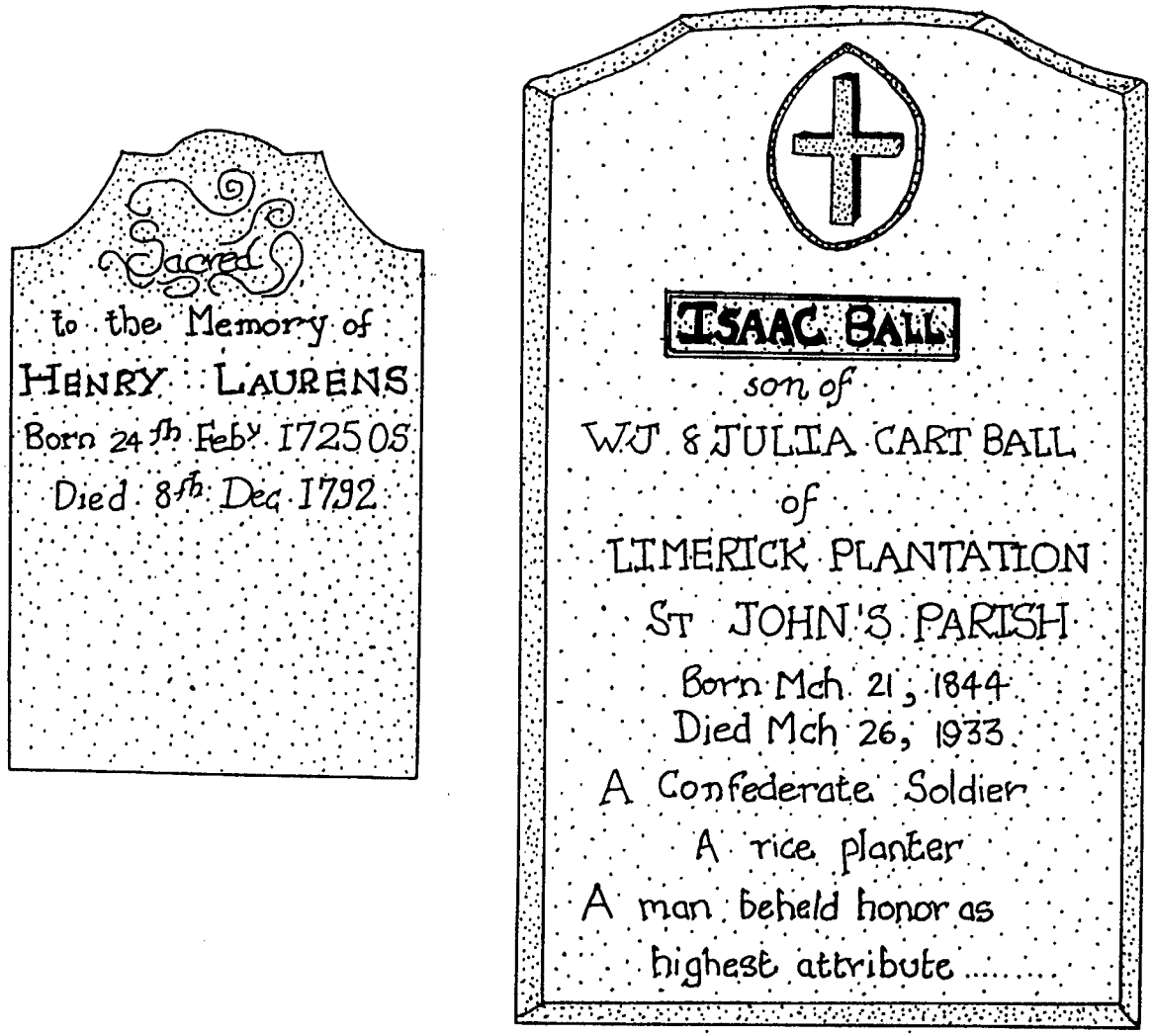
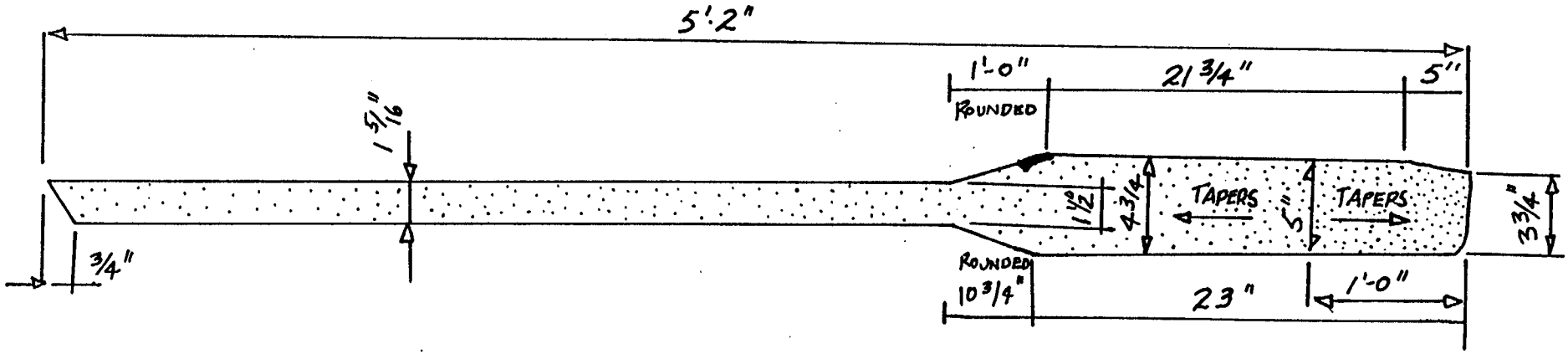


Figure 48. Grave Markers for Henry Laurens and Isaac Ball.

Drawn from a Photo by Jimmy Moss



ADZE MARKS OVER ENTIRE SURFACE

Figure 49. Oar from Section 8 (38BK852).

Drawing by Darryl Boyd

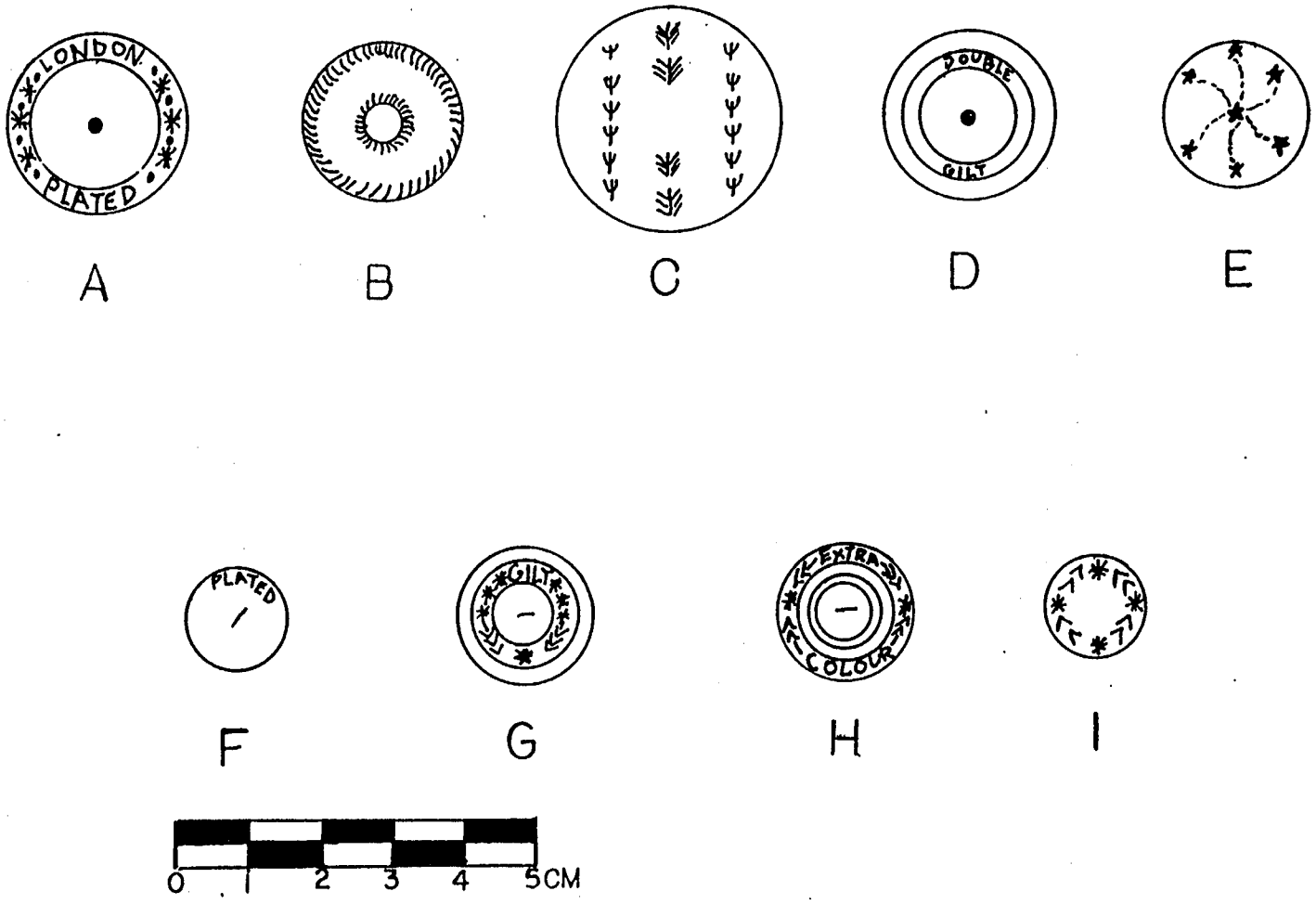


Figure 50. Buttons from Section 1 (38BK48).

Drawing by Michael James

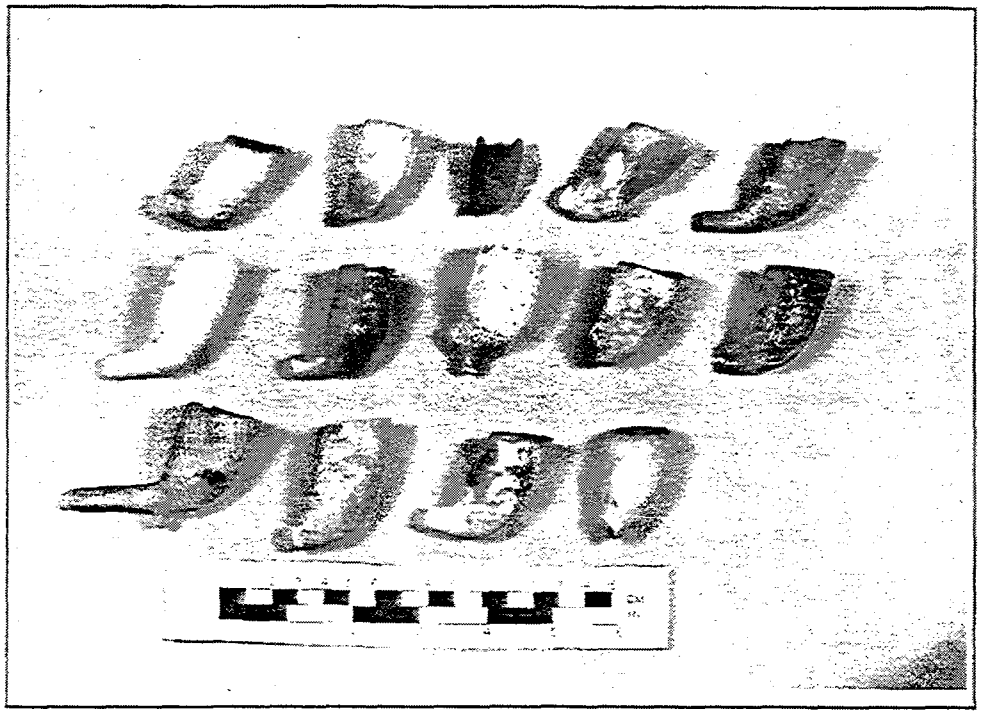


Figure 51. Pipes from Section 1 (38BK48).

Photo by Doug Boehme

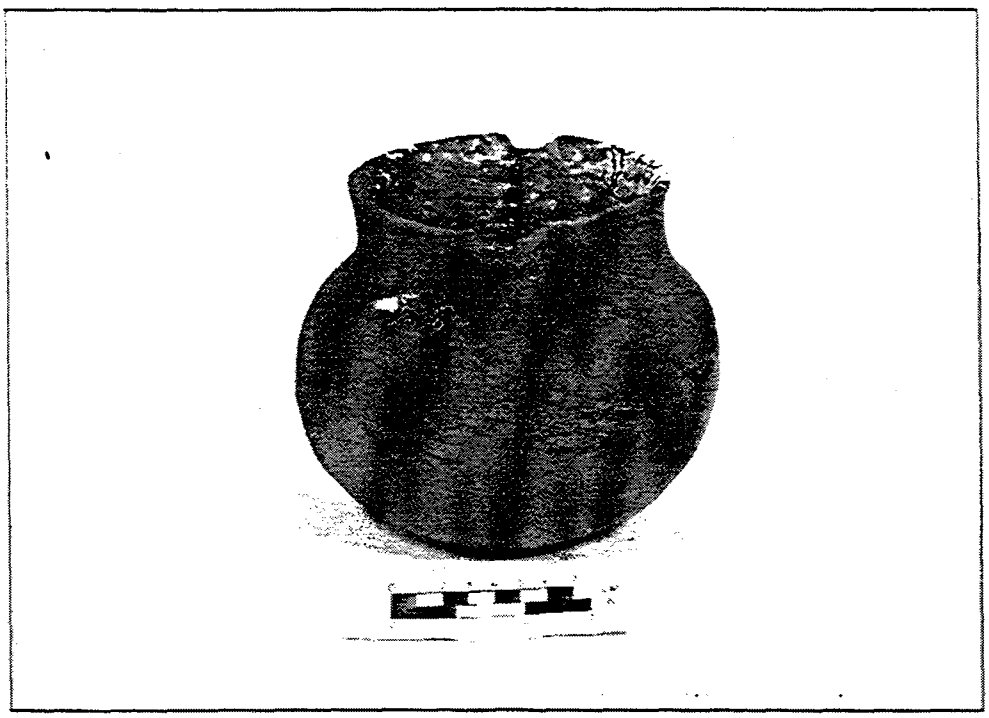


Figure 52. Colonoware Bowl from Section 1 (38BK48)

Photo by Doug Boehme

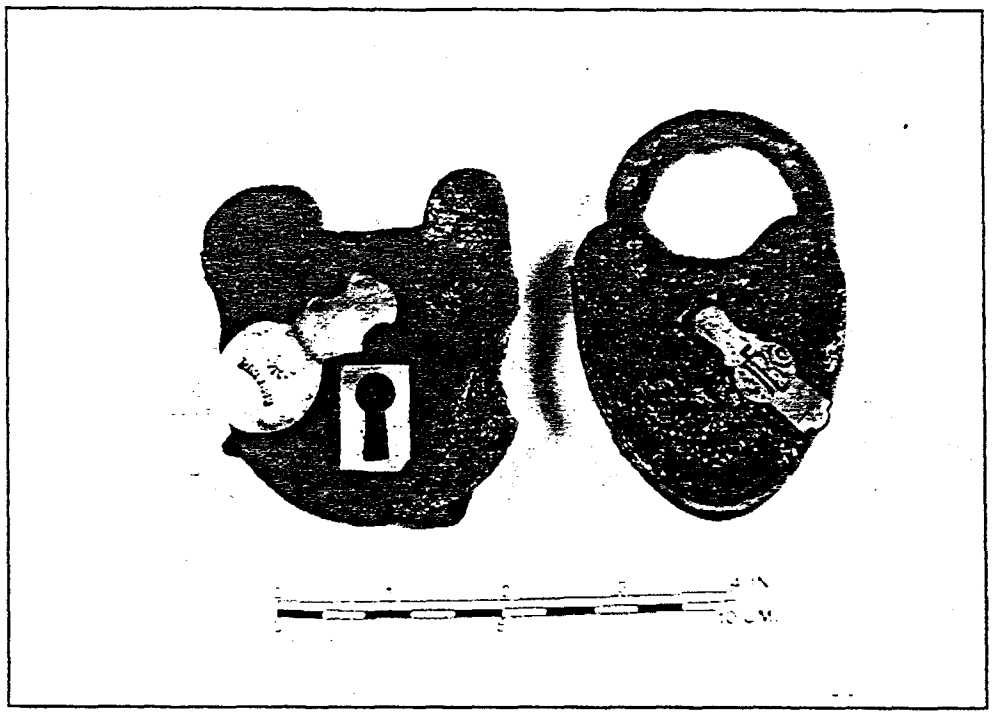


Figure 53. Locks from Section 1 (38BK48).

Photo by Doug Boehme

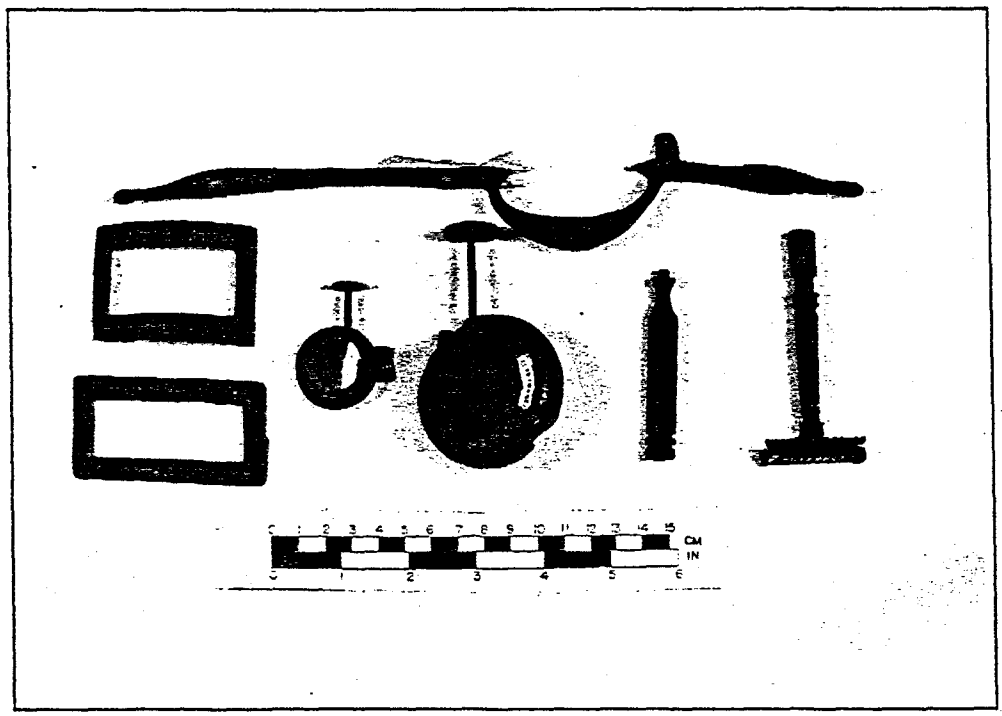


Figure 54. Miscellaneous Items Recovered During Survey

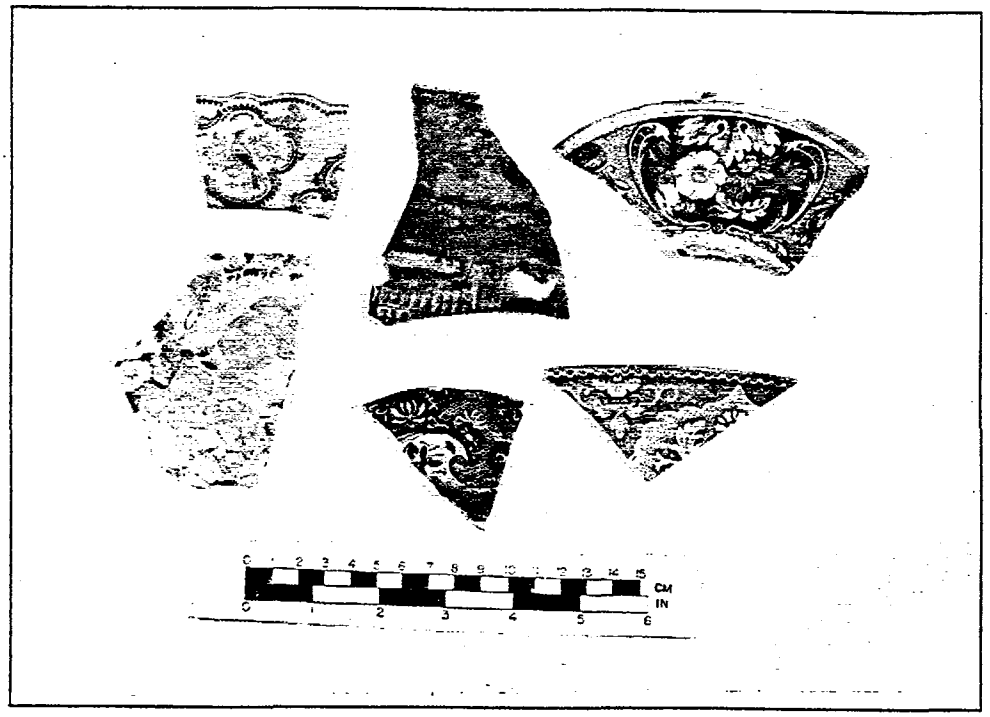


Figure 55. Transferprinted Ceramics from the Survey Area.

Photo by Doug Boehme

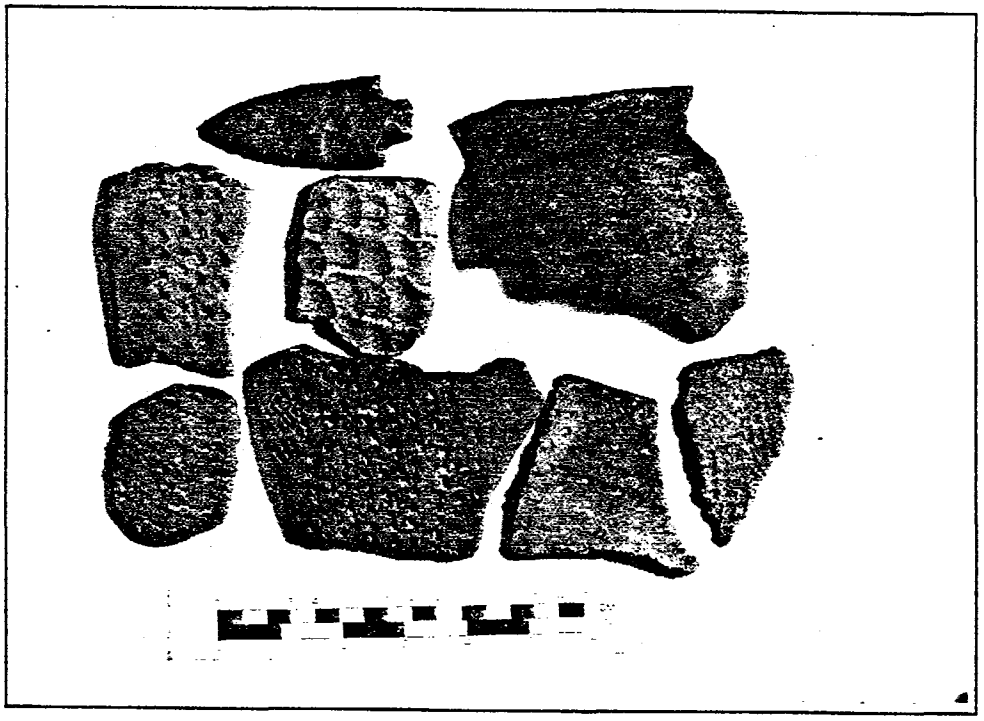


Figure 56. Prehistoric Ceramics from the Survey Area.

Photo by Doug Boehme

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